

Change Engine Oil

Change engine oil only when engine is hot.

Note the color of the oil and check if there is impurity order to find fault.

Tighten the oil drain plug and replace both oil filter cartridges.

Fill new engine oil into engine to the upper mark on dipstick.

Starting the engine at low speed. Check leak of the oil filter.

Starting the engine at low speed.

Check leak of the oil filter.

5 minutes later after stopping the engine, check and add oil to the upper mark on dipstick.

Change oil filter cartridge

The oil filter cartridge must be changed. When changing, put away the oil parallel filter at the same time.

Apply a thin coat of oil gasket and tighten filter by hand only. Tighten the filter.

Valve clearance adjustment

Valve clearance with cold engine

Inlet valve: 0.3mm

Outlet valve: 0.4mm

Injection nozzles

Check the injection opening pressure:

Injection pressure 30 ± 0.5 Mpa

Fuel filter

Change both filter elements at the same time.

Open drain screw plug, drain impurity. When maintenance, clear the cartridge!

Wash and clean pre-filter on fuel pump.

Check air filter maintenance indicator

Check operation of vacuum indicator

Tip up the cab and, with the engine running, briefly cover the air intake aperture in the wing.

Indicator light should light up at once.

Air filter maintenance

Clean air filters everyday.

When cleaning put one end of the cartridge on the wheel tire. Knock it smoothly; put away dust from inner cartridge.

But the dust cannot be removed away thoroughly.

Blow off outside and inside surfaces of cartridge with dry compressed air at a max pressure of 0.5Mpa, applied at an oblique angle.

Inspect cartridge for damage:

Shine a hand lamp through the cartridge from the inside and check for cracks, holes or the damage.

Note: Never use cartridge with cracks and holes. Otherwise unusual wear happened to the engine.

Check seal ring

If the seal ring is damaged or if there is any other damage to the cartridge, always replace

the cartridge. When fitting the filter cartridge, tighten the nut of the cleaning bolt firmly.

Air filter with safety cartridge

The safety cartridge should not be cleaned, but renewed; the safety cartridge must be replaced every two years or after the cartridge was damaged. If the maintenance indicator comes on again immediately after cleaning the main cartridge, the safety cartridge must be renewed.

Fitting sequence

- (1) Insert safety cartridge into filter housing and secure with large hexagonal nut.
- (2) Insert main cartridge and tighten with the small hexagonal nut.
- (3) Fit cover with dust extraction valve (the handle must point to the rear or down) and tighten wing nut by hand.

Engine type	Engine Power	Max. radial gap(mm)	Max. axial gap(mm)
WD615	≥310PS	0.075-0.18	0.025-0.1
WD615	≤290PS	0.46	0.16

Injection pump exhausting

Put hand accelerator in Stop position. Take hand fuel pump to pump fuel, release off from the drain cock. When the fuel bubbles, stop pumping.

Gearbox oil level checks and oil change

1 Check oil level and filling plug

2 Drain oil plug (see from bottom of gearbox)

Fuller gearbox air filter

Clean cartridge of air filter.

Dry it with compressor air.

If filler has been damaged change it.

Venting unit of transfer box

Screw down plug from the air outlet port. Clean it with compressed air.