



Contents —

Specifications

| TURNTABLE FG Servo DC motor Motor 33-1/3 and 45r.p.m. Speeds. 0.1% (WRMS) Wow & Flutter 60 dB DIN45539B (weighted) Turntable Platter. 296 mm aluminum alloy die-cast |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TONEARM 130 mm Effective Length |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$ |
| OPERATION: Microcomputer-controlled fully automatic: Automatic start, return, repeat and record size selector by beam sensor Cueing. DC motor controlled Muting Reed relay method avoiding shock noise Speed Selector Automatic selection by beam sensor (switchable for manual speration) |
| GENERAL 12 watts Power Consumption. 12 watts Dimensions 416(W) × 94(H) × 346(D) mm Weight. 41 kg (net) NOTE: Due to continuing product improvement, specifications and design are subject to change without notice. |

Parts Locations and Disassembly Instructions



- **1.** Removal of Cabinet Top "(1)"
- In case that the tonearm starts moving normally.
 - (1) Press the POWER Button " (5)" so that the power will be switched off, and remove the turntable platter as shown in Figure 2.



(2) Place the unit upside down on a suitable bench. Remove seven screws " (1) " which mount the Cabinet bottom " (15) " as shown in Figure 3.





(3) Reverse the unit. Remove one screw " which mounts the cover " (10) " to the cabinet top "(1)".

Remove the cover " (10) " from the Cabinet top by pulling it out as shown in Figure 4.

(4) Press the POWER button so that the power will be switched on and remove the tonearm to the position where the Cover "(10) " was mounted, by pressing the START button. Press the POW-ER button to switch the unit off.

Remove three screws " (21) " which mount the cabinet top as shown in Figure 5, and lift the cabinet top off.



Figure 4

Figure 5

- In case that the tonearm does not start moving with trouble.
 - (1) If the tonearm is above or on the turntable platter, turn the pulley " (33) " counterclockwise through the hole as shown in Figure 6 with a slotted-head screwdriver (width 2.5 \sim 4 mm) until tonearm moves to its rest position. Remove the turntable platter.

Follow the same procedures as described above 1. (2), (3) and (4).

Move the tonearm to the position where the cover " (10) " was mounted, turning the pulley " (33) " clockwise as shown in Figure 6.

Follow the same step described in 1. (4).

If the tonearm does not move by turning the Pulley " (33) " (Figure 6), an additional force by finger should be added to the bended part of tonearm in the desired direction.





- 2. Removal of the Plate Assembly "(47)"
 - (1) After removing the cabinet top, remove position
 - PCB Assembly "(84)" as shown in Figure 7.
 (2) Remove the Belt "(34)" between Servo-controlled Motor "(76)" and Pulley "(33)".
 - (3) Remove the Bearing Assy "(30)" as shown in Figure 8.



Figure 7





(4) After removing one screw " 201" as shown in Figure 9, remove the Plate Assembly " 47)" by lifting the left end of the Pipe " 42 ".



- 3. Removal of the Tonearm Assembly " 63 "
 - (1) Unsolder the five lead-wires on Phono PCB Assembly "(82)" coming from tonearm.
 - (2) Remove the Phono PCB Assembly which is mounted to the Plate Assembly "(47)" by two screws, "(202)" and "(205)" as shown in Figure 10.
 - (3) Remove the Hexagon Nut " (21)" and Spring Washer " (16)" to remove the tonearm assembly as shown in Figure 9.
 - Note: When the Phono PCB Assembly "⁽⁸²⁾" is mounted, make sure to refer to "4. No Tracking Error Adjustment" (page 9).



Figure 10

- 4. Removal of the Switch " (79) " on the Plate Assembly " (47) "
 - (1) Remove the E type Washer " (17) " 2ϕ on Plate Assembly " (47) ".
 - (2) Remove the Washer " (19) " and Spring " (59) ".
 - (3) Remove the Lift Angle Assembly " (48) ".
 - (4) Remove one screw " 204 " as shown in Figure 11.



- 5. Remove the Worm Gears " (31) " and " (54) "
 - (1) Worm gears have been press-insert mounted. When worm gears are lifted, make sure to apply an equal force to each connecting parts as shown in Figure 12.
 - (2) To lift the Worm Gear "⁵⁴" remove two screws "⁽¹³⁾" as shown in Figure 12.



Figure 12

P-406/P-102

Replacement and Reassembly

- 1. The Wire Assembly " (38) "
 - (1) Prior to mounting, Wire Assembly "⁽³⁸⁾" should be rolled two turns with the Wheel "⁽³⁵⁾" as shown in Figure 13.
 - (2) Place the Wheel "(35)" to the Shaft" (36)", and rotate the wheel clockwise until the starting point of the wire (slit on pulley) comes to the Point A as shown in Figure 14.
 - (3) Rotate the wheel then counterclockwise until the arrowed point A comes to the arrowed point B.
 This position will correspond to the most left possible location of the Plate Assembly "(39)".
 - (4) Place the Guide "(38-2)" to the depressed part on cabinet bottom as shown in Figure 13.



Cautions Reassembly of The Worm Gear Assembly "(31) "

Figure 15

- 1. Worm gear " (54) " Assembly
 - (1) Pressing insert the Pulley " 55 " to the Worm Gear " 54 " so that the left end of the worm gear will be on the same level as the face of the smaller circle in the pulley as shown in Figure 16.



- 2. Worm gear "(31)" Assembly
 - As described in Figure 17 pressing inert the shifter "(32)" to the long and pulley to the short bars of Worm Gear "(31)" respectively. When the shifter "(32)" is assembled, make sure that the left end of the bar is on the same level as the face of the shorter boss of shifter. When the Pulley "(33)" is assembled, press the pulley as long as it goes.







Figure 14

- **2.** Cautions on Replacement of the Cam "(60) "
 - When Cam " 60 " is replaced, make sure that the depressed part on the cam should be mounted facing with the tonearm as shown in Figure 15.

- Reassembly of the Motors "(75)" and "(76)" (1) When the Pulley ((61) or (62)) is mounted to the motor ((75) or (76)), make sure to have the specified clearance between the pulley and the motor referring to Figures 18 and 19.
 - (2) After mounting the pulley, apply quick-dry adhesive agent. We recommend "NEJI-LOCK SUPER, 1324B" for this assembly.

To Reassemble, Use Disassembly Instructions in Reverse.

Note: Reverse the disassembly Instructions to reassemble.



Adjustment Procedures

1. Stylus Point Height

- Remove the cabinet top according to "1. Removal of Cabinet Top" (page 4).
- (2) Turn the screw "(53)" described in Figure 20 so that the clearance between stylus and turntable platter will be within 8 \sim 10 mm when the tonearm is in up position (Figure 21).



2. Tonearm Setup Position

- Remove the cabinet top according to "1. Removal of Cabinet Top" (page 4).
- (2) Turn the adjuster " 50 " described in Figure 22 so that the tonearm will be mounted at right angles with its moving direction (Figure 23).
- (3) After this adjustment, make sure to apply "4. No Tracking Error Adjustment" (page 9).



3. Tracking Sensor Sensitivity

This adjustment is subject to rectifying the uneven sensitivity of Photo Interrupter PC301 on the Phono PCB Assembly "(82)".

- Note: This adjustment has to be done without any direct sun shine nor any strong light.
- Remove the cabinet top according to "1. Removal of Cabinet Top" (page 4).
- (2) Press this POWER button so that the unit will be switched on.
- (3) Connect the D.C. voltmeter between TP1 and TP3 terminals on Control PCB Assembly "(81) " (Figure 24).



Figure 24

- (4) Slightly loosen two screws, " (20)" and " (20)", which fasten the Photo PCB Assembly " (82)" (Figure 25).
- (5) Turn the adjusting boss counterclockwise with the screwdriver (Figure 25).



Figure 25

(6) Turn the Phono PCB Assembly clockwise by approximately 5° with the screw A as a center (Figure 26).



Figure 26

- (7) Make sure that the sensor gets enough light not being obstracted by shutter plate.
- (8) Turn the Variable Resistor (VR101) with a small size slotted-head screwdriver so that the voltmeter reads $3.9 \sim 4.1$ volts.
- (9) After the above adjustment, make sure to apply "4. No Tracking Error" and "5. Stylus Set-Down Position Adjustments" (page 9).

4. No Tracking Error

- Note: This adjustment has to be done without any direct sun shine nor any strong light.
- (1) Remove the cabinet top according to "1. Removal of Cabinet Top" (page 4).
- (2) Press the POWER button so that the unit will be switched on.
- (3) Connect the D.C. voltmeter between TP1 and TP3 terminals on Control PCB Assy "(81)" as shown in Figure 24. Slightly loosen two screws, "(02)" and "(05)", which fasten the Phono PCB Assy as shown in Figure 25. Turn the adjusting boss with a screwdriver so that the voltmeter shows $-0.5 \sim +0.5$ volts.
- (4) Re-connect D.C. voltmeter between TP2 and TP3 terminals on Control PCB Assembly as shown in Figure 27.



Figure 27

- (5) Without placing the turntable platter, press the START button so that the tonearm starts moving.
- (6) Press the CUEING button so that the tonearm lifts after stylus set-down.
- (7) Turn the variable resistor (VR102) with a screw-driver so that the voltmeter showns 0.4 \sim 0.6 volts.
- (8) Press the CUEING button so that the tonearm descends and press the STOP button for tonearm return to its rest.

After above adjustment, make sure to apply "5. Stylus Set-Down Position Adjustment".

5. Stylus Set-Down Position

- (1) Remove the cabinet top according to "1. Removal of Cabinet Top" (page 4).
- (2) Press the POWER button so that the unit will be switched on. Place the turntable platter, install the belt to the pulley and place the mat.
- (3) Use the first face of NEC test record ES-1008 for this adjustment. Press the START button; turntable platter starts rotation, the tonearm will move and descend onto a record.
- (4) Turn the adjusting pin described in Figure 28 so that the stylus set-down position will be counted between 15 and 17 points.
- (5) Using the second face of the test record ES-1008 make sure that the automatic return position will be counted between 19 and 22 points.
 - Note: After the above steps, no adjustment for 17 cm records is required. However, to settle the specified counting position by the first time adjustment may be difficult. Apply several times adjustments to confirm the above specified position.

6. Pitch Adjustment of Stylus Set-Down Position

After fundamental adjustment mentioned above 5., pitch adjustment of stylus set-down position is available without removing the case cabinet top.

- (1) Place the unit upside down on a suitable bench.
- (2) Stylus set-down position can be adjusted by rotating the cam through the hole which is marked in Figure 3 with a slotted-head screwdriver.
- (3) Counterclockwise turn moves the set-down position inward; clockwise turn moves the set-down position outward.



Figure 28

Trouble Shooting Guide

- 1. The Record Size Searcher Light Does Not Turn On Measure the voltage between GND and +12 volts terminals on Control PCB Assy "(81)" with D.C. volt meter.
 - * Approximately +12V is supplied: Measure the voltage between 1 and 2 terminals on Position PCB '' (84.1) '' with D.C. voltmeter.
 - * Approximately 12V is supplied: Lead-wire is defective.
 - * Too short voltage is supplied: Jumper Lead 7P (J7P) or connector is defective.
 - * Quite different voltage from +12V is supplied: IC101 is defective.
- 2. The Turntable Platter Does Not Start Rotation After Placing The Record

Check to see that the base-voltage at Q102 is approximately +12V when tonearm returns to its rest upon STOP button being pressed, and the voltage is lowered by approximately +11.4V upon START button being pressed.

- * Yes: Phone Motor "(77)" is defective.
- * No: IC105 or R113 is defective.
- 3. Stylus Set-Down Position Is Not Corresponding to The Record Size

Check to see that the pin 6 voltage at IC104 against GND will be changed from approximately +5V to approximately 0V when the light through the slit on the turntable platter reaches to the Photo Transistor 0401 on Record PCB Assy "($\widehat{83}$)".

- Note: Make sure that no outside light will be reached to Photo transistor during the measurement. Use D.C. voltmeter or oscilloscope for the measurement.
 - * No change: Photo Transistor Q401, Q115 or IC104 is defective.
 - * Changing: IC105 is defective.
- Note: After replacement of the part, the adjustment according to Adjustment, 5. on page 9 should be applied.

4. Tonearm Moves Too Inside Upon Start Button Being Pressed

Check to see that the collector voltage at IC501 against GND with the oscilloscope will be changed by 8 pulses per one turn (from approximately +12V to OV) according to the turn of Shifter "(32)" which has 8 slits.

- No change or small number of pulse: PC501 or IC104 is defective.
- * Changing: IC105 is defective.

Information: The IC105 acknowledges that the tonearm moves to the stylus set-down and/or return position when the number of the pulse from the start point corresponds to the number programmed beforehand. After the acknowledgement, IC105 will supply the necessary signal for various movement according to the position of tonearm.

5. No Sound From The Loud Speaker

Measure the value of resistor between Wire Shield "(74)" and its shielded part.

- * 0 ohm: The circuit "(81)" or "(82)" is shortage or muting relay is defective.
- * Approximately ∞ ohm: The dead circuit or defective cartridge.

6. No Muting Works Upon Stylus Up Action

Check to see that the base-voltage at Q112 against GND is approximately 0.6V when tonearm is in up position upon CUEING button being pressed, and the voltage is approximately 0V upon CUEING button being pressed again.

- * Yes: Q112 or muting relay is defective.
- * No: IC105 is defective.
- 7. The Tonearm Moves Left-Ward Upon Up and Down Actions

Apply Adjustment 3., 4. and 5 (page 8 and 9).

8. The Stylus Kicks The Record Upon Its Up Action Apply Adjustments 3., 4. and 5 (page 8 and 8). 12).

Note: The extent up to 0.2 mm fall wthin the specification settled. If the pitch of the record groove increases, this figure tends to increase.



Parts Layout on P.C. Boards

Wiring Diagram



Electrical Parts List

Resistors: Carbon resistors under $\frac{1}{4}$ watts are not mentioned in the parts list, please confirm them by schematic diagram. uF = microfarads, pF = picofarads

| Symbol No. | Part No. | Description | |
|----------------|----------------------------|-----------------------------------------------------------------|---|
| lCs | | | |
| IC101 IC102 | 51T53320F01 51E02052S01 | L78M12 (or NJM78M12) LA6324 | |
| IC103 | 51T60576F01 | (or NJM2902, or LM324) LC4066B (or CD4066BC, or MB84066B) | |
| IC104 | 51E02053S01 | LC4049B (or CD4049BC, or MB84049B) | |
| IC105 | 51E02054S01 | LM6417E-400 | |
| IC106 | 51E02055S01 | LC4011B | |
| Transis | tors | | |
| | | 005000 | |
| Q101 Q102 | 48E02047S01 48T47143F02 | 2SD863 2SC536 | |
| Q102 | 48T47143F02 | 2SC536 | |
| Q104 | 48E02046S01 | 2SC3400 | |
| or | 48T70462F01 | UN4212 | |
| Q105 | 48E02049S01 | 2SA1346 | |
| or | 48E02050S01 | UN4112 | ┢ |
| Q106 | 48E02051S01 | 2SK304F | + |
| Q107 Q108 | 48E02048S01 48E02047S01 | 2SB764 2SD863 | |
| Q109 | 48E02048S01 | 2SB764 | |
| Q110 | 48E02047S01 | 2SD863 | |
| Q111 | 48E02048S01 | 2SB764 | |
| Q112 Q113 | 48E02047S01 48E02048S01 | 2SD863 2SB764 | |
| 0114 | 48E02047S01 | 2SD863 | |
| Q115 | 48E02046S01 | 2SC3400 | |
| or Q116 | 48T70462F01 48E02046S01 | UN4212 2SC3400 | |
| or | 48E02046301 48T70462F01 | UN4212 | |
| Q401 | 48E02009S01 | PN150 | |
| PC301 PC501 | 48E02008S01 48E02008S02 | PCR ON1108 PCR ON1128 | |
| | .0102000002 | | |
| | | | ┢ |
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| | | | |
| | | | |
| | | | L |

| | Symbol | | | | | | | | | | | |
|--------------|--------------|----------------------------|-----------------------------------|--|--|--|--|--|--|--|--|--|
| S | ymbol No. | Part No. | Description | | | | | | | | | |
| | Diodes | /Fuse | | | | | | | | | | |
| | D101 D102 | 48E01576S01 48T44992F01 | Bridge, W02 DS135D | | | | | | | | | |
| | D103 | 48T51305F01 | DS442 | | | | | | | | | |
| | D104 | 1 | DS442 | | | | | | | | | |
| | D105 | 48E02045S01 | Zener, GZA5.6Y | | | | | | | | | |
| | D106 | 48T51305F01 | DS442 | | | | | | | | | |
| | D107 | 48T51305F01 | DS442 | | | | | | | | | |
| | D108 | 48T51305F01 | DS442 | | | | | | | | | |
| D109 D110 | | 48E02004S01 48T44992F01 | LED, LN21RCPHL DS135D | | | | | | | | | |
| | DITO | 40144992F01 | | | | | | | | | | |
| | D111 | 48T51305F01 | DS442 | | | | | | | | | |
| | D112 | 48T51305F01 | DS442 | | | | | | | | | |
| | D114 D115 | 48T51305F01 | DS442 DS442 | | | | | | | | | |
| | D115 | 48T51305F01 48T51305F01 | DS442 DS442 | | | | | | | | | |
| | DITO | 48151505F01 | 03442 | | | | | | | | | |
| • | F601 | | Fuse, T 630mA | | | | | | | | | |
| | F601 | | Fuse, T 630mA | | | | | | | | | |
| | F601 | | Fuse, 200mA | | | | | | | | | |
| | | | | | | | | | | | | |
| | Coils / | Relay | | | | | | | | | | |
| R | EL | 80E02001S01 | Relay Reed | | | | | | | | | |
| | 101 | 24E02007S01 | 39 µ H | | | | | | | | | |
| L | 201 | 24E02007S01 | 39 µ H | | | | | | | | | |
| Ľ | 202 | 24E02007S01 | 39 µ H | | | | | | | | | |
| Ľ | 203 | 24E02007S01 | 39 µ H | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Switch | es/Plugs/Neon | Lamp | | | | | | | | | |
| | W1 | 40E01996S01 | Switch, Speed | | | | | | | | | |
| | N2 | 40E01997S01 | Switch, Rep/Cue/Play/Sta | | | | | | | | | |
| | N602 | 40E01998S01 | Switch, Power | | | | | | | | | |
| TI | N4P | 28E02000S01 28E02000S02 | 3P 4P | | | | | | | | | |
| | N441 | 20202000302 | 46 | | | | | | | | | |
| N | L1 | 65E02013S01 | Neon Lamp | | | | | | | | | |
| | | | | | | | | | | | | |
| _ | Capacit | | ~ | | | | | | | | | |
| | 01 | 23E02056S01 | CDV 1000 µ F/35V | | | | | | | | | |
| | 02 | 23E02057S01 | CC 0.047 µ F/50V | | | | | | | | | |
| | 03 04 | 23E02056S02 23E02056S03 | CDV 47 µ F∕16V | | | | | | | | | |
| | 05 | 23E02056S03 23E02056S04 | CDV 10 μ F/16V CDV 4.7 μ F/35V | | | | | | | | | |
| | | | | | | | | | | | | |

Note: ●: For North American model (P-406) only (UC), □: For West Germany model (P-102) only (AD),

■: For North American model (P-102) only (UC), Others : Common

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|---------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------------|
| C106 C107 C108 C109 C113 | 23E02056S03 23E02056S03 23E02057S02 23E02057S01 23E02056S05 | CDV 10 μ F/16V CDV 10 μ F/16V CC 220pF/50V CC 0.047 μ F/50V CD 100 μ F/16V | | | |
| C114 C115 C117 C118 C120 | 23E02057S03 23E02057S01 23E02057S01 23E02056S05 23E02056S03 | CC 0.01 μ F/50V CC 0.047 μ F/50V CC 1 μ F/50V CC 0.01 μ F/50V CC 0.01 μ F/50V CDV 10 μ F/16V | | | |
| C121 C303 C502 C601 | 23E02057S05 23E02057S06 08T42629F17 | CDV 1 µ F∕16V CC 0.01 µ F∕50V CC 0.0033 µ F∕50V Mylar 0.01 µ F | | | |
| Resist | ors | | | | |
| VR101 VR102 VR103 VR104 VR105 R601 | 18E02002S01 18E02002S02 18E02002S01 18E02002S03 18E02003S01 18E02010S01 | Semi fixed 20Kohm Semi fixed 2Kohm Semi fixed 20Kohm Semi fixed 200Kohm Variable 5Kohm-B RH 18Kohm 1W J | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Schematic Diagram



NOTES:

1. All resistance values are in ohms. K = 1,000

2. All capacitance values are in microfarads. $P = \frac{1}{1.000,000}$



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P-406/P-102 P-406/P-102

Cabinet Assembly Parts List

| Symbol No. | | Part No. | | Description | | Symbol No. | Index | Part No. |
|---------------|----|------------|--------------|--------------------------|---|---------------|------------|-------------|
| • | 1 | 2-D | 16E01909S01 | Cabinet, Top | 1 | 32 | 5-D | 44E01955S01 |
| | 1 | 2-D | 16E02274S01 | Cabinet, Top | | 33 | 5-D | 49E01956S01 |
| | 1 | | 16E02274S01 | Cabinet, Top | | 34 | 5-D | 42E01962S01 |
| • | 2 | 2-D 3-E | 36E01910S01 | Knob, Play/Stop/Cue/Rept | | 35 | 5-E | 49E01963S01 |
| | 2 | 3-E | 36E02178S01 | Knob, Play/Stop/Cue/Rept | | 36 | 5-E | 47E01938S01 |
| | | | | | | | | |
| | 2 | 3-E | 36E02178S01 | Knob, Play/Stop/Cue/Rept | | 37 | 6-D | 15E01930S01 |
| • | 3 | | 64E01914S01 | Panel, Control | | 38 | 4-E | 30E01964S01 |
| | | 4-D | 64E02183S01 | Panel, Control | | 39 | 5-E | 09E01922S01 |
| | 3 | | 64E02183S01 | Panel, Control | | 40 | 5-E | 41E01946S01 |
| | 4 | 3-E | 34E01916S01 | Indicator | | 41 | | 49E01957S01 |
| | 5 | 4-D | 36E01911S01 | Knob, Power | | 42 | 2-F | 45E01967S01 |
| | 6 | 4-E | 75E01917S01 | Cushion | | 43 | | 75E01919S01 |
| | 7 | 4-E | 61E01847S01 | Filter, strobo | | 44 | 3-F | 45E01968S01 |
| | 8 | 3-E | 61E01848S01 | Filter, Size Lamp | | 45 | 3-F | 41E01947S01 |
| | 9 | 2-E | 09E01921S01 | Plate | | 45 | 3-F | 41E02185S01 |
| • | 11 | 2-4 | 15E01594S01 | Dust Cover | | 45 | 3-F | 41E02185S01 |
| | 11 | | 15E02179S01 | Dust Cover | | 40 | 3-G | 43E01969S01 |
| | 11 | | 15E02179S01 | Dust Cover | | 40 | 3-0 1-F | 09E01923S01 |
| • | | | 64E01915S01 | Panel, Dust Cover | | • 47 48 | 2-D | 1 |
| | 12 | | 64E02180S01 | | | | | 01E01973S01 |
| - | 12 | 2-A | 04EUZ 100301 | Panel, Dust Cover | | ■ 49 | 1-D | 45E01942S01 |
| | 12 | 2-A | 64E02180S01 | Panel, Dust Cover | | □ 50 | 1-D | 03E01974S01 |
| | 13 | | 43E00680S01 | Pad, Dust Cover | | 51 | 1-D | 61E01978S01 |
| | 14 | | 07E01595S01 | Hinge | | 52 | 1-D | 41E01948S01 |
| | | 3-E | 07E01932S01 | Holder | | 53 | 2-D | 03E01975S01 |
| | 17 | | 75E01939S01 | Leg | | 54 | 2-E | 44E01954S01 |
| | 18 | | 75E01918S01 | Cushion | | 55 | 2-E | 49E01958S01 |
| | 19 | 3-C | 42E01596S01 | Rubber Belt | | 56 | 2-E | 41E01949S01 |
| | 20 | 6-G | 36E01912S01 | Knob, Speed Select | | 57 | 2-F | 42E01597S01 |
| | 21 | 3-E | 47E01937S01 | T.T. Shaft | | 58 | 2-E | 59E01979S01 |
| | 22 | 2-G | 45E01940S01 | Guide | | 59 | 2-D | 41E01950S01 |
| | 24 | 3-G | 43E01649S01 | Bushing | | 60 | 2-E | 45E01983S01 |
| • | | | 75E01943S01 | Turntable Platter | | 61 | 2-F | 49E01983301 |
| | | | 75E02184S01 | Turntable Platter | | 62 | 5-D | 49E01960S01 |
| | | | 75E02184S01 | Turntable Platter | | 63 | 1-B | 01E01984S01 |
| | | | 07E01933S01 | Holder (A) | | 66 | 4-F | 75E01810S01 |
| | 07 | 5.0 | 07501024004 | | | | 0 - | 0750400505 |
| | | | 07E01934S01 | Holder (B) | | 67 | 3-E | 65E01985S01 |
| | | | 45E01944S01 | Lever | | 68 | 3-F | 49E01961S01 |
| | | | 41E01945S01 | Spring | | 69 | 2-B | 75E01986S01 |
| | | | 43E01952S01 | Assembly, Bearing | | 70 | 4-C | 75E01987S01 |
| | 31 | D-D | 44E01953S01 | Worm Gear | | 71 | 5-C | 45E01990S01 |
| | | | | | | | | |
| | | | | | | | | |

NOTE: The parts without part numbers are not supplied.

Encoder Pulley Rubber Belt Wheel Shaft

Cover, Motor Assembly, Wire Assembly, Plate

Spring Pulley

Pipe Cushion Arm Spring Spring

Spring Spacer

Guide

Screw Protector Spring Screw Worm Gear

Pulley Spring Rubber Belt Mount, Motor Spring

Cam

Lamp

Sheet

Pulley, Lift Motor Pully, Track Motor Assembly, Tonearm Rubber Cushion

Pulley, Phono Motor Turntable Sheet

45 rpm Adapter

Assembly, Plate Assembly, Lift Angle

Description

Note : \bullet : For North American model (P-406) only (UC), \Box : For West Germany model (P-102) only (AD),

■: For North American model (P-102) only (UC), Others : Common

| NOTE: The parts without part numbers are not sup |
|---------------------------------------------------------|
|---------------------------------------------------------|

| | nbol Io. | Index | Part No. | Description | Sym Na | | Index | Part No. | Description |
|----|-------------|-------|-------------|----------------------------------------------------------------|-----------|----|-------|-------------|-----------------------------|
| • | 73 | 1-G | 30E01991S01 | Power Cord | 22 | 20 | 4-F | 03E01659S01 | Special Screw (Motor, Clamp |
| | 73 | 1-G | 30E01991S01 | Power Cord | 22 | 21 | 1-G | 02E02042S01 | Hexagon Nut (M4) |
| | 73 | 1-G | 28E02188S01 | Power Cord | 22 | 22 | 6-C | 03E02039S03 | Tapping Screw B with Plair |
| • | 74 | 1-H | 30E01992S01 | Assembly, Wire Shield | | | | | Washer (M3 \times 10) |
| | | | 30E02186S01 | Wire Shield | | | | | |
| | 74 | 1-H | 30E02187S01 | Wire Shield | | | | | |
| • | | | 59E01980S01 | Motor, Lifter | | | | | |
| | | | 59E01981S01 | Motor, Tracking | | | | | |
| - | | | 59E01982S01 | Motor, TT Drive | | | | | |
| • | | | 25E01994S01 | Power Transformer | | | | | |
| | 78 | 5-E | 25E01994S01 | Power Transformer | | | | | |
| | | | 25E03502S01 | Power Transformer | | | | | |
| | | | 40E01995S01 | Switch, Lifting | | | | | |
| 81 | | 4-F | | Assembly, Cord | | | | | |
| | | | 09E02011S01 | Socket, DIN (4P) | | | | | |
| 86 | 3-3 | 3-F | 07E02012S01 | Metal, Mount | | | | | |
| • | | | 43E01971S01 | Spacer | | | | | |
| | | | 43E02189S01 | Spacer | | | | | |
| | 91 | 3-F | 10202100001 | Spacer | | | | | |
| | 92 | | 43E02189S01 | | | | | | |
| | 93 | 1-H | 40E02193S01 | Switch, Voltage Selector | | | | | |
| ; | | 2-E | | Pan Screw (M1.7 \times 2.5) | | | | | |
| | | 1-F | | Pan Screw with Spring Washer | | | | | |
| | 202 | 1-C | 03E02035S01 | (M3×6) Pan Screw with Plain Washer (M3×25) | | | | | |
| 2 | 203 | 3-F | 03E02038S01 | Tapping Screw B (M2 \times 8) | | | | | |
| | | | 03E02036S01 | | | | | | |
| 2 | 205 | 5-F | 03E02038S02 | Tapping Screw B (M3 \times 6) | | | | | |
| 2 | 206 | | 03E02038S03 | Tapping Screw B ($M3 \times 8$) | | | | | |
| 2 | 207 | | 03E02039S01 | Tapping Screw B with Plain washer (M3×8) | | | | | |
| 2 | 208 | | 03E02038S04 | Tapping Screw B (M3×10) | | | | | |
| 2 | 209 | | 03E02040S01 | Tapping Screw (M3×10) | | | | | |
| 2 | 210 | | 03E02039S05 | Tapping Screw B with Plain Washer ($M3 \times 10$) | | | | | |
| 2 | 211 | | 03E02038S05 | | | | | | |
| | | 2-G | 03E02037S01 | Tapping Screw B with Plain | | | | | |
| 2 | 214 | 3-E | 03E02039S02 | Washer (M3×12) Tapping Screw B with Plain Washer (M3×16) | | | | | |
| 2 | 2 15 | 1-F | 04E02043S01 | Spring Washer (M1.7) | | | | | |
| | | | 04E02043S02 | | | ļ | | | |
| 2 | 217 | 2-D | 04E02044S01 | E Type Washer (M2) | | | | | |
| 2 | 2 18 | 5-D | 04E02044S02 | E Type Washer (M3) | | | | | |
| - | | ام م | 04E02041S01 | | 1 | | | | |

Note: ●: For North American model (P-406) only (UC), □: For West Germany model (P-102) only (AD),

■: For North American model (P-102) only (UC), Others : Common

Packing Method View



Packing Assembly Parts List

| | No. | | | | No. | Part No. | Descripti |
|---|-----|-------------|----------------------------|---|-----|----------|-----------|
| | 301 | 15E02023S01 | Poly cover (turntable mat) | | | | |
| | 302 | 56E01988S01 | Sheet | | | | |
| | 303 | 56E02019S01 | Pad | | | | |
| | 304 | 56E02018S01 | Pad, rear | | | | |
| | 305 | 56E02017S01 | Pad, front | | | | |
| • | 306 | 68E01599S01 | Owner's manual | | | | |
| | 306 | 68E02182S01 | Owner's manual | | | | |
| - | 306 | 68E02190S01 | Owner's manual | | | | |
| | 307 | 68E02028S01 | Safety instruction (UL) | | | | |
| | 308 | 56E02024S01 | Bag fan | | | | |
| | 309 | 56E01989S01 | Patching sheet (unit) | | | | |
| | 310 | 56E01602S01 | Carton box | | | | |
| | 310 | 56E02181S01 | Carton box | | | | |
| 3 | 310 | 56E02181S01 | Carton box | | | | |
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Note: •: For North American model (P-406) only (UC), : For West Germany model (P-102) only (AD), : For North American model (P-102) only (UC), Others : Common



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