SERVICE MANUAL

TT4.80 / TT4.90

Tractor

Part number 47866580

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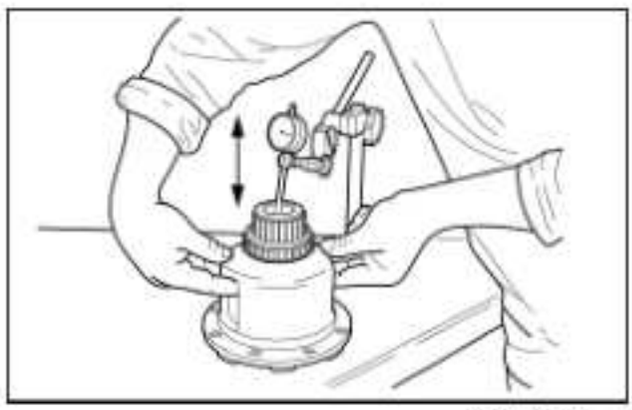
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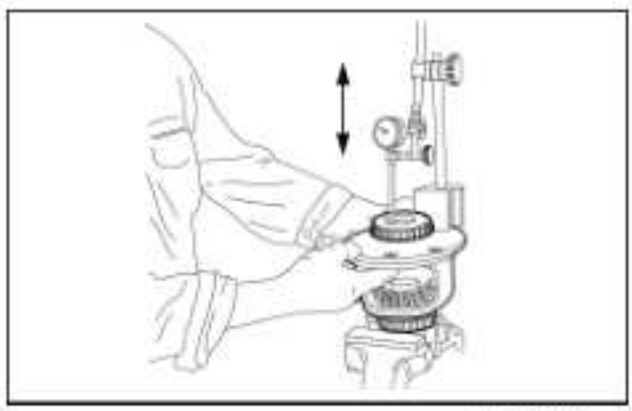
Differential - Adjust

NOTICE: *When overhauling the differential assembly it is necessary to adjust the backlash between the teeth of the planet pinions and the side gears.*

1. Thoroughly clean the components of the differential to remove any traces of oil which would otherwise prevent accurate backlash measurement.
2. Install the side gears without thrust washers.
3. Fit the planet pinions complete with thrust washers and pins and screw the pin retaining bolts in by a few turns sufficient to hold the pins in place.
4. Position a dial gauge on the differential housing, as shown in figure **1**.
5. Move the left-hand side gear to bring it into full contact with the planet pinion and then push it up against the differential housing, reading the end float (Gs) on the dial gauge.
6. Repeat the above operations to measure the End float on the right-hand side gear (Gd). The end float should be **0.25 mm** (**0.0098 in**). Therefore the shims to be inserted in the differential housing are given by: Ss = Gs - **0.25 mm** (**0.0098 in**) for the left-hand side gear; Sd = Gd - **0.25 mm** (**0.0098 in**) for the right-hand side gear.
7. Install shims as near as possible to the calculated value and, using a dial gauge and following the procedure described above; check that the end float of the left and right -- hand side gears is approximately **0.25 mm** (**0.0098 in**).



NDIL14TR89402AA 1



NDIL14TR89401AA 2

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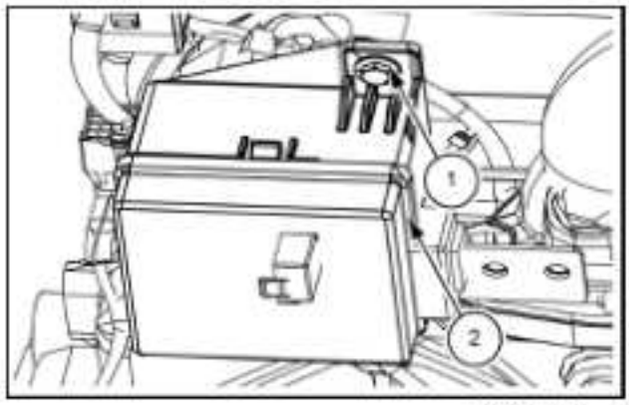
Main lift system - Troubleshooting

Problem	Possible Cause	Correction
Lift fails to operate	Governor blocked open	Remove foreign particles from drain holes and inspect filter.
	Inefficient pump	Disassemble and inspect.
Erratic upward lift movement.	Clogged oil filter	Inspect filter and replace cartridge if necessary.
	Air entering suction line	Check for faulty connections or seals.
	Oil leakage past spool seals	Replace seals.
	Leakage past spool	Remove, check for leakage, clean and replace damaged parts. Inspect filter.
	Check valve leakage	Remove, inspect and clean.
	Leakage past lift piston Replace seals. Gland or lift cylinder seal	Replace seals.
	Safety valve leakage or incorrect setting	Replace valve.

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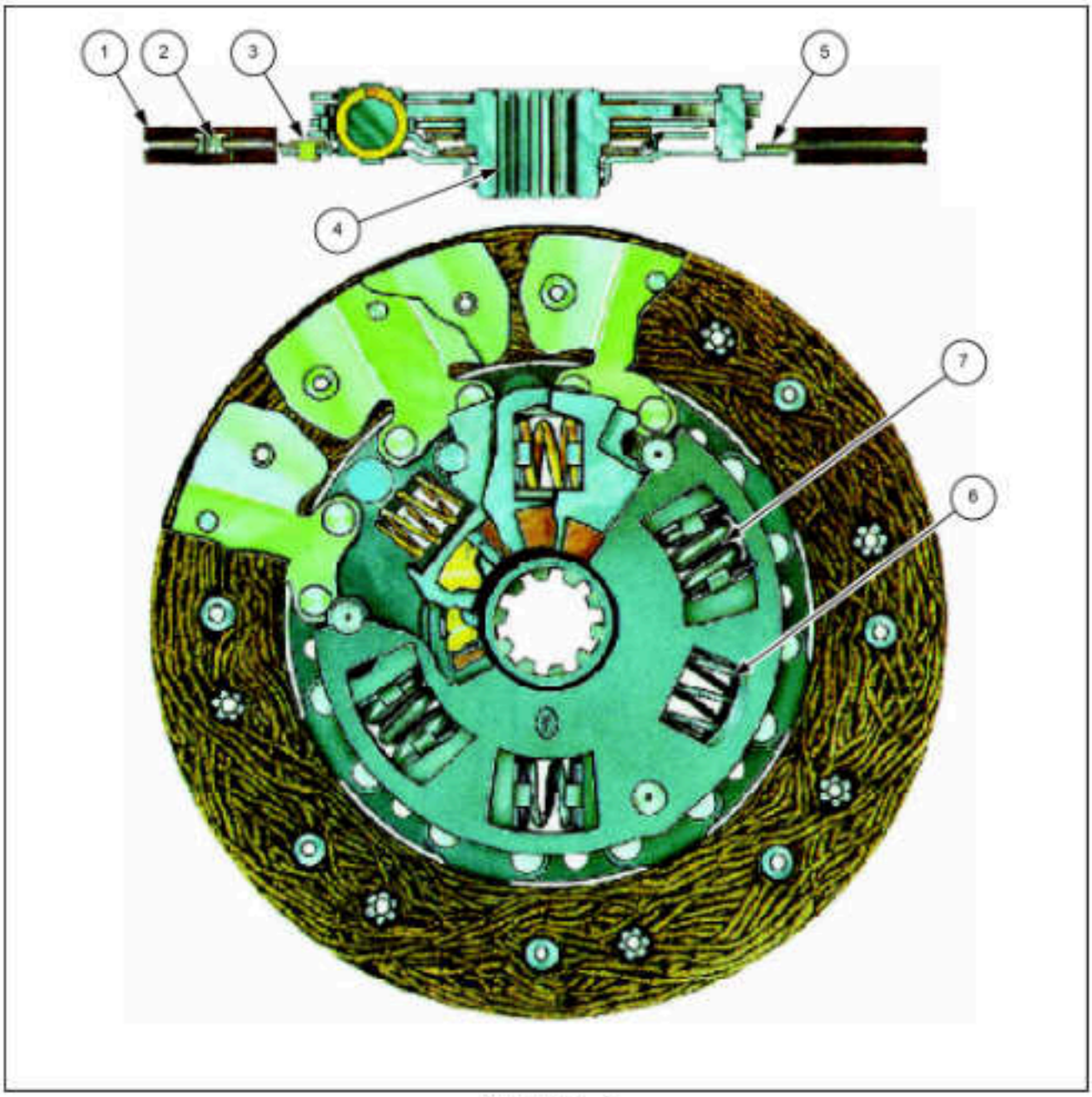
Fuse and relay box - Remove

1. Remove the battery. See the **Battery - Remove (55.302)**.
2. Loosen and remove the bolts **(1)**. Remove the fuse box assembly **(2)**.



ONL10TR0078AB 1

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GNBL15TR00394GB 2

Mechanical version

1. Clutch facing
2. Facing rivet
3. Segment rivet
4. Hub
5. Segment
6. Idle damper spring
7. Main damper spring

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drives the idler gear, which is attached to the front of cylinder block. The idler gear then drives the camshaft and the injection pump via meshing helical gears.

The camshaft gear is bolted to the front of the shaft and is keyed to maintain position of the gear on the camshaft.

Lubrication system

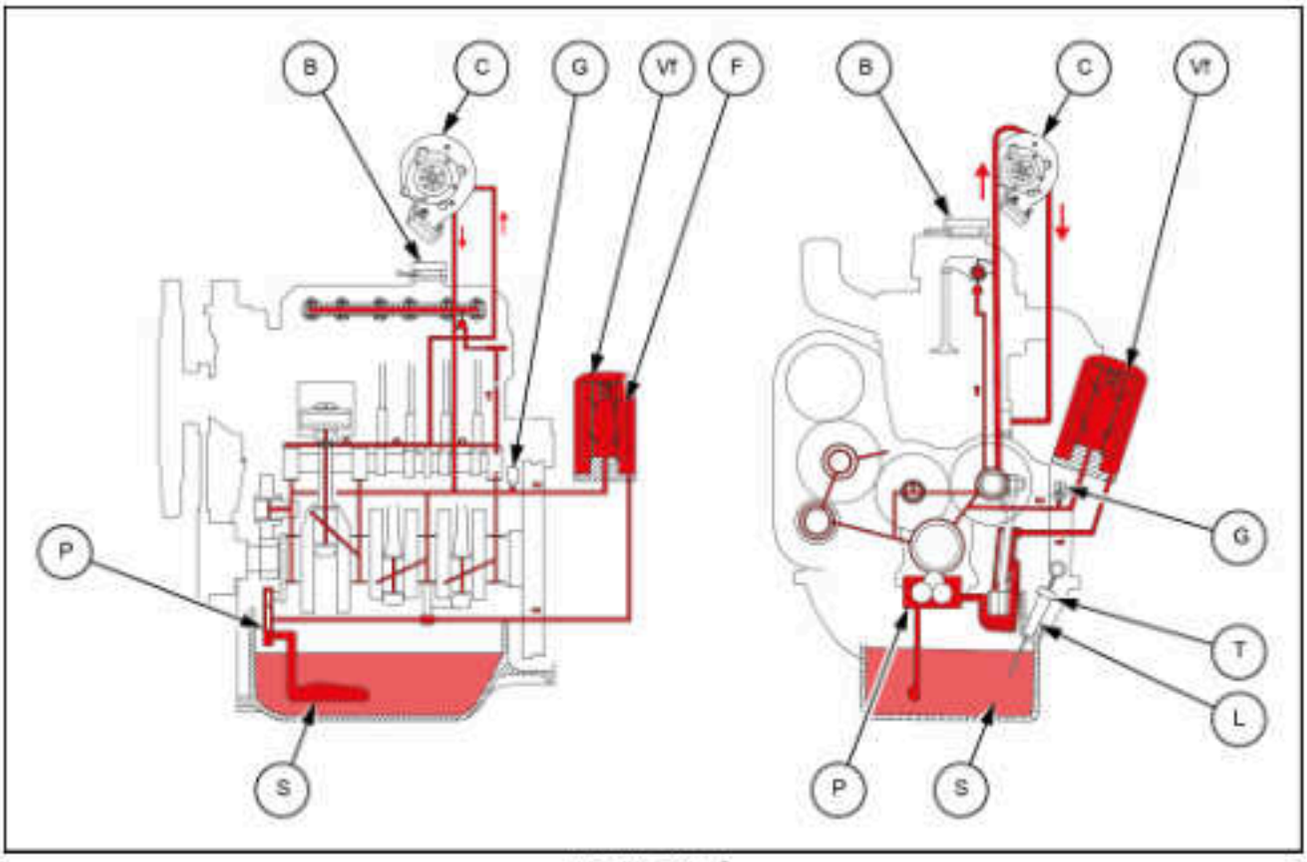
Lubrication of the engine is maintained by a gear type oil pump mounted in the rear of the engine block., forward of the flywheel on the left hand side viewing from rear side of the engine. The oil pump is driven from the rear of the camshaft and drains oil from the engine oil sump through a tube and screen assembly.

A spring loaded relief valve is integral with the oil filter and prevents over pressurization of the system. A spin on type oil filter is mounted externally to its support housing on the left hand side of the engine. Oil flows from the filter to the main oil gallery, which runs the length of the cylinder block, which also intersects the camshaft follower chamber.

The main gallery also supplies oil to the crankshaft main bearings, connecting rods both big and small ends and timing gear bushes. The underside of the pistons and pins are lubricated by oil pressure jets.

Timing gears are lubricated by splashed oil from the cam follower chamber and the pressure lubricated camshaft drive gear bushing.

An intermittent flow of oil is directed to the value rocker arm shaft assembly via a drilled passage in the cylinder block. This is located vertically above number 3 camshaft bearing and aligns to a hole in the cylinder head. The rotation of the camshaft allows a controlled intermediate flow of lubrication.



N3L14TR0221SB 2

F. Filter
P. Pump
C. Turbocharger
Vf. Filter relief valve
L. Dipstick
G. Oil pressure sensor
S. Suction filter
T. Oil filter cap
B. Breather cap

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