



Service Repair Manual

Models

D9T TRACK-TYPE TRACTOR

Product: TRACK-TYPE TRACTOR

Model: D9T TRACK-TYPE TRACTOR TWG

Configuration: D9T TRACK-TYPE TRACTOR TWG00001-UP (MACHINE) POWERED BY C18 Engine

Disassembly and Assembly C15 and C18 Engines for Caterpillar Built Machines

Media Number -REN8261-28

Publication Date -01/08/2015

Date Updated -28/08/2018

i05949825

Gear Group (Front) - Install

SMCS - 1206-012

Installation Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	-	Loctite 5900	-
B	-	Loctite 243	-

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

NOTICE

Do not turn the crankshaft or the camshaft while the camshaft gear is removed. If the front gear group is not correctly timed during installation, interference can occur between the pistons and the valves, resulting in damage to the engine.

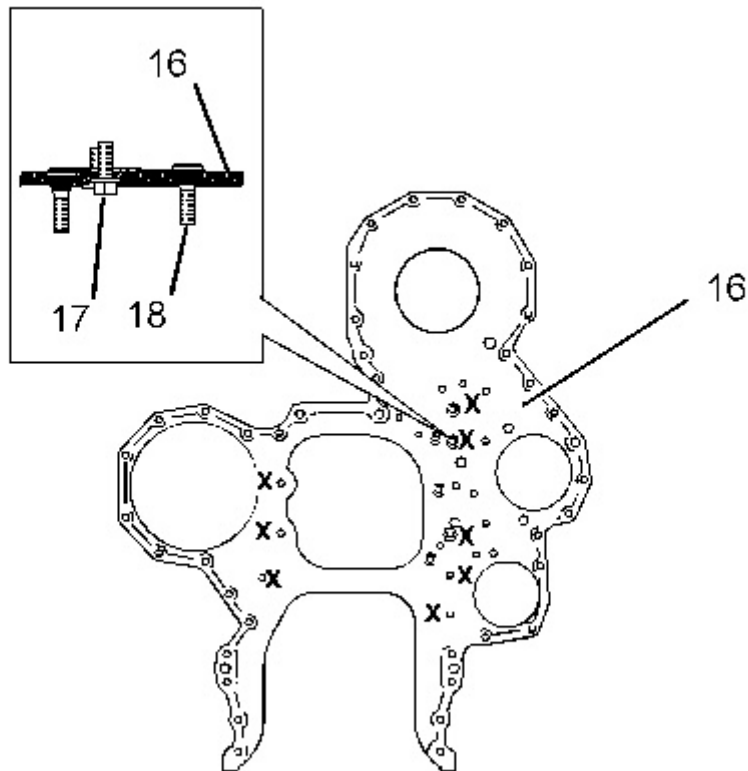


Illustration 1

g01047263

1. Apply Tooling (B) to the serrations of studs (18). Install the studs in plate (16).
2. Install the integral seal on the dowel pins on the cylinder block.

Note: Apply Tooling (A) to the bottom of the integral seal in order to fill the space at the cylinder block, the front housing, and the engine oil pan.

3. Install plate (16) on the dowel pins on the cylinder block. Install new locking bolts (17) (Marked "X") in order to fasten the front plate to the cylinder block. Tighten the locking bolts to a torque of 55 N·m (41 lb ft).

Note: Apply Tooling (B) to the bolts.

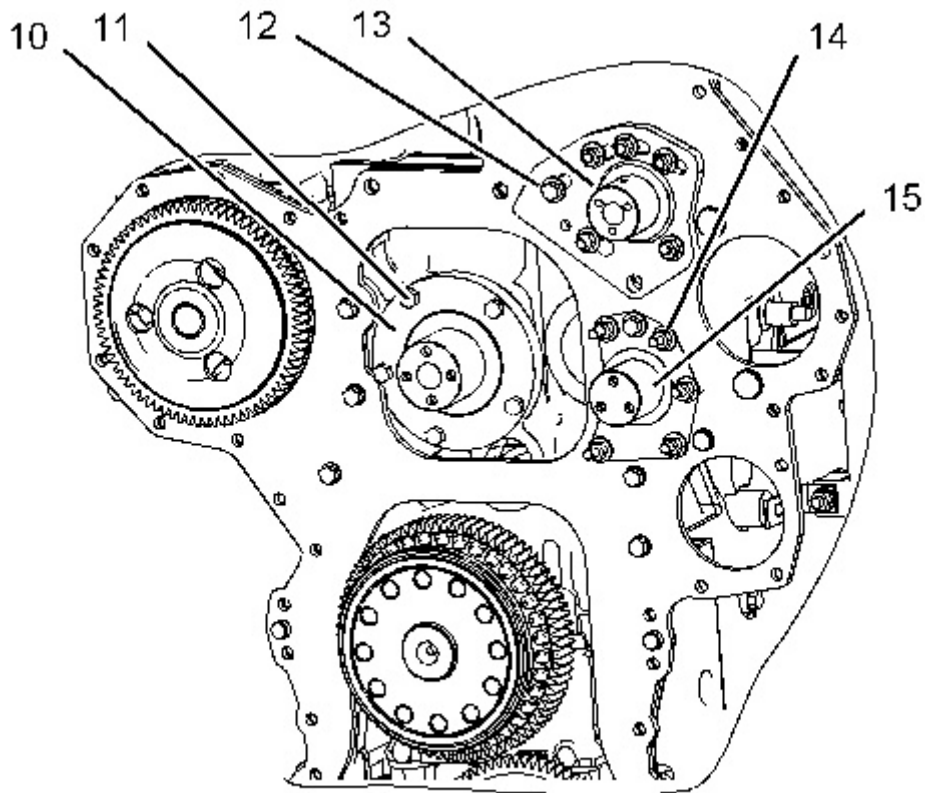


Illustration 2

g01056102

4. Install stub shaft (15). Apply Tooling (B) to the studs and the bolt for stub shaft (15). Tighten nuts (14) and the bolt to a torque of 55 ± 10 N·m (41 ± 7 lb ft).
5. Install shaft assembly (13). Do not tighten nuts (12) and the bolt for the shaft assembly at this time. The nuts and the bolt for shaft assembly (13) will need to be tightened when the backlash is adjusted.
6. Adjust the backlash between the camshaft gear and the adjustable idler gear assembly. The backlash should be 0.356 ± 0.254 mm (0.014 ± 0.010 inch). Refer to Testing and Adjusting, "Gear Group (Front) - Time" for the backlash adjustment procedure. Tighten nuts (12) and the bolt to a torque of 55 ± 10 N·m (41 ± 7 lb ft).
7. Install stub shaft (10). Apply Tooling (B) to bolts (11). Install bolts (11) and tighten to a torque of 55 ± 10 N·m (41 ± 7 lb ft) in sequence. (1, 3, 4, 5, 2, 1, 2, 3, 4, 5, 1).

Note: Mark bolts (11) in clockwise order from one to five. These will be the numbers for the torque sequence in step 6.

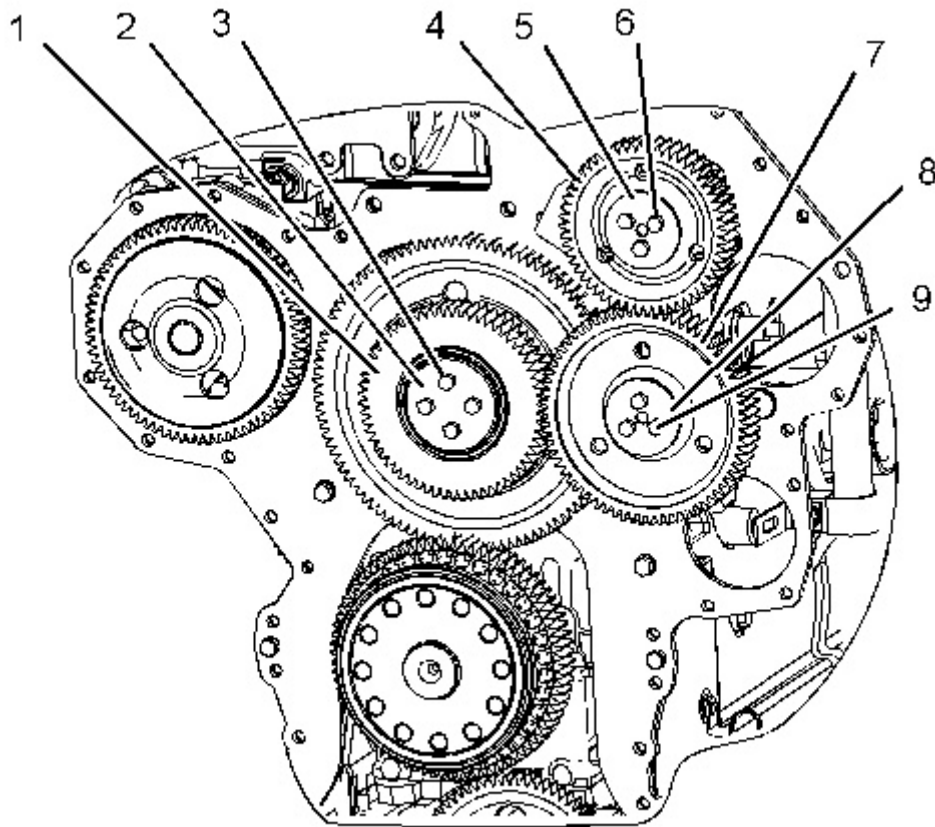


Illustration 3

g01047231

8. Position cluster gear assembly (1) on the stub shaft. Ensure that the timing marks are aligned on the cluster gear assembly and the crankshaft gear.
 9. Apply Tooling (B) to bolts (3). Position plate (2) with the oil groove toward the gear face. Install bolts (3).
 10. Position idler gear (7) on the shaft assembly.
 11. Apply Tooling (B) to bolts (9). Position plate (8) with the oil groove toward the gear face. Install bolts (9).
- Note:** Skip Step 12 if the shaft assembly is removed. The backlash for the camshaft gear and the adjustable idler gear will need to be readjusted. Refer to Testing and Adjusting, "Gear Group (Front) - Time".
12. Position adjustable idler gear (4) on the shaft assembly.
 13. Apply Tooling (B) to bolts (6). Position plate (5) with the oil groove toward the gear face. Install bolts (6).
 14. Adjust the backlash for the camshaft gear and the adjustable idler gear, if necessary. Refer to Testing and Adjusting, "Gear Group (Front) - Time".

Note: The camshaft gear must be installed and the adjustable idler gear must be removed in order to perform the backlash adjustment procedure.

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