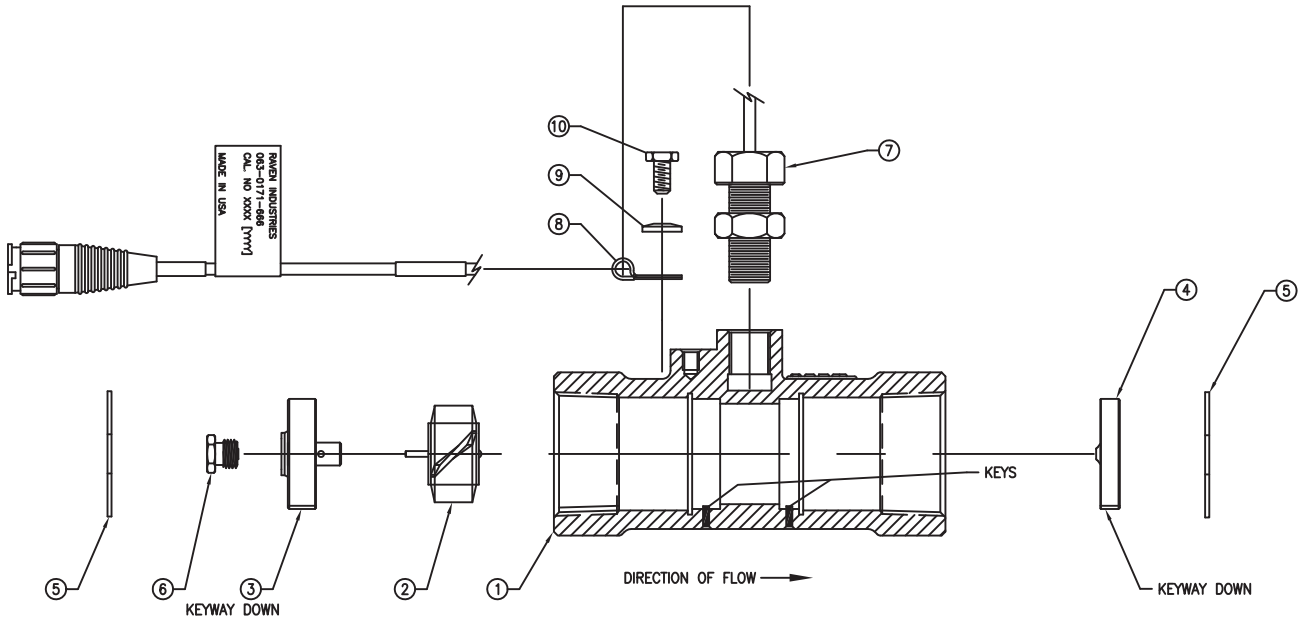


RFM 60s FLOW METER REPLACEMENT PARTS

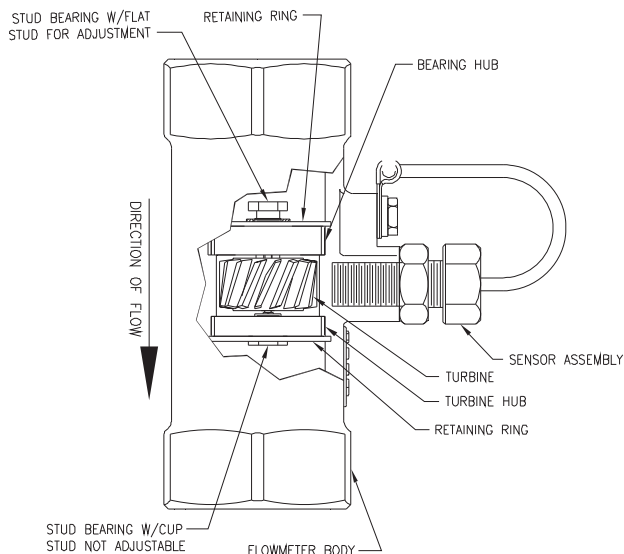
063-0171-666

ITEM	DESCRIPTION	RAVEN PART #
1	Body, RFM 60s Flowmeter	107-0171-246
2	Rotor/ Magnet Assembly	063-0171-673
3	Hub/Bearing Assy, Upstream	063-0171-674
4	Hub Assembly, Downstream	063-0171-769
5	Ring, Retaining, Internal	335-0000-278
6	Stud Bearing	063-0173-062
7	Sensor Assembly	063-0171-669
8	Clamp, Cable Insulated	435-3001-042
9	Washer, Spring	313-2400-001
10	Bolt, Hex Head	311-0050-254





RFM 60s FLOW METER MAINTENANCE AND ADJUSTMENT PROCEDURE

- 1) Remove Flow Meter from Sprayer , brush away any debris and flush with clean water to remove any foreign material.
- 2) Remove the retaining rings carefully. Remove the bearing hub, turbine hub, and turbine from inside Flow Meter housing.
- 3) Clean the turbine and hubs of metal filings and any other foreign material. Use pressurized air to blow metal fillings and debris out of both hubs and turbine. Confirm that the turbine blades are not worn. Hold turbine and bearing hub in your hand and spin turbine. It should spin freely with very little drag.
- 4) If bearing hub stud is adjusted or replaced, verify the turbine fit before reassembling: Put turbine hub and retaining ring in place. Put bearing hub with turbine against turbine hub inside the flowmeter housing. (Make sure stud keys inside flowmeter housing must be lined up in the groove on the hub). Put the retaining ring into the groove, to lock bearing hub in place. Spin turbine by blowing on it. Tighten bearing hub stud until turbine stalls. Loosen the stud 1/3 of a turn. The turbine should spin freely.
- 5) Use a low pressure (5 psi) [34.5 kPa] jet of air thru Flow Meter in the direction of flow and again in opposite direction to verify that the turbine spins freely. If there is drag, loosen the stud on the bearing hub 1/16 turn until the turbine spins freely.
- 6) If turbine spins freely and the cables have checked out O.K., but the Flow Meter is not totalizing properly, verify that the sensor assembly is threaded all the way into the flowmeter body, and the orientation groove on top of sensor is parallel with flowmeter body. If flowmeter still does not totalize, replace Sensor Assembly.



PROCEDURE TO RE-CALIBRATE FLOW METER

- 1) Enter a METER CAL number of 10 [38] in the key labelled: 
- 2) Enter a TOTAL VOLUME of 0 in the key labelled: 
- 3) Switch OFF all booms.
- 4) Remove a boom hose and place in calibrated 5 gallon [19 liter] container.
- 5) Switch ON appropriate boom switch and MASTER switch. Pump exactly 10 gallons [38 liters].
- 6) Readout in TOTAL VOLUME is the new METER CAL number. This number should be within +/- 3% of the number stamped on the tag on Flow Meter.
- 7) Repeat this procedure several times to confirm accuracy. (Always "zero out" the TOTAL VOLUME display before retesting).

NOTE: For greatest precision, set METER CAL to 100 and pump 100 gallons (378 liters) of water.

- 8) To verify Flow Meter calibration, fill applicator tank with a predetermined amount of measured liquid (i.e. 250 gallons). **DO NOT RELY ON GRADUATION NUMBERS MOLDED INTO APPLICATOR TANK.** Empty the applicator tank under normal operating conditions. If the number displayed under TOTAL VOLUME is different from the predetermined amount of measured liquid by more than +/- 3%, complete the following calculation.

EXAMPLE: METER CAL = 720 [190]
 TOTAL VOLUME = 260 [983]
 Predetermined amount of measured liquid = 250 [945]

$$\text{Corrected METER CAL} = \frac{\text{METER CAL} \times \text{TOTAL VOLUME}}{\text{Predetermined amount of measured liquid}}$$

ENGLISH UNITS:
 $= \frac{720 \times 260}{250} = 749$

METRIC UNITS:
 $= \frac{[190] \times [983]}{[945]} = [198]$

Corrected METER CAL = 749 [198]

- 9) Enter corrected METER CAL before resuming application.