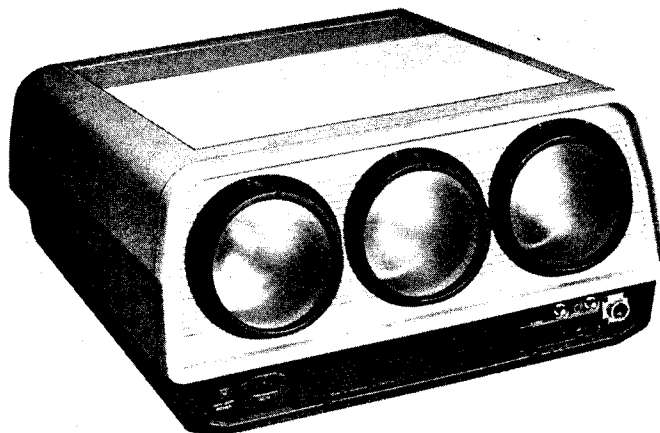


# VPH-1000QM

## SERVICE MANUAL

*AEP Model*  
Chassis No. SCC-B82B-A



### SPECIFICATIONS

#### Optical

Projection system	3 picture tubes, 3 lenses, direct projection system
Picture tube	5.5-inch high-brightness monochrome tubes, with coolant sealed
Projection lens	High-performance hybrid lenses F1.0/130 mm
Projected picture size	70 – 250 inches measured diagonally Factory-adjusted to 100 inches measured diagonally
Light output	600 lm

#### General

Color system	PAL, SECAM, NTSC and NTSC <sub>4.43</sub> systems, switched automatically
Resolution	650 TV lines
Test signal	Cross-hair test pattern generator incorporated
Speaker	5 x 9 cm (2 x 3½ inches), 1 unit, 3 W

— Continued on next page —

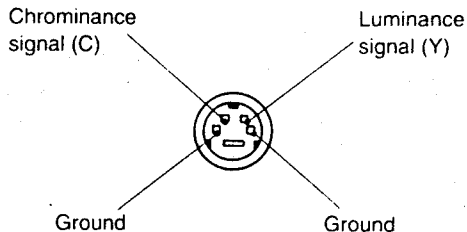


COLOR VIDEO PROJECTOR  
**SONY®**

## Inputs

**LINE IN**

S VIDEO: 4-pin mini DIN connector  
 Y (luminance) signal: 1 Vp-p  $\pm$ 2 dB,  
 sync negative, 75 ohms terminated  
 C (chrominance) signal: burst  
 0.286 Vp-p  $\pm$ 2dB, 75 ohms terminated  
 (NTSC)  
 0.3 Vp-p  $\pm$ 2dB, 75 ohms terminated  
 (PAL)



VIDEO: BNC connector  
 Composite video input,  
 1 Vp-p  $\pm$ 2 dB, sync negative,  
 75 ohms terminated  
 AUDIO: phono jack  
 0.5 Vrms  
 Impedance: more than 47 kohms

**TO VPR-722S**

14-pin connector

## Output

**MONITOR OUT**

VIDEO: BNC connector  
 Composite video output,  
 1 Vp-p  $\pm$ 2 dB, impedance  
 75 ohms,  
 Selected video output  
 With the remote controller:  
 Video signal from the controller\*  
 Without the remote controller:  
 Video signal from the LINE IN VIDEO  
 connector\*

\* The separated Y and C signals input to the S VIDEO connector is output as a composite video signal.

## Power requirements

220 - 240 V AC, 50/60 Hz

## Power consumption

210W

## Dimensions

Approx. 532 x 288 x 597 mm (w/h/d)  
 (21 x 11<sup>3</sup>/<sub>8</sub> x 23<sup>5</sup>/<sub>8</sub> inches)

With the brackets pushed down,  
 incl. projecting parts and controls

## Weight

Approx. 30 kg  
 (66 lb 2 oz)

## Accessories supplied

AC power cord (1)  
 Spacer for 200" projection (4)

Design and specifications subject to change without notice.

**Optional Accessories**

Remote controller VPR-722S  
 Projector pedestal SU-722  
 Projector suspension support PSS-722, PSS-10  
 Screen VPS-100F1 (100" flat)  
     VPS-120F (120" flat)  
     VPS-72HG1 (72" curved)  
     VPS-100HG1 (100" curved)  
     VPS-700R (70" rear projection)  
 Carrying case VLC-1040  
 CCQ BRS cables

## SECTION 8 EXPLODED VIEWS

**NOTE:**

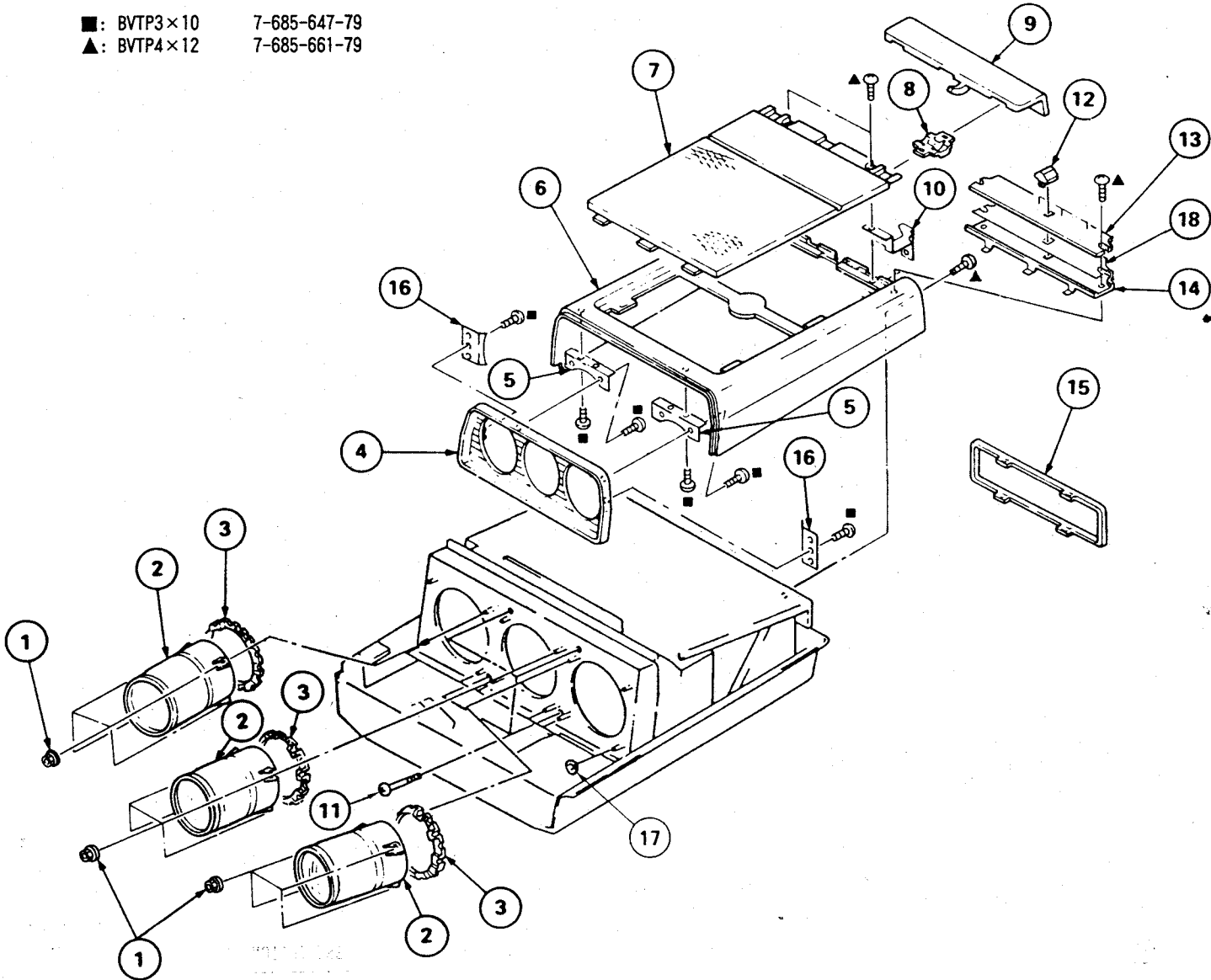
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **▲** are critical for safety. Replace only with part number specified.

**8-1. LENS**

- : BVTP3×10      7-685-647-79
- ▲: BVTP4×12      7-685-661-79

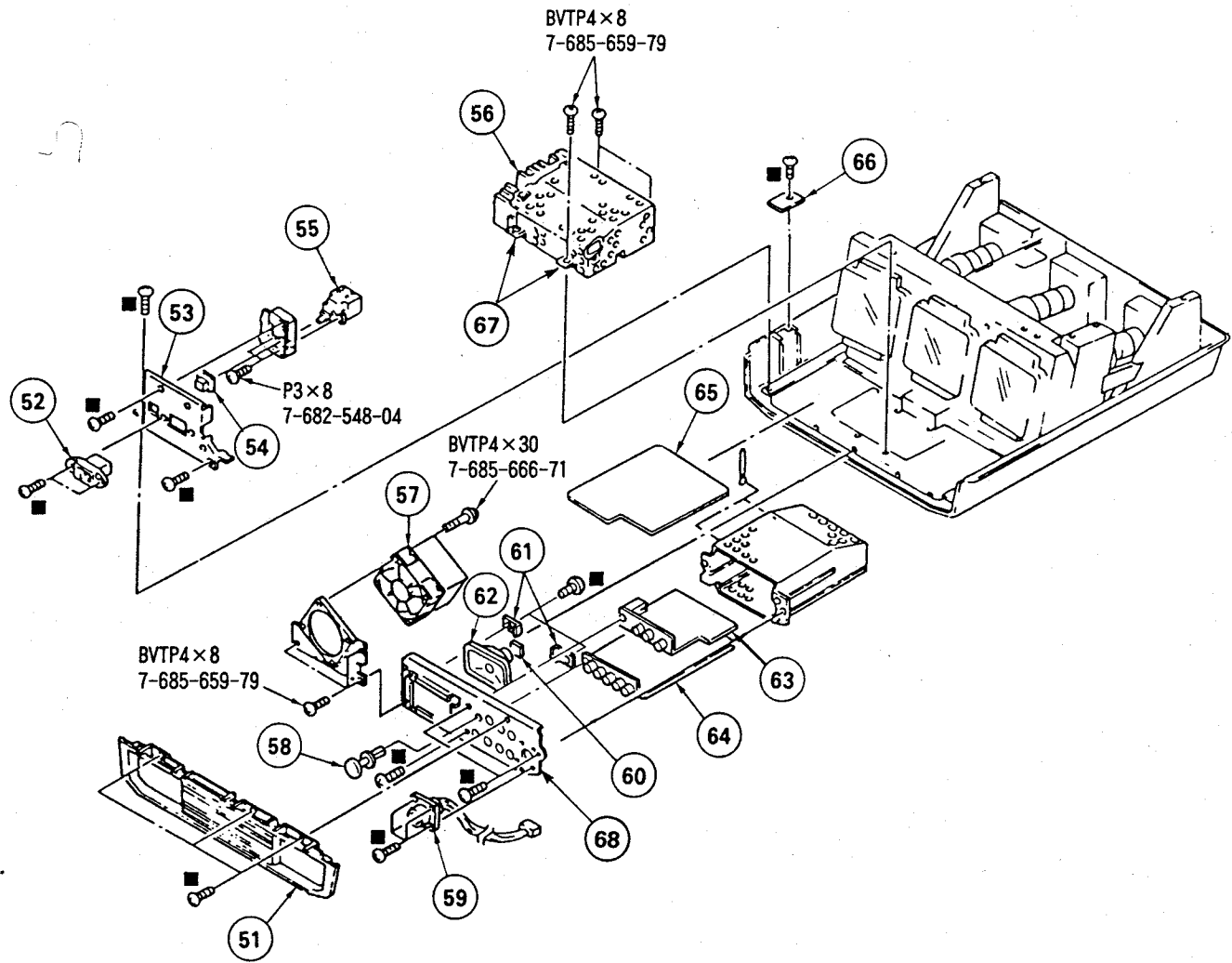


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-304-749-00	NUT, FLANGE		10	*4-378-670-01	BRACKET, MESH EARTH	
2	4-383-018-02	LENS (DELTA) (TAC-3)		11	4-383-072-01	SCREW (4X45) (G), TAPPING, + BV	
3	*4-378-642-01	WASHER, LENS		12	4-030-100-01	CAP. LAMP	
4	4-383-064-01	PANEL, LENS		13	4-030-384-01	PLATE, ORNAMENTAL, CONTROL	
5	*4-383-021-01	BRACKET, LENS PANEL		14	4-383-056-01	PANEL, CONTROL	
6	4-378-655-01	CABINET		15	4-033-269-01	PANEL, REAR	
7	X-4378-625-1	BOARD ASSY, TOP		16	*4-383-038-01	BRACKET (B), LENS PANEL	
8	3-659-618-00	HINGE, SPRING		17	3-639-647-00	WASHER	
9	X-4378-603-1	DOOR ASSY		18	4-030-385-01	SHEET, CONTROL	

## 8-2. PANEL

■: BVTP3×8      7-685-646-79

The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.

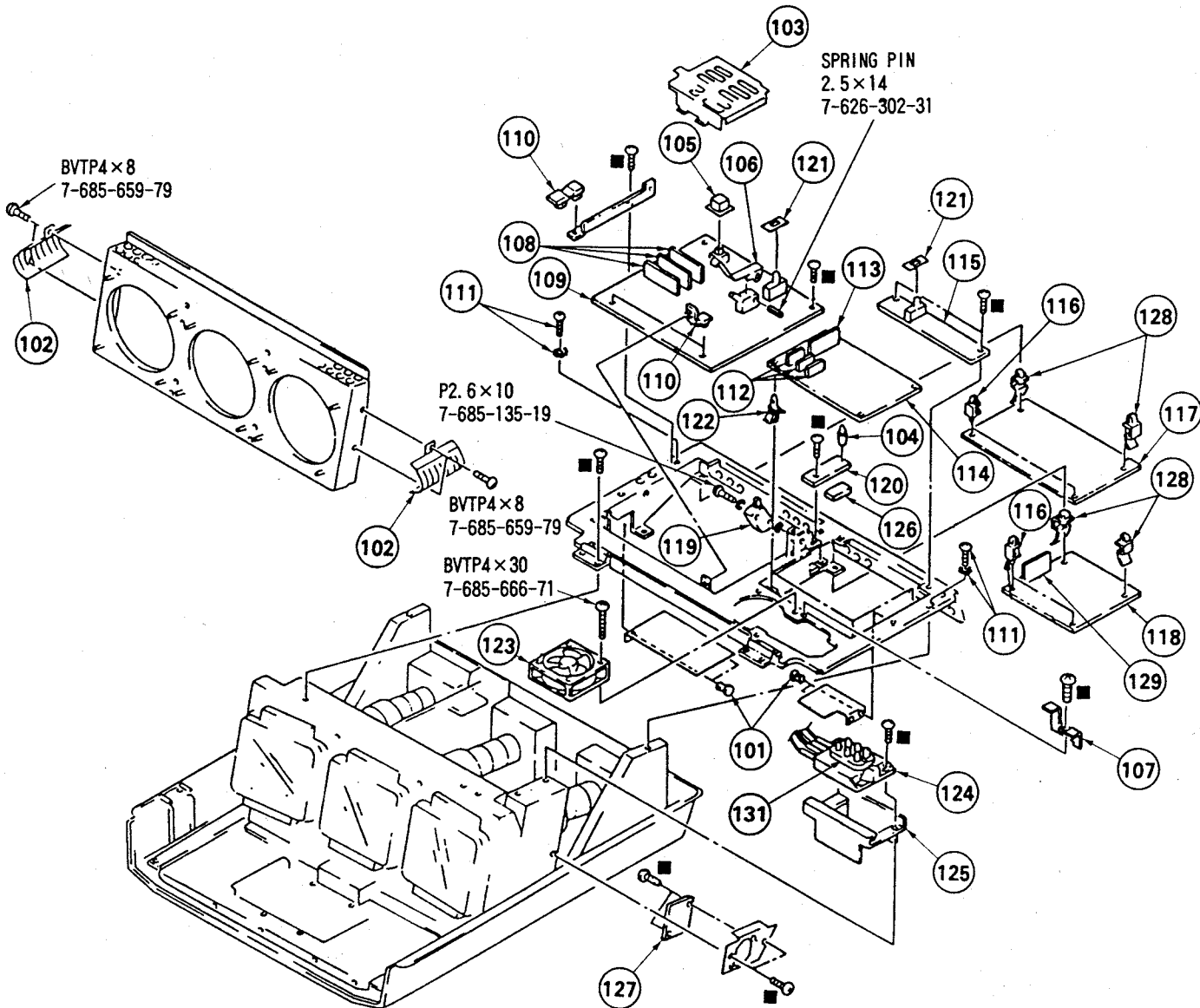


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-383-063-01	PANEL, CONNECTOR		60	4-383-088-01	CUSHION, RUBBER	
52 <b>Δ</b>	*1-580-375-21	INLET 3P		61	4-383-026-01	SPRING	
53	4-383-049-01	PANEL (F), CONNECTOR		62	1-503-255-11	SPEAKER	
54	4-362-811-00	BUTTON, MAIN POWER		63	*A-1270-238-A	MOUNTED PCB, QB	
55 <b>Δ</b>	*1-570-052-12	SWITCH, PUSH (AC POWER) (1 KEY)		64	*A-1270-292-A	MOUNTED PCB, QA	
56 <b>Δ</b>	*1-413-289-12	REGULATOR, SWITCHING (TK-15)		65	*1-621-056-11	FA BOARD	
57 <b>Δ</b>	*1-541-449-11	FAN, DC (WITH SENSOR)		66	*1-621-058-11	FC BOARD	
58	4-374-303-01	RIVET, NYLON		67	*2-277-426-01	CLAMP	
59	1-559-088-21	CONNECTOR ASSY, ROUND TYPE 14P		68	*4-032-826-01	CHASSIS (R), FRONT	

8-3. D BOARD

■: BVTP3×8 7-685-646-79

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

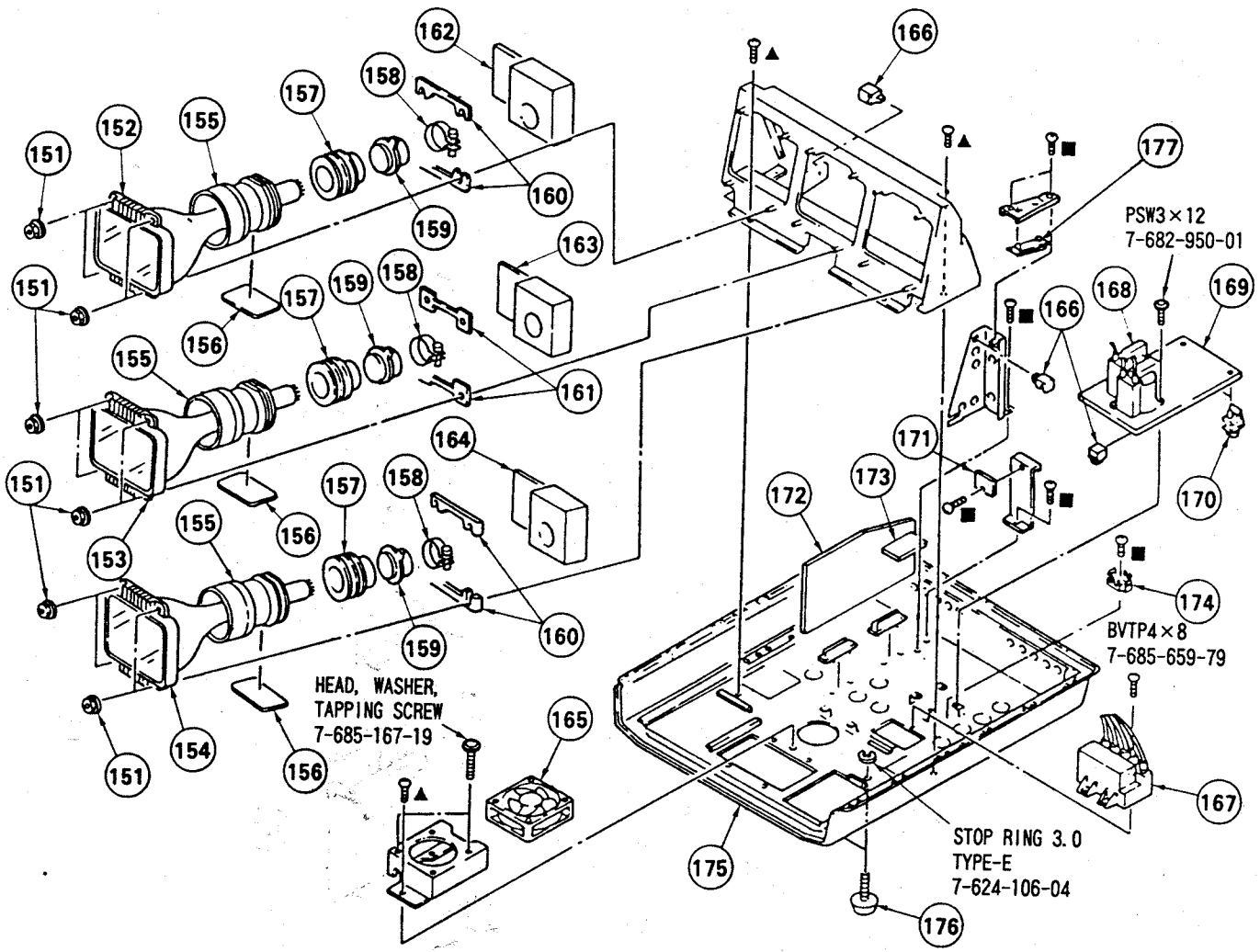


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
101	4-374-303-01	RIVET, NYLON		116	*4-353-620-02	HINGE, PC BOARD	
102	*4-378-671-01	SPRING		117	*A-1130-546-A	MOUNTED PCB, BB	
103	*4-383-047-01	COVER, REGISTRATION ADJUSTMENT		118	*A-1135-520-A	COMPLETE PCB, BA	
104	1-518-590-11	LAMP, PILOT (WITH HOLDER)		119	$\Delta$ 1-552-437-11	SWITCH, LEVER	
105	4-362-808-00	BUTTON, POWER		120	*1-621-051-21	X BOARD	
106	*4-378-608-01	ACTUATOR		121	*4-337-847-00	INSULATOR, SLIDE SWITCH	
107	*4-387-737-02	HOLDER, E PC BOARD		122	*3-703-353-02	SUPPORT, PC BOARD	
108	*1-621-059-11	DB BOARD		123	$\Delta$ 1-541-449-11	FAN, DC (WITH SENSOR)	
109	*A-1341-335-A	MOUNTED PCB, D		124	$\Delta$ 1-237-582-11	RESISTOR ASSY, HIGH-VOLTAGE	
110	*4-313-732-00	CLIP, HINGE, CIRCUIT BOARD		125	*4-383-037-01	COVER, FOCUS PACK	
111	4-389-025-01	SCREW (M4X8) (EXT TOOTH WASHER)		126	9-911-840-XX	CUSHION	
112	*1-621-060-11	EC BOARD		127	*1-622-694-21	ED BOARD	
113	*1-621-055-11	EB BOARD		128	*3-703-141-00	HOLDER, PCB	
114	*A-1340-922-A	MOUNTED PCB, E		129	*A-1130-718-A	MOUNTED PCB, BC	
115	*1-621-062-21	HA BOARD		130	*X-4378-626-6	BRACKET ASSY, PC BOARD	
				131	*4-032-125-01	COVER (B), FOCUS PACK	

8-4. BASE ASSY

- ▲: BVTP4×12 7-685-661-14
- : BVTP3×8 7-685-646-79

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
151	4-304-749-00	NUT, FLANGE		164	*1-621-053-21	CB BOARD	
152	▲ 8-733-023-05	PICTURE TUBE SD-187 (R)		165	▲ 1-541-449-11	FAN, DC (WITH SENSOR)	
153	▲ 8-733-021-05	PICTURE TUBE SD-187 (G)		166	*3-701-903-00	HOLDER, PC BOARD	
154	▲ 8-733-022-05	PICTURE TUBE SD-187 (B)		167	▲ 1-453-108-11	DC BLOCK, HIGH-VOLTAGE	
155	▲ 1-451-243-00	DEFLECTION YOKE (Y636PA)		168	▲ 1-439-408-31	TRANSFORMER ASSY, FLYBACK (NX-2023)	
156	*1-621-053-21	DY BOARD		169	*1-621-050-21	PC BOARD	
157	▲ 1-452-302-11	PICTURE TUBE NECK ASSEMBLY		170	3-680-721-00	HOLDER, CHASSIS	
158	X-4378-637-1	BAND ASSY		171	*1-621-052-21	Y BOARD	
159	▲ 1-452-443-13	NECK ASSY, PICTURE TUBE (NA367)		172	*A-1190-113-A	MOUNTED PCB, PA	173
160	4-378-603-01	SPACER (100"), PICTURE TUBE		173	*1-621-054-11	PB BOARD	
161	*4-383-025-01	SPACER (G), PICTURE TUBE		174	*4-309-624-00	TERMINAL, EARTH	
162	*1-621-068-11	CR BOARD		175	X-4378-628-3	BASE ASSY	176
163	*1-621-069-11	CG BOARD		176	4-378-622-01	ADJUSTOR	
				177	*3-680-613-01	SUPPORT, PC BOARD	

The components identified by shading and mark  $\Delta$  are critical for safety.  
 Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
*****			
	*1-621-051-21	X BOARD ***** <LAMP>	
PL1	*1-535-615-11	TERMINAL (LAMP SOCKET)  <CONNECTOR>	
X1	*1-566-041-11	PIN, CONNECTOR 2P	
X2	*1-566-041-11	PIN, CONNECTOR 2P	
*****			
	*1-621-052-21	Y BOARD *****	
	*4-365-850-00	HOLDER, LED  <DIODE>	
D1	8-719-420-94	DIODE LN342GPH  <CONNECTOR>	
Y1	*1-566-041-11	PIN, CONNECTOR 2P	
*****			
MISCELLANEOUS *****			
	$\Delta$ 1-237-582-11	RESISTOR ASSY, HIGH-VOLTAGE	
	$\Delta$ 1-413-289-12	REGULATOR, SWITCHING (TK-15)	
	$\Delta$ 1-451-243-00	DEFLECTION YOKE (Y636PA)	
	$\Delta$ 1-452-302-11	PICTURE TUBE NECK ASSEMBLY	
	$\Delta$ 1-452-443-13	NECK ASSY, PICTURE TUBE (NA367)	
	$\Delta$ 1-453-108-11	DC BLOCK, HIGH-VOLTAGE	
	1-518-590-11	LAMP, PILOT (WITH HOLDER)	
	$\Delta$ 1-541-449-11	FAN, DC (WITH SENSOR)	
	$\Delta$ 1-552-437-11	SWITCH, LEVER	
	$\Delta$ 1-570-052-12	SWITCH, PUSH (AC POWER) (1 KEY)	
	$\Delta$ *1-580-375-21	INLET 3P	
CNJ6	1-559-088-21	CONNECTOR ASSY, ROUND TYPE 14P	
SP1	1-503-255-11	SPEAKER	
V901	$\Delta$ 8-733-023-05	PICTURE TUBE SD-187 (R)	
V902	$\Delta$ 8-733-021-05	PICTURE TUBE SD-187 (G)	
V903	$\Delta$ 8-733-022-05	PICTURE TUBE SD-187 (B)	
*****			

ACCESSORIE & PACKING MATERIALS  
 \*\*\*\*\*

PART NO.	DESCRIPTION	REMARK
$\Delta$ 1-590-151-11	CORD SET, POWER	
3-753-799-11	MANUAL, INSTRUCTION	
3-753-800-11	INSTRUCTION	
*4-310-638-00	BAG, PROTECTION	
*4-378-674-01	CUSHION (UPPER) (ASSY)	
*4-378-681-01	CUSHION (LOWER) (ASSY)	
4-378-685-01	SPACER, 200"	
4-378-686-01	SPACER (200"), PICTURE TUBE	
*4-383-076-02	SPACER	
*4-383-085-01	CUSHION (A)	
*4-033-234-01	CUSHION (B)	
*4-033-195-01	INDIVIDUAL CARTON	