



## INSTALLATION INSTRUCTIONS FOR KFP SERIES ENGINES

1. Fix up the pump set on foundation and complete installation as per pump manufacturer's instructions. Connect the engine to pump set with drive shaft in between and perform the alignment. Apply grease at the grease nose provided on driveshaft universal joint.
2. Connect the heat exchanger outlet to discharge pipe. The discharge pipe size should not be smaller than the outlet connection size on the heat exchanger. The pipe connected to the heat exchanger must be fastened to reduce pipe movement by engine vibration. The limit of cooling loop water pressure to the heat exchanger is 60 PSI. Discharge water is to be connected to an open waste.
3. Open the heat exchanger cap and fill engine cooling system with premixed 50% Glycol and 50% water if supplied with engine or Use coolants meeting ASTM-D6210 specifications for heavy-duty diesel engines. Refer the chart below for cooling system capacity.

Engine Model	Capacity in Liter (Gallon)
KFP4R-UF07	9.5 (2.5)
KFP4R-UF15	9.5 (2.5)
KFP6R-UF25	18 (4.75)
KFP6S-UF35	21 (5.55)

4. Use SAE 15W40 grade lubrication oil or API CI - 4, CH - 4 and CJ - 4 grade oil or K-oil super if supplied with engine. Refer the chart below for oil capacity.

Engine Model	Capacity in Liter (Gallon)	
	First fill	Re-fill
KFP4R-UF07	11.5 (3.0)	9.5 (2.5)
KFP4R-UF15	11.5 (3.0)	9.5 (2.5)
KFP6R-UF25	17 (4.5)	15 (4.0)
KFP6S-UF35	26 (6.85)	24 (6.35)

**Note:**

1. First fill = Sump Capacity + Gallery Capacity + Lube oil Filter Capacity.

2. Do not forget to fill the lube oil filter whenever you replace the filter

5. Connect fuel supply and return line to fuel supply tank plumbing. Refer the Fuel System section of the Installation, Operation & Maintenance manual supplied with engine. Bleed the fuel supply system of air lock and check for any leaks.
6. Connect exhaust silencer and piping to flexible expansion bellow on the engine. The exhaust piping must be supported by the building structure but not the engine. The exhaust flexible expansion bellow is provided only for the purpose of thermal expansion and vibration isolation but not for the purpose of misalignment
7. Connect jacket coolant heater to AC power source. The electrical supply requirements are mentioned on the heater body. Connect the AC wires directly to the electrical junction box mounted on engine. The AC Supply wire should never be routed through the engine control panel, this will damage engine control components. Energize the AC supply to heater only after above step #3 is completed.
8. All electrical (DC) connections between the engine control panel terminals and the controller to be done as per the controller manufacturer's instructions. Note that the cooling water solenoid is operated through engine instrumentation/gauge panel. Refer the wiring diagram with engine gauge panel for proper connection of the water solenoid.
9. Check batteries are filled with electrolyte as per battery manufacturer's instructions. Connect cables between engine and batteries only after electrolyte is installed. Refer the wiring diagram kept inside the engine control panel cover for correct positive and negative connections. Connect negative cables directly to the engine block and the positive cable to each starter contactor but not directly connect at starter positive terminal. These engines have only one starter motor with two starter contactor which connected to each battery bank.
10. **NOTE:** To get prompt Warranty Service, Every engine must be registered with final installation site name and address. To register this engine, please visit to [kfp.kirloskar.com](http://kfp.kirloskar.com) for Warranty Registration.

For further additional technical details like engine installation drawings, wiring diagrams, specifications and to locate authorized KOEL Service Dealer for start-up inspection and warranty, please refer the Kirloskar web site: [kfp.kirloskar.com](http://kfp.kirloskar.com)