



Elster American Gas Meter

MTU Installation Instructions (Y20968-TUM Rev A)

FCC/ISED Compliance

This product/device has been tested and certified to be in compliance with all appropriate requirements of both the FCC and ISED.

Any changes or modification to this product/device, or the use of any antenna other than the one provided by or authorized with expressed written approval by Aclara Technologies LLC may void the user's authority to operate this product/device.

This product/device and/or its antenna must be fixed-mounted on indoor or outdoor permanent structure(s) providing a separation distance of at least 20 cm from all persons during normal operation. This device is not designed (and it has no external connection) to operate in conjunction with any other antennas or transmitters. No other operating instructions for satisfying RF exposure compliance are needed.

This product/device has been tested and calibrated at the factory. It has no user adjustable controls and can only be adjusted by authorized, trained personnel.

French translation

Conformité FCC/ISDE

Cet équipement a été testé et il est conforme à toutes les exigences appropriées de la FCC et de l'ISDE.

Tout changement ou toute modification à cet appareil, ou l'emploi de n'importe quelle antenne autre que celle fournie par ou autorisée sous l'accord exprès donné par écrit d'Aclara Technologies LLC peut annuler l'autorisation d'utiliser de cet appareil.

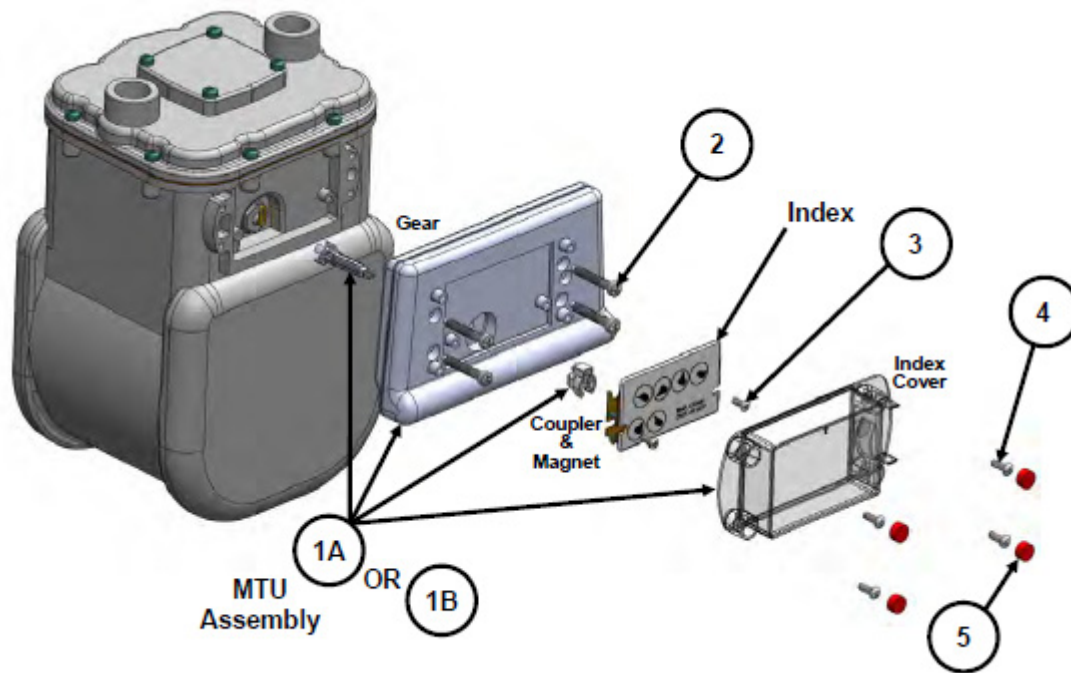
Cet appareil ainsi que son antenne doivent être montés de manière fixe sur des structures intérieures ou extérieures permanentes en conférant une distance d'au moins 20 cm des personnes pendant le fonctionnement normal. Cet appareil n'est pas conçu (et il n'a aucun branchement externe) pour être utilisé en association avec toute autre antenne ou tout émetteur. Aucune autre instruction d'utilisation n'est requise pour assurer la conformité aux règles d'exposition aux RF.

Cet appareil a été soumis à des tests et calibré en usine. Il n'a pas de contrôle d'ajustement et ne peut être ajusté que par un personnel autorisé et qualifié.

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Purpose & Scope

These instructions provide a procedure for installing a STAR direct-mount MTU on the following Elster/American Gas Meters: AC-175, AL-175, AT-175, AC-250, AL-250, AM-250, AR-250, AT-210/250, AT-350, AL-425, AC-630. These installation instructions cover the Aclara Catalog numbers 3531-010-RBS2 and 3531-010-RBS2W for these gas meters.



Parts Required

#	Item	General Description	Qty
1A	MTU, GAS, OD2, DIR, AMRES, STDRNG	MTU Assembly	1
1B	MTU, GAS, OD2, DIR, AMRES, EXTRNG	MTU Assembly	1
2	1/4-20 x 1.5" COMBO FIL HD, DP	Screws	4
3	#8 x 3/8" CMB TRI-LOB, Z-SEAL	Screws	2
4	#10 x 1/2" CMB TRI-LOB, Z-SEAL	Screws	4
5	SNAP SEAL, GAS MTU, RESDNTL	Tamper Plugs	4

NOTE

The mounting kit contains the exact quantity of hardware required for a single installation. Keep extra hardware on hand.

NOTE

No repair or maintenance of MTU is required. Defective MTU will be replaced.

NOTE

MTU may be wiped with damp cloth to prevent electrostatic charge hazard.

Tools Required

To mount the MTU to these meters, you will need the following tools and equipment:

- Phillips or slotted screwdriver
- Safety glasses
- Torque limiting screw driver

Remove Index

Before installing the MTU, remove all anti-tamper, safety, and security hardware from the clear index cover.



1. Remove the four screws from the clear index cover.



2. Discard cover and screws.

NOTE: Do not install the MTU if any of the screws are broken.

3. Remove the two OEM screws from the index.

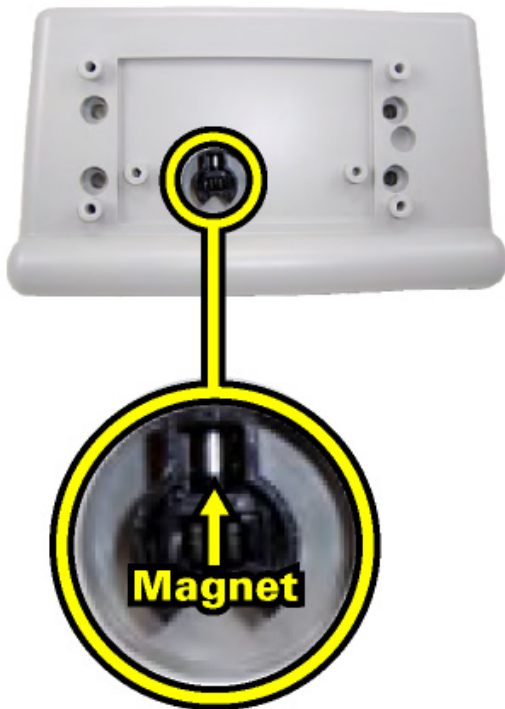


4. Set the index aside, and discard the old screws.

NOTE: If either of the OEM screws break during removal of the index, the remaining portion of the screw must not protrude from the face of the meter. **DO NOT** install the MTU if there are any protruding screws.

Mount Index to MTU/Pulsar

1. Visually inspect the front of the MTU assembly and ensure that the coupler is properly engaged with the gear shaft and that the coupler contains the magnet.



NOTE: Gear and Coupler are pre-assembled in the MTU.

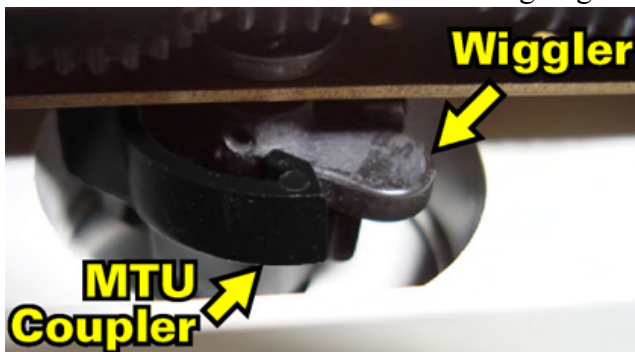
2. Visually inspect the back of the MTU assembly to check that the pre-applied gasket is properly adhered to the back.



3. Mount the index onto the MTU by inserting the two #8 x 3/8" screws into the holes on the bottom plate of the index.
4. Start one of the screws into its mounting hole.



5. Slide the index beneath the screw aligning the wiggler on the index with the MTU coupler.



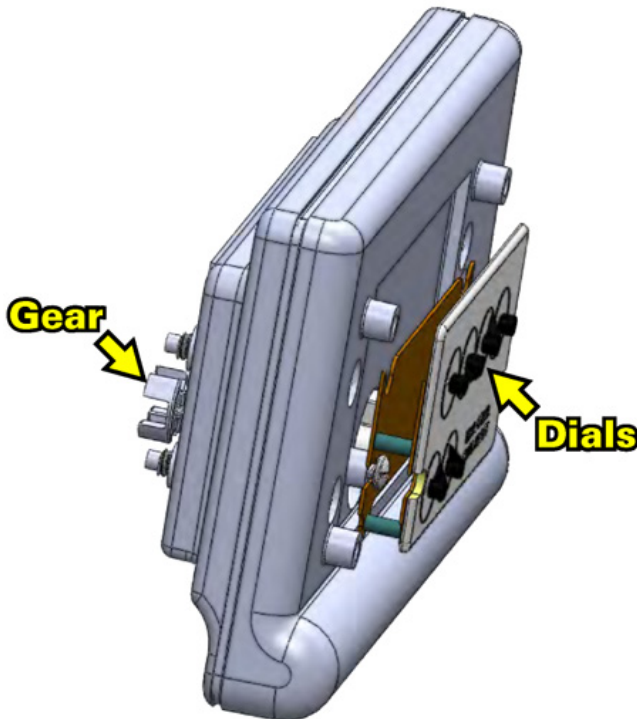
6. Start the second screw keeping the coupler and wiggler aligned.



7. Tighten both screws to a torque of 4-8 inch-pounds.

CAUTION! Do not over tighten screws. Excessive torque may damage the MTU enclosure.

8. Check that the index is properly engaged by rotating (clockwise and counterclockwise) the gear on the back of the MTU and ensuring the index dials are rotating without obstruction.



Mount MTU Assembly to Meter

1. Insert the four 1/4-20 X 1.5" screws through the holes on the MTU.

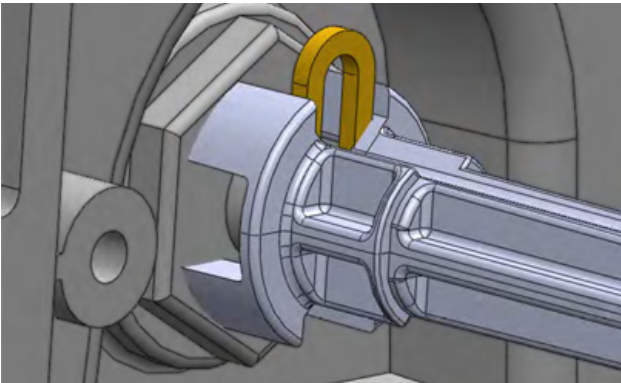


2. Align MTU gear opening with the wiggler on the meter.



3. Tighten the four 1/4-20 X 1.5" mounting screws to 12-16 inch-pounds.

CAUTION! Do not over tighten screws. Excessive torque may damage the MTU enclosure.



Note: Gear shown below is detached from the MTU for illustration purposes only.

- Place the new cover over the index and align the magnet in the index cover so that it seats in the recess in the MTU.



- Align the index cover with the mounting holes on the MTU, and secure it using the four #10x1/2" screws.
- Tighten the four #10x1/2" screws to 8-12 inch-pounds. The index cover gasket will be compressed slightly.



CAUTION! Do not over tighten screws. Excessive torque may damage the MTU enclosure.

- Install the four Tamper Plugs in the index cover screw towers.



Putting the Device into Service

Program the MTU using the MTU Programmer software and the Field Programmer.



To take the device out of service, follow the instructions for putting the device into service in reverse order.

MTU ID Label Examples



NOTE

Specific Conditions of use in hazardous locations indicated on label.

List of Standards

1. ANSI/ISA 12.12.01
2. CSA 22.2

NOTE

Training can be provided by Aclara or Aclara can train and certify third party installers. Installers may be anyone certified by Aclara.

