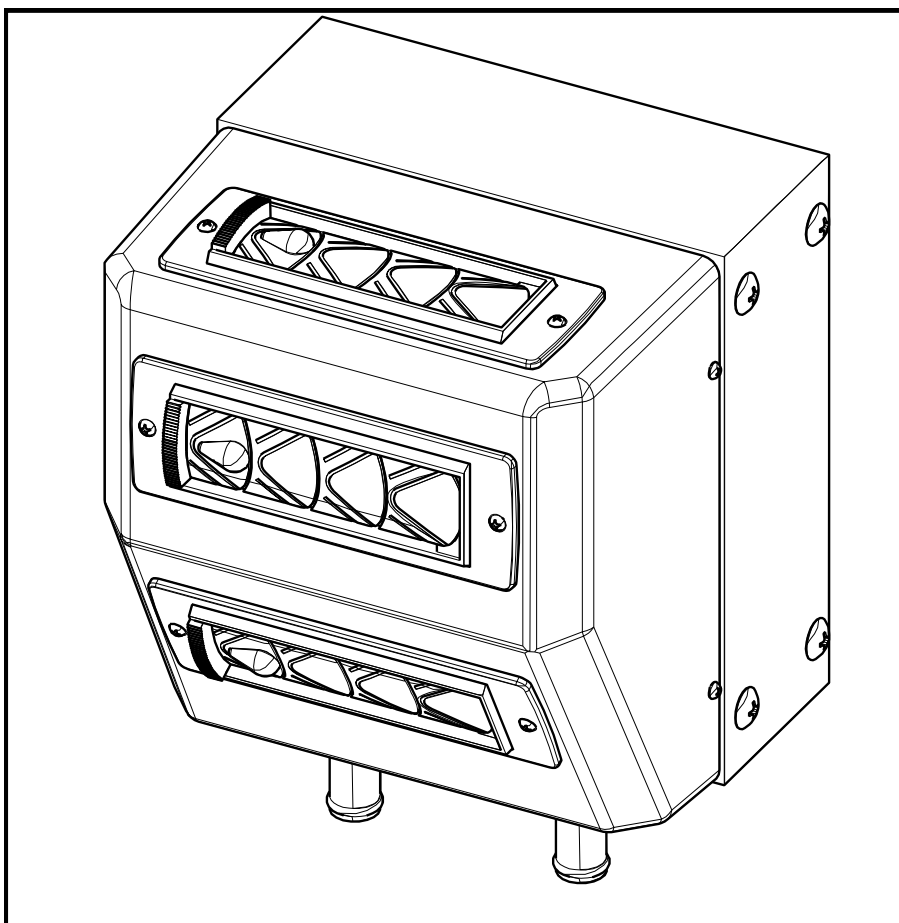




## Kubota BX80 Heater

(p/n: 9PH20S72)

fits tractor models: BX1880, 2380, and 2680



### Approximate Installation Time \*

Experienced Dealer Technician – 2 Hours

Average Dealer Technician – 3 Hours

Do-It-Yourself – 4 Hours

(\*=Not including accessories)

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

Rev. A, 04/11/2022

P/N: IM-9PH20S72

# HEATER INSTALLATION

These instructions assume cab installation is already complete. If installing heater at the same time as cab, follow cab instructions.

## STEP 1: (Mounting and wiring)

- 1.1 Remove hardware already in place and attach the heater bracket to the right A-Pillar with it. See Figure 1.1. Tighten hardware.

### Tools required

1/2" wrench or socket

- 1.2 Attach the heater to the heater bracket using the screws already installed on the side of the heater. Note that only the bottom 2 screws are installed on cabs with vinyl hinged doors. The top screws will be installed in a later step. See Figure 1.2. Tighten hardware.

### Tools needed

#2 Phillips Screw driver.

- 1.3 See fig. 1.3. Push the switch connector up through the rectangular hole in the cowl, connect to the switch and snap in the heater switch. The "off" position for this switch is in the middle, with low speed one way and high speed the other way. The switch may be installed in either direction, and can be removed and rotated 180° later if desired.
- 1.4 Connect the heater bullet connectors to the wiring harness, matching wire colors. Cover the exposed wires with 1/2" split loom provided.

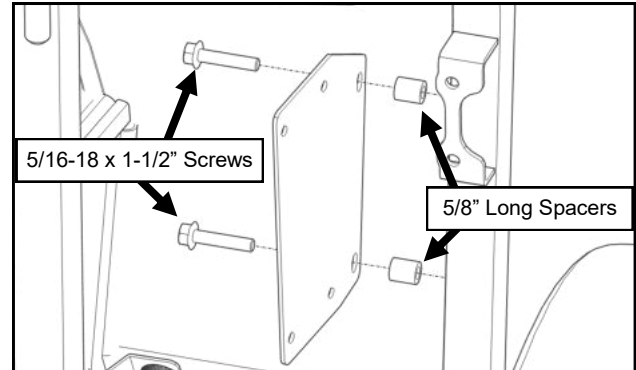


Fig. 1.1 (Install Heater Bracket to A-Pillar)

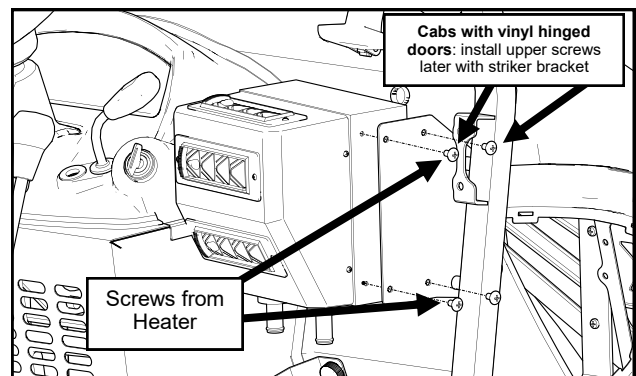


Fig. 1.2 (Install Heater)

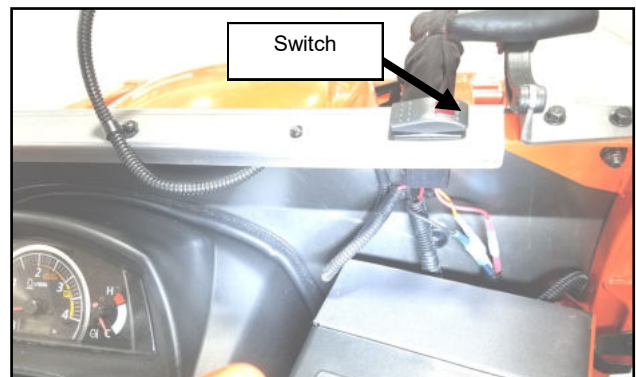


Fig. 1.3 (Install Switch)

# HEATER INSTALLATION

## STEP 2: (HEATER PLUMBING)

\* **CAUTION** \* To avoid injury caused by hot engine coolant, make sure the engine is completely cooled down before beginning plumbing of auxiliary heater.

- 2.1 Drain the engine coolant into a clean container so that it may be reused.
- 2.2 From outside the cab, remove both dome plugs, and install both  $\frac{3}{4}$ " snap bushings into the large holes in the right A-pillar floor board. Feed both ends of the  $\frac{5}{8}$ " diameter hose through the bushings to the inside of the cab, connect them to the nipples on the heater, and secure them with 1" hose clamps. See Figure 2.2.
- 2.3 Make sure the heater hose is not too tight or kinked before going through the snap rings, and cut both ends of hose about 1" beyond the snap rings on the outside. Connect the 90° heater hose elbows and secure with 1" hose clamps. Attach 6" of Trim Lok to the bottom edge of the vehicle floor board. See Figure 2.3.
- 2.4 Locate the lower coolant hose on the right side of the engine. See Figure 2.4. Cut the lower hose between the two 90° bends as shown and let any remaining coolant drain into a clean drain pan.
- 2.5 Place the two 1.5" hose clamps on either side of the cut lower hose and install the T-Fitting pointing down. See Figure 2.5. Tighten the hose clamps.
- 2.6 Unbolt the thermostat housing and remove the thermostat and gasket. See Figure 2.6. Save the thermostat for re-installation, but discard the gasket and bolts.

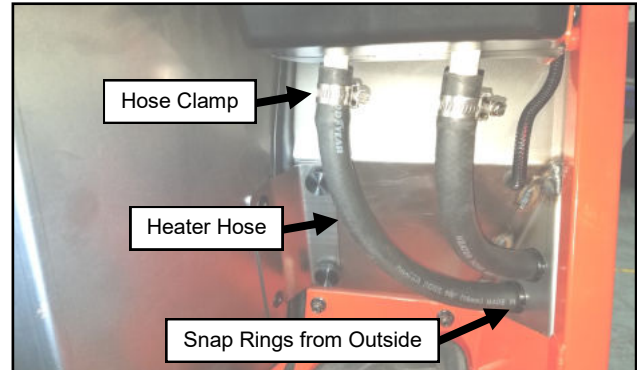


Fig. 2.2 (Snap Rings and Heater Hose)

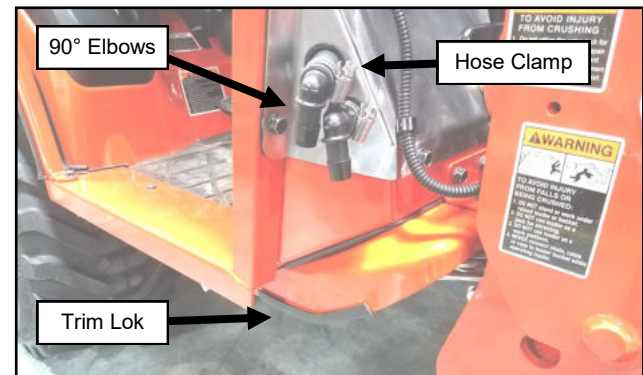


Fig. 2.3 (90° Heater Hose Elbow and Trim Lok)

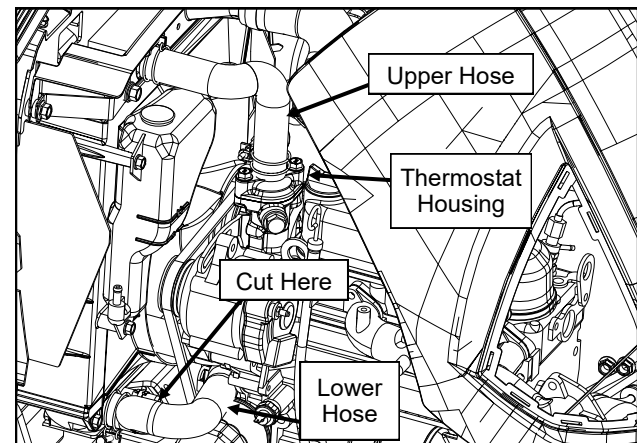


Figure 2.4 (Right Side of Engine Bay)

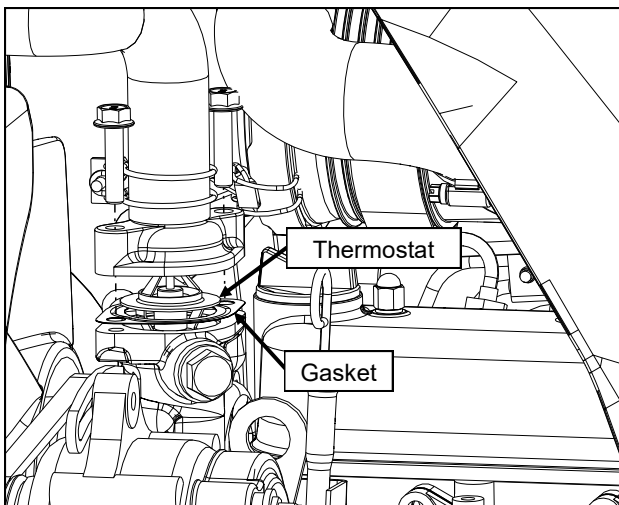


Figure 2.6 (Remove Thermostat)

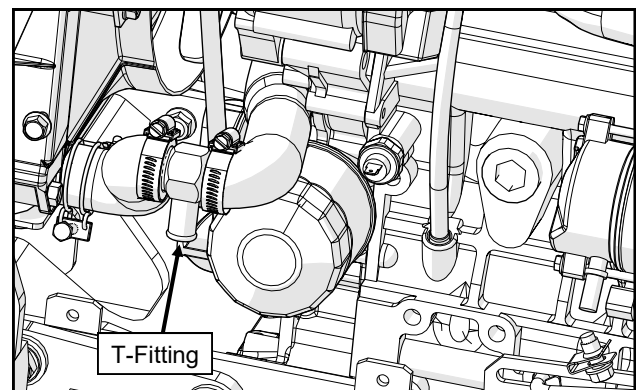


Figure 2.5 (Install T-Fitting in Lower Hose)

# HEATER INSTALLATION

## STEP 2: (HEATER PLUMBING CONTINUED)

- 2.7 Pre-install the 3/8" NPT Nipple into the thermostat spacer using Teflon tape. Install the thermostat spacer onto the engine using a new gasket provided, followed by the thermostat, another new gasket, and the thermostat housing with new longer bolts. Ensure that the nipple is pointing towards the front left of the vehicle. See Figure 2.7.
- 2.8 See fig. 2.8. Connect 5/8" hose to the 3/8" NPT Nipple on the thermostat spacer and secure it with 1" hose clamp. Run the hose around the front of the engine, down past the alternator, and between the right floor board and front loader frame. See Figure 2.8. Roughly run the end of the hose to the 90° elbows and cut the rest of the hose off.
- 2.9 Connect the 5/8" hose to the T-Fitting and secure it with a 1" hose clamp. Run the hose along next to the previously run hose in step 2.8.
- 2.10 Pre-install the mesh sleeve onto the two hoses and then trim the hoses to length and connect them to the 90° elbows, securing them with 1" hose clamps. See Figure 2.10.
- 2.11 Slide the mesh sleeve over the fittings and secure it with a cable tie. See Figure 2.11.
- 2.12 Check hose and wire routing to make sure no hoses or wires are kinked, pinched, or are rubbing against any sharp edges. Also make sure the hoses and wires will not interfere with hood when closing, any moving parts, pedals on the tractor, or contact hot engine components. Secure hoses as necessary with large wire ties provided.
- 2.13 Splice into the heater supply line above the exhaust manifold and install the in-line shut-off valve using 1" hose clamps.

**NOTE:** The in-line shut-off valve quickly converts the heater into a summer time blower by preventing hot water from flowing to the heater core.

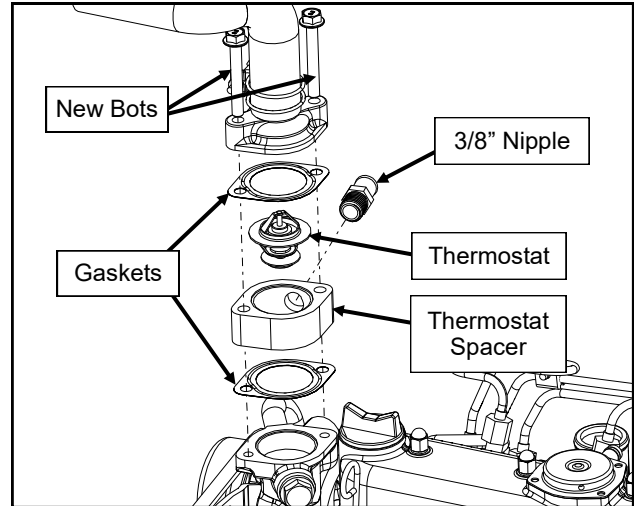


Figure 2.7 (Install Thermostat Spacer)  
(View from Right Side)



Figure 2.8 (Run Hose Around Engine)  
(View from Right Side)



Figure 2.11 (Cover Hoses and Fittings with Mesh)



Figure 2.10 (Connect Hoses to 90° Elbows)

# HEATER INSTALLATION

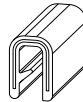
## STEP 3: (FINISH)

- 3.1 Refill the cooling system. Start the tractor and inspect coolant system for leaks.
- 3.2 With the tractor running, check the heater hoses and make sure they get warm. If not, remove the heater from its mount and let hang from the hoses as low as possible. If the heater and hoses still do not get warm, temporarily put a clamp on the upper radiator hose to force coolant through the heater. **Warning:** To avoid engine damage, remove the clamp as soon as heater gets warm. Reattach heater to the bracket. Once complete, let the engine cool, check the coolant level, and top off coolant if required.

## SERVICE PARTS

PART NUMBER	DESCRIPTION
9SV-9DPSB	HEATER HOSE BUSHINGS, SNAP BUSHING, .750" X 1.093" (QTY.: 1)
8SV-9HR-00001-5	NYLON SLEEVING, 2.38" I.D., 5' LENGTH
9SV-9HR-00008	THERMOSTAT SPACER, BX80 HEATER (1 SPACER, 2 GASKETS)
9SV-9HR0039	90 DEGREE HEATER HOSE ELBOW 5/8" BARBED ENDS (QTY.: ONE)
9SV-9HR0042	1" TEE FITTING (QTY.: ONE)
9SV-9HR0045	BLOCK ADAPTER (3/8" NIPPLE) (QTY.: 2)
9SV-9HR00601.0	HOSE CLAMPS #10 (1") (QTY.: 6)
9SV-9HR00601.5	HOSE CLAMPS #16 (1.5") (QTY.: 2)
9SV-UHTRILV	UNIVERSAL HEATER IN-LINE VALVE (SET OF 2)
9SV-9HR0048	ROCKER SWITCH (HI-OFF-LOW) (QTY.: ONE)
9SV-9HR-L	REPLACEMENT LOUVER-15,000 & 20,000 BTU HEATER
8SV-9PH20WG	TUCK-AWAY HEATER WITH WIRED GROUND
9SV-HRH61-20	HEATER HOSE (5/8" I.D.)-20 FT
9PH20-2	FAN 120 x 120 x 38 12VDC 12W 3200 RPM

TRIM LOK, STD,  
1/16" - 1/8" GRIP



9SV-PRO1-10