

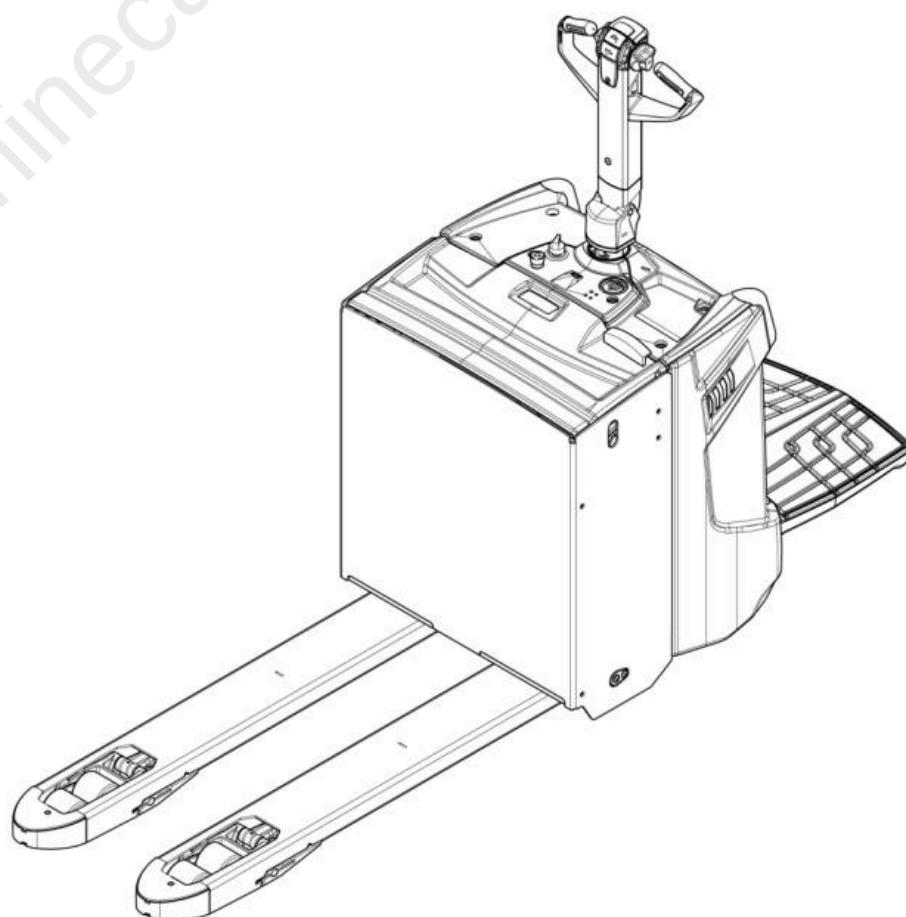


SERVICE MANUAL

NPP

18N2R/20N2R

615025



5.6 Transmission gear

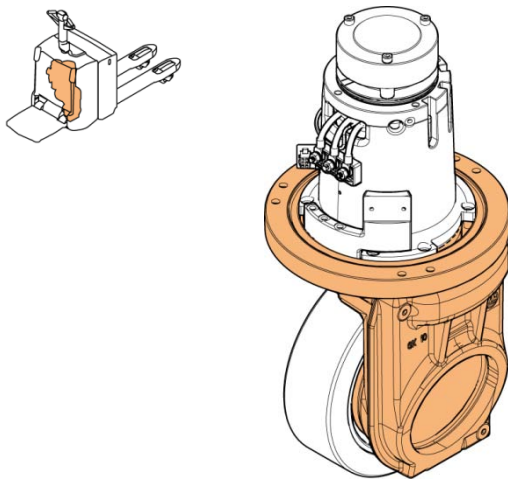


Figure 31. Transmission gear overview

There is no need to change the transmission gear lubricant during the truck's lifetime.

During maintenance, check the transmission gear for any leaks.

Transmission gear oil	SAE 80W/90, API GL-5
Total transmission oil quantity	1.05 L



⚠ CAUTION

Transmission oil is hazardous waste that must be disposed of accordingly.

10.2 Hydraulic oil recommendations



⚠ CAUTION

Hydraulic oil is hazardous waste that must be disposed of accordingly.

Normal operating conditions	ISO VG 32
Cold storage	ISO VG 15
Hot temperatures	ISO VG 46

Fill the hydraulic oil tank up to $\frac{3}{4}$ of the full volume. The filling hole for hydraulic oil is shown in Figure 79 below.

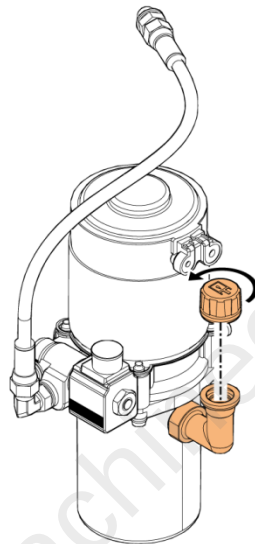
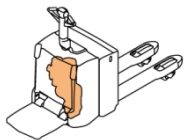


Figure 79. Filling hole for hydraulic oil

10.3 Maintenance points of the hydraulic system

During maintenance, clean the hydraulic oil suction filter in the oil tank.

14.3 Maintenance check list

Legend: C = Check, R = Repair, Clean or Change, G = Grease

	BEFORE DAILY USE (USER)	MONTHLY (OWNER)	600 h OR ONCE A YEAR (SERVICE)	1,200 h OR EVERY SECOND YEAR (SERVICE)
Drive unit				
Transmission leakage check	C	C	C	C
Steering bearing			C	C
Fastening of the gearbox			C	C
Hydraulics				
Leakage checking		C	C	C
Cleaning the oil filter				R
Hydraulic oil change				R
Oil level		C	C	C
Hose and cylinder		C	C	C
Operation of the hydraulics	C	C	C	C
Pressure relief valves			C	C
Linkage				
Bearings			C	C
Linkage			C	C
Wheels				
Traction wheel	C	C	C	C
Traction wheel has to be replaced when its diameter reaches 218 mm			C	C
Load wheels	C	C	C	C
Castor wheel suspension			C	C
Battery				
Battery water level	C	C	C	C
Battery cable and connector	C	C	C	C
Battery automatic watering system		C	C	C

8.2.4 Contactors and relays

Type	Main / drive contactor
Coil type	24 Vdc continuous duty coil
Electrical wiring	Coil: quick connect terminals 6.3 x 0.8 mm Power contacts: M8 ring terminals
Contact rating	Resistive load: 125/150 A @ 60 Vdc max Overload: 205/225 A / UL 508 Inductive load: 100 A @ 96 Vdc max
Switching output	NO
Spare part	RL490525

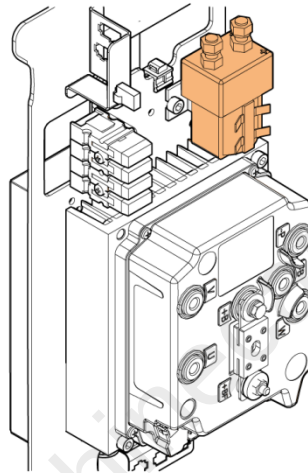
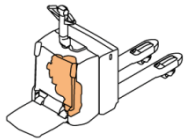


Figure 56. Contactor

A contactor is an electrically-controlled switch used for switching a power circuit, similar to a relay, except with higher current ratings. A contactor is controlled by a circuit, which has a much lower power level than the switched circuit.

Full Version Available

Caterpillar NPP20N2R Pallet Truck Service, Operator and Schematic Manual (615025)

Caterpillar NPP20N2R Pallet Truck service manual, covers hydraulics, drive unit, wiring, and schematics. Searchable PDF download.

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