

Trader

SERVICE SHEET

The BSR P200 is the record deck used in high-grade music centres and audio units produced during 1978. Intended primarily for the OEM market, the P200 is not normally available as a separate unit.

It is a semi-automatic single player which in external appearance resembles the BSR P182 (see TRADER service sheet 3289), but is more sophisticated and is therefore suitable for higher class systems using magnetic cartridges.

Essential differences between the P182 and the P200 are that the P200 has a belt-driven pressed turntable, two speeds only (33½ and 45 rpm), the tonearm has a calibrated counterweight and a bias correction control, calibrated for both spherical and elliptical styli.

Like the P182 the P200 has a bevel-edged turntable, partially recessed into the deck base, a gimbal-mounted tubular tonearm, and has the speed, start/stop controls on the deck front edge. The record diameter selection control is a slider control below the tonearm; a cueing lever is fitted.

Finish is in matt black, with polished aluminium tonearm and trim.

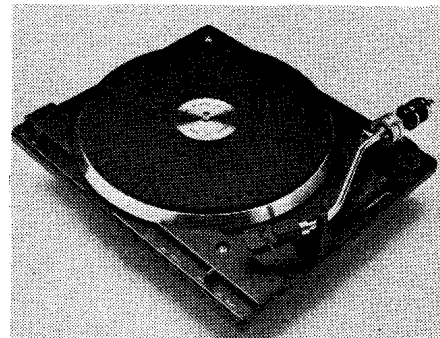
Brief Specification

Power supply	240V 50Hz a.c. mains
Motor	4-pole synchronous
Speeds	33½ and 45 rpm
Turntable	10½in (267mm) diameter, alloy diecasting
Cartridge	Varies according to equipment in which the P200 is mounted. Check with cartridge maker's specification for details.
Stylus	According to cartridge
Controls	On/off, speed change, record size (7, 10, 12in)
Tonearm	S-shaped tubular, gimbal-mounted, with calibrated adjustable counterweight
Dimensions	Width 13in (378mm) Depth 13in (378mm) plus ½in (13mm) for tonearm rear end overhang
Manufacturer	BSR Limited, Monarch Works, Cradley Heath, Warley, West Midlands. Cradley Heath 61591

3341

BSR P200

Record deck



Setting-up adjustments

(These adjustments must be carried out with the mains supply disconnected.)

Tonearm balance and stylus force (see Figure 2)

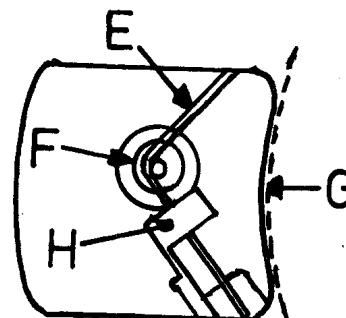
1. Move the starting lever to "ON".
2. Free the tonearm from its rest, hold it horizontal, and turn the complete counterweight assembly to move it along the tonearm tube until the arm balances with the stylus tip ½in (3mm) above the surface of a record.
3. Holding the main body of the counterweight stationary in position on the tube, turn the calibrated stylus pressure ring A until the "O" inscribed coincides with the marker line along the top of the tube.

Fitting turntable (see Figure 1)

1. Check that deck transit screws are fully up and that deck is "floating".
2. Remove turntable centre disc and mat to expose two cut-out holes in the turntable casting.
3. Check that the turntable drive drum is clean and free of dirt or grease, then wrap the drive belt around the drum.
4. Gently lower the turntable, rotating it slightly anti-clockwise, on to the chassis well centre bearing.
5. Rotate the turntable manually clockwise about five turns to ensure that it is free and that the auto mechanism is in a neutral condition.
6. Set the speed selector to "33".
7. Rotate the turntable until one of the holes is over the motor drive pulley, as shown in Figure 1.
8. Carefully stretch the drive belt E away from the turntable drive drum G and pass it between the horizontal arms of the speed change fork H and around the drive pulley F.
9. Refit the turntable mat and centre disc.

NOTE: If replacing a drive belt, when lifting off the turntable, it may be necessary with some versions to remove a circlip from the centre spindle. This circlip should be refitted on re-assembly.

Figure 1



4. Now turn the complete counter-weight until the figure on the pressure ring coinciding with the tube marker line corresponds with the stylus force recommended by the cartridge manufacturer.

Bias compensation (anti-skate)

(see Figure 3)

1. Set the bias compensator control knob C to a figure corresponding with that of the stylus force set up. Note that the control knob has separate scales for use with spherical and elliptical styli. Use the appropriate scale.
2. If, after setting, when the tonearm is lowered onto a test record having a no-groove area, the arm tends to swing inwards or outwards, then slightly decrease the setting if the arm moves outwards, or increase it if it moves inwards.

Stylus set-down (see Figure 3)

1. Place a 12 inch record on the turntable.
2. Select "12" on the record size control.
3. Move the starting lever to "AUTO", and release the lever.
4. Rotate the turntable manually until the tonearm moves in and lowers the stylus down on to the record. This should occur at a point $\frac{1}{8}$ in (3mm) from the record rim.
5. If the set-down position is incorrect, then turn the set-down screw B clockwise to move the set-down point outwards, or anti-clockwise to move the point inwards, as required.
6. The set-down positions for 10in and 7in records will follow automatically if the 12in position is correctly set.

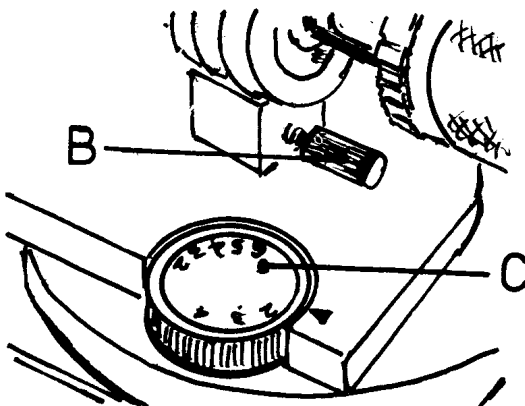


Figure 3

Tonearm height (see Figure 4)

1. With a 12 inch record on the turntable, set the lever to "AUTO" and release it.
2. Rotate the turntable manually until the stylus has set down on the record.
3. Lift the tonearm and move it inwards, then re-set it down on the record run-out groove.
4. Continue rotating the turntable until the tonearm lifts and returns towards the rest. The underside of the tonearm tube should clear the top of the tonearm rest by $\frac{1}{8}$ in (3mm) as the arm returns to it.
5. If the clearance is incorrect, then turn the height screw D clockwise to lower the arm, or anti-clockwise to raise it.

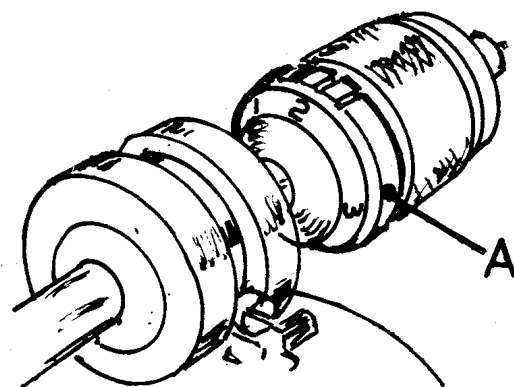
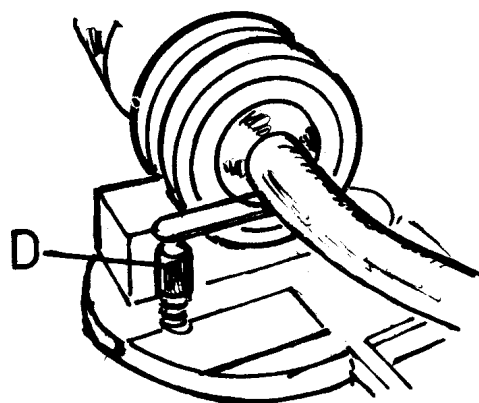


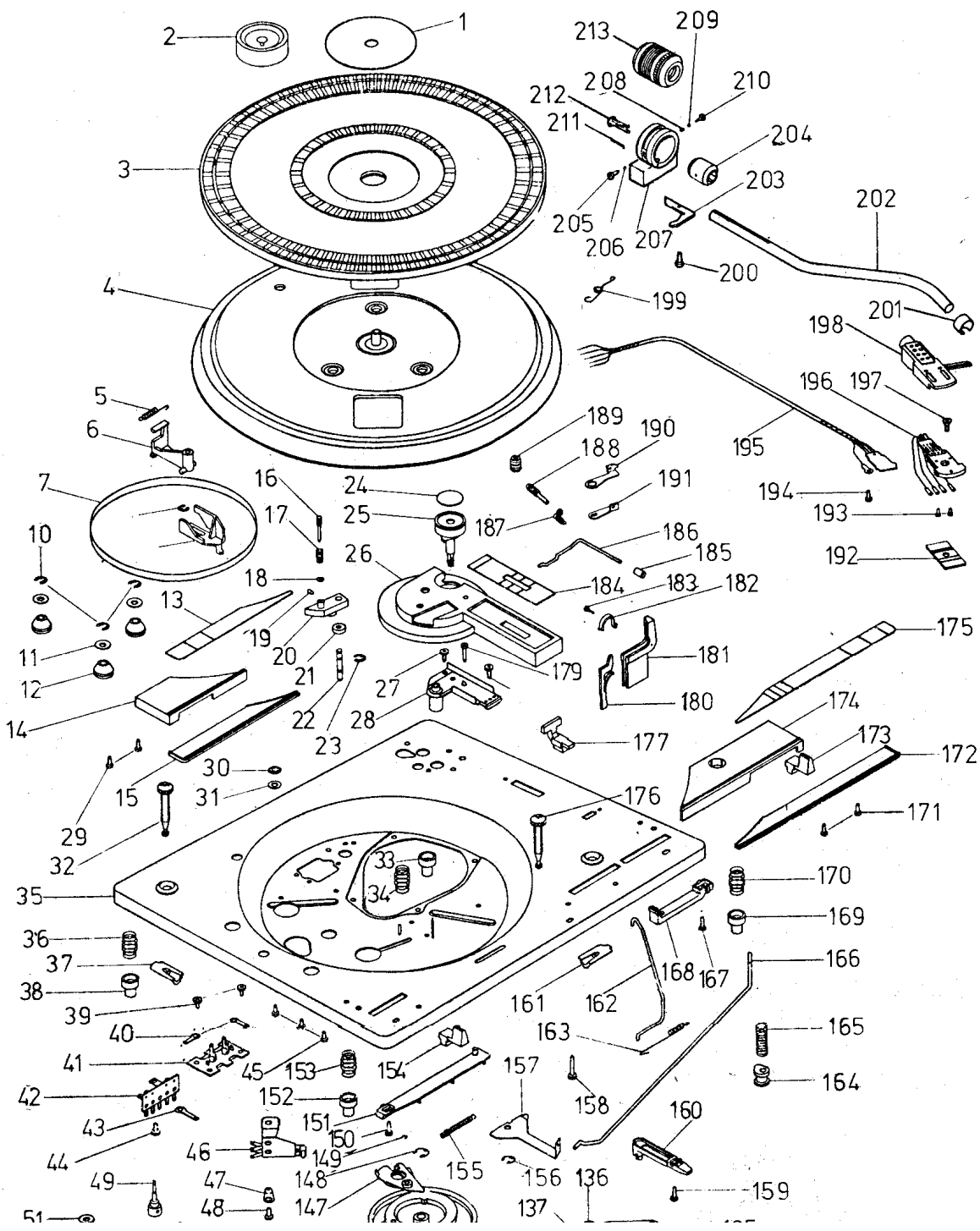
Figure 2

Figure 4



PARTS LIST

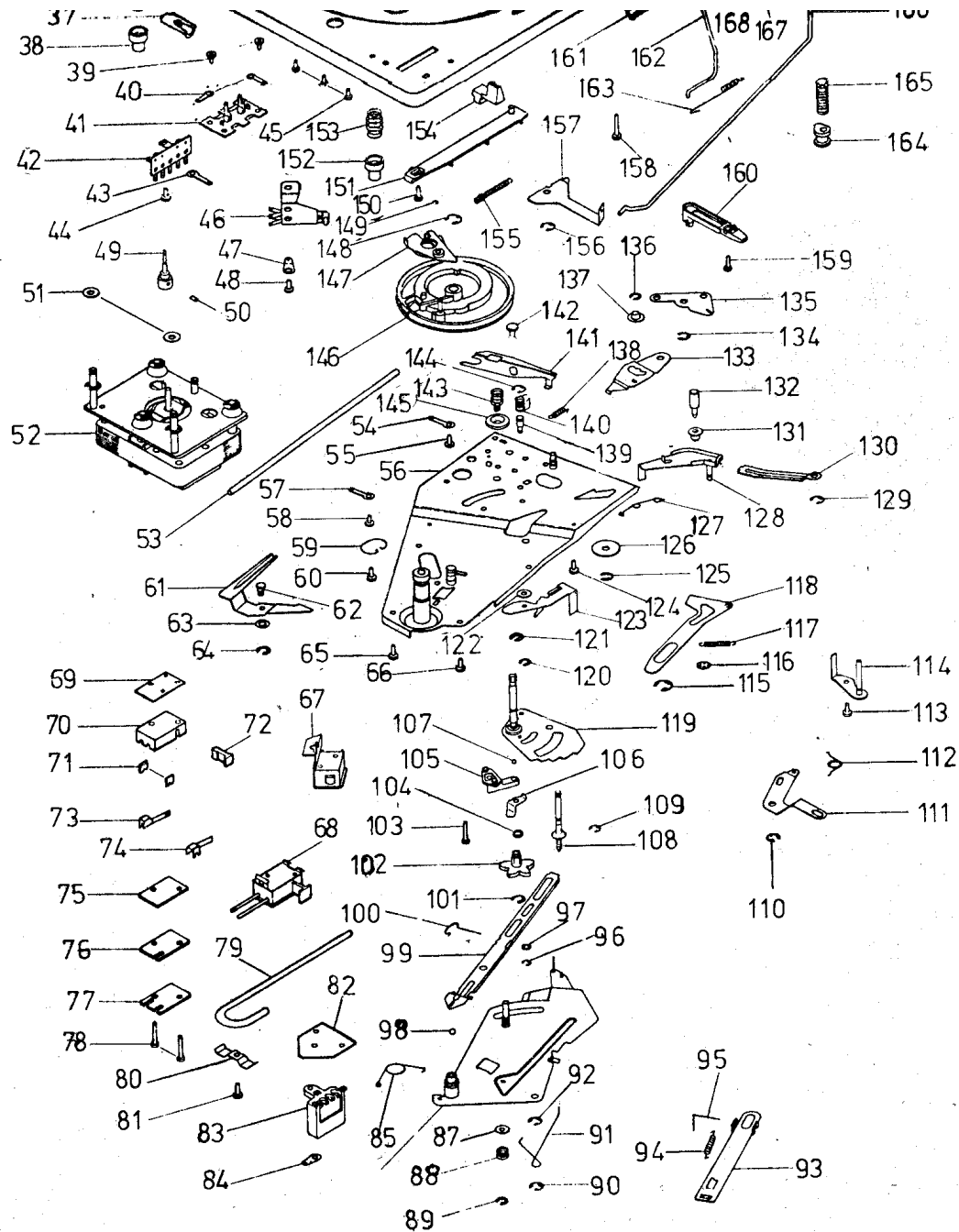
- 1 Turntable Centre Disc
- 2 Turntable Adaptor
- 3 Turntable Mat
- 4 Turntable Assembly
- 5 Spring
- 6 Raising Arm
- 7 Drive Belt
- 8 Circlip
- 9 Raising Slide
- 10 Circlip
- 11 Washer
- 12 Rubber Mounting
- 13 Trim (Speed Change)
- 14 Control Cover (Speed Change)
- 15 Escutcheon (Speed Change)
- 16 Position Adjusting Screw
- 17 Spring
- 18 Washer
- 19 Grub Screw 6 B.A. x 3.2
- 20 Raising Pad
- 21 Spacer
- 22 Plunger
- 23 Circlip
- 24 Trim (Anti-Skate Knob)
- 25 Anti-Skate Control Knob
- 26 Control Housing
- 27 Screw type B No. 6 x 6.5
- 28 Cue Bracket Riveting Assembly
- 29 Screw type B.T. 4-24 x 6.5
- 30 Self Locking Ring
- 31 Washer
- 32 Transit Screw
- 33 Spring Mounting Cup
- 34 Spring (Unit Mounting)
- 35 Mainplate Sub Assembly
- 36 Spring (Unit Mounting)
- 37 Retaining Clip
- 38 Spring Mounting Cup
- 39 Screw type B No. 6 x 6.5
- 40 Solder Tag (2 off)
- 41 Phono Socket
- 42 Tag Mounting Strip
- 43 Solder Tag
- 44 Screw type B No. 6 x 6.5
- 45 Screw type B.T. 4-24 x 4.5
- 46 Muting Switch Assembly
- 47 4 B.A. Tag Lockwasher
- 48 Screw type B No. 6 x 6.5
- 49 Motor Pulley (50 Hz)
- 50 ISO M3x3 Grub Screw Cup End
- 51 Washer (2 off)
- 52 F.P. 50 Motor Assembly
- 53 176mm of 03 P.V.C. Sleeving
- 54 Solder Tag
- 55 Screw type No. 8 x 13
- 56 Main Sub Plate Riveting Assem-
blv



- 105 Support Bracket
- 106 Support Spring
- 107 3/32" dia. Ball Bearing
- 108 P.U. Raising Spindle Assembly
- 109 Circlip
- 110 Circlip
- 111 Actuating Lever
- 112 Toggle Spring
- 113 Screw type B No. 6 x 6.5
- 114 Stop Plate Assembly
- 115 Circlip
- 116 Retainer
- 117 Spring
- 118 Cut-off Lever
- 119 Quadrant Assembly
- 120 Circlip
- 121 Circlip
- 122 Washer
- 123 Selector Lever
- 124 Screw type B No. 6 x 6.5
- 125 Circlip
- 126 Control Washer
- 127 Detent Spring
- 128 Reject Lever Assembly
- 129 Circlip
- 130 Reject Link
- 131 Bush
- 132 Cut-off Slide Pin
- 133 Detent Plate
- 134 Circlip
- 135 Reject Plate Assembly
- 136 Circlip
- 137 Roller
- 138 Spring
- 139 Selector Pivot
- 140 Spring (Selector Pivot)
- 141 Cut-off Slide
- 142 Slide Pin
- 143 Spring (Cut-off Slide)
- 144 Circlip
- 145 Screw Escutcheon
- 146 Cam Gear Riveting Assembly
- 147 Actuating Pawl Assembly
- 148 Circlip
- 149 Circlip
- 150 Screw type B.T. 4-24 x 8
- 151 Speed Change Slide
- 152 Spring Mounting Cup
- 153 Spring (Unit Mounting)
- 154 Knob
- 155 Spring
- 156 Circlip
- 157 Switch Lever
- 158 Screw type B.T. 6-20 x 16
- 159 Screw type B.T. 4-24 x 8
- 160 Selector Slide
- 161 Retaining Clip
- 162 Reject Wire
- 163 Spring (Anti-Skate)
- 164 Spring Anchor
- 165 Spring

Printed in Great Britain by Electronic Press

- 43 Solder Tag
- 44 Screw type B No. 6×6.5
- 45 Screw type B.T. 4-24×4.5
- 46 Muting Switch Assembly
- 47 4 B.A. Tag Lockwasher
- 48 Screw type B No. 6×6.5
- 49 Motor Pulley (50 Hz)
- 50 ISO M3×3 Grub Screw Cup End
- 51 Washer (2 off)
- 52 F.P. 50 Motor Assembly
- 53 176mm of 03 P.V.C. Sleeving
- 54 Solder Tag
- 55 Screw type No. 8×13
- 56 Main Sub Plate Riveting Assembly
- 57 Solder Tag
- 58 Screw type B No. 6×6.5
- 59 Circlip
- 60 Screw type B No. 6×6.5
- 61 Reset Lever
- 62 Selector Pivot
- 63 Washer
- 64 Circlip
- 65 Screw type B No. 6×6.5
- 66 Screw type B No. 6×6.5
- 67 Muting Switch Riveting Assembly
- 68 Miniature Switch Assembly
- 69 Retaining Strip
- 70 Switch Body
- 71 Solder Tag (2 off)
- 72 Switch Dolly
- 73 Contact (Domed)
- 74 Contact (Flat)
- 75 Switch Cover
- 76 Switch Cover
- 77 Switch Cover
- 78 T.C. Screw type B.T. 4-24×16
- 79 170mm of 05 P.V.C. Sleeving
- 80 Cable Clamp
- 81 Screw type B.T. 6-20×9.5
- 82 Insulating Strip
- 83 Molex Plug
- 84 4 B.A. Tag Lockwasher
- 85 Operating Plate Spring
- 86 Operating Plate Spring
- 87 Washer
- 88 Spring
- 89 Circlip
- 90 Circlip
- 91 Spring (Selector Drive)
- 92 Circlip
- 93 Feed Lever Link
- 94 Spring (Link Return)
- 95 Feed Lever Link Spring
- 96 Circlip
- 97 Washer
- 98 9/64" dia. Ball Bearing
- 99 Actuating Slide
- 100 Actuating Slide Spring
- 101 Circlip
- 102 Toggle Wheel
- 103 Screw type B.T. 4-24×16
- 104 Spring Clip



- 150 Screw type B.T. 4-24×8
- 151 Speed Change Slide
- 152 Spring Mounting Cup
- 153 Spring (Unit Mounting)
- 154 Knob
- 155 Spring
- 156 Circlip
- 157 Switch Lever
- 158 Screw type B.T. 6-20×16
- 159 Screw type B.T. 4-24×8
- 160 Selector Slide
- 161 Retaining Clip
- 162 Reject Wire
- 163 Spring (Anti-Skate)
- 164 Spring Anchor
- 165 Spring
- 166 Switch Link
- 167 Screw type B.T. 4-24×8
- 168 Reject Slide
- 169 Spring Mounting Cup
- 170 Spring (Unit Mounting)
- 171 Screw type B.T. 4-24×6.5
- 172 Escutcheon
- 173 Knob
- 174 Control Cover
- 175 Trim
- 176 Transit Screw
- 177 Size Selector Knob
- 178 Screw type B No. 6×8
- 179 Screw type 'Tapitite' 4-40×13
- 180 P.U. Clip
- 181 Pick-Up Rest
- 182 P.U. Clip
- 183 Pick-Up Clip Pivot Pin
- 184 Size Selector Trim
- 185 Cue Knob
- 186 Raising Arm
- 187 Spring
- 188 Adjusting Screw
- 189 P.U. Spindle Nut
- 190 Overload Plate
- 191 P.U. Adjuster
- 192 Weight (P.U. Head)
- 193 Screw 3.48×3.2 Std.
- 194 Screw type A No. 4×6.5
- 195 Tag Strip Assembly
- 196 Mounting Slide Assembly
- 197 Screw 6 B.A.×6.5
- 198 Pick Up Head
- 199 Spring
- 200 Screw type A No. 4×8
- 201 P.U. Head Trim
- 202 Pick-Up Tube
- 203 Raising Plate
- 204 Tube Holder
- 205 Pivot Screw
- 206 Steel Ball 0 1.58
- 207 P.U. Body Assembly
- 208 Spring
- 209 Steel Ball 0 1.58
- 210 Pivot Screw
- 211 Spring
- 212 Tube End
- 213 P.U. Weight Assembly