

ROOTS Meters & Instruments

DRESSER

FIELD INSTALLATION:

REPAIR ASSEMBLY #399 CONVERT:

- CTR/TC TO ICPW/ITPW
- CPW/TPW TO ICPW/ITPW



REVISIONS		
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B		27FEB03
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ATT	14NOV02	DMK	Rick Atton	RA	24MAY04

REPAIR ASSEMBLY #399 INSTRUCTIONS TO CONVERT CTR/TC AND CPW/TPW TO ICPW/ITPW

Tools Needed:

- 5/32 Allen® wrench
- 9/64 Allen® wrench
- Torque wrench capable of 50-in-lb
- 4" extension for torque wrench
- 053858-500 Hardware Kit (included)

Removal:

1. Using a 5/32 Allen® wrench, remove the four #10-24 screws holding the slip flange on.
See Figure 1.
2. Slide the slip flange off the accessory housing.
3. Gently pull the accessory housing assembly off of the meter.
NOTE: Special care should always be taken when removing a TC (Temperature Compensated) unit of any kind, so as not to bend the temperature probe.
4. Remove the screws, slip ring and mounting surface O-ring. Discard the O-ring.

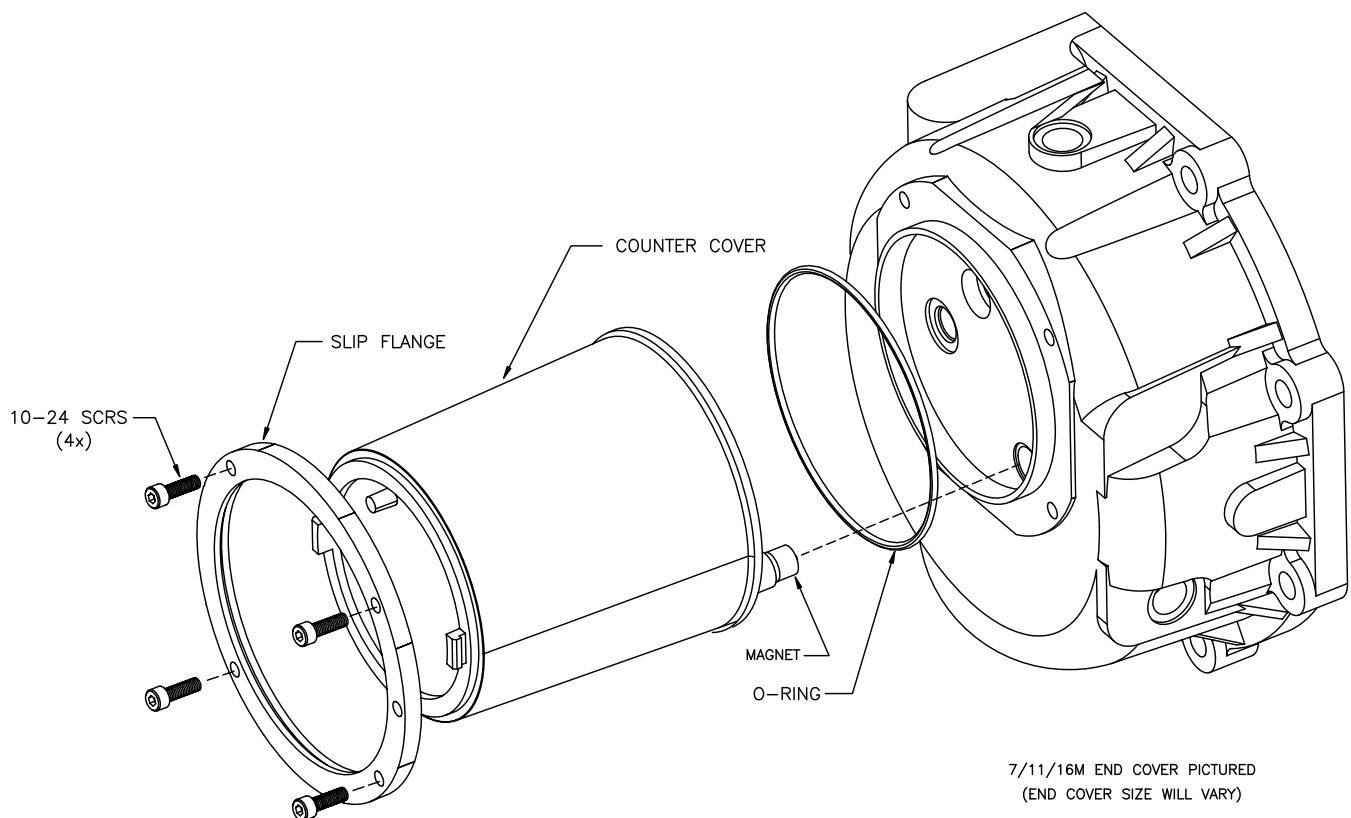


Figure 1

- Using a 9/64 Allen® wrench, use the tool access hole and loosen the #8-32 screw inside the accessory housing. Back it out until the screw threads are no longer engaged. **See Figure 2.**
- Slide the counter assembly out of the housing and discard the old housing. A new screw is provided in the hardware kit, if needed.

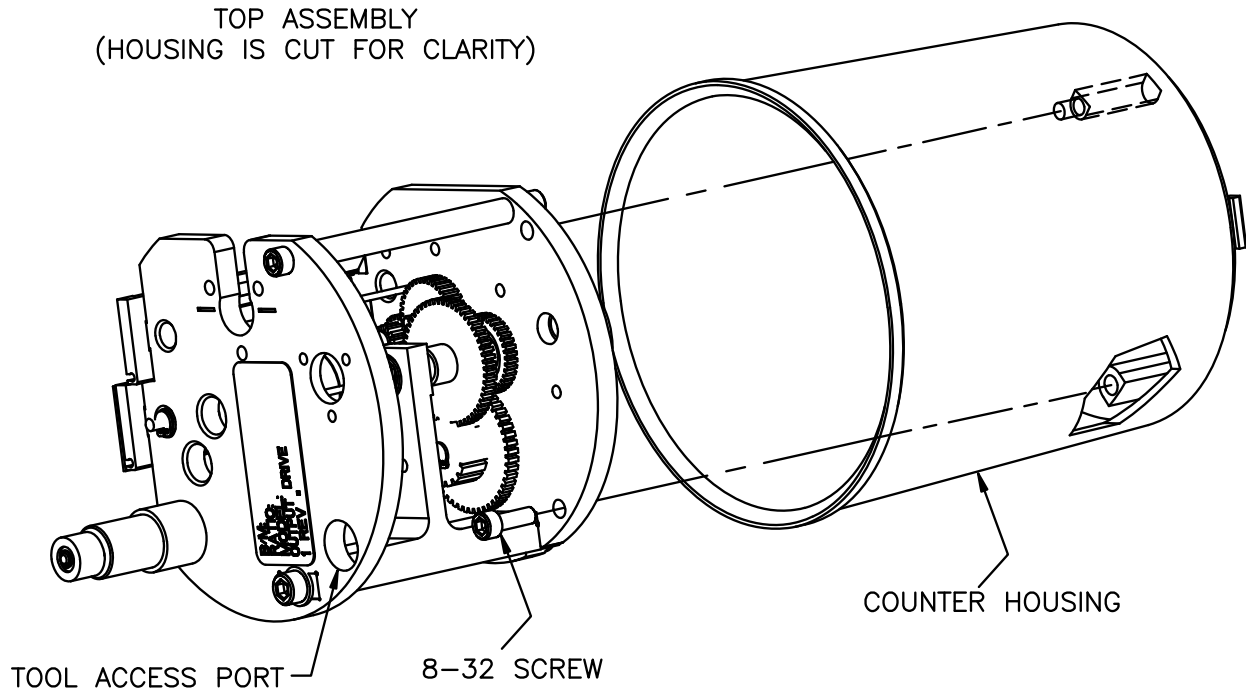


Figure 2

Installation of Magnets

- E**
- Refer to drawing 054190-090 (included). ICPW/ITPW units are normally equipped with magnets. If magnets are not installed, use the magnet(s) and associated parts that are supplied with this conversion assembly. For ICPW installation, see sheet 2 of 6. For ITPW installation, see sheet 4 of 6.

C **NOTE (if converting CTR/CPW to ICPW):** Remove the existing spacer (item 5) as shown in Figure 3 and replace with the Teflon washer (item 12) supplied. See drawing 054190-090 sheet 2 of 6.

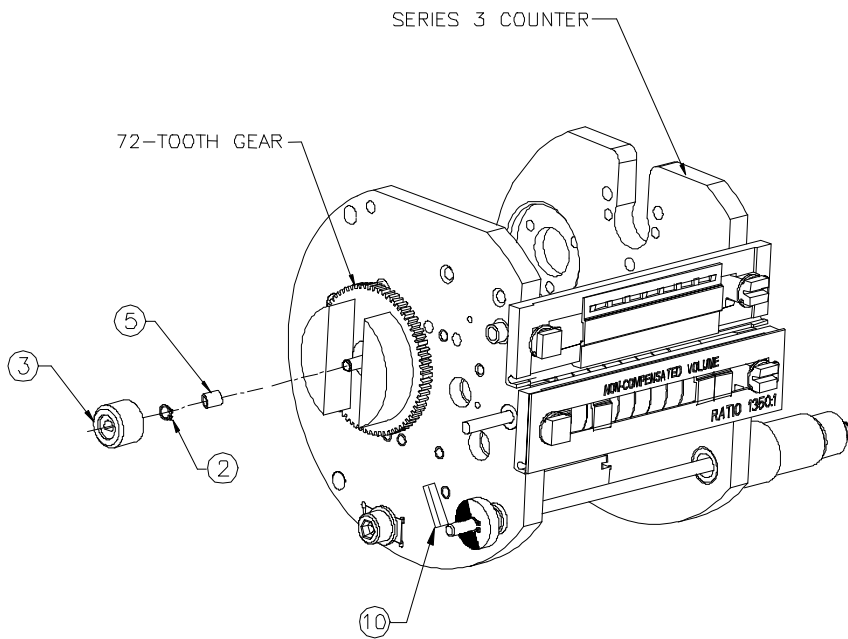


Figure 3

8. Line up the counter assembly with the new Pulser accessory housing by lining up the odometer window. Slide the counter assembly into the housing while holding the # 8-32 screw in its perspective hole with the 9/64 Allen® wrench (use the tool access hole). Tighten the # 8-32 screw to 20-in-lb. **See Figure 4.**

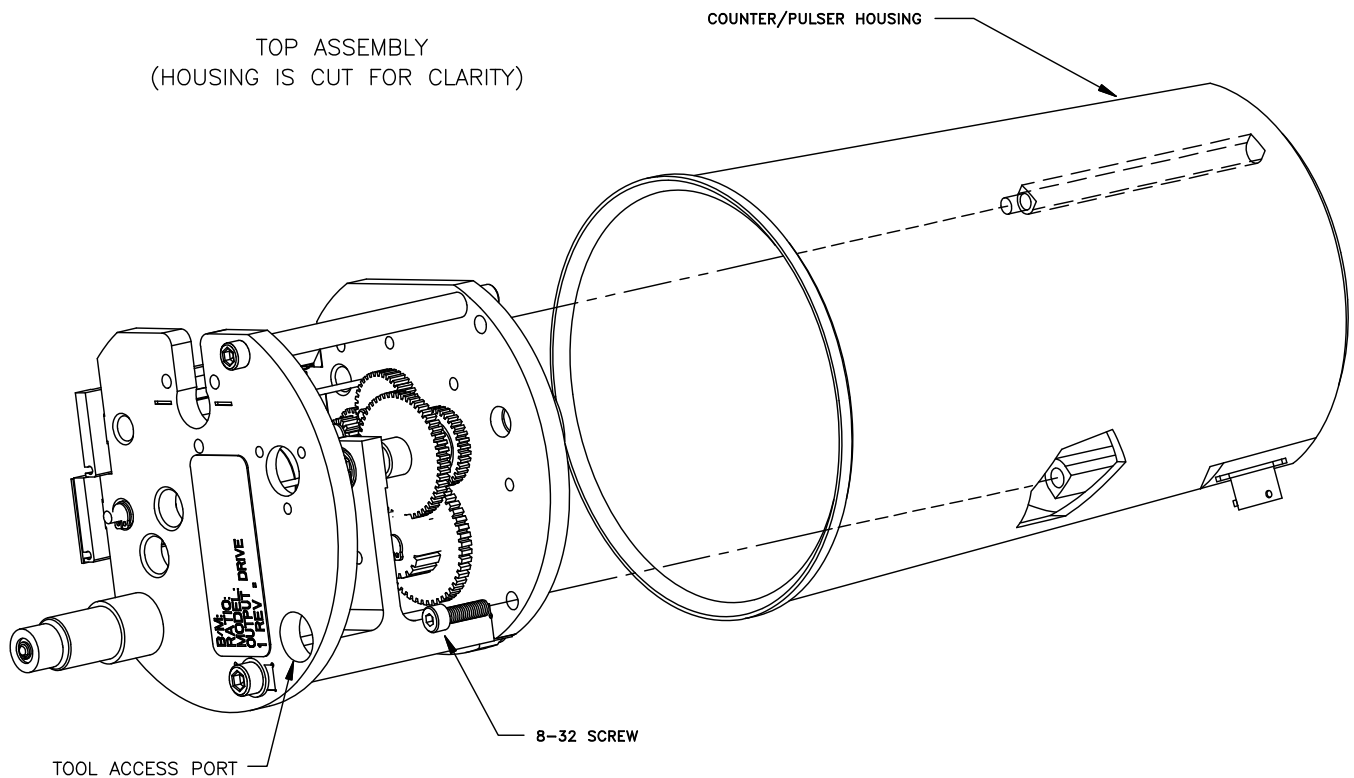


Figure 4

- D** 9. Line up the Pulsar housing assembly with the meter's accessory unit mounting surface. Gently slide the assembly into the meter all the way until it contacts the mounting surface.
10. Slide the slip flange with the alignment identification mark lined up with the odometers. Slide the # 10-24 drilled head screw through the top right flange hole and into the meter's screw hole. Some minor rotation of the slip flange may be required to line up its holes with the mounting surface screw holes.
- E** 11. Insert the remaining three (3) # 10-24 screws. Tighten the screws in a star-like fashion and torque to 47-53 in-lbs.

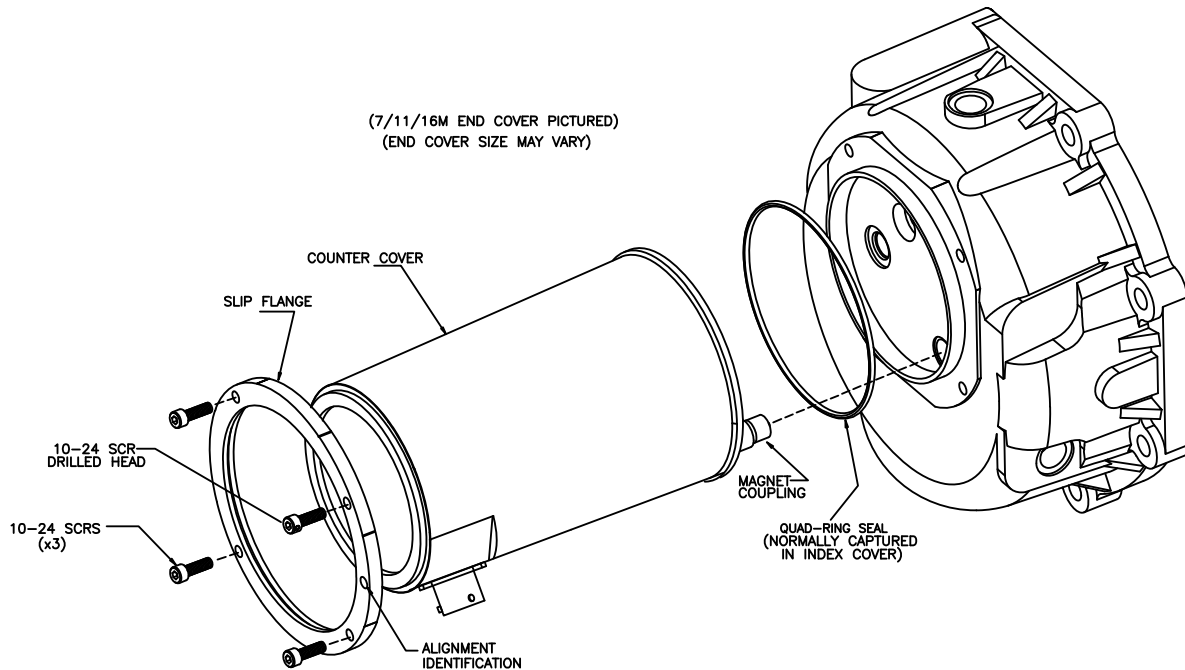


Figure 5

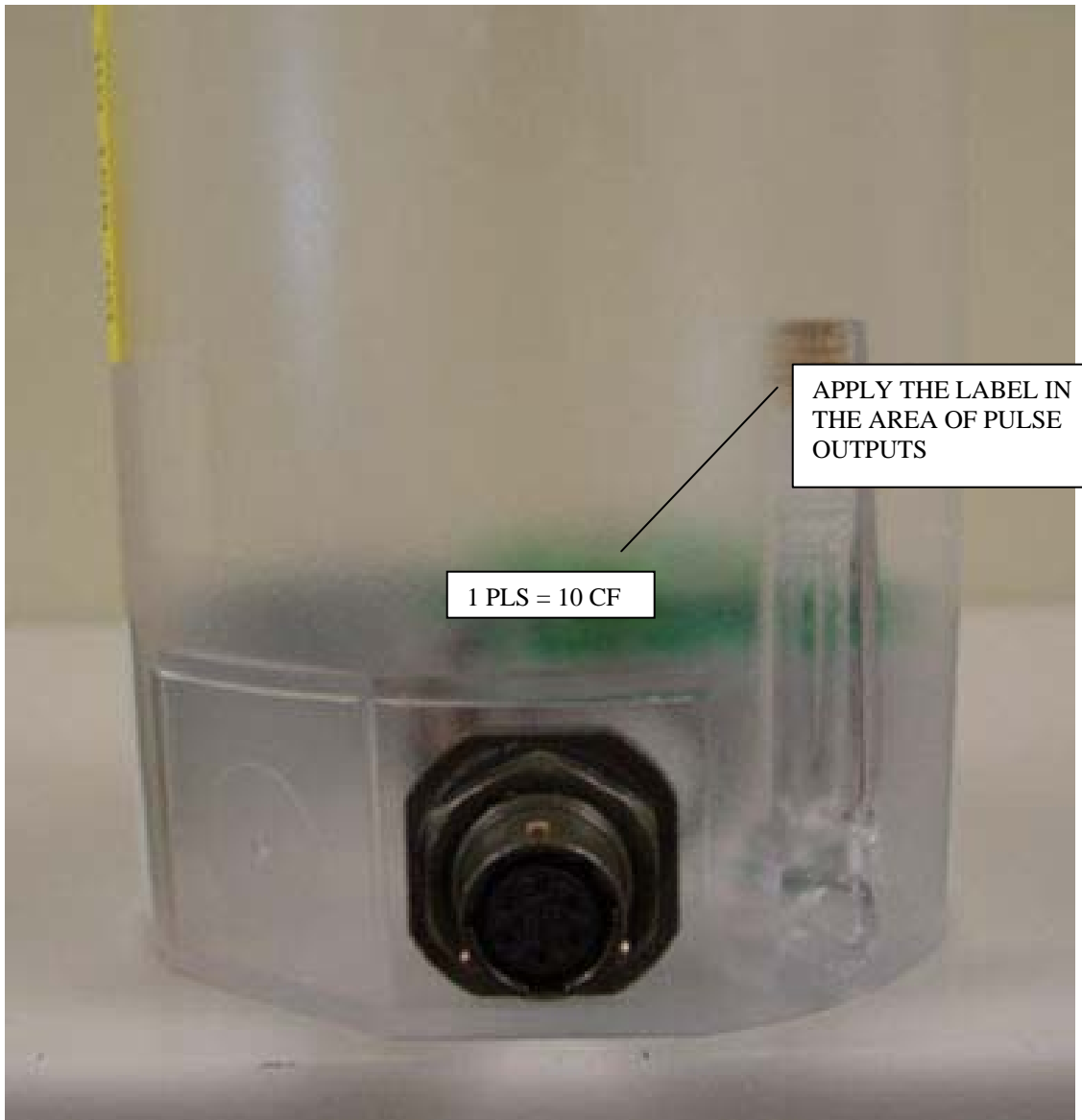
- E** 13. Refer to the Pulse Rate Identification Matrix drawing 054772-000 sheet 5 of 5 (included). Select a label, from the label card 054699-xxx, which corresponds to the unit type, connector, and meter size which is applicable to this installation.

Example: If you are installing P/N 057128-060, an ICPWS (Counter Pulsar with Single Circular connector) on a 7M B3 meter, then you would use the label which says 1 PLS=10cf (or 1 PLS=1.0m³ if the counter unit is metric).

14. Attach the label to the outside of the counter housing. You may want to select a location that is easily readable, like directly above the connector(s). **See Figure 6 on page 6** for the completed assembly.

Wiring Instructions D E

- Circular 6-position connector versions are pre-wired for Dresser cables P/N 056922-xxx (consult the factory for various lengths available). See the wiring diagram 057159-000 (included) for specific wire colors. For other circular connectors a separate wiring diagram will be provided.
- Cable Gland and Conduit versions will be supplied with a standard 4-foot pigtail cable (consult the factory for longer lengths if required). See the wiring diagram 057159-000 (included) for specific wire colors.



E **Figure 6 Completed Assembly**
(Single Circular connector shown)