



INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

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No. 0580001133 (5)

1RKHO.P / 1RKHO.H Single Hands-Off Retro-Fit Kit

NOTE TO INSTALLER: Please leave this information with the Maintenance Department.

CAUTION! Prior to making any electrical connections, verify with a voltmeter that power from the service panel is **off**.

LIMITED WARRANTY

HAWS warrants that all of its products are guaranteed against defective material or poor workmanship for a period of **one year from the date of shipment**. The foregoing notwithstanding, *HAWS* warrants certain specific products or components thereof for an adjusted period. A list of these excepted products and components and a description of their respective warranty terms may be found here: www.hawsco.com/warranty. *HAWS*' liability under this warranty shall be discharged by furnishing without charge F.O.B. *HAWS* factory any goods, or part thereof, which shall appear to the Company upon inspection to be of defective material or not of first-class workmanship, provided that a claim is made in writing to Company within a reasonable period after receipt of the product. Where claims for defects are made, the defective part or parts shall be delivered to the Company, prepaid, for inspection. *HAWS* shall not be liable for the cost of repairs, alterations or replacements, or the labor required to implement them, or for any expense connected therewith made by the owner or owner's agents, except upon written authority from *HAWS*. *HAWS* shall not be liable for any damages caused by defective materials or poor workmanship, except for replacements, as provided above. Buyer agrees that *HAWS* has made no other warranties either express or implied in addition to those above stated, except that of title with respect to any of the products or equipment sold hereunder and that *HAWS* shall not be liable for general, special, incidental, or consequential damages claimed to arise under the contract of sale.

Equipment manufactured by *HAWS* is warranted to function if installation and maintenance instructions provided are adhered to. The units also must be used for the purpose for which they were intended. Any *HAWS* emergency equipment is intended to supplement first-aid treatment. Due to widely varying conditions, *HAWS* cannot guarantee that the use of this emergency equipment will prevent serious injury or the aggravation of existing or prior injuries.

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SHOULD YOU EXPERIENCE DIFFICULTY WITH THE INSTALLATION OF THIS MODEL PLEASE CALL:

TECHNICAL SUPPORT: 1-800-766-5612

FOR CUSTOMER SERVICE: 1-888-640-4297

RECOMMENDED TOOLS: Spanner wrench (Haws pn 0006983506, not supplied), and Phillips head screwdriver.

MAINTENANCE: Periodically clean the strainer.

INSTALLATION PROCEDURE

NOTES:

1. For all plastic push-in type fitting connections, only connect NSF-61 copper or plastic tubing. Stainless steel or glass tubing is not recommended. The following assembly instructions must be followed to ensure a watertight connection:
 - a. Cut tubing square and clean.
 - b. Mark from end of tube the length of insertion (See table below).
 - c. Push tube into the fitting until it bottoms out.
 - d. To remove, depress collet and pull tubing out.

Tube Sizes	O.D. Tolerance	Insertion Depth
3/8"	±.005"	3/4"

2. 1RKHO.P Transformer is compatible with Type A and Type B North American Electrical Outlets. For other receptacle types, an adapter must be provided by others.

STEP 1: Remove access plate. Turn off water supply. Disconnect tubing from 5874 Push Button and use Spanner Wrench (Haws pn 0006983506) to remove valve.

STEP 2: Flush water through supply lines thoroughly before installing the system. Do not allow dirt, Teflon tape, or metal particles to enter the solenoid valve.

STEP 3: Assemble in the following order:
Connect supply tubing to 3/8" OD Y-strainer inlet.
Use 3/8" OD tubing to connect Y-strainer outlet to solenoid valve inlet.
Use 3/8" OD tubing to connect solenoid valve outlet to regulator valve inlet.
Connect regulator valve inlet to bubbler tubing.
Reference plumbing drawing for installation instructions (see page 4 of 7).

STEP 4: Use mounting hardware to secure sensor to the hole for the 5874 Push button. Sensor kit may be installed on internal and external walls, provided the transformer is mounted inside the wall per the instructions in Step 6. For external installations: avoid direct contact with sunlight on the sensor lens.

STEP 5: Wire cable harness per Cable Wiring Schematic (see page 7 of 7).

STEP 6: For 1RKHO.P: Plug the 9V transformer into a duplex receptacle. For 1RKHO.H: Wire the transformer to appropriate power per NEC/CEC and Local Code. If needed, enclose transformer in outlet box (not supplied).

STEP 7: Clear the area in front the sensor. Allow the sensor to calibrate for at least 10 seconds before operating. When the sensor is activated continuously for 30 seconds, the sensor will automatically shut off the water supply to the bubbler. To resume activation, remove obstruction and allow the sensor to reactivate. This feature prevents flushing of water due to unintentional activation or vandalism.

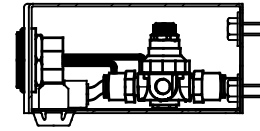
STEP 8: Turn water supply on and adjust the bubbler's flow using the black regulator valve. Clockwise adjustment increases flow and counterclockwise decreases flow. Check fountain for leaks.

SENSOR/SOLENOID TROUBLESHOOTING	
PROBLEM	REPAIR CHECKLIST
1. Insufficient bubbler flow.	<ul style="list-style-type: none"> a. Check that screwdriver stop is wide open on the regulator valve. Turn clockwise to increase flow and counter-clockwise to decrease flow. b. Verify minimum 30 psi supply pressure. c. Clean inlet strainer (if one is present).
2. No bubbler flow – light in the sensor does not flash once when user's hands are within the sensor's range	<ul style="list-style-type: none"> a. Object is blocking sensor. Remove object in front of sensor eye. b. Sensor is picking up reflections from a foreign object. Eliminate the source of reflection.
3. No bubbler flow – light in the sensor flashes once when user's hands are within sensor range.	<ul style="list-style-type: none"> a. Connectors between electronic unit and solenoid are disconnected. Reconnect the connectors. b. Debris or scale in solenoid. Shut off water and power. Unscrew solenoid, pull out the plunger and spring from the solenoid and clean them. Use scale remover if needed. When replacing the plunger, ensure the spring is oriented vertically. c. The central orifice in the diaphragm is plugged or the diaphragm is torn. Clean the orifice or replace the diaphragm. d. The water supply pressure is higher than 115 psi. Reduce the supply water pressure.
4. Continuous bubbler flow – sensor flashes once when user's hands are within the sensor's range.	<ul style="list-style-type: none"> a. Debris or scale in solenoid diaphragm. Clean the orifice or replace diaphragm per 4b-c.
5. Continuous bubbler flow – light in the sensor does not flash once when user's hands are within sensor range.	<ul style="list-style-type: none"> a. Sensor is dirty or covered. Clean or eliminate cause of interference. In this event, the security time will stop flow. b. Sensor is picking up reflections from an object. Eliminate the cause of reflection.
6. Repeated clogs in strainer.	<ul style="list-style-type: none"> a. Install water filter in supply line.
7. Bubbler does not activate.	<ul style="list-style-type: none"> a. Check wiring harness. Replace if necessary. b. Check solenoid valve. Replace if necessary. c. Replace sensor. d. Check transformer for 9V at output terminals; replace if necessary.

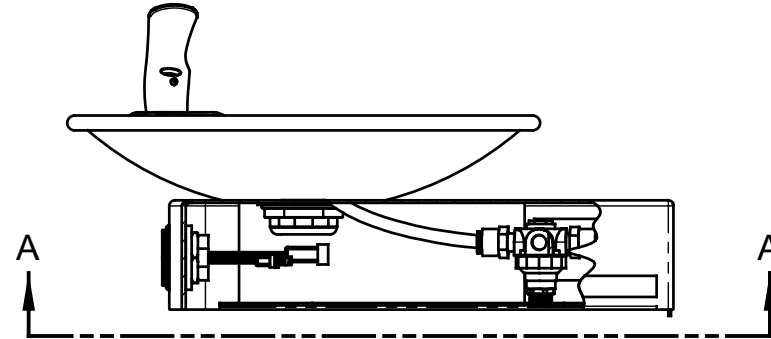
NOTES:

- 1RKHO.P AND 1RKHO.H RETROFIT KITS ALLOW INDOOR FOUNTAINS TO BE CONVERTED FROM A HAWS 5874 PUSH BUTTON VALVE TO HANDS-OFF (TOUCHLESS) OPERATION.
 FOUNTAINS (NOT SUPPLIED) MAY BE MOUNTED ON THE EXTERNAL WALL OF A BUILDING PROVIDED THE TRANSFORMER SHALL BE MOUNTED INSIDE THE WALL AND PROTECTED FROM WATER AS SHOWN IN THIS INSTALLATION PER NEC/CEC AND LOCAL CODE. AVOID DIRECT CONTACT WITH SUNLIGHT ON THE SENSOR LENS.
- RETROFIT KIT MODELS:
 1RKHO.P: INDOOR HO RETRO-FIT KIT (INCLUDES HO SENSOR WITH MOUNTING HARDWARE, SOLENOID VALVE, REGULATOR, AND 100-240V PLUG-IN TRANSFORMER - SEE SHEET 2).
 1RKHO.H: INDOOR HO RETRO-FIT KIT (INCLUDES HO SENSOR WITH MOUNTING HARDWARE, SOLENOID VALVE, REGULATOR, AND 100-277V HARDWIRE TRANSFORMER - SEE SHEET 3).
- 1RKHO.P REQUIRES 100-240VAC POWER CONNECTION. 1RKHO.H REQUIRES 100-277V POWER CONNECTION.
- TRANSFORMERS MUST BE MOUNTED SUCH THAT THEY ARE PROTECTED FROM WATER.
- 1RKHO.P TRANSFORMER IS COMPATIBLE WITH TYPE A AND TYPE B NORTH AMERICAN ELECTRICAL OUTLETS. FOR OTHER RECEPTACLE TYPES, AN ADAPTER (NOT SUPPLIED) MUST BE PROVIDED BY OTHERS.

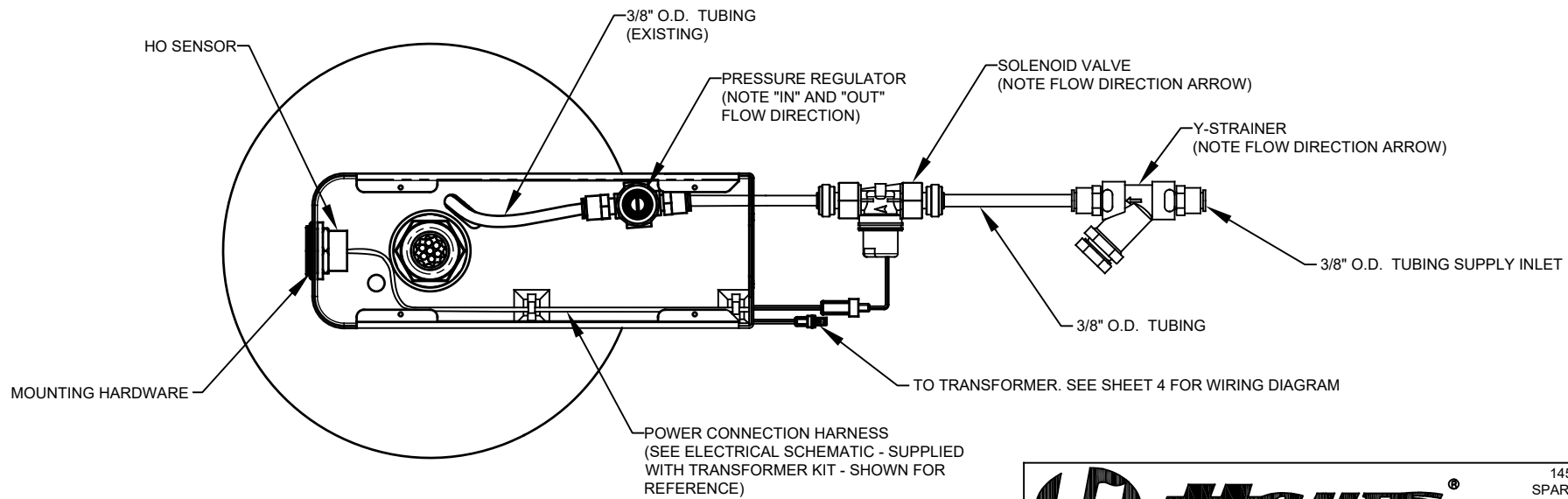
(NOTES CONTINUED ON SHEET 4)



EXAMPLE 1920 BOTTLE FILLER INSTALLATION



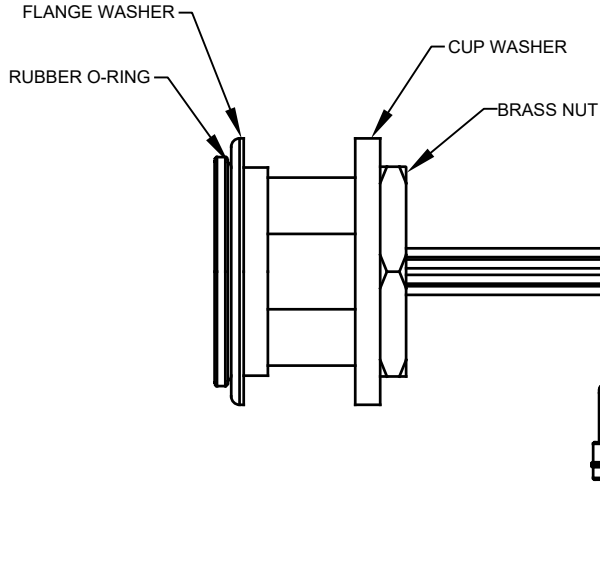
EXAMPLE 1001 FOUNTAIN INSTALLATION



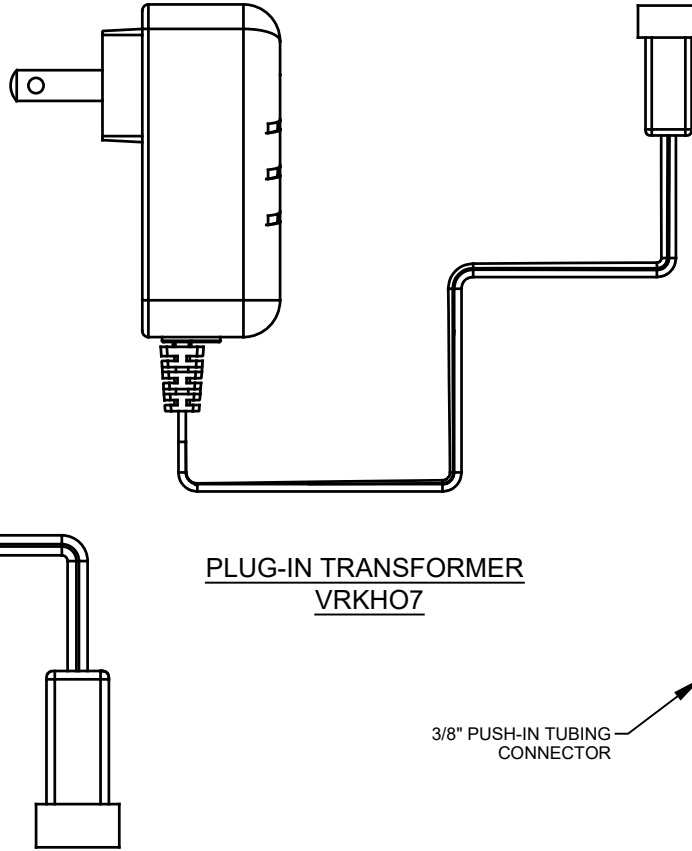
VIEW A - A

(BOTTOM PLATE OMITTED FOR CLARITY)

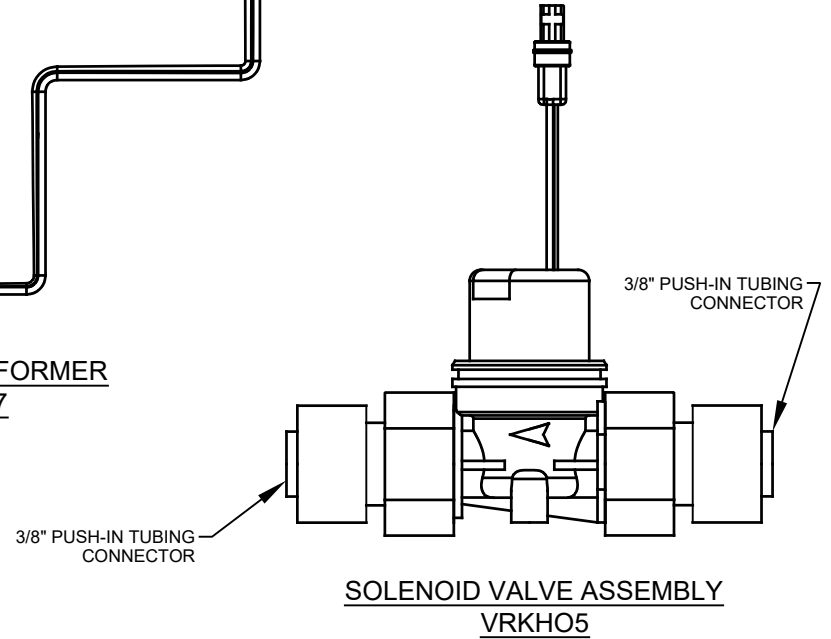
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				0580001133.D
ECN NO. 5598	REVISED PER BY: ECN: 5749 BJM	MODEL(S)	1RKHO.P / 1RKHO.H	
DRAWN: BJM	DATE: 12/23/20	CHKD.: FV	SINGLE HANDS-OFF RETRO-FIT KIT	
APPROVED: BJM	DATE: 10/28/21	SCALE: N/A	DRAWING TYPE: INSTALLATION	SHEET 1 OF 4



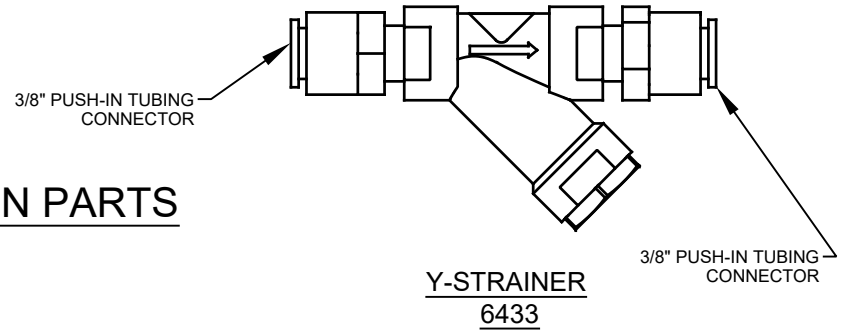
HO SENSOR ASSEMBLY
VRKH06



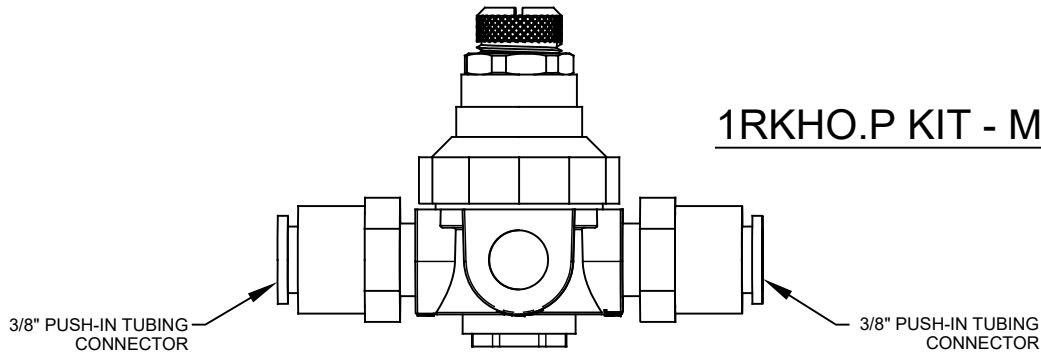
PLUG-IN TRANSFORMER
VRKH07



SOLENOID VALVE ASSEMBLY
VRKH05



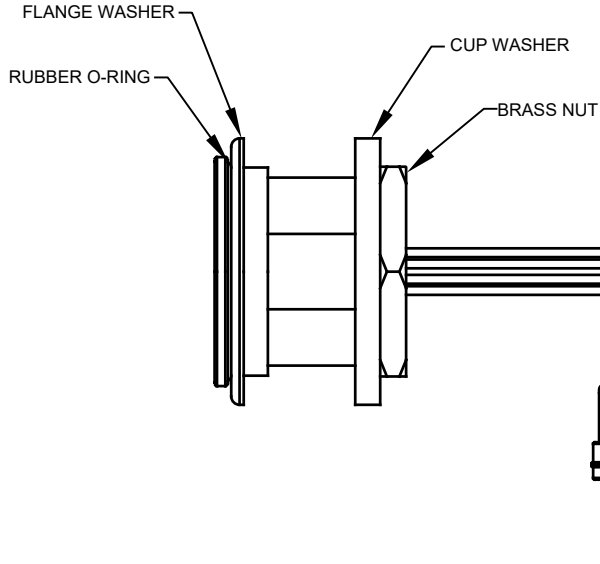
Y-STRAINER
6433



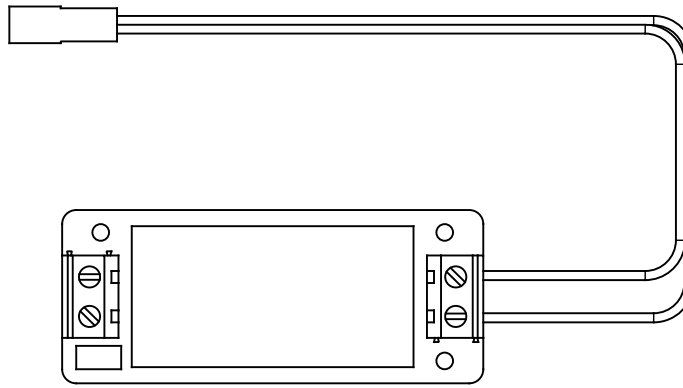
VALVE REGULATOR
5867

1RKHO.P KIT - MAIN PARTS

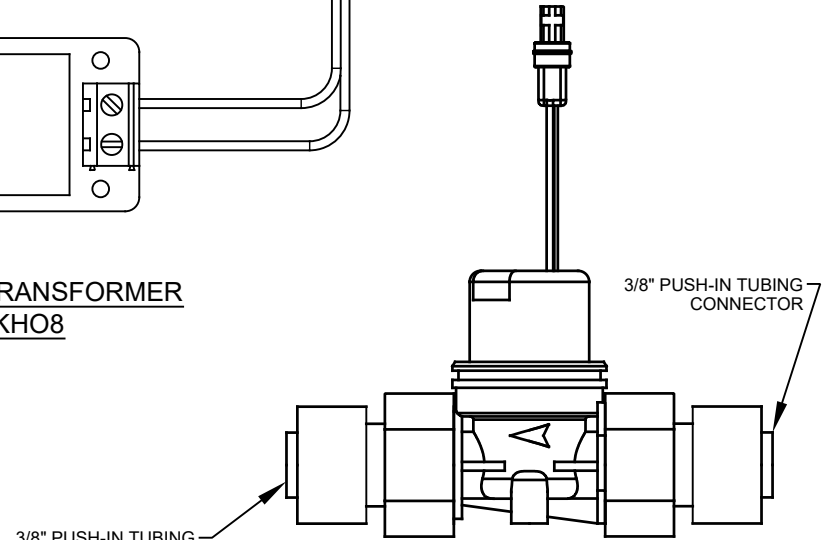
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ECN NO. 5598	REVISED PER ECN: 5749	BY: BJM	MODEL(S)		PART NUMBER
DRAWN: BJM	DATE: 12/23/20	CHKD.: FV	1RKHO.P / 1RKHO.H		0580001133.D
APPROVED: BJM	DATE: 10/28/21		SINGLE HANDS-OFF RETRO-FIT KIT		REVISION 5
			SCALE: N/A	DRAWING TYPE: INSTALLATION	SIZE: A SHEET 2 OF 4



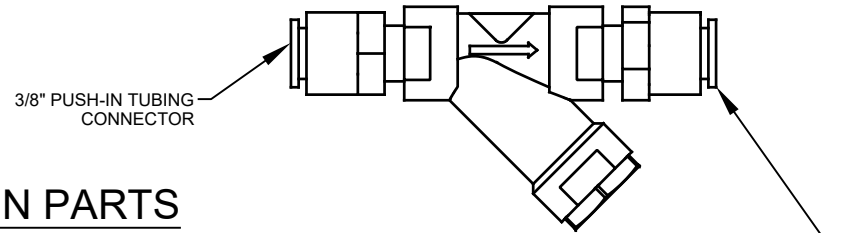
HO SENSOR ASSEMBLY
VRKH06



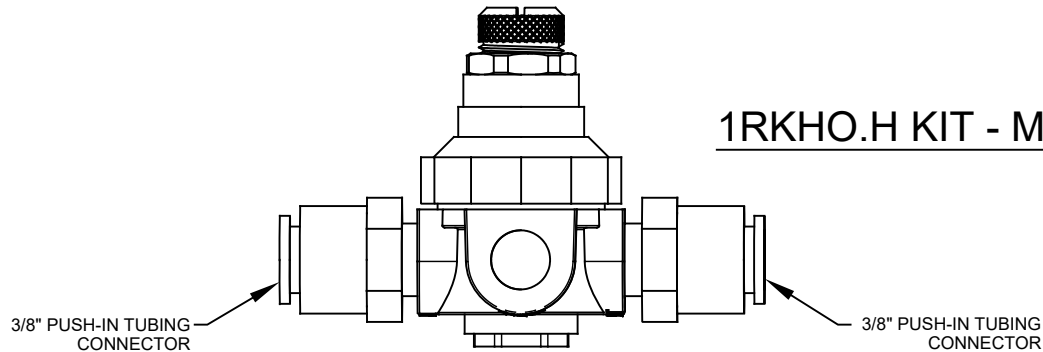
HARDWIRE TRANSFORMER
VRKH08



SOLENOID VALVE ASSEMBLY
VRKH05



Y-STRAINER
6433



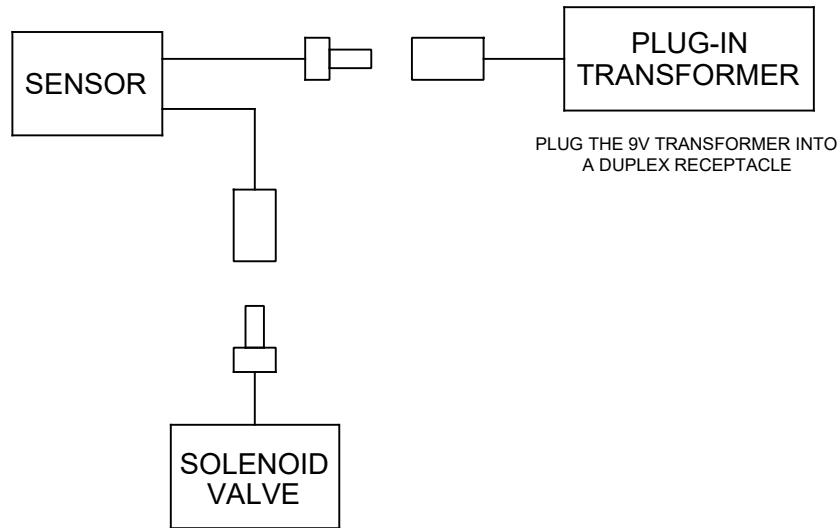
VALVE REGULATOR
5867

1RKHO.H KIT - MAIN PARTS

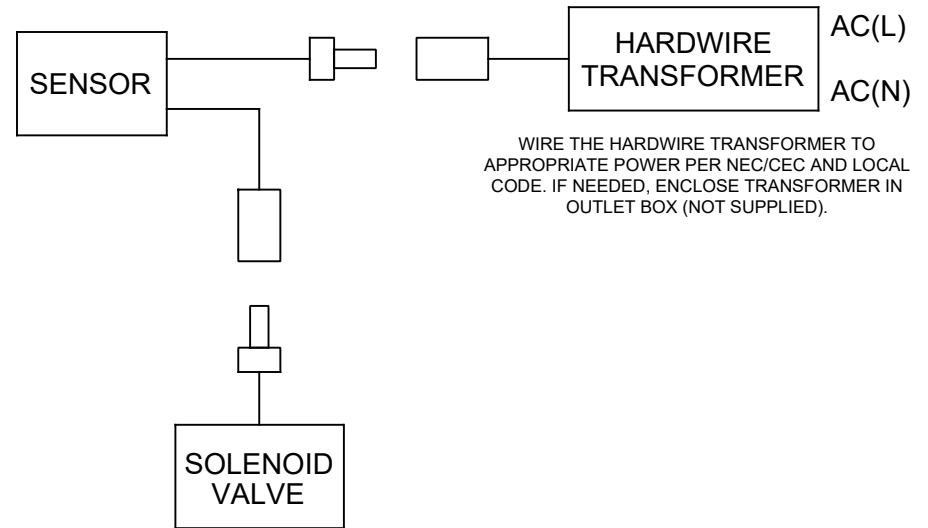
		1455 KLEPPE LANE SPARKS, NEVADA 89431 (775) 359-4712 FAX (775) 359-7424 E-MAIL: HAWS@HAWSCO.COM WEBSITE: WWW.HAWSCO.COM	
ECN NO. 5598	REVISED PER ECN: 5749	BY: BJM	MODEL(S) 1RKHO.P / 1RKHO.H
DRAWN: BJM	DATE: 02/09/21	CHKD.: FV	PART NUMBER 0580001133.D
APPROVED: BJM	DATE: 10/28/21	SCALE: N/A	REVISION 4
		DRAWING TYPE: INSTALLATION	SHEET 3 OF 4

NOTES (CONTINUED FROM SHEET 1):

- 6. 1RKHO.H TRANSFORMER WIRE RANGE: 24-12 AWG
1RKHO.H TRANSFORMER TIGHTENING TORQUE: MAX 0.4 N*m



1RKHO.P CABLE WIRING SCHEMATIC



1RKHO.H CABLE WIRING SCHEMATIC

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		ECN NO. 5598 DRAWN: BJM APPROVED: BJM	REVISED PER ECN: 5749 DATE: 12/23/20 DATE: 10/28/21
MODEL(S) 1RKHO.P / 1RKHO.H SINGLE HANDS-OFF RETRO-FIT KIT		SCALE: N/A DRAWING TYPE: INSTALLATION	SIZE: A SHEET 4 OF 4