

10VM/VR/VT1000

10V_9001 Vortex Flowmeter Vapor Seal Field Installation Instructions

INSTALLATION INSTRUCTIONS

10V_9001 FIELD INSTALLATION OF VAPOR SEAL FOR VORTEX FLOWMETERS MODELS 10VM1000, 10VR1000 AND 10VT1000

The installation of the vapor seal kit will eliminate possible infiltration of process vapor into the electronics housing.

Content of 614B984U01 Parts Kit:

ITEM	PART NUMBER	DESCRIPTION	QTY
1	01H126AU01	M5 x 70 guide bolt	2
2	333G231U02	Tower gasket	1
3	368B077U01	Vapor seal	1
4	377A426U01	Thin slotted washer	1
5	625B3721101	Thick slotted washer	1
6	124G070U01	4 mm hex key	1

Procedure for retrofitting vapor seal:

- 1) Remove and save (2) diagonal tower bolts and washers. Use 4 mm hex key.
- 2) In place of the removed tower bolts, install (2) M5x70 guide bolts (Item 1). Hand tighten to bottom of threads in body.
- 3) Remove and save remaining (2) tower bolts and washers.
- 4) Separate tower assembly from meter body by lifting tower away from body. Slide tower to end of M5x70 guide bolts. This will expose enough of the sensor to permit installation of the new parts.

CAUTION

1. Lifting the tower more than allowed by the M5x70 guide bolts may cause unrepairable damage to the sensor.
2. Do not loosen or adjust sensor bolts. The sensor is pressurized at process conditions.

- 5) Remove and discard existing tower gasket.

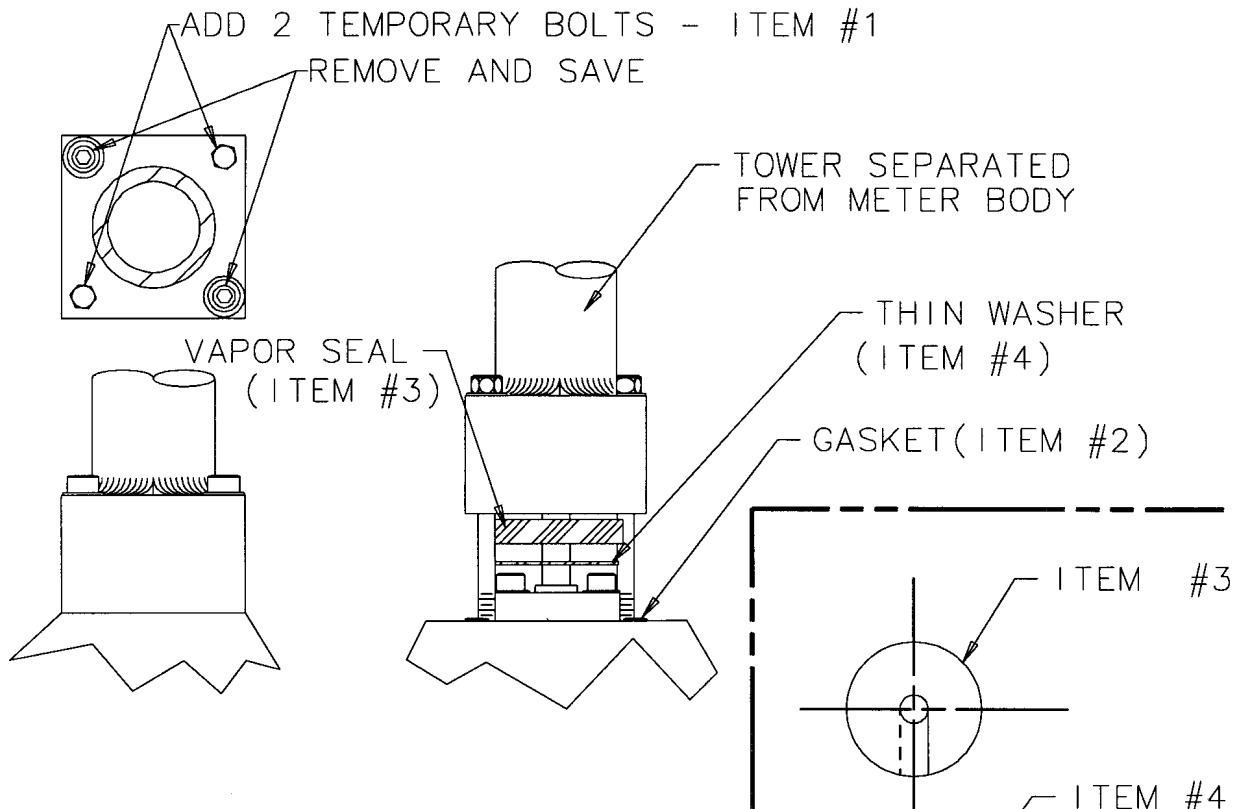
- 6) Install slotted gasket (Item 2). Position gasket above sensor bolts and against M5x70 guide bolts. Slide gasket past sensor flange to final position on meter body.
- 7) Install split vapor seal (Item 3) around sensor shaft.
- 8) Install slotted washer between vapor seal and sensor bolts:
 - a) Use **thin** slotted washer (Item 4) with **welded tower design**.
 - b) Use **thick** slotted washer (Item 5) with **cast tower design**.

NOTE:

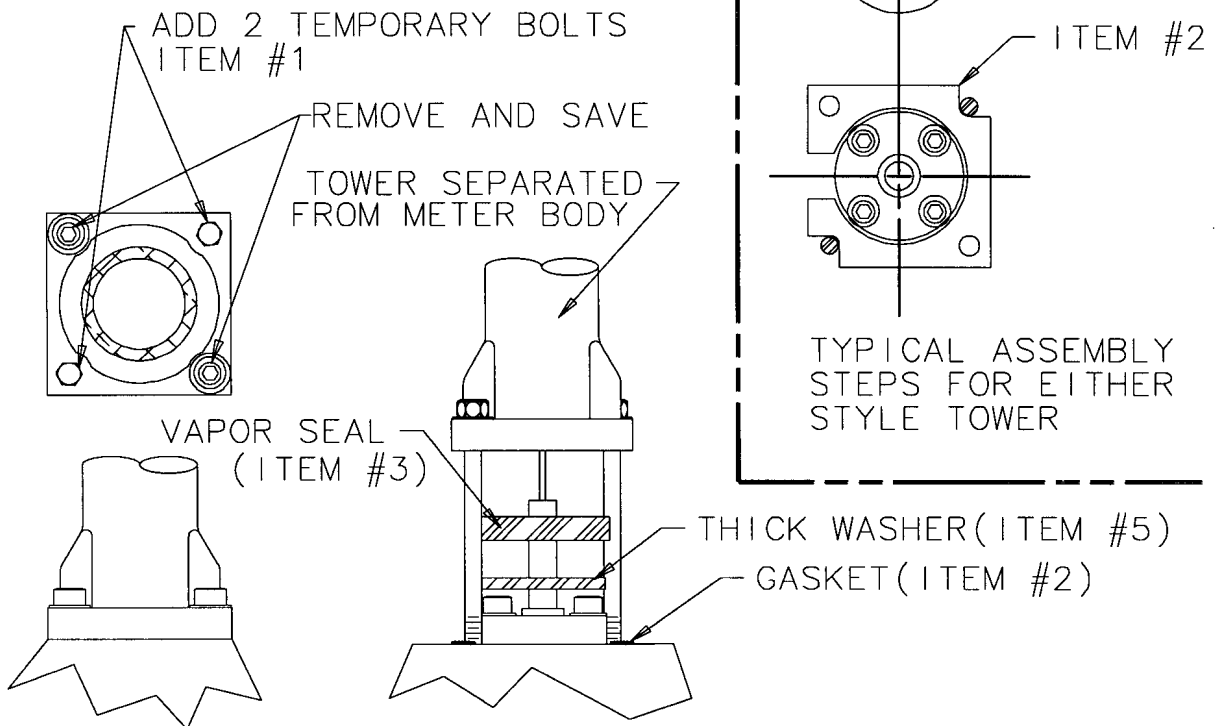
1. **Align washer so that contact is made with all (4) sensor bolts.** Washer will not remain level if the slot is over a sensor bolt.
2. Rotate vapor seal so that the split is oriented 180 degrees from the slot in the washer.

- 9) With M5x70 guide bolts still in place, push tower over vapor seal. Approximately 1/16 inch compression is required to fully close the gap.
- 10) Loosely bolt tower to body with (2) original bolts and washers.
- 11) Remove and discard (2) M5x70 guide bolts.
- 12) Assemble remaining (2) bolts and washers into tower and body.
- 13) Tighten all (4) bolts evenly to compress vapor seal between sensor and tower.

WELDED TOWER DESIGN



CAST TOWER DESIGN



PN24691



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