



# Service Repair Manual

## **Models**

299D2 COMPACT TRACK LOADER

---

Product: COMPACT TRACK LOADER

Model: 299D2 COMPACT TRACK LOADER BY4

Configuration: 299D2 and 299D2XHP Compact Track Loader BY400001-UP (MACHINE) POWERED BY C3.8 Engine

## Disassembly and Assembly C3.8 Engines for Caterpillar Built Machines

Media Number -UENR0129-08

Publication Date -01/09/2015

Date Updated -19/05/2016

i04664023

## Flywheel - Install

SMCS - 1156-012

## Installation Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	9U-7994	Guide Bolt	2



**WARNING**

**Always wear protective gloves when handling parts that have been heated.**

---

---

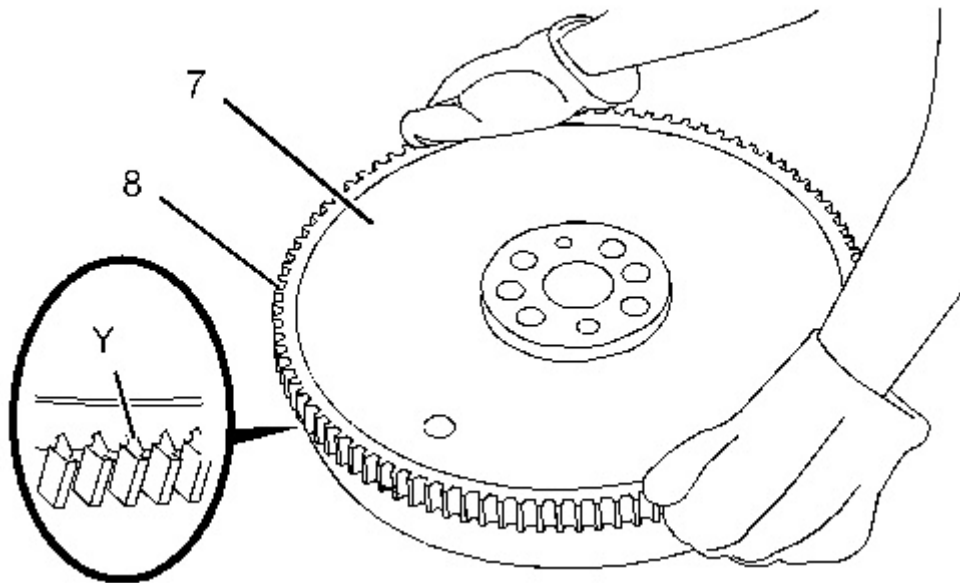


Illustration 1

g02797127

Typical example

1. If the ring gear was removed, follow Steps 1.a through 1.c to install ring gear (7) to flywheel (8).
  - a. Identify the orientation of the new ring gear in order to install the ring gear correctly onto the flywheel.
 

**Note:** The chamfered side of gear teeth (Y) must face toward the starting motor when the flywheel is installed. This will ensure the correct engagement of the starting motor.
  - b. Heat ring gear (3) in an oven to a maximum temperature of 150°C (302°F) prior to installation.
 

**Note:** Do not use a torch to heat the ring gear.
  - c. Ensure that the orientation of ring gear (7) is correct and quickly install the ring gear onto flywheel (8).



Illustration 2

g02797120

2. Thoroughly clean the flywheel housing. Inspect the crankshaft rear seal for leaks. If there are any oil leaks replace the crankshaft rear seal. Refer to Disassembly and Assembly, "Crankshaft Rear Seal - Remove and Install".
3. Install Tooling (A) on the crankshaft.
4. Use a suitable lifting device to position flywheel assembly (5). The weight of flywheel assembly (5) is approximately 23 kg (50 lb).
5. Align flywheel assembly (5) with Tooling (A). Install flywheel assembly (5) to the crankshaft.

**Note:** Ensure the correct orientation of the flywheel on the crankshaft.

6. Apply clean engine oil onto bolts (6). Install bolts (6) finger tight.
7. Remove Tooling (A) and install the two remaining bolts (6).
8. Remove the lifting device from the flywheel.
9. Use a suitable tool to prevent flywheel assembly (5) from rotating. Tighten bolts (6) to a torque of 98.1 to 107 N·m (72 to 79 lb ft).
10. Check the concentricity of the flywheel. Refer to Systems Operation, Testing and Adjusting, "Flywheel - Inspect".

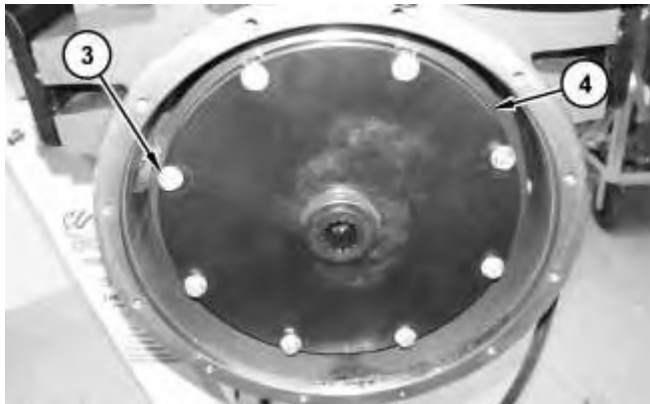


Illustration 3

g02797118

11. Install pump coupling (4). Install bolts (3).



12. Install cover (2). Install bolts (1).

**End By:**

a. Install the starting motor.

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](mailto:ebooklibonline@outlook.com)