

INSTRUCTION MANUAL

70000-00297 Engine Block Heater Kit (400 Watts, 115 Volts)

For KUBOTA Equipment utilizing engines with 32mm freeze plug



WARNING – To avoid death or serious personal injury: Never energize heater in the air. If the heater element is energized in the air, it may burst.

CAUTION – To avoid personal injury: Allow the engine and coolant to cool down before attempting to install the block heater.

Applications: KH101, KH151, KX91-3, KX101, KX121-2, KX121-3, KX151, KX161-2, KX161-3, L2050, L2250, L2350, L2500, L2550, L2600, L2650, L2850, L2900, L2950, L3000, L3010, L3130, L3200, L3240, L3540, L3250, L3300, L3350, L3410, L3430, L3450, L3600, L3650, L3710, L3750, L3800, L3830, L3940, L4150, L4200, L4300, L4240, L4310, L4330, L4350, L4400, L4600, L4610, L4630, L4740, L48, L4850, L5040, L5030, L5240, L5450, L5740, M4030, M4700, M4800, M4900, M5030, M5400, M5700, M59, MX5000, MX5100 and U-35.

1. When the engine and coolant are fully cooled down, drain the coolant.
2. Remove the freeze plug from the engine block (Figure 2). Choose the freeze plug that is accessible and closest to the center of the engine.
 - Standard location is on the **left** hand side of the engine block closest to the center of the engine block (Figure 2).
 - **MX5100, M59, L3940, L4240, L4740, L5040, L5240, L5740, L4330, L4630, L5030 and L4400** applications require installing the block heater in the freeze plug port on the **right** hand side of the engine block closest to the flywheel. The hydraulic pump must be removed for installation in this location.
 - MX5000 applications can be installed in the standard location on the left hand side of engine block, however for optimum performance it should be installed in the freeze plug port on the right hand side of the engine block closest to the flywheel. The hydraulic pump must be removed for installation in this location.
 - L48 applications can be installed in the standard location on the left hand side of engine block, however for optimum performance it should be installed in the freeze plug port on the right hand side of the engine block 2nd port from the flywheel. The hydraulic pump must be removed for installation in this location.
3. Clean the port in the engine block. Install the adapter bushing (Figure 1) into the block by lightly tapping with a plastic mallet. Make sure the adapter bushing is not crooked when tapping it into the engine block. Loctite should be used to help seal the adapter bushing into the block heater.
4. Tap the adapter bushing sufficiently and evenly to secure it in the engine block. Check to make sure the leading edge of the bushing does not contact the cylinder liner and coolant can enter the heating element cavity.
5. Apply sealing tape (Plumber/Teflon tape) to the heating element (Figure 1) threads and screw it into the bushing.
6. Install the electrical cord (Figure 1). Make sure the cord is away from all hot surfaces and moving parts.
7. Refill the coolant to its proper level. Run the engine for 10 to 15 minutes to ensure the engine's thermostat opens and allows complete coolant circulation from the radiator to the engine block.
8. Shut off engine and check for leaks around the heater. If leaks are present, repair them immediately.

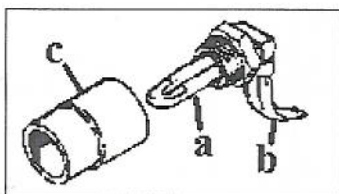


Figure 1.

- a) Heating Element, p/n: 70000-74128
- b) Electrical Cord, p/n: 70090-33386
- c) Adapter Bushing, p/n: 70090-33385

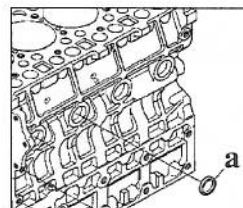


Figure 2.

- a) Freeze Plug