

Automated Meter Reading (AMR)

Transmitter Mounting Instructions

For Invensys (Equimeter, Rockwell) Gas Meters



Applicable Meters

R750, R800.

RF Exposure Note

In order to comply with FCC RF Exposure requirements, the Automatic Meter Reading unit must be installed in such a way that there is a 20c[°]m separation distance between it and all persons during normal operation.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety code 6, obtainable from Health Canada's website <u>www.hc-sc.gc.ca/rpb</u>

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

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Components

Verify that all the required components for the installation are available:



GS0005 AMR Transmitter

Hardware

Screw kit (see **Appendix – Transmitter Installation Screws** as identification guide):

- 2x mounting screws (thread length 3¹/₂")
- 2x index screws (thread length ¹/₂")
- 2x snap seals



Tools

Verify that all the required tools for the installation are available:

- #3 Phillips screwdriver
- Flat screwdriver (blade size ¹/₄")
- Stiff blade putty knife
- ¹/₄" Nut driver
- *Mint* handheld terminal (HHT)



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AMR Transmitter Installation

Installation Tasks

- 1. Remove index cover.
- 2. Remove index from gas meter.
- 3. Assemble index onto AMR transmitter.
- 4. Mount AMR transmitter and cover onto gas meter.
- 5. Initialize AMR transmitter with HHT.

Remove index cover

1. Use flat screwdriver to punch out the seals that cover the two (2) index cover screws.



- 2. Remove and properly dispose the two (2) screws holding the index cover onto meter, with flat screwdriver. If any screws shear off during the cover removal (or were previously sheared off), the meter will need to be replaced by a qualified utility representative. Reinstall any index cover screws that were removed and cap with seals if possible. Enter the appropriate information in the Mint HHT and skip to the next work order.
- 3. Remove the index cover.

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Remove index

1. Remove, with flat or Phillips screwdriver, and properly dispose the two (2) screws holding the index onto the meter.

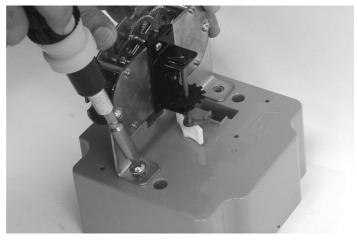


- 2. Remove the index and carefully clean any debris from it. Inspect for proper index operation by turning the input shaft and verifying that the gearing turns freely. Also, inspect the index for any missing or broken hands. Place the index, or a new index if necessary, on a clean surface near you for reinstallation later.
- 3. If any screws shear off during the cover removal (or were previously sheared off), the meter will need to be replaced by a qualified utility representative. Reinstall any index cover screws that were removed and cap with seals if possible. Enter the appropriate information in the Mint HHT and skip to the next work order.
- 4. With a putty knife, scrap away any gasket material that remained on the meter when the index cover was removed.

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Assemble index onto transmitter

- 1. Insure the two (2) index screws are available and within reach.
- 2. Align the index's shaft with the Transmitter's shaft.
- 3. While holding the index in its position, insert one index screw into the Transmitter.



- 4. Insert the other screw into place.
- 5. Tighten the index screws, securing the index to the Transmitter.



CAUTION Use care when working with a power screwdriver to insert screws in the plastic Transmitter box. Over tightening will damage the box and/or weaken the contact.

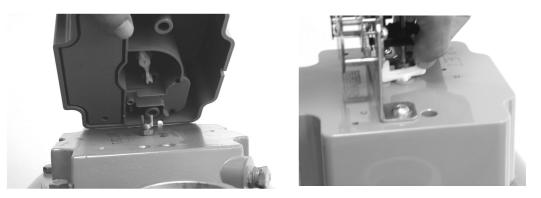
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Mount Transmitter and cover on meter

Verify that the transmitter is functional: check that the magnet on the bottom cam is visible; with the HHT check the transmitter ID and validate with the transmitter label.

Prepare the index cover within reach. This should be (replace if necessary) a plastic index cover with bosses for snap seals, as shown in this document.

1. Place the AMR Transmitter+index onto the gas meter. Adjust the Transmitter shaft's position by holding it from the top, and combine it into the meter's fork shaped drive dog. Rotate the shaft from the top and verify there is a slight freedom of motion.



- 2. While holding the Transmitter in place, place the index cover properly on the Transmitter, so that the index cover screw bosses align with the holes in the Transmitter.
- 3. Insert the two mounting screws through the cover and the Transmitter, and fasten securely to the meter.



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4. Install the two snap seals in the index cover and insert fully with the aid of a nut driver. Align the end of the nut driver on the snap seal and tap the end of the nut driver handle with your hand until it is fully seated.



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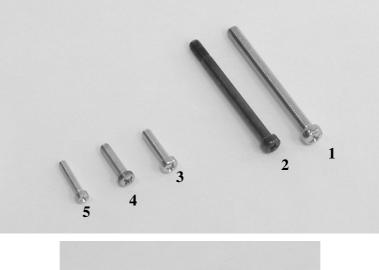
Initialize AMR Transmitter with HHT

On operating the *Mint* HHT, see **Gas AMR Installation HHT** (*Mint*) **User's Guide**. When you are ready to initialize (program) the AMR Transmitter, position the HHT with the upper back part of the HHT against the Transmitter receive area (see below) and press the PRG key (7-dot mark).



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Appendix – Transmitter Installation Screws





Mounting Screws

1.	Equimeter/Rockwell commercial meter (e.g. R750) – 5/16" x 3 ¹ / ₂ " combo fillister
2.	American commercial meter (e.g. AL800) - #18-18 x 84 Phillips pan head
3.	American residential meter (e.g. AC250) - 1/4" x 1" Phillips fillister
4.	$Schlumberger/Sprague\ residential\ meter\ (e.g.\ S175) - 10\text{-}24\ x\ 1"\ Phillips\ fillister$
5.	Equimeter/Rockwell residential meter (e.g. R275) – 10-24 x 3/4" Phillips fillister

Index Screws

6.	Equimeter/Rockwell commercial meter (e.g. R750) - WN1411 KA 60x14 Phillips
8.	Equimeter/Rockwell residential meter (e.g. R275) – WN1412 KA 35x22 Phillips
9.	American & Schlumberger/Sprague residential meter- WN1411 KA 40x12 Phillips

Index Cover Screws

7.

All residential meters - WN1412 KA 50x20 Phillips

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