

KUBOTA Heater Kit p/n: F5311
For use with F-Series Cab p/n: F5206
Fits tractor models: F3990, F2690, and F2690E

Approximate installation time: 2 hours

Tools required:

- 3/8" SAE wrench or socket and ratchet
- 7/8" open-end wrench
- 5/16" Allen wrench
- 5/16" nut driver or flat screwdriver
- #2 Phillips screwdriver
- Wire snips (for wire ties)
- Large snips (for cutting hose)
- Drain Pan
- Teflon tape

SAFETY INFORMATION:

▲ WARNING: Serious injury or death: Hot!
 Do not attempt to service hot engine, exhaust system, or motor. Failure to heed this warning could result in severe burns.

Step 1: Tractor Plumbing:

1.1 Make sure engine is completely cooled down then drain the coolant system.

1.2 Cut the long 5/8" I.D. heater hose approximately in half.

1.3 F2690 and F2690E: remove the plug and washer on lower radiator hose shown in fig. 1.3 (return hose connection).

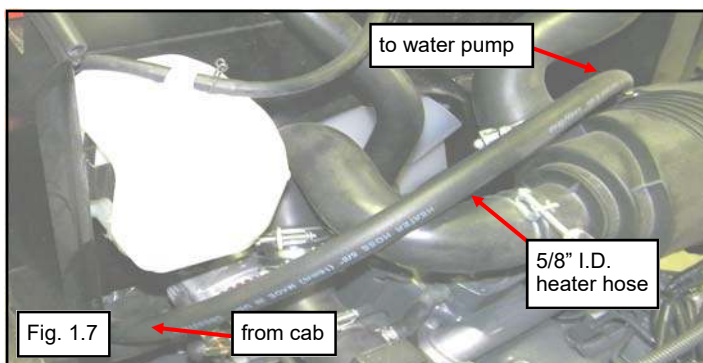
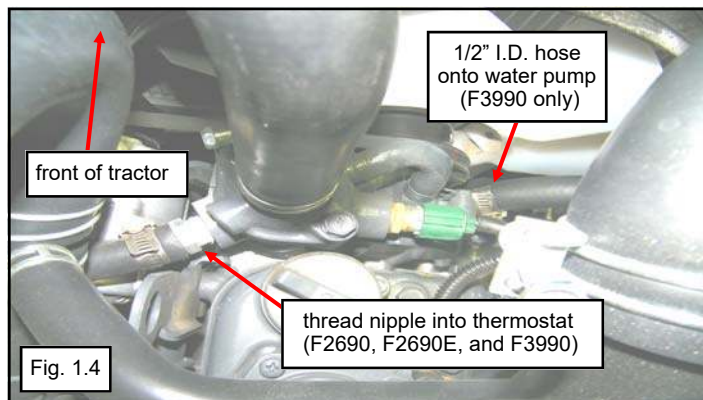
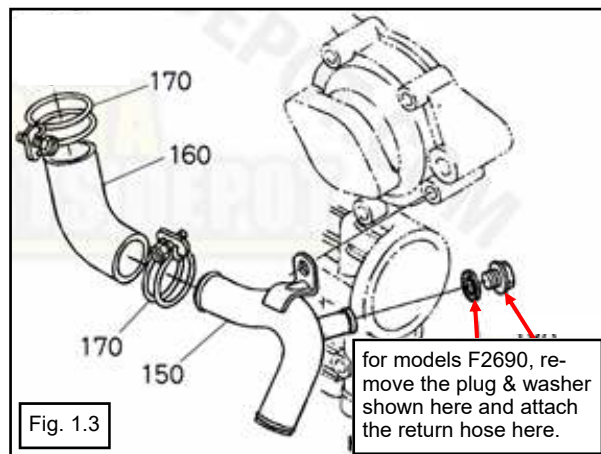
1.4 F3990: remove the spring clip and cap from the water pump. See fig. 1.4.

1.5 F2690, F2690E, and F3990: remove the plug from the thermostat housing. See fig. 1.4 (hose to engine connections).

1.6 F2690, F2690E, and F3990: per figure 1.4, install the supplied nipple to the thermostat port with Teflon tape (not provided) on the threads of the adapter. Push one end of each of the hoses onto the threaded nipple and water pump nipple (or lower radiator hose nipple) and secure with hose clamps.

1.7 F3990: per fig. 1.7 (return hose routing), connect the supplied 6" length of 1/2" I.D. hose to the nipple on the water pump. Connect the supplied Reducer Coupling to the end of the 1/2" I.D. hose. Connect the 5/8" I.D. hose to the end of the Reducer Coupling. Route the long 5/8" I.D. hose from the water pump to the right of the cab, up over the intake hoses to the left and down to the left side of the alternator.

1.8 F2690 and F2690E: route the hose from the lower radiator hose nipple downward and forward along the left side of the tractor. Be sure the hoses do not kink.



Step 1: Tractor Plumbing (continued):

- 1.6. Per fig. 1.6 (shut-off valve), route the hose from the Thermostat above the alternator and to the left. Cut the hose above the left side of the alternator and install the supplied shut-off valve into the hose and secure with hose clamps.

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

- 1.7 Per fig. 1.7 (hose routing), route the hoses toward the front of the tractor, and secure them up away from the fan and the driveshaft.

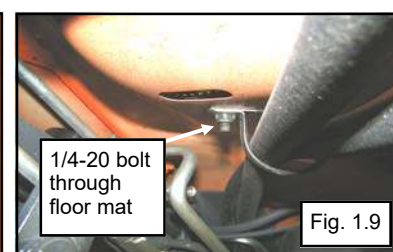
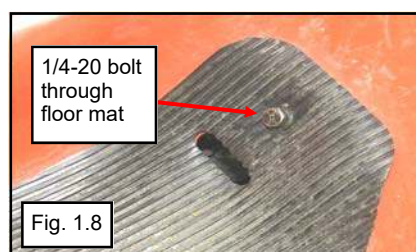
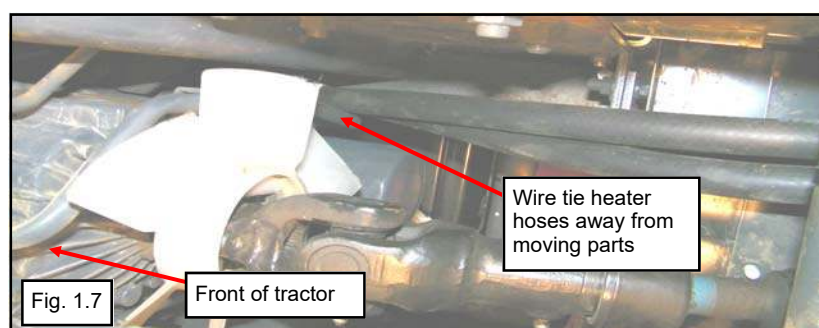
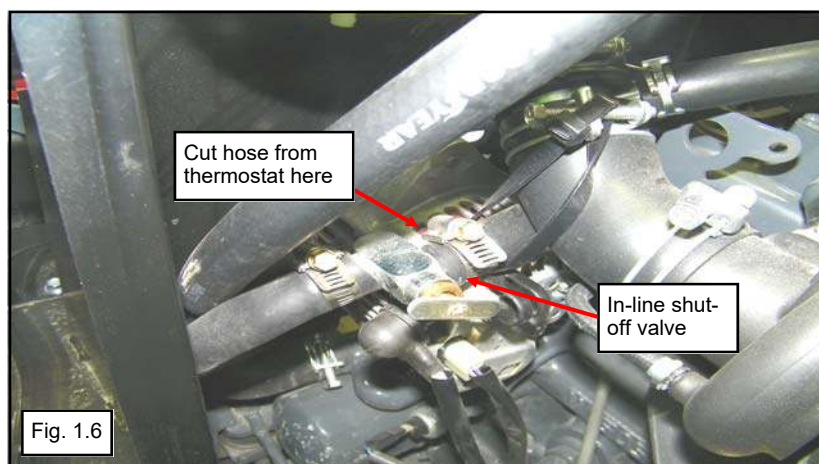
- 1.8 Per fig. 1.8 (left floor mat), remove the barbed plastic plug from the rear of the left floor mat and install the supplied 1/4-20 x 1" bolt in its place.

- 1.9 Per fig. 1.9 (P-Clamp), route the hoses underneath the left fender and secure them with a P-clamp and nut to the 1/4-20 bolt installed in 1.8.

- 1.10 Per fig. 1.10 (front mount), route the hoses to the front of the tractor and secure them to the left front mount using another P-clamp and a #12 self-drilling screw into the hole in the front mount.

- 1.11 Per fig. 1.10, cut the hoses approximately 2" in front of the P-clamp, install male quick disconnect fittings, and secure them with hose clamps.

NOTE: Male fittings are used on the heater hoses that will remain with the tractor, to keep dust and debris out of the fittings when the tractor is used without the cab.



Step 2: Heater Installation:

- 2.1 Per fig. 2.1 (heater box), remove the screws from the left side of the heater. Install the heater to the bracket on the left frame using three screws.
- 2.2 Remove the two large hole plugs from the front of the cowl and install plastic bushings into the holes with the flange on the bushings inside the cab.
- 2.3 Per fig. 2.5 (heater hose, outside cowl), install the supplied trim rubber to the tractor fender underneath the holes in the cowl (see fig. 2.5).
- 2.4 Per fig. 2.4 (heater hoses, cowl to heater), feed a hose end through the two plastic bushings and install them onto the heater securing them with hose clamps.
- 2.5 Per fig. 2.5, cut the hoses approximately 1 inch outside the plastic bushings. Install a 90-degree barbed elbow to each hose and secure them with hose clamps. Install the remaining segments of hose to the elbow fittings and secure them with hose clamps.
- 2.6 Per fig. 2.6 (heater hoses, quick disconnect), connect the female quick disconnect fittings onto the male fittings installed on the tractor in step 1.11. Route the hoses from the cowl to the quick disconnects and cut the hoses at the end flange of the barbs. Secure the hoses to the barbs of the quick disconnects with hose clamps.



Fig. 2.1



Fig. 2.4



Fig. 2.5

Step 3: Refill Coolant :

- 3.1 Confirm that the in-line shut-off valve is open and refill the cooling system with drained coolant. Top off the radiator with a 50/50 coolant / antifreeze mix.
- 3.2 Install the radiator cap. Start engine and check system for leaks. Run the engine at full throttle. Allow engine to warm up until thermostat opens (the upper radiator hose will get hot). The heater and heater hoses should already be warm at this point. If one of the heater hoses is cooler than the other, then there is still air trapped in the heater. In this case, shut the engine off and allow to cool. Repeat step 3.2.



Fig. 2.6

Step 4: Wiring

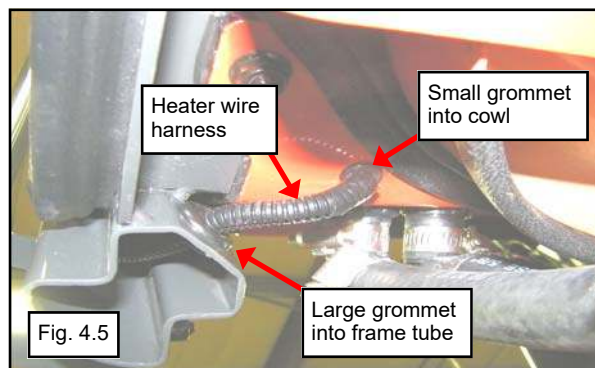
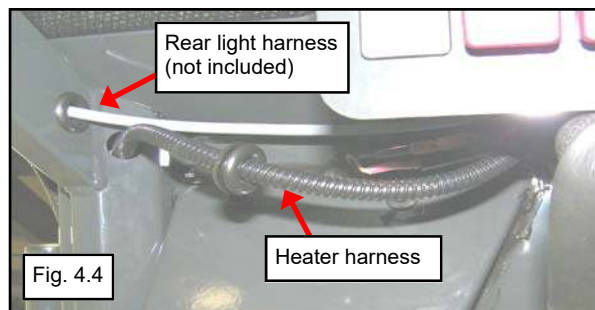
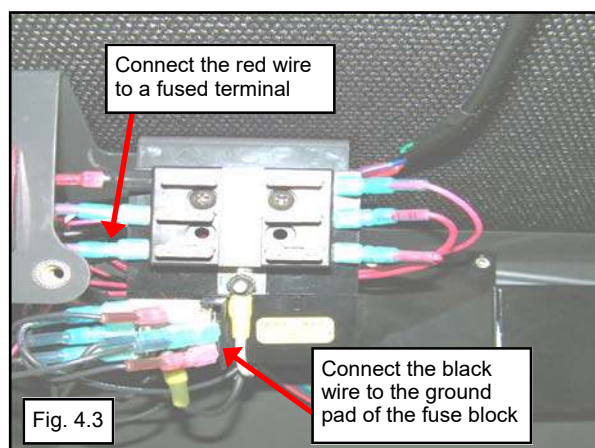
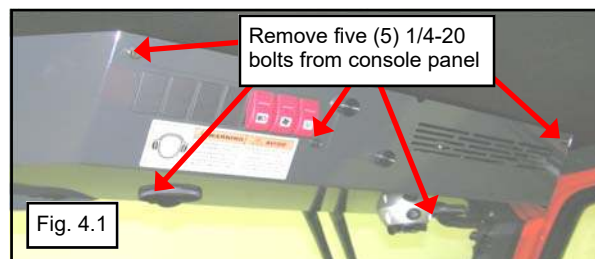
- 4.1 Per fig. 4.1 (center console), remove and save the five (5) 1/4-20 flanged hex bolts holding the console cover panel. Disconnect the bullet terminals for the dome light and place the console panel aside. The console cover panel will be re-installed after wiring is complete.
- 4.2 Per fig. 4.2 (switch installation), remove one switch blank from the switch panel. Insert the switch plug on the wire harness through the opening from behind the panel. Connect the switch to the harness and fully seat the switch into the panel.

NOTE: Make sure the switch face is oriented correctly, with the locking tab on the plug up and the switch face oriented the same as the factory-installed switches.

- 4.3 Per fig. 4.3 (fuse block), connect the push-on terminals from the wire harness to the fuse block. Connect the red wire to one of the unused fused terminals on the side of the fuse block, and the black wire to the ground pad at the bottom of the fuse block.

NOTE: The positive terminals of the fuse block will not be active unless the ignition key is on and a fuse is installed next to that terminal.

- 4.4 Per fig. 4.4 (harness routing), place a large rubber grommet onto the free end of the wire harness and feed the harness through the hole near the top of the front left frame tube until it exits out the bottom of the tube. Install the grommet into the hole in the frame tube and secure the heater harness against the existing wires inside the console with wire ties.
- 4.5 Per fig. 4.5, (harness routing), at the bottom of the frame tube, feed the harness through the hole near the bottom of the tube, install a second large grommet onto the harness and install the grommet into the hole in the tube.
- 4.6 Per figure 4.5, remove the small hole plug from the bottom of the cowl and feed the end of the heater harness up through the hole in the cowl. Install a small rubber grommet onto the wire harness and install the grommet into the hole in the cowl.
- 4.7 Connect the terminals from the harness to the heater wires: RED to RED, ORANGE to ORANGE, and BLACK to BLACK.
- 4.8 Insert the supplied fuse into the fuse panel. Turn the ignition key on and verify the switch light is on. Turn the switch on and verify off/high/low operation of the heater fan. Turn the ignition off before installing the console panel.
- 4.9 Re-connect the dome light to the bullet terminals from the console and re-install the console panel into the cab using the five (5) 1/4-20 bolts previously removed.
- 4.10 Turn the ignition key on and check each switch in the console and on the dome light to verify all electronics function correctly.



F5311 HEATER FOR F-SERIES CAB SERVICE PARTS

REF. NO.	KUBOTA P/N	CODE NO.	QTY.	DESCRIPTION
1	77700-02445	9PH20	1	TUCK-AWAY HEATER
2	77700-05440	KF2-HWH	1	WIRE HARNESS, HEATER
3	70000-01157	OHC-6	1	SWITCH, 3 POSITION
4	70000-01218	9PCD1-A	1	SWITCH COVER (HEATER)
5	70000-01086	AC1028	1	3/8" RUBBER GROMMET
6	77700-05457	9HR03	2	RUBBER GROMMET, .44IDx.13GWx.69GDx.94OD
7	70000-01034	9HP0061	1	HEATER HOSE (5/8" I.D.) (16ft)
8	70000-01027	9HR0045	1	BLOCK ADAPTER (3/8" NIPPLE)
9	77700-05213	9HR0039	2	5/8" BARBED ELBOW
10	70000-01026	9HR0044	1	5/8" IN-LINE SHUT OFF VALVE
11	70000-01032	9HR0060-1.0	14	HOSE CLAMPS (1")
12	77700-05485	9HR0060-P1-3/4	2	P-CLAMP (1-3/4")
13	77700-06370	9DPSB	2	SNAP BUSHING, .750" x 1.093"
14	77700-05486	9HR0066	2	IN-LINE COUPLING, MALE INSERT
15	77700-05487	9HR0067	2	IN-LINE COUPLING, FEMALE BODY
16	77700-05459	F5311P1	1	INSTALLATION INSTRUCTIONS
17	77700-11222	SVC-9HR-00030	1	REDUCER COUPLING KIT (INCLUDES 1/2" I.D. x 6" LONG HOSE)

