



Service Manual

Chassis & Mast

LC/FC

DP100NZ

T36AE-10011-up

DP120NZ

T37AE-10011-up

DP135NZ

T38AE-10011-up

DP150NZ

T39AE-10011-up

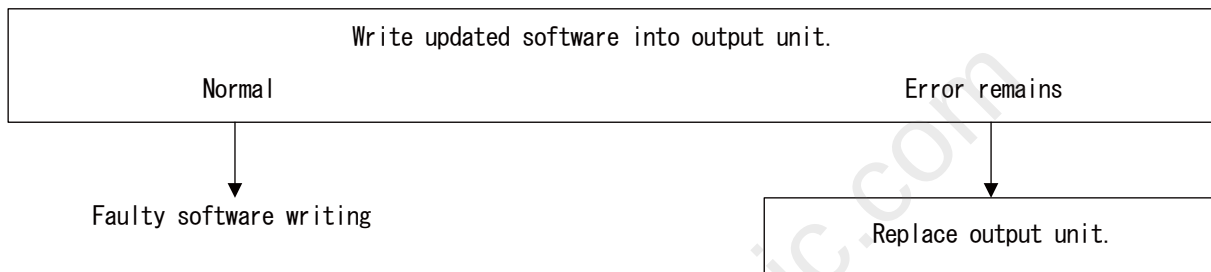
For use with 6D16-TL Engine
Service Manual.

99799-41000

4.23 Output Unit Memory Check Error (F43)

Error code: F43	
Situation	"F43" flickering. Hydraulic operations disabled.
Possible causes	Faulty output unit
How the error code is triggered.	Software checks sum value of ROM and EEPROM (memory setting value) in CPU, and detects fault.

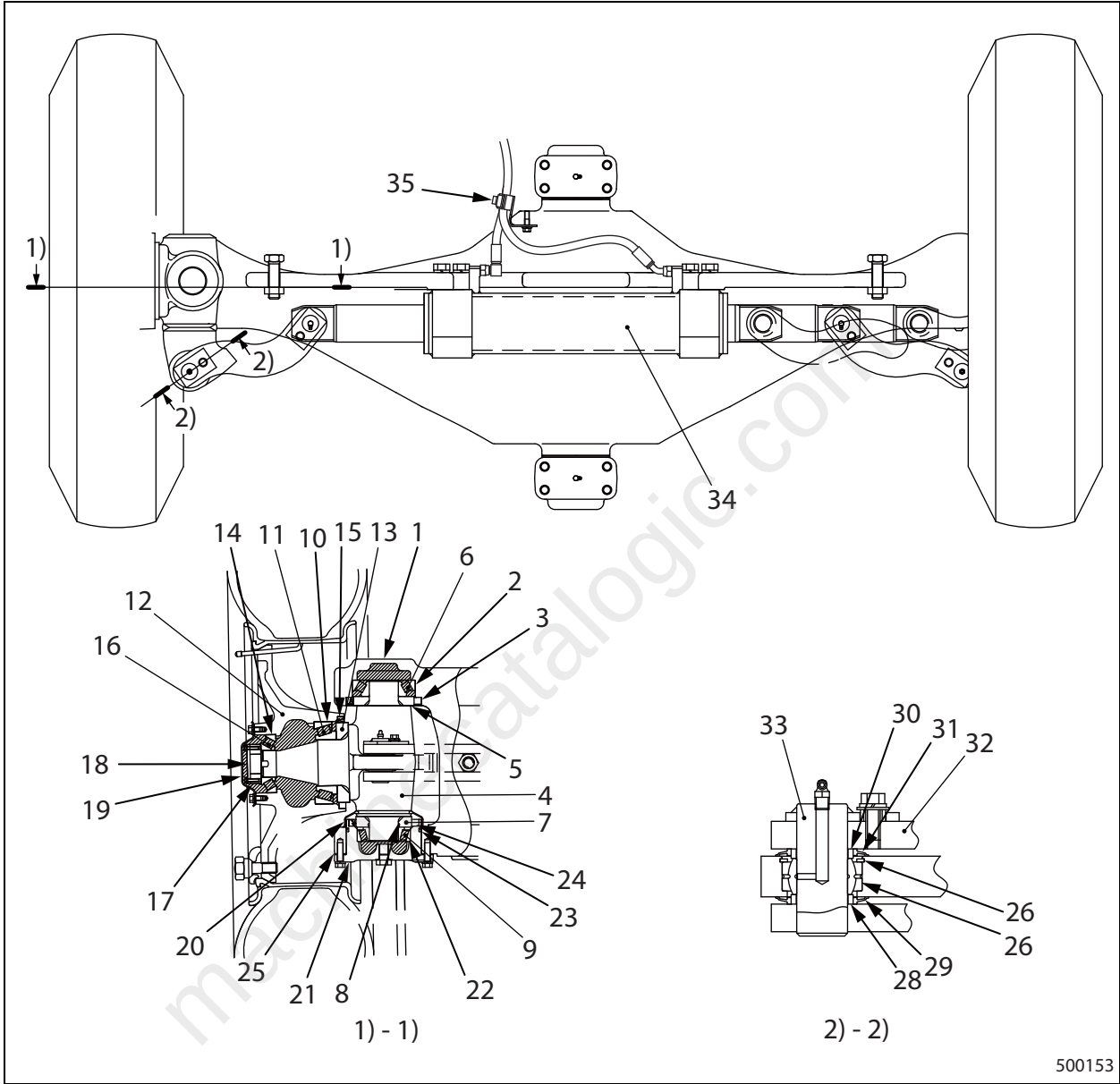
Checks



500503E

8. Reassembling Rear Axle

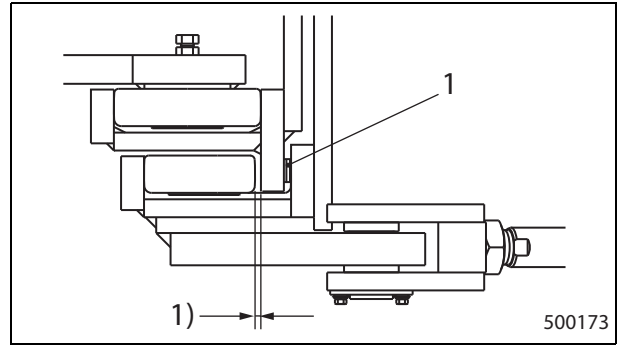
8.1 Reassembly Sequence



500153

Installing mast strip

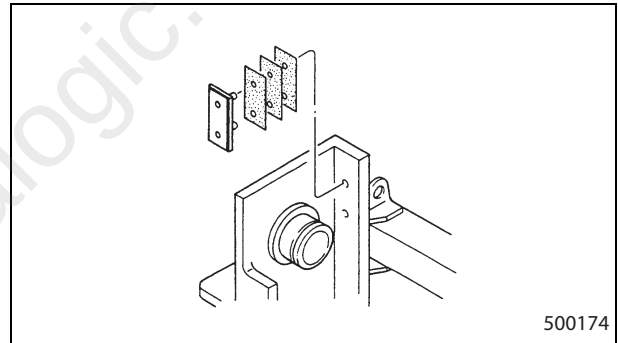
- (1) Install the mast strip and shims to make the front and rear clearances between the outer and inner masts at the maximum height range.



1. Mast strip

Ref.	Item	Standard value
1)	Forward and backward clearance between outer and inner masts	0.5 to 1.5 mm (0.02 to 0.06 in.)

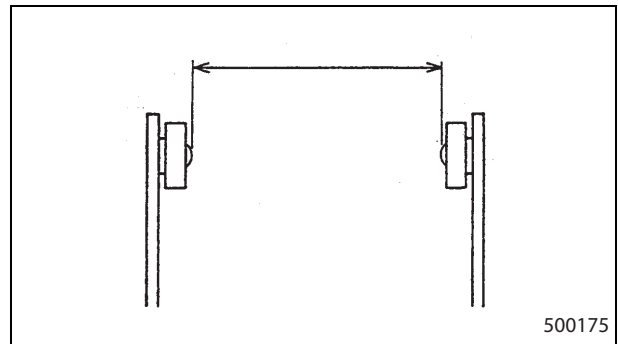
- (2) When the forward and backward clearance between the outer and inner masts is not within the standard value, adjust the number of shims.



Right and left clearances between outer and inner masts

- (1) Measure the dimension between the right and left side rollers of outer mast, and install the rollers so that the specified dimension is obtained.

Note: Measure at the smallest inner width between the side rollers.

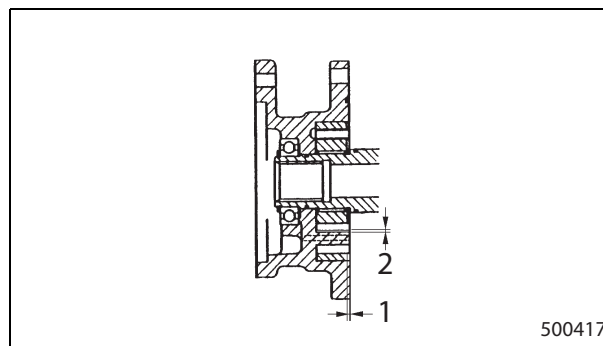


Item	Truck model	Standard value
Dimension between the right and left side rollers of outer mast	DP100NZ	754±0.5 mm (29.69±0.02 in.)
	DP120NZ	
	DP135NZ	
	DP150NZ	748±0.5 mm (29.45±0.02 in.)

9. Inspecting and Correcting Transmission

Oil pump

- (1) Install the internal gear and pump gear to the pump case, and measure the top clearance.
- (2) Measure the side clearance between the gear and pump case with a dial gauge.



Ref.	Item	Standard value	Service limit value
1	Side clearance	0.040 to 0.078 mm (0.0016 to 0.0031 in.)	0.09 mm (0.0035 in.)
2	Top clearance	0.3 to 0.345 mm (0.0118 to 0.0136 in.)	0.35 mm (0.0138 in.)

Stator shaft

Check the stator shaft and make sure that the stator shaft is free of following defects.

- Thread damage of spline
- Clutch passages clogged.

Friction plates and mating plates

Check the friction plates and mating plates and make sure that they are free of following defects.

- Seizure, local contact, distortion and wear.
- Wear and damage of splines

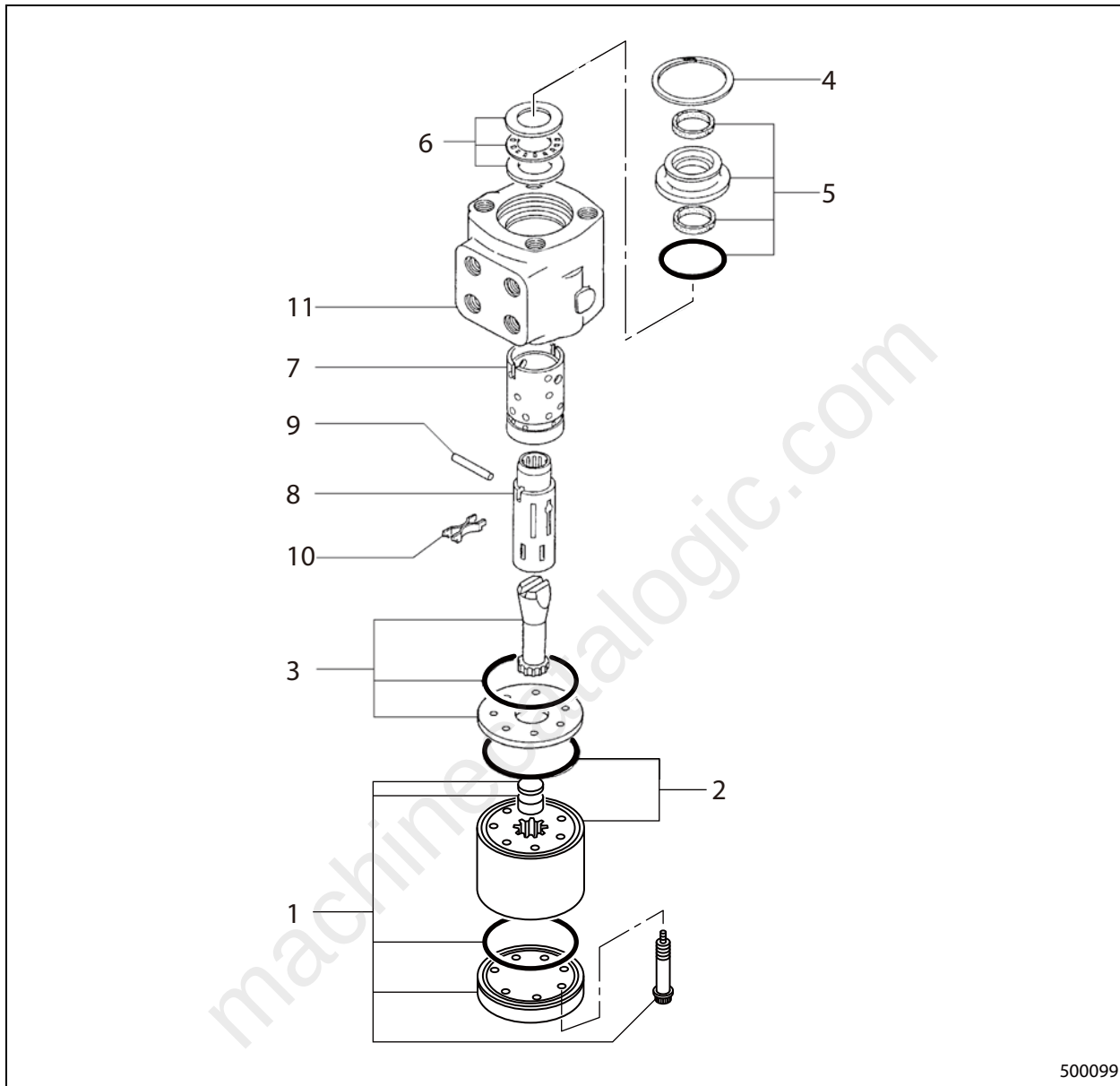
Clutch drums of forward, reverse, and 1st/3rd speed clutches

Check the shafts and clutch drums and make sure that they are free of following defects.

- Wear and damage of mating plate sliding surfaces.
- Wear and damage of clutch piston sliding surfaces.

5. Disassembling Steering Valve

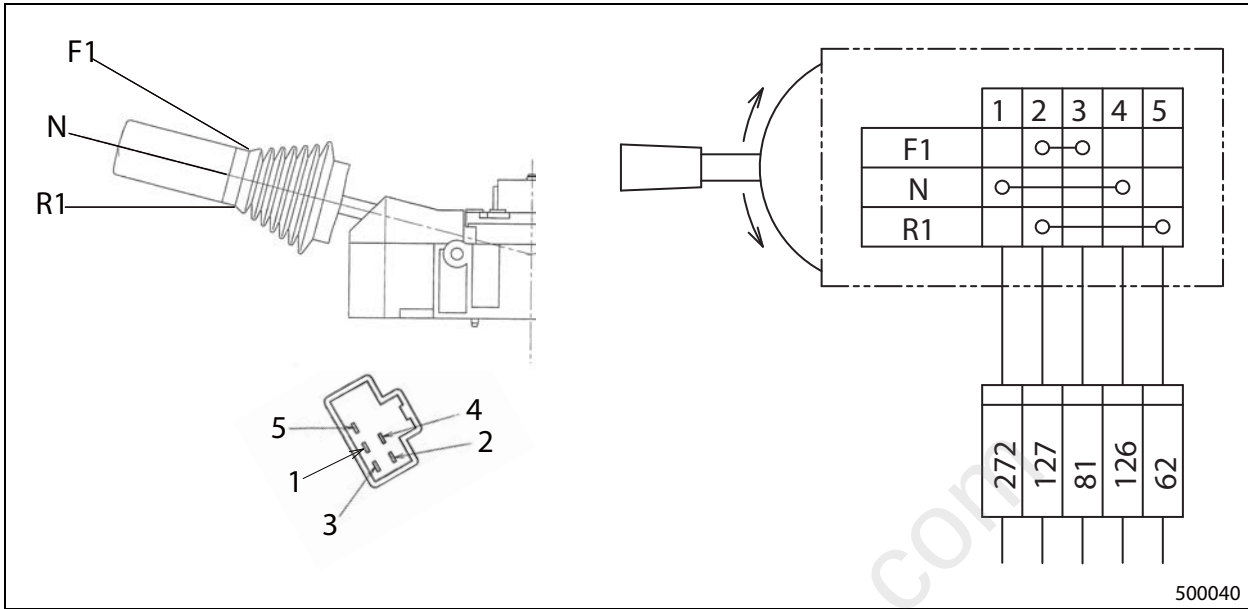
5.1 Disassembly Sequence of Steering Valve



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- | | |
|--|--------------------------------|
| 1. End cap, Bolt, O-ring, Spacer | 6. Thrust needle, Race bearing |
| 2. Gerotor set, O-ring | 7. Control sleeve |
| 3. Drive shaft, Spacer plate, O-ring | 8. Control spool |
| 4. Retaining ring | 9. Pin |
| 5. Seal gland bushing, O-ring
Oil seal, Dust seal | 10. Centering spring |
| | 11. Housing |

Direction lever

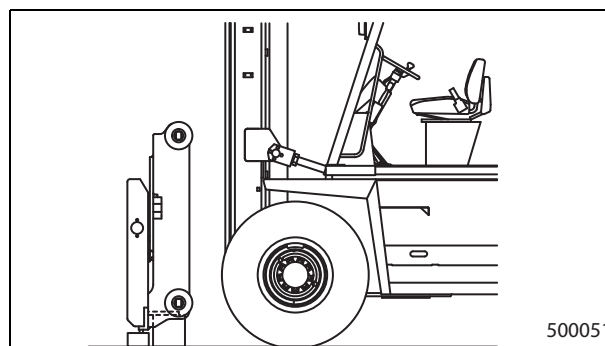


500040

Circuit No.	Wire diameter	Wire color
272	0.5	G/Y
127	0.5	B/L
81	0.5	G/R
126	0.5	B/L
62	0.5	L/G

Removing lift bracket

- (1) Remove the split pin from the lift chain. Remove the anchor nut and lock nut.
- (2) Connect a rope to each end of the lift chain (two pieces).
The length of the rope is approx 3 m (9.8 ft.).
- (3) Connect the ropes of 3 m (9.8 ft.) long to the hoses (2 pieces for simultaneous move type and 4 pieces for independent move type).
- (4) Start the engine and lift the inner mast to the position where main rolls on lift bracket are disengaged. At this time, pull the ropes to give the tension to the chains and hoses to prevent them from disengaging from the chain wheels and hose reels.
- (5) When the main rollers on the lift bracket come to the position where they disengage from the inner mast, move the lift truck backward to separate the lift bracket.



⚠ CAUTION

When the mast is rising, never touch any control levers except the lift lever.

Full Version Available

Caterpillar DP100NZ Forklift Service Manual (99799-41000)

Caterpillar DP100NZ Forklift service manual, covers hydraulics, power train, mast, wiring, and service data. Instant searchable PDF download.

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