

Installation Instructions

Propeller Meter Conversion to a Sealed Register

SEALED REGISTER CONVERSION KITS

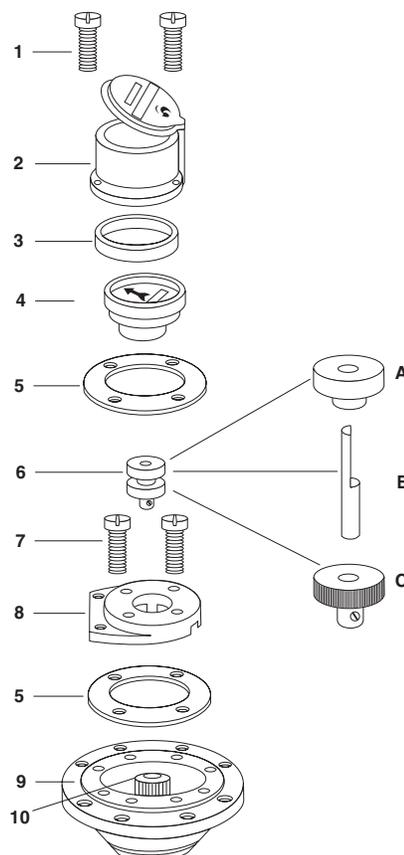
Conversion kits are designed to permit the installation of a hermetically sealed register to Sensus Propeller Meters. Please read the following comments before reading the instructions:

1. Sealed Register provides totalization only.
2. If the Propeller Meter is being converted from totalization only (and registration is to remain the same), use the change gears from the meter being converted (referred to below as illustration #6C and #10). If the meter is being converted to a registration other than what it already has (such as gallons to cubic feet, or from rate of flow to totalization only), consult your Sensus representative for information on using the correct change gears (illustration #6C and #10).

CONVERSION INSTRUCTIONS

1. Remove the existing register bonnet and register from meter head.
2. Remove change gear from underside of register, using a hex wrench. This gear will be re-used (per Ill. #6), unless a substituted correct gear is required, as noted in "comments point 2, above.
3. Install gear (Ill. #6C) onto shaft, (Ill. #6B). Be sure that the gear hub (the end with the set-screw) just covers the end of the machined flat surface on the shaft, at the point where the "flat" joins the round portion. Tighten set-screw onto "flat" of the shaft.
Note: At this point, there should not be any flow through the meter to prevent injuries to hands or fingers.
4. If the gear shown in Ill. #10 is the correct one to be used, leave it loosely in place, or remove it and loosely install the correct change gear in place.
5. Place on gasket (Ill# 5) on the meter head (Ill. #9), then place the adapter plate (Ill #8) on the top gasket. Insert the round end of the shaft (Ill. #6B) with attached gear, (Ill. #6C) into bushing at the hole in the center of the adapter plate.
6. Adjust the meter gear (Ill. #10) on its shaft so that a proper vertical mesh is obtained with the register gear (Ill. #6C) in the adapter plate, then tighten the meter gear.
7. Line up the Ill. #5 gasket with the slots in the adapter plate, then line both the gasket and plate to match the holes in the meter head and insert four screws (Ill. #7) into the holes; adjust the adapter plate so that the gears mesh - but do not bind. Tighten all four screws.
8. Remove the register gear/shaft assembly from the adapter plate and apply a light coating of grease to the gears, shaft and bushing, then replace the assembly in the adapter plate.
9. Place the register gasket (Ill. #3) on top of the register, (Ill. #4) and apply a thin film of lubricant to the outside of the gasket. Insert the register into the bonnet (Ill. #2). Be sure that the register face is in the correct position before pressing into place. Set aside for later use.
10. Place the magnet (Ill. #6A) on the shaft (Ill. #6B), noting that the hole in the magnet has a flat side to match the "flat" side of the shaft.
11. Place the gasket (Ill. #5) on top of the adapter plate, then place the register bonnet assembly in place - for the desired viewing position of the odometer. Install the bonnet seal screws (Ill. #1), noting that two of them are drilled to accept original seal wire.
12. Resume the flow through the meter and check the completed assembly for proper operation.

Note: As part of the annual meter maintenance procedure, it is a good idea to inspect the condition of the gears, bushings and shaft. Replace any which appear to be worn or damaged.



Conversion Kit Consists of:

Ill No.	Description
1.	Register Bonnet Seal Screws (4) - 2 with seal wire and 2 without
2.	Register Bonnet with Lid
3.	Register Gasket
4.	Sealed Register
5.	Gaskets (2)
6.	Magnet and Gear Assembly - Magnet (6A) and Shaft (6B) supplied in kit, Change Gear (6C) is from register on meter
7.	Adapter Plate Screws (4)
8.	Adapter Plate

Note: Illustration numbers 9 and 10 are not provided in the kit as they are part of the meter being converted.

Tools Required (but not supplied) for Conversion:

- Screwdriver with 5/16" maximum blade width
- A 1/16" size Hex Wrench
- Lightweight Lubricating Grease