



Service Manual

Chassis & Mast

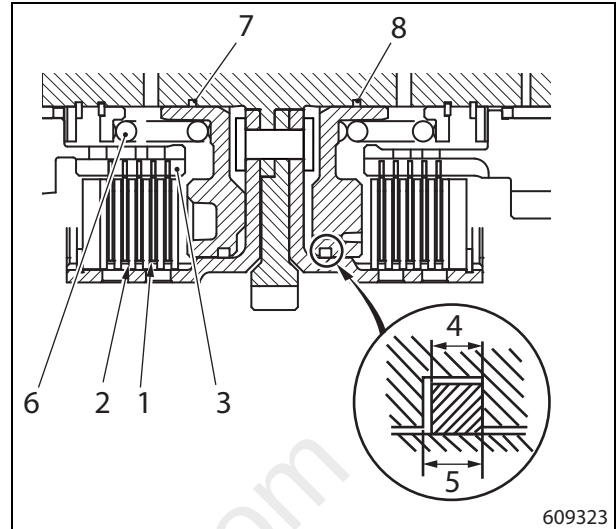
MC/FC

DP70N1 AT20E-00011-09999

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8.4 Input Shaft and Countershaft Clutch Drum

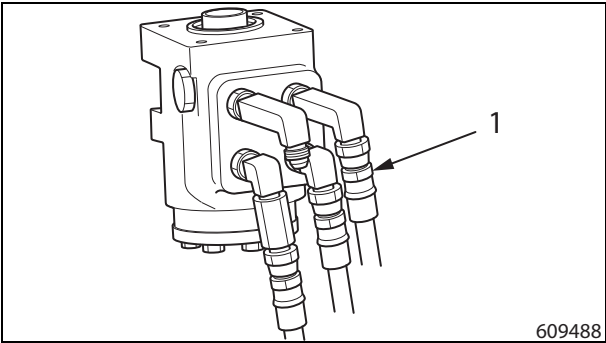
- Wear and damage of mating plate sliding surfaces.
- Wear and damage of clutch piston sliding surfaces.



609323

Ref.	Item	Standard	Limit
1	Thickness of mating plate	2.3 ± 0.07 mm (0.091 $\pm$ 0.0023 in.)	2.1 mm (0.083 in.)
2	Thickness of friction plate	2.6 ± 0.1 mm (0.102 $\pm$ 0.004 in.)	2.2 mm (0.087 in.)
3	Backlash between friction plate and gear	0.10 to 0.30 mm (0.0039 to 0.0118 in.)	-
4	Width of piston seal ring	4 ± 0.05 mm (0.16 $\pm$ 0.002 in.)	3.5 mm (0.138 in.)
5	Width of piston seal ring groove	$4^{+0.2}_{+0.1}$ mm (0.16 $^{+0.008}_{+0.004}$ in.)	4.5 mm (0.177 in.)
6	Clutch spring free length (k = Spring constant N/mm)	68 ± 2 mm (2.68 $\pm$ 0.0787 in.) k=39.1 (4 kgf/mm) [223.27 lbf/in.]	65 mm (2.56 in.)
7	Width of clutch piston seal ring	2.5 ± 0.05 mm (0.098 $\pm$ 0.002 in.)	2.0 mm (0.079 in.)
8	Width of clutch piston seal ring groove	2.5 mm (0.098 in.)	3.0 mm (0.118 in.)

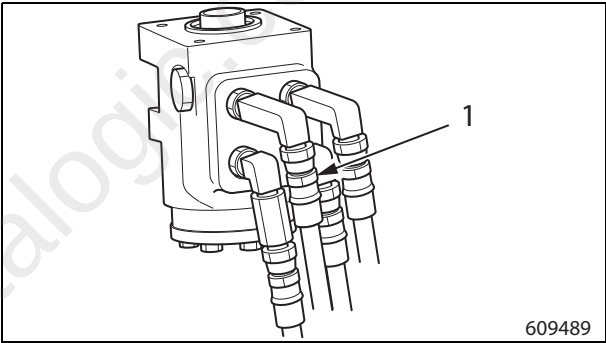
(6) Connect hose to L port connector.



1. Hose

Item	Tightening torque
L port connector hose	$49 \pm 4.9 \text{ N}\cdot\text{m}$ ($5.0 \pm 0.50 \text{ kgf}\cdot\text{m}$) [$36.14 \pm 3.614 \text{ lbf}\cdot\text{ft}$]

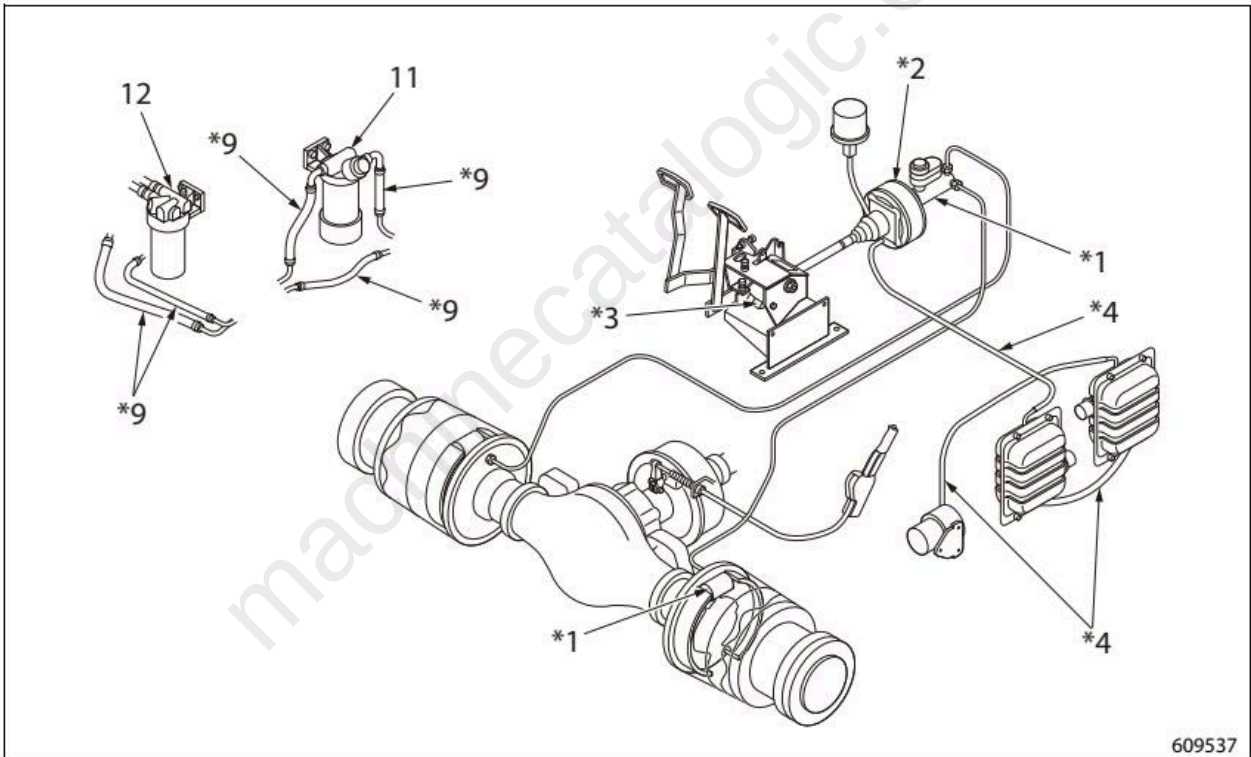
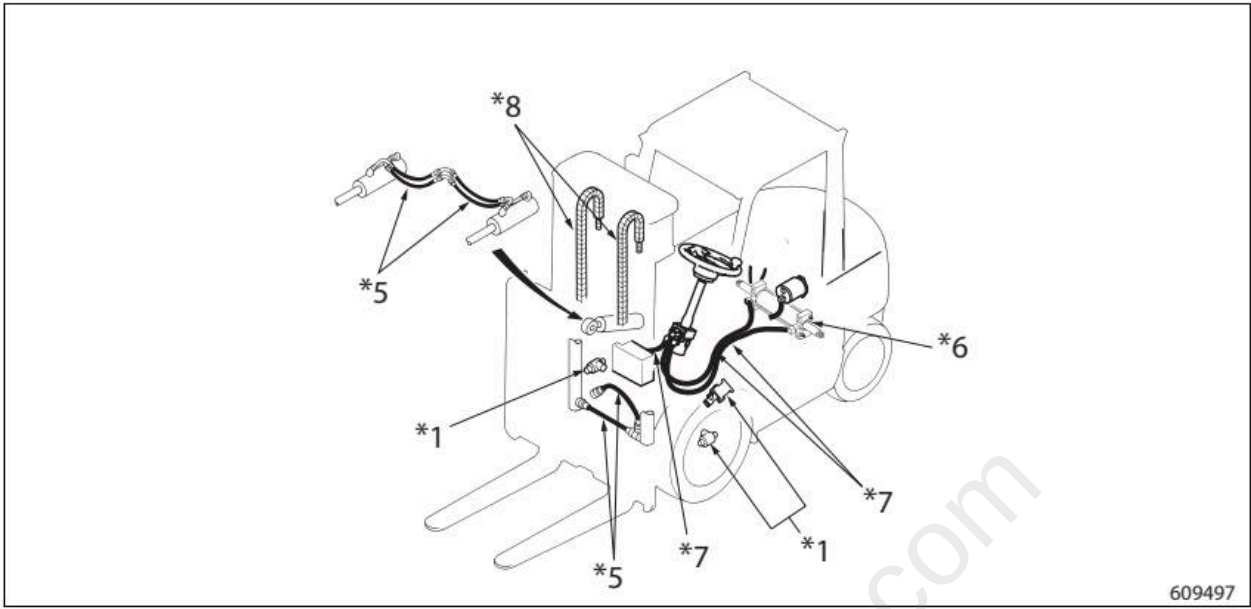
(7) Connect hose to T port connector.



1. Hose

Item	Tightening torque
T port connector hose	$49 \pm 4.9 \text{ N}\cdot\text{m}$ ($5.0 \pm 0.50 \text{ kgf}\cdot\text{m}$) [$36.14 \pm 3.614 \text{ lbf}\cdot\text{ft}$]

3.1 Safety Critical Parts

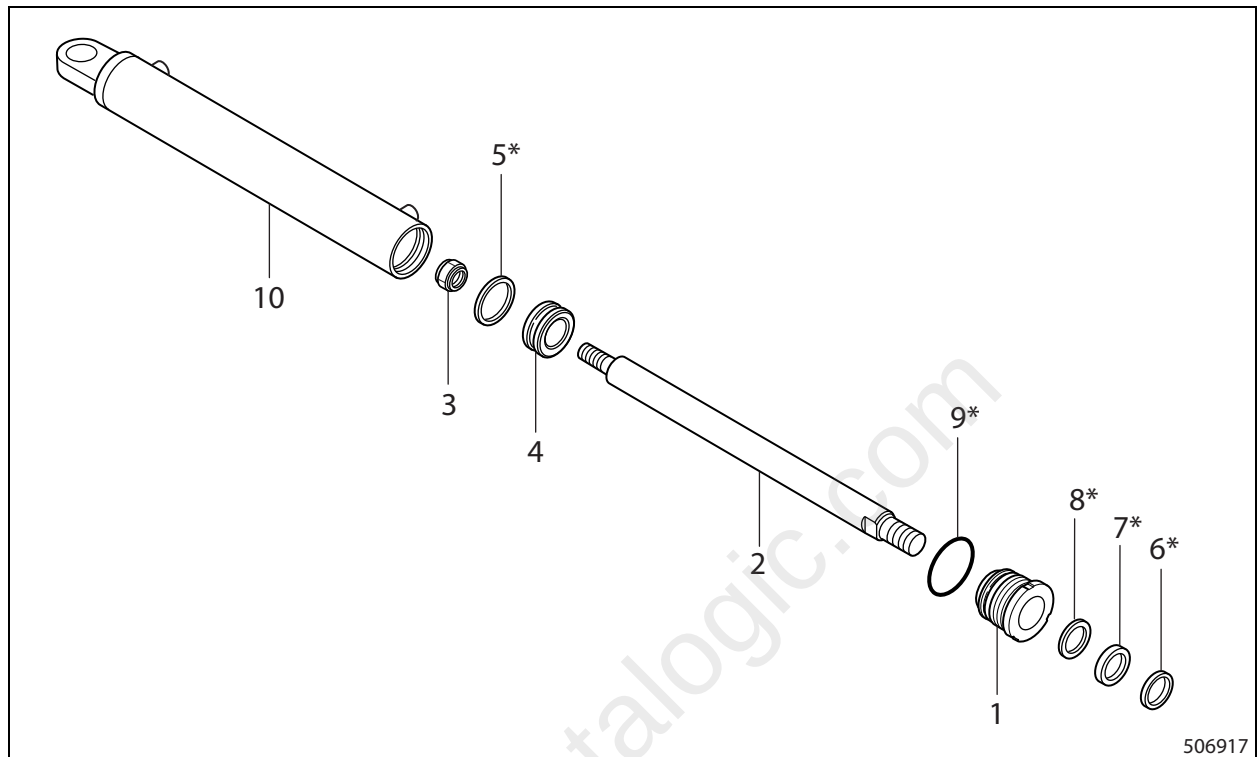




9. Disassembling Side Shifter Cylinder

9.1 Disassembly Sequence

SS (Hook type)



1. Cylinder head
2. Piston rod
3. Self-locking nut
4. Piston
5. Piston seal

6. Dust seal
7. Packing
8. Buffer ring
9. O-ring
10. Cylinder tube

Note: Parts marked with * are contained in seal kit.

Full Version Available

Caterpillar DP70N1 Forklift Service and Operator Manual (99709-60100)

Caterpillar DP70N1 Forklift service manual, covers hydraulics, mast, wiring, power train, and engine work in searchable PDF. Instant PDF download.

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