## MAINTENANCE GUIDE FOR THE JV-XXTC SERIES FLOW METER

Cleaning, inspecting, or repairing a JV-TC Series gear flow meter is easily accomplished by following the procedures below. Read all instructions before starting.

Step by Step video link: <a href="https://www.voutube.com/watch?v=I\_MxHwUxwGI">https://www.voutube.com/watch?v=I\_MxHwUxwGI</a>

## **Tools Needed:**

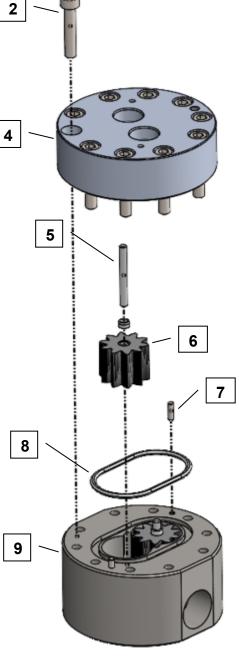
- 5mm or 8mm Hex Key
- Hammer
- Torq Wrench
- Cleaning solution
- 1. Remove the Sensor from the flow meter body Upper Housing (4).
- 2. The JV-30 size and smaller use M6 Bolts (2), loosen them using a 5mm hex key. The JV-60 uses M10 Bolts (2), loosen them using an 8mm hex key. Keep the 2 opposing bolts near the Locating Pins (7) engaged by a few threads to avoid stress on the shafts and the locating pins during housing separation. Please note the orientation of the Upper and Lower housings with respect to each other so that the meter is reassembled the same way.
- Holding the Upper Housing (4), gently tap on the top of the 2 opposing bolt heads to separate the Upper Housing (4) from the Lower Housing (9). Do NOT use chisels or screwdrivers to split and pry apart the housings. This can cause damage to the meter bodies and meter internal parts.
- 4. After separation, remove, clean, and inspect the gears (6) and shafts (5). Clean out the O-ring groove, shaft holes and meter cavity.
- 5. After cleaning all parts completely, the Gears (6) and Shafts (5) can be reinserted. Check for free and easy rotation of the gears.
- 6. Replace the O-Ring (8). PTFE O-rings should always be replaced. FKM O-rings can be reused if they are not damaged.

Note: JVx-60TC Flow meters have 2 O-rings per meter.

- 7. During reassembly keep the meter housings as parallel as possible. Make sure the housings are orientated the same way they were prior to disassembly. Model and serial number tags should match up as a reference.
- 8. Replace the Bolts (2) and torque to 11 ft/lbs for the 10, 12, 20, and 30 size meters and 22 ft/lbs for the 60 size meters. Do not force the meter housings together. Do NOT use a hammer or other such device. Over tightening may fatigue the bolts and/or restrict the operation if internal surfaces are not completely clean.

Note: Torque specs are for standard bolts.

9. Clean any debris from the pickup holes before remounting the sensor to the Upper Housing (4). Note for dual pickup sensors there is a correct and incorrect orientation for mounting on the flow meter. Please see the AW Gear Meters website for further documentation.





## **CROSS REFERENCE GUIDE FOR JV-XXBB SERIES SPARE PARTS**

Part - Qty per meter [Drawing Ref #]	JV-10TC	JV-12TC	JV-20TC	JV-30TC	JV-60TC
Locating Pin - 2 [7]	LP-3x10	LP-3x10	LP-3x10	LP-3x10	LP-8x32
Shaft - 2 [5]	ST-4X19.5-C	ST-4X23.5-C	ST-4X23.5-C	ST-4X35.5-C	ST-6X45.5-C
Gear Assembly - 2 [6]	GR-10TC	GR-12TC	GR-20TC	GR-30TC	GR-60TC
PTFE O-Ring - 1 [1]	SEL-OT9-39X3	SEL-OT9-39X3	SEL-OT9-46X3	SEL-OT9-46X3	SEL-OT9-68X4
FKM O-Ring - 1 [1]	SEL-OV9-39X3	SEL-OV9-39X3	SEL-OV9-46X3	SEL-OV9-46X3	SEL-OV9-68X4
Bolts - 10 [2]	FAS-SM610-5	FAS-SM610-5	FAS-SM610-5	FAS-SM610-5	FAS-SM1015-5
Kit (2 gears, 2 shafts, 1 PTFE and FKM O- Ring)	JV-KIT-10TC	JV-KIT-12TC	JV-KIT-20TC	JV-KIT-30TC	JV-KIT-60TC

<sup>\*</sup>JV-60 Kit includes 2 of each O-ring

