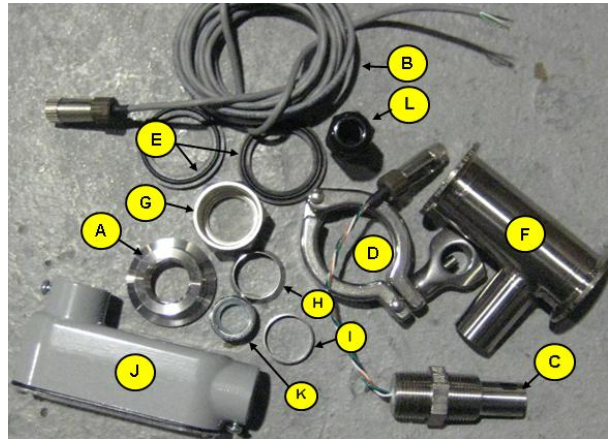


4400HX LOOP SENSOR

This Tech Note details a change that affects all 4400HX Hot Water Sanitizable RO Systems. The existing Loop Conductivity / Temperature Sensor (JUMO 2000477361) are being replaced. The new sensor is rated to 200°C and 250 psig. It is more robust when exposed to repeated temperature changes brought on during regular life.

For customers who need to replace the older sensor, a retrofit kit, P/N 3027301, is required. It contains the sensor along with all of the other necessary parts to perform a change out of this device. The kit is semi-assembled, but will require following the retrofit instructions. For those customers who have the new sensor but require a replacement, use P/N 3027298.



ITEM #	REF	DESCRIPTION	QTY
5	A	THREADED THERMOMETER CAP	1
12	B	SENSOR CABLE	1
8	C	CONDUCTIVITY SENSOR	1
7	D	TRI-CLAMP	1
6	E	TRI-CLAMP GASKET	2
4	F	SENSOR FITTING	1
1	G	LETLOK NUT	1
2	H	LETLOK FRONT FERRULE	1
3	I	LETLOK BACK FERRULE	1
9	J	CONDUIT BOX W/GASKET & COVER	1
10	K	REDUCER FOR CONDUIT BOX	1
11	L	STRAIN RELIEF	1

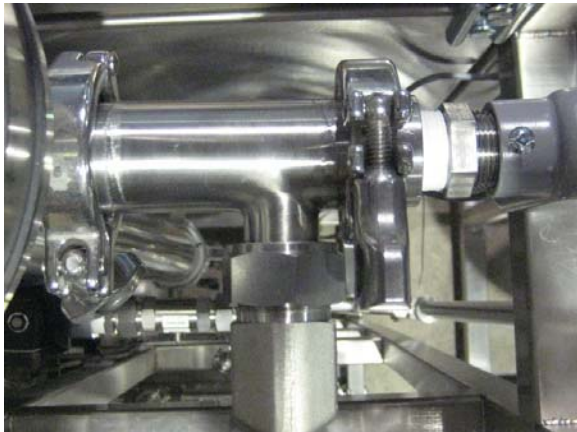
RETROFIT INSTRUCTIONS

- (1) Turn pump selector switch "OFF".
- (2) Close pump discharge valves.
- (3) Close heater outlet valve.
- (4) Place the RO in "OFF" mode.
- (5) Turn 4400HX main disconnect switch "OFF" and open the panel.
- (6) Disconnect existing sensor patch cord from the JUMO controller.

Note: Verify there is not another green (ground) wire connected to terminal 14. If so, disconnect it, cut the end, and then tuck it into the wire duct.

- (7) Disconnect the existing DIN connector from the JUMO sensor and remove the patch cord from the panel.
- (8) Remove the JUMO sensor fitting along with the 1" tri-clamp gasket.
- (9) Install the new sensor fitting using items 1,2,3,6 and the tri-clamp that was removed.
- (10) Remove the cover from the LB conduit box (Item 9) and run the sensor cord (Item 8) through the 3/4" 90 degree hole. Thread the sensor to LB conduit box.
- (11) Thread the reducer (Item 10) and strain relief (Item 11) in the other hole on the LB conduit box.
- (12) Apply Teflon tape to the sensor threads (Item 8) and thread it into the sensor tri-clamp adaptor (Item 5). Tighten securely.
- (13) Install the sensor assembly to the sensor fitting using items 6 and 7. Tighten the tri-clamp securely.
- (14) Run the sensor patch cord (Item 12) leads end through the LB conduit box opening so that the connector is in the conduit box.
- (15) Connect the sensor quick connects.
- (16) Tighten the strain relief and install the LB box cover with gasket.
- (17) Run the sensor cable into the 4400HX panel and up to the JUMO controller.
- (18) Connect the colored lead wires to the following terminals on the JUMO controller.

White	→	Pin 9
Green	→	Pin 12
Black	→	Pin 13
Red	→	Pin 14



Top View



Front View

Controller Setup Instructions :

- (1) Turn the 4400HX panel power "ON". The panel door will need to remain open to access the controller.
- (2) On the JUMO controller, press "P" for longer than 2 seconds. **USER** will appear on the screen.
- (3) Press the down arrow once. **ADMIN** will appear on the screen.
- (4) Press "P". **CODE⁰** will appear on the screen.
- (5) Press the up arrow until the number is **CODE²⁰** and then press "P".
- (6) Press the up or down key until **TEMP** appears on the screen and then press "P".
- (7) Use the up or down key until **SENS¹** appears on the screen and then press "P".
- (8) Use the up or down key until the **SENS²** appears on the screen and then press "P".
- (9) The JUMO controller will return back to the main menu after 60 seconds.

System Start-up :

- (1) Close the 4400HX panel door.
- (2) Open the heater outlet valve.
- (3) Open the pump discharge valves.
- (4) Place the RO in "RUN" mode.
- (5) Turn the pump selector switch "ON".
- (6) Check for leaks and repair if any are found.
- (7) Verify the water quality using a calibrated hand held conductivity meter.