# **CATERPILLAR®**

## Service Repair Manual

## **Models**

# D7R II TRACK-TYPE TRACTOR

**ℤProduct:** TRACK-TYPE TRACTOR

Model: D7R II TRACK-TYPE TRACTOR AGN

Configuration: D7R Series II TRACK-TYPE TRACTOR STD, XR Differential Steering AGN01500-UP (MACHINE) POWERED BY 3176C Engine

#### **Disassembly and Assembly**

**D7R Series II Track-Type Tractor Power Train** 

Media Number -RENR5626-03

Publication Date -01/09/2015

Date Updated -14/05/2018

i07321002

### **Steering Planetary and Brake - Assemble**

**SMCS - 4132-016** 

### **Assembly Procedure**

Table 1

Required Tools			
Tool	Part Number	Description	Qty
A	138-7575	Link Bracket	3
D	6V-6640	Sealant	1

**Reference:** Refer to Specifications, "Brake and Planetary" in the Service Manual for your machine.



Illustration 1

g00819345

**Note:** Orient the disc spring with the outer edge downward.

1. Install ring (30) and spring (29) in housing (5).

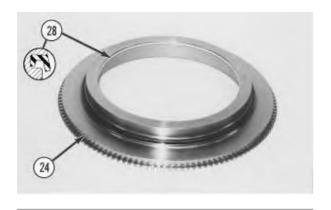


Illustration 2 g00622157

2. Apply clean oil to seal ring (28).

**Note:** Orient the seal ring with the lip downward. Refer to Illustration 2.

3. Install seal ring (28) in piston (24).



Illustration 3 g00622156

4. Install piston (24) and O-ring seal (27) in the housing.

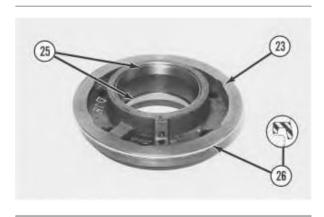


Illustration 4 g00622155

5. Lower the temperature of bearing cups (25). Install bearing cups (25) in retainer (23).

**Note:** Orient the seal ring with the lip downward. Refer to Illustration 4.

6. Apply clean oil to seal ring (26). Install seal ring (26) in retainer (23).



Illustration 5

g00622132

### **WARNING**

Improper assembly of parts that are spring loaded can cause bodily injury.

To prevent possible injury, follow the established assembly procedure and wear protective equipment.

7. Install retainer (23) on piston (24). Align the oil passage in retainer (23) with the oil passage and the O -ring seal in the housing. Install bolts (22).

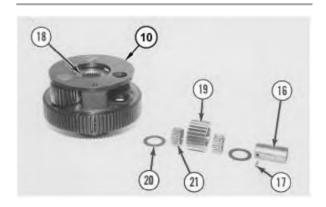


Illustration 6

g01205304

- 8. Install sun gear (18) in planetary carrier (10).
- 9. Install bearings (21) in planetary gear (19).
- 10. Install discs (20) and planetary gear (19) in planetary carrier (10). Install shaft (16).



Illustration 7 g00622128

**Note:** If the rubber in pin (17) is damaged, replace pin (17).

- 11. Align the hole in shaft (16) with the hole in planetary carrier (10) and install pin (17). Install pin (17) until the pin is even with the surface of planetary carrier (10).
- 12. Repeat Steps 9 through 11 for the remaining planetary gears.

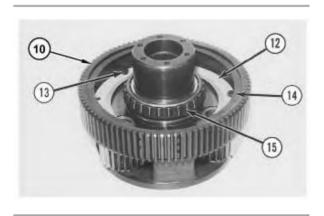


Illustration 8 g01205303

**Note:** If bearing cone (15) was removed from planetary carrier (10), a new bearing must be installed.

- 13. Raise the temperature of bearing cone (15). Install the bearing cone on planetary carrier (10).
- 14. Apply Tooling (D) to the flange of slinger (12).
- 15. Install slinger (12) on planetary carrier (10). Install bolts (13) and tighten to a torque of  $25 \pm 6 \text{ N} \cdot \text{m}$  (221  $\pm$  53 lb in).
- 16. Install ring (14) in planetary carrier (10).

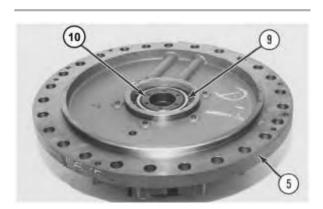


Illustration 9 g01205389

17. Position housing (5) on planetary carrier (10).

**Note:** Install shim pack between plate and planetary carrier (10), only if there was a shim pack originally installed in the differential group and if the same planetary carrier (10) is being reused. shim pack thickness should be 0.31 mm (0.0122 inch).

18. Raise the temperature of bearing cone (9). Install bearing cone (9) on planetary carrier (10).

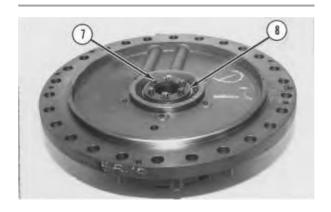


Illustration 10

g00818972

- 19. Position plate (8) on the planetary carrier.
- 20. Install bolts (7).



Illustration 11

g00622110

21. Install friction discs (6) and brake plates. Alternate the friction discs and the brake plates.



Illustration 12 g00622109

- 22. Position ring gear (4) on housing (5).
- 23. Install bolts (3). Tighten the bolts to a torque of  $135 \pm 20 \text{ N} \cdot \text{m}$  ( $100 \pm 15 \text{ lb ft}$ ).

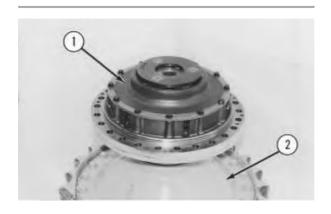


Illustration 13

g00622108

- 24. Use a suitable lifting device and Tooling (A) to position the planetary group and brake (1) on final drive (2). The weight of the planetary group and brake is approximately 135 kg (300 lb).
- 25. Install the bolts that hold the planetary group and brake on the final drive.

#### End By:

a. Install the right-hand final drive, the planetary group, and the brake. Refer to Disassembly and Assembly, "Final Drive, Steering Planetary, and Brake (Right Side) - Install"

.

Copyright 1993 - 2021 Caterpillar Inc.

All Rights Reserved.

Private Network For SIS Licensees.

Sun Mar 7 14:05:29 UTC+0800 2021

Thank you so much for reading. Please click the "Buy Now!" button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com