

# AMERICAN

## 4", 6", and 8" GTS<sup>®</sup> Turbine Meters

Installation Instructions for  
GTS Cartridge in a GT Housing



**AMERICAN**  
**METER COMPANY**

*Measurement Engineers Since 1836*

# GTS® Cartridge Conversion Process

## 4", 6", and 8" Turbine Meters

### HOW TO REPLACE THE GT CARTRIDGE IN A METER SHOP

1. Remove the existing GT cartridge, O-ring and top plate bolts and set aside.
2. In the 4-inch size only, the next step is to replace the nose cone of the inlet Flo-Guide.
  - Remove the inlet flow guide by removing the large retaining ring at the meter inlet.
  - Disassemble the existing (black) nose cone held in place with a single screw and attach the (white) nose cone with the screw supplied.
  - Then reassemble the Flo-Guide using the existing retaining ring.
3. Remove the existing seal tape from the meter housing. Use a detergent to remove any oil, debris, etc. from the meter housing. Install the new seal tape, with the adhesive supplied, in the position shown in the diagram at right. This new seal tape goes on the *downstream* side of the drain plug at the bottom of the meter housing. The adhesive takes about 24 hours to dry.
4. Before installing the GTS cartridge, apply a light coating of grease to the seal tape.
5. Grease the new cartridge O-ring and place it in the cartridge top plate groove.
6. Install the GTS cartridge *with the rotor facing upstream*. Install the hex head cartridge bolts and tighten to the torque levels listed in chart at right.

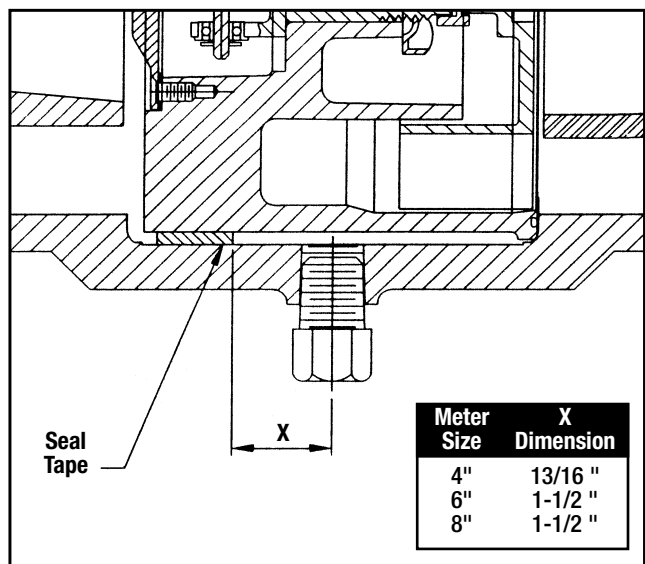
*The meter does not have to be rebadged. The cartridge comes with the serial number identification.*

**IMPORTANT:** To mount a Mercury Instrument or Equimeter corrector on the new cartridge, install the optional adapter plate over the cartridge gear train housing.

### PARTS INCLUDED WITH KIT

- |                              |                            |
|------------------------------|----------------------------|
| (1) Cartridge                | (8) Hex head bolts         |
| (1) Nose cone – 4" only      | (1) Package of O-ring lube |
| (1) Pan head screw – 4" only | (1) Instructions           |
| (1) O-ring and grease        |                            |

### SEAL TAPE APPLICATION



### CARTRIDGE BOLTS – TORQUE LEVELS

Pressure (psi)	4" Torque (lbs-ft)	6" Torque (lbs-ft)	8" Torque (lbs-ft)
175	25	35	70
300	31	50	100
720	68	205	340
1440	90	300	500



300 Welsh Road  
 Building One  
 Horsham, PA 19044-2234 U.S.A.  
 Phone: 215/830-1800  
 Fax: 215/830-1890  
 Website: americanmeter.com



275 Industrial Road  
 Cambridge, Ontario, N3H 4R7 Canada  
 Phone: 877/461-2626 (toll free)  
 Phone: 519/650-1900  
 Fax: 519/650-1917  
 Website: canadianmeter.com