

SERVICE MANUAL

FISHER

MT-6020

**SEMI-AUTOMATIC
STEREO TURNTABLE**

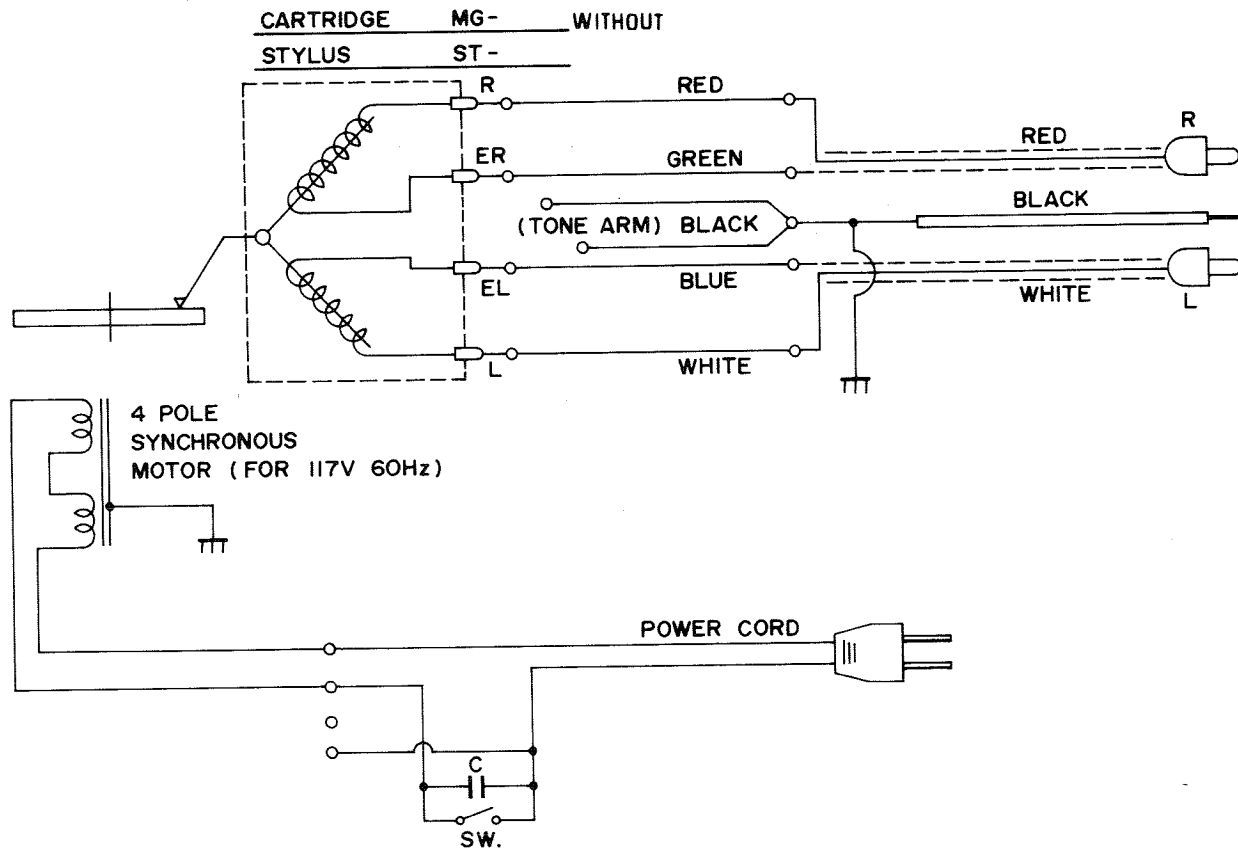


WORLD LEADER IN HIGH QUALITY STEREO

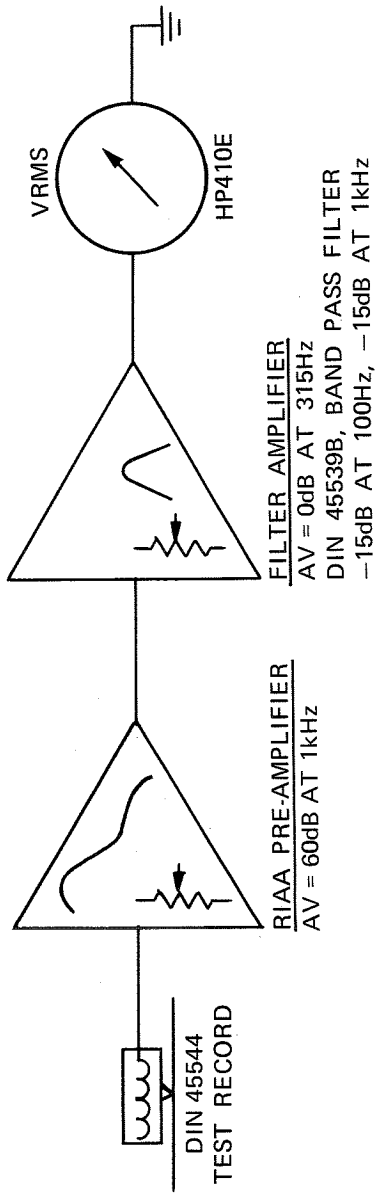
SPECIFICATIONS

Cartridge weight range	20gr
Maximum tracking error	+3°, -1°
Minimum tracking pressure	1gr
Friction	Horizontal 0.15gr
	Vertical 0.2gr
Counterweight calibration accuracy (from 0 to 3.5gr)	±10%
Antiskate calibration accuracy for elliptical stylus (from 0 to 3.0gr)	±10%
Cycling speed	10 sec at 33-1/3 rpm
Wow + Flutter (at 33-1/3 rpm)	±0.15%
Rumble (at 33-1/3 rpm)	-55dB

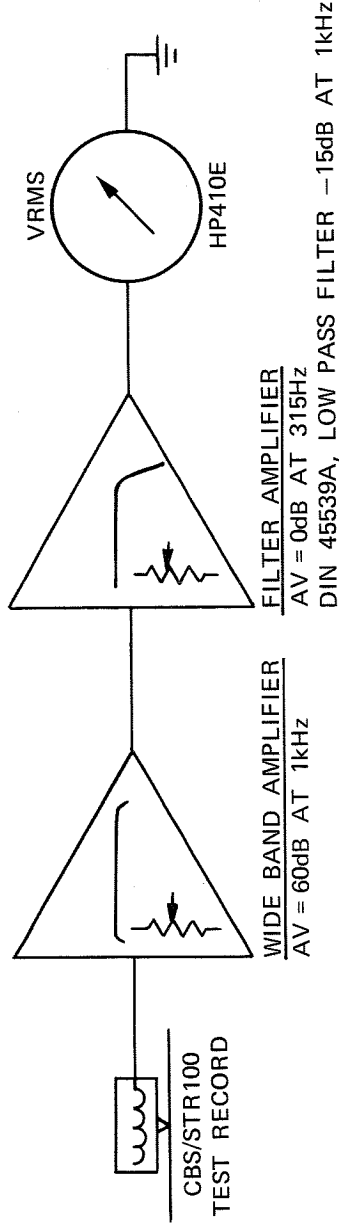
SCHEMATIC DIAGRAM



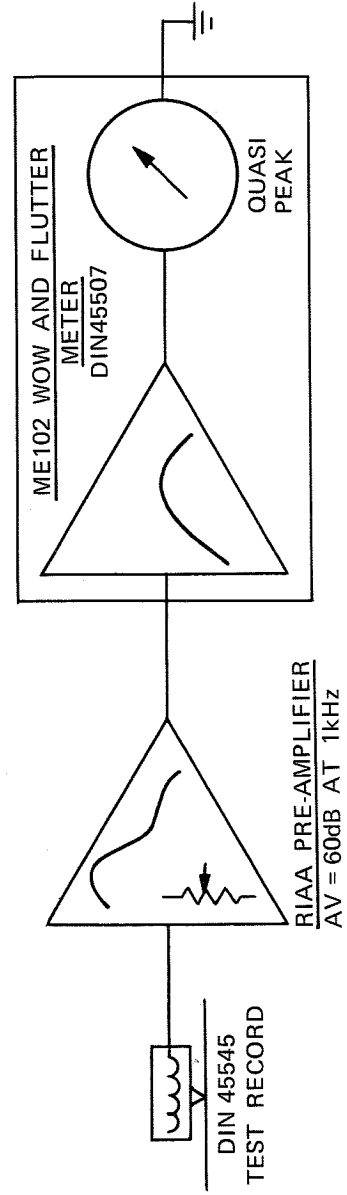
TURNTABLE RUMBLE
WEIGHTED



TONEARM RESONANCE



WOW AND FLUTTER
WEIGHTED



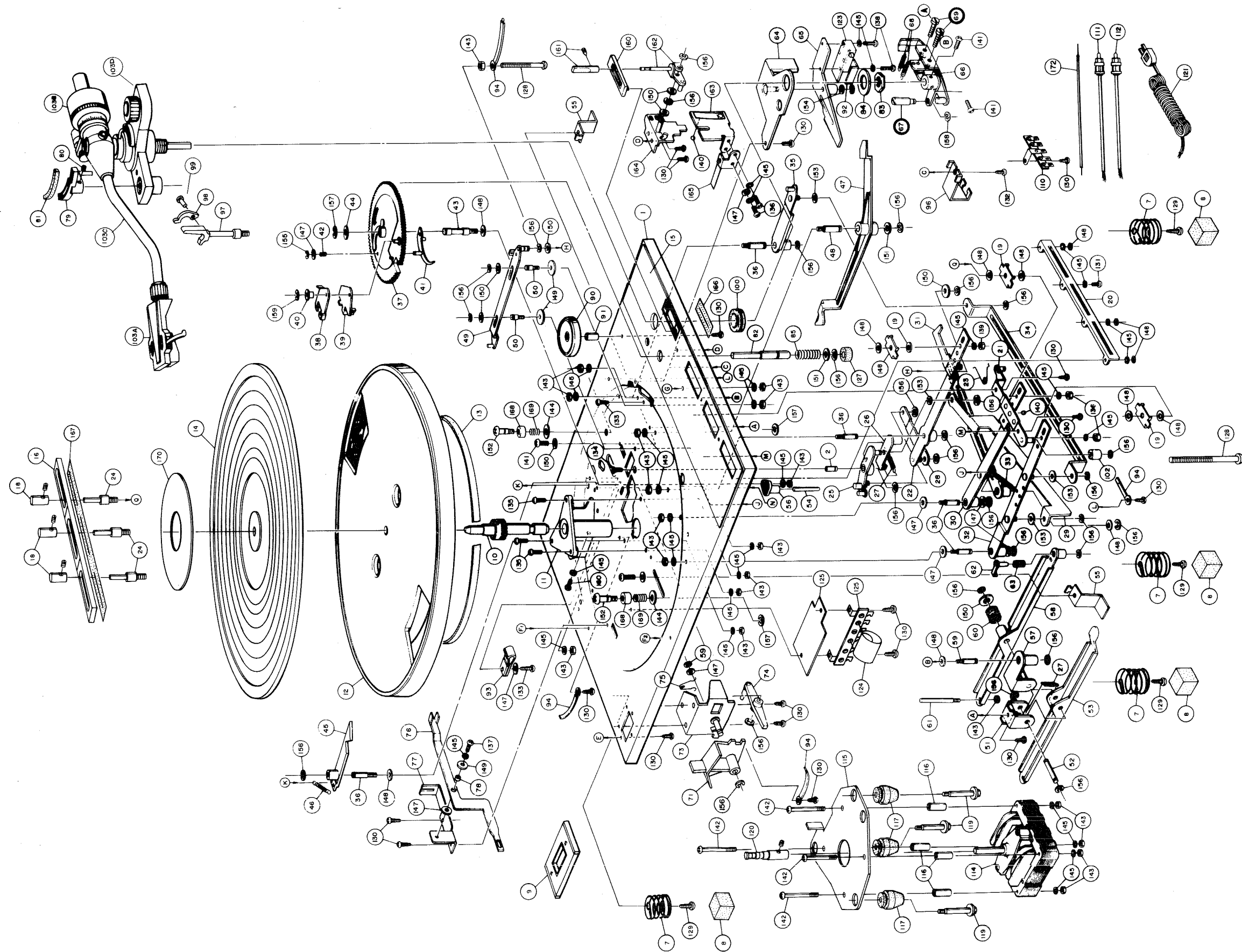
PARTS LIST

Key No.	Part No.	Description
TURNTABLE		
1*	134 0 6001 12205	Main Plate
2	134 2 4106 16100	Shaft
7*	TT4191-005	Spring
8*	134 2 5205 10001	Cushion
9	TT4191-058	Cover, Speed Selector
10	TT4191-029	Spindle, Turntable Assy.
11*	134 0 5010 10500	Bearing, Turntable Assy.
12	134 2 6101 11001	Turntable Platter
13	TT4191-028	Belt, Drive
14	134 2 6102 13400	Mat, Platter
15*	134 2 1202 10700	Main Plate Escutcheon
16	134 2 1405 01400	Cover, Controls, Select
17	131 2 1503 11501	Overhang Indicator
18	131 2 1601 37700	Knob - Controls
19	134 2 4108 17100	Plate, Control Shaft
20*	134 2 4121 10700	Guide Holder, Lever
21*	134 0 6037 10700	Stationary Control Guide Link
22*	134 0 6009 10900	Record Repeat On/Off Assy.
23	134 2 5101 21100	Spring, Lever Actuating
24	134 2 4106 20400	Shaft Control
25*	134 0 9902 10400	Upper Plate Assy.
26*	134 0 6009 11500	Lower Plate Assy.
27	134 2 5101 21200	Spring
28*	134 2 4123 13800	Link
29*	134 2 4123 13900	Arm
30*	134 0 6009 11000	Record Size, Select Lever
31*	134 0 6009 12000	Arm Latch
32*	134 0 6009 11100	Off/On/Reject Lever
33	TT4191-082	Spring, Lever Return Tension
34*	134 2 4123 14200	Lever Arm Link
35*	134 0 6009 11200	Lever Plate Assy.
36	134 2 4106 16200	Stud
37A	134 0 6030 11100	Drive Gear Cycling Assy.
37*	134 2 4110 10800	Drive Gear P/O 37A
38*	TT4191-035	Upper Trip Plate P/O 37A
39*	134 2 4122 11100	Lower Trip Plate P/O 37A
40*	TT4191-036	Collar P/O 37A
41*	134 2 4124 10500	Cam P/O 37A
42*	TT4191-046	Spring, Gear Drive P/O 37A
43*	134 2 4106 16700	Shaft, Gear Drive P/O 37A
44*	134 2 4203 02100	Washer, Gear Drive P/O 37A
45	134 2 4120 14900	Lever
46	TT4191-046	Spring
47	134 2 4123 13700	Arm
48	134 2 4106 16800	Shaft
49*	134 0 6009 11600	Slide Pawl
50	134 2 4106 17100	Shaft, Slide Pawl
51*	134 2 2403 12800	Lift Arm Lever Support Bracket
52	134 2 4106 17200	Shaft, Long, Lift Arm Lever
53*	134 2 4123 14000	Lever, Lift Arm
54	134 2 4106 18100	Shaft, Short, Lift Arm Lever
55*	134 2 2403 12300	Turntable To Cabinet Holding Bracket
56	134 2 4118 14600	Bushing
57*	134 0 6026 10600	Trip Arm Lever Support Bracket
58*	134 0 6009 11800	Trip Arm Lever
59/61	134 2 4106 18300	Stud, Bracket
60	134 2 5101 22000	Spring, Trip Arm Lever
61/59	134 2 4106 18300	Stud, Trip Arm Lever
62	134 0 6027 11000	Contact, Trip Arm Lever
63	134 2 5101 21300	Spring, Contact Pressure
64*	134 0 6037 10400	Lower Plate Assy.
65*	134 0 6037 10500	Upper Plate Assy.
66	134 0 6022 10700	Pick Up Fix Assy.
67	134 2 4106 17600	Screw Record Size Adjust
68	134 2 5101 22100	Spring, Pick Up Assy.
69	134 2 4201 11700	Screws, Cycling & Indexing Adjust
71	TT4191-060	Knob, 33/45 Select
73*	TT4191-061	Speed Selector Plate Assy.
74	TT4191-066	Rocker Arm
75	TT4191-063	Spring, Speed Select Tension
76*	134 2 4123 12800	Arm, Speed Select Lever
77*	134 2 2403 13900	Guide Plate, Lever Arm
78	TT4191-054	Spacer
79/81	TT4191-102A	Lift Support Arm Cushion Assy.
80	TT4191-103	Screw, Pick Up Arm Height Adjust 2.6 x 3
81/79	TT4191-102A	Lift Support Arm Cushion Assy.
82	134 2 4116 11900	Spindle Lift

Key No.	Part No.	Description
TURNTABLE		
83*	134 2 4202 11501	Nut
84*	134 2 4203 02301	Washer
85	134 2 5101 21400	Spring, Spindle Lift
90*	TT4191-024	Adapter, 45 RPM
91*	TT4191-025	Pin, Adapter Holder
92*	TT4191-133	Cover Switch
93*	131 2 3608 11000	Clamp, Wire
94*	131 2 3608 10700	Clamp, Wire
96*	134 2 2403 13300	Bracket
97	TT4191-125A	Tone Arm Rest Assy.
98	TT4191-124	Tone Arm Lock
99	TT4191-123	Screw, Pan Head
100	134 2 5202 11100	Rubber Grommet
102	134 2 5202 11200	Rubber Cushion
103	134 0 4001 04300	Pick Up, W/O Cartridge Shell/Counterweight
103A	TT4192-103A	Cartridge Shell
103B	134 0 4003 00201	Counterweight
103C	134 0 4400 30010	Arm Assembly
103D	134 0 4005 00300	Stand Assembly
110*	4 2379 21500	Terminal Strip 5 Lug
111*	131 0 4004 12006	Wire Shield Assy. (L)
112*	131 0 4004 12007	Wire Shield Assy. (R)
114	TT4191-162	Synchro Motor
115*	TT4191-157	Plate, Motor Mount
116	TT4191-161	Spacer, Motor Mount
117	TT4191-158	Motor Shock Mounts
119	TT4191-159	Shaft, Motor Support
120	134 2 6401 11500	Pulley 60 Hz
121*	2740241	AC Power Cord
122*	TT4191-150	Terminal Strip 6 Lug
123	4 2319 21993	Switch, Power
124	C2JNRM473C	Capacitor .047MF 630WV
125*	TT4191-149	Insulator
127	131 2 6111 15100	Bushing, Spindle Lift
128*	101 3 1104 054000	Screw, Pan Head 4 x 60
129*	101 3 1103 508010	Screw, Pan Head 3.5 x 8
130*	102 3 1203 006020	Screw, Pan Head Tapping 3 x 6
131*	131 2 4201 162000	Screw, Pan Head Tapping 3 x 5
132*	101 3 1103 008020	Screw, Pan Head Tapping 3 x 8
133*	TT4191-139	Screw, Pan Head Tapping 3 x 12
134*	101 3 1102 606030	Screw, Pan Head 2.6 x 6.1
135*	101 3 1103 008020	Screw, Pan Head Tapping 3 x 8
136	TT4191-042	Screw, Cue Height Adjust
137*	101 3 1103 008020	Screw, Pan Head 3 x 8
138*	101 3 1103 014020	Screw, Pan Head 3 x 14
139*	104 3 1102 600000	Nut 2.6mm
140	TT4191-115	Steel Ball 4mm
141*	TT4191-010	Screw, Pan Head 4 x 8
142*	101 3 1103 045010	Screw, Pan Head 3 x 45
143*	TT4191-032	Nut M3
144*	TT4191-019	Washer 6 x 14 x 1
145*	105 3 1202 600030	Spring Washer 2.6
146*	105 3 1204 000010	Spring Washer 4
147*	TT4191-052	Washer 3 x 8 x 0.5
148*	131 2 4203 830030	Washer 3 x 10 x 1
149*	131 2 4203 830004	Washer 3 x 13 x 1t
150*	131 2 4203 845000	Washer 4.5 x 10 x 0.8t
151*	131 2 4203 850000	Washer 5 x 10 x 0.3t
152	TT4191-016	Screw - Transit
153	131 2 4203 840000	Polywasher 4 x 10 x 0.8t
154	131 2 4203 826000	Fiber Washer 2.6 x 10 x 0.5t
155*	108 3 8311 020003	E Ring 2mm
156*	108 3 1103 000070	E Ring 3mm
157*	TT4191-020	E Ring 4mm
158*	131 2 4206 11600	C Ring 2.4mm
159*	TT4191-037	C Ring 3mm P/O 37A
160	TT4191-110	Cover, Cue
161	TT4191-108	Knob, Cue Lever
162	TT4191-112	Cue Lever Assy.
163*	TT4191-116	Cue Outer Plate
164*	134 0 6026 10900	Cue Inner Plate
165*	TT4191-117	Contact Plate
166*	131 2 6113 16100	Felt Strip
167*	131 2 6113 20600	Felt Strip
168*	TT4191-017	Washer
169*	TT4191-018	Spring
170	134 2 6103 10000	Plate, Mat Center Disc
171	105 3 1203 000020	Spring Washer 3mm
172*	271 3 0015 001010	Ground Wire 1500mm
173	134 2 5101 16300	Spring

* NOT AVAILABLE

EXPLODED VIEW (TURNTABLE)

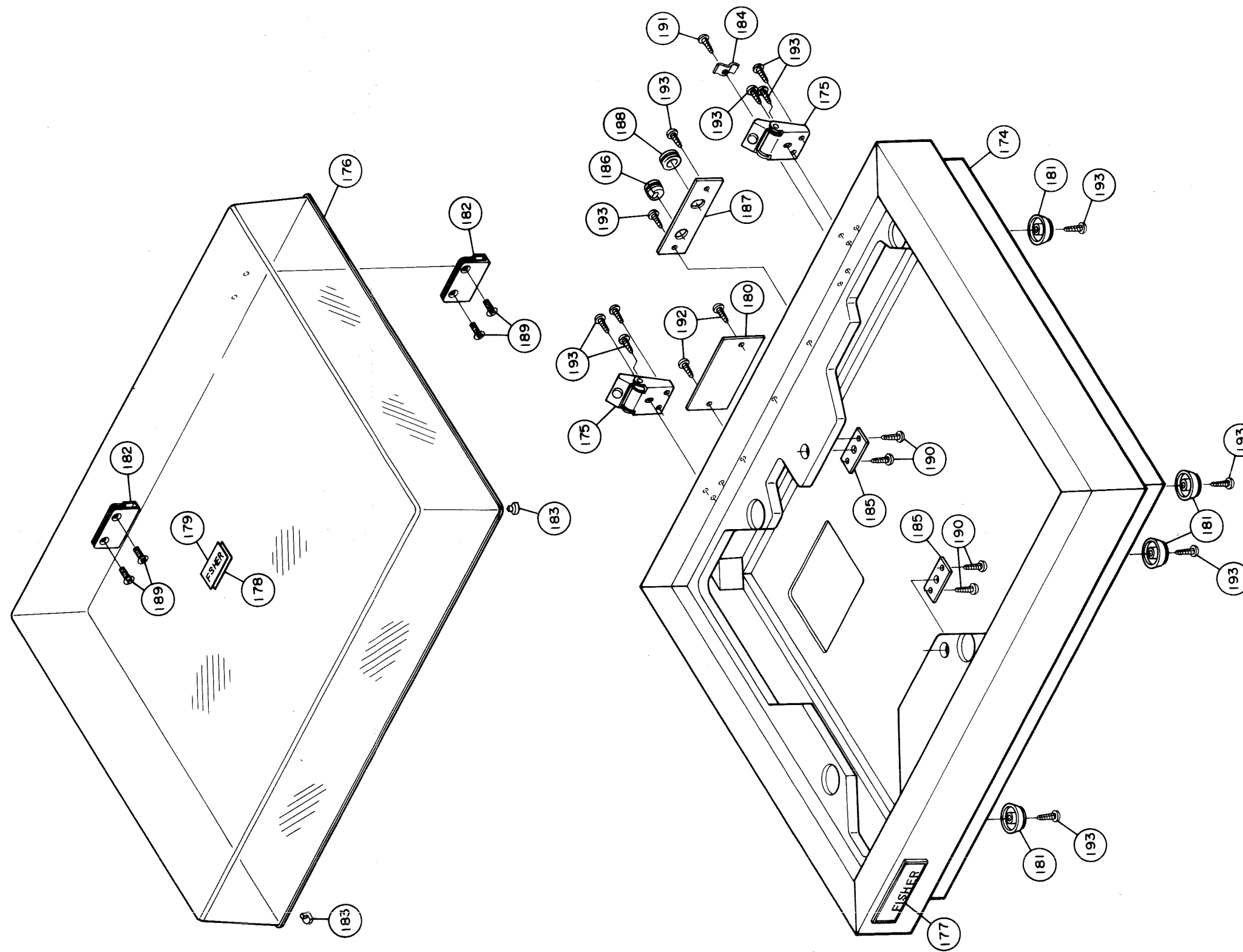


PARTS LIST

EXPLODED VIEW (CABINET)

Key No.	Part No.	Description
CABINET		
174A	131 0 1101 07600	Cabinet Assy.
174*	131 2 1101 30600	Cabinet P/O 174A
175*	131 0 2002 14201	Hinge Assy. Cabinet
176*	TT4191-183	Lid, Plastic P/O 176A
176A	TT4191-178	Lid Assy.
177*	TT4191-189	Nameplate, Cabinet P/O 174A
178*	TT4191-185	Plate - Lid Inside P/O 176A
179*	TT4191-184	Nameplate, Lid P/O 176A
180*	131 2 1310 23600	Nameplate, Cabinet Rear
181*	TT4191-177	Feet, Cabinet P/O 174A
182*	131 2 2108 00900	Hinge, Lid
183*	TT4191-186	Bumper, Lid P/O 176A
184*	131 2 3608 10301	Wire, Clamp
185*	131 2 4212 00101	Tapped Mounting Plate, Cabinet P/O 174A
186*	131 2 6111 14200	Bushing, Power Cord
187*	131 2 3101 11900	Cord/Cable Mounting Plate
188*	131 2 6111 10300	Grommet, Cable
189*	101 3 1204 00803	Screw, Flat Head 4.0 x 8
190*	TT4191-179	Screw, Round Head, Wood 2.7 x 10
191*	TT4191-181	Screw, Round Head, Wood 3.1 x 8
192*	TT4191-181	Screw, Round Head, Wood 3.1 x 8
193*	TT4191-180	Screw, Round Head, Wood 3.1 x 13

* NOT AVAILABLE



ADJUSTMENT

Tone Arm Balance Adjustment

1. Rotate COUNTER BALANCE WEIGHT on tone arm and adjust until the tone arm is floating freely and is parallel with the shelf edge of tone arm rest post. (Adjustments are to be made with cartridge mounted or whenever a new cartridge is installed.)
2. Initially, set VERNIER DIAL CONTROL of counter balance weight to indicate "0" position.
3. Finally, adjust counter balance weight to the correct cartridge/stylus pressure (grams) according to manufacturer's specification.
4. Set ANTI-SKATE CONTROL to indicate the same number as cartridge/stylus pressure setting on vernier control of counter balance weight.

Tone Arm Height Adjustment

1. Loosen tone arm lifter adjustment screw (80) and slide lifter assembly up or down until the tone arm stylus rests approximately 1/16 inches above the SATYLUS OVERHANG INDICATOR. Tighten adjustment screw after proper position is attained.

Record Size Indexing Adjustment (For AUTO/START MODE only)

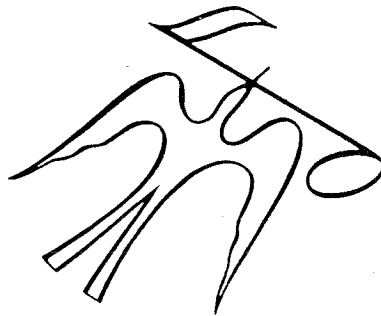
1. Use a 33 RPM record to check for proper indexing. To correct indexing, adjust fine adjustment screw (67) slowing clockwise or counterclockwise until the tone arm drops on record slightly inside of first groove for correct start position of play. Should a more coarse adjustment be required, then adjust screw (69A) in conjunction with adjustment screw (67).

End of Cycle Adjustment

1. Use a 33 RPM record for this adjustment. The end of record play cycle should correctly take place at end of last program. At this point, the tone arm's stylus glides into the spiral concentric groove tripping the return cycle mechanism and allowing tone arm to lift up and return to its rest post.
2. Should this not occur, then adjust screw (69B) slowly clockwise or counterclockwise which will manually actuate the tripping cycle mechanism allowing to correct the condition. Play the record again and repeat adjustment if necessary until correct cycling is attained.

Cueing Adjustment

1. Set cueing lever in the "up" position. Slowly turn both screws (136) slightly counterclockwise to loosen elevator support arm (165). Raise or lower elevator support arm (165) setting tone arm position approximately 1/4 inches above the shelf of tone arm rest post. Tighten screws (136).



FISHER CORPORATION 11-40 45th ROAD • LONG ISLAND CITY • NEW YORK 11101

NL4192-103

PRINTED IN JAPAN
WM1499