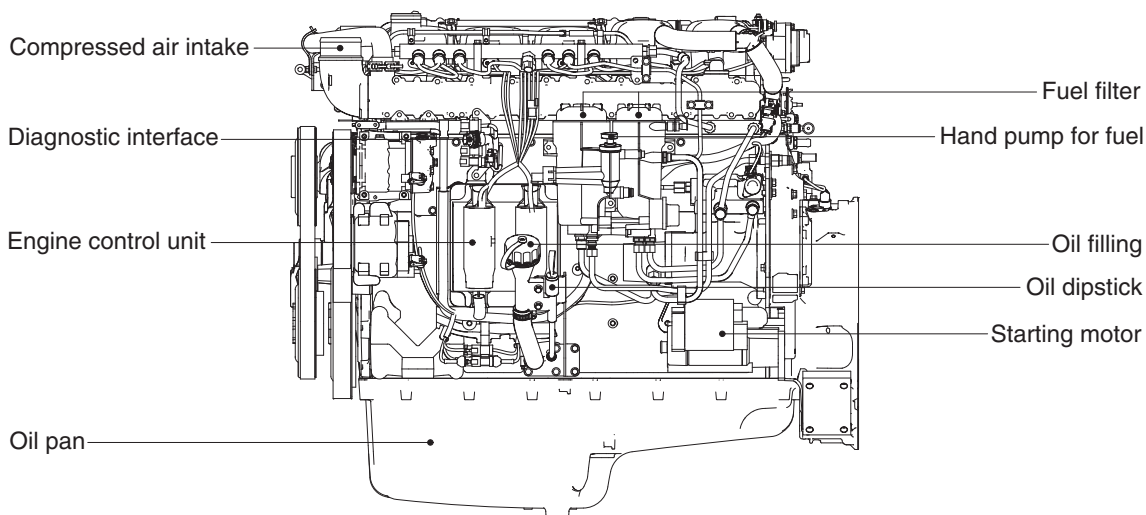
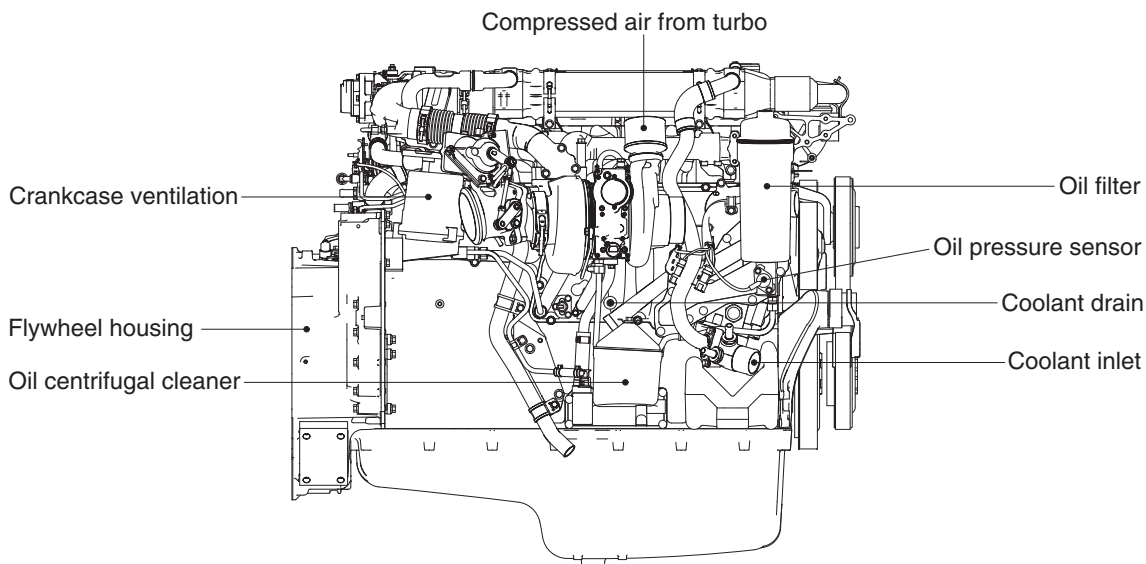


SECTION 2 ENGINE

Group 1 Structure and Function	2-1
Group 2 Engine speed and Stall rpm	2-3

GROUP 1 STRUCTURE AND FUNCTION

1. STRUCTURE

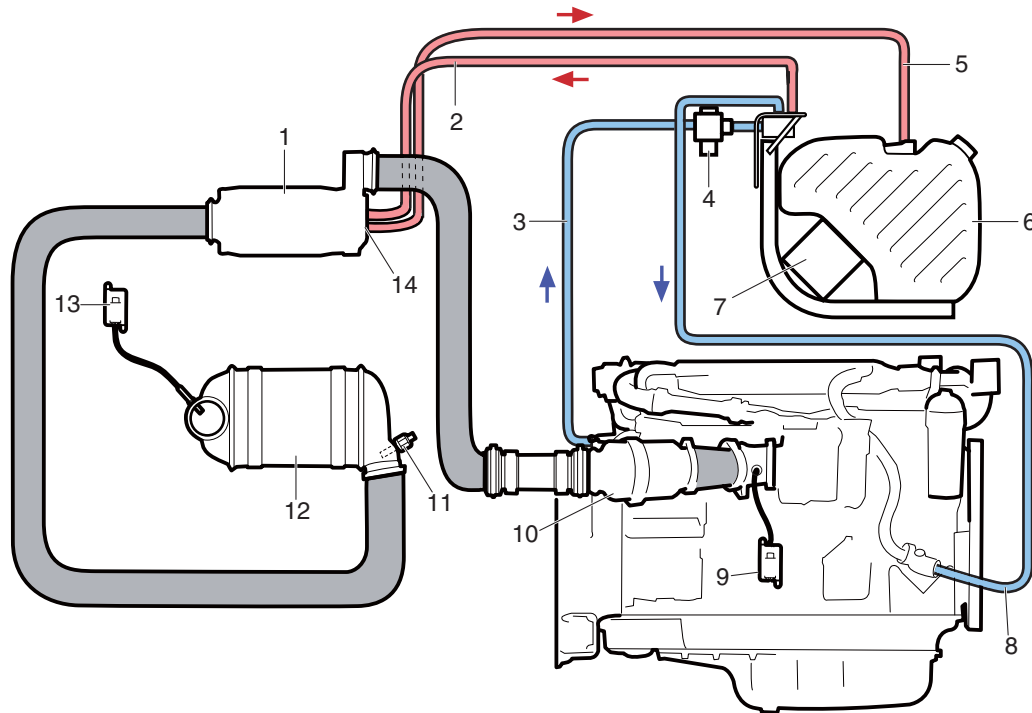


770F2EG01

- Direct 4-stroke, 5-cylinders, water-cooling and charge air cooled diesel engine in installed, cylinder block and cylinder head are made of case iron and turbocharger is attached.

2. SCR SYSTEM

The following drawing provides an overview of SCR system components.



770F2EG06

- | | | | |
|---|--|----|---|
| 1 | Evaporator | 8 | Coolant hose, return from tank and pump heating |
| 2 | Pressure line for reductant | 9 | NOx sensor with control unit |
| 3 | Coolant hose for tank and pump heating | 10 | Oxidation catalytic converter |
| 4 | Coolant valve | 11 | Exhaust gas temperature sensor |
| 5 | Reductant return line | 12 | SCR catalytic converter |
| 6 | Reductant tank | 13 | NOx sensor with control unit |
| 7 | Reductant pump and control unit | 14 | Reductant doser |

GROUP 2 ENGINE SPEED & STALL RPM

1. TEST CONDITION

- 1) Normal temperature of the whole system
 - Coolant : Approx 80°C (176°F)
 - Hydraulic oil : 45 ± 5°C (113 ± 10°F)
 - Transmission oil : 75 ± 5°C (167 ± 10°F)
- 2) Normal operating pressure : See page 6-57.

2. SPECIFICATION

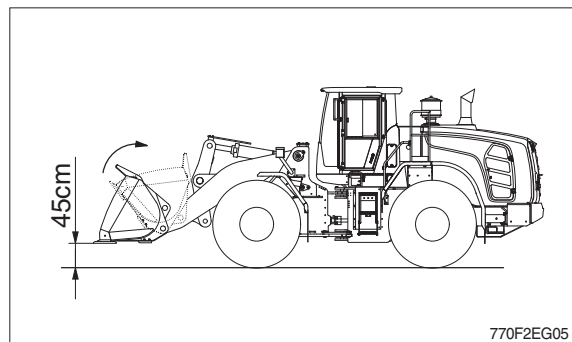
Engine speed (P mode), rpm						Remark
Low idle	High idle	Pump stall	Converter stall	Full stall	Fan motor	
800±25	2100±50	2100±70	1800±70	1760±100	850±50	

3. ENGINE RPM CHECK

Remark : If the checked data is not normal, it indicates that the related system is not working properly. Therefore, it is required to check the related system pressure : See page 6-57.

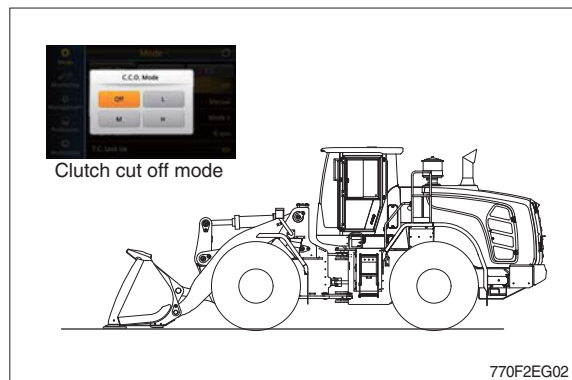
1) Pump stall rpm

- Start the engine and raise the bucket approx 45 cm (1.5 ft) as the figure.
- Press the accelerator pedal fully and operate the bucket control lever to the retract position fully.
- Check the engine rpm at the above condition.



2) Converter stall rpm

- Start the engine and lower the bucket on the ground as the figure.
- Set the clutch cut off mode switch at the OFF position.
- Press the brake pedal and accelerator pedal fully.
- Shift the transmission lever to the 4th forward position.
- Check the engine rpm at the above condition.



3) Full stall rpm

- Start the engine and raise the bucket approx 45 cm (1.5 ft) as the figure.
- Set the clutch cut off mode switch at the OFF position.
- Press the brake pedal and accelerator pedal fully .
- Shift the transmission lever to the 4th forward position and operate the bucket lever to the retract position fully.
- Check the engine rpm at the above condition.

