ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Rod-L M25* at our website: *Click HERE*

M-5, 30/25/40/10

Section 1
INTRODUCTION

1-1. Scope of This Manual

This publication provides operation and service instructions for the Rod-L Electronics Inc. Ground Continuity Test Instruments. (It will refer to Model M25, though the M30, M35, and M10 all operate the same. The model number refers to the amount of current it is capable of outputting). The manual is divided into six sections.

Section 1 - Introduction (capabilities and specifications)
Section 2 - Installation and Operation
Section 3 - Theory of Operation
Section 4 - Service and Calibration
Section 5 - Options
Section 6 - Parts Lists, Schematics, Diagrams

1-2. Ground Continuity Tester General Description and Test Features

The Rod-L Ground Continuity Test Instruments, Models M25, M30, etc., are rugged, self-contained testers designed for both laboratory and production use. Its purpose is to provide a means for evaluating the ground continuity between a unit's chassis and the ground from the AC power-in cord. This ground must be able to effectively shunt any accidental "leakage" current, usually produced by accidental high voltage spikes, to earth ground.

Certification agencies usually require a 1 ampere ground continuity test to ensure that a ground is capable of diverting any leakage current without getting damaged. Several European and Canadian agencies, including B.S.I., V.D.E., and I.E.C., require a 25 ampere ground continuity test.

The Model M25 Ground Continuity Tester applies a 25 ampere current to the DUT (Device Under Test) for a duration of time, preset from 1 second to 90 seconds. The DUT is plugged into the front panel receptacle (or special rear panel connector option). The total resistance in the ground circuit is measured and displayed on the front panel of the Ground Continuity Tester. Test limits for total resistance are preset by the user via a rear panel control. When the DUT is defective, automatic circuitry turns off the current and meter, turns on a FAIL lamp, and activates an audible alarm. This electronic shutdown circuit turns off the

p.2
Jul 15 09 10:05a

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

current within 2ms (two milliseconds) after a fault. These audible and visual alarms must be manually reset at the front panel, or by a Remote Control Option.

Important physical, electrical, and environmental specifications are given in Table 1-1.

1-3. Product Specifications (Table 1-1)

Table 1-1: Model M25 Specifications

Test Voltage and Current
at 0.1Ω load; 3 VAC RMS, 25 A RMS, 50/60 Hz

Voltage Shutdown
Within 2 milliseconds after a fault or end of test is detected (electronic shut down circuits)

Test Time
1 second to 90 seconds (adjustable)

Initial Turn-On Period
Allow 5 seconds warm-up

Ohm Meter
0 - 0.15Ω, ±5% F.S. accuracy

Ammeter
Up to 40 amps (user specified) ±5% F.S. accuracy

Input Power
115/230 VAC, 44-66 Hz., 360 watts, max

Environmental Operating Temperature
0° to 50° C, 32° to 122° F

Exterior Color
Mint grey / Olive grey

Weight
35 lbs (13.5 kg) net

Dimensions
16.75 x 13.25 x 5.5 inches (43 x 34 x 14 cm)

Jul 15 09 10:05a p.3

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

1-4. Safety Features

A) Loss of Ground connection terminates test cycle

B) Front panel receptacle accepts 3-pronged power cord from DUT providing maximum safety and significantly reduces time required to perform the test

C) Recessed START button

D) Visual alarm at failure

E) Audible alarm at failure

F) Fast electronic shut down of voltage

G) Hard RESET after failure required to perform next test

H) Complete discharge of Device Under Test (DUT)

1-5. Supplied Equipment

A) Ground Continuity Tester, Model M25, M30, M35, or M10

B) Power Cord, three pronged, 6 ft

C) High Current Ground Sense cable, 18 in

D) HV Interface Cable (interfaces to Hipot)

E) Operation/Service Manual

F) Extra fuse set for the alternate AC supply voltage

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

M25/30/35/40

Section 2
INSTALLATION AND OPERATION



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers that are provided with the equipment.

WARNING

Verify that the voltage selector switch is positioned and the correct power supply cord is selected to match the voltage source.

WARNING

This product is shipped with a high voltage mating plug and cap installed on the rear panel HV OUT/INTERFACE connector. To reduce the risk of shock, this plug and cap must be used whenever the high voltage interface cable is not installed.

In addition, the high voltage interface cable must only be used when both ends are terminated at their respective equipment connectors. To reduce the risk of electric shock, the equipment must not be operated with one end not terminated.

2-1. General Information

This section contains the recommended procedures for unpacking, inspection, installation, operation, storage, and reshipment.

2-2. Unpacking and Inspection

A shipping carton that appears damaged should be inspected and unpacked with the carrier's agent present. Inspect the instrument for damage (scratches, dents, broken knobs or meters, etc.)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

If the instrument is found to be damaged upon receipt, notify the carrier and Rod-L Electronics immediately. Retain the shipping carton and the padding material for the carrier's inspection, and for return shipment.

2-3. Installation

The Rod-L Ground Continuity Test Instrument is suitable for either bench or rack mounting.

2-4. Rack Mounting

To rack mount the instrument, use Option 15 A. The procedure for installing the Rack Mounting Kit on the Ground Continuity Tester is as follows:

A) Remove Extrusion insert (2 each) from both sides of instrument

B) Place L-Bracket (2) and secure to chassis with four machine screws furnished with Mounting Kit

C) Check that the screws and brackets are firmly secure

2-5. Power Requirements

The Ground Continuity Tester requires a power source of either 115 or 230 volts AC, 44 to 66 Hz single-phase. Prior to applying power to the instrument, ensure the AC line voltage selector switch on the Rear Panel is in the appropriate position. Also, the AC power socket to which the Ground Continuity Tester connects must have a functioning safety ground.

To protect operating personnel, NEMA, the National Electrical Manufacturers Association, recommends that the instrument panel and cabinet be grounded. The Ground Continuity Tester is equipped with a 3-conductor power cord, which, when plugged into an appropriate receptacle, grounds the instrument. The offset pin on the 3-prong connector is the ground pin.

2-6. Storage

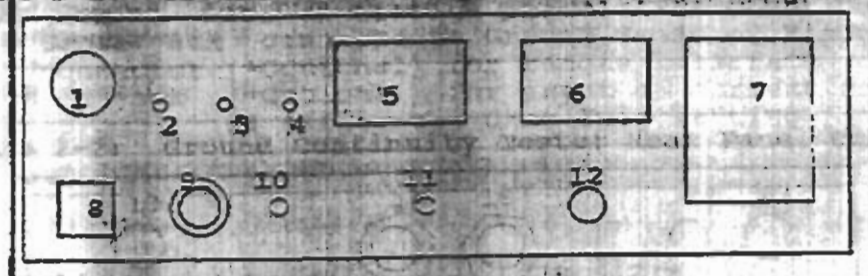
It is strongly recommended that the Ground Continuity Tester be packed as if for reshipment. Environmental conditions during storage and reshipment should be as follows:

A) Maximum temperature: 167°F (75°C)

B) Minimum temperature: -40°F (-40°C)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Figure 2-1: Ground Continuity Tester Front Panel Controls



1. Alarm — emits audible signal on failure
2. READY lamp — comes on at power up
3. TESTING lamp — on during a test
4. FAIL lamp — on if a test fails
5. Current (I) meter — indicates current (in AC Amps)
6. Ohm (R) meter — provides direct Resistance reading of DUT's ground loop
7. HV Output Block receptacle — for DUT's 3-pronged AC power line
8. Line Power switch — turns on and indicates line power input
9. START switch — initiates Ground Continuity Test if instrument is grounded properly and not already indicating a ground-test failure
10. RESET button — resets Ground Continuity Tester
11. A/B switch — chooses Function: Ground Continuity Test only or Ground Continuity Test and Hipot Test
12. Chassis Ground Sense — for DUT chassis ground connection

Figure 2-2: Ground Continuity Tester Rear Panel Controls

13. Low Line Switch — SS compensates for Low Line Voltage inputs; normal, -8%, or -16%
14. Voltage Selector Switch — chooses 115VAC or 230VAC input; be sure to install correct fuses
15. AC line power In receptacle
16. AC Fuses — F1/F2 3A @ 115VAC, 2A @ 230VAC; T2 .5A @ 115/230VAC
17.* HV Out connector (optional) — for 5KV for Leakage Tester(LT) use
18. HV Interface connector — for Hipot Interface
19. Ground jack — for connecting chassis' of other testers
20. Ground Sense jack — connects to Ground Sense of Hipot Tester
21.* Remote connector (*Optional) — for remote interface
22.* Current In jack (*Optional) — for input of current from the LT
23. Ohms Trip pot — adjusts Ohms Trip setting

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

2-7. Repackaging for Shipment

If possible, use the original shipping container and packing materials. Otherwise:

A) Wrap the Ground Continuity Tester in heavy paper or plastic before placing it in the shipping container.

B) Use plenty of packing material around the instrument, and protect the front panel with cardboard or plastic bubble packing. Protect the instrument with two inch rubberized foam pads placed along all surfaces of the instrument, or with a layer of excelsior about 6 inches thick, packed firmly against all surfaces of the instrument.

C) Use a strong, well-sealed shipping container (350 lb/sq in. bursting test).

D) Mark the container "FRAGILE - DELICATE INSTRUMENT."

2-8. Operating Controls and Operating Instructions

The Front panel and rear panel controls are shown in Figures 2-1 and 2-2.

WARNING

This instrument to be used ONLY in THREE WIRE GROUNDED OUTLETS. It is recommended that periodic checks of the outlet and the ground wire be made to ensure operator safety.

2-9. Initial Installation and Power-Up

The Ground Continuity Tester is shipped configured for 115 VAC operation. Appropriate fuses (1.5 ampere) are also provided for 230 VAC operation. Before applying 230 VAC power to the instrument, perform the following:

CAUTION

Changing fuses: must pull the Ground Continuity Tester and disconnect the POWER CORD. Then install the proper fuse. Otherwise, damage to the instrument and or personal could result.

Jul 15 09 10:07a p.8

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

2-10. Operational Check

This is an operator oriented procedure which allows operational check of the Rod-L Ground Continuity Tester without test equipment. Refer to Section 4 of this manual for a complete calibration procedure.

Place the instrument in a sturdy position, preferably on an insulated surface, with all surrounding metal/conductors grounded. Position the power cord so as to avoid being walked on or pinched by other equipment.

A) Set LINE POWER switch to OFF.

B) Validate that the fuses are the proper values.

C) Verify Input Line Voltage Select Switch position.

D) Set the OHMS ADJ control to full clockwise position.

E) With an AC voltmeter, check the primary power line for normal line voltage conditions.

F) Set the VOLTAGE SELECT switch on the rear panel to appropriate position if the AC input is low line.

G) Connect AC Power Cord between the AC receptacle on the rear panel and an AC power source.

H) Set LINE POWER switch to ON.
   a) The lamp should light.
   b) The green READY lamp should also illuminate.

NOTE: If the power ON lamp remains off, check for proper AC line voltage.

I) Insert the banana plug of the High Current Chassis Ground Cable into the Chassis Ground Sense banana jack. Connect the clamp of that cable to any exposed metal part of the Ground Continuity Tester.

J) Ensure that "OHM ADJ" on the rear panel is set to "full" the maximum.

K) Push the START button.
   a) The Testing lamp should come on for approximately 5 seconds.
   b) Current Meter should read approximately 25 Amps. Keep in mind.
   c) Ohmmeter should read less than .010. Keep in mind. While Reading is with NO LOAD. Refered this reading on page 12, Section 2-11.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

L) Set "Total Ohm Trip" pot to the minimum, "0."

M) Push the START button.
   a) The alarm should sound.
   b) The red FAIL lamp should illuminate.

NOTE: *If this setting is left as is, turning the M25 off and then on again may cause it to fail as soon as it is turned on.*

N) Press the RESET button.
   a) The alarm should go off.
   b) The red FAIL lamp should go off.

O) If the above conditions are met, the Ground Continuity Tester is operating properly. If your normal operating voltage is different from what is specified above, refer to Set Up Procedures (4-4), page 25.

2-11. Total Resistance Trip Set

The BSI standard states that the resistance to be measured shall not exceed (0.1 ohm + R) Ω, where R is the resistance of the supply cord. The high current grounding cable must also be considered, and this resistance was measured in Section 2-10, E, 3) on page 12.

Each division on the scale of the Total Current Trip pot represents approximately .015Ω, and this scale is non-linear to the pot.

For accurate failure points, a known value of resistance should be inserted into the Continuity Loop. The trip point pot can then be adjusted from above until a failure is indicated, or in other words, while the test is running, set the trip point pot high enough so that there is no failure, then turn the pot slowly down until a failure occurs.

2-12. [illegible] Ground Continuity Test

A) Plug the power cord of the DUT into the 3-pronged receptacle on the front panel of the Ground Continuity Tester.

B) Insert the banana plug of the High Current Chassis Ground Cable into the Chassis Ground Sense banana jack.

C) Connect the clamp of this cable to any exposed metal part of chassis of the DUT. Make sure connections are solid.

D) Push the START button.
   a) The Testing lamp should come on.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

b) If the total resistance of the DUT does not exceed the setting of the trip pot, the test will run approximately 5 seconds.

1) The Ammeter will indicate the current through the Ground Loop.

2) The Ohmeter will indicate the resistance of the Ground Loop of the DUT.

c) If the total resistance of the DUT is higher than the trip pot setting, a failure indication will be given, both audible and visual.

d) To test devices that do not have a 3-pronged supply cable, make a suitable grounding cable by using 3 layers of 3/16" diameter tinned copper braid tubing, and 2 (each) 25amp battery clamps. To perform a Ground Continuity Test under these conditions:

1) Connect banana plug of High Current Cable to the Ground Continuity Tester banana jack.

2) Connect clamp to the chassis of DUT.

3) Connect one clamp of the cable just made to DUT ground, and other clamp to the chassis of the Ground Continuity Tester. Proceed with Step 2-12.D. (Remember to compensate trip point for resistance of the newly made cable).

2-13. Test Time Adjustment Procedure

The Test Time Adjustment potentiometer is factory set for 5 to 7 seconds. Reset this control as necessary in accordance with the regulatory agency suggested test time for the DUT.

To reset the test time duration, proceed as follows:

A) Turn OFF power to the Ground Continuity Tester.

B) Remove top cover and locate Test Time Adjustment potentiometer, R20 on the A22 Control Logic PCB.

C) Set the Ground Continuity Tester up for a Ground test either chassis self-test, or with a device to be tested.

D) Reapply power to the Ground Continuity Tester.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

> **CAUTION**
>
> Do not touch any of the other potentiometers on the PCBs. Otherwise, the calibration of the instrument will be destroyed.

E) Use a stopwatch to time how long the TESTING lamp remains lit. By adjusting R22 on the A22, and timing the TESTING lamp duration with the stopwatch, any Test duration can be set between 1 second and 90 seconds.

2-14. **Automatic Test Procedure: Using the Ground Continuity Tester with a Rod-5 Hipot**

See the drawings at the rear of this manual, #s 01075-01 and 01076-01. One of these drawings should enable setting up of a Ground Continuity Tester and Hipot Tester for use in tandem.

Connect the Remote Control Cable (with 25p D Sub miniature connector) to the Ground Continuity Tester, and a remote operating device if the Ground Continuity Tester is equipped with Option 01 or 19.

Make sure that the Ground Continuity/Hipot Tester Interface Cable (4pin LEH connector) is in place.

Ensure the Testers are connected to the same AC Line Power source.

Turn AC power switch of the Ground Continuity Tester on first.

NOTE: *If the Hipot is turned on first, the Hipot Tester may immediately start a Test when the Ground Continuity Tester is turned on, and high voltage will appear on both output receptacles.*

Then turn on the power switch of the Hipot Tester.

The DUT (Device Under Test) should be plugged into the Ground Continuity Tester receptacle for sequential testing, i.e., Ground Continuity Test first, and then the Hipot Test.

If the Hipot Test only is preferred, the test must be initiated at the Hipot Tester. (The DUT can still be plugged into the Ground Continuity Tester).

A failure of the Ground Continuity Test will not allow the Hipot Test to start. If a failure occurs in the Ground Continuity Test or the Hipot Test, a RESET on the Ground Continuity Tester

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

must be initiated before any further testing can be done. If the Hipot Tester is equipped with the Automatic Reset Option, when a failure occurs in the Hipot Test only, the Tester will automatically reset in 3 seconds.

If the Hipot Tester's Chassis Ground voltage is not connected to BP-2, the Rear Panel Banana Jack of the Ground Continuity Tester, the READY light of the Hipot Tester should not come on, and no Hipot Test can be initiated from the Ground Continuity Tester. If the Hipot Tester's chassis Ground voltage is connected to BP-2, the total safety Ground return, from the DUT to the Hipot Tester, is tested, and the READY light should be on if this resistance is less than the Hipot Tester's setting (0.5Ω standard). It is assumed that the Hipot Tester controls are already set up according to the respective Operation Manual.

Push the START button on the Ground Continuity Tester.

The READY light of the Hipot Tester should go off since the Safety Ground Return Test from the DUT is taken over by the Ground Continuity Tester using the relays K1 and K2 (see drawing # 00431-XX, or if none, then 00431-XX). The Safety Ground Return is connected to the Ground Continuity Tester Chassis and the Chassis Ground voltage output through BP-1 is connected to the High Current Transformer.

The TESTING light of the Ground Continuity Tester comes on and the Ground Continuity Test is performed. Should a failure occur, the Ground Continuity Tester has to be manually RESET. No Hipot Tester will be automatically started if that occurs.

Put front panel switch in Ground/Hipot Test position for sequential testing. If Ground Continuity Test only is performed, place the switch in the ground position. Sequential testing, or Ground (Continuity only) Test, will be initiated by starting the Ground Continuity Tester. The Hipot Tester's Chassis Ground voltage must connected to BP-2, the Rear Panel Banana Jack of the Ground Continuity Tester.

If the Ground Continuity Test performs successfully, the TEST light will go off after the preset time. Then the READY light on the Hipot Tester will go on as the Hipot Tester takes over the Safety Ground Return Test. Because the relays K1 and K2 in the Ground Continuity Tester return to normal position, the Safety Ground Return is connected to the Hipot Tester Chassis through the RV Return wire, and the Chassis Ground voltage output BP-1 is connected to BP-2 where the Chassis Ground voltage of the Hipot Tester is connected.

After about 1 second the Hipot Tester is started automatically from the Ground Continuity Tester. The Hipot Tester test time comes on and continues to perform as specified in the respective

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

manual. Pressing the RESET button on the Ground Continuity Tester can, at any given moment, reset the Hipot Tester.

2-15. Ground Continuity Tester with M488 Tester Set Up

The Ground Continuity Tester to Hipot Tester Interface Cable, and the connection between the M488's Chassis Ground and the Ground Continuity Tester BP-2 Rear Panel Banana Jack should be made as described above in section 2-14.

The Ground Continuity Tester must be equipped with Option 01 Remote Control, and the 25-pin Remote connectors on the rear panels of both instruments must be connected together.

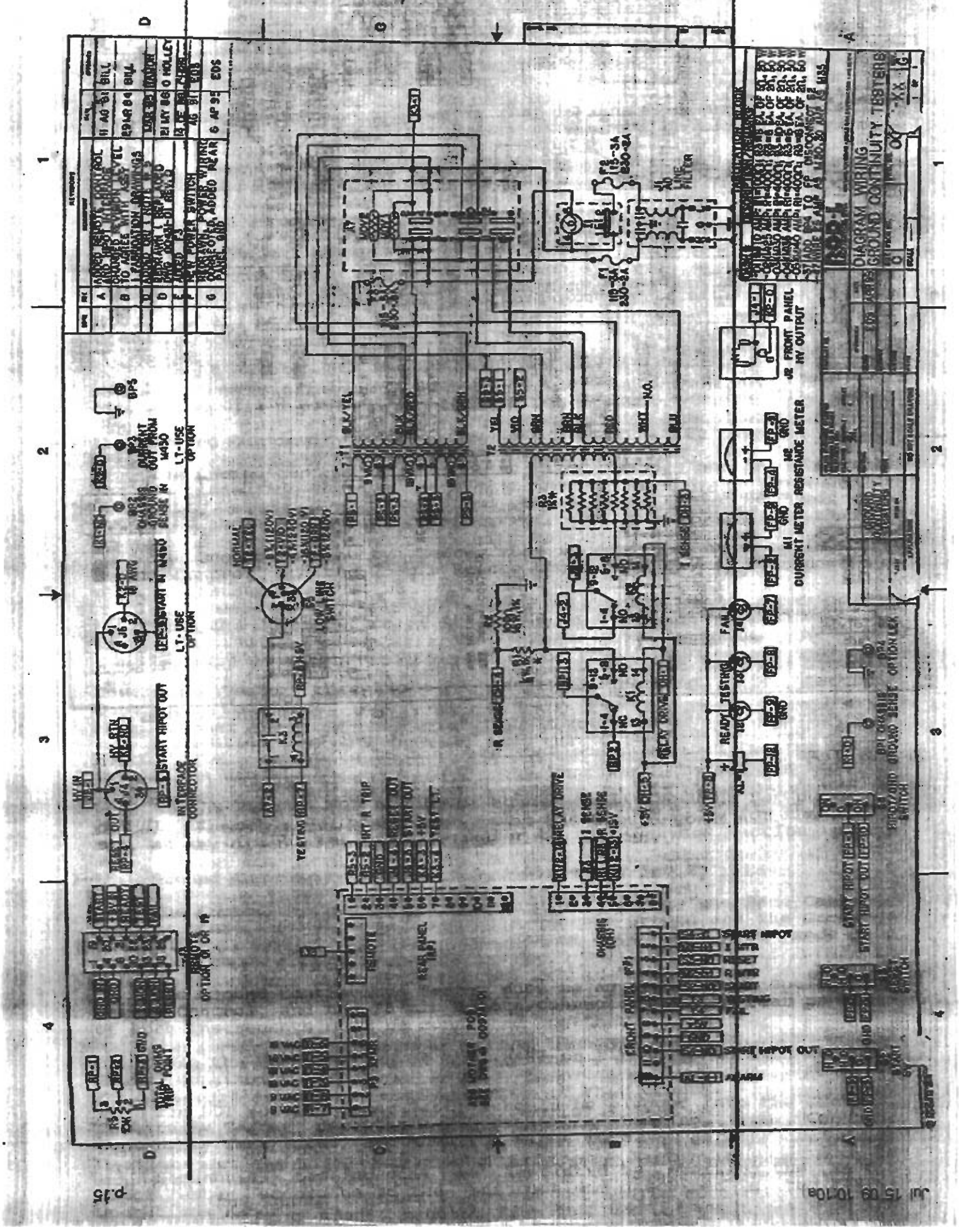
Turn the Power Switch of the M488 on first. Then turn on the Ground Continuity Tester.

The DUT (Device Under Test) should be plugged into the Ground Continuity Tester receptacle for sequential testing, i.e., Ground Continuity Test first, and then the Hipot Test.

Sequential testing will be initiated by starting the M488 Hipot Tester according to the instructions described in the M488 Operations Manual.

The A8 Remote PCB should be adjusted, if needed, for putting out 10 VDC when a 0.1Ω load resistor is used. This is for the M488 monitoring of the resistance. Refer to the Options Section, page 29.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

R24 on the A22 Control Logic PCB controls the *MAXIMUM OHM TRIP POINT*, which is the highest resistance level to which the Ohm Trip Pot on the Rear Panel can be set. It should be set before setting the Ohm Trip Point with the Ohm Trip Pot on the Rear Panel. When set at the factory, a load equivalant to the F.S., (usually a 0.15Ω resistor) is used as a calibrating load with the OHM TRIP pot fully CW. Then, when the START button is pushed, the resistance meter should deflect to F.S., and a failure mode be produced. If a failure mode is not produced when the meter is deflecting to F.S., then adjust R24 until it is. Then Push RESET and proceed with Resistance Calibration.

4-10. List of Adjustment Pots

A) R25 on the A22 PCB — Current Meter Calibration

B) R24 on the A22 PCB — Maximum Resistance Trip Point

C) R22 on the A22 PCB — Test Time Adjustment

D) R21 on the A22 PCB — Resistance Meter Calibration

4-11. Trouble Shooting

Below is a list of problems, probable causes, and remedies for fault location. It should assist the technician in isolating fault location. This table does not tabulate all the possible symptoms; only those Customer Service has determined most likely to occur.

A) No AC Power

1) Check fuses F1 and F2.

Recommended Fuses:		
F1,2	115VAC	3A Slow blow
F3	115VAC	.5A Slow blow
F1,2	230VAC	2A Slow blow
F3	230VAC	.5A Slow blow

2) Check for bad AC Power Switch (S1) or Line Filter.

3) Measure for line voltage between Pin 1 of the solid state relay, K3, and Neutral.

B) Ground Continuity Tester blows fuses

1) Check for correct fuses.

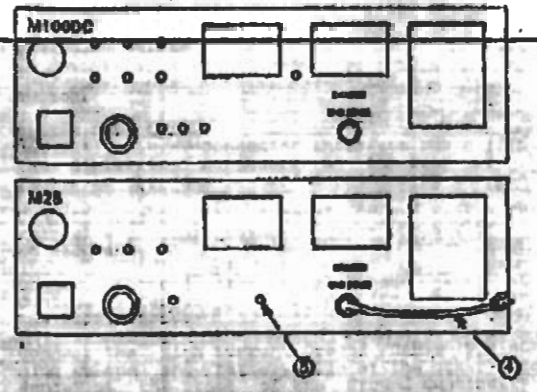
2) Check for shorted varistors on the A7 PCB.

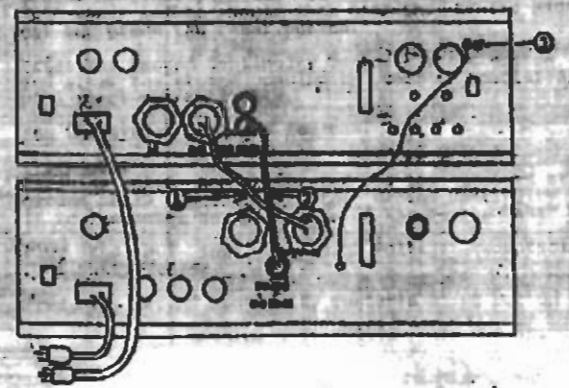
3) Troubleshoot the A10 Power Supply PCB.

p.16 Jul 15 09:10:10a

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	Initial release	29 AUG 86	G Holley
B	Redrawn, Corrected use	July 94	EDS
C	Added Ground	8 FEB 95	EDS
D	Added note 3 & moved #8	11 SEP 95	EDS





SYSTEM DESCRIPTION

To perform a Ground Continuity, then a DC Hipot test automatically through one high voltage receptacle and with one press of the start switch.

SYSTEM SETUP CHECK

1. Use the 4-pin+HV-connector interface cable (P/N 00533-04) to connect the "Interface" connector at the rear of the Ground Continuity Tester to the "Gnd Tester" connector at the rear of the M100DC.
2. Connect together the "Chassis Ground Gangs" (block banana jack) at rear of each unit using a jumper cable with a standard banana plug at each end.
3. Connect "Ground" (the metal banana jack) at rear of the Ground Continuity Tester to " Ground" (the metal banana jack) at rear of the Hipot Tester.
4. Connect the High Current Ground Cable (P/N 00436-04) giant banana plug at one end, battery clip at the other) to the "Chassis Ground Banks" at the front of the Ground Continuity Tester and to it's metal chassis frame.
5. The function select switch of the Ground Continuity Tester should be in the "GND/HIPOT" position.
6. Plug both units into a common ground AC outlet. Turn power of the Ground Continuity Tester on first, then power on the Hipot Tester. Both ready lights should then come on. If the M100DC ready light is not on, press the reset button.
7. Press the Ground Continuity Tester's start button. The test begins, and after the ground continuity test is completed, the Hipot Tester will start automatically.

Now the system is ready for use.

SYSTEM USE

1. Assuming Units are calibrated to the desired trip points, remove Ground Cable connection to the Ground Continuity Tester and connect it to the metal chassis of the Device Under Test (DUT).
2. Plug the DUT into the high voltage receptacle of the Ground Continuity Tester.
3. Press the Ground Continuity Tester's start button to begin the test.
4. For individual machine difficulties, see the appropriate manual.

DRAWN	EDS	JY 94	
CHECKED			
ENGR APPR			
MFG APPR			

DO NOT SCALE DRAWING

APPLICATION

DIAGRAM — SYSTEM HOOKUP
GT — DG INTERFACE

SIZE	DRAWING NO.	REV
B	01076-01	D

SCALE

SHEET

Jul 15 09 10:11a p.17

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

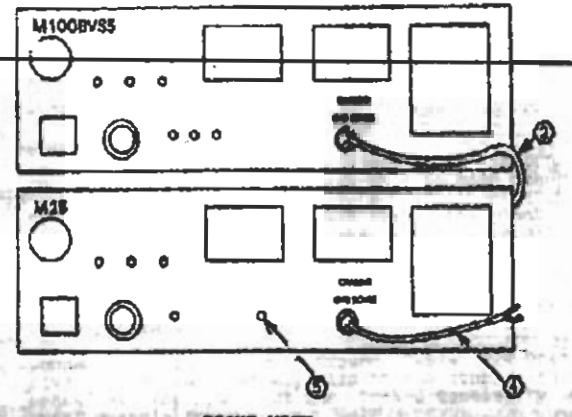
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

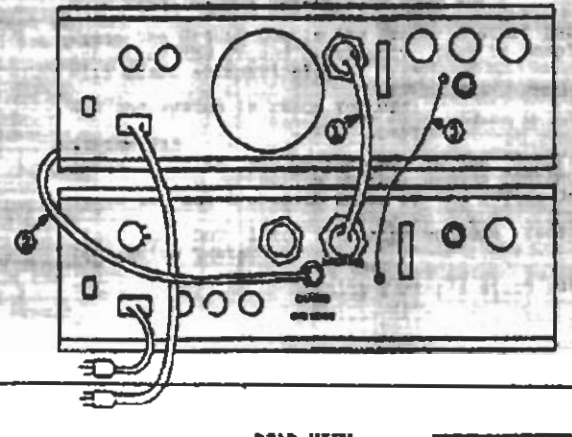
Jul 15 08 10:12a

DWG. NO.	REV

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	Initial release	29 AU 94	C Holley
B	Redrawn, Corrected use	July 94	EDS
C	Added Ground	6 Fe 95	EDS
D	Added note 3 & moved #3	11 My 95	EDS





SYSTEM DESCRIPTION

To perform a Ground Continuity, then an AC Hipot test automatically through one high voltage receptacle and with one press of the start switch.

SYSTEM SETUP CHART

1. Use the Interface cable (P/N 00333-04) to connect the "Interface connectors at the rear of each unit to each other.
2. Connect "Chassis Ground Sense" (BP2, the black banana jack) at rear of the Ground Continuity Tester to "Chassis Ground Sense" (BP2) at the front the Hipot Tester.
3. Connect "Ground" (the metal banana jack) at rear of the Ground Continuity Tester to " Ground" (the metal banana jack) at rear of the Hipot Tester.
4. Connect the High Current Ground Cable (P/N 00436-04) giant banana plug at one end, battery clip at the other) to the "Chassis Ground Sense" at the front of the Ground Continuity Tester and to it's metal chassis frame.
5. The function select switch of the Ground Continuity Tester should be in the "GND/HIPOT" position.
6. Plug both units into a common-ground AC outlet. Turn power of the Ground Continuity Tester on first, then power on the Hipot Tester. Both ready lights should then come on.
7. Press the Ground Continuity Tester's start button. The test begins, and after the ground continuity test is completed, the Hipot testing will start automatically.

Now the system is ready for use.

SYSTEM USE

1. Assuming units. are calibrated to the desired trip points, remove ground cable connection to the ground Continuity Tester and connect it to the metal chassis frame of the Device Under Test (DUT).
2. Plug the DUT into the high voltage receptacle of the Ground Continuity Tester.
3. Press the Ground Continuity Tester's start button to begin the test.
4. For individual machine difficulties, see the appropriate manual.

APPLICATION	DO NOT SCALE DRAWING	APPROVALS EDS	DATE JY 94

DIAGRAM — SYSTEM HOOKUP
GT — AV/BV INTERFACE

SIZE B | DWG NO. 01075-01 | REV D

SCALE | SHEET

p.20

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

General Safety Guidelines for ROD-L Units

[Note: The following information applies to all ROD-L units and is also contained in the user's manuals]

All ROD-L Electronics units are designed to assure maximum safety for the operators of the units. There are no extraordinary precautions necessary during their operation and setup, however, due to the fact that high voltage and high current are in use, there are some strongly recommended guidelines listed below:

There are a number of safety features built into ROD-L units that should never be removed or overridden. These are; 1) the chassis ground sense circuit, 2) The internal components of the front panel high voltage receptacle, 3) The recessed start button, 4) The alarm light and alarm tone, 5) The internal shut-down circuitry of the units, 6) The reset switch.

The units should only be connected to three-wire grounded outlets. The safety of the outlets should be periodically checked to insure safety.

Before initial operation, verify that the line input voltage selector switch (for 115 volts vs. 230 volts) is in the correct position.

Due to the fact that high voltage is also present at the rear panel voltage connector during operation of the unit, the connector when not used should be covered or the unit should be positioned in such a way that the metal contacts within it cannot be accidentally touched.

Before changing fuses in the units, the power switch should be turned-off and the power cord disconnected.

Do not touch the device-under-test or its power cord while a test is in progress.

Following the above precautions should eliminate hazard to the operator of the ROD-L unit, but it should be noted that the same common sense advice that would apply to the use of any electrical product should always be used when operating ROD-L units.

p.27

Jul 15 09 10:12a

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP