

INSTRUCTION MANUAL
FOR THE
WJ-8626A-4/MPSA & WJ-8628-4/MPSA
POWER SUPPLY

WATKINS-JOHNSON COMPANY
700 QUINCE ORCHARD ROAD
GAITHERSBURG, MARYLAND USA 20878

June 1988

WARNING

This equipment utilizes voltages which are potentially dangerous and may be fatal if contacted. Exercise extreme caution when working with the equipment when any protective cover has been removed.

PROPRIETARY STATEMENT

This document and subject matter disclosed herein are proprietary items to which Watkins-Johnson Company retains the exclusive right of dissemination, reproduction, manufacture and sale.

This document is provided to the individual or using organization for their use alone in the direct support of the associated equipment unless permission for further disclosure is expressly granted in writing.

CUSTOMER SERVICE INFORMATION

EQUIPMENT MALFUNCTIONS

This unit was thoroughly inspected and factory adjusted for optimum performance prior to shipment. If an apparent malfunction is encountered after installation, verify that the correct input signals are present at the proper connectors. Prior to taking any corrective maintenance action or breaking any seals, contact your Watkins-Johnson representative, or the Watkins-Johnson Company Service Department to prevent the possibility of voiding the terms of the warranty. Contact the Watkins-Johnson Company via mail, telephone, wire, or cable at:

Watkins-Johnson Company
Company Service Department
700 Quince Orchard Road
Gaithersburg, Maryland 20878-1794

Toll Call: (301) 948-7550 Ext. 7201
TELEX: 89-8402
TWX: 710-828-0546
TELEFAX: (301) 921-9479
EASYLINK: 62928185

If reshipment is necessary, follow the instructions in the following paragraph (Preparation for Reshipment or Storage). Do not return the equipment until a Return for Maintenance Authorization (RMA) number has been obtained from the Watkins-Johnson Company's Customer Service Department. See Item 10 in the **General Terms and Conditions of Sale** paper (WJ Form # WJ-151-X) for more information on equipment returns.

PREPARATION FOR RESHIPMENT OR STORAGE

If the unit must be prepared for reshipment, the packaging method should follow the pattern established in the original shipment. Use the best packaging materials available to protect the unit during reshipment or storage. When possible, use the original packing container and cushioning materials. If the original packing materials are not available, use the following procedure:

1. Wrap the unit in sturdy paper or plastic.
2. Place the wrapped unit in a strong shipping container and place a layer of shock-absorbing material (3/4-inch minimum thickness) around all sides of the unit to provide a firm cushion and to prevent movement inside the container.

CUSTOMER SERVICE INFORMATION

3. If shipping the unit for service, fill out all information on the 5x6 PRODUCT DISCREPANCY REPORT card (WJ Form # WJC-QA55-0) that was provided with the original shipment. Also ensure that the Return for Maintenance Authorization (RMA) number is recorded on the card. If this card is not available, attach a tag to the unit containing the following information:
 - a. Return for Maintenance Authorization (RMA) number.
 - b. The Watkins-Johnson Type/Model number of the equipment.
 - c. Serial number.
 - d. Date received.
 - e. Date placed in service.
 - f. Date of failure.
 - g. Warranty adjustment requested, yes or no.
 - h. A brief description of the discrepant conditions.
 - i. Customer name and return address.
 - j. Original Purchase Order/Contract number.
4. Thoroughly seal the shipping container and mark it **FRAGILE**.
5. Ship to:

Watkins-Johnson Company
700 Quince Orchard Road
Gaithersburg, Maryland 20878-1794
U.S.A

When storing the equipment for extended periods, follow the above packing instructions to prevent damage to the equipment. The safe limits for storage environment are:

Temperature: -40 to +70°C
Humidity: less than 95%

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SECTION I
GENERAL DESCRIPTION

SECTION I

GENERAL DESCRIPTION

1.1 ELECTRICAL CHARACTERISTICS

The WJ-8626A-4/MPSA and the WJ-8628-4/MPSA are electrically identical modular power supply assemblies designed to permit operation of the WJ-8626A-4 and the WJ-8628-4 Receivers outside of a WJ-9040/EFR Equipment Frame. These assemblies provide all dc voltages required for receiver operation. In addition, a 50 MHz reference generator, contained within the power supply housing, provides two 50 MHz reference signals. Two of these 50 MHz reference signals are required by the WJ-8628-4 Receiver, while only one 50 MHz reference signal is required by the WJ-8626A-4 Receiver. An internal DIP switch allows this reference generator to be configured to derive its 50 MHz output from an internal oscillator or from external 1, 5, or 10 MHz reference input at J6. The WJ-8626A-4/MPSA and the WJ-8628-4/MPSA accept ac power inputs of either 115 Vac or 230 Vac. Table 1-1 lists the dc operating voltages provided by the MPSAs as well as other electrical specifications.

1.2 MECHANICAL SPECIFICATIONS

The WJ-8626A-4/MPSA and the WJ-8628-4/MPSA are mechanically similar. As shown in Figure 1-2, the MPSA is a box-like assembly that mounts to the rear panel of the receiver. Its mechanical specifications are listed in Table 1-1.

The top panel of each MPSA contains two SMA 50 MHz Reference output connectors and a SMA Reference Input connector that accepts a 1, 5, or 10 MHz external reference signal. The top panel of the MPSA also contains a removable cover plate that allows access to three DIP switches used to select what reference signal will be used to derive the 50 MHz output. The rear panel of the MPSA, which faces away from the rear panel of the receiver, contains a fuse/power input assembly and a power ON/OFF switch.

The front panels of the WJ-8626A-4/MPSA and the WJ-8628-4/MPSA are mechanically different. The mechanical difference between the front panel of these two MPSAs lies in the number of D-type connectors used to source dc operating voltages to the receiver. The front panel of the WJ-8626A-4/MPSA contains one D-type connector for this purpose. In contrast, the dc voltages required to operate the WJ-8628-4 are routed from the WJ-8628-4/MPSA through two D-type connectors. Figures 1-1a and 1-1b depict the differences between the two front panels. The bracket used to mount the MPSA to the receiver is also mechanically different. The differences in part numbers are noted in Table 3-1.

When the MPSA is installed in a system that includes a frequency extender, there are small mechanical differences that allow a more convenient connection of the frequency extender "INPUT" connector. The removable plate that covers the DIP switches is replaced by a combination bracket/cover, which contains an SMA connector and a cable assembly. These mechanical differences are also noted on Table 3-1.

GENERAL DESCRIPTION

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

Table 1-1. Table of Specifications

Standard Equipment Frame Interface	D-series connector(s)
Frequency Reference Outputs	Two 50 MHz sine wave outputs, 0 dBm minimum, SMA female, 50 ohms nominal impedance
Reference Stability	Internal: ±1 ppm, 0-50 degrees C ±3 ppm, per year External: Depends on site reference
External Reference Input	1, 5 or 10 MHz, TTL level at 50 ohms
Output Voltages/Currents Provided	29.0 Vdc @ 29 mA 18.3 Vdc @ 612 mA -18.3 Vdc @ 336 mA 8.2 Vdc @ 1040 mA
Size:	
Height	2.94 inches (7.47 cm)*
Width	7.70 inches (19.6 cm)
Depth	4.70 inches (11.9 cm)
Power Requirement	90 to 130 Vac or 180 to 260 Vac, at 47 to 450 Hz
Weight	2.3 pounds (1.4 kg)
Cooling	Convection
Operating Temperature	0 to 50 degrees C

* WJ-8628-4/MPSA Power Supplies with serial numbers under 185 are 3.25 inches (8.25 cm) in height

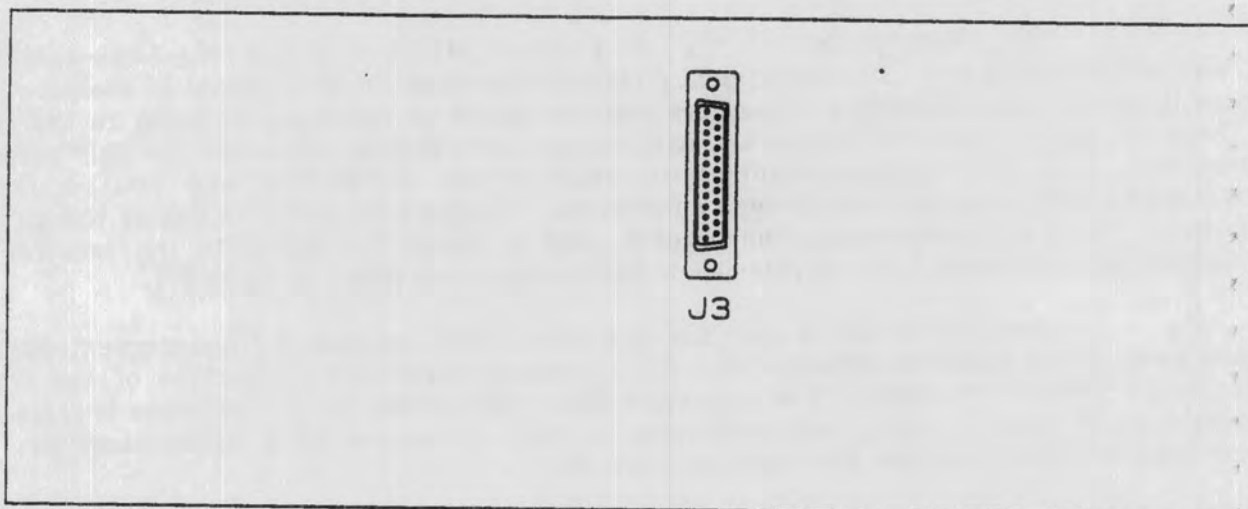


Figure 1-1a. WJ-8626A-4/MPSA Power Supply Front Panel

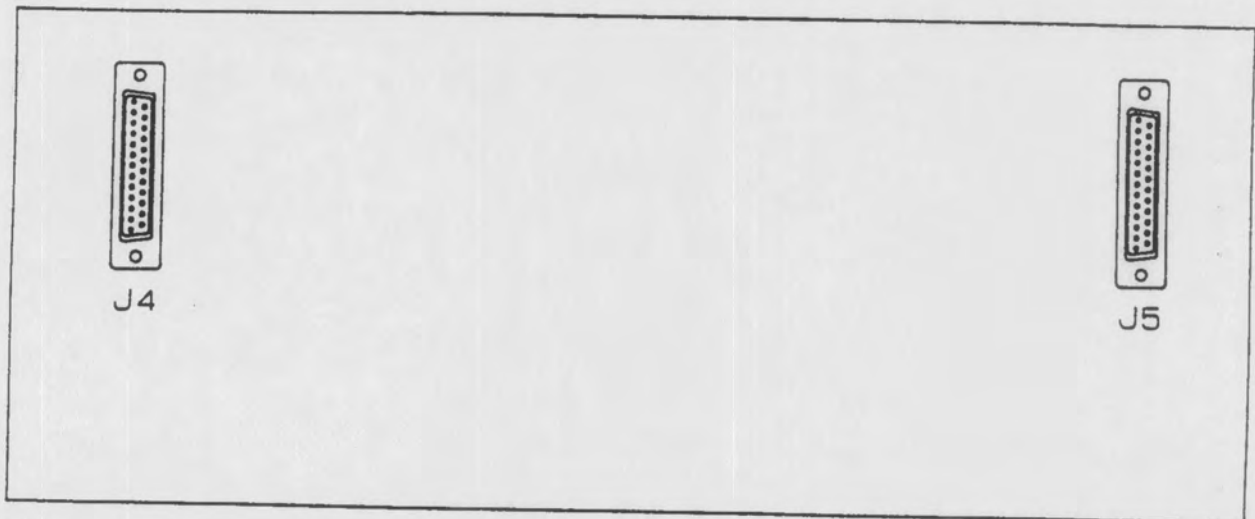


Figure 1-1b. WJ-8628-4/MPSA Power Supply Front Panel

1.3

EQUIPMENT SUPPLIED

The following equipment is supplied with the WJ-8626A-4/MPSA Power Supply:

- One six inch coaxial cable with an "SMA" connector installed

The following equipment is supplied with the WJ-8628-4/MPSA Power Supply:

- One six inch coaxial cables with "SMA" connectors installed

NOTE: Two extra cables are supplied when the WJ-8628-4/MPSA Power Supply is installed on a receiver with the Frequency Extender option.

1.4

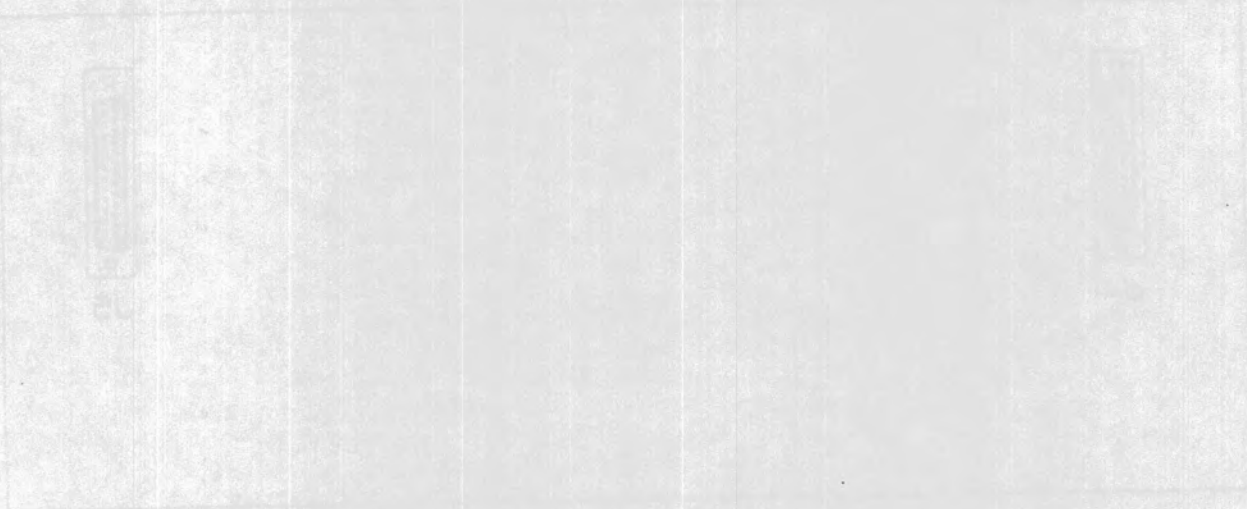
EQUIPMENT REQUIRED BUT NOT SUPPLIED

No additional equipment is required to operate the power supply.

GENERAL DESCRIPTION

WJ-8626A-4/MP3A & WJ-8628-4/MP3A

NOTES



SECTION II
INSTALLATION AND OPERATION

SECTION II

INSTALLATION AND OPERATION

2.1 UNPACKING AND INSPECTION

Examine the shipping carton for damage before the equipment is unpacked. If the carton's exterior appears to be damaged, try to have the carrier's agent present when the equipment is unpacked. If this is not possible, retain all packing material and shipping containers for the carrier's inspection if damage to the equipment is evident after it has been unpacked. Also, verify that the equipment is complete as listed on the packing slip. Contact the Watkins-Johnson Company or your Watkins-Johnson representative for any discrepancies or shortages.

2.2 INSTALLATION

The Type WJ-8626A-4/MPSA and WJ-8628-4/MPSA power supplies are shipped from the factory installed to the appropriate receiver. No customer mechanical installation is required. Configuration of power supply input voltage and Reference Generator may be required. Table 2-1 provides a list of connectors and their signal or voltage input/output.

2.2.1 CONFIGURATION

Before the unit is turned "ON" however, the power supply should be checked to be sure that the power supply has been configured for the supply line voltage to be used. The present input line voltage value can be seen by looking into the fuse holder, down on the printed circuit card. Either "115" or "230" will be seen through the cut-out in the fuse holder compartment. Also make sure the proper fuse is installed.

If the input voltage is set to the incorrect value, the power supply may be changed to the proper setting by removing the AC power cord from the unit. Next, pull the tab at the Fuse holder marked "PULL FUSE" and remove the fuse. Then remove the small printed circuit card located at the bottom of the compartment by pulling the printed card outward from the supply. (A small hole is provided in the printed circuit card for this purpose.) Turn the printed circuit card over and re-insert the card. Note that the number shown on the top of the card as it is re-installed, indicates the operating voltage. Replace the fuse with the proper fuse. A one ampere fuse is used for 115 Vac and one-half ampere fuse is used for 230 volts. Slide the fuse compartment cover over the fuse and re-connect the AC power cord.

The WJ-8626A-4/MPSA and the WJ-8628-4/MPSA power supplies contain a 50 MHz Reference Generator. The 50 MHz reference output can be generated from an internal reference oscillator or an external 1 MHz, 5 MHz or 10 MHz reference. A three part dip switch, S1 is used for configuration of the Reference Generator.

Table 2-1. Table of Connector Signals

Connector Designation	Signal/Voltage	Input or Output
J1	50 MHz Reference	Output
J2	50 MHz Reference	Output
J3	Power (8626-4/MPSA) Pin 5 PWR GND #1 Pin 6 +29 Vdc Pin 7 +18.3 Vdc Pin 8 +8.2 Vdc Pin 18 PWR GND #2 Pin 19 -18.3 Vdc Pin 20 +8.2 Vdc	Output
J4	Power (8628-4/MPSA) Pin 5 PWR GND #1 Pin 6 +29 Vdc Pin 7 +18.3 Vdc Pin 8 +8.2 Vdc Pin 18 PWR GND #2 Pin 19 -18.3 Vdc Pin 20 +8.2 Vdc	Output
J5	Power (8628-4/MPSA) Pin 5 PWR GND #1 Pin 6 +29 Vdc Pin 7 +18.3 Vdc Pin 8 +8.2 Vdc Pin 18 PWR GND #2 Pin 19 -18.3 Vdc Pin 20 +8.2 Vdc	Output
J6	1 MHz, 5 MHz, or 10 MHz External Reference	Input
P1 (AC Receptacle)	AC line plus ground	Input

Figure 2-1 illustrates the the proper positions for each of pole of switches S1-1, S1-2 and S1-3. The switch is covered by a small aluminum plate near the center, of the power supply top cover. The plate is held by two screws. Removing these screws will allow removal of the cover plate. The DIP switch may then be configured for either a 1, 5 or 10 MHz external reference. Note that S1-1 and S1-2 must be set to configure the external reference input, if used. S1-3 is used to either lock the 50 MHz reference oscillator or to unlock it, as required by the user. The proper position for the sections of S1 are listed in Table 2-2.

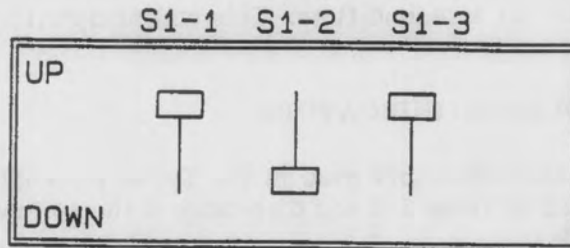


Figure 2-1. S1 DIP Switch Configuration Illustration

Table 2-2. Reference Generator Switch S1 Configuration

Reference Selection	S1-1	S1-2	S1-3
External 1 MHz	UP	UP	DOWN
External 5 MHz	UP	DOWN	DOWN
External 10 MHz	DOWN	DOWN	DOWN
Internal 50 MHz	X	X	UP

X = Does Not Matter

2.3

EQUIPMENT MALFUNCTIONS

This unit was thoroughly inspected and factory adjusted for optimum performance prior to shipment. If malfunctions are encountered after following the recommended installation procedures, **paragraph 2.2**, verify the correct input signals are present at the proper jacks. Contact your Watkins-Johnson representative or the Watkins-Johnson Company Communication Electronics Technology Division, Gaithersburg, Maryland, USA prior to undertaking any corrective maintenance action, to prevent possible warranty voiding.

INSTALLATION AND OPERATION

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

2.4 **OPERATION**

The WJ-8626A-4/MPSA and WJ-8628-4/MPSA power supplies contain one control and one indicator. These are listed in **Table 2-3**. The operation of the power supply consists of pressing the AC Power Switch (S1) in to turn "ON" the power supply. This will also turn "ON" the pilot lamp (DSP1), which is located inside of the switch housing. The power supply is turned "OFF" by pressing switch S1 a second time. This will also extinguish the pilot lamp.

2.4.1 **CONTROLS AND INDICATORS**

Controls and indicators used in the Types WJ-8626A-4/MPSA and WJ-8628-4/MPSA power supplies are listed in **Table 2-3** and discussed in the following paragraphs. The rear panel is illustrated in **Figure 2-2**.

Table 2-3. Table of Controls and Indicators

Control or Indicator	Function
Power Push On/Off Switch S1	Connects/disconnects AC power to the power supply
DS1 Indicator	Power Supply "ON"/"OFF" indicator.

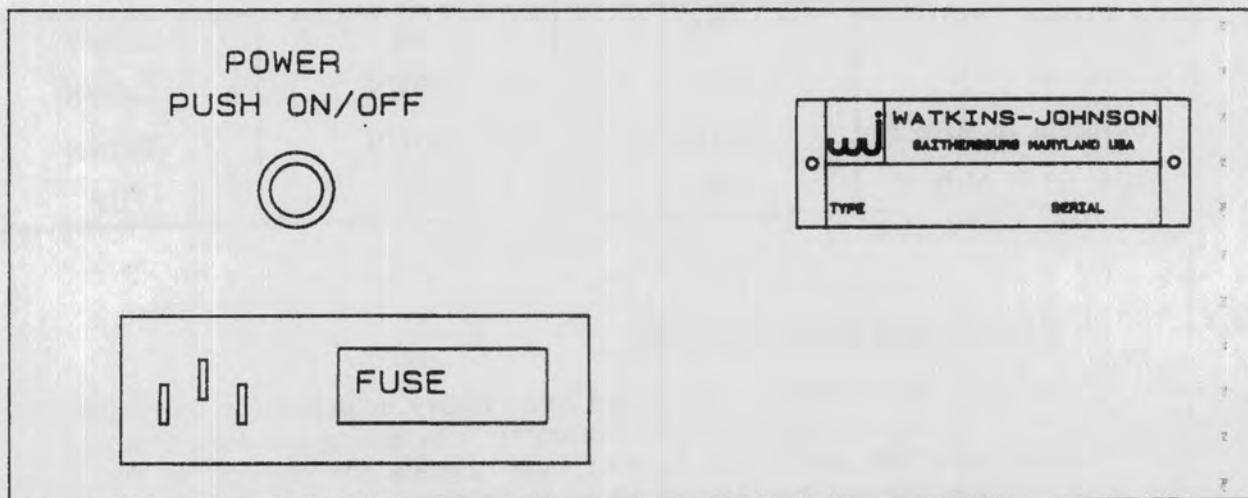


Figure 2-2. WJ-8626A-4/MPSA & WJ-8628-4/MPSA Rear Panel

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

INSTALLATION AND OPERATION

2.4.1.1 **POWER PUSH ON/OFF S1** - This is a push type switch that toggles between "OFF" and "ON". It is used to connect/disconnect the AC power from the power supply.

2.4.1.2 **DS1** - DS1 is an AC "ON" indicator which is located within the knob of the AC ON/OFF switch. The indicator illuminates when the AC power is "ON".

2.5 **PREPARATION FOR RESHIPMENT**

If the unit is to be prepared for reshipment, follow the packaging methods established in the original shipment. If the original packaging container and materials have been retained and are in good condition, they may be again be used or at least provide guidance for the repackaging effort.

INSTALLATION AND OPERATION

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

NOTES

SECTION III
REPLACEMENT PARTS LIST

SECTION III

REPLACEMENT PARTS LIST

3.1 UNIT NUMBERING METHOD

The method of numbering used throughout the unit is assigning reference designations (electrical symbol numbers) to identify: assemblies, subassemblies, modules within a subassembly, and discrete components. An example of the unit numbering method used is as follows:

Subassembly Designation A1

Identify from right to left as:

R1 Class and No. of Item

First (1) resistor (R) of
First (1) subassembly (A)

On the main chassis schematic, components which are an integral part of the main chassis have no subassembly designations.

3.2 REFERENCE DESIGNATION PREFIX

The use of partial reference designations are used on the equipment and on the manual illustrations. This partial reference designation consists of the component type letter(s) and the identifying component number. The complete reference designation may be obtained by placing the proper prefix before the partial reference designation. Reference designation prefixes are included on the drawings and illustrations in the figure titles (in parenthesis).

3.3 LIST OF MANUFACTURERS

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
01295	Texas Instruments, Inc. Semiconductor-Components Div. 13500 North Central Expressway Dallas, TX 75231	08108	Lamp Industry for use with industry designations and abbreviations for lamps.
04713	Motorola, Incorporated Semiconductor Products Div. 5005 East McDowell Road Phoenix, AZ 85008	09021	Airco, Inc. Airco Electronics Bradford, PA 17055
05245	Corcom, Inc. 1600 Winchester Road Libertyville, IL 60048-1267	14632	Watkins-Johnson Company 700 Quince Orchard Road Gaithersburg, MD 20878

REPLACEMENT PARTS LIST

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

<u>Mfr. Code</u>	<u>Name and Address</u>	<u>Mfr. Code</u>	<u>Name and Address</u>
15542	Mini-Circuits Laboratories Division of Scientific Components Corp. 2625 E. 14th Street Brooklyn, NY 11235	71279	Cambridge Thermionic Corp. 445 Concord Avenue Cambridge, MA 02138
18324	Signetics Corporation 811 East Arques Avenue Sunnyvale, CA 94086	71468	ITT Cannon Electric 10550 Talbert Avenue P.O. Box 8040 Fountain Valley, CA 92708
19505	Applied Eng. Products, Co. Division of Samarious, Inc. 300 Seymour Avenue Derby, CT 06418	80131	Electronic Industries Assoc. 2001 Eye Street, N.W. Washington, D.C. 20006
33095	Spectrum Control, Inc. 152 E. Main Street Fairview, PA 16415	81073	Grayhill, Incorporated 561 Hillgrove Avenue P.O. Box 10373 La Grange, IL 60525-5914
51642	Centre Engineering, Inc. 2820 East College Avenue State College, PA 16801-7515	81349	Military Specifications
52648	Plessey Semiconductors 1641 Kaiser Avenue Irvine, CA 92714	87034	Marco-Oak Industries 207 South Helena Street Anaheim, CA 92803
56289	Sprague Electric Company 87 Marshall Street North Adams, MA 01247	96906	Military Standards
59660	Tusonix, Inc. 2155 North Forbes Blvd. Tuscon, AZ 85745	98291	Sealectro Corporation 40 Lindeman Drive Trumbull, CT 06611
		99800	American Precision Ind., Inc. Delevan Electronics Division 270 Quaker Road East Aurora, NY 14052-2114

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

REPLACEMENT PARTS LIST

3.4

PARTS LIST

The following parts lists contain all the electrical components used in the unit, along with mechanical parts which may be subject to unusual wear or damage. When ordering replacement parts from the Watkins-Johnson Company, specify the unit type and serial number. Also include the reference designation and the description of each item ordered. The list of manufacturers, provided in **paragraph 5.3**, and the manufacturer's part number, provided in **paragraph 5.5**, are supplied as a guide to aid the user of the equipment while in the field. The parts listed may not necessarily be identical with the parts installed in the unit. The parts listed in **paragraph 5.5** will provide for satisfactory unit operation.

Replacement parts may be obtained from any manufacturer provided that the physical characteristics and electrical parameters of the replacement item are compatible with the original part. In the case where components are defined by a military or industrial specification, a vendor which can provide the necessary component is suggested as a convenience to the user.

REPLACEMENT PARTS LIST

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

3.5 TYPE 8628-4/MPSA MODULAR POWER SUPPLY

REF DESIG PREFIX PS

REF DESIG	DESCRIPTION	QTY PER ASSY	MANUFACTURER'S PART NO.	MFR. CODE	RECM VENDOR
AI	Mounting Bracket	1	See Note	14632	
AI1	Screw, Machine		MS51957-14	96906	
AI1	Mounting Block Left	1	271396-1	14632	
AI3	Washer, Lock		MS35338-135	96906	
AI4	Washer, Flat		MS15795-803	96906	
AI5	Screw, Machine	1	MS51957-18	96906	
A1	1 MHz, 5 MHz Site	1	371343-3	14632	
C1	Capacitor, Ceramic, Feedthru: .05 μ F, 300 V	3	54-785-005-503P	33095	
C2	Same as C1				
C3	Same as C1				
DS1	Lamp, Incandescent	1	345	08108	
E1	Terminal	7	013-5702-709	98291	
E2 Thru E7	Same as E1				
FL1	Filter	1	6J4	05245	
J1	Connector, Receptacle: SMA	3	9412-7113-000	19505	
J2	Same as J1				
J3	See Note 3				
J4	Connector, Receptacle	2	DBM25S	71468	
J5	Same as J4				
J6	Same as J1				
PS1	Power Supply 30 W PWA	1	841289	14621	
R1	Resistor, Fixed, Film: 100 Ω , 5%, 1/4 W	1	CF1/4-100 OHMS/J	09021	
S1	Switch, Pushbutton	1	671-6-1	87034	
W1	CORO, Line	1	17606	14628	
W2	Cable Assembly	1	17300-433.1	14632	

Note 1 The difference between the WJ-8626A-4 and WJ-8628-4/MPSA power supply is the following:

1. WJ-8626A-4/MPSA Bracket is Part Number 371244-1
2. WJ-8628-4/MPSA Bracket is Part Number 371731-1

Note 2 When a WJ-8628 Receiver with the Frequency Extender option is used with the WJ-9628-4/MPSA Power Supply, the following parts are added:

- | | | | | | |
|----|----|----------------|---|-------------|-------|
| 1. | W3 | Cable Assembly | 1 | 17300-443-2 | 14632 |
| 2. | | Cable Bracket | 1 | 282027-1 | 14632 |

Note 3 J3 is identical to J4 and J5 and is used on the WJ-8626A/MPSA power supply. J4 and J5 are not used on the WJ-8626A-4/MPSA power supply.

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

REPLACEMENT PARTS LIST

3.5.1 TYPE 371343-3 1 MHz, 5 MHz, 10 MHz SITE REFERENCE REF DESIG PREFIX A1

REF DESIG	DESCRIPTION	QTY PER ASSY	MANUFACTURER'S PART NO.	MFR. CODE	RECM VENDOR
C1	Capacitor, Ceramic, Disc: 0.47 μ F, 20%, 100 V	8	8131M100-651-474M	59660	
C2 Thru C4	Same as C1				
C5	Capacitor, Ceramic, Disc: .01 μ F, 20%, 50 V	1	34453-1	14632	
C6	Capacitor, Ceramic, Disc: 1 μ F, 20%, 50 V	2	8131-050-651-105M	59660	
C7	Capacitor, Ceramic, Disc: 0.1 μ F, 20%, 50 V	7	8121-050-651-104M	59660	
C8	Capacitor, Ceramic, Monolithic: 6.8 pF, \pm .5 pF, 100 V	1	8101-100-COHO-689D	59660	
C9	Same as C7				
C10	Capacitor, Electrolytic, Tantalum	4	196D475X0035JE3	56289	
C11	Capacitor, Ceramic, Disc: 1000 pF, 5%, 100 V	2	8121-100-COGO-102J	59660	
C12	Same as C1				
C13	Same as C7				
C14	Same as C10				
C15	Capacitor, Ceramic, Monolithic: 180 pF, \pm 2%, 100 V	7	150-100-NPO-181G	51642	
C16	Capacitor, Ceramic, Monolithic: 10 pF, \pm .5 pF, 100 V	1	8101-100-COGO-100D	59660	
C17	Same as C15				
C18	Same as C15				
C19	Capacitor, Ceramic, Monolithic: 62 pF, \pm 2%, 100 V	2	150-100-NPO-620G	51642	
C20	Same as C19				
C21 Thru C24	Same as C15				
C25	Same as C10				
C26	Same as C10				
C27	Capacitor, Ceramic, Monolithic: 100 pF, \pm 2%, 100 V	1	200-100-NPO-101G	51642	
C28	Same as C11				
C29	Same as C1				
C30	Capacitor, Ceramic, Disc: 0.047 μ F, 10%, 100 V	1	8121-100-X7RO-473K	59660	
C31	Same as C6				
C32	Same as C1				
C33	Same as C7				
C34	Same as C7				
C35	Same as C1				
C36	Same as C7				
C37	Same as C7				
E1	Terminal, Forked	11	140-1941-02-01	71279	
E2 Thru E11	Same as E1				
J1	Not Used				
L1	Coil, Fixed: 2.2 μ H, 10%	1	1025-28	99800	
L2	Coil, Fixed: 0.82 μ H, 10%	1	1537-10	99800	

REPLACEMENT PARTS LIST

WJ-8626A-4/MPSA & WJ-8628-4/MPSA

REF DESIG PREFIX A1

REF DESIG	DESCRIPTION	QTY PER ASSY	MANUFACTURER'S PART NO.	MFR. CODE	RECM VENDOR
L3	Coil, Fixed, Molded: 10 μ H	1	1025-44	99800	
L4	Coil, Fixed, Molded: .18 μ H, 10%	1	1025-02	99800	
R1	Resistor, Fixed, Film: 56 Ω , 5%, 1/8 W	1	CF1/8-56 OHMS/J	09021	
R2	Resistor, Fixed, Film: 560 Ω , 5%, 1/4 W	1	CF1/4-560 OHMS/J	09021	
R3	Resistor, Fixed, Film: 10 k Ω , 5%, 1/8 W	3	CF1/8-10K/J	09021	
R4	Resistor, Fixed, Film: 2.2 k Ω , 5%, 1/8 W	1	CF1/8-2.2K/J	09021	
R5	Resistor, Fixed, Film: 68 k Ω , 5%, 1/8 W	1	CF1/8-68K/J	09021	
R6	Same as R3				
R7	Resistor, Fixed, Film: 4.7 k Ω , 5%, 1/8 W	2	CF1/8-4.7K/J	09021	
R8	Same as R7				
R9	Resistor, Fixed, Film: 39 k Ω , 5%, 1/8 W	1	CF1/8-39K/J	09021	
R10	Resistor, Fixed, Film: 820 Ω , 5%, 1/4 W	1	CF1/4-820 OHMS/J	09021	
R11	Resistor, Fixed, Film: 470 Ω , 5%, 1/8 W	4	CF1/8-470 OHMS/J	09021	
R12	Resistor, Fixed, Film: 6.8 Ω , 5%, 1/8 W	2	CF1/8-6.8 OHMS/J	09021	
R13	Same as R11				
R14	Resistor, Fixed, Composition	1	RRC32G221JS	81349	
R18	Resistor, Fixed, Film	1	RN55C1272F	81349	
R19	Resistor, Fixed, Film: 5.6 Ω , 5%, 1/4 W	1	CF1/4-5.6 OHMS/J	09021	
R20	Resistor, Fixed, Film: 13.3 k Ω , 1%, 1/10 W	1	RN55C1332F	81349	
R21	Resistor, Fixed, Film: 12.1 k Ω , 1%, 1/10 W	1	RN55C1212F	81349	
R22	Same as R3				
R23	Resistor, Fixed, Film: 1.0 k Ω , 5%, 1/4 W	1	CF1/4-1K/J	09021	
R15*	Same as R11				
R16*	Same as R12				
R17*	Same as R11				
S1	Switch	1	76STC03	81073	
U1	Integrated Circuit	1	MC14568BCP	04713	
U2	Integrated Circuit	1	NE5534D	18324	
U3	Oscillator	1	92174	14632	
U4	Power, Splitter	1	MSC-2-1	15542	
U5	Integrated Circuit: 200 MHz	1	SP8657B/CM	52648	
U6	Amplifier RF: 0.1-400 MHz	1	MWA130	04713	
U7	Divider: 100 kHz-200 MHz	1	PSC-4-1	15542	
U8	Voltage Regulator: -15 V	1	MC79L15ACP	04713	
U9	Integrated Circuit, VR: 9.5-40 V	1	UA723CD	18324	
U10	Integrated Circuit	1	SN75108BN	01295	
U11	Integrated Circuit	1	SN74LS74D	01295	
U12	Voltage Regulator: -5 V 0.1A to -92	1	MC79L05ACP	04713	
U13	Voltage Regulator	1	MC78L05ACP	04713	
VR1	Diode, Zener: 5.1 V	1	1N751A	80131	

*Nominal Value, Final Value Factory Selected.

SECTION IV
SCHEMATICS

NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 a) RESISTANCE IS IN OHMS, $\pm 5\%$, 1/8W.
 b) CAPACITANCE IS IN μF .
 c) INDUCTANCE IS IN μH .
 2. NOMINAL VALUE, FINAL VALUE FACTORY SELECTED (R15, R16 & R17).

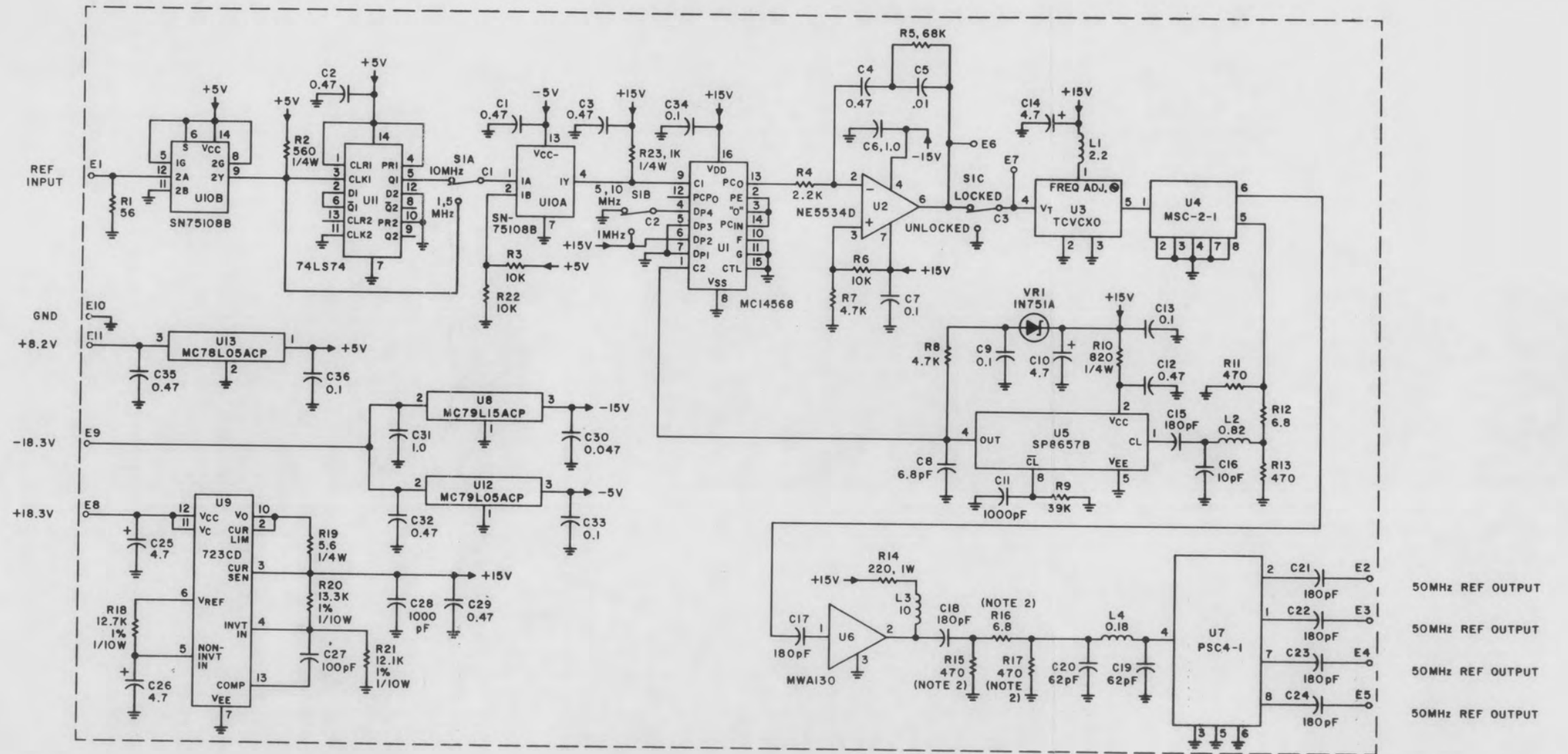


Figure 4-1. Part 371343-3, 1 MHz, 5 MHz, 10 MHz Site Reference (A1), Schematic Diagram 471267 (A)

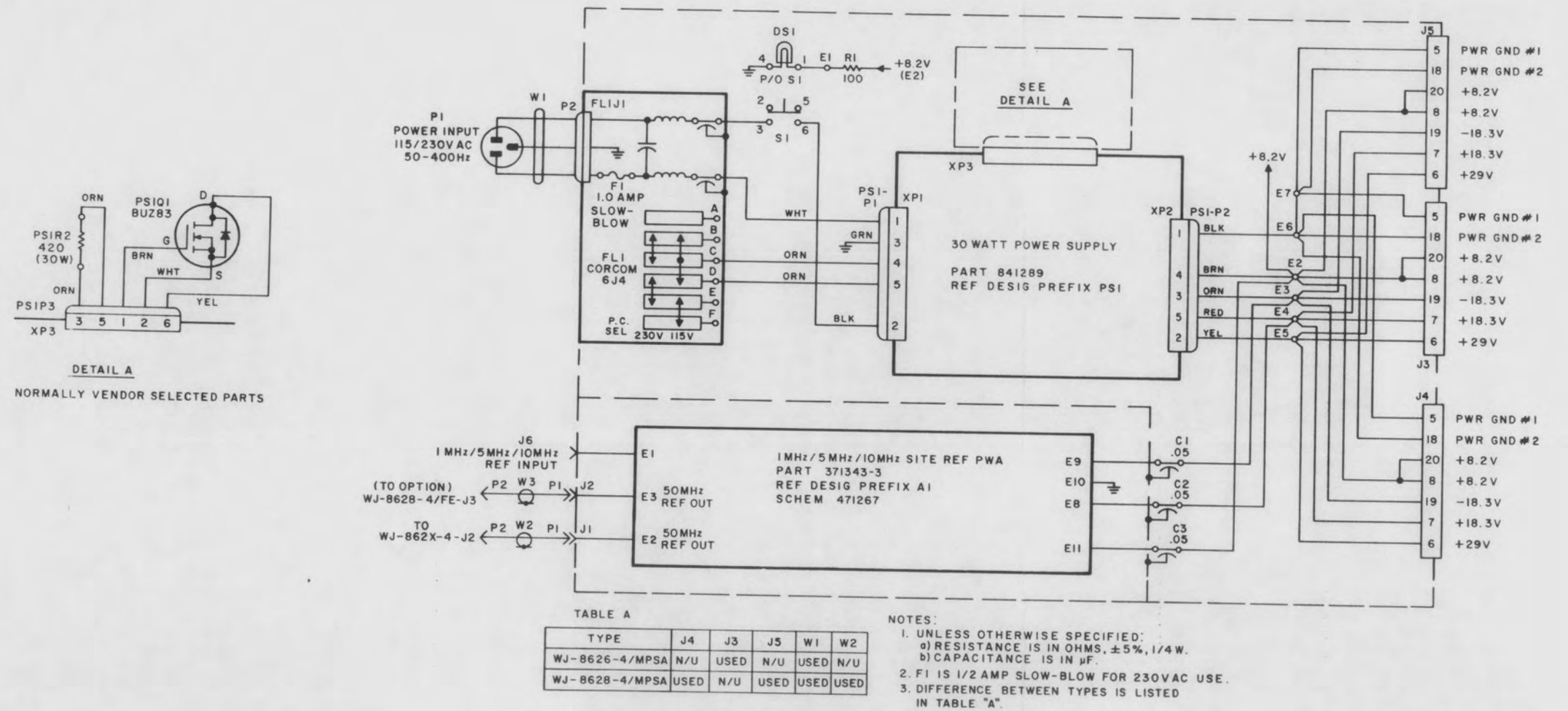


Figure 4-2. Type WJ-8626A-4/MPSA & WJ-8628-4/MPSA Modular Power Supply Schematic Diagram 471266 (D)

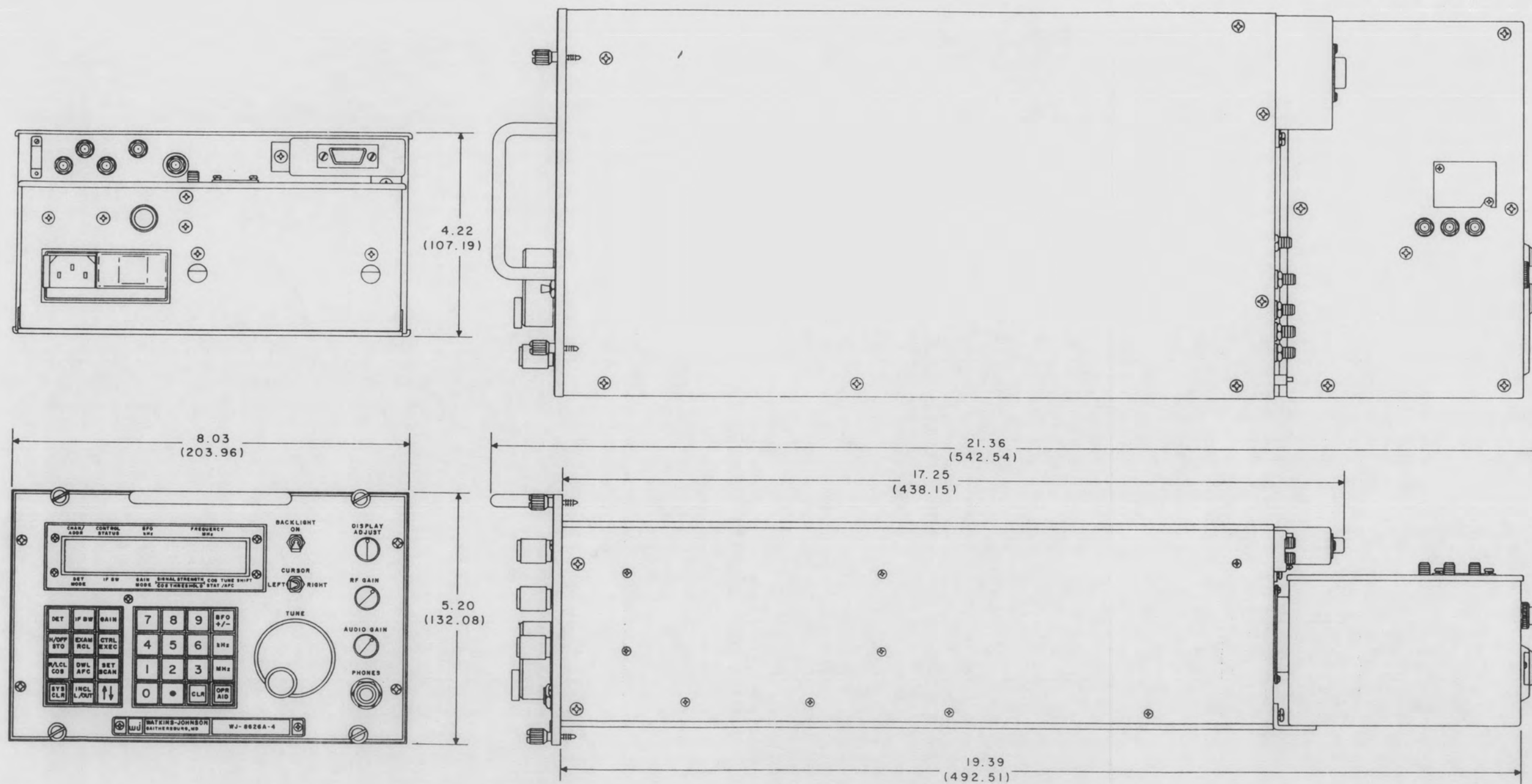


Figure 1-2. WJ-8626A-4/MPSA & WJ-8628-4/MPSA Outline Drawing