
**User's
Manual**

**Installation
Manual for
Panel-Mounted Instruments**

YEW SERIES 80

IM 1B4F1-01E

Notices

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- (1) This manual should be passed on the end user. Keep at least one extra copy of the manual in a safe place.
- (2) Read this manual carefully and fully understand how to operate this product before you start operation.
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1. GENERAL.

This manual describes the installation and wiring instructions for the YEWSERIES 80 panel-mounted instruments listed in Table 1-1.

For operation and external wiring of the individual instruments, refer to the relevant instruction manual. For instruments with communication functions, refer to the Field Control Unit instruction manual (IM 34B6G1-01E or IM 34A6L11-01E).

Table 1-1. YEWSERIES 80 Panel Mounted Instruments.

Model	Instrument Name
SRVD	Strip Chart Recorder
SRHD	Intelligent Recorder
SJBD	Selector Station
SIHM	Indicator (With Housing)
SIHF	Bar Graph Indicator (With Alarms)
SIHK	Indicator (With Alarm)
SLCD	Indicating Controller – communication functions are available.
SLPC	Programmable Indicating Controller – with communication functions.
SLMC	Programmable Indicating Controller – with pulse width output.
SMLD	Manual Station
SMST	Auto/Manual Station
SMRT	Ratio Set Station
SCMS	Programmable Computing Station
SBSD	Batch Set Station (With Communication Functions)
SLCC	Blending Controller (With Communication Functions)
SLBC	Batch Controller (With Communication Functions)
STLD	Totalizer (With Communication Functions)
SHUP	Housing

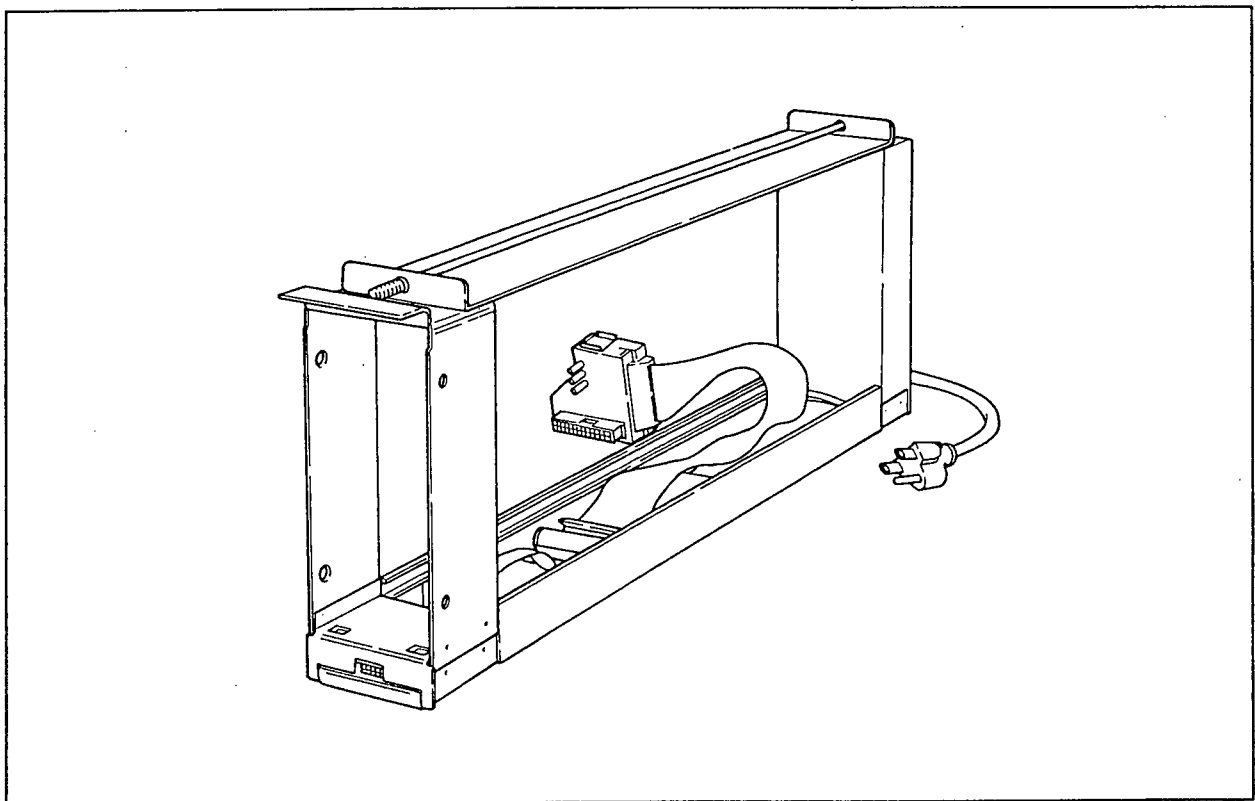


Figure 1-1. Housing Kit.

2. PANEL MOUNTED INSTRUMENT CONFIGURATION.

YEW SERIES 80 panel-mounted instruments consist of internal units and housings. See Figure 2-1. Each internal unit is connected to the housing via a multipin connector.

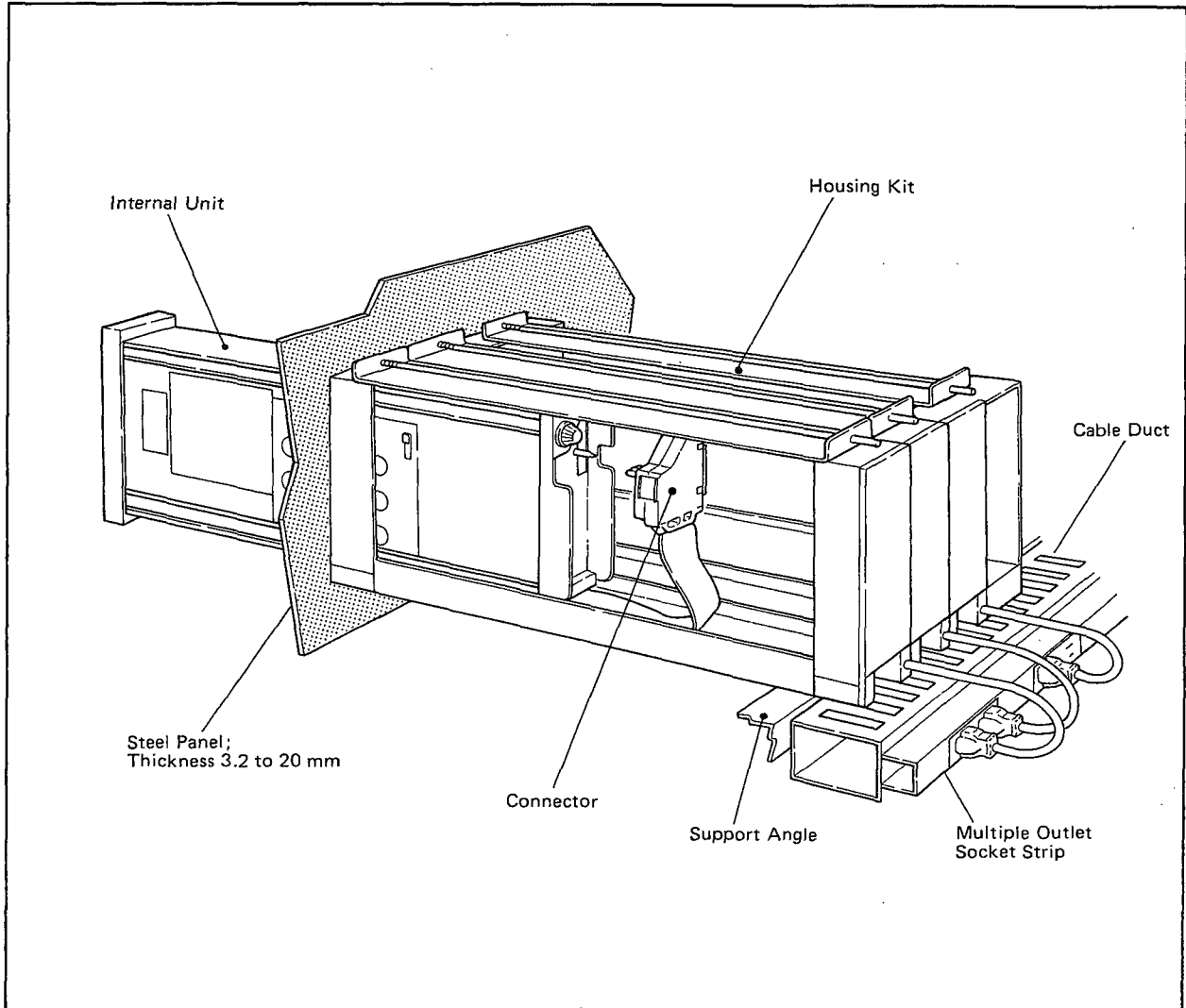


Figure 2-1. Configuration of Panel-Mounted Instruments.

2-1. Housing Kit.

The housing kit is listed in Table 2-1.

Table 2-1. Housing Kit.

Item	Description	
①	Mounting Clamp	
②	Housing	
③	Two Bracket Clamps	Mounting Kit
④	Right Bezel	
⑤	Four Bezel Mounting Screws	
⑥	Left Bezel	

Notes:

- 1. To mount a single unit, all parts in Table 2-1 are used.
- 2. For multi-housings (side-by-side), only one mounting kit consisting of parts 3 to 6 is required per each group of instruments.

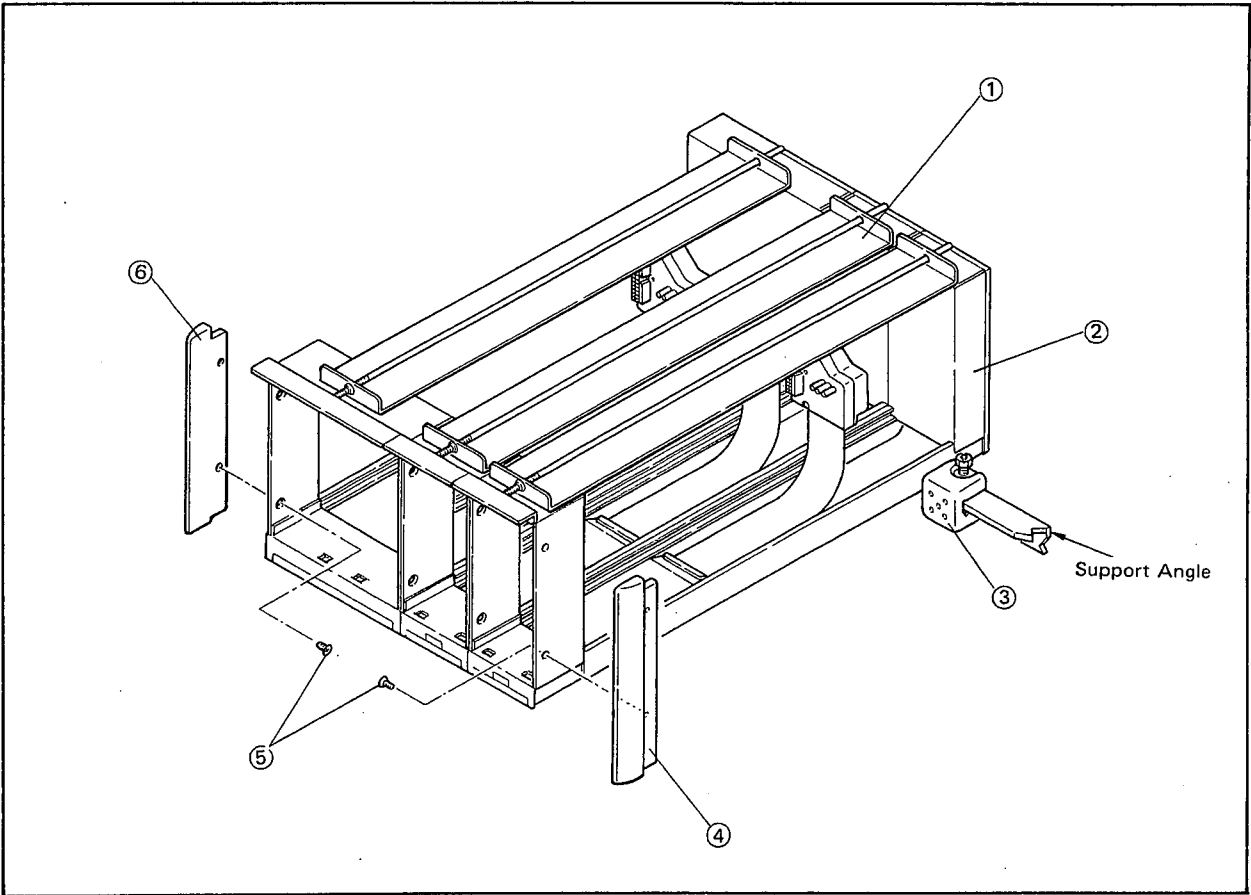


Figure 2-2. Housing Kit Configuration.

3. EXTERNAL DIMENSIONS.

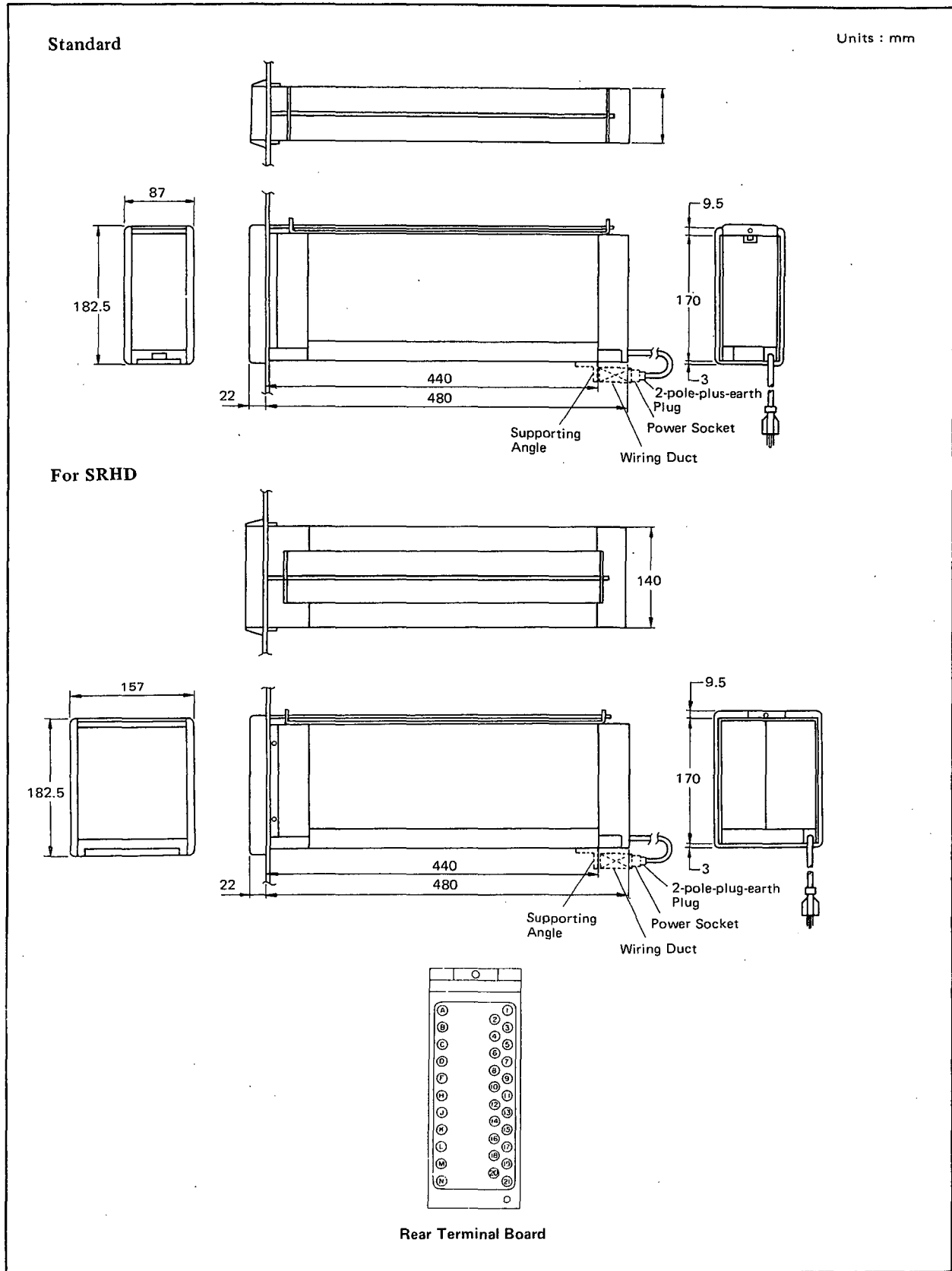


Figure 3-1. External Dimensions.

4. PANEL REQUIREMENTS.

Housings can be mounted in panels between 3.2 and 20 mm thick.

4-1. Panel Cutout.

Figure 4-1 (a) shows panel cutout dimensions for multi-housings (side-by-side mounting).

Figure 4-1 (b) shows panel cutout dimensions for a single-housing.

CAUTION

The bottom of each panel cutout edge must be flat, horizontal and perpendicular to the vertical edge of the cutout. No instrument lateral tilt is allowed when it is mounted in the panel. When cutting out the panel, insure that the panel surface does not bend.

If the panel is not strong enough to support multi-housing assemblies of the size desired, weld additional angle-iron supports both vertically and horizontally on the panel rear surface after making the panel cutout.

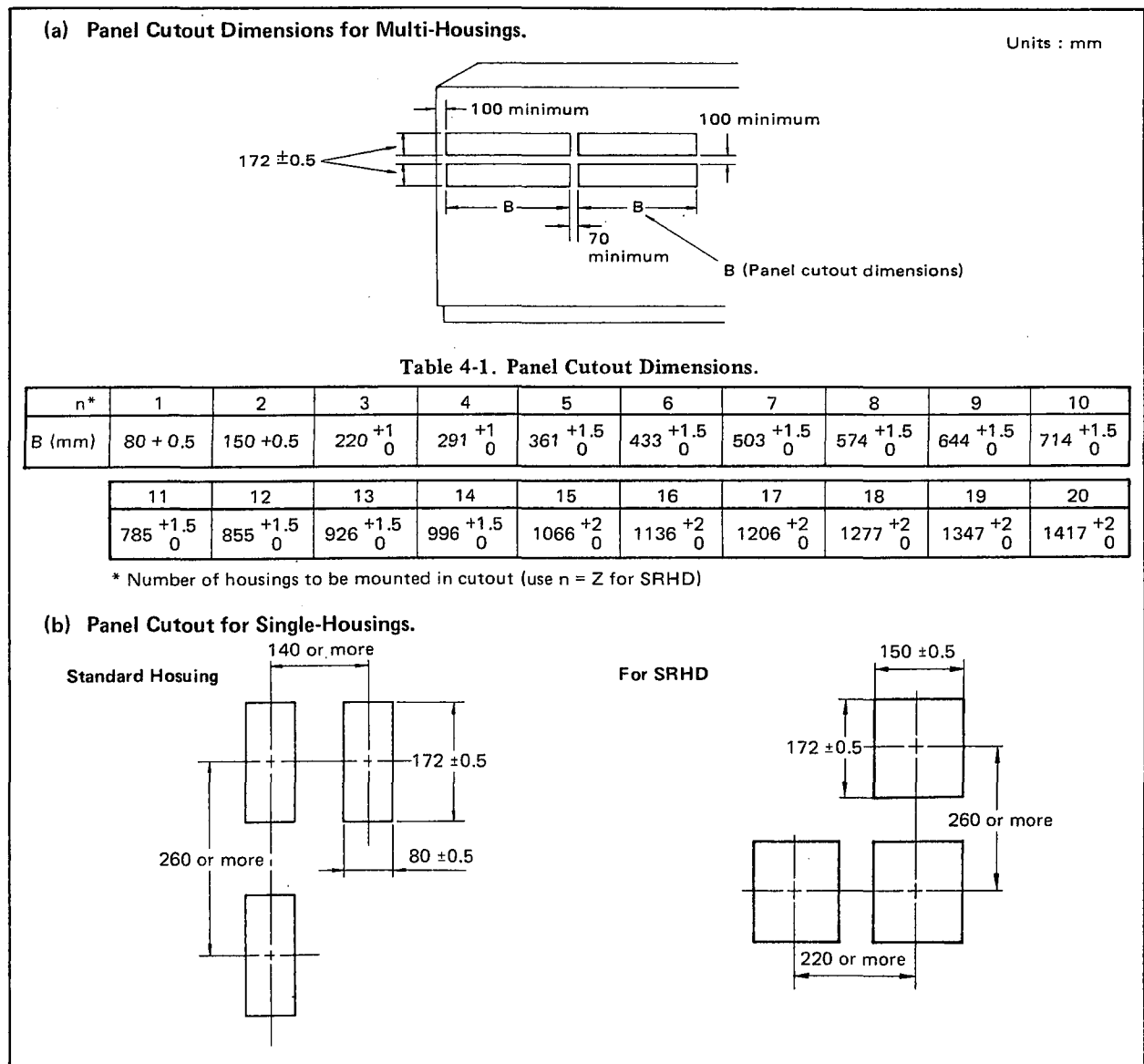


Figure 4-1. Panel Cutout Dimensions.

4-2. Recommended Installation Height and Inclined Mounting.

The recommended viewing height for instrument installation is 1500 to 1700 mm above floor and midway up the panel face. See Figure 4-3. Inclined mounting (instrument rear below front) is possible to a maximum of 75°, but preferable to no more than

60°. Inclined mounting with instrument rear above front is not allowed. See Figure 4-2.

4-3. Rear Support.

Since the housings are quite deep (approximately 480 mm), a housing rear support angle-iron must be installed.

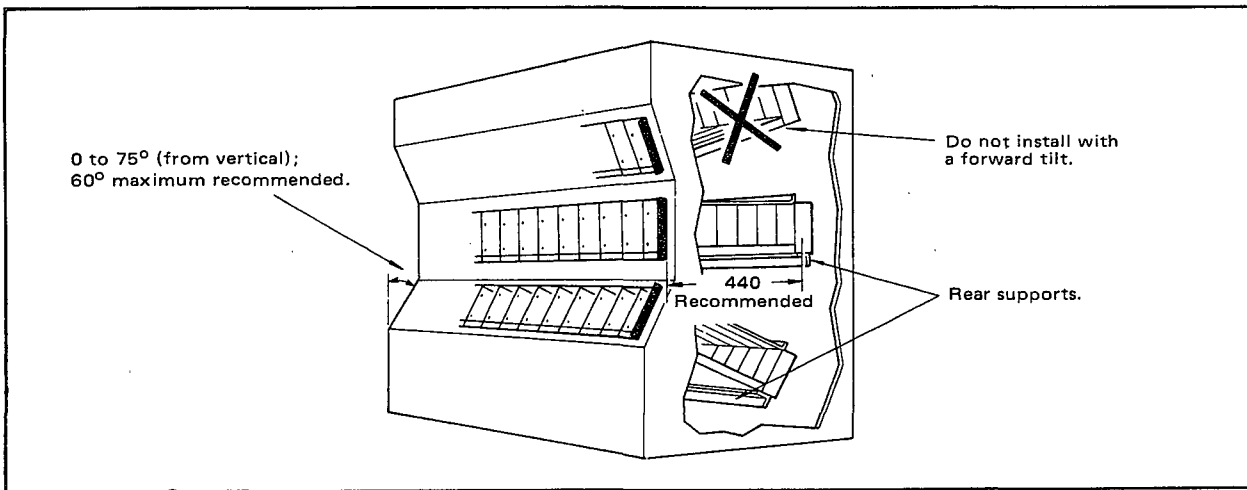


Figure 4-2. Inclined Mounting and Rear Supports.

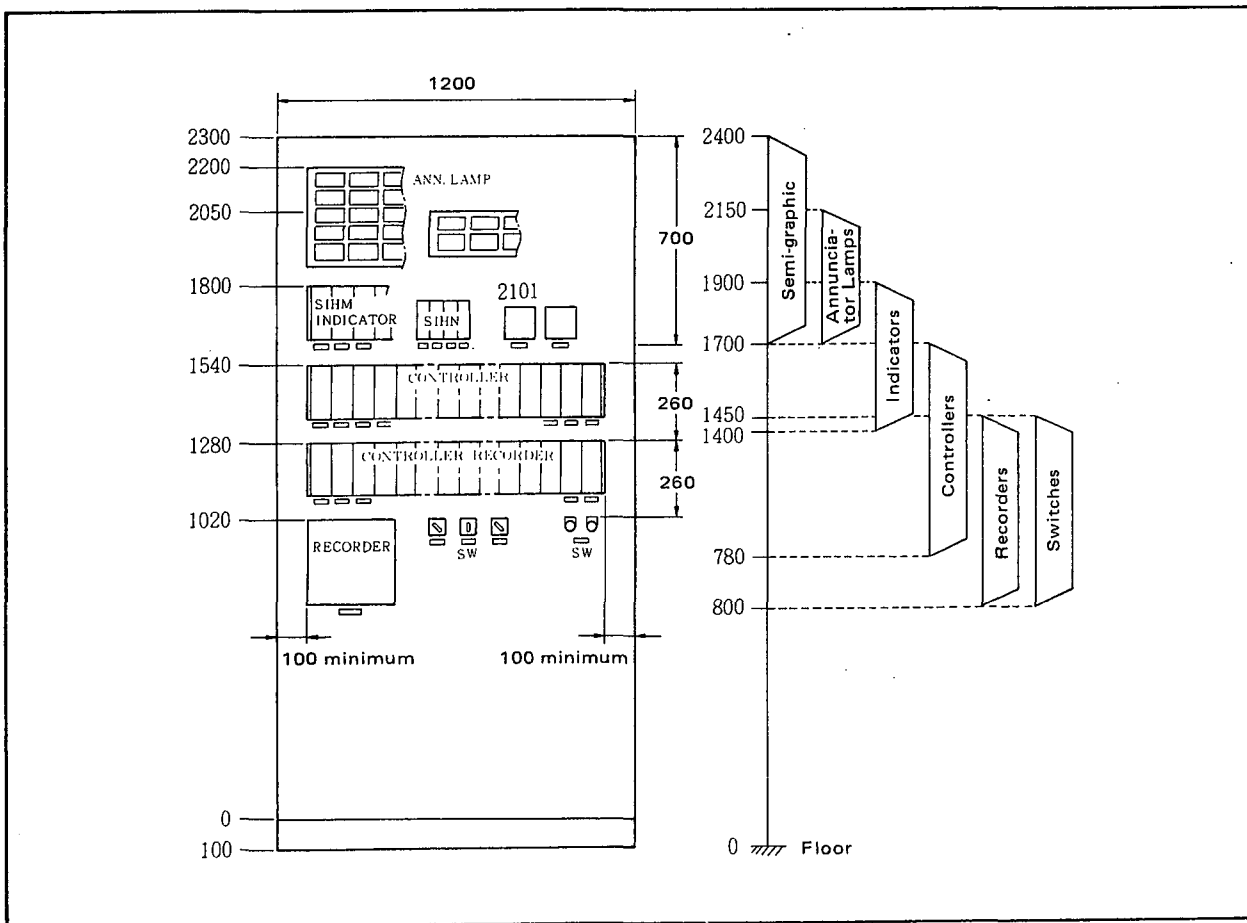


Figure 4-3. Recommended Instrument Height.

5. PANEL MOUNTING.

(1) Single Instrument Installation.

- a. Loosen the mounting clamp screw. See Figure 5-1.
- b. Push the clamp forward and remove it from the housing.
- c. Insert the housing into the panel cutout. See Figure 5-3.
- d. Reinstall the clamp and tighten the clamp screw against the rear surface of the panel.

(2) Side-by-side Instrument Installation.

- a. Loosen the mounting clamp screw. See Figure 5-1.
- b. Push the clamp forward and remove it from the housing.
- c. First insert the housing to be located at the extreme left end of the panel cutout and then place all other housings in their correct locations in the panel. All housing should be in close contact with each other. See Figure 5-4 and 5-5.

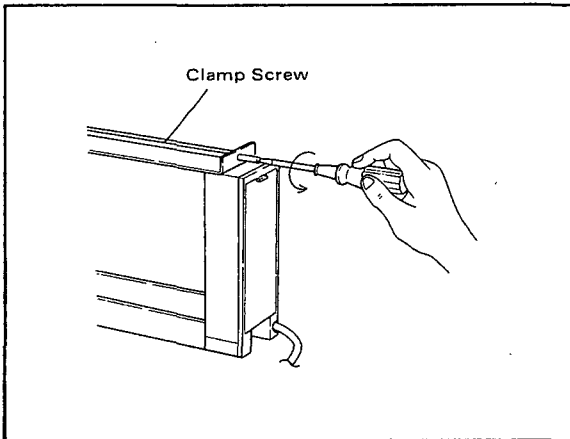


Figure 5-1. Removing the Clamp Screw - (1).

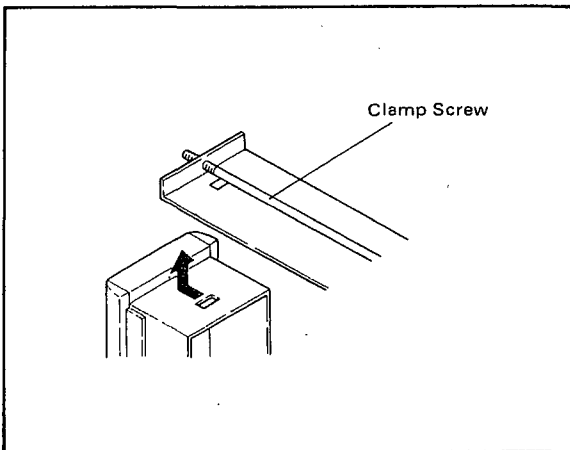


Figure 5-2. Removing the Clamp Screw - (2).

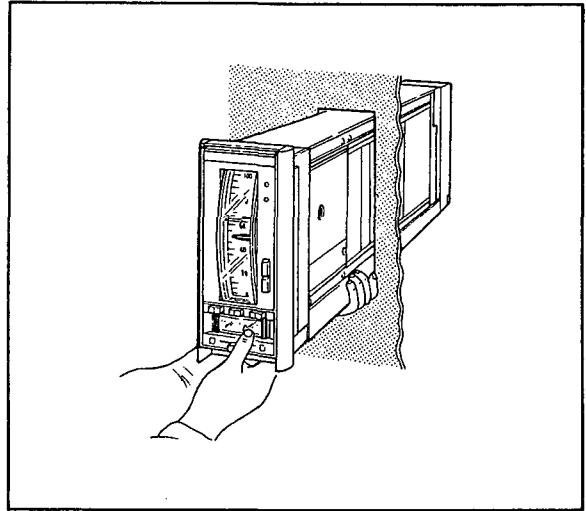


Figure 5-3. Inserting an Instrument into a Panel (1).

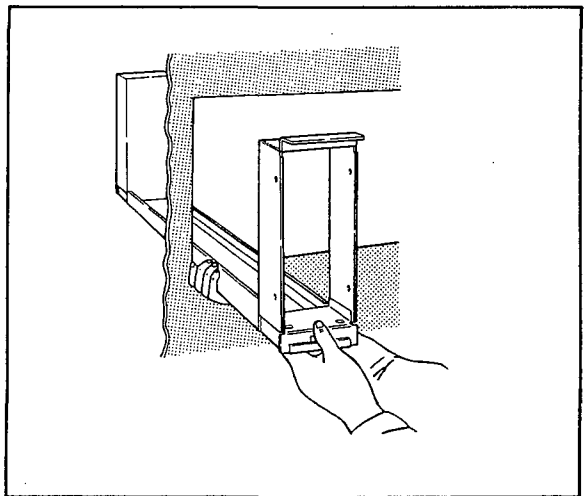


Figure 5-4. Inserting Instruments into a Panel (2).

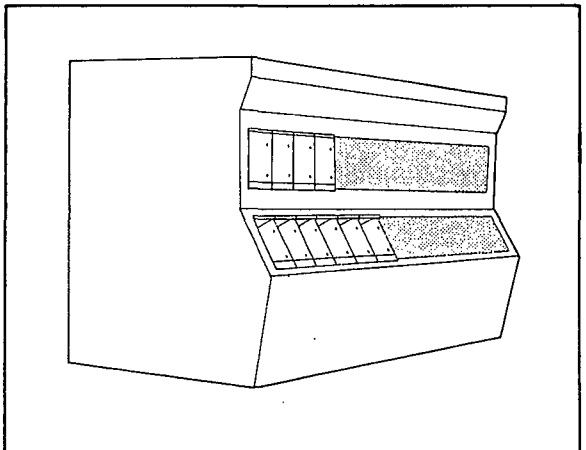


Figure 5-5. Side-by-Side Housing Installation.

- d. When installing housings in the panel, optional mounting hardware is required for side-by-side instrument installation. See Figure 5-6. Install the mounting hardware in the order described in the following steps.
- e. When all housings are installed, mount the left hand side bezel on the housing, using a stubby phillips screwdriver. See Figure 5-7.
- f. Mount the right side bezel on the housing. See Figure 5-8.
- g. Tighten the individual clamp screw so the housings are secured to the panel.
- h. Secure the right and left housings with the bracket clamps (provided) on the angle-iron to prevent horizontal shifting of the housings. See Figure 5-9.

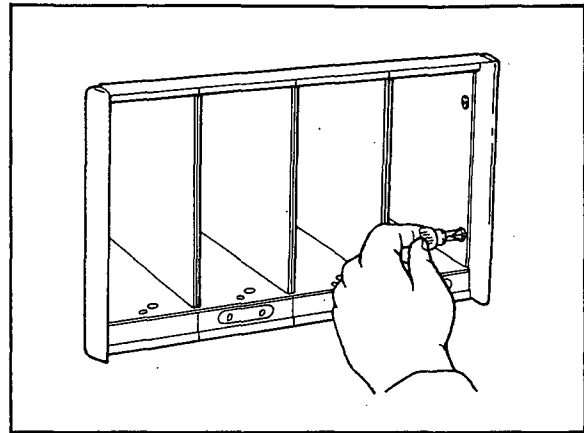


Figure 5-8. Mounting the Right Bezel.

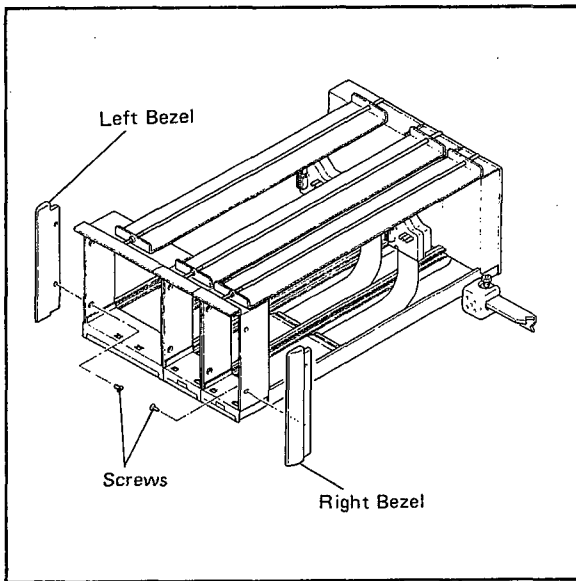


Figure 5-6. Mounting Hardware.

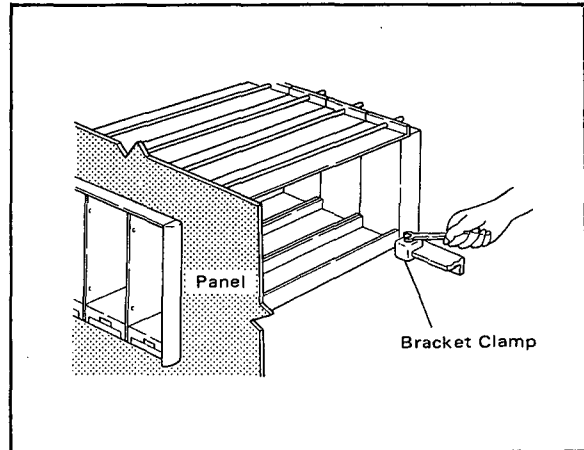


Figure 5-9. Tightening the Bracket Clamp.

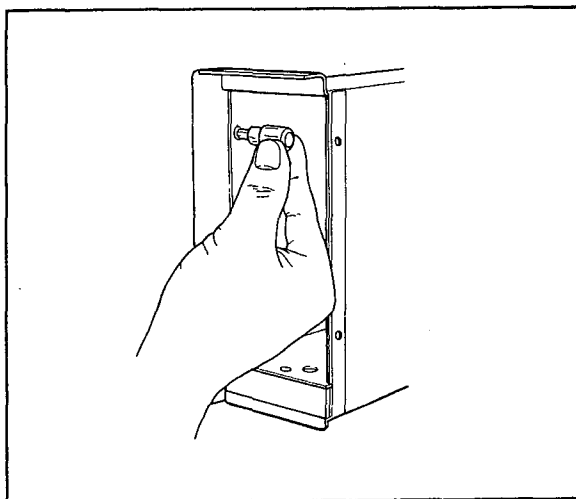


Figure 5-7. Mounting the Left Bezel.

(3) Internal Unit Installation.

- a. Plug the multipin housing connector into the socket on the rear of the internal unit. See Figure 5-10.
- b. While pressing down the stopper spring on the top of the internal unit, insert the unit into the housing. Insure that the internal unit is installed in its correct position. See Figure 5-11.

(4) Terminal Cover Installation.

After completing the wiring, install the terminal cover on the rear terminal board for safety and dust protection. See Figure 5-12.

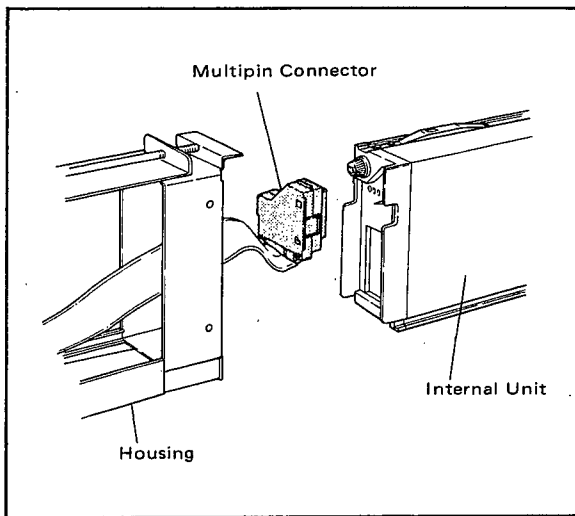


Figure 5-10. Connecting the Multipin Housing Connector.

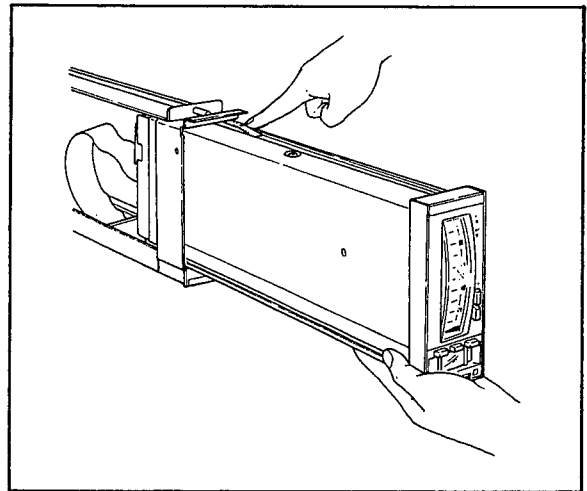


Figure 5-11. Stopper Spring.

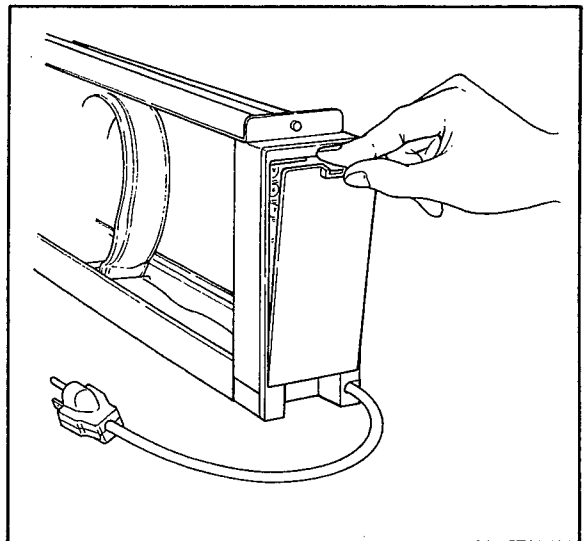


Figure 5-12. Installing the Terminal Cover.

6. WIRING.

6-1. Wiring Precautions.

- (1) Use stranded wires for internal panel wiring.
- (2) Cable ends must be furnished with solderless lugs for 4 mm terminal screws.
- (3) Power supply and ground connections.

Two-pole plug with earthing contact (100 V version: IEC A5-15, UL 498, JIS C8303; 125 V, 15 A, 220 V version: CEE7 VII CENELEC standard plug) is used to connect power supply and ground wires. Prepare outlet sockets to mate with this plug.

6-2. Wires and Solderless Lugs.

(1) Signal wires.

Conductor Nominal Sectional Area: 0.5 to 0.75 mm²
PVC insulated stranded wires (VSF) conforming to JIS C3306.

Solderless Lugs: For 4 mm terminal screws.

(2) Alarm wires.

Conductor Nominal Cross Sectional Area: 0.75 to 1.25 mm² 600 V PVC insulated stranded wire (IV)

conforming to JIS C3307 PVC insulated (KIV) wire conforming to JIS C3316.

Solderless Lugs: For 4 mm terminal screws.

- (3) Use the following wires for the power supply and ground.

Conductor Cross Sectional Area: 2.0 mm² 600 V PVC insulated stranded wires (IV) conforming to JIS C3307 PVC insulated (KIV) wire conforming to JIS C3316.

Power supply wires should be selected according to the power requirements. The wire conductor must have cross sectional area of at least 1.25 mm².

- (4) Data communication wires (for instruments with communication functions).

Use a stranded shielded wire pair (SCCD-□□□) for communication purposes.

The wire ends must be furnished with solderless lugs for 4 mm terminal screws. Connect the shielded wire to the terminal block in the Interface Unit. See Figure 6-1.

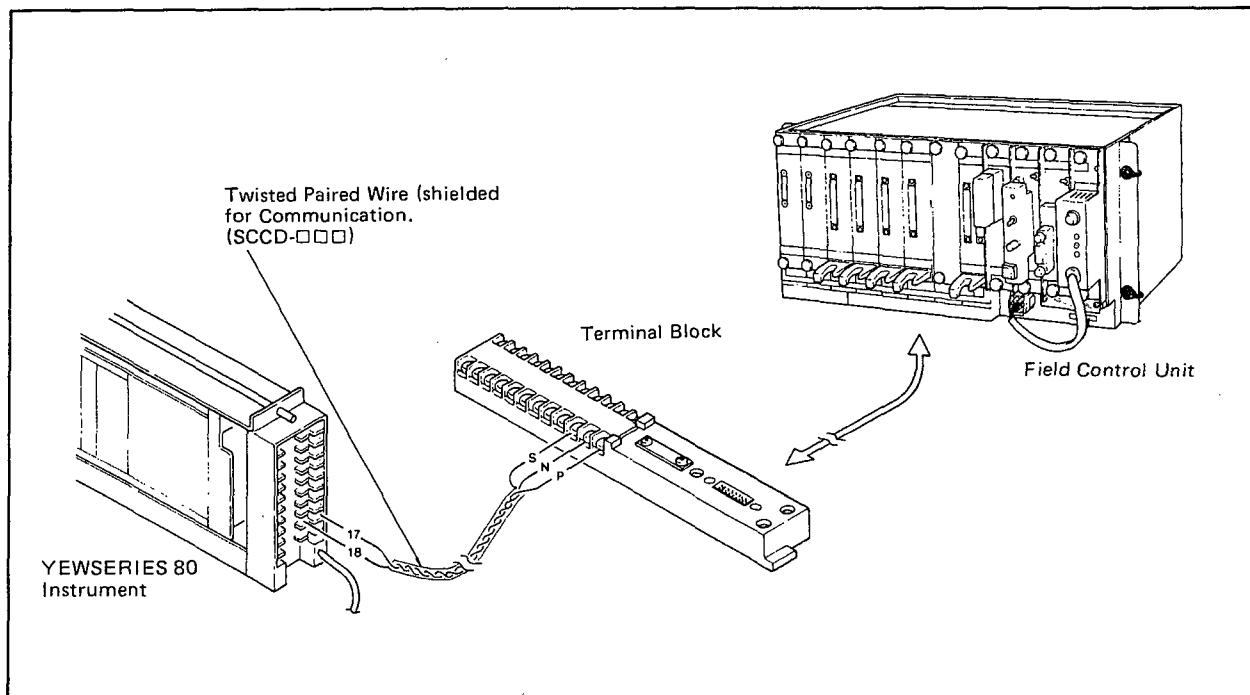


Figure 6-1. Twisted Paired Wire (shielded) for Communication.

6-3. Outlet Sockets.

Use outlet sockets which mate with two-pole plug with earthing contact (100 V version: IEC A5-15, UL 498, JIS C8303; 125 V, 15 A, 220 V version: CEE7 VII CENELEC standard plug). Install these sockets on the bracket and pass the wires through the cable

duct. This simplifies the wiring between the power supply and ground, and simplifies the maintenance checks.

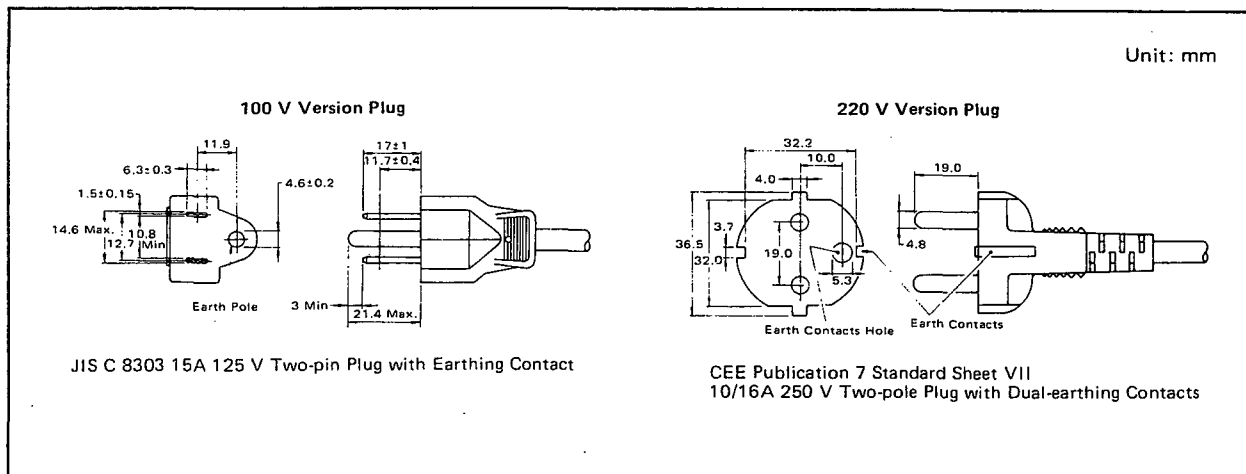


Figure 6-2. YEW SERIES 80 Instrument Plug Dimensions

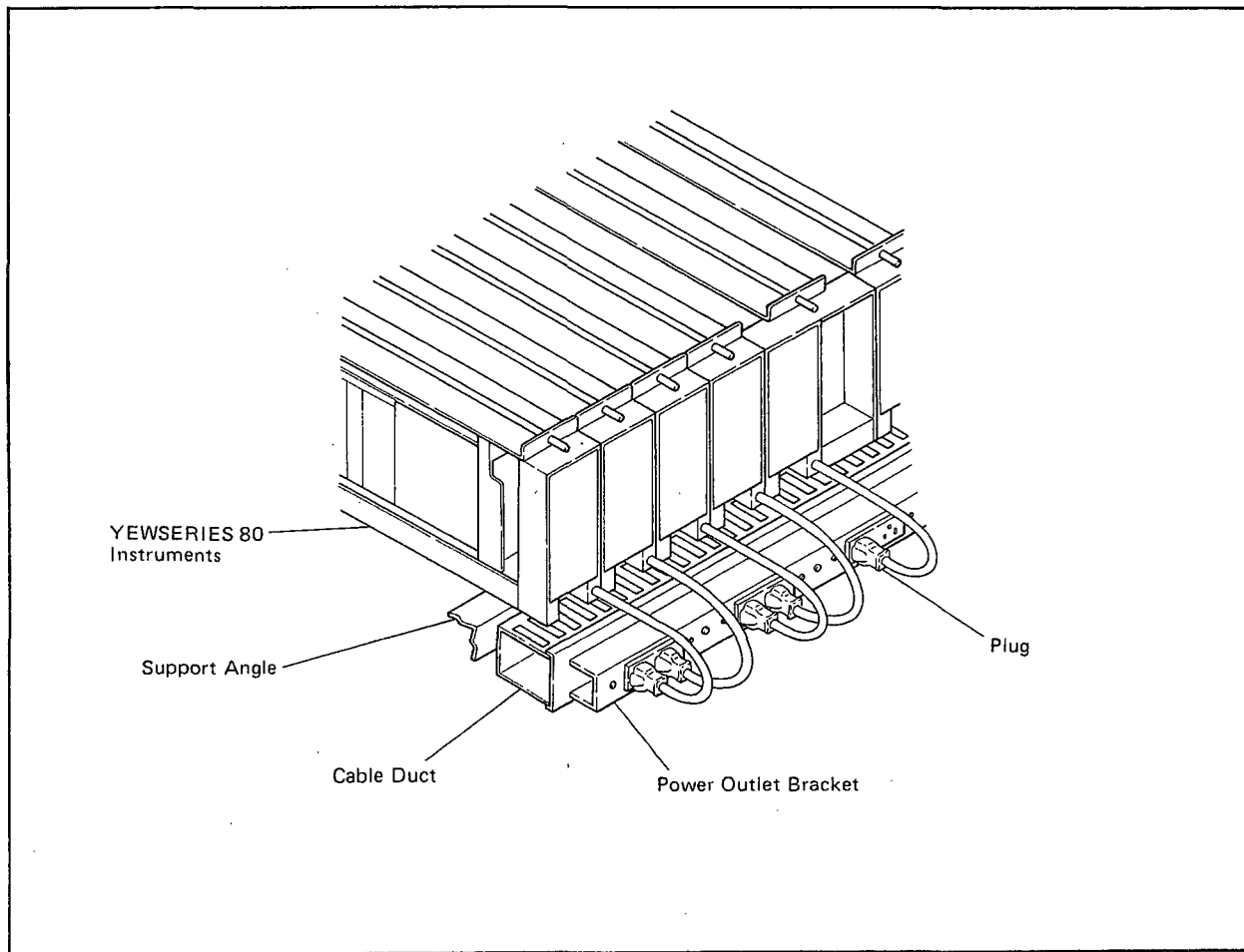


Figure 6-3. Installation of the Multiple Outlet Socket Strip.

6-4. Power Supply and Ground Wiring for Long Housing (option/LH).

The long housing is provided with terminals for power supply and ground wiring. Use the following types of wires and solderless lugs for wiring.

Conductor Nominal Sectional Area: 1.25 to 2.00 mm²

Example of suitable wire:

600 V Grade polyvinyl chloride insulated wire (IV) Stranded wire (JIS C3307) or 600 V Grade polyvinyl chloride insulated wire for Electrical Apparatus (KIV) stranded wire (JIS C3316).

Solderless lugs: For 4 mm terminal screws.
Round lugs.

After wiring, be sure to replace the power supply terminal cover.

Refer to instruction manual IM 1B4B2-04E SRHD Intelligent recorder with signal conditions for SRHD (long housing) wiring.

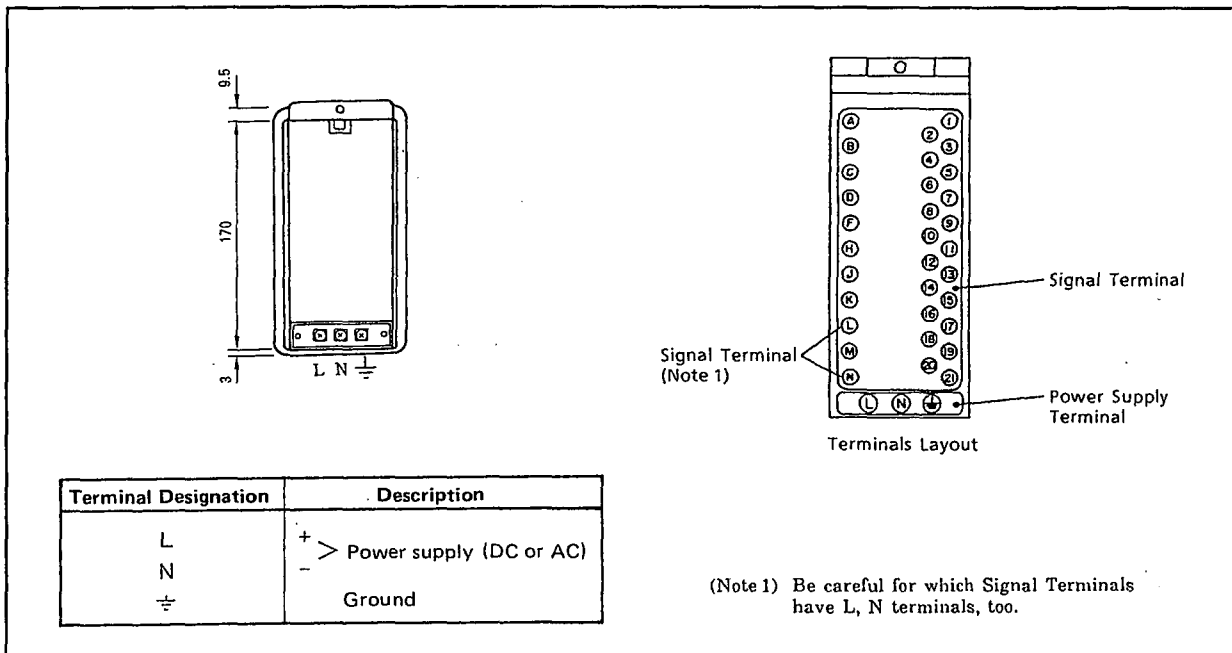


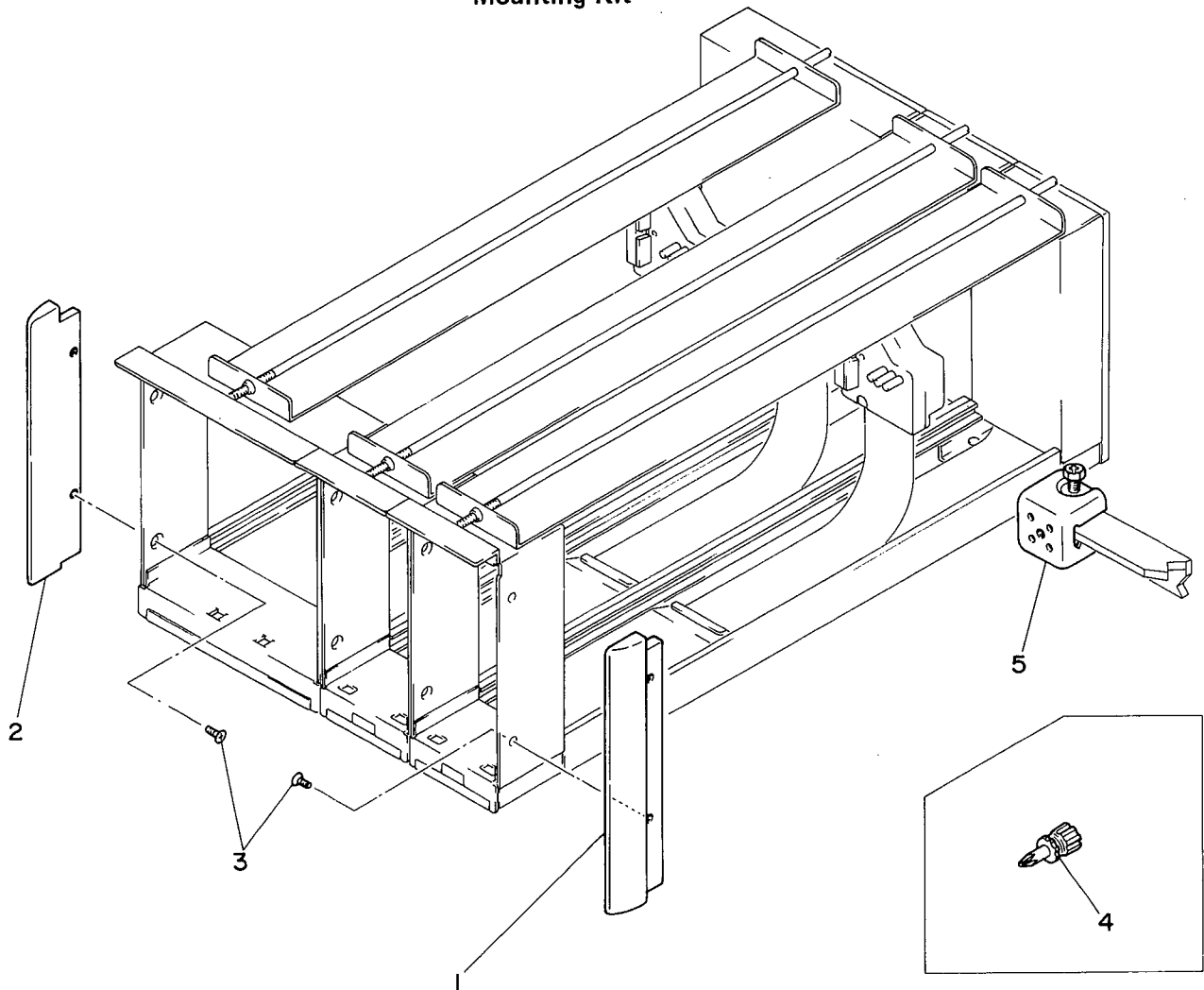
Figure 6-4. Power Supply and Ground Wiring.

Customer Maintenance Parts List

Model MTS Mounting Kit
Model SHUP Housing Kit

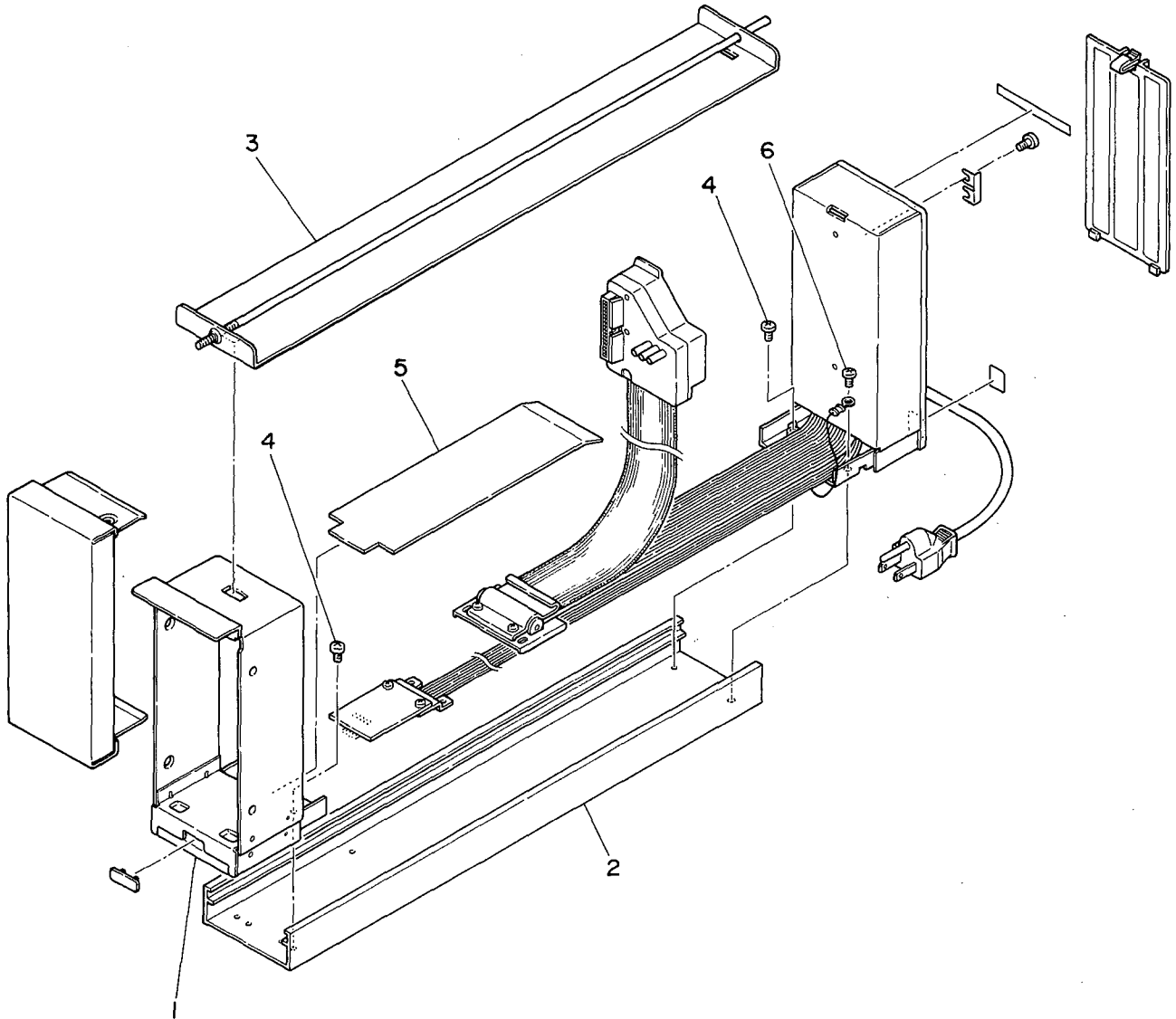
YEW SERIES 80

Mounting Kit

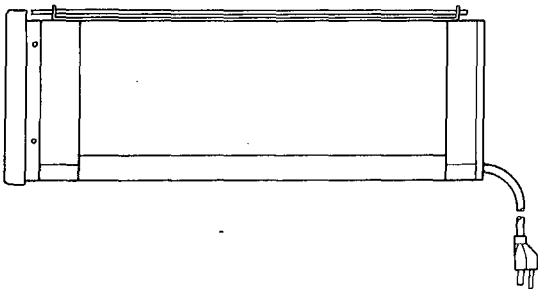


Item	Part No.	Qty	Description
1	E9310CK	1	Bezel (Right Side, Standard Color: Black)
2	E9310CL	1	Bezel (Left Side, Standard Color: Black)
3	Y9406EB	4	F.H. Screw, M4 x 6
4	E9310CT	1	Screw Driver
5	E9310DT	2	Lock Vice Assembly

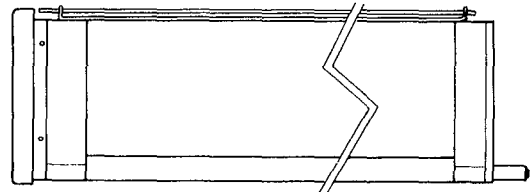
Housing Kit



Model SHUP-000

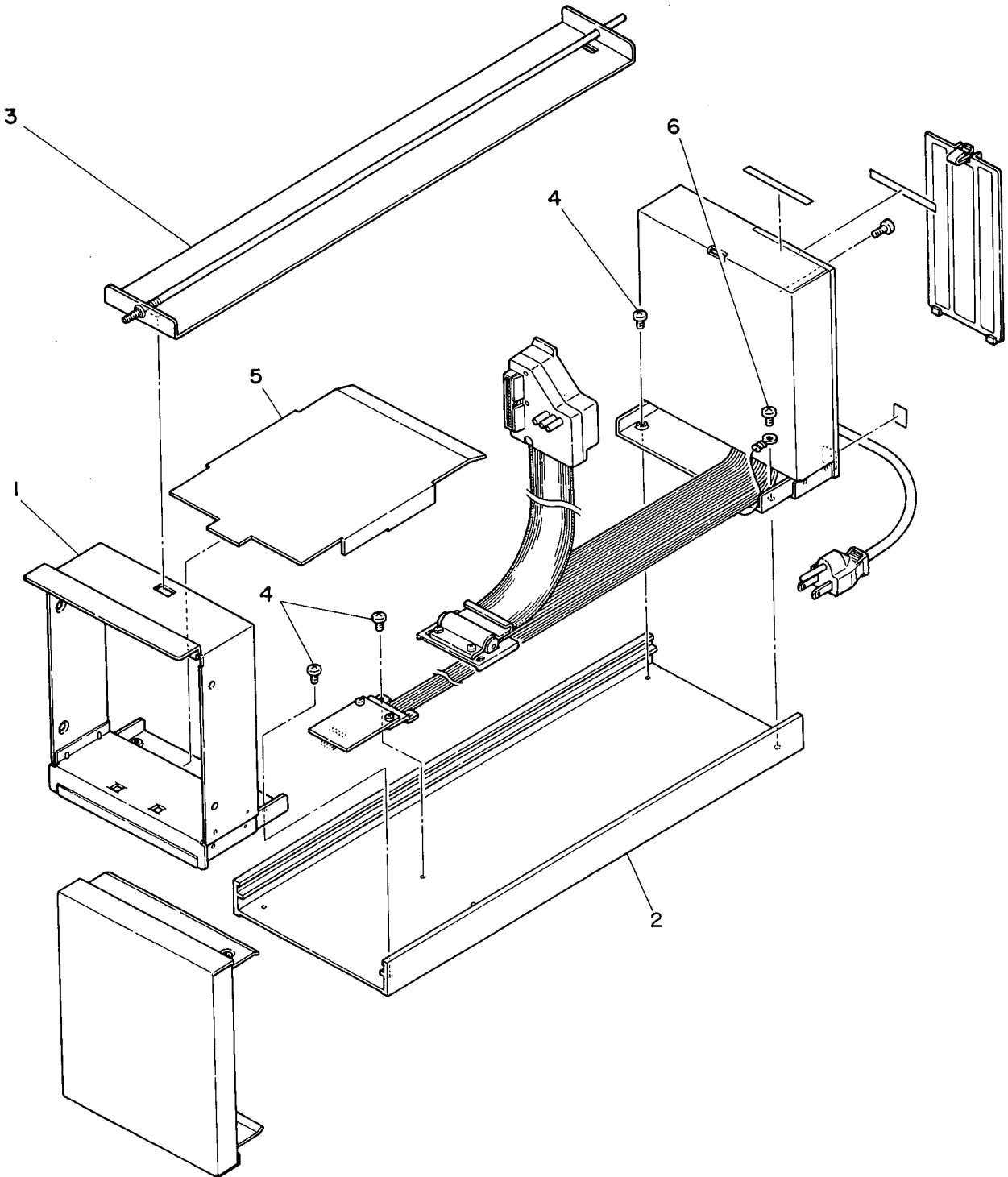


Model SHUP-100



Item	Part No.	Model	Qty		Description
			SHUP-000	SHUP-100	
1	E9710CA		1	1	Frame Assembly
2	E9710CK		1		Frame
	E9710CR			1	Frame
3	E9710CM		1		Clamp Assembly
	E9710CT			1	Clamp Assembly
4	Y9306JB		7	7	Pan H. Screw, M3 x 6
5	E9710CQ		1		Plate
	E9710FP			1	Plate
6	Y9406JB		1	1	Pan H. Screw, M4 x 6

Model SHUP-200 Housing Kit



<u>Item</u>	<u>Part No.</u>	<u>Qty</u>	<u>Description</u>
1	E9721UA	1	Frame Assembly
2	E9721TF	1	Frame
3	E9710CM	1	Clamp Assembly
4	Y9306JB	7	Pan H. Screw, M3 x 6
5	E9721TE	1	Plate
6	Y9406JB	1	Pan H. Screw, M4 x 6

YOKOGAWA

Yokogawa Electric Corporation

YOKOGAWA ELECTRIC CORPORATION

Network Solutions Business Div.

2-9-32, Nakacho, Musashino-shi, Tokyo, 180-8750 JAPAN

Phone: +81-422-52-7179 Facsimile: +81-422-52-6793

Sales Branch Offices

Tokyo, Nagoya, Osaka, Hiroshima, Fukuoka

YOKOGAWA CORPORATION OF AMERICA

Headquarters

2 Dart Road, Newnan, GA. 30265-1094 U.S.A.

Phone: +1-770-253-7000 Facsimile: +1-770-251-0928

Sales Branch Offices / Texas, Chicago, Detroit, San Jose

YOKOGAWA EUROPE B. V.

Headquarters

Databankweg 20, 3821 AL Amersfoort THE NETHERLANDS

Phone: +31-334-64-1611 Facsimile: +31-334-64-1610

Sales Branch Offices / Houten (The Netherlands), Wien (Austria), Zaventem (Belgium), Ratingen (Germany), Madrid (Spain), Bratislava (Slovakia), Runcorn (United Kingdom), Milano (Italy), Velizy villacoublay(France), Johannesburg(Republic of South Africa)

YOKOGAWA AMERICA DO SUL S.A.

Headquarters & Plant

Praca Acapulco, 31-Santo Amaro, Sao Paulo/SP, BRAZIL CEP-04675-190

Phone: +55-11-5681-2400 Facsimile: +55-11-5681-4434

YOKOGAWA ENGINEERING ASIA PTE. LTD.

Head office

5 Bedok South Road, Singapore 469270 SINGAPORE

Phone: +65-6241-9933 Facsimile: +65-6241-2606

YOKOGAWA ELECTRIC KOREA CO., LTD.

Seoul Sales office

395-70, Shindaebang-dong, Dongjak-gu, Seoul,156-010, KOREA

Phone: +82-2-3284-3000 Facsimile: +82-2-3284-3019

YOKOGAWA TAIWAN CORPORATION

Head office

17F, No.39, Sec. 1, Chung Hwa Road Taipei, 100 TAIWAN

Phone: +886-2-2314-9166 Facsimile: +886-2-2314-9918

YOKOGAWA AUSTRALIA PTY. LTD.

Head office

Centrecourt D1, 25-27 Paul Street North, North Ryde, N. S. W. 2113, AUSTRALIA

Phone: +61-2-9805-0699 Facsimile: +61-2-9888-1844

YOKOGAWA INDIA LTD.

Head office

40/4 Lavelle Road, Bangalore, 560 001, INDIA

Phone: +91-80-227-1513 Facsimile: +91-80-227-4270

LTD. YOKOGAWA ELECTRIC

Grokholskiy per. 13, Build. 2, 4th Floor, 129010, Moscow, RUSSIA FEDERATION

Phone: +7-095-737-7868 Facsimile: +7-095-737-7869
