SRZ-100 Helical Flow Meter Maintenance Guide

Disassembly Procedure - Refer to the attached drawing #SRZ1902.

Never pry any housing components apart with a chisel or screwdriver. There are delicate carbide shafts inside this unit - to avoid damaging these parts lay the unit horizontally on a flat table or bench and follow the procedures below.

First remove the sensor (13) by releasing the locknut and removing the sensor from the flowmeter housing. Next relax the six hex head bolts (2) at the sensor end (6) with a 8mm Allen hex key. Remove four of the six bolts but keep two opposing bolts engaged by a few threads. With the flowmeter laying on its side on a table, hold the upper housing at the sensor end (6) and gently tap on the two bolts alternately with a hammer until the housing parts (6) & (7) separate. Remove the last two bolts and ease the two flowmeter sections fully apart. **NOTE: Carefully slide the upper housing (6) straight off until it is completely clear of the gears (8) so as not to break the gear shafts**. With the housing separated, remove the helical gears (8), the sleeve bearing (11), and the sleeve (10) by lifting the gears straight out of the housing. Check that the ball bearings (9) do not fall out. Unscrew the remaining housing bolts (1) and remove the inlet housing (5).

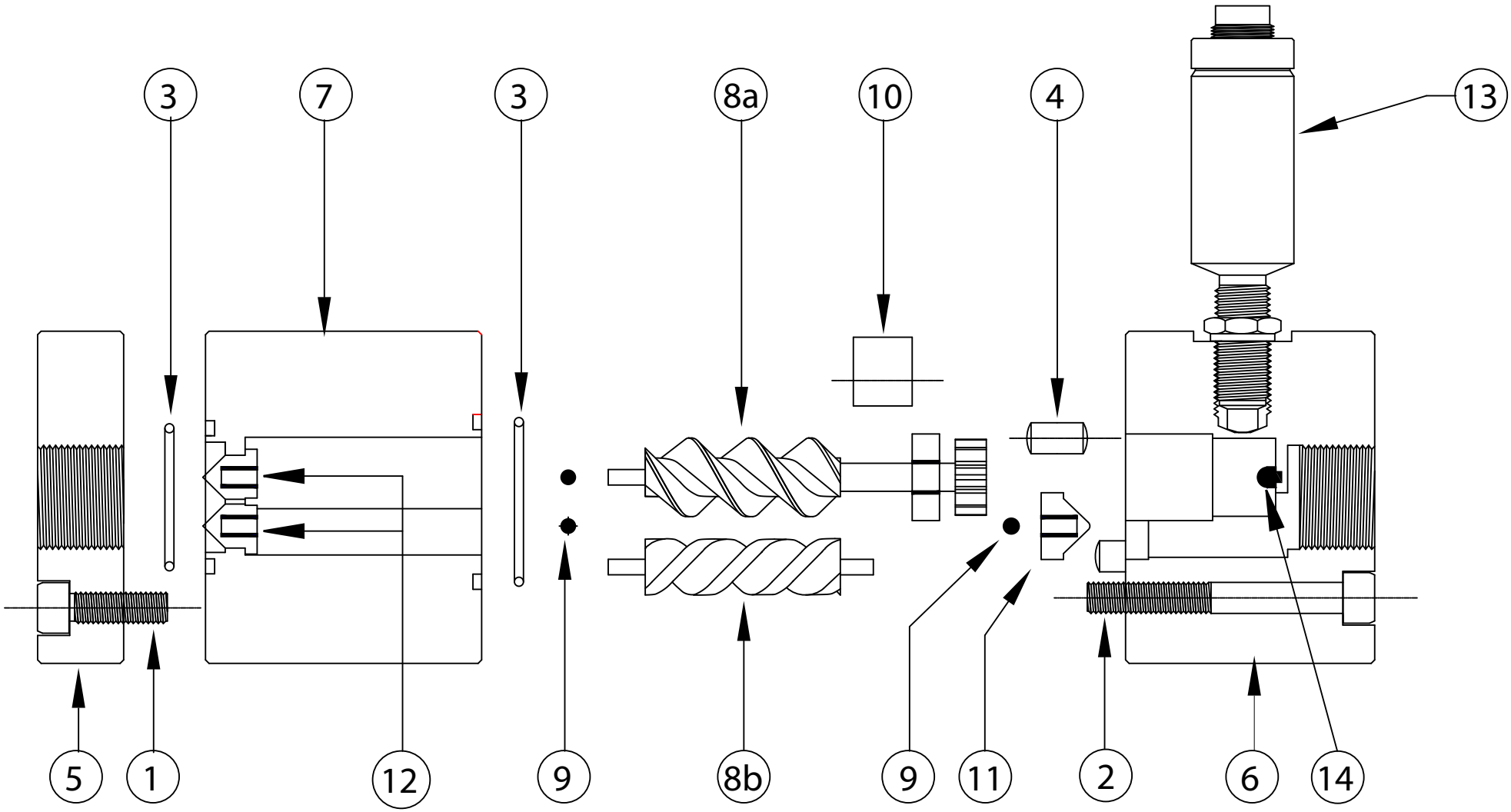
Reassembly Procedure - Refer to the drawing

Check the condition of the 2 o-rings (3), replace them if any deterioration is noticed. Set housing part (7) down with the inlet side pointing up. Check that the o-ring is seated snugly and screw the inlet housing (5)on hand tight - make sure the index marks on the housing parts line up. Check that the other o-ring (3) is also fitted snugly in its groove. Next set housing part (6) down on a table with the locating pins (4) pointing up. Insert the larger helical gear, including the donut bearing (8a), into the opening with the tooth gear end going first - press the donut bearing into the hole as well. Raise the gear (8a) until the spacer sleeve (10) can be placed into the same hole above the donut bearing. Press down the sleeve (10) until it sits flush in the housing (6) - make sure the sleeve is turned so that it does not close off the opening inside the housing. Place the sleeve bearing (11) into the other opening and set it flush with the housing. If necessary, lift the larger gear (8a) slightly to get sleeve bearing (11) into its opening. Insert the smaller helical gear (8b)into the sleeve bearing (11) making sure the two helical gears mesh with each other. Turning the gears will help. Next, lay the housings (6 & 7) sideways on a table, match the holes in housing (7) with the gears and **carefully** slide the housing (7) over the helical gears. **Make sure to slide the housing on straight without any twisting to avoid stress on the shafts.** Insert two opposing bolts (2) and alternately tighten each down until the two housing parts (6 & 7) are together. Insert and tighten down the remaining four bolts with the 6 mm allen hex key. If the parts are reassembled correctly, a snug hand tight torque will provide a sufficient seal. Reassembly should not require use of a vise.

FOOTNOTE: *The use of thread seal tape or pipe dope on the fluid fittings should be avoided as pieces may enter the meter. It is not recommended that the meter be operated or flushed with water. Should this occur, residual water should be removed with alcohol and the internals oiled. If the device is to remain inoperative for any extended period it is recommended that the internals be oiled.*

SRZ-100 HELICAL FLOWMETER

REV	DESCRIPTION	DATE	APPR.BY
B	ADDED PART NUMBERS	02-02-05	C.H.
C	REVISED COMPANY LOGO	12-08-11	JP



PART #	REF #	PART #	REF #	PART #	REF #
M1035	1		6	BFO-100	11
M1090	2		7	MFO-100	12
COT-SRZ-100	3	GR-100M	8a	VTER/P	13
COV-SRZ-100		GR-100F	8b	BN-100	14
LP-100	4	BB-100	9		
	5	BS-100	10		

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TITLE: SRZ-100 HELICAL FLOW METER

DRAWING NUMBER: SRZ1902C			PART NUMBER: BD00100
DATE: 02-02-05	REV: C	DRAWN BY:	CHRIS HUSSON
CHECKED BY: C.H.	PAGE OF 1	1	SCALE: NONE