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# **SERVICE MANUAL**

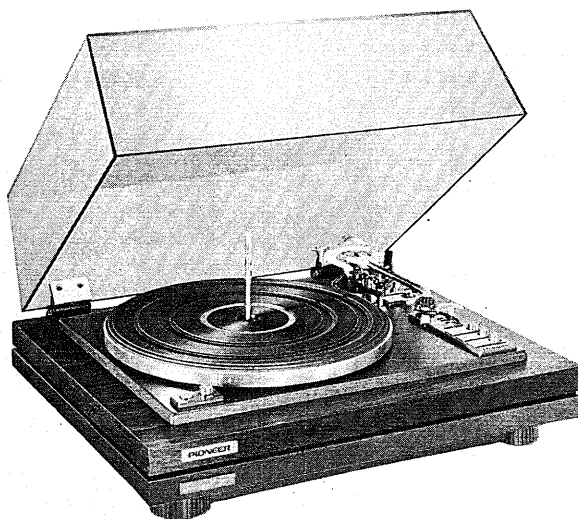
AUTOMATIC RECORD CHANGER

# **PL-A505**

PV

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# 1. SPECIFICATIONS

## MOTOR AND TURNTABLE

|                          |                                    |
|--------------------------|------------------------------------|
| Motor: Phono motor ..... | 4-pole synchronous motor           |
| Tonearm move .....       | Geared motor                       |
| Turntable drive .....    | Belt-driven                        |
| Speed .....              | Two speeds; 33-1/3 rpm; 45 rpm     |
| Wow and flutter .....    | 0.1%(WRMS) or less                 |
| S/N .....                | 47 dB or more                      |
| Turntable platter .....  | 30cm (12") diameter aluminum alloy |

## ONEARM

|                               |                                          |
|-------------------------------|------------------------------------------|
| Tonearm type .....            | Static balance type, pipe arm (S-shaped) |
| Effective arm length .....    | 224 mm                                   |
| Tracking error .....          | +3° ~ -1°                                |
| Usable cartridge weight ..... | 21g (max)                                |
| Furnished cartridge .....     | PC-50 (IM type)                          |

## SUB-FUNCTIONS

Automatic record changer  
 Anti-skating force control  
 Light aluminum head shell plug-in type  
 Dust cover with free stop hinge  
 Wooden base with anti-acoustic feedback suspension  
 Lateral balance control

## MISCELLANEOUS

|                          |                                                                |
|--------------------------|----------------------------------------------------------------|
| Power requirements ..... | AC 110 ~ 130V, 220 ~ 240V. (switchable) 60Hz, 50Hz             |
| Power consumption .....  | 15W (max)                                                      |
| Dimensions .....         | 480(W) x 410(D) x 231(H)mm 18-7/8(W) x 16-1/8(D)<br>x 9-1/8(H) |
| Weight .....             | 12.5 kg 27 lb 8 oz                                             |

## FURNISHED PHONO CARTRIDGE

|                          |                                                                                            |
|--------------------------|--------------------------------------------------------------------------------------------|
| Type .....               | Induced magnet type (PC-50)                                                                |
| Frequency response ..... | 10Hz to 25,000Hz                                                                           |
| Channel separation ..... | More than 25dB at 1,000Hz                                                                  |
| Output voltage .....     | 3mV at 1,000Hz (5cm/s or 2 ips)                                                            |
| Load impedance.....      | 50kΩ                                                                                       |
| Stylus .....             | 0.5 mil diamond (PN-50)                                                                    |
| Compliance .....         | 12 x 10 <sup>-6</sup> cm/dyne at 100Hz (dynamic)<br>22 x 10 <sup>-6</sup> cm/dyne (static) |
| Tracking force.....      | 1.5 to 2.1g                                                                                |
| Weight .....             | 6g, 0.21 oz                                                                                |
| Mounting .....           | Conforms to the EIA standards                                                              |

## NOTE:

Specifications and the design subject to possible modification without notice due to improvements.

## 2. EXPLODED VIEW

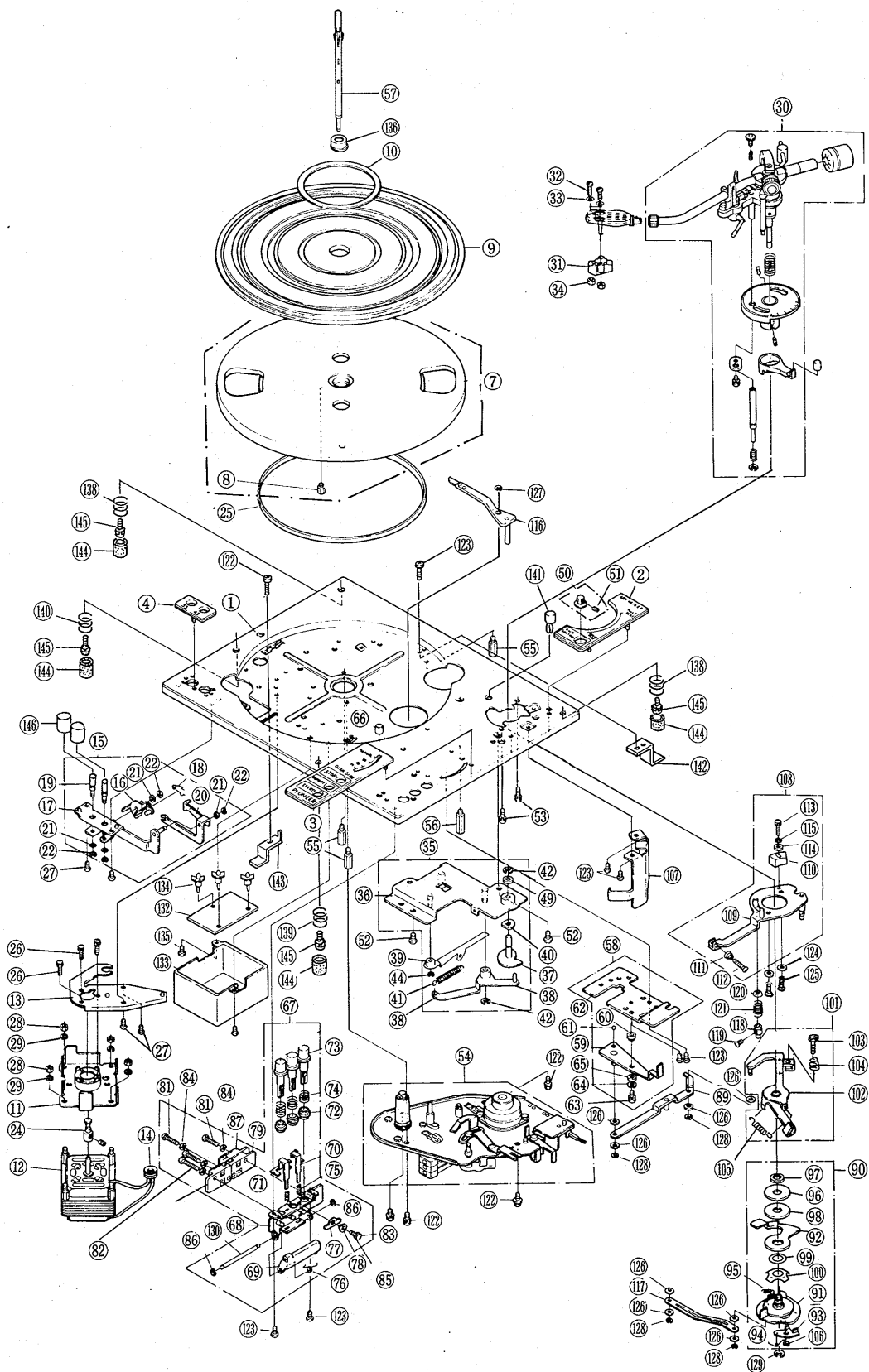
### PARTS LIST

NOTICE: Any parts asterisked (\*) are subject to being not supplied.

| Key No. | Description                | Part No.  |  |
|---------|----------------------------|-----------|--|
| 1*      | Panel                      | KXA-270-H |  |
| 2       | Name plate A               | KAK-017-B |  |
| 3       | Name plate B               | KAK-037-0 |  |
| 4       | Name plate C               | KAK-013-C |  |
| 5       |                            |           |  |
| 6       |                            |           |  |
| 7       | Turntable platter assembly | KXA-449-B |  |
| 8       | Pin B                      | W73-640-0 |  |
| 9       | Rubber mat                 | KNK-159-0 |  |
| 10      | Ring                       | KNA-368-B |  |
| 11*     | Plate                      | KXA-283-C |  |
| 12      | Phono motor                | KXM-035-B |  |
| 13*     | Plate                      | KNA-439-A |  |
| 14*     | Oil cap                    | KNK-157-A |  |
| 15      | Speed selector assembly    | KXA-293-D |  |
| 16*     | Angle                      | KXA-286-B |  |
| 17*     | Angle                      | KXA-287-B |  |
| 18      | Spring                     | KBH-087-A |  |
| 19*     | Button shaft               | KLA-337-A |  |
| 20*     | Speed selector             | KNA-438-A |  |
| 21      | Teflon washer 3.2φx8φx0.5t |           |  |
| 22      | E-type washer E-2          |           |  |
| 23      |                            |           |  |
| 24      | Motor pulley 50Hz          | N24-005-F |  |
|         | 60Hz                       | N24-006-F |  |
| 25      | Belt                       | KEB-006-0 |  |
| 26      | Sems screw A M3x6          |           |  |
| 27      | ⊕ Tapping screw M3x6       |           |  |
| 28      | Nut M4                     |           |  |
| 29      | Spring washer M4           |           |  |
| 30      | Tonearm                    | KPD-035-A |  |
| 31*     | Cartridge PC-50            |           |  |
| 32      | Screw                      | B11-657-C |  |
| 33      | Washer                     | B23-642-0 |  |
| 34      | Nut                        | B71-652-A |  |
| 35      | Anti-skating assembly      | KXA-433-J |  |
| 36*     | Plate                      | KXA-233-C |  |
| 37*     | Cam                        | KXA-263-E |  |
| 38*     | Lever                      | KXA-262-B |  |
| 39*     | Lever                      | KXA-264-A |  |
| 40*     | Washer                     | KNA-309-B |  |
| 41      | Spring                     | KBH-048-B |  |
| 42      | E-type washer E-2          |           |  |
| 43*     |                            |           |  |
| 44      | E-type washer E-1.2        |           |  |
| 45*     |                            |           |  |

| Key No. | Description                 | Part No.  |  |
|---------|-----------------------------|-----------|--|
| 46*     |                             |           |  |
| 47*     |                             |           |  |
| 48*     |                             |           |  |
| 49      | Flat washer M3              |           |  |
| 50      | Knob                        | KXA-495-0 |  |
| 51      | ⊕ Screw M2.6x3              |           |  |
| 52      | ⊕ Tapping screw M3x6        |           |  |
| 53      | Sems screw A M3x8           |           |  |
| 54      | Auto-changer mechanism      | KXB-016-0 |  |
| 55*     | Pole A                      | KLA-253-A |  |
| 56*     | Pole B                      | KLA-254-A |  |
| 57      | Auto-changer spindle        | KXA-524-E |  |
| 58*     | Disk size selector assembly | KXA-714-A |  |
| 59      | Selector lever              | KXA-715-A |  |
| 60*     | Washer                      | KLA-488-0 |  |
| 61      | Steel ball 3/16"            |           |  |
| 62*     | Selector plate              | KNA-646-0 |  |
| 63      | ⊕ Pan head screw M3x6       |           |  |
| 64      | Spring washer M3            |           |  |
| 65      | Flat washer M3              |           |  |
| 66      | Selector knob               | KXA-252-B |  |
| 67      | Control switch assembly     | KXA-790-A |  |
| 68*     | Control switch base         | KXA-230-E |  |
| 69*     | Angle                       | KNA-268-A |  |
| 70*     | Angle                       | KNA-270-B |  |
| 71*     | Angle                       | KNA-267-A |  |
| 72*     | Button guide                | KNK-142-0 |  |
| 73      | Push button                 | KXA-229-B |  |
| 74      | Button spring               | KBH-053-B |  |
| 75      | Spring                      | KBH-054-0 |  |
| 76      | Spring                      | KBH-055-B |  |
| 77*     | Lever                       | KNA-452-A |  |
| 78*     | Ring                        | KLA-068-B |  |
| 79*     | Microswitch                 | KSF-009-0 |  |
| 80*     |                             |           |  |
| 81      | ⊕ Pan head screw M3x25      |           |  |
| 82      | ⊕ Pan head screw M3x12      |           |  |
| 83      | ⊕ Pan head screw M2.6x5     |           |  |
| 84      | Spring washer M3            |           |  |
| 85      | Spring washer M2.6          |           |  |
| 86      | E-type washer E-2           |           |  |
| 87      | Microswitch                 | KSF-010-0 |  |
| 88      | Microswitch                 | KSF-024-0 |  |
| 89      | Selector lever              | KXA-487-0 |  |
| 90      | Disk C assembly             | KXA-706-A |  |
| 91*     | Disk C                      | KXA-480-F |  |
| 92*     | Plate A                     | KNA-491-B |  |
| 93*     | Lever                       | KNA-241-B |  |
| 94      | Spring                      | KBH-052-0 |  |
| 95      | Spring                      | KBH-092-A |  |

| Key No. | Description                 | Part No.  |  |
|---------|-----------------------------|-----------|--|
| 96*     | Washer                      | KNA-245-A |  |
| 97*     | Nut                         | KLA-215-A |  |
| 98*     | Washer                      | KNK-130-0 |  |
| 99*     | Washer                      | KNK-134-0 |  |
| 100     | Spring                      | KBK-008-A |  |
| 101     | Arm B assembly              | KXA-705-A |  |
| 102*    | Arm B                       | KXA-704-A |  |
| 103     | Adjustable screw            | N54-048-0 |  |
| 104     | Spring                      | B31-745-B |  |
| 105     | Spring                      | B31-749-B |  |
| 106     | E-type washer E-3           |           |  |
| 107*    | Stand                       | KNA-667-0 |  |
| 108     | Arm A assembly              | KXA-479-G |  |
| 109*    | Arm A                       | KXA-478-F |  |
| 110*    | Balance weight              | KNH-078-0 |  |
| 111     | Spring                      | B31-745-B |  |
| 112     | Adjustable screw M3x18      |           |  |
| 113     | ⊕ Pan head screw M3x10      |           |  |
| 114     | Flat washer M3              |           |  |
| 115     | Spring washer M3            |           |  |
| 116     | Plate D                     | KXA-224-A |  |
| 117*    | Lever D                     | KNA-463-A |  |
| 118     | Shaft                       | KNK-136-B |  |
| 119     | Screw M3x4                  |           |  |
| 120     | Washer                      | KNA-276-0 |  |
| 121     | Spring                      | KBH-061-A |  |
| 122     | Sems screw B M4x10          |           |  |
| 123     | ⊕ Tapping screw M3x6        |           |  |
| 124     | Flat washer M2.6            |           |  |
| 125     | Sems A M2.6x8               |           |  |
| 126     | Teflon washer 4.2φx10φx0.5t | KBK-017-0 |  |
| 127     | E-type washer E-2           |           |  |
| 128     | E-type washer E-3           |           |  |
| 129     | E-type washer E-5           |           |  |
| 130*    | Rod                         | KLA-231-0 |  |
| 131     |                             |           |  |
| 132     | Circuit board               | KNP-050-B |  |
| 133*    | Cover                       | KNK-245-B |  |
| 134*    | Pin                         | KNK-186-A |  |
| 135     |                             |           |  |
| 136     | Cap                         | KNK-250-B |  |
| 137*    |                             |           |  |
| 138     | Panel spring E              | KXA-791-0 |  |
| 139     | Panel spring C              | KXA-709-A |  |
| 140     | Panel spring F              | KXA-792-0 |  |
| 141     | Adaptor holder              | N93-007-B |  |
| 142*    | Angle                       | KNA-321-0 |  |
| 143*    | Angle                       | N61-063-A |  |
| 144     | Buffer                      | E33-001-0 |  |
| 145     | ⊕ Panhead screw M5 x 4.5    |           |  |
| 146     | Knob                        | KXA-251-B |  |



### 3. AUTO-CHANGER MECHANISM VIEW

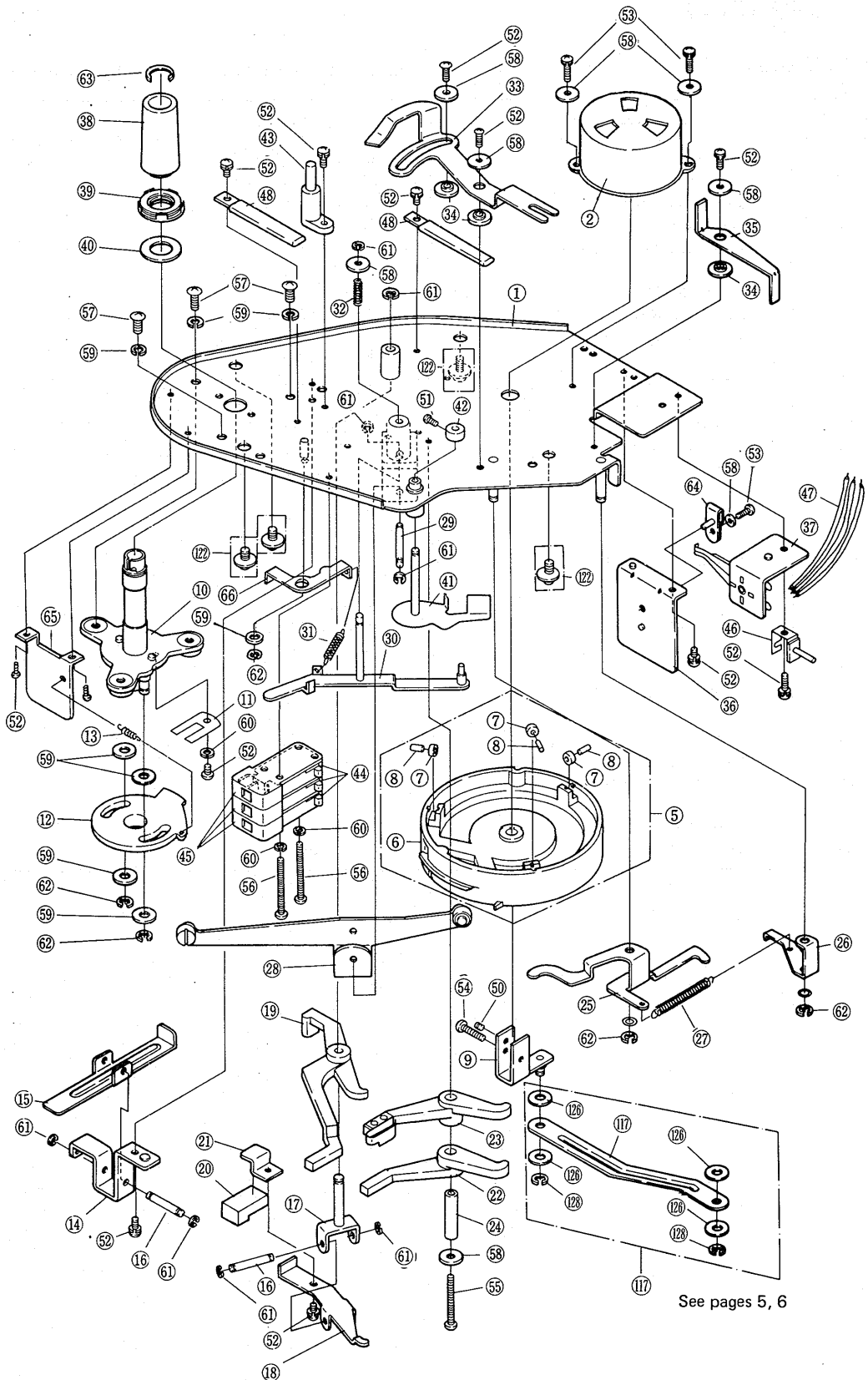
#### PARTS LIST

NOTICE: Any parts asterisked(\*) are subject to being not supplied.

| Key No. | Description                    | Part No.  |  |
|---------|--------------------------------|-----------|--|
| 1*      | Chassis                        | KXA-320-E |  |
| 2       | Geared motor                   | KXM-034-A |  |
| 3       |                                |           |  |
| 4       |                                |           |  |
| 5       | Disk A assembly                | KXA-446-E |  |
| 6*      | Disk A                         | KNK-234-E |  |
| 7*      | Ring                           | KNK-235-0 |  |
| 8*      | Shaft                          | KLA-458-0 |  |
| 9*      | Lever D-connected angle eyelet | KXA-441-0 |  |
| 10      | Spindle holder                 | KXA-219-0 |  |
| 11      | Spring                         | KBK-015-0 |  |
| 12*     | Disk B                         | KNK-353-0 |  |
| 13      | Disk B spring                  | KBH-065-D |  |
| 14*     | Lever E angle                  | KNA-251-0 |  |
| 15*     | Lever E                        | KNA-252-0 |  |
| 16*     | Shaft                          | KLA-219-0 |  |
| 17*     | Lever F angle                  | KXA-226-0 |  |
| 18*     | Lever F                        | KNA-247-A |  |
| 19      | Actuator B                     | KNK-133-C |  |
| 20*     | Balance weight                 | KNH-067-A |  |
| 21*     | Plate                          | KNK-238-0 |  |
| 22      | Actuator C                     | KNK-132-A |  |
| 23      | Actuator A                     | KXA-318-A |  |
| 24*     | Pole                           | KLA-226-0 |  |
| 25      | Lever                          | KNA-248-A |  |
| 26      | Lever                          | KNA-250-A |  |
| 27      | Spring                         | KBH-064-0 |  |
| 28      | Lever A                        | KXA-443-A |  |
| 29*     | Shaft                          | KLA-225-A |  |
| 30      | Lever B                        | KXB-014-0 |  |
| 31      | Spring                         | KBH-094-A |  |
| 32      | Spring                         | KBH-091-0 |  |
| 33*     | Lever                          | KNA-464-B |  |
| 34*     | Washer                         | KLA-457-0 |  |
| 35*     | Lever                          | KNK-494-0 |  |
| 36*     | Stand                          | KNA-466-0 |  |
| 37      | Switch (S7)                    | KXA-272-C |  |
| 38      | Center shaft                   | KLA-459-A |  |
| 39      | Bearing assembly               | KXA-308-0 |  |
| 40      | Washer                         | KNK-183-0 |  |
| 41      | Plate C                        | KXA-225-A |  |
| 42*     | Ring                           | KLA-217-0 |  |
| 43      | Pin assembly                   | KNK-127-A |  |
| 44      | Microswitch (S1, S2, S3)       | KSF-019-0 |  |
| 45*     | Cover                          | KNK-336-0 |  |

| Key No. | Description               | Part No.  |  |
|---------|---------------------------|-----------|--|
| 46      | Terminal                  | KKC-101-A |  |
| 47*     | Lead wire                 | KDE-039-D |  |
| 48*     | Wire clamp                | M46-751-B |  |
| 49*     |                           |           |  |
| 50      | Setscrew M2.6x5           |           |  |
| 51      | ⊕ Pan head screw M2x4     |           |  |
| 52      | ⊕ Pan head screw M3x6     |           |  |
| 53      | ⊕ Pan head screw M3x8     |           |  |
| 54      | ⊕ Pan head screw M3x12    |           |  |
| 55      | ⊕ Pan head screw M3x25    |           |  |
| 56      | ⊕ Pan head screw M3x28    |           |  |
| 57      | ⊕ Pan head screw M4x5     |           |  |
| 58      | Flat washer M3            |           |  |
| 59      | Flat washer M4            |           |  |
| 60      | Spring washer M3          |           |  |
| 61      | E-type washer E-2         |           |  |
| 62      | E-type washer E-3         |           |  |
| 63      | E-type washer No. 5103-40 |           |  |
| 64      | Wire clamp                | KNK-213-A |  |
| 65      | Stand                     | KNA-689-0 |  |
| 66      | Lever C                   | KNA-691-0 |  |



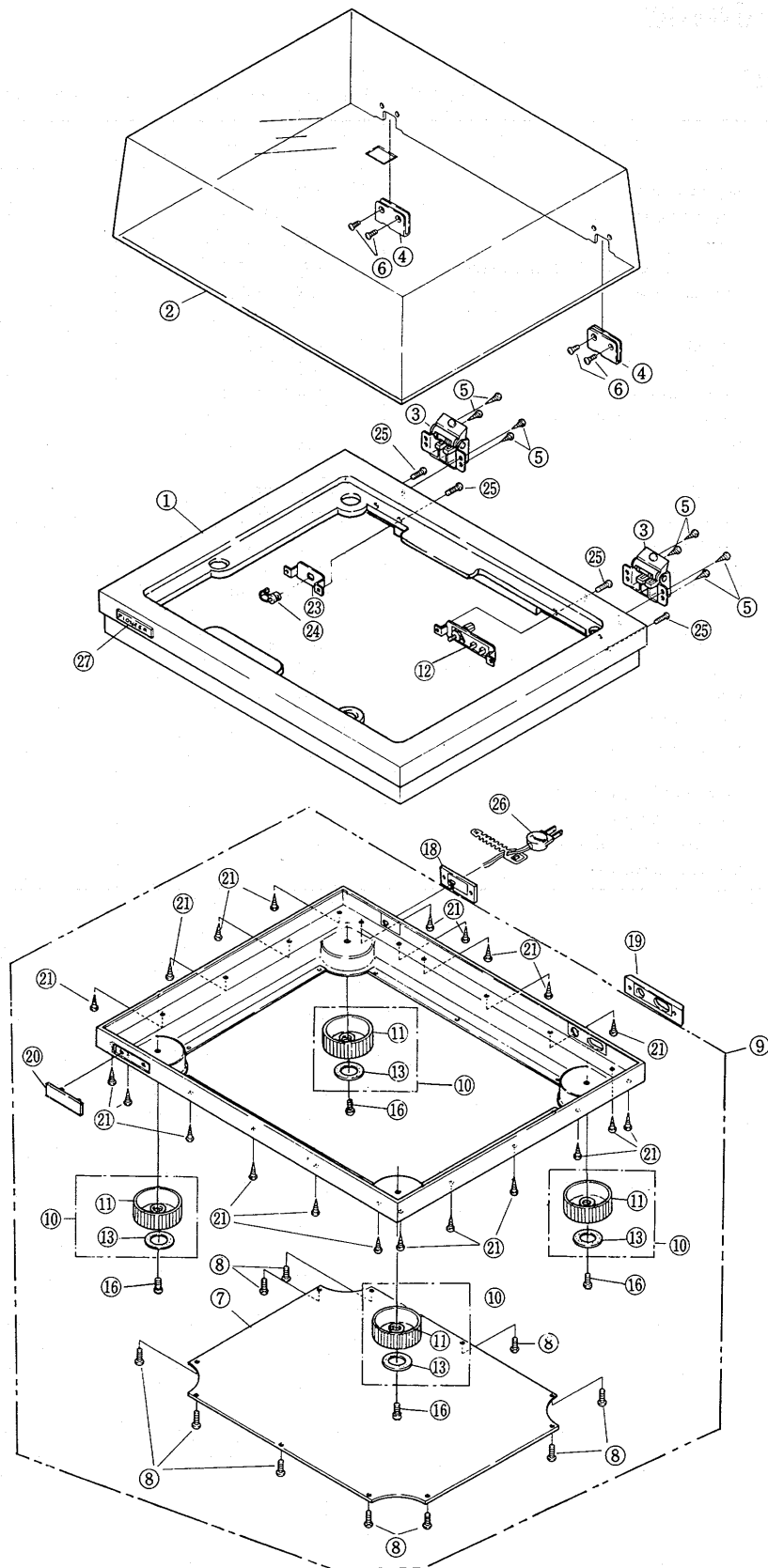


## 4. CABINET

### PARTS LIST

NOTICE: Any parts asterisked(\*) are subject to being not supplied.

| Key No. | Description          | Part No.  |  |
|---------|----------------------|-----------|--|
| 1       | Wooden case          | KMM-070-A |  |
| 2       | Dust cover           | KNK-323-0 |  |
| 3       | Spring hinge         | KXA-757-0 |  |
| 4       | Lock plate           | N61-084-0 |  |
| 5       | ⊕ Wood screw 3.1øx13 |           |  |
| 6       | Screw M4x10          |           |  |
| 7*      | Wooden board         | KMS-089-0 |  |
| 8       | Sems screw F M3x8    |           |  |
| 9       | Metal case           | KNA-692-0 |  |
| 10      | Insulator assembly   | KXA-727-0 |  |
| 11*     | Insulator case       | KNK-325-0 |  |
| 12      | Terminal assembly    | KXA-571-0 |  |
| 13*     | Felt                 | KED-009-B |  |
| 14*     |                      |           |  |
| 15*     |                      |           |  |
| 16      | Tapping screw M3 x 8 |           |  |
| 17      |                      |           |  |
| 18      | Name plate           | KNK-253-D |  |
| 19      | Name plate           | KNK-254-C |  |
| 20      | Name plate           | KAM-051-0 |  |
| 21      | ⊕ Wood screw 3.1øx15 |           |  |
| 22      |                      |           |  |
| 23*     | Angle                | KNA-522-B |  |
| 24*     | Cord stopper         | E32-056-0 |  |
| 25      | Sems screw M3x15     |           |  |
| 26      | Power cord           | KDG-007-0 |  |
| 27      | Name plate           | KAM-034-0 |  |

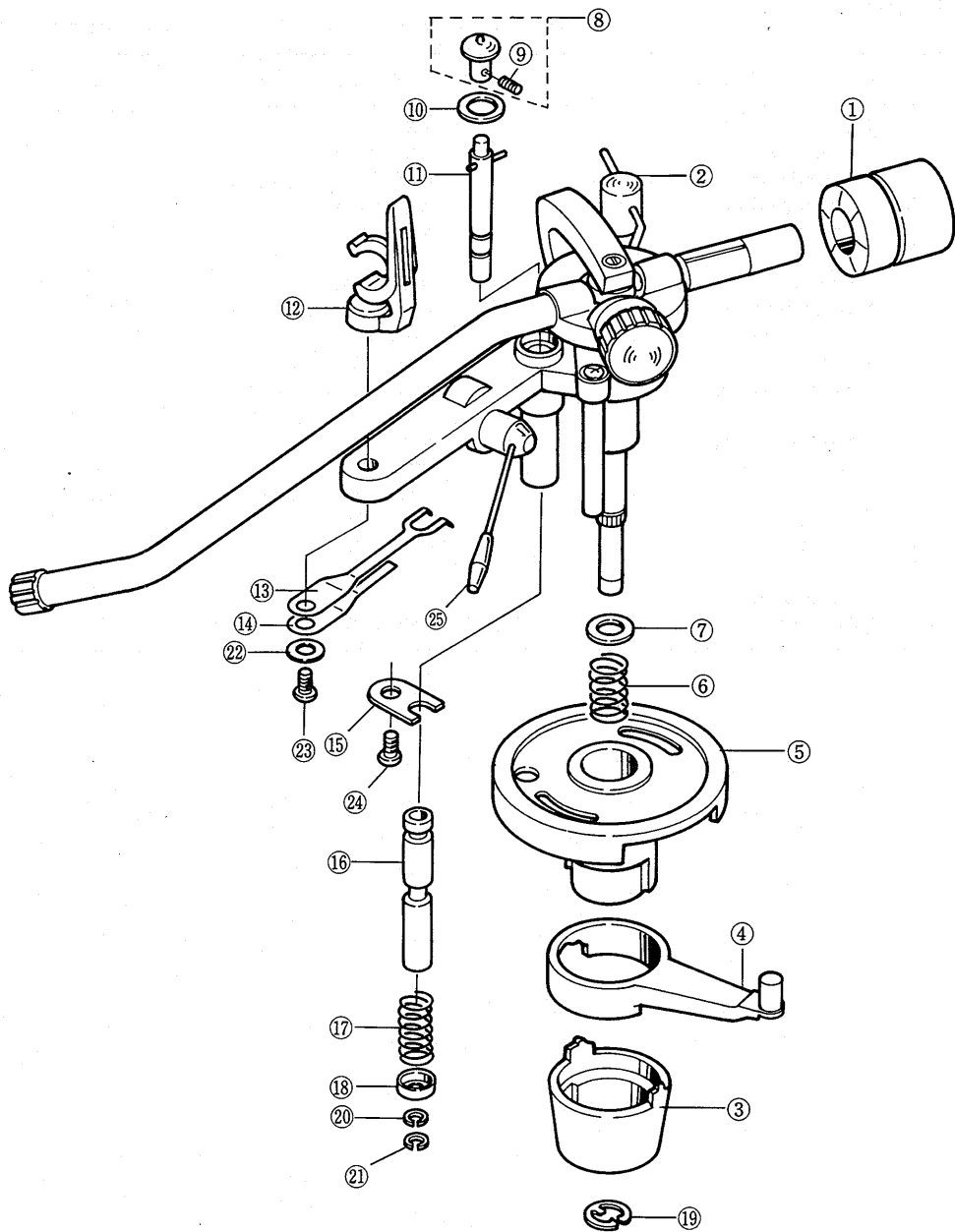


## 5. TONEARM

### PARTS LIST

NOTICE: Any parts asterisked(\*) are subject to being not supplied.

| Key No. | Description                     | Part No.  |  |
|---------|---------------------------------|-----------|--|
| 1       | Main weight                     | KXA-756-0 |  |
| 2       | Lateral balance weight          | KXA-420-B |  |
| 3       | Cover                           | KNK-320-A |  |
| 4       | Tonearm height adjustment lever | KNK-317-A |  |
| 5       | Tonearm stand                   | KXA-698-A |  |
| 6       | Spring                          | KBH-133-0 |  |
| 7       | Washer                          | KBE-014-0 |  |
| 8       | Elevation tip                   | KXA-787-0 |  |
| 9       | Set screw .h No.9               |           |  |
| 10      | Ring                            | KNA-664-0 |  |
| 11      | Shaft                           | KXA-752-0 |  |
| 12      | Arm rest                        | KXA-753-A |  |
| 13      | Plate spring A                  | KBK-019-A |  |
| 14      | Plate spring B                  | KBK-020-A |  |
| 15      | Plate                           | KNA-687-0 |  |
| 16      | Shaft                           | KLA-655-0 |  |
| 17      | Spring                          | KBH-124-0 |  |
| 18      | Cap                             | KNA-125-A |  |
| 19      | E-type washer E-5               |           |  |
| 20      | E-type washer E-2               |           |  |
| 21      | E-type washer No.5103-12        |           |  |
| 22      | Flat washer M2.6                |           |  |
| 23      | Pan head screw M2.6 x 5         |           |  |
| 24      | Screw and washer M3 x 5         |           |  |

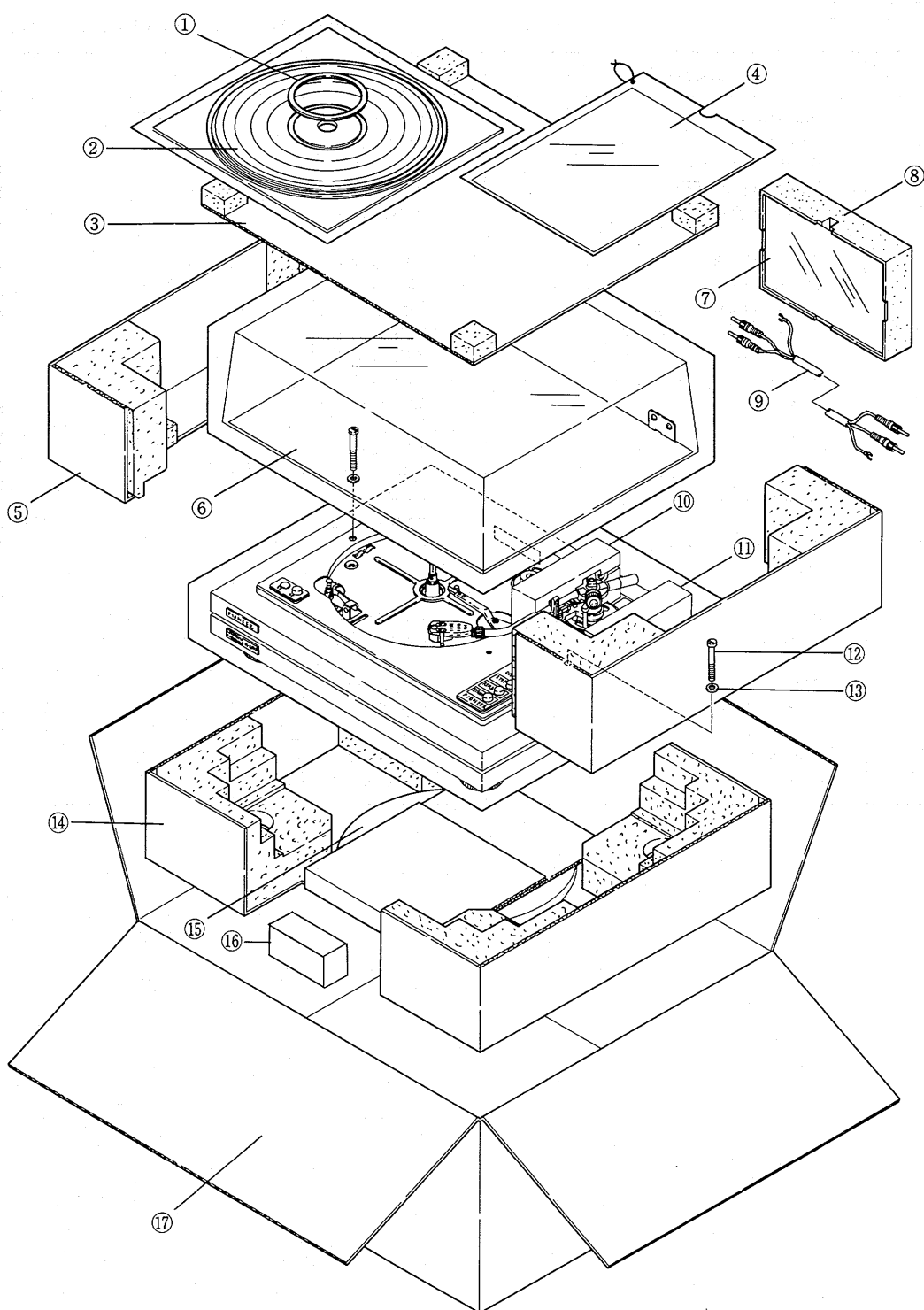


## 6. PACKING

### PARTS LIST

NOTICE: Any parts asterisked(\*) are subject to being not supplied.

| Key No. | Description            | Part No.  |  |
|---------|------------------------|-----------|--|
| 1       | Ring                   | KNA-368-B |  |
| 2       | Rubber mat             | KNK-159-0 |  |
| 3       | Top card board         | KHK-240-0 |  |
| 4       | Operating instructions | KRB-042-0 |  |
| 5       | Side pad               | KHA-280-0 |  |
| 6       | Dust cover             | KNK-323-0 |  |
| 7       | Plastic board          | KHX-027-0 |  |
| 8       | Accessory box          | KHX-026-A |  |
| 9       | Output cord            | KDE-037-C |  |
| 10      | Tonearm packing L      | KNK-262-A |  |
| 11      | Tonearm packing R      | KNK-263-B |  |
| 12      | Screw                  | B11-055-C |  |
| 13      | Washer                 | B22-026-0 |  |
| 14      | Corner pad             | KHA-205-0 |  |
| 15      | Turntable platter      | KXA-449-B |  |
| 16*     | EP changer spindle     |           |  |
| 17      | Packing case           | KHK-240-0 |  |



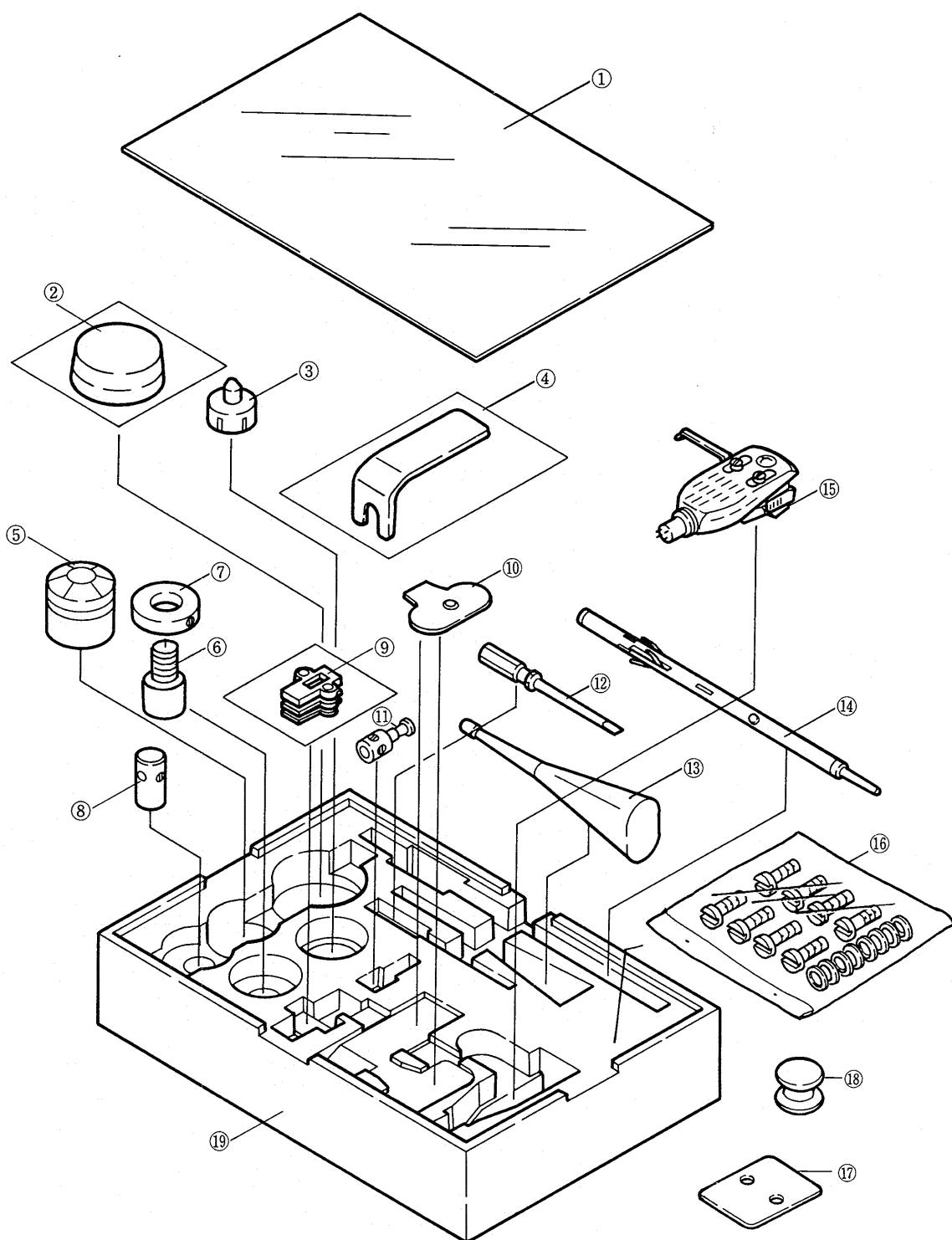
## 7. ACCESSORIES

### PARTS LIST

NOTICE: Any parts asterisked (\*) are subject to being not supplied.

| Key No. | Description            | Part No.  |  |
|---------|------------------------|-----------|--|
| 1       | Box cover              | KHX-027-0 |  |
| 2       | EP adaptor             | KNK-055-0 |  |
| 3       | Single play spindle    | KLA-258-0 |  |
| 4       | Overhang checker       | KNK-255-0 |  |
| 5       | Main weight            | KXA-756-0 |  |
| 6       | Sub weight A           | KLA-131-0 |  |
| 7       | Sub weight B           | KLA-151-0 |  |
| 8       | Lateral balance weight | KXA-420-B |  |
| 9       | Spacer A(1.5 mm)       | KNK-155-0 |  |
|         | Spacer B(2.0 mm)       | KNK-232-0 |  |
|         | Spacer C(3.0 mm)       | KNK-233-0 |  |
| 10      | Dirver                 | E11-125-0 |  |
| 11      | Capstan 50Hz           | N24-005-0 |  |
|         | 60Hz                   | N24-006-0 |  |
| 12      | Screw driver           | KEX-002-0 |  |
| 13      | Oil                    | KEM-001-0 |  |
| 14      | Auto-changer spindle   | KXA-524-0 |  |
| 15*     | PC-50                  |           |  |
| 16      | Screw                  | KBA-043-0 |  |
|         | Screw                  | KBA-044-0 |  |
|         | Screw                  | KBA-045-0 |  |
|         | Screw                  | B11-657-0 |  |
| 17      | Weight plate           | N64-698-A |  |
| 18      | Rubber bush            | E31-744-0 |  |
| 19      | Case                   | KHX-026-0 |  |





**PIONEER ELECTRONIC CORPORATION**

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