

VOORWOORD

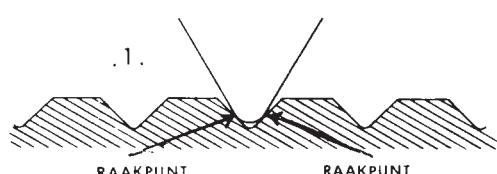
Deze catalogus is ontworpen om U meer inzicht te geven in **wat een grammofonnaald is** — op welke uiterlijke details U moet letten, hoe hij werkt, hoe U kunt vaststellen van welk fabrikaat hij is en door welke naalden U hem kunt vervangen. Als U even tijd neemt om deze pagina's te bestuderen, zal dat zowel op Uw omzetcijfers in naalden als op de tevredenheid van Uw klanten een stimulerende werking hebben!

De groef van een grammofonplaat is in talloze kleine zig-zag-kronkelingetjes geperst. De grammofon is een apparaat dat deze zig-zag-bewegingen van de groef in geluid omzet, "vertaalt".

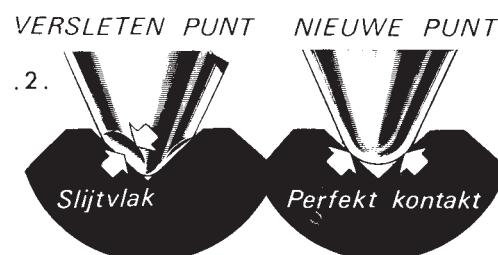
Dit gebeurt door de naald af te tasten. De zig-zag-bewegingen die de naald bij z'n loop door de groef maakt worden overgebracht op een z.g. element. Dit element nu produceert een stroompje, waarvan de sterkte varieert met de bewegingen van de naald. Dit steeds van sterkte wisselende stroompje wordt nu door een versterker omgezet in stroomsterktevariaties van een grootte-orde voldoende om een luidspreker geluid te laten voortbrengen.

Met nadruk wijzen wij erop, dat de enige verbindingschakel tussen grammofonplaat en pick-up de naald is. Is de naald versleten of beschadigd, dan zal dat resulteren in slechts gedeeltelijk of vervormd weergegeven geluid. Dat is één van de redenen waarom het zo belangrijk is dat de naald in goede staat verkeert.

Laten wij nu de naald zelf nog eens wat nader bekijken. In dwarsdoorsnede gezien, ziet de groef van de grammofonplaat met de erop geplaatste naald er ongeveer zo uit:



Zoals U ziet, heeft de naald geen scherpe, maar een afgeronde punt; de naald maakt alleen contact met de twee zijkanten van de groef. Als de grammofonplaat draait, glijd de naald langs deze twee contactpunten. Het aanvankelijk afgeronde naaldoppervlak langs deze twee punten zal, op den duur, vlak afgeslijten. (Zie tekening.) →



De plaats waar de nog afgeronde en de vlak afgesleten gedeelten van het naaldoppervlak samenkommen gaat nu een scherpe rand vormen, die op zijn beurt weer de zijkanten van de groeven gaat afsluiten, waardoor een gedeelte van de scherpe zig-zag-vorm waarin de groef geperst is verloren gaat. Aangezien nu juist deze zig-zag-vorm de 'informatiebron' is voor het geluid en alle aspecten daarvan, zoals hoge en lage tonen, timbres, verschillende instrumenten, enz., betekent de vermindering ervan door een versleten naald eigenlijk dat er geluid van de plaat wordt afgeslepen. Dat geluid is daarmee onherstelbaar verloren gegaan.

Het gevolg is dan ook dat zelfs de kostbaarste installaties en platen vrijwel waardeloos worden als ze gebruikt worden met een versleten naald! IEDERE NAALD MOET REGELMATIG VERVANGEN WORDEN. (Meer hierover later.)

Wij weten nu hoe een grammofonnaald werkt en waarom hij vervangen moet worden. Welke procedure moeten wij nu volgen om onze klanten van de juiste vervangingsnaald te voorzien?

Er is tegenwoordig een grote verscheidenheid aan naaldtypen in omloop. Ieder type is ontworpen voor een bepaald element en past vaak alleen in dat element. Sommige naalden zijn "populairder" dan andere, omdat de elementen waarin deze naalden passen door veel fabrikanten van grammofons gebruikt worden; vandaar dat er een relatief grote vraag naar deze naalden is. Uw bevinding zal waarschijnlijk zijn dat deze "populaire" naaldtypen (in aantal zo'n 12 tot 16) ongeveer 75% van Uw naaldomzet vormen. U moet daarom goed vertrouwd zijn met deze "populaire" typen.

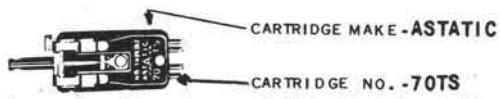
De meeste klanten weten niet welke naaldsoort in hun installatie past. Het is in zo'n geval noodzakelijk dat U Uw klant uitlegt welke informatie hij U precies moet geven om U in staat te stellen hem de juiste vervangingsnaald te leveren.



1. De gemakkelijkste en meest directe manier om vast te stellen om welk naaldtype het gaat, is om de klant U het merk en nummer van zijn element te laten geven.

'U zoekt dan in de alfabetische lijst de elementenfabrikant op. Heeft U deze gevonden, dan zoekt U in de kleine hokjes boven aan naar het juiste elementnummer.

Probeer U eens de Pathé Marconi MUCS. Als U goed heeft gezocht, dan vindt U ons bestelnummer 240.



Tonar replacement types for: PATHE MARCONI

51	53	MUCS; MCS	RC 5/6	STC-7; STC-S; STC-41	STEREO	ST-10 J	STC-2000 D
154 	155 	240 	156 	157 	158 	771 	157
917 	885 						

2. Een andere manier om een naaldtype vast te stellen is om Uw klant te vragen zijn oude naald mee te nemen, en U het merk van zijn platenspeler te vertellen. Dan kunt U door het vergelijken van de tekeningen in de alfabetische lijst met het meegebrachte naaldje, vaak ook tot identificatie komen.

3. U zou ook Uw klant kunnen vragen wat het merk en het nummer zijn van een eerder door hem gekochte naald — of welk naalddnummer er opgegeven wordt in de handleiding bij zijn grammofoon-installatie.

4. Heeft Uw klant al eens eerder een TONAR naald gekocht, dan weet hij het nummer.

441	Ronette CMT-102
442	B.S.R. ST-16/17
	Fidelity
	Schneider ST-16/17
443	Dual CDS-650; 651; 660; 661
	Dual CDS-670; CDS-671
	Dual DN-6; 8; 62; 63; 64; 65; 85
	Perpetuum Ebner PE-3000; CDS-650;
	CDS-651
444	Clean CM-500
	Hape
	Piezo Y-930; YM-101
445	Kenwood N-23
	Trio N-23
446	Teppaz MT-30



U kunt dan met behulp van dit nummer in de numerieke lijst te weten komen welk type het is.

Aan de hand van deze vier trefzekere methodes zult U in de meeste gevallen zeker kunnen zijn van de verkoop van een naald. Er zullen zich soms uiteraard ook gevallen voordoen, waarin U niet in staat zult zijn het naaldtype dat Uw klant nodig heeft vast te stellen, bv. door gebrek aan, of onjuiste informatie. Laat U door de paar keren dat dat gebeurt niet ontmoedigen; meestal zult U succes hebben en naarmate U meer ervaring krijgt zal de verkoop van naalden U steeds gemakkelijker afgaan.

Nu nog even een paar tips betreffende de levensduur van een naald.

Dikwijls wordt de vraag gesteld hoe lang een naald bruikbaar is, en waaraan je kunt merken dat een naald versleten is. Helaas is het zo, dat zodra men een hoge, scherpe ruistoon door de plaat hoort, het al te laat is — het kwaad is dan al geschied. Een betere manier om te bepalen in hoeverre een naald versleten is, is het bijhouden van de tijdsduur dat de naald in gebruik is geweest. Wil men een redelijke schatting maken van de te verwachten levensduur van een naald, dan moet men met veel factoren rekening houden: het gewicht van de draagarm, de toestand waarin de plaat verkeert, de hoeveelheid stof in de lucht, of het om een mono- of stereonaald gaat, en uit wat voor materiaal de punt bestaat — dit alles beïnvloedt de levensduur van de naald.

Wanneer bovengenoemde omstandigheden niet teveel van het gemiddelde afwijken, dan kunt U ongeveer het volgend aantal speeluren van Uw naald verwachten:

Punt gemaakt van :	Aantal speeluren:
Saffier	40—60 uren
Diamant	400—600 uren



N.B. — Uw vaardigheid in het verkopen van naalden zal sterk toenemen naarmate U meer vertrouwd raakt met Uw TONAR catalogus en U meer ervaring krijgt in het aflezen van nummers van elementen, naalddtypen, enz. Wij raden U dan ook aan om telkens wanneer U daartoe in de gelegenheid bent te oefenen door de arm van de grammofooninstallaties die U in de zaak heeft staan op te tillen en het merk en nummer van het element af te lezen. Raadpleeg daarna Uw TONAR catalogus en identificeer de gebruikte naald. Op deze manier zult U snel de 'naalden-expert' in Uw omgeving worden, hetgeen niet alleen Uw verkoop van naalden ten goede zal komen, maar door de wijdere klantenkring die U aantrekt zult U ook een grotere omzet kunnen bereiken in Uw andere artikelen.

INFORMATIE OVER CODERINGEN OP VERPAKKINGEN

In onderstaand lijstje vindt u alle gebruikte coderingen die op de verpakkingen van onze naalden kunnen voorkomen.

CODE OP VERPAKKING	OMSCHRIJVING
SS	SAFFIER STEREO
SN	SAFFIER NORMAAL (78 TOEREN)
DS	DIAMANT STEREO
DN	DIAMANT NORMAAL (78 TOEREN)
DE	DIAMANT ELLIPTISCH (BI-RADIAAL)
HYPEL	DIAMANT HYPER ELLIPTISCH (BI-RADIAAL)
ES	DIAMANT LINE CONTACT
SHIBA	DIAMANT SHIBATA GESLEPEN
D-SAS	DIAMANT NAKED BLOCK D-SAS GESLEPEN

Een aantal typen naalden die in onze verpakkingen voorkomen zijn feitelijk originele naalden (gefabriceerd door de fabriek die deze ook heeft ontworpen).

Deze naalden zijn herkenbaar aan de coderingen.

CODE OP VERPAKKING	OMSCHRIJVING
DS-OR	DIAMANT STEREO ORIGINEEL
DE-OR	DIAMANT ELLIPTISCH ORIGINEEL
SHIBA-OR	DIAMANT SHIBATA CUT ORIGINEEL

Voor de kristal en keramische elementen werden vroeger naalden gebruikt die omkeerbaar waren. Aan de ene kant zat dan een stereo naald en aan de andere een 78-toeren naald. Later, toen de 78-toeren platen schaars werden, ontstond de vraag om in plaats van de 78-toeren punt een stereo punt te monteren. Aangezien dit voor de fabriek geen extra kosten met zich meebracht, ontstonden de 'dubbel-stereo naalden'. De populaire typen van dit soort naalden worden nu standaard in 'dubbel-stereo' geleverd, en op speciaal verzoek met een 78-toeren punt. De minder populaire typen worden uitsluitend met 78-toeren en stereopunt geleverd.

CODE OP VERPAKKING	OMSCHRIJVING
SN/SS	SAFFIER NORMAAL (78 TOEREN) / SAFFIER STEREO
SS/SS	SAFFIER STEREO / SAFFIER STEREO
SN/DS	SAFFIER NORMAAL (78 TOEREN) / DIAMANT STEREO
SS/DS	SAFFIER STEREO / DIAMANT STEREO

Ons leveringsprogramma is in een aantal artikelengroepen onderverdeeld. Aan de hand van het artikelnummer kunt U direct zien in welke groep het betreffende artikel valt.

ARTIKEL NO.	ARTIKEL GROEP	OMSCHRIJVING
1 - 1999	0 OF 1	TONAR DIAMANTEN NAALDEN
6000 - 6999	0 OF 1	TONAR DIAMANTEN NAALDEN
2000 - 2999	2	PICK-UP ELEMENTEN
9100 - 9999	2	PICK-UP ELEMENTEN
3000 - 5999	3	ACCESSOIRES EN OVERIGE ONDERDELEN

In onze catalogus hebben wij veel originele naalden met hun nummers opgenomen om het vinden van de naald voor U gemakkelijk te maken. Ons totale programma originele naalden is echter veel groter en hiervoor verschijnt regelmatig een speciale lijst met het complete leveringsprogramma en de prijzen.

Tonar replacement types for: ACOS

GP-19	GP-29	GP-33	GP-37	GP-59	GP-65; GP-67	GP-71/3	GP-73/1; 73/3
8	3	7	2	1	5	6	4
GP-79	GP-81	GP-91	GP-91-1-2-3 SC	GP-93-94	GP-95-96	GP-104	GP-104
307	9	246	353	364	377	392	455
POWER POINT	M-6	M-6 E	M-6 E/X	M-7	M-7 E		
339	632 white	633 red	634 yellow	756 red	756 DE yellow		

Tonar replacement types for: ACUTEX

M-106	M-110 E	206 II	207 II	310 III	312 III	315 III	320 III
6201 white	6202 DE dark red	6215 white	6216 dark grey	6217 orange	6218 red	6219 blue	6220 black

Tonar replacement types for: A.D.C.

R-7 E	R-9 E	R-1; R-10 I; I Mark II	R-12 E	R-15 E 10 E Mark IV	R-20; 220	R-20 X; 220 X	R-20 XE 220 XE
R-25; 25	R-251; 25	R-253; 25	R-26; 26	R-27; 27	R-3; R-30 3; 3 Mark II	R-50 XE 550 XE	R-60 XE
R-90 XE	660	770	R-778 78 r.p.m.	K-series	R-K 3 E	R-K 7 E	R-K 8 E
P-series	Q-series	R-LM-1; R-ML-1	R-LMA-1; LMA-1 accutrack	R-LMA-3; LME-3 accutrack +6	QLM-30 MK II	QLM-30 MK III	QLM-32 MK II
R-SQ-32 QLM-32 MK III	R-SQ-33 QLM-33 MK III	R-SQ-34 QLM-34 MK III	R-QLM-36 QLM-36 MK II	R-Q-36 QLM-36 MK III	VLM	R-VL VLM MK II	R-SV VLM MK III
XLM	R-XL XLM	R-ZD XLM MK II	R-ZL SUPER XLM MK II	R-SX; XLM MK III XLM MK 3 impr.	R-YX YX MK III	R-X-4 XL-400	R-XT II XT series II

CONTINUED



diamond styli

Tonar replacement types for: A.D.C.

CONTINUED

R-Z 10 ZL-1000	R-SZ; ZLM ZLM improved	R-78, 78-RPM for: K;P;Q;QLM;XLM;VLM	R-L-3; L-3	R-L-4; L-4	R-L-5; L-5	R-Q-3; Q-3	R-Q-4; Q-4
1634 black	1234 black	1236 red 78 r.p.m!	1251 blue	1400 blue	1435 red	1385 blue	1401 red
R-S1 phase I Digital ser. 1	R-S2 phase II Digital ser. 2	R-S3 phase III Digital ser. 3	R-S4 phase IV Digital ser. 4	R-XM 1 INTEGRA XLM-1	R-XM 2 INTEGRA XLM 2	R-XM 3 INTEGRA XLM 3	R-SA ASTRION
1413 grey	1414 black	1415 black	1416 black	1800 black	1801 black	1802 black	1787 tr. clear
R-SX 5; SX-5	R-SX 5 E SX-5 E	R-PSX-10 PSX-10	R-PSX-20 PSX-20	R-PSX-30 PSX-30	R-PSX-40 PSX-40	R-TRX-1 TRX-1	R-TRX-2 TRX-2
6150 black	6150 DE blue	1386 blue	1417 red	1418 white	1419 tr. blue	1430 gold	1431 gold
R-DC 90 S DC-90 S	R-XT III XT series III	R-XT IV XT series IV					
1670 grey	1803 black	1804 black					

Tonar replacement types for: ADMIRAL

409 B 19-8							
10 							

Tonar replacement types for: AIMOR

532 red							
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Tonar replacement types for: AIWA

AN-1 A	AN-2	STYLUS 5	AN-5; RN-5	AN-6	AN-7	AN-10	AN-F 10
813 red	6156 black	1319 black	832 red	757 green	831 yellow	6148 grey	6208 blue
AN-11	AN-20	AN-30	M-32	AN-35	AN-36	AN-87-43	AN-87-45
6263 1.grey	980 red	6014 blue	660 green	813 red	822 white	691 orange	753 black
AN-50	AN-60	AN-70	AN-71	AN-77 DY	AN-5080	AN-110	AN-501 C
957 black	953 white	935 black	758 black	6156 black	6344	6036 black	813 red

Tonar replacement types for: AKAI

APN-2	RS-3 J	APN-4	APN-5 CN-2398	Stylus 5;LMB-5	RS-5; SMB-5	RS-7; PC-7	RS-10; PC-10
571 white	889 black	323 ES 4-channel	677 yellow	1319 black	1319 black	982 black	6161 black
Stylus 12 LMB-12	RS-33; PC-33	RS-35; PC-35	RS-38	RS-41	RS-50; PC-50	RS-50E; PC-50E	RS-77
1318 black	6049 black	6049 black	753 black	1318 black	6152 black	6152 DE black	935 black
RS-82	RS-83	RS-84	RS-85; PC-85	RS-90; PC-90	RS-95; PC-95	RS-100; PC-100	RS-120; PC-120
990 green	897 brown	926 red	933 black	831 yellow	896 DE black	734 black	734 DE black
RS-150; PC-150	RS-180; PC-180	RS-200; PC-200	RS-65			ATN-3609 YL	CN-246
899 DE black	6142 DE black	1243 black	808 green	981 white	6166 yellow	6345 yellow	6353 grey
ATN-3606	APM-395	CN-254	APM-40; APM-70	MG-2721	APM-550	APM-600	PL-305
6237 grey	6260 MM blue	6366 black	6353 grey	6353 grey	6353 grey	6360 MM black	

Tonar replacement types for: A.K.G.

X2R; PU-2R	X3E; PU-3E	X-4; P-4; P-4 DP	X-4E; PU-4E	X-5ED; P-5 ED	X6R; P6R	X6E; P6E	X7E; P7E
551 beige	551 beige	1455 black	1180 black	1456 black	1294 red	1295 black	1296 tr.clear
X8E; P8E	X8S; P8ES	X-10 S P-10 ED; P-10 S	X-15 S P-15 MD; P-15 S	XD-20; P-20 MD REVOX	X-25 S / P-25 S X-25 MD-24/.35	X-8 ES P-8 ES Super Nova	X-10 ST P-10 ED STUDIO
6367 DE tr.clear	1298 tr.clear	1676 red	1677 blue	1677 black	1678 black	1673 black	1675 red

Tonar replacement types for: ALLPHON

66	69	JEUNESSE	PC-1				
306 red	404 blue	425 black	369 black				

Tonar replacement types for: AMSTRAD

	T-30 MS T-30 MD		TS-51/55	TM-77	N-900 C 900 C	N-900 D 900 D	N-900 EX 900 EX
980 red	948 blue	6016 blue	6172 red	6175 red	725 .6 mil orange	6256 .5 mil grey	725 DE yellow

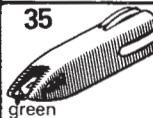
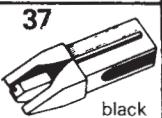
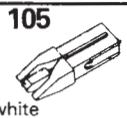
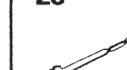
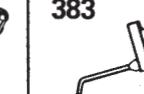
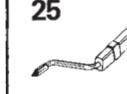
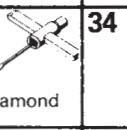
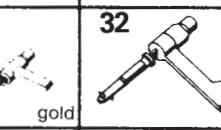
Tonar replacement types for: **ANDANTE**

P-38	P-76						
6270 black	6272 DE tr. clear						

Tonar replacement types for: **A + R / CAMBRIDGE**

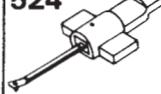
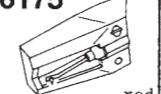
P-77	P-78						
789 red	789 ES brown						

Tonar replacement types for: **ASTATIC**

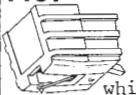
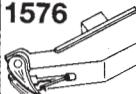
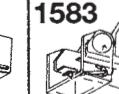
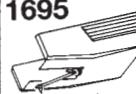
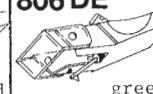
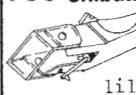
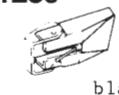
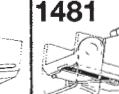
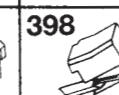
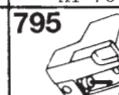
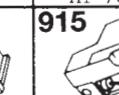
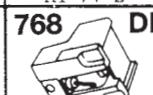
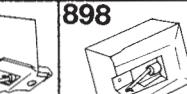
13 T  green	81-T  black	91-T  white	N-7 	N-8 	N-14/215 	N-17; 207 	N-19; 223 
N-29; G	N-30; 55; GCD	N-31; K	N-34; Q	N-35; R	N-36; L; T	N-37; U	N-38; 57; GC
24 	29 	26 	22 	383 	25 	36 	30 
N-39; A	N-41; N 42; 17-D	N-43; 15-D	N-45; 45-D	N-50; N-51; 133	N-52; N-53	N-54; N-55	N-56
23 	31 	33 black for sapphire red for diamond	34  gold	32 	39 	40 	41 
N-60	N-64	N-72	N-74	N-76	N-79	N-81	N-83
38 	248 	354 	289 	290 	312 	313 	314 
N-85	N-89/205	N-687	81T; 89T	81T; 89T			
355 	470 	271 	6464 red	6465 DN green 78 RPM			

Tonar replacement types for: **AUDIO EMPIRE, See: EMPIRE SCIENTIFIC**

Tonar replacement types for: **AUDIO SONIC**

456  blue	651  MM black/white	524 	734  black	6175  red			
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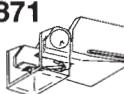
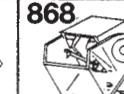
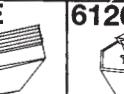
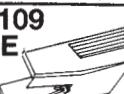
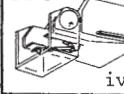
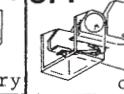
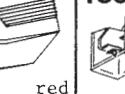
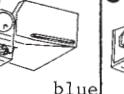
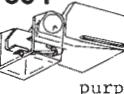
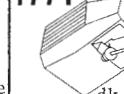
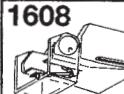
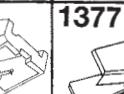
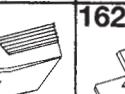
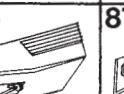
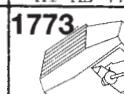
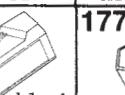
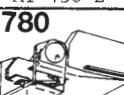
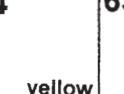
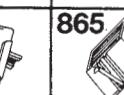
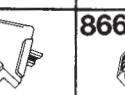
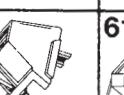
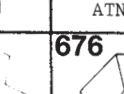
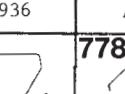
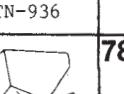
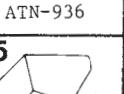
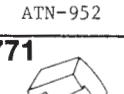
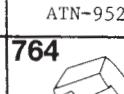
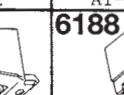
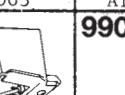
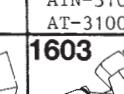
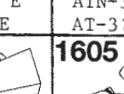
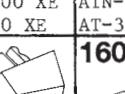
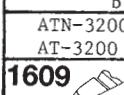
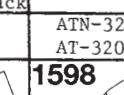
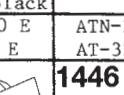
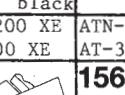
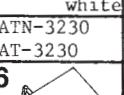
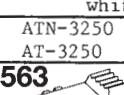
Tonar replacement types for: **AUDIO TECHNICA**

ATP-1	ATX-1	ATP-2	AT-3	ATP-3	AT-VM-3	ATX-3E	AT-3-5 D
 1197 white	 1306 red/grey	 1198 white/blue	 780 white	 1199 white/red	 671 yellow	 1307 blue/grey	 6270 yellow
ATN-UL 3 AT-UL 3	AT-4-7 D	AT-4-7 D	ATP-N 4 ATP-4	ATP-N 5 ATP-5	ATX-5 E	AT-6	ATP-N 6 ATP-6
 1576 orange	 6236 black MM	 6280 orange MM	 1582 red	 1583 blue	 1308 bronze/grey	 296 white	 1584 caramel
ATP-N 8 EP	ATP-N2	ATN-DS3 YL	ATN-DS3	ATN-DS7	ATN-G5		ATS-12 C
 1695 1.blue	 6870 yellow	 6872 black	 6874 black	 6876 black	 6878 red		 1840 brown
ATP-N 7	AT-7	VM-8 7D MG-35 V	AT-10	AT-11	AT-11 E	AT-11 S	ATX-11
 1694 red	 729 black	 571 white	 568 red	 677 yellow	 741 DE green	 894 white	 847 grey
AT-12 E	AT-12 S	AT-12 Sa	AT-12 XE	AT-13 E	AT-13 Ea	AT-13 Ea/X	AT-14 S
 748 DE blue	 620 shibata ivory	 782 shibata white	 781 DE l.brown	 783 DE orange	 794 DE orange/red	 806 DE green	 619 ES red
AT-14 Sa	AT-15 S AT-15 Sa	AT-15 SS	AT-15 XE	AT-20 SL AT-20 SLa	AT-20 SS	AT-21	AT-22; 23a
 796 shibata lilac	 1239 black	 1239 black	 709 DE black	 1240 black	 398 DE grey	 1269 silver	
AT-24	AT-25	AT-30	AT-30 E	AT-30 HE	AT-31 E	AT-33; AT-35	AT-VM 35
 1241 silver	 1241 silver	 1243 black	 1243 silver	 1481 grey	 1378 blue	 1220 yellow	 572 red
ATN-E 50	AT-51; 52; 53	AT-51 E; 52 E AT-53 E	AT-55	AT-55 XE	AT-57 XE	AT-59 XE	ATN-61 AT-61
 1687 met.green	 904 black	 904 DE black	 542 white	 904 DE black	 904 DE black	 904 DE black	 1585 grey
ATN-61 E AT-61 E	ATN-61 XE AT-61 XE	AT-66	ATN-70 AT-70	ATN-70 L AT-70 L	ATN-E 70	ATN-71 AT-71	ATN-71 E AT-71 E
 1586 grey/grey	 1590 grey	 398 IM grey	 795 red	 915 white	 1688 met.blue	 758 yellow	 768 DE green
ATN-72 AT-72	ATN-72 E AT-72 E	ATN-90 AT-90	ATN-E 90 AT-E 90	ATN-91 AT-91	ATN-93 AT-93	ATN-95 E AT-95 E	ATN-101 P AT-101 P
 895 brown	 760 DE blue	 6182 grey	 1776 met.red	 974 yellow	 898 yellow	 6127 DE green	 6126 yellow
ATN-101 EP AT-101 EP	ATN-102 P AT-102 P	ATN-102 EP AT-102 EP					
 6189 DE green	 927 grey	 986 DE green					

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Tonar replacement types for: AUDIO TECHNICA

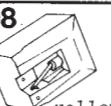
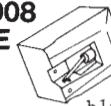
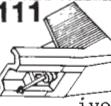
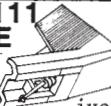
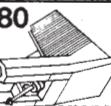
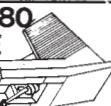
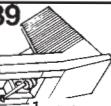
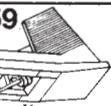
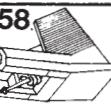
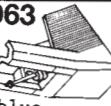
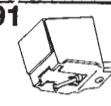
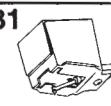
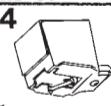
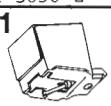
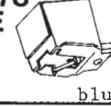
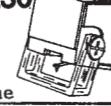
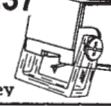
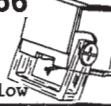
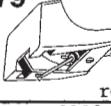
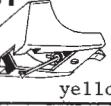
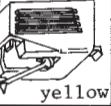
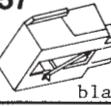
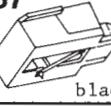
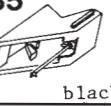
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AT-103 soundurger	ATN-105 AT-105	ATN-110 E AT-110 E	ATN-112 EP AT-112 EP	ATN-115 E AT-115 E	ATN-120 E AT-120 E	ATN-122 EP AT-122 EP	ATN-122 LP AT-122 LP
 871 red	 867 yellow	 868 blue	 979 DE blue	 6120 DE smoke grey	 6891 DE caramel	 6109 DE brown	 6110 ES ivory
ATN-125 LC AT-125 LC	ATN-130 E AT-130 E	ATN-132 EP AT-132 EP	ATN-135 E AT-135 E	ATN-140 LC AT-140 LC	ATN-140 ML AT-140 ML	ATN-ML 140	ATN-142 LP AT-142 LP
 870 ivory	 871 orange	 1376 red	 1594 blue	 872 burgundy	 1604 purple	 1771 met. dk. blue	 1596 blue
ATN-150 E AT-150 E	ATN-ML 150	ATN-152 LP AT-152 LP	ATN-152 MLP AT-152 MLP	ATN-155 LC AT-155 LC	ATN-160 ML AT-160 ML	ATN-ML 170 AT-ML 170	ATN-ML 180 AT-ML 180
 1608 black	 1772 met. dk. grey	 1377 black	 1624 brown	 873 black	 1480 dk. brown	 1773 beige	 1774 silver
ATN-201 P AT-201 P	ATN-201 EP AT-201 EP	ATN-211 EP AT-211 EP	ATN-216 EP AT-216 EP	ATN-221 EP AT-221 EP	ATN-231 LP AT-231 LP	ATN-261 AT-261	ATN-113
 1587 grey black	 1588 grey ivory	 1589 grey orange	 1590 grey caramel	 1591 grey yellow	 1592 grey blue	 1693 red/red	 6348 orange
ATN-312 EP AT-312 EP	ATN-312 HEP AT-312 HEP	ATN-312 PBK AT-312 PBK	ATN-420 E AT-420 E	ATN-422 EP AT-422 EP	ATN-430 E AT-430 E	ATN-432 EP AT-432 EP	
 1409 grey orange	 1593 grey red	 1407 black green	 1778 caramel	 1779 caramel	 1780 orange	 1781 orange	
AT-100 E	AT-150 MLX	AT-440 MLa	ATN-360	ATN-361	ATN-362		
 6897 red	 1949 black	 6838 purple	 6394 yellow	 6395 green	 6396 blue		
ATN-750	ATN-750	ATN-750	ATN-750	ATN-770			
 864 grey	 903 blue	 865 orange	 866 black	 6181 red			
ATN-770 L	ATN-771	ATN-936	ATN-936	ATN-936	ATN-952	ATN-952	AT-892
 850 grey	 828 yellow	 676 white	 778 orange	 785 black	 771 black	 764 orange	 928 black
ATN-2001 AT-2001	ATN-2002 AT-2002	ATN-2003 AT-2003	ATN-2004 AT-2004	ATN-2005 AT-2005	ATN-3050 AT-3050	ATN-3070 AT-3070	
 6048 violet	 6178 blue	 6188 blue	 990 green	 981 ivory white	 1691 yellow	 1692 red	
ATN-3100 AT-3100	ATN-3100 E AT-3100 E	ATN-3100 XE AT-3100 XE	ATN-3100 XE/II AT-3100 XE/II	ATN-3150 AT-3150	ATN-3150 E AT-3150 E		
 1372 black	 1603 black	 1605 black	 1607 blue	 1614 white	 1615 white		
ATN-3200 AT-3200	ATN-3200 E AT-3200 E	ATN-3200 XE AT-3200 XE	ATN-3200 XE/II AT-3200 XE/II	ATN-3230 AT-3230	ATN-3250 AT-3250	ATN-3250 E AT-3250 E	
 1609 black	 1598 black	 1446 black	 1562 grey	 976 black	 1563 ivory	 1595 ivory	

CONTINUED

Tonar replacement types for: AUDIO TECHNICA

CONTINUED

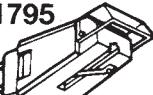
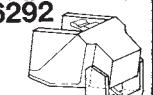
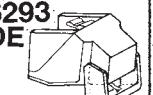
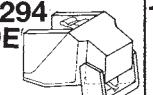
ATN-3400 AT-3400	ATN-3400 C AT-3400 C	ATN-3401 AT-3401	ATN-3410 AT-3410	ATN-3450 AT-3450	ATN-3450 C AT-3450 C	ATN-3450 L AT-3450 L	ATN-3451 AT-3451
832  red	6186  dk. grey	851  grey	898  yellow	832  red	6186  dk. grey	851  grey	898  yellow
ATN-3451 E AT-3451 E	ATN-3452 E AT-3452 E						
6127 DE  green	6008 DE  blue	925  tr.violet					
ATN-3472 P AT-3472 P	ATN-3472 EP AT-3472 EP	ATN-3482 P AT-3482 P	ATN-3492 P AT-3492 P	ATN-3492 EP AT-3492 EP			
6111  ivory	6111 DE  ivory	6126  yellow	6180  orange	6180 DE  orange	6189  1.green	6159  dk.green	6158  dk.blue
6154  red	6063  1.blue						
ATN-3600 AT-3600	ATN-3600 C AT-3600 C	ATN-3600 L AT-3600 L	ATN-3601 AT-3601	ATN-3626 AT-3626	ATN-3650 AT-3650	ATN-3650 C AT-3650 C	ATN-3650 L AT-3650 L
917  red	991  dk.grey	981  ivory	974  yellow	981  ivory	917  red	991  dk.grey	981  ivory
ATN-3651 AT-3651	ATN-3651 E AT-3651 E	ATN-3652 AT-3652	ATN-3652 E AT-3652 E				
974  yellow	6179 DE  green	6187  brown	6178 DE  blue	6193  turquoise	6048  dk.violet		
ATN-3660 YL	ATN-3663	AT-1059	AT-3609 GY	AT-3651 F	AT-3609 YL		
6203  yellow	6315  yellow	6230  blue	6237  grey	6166  yellow	6345  yellow	6334  black	
ATN-3710 AT-3710	ATN-3710 L AT-3710 L	ATN-3711 AT-3711	ATN-3711 E AT-3711 E	ATN-3712 AT-3712	ATN-3712 E AT-3712 E	ATN-3721 AT-3721	
879  red	942  ivory	831  yellow	922 DE  green	849  brown	848 DE  blue	900  yellow	
ATN-3830 AT-3830	ATN-3831 AT-3831	ATN-3851 AT-3851					
957  black	957  black	935  black					
AT-91 78 RPM	AT-3400 78 RPM	AT-3472 78 RPM	AT-95 78 RPM				
6378 DN  yellow	6439 DN  yellow	6436 DN  yellow	6439 DN  yellow				

Tonar replacement types for: AUREX, See: TOSHIBA

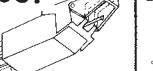
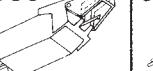
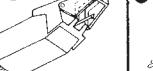
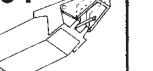
Tonar replacement types for: AVNET

ATN-3626							
981  l. grey							

Tonar replacement types for: AZDEN

GM-1 E	YM-10 C	YM-10 E	YM-10 VE	YM-P-20 E	YM-P-50 C	YMP-50 E	YMP-50 VL
 gold	 violet	 black	 purple	 blue	 clear	 tr. blue	 tr. red

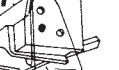
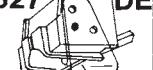
Tonar replacement types for: BANG & OLUFSEN

B & O	PROFESSIONAL	350 R; 72	SP-I; SP-II	SP-6/7	SP-6/7	SP-8/9	SP-8/9
42 	43 	44 	45  red	315  stylus only	340  complete	315  DE	340  DE
SP-10	SP-12	SP-14	MMC-1	MMC-2	MMC-3	MMC-4	MMC-5
843  naked diamond	844 DE  naked elliptical	845 	9355  black	9357  black	9359  black	9334  black	9334  black
MMC-10 E (MMC-20 S)	MMC-20 S (MMC-3000)	MMC-20 E (MMC-4000)	MMC-20 EN (MMC-5000)	MMC-20 CL (MMC-6000)			
9248  nickle	9248  nickle	9248  nickle	9363  nickle	9365  nickle			

Tonar replacement types for: BARCO

753  black							
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Tonar replacement types for: BELLEX

BX-50	BX-50 E						
827  blue	827 DE  red						

Tonar replacement types for: BLAUPUNKT

EM-240	P-60	305 M	ATN-3100	CN-5431		GP-330	
757  tr. green	651  MM black/white	382  blue	1372  black	832  red	974  yellow	994  black	

Tonar replacement types for: BOHLAND AND FUCHS, See: SUPRAPHON



diamond styli

Tonar replacement types for: **BRANDT**

				FF-15 O MK II	QLM-30 MK III	L-3	L-4
904 DE	935	758	917	802	1229	1251	1400
black	black	yellow	red	red	grey	blue	blue

Tonar replacement types for: **BRAUN**

MAG 1 E	MC-1 E MC-2 E	MAG 2 E					
776 DE	1243	1445					
black	black	black					

Tonar replacement types for: **B.S.R.**

ST-3; ST-4	ST-5; ST-6; ST-7	ST-8; ST-9	ST-10	ST-12/14/15	ST-16/17	ST-19; ST-22	ST-20/21
ST-3; ST-4	ST-5; ST-6; ST-7	ST-8; ST-9	ST-10	ST-12/14/15	ST-16/17	ST-19; ST-22	ST-20/21
TC 4	TC 8	TC 8 STEREO	TC 12	ST-23		S-1; SN-1	ATN-3600 L
TC 4	TC 8	TC 8 STEREO	TC 12	ST-23	red	red	grey

Tonar replacement types for: **BYNATONE**

948	934						

Tonar replacement types for: **CAMBRIDGE, See: A + R / CAMBRIDGE**

Tonar replacement types for: **C.E.C.**

RS-3	MC-5	MC-6 S	MC-7	MC-8	MC-10	MC-11	MC-16
tr. green	grey	white	black	red	black	red	black
MC-17	MC-20	MC-45	ST-630	ATN-750		MC-20 ES	N-103
black	red	red	clear	IM black	white	black	black

Tonar replacement types for: **CLEAN**

CM-500							
444  white							

Tonar replacement types for: **CLIFTON**

clifton	CLIFTON						
1108  black	565  lilac						

Tonar replacement types for: **COBRA**

250	520						
920  white	920  white						

Tonar replacement types for: **COLLARO**

PX	STUDIO						
52 	53 						

Tonar replacement types for: **COMPASS**

ATX-1	ATX-3 E	ATX-5 E					
1306  red/grey	1307  blue/grey	1308  bronze/grey					

Tonar replacement types for: **CONER**

RCS STEREO	RCQ MONO	TESTINA RC-1	R-608 RCS				
524  black	366 	6070  copper	6191  red				



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Tonar replacement types for: CONNOISSEUR

SCU-1								
358 								

Tonar replacement types for: CONVER

B-60-100	STEREO							
394 	252 							

Tonar replacement types for: CORAL

V-7000; V-30 D	555-5	666 EX						
399 white	334 black	6005 DE white						

Tonar replacement types for: COSMO

COSMO	COSMOS G 62-30 M 23	G 62-30 M 23						
252 	394 	563 short tube						

Tonar replacement types for: CONTINENTAL EDISON

758 yellow	832 red	781DE brown	885 clear	935 black	524 black			



diamond styli

Tonar replacement types for: **CROWN**

DT-36			ST-21 D; SHC-6100				
813	801	6175	556				

Tonar replacement types for: **CYBERNET**

573	822	832					
yellow	white	red					

Tonar replacement types for: **DAEWOO**

974	6175	6240					
yellow	all plastic	dark blue					

Tonar replacement types for: **DARLING**

M-22	ATN-3660 YL		DL-32 E	ATN-3663			
6242	6203	6175	974	6315			

Tonar replacement types for: **DECCA**

H	XMS	FF SS	DERAM				
56	55	1326*	6006				

* = Naaldremplacering voor deze elementen zijn alleen leverbaar na inlevering van het oude element.

Replacement needles for these cartridges are only available when the old cartridge is returned to us.

Tonar replacement types for: **DENON, See: JAPAN COLUMBIA**

Tonar replacement types for: **DIATONE, See: MITSUBISHI**

Tonar replacement types for: **DIGITRACK (BY: ORTOFON)**

25 S	25 SP	50 E	50 EP	DIG 280 E	DIG 380 NE	DIG 450 SE	S
1740 black	1741 black	1743 black	1742 black	1649 black	1650 black	1651 black	1805 black

Tonar replacement types for: DREHER + KAUF

101							
1093  black							

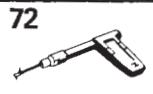
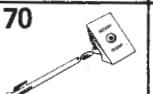
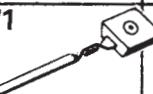
Tonar replacement types for: DUAL

CDS-1	DN-1	CDS-2/3	DN-3	DN-4	DN-5;55;56 CDS-630	DN-6;62;63;64	DN-8
57 	59 	58 	60  blue	61  brown	253  green	443 	443 
DN-22	DN-23; 43	DN-24	DN-26; 45	DN-32	DN-34	DN-65	DN-70 CDS-700
236  red	66  gold	62  silver	63  red	64  red	65  silver	443 	504 
M-75 type D M-71 MB-D	M-73 M-G M-75 M-G	DN-85	DN-90; 95 DN-96	DN-110 MCC-110	DN-120 MCC-120	DN-140 S ULM-40 S	DN-145 S ULM-45 S
387  beige	386  grey	443 	67  red	1313  black	1374  grey	911  black	970  black
DN-145 E ULM/TKS 45E	DN-149 S TKS-49 S	DN-150 E ULM/TKS 50E	DN-152 E TKS-52 E	DN-155 E ULM/TKS 55E	DN-160 E ULM/TKS 60E	DN-165 E ULM-65 E	DN-166 E ULM-66 E
970  DE	6030  black	1286  black	6030  DE black	6033  DE black	6034  DE black	1405  DE black	1406  black
DN-201 DMS-200	DN-202 DMS-200	DN-211 DMS-210	DN-212 DMS-210	DN-221 DMS-220	DN-222 DMS-220	DN-235 DMS-235	DN-236 TKS/DMS 236/238
1012  red	1285  DN 78 R.P.M.	732  black	1411  DN 78 R.P.M.	820  red	1328  78 R.P.M.	981  white	6045  black
DN-237 TKS-237	DN-239 DMS-239	DN-241 DMS-240 E	DN-242 DMS-242 E	DN-301; 302 SP-1	DN-305; 306 M-44 MG	DN-311 V-15 D/AC	DN-314; DN-315 V-15 PD/1
969  black	981  white	1183  orange/brown	821DE  green	45  red	267-7  white	465  grey	275  black
DN-320	DN-325	DN-330 M-91 MG-D	DN-340 DM-101 M-G	DN-345 DM-103 M-E	DN-350 M-20 E	DN-352 V-15 III LM	DN-353 FF-15 MK II D
386  grey	387  beige	401  grey	615  red	623  yellow	1036  DE black	584  DE black	1181  red
DN-360 M-95 G-LM	DN-362 D-105 ED	DN-380 E TKS-380 E	DN-390 E TKS-390 E	DN-450 MMP-450	CDS-660; 661 CDS-650; 651	CDS-670; 671	DN-20 NE OMB-20
678  grey	762  DE black	537DE  black	6046DE  black	6049  black	443 	443 	1631  black
N-20 EO F-20 EO	DN-105 soundburger	DN-167	DN-411	MMD-340	MMD-345	MMD-360 E	DN-245 DMS-245
1546  black	1529  black	1558  DN black	1549  black	2473 *  black	2474 *  black	2475 *  black	1630  black
DN-249 E	DN-251 S	DN-251 E	DN-163 E	DN-166E; DN-168E	DN-34 MMD-340; MMD-345		
1736  black	1829  black	1831  black	1405  black	1406  black	1902  black		

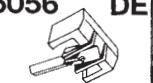
Tonar replacement types for: **EAGLE**

P 750 E							
734 DE  black							

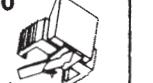
Tonar replacement types for: **EDEN**

CLARVILLE	OLD MODEL	STEREO	59	62			
72 	68 	70 	69 	71 			

Tonar replacement types for: **E.E.I.**

EEI-300 H	EEI-400	EEI-500	EEI-700	EEI-800			
6056  naked diamond green	6056 DE  green	6056 ES  yellow	6057 ES  black naked diamond	6162 ES  tr. red			

Tonar replacement types for: **ELAC**

DM-240	DM-410	KST-2	MST-2	SM-101	SM-103	SM-107; SM-110	SN-11
341 	561 	75 	87 	77  stereo	79  stereo	82 	569  single tip
SN-12	SNM-9; SMM-9	SNM-14	SNM-100	SNM-102	SNM-104	SNM-106; 112; 406; KST-112	SNM-402
74 	73 	81 	76 stereo/ standard 	78 stereo/ standard 	80  stereo/ standard	84 	86 stereo/ standard 
STS-210	STS 244-C D 244-C	STS 244-17 D 244-17	STS-322 STS-310	STS 344 D 344	STS 444 D 444	STS 144-17 D 144-17	STS 155-17 D 155-17
83 	427 grey 	428 grey red dot 	85 	429 white 	430 black 	745 green 	750 black 
STS 255-17 D 255-17	STS 355-17 D 355-17	STS 455-12 D 455-12	STS 455-E D 455-E	STS 555-12 D 555-12	STS 555-E D 555-E	STS 655 D-4 D 655 D-4	ESG-792 E DN-792 E
751 green/black 	752 red/black 	6384 gold/black 	6384 DE gold/black 	6385 gold/green 	6385 DE gold/green 	6386 SHIBA 	6041 DE black 
ESG-793 (E) DN-793 E	ESG-794 (E) DN-794 E	ESG-795 (E) DN-795 E	KST-115	DN-796 H shibata	D-155 S	DN-791	D-355 S
6377 black 	1382 black 	6370 DE black 	82 	6419 blue gold 	1702 black white 	6375 silver black 	1704 black white 



diamond styli

Tonar replacement types for: **ELECTRONIC REPRODUCERS**

ERC-2 SB	ERC-2 SX	ER-5 MX	ER-5 MX 1	ER-5 SB	ERC-5 MB	ER-60	ER-312 X
437 450 M	437 ERC-750	89 ERC-800	211 single tip ERC-900	90 ERC compat C	437 ERC-750	88 ERC-800	891 black ERC-900
725 red	148	148	6205	437			

Tonar replacement types for: **ELECTRO VOICE**

10; 14; 34; 4130	16; 16 TT	21	26	31; 2606	37; 72; 2614	37; 38; 47; 72 2626	47; 2614; 2615
91	92	93	94	95	98 Plastic	343	287
51	56	57; 2610	58; 2611	76	117; 131; 148 2616	122 to 125	32; 141; 149; 2617
103 red	104 blue	96	97	105 white	99	100	101 Metal
147; 2621	169; 2622	2630; 5015	2632; 5018	2634; 5051	2636; 5080	2637; 5076	2638; 5081
102	237	407	418	408	459	431	432
2639; 5082	2640; 5078	2641; 5083	2647	2660	5000	EV 194; 2623	EV 198/199; 2624
433	434	460	525	571	342	254	255
2649; 5600 D	2671 D 6012 D	81 D					
532 red	572 red	35					

Tonar replacement types for: **E.M.I.**

MULTIPLAY	RS 3						
106	107						

Tonar replacement types for: EMPIRE SCIENTIFIC (AUDIO EMPIRE)

SBC-1	SC-1	SE-1	S-3 D	EDR-7	EDR-9	EXL-10	10 PK
1346 yellow	6072 black	6072 DE black	6297 l. grey	1460 black	1219 black	1208 red	1721 black
10 PE	15-C	MC +2G	25 E	S-40	S-45 E	66/X	66 E/X
1722 black	6311 black	1463 DE gold	6312 DE blue	6298 yellow	6299 DE yellow	626 red	627 DE black
66 QE/X	80 EE	88	90 EE/X	100 S	SBC-100	S-105	108; 108 P
1072 purple	365 DE black	249 black	1021 orange	968 tr. yellow	1723 black	6300 DE IM	250 white
S-111	140 C	150 C	150 KC	190 LT	195 LT	200 E	SBC-200
6221 tr. clear	6302 blue	6072 black	6313 black	1461 clear	6304 tr. yellow	968 DE tr. blue	1717 clear
S-205	S-245 E	S-250 E	S-250 KE	S-290 LT	S-295 LT	S-300 ME	S-300 ELT
6301 IM white white	6303 DE yellow yellow	6072 DE black black	6314 DE blue blue	1462 tr. blue	6305 DE tr. blue tr. blue	1342 tr. brown brown	6309 DE red red
S-333	S-390 LT	S-395 LT	S-400 TC	S-440 D	S-485 LT	S-500 ID	S-500 PEX
6222 tr. blue blue	1462 blue blue	6306 DE smoke smoke	1343 tr. red red	1075 blue blue	6307 DE tr. red tr. red	1344 tr. purple purple	6310 DE red red
S-580 LT	S-600 LAC	S-800 UFR	S-800 II		S-808	S-808 E	880 P; 880 PE
1466 gold gold	1345 black black	1466 gold gold	1457 black black	1338 green green	365 black black	365 DE black black	251 nickle/green nickle/green
888 series	S-900 II	S-900 Mark 2	S-900 GT	S-909 E/X	S-980 LT	S-999 /X	S-999 E/X
345 brown brown	1458 black black	1145 black black	1464 black black	1022 red red	1464 brown brown	1023 green green	1204 green
S-999 PE/X	S-999 SE/X	S-999 TE/X	S-999 VE	S-999 VE/X	S-1000 ZE/X	S-1000 GT	S-1000 GT II
1266 yellow yellow	1024 blue blue	1104 white white	346 purple purple	1025 purple purple	1026 black black	1465 black black	1459 black black
S-1000 Mark 2	S-1080 LT	S-1085 LT	S-2000	S-2000 E	S-2000 E/I	S-2000 E/II	S-2000 E/III
1309 blue blue	1465 met.red	6308 ES black black	856 smoke smoke	857 DE tr. red tr. red	859 DE green green	860 DE blue blue	667 DE clear clear
S-2000 T	S-2000 X	S-2000 Z	S-3000	S-4000 D/I	S-4000 D/II	S-4000 D/III	S-5000
947 silver silver	924 DE met.red met.red	793 DE gold gold	1460 black black	858 DE black black	861 DE yellow yellow	668 DE white white	1219 black black



diamond styli

Tonar replacement types for: **EUPHONICS**

E-1	U-1; J-13 HC	U-8/9	U-8 RB/U-9 RB	U-10/11	U-10 RB U-11 RB	U-12/13	U-15-2
108 	109 	110 	409 	111 	410 	112 	411
U-15/16	U-17/19						
256 	288 						

Tonar replacement types for: **EUROFUNK**

EF-85	EF-404	EF-505	EF-606	EF-707			
756 	756 	792 	792 DE 	792 ES 			

Tonar replacement types for: **EUROPHON**

148 	374 	524 	974 	734 	6191 	951 	
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Tonar replacement types for: **EXCEL**

ES-70 E	ES-70 EX	ES-70 EX-4	ES-70 F	ES-70 S	ES-70 H	QD-700 CR	QD-700 ER
528 	529 	530 	527 	526 	680 	608 	609
QD-700 XR	QD-700 FR	ME-35	ME-45	ME-55	ME-65	ESP-300 C	ESP-300 E
610 	670 	632 	809 	837 	921 	6026 	6025
ESP-300 X	S-75 CR ME-75	S-700 DR ES-700 D	S-65 XR ME-65 X	S-75 QL	ES-750 L	MC-100 E	ESP-250
6025 	6184 	6185 	6231 	6232 	6275 	2521 	6261



diamond styli

Tonar replacement types for: EXPERT

EXPERT		popular	ellipse	disco	quadro	super	78 RPM needle for: DISCO and SUPER
555 green	738 black	555 green	555 DE black	728 blue	550 ES white	684 ES black	736 green
78 RPM needle for: popular ellipse and quadro							
737 green							

Tonar replacement types for: FIDELITY

		F	T-50 HS				
801 DS black	625 blue	442 5716 15	1093 black	6038 grey	6175 red		

Tonar replacement types for: FIDELITY RESEARCH

S-5	FR-5 E	FR-101	FR-6 SE				
1365 black	1366 black	1447 black	1467 black				

Tonar replacement types for: FISHER , See: SANYO

Tonar replacement types for: FISHER PRICE

power point	power point						
6277 green	6277 red						

Tonar replacement types for: FONICA

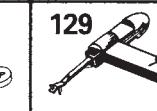
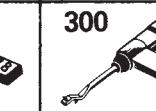
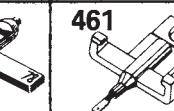
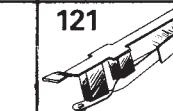
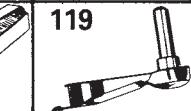
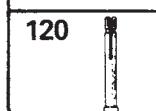
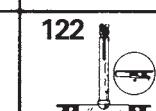
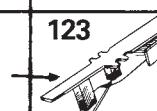
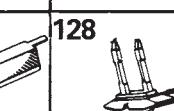
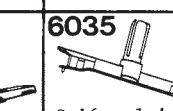
UF-50	UF-70						
299 red	6262 red						

Tonar replacement types for: FUJIYA AUDIO, See: N.E.C.

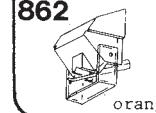
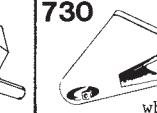
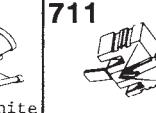
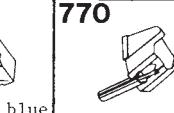
Tonar replacement types for: GARRARD

GC-2	GC-8	GC-12	GCM-21-22; GKM-22	GCM- 21 T-22 T; GCS-23 T; TS-1; TS-2-3	GCM-31; GSS-1; GCS-35/36	GCS-10
113 	116 	118 	436 	438 	435 GCS-38	117
GCS-23; GKS-25-26	GCS-38; GSS-2	KS-40 A	KS-41 B	KS-41 C	TOM-1	TOM-2
437 LP3	587 5327-B	462 	585 	586 	114 	115 830 blue
ATN-936	GS-22	GS-22 E	GC-11	GA-150	GSN-66 E gradiente	
676 white	904 black	904 DE black blue	6004 blue	831 yellow	1739 black	

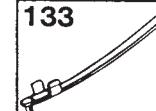
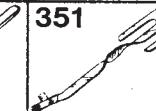
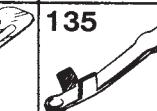
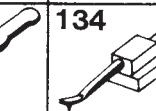
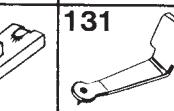
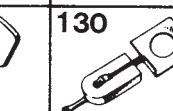
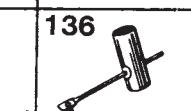
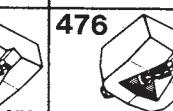
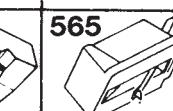
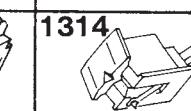
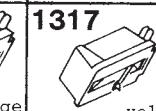
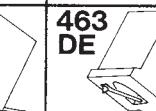
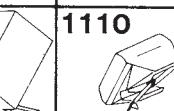
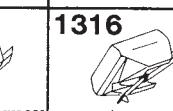
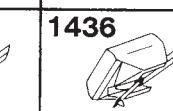
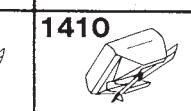
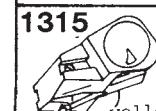
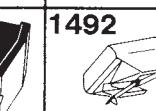
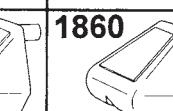
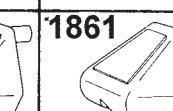
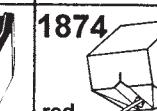
Tonar replacement types for: GENERAL ELECTRIC

C-100	C-200	C-500	C-650	C-660	GC-7	RPJ-047	RPX-040
							
RPX-047; 050	VR-II/G-15	VR-II; 4 G	VR-22	VR-1000-7	VR-II/G-16		
							
		G-15 only!			G-16 only!		

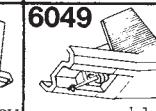
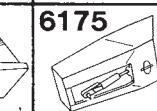
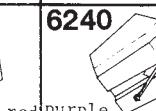
Tonar replacement types for: GLANZ

MG-20 R	MG-30 R	MG-50 R	MG-55 R	MG-70 R			
							
orange	red.	white	blue	red			

Tonar replacement types for: GOLDRING

MX 1/2	SX-10	CM-60; CS-80	CS-90; CS-91 E	200	500	580; 600	700
							
NG-2	NG-2 E	G-800	G-800 E	G-800 Super E	G-800 H	G-820	G-820 DJ
							
black	beige	white	grey	grey	red	lilac	DISCO DUTY red
G-820 E	G-820 SE	G-850	G-850 E	G-900 SE	G-900 IGC	G-910 IGC	G-920 IGC
							
beige	yellow	red		grey	tr. green	tr. orange	tr. purple
G-950	G-950 E	EPIC	G-900 SE MK II	1010; 1012GX	1020; 1022GX	1040; 1042	1006
							
yellow	grey		black	black	black	black	black
G-900 SR	EPIC DJ-E	ELECTRA	2100	2200	2300	2400	2500
			6816	6820	6822	6824	6826
tr. green	red		black	black	black	black	black

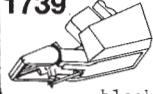
Tonar replacement types for: GOLDSTAR

							
yellow	black	red	purple	IM			

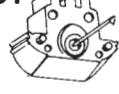
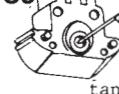
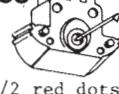
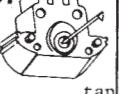
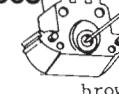
Tonar replacement types for: GRACE

F-8; F-21	F-9 L						
502  clear	1636  clear						

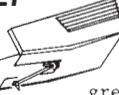
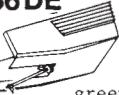
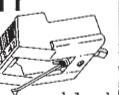
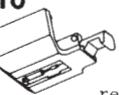
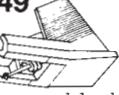
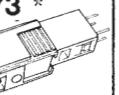
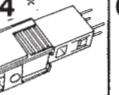
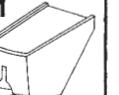
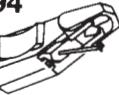
Tonar replacement types for: GRADIËNTE

GSN-66 EMC							
1739  black							

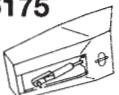
Tonar replacement types for: GRADO

B-SERIES	F-SERIES	FE-SERIES	MTE +/S	MTE +1/S	MF 3E +/S	MF 2 +/S	MF 1 +/S
468  grey	551 	1180  tan	1655  tan/2 red dots	1656  tan/2 silv.dots	1657  tan	1659  white dots	1661  tan/2 blue dots
M +/S	M 1 +/S	M 2 +/S	GTE +/S	black; green			
1663  brown	1665  brown/2 yellow dots	1667  brown/2 gold dots	1669  78 r.p.m.	551 DE			

Tonar replacement types for: GRUNDIG

P-24	ATN-102	ATN-102 EP	DN-235	DN-236	GP-500 MK II		
940  tr.orange	927  grey	986 DE  green	981  white	1311  black	534  black	758  yellow	768  green
		DN-239		MG-44 J	MMD-340	MMD-345	P-30 S
832  red	910  red	981  white	6049  black	6063 	2473 * 	2474 * 	6031 
MG-45	GP-330						
6063  red	994 						

Tonar replacement types for: HAITAI

					ATN-3651 F	3609 GY	
6175  red	974  yellow	6049  black	758  yellow	6164  orange	6166  yellow	6237  grey	

Tonar replacement types for: **HANDIC**

V-307							
769  blue							

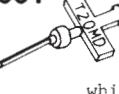
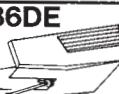
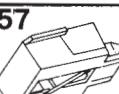
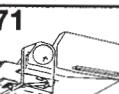
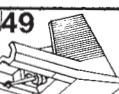
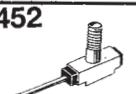
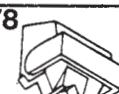
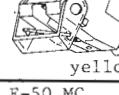
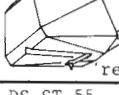
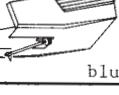
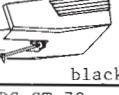
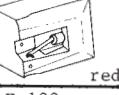
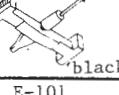
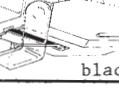
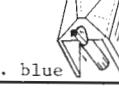
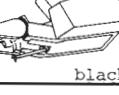
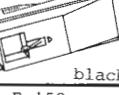
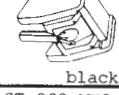
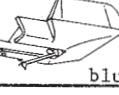
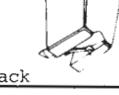
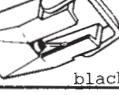
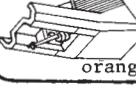
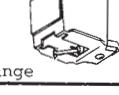
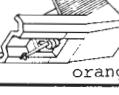
Tonar replacement types for: **HAPE**

MD-4							
725  red	444  white						

Tonar replacement types for: **HENFAI**

372 							
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Tonar replacement types for: **HITACHI**

DS-ST-2	DS-ST-3 MFS-170/171	DS-ST-5	HN-ST-6	HN-ST-7	DS-ST-7	DS-ST-9	F-11 MT-11 F
148 	296  white	596  white	6001  white	681  black	974  yellow	148 	509  white
DS-ST-12 DS-ST-14	DS-ST-13 MT-13	DS-ST-15	DS-ST-16	DS-ST-17	SJN-18	DS-ST-18 R	DS-ST-18
581  grey	986DE  green	939  white	957  black	871  red	767  white	6049  black	6049  black
HN-ST-19	HN-ST-20 CFS-280	HT-20 S	DS-ST-20	DS-ST-20 E	F-22 EX MT-22	DS-ST-23	DS-ST-24 MT-24
452  nickle	426  nickle	978  beige	784  white		723ES  beige	770  red	763  orange
DS-ST-25	DS-ST-26	DS-ST-26 E	DS-ST-30	DS-ST-32	DS-ST-33	DS-ST-33 E	DS-ST-35 DS-ST-36
645  red	677  yellow	894DE  white	828  yellow	963  red	979  blue	982DE  black	832  red
DS-ST-40 MT-10	SJN-45	DS-ST-45 HT-M 45	E-50 MC MT-50 MC	DS-ST-55 MT-55	DS-ST-60	DS-ST-70 DS-ST-72	E-100 MT-100
601  brown/red	801  black	1468  ivory	1243  black	695  tr. blue	1598  black	294 DE  black	1470  black
DS-ST-101	E-101 MT-101	DS-ST-102	DS-ST-103	DS-ST-104	DS-ST-110	E-150 MT-150	DS-ST-202 MK2 E-202 MK 2
607  ivory	1469  black	711  blue	734  black	748 DE  blue	1093  black	1484  black	1472  black
RT-8500				DS-ST 8	HT-300		
6180  orange	674  green	6279  orange	6180  orange	6348 orange	6348 orange		



diamond styli

Tonar replacement types for: **H.M.V.**

HMV-1	HMV-2						
390 A stylus with a long, thin arm and a double-tipped needle.	391 A stylus with a long, thin arm and a single-tipped needle.	long arm, double tip					

Tonar replacement types for: **INKEL**

PD-40	PD-607	JB-2000	JB-4000 JB-5000	ATN-3710		ATN-102 P	ATN-122 EP
832 A stylus with a short arm and a single-tipped needle.	904 A stylus with a long arm and a single-tipped needle.	865 A stylus with a long arm and a single-tipped needle.	956 A stylus with a long arm and a single-tipped needle.	879 A stylus with a long arm and a single-tipped needle.	red	895 A stylus with a long arm and a single-tipped needle.	brown
ATN-3482 P	PD-608					927 A stylus with a long arm and a single-tipped needle.	grey
6126 A stylus with a long arm and a single-tipped needle.	917 A stylus with a long arm and a single-tipped needle.	red				6109 DE A stylus with a long arm and a single-tipped needle.	brown

Tonar replacement types for: **INTEL**

374 A stylus with a long arm and a single-tipped needle.							
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Tonar replacement types for: **ISKRA**

180 A stylus with a long arm and a single-tipped needle.							
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Tonar replacement types for: **I.T.T. - GRAETZ**

ME-45-77	AT-70	AT-71	AT-12 XE	AT-13 E	ATN-50		ST-30
809 A stylus with a long arm and a single-tipped needle.	795 A stylus with a long arm and a single-tipped needle.	758 A stylus with a long arm and a single-tipped needle.	781 DE A stylus with a long arm and a single-tipped needle.	794 DE A stylus with a long arm and a single-tipped needle.	904 A stylus with a long arm and a single-tipped needle.	832 A stylus with a long arm and a single-tipped needle.	6016 A stylus with a long arm and a single-tipped needle.
blue	red	yellow	i.brown	orange	black	red	blue
			AP-591	ST-40			
673 A stylus with a long arm and a single-tipped needle.	6239 A stylus with a long arm and a single-tipped needle.	6259 A stylus with a long arm and a single-tipped needle.	6208 A stylus with a long arm and a single-tipped needle.	917 A stylus with a long arm and a single-tipped needle.			
red	blue	red	purple	red			



diamond styli

Tonar replacement types for: JAPAN COLUMBIA (DENON)

DSN-1; SJN-1	JTS-1/5; DTS 1/5	JTS-3	DSN-3	DTS-4	DSN-4	DSN-5	DSN-6
148	349	272	6073	6074 nickle	6075 nickle	6076 nickle	6077 white
DSN-7 DSN-8	DSN-9	DSN-10; DSN-13	DSN-11	DSN-14	DSN-16; SJN-16	DSN-22	DSN-24; GN-20
6078 white	6192 white	296 white	6087 grey	644 red	452 nickle	786 grey	499 red
DSN-28	DSN-32	DSN-34	DSN-35	SJN-18 DSN-38	DSN-39	DSN-40	DSN-41
677 yellow	6079 orange	705 MM	371 ivory	767 white	758 yellow	6080 white	772 tr. black
DSN-42	DSN-44	SJN-45 DSN-45	DSN-46	DSN-47	DSN-48	DSN-50	DSN-51
892 black	823 black	801 black	6351 white	937 orange	938 tr. orange	834 orange	949 orange
DSN-54	DSN-55	DSN-57	DSN-60	DSN-61	DSN-62	DSN-63	DSN-85
741DE green	475 orange	980 red	931 DE white	692 grey	983 grey	957 black	6910 white
DSN-65	DSN-66	DSN-67	DSN-68	DSN-69	DSN-70; SJN-68	DSN-71	DSN-72
6027 brown	6016 blue	6233 MM	6084 blue	877 red	6174 red	828 yellow	974 yellow
DSN-73	SJN-75	JN-78 K	DSN-80 DL-80 A	DSN-25	ATN-3400	DSN-36	DSN-81
885 DE tr. clear	6175 red	974 yellow	1672 red	6269 orange	832 red	6349 white	6353 grey

Tonar replacement types for: JELCO

MCI-5	SMC-101	MC-9	MC-12	MC-14	MC-15	4C-1X	D
538 grey	533 grey	573 brown	699 red	637 red	700 green	701 yellow 4-channel	637 red
MC-45D	D	MC-29		TC-812 E	MC-50 D		
952 red	908 black	6255 MM	6268 black	792 DE red	6274 black		

Tonar replacement types for: **JENSEN**

409C; 64-1	J-2T		B-2735				
276	343		42				

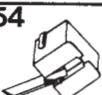
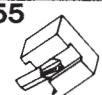
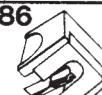
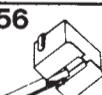
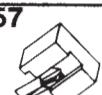
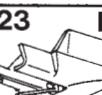
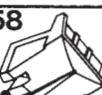
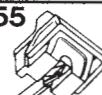
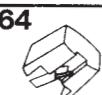
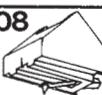
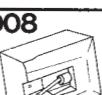
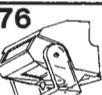
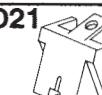
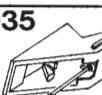
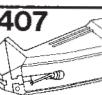
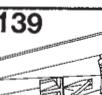
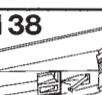
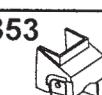
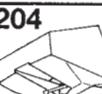
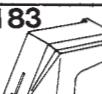
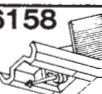
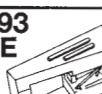
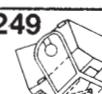
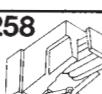
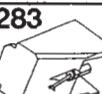
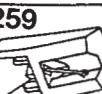
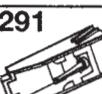
Tonar replacement types for: **J.V.C., See: NIVICO**

Tonar replacement types for: **JUKEBOXES, See: N.S.M., Schuman, Seeburg, Zenith types**

Tonar replacement types for: **K.D.**

69							
412							

Tonar replacement types for: **KENWOOD**

N-6 AT	N-11	N-15 0 MK II	NF-15 0 MK II	N-20	N-23	N-25	N-26
296  white	758  yellow	803  white	802  red	780  white	445  grey	654  1.grey	771  black
N-30	N-31	N-32; N-33	N-34	N-35	N-36	N-37	N-38
654  1.grey	655  black	571  white	541  white	686  brown/silver	656  dark grey	657  red	325  scarlet
N-39	N-39 MK II	N-39 MK III	N-40	N-41	N-42	N-43	N-44
326  orange	958  black	829  black	323  4-channel	677  yellow	323  4-channel	658  blue	688  ES 4-channel
N-45	N-46	N-47	N-48	N-49	N-50	N-51 E	N-52
1493  MC	755  black	730  white	758  yellow	764  orange	908  black	908  DE black	6008  blue
N-53/V-53	N-54	N-55	N-56; N-56 B	N-57	N-58	N-59	N-77
876  black	6021  blue	1408  MC blue	935  black	1407  green/black	6139  IM black	6138  MM dark grey	6353  grey
N-61	N-62; V-62	N-63	N-64	N-64 C	N-65	N-66	N-67
6204  MM blue	6183  red/blue	6158  blue	393  black	393  DE black	6249  green	6257  MM red	6258  MM red
N-68	N-69	N-70	N-71	N-72	N-73	N-74	N-75
6283  blue	6259  red	1586  grey	6291  black	6335  blue	6204  MM purple/blue	6334  black	957  black

Tonar replacement types for: K.L.H.

832							
 red							

Tonar replacement types for: K.S.M.U.

0261	KD-69						
448	412						

Tonar replacement types for: LENCO

single	double	RCS Pop Stereo	M-94	M-95	M-100	M-100	M-150
137	138	524	672 black	463 red	526 blue	527 yellow	565 purple
M-200	M-300	M-350	OMB-20	GS-11	M-400; M-550	L-3807 USB	L-3866 USB
309 red	1599 black	1599 black	1253 black		1835 black	6259 red	6259 red

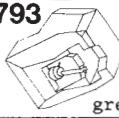
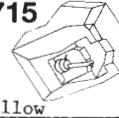
Tonar replacement types for: LESA

A	B	C-1	D	E	F-3	F-5	K-2
139	140	512	137	141	344	310	212
K-3	K-3 New Version	S	U	U-2	W		
592	368 black	144	142	143	257	524	725 red

Tonar replacement types for: **LESON**

LESON								
434  grey								

Tonar replacement types for: **LIN SONDEK**

K-5	K-9 4-channel	K-18 4-channel						
1793  grey	1715  yellow	1794  grey						

Tonar replacement types for: **L.O.D., See: HITACHI**

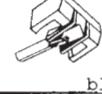
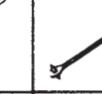
Tonar replacement types for: **LUSTRE**

L-1								
457 								

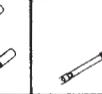
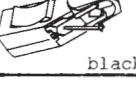
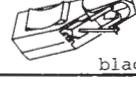
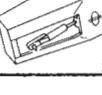
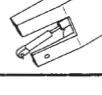
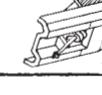
Tonar replacement types for: **LUXMAN**

	ATS-11	ATN-71 E	N-310 C	N-320 C	ATN-3710			
974  yellow	677  yellow	768 DE  green	1563  white	1609  black	879  red	957  black	6156  black	

Tonar replacement types for: **LUXOR**

3200	3823	3831; 3833	8000	36200	65977	72411	72786
465  grey	387  beige	526  blue	802  red	526  blue	148 	145 	146 
74916							
147 	758  yellow						

Tonar replacement types for: **MAGNAVOX**

560101	560151/560133	560161	560247	560305	560344/45	560347-1	560348
150 	149 	151 	200 	277 	303 	525 	317 
560398	560356	560369	560418	560429	560434	25130071	5604370033
572  red	571  white	795  red	734  black	851  white	910  white	916  red	801  black
25130079	25130081		5690300003	5604370111			
994  black	994 DE  black	6175  red	6172  red	6111  white			

Tonar replacement types for: MARANTZ

CT-5 S	CT-6 S	CT-100	TT-130 TT-221	TT-140	TT-143	TT-151	TT-151
832	922 DE	993	384	6063	393	981	6163
TT-153	CT-165	TT-170	TT-185 CTS-165	TT-221	TT-240	TT-243	TT-251
6206	6158	6049	388	384	6063	393	6163
TT-253	TT-275	TT-285	CT-300 TT-320	TT-333	CT-340; TT-340 TT-440	TT-351	CTS-420
393	6234	957	384	935	6063	6163	384
TT-430	TT-433 TT-443	TT-451	500	CS-500	TT-520	TT-525	TT-530
6159	935	6163	758	973	687	687	6026
TT-551	CT-551	TT-553	TT-873				
6163	6260	935	957	956	965	6354	

Tonar replacement types for: MARLUX

NM-106	MC-500	NM-33			SX-50S	MX-66	
661	666	296	527	789	792	1108	

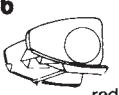
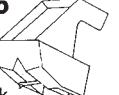
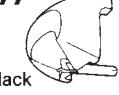
Tonar replacement types for: MASTERCRAFT

MCI-5	SJN-1	SMC-101					
538	270	533					

Tonar replacement types for: MERULA

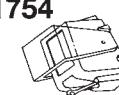
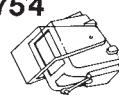
FANFARE	HMV-1	HMV-2	SC-474	SK 451	SK 452	SK 453	SK 456; STK 494
182	390	391	153	183	184	185	186
STC-480	STC-485/486	STC-487	STC-488	STK-490	STK-495/1	STC-481	
420	414	493	685	152	239	391	

Tonar replacement types for: **MICRO**

SC-301	M-207	V-2100	V-3100	V-3200	V-3300/7	V-307; V-7000	VP-1; V-8; V-10; V-70
359  new yorker	399  white	598  red	400  grey	636  red	735  black	769  turquoise	775  black
V-5	V-20	V-40	V-7; LF-7	V-307 IM type	V-3200 E V-3200 XE	V-1100 V-1110	
776  blue	777  black	852  black	918 DE  black	6013  IM beige	636 DE  red		

Tonar replacement types for: **MICRO ACOUSTICS**

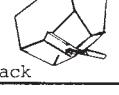
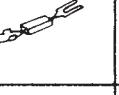
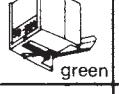
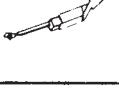
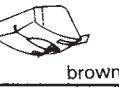
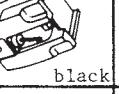
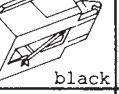
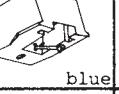
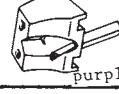
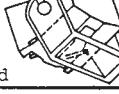
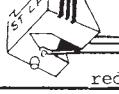
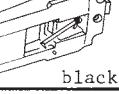
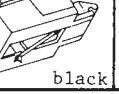
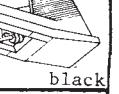
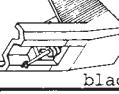
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QDC-1E; QDC-1S 282 E; 530 MP	MA-282 E	QDC-1E; QDC-1S 630; 830 CSA	309; 382; 3002 630; 830 CSA	50-PE (T4P)	100 E	2002 E	
1754  black	1754  black	1754  black		6310  no longer available	 red	 no longer available	1754  black

Tonar replacement types for: **MISSION**

773 MM	774	SOLITAIRE					
637  red		6268  black					

Tonar replacement types for: **MITSUBISHI**

MD-1	3D-MM 1	MD-2	3D-MM2	STYLUS 5 LMT-5	3D-20 M; ST-15; SP-16	SJN-16	SJN-18
649 DE  beige	6121  black	649  brown	1276  black	1319  black	148 	452 	767  white
3D-23 M	3D-24 M	3D-25 M	3D-26 M	3D-28 M	3D-29 M	3D-30 M	3D-31 M
399  white	399  white	566  white	1490  white	400  ivory	6088  white	647  green	646  green
ST-11; 3D-32 M	3D-33 M	3D-34 M	3D-37 M	3D-38 M	3D-40 M	3D-42 M	3D-44 M
426  green	582  green	674  green	649  brown	706  green	571  ivory	936  black	771  black
3D-45 M	3D-46 M	3D-47 M	3D-48 M	3D-50 M	3D-51 M	3D-52 M	3D-54 M
936  black	6009  brown	897  brown	822  white	913  black	957  black	985  blue	935  black
4500 Z EEE	LT-55; LT-75	STP-607 M	L-4	RS-50		3D-55 M	3D-56 M
1072  purple	6084  red		6042  red	6152  black	6144  smoke grey	957  black	6049  black
3D-57 M							
6049  black	981  white						

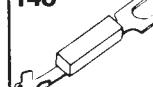
Tonar replacement types for: MULTITECH

M-22							
6242  yellow							

Tonar replacement types for: N.A.D.

NAD 9100	NAD-9200	NAD-9300	TT-533	520			
1231  grey	1231  grey	1391  grey	1874  red	1834  red			

Tonar replacement types for: NAGAOKA

JT-311	JT-322	NC 100; 202; 203 NC 505; 400; 400H	NC 202; 203; 400 NC 400 H	NC-700	NC-770	NM-11 A	NM-22
555  green	550 ES  4-channel white	27 	148  stereo	494 	270 	222 	263  white
NM-33	NM-33-A	NM-66	NR-1	JT-333	JT-511	JT-555	JT-511 BE
296  white	453  blue	447 DE  grey	363 	683 ES 	664  red	684 ES  black	746 DE  yellow
JT-511 DJ	78 RPM needle for: JT-511 series; JT-555	78 RPM needle for: JT-311; JT-322	OS-100 MP	OS-200 MP	OS-300 MP	C-711-01	MP-100 ; MP-10
728  blue	736  green	737  green	717  transparent clear	719 DE  transparent grey	721 DE  solid black cantilever transparent purple	808  green	6819  red
MP-110 ; MP-11	MP-150 ; MP-15	MP-200 ; MP-20	MP-300 ; MP-30	MP-500 ; MP-50	C-320 M	MM-321 B	C-711
6821  yellow	6823  green	6825  purple	6827  white	6829  black	914  all pl. tr. green	945  tr. green	808  MM green
C-721	MP-05	MP-50 Super	JN-110 JT-110	JN-120 JT-120	JN-11 EB MP-11 EB		
943  IM green	944  purple	1250  black	6003 ES  black	6151 	1601 		
NMP-1.0 MIL	NMP-2.0 MIL	NMP-2.5 MIL	NMP-3.0 MIL	NMP-3.5 MIL	NMP-4.0 MIL		
6837  MONO	6839  78 RPM	6845  78 RPM	6835  78 RPM	6841  78 RPM	6843  78 RPM		

Tonar replacement types for: NATIONAL (PANASONIC, TECHNICS)

EPS-02 C-103	EPS-04 LP EPC-27 WTGS 5	EPS-04 ST EPC-29 TTGS 1	EPS-04 ST EPC-29 TTBS 4	EPS-04 ST EPC-69 STA; STC	EPS-04 STSD EPC-29 TTES 5	EPS-05 EPC-05; EPC-08	EPS-05 ST EPC-01 TTC
6123 	148 	148 	148 	148 	148 	269 nickle	269 nickle
EPS-05 ST EPC-30 TTA	EPS-08	EPS-10 EPC-83 SMAD	EPS-10 STDD EPC-83 SMED	EPS-11 EPC-81 STSD	EPS-11 STSD EPC-81 STBD	EPS-12	EPS-13 EPC-34 TTAD
269 nickle	397 black	397 black	397 black	648 nickle	648 nickle	397 black	372 black
EPS-13 TT EPC-35 TTA	EPS-13 TTSD EPC-35 TTAD	EPS-14 ST EPC-34 STC	EPS-14 STSD EPC-34 STCD	EPS-14 STSD EPC-34 STBD	EPS-18 ST EPC-34 STFA	EPS-18 STSD EPC-34 STFAD	EPS-19 EPC-40 STBD
372 black	372 black	374 black	374 black	374 black	618 white	618 white	606 black
EPS-19 STSD EPC-40 TTB	EPS-22 CS EPC-P 22 S	EPS-22 ES EPC-P 22 S	EPS-22 ES EPCP 202 CBK	EPS-23 CS EPC-P 23 S; SK	EPS-23 CS; ES EPC-P 23	EPS-24 CS EPC-P 24	EPS-24 STSD EPC-95 SSED
402 black	426 nickle	885 DE tr.clear	885 DE tr.clear	885 tr.clear	885 tr.clear	940 tr.orange	451 nickle
EPS-25 EPC-42	EPS-25 CS EPC-U 25 S; SK	EPS-25 CS U-25; H-25	EPS-25 STSD EPC-42 STAD	EPS-27 EPC-09 STAD	EPS-27 CS EPC-P 27	EPS-28 EPC-96 SS	EPS-28 CS EPC-P 28
516 grey	6023 tr.brown	6023 tr.brown	516 grey	842 white	959 tr.yellow	600 yellow	959 tr.yellow
EPS-30 STSD EPC-82 SMAD	EPS-30 CS EPC-P 30	EPS-31 SPSD	EPS-31 STSD EPC-82 SMBD	EPS-33 ES EPC-P 33	EPS-34 STSD EPC-78 SMAD	EPS-35 STED	EPS-35 STSD EPC-78 SMBD
677 yellow	6031 blue	741 green	571 white	6032 grey	748 DE blue	748 DE blue	568 red
EPS-36 STSD EPC-05 STA	EPS-37 EPC-37	EPS-39 STSD	EPS-41 STSD EPC-41; EPC-13	EPS-43 STSD	EPS-45 STQD EPC-450 C	EPS-46 STSD EPC-460 C	EPS-46 STQD EPC-460 C 4
629 white	376 white	850 white	951 white	991 grey	630 ES 4-channel grey	650 yellow	621 ES 4-channel grey
EPS-50 EPC-84 SM	EPS-51 EPC-85 SM	EPS-51 CS EPC-P 51 S	EPS-52 EPC-86 SNAD	EPS-53 EPC-87 SMAD	EPS-P 53 CS EPC-P 53 S	EPS-54 EPC-88 SMAD	EPS-56 EPC-79 SMAD
759 DE black	759 DE black	6117 red	599 orange	6119 DE tr.clear	6118 tr.red	759 DE black	749 blue
EPS-74 STED EPC-74 SMED	EPS-74 STSD EPC-74 SMAD	EPS-75 SMLD	EPS-75 STSD EPC-75 SMAD	EPS-75 STCSD EPC-75	EPS-75 STHSD	EPS-75 TFSD	EPS-76 STED
760 DE blue	758 yellow	6064 orange	832 red	851 grey	991 dark grey	898 yellow	851 grey
EPS-76 STSD	EPS-90 SMAD	EPS-90 SMBD	EPS-90 STGD	EPS-90 STGED	EPS-91 SMAD	EPS-100 ED 2	EPS-100 ED 4 EPC-100 C MK 4
831 yellow	986 DE green	927 grey	927 grey	986 DE green	581 white	1369 black	1501 black

CONTINUED

Tonar replacement types for: NATIONAL (PANASONIC, TECHNICS)

CONTINUED

EPS-P 100 ED 4 EPC-P 100 CMK4	EPS-202 ED EPC-P 202 C	EPS-205 ED EPC-205 C II S	EPS-205 ED EPC-205 C2 LKX	EPS-205 ED EPC-205 C2 SKX	EPS-205 EX EPC-205 C II	EPS-205 ED 3 EPC-205 C MK 3	EPS-205 ED 4 EPC-205 C MK 4
1502  tr.clear	885 DE  tr.clear	759 DE  black	766 DE  gold	766 DE  gold	766 DE  gold	766 DE  gold	1503  gold
EPS-P205 ED 3 EPC-P205 C MK3	EPS-P205 ED 3 EPC-P205 C3K	EPS-P205 ED 4 EPC-P205 C MK4	EPS-206 C	EPS-206 ED EPC-206 CK	EPS-207 C	EPS-207 ED EPC-207 C	EPS-207 ED EPC-207 C II
1504  tr.clear	1504  tr.clear	1504  tr.clear	886 DE  black	886 DE  black	841  black	841 DE  black	841 DE  black
EPS-207 ED EPC-207 CK	EPS-270 SD EPC-270 CK; CX; EPC-270 C; D	EPS-270 SD EPC-270 C II	EPS-270 ED EPC-270 C II	EPS-270 ED EPC-270 C2K-X	EPS-270 ED EPC-271 C	EPS-270 ED EPC-271 CES	EPS-270 ED EPC-271 CS-X
841 DE  black	757  tr.green	757 DE  tr.green	757 DE  tr.green	757 DE  tr.green	757 DE  tr.green	757 DE  tr.green	757 DE  tr.green
EPS-275 EPC-09 STAD	EPS-290 SD EPC-290 C	EPS-310 MC EPC-310 MC	EPS-310 MC 2 EPC-P 310 MC 2	EPS-405 QD EPC-405 C	EPS-440 QD EPC-440 C	EPS-450 QD EPC-450 C II	EPS-451 QD EPC-451 C
842  white	599  tr.orange	1521 No longer available	2237 No longer available	759 ES 4-channel black	599 ES 4-channel clear	1544 clear 4-channel	628 ES 4-channel red
EPS-510 CS EPC-P 510 S	EPS-520 ES EPC-P 520	EPS-530 ES EPC-P 530	EPS-540 ES EPC-P 540	EPS-550 ES EPC-P 550		EPS-24 ES EPC-P 24	
6031  green	6031 DE  blue	6340 DE  grey	6341 DE  gold/black	6342 DE  red gold		940 DE  tr.orange	
P-30 S	EPC-P 328	EPC-P 511 S	EPC-01 WTB	SPJ-4	EPS-55 CS	P-34; EPS-34CS	EPS-1200 CS
6031  blue				148 	6284  tr.green	6049  black	6855 (DJ)

Tonar replacement types for: NEAT

N-100	VS-700; V-70; VS-90	VS-80					
148 	389 	526 	533  grey				



diamond styli

Tonar replacement types for: **NEUFUNK**

368	293						
 368	 293						

Tonar replacement types for: **NIKKO**

851	956	973	801	6049	6239		
grey 851	red 956	white 973	black 801	black 6049	MM blue 6239		

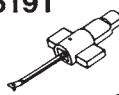
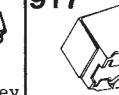
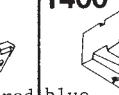
Tonar replacement types for: **NIPPON ELECTRIC COMPANY (N.E.C.)**

LP-5 D; SP-5 S	LP-10 D	SP-15 S; LP-15 D	LP-20 D	LP-25 D	LP-30 D	LP-35 D	LP-40 D
269 black	397 black	148 black	296 white	367 white	786 grey	653 black	456 white
LP-45 D	LP-50 D	LP-55 D	LP-60 D	LP-65 D	LP-70 D	LP-75 D	LP-305 M
641 black	711 blue	578 black	822 white	730 white	834 orange	813 red	382 blue
LP-310 D	LP-335 D LP-355 D	LP-735 D	LP-5100 D	LP-6000 D	LP-6100 D	LP-6300 D	LP-7000 D
937 orange	832 red	758 yellow	651 MM	760 blue	726 green	726 1. brown/green	568 red
LP-8000 D	LP-8300 D	AT-3472 P					
741 green	637 red	581 white	927 grey	673 red	956 red	6126 yellow	

Tonar replacement types for: NIVICO

DTS-1	DTS-2	DT-7	DT-11; SS-11	DT-12	DT-13	DT-15	DT-16
347	348 black	148	510 white	6089 white	6090 white	6093 nickle	296 MM white
ST-17	DT-18	DT-19	DT-20	DT-21	DT-22	DT-23	DT-25 H
348 black	6094 white	6091 MM white	426 nickle	6108 blue	6092 white	659 black	552 IM red
DT-26	DT-27	DT-29	DT-30 S	DT-31	DT-32	DT-33 G	DT-33 H
639 white	596 IM red	595 MM red	853 IM blue	571 blue	660 white	640 green	545 yellow
DT-33 S	DT-34 S	DT-36	DT-37 MD-1034	DT-38	DT-39 E	DT-41 LE-500; LE-600	DT-45
509 white	720 black	813 red	906 blue	898 yellow	923 black	930 purple	388 dark blue
DT-45 E	DT-50	DT-51	DT-55	DT-55 W	DT-55 MK2	VPF-96	DT-100 E MC-100 EB
388 brown	714 orange	801 black	974 yellow	6122 orange	987 blue	381 SPL	1475 MC ivory
DT-200 E	DT-201	DT-201 E	DT-Z 1 S	DT-Z 1	DT-Z 1 EB	DT-Z L1S	DT-E 3E
1606 MC red	988 MC blue	1477 MC blue	718 khaki	739 ES tr. clear	932 DE tr. green	473 blue	1602 red
DT-Z 3 ED	DT-Z 4 S	DT-U 2	DT-U 2 E	DT-X 1 MK I	DT-X 1 MK II	4 DT-1 X	4 DT-2 X
884 DE tr. red	884 red	1471 naked 4-channel black/ white line	1473 naked elliptical black/ red line	1287 clear	740 ES transparent clear	509 ES white 4-channel	703 ES black 4-channel
4 DT-5 X	4 DT-10 X	4 DT-20 X	4 DT-30 X	4 DT-35 X	DT-35	DT-56	DT-57
509 ES white 4-channel	509 ES white 4-channel	619 ES red 4-channel	620 ES grey 4-channel	620 ES grey 4-channel	6169 brown	957 black	6111 ivory
DT-58	DT-59	DT-60	DT-Z 5 P Z-5 P	MC-5 E	DT-55 B	DT-55 II B	DT-Z 1 E
6050 blue	6230 blue	6265 orange	6168 tr. orange		6166 yellow	6246 blue	6250 DE tr. orange
DT-202 B	DT-58 B	ATN-1059		DT-X 1 MK II	DT-X 1 MK II	DT-62	
1696 grey	6264 1. blue	6230 green		1751 elliptical	1752 shibata	6289 MM tx. blue	6175 red
DT-64	DT-65						
6111 white	981 white						

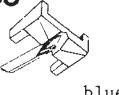
Tonar replacement types for: NORDMENDE

ST-10 J					L-4	OMB-10	
771	6191	904	961	917	1400	1276	974
							
black	red	black	grey	red	blue	black	yellow

Tonar replacement types for: NOVAK

CLARVILLE							
72							

Tonar replacement types for: N.S.M. / WURLITZER

N-17 CM		DB-200; D-102	CONSULT 120				
605	6223	182	182				
							
blue	black	Gold	Gold				

Tonar replacement types for: NUMARK

CC-1	CS-1	Groovetool					
6813	6815	6259					
							
silver	silver	red					

Tonar replacement types for: NUWAY

NS-88							
6086							
							
gold							

Tonar replacement types for: OHIO SOUND

T-812 E							
792 DE							
							
tr. red							

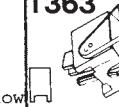
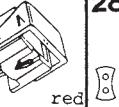
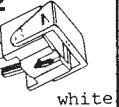
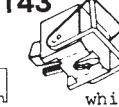
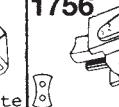
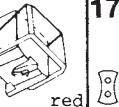
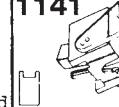
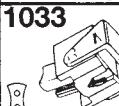
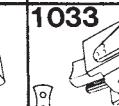
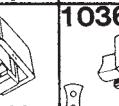
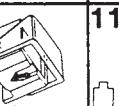
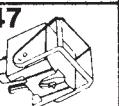
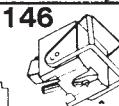
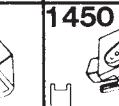
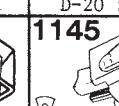
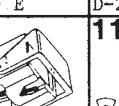
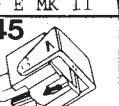
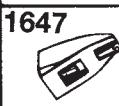
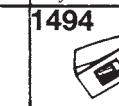
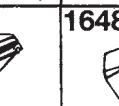
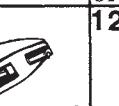
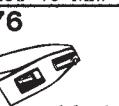
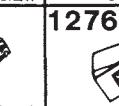
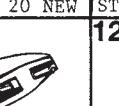
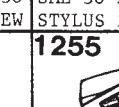
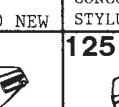
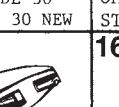
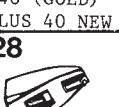
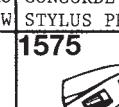
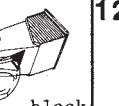
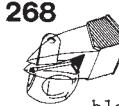
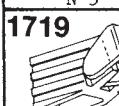
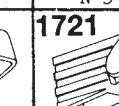
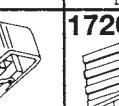
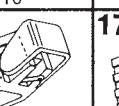
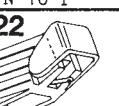
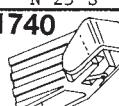
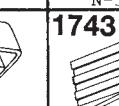
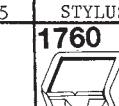
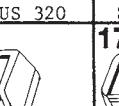
Tonar replacement types for: OLYMPIC

1							
378							

Tonar replacement types for: ONKYO

DN-1 ST; SN-2 ST	DN-3 ST	DN-5 ST	DN-7 ST	DN-8 ST	DN-10 ST	DN-12 ST	DN-13 ST
148	269	296	397	367	397	374	296
DN-14 ST	DN-15 ST	white	black	white	black	black	white
nickle DN-22 ST OC-22 M	IM DN-23 ST OC-23 M	grey DN-24 ST	white DN-25 ST	black DN-27 ST	brown DN-28 ST	white DN-29 ST	DN-21 ST OC-21 M DN-30 ST
507	535	589	698	571	726 ES	726	1022
blue	brown	orange-brown	4-channel transparent red	white	4-channel yellow	green	red
DN-31 ST	DN-32 ST	DN-33 ST	DN-34 ST	DN-35 ST	DN-36 ST	DN-37 ST	DN-38 ST
556	571	778	6081	758	6082	894	6071
white	white	red	blue	yellow	green	white	blue
DN-39 ST	DN-40 ST	DN-50 MC	DN-51 ST	DN-52 ST	DN-54 ST	DN-55 ST	DN-56 ST
817	771	1243	862	832	949	923	955
yellow	black	black	red	red	orange	black	grey
DN-57 ST	DN-59 ST	DN-60 STE	DN-61 ST	DN-61 STE	DN-62 ST	DN-63 STE	DN-64 STE
708	923	802	DE 6048	6048	DE 6036	916 DE	1576
grey	black	red	lilac	l. blue	black	black	orange
DN-65 ST	DN-66 ST	DN-67 ST	DN-68 ST	DN-69 ST	DN-70 ST	DN-72 ST	DN-106 ST
6193	6043	6084	6237	6084	6286	6024	6244
blue	red	red	grey	red	grey	tr. blue	white
DN-107 ST	DN-201 ST	DN-202 STE	DN-505 MC	DN-1005 ST	OMP-5 E	OM-20	Q-4
6248	848	848	DE 1378	651	1494	1253	6043
orange	blue	blue	MC	blue	MM black/white	black	red

Tonar replacement types for: ORTOFON

NF-10 E FF-10 E	FF-10 XE MK II NF-10 XE MK II	FF-15 D MK II NF-15 D MK II	F-15 S; F-15 O N-15 S; N-15 O	F-15 S MK II N-15 S MK II	F-15 E; F-15 EO N-15 E; N-15 EO	F-15 E MK II N-15 E MK II	F-15 O MK II N-15 O MK II
 1646	 1363	 1181	 282	 1143	 291 DE	 1144	 1143
F-15 EO MK II N-15 EO MK II	FF-15 NF-15	FF-15 S MK II NF-15 S MK II	FF-15 E NF-15 E	FF-15 E MK II NF-15 E MK II	FF-15 O MK II NF-15 O MK II	FF-15 EO MK II NF-15 EO MK II	FF-15 XE MK II NF-15 XE MK II
 1144	 1756	 1141	 1755	 1142	 1141	 1142	 1148
M-15 Super D-15 Super	M-15 E Super D-15 E Super	M-20 E N-20 E; DN-350	M-20 E Super D-20 E Super	M-20 FL Super D-20 FL Super	VMS-3 MK II D-3 MK II	VMS-5 E MK II D-5 E MK II	VMS-10 E MK II D-10 E MK II
 1033	 1033	 1036	 1147	 1146	 1482	 1450	 1338
VMS-15 XE MKII D-15 XE MKII	VMS-20 S D-20 S	VMS-20 E D-20 E	VMS-20 E MK II D-20 E MK II	VMS-20 EO MKII D-20 E MK II	VMS-20 XE MKII D-20 XE MK II	VMS-30 FL MKII D-30 MKII	NF-15/78 rpm
 1744	 1145	 1145	 1145	 1645	 1309	 1684	78 rpm stylus
STYLUS 1 NEW	OMP-5 E; Stylus 5 E New	STYLUS 7 NEW	TM-10 H; LM-10 STYLUS 10 NEW	OM-10; OMP-10 STYLUS 10 NEW	CONCORDE 10 STYLUS 10 NEW	CONCORDE EC-10 STYLUS 10 NEW	OMB-12 STYLUS 12 NEW
 1647	 1494	 1648	 1276	 1276	 1276	 1276	 1318
TM-14 STYLUS 14 NEW	OMB-15 STYLUS 15 NEW	LM-20; LM-20 H STYLUS 20 NEW	OM-20; OMP-20 STYLUS 20 NEW	CONCORDE 20 STYLUS 20 NEW	TM-20 H STYLUS 20 NEW	LM-30; LM-30 H STYLUS 30 NEW	TM-30 H STYLUS 30 NEW
 1336	 6399 DE	 1253	 1253	 1253	 1253	 1255	 1255
OM-30; OMP-30 STYLUS 30 NEW	SME-30 H STYLUS 30 NEW	CONCORDE 30 STYLUS 30 NEW	OM-40 (GOLD) STYLUS 40 NEW	LM-PRO; OM-PRO STYLUS PRO NEW	CONCORDE PRO STYLUS PRO	CONCORDE STD STYLUS STD	DN-167 78 RPM STYLUS
 1255	 1255	 1255	 1628	 1575	 1575	 1310	 1558 DN
DN-149 S	DN-150 E	DN-152 E	DN-155 E	DN-160 E	DN-165 E	DN-166 E	THORENS M-200E D-200 E
 1354	 1286	 1355	 1284	 1268	 1405 DE	 1406	 1320
M-5 N-5	M-5 P N-5 P	M-10 N-10	M-10 P N-10 P	M-25 S N-25 S	M-25 SP N-25 SP	M-50 E N-50 E	M-50 EP N-50 EP
 1719	 1721	 1720	 1722	 1740	 1741	 1743	 1742
305 STYLUS 305	310 STYLUS 310	320 STYLUS 320	520 STYLUS 520	530 STYLUS 530	540 STYLUS 540	N-15 BC	
 1759	 1760	 1761	 1762	 1763	 1764	 1757	
2M RED	2M BLUE	2M BRONZE	2M BLACK	F/FF-15 MK I/II	F/FF-15 E I/II	OM-SERIES	
6830	6832	6834	6836	 6369	 6369 DE	 6469 shibata	

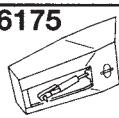
Tonar replacement types for: OSAWA

OS-101	OS-102	OS-201	OS-202	OS-301	OS-1001	OS-2001	OS-3001
1567 IM black /grey	1570 grey	1568 IM silver/grey	1571 blue	1569 IM gold/ grey	953 white	953DE blue	953DE blue

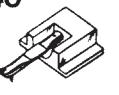
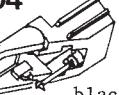
Tonar replacement types for: OTTO, See: SANYO

Tonar replacement types for: PANASONIC, See: NATIONAL

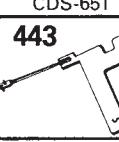
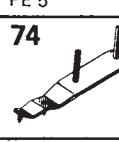
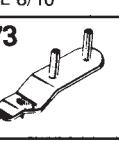
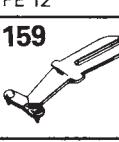
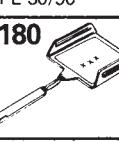
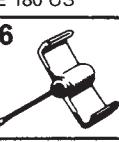
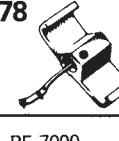
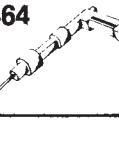
Tonar replacement types for: PARAMOUNT

RF-20							
6175 							

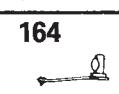
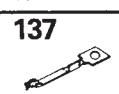
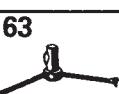
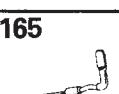
Tonar replacement types for: PATHE MARCONI

51	53	MUCS; MCS	RC 5/6	STC-7; STC-S; STC-41	STEREO	ST-10 J	STC-2000 D
154 	155 	240 	156 	157 	158 	771  black	157 
		T-H 5 S	T-H 5 E	STC-10 S			
917  red	885  transp. clear	904  black	904 DE  black	157 			

Tonar replacement types for: PERPETUUM EBNER

CDS-650; CDS-651	PE 5	PE 8/10	PE 12	PE 30/90	PE TO 48/51	PE 92	PE 180 US
443 	74 	73 	159 	180 	162 	259 	76 
PE 182 US	PE 184 US	PE 186	PE 188	PE 190	223/1	223/2; PE-192	PE 194
80 	78 	84 	160 	439 	356 	357 	464 
PE-3000	PE-7000	PE-8000	PE-9000				
443 	161 	83 	45 				

Tonar replacement types for: PHILCO

35-2682	35-2775	45-9612	325-8210	325-8214			
164 	137 	163 	258 	165 			

Tonar replacement types for: PHILIPS

AU 1010/1020 1030	AG-3001	AG-3010;3012; AG-3013;3015	AG-3016	AG-3019	AG-3020;3021	AG-3025;3026	AG-3027
20	13	11	12	238	16	11	16
AG-3052	AG-3063;3066	AG-3109;3113; AG-3114	AG-3201;3202	AG-3201 (D)	AG-3221;3222	AG-3224;3228;	AG-3229
17	14	11	18	21	18	20	405 stylus only
AG-3230	AG-3304	AG-3301;3302; AG-3304;3305	AG-3306-1	AG-3306;3310	AG-3308	AG-3311 GP-311	AG-3400
20	14	15	247	20	14	280	19 philitina
AG-3401;3402	AG-3404;3407 AG-3408;3409	AG-3410	AG-5001	AG-5012;5013	GP-200	GP-204;205	GP-212;213
19	301 blue	19	17	16	20	543	553
GP-214	GP-215	GP-224	GP-228	GP-229	GP-230	GP-233	GP-235
2061 orange	2132 grey	20	20	405-C complete	20	1123	20
GP-300;306;310	GP-316	GP-330	GP-331	GP-350	GP-351	GP-370	GP-371
20	12	994 black	994 DE black	1403 black	1404 black	503 ivory	582 green
GP-380	GP-390	GP-397 MK III	GP-400	GP-400 MK II	GP-400 MK III	GP-401	GP-401 MK II
1123	1123	808 green	511 grey	534 black	946 black	511 DE black	534 DE black
GP-401 MK III	GP-404	GP-406 MK II	GP-406 MK III	GP-407;408;409 GP-410;411	GP-412	GP-412 MK II	GP-412 MK III
946 DE black	301 blue	534 DE black	946 DE grey	301 blue	534 DE black	534 DE black	946 DE grey
GP-413	GP-420 MK III	GP-421	GP-422	GP-422 MK II	GP-422 MK III	499	GP-500
534 DE black	1333 black	534 DE black	534 ES black	534 ES black	1349 grey	933 black	511 grey
GP-500 MK II	GP-501 MK II			RB-5400		FP-772	GP-780
534 black	534 DE black	916 black	6175 red	6262 red	6172 red	6239 MM blue	981 white
FP-360	MG-2510	FP-575	FP-140		F-1275		FP-563
6346 blue	6259 red	957 black	994 black	6354 black	6174 MM red	6329 red	994 black

Tonar replacement types for: PICKERING

150	150 & Spring	Mark II T-guard	U-38/380 D-3807 A	U-38/380 D-3807 AT	U-38/380 D-3807 C	V-15/D-1507 AC V-15 P/AC	V-15/D-1500ACE V-15 P/ACE
166 	167 	168 	559 red 	362 yellow 	558 black 	501 red 	501 DE orange
V-15/D-1507 AM V-15 P/AM	V-15/D-1500AME V-15 P/AME	V-15/D-1507 AT V-15 P/AT	V-15/D-1500ATE V-15 P/ADE	V-15/.6 Mil.	V-15/PD-07 T V-15 P/DT	V-15/PDE	V-15 series with brush
539 gold 	539 DE gold 	465 grey 	465 DE grey 	275 black 	603 yellow 	604 DE yellow 	547 red
V-15 E series with brush	D-IV AC V-15 MICRO AC	D-IV ACE V-15 MICRO ACE	D-IV AT V-15 MICRO AT	D-IV ATE V-15 MICRO ATE	D-IV AM V-15 MICRO AM	D-IV AME V-15 MICRO AME	D-150 DJ XV-15/150 DJ
547DE red 	583 ivory 	583DE ivory 	583 ivory 	583DE ivory 	583 ivory 	583DE ivory 	1530 white
D-350 XV-15/350	D-400 XV-15/400 E	D-625 XV-15/625 E	D-625 DJ XV-15/625 DJ	D-750 XV-15/750 E	D-757 S XV-15/757 S	D-1200 XV-15/1200 E	D-1800 S XV/1800 S
546 black 	546DE black 	1166 gold 	1334 white 	1167 	1612 	1168 gold black 	1580
D-2000 Q UV-15/2000 Q	D-2400 Q UV-15/2400 Q	D-3000 XSV-3000	D-3000 SP XSV-3000 SP	D-3000 XSP-3003	D-3001 E	D-3500 E XLZ-3500 E	D-4000 XSV-4000
1170 black 	1171 black/copper 	1169 black 	1611 silv./black 	1169 silv./black 	1782 	1557 bronze/black 	1555 silv./black
D-4000 SP XSV-4000 SP	D-4000 XSP-4004	D-4500 Q XUV/4500 Q	D-4500 S XLZ-4500 S	D-5000 XSV-5000	D-5000 XSV-5000 U	D-7500 TLZ-7500 S	D-7500 XLZ-7500 S
1610 brown white 	1555 silv./black 	1172 	1613 	1556 gold white 	1556 gold white 	1528 gold 	1528 gold
DLC TLC	DLE TLE	D-2E TLE MK II	DTL-1 TL-1	DTL-2 E TL-2 E	DTL-2 S TL-2 S	DTL-3 S TL-3	DTL-4 S TL-4 S
1616 white 	1617 	1618 black white 	6140 DE white 	1620 white 	1621 white 	1622 white 	1623 white

Tonar replacement types for: PIEZO

MS-2;SMT-13	MS-8	SMT-29	03-40729	SC-503	STEREO	Y-100; Y-510	Y-310
27 	170 	169 	380 	148 	449 	370 	270
Y-565;575;590	Y-640	Y-670	Y-730	Y-930	Y-990	Y-995	YM-101
50 	367 white 	646 green 	270 	444 white 	NO LONGER AVAILABLE	506 ivory 	444 white
YM-114	YM-118	YM-121	YM-122	YM-123	YM-124	YM-125	YM-127
607 white 	665 red 	753 black 	882 orange 	834 orange 	883 yellow 	890 black 	949 orange
YM-130	YM-304	YM-308	YM-310	YM-320	YM-818	AN-10	YM-305
NO LONGER AVAILABLE black	NO LONGER AVAILABLE black	734 black 	835 black 	891 black 	6130 green 	6072 black 	6343 black



diamond styli

Tonar replacement types for: **PIONEER**

PN-3 MC	PN-4 MC	PN-5 MC	PN-6 MC	PL-N 6	PL-N 9	PN-10; PN-11	PN-12
1361 MC white/brown	1379 MC red	1387 MC grey	1388 MC white/red	296 white	395 white	396 grey	324 red
PN-14	PN-15	PN-16	PN-20	PN-21	PN-30	PN-31 MC	PN-33 MC
675 green	320 red	588 grey	616 blue	6104 ES ivory	591 red	1389 MC blue	1243 black
PN-35	PN-41 MC	PN-50	PN-K 65	PN-K 85	PN-110	PN-110 MK II	PN-131
574 yellow	1390 MC green	597 IM purple	953 white	710 IM grey	324 red	797 black	715 orange
PN-135	PN-150	PN-200	PN-220	PN-230	PN-250 T	PN-330	PN-330 E
733 black	838 yellow	6102 light green	851 grey	912 green	6224 black	588 grey	6105 DE brown
PN-330 MK II	PN-400	PN-550 E	PN-550 E MK II	PN-600	PN-770 EX	PN-800	PN-1000 C
774 tr. green	799 green	6106 DE red	6124 DE tr. smoke	800 yellow	6107 ES black	6103 white	6107 ES black
PN-1000 MK II	PN-7 MC	PN-290 T	PN-295 T	PN-300 T	PN-301	PN-305 T	PN-320
6125 ES tr. black	1600 grey	6160 IM white	6167 white	6160 DE grey	1566 black	6049 black	974 yellow
PN-19	PNK-75	PN-210	PN-240	PN-291	PN-260	PL-201Z; PL-2002	
6290 grey	6251 IM yellow	981 white	6287 grey	6197 grey	6336 grey	6158 blue	

Tonar replacement types for: **PRINZ, See: SCHNEIDER**

Tonar replacement types for: **RADIOHM**

MONO; STEREO	CS-60; CM-71						
177	350						

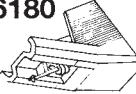
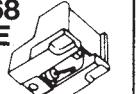
Tonar replacement types for: **RADIOLA**

GP-500 MK II	GP-501 MK II	GP-330	GP-331				
534 black	534 DE black	994 black	994 DE black				

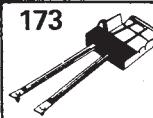
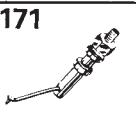
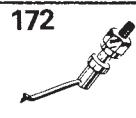
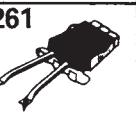
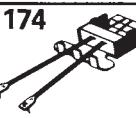
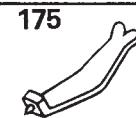
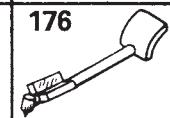
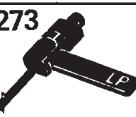
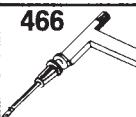
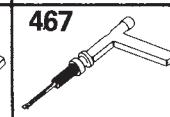
Tonar replacement types for: Q.E.D.

RATA RP-20 diasa ellipt.	RATA RP-40 nude ellipt.	RATA RP-70 ogura vital					
1708  tr. clear	1710  tr. clear	1712  tr. clear					

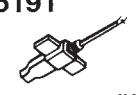
Tonar replacement types for: RADIO SHACK

RT-1500	RXT-4	X-3 N-75 EC	RT-8500	ATN-71 E	ATN-771 E		
6062  brown	901DE 	1679  brown	6180  orange	768 DE  green	6316 DE  green		

Tonar replacement types for: R.C.A.

104; 200; 108800	106969; 106770 106771	74068	75497	100020 A	110020; 110022	115060	115061
173 	297 	171 	172 	261 	174 	175 	176 
115276/115302/ 115303	115329	117330/118197	118199/118200	120695/122057	126566/7	131779/131780	131781/131788
260 	298 	273  LP	305  UP	413 	419 	466 	467 

Tonar replacement types for: REALISTIC

RT-1500	RXT-4	R-47 XT	AT-71 E	QLM-30 MK 3	Clarinette 66		
6062  brown	901DE 	1245 	768 DE  green	878  grey	6191  red		

Tonar replacement types for: RESON

33; 78							
178 							



diamond styli

Tonar replacement types for: REUTER

N4; S1							
179							

Tonar replacement types for: REVOX

PD-20	Shure Tracer						
1329	1753						

Tonar replacement types for: REX (ZANUSSI)

828	934						

Tonar replacement types for: RIGONDA

rigonda 123	complete cartridge	2163	ACCORD MONO COMIX	Rigonda			
779	2163	436	2563	6480 original			

Tonar replacement types for: RION

NP-01 D							
379							



diamond styli

Tonar replacement types for: **ROELOFS**

RD-121							
601							

Tonar replacement types for: **RONETTE**

BF 40	CMT-102	SC-107; SC-109	SM-500/7	TA 600	TO 284	TO 284 OE	TX 88
180	441	440	562	241	137	27	181
				red			
SC-103	107 (double)						
440	6194						
black	black						

Tonar replacement types for: **ROTEL**

2 RC-5	2 RC-3	2 RC-4	2 RN-5	2 RC 1	SYSTEM 400	RMC-7 AT-30 E	AT-51 E
758	573	888	850	862	813	1243	904 DE
yellow	brown	red	grey	orange	red	black	black
		ATN-110 E		RT-8500			
956	981	868 DE	1603	6180			
red	white	blue	black	orange			

Tonar replacement types for: **SABA**

ATX-11 E	CN-5431 (C-3000)	AT-3400 (PSP-240)	AT-12 E (PSP-244)	AT-13 EaV (PSP-248)	AT-71 (CSP-300)	ATN-12 ES (PSP-250)	C-2500 (RPC-1000)
847 DE	832	832	748 DE	794 DE	795	893 DE	524
grey	red	red	blue	orange/red	red	tr. grey	red
AT-3400 (PSP-100)	DISCO CENTRE		STC-10 S		OMB-5 (PSP-45)		PSP-15
832	157	904	157	974	1319	904 DE	917
red		black		yellow	black	black	red



diamond styli

Tonar replacement types for: SAMSUNG

LP-4	150; 350	4237	VIP-550			CN-108	
956 red	822 white	813 red	6240 IM violet	6175 red	974 yellow	6241 IM orange	6265 orange
VIP-580L			SCM-6500L				SCM-8900
917 red	6166 yellow	6230 green	6329 red	6240 IM violet	6049 black	6258 MM	6353 red
							grey

Tonar replacement types for: SANSUI

ST-2 D	ST-3	ST-6 D	ST-9 D	SN-10; SN-10 A	ST-10 D	SN-21; SN-22	SN-23
6065 MM black	269 SC-37 A; SN-70	296 green	6067 tr. brown	513 black	399 transp. black	296 white	399 white
SN-24	SN-25; MCI-5	SN-26	SN-27	SN-28	SN-29	SN-31; ST-3200 V-3030	SN-37; SC-37
6067 SC-37 A; SN-70	538 SN-41	573 SN-42	689 SN-43	651 black	6061 red	590 grey	710 IM grey
IM red	orange	tr. clear	purple	black	black	SN-50	SN-60; SC-60
SN-70 SC-37 A	SN-80 SC-80	SN-101 SV-101	SN-202	SN-303	SN-P 313	SN-505	SN-P 515
6010 IM red	712 IM red	713 orange	6112 yellow	823 purple	824 black	825 orange	877 MM orange
SN-707	SN-909	ATN-3100	ST-3200	SN-33	SN-36	SN-38	SN-110
985 blue	6060 black	1372 black	590 grey	542 white	6281 MM orange	663 IM red	6252 tr. brown
SV-111	SNP-212	SN-757	SN-40 X	SN-1112	SN-3601	SN-3601/II	
6247 red	6234 IM red	6226 red	620 ES grey	6279 orange	6279 orange	6279 DE orange	
SN-343	SN-333	AT-113; SN-353	PE-570	AT-3609	AT-370SS		
6166 yellow	6208 blue	6348 orange	6348 orange	6237 grey	6353 grey		

Tonar replacement types for: SANWA

9020							
767 white							

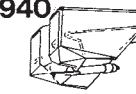
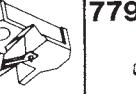
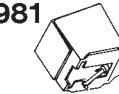
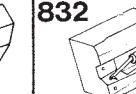
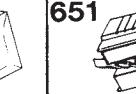
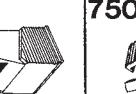
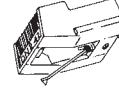
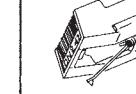
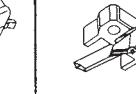
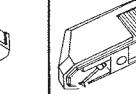
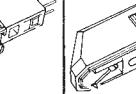
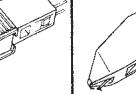
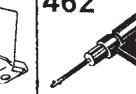
Tonar replacement types for: SANYO

STA-1 D	STG-1	STL-1	STG-2 D ST-107	ST-03	ST-3 D	STA-3 D	STG-3
6096 DE yellow	578 black	148 white	822 white	951 white	50 white	781 DE brown	211 white
ST-4 D STL-40 T	ST-05	ST-5 D MG-2	STG-5 MGT-45	ST-L 5D	ST-6; ST-6 D MGT-1	STG-6	ST-07 D
787 NO LONGER AVAILABLE white	6175 red	514 white	801 black	6050 1.blue	367 white	801 black	6228 MM ed
STG-7	ST-8; 42 K MGT-2	ST-08 D	STG-8	STG-9	ST-09D STW-17 J	ST-10 D MGT-3	STG-10
826 orange	575 white	6229 IM black	813 red	980 red	6259 MM red	536 nickel	6282 blue
ST-10J; ST-11D MG-10; MG-10J	STG-11	STM-11 MG-M 11	ST-12 D MG-3	STG-12	STG-13 GXT-250	ST-14 D MGT-5	ST-15 J
771 black	6240 violet	989 dark grey	296 white	6208 violet	6172 red	456 ivory	971 white
ST-15; MG-15 ST-15 GD; LD	ST-17 D MGT-17	MG 17-10	ST-20 J	ST-20 D MG-2	ST-25 D MG-25	ST-25 J	ST-26 D MG-26
573 tr.brown	767 white	980 red	954 black	738 black	526 blue	542 white	691 orange
ST-26 DL	ST-26 J	ST-27 D MG-27	ST-27 DL MG-27 L	ST-28 D MG-28	ST-29 D	ST-30 D MG-30	ST-30 J
6011 black	915 white	608 blue	738 black	663 red	972 MM red	633 red	1243 black
ST-31 J	ST-34 D	ST-35 D	ST-35 VD MG-35 V	ST-36 D MG-36	ST-36 VD	ST-37 D	ST-37 LD
833 red	6012 black	851 grey	571 white	652 orange	568 red	382 blue	6017 tr.darkblue
ST-38 D ATN-892	ST-40 D	ST-40 DX MG-40 X	ST-41 D	ST-41 J	ST-41 ZD	ST-42 D	ST-43 ST-43 D
928 black	6149 orange	694 ES 4-channel tr.brown	865 orange	851 grey	903 blue	898 yellow	771 black
ST-44 D	ST-44 J	ST-45 DX	ST-47 D	ST-48 D	ST-50 D MG-50	STP-50 J	
839 black	6063 blue	688 ES 4-channel blue	6199 black	822 white	951 white	788 black	393 black
ST-51 J	ST-51 D	ST-53 D	ST-53 ZD MG-53 Z	ST-55 D	ST-57 D	ST-63 D	ST-66 D
406 red	904 black	849 brown	849 brown	6195 MM orange	6200 black	760 DE blue	6164 red
ST-67 D	ST-100 SD	ST-101 SD	ST-102 S ST-102 SD	ST-103 SD	ST-107	ST-140	ST-170 GXT-170
6198 tr.black	840 black	975 black	6036 black	957 black	822 white	6172 red	801 black
ST-707J GXT-210	GXT-210 GXT-410	STW-8J DN-239		ATN-750		STW-40	all plastic
6175 red	6016 blue	981 white	6261 orange	865 orange	6064 orange	6239 blue	6068 grey

Tonar replacement types for: **SATIN**

117 NS							
1370  white							

 Tonar replacement types for: **SCHNEIDER**

L-3	L-4	Q-4	P-24	SPP-26	QLM-30 MK III	SPP-30	T-30 MS
1251  blue	1400  blue	1401  red	940  tr.orange	973  white	1229  grey	857 DE  tr.red	948  blue
ULM-40 S	SP-60 N	SP-61 M	SP-62 M	ATN-70	M-74 CS SBD-71	KS-231	DN-236
1281  black	801  black	801  black	813  red	795  red	617  blue	779  blue	1311  black
DN-239					DN-145 E	D-155-17	DN-211 DMS-210
981  white	920  white	832  red	651  MM: black/white	384  black	970  black	750  black	732  black
DN-221 DMS-220	DN-242 DMS-242 E	DN-325	MMD-340	MMD-345	MMD-360 E	CN-933	KS-40 A
820  black	821  black	387  black	2473 *  black	2474 *  black	2475 *  black	676  black	462  black
ST-12/14/15	ST-16/17	T-50 HS		1403 TS			
424  black	442  black	6038  black	910  black	6172  red	6175  red	6259  red	6176  white
	2700	TS-1672					
6329  red	974  yellow	462  black					

* = Complete cartridge only !

 Tonar replacement types for: **SCHUMANN**

FANFARE	HMV-1	HMV-2	SC-474	SK 451	SK 452	SK 453	SK 456; STK 494
182  black	390  black	391  black	153  black	183  black	184  black	185  black	186  black
STC-480	STC-485/486	STC-487	STC-488	STK-490	STK-495/1	STC-481	
420  black	414  jupimatic	493  black	685  green	152  black	239  black	391  black	

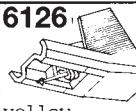
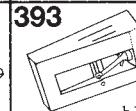


diamond styli

Tonar replacement types for: **SCIENTELEC**

1108  black							
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Tonar replacement types for: **SCOTT**

20 SC	21 SC	21 ASC	ATN-3482 P				ATN-3660 YL
956  red	879  red	966  red	6126  yellow	393  black	758  yellow	6049  black	6203  yellow
974  yellow	6164  orange						

Tonar replacement types for: **SEARS**

910  white							
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Tonar replacement types for: **SEEBURG**

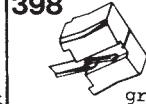
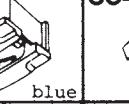
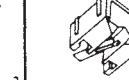
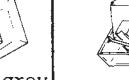
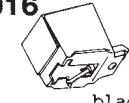
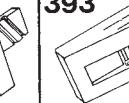
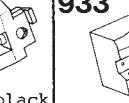
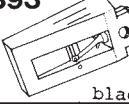
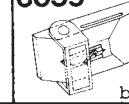
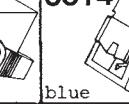
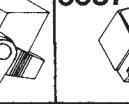
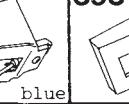
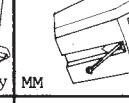
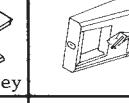
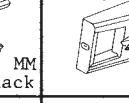
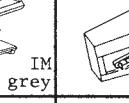
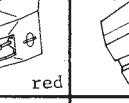
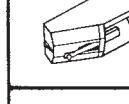
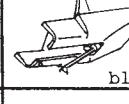
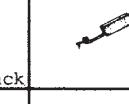
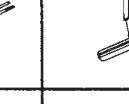
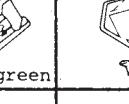
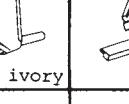
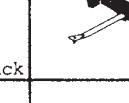
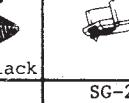
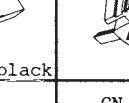
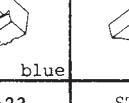
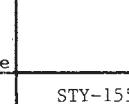
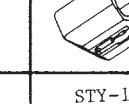
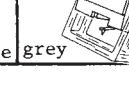
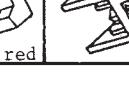
JKUE BOX	MK II	R 150	SHOWCASE	STEREO	D-102	M-100C	
188  blue	168  red	166 	403  yellow	187  turquoise	182 	303 	

Tonar replacement types for: **SETTON**

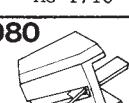
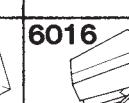
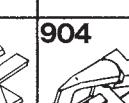
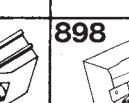
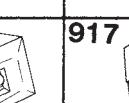
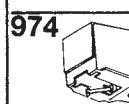
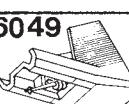
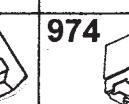
322  black							
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Tonar replacement types for: **SHERTON**

sherton							
1455 							

N-03 D	N-05 D; N-06 S	N-08 D	N-09 D	N-14 D	N-15 D	N-16 D	N-17 D
544 	296  white	348 	372 	653  black	6066  black	653  black	398  grey
N-20 D	STY-100	STY-101 STY-111	STY-102	STY-103	STY-104	STY-105	STY-107
571  white	711  blue	730  white	702  blue	712  orange	651  MM black	760  blue	6047  tr.smoke
STY-113	STY-114	STY-115	STY-116	STY-117	STY-118	STY-120	STY-121
148  IM silver	710  silver	758  yellow	862  red	822  white	851  grey	941  blue	905  black
STY-122	STY-123	STY-124	STY-127	STY-128	STY-129	STY-130	STY-131
992  MM blue	916  black	957  black	956  red	913  black	393  black	933  black	989  grey
STY-132	STY-133	STY-134	STY-135 RP-P8	STY-136 RP-155	STY-137 RP-255	STY-138	STY-139
934  black	393  black	148 	6059  black	6015  white	6014  blue	6037  blue	393  black
STY-140	STY-141	STY-142	STY-143	STY-144	STY-145	STY-146	STY-147; STY-148 STY-149
987  dark blue	991  grey	991  dark grey	6148  MM grey	6196  MM black	6253  IM grey	6175  red	980  red
STY-150	STY-202	STY-213	STY-450	STY-451 ETC.	STY-550	STY-555	STY-701
6228  red	571  white	322  black	653  black	148 	6083  green	705  ivory	660  green
STY-703	STY-704	STY-705	STY-706	STY-707	STY-717	STY-750	STY-751
322  black	456  white	696  ivory	641  black	578  black	681  black	711  blue	722ES  white
STY-752		RP-23; RP-35	RP-50		SG-20 music centre	CN-2423	STG-12
697  orange	6064  orange	987  blue	6085 	910  white	956  red	795  red	6208  violet
DN-239	SGF-10	STY-112	STY-155	STY-158	STY-152	STY-154	STY-161
981  white	6237  grey	6288  MM	6237  blue	6259  red	6331  grey	6332  brown	6282  blue

Tonar replacement types for: **SHERWOOD**

AT-112 EP	MG-1710	ATN-3472 EP					
979DE  blue	980  red	581 DE  ivory	6127 DE  green	6016  blue	904  black	898  yellow	917  red
ST-870			OMB-5	CN-251 MG-2831	PD-604-2		
974  yellow	6049  black	6084  red	1494  black	6365  yellow	974  yellow		

Tonar replacement types for: SHURE

M-3 D	PC-6 WC-6	M-7 D	M-8 D	PC-9 WC-38	SPS series N-11	SPS series N-12	PC-12 WC-32
gold	nickle	silver			brown	orange	
SPS series N-13	SPS series N-14	PC-20;WC-20	M-21 D	M-24 H	M-31 E	M-32 E	M-33-5
tan	blue	gold	gold	gold	yellow	red	
M-33-7	SC-35 C SS-35 C	SC-39 B	SC-39 EJ	SC-39 ED	PC-42	ML-44 PC-2	M-44-5
white	blue	beige	green	orange	red	nickle	red
M-44-7	M-44-C	M-44 C with guard	M-44 G	M-44 E	M-55-E	M-70 B	M-70 EJ
white	blue	light blue	brown	yellow	beige	green	
M-72 B	M-72 EJ	P-72 W-68	M-71;M-75 6S M-75 6;M-75 MB	M-75 B type II	M-75 G	M-75 G type II	M-75 C
beige	green	red	beige	beige	grey	grey	blue
M-75 E	M-75 EJ type II	M-75 ED type II	M-77	M-81 MC	M-91 G	M-91 GD	M-91 E
yellow	green	black	black	blue	grey	red	black
M-91 ED	M-92 G	M-92 E(old)	M-92 E (new)	M-93 E	N-94 EP	M-95 G	M-95 EJ
yellow	grey	yellow	red	green	blue	grey	green
M-95 ED	M-95 HE	Ne-95 ED Me-95 ED	N-96 LT	M-97 B	M-97 EJ	M-97 ED	M-97 HE
black	black	encore series	yellow	black	black	black	black
M-97 LT	Me-97 HE Ne-97 HE	M-99 E	M-104 E	M-105 E	M-110 HE	M-111 HE	M-120 HE
red	black	blue	yellow	black	white	red black	black red dot
M-140 HE	NDC-EJ	NDC-ED	SDS-1	SDS-3 NDC-HE	RXT-4	N-15	N-16
black white dot	black	black	black	black	black	green	black
NSM N-17 CM JUKEBOX NDL.	NV-30 HE	N-75 EC 3 X	N-75 HE / II		Whitelabel	M-44-7 competition	
blue	black	brown	grey		blue	white	

CONTINUED



diamond styli

Tonar replacement types for: SHURE

CONTINUED

SS-40 DC-40	SS-50 DC-50	SS-60 DC-60	SS-70 BC-70	SS-80 BC-80	SS-90 BC-90		VN-35 MR V-15 type III
1745 red	1746 blue	1747 green	1748 red	1749 blue	1750 green		584 shibata
VN-2 E V-15 type I	VN-15 E V-15 type II	VN-35 E V-15 type III	VN-35 HE V-15 type III	VN-45 HE V-15 type IV	VN-45 MR V-15 type IV	VN-45 LT V-15 LT	VN-5 HE V-15 type V-B
1084 black	567 black	584 DE black	584 ES black	798 DE black	1120 black	1483 black	6420 shibata
VN-5 MR V-15 type V MR VN-5 P	V-15 type V P	ULTRA 300 S	ULTRA 400 S	ULTRA 500 S	VNSEP3HE VST III P	VNSE3HE VST III	VNSE5MR VST V
6420 shibata silver black	1671 grey	1733 red black	1734 blue black	1735 black	1797 black	1798 black	1799 black
M-97 XE	M-97 XE	V-15 II ; VN-15 E	V-15 III ; VN-35 MR	V-15 IV ; VN-45 MR	V-15 V x/MR	V-15 V MR	V-15 V x/MR
1959	6441 D-SAS	6416 D-SAS	6407 D-SAS	6409 D-SAS	6430 shibata	6425 D-SAS	6435 D-SAS

Tonar replacement types for: SHURE — 78 RPM —

N-44 3 M-44;55 series	N-70 3 M-70;72 series	N-75 3 M-75 series	N-91 3 M-91 series	N-95 3 M-95 series	VN-78 E V-15 type III	VN-478 E V-15 type IV	VN-578 E V-15 type V
1222 78 R.P.M.	1098 78 R.P.M.	1064 78 R.P.M.	1065 78 R.P.M.	1223 78 R.P.M.	1122 78 R.P.M.	1121 78 R.P.M.	1057 78 R.P.M.
SS-78 E SC-35 C	N-78 E	N-978 E (M-97)				N-32-3	N-44-1
1732 78 R.P.M.	1727 78 R.P.M.	1827				1784 78 R.P.M.	1724 blue

Tonar replacement types for: SIEMENS

L-3	AT-30 E	QLM-30 MK III	RW-150	DN-239	555		
1251 blue	1243 black	1229 grey	898 yellow	981 white	794 DE orange	406 red	758 yellow
		RS-226		MMD-340		CN-213	
760 blue	813 red	910 white	974 yellow	2473 MM blue	6208 light blue	6016 MM	6164 orange

Tonar replacement types for: SIGNET

TKN-3EA	TKN-1; TK-5E	TKN-2; TK-7E	TKN-3; TK-7SU	TK-9 LCA TKN-9 LCA	TKN-7 LCA TK-7 LC	MRN-05 BASIC	TKN-9 Ea
1271 grey	1200 blue/grey	1201 brown	1202 brown	1597 gold	1639 brown	1690	1775 red
TKN-5EA	TKN-6; TK-3E	TKN-7 LCA	TKN-22	TKN-29; TK-9E; TK-10			
1823	1777	1639	6446	6905			

Tonar replacement types for: **SILVER**

SLU-30	SYSTEM 70	SYSTEM 70	SYSTEM 75	SS-85	SYSTEM 90	SYSTEM 100	SYSTEM 110
956 red	839 black	813 red	813 red	813 red	601 orange	712 orange	573 brown
SS-170	SYSTEM 200	SS-250	SS-270	SYSTEM 300	SYSTEM 1500	SS-3850	SL-5030
813 red	710 IM grey	710 IM grey	813 red	712 orange	573 brown	801 black	882 orange
SL-5050	S-8300		SL-90	SL-770			
753 black	934 black	673 red	6015 white	6259 red			

Tonar replacement types for: **SINGER**

PU-1300	PU-1357	PU-3012					
272	349	381					

Tonar replacement types for: **SONIC**

S-10 C							
725 orange							

Tonar replacement types for: **SONICA**

SK-58 C	SK-20 S						
792 tr. yellow	no longer available yellow						

Tonar replacement types for: **SONOTONE**

1 P	3 P	2 T	3 T	8 T; 8 TA 8 TA-77	9 T	12 T	14 T
198	199	258	165	200	201	202	180
16 T	18 T	20 T	21 T; 22 T; 23 T	25 T; 28 T	26 T; 27 T	32 T; 39 T	60 T
205	244	207	208	262	209	304	416
100 T	916 T	9 TA	21/24-TA	12 T-LA	12 T-HR	2109; 2509; 2539	2529
302	206	271	415	203	204	435	587
3509	3539	3559	V-100; V-101				
462	585	586	1093 black				

 Tonar replacement types for: **SONOVOX**

N-11 S	50 S	S-101 C	S-101 E	S-101 SH	SN-300	TC-812 E	
791 	790 	792 	792 DE 	792 ES 	602 	792 DE 	

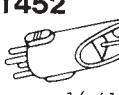
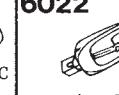
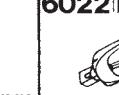
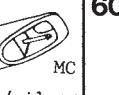
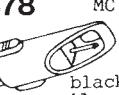
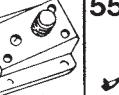
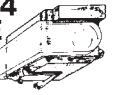
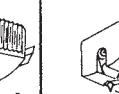
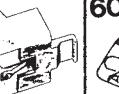
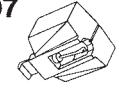
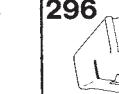
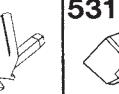
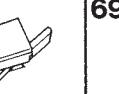
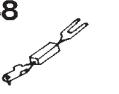
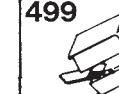
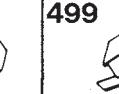
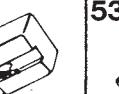
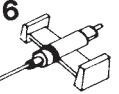
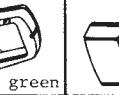
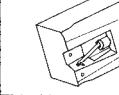
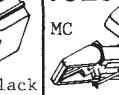
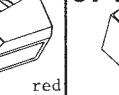
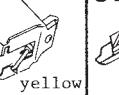
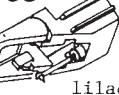
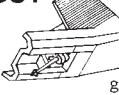
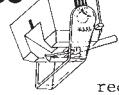
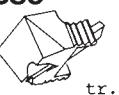
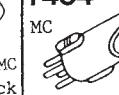
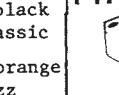
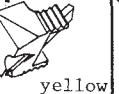
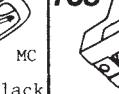
 Tonar replacement types for: **SONTRA**

SN-20							
454 							

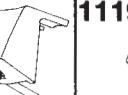
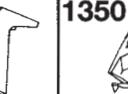
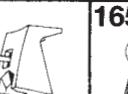
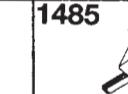
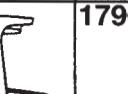
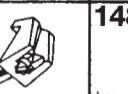
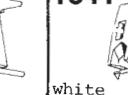
 Tonar replacement types for: **SONUS**

SR-202	BLACK A BLACK C	SILVER E	SILVER P	BRONZE	GOLD BLUE	SUPER BLUE	DIMENSION 5
1421 	1422 	1423 	1424 	1425 	1426 	1427 	1428
brown	white	white	white	brown	white	blue	black
CLEAR E	BLACK E	SMOKE E	BLACK BLC	BLACK NLC	GREEN/GOLD	RED/GOLD	
6209 DE 	6210 DE 	6211 DE 	6212 ES 	6213 ES 	1666 	1664 	
clear	black	smoke	black	black			

Tonar replacement types for: SONY

ND-MC1 E XL-MC 1	ND-MM1 G XL-MM 1	ND-MM2 E XL-MM 2	ND-MC3 X XL-MC 3	ND-MM3 X XL-MM 3	ND-MC5 X XL-MC 5	ND-5 G VL-5	ND-7 E
1452  MC red/silver	6022  tr. orange	6022 DE  tr. red	1453  MC brown/silver	6022 ES  black	1478  MC black silver	848  blue	848 DE  blue
ND-14 G VL-14 GS	ND-15 G XL-15; VL-15G	ND-15 GA XL-15 A	ND-20 G VC-20	ND-ST 21	ND-25 E XL-25; XL-25A	ND-30 E XL-30	ND-35 E XL-35
773  orange	731  orange	731  orange	1303  silver	556 	854 DE  grey	881 DE  blue	855 DE  tr.red
ND-45 E XL-45 E	ND-45 X XL-45	ND-45 X II XL-45 II	ND-50 G VX-50 G	ND-50 X XL-50	ND-60 G VX-60 G	ND-70 X XL-70	ND-100 G VL-100 G
765 DE  tr.purple	754 ES  tr.purple	742  orange	6095 DE  orange	807  red	458 DE  tr.red	727  green	
ND-108 VM-8 GS	ND-111 E/112 E VC-8 E	NS-113 P VM-9 P	ND-114 P VM-10 P	ND-115 G VM-11 G	NS-116 P VX-12/13	ND-117 P VM-15 P	ND-119P VX-17P ND-120P VX-18P
816  red	679  white	296  white	531  red	693  black	148 	498  orange	497  green
ND-121 P VM-19 P	ND-124 P	ND-125 G VM-21G; 21P	ND-126 G VM-22 GA	ND-127 P VX-23 P	ND-128 P VX-24 P	ND-129 G VM-25 G	ND-130 G
505  red	499  red	499  red	496  black	532  red	316  black	571  white	323 ES  4-channel
ND-131 G VM-1200 G	ND-132 G VM-22G; VM-26G	ND-133 G VL-30 G	ND-134 VL-32 G	ND-134 G VL-34 G	ND-135 G VM-27 G	ND-136 G VL-33 G	ND-137 G VL-37 G
635  blue	612  black	613  green	662  red	662 DE  yellow	778  red	795  red	819  yellow
ND-138 G VL-38 GS	ND-139 G	ND-141 G VC-41 G	ND-142 G VL-42 G	ND-143 G VL-43 G	ND-144 G VL-44 G	ND-145 G VL-45 G	ND-147
832  red	904  black	1626  MC red	974  yellow	977  tr.blue	6165  lilac	581  grey	6064  orange
ND-150	ND-150 G XL-150	ND-156 G	ND-200 G XL-20 G	ND-200 E XL-20	ND-220 G VL-20	ND-250 G XL-250 G	ND-301 P
902  green	907  tr.red		919  tr.blue	880 DE  blue	863  red	880  tr.red	6170 
ND-333 E XL-333	ND-500 E XL-500 E	ND-1500 XL-15; XL-25	ND-40 E XL-40	ND-10 G XL-10	ND-142 GP	ND-142 EP	ND-142 EY
1451  MC purple/black	1454  MC red silver	1510 ND-15 black for classic ND-15 orange for jazz	1479  tr.purple	6145  white	6155  pink	6155 DE  pink	974 DE  yellow
ND-148 G	ND-152 P	ND-153 G	ND-155 G	ND-250 E XL-250 E	ND-300 G XL-300	ND-105	
6208  blue	6174  red	957  black	981  white	6147  yellow	6143  red	6346  blue	
ND-MC 2 E XL-MC 2	ND-MC 10 E XL-MC 10	PS-212A	CN-234	PSLX-49/CN-234			
1697  MC red silver	1632  MC orange/black	758  yellow	6259  red	6259  red			

Tonar replacement types for: STANTON

mark V D-5	E-7 S	LZ-8S; HZ-8S E-8 S	LZ-9S; HZ-9S E-9 S	500 A D-5107 A	500 AA D-5105 AA	500 A/ II D-50 A	500 E D-5100 E
1713  black	1642  tr. brown	1581  black	1551  black	549  black	549  black	1653  blue	549 DE  black
500 E/II D-50 E	500 EE D-5100 EE	500 EE/ II D-50 EE	500 AL D-5107 AL	L-500 AL D-57 P-AL	500 EL D-5100 EL	500 series D-5127	600 A D-6071 A
1550  blue	549 DE  black	1654  blue	6364  DISCO white	1637  white	1789  white	1119  78 rpm	964  black
600 E D-6004 E	600 EE D-6003 EE	600 series D-6027	680 AL D-6800 AL		680 EL DISCO D-6800 EL	680 SL DISCO D-6800 SL	680 AMC D-6800 AMC
964 DE  black	964 DE  black	1187  78 rpm	1643  white		6390 DE  white	1350  white	1552  black
680 BPSM D-6800 BPSM	680 BPSR D-6800 BPSR	681 A D-6807 A	681 E D-6800 E	681 EE D-6800 EE	681 EEE/S D-6800 EEE/S	681 EEE/S II D-6800 EEE/S II	681 EEE/S II D-6800 EEE/S II
1553  black	1644  black	548  black	548DE  black	548DE  black	669DE  black	1652  black	1652  black
681 SE D-6800 SE	681 series D-6827	STC-710 D-70 E	L-720 EE D-71 EE	L-725 E D-71-2E	L-727 E D-72 E	STC-730 D-71-2F	L-737 S D-73 S
1112  black	1184  78 rpm	1791  black	1485  black	1790  black	1486  tr. clear	1790  black	1487  tr. clear
L-737 E D-73 E	STC-740 D-72 E	L-747 S D-74 S	L-837 S D-83 S	L-847 S D-84 S	881 S D-81	881 series D-827	980 LZS D-98 S
1488  tr. clear	1486  tr. clear	1489  tr. clear	1640  white	1641  white	805DE  white	1185  white 78 R.P.M.	1352  tr. clear

Tonar replacement types for: STARE

210 							
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Tonar replacement types for: STEEL NEEDLES

Laubscher forte 11	EDISON CILINDER	Laubscher PPP 34	VERY SOFT TONE	SOFT TONE	MEDIUM LOUD TONE	LOUD TONE	VERY LOUD TONE
1886  BOX 200 PCS. 15.0 x 1.5 MM	6317  AMBEROLA	1888  BOX 100 PCS. 15.5 x 0.8 MM	6459  BOX 100 PCS. 16.0 x 0.8 MM	6460  BOX 100 PCS. 18.0 x 1.0 MM	6461  BOX 100 PCS. 17.0 x 1.4 MM	6462  BOX 100 PCS. 18.0 x 1.5 MM	6463  BOX 100 PCS. 16.0 x 1.7 MM

In old 78 RPM record players - so called Pathé-phones - there was no amplifier. Instead the volume is controlled by the shape and the dimensions of the steel needle. We are proud to announce newly manufactured steel needles which are available in boxes of 100 pcs. and in various tone types like very soft tone, soft tone, medium loud tone, loud tone and very loud tone.

Tonar replacement types for: SUPEX

SM-38	SM-38 E	SMM-5					
984  black	984 DE  black	6214  black					



diamond styli

Tonar replacement types for: **SUPRAPHON / TESLA**

KS-22	VK-311/68317	VK-4302	VM-2101	JT-311	VK-4302	JT-511	JT-411
378 	450 	464 turnover 	1052 black 	555 green 	1066 * single tip 	664 red 	761 yellow
E-100	VK-4202	VK-051	VM-2102	VM-2103	VM-2204		
1093 	1066 	27 	1599 black 	1834 red 	1835 black 		

* Naald VK-4302 (T-naald) wordt geleverd als naald voor VK-4202 met gebruiksaanwijzingen.

The stylus for VK-4302 (T-Bar) is delivered identical to the stylus for the VK-4202 along with mounting instructions sheet.

Tonar replacement types for: **TANNOY**

MK-11							
213 							

Tonar replacement types for: **TEAC**

866 	909 	601 	PC-707 ; N-707	PC-313	PCS-708 PC-708		
black	black	brown	grey	MM red	6049 black	898 yellow	758 yellow
P-75	PX-550						
6259 	865 						
MM red	orange						

Tonar replacement types for: **TECHNICS, See: NATIONAL**

Tonar replacement types for: **TELEFUNKEN**

2 TS	3 TS	8 TS	A 20/1; T 20/1	A 20/2; T 20/2	A 23/1	A 23/2; T 23/2 A 25/2; T 25/2	A 200; T 200
258 	165 	200 	217 	218 	311 	299 	219
TTSA	STYLUS-12 LMA-12	STYLUS-5 LMA-5	TM-500	TM-600 A-600 D	ATN-72	ATN-3410	
216 	1318 	1319 	608 blue 	781 DE l.brown 	895 brown 	898 yellow 	917 red
STYLUS 10 NEW OMB-10	TM-400			M-22			
1276 	526 	904 black 	916 black 	6242 yellow 			



diamond styli

Tonar replacement types for: **TELETON**

CMS-500/400/ 300	DST-17/S-100 G; CS-400/401	ATN-71	MST-31	MPC-7		MST-5	MST-6
452	571	758 	712 	822 	801 	661 	822
N-1520	MM-321 B						
6014 	945 	673 	974 				
blue	tr.green	red	yellow				

Tonar replacement types for: **TENOSEL**

T-2001	T-2001 ED	T-2001 SD					
622 	622 DE 	622 ES 					
white	black						

Tonar replacement types for: **TENSAI**

			Jelco 9 A				
831 	712 	637 	573 	813 	898 	934 	877
yellow	orange	red	yellow	red	yellow	black	MM orange
L-3		L-4				MC-390	MC-3750
1251 	974 	6042 	910 	6015 	917 	801 	6175
blue compo 15 compo 25	yellow	blue	red	white	red		red
920 							
white							

Tonar replacement types for: **TEPPAZ**

ECO 60/423; 26	MT-30	STEREO	VISSEAU	JUPITER			
292 	446 	215 	214 	557 			

Tonar replacement types for: **TESLA, See: SUPRAPHON**

Tonar replacement types for: TETRAD

T-5 H	T-2 MS T-2 MD	T-3 MS T-3 MD	T-12 MS T-12 MD	T-20 MS T-20 MD	T-50 HS	T Z- 1 S T Z- 1 D	T-30 MS T-30 MD
874 grey	875 white	6002 blue	6007 blue	6001 red	6038 white	6128 grey	948 blue

Tonar replacement types for: THOMPSON

L-4	T-H 5 S	T-H 5 E	AT-10	ATS-11	ATS-11 E	ATN-12 XE	ATN-13 Ea
1400 blue	904 black	904 black	568 red	677 yellow	741 green	781 brown	794 orange
STC-100 D	STC-1000 D		ATN-3721			DN-105	M-22
157 	157 	917 red	831 yellow	524 black	935 black	1529 black	6242 yellow

Tonar replacement types for: THORENS

M-200 E D-200 E	LMB-12						
1320 black	1318 black						

Tonar replacement types for: TONACORD

TM-1000	TM-1000 S	TM-511	TMC-100				
815 5mV yellow	550 ES white	664 red	2521 black				

Tonar replacement types for: TONAR

5-POLE	5-POLE-2	JT-311	JT-322	NC 100; 202; 203 NC 505; 400; 400H	NC 202; 203; 400 NC 400H	NC-700	NC-770
436 	20 	555 green	550 white 4-channel	27 	148 stereo	494 	270
NM-11-A	NM-22	NM-33	NM-33-A	NM-66	NR-1	CDS-650	511
222 gold	263 white	296 white	453 blue	447 grey	363 	614 	960 red
511 BE	555	611	611 BE	711 MC	BAKTRAK	DIABOLIC E	BANANA
960 yellow	960 black	6176 white	6177 yellow	2521 black	1811 yellow	1953 red	1812 yellow

Tonar replacement types for: TETRAD

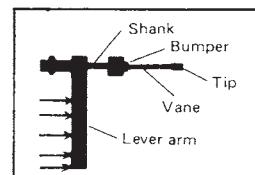
IMPORTANT POINTS ON TETRAD NEEDLES — All TETRAD needle models are very similar in construction. The shank portions vary only in the length of the metal vane and the position of the rubber coupler, or bumper. The scale drawings in the middle left side of each illustration block are exact size.

Although the major difference shown in each scale drawing is the length of the handle, there are many vital, significant differences. Engineering specifications such as the rubber flexibility, length and thickness of the tube and material composition are all factors in reproducing the full frequency cycle range, smooth response characteristics and good tonal qualities of sound reproduction.

To determine needle group needed, we suggest placing the old needle directly on the scale drawings until a match is found where shank, bumper, vane and lever-arm of drawing agree with actual needle. There may be a slight variation in length of a few thousandths of an inch, which does not affect playback performance.

Lever arm lengths are indicated by the letters A, B, C, D and E in the illustrations. Match the old needle lever arm to determine the arm length needed (A, B, C, D or E). If in doubt, it is advisable to purchase the "E" length and cut off a portion of the lever arm to fit.

PLEASE NOTE: All ALL-PLASTIC needles may be replaced by HIGH-COMPLIANCE METAL NEEDLES. The second column of TONAR numbers under the ALL PLASTIC needle section gives you immediately the TONAR number of the HIGH-COMPLIANCE needle replacing the ALL-PLASTIC needle concerned.

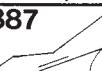
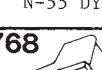
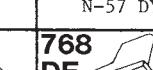
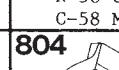
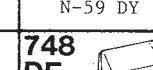
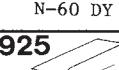
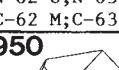
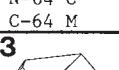
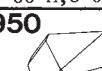
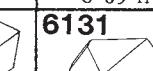
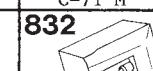
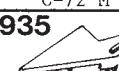
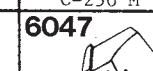
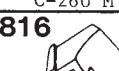
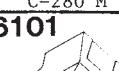
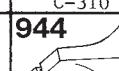
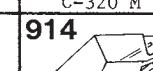
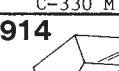
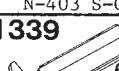
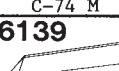
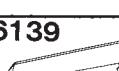
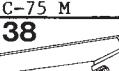
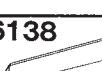
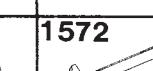
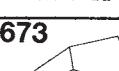
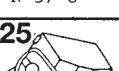
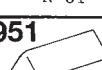
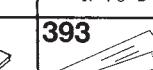
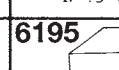
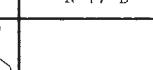
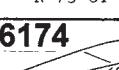


HIGH COMPLIANCE NEEDLES				TONAR N°		TURNOVER-ARM LENGTH	
TONAR N°		TONAR N°		TONAR N°		TONAR N°	
NEW	OLD	TETRAD NRS.	ILLUSTRATIONS	NEW	OLD	TETRAD NRS.	ILLUSTRATIONS
281	—	A 50; 60 A-0; B-0; C-0*		330	—	70	
—	—	51		—	—	80	
327	332	B 61 A-1*; B-1; C-1*		473	—	90	
—	—	53		335	—	71	
328	333	C 63 A-3*; B-3; C-3*		—	—	81	
—	—	52		373	—	91	
266	294	D 62 A-2*; B-2; C-2*		337	—	73	
—	—	54		331	—	83	
329	334	E 64 A-4; B-4; C-4		336	—	72	
—	—	—	—	—	—	82; 92	
—	—	—	—	—	—	74	
319	324	20 A 40 E-0; G-0		338	—	84	
—	—	—	—	475	—	94	
317	—	21		*ALL PLASTIC NEEDLES			
221	B	41 121 E-1*; G-1*		TONAR N°			
—	—	—	—	All Plastic	H.C.*	TONAR N°	
293	325	C 43 E-3*; G-3*		481	327	A A-1	
—	—	22		483	328	B A-3	
283	—	D 42 E-2*; G-2*		482	266	C A-2	
—	—	24		471	281	A C-0	
321	326	E 44 E-4; G-4		484	327	B C-1	
—	—	—	—	486	328	C C-3	
295	322	A 10 30		485	266	D C-2	
—	—	11		487	221	A E-1	
220	B	31; 111		489	293	B E-3	
—	—	13		488	283	C E-2	
265	C	291 33		490	221	A G-1	
—	—	12		492	293	B G-3	
264	D	32		491	283	C G-2	
—	—	14		—	—	—	—
318	E	34		—	—	—	—

* Also available as All Plastic type.

* High Compliance replacement for All Plastic needle.

Tonar replacement types for: TOSHIBA

TP-102;106; TP-114	TP-102;106 TP-114	N-2 C	N-3 C C-03 C;C-10C	N-4 CS C-07	N-04 C C-04 C	N-6 C	N-6 L C-6 L
27 	148  stereo	148 	578  black	296  white	508 	148 	1474  tr.green
N-6 Z C-6 Z	N-11 C SM-280;290	N-12 C C-26 M	N-13 C C-27 M	N-14 D	N-20 C	N-21 D	N-33 C C-911
1476  tr.purple	456  white	398  grey	542  IM white	571  white	920  white	910  red	876  black
N-34 C;N-35 D C-34 M;C-35 M	N-40 C	N-44	N-45 C C-45 M	N-50 C C-50 M	N-51 C	N-52 DY	N-53 DY
887  red	934  black	6115  IM blue	962  orange	972  MM red	972  MM red	677  yellow	568  red
N-55 DY	N-56 DY	N-57 DY	N-58 C C-58 M	N-59 DY	N-60 DY	N-62 C;N-63 D C-62 M;C-63 M	N-64 C C-64 M
768  green	915  grey	768 DE  green	804  tr.violet	748 DE  blue	925  tr.purple	950  MM red	963  IM red
N-66 C;N-67 D C-66 M;C-67 M	N-68	N-69 D C-69 M	N-70 C	N-71 D C-71 M	N-72 D C-72 M	N-80 D C-80 MC	N-88 D C-88 MC
950  MM red	887  red	6131  red	925  tr.violet	832  red	935  black	1373  red	1407  green black
N-160 C C-160 M	N-210 C C-210 M	N-220 ME/X C-220 M	N-230 C C-230 M	N-250 C C-250 M	N-260 C C-260 M	N-280 C C-280 M	N-290 D
862  orange	826  red	6116 ES  red	826  red	6047  smoke	816  red	6101  MM white	6052  MM black
N-292	N-300 C C-300 F	N-301 C C-301 F	N-310 C C-310 M	N-320 D C-320 M	N-330 D C-330 M	N-400 N-403 S-C	N-404 C-EX
973  white	570 	508 	944  orange	914  tr.green	914  tr.green	1339 	1348 
N-500 C C-500	N-550 C C-550 M		C-30 M	C-32 M	N-74 C C-74 M	N-74 DY	N-75 C C-75 M
6129  tr.green	373  tr.blue	851  white	851  white	6183  red	6154  red	6139  IM grey	6139  MM black
N-76 DY	N-293 DY	N-402 S-D	TP-116 SD	N-16 D	SR-V-22	N-36	N-37 C
6138  black	851  white	1572  nickle	6190  white	917  red	673  red	6084  red	6225  dark blue
N-61	N-77 C	N-78 D	N-15 C	N-17 D	N-73 CY	N-501 C	
951  white	6207  black	393  black	6195  MM orange		6174 	813  MM red	

Tonar replacement types for: TRIO

N-6 AT	N-11	N-15 0 MK II	NF-15 0 MK II	N-20	N-23	N-25	N-26
296 white	758 yellow	803 white	802 red	780 white	445 grey	654 1.grey	771 black
N-30	N-31	N-32; N-33	N-34	N-35	N-36	N-37	N-38
654 1.grey	655 black	571 white	541 white	686 brown/silver	656 dark grey	657 red	325 scarlet
N-39	N-39 MK II	N-39 MK III	N-40	N-41	N-42	N-43	N-44
326 orange	958 black	829 black	323 ES 4-channel	677 yellow	323 ES 4-channel	658 blue	688 ES 4-channel
N-45	N-46	N-47	N-48	N-49	N-50	N-51 E	N-52
1493 MC	755 black	730 white	758 yellow	764 orange	908 black	908 DE	6008 blue
N-53/V-53	N-54	N-55	N-56; N-56 B	N-57	N-58	N-59	N-77
876 black	6021 blue	1408 MC blue	935 black	1407 green/black	6139 IM black	6138 MM dark grey	6353 grey
N-61	N-62; V-62	N-63	N-64	N-64 C	N-65	N-66	N-67
6204 MM blue	6183 red blue	6158 red blue	393 black	393 DE black	6249 green	6257 MM red	6258 MM red
N-68	N-69	N-70	N-71	N-72	N-73	N-74	N-75
6283 MM blue	6259 red	1586 grey	6291 black	6335 I.blue	6204 purple/blue	6334 black	957 black

Tonar replacement types for: TRIO TRACK

		AC-100	AC-1				
72 red	390 white	239	239				

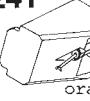
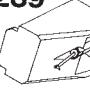
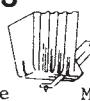
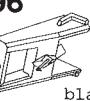
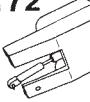
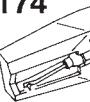
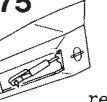
Tonar replacement types for: UHER

					L-4	Q-4	MMD-345
956 red	832 red	973 white	6016 blue	974 yellow	1251 blue	1401 blue	2474 black

Tonar replacement types for: UNITRA

MF-100	MF-102	UF-70		MF-101			
 622 white	 622 white	 6262 red	311	 622 white			

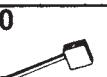
Tonar replacement types for: U.P.O. 'S

CN-108			KP-20				
 6241 IM orange	 6239 MM blue	 6164 MM red	 6133 white	 6171 IM	 6173 MM yellow	 6196 MM black	 6253 IM grey
 6242 MM yellow	 6243 MM green	 6245 MM gold	 6240 IM violet	 6016 light blue	 6130 MM light green	 6051 MM white	 6234 IM red
 6172 red	 6174 red	 6175 red	 6259 MM red	 6228 IM red	 6229 MM black	 6258 MM red	 6260 MM
CN-229	MG-2721	CN-234	CN-111	CN-246; CN-252	CN-254	CN-251	
 6346 blue	 6353 grey	 6259 red	 6198 IM black	 6353 grey	 6366 MM black	 6365 yellow	

Tonar replacement types for: VACO/LUXOR

M 50	MS 8; SN 45	S 45	SN-65-75	ST 20/40; ST 100	ST 20/40	STP 2	T 45
 226	 227	 224	 278	 27	 223	 148 stereo	 225
TN-02H	TN-04	TN-8					
 279	 417	 421	 78				

Tonar replacement types for: VALKONA

KD-69	CS-21; KS-23	KSS-0162	KSS-0163	CN-24	MS-16	KS-231	MS-27 D
 412	 554	 540	 378	 779 blue	 1179	 779	 1247 black



diamond styli

Tonar replacement types for: **V.E.B.**

KD-69	KS-22	CS-21; KS-23	KSMU-0261	KSS-0162	KSS-0163 DS-262	MS-8	CN-24
412 	378 	554 	448 	540 	378 	308 	779
KS-231	MS-27 D						
779 	1247 black						

Tonar replacement types for: **VISONIK**

YM-818				T-20 MS			
6130 	851 	456 	910 	6001 			

Tonar replacement types for: **WALTHAM**

T-30 MS							
948 							

Tonar replacement types for: **WEBSTER ELECTRIC**

SC 1	SC 3	WE 14/15	WE 57/58				
228 	229 	230 	137 				

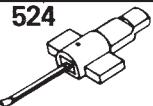
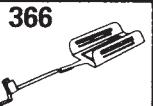
Tonar replacement types for: **WEGA**

	ATN-70	MCN-42	ND-139 G				
832 	795 	1243 	904 				

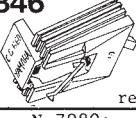
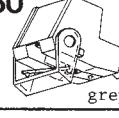
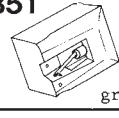
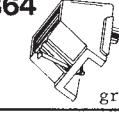
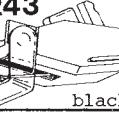
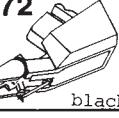
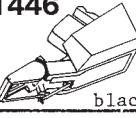
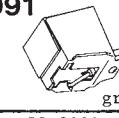
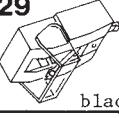
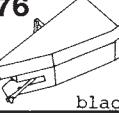
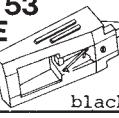
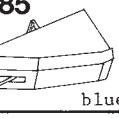
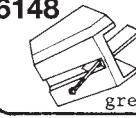
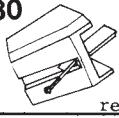
Tonar replacement types for: **WEHKAMP**

KSMU-0261							
448 							

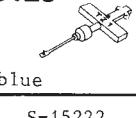
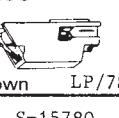
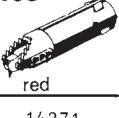
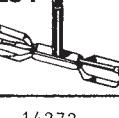
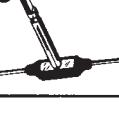
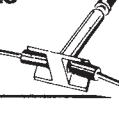
Tonar replacement types for: **WILSON**

							
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Tonar replacement types for: **YAMAHA**

MC-101	N-3000	N-3500 N-4000	N-4500; N-4500 MK II	N-5000	N-5500	N-6000	N-6500
NO LONGER AVAILABLE	296 	690 	785 	398 	542 	NO LONGER AVAILABLE 	571 
MC	MM white	white	black	grey	white	NO LONGER AVAILABLE	white
N-6600	N-6600 S	N-6700	N-6800	N-6900	N-7000	N-7030	N-7050; M-705 MC
846 	850 	851 	864 	6113 	716 	1243 	1372 
N-7080; MC-708	CG-7700	N-7800	N-7900	N-8000	N-8010; MC-801	N-8100	N-8200
1446 	991 	991 	6114 DE tr. ruby	929 	976 	6153 DE 	1685 
N-102	N-103	CG-8300 N-8300	N-8400	AL-E 500	N-2500		
6148 	980 	6266 tr. dk. grey/ blue	6289 tr. blue	6266 tr. black	6853 		

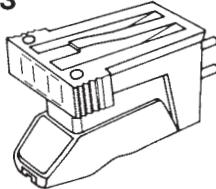
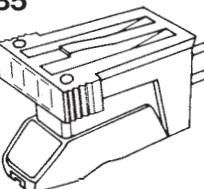
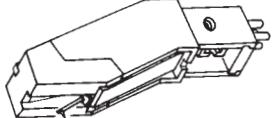
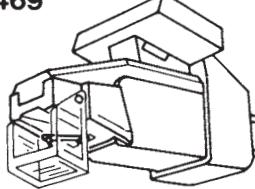
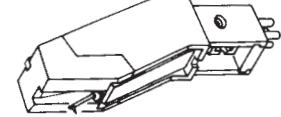
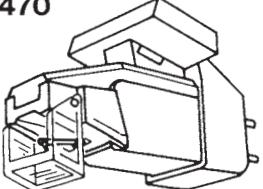
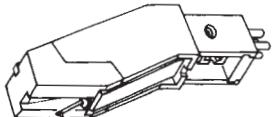
Tonar replacement types for: **ZENITH**

142-185	142-76/77	142-80	142-90	142-126/128	142-136/141	142-150	142-167
6128 	233 	104 	103 	234 	235 	268 	423 
S-15222	S-15780	S-11473	14271	14272	14273		
1986 	1988 DA allplay green/red	1990 DN red 78 rpm	232 DS blue	232 DA yellow allplay	232 DN purple 78 rpm		

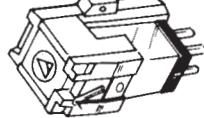
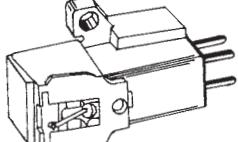
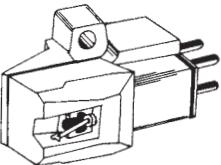
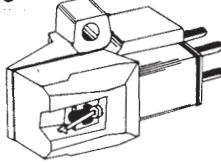
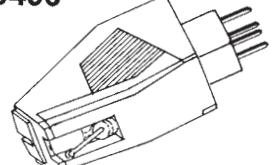
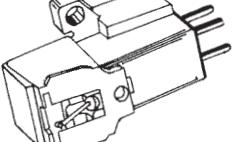
IMPORTANT!

On the following pages you will find a listing of the most important crystal, ceramic and magnetic cartridges in our line. Almost all of these cartridges have special attachments and cannot be replaced by other cartridges. Most cartridges with a universal 1/2 inch screw mounting have not been listed as these can economically be replaced by the Tonar models, which are listed in the first part of our catalogue. In the case you require a model, which is not listed on these pages, please contact the importer in your country as in most cases we will be able to supply the one you are looking for.

Tonar replacement types for: A.D.C.

QLM-30 MK III B Slidemount bracket	QLM-32 MK III B Slidemount bracket	L-3	Q-3
2453 	2485 	2466 	2469 
L-4	Q-4	L-5	QLM-30 MK3
2467 	2470 	2468 	2651 

Tonar replacement types for: AUDIO TECHNICA

AT-71	AT-91	AT-3400	AT-95E; AT-3451 E
2648 	2392 	2492 	2806 
AT-3482 PB	AT-3600 L		
9496 	2491 		

Tonar replacement types for: **BANG & OLUFSEN**

MMC-1	MMC-2	MMC-3	MMC-4
9355 	9357 	9359 	9334
MMC-5	MMC-10 E REPLACED BY MMC-20 S	MMC-20 S	MMC-20 E
9334 	9248 	9248 	9248
MMC-20 EN	MMC-20 CL		
9363 	9365 		

Tonar replacement types for: **B.S.R.**

X-5 H	X-5 M	SC-5 H	SX-6 M
2009 	2010 	2012 	2014
SX-6 H	SC-7 M-2	SC-7 M-4	TC-8 S
2140 	2382 	2153 	2007
TC-8 H	SC-11 M	SC-12 M	SC-12 H
2008 	2165 	2016 	2271



cartridges

Tonar replacement types for: **CONER**

RCQ-mono	RCS-stereo		
2018 	2017 		

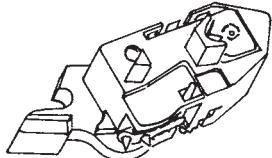
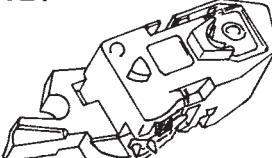
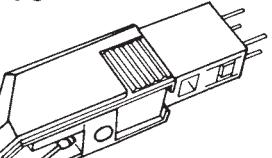
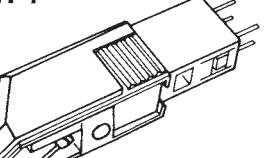
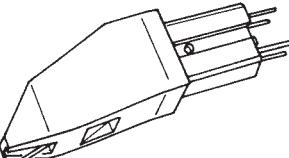
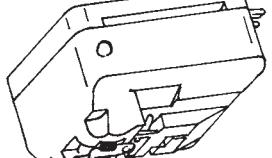
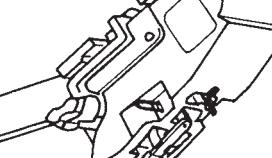
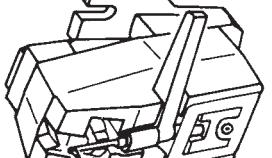
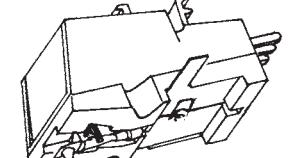
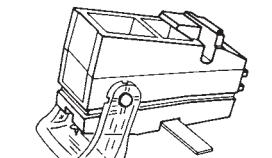
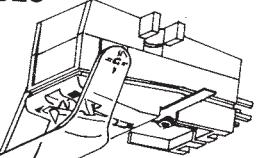
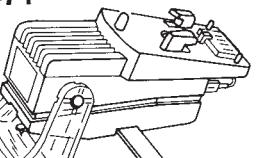
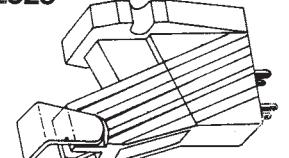
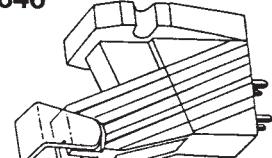
Tonar replacement types for: **COSMO**

TC-0014			
2019 			

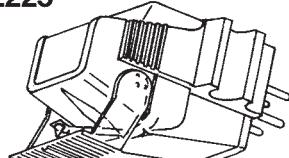
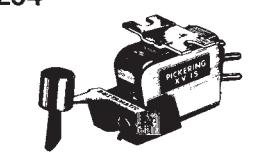
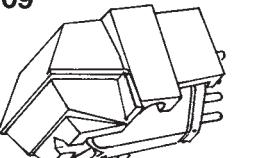
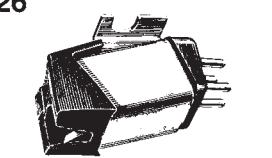
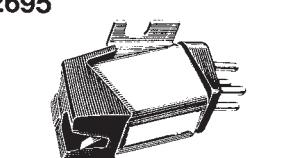
Tonar replacement types for: **DIGITRACK**

25 S	25 SP	50 E	50 EP
2656 1/2 inch mounting	2658 T-4 P plug-in cartridge	2660 1/2 inch mounting	2662 T-4 P plug-in cartridge

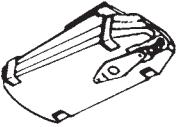
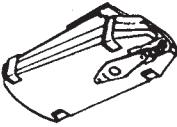
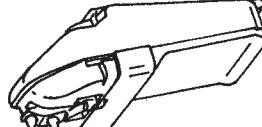
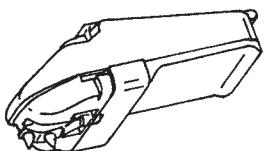
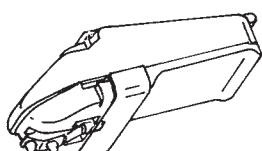
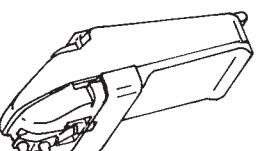
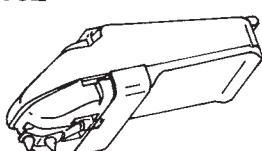
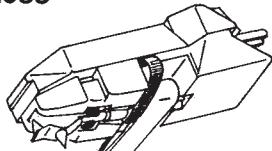
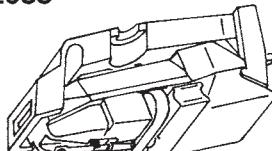
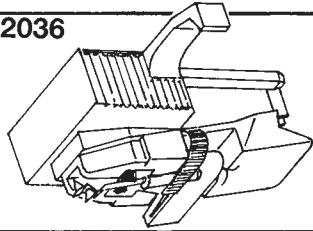
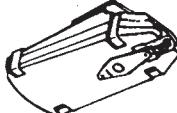
Tonar replacement types for: DUAL

CDS-3/34	CDS-320/3	MMD-340	MMD-345
2020	2021	2473	2474
			
MMD-360 E	CDS-420/43	CDS-520	CDS-630
2475	2022	2023	2028
			
CDS-660	CDS-670	CDS-671	TKS-670
2024	2327	2025	2471
			
DMS-245	DMS-249		
2525	2646		
			

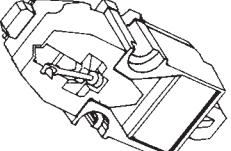
Tonar replacement types for: DJ CARTRIDGES

NAGAOKA JT-511 DJ	PICKERING XV-15 625 DJ	SHURE SC-35 C	STANTON 500 AL
2225	2294	2109	2126
			
STANTON 500 EL	STANTON 680 AL	STANTON 680 EL	STANTON 680 SL
2695	2548	2353	2347
			

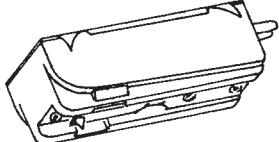
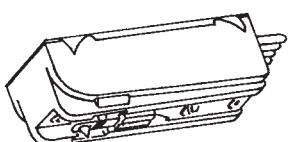
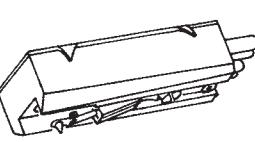
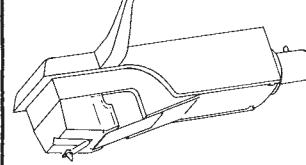
Tonar replacement types for: **ELAC**

KST-5	KST-9; KST-19	KST-11	KST-12
2696	2030 	2697 	2698 
KST-22	KST-102	KST-103	KST-104
2699 	2031 	2700 	2032 
KST-106	KST-109	KST-110 D	KST-112
2033 	2701	2035 	2036 
KST-115	KST-21		
2610	9385 		

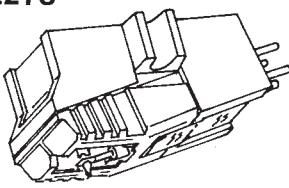
Tonar replacement types for: **FONICA**

UF-70			
2552 			

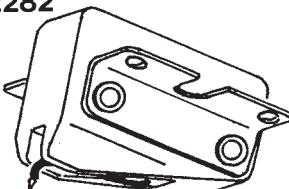
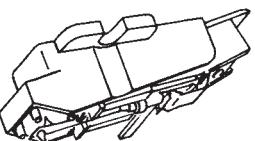
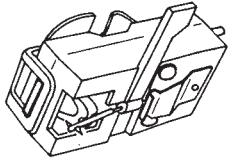
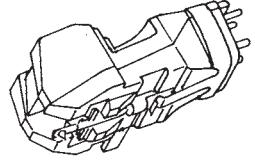
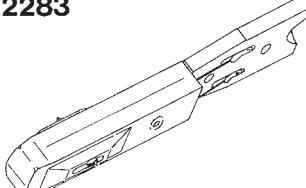
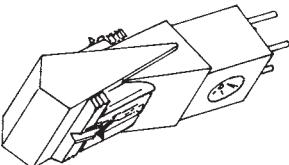
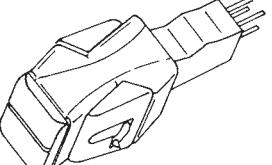
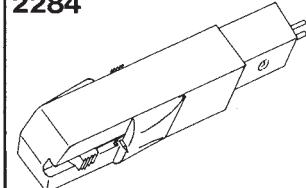
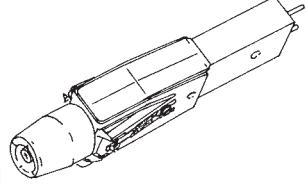
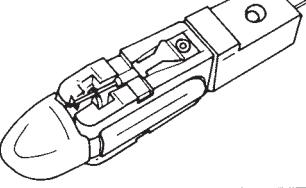
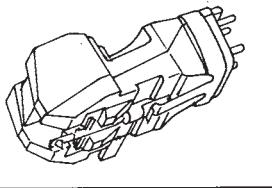
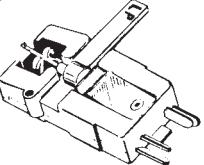
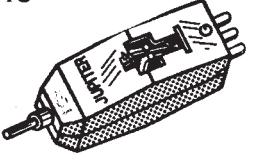
Tonar replacement types for: **GENERAL**

MC-110	SC-110	NX-600	C-712-01 IN SME SHELL
2219 	2221 	2220 	2258 

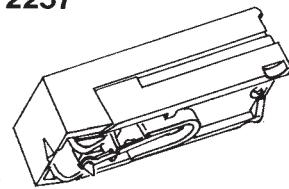
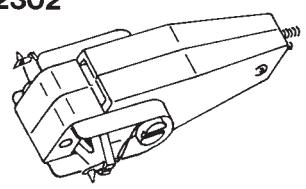
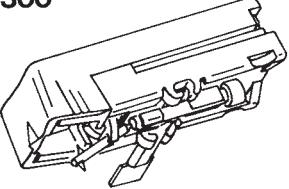
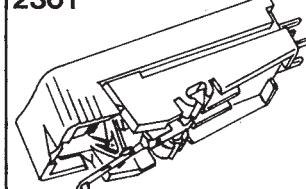
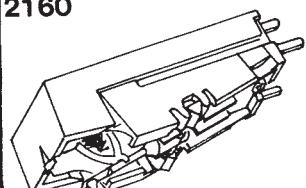
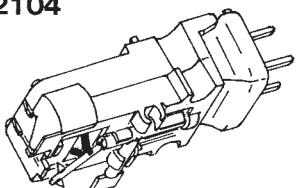
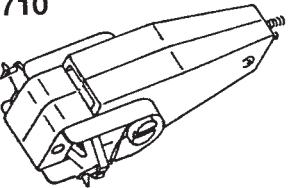
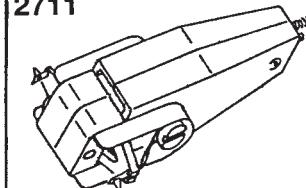
Tonar replacement types for: **JAPAN COLUMBIA**

JL-23; JC-23			
2273 			

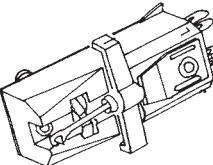
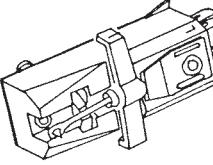
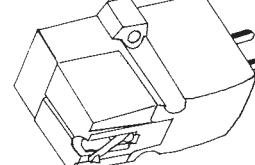
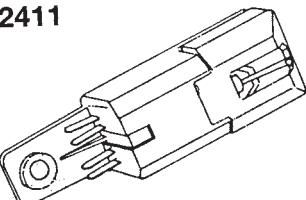
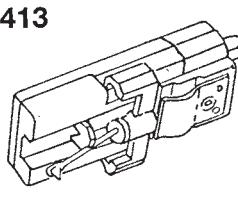
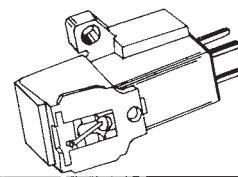
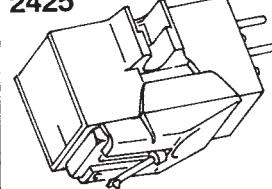
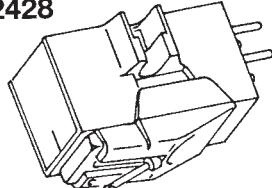
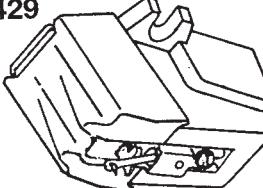
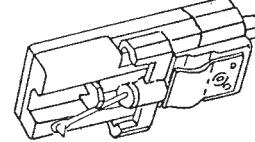
Tonar replacement types for: JUKEBOX TYPES (see also SCHUMANN types)

ASTATIC 51-1 M	ASTATIC STEREO	ASTATIC 146 (15 D)	ASTATIC 133 DD (N-51 D)
2282 	2287 	2333 	2346 
Seeburg 631238; A-251620 Pickering black	Seeburg Stereo 249755 Pickering	Seeburg Showcase 253781	Seeburg 246796-(2) Pickering
2283 	2285 	2286 	2284 
Seeburg Conversion Cartridge models "B" through "201"	Seeburg Conversion Cartridge models "B" through "201"	Wurlitzer 138662	ASTATIC/SONOTONE
2288 	2380 	2346 	2620 
	SONOTONE 31 TA	TEPPAZ JUPITER FOR JUPIMATIC JUKEBOX	ZENITH COBRA
2623	2340 	2713 	2624

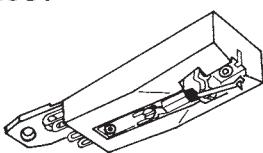
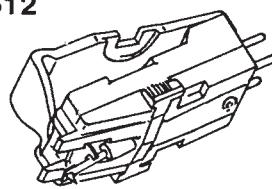
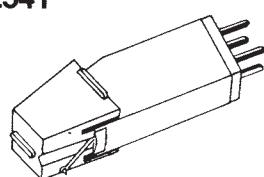
Tonar replacement types for: LESA

C-1	E-3	F	K-2
2257 	2302 	2300 	2301 
K-3	W	E-2	E-4
2160 	2104 	2710 	2711 

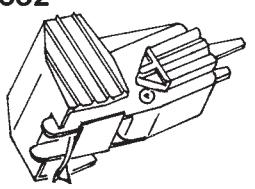
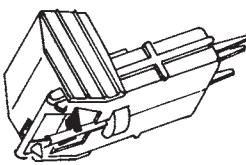
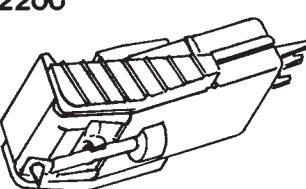
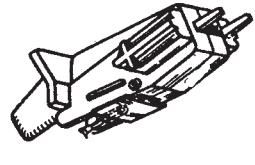
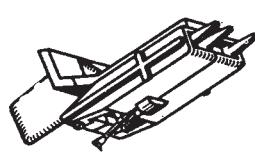
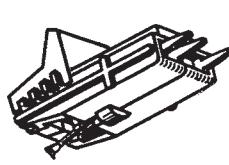
Tonar replacement types for: NATIONAL

EPC-02 STH	EPC-05 STA	EPC-05 STAD	EPC-09 STAD
2404	2408 	2409 	2410 
EPC-13 STH	EPC-34 TTCD	EPC-34 STCD	EPC-36 SMAD
2411 	2414	2413 	2415 
EPC-36 SMBD	EPC-42 STAD	EPC-69 STLD	EPC-69 STA
2416	2417	2438	2418
EPC- 74 SMAD	EPC-76 SMAD	EPC-77 SMAD	EPC-78 SMAD
2420	2423	2424	2425 
EPC-79 SMAD	EPC-82 SMAD	EPC-95 SSED	EPC-34 STBD
2427	2428 	2429 	2412 
EPC-451 C			
2434			

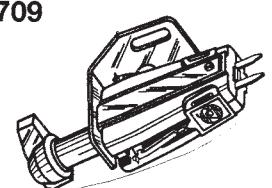
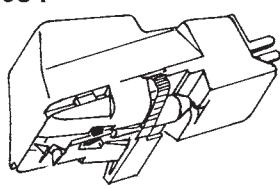
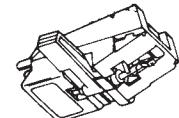
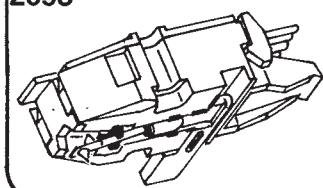
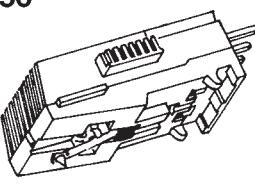
Tonar replacement types for: **NIVICO**

CS-1021 H	DT-51	DT-36	MD-1041 Z
2361 	2512 	2531	2541 

Tonar replacement types for: **PATHE MARCONI**

MUCS/MCS - MONO	STUCS/STC-S STEREO	STC-41 STEREO	MUCS/MCS - MONO RED GRIP
2052 	2053 	2200 	9492 RED GRIP 
STUCS/STC-S STEREO	STC-10 S STEREO		
9498 RED GRIP 	9325 		

Tonar replacement types for: **PERPETUUM EBNER**

PE-30	PE-30/2	PE-188	PE-190
2709 	2708	2054 	2055 
PE-192	PE-194	PE-7000	
2095 	2056 	2707	



cartridges

Tonar replacement types for: PHILIPS

GP-200;GP-300 GP-204;GP-205	GP-214	GP-215	GP-229
2102 	2061 	2132 	2062
GP-230	GP-231	GP-235	GP-314
2063 	2064 	2065 	2141
GP-315	GP-330	GP-331	GP-380
2139 	2389 	2390 	2393
GP-390	GP-397 MK III	4822 251 30095	GP-330 integrated
2066 	2322 	2561 	2564
GP-814	UF-70	MG-2510	4822 251 30112
2148 	2552 	2767 	2795

Tonar replacement types for: RIGONDA

ACCORD MONO	COMIX	RIGONDA	
2563 	2163 		

Tonar replacement types for: **RONETTE**

DC-284 OV	ST-105	DC-284 MONO CRYSTAL	ST-105 STEREO CERAMIC
2069	2068	9510	9342

Tonar replacement types for: **SANYO**

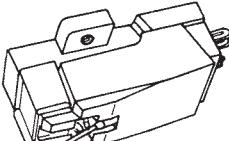
MGT-5	MGT-17	ST-15 J	
2289	2273	2369	

Tonar replacement types for: **SCHUMANN**

SK-451 A	SK-458 A	SK-459	SK-460
2712	2702	2703	2210
SK-461	SK-463	SK-474	STC-476
2255	2256	2704	2209
STC-480/2	STC-485	STC-486	STC-487
2207	2204	2203	2205
STC-492	SK-495	SK-496	STC-496/1
2208	2705	2706	2259
STC-500		STC-485; STC-487	
2206	2846	2847	

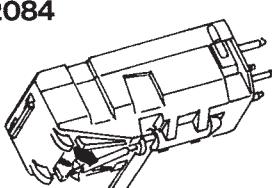
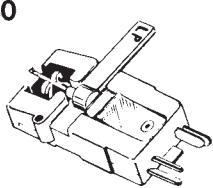
Tonar replacement types for: SHARP

STY-717			
2388			



Tonar replacement types for: SONOTONE

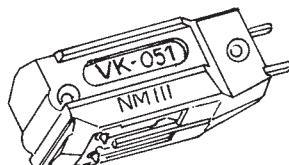
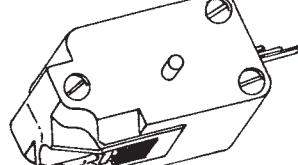
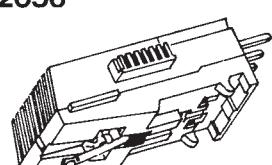
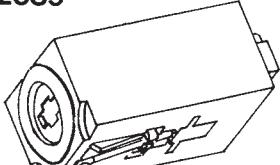
3509	31 TA		
2084	2340		

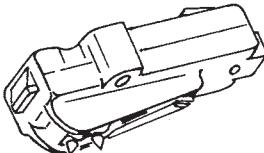
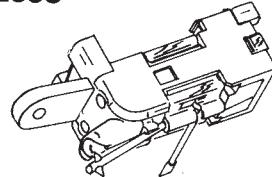
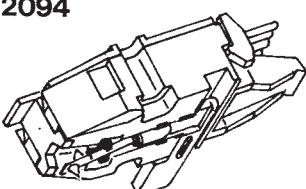
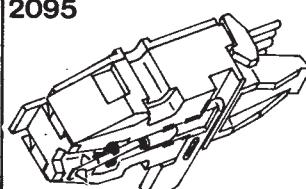
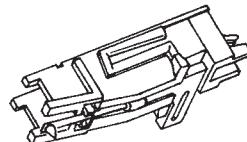
Tonar replacement types for: SONY

XL-200	VX-24 P	VL-30 G	
2650	2617	2615	

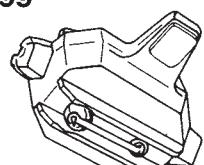
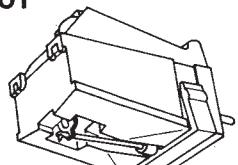
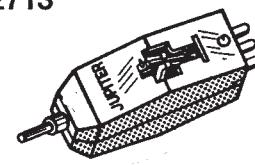
Tonar replacement types for: SUPRAPHON

VK-051	VK-311	VM-2101	VM-2102
2090	2088	2091	2608
			
VK-4302	KS-22	VM-2103	VM-2204
2056	2089	2774	2775
			

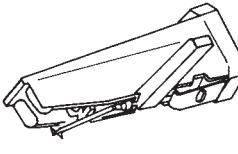
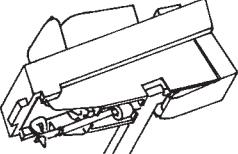
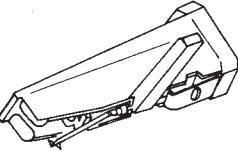
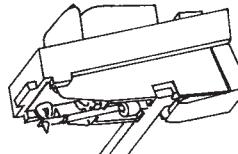
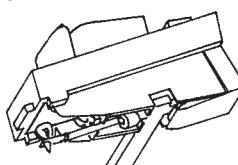
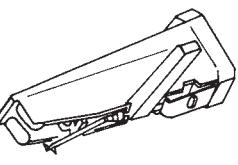
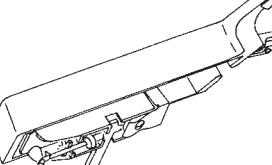
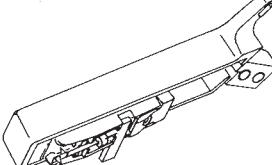
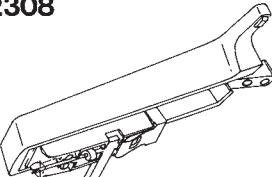
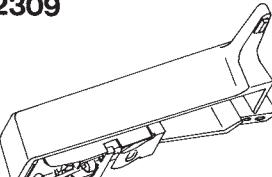
Tonar replacement types for: TELEFUNKEN

T.T.S.A.	T-22-2	T-25-2	T-25-2 COPY
2092	2093	2094	2095
			
T-260/1 E			
2096			
			

Tonar replacement types for: TEPPAZ

VISSEAU MONO	STEREO 60	MT-30	JUPITER
2099	2100	2101	2713
			

Tonar replacement types for: TETRAD

TC-8 HO	TC-8 HI	TC-11 MO	TC-11 MI
2154	2498	2496	2499
			
TC-12 MI	TC-12 MO	GL-93	97
2497	2381	2310	2307
			
V-122	V-142	TC-12 HI	TC-12 HO
2308	2309	2547	2551
			

Tonar replacement types for: **TOSHIBA**

C-20 C	C-22 C	C-62 M	C-63 M
2370	2368	2371	2439

Tonar replacement types for: **U.P.O. 'S**

CZ-680-6C	CZ-680-9	CZ-682	CZ-693
2272	2512	2273	2369
CZ-698-3	CZ-699		
2370	2514	2513	2515

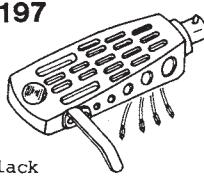
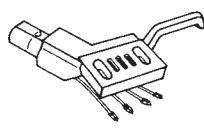
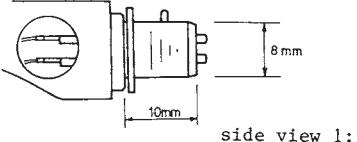
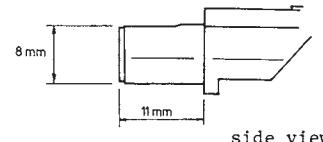
Tonar replacement types for: **VALKONA**

MS-16	KS-22	KSS-0163	KS-23	CS-24
2145	2089		2097	2157
KSMU-0161	KSMU-0263		CS-24/CS-29	
2162	2161	2157		

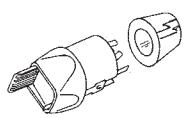
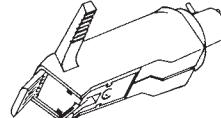
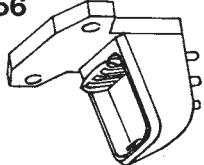
Tonar replacement types for: **ZENITH**

142-166	142-167	142-168	142-182
2303	2304	2305	2306

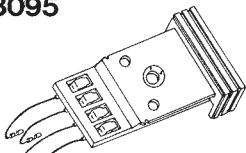
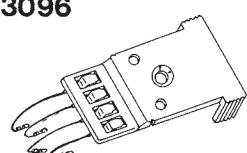
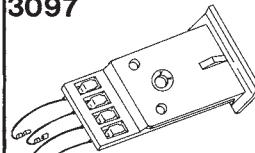
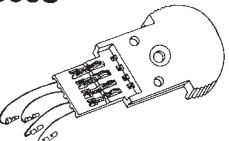
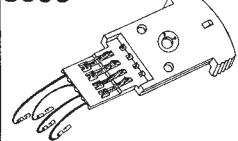
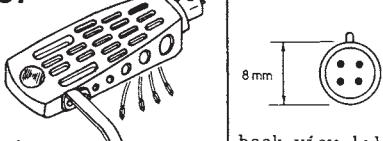
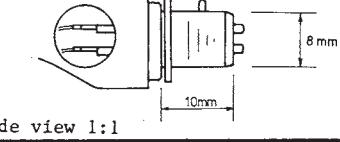
Tonar replacement types for: A.D.C.

A.D.C. 1500	C-114864 for recordplayers: A.D.C. 1600; A.D.C. 1700.	
3197  black	3146  back view 1:1	
 side view 1:1	 side view 1:1	

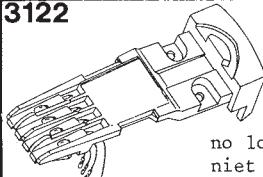
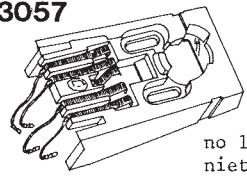
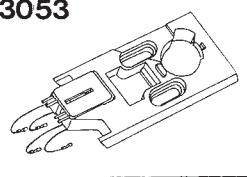
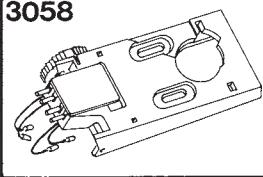
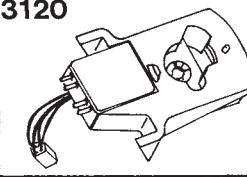
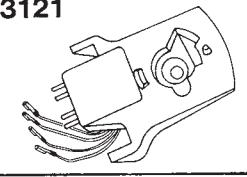
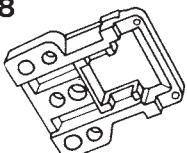
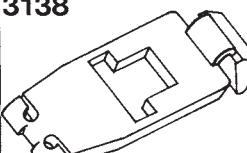
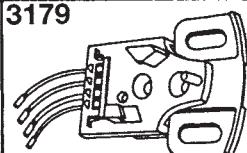
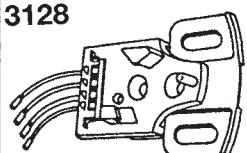
Tonar replacement types for: BANG & OLUFSEN

ADAPTER FOR MOUNTING MMC-20 SERIES CARTRIDGES ONTO SP-SERIES TONEARM	ADAPTOR FOR MOUNTING MMC-20 SERIES CARTRIDGES ONTO SME-TYPE TONEARM	ADAPTOR FOR MOUNTING MMC-20 SERIES CARTRIDGES IN UNIVERSAL HEADSHIELDS WITH R.E.T.M.A. $\frac{1}{2}$ INCH SCREW ATTACHMENTS
3090 	3150 	3156 

Tonar replacement types for: B.S.R.

A-108693 for recordplayers: MP-60; 510; 610.	A-111497 for recordplayers: BDS-80; P-157	A-111875 for recordplayers: BDS-90; P-161
3095 	3096 	3097 
no longer available niet meer leverbaar		no longer available niet meer leverbaar
A-112016	A-113696	A-114990 (SME) for recordplayers: 500 Quanta; 600 Quanta; 800 Quanta
3098 	3099 	3197  black
		 side view 1:1

Tonar replacement types for: DUAL

0-12 B	TK-12	TK-14 ; TK-24 for record players: 1209-49; 461; 481; 491, 502; 504; 510; 521; 601; 604; 621; 701; 704; 714; 721; 731.
3122  no longer available niet meer leverbaar	3057  no longer available niet meer leverbaar	3053 
TK-25 for recordplayers: 1209-49; 461; 481; 491; 502; 504; 510; 521; 601; 604; 621; 701; 704; 714; 721; 731.	TK-26 for record players: 714 Q; 731 Q.	TK-27 for recordplayers: 714 Q MC; 731 Q MC.
3058 	3120 	3121 
TKS-236; TKS-237 TO: R.E.T.M.A.	HS-421; 427; 430	K 261865
3148 	3138 	3145
G 262186	TKS-G 266048	TKS 269611
3178	3179 	3128 
CONTINUED		

Tonar replacement types for: DUAL

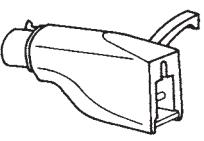
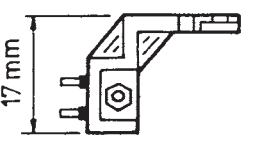
CONTINUED

269654 (TKS-49 S)	275361	277955
3127	3376	3188
277956	VTA 279606	280112
3184	3302	3301

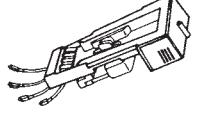
Tonar replacement types for: LENCO

B-52; B-55; L-75; L-78	L-60; L-62; L-65; L-80; L-84; L-130; L-133; L-236; L-247; L-332; L-744	L-85; L-90; L-830; L-833
3139	3142	3141

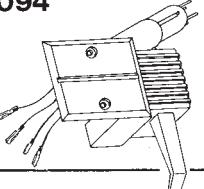
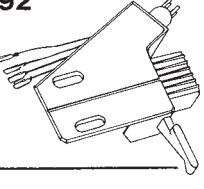
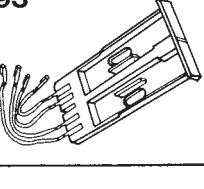
Tonar replacement types for: NATIONAL (PANASONIC, TECHNICS)

SH-80 S ADAPTOR T-4 P to SME	ADAPTOR T-4 P to: $\frac{1}{2}$ - inch screw-mount		
3163 	3125 		

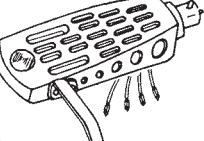
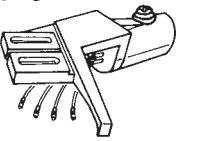
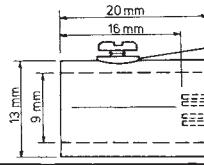
Tonar replacement types for: PERPETUUM EBNER

3010; 3012; 3015			
3175 			

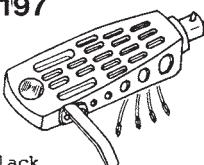
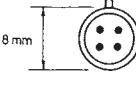
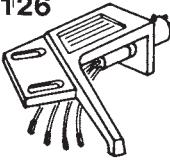
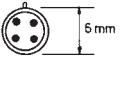
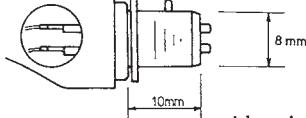
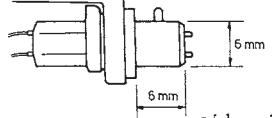
Tonar replacement types for: PHILIPS

4822 265 30145	4822 402 60627	4822 444 30169
3094 	3092 	3093 

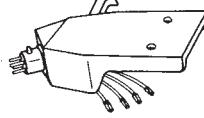
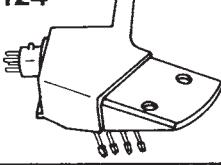
Tonar replacement types for: PIONEER

SME-type "S" - arm	PXB-563 straight-arm	
3196  silver	3129  back view 1:1	 side view 1:1

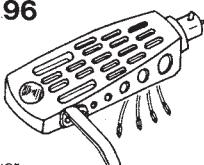
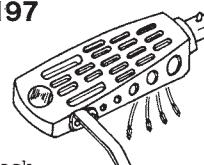
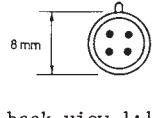
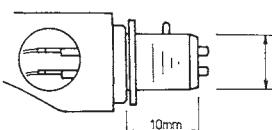
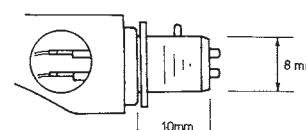
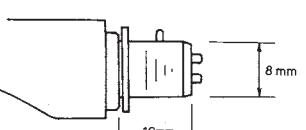
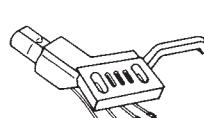
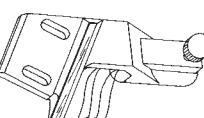
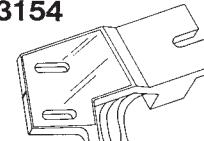
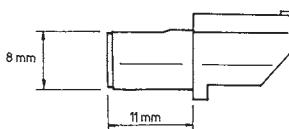
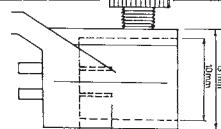
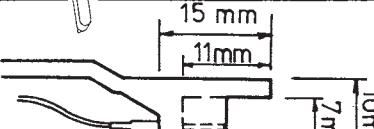
Tonar replacement types for: **SONY**

		SH-151			
3197 	 back view 1:1	3126 	 back view 1:1		
 side view 1:1		 side view 1:1			

Tonar replacement types for: **SUPRAPHON**

HC-16; NC-160; NZC-160 SL-160; NZK-160	NC-420; NZC-420; NZC-421; L-452; L-500	HC-43; L-43 CH; NC-430; L-430; NZC-431; NC-435; L-435; NC-450; L-450
3123 	3124 	3409 
8AK 425002.01	8AK 425000	7AK 42530.03
HC-30; NC-300; NZC-300 L-300; SL-301		
3160 		
8AK 425.005.01		

Tonar replacement types for: **TONAR**

UNIVERSAL SHELL "S" ARM S.M.E. TYPE	UNIVERSAL SHELL "S" ARM S.M.E. TYPE	SLIM-LINE S.M.E. type
3196  silver	3197  black	3147  back view 1:1
 side view 1:1	 side view 1:1	 side view 1:1
UNIVERSAL SHELL STRAIGHT ARM ADC-type		
3146  back view 1:1	3155  back view 1:1	3154  10 mm back view 1:1
 side view 1:1	 side view 1:1	 side view 1:1

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
1	Acos GP-59	59	Dual DN-1	126	General Electric C-100
2	Acos GP-37	60	Dual DN-3	127	General Electric C-200
3	Acos GP-29	61	Dual DN-4	128	General Electric VR-1000-7
4	Acos GP-73/1; 73/3	62	Dual DN-24	129	General Electric C-500
5	Acos GP-65; GP-67	63	Dual DN-26; DN-45	130	Goldring 500
6	Acos GP-71/3	64	Dual DN-32	131	Goldring 200
7	Acos GP-33	65	Dual DN-34	132	Goldring 580; 600
8	Acos GP-19	66	Dual DN-23; DN-43	133	Goldring MX 1/2
9	Acos GP-81	67	Dual DN-90; DN-95; DN-96	134	Goldring CS-90; CS-91 E
10	Admiral 409 B 19-8	68	Eden old model	135	Goldring CM-60; CS-80
	Shure PC-42	69	Eden 59	136	Goldring 700
11	Philips AG-3010; 3012; 3013; 3015; AG-3025; 3026; 3109; 3113; 3114	70	Eden stereo	137	Lenco single
12	Philips AG-3016; GP-316	71	Eden 62		Lesa D
13	Philips AG-3001	72	Eden clarville		Philco 35-2775
14	Philips AG-3063; 3066; 3304; 3308 (this needle is used on the stereo side of these cartridges.)		Novak clarville		Ronette TO-284
15	Philips AG-3301; 3302; 3304; 3305 (this needle is used on the 78-RPM side of these cartridges.)		Trio Track		Webster Electric WE-57-58
16	Philips AG-3020; 3021; 3027; 5012; 5013	73	Elac SMM-9; SMM-9		Lenco double
17	Philips AG-3052; 5001	74	Perpetuum Ebner PE 8/10	138	Lesa A
18	Philips AG-3201; 3202; 3221; 3222	75	Elac SN-12	139	Lesa B
19	Philips AG-3400; 3410; 3401; 3402	76	Perpetuum Ebner PE-5	140	Lesa E
20	Philips AG-3306; 3310; 3224; 3228; AG-3230; AU-1010; 1020; 1030 GP-200; GP-224; 228; 230; 235; 300; 306; 310	77	Elac KST-2	141	Lesa U
	Tonar 5-pole (type II)	78	Elac SMM-100	142	Lesa U-2
21	Philips AG-3201 (D)	79	Perpetuum Ebner PE-180 US	143	Lesa S
22	Astatic N-34; Q	80	Elac SM-101	144	Luxor 72411
23	Astatic N-39; A	81	Elac SMM-102	145	Luxor 72786
24	Astatic N-29; G	82	Perpetuum Ebner PE-184 US	146	Luxor 74916
25	Astatic N-36; L; T	83	Elac SM-103	147	This needle is used on the stereo side of the following cartridges:
26	Astatic N-31; K	84	Elac SMM-104	148	Europphon
27	Astatic N-7; Columbia CS-520	85	Perpetuum Ebner PE-182 US		Hitachi DS-ST-2; DS-ST-9
	Nagaoka NC-100; 202; 203; 500; 400; NC-400 H	86	Elac SM-14		Japan Colombia (Denon) DSN-1; SJN-1
	Piezo MS-2; MST-13	87	Elac SM-107; SM-110		Luxor 65977
	Ronette TO-284-OE	88	Elac STS-210		Mitsubishi 3D-20 M; ST-15; SP-16
	Supraphon VK-051	89	Perpetuum Ebner PE-8000		Nagaoka NC-202; 203; 400; 400 H
	Tonar NC-100; NC-505	90	Elac SMM-106; DMSN-112; SMM-406		Neat N-100
	This needle is also used on the 78-RPM side of the following cartridges:	91	Perpetuum Ebner PE-186		Piezo SC-503
	Tonar NC-202; NC-203; NC-400 NC-40 NC-400H;	92	Elac STS-310		Tonar NC-202; NC-203; NC-400 H
	Vaco/Varco ST-20/40 ST-100	93	Elac SMM-402		Vaco STP-2 etc., etc.
	Toshiba TP-102; 106; 114	94	Elac MST-2	149	Magnavox 560151; 560133
28	Astatic N-8	95	Electronic Reproducers ER-60	150	Magnavox 560101
29	Astatic N-30; 55; GCD	96	Electronic Reproducers ER 5 MX	151	Magnavox 560161
30	Astatic N-38; 57; GC	97	Electronic Reproducers ER 5 SB	152	Merula STK-490
31	Astatic N-41; N-42; 17-D	98	Electro Voice 10; 14; 34; 4130	153	Schumann STK-490
32	Astatic N-50; 51; 133	99	Electro Voice 16; 16TT	154	Merula SC-474
33	Astatic N-43; 15-D	100	Electro Voice 21	155	Schumann SC-474
34	Astatic N-45; 45-D	101	Electro Voice 26	156	Pathé Marconi 51
35	Astatic 13 T	102	Electro Voice 31; 2606	157	Pathé Marconi 53
36	Astatic N-37; U	103	Electro Voice 57; 2610		Pathé Marconi RC 5/6
37	Astatic 81-T	104	Electro Voice 58; 2611		Pathé Marconi STC-7; STC-S
38	Astatic N-60	105	Electro Voice 37; 72; 2614		STC-41
39	Astatic N-52; N-53	106	Electro Voice 117; 131; 148; 2616		Pathé Marconi STC-2000 D
40	Astatic N-54; N-55	107	Electro Voice 122 to 125		Saba Disco Centre STC-10 S
41	Astatic N-56	108	Electro Voice 132; 141; 149; 2617		Thompson STC-100 D; STC-1000 D
42	Bang & Olufsen B & O	109	Electro Voice 147; 2621	158	Pathé Marconi stereo
43	Bang & Olufsen professional	110	Electro Voice 51	159	Perpetuum Ebner PE-12
44	Bang & Olufsen 350 R; 72	111	Zenith 142-90	160	Perpetuum Ebner PE-188
45	Bang & Olufsen SP-1; SP-2	112	Electro Voice 56	161	Perpetuum Ebner 7000
	Perpetuum Ebner PE-9000	113	Zenith 142-80	162	Perpetuum Ebner PE TO 48/51
	Dual DN-301; 302; SP-1	114	Astatic 91-T	163	Philco 45-9612
46	B.S.R. TC-8	115	Electro Voice 76	164	Philco 35-2682
47	B.S.R. TC-8 stereo	116	Webcor A-1919	165	Philco 325-8214
48	B.S.R. TC-4	117	E.M.I. multiplay	166	Sonotone 3-T
49	B.S.R. TC-12	118	E.M.I. RS-3	167	Telefunken 3 TS
50	B.S.R. ST-3; ST-4	119	Euphonics E-1	168	Pickering 150
	Piezo Y-565; 575; 590	120	Euphonics U-1; J-13 HC	169	Seeburg R-150
	Sanyo ST-3 D	121	Euphonics U-8/9	170	Pickering 150 plus spring
51	B.S.R. ST-5; ST-6; ST-7	122	Euphonics U-10/11	171	Pickering stereo
52	Collaro PX	123	Euphonics U-12/13	172	Seeburg mark II
53	Collaro studio	124	Garrard GC-2	173	Piezo SMT-29
54	Columbia SC-1	125	Garrard TOM-1	174	Piezo MS-8
55	Decca XMS	126	Garrard TOM-2	175	R.C.A. 74068
56	Decca H	127	Garrard GC-8	176	R.C.A. 75497
57	Dual CDS-1	128	Garrard GCS-10	177	R.C.A. 104; 200; 108800
58	Dual CDS 2/3	129	Garrard GC-12	178	R.C.A. 110020; 110022
		130	General Electric RPX-040	179	R.C.A. 115060
		131	General Electric RPX-047	180	R.C.A. 115061
		132	O50 (complete)		Radiohm Mono; Stereo
		133	General Electric RPJ-047	181	Reson 33; 78
		134	plug in		Reuter N-4; S-1
		135	General Electric VR-II/G-15 only		Ronette BF-40
		136	(complete)		Perpetuum Ebner 30/90
		137	General Electric VR-II plug in		Sonotone 14-T
		138	General Electric GC-7		Iskra
		139	General Electric VR-22		Ronette TX-88

TONAR No.	May be used as replacement for:
182	Merula Fanfare Schumann Fanfare
183	Merula SK-451 Schumann SK-451
184	Merula SK-452 Schumann SK-452
185	Merula SK-453 Schumann SK-453
186	Merula SK-456; STK-494 Schumann SK-456; STK-494
187	Seeburg stereo
188	Seeburg juke box
189	Shure P-72; W-68
190	Shure PC-9; WC-38
191	Shure PC-6; WC-6
192	Shure ML-44; PC-2
193	Shure PC-12; WC-32
194	Shure M-3-D
195	Shure M-21-D
196	Shure PC-20; WC-20
197	Shure M-77
198	Sonotone 1-P
199	Sonotone 3-P
200	Sonotone 8-T; 8-TA; 8-TA-77 Telefunken 8-TS Magnavox 560247
201	Sonotone 9-T
202	Sonotone 12-T
203	Sonotone 12-T-LA
204	Sonotone 12-T-HR
205	Sonotone 16-T
206	Sonotone 916-T new and improved Universal needle for the following series: 9T; 9TA; 9TAF; 9TAFV; 9TAV; 9TV; 16T; 16TA; 16TAF; 916T; 916TA; 916TAF
207	Sonotone 20-T
208	Sonotone 21-T; 22-T; 23-T
209	Sonotone 26-T; 27-T
210	Stare
211	Electronic Reproducers ER 5 MX 1 Sanyo STG-3
212	Lesa K-2
213	Tannoy MK II
214	Teppaz Visseau
215	Teppaz Stereo
216	Telefunken TTSA
217	Telefunken A-20-1; T-20-1
218	Telefunken A-20-2; T-20-2; T-22-2
219	Telefunken A-200; T-200
220	Tetrad 11; 31; 111
221	Tetrad 21; 41; 121; E-1; G-1
222	Tonar NM-11-A
223	Nagaoka NM-11-A
224	Vaco ST-20/40 (stereo only)
225	Vaco S-45
226	Vaco T-45
227	Vaco M-50
228	Vaco SN-45; MS-8
229	Webster Electric SC-1
230	Webster Electric SC-3
231	Webster Electric WE-14/15
232	Zenith 15780; 15222; 11473 Zenith 142-71; 142-72; 142-73; 142-74
233	Zenith 142-76/77
234	Zenith 142-126/128
235	Zenith 142-136/141
236	Dual DN-22
237	Electro Voice 169; 2622
238	Philips AG-3019
239	Schumann/Merula STK-495/1 Trio Track AC-100
240	Pathé Marconi MUCS; MCS
241	Ronette TA-600
242	Shure M-33-5
243	Shure M-33-7
244	Sonotone 18-T
245	Shure M-7-D
246	Acos GP-91
247	Philips AG-3306-1 (short handle)
248	Astatic N-64
249	Empire Scientific 88
250	Empire Scientific 108; 108 P

TONAR No.	May be used as replacement for:
251	Empire Scientific 880 P; 880 PE
252	Conver stereo COSMO "cosmo"
253	Dual DN-5; 52; 54; 55; 56 Dual CDS-630/5
254	Electro Voice 194; 2623
255	Electro Voice 198/199; 2624
256	Euphonics U-15/16
257	Lesa W
258	Sonotone 2T Philco 325-8210 Telefunken 2-TS
259	Perpetuum Ebner PE-92
260	R.C.A. 115276; 115302; 115303
261	R.C.A. 100020 A
262	Sonotone 25-T; 28-T
263	Nagaoka NM-22 Tonar NM-22
264	Tetrad 12; 32
265	Tetrad 13; 33
266	Tetrad 52; 62; A-2; B-2; C-2
267-5	Shure M-44-5
267-7	Shure M-44-7
268	Dual DN-305; DN-306; M-44 M-G
269	Zenith 142-150 National EPS-05; EPS-05 ST N.E.C. LP-5 D; SP-5 S
270	Onkyo DN-3 ST Sansui ST-3 Mastercraft SJN-1 Tonar/Nagaoka NC-770 Piezo Y-310; Y-730
271	Sonotone 9-TA (flexible)
272	Singer 484001/5; PU-1300 Japan Columbia JTS-3
273	R.C.A 117330/118197
274-DE	Shure M-55-E
275	Pickering V-15-6 mil Dual DN-314; 315; V-15 PD/1
276	Jensen 409 C; 64-1
277	Magnavox 560305
278	Vaco SN-65; CN-60/62/67/68 Mono Vaco CN-70; 72/75 (stereo) Vaco TN-02-H
279	Philips AG-3311; GP-311 Philitina
280	Tetrad 50; 60; A-0; B-0; C-0
281	Ortofon N-15 S; N-15 O; F-15 S; F-15
282	Tetrad 22; 42; E-2; G-2
283	Shure M-8-D
284	B.S.R. ST-10
285	B.S.R. ST-9; ST-8
286	Electro Voice 47; 2614; 2615
287	Euphonics U-17/19
288	Astatic N-74
289	Astatic N-76
290	Ortofon N-15 E; F-15 E; N-15 EO; F-15 EO
291-DE	Teppaz Eco 60/432; 26 Neufunk
292	Tetrad 23; 43; E-3; G-3
293	Hitachi DS-ST 70; DS-ST-72
294-DE	Tetrad 10; 30 Audio Technica AT-6
295	Hitachi DS-ST-3; MFS-170/171 Japan Columbia (Denon) DSN-10/13
296	Kenwood N-6 AT Marlux NM-33 Nagaoka NM-33 N.E.C. LP-20 D
297	Nivico DT-16 Onkyo DN-5; DN-13 Pioneer PL-N6 Sansui ST-6 D; SN-22 Sanyo ST-12 D; MG-3 Sharp N-05 D; N-06 S
298	Sony ND-113 P; VM-9 P Tonar NH-33 Toshiba N-4 CS; C-07 Trio N-6 AT Yamaha N-3000
299	R.C.A. 106969; 106770; 106771 R.C.A. 115329 Telefunken A-23-2; T-23-2; A-25-2 T-25-2

TONAR No.	May be used as replacement for:
299	Fonica UF-50
300	General Electric C-650
301	Philips AG-3404; 3407; 3408; 3409; GP-404; 407; 408; 409; 410; 411
302	Sonotone 100-T
303	Magnavox 560344/45
304	Sonotone 32-T; 39-T
305	R.C.A. 118199; 118200
306	Allphon 66
307	Acos GP-79
308	V.E.B. MS-8
309	Lenco M-200
310	Lesa F-5
311	Telefunken A-23/1
312	Astatic N-79
313	Astatic N-81
314	Astatic N-83
315	Bang & Olufsen SP-6/7 Stylus only
315-DE	Bang & Olufsen SP-8/9 Stylus only
316	Sony ND-128 P; VX-24 P
317	Magnavox 560348
318	Tetrad 14; 34
319	Tetrad 20; 40; E-0; G-0
320	C.E.C. MC-8;
321	Pioneer PN-15
322	Tetrad 24; 44; E-4; G-4
323-ES	Setton Sharp STY-213; STY-703
324	Akai APN-4
325	Kenwood N-40; N-42
326	Sony ND-130 G
327	Trio N-40; N-42
328	Pioneer PN-12; PN-110
329	Kenwood N-38
330	Trio N-38
331	Kenwood N-39
332	Trio N-39
333	Tetrad 51; 61; A-1; B-1; C-1
334	Tetrad 53; 63; A-3; B-3; C-3
335	Tetrad 54; 64; A-4; B-4; C-4
336	Tetrad 70; 80; 90
337	Empire Scientific 909/X; 999/X
338	Empire Scientific 90EE/X;
339	909 E/X; 999 E/X
340	Empire Scientific 1000 ZE;
341	1000 ZE/X
342	Coral 555-5
343	Tetrad 71; 81; 91
344	Tetrad 72; 82; 92
345	Tetrad 73; 83; 93
346-DE	Tetrad 74; 84; 94
347	Acos Power Point
348	Bang & Olufsen SP-6/7 Complete needle
349	Bang & Olufsen SP-8/9 Complete needle
350	Elac DM-240
351	Electro Voice 5000
352	Electro Voice 37; 38; 47; 72; 2626
353	Jensen J-2T;
354	Lesa F-3
355	Empire Scientific 888
356	Empire Scientific 999/VE
357	Nivico DTS-1
358	Nivico DTS-2; ST-17
359	Sharp N-08 D
360	Japan Columbia JTS-1/5; DTS-1/5
361	Singer PU-1357
362	Radiohm CM-71
363	Goldring SX-10
364	Goldring G-800
365	Acos GP-91-1 SC; 2 SC; 3 SC
366	Astatic N-72
367	Astatic N-85
368	Perpetuum Ebner PE-223/1
369	Perpetuum Ebner PE-192; PE-223/2
370	Connoisseur SCU-1
371	Micro SC-301; New Yorker
372	Shure M-44-C
373	A.D.C. 770
374	Pickering U-38/380 D-3807 AT
375	Nagaoka NR-1
376	Tonar NR-1

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
364	Acos GP-93/94	401	Shure M-91-G	456	N.E.C. LP-40 D
365	Empire Scientific 808	402	National EPS-19 STSD		Sanyo ST-14 D; MGT-5
365-DE	Empire Scientific 80 EE; 808 E	403	Seeburg "Showcase"		Sharp STY-704
366	Coner RCQ mono	404	Allphon 69-1 single tip		Toshiba N-11 C; SN-280; 290
	Wilson	405	Philips AG-3229; GP-229		Visonik
367	Onkyo DN-8 ST; SN-20 ST	405-C	(spring only)		Lustre L-1
	Piezo Y-640	406	As above complete with	457	Sony ND-70 X; XL-70
	N.E.C. LP-25 D		ceramic element	458-DE	Electro Voice 2636; 5080
	Sanyo ST-6; ST-6-D; MGT-1	407	Sanyo ST-51 J	459	Electro Voice 2641; 5083
368	Lesa K-3 new version	408	Siemens	460	General Electric G-660
	Neufunk	409	Electro Voice 2630; 5015	461	Garrard KS-40 A
369	Allphon PC-1	410	Electro Voice 2634; 5051	462	Schneider KS-40 A
370	Piezo Y-100; Y-510	411	Euphonics U-8 RB/U-9 RB		Sonotone 3509
371	Japan Columbia (Denon) DSN-35	412	Euphonics U-10 RB/U-11 RB	463	Goldring G-850
372	National EPS-13; 13 TT; 13 TTSD	413	Euphonics U-15/2		Lenco M-95
	Henfai	414	K.D.-69, also for K.S.M.U.,	463-DE	Goldring G-850 E
	Sharp N-09 D	415	V.E.B. & Valkona	464	Perpetuum Ebner PE-194
	Toshiba N-550 C; C-550 M	416	R.C.A. 120695; 122057		Supraphon VK-4302
374	Europhon	417	Schumann/Merula STC-485/486	465	Dual DN-311; V-15 D/AC
	Intel	418	Jupimatic jukebox		Luxor 3200
	National EPS-14 ST; 14 STSD	419	Sonotone 21/24-TA	465-DE	Pickering V-15/D-1507 AT;
	Onkyo DN-12 ST	420	Sonotone 60-T		V-15 P/AT
375	Audak R-2/R-6	421	Vaco TN-04	466	Pickering V-15/D-1500 ATE;
376	National EPS-37	422	Electro Voice 2632; 5018	467	V-15 P/ATE
377	Acos GP-95/96	423	R.C.A. 126566/7		R.C.A. 131779/131780
378	Olympic 1	424	Schumann/Merula STC-480		R.C.A. 131781/131788
	Supraphon KS-22	425	Vaco TN-08	468	(single tip)
	Valkona KSS-0163	426	A.D.C. 220; A.D.C. R-20	469-DE	Grado B-series ceramic
	V.E.B. KSS-0163; KS-22; DS-262	427	Zenith 142-167		Shure M-91-E
379	Rion NP-01 D	428	B.S.R. ST-12/14/15	470	Astatic N-89; 205
380	Piezo 03-40729	429	Schneider ST-12/14/15	471	Tetrad C-0
381	Nivico VPF-96	430	Allphon Jeunesse	472	Shure M-92-G
	Singer PU-3012	431	Hitachi HN-ST-20; CFS-280	473	Nivico DTZ L1S
382	Blaupunkt 305 M	432	Mitsubishi ST-11; 3D-32 M	474-DE	Shure M-92-E (old)
	N.E.C. LP-305 M	433	National EPS-22		Japan Columbia (Denon) DSN-55
	Sanyo ST-37 D	434	Nivico DT-20	475	Goldring G-800 H
383	Astatic N-35; "R"	435	Elac STS-244-C; D-244 C	476	Ortofon D-15 E Super
384	Marantz CT-300; TT-320; TT-130;	436	Elac STS-244-17; D-244-17	477	Ortofon D-15 Super
	TT-221; CTS-420	437	Elac STS-344; D-344	478	Astatic N-17; 207
	Schneider	438	Elac STS-444; D-444	479	Astatic N-19; 223
385-DE	Shure M-75-E	439	Electro Voice 2637; 5076	480	Tetrad A-1
386	Dual DN-320; 323	440	Electro Voice 2638; 5081	481	Tetrad A-2
	Shure M-73 M-G; 75 E; 75 M-G	441	Electro Voice 2639; 5082	482	Tetrad A-3
387	Dual DN-325	442	Electro Voice 2640; 5078	483	Tetrad C-1
	Luxor 3823	443	Garrard GCM-31; GCS-1; 35; 36	484	Tetrad C-2
	Schneider DN-325	444	Sonotone 2109; 2509; 2539	485	Tetrad C-3
	Shure M-75 6; M-75 6 S; M-75 D;	445	Garrard GCM-21-22; GKM-22	486	Tetrad E-1
	Shure M-75 M-G; M-71 MB-D; M-71;	446	Goldring HC-2	487	Tetrad E-2
	Shure M-73 M-G; M-75 M-G	447	Rigonda 2163	488	Tetrad E-3
388	Nivico DT-45	448	Tonar 5-pole	489	Tetrad G-1
388-DE	Nivico DT-45 E	449	Garrard GCS-23; GKS-25/26	490	Tetrad G-2
389	Neat VS-700; V-70; VS-90	450	Goldring HC-3	491	Tetrad G-3
390	H.M.V. HMV-1	451	Garrard GCM-21 T/22 T	492	Schumann/Merula STC 487
	Merula HMV-1	452	GCS-23 T; TS-1/2/3	493	Nagaoka/Tonar NC-700
	Schumann/HMV-1 short handle;	453	Perpetuum Ebner PE-190	494	Astatic N-14; 215
	Trio Track	454	Ronette SC-107; SC-109	495	Sony ND-126 G; VM-26 GH
391	H.M.V. HMV-2	455	Ronette CMT-102	496	Sony VX-17-P; VX-18-P;
	Merula HMV-2; STC-481	456	B.S.R. ST-16/17	497	ND-119-P; ND-120-P
	Schumann STC-481;	457	Fidelity	498	Sony ND-117-P; VM-15 P
392	Schumann/HMV-2	458	Schneider ST-16/17	499	Japan Columbia DSN-24; GN-20
393	Acos GP-104	459	Dual CDS-650; 651; 660; 661		Onkyo DN-18 ST
	Marantz TT-143; TT-243	460	Dual CDS-670; CDS-671		Sony ND-124-P; ND-125-G; VM-21-G;
	Sanyo STP-50J	461	Dual DN-6; 8; 62; 63; 64; 65; 85	500-DE	VM-21-P
	Scott	462	Perpetuum Ebner PE-3000; CDS-650;		Shure M-93-E
	Sharp STY-129; 133; 139;	463	CDS-651	501	Pickering V-15/D-1507 AC;
393-DE	Yamaha N-8100	464	Clean CM-500		V-15 P/AC
394	Conver B-60-100	465	Hape	501-DE	Pickering V-15/D-1500 ACE;
	Cosmos G.62.30.M.23	466	Piezo Y-930; YM-101		V-15 P/ACE
395	Pioneer PL-N9	467	Kenwood N-23	502	Grace F-8; F-21 series
396	Pioneer PN-10; PN-11	468	Trio N-23	503	Philips GP-370
397	National EPS-08; P0; 10 STDD; 12	469	Teppaz MT-30	504	Dual DN-70; CDS-700
	N.E.C. LP-10 D	470	Nagaoka/Tonar NM-66	505	Sony ND-121 P; VM-19 P
	Onkyo DN-7; DN-10; DN-17	471	K.S.M.U.-0261, also for Wehkamp	506	Osaka Onkyo DN-21; OC-21 M
398	Audio Technica AT-21; AT-66	472	& V.E.B.		Piezo Y-995
	Onkyo DN-15 ST	473	Piezo stereo	507	Osaka Onkyo DN-22; OC 22 M
	Sharp N-17 D	474	Supraphon VK-311; 68317	508	Toshiba N-301-C; C-301-F;
	Toshiba N-12 C; C-26 M	475	National EPS-24 STSD		N-04 C; C-04 C
	Yamaha N-5000	476	Hitachi HN-ST-19	509-DE	Nivico DT-33 S
399	Coral V-30-D; V-7000	477	Mitsubishi SJN-16	509-ES	Hitachi F-11; MT-11 F
	Micro M-207	478	Teleton CMS-500/400/300		Nivico 4 DT-IX; 4 DT-5X; 4 DT-10X
	Mitsubishi 3D-23 M; 3D-24 M	479	Japan Columbia DSN-16; SJN-16	510	Nivico DT-11; SS-11
400	Sansui ST-10; SN-23	480	Nagaoka/Tonar NM-33 A	511	Philips GP-400; GP-500
	Micro V-3100	481	Sontra SN-20	511-DE	Philips GP-401
	Mitsubishi 3D-28 M	482	Acos GP-104 transcription		Lesa C-1
	Dual M-91 MGD; DN-330	483	Audio Sonic	512	Vaiani VA-62

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
513	Sansui SN-10; SN-10 A	551	A.K.G. X2R; PU-2R; X3E; PU-3E	584-DE	Shure VN-35-E (V-15 type III)
514	Sanyo MG-2; ST-5 D	552	Grado F-series	585	Garrard KS-41 B
515	National 28-100 ST	553	Nivico DT-25H	586	Sonotone 3539
516	National EPS-25; 25 STSD	554	Philips GP-212; GP-213	587	Garrard KS-41 C
517-DE	Shure N-75-EJ type II	555	Valkona/V.E.B. KS-23		Sonotone 3559
518	Shure N-75-B type II		Expert expert; popular		Garrard GCS-38; GSS-2
519	Shure N-75-G type II		Nagaoka		Sonotone 2529
520-DE	Shure N-75-ED type II		Supraphon JT-311		Pioneer PN-16; PN-330
521	Ortofon D-20 S	555-DE	Tonar JT-311		Onkyo DN-24
522	Ortofon D-20 E	556	Expert Ellipse	590	Sansui SN-31; ST-3200; V-3030
523	B.S.R. ST-19; ST-22		B.S.R. ST-20/21	591	Pioneer PN-30
524	Audio Sonic		Onkyo DN-31 ST	592	Lesa K-3
	Coner RCS		Sony ND-ST 21	593-DE	Goldring G-800 Super E
	Continental Edison		Teppaz Jupiter	594-DE	Goldring G-800 E
	Europphon	557	Pickering U-38/380-D-3807 C	595	Nivico DT-29
	Lenco RCS; Pop Stereo	558	Pickering U-38/380-D-3807 A	596	Hitachi DS-ST-5
	Lesa	559	A.D.C. 220-X; R-20-X	597	Nivico DT-27
	Nordmende	560	Elac DM-410	598	Pioneer PN-50
	Saba RPC-1000	561	Ronette SM-500/7	599	Micro V-2100
	Thompson	562	Cosmo G.62-30 M-23 (short tube)	599-ES	National EPS-52
	Wilson	563	A.D.C. 220-XE; R-20-XE	600	National EPS-290 SD
525	Electro Voice 2647	564-DE	Goldring G-820	601	National EPS-440 QD
	Magnavox 560347-1	565	Lenco M-150		National EPS-28
526	Excel ES-70-S	566	Mitsubishi 3D-25		Hitachi DS-ST-40; MT-10
	Lenco M-100 blue	567-DE	Shure VN-15 E		Roelofs RD-121
	Luxor 3831; 3833; 36200	568	Audio Technica AT-10		Silver System 90
	Neat VS-80		National EPS-35 STSD		Teac
	Sanyo ST-25 D; MG-25		N.E.C. LP-7000 D	602	Sonovox SN-300
	Telefunken TM-400		Sanyo ST-36 VD	603	Pickering PD-07 T; V-15 P/DT
527	Excel ES-70-F (O.E.M.)		Thompson AT-10	604-DE	Pickering PDE
	Lenco M-100		Toshiba N-53 DY	605	N.S.M./Wurlitzer N-17 CM
	Marlux	569	Elac SN-11	606	Shure Jukebox N-17 CM
528-DE	Excel ES-70-E	570	Toshiba N-300-C; C-300 F	607	National EPS-19 single tip
529-DE	Excel ES-70-EX	571	Akai APN-2		Hitachi DS-ST-101
530-ES	Excel ES-70-EX-4		Audio Technica MG-35 V		Piezo YM-114
531	Sony ND-114P; VM-10P		Audio Technica VM-8-7 D	608	Excel QD-700 CR
532	Aimor		Electro Voice 2660		Sanyo ST-27 D; MG-27
	Electro Voice 2649; 5600 D		Fisher ATS-10 L; ST-35 VD		Telefunken TM-500
	Sony ND-127; VX-23 P		Kenwood N-32; N-33	609-DE	Excel QD-700 ER
533	Jelco SMC-101		Magnavox 560356	610-ES	Excel QD-700 XR
	Mastercraft SMC-101		Mitsubishi 3 D-40 M	611	Ortofon M-20 E
	Neat		National EPS-31	612	Sony ND-132 G; VM-22 G; VM-26 G
534	Grundig GP-500 MK II		Nivico DT-31	613	Sony ND-133 G; VL-30 G
	Philips GP-400 MK II; GP-500 MK II		Onkyo DN-27; DN-32	614	Tonar CDS-650 repl. cartr.
	Radioola GP-500 MK II		Sanyo MG-35 V; ST-35 VD	615	Shure N-91 GD
534-DE	Philips GP-412; GP-413; GP-421		Sharp N-20 D; STY-202	616	Dual DM 101 M-G; DN-340
	GP-401 MK II; GP-406 MK II;		Sony ND-129-G; VM-25 G	617	Pioneer PN-20
	GP-412 MK II; GP-501 MK II		Toshiba N-14 D		Schneider M-74 CS; SBD-71
	Radioola GP-501 Mark II		Trio N-32; N-33		Shure M-81 MC
534-ES	Philips GP-422; 422 Mark II		Teleton DST-17/S-100 G; CS-400/401	618	Shure M-75 C jukebox
535	Osaka Onkyo DN23; OC-23M; SN-19 ST		Yamaha N-6500	619-ES	National EPS-18 ST; EPS-18 STSD
536	Sanyo ST-10 D; MGT-3	572	Audio Technica AT-VM-35		Audio Technica AT-14 S
537-DE	Dual DN-380 E; TKS-380 E		Electro Voice 2671 D; 6012 D	620-ES	Nivico 4 DT-20X
538	Sansui MCI-5; SN-25		Magnavox 560398	621-ES	Audio Technica AT-12 S
	Mastercraft MCI-5	573	Cybernet	622	Nivico 4DT-30 X; 4DT-35 X
	Jelco MCI-5		Jelco MC-9	622-DE	National EPS-46 STQD
539	Pickering V-15/D-1507 AM;		Rotel 2RC-3	622-ES	Tenorel T-2001
	V-15 P/AM		Sanyo ST-15; MG-15; ST-15 GD; LD	623-DE	Unitra MF-100; MF-102
539-DE	Pickering V-15/D-1500 AME		Sansui SN-26	624	Tenorel T-2001/ED
	V-15 P/AME		Silver System 110; 1500	625	Tenorel T-2001/SD
540	V.E.B. KSS-0162		Tensai Jelco 9A	626	Shure N-91 ED
541	Kenwood N-34	574	Pioneer PN-35	627	Dual DM-103 ME; DN-345
	Trio N-34	575	Sanyo ST-8; 42 K; MGT-2	628-ES	A.D.C. K series
542	Audio Technica AT-55	576	C.E.C. MC-5	629	A.D.C. Q series
	Sanyo ST-25 J	577	C.E.C. MC-7	630	Fidelity
	Toshiba N-13 C; C-27 M	578	N.E.C. LP-55 D	631	Empire 66/X
	Yamaha N-5500		Sanyo STG-1	632	Empire 66 E/X
543	Philips GP-204; GP-205		Sharp STY-707	633	National EPS-451 QD
544	Sharp N-03 D		Toshiba N-3 C; C-03 C; C-10 C	634-ES	National EPS-36 STSD
545	Nivico DT-33 H	579-DE	A.D.C.-XLM	630-ES	National EPS-45 STQD
546	Pickering XV-15/350; D-350	580	A.D.C.-VLM	631	A.D.C. 660
546-DE	Pickering XV-15/400 E; D-400	581	Audio Technica AT-3472 P	632	Acos M-6
547	Pickering V-15 series with brush		Hitachi DS-12; DS-ST-14	633	Excel ME-35
547-DE	Pickering V-15 E series with brush		National EPS-91 SMAD	634-ES	Sanyo ST-30 D; MG-30
548	Stanton 681 A; D-6807 A		N.E.C. AT-3472 P	635	Acos M-6 E
548-DE	Stanton 681 E; 681 EE; D-6800 E;		Sony ND-145	636	Acos M-6 EX
	D-6800 EE	581-DE	Sherwood ATN-3472 EP	637	Sony ND-131 G; VM-1200 G
549	Stanton 500 A; D-5107 A;	582	Mitsubishi 3D-33 M		Micro V-3200
	500 AA; D-5107 AA		Philips GP-371	636-DE	Micro V-3200 E; V-3200 XE
549-DE	Stanton 500 E; D-5100 E;	583	Pickering V-15 Micro IV AC, AT,		C.E.C. MC-20
	500 EE; D-5100 EE		AM series		Jelco D; MC-14
550-ES	Expert Quadro	583-DE	Pickering V-15 Micro IV ACE, ATE,		Mission 773 MM
	Nagaoka	584-DE	AME series		N.E.C. LP-8300 D
	Tonacord TM-1000 S		Dual DN-352; V-15 III L-M		Tensai
	Tonar JT-322		Shure V-15 III L-M	638-DE	Shure M-95 ED

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
639	Victor DT-26	681	Sharp STY-717	734	Europhon
640	Victor DT-33-G	682-DE	Goldring G-820 E		Hitachi DS-ST-103
641	N.E.C. LP-45 D	683-ES	Nagaoka JT-333		Magnavox 560418
	Sharp STY-706	684-ES	Expert Super		Piezo YM-308
642	B.S.R. ST-23 sapphire	685	Nagaoka JT-555	734-DE	Akai RS-120; PC-120
643	Electro Voice 5078 new execution; old execution: Tonar nr. 434	686	Schumann/Merula STC-488		Eagle P-750 E
644	Japan Columbia DSN-14	687	Trio N-35	735	Micro V-3300/7
645	Hitachi DS-ST-25	688-ES	Kenwood N-35		78 R.P.M. needle for:
646	Mitsubishi 3D-31 M		Marantz TT-520		Nagaoka JT-511 series; JT-555
	Piezo Y-670		Kenwood N-44		Expert Disco; Super
647	Mitsubishi 3D-30 M		Sanyo ST-45 DX		78 R.P.M. needle for:
648	National EPS-11; EPS-11 STSD	689	Trio N-44		Nagaoka JT-311; JT-322
	Onkyo DN-14 ST	690	Sansui SN-27		Expert Popular; Ellipse;
649	Mitsubishi MD-2; 3D-37 M	691	Yamaha N-3500; N-4000		Quadro
649-DE	Mitsubishi MD-1	692	Aiwa AN-87-43		Expert
650	National EPS-46 STSD	693	Sanyo ST-26 D; MG-26		Sanyo ST-20 D; MG-2; ST-27 DL;
651	Audio Sonic	694-ES	Denon DSN-61		MG-27 L
	Blaupunkt P-60	695	Japan Columbia (Denon) DSN-61		Tensai
	N.E.C. LP-5100 D	696	Sony ND-115 G; VM-11 G	739-ES	Nivico DT-Z 1
	Onkyo DN-1005 ST	697	Sanyo ST-40 DX; MG-40 X	740-ES	Nivico DT-X 1 MK II
	Sansui SN-28	698	Hitachi DS-ST-55; MT-55	741	National EPS-31 SPSD
	Schneider	699	Sharp STY-705		N.E.C. LP-8000 D
652	Sharp STY-104	700	Sharp STY-752	741-DE	Audio Technica AT-11 E
653	Sanyo ST-36 D; MG-36	701-ES	Onkyo DN-25 ST		Denon DSN-54
	N.E.C. LP-35 D	702	Jelco MC-12		Japan Columbia (Denon) DSN-54
	Sharp N-14 D; N-16 D; STY-450	703-ES	Jelco MC-15		Thompson ATS-11 E
654	Kenwood N-25; N-30	704	Sharp STY-102	742	Sony ND-50 G; VX-50 G
	Trio N-25; N-30	705	Nivico 4 DT-2X	743	Shure M-70 B
655	Trio N-31	706	Nagaoka NR-2	744-DE	Shure M-70 EJ
	Kenwood N-31	707-ES	Japan Columbia DSN-34	745	Elac STS 144-17; D 144-17
656	Trio N-36	708	Sharp STY-555	746-DE	Nagaoka JT-511 BE
	Kenwood N-36	709-DE	Mitsubishi 3D-38 M	747	A.D.C. P-series
657	Trio N-37	710	Shure M-24 H	748	National EPS-34 STSD
	Kenwood N-37	711	Onkyo DN-57 ST	748-DE	Audio Technica AT-12 E
658	Trio N-43	712	Audio Technica AT-15 XE		Hitachi DS-ST-104
	Kenwood N-43		Pioneer PN K-85		National EPS-34 STSD; EPS-35 STED
659	Nivico DT-23		Sansui SN-37; SC-37		Saba AT-12 E; (PSP-244)
660	Aiwa M-32		Sharp STY-114	749	Toshiba N-59 DY
	Nivico DT-32		Silver system 200; SS-250	750	National EPS-56
	Sharp STY-701		Glanz MG-55 R	750	Elac STS 155-17; D 155-17
661	Marlux NM-106		Hitachi DS-ST-102	751	Schneider D-155-17
	Teleton MST-5		N.E.C. LP-50 D	752	Elac STS 255-17; D 255-17
662	Sony ND-134; VL-32 G		Sharp STY-100; STY-750	753	Elac STS 355-17; D 355-17
662-DE	Sony ND-134 G; VL-34 G		Sansui SN-41		Aiwa AN-87-45
663	Sanyo ST-28 D; MG-28		Sharp STY-103		Akai RS-38
664	Nagaoka JT-511		Silver System 100; 300		Barco
	Supraphon JT-511		Teleton MST-31		C.E.C. MC-16
	Tonacord TM-511		Tensai	754-ES	Piezo YM-121
665	C.E.C. MC-11	713	Sansui SN-42	755	Silver SL-5050
	Piezo YM-118	714	Nivico DT-50		Sony ND-45 X; XL-45
666	Marlux MC-500	715	Pioneer PN-131		Kenwood N-46
667-DE	Empire 2000 E/III	716	Yamaha N-7000	756	Trio N-46
668-DE	Empire 4000 D/III	717	Nagaoka OS-100 MP	756-DE	Acos M-7
669-DE	Stanton 681 EEE; D-6800 EEE	718	Nivico DT-Z 1 S	757	Eurofunk EF-85; EF-404
670	Excel QD-700 FR	719-DE	Nagaoka OS-200 MP		Acos M-7 E
671	Audio Technica AT-VM3	720	Nivico DT-34 S		Aiwa AN-6
672	Lenco M-94	721-DE	Nagaoka OS-300 MP		National EPS-270 SD
673	N.E.C.	722-ES	Sharp STY-751		Blaupunkt EM-240
	Sansui SN-80; SC-80	723-ES	Hitachi F-22 EX; MT-22	757-DE	National EPS-270 ED
	Silver	724	B.S.R.	758	Audio Technica ATN-71
	Teleton	725	Electronic Reproducers 450 M		Brandt
674	Hitachi		Hape MD-4		Continental Edison
	Mitsubishi 3D-34 M		Lesa		Grundig
675	Pioneer PN-14		Sonic S-10 C		I.T.T. AT-71
676	Audio Technica CN-933; CN-936	726	N.E.C. LP-6100 D; LP-6300		Japan Columbia (Denon) DSN-39
	Schneider CN-933		Onkyo DN-29 ST		Kenwood N-11; N-48
677	Akai APN-5	727	Onkyo DN-28 ST		Luxor
	Audio Technica AT-11;	728	Sony ND-100 G; VL-100 G		Marantz 500
	CN-2398	729	Expert Disco		National EPS-74 STSD
	Hitachi DS-ST-26	730	Nagaoka JT-511 DJ		N.E.C. LP-735 D
	Japan Columbia DSN-28		Audio Technica AT-7		Onkyo DN-35 ST
	Luxman ATS-11		Glanz MG-50 R		Rotel 2RC-5
	National EPS-30 STSD		Kenwood N-47		Scott
	Thompson ATS-11		N.E.C. LP-65 D		Sharp STY-115
	Toshiba N-52 DY		Sharp STY-101		Siemens
	Trio N-41	731	Trio N-47		Teac
	Kenwood N-41		Sony ND-15 G; ND-15 GA; XL-15 A		Teleton ATN-71
678	Shure M-95 G; M-95 G-LM	732	XL-15; VL-15 G		Trio N-11; N-48
	Dual DN-360		Dual DMS-210; DN-211	759-DE	National EPS-50; 51; 54; 205 ED
679	Sony ND-111 E; 112 E; VC-8 E	733	Schneider DN-211; DMS-210	759-ES	National EPS-405 QD
680	Excel ES-70 H	734	Pioneer PN-135	760	Fisher MG-63; ST-63 D
	Hitachi HN-ST-7		Akai PC-100; RS-100		N.E.C. LP-6000 D
			Audio Sonic		Sharp STY-105
					Siemens
					Audio Technica ATN-72 E

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
760-DE	National EPS-74 STED Sanyo ST-63 D	794-DE	Thompson ATN-13 Ea I.T.T. AT-70; ATN-70	826	Toshiba N-210; C-210 M; N-230 C; C-230 M
761	Supraphon JT-411	795	Magnavox 560369 Saba AT-71 (CSP-300)	827	Bellex BX-50
762-DE	Dual D-105 ED; DN-362		Schneider ATN-70	827-DE	Bellex BX-50 E
763	Hitachi DS-ST-24; MT-24		Sharp CN-2423	828	Audio Technica ATN-771
764	Audio Technica ATN-952		Sony ND-136 G; VL-33 G		Hitachi DS-ST-30
	Kenwood N-49		Wega ATN-70		Japan Columbia (Denon) ATN-771
	Trio N-49		Audio Technica AT-14 Sa		Rex (Zanussi)
765-DE	Sony ND-45 E; XL-45 E	796-ES	Pioneer PN-110 MK II	829	Sansui SN-101; SV-101
766-DE	National EPS-205 EX; National EPS-205 ED III	797	Shure VN-45 HE; V-15 type IV		Kenwood N-39 MK III
767	Hitachi SJN-18	798-DE	Pioneer PN-400	830	Trio N-39 MK III
	Japan Columbia (Denon) DSN-38	799	Pioneer PN-600	831	Garrard GMC-50 C
	Mitsubishi SJN-18	800	Crown		Aiwa AN-7
	Sanyo ST-17 D; MGT-17	801	Fidelity		Akai PC-90; RS-90
768	Toshiba N-55 DY		Hitachi SJN-45		Audio Technica ATN-3711; ATN-3721
768-DE	Audio Technica ATN-71 E		Japan Columbia DSN-45		CN-2701;
	Grundig		Magnavox 560 4370033		Garrard GA-150
	Luxman ATN-71 E		Nikko		National EPS-76 STSD
	Radio Shack ATN-71 E		Nivico DT-51		Tensai
	Toshiba N-57 DY		Sanyo STG-5; STG-6; MGT-45;		Thompson ATN-3721
769	Handic V-307		ST-170; GXT-170		Aiwa AN-5; RN-5
	Micro V-307; V-7000		Schneider SP-60 N; SP-61 M		Audio Technica ATN-3400; ATN-3450
770	Denon DSN-34		Silver SS-3850		Blaupunkt CN-5431
	Glanz MG-70 R		Teleton		Continental Edison
	Hitachi DS-ST-23		Tensai		Cybernet
771	Audio Technica ATN-952	802	Brandt FF-15 O MK II		Grundig
	Kenwood N-26		Kenwood NF-15 O MK II		Hitachi DS-ST-35; DS-ST-36
	Mitsubishi 3D-44 M		Luxor 8000		Inkel PD-40
	Nordmende ST-10 J		Ortofon FF-15 MK II		I.T.T.
	Onkyo DN-40 ST		Trio NF-15 O MK II		Japan Columbia ATN-3400
	Pathé Marconi ST-10 J		Onkyo DN-60 STE		K.L.H
	Sanyo ST-10 J; MG-10; MG-10 J;	802-DE	Kenwood N-15 O MK II		Marantz ATN-3400; CT-5 S
	ST-11 D; ST-43; ST-43 D	803	Ortofon F-15 MK II		National EPS-75 STSD; EPS-77 ST
	Trio N-26		Trio N-15 O MK II		N.E.C. LP-355 D
772	Japan Columbia DSN-41	804	Toshiba N-58-C; C-58 M		Onkyo DN-52 ST
773	Sony ND-14 G; VL-14 GS	805-DE	Stanton 881 S; D-81		Saba CN-5431 (C-3000);
774	Pioneer PN-330 MK II	806-DE	Audio Technica AT-13 Ea/X		AT-3400 (PSP-240);
775	Micro VP-1; V-8; V-10; V-70	807	Sony ND-60 G; VX-60 G		AT-3400 (PSP-100)
776	Micro V-5	808	Nagaoka C-711-01; C-711		Sanyo ST-55 D
776-DE	Braun MAG 1 E	809	Philips GP-397 MK III		Schneider
777	Micro V-20		Excel ME-45		Sony ND-138 G; VL-38 GS
778	Audio Technica ATN-936		I.T.T. ME-45-77		Toshiba N-71 C; C-71 M
	Onkyo DN-33 ST	810	Onkyo DN-16 ST		Uher
	Sony ND-135 G; VM-27 G	811	N/A		Wega
779	Rigonda 123	812	N/A		Sanyo ST-31 J
	Schneider KS-231	813	Aiwa AN-35		Japan Columbia DSN-50
	Valkona CN-24; KS-231		Crown		N.E.C. LP-70 D
	V.E.B. CN-24; KS-231		Fisher ST-34 D		Piezo YM-123
780	Audio Technica AT-3		N.E.C. LP-75 D		Piezo YM-310
	Kenwood N-20		Nivico DT-36		N/A
	Trio N-20		Rotel System 400		Excel ME-55
781-DE	Audio Technica AT-12 XE		Samsung 4237		Pioneer PN-150
	Continental Edison		Sanyo STG-8		Fisher ST-44 D
	I.T.T. AT-12 XE		Schneider SP-62 M		Sanyo ST-44 D
	Sanyo STA-3 D		Siemens		Silver system 70
	Telefunken TM-600		Silver System 70; System 75		Fisher MG-100 S
	Thompson ATN-12 XE		Silver SS-85; SS-170; SS-270		Sanyo ST-100 SD
782-ES	Audio Technica AT-12 Sa	814	Tensai		National EPS-207 C
783-DE	Audio Technica AT-13 E	814-DE	Ortofon FF-15 X MK II		National EPS-207 ED
784	Hitachi DS-ST-20	815	Ortofon FF-15 XE MK II		National EPS-27; EPS-275;
785	Audio Technica ATN-936	816	Tonacord TM-1000		Bang & Olufsen SP-10
	Yamaha N-4500; N-4500 MK II	817	Sony ND-108; VM-108 GS		Bang & Olufsen SP-12
786	Japan Columbia DSN-22	818	Toshiba N-260 C; C-260 M		Bang & Olufsen SP-14
	N.E.C. LP-30 D	819	Onkyo DN-39 ST		Yamaha N-6600
787	Sanyo ST-4 D	820	C.E.C. MC-10		Audio Technica ATX-11
788	Sanyo ST-50 D; MG-50		Sony ND-137 G; VL-37 G		Saba ATX-11 E
789	A+R/Cambridge P-77		Dual DMS-220; DN-221		Onkyo DN-201 ST
	Marlux		Schneider DN-221; DMS-220		Sony ND-5 G; VL-5
789-ES	A+R/Cambridge P-78	821-DE	Dual DMS-240 E; DN-241		Audio Technica ATN-3712 E
790	Sonovox 50 S		Dual DMS-242 E; DN-242		Onkyo DN-202 STE
791	Sonovox N-11 S		Schneider DN-242; DMS-242 E		Sony ND-7 E
792	Eurofunk EF-505	822	Aiwa AN-36		Audio Technica ATN-3712
	Marlux SX-50 S		Cybernet		Fisher MG-53; ST-53 D
	Sonica SK-58 C		Mitsubishi 3D-48 M		Sanyo ST-53 D; ST-53 ZD; MG-53 Z
	Sonovox S-101 C		N.E.C. LP-60 D		Audio Technica ATN-770 L
792-DE	Eurofunk EF-606		Samsung 150; 350		National EPS-39 STSD
	Sonovox S-101 E		Sanyo ST-107; STG-2D; ST-48 D		Rotel 2RN-5
792-ES	Eurofunk EF-707		Sharp STY-117		Yamaha N-6600 S
	Sonovox S-101 SH		Teleton MPC-7; MST-6		Audio Technica ATN-3401;
793-DE	Empire 2000 Z	823	Japan Columbia (Denon) DSN-44		ATN-3450 L
794-DE	Audio Technica AT-13 Ea	824	Sansui SN-44		Magnavox 560429
	I.T.T. AT-13 E	825	Sansui SN-45		National EPS-75 STC/SD;
	Saba AT-13 EaV; (PSP-248)	826	Sansui SN-50		EPS-76 STED; EPS-77 ST
	Siemens 555		Sanyo STG-7		Nikko
					Pioneer PN-220

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
851	Sanyo ST-35 D; ST-41 J Sharp STY-118 Toshiba N-293 DY Visonik Yamaha N-6700	893-DE 894	Saba ATN-12 ES (PSP-250) Audio Technica ATN-11 S Onkyo DN-37 ST	916-DE 917	Onkyo DN-63 STE Audio Technica ATN-3600; ATN-3650 Brandt National ATN-3600 Nordmende Pathé Marconi Saba Sherwood Telefunken Tensai Thompson
852	Micro V-40	894-DE 895	Hitachi DS-ST-26 E Audio Technica ATN-72 Inkel Telefunken ATN-72	918-DE 919 920	Micro LF-7 Sony XL-20 G/ ND-200 G C.E.C. MC-6 S Cobra 250; 520 Schneider Toshiba N-20 C Excel ME-65
853	Nivico DT-30 S	895	Akai RS-95; PC-95 Audio Technica ATN-3721	921	Audio Technica ATN-3711 E
854-DE	Sony ND-25 E; XL-25; XL-25 A	896-DE	Akai RS-83 Audio Technica ATN-3412	922-DE	Marantz ATN-3711 E; CT-6 S
855	Sony ND-35 E; XL-35	897	Mitsubishi 3D-47 M Audio Technica ATN-93; ATN-3410	923-DE	Nivico DT-39; LF-71
856	Empire Scientific 2000	898	ATN-3451 Marantz ATN-3400 National EPS-75 TFSD	924-DE 925	Onkyo DN-55 ST; DN-59 ST Empire 2000 X Audio Technica
857-DE	Empire Scientific 2000 E		Nivico DT-38 Sansui SN-202 Sanyo ST-42 D Sherwood Siemens RW-150	926	Toshiba N-60 DY; N-70 C
858-DE	Schneider SPP-30		Teac Telefunken ATN-3410	927	Akai RS-84
859-DE	Empire Scientific 4000 D/I	899-DE	Tensai Akai PC-150; RS-150	928	Audio Technica AT-102 P
860-DE	Empire Scientific 2000 E/I	900	Audio Technica ATN-3721	929	Grundig ATN-102
861-DE	Empire Scientific 2000 E/II	901	Shure N-97 B	930	Inkel ATN-102 P
862	Empire Scientific 4000 D/II	901-DE	Radio Shack RXT-4	931-DE	National EPS-90 SMBD; 90 STGD
	Glanz MG-20 R	901-ES	Rotel RXT-4	932-DE	N.E.C
	Onkyo DN-51 ST	902	Shure N-97 ED	933	Audio Technica AT-892
	Rotel 2RC-1	903	Shure N-97 HE	934	Sanyo ST-38 D; ATN-892
	Sharp STY-116	904	Sony ND-150 (not ND-150 G)	935	Yamaha N-8000
	Toshiba N-160 C; C-160 M		Audio Technica ATN-750		Nivico DT-41; LE-500; LE-600
863	Sony ND-220 G; VL-20		Sanyo ST-41 ZD		Denon DL-60
864	Audio Technica ATN-750		Audio Technica ATN-51; 52; 53		Japan Columbia DSN-60
865	Yamaha N-6800		Garrard GS-22		Nivico DT-Z 1 EB
	Audio Technica ATN-750		Inkel PD-607		Akai RS-85; PC-85
	Fisher ST-41 D		I.T.T. ATN-50		Audio Technica ATN-3401
	Inkel JB-2000		Nordmende		Philips 499
	Sanyo ST-41 D; ATN-750		Saba		Sharp STY-130
866	Audio Technica ATN-750		Sanyo ST-51 D		CX-680 6C (801 DS plastic cant.)
	C.E.C. ATN-750		Sherwood		Rex (Zanussi)
	Teac		Sony ND-139 G		Sharp STY-132
867	Audio Technica ATN-105		Telefunken		Silver S-8300
868-DE	Audio Technica ATN-110 E		Thompson T-H 5 S		Tensai
	Rotel ATN-110 E		Wega ND-139 G		Toshiba N-40 C
869-DE	Audio Technica ATN-120 E	904-DE	Audio Technica AT-51 E; AT-52 E;		Aiwa AN-70
870-ES	Audio Technica ATN-125 LC		AT-53 E; AT-55XE; AT-57 XE; 59 XE		Akai RS-77
871	Audio Technica AT-103 Sound Burger		Brandt		Audio Technica ATN-3851
	Hitachi DS-ST-17		Garrard GS-22 E		Brandt
871-DE			Rotel AT-51 E; ST-51 D		Continental Edison
872-ES	Audio Technica ATN-130 E		Saba		Kenwood N-56; N-56 B
873-ES	Audio Technica ATN-140 LC		Thompson T-H 5 E		Marantz TT-333; TT-433; TT-443;
874	Audio Technica ATN-155 LC		Sharp STY-121		TT-553
875	Tetrad T-5 H		Nivico DT-37; MD-1034		Mitsubishi 3D-54 M
876	Tetrad T-2 MS; T-2 MD		Sony ND-150 G; XL-150		Sansui SN-303
	Kenwood N-53/V-53		Jelco D		Thompson
	Toshiba N-33 C; C-911		Kenwood N-50		Toshiba N-72 D; C-72 M
	Trio N-53/V-53		Trio N-50;		Trio N-56; N-56 B
877	Sansui SN-60; SC-60		Kenwood N-51 E		Audio Technica ATN-70
	Teac PC-313		Trio N-51 E		Mitsubishi 3D-42 M; 3D-45 M
	Tensai		C.E.C. MC-17		Denon DSN-47
878	A.D.C. QLM-series		Teac		N.E.C. LP-310 D
	Brandt QLM-30 MK III		Grundig		Japan Columbia DSN-47
	Radio Shack QLM-30 MK III		Magnavox 560434		Denon DSN-48
	Schneider QLM-30 MK III		Schneider		Japan Columbia DSN-48
879	Siemens QLM-30 MK III		Sears		Hitachi DS-ST-15
	Audio Technica ATN-3710		Sharp		Grundig P-24
	Inkel		Siemens RS-226		National EPS-24 CS
	Luxman ATN-3710		Tensai		Schneider P-24
	Scott 21 SC		Toshiba N-21 D		National EPS-24 ES
880	Sony ND-250 G; XL-250 G		Dual DN-140 S; ULM-40 S		Sharp STY-120
880-DE	Sony XL-20; ND-200 E		Pioneer PN-230		Audio Technica ATN-3710 L
881-DE	Sony XL-30; ND-30 E		Mitsubishi 3D-50M		Nagaoka C-721
882	Piezo YM-122		Sharp STY-128		Nagaoka MP-05
	Silver SL-5030		Nagaoka C-320 M		Toshiba N-310 C; C-310 M
883	Piezo YM-124		Toshiba N-320; C-320 M; N-330 D;		Nagaoka MM-321 B
884	Nivico DT-Z-4 S		C-330 M		Teleton MM-321B
884-DE	Nivico DT-Z-3 ED		Audio Technica ATN-70 L		Philips GP-400 MK III
885	Continental Edison		Sanyo ST-26 J		Philips GP-401 MK III
	Pathé Marconi		Toshiba N-56 DY		Empire 2000 T
	National EPS-202 C; 202 ED		Audio Technica ATN-3601		Amstrad T-30 MS; T-30 MD
	EPC-202 CK; P-23; EPS-23 CS;		Magnavox 25130071		Schneider T-30 MS
	EPS-23 ES; H-23; P-22		Philips		
885-DE	National EPS-22 ES; EPS-23 ES;	911	Sharp STY-123		
	EPS-202 ED	912			
886	National EPS-206 C	913			
886-DE	National EPS-206 ED	914			
887	Toshiba N-34 C; N-35 D; C-34 M;	915			
	C-35 M; N-68	916			
888	Glanz MG-30R				
	Rotel 2RC-4				
889	Akai RS-3 J				
890	Piezo YM-125				
891	Electronic Reproducers ER-312 X				
	Piezo YM-320				
	Denon DL-8 A; DSN-42				
892	Japan Columbia DSN-42				



TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
948	Tetrad T-30 MS; T-30 MD Waltham T-30 MS	978	Hitachi HT-20 S	6022	Sony ND-MM 1 G; XL-MM 1
949	Japan Columbia DSN-51	979	Hitachi DS-ST-33	6022-DE	Sony ND-MM 2 E; XL-MM 2
	Onkyo DN-54 ST	979-DE	Audio Technica ATN-112 EP	6022-ES	Sony ND-MM 3 X; XL-MM 3
	Piezo YM-127	980	Sherwood AT-112 EP	6023	National EPS-25 CS
950	Toshiba N-62 C; C-62 M; N-66 C; C-66 M; N-67 C; N-67 M	980	Amstrad	6024	National EPS-23 CS
951	National EPS-41 STSD; EPS-41 ST		Denon DSN-57	6025	C.E.C. ST-630
	Sanyo ST-03; ST-50 D		Japan Columbia (Denon) DSN-57	6025-DE	Excel ESP-300 E
952	C.E.C. MC-45		Sanyo STG-9; MG-17-10	6025-ES	Excel ESP-300 X
953	Jelco MC-45 D		Sherwood MG-1710	6026	Excel ESP-300 C
	Aiwa AN-60		Audio Technica ATN-2005;	6027	Marantz TT-530
	Osawa OS-1001		ATN-3600 L; ATN-3650 L	6027	Denon DSN-65
953-DE	Pioneer PN-K-65		Dual DN-235; DMS-235; DN-239;	6028	Japan Columbia (Denon) DSN-65
	Osawa OS-2001		DMS-239	6028	Jelco MC-12
	Osawa OS-3001		Grundig DN-235; DN-239	6029	Ortofon VMS-20 E
954	Sanyo ST-20 J		Rotel	6030	Dual DN-149 S; TKS-49 S
955	Onkyo DN-56 ST		Schneider DN-239	6030-DE	Dual DN-152 E; TKS-52 E
956	Inkel JB-4000; JB-5000		Siemens DN-239	6031	National EPS-30 CS
	Marantz		Akai RS-7; PC-7	6032	National EPS-33 ES
	N.E.C.		Hitachi DS-ST-33 E	6033-DE	Dual DN-155 E; ULM/TKS 55E
	Nikko		Japan Columbia (Denon) DSN-62	6034-DE	Dual DN-160 E; ULM/TKS-60E
	Rotel		Denon DSN-62	6035	General Electric VR-II/G-16 only
	Samsung LP-4		Supex SM-38	6036	Onkyo DN-62 ST
	Scott 20 SC		Supex SM-38 E		Sanyo ST-102 S; ST-102 SD
	Sharp SG-20 music centre; STY-127		Mitsubishi 3D-52 M	6037	Sharp STY-138
	Silver SLU-30		Sansui SN-707	6038	Fidelity T-50 HS
	Uher		Audio Technica AT-102 EP		Schneider T-50 HS
957	Aiwa AN-50		Grundig ATN-102 EP		Tetrad T-50 HS
	Audio Technica ATN-3830; ATN-3831		Hitachi DS-ST-13; MT-13	6039	A.D.C. L-3
	Denon DSN-63		National EPS-90 SMAD; 90 STGED	6040	A.D.C. Q-3
	Hitachi DS-ST-16		Nivico DT-55 MK II	6041-DE	Elac ESG-792 E; DN-792 E
	Japan Columbia (Denon) DSN-63		Sharp RP-23; RP-35; STY-140	6042	A.D.C. L-4
	Mitsubishi 3D-51 M		Nivico DT-201		Mitsubishi L-4
	Nivico DT-56		Sanyo STM-11; MG-M 11	6043	Tensai
	Sharp STY-124		Sharp STY-131	6044	A.D.C. Q-4
958	Kenwood N-39 MK II		Akai RS-82		
	Trio N-39 MK II		Audio Technica ATN-2004		
959	National EPS-27 CS; EPS-28 CS		Audio Technica ATN-3600 C; ATN-3650 C	6045	Dual DN-236
960	Tonar 511		National EPS-43 STSD; 75 STHSD	6046	Dual DN-390
960-DE	Tonar 511 BE		Sharp STY-141; STY-142	6047	Sharp STY-107
960-ES	Tonar 555		Teac PC-707; N-707	6048	Toshiba N-250 C; C-250 M
961	Nordmende		Yamaha CG-7700; N-7800		Audio Technica ATN-2001
	Sansui SN-505		Sharp STY-122		Onkyo DN-61 ST
962	Toshiba N-45 C; C-45 M		Marantz CT-100	6048-DE	Onkyo DN-61 STE
963	Hitachi DS-ST-32		Magnavox 25130079	6049	Akai RS-33; PC-33; RS-35; PC-35
	Toshiba N-64 C; C-64 M (IM)		Philips GP-330		C.E.C. N-103
964	Stanton 600 A; D-6071 A		Radiola GP-330		Dual DN-450; MMP-450
964-DE	Stanton 600 E; D-6004 E; 600 EE;		Magnavox 25130081		Grundig
	D-6003 EE		Philips GP-331		Pioneer PN-250 T; PN-305 T
965	C.E.C. RS-3		Radiola GP-331		Sansui SN-P 313; SN-P 515
	Marantz		Steel needles in box of 200 pcs		Teac PCS-708; PC-708
	Scott 21 A SC		6001		DS-ST 18 R
966	Shure SC-35 C; SS-35 C		Hitachi HN-ST-6	6049-DE	Hitachi DS-ST 18
967	Empire Scientific 100 S		Tetrad T-20 MS; T-20 MD	6050	Sanyo ST-L 5 D
968-DE	Empire Scientific 200 E		Tetrad T-3 MS; T-3 MD	6051	C.E.C.
969	Dual DN-237; TKS-237		6003-ES		U.P.O.'s white
970	Dual DN-145 S; ULM-45 S		Nagaoka JN-110	6052	Toshiba N-290 D
970-DE	Dual DN-145 E; ULM/TKS-45 E		Garrard GC-11	6053	Ortofon M-20 E Super
	Schneider DN-145 E		Coral 666 EX	6054	Ortofon Stylus STD
971	Sanyo ST-15 J		Decca Deram	6055	Ortofon LM-10
972	Sanyo ST-29 D; ST-55 D		6007		E.E.I. 300H
	Toshiba N-50 C; N-51 C		Tetrad T-12 MD; T-12 MS	6056-DE	E.E.I. 400
973	Marantz CS-500		6008		E.E.I. 500
	Nikko		Kenwood N-52	6056-ES	E.E.I. 700
	Sanyo STG-11		Trio N-52	6057-ES	Shure V-15 type 5
	Schneider SPP-26		6008-DE	6058	Sharp STY-135; RP-P8
	Toshiba N-292		Audio Technica ATN-3452 E	6059	Sanyo SN-909
	Uher		Mitsubishi 3D-46 M	6060	Sansui SN-29
974	Audio Technica AT-91; ATN-91;		Sansui SN-70; SC-37 A	6061	Radio Shack RT-1500
	ATN-3601; ATN-3651		6009	6062	Realistic RT-1500
	Blaupunkt		Audio Technica ATN-3472 P	6063	Marantz TT-140; TT-240; TT-340;
	Europphon		Sanyo ST-26 DL		TT-440
	Luxman		6011-DE		Sanyo ST-44 J
	Nivico DT-55		Audio Technica ATN-3472 EP	6064	National EPS-75 SMLD
	Pioneer PN-320		Sanyo ST-34 D		Sanyo
	Saba		6012		Sharp
	Sanyo		Micro 307 IM	6065	Sony ND-147
	Sony ND-142 G; VL-42 G		Aiwa AN-30	6066	Sansui ST-2 D
	Teleton		Sharp STY-137; RP-255	6067	Sharp N-15 D
	Tensai		6014	6068	Sansui ST-9 D; SN-24
975	Sanyo ST-101 SD		Teleton N-1520	6069	Sanyo all plastic
976	Audio Technica ATN-3230		Sharp STY-136; RP-155	6070	Coner Testina RC-1
	Yamaha N-8010; MC-801		Tensai	6071	Onkyo DN-38 ST
977	Sony ND-143 G; VL-43 G		6015	6072	Empire Scientific 150 C
			Denon DSN-66	6072-DE	Empire Scientific 250 E
			Japan Columbia DSN-66	6073	Japan Columbia (Denon) DSN-3
			Sanyo STG-10; GXT-210; GXT-410		
			Sherwood		
			Sanyo ST-37 LD		
			6017		
			Shure M-97 LT		
			6018		
			Shure SDS-1		
			6019		
			Shure M-44 C with guard		
			6020		
			Kenwood N-54		
			6021		
			Trio N-54		

TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
6074	Japan Columbia (Denon) DTS-4	6148	Sharp STY-143	6228	Sanyo ST-07 D
6075	Japan Columbia (Denon) DSN-4	6149	Sanyo ST-40 D	6229	Sanyo ST-08 D
6076	Japan Columbia (Denon) DSN-5	6150	A.D.C. PSX-5; PSX-5 E	6230	Nivico DT-59
6077	Japan Columbia (Denon) DSN-6	6151	Nagaoka JN-120	6231-ES	Excel ME-65 X
6078	Japan Columbia (Denon) DSN-7/DSN-8	6152	Akai RS-50	6232-ES	Excel S-75 QL
6079	Japan Columbia (Denon) DSN-32		Mitsubishi RS-50	6233	Japan Columbia DSN-67
6080	Japan Columbia (Denon) DSN-40	6152-DE	Akai RS-50 E	6234	Sansui SNP-212
6081	Onkyo DN-34 ST	6153-DE	Yamaha N-8100	6235-DE	Dual DN-150 E
6082	Onkyo DN-36 ST	6154	Toshiba C-32 M	6236	Audio Technica AT-4-7 D black
6083	Sharp STY-550	6155	Sony ND-142 GP	6237	Onkyo DN-68 ST
6084		6155-DE	Sony ND-142 EP		Sharp STY-155
6085	B.S.R. S-1; SN-1	6156	Aiwa AN-2	6238	Sony ND-155 G
	Sharp RP-50	6157		6239	U.P.O.'s
6086	Nuway NS-88	6158	Kenwood N-63	6240	U.P.O.'s
6087	Japan Columbia (Denon) DSN-11		Trio N-63	6241	U.P.O.'s
6088	Mitsubishi 3D-29 M	6159	Marantz TT-430	6242	U.P.O.'s
6089	Nivico DT-12	6160	Pioneer PN-290 T	6243	U.P.O.'s
6090	Nivico DT-13	6160-DE	Pioneer PN-300 T	6244	Onkyo DN-106 ST
6091	Nivico ST-19	6161	Akai RS-10; PC-10	6245	U.P.O.'s
6092	Nivico DT-22	6162-ES	E.E.I. 800	6246	Nivico DT-55 MK 2
6093	Nivico DT-15	6163	Marantz TT-551	6247	Sansui SV-111
6094	Nivico DT-18	6164	Sanyo ST-66 D	6248	Onkyo DN-107 ST
6095-DE	Sony ND-50X; XL-50	6165	Sony ND-144 G	6249	Trio N-65
6096-DE	Sanyo STA-1D	6166	Nivico DT-55 B	6250-DE	Nivico DT-Z 1 E
6097-DE	Shure M-92 E (new)	6167	Pioneer PN-295 T	6251	Pioneer PNK-75
6098-DE	Shure M-99 E	6168	Nivico DT-Z 5 P; Z-5 P		Sharp STY-145
6099-DE	Shure M-104 E	6169	Nivico DT-35	6254	
6100-ES	Shure M-110 HE	6170	Sony ND-301 P	6255	Jelco MC-29
6101	Toshiba N-280 C; C-280 M	6171	U.P.O.'s blue	6256	Amstrad 900 D
6102	Pioneer PN-200	6172	U.P.O.'s red	6257	Trio N-66
6103	Pioneer PN-800	6173	U.P.O.'s yellow		Kenwood N-66
6104-ES	Pioneer PN-21	6174	U.P.O.'s red	6258	Trio N-67
6105-DE	Pioneer PN-330 E	6175	Tensai MC-3750	6259	Kenwood N-67
6106-DE	Pioneer PN-550 E		U.P.O.'s red	6260	Sanyo ST-09 D
6107-ES	Pioneer PN-770 EX; PN-1000C	6176	Tonar 611	6261	Trio N-69
6108-DE	Nivico DT-21	6177-DE	Tonar 611 BE	6262	Kenwood N-69
6109-DE	Audio Technica AT-122 EP	6178	Audio Technica ATN-2002	6263	Marantz CT-551
	Inkel ATN-122 P	6178-DE	Audio Technica ATN-3652 E	6264	Sanyo
6110-ES	Audio Technica AT-122 LP	6179-DE	Audio Technica ATN-3651 E	6265	Fonica UF-70
6111	Nivico DT-57	6180	Audio Technica ATN-3492 P	6266	Aiwa AN-11
6111-DE	Audio Technica AT-3472 EP	6180-DE	Audio Technica ATN-3492 EP	6267	Nivico DT-58 B
6112	Sansui SN-43	6181	Audio Technica ATN-770	6268	Nivico DT-60
6113	Yamaha N-6900	6182	Audio Technica ATN-90	6269	Yamaha N-8300
6114-DE	Yamaha N-7900	6183	Kenwood N-62; V-62	6270	Nivico ATN-1059
6115	Toshiba N-44		Trio N-62; V-62	6271	Mission Solitaire
6116-ES	Toshiba N-220 ME/X; C-220 M	6184	Excel S-75 ER; ME-75	6272-DE	Japan Columbia DSN-25
6117	National EPS-51 CS	6185	Excel S-700 DR; ES-700 D	6273	Andante P-38
6118	National EPS-P 53 CS	6186	Audio Technica ATN-3400 C; ATN-3450 C	6274	Audio Technica AT-3-5 D
6119-DE	National EPS-53	6187	Audio Technica ATN-3652	6275	Andante P-76
6120-DE	Audio Technica AT-115 E	6188	Audio Technica ATN-2003	6276	Sanyo blue
6121	Mitsubishi 3D-MM 1	6189-DE	Audio Technica ATN-101 EP	6277	Jelco MC-50 D
6122	Nivico DT-55 W	6190	Toshiba TP-116 SD	6278	Excel ES-750 L
6123	National EPS-02	6191	Coner R-608 RCS	6279	Pioneer PN-350
6124-DE	Pioneer PN-550 E MK II	6192	Japan Columbia DSN-9		Fisher Price power point
6125	Pioneer PN-1000 MK II	6193	Onkyo DN-65 ST	6280	Tetrad T-1 LD
6126	Audio Technica ATN-101 P N.E.C.	6194	Ronette 107 double	6281	Sansui SN-1112
	Scott ATN-3482 P	6195	Sanyo ST-55 D	6282	Audio Technica AT-4-7 D orange
6127-DE	Audio Technica ATN-95 E; ATN-3451 E	6196	Sharp STY-144	6283	Sansui SN-36 orange
	Sherwood	6197	Pioneer PN-291		Trio N-68
6128	Tetrad TZ-1 S; TZ-1 D	6198	Sanyo ST-67 D	6284	Kenwood N-68
	Zenith 142-185	6199	Sanyo ST-47 D	6285-ES	National EPS-55 CS
6129	Toshiba N-500 C; C-500	6200	Sanyo ST-57 D	6286	Shure Ne-97 HE (Encore)
6130	Piezo YM-818	6201	Acutex M-106	6287	Onkyo DN-70 ST
	Visonik YM-818	6202-DE	Acutex M-110 E	6288	Pioneer PN-240
6131	Toshiba N-69 D; C-69 M	6203	Audio Technica ATN-3660 YL	6289	Sharp STY-112
6132		6204	Trio N-61	6290	Nivico DT-62
6133	U.P.O.'s KP-20	6205	Kenwood N-61	6291	Pioneer PN-19
6134	A.D.C. PSX-10	6206	Electronic Reprod. ERC-900		Kenwood N-71
6135	A.D.C. PSX-20	6207	Marantz TT-153	6292	Trio N-71
6136	A.D.C. PSX-30	6208	Toshiba N-77 C	6293	Azden YM-10 C
6137	A.D.C. PSX-40	6209-DE	Sanyo STG-12	6294-DE	Azden YM-10 E
6138	Kenwood N-59	6210-DE	Sonus Clear E	6295	Azden YM-10 VE
	Toshiba N-75 C; C-75 M; N-76 DY	6211-DE	Sonus Black E	6296	Azden YM-P 50 C
	Trio N-59	6212-ES	Sonus Smoke E	6297	Toshiba N-73 CY
6139	Toshiba N-74 C; C-74 M; N-74 DY	6213-ES	Sonus Black Bonded LC	6298	Empire S-3 D
6140-DE	Pickering DTL-1; TL-1	6214	Sonus Black Naked LC	6299	Empire S-40
6141		6221	Supex SMM-5	6300-DE	Empire S-45 E
6142-DE	Akai RS-180; PC-180	6222	Empire S-111	6301	Empire S-105
6143	Sony ND-300 G; XL-300	6223	Empire S-333	6302	Empire S-205
6144	Dual DN-450	6224	N.S.M. (ORTOFON)	6303-DE	Empire 140 C
6145	Sony ND-10 G; XL-10	6225	Pioneer PN-250 T	6304	Empire 245 E
6146-DE	C.E.C. MC-20 ES	6226	Toshiba N-37 C	6305	Empire 195 LT
6147	Sony ND-250 E; XL-250 E	6227	Sansui SN-757		Empire 295 LT



TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:	TONAR No.	May be used as replacement for:
6306	EMPIRE S-395 LT	6365	U.P.O.S. CN-251 (CART MG-2831)	6417	EMPIRE S-2000-SHIBATA W/GUARD
6307	EMPIRE S-485 LT	6366	AKAI CN-254 BLACK	6418	AUDIO TECHNICA ATN-95 SHIBATA
6308	EMPIRE S-1085 LT	6367	A.K.G. X 8 E	6419	ELAC DN-796 H - SHIBATA TIP
6309	EMPIRE 300 ELT	6368	ORTOFON STYLUS 5 * NEW *	6420	SHURE V-15 TYPE V - MR
6310	EMPIRE 500 PEX	6369	ONBEKEND ARTIKEL (FAH383)	6421	ELAC D-796H - HYPER ELLIPTICAL
6311	EMPIRE 15 C	6369	ORTOFON ALL-ROUND F/FF I/II	6422	SHURE N-91 HE - HYPER ELLIPT.
6312	EMPIRE 25 E	6369	ORTOFON ALL ROUND F/FF I/II	6423	AUDIO TECHNICA ATN-3492P
6313	EMPIRE 150 KC	6370	ELAC D-795 E	6424	SHURE N-75 ED II - SAS TIP
6314	EMPIRE 250 KE	6371	ORTOFON STYLUS 20 (NEW)	6425	SHURE V-15 TYPE V/MR - SAS
6315	AUDIO TECHNICA ATN-3663	6372	SHURE N-105 ED	6426	SHURE N-91 ED - SAS TIP
6316	AUDIO TECHNICA ATN-771 E	6373	STYLUS FOR 2283/2288/2380	6427	NATIONAL EPS-270 ED - SAS TIP
6317	EDISON T FOR AMBEROLA CILINDER	6373	78 RPM FOR 2283, 2288, 2380	6428	SHURE N-95 ED - SAS TIP
6318	AZDEN YMP-50 E	6374	A.K.G. X-6 R	6429	NATIONAL EPS-30 ES - SAS TIP
6319	AZDEN YMP-50 VL	6374	A.K.G. X-6 E	6430	SHURE V-15 TYPE V/X/MR
6320	SHURE NV-30 HE	6375	ELAC D-791	6431	AUDIO TECHNICA ATN-3482 P
6321	SHURE N-11 (SPS-series)	6376	ORTOFON ALLROUND FF-SERIES	6432	NATIONAL EPS-205CEX - SAS TIP
6322	SHURE N-12 (SPS-series)	6376	ORTOFON ALLROUND FF-E SER.	6433	AUDIO TECHNICA ATN-3472 EP
6323	SHURE N-13 (SPS-series)	6377	VERVALLEN	6434	NATIONAL EPS-205ED - SAS TIP
6324	SHURE N-14 (SPS-series)	6377	ELAC D-793 E	6435	SHURE V-15 TYPE V/xMR - SAS
6325	SHURE N-15 (SPS-series)	6378	AUDIO TECHNICA ATN-91 78-RPM	6436	AUDIO TECHNICA ATN-3472 -78RPM
6326	SHURE N-75 HE	6379	DUAL DN-34 TBV MMD-340/345	6437	AUDIO TECHNICA ATN-20 SS
6326	SHURE N-75 HE TYPE II	6380	PHILIPS GP-350	6438	NATIONAL EPS-202 ED - SAS TIP
6327	SHURE NDC-HE (SDS-3)	6381	PHILIPS GP-351	6439	AUDIO TECHNICA ATN-95 78 RPM
6328	PIEZO YM-130 BLOCK-ELLIPTICAL	6382	STANTON D-71 EE (L-720 EE)	6440	AUDIO TECHNICA ATN-3472 SEP
6329	A.E.U. CERAMIC RED ALL PLASTIC	6383	ELAC D-355-17	6441	SHURE N-97 XE - SAS TIP
6329	AEU CERAMIC RED ALL PLAST DIA	6383	ELAC D-355 E	6442	SHURE N-110 MR - SHIBATA GR.CC
6330	A.E.U. CERAMIC ALLU CANT.	6384	ELAC D-455-12	6443	STANTON D-72 E, D-73 E, L-727E
6331	SHARP STY-152	6384	ELAC D-455-E	6444	COIN MACHINE
6332	SHARP STY-154 BROWN	6385	ELAC D-555-12	6445	SHURE VN-45 HE - HYPER ELLIPT.
6333	DUAL DN-150 E	6385	ELAC D-555 E	6446	SIGNET TKN-22 STYLUS ELLIPT.
6334	TRIO/KENW. N-74; N-75	6386	ELAC D-655 D-4	6447	STANTON 881-S SHIBATA TIP
6335	TRIO N-72	6387	PHILIPS GP-406 III	6448	STANTON 881-S - D-SAS TIP
6336	PIONEER PN-260	6388	PHILIPS GP-412 III	6449	NATIONAL EPS-270 HYPER ELL.
6337	EPS-510 NML VVD: 6031 DS	6389	PHILIPS GP-420 III	6450	SHURE VN-45 MR - SHIBATA TIP
6338	EPS-520 ES NML, VVD: 6031 DE	6390	STANTON D-6800 EL	6451	NATIONAL EPS-24 CS HYPER ELL.
6339	SHURE N-75-3 NML, VVD: 386 DN	6391	AUDIO TECHNICA ATN-10 G	6452	STANTON 681 EEE - HYPER ELLIPT
6340	NATIONAL EPS-530 ES	6392	SHURE N-70 BX	6453	SHURE V-15 III VN-35 HYPER ELL
6341	NATIONAL EPS-540 ES	6393	AUDIO TECHNICA ATN-13 E	6454	SHURE N-110 D-SAS TIP
6342	NATIONAL EPS-550 ES	6394	AUDIO TECHNICA ATN-360 YELLOW	6455	STANTON 881-S MK II - SHIBATA
6343	PIEZO YM-305	6395	AUDIO TECHNICA ATN-361 GREEN	6456	AUDIO TECHNICA ATN-3472 P
6344	AIWA AN-5080	6396	AUDIO TECHNICA ATN-362 BLUE	6457	AUDIO TECH. ATN-3600L-NO LOGO
6345	AUDIO TECHNICA ATN-3609 YL	6397	AUDIO TECHNICA ATN-14 EA	6458	GOLDRING G-920 HYPEL
6346	PHILIPS MG-2510; SANYO ST-59 U	6398	AUDIO TECHNICA ATN-102 P	6459	TONAR STEEL NEEDLE V.SOFT TONE
6347	SHARP STY-146 RED PLASTIC DIAM	6399	ORTOFON STYLUS 15 NEW	6460	TONAR STEEL NEEDLES SOFT TONE
6348	HITACHI DS-ST-8; HT-300	6400	NIVICO DT-55 ELIP. BLUE/GUARD	6461	TONAR STEEL NEEDLES MED-LOUD
6348	HITACHI DS-ST-8 (HT-300)	6400	NIVICO DT-55 SHIBATA TIP	6462	TONAR STEEL NEEDLES LOUD TONE
6349	JAPAN COLUMBIA DSN-36	6401	SHURE N-97 LT HYP.ELLIP. RED	6463	TONAR STEEL NEEDLES VERY LOUD
6350	PHILIPS GP-406 MK III	6402	ASTATIC N4-2S 78RPM	6464	ASTATIC POWERPOINT 81T 89T
6351	JAPAN COLUMBIA DSN-46	6403	AUDIO TECHNICA ATN-3600L - DJ	6465	ASTATIC POWERPOINT 81T; 89T
6352	TRIO/KENWOOD N-77	6404	AUDIO TECHN. ATN-3472LC SHIBAT	6466	PHILIPS GP-406 MK III
6353	AKAI APM-70 GREY (5110.6)	6405	CONER RCS/RONETTE SC109	6467	DENON DL-107 STYLUS
6354	PHILIPS NLD 4822 251 30112	6406	NAALD VOOR PFAN P-132D	6468	PHILIPS GP-412 MK III
6355	ORTOFON STYLUS PRO -COPY-	6407	SHURE VN-35 MR - SAS TIP	6469	ORTOFON OM-SERIES SHIBATA
6356	ORTOFON STYLUS 10 NEW	6408	AUDIO TECHN. ATN-3600 SHIBATA	6470	AUDIO TECHNICA ATN-3472 HYPEL
6357	ORTOFON STYLUS 5 NEW	6409	SHURE VN-45 MR - SAS TIP	6471	A.D.C. RS-Q 30 ELLIPT.
6358	ORTOFON STYLUS 5-E NEW	6410	AUDIO TECHNICA ATN-95 HE BLUE	6472	SHURE N-97 HE SHIBATA
6359	PICKERING DLC	6411	ELAC D-793 SH - SAS TIP	6473	A.D.C. XLM - SHIBATA
6360	AKAI PL-305	6412	NATIONAL EPS-22 - SHIBATA	6474	SHURE VN-5 MR - HYPER ELLIPT.
6361	SHURE N-44 G DARK GREY	6413	PIONEER PNQ-1 - SHIBATA	6475	AUDIO TECHNICA ATN-14 SA-SHIBA
6362	ORTOFON STYLUS 30 COPY	6414	STANTON D-680 SHIBATA TYPE	6476	ORTOFON D-30 E MKII SHIBATA
6363	PHILIPS 4822 251 40143	6415	EMPIRE S-200 - SHIBATA STYLUS	6479	SHURE VN-5 X/MR HYPER ELLIPT
6364	STANTON D-5100 AL - DJ STYLUS	6416	SHURE VN-15 (V-15 TII)-SAS TIP		

