CATERPILLAR®

Service Repair Manual

Models

325D and 325D L Excavator

Tool	Part Number	Part Description	Qty
A	1P-2420	Transmission Stand Group	1
B	138-7573	Link Bracket	2
C	1P-1863	Retaining Ring Pliers	1
D	138-7575	Link Bracket	3
E	138-7576	Link Bracket	3
F	138-7574	Link Bracket	2
G	1U-5933	Duo-Cone Seal Installer As	1
	169-0503	Installation Kit	1
H	4C-5599	Anti-Seize Compound	-
J	9S-3263	Thread Lock Compound	-
K	8C-8422	Sealant	-
L	FT-2770	Leak Down Test Tool	1

1. Make sure that all parts of the final drive are thoroughly clean and free of dirt and debris prior to assembly. Check the condition of all O-ring seals that are used in the final drive. If any of the seals are damaged, use new parts for replacement. Reassemble the final drive on Tooling (A) .

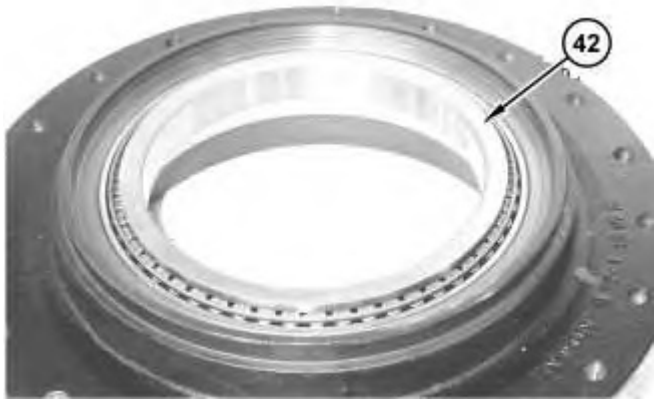

Illustration 1 g01208879

2. Apply Tooling (H) to the surfaces inside sprocket housing (35) that make contact with the bearing cups. Install a bearing cup that is in each side of the sprocket housing with a press. Make sure that the bearing cups are properly seated.

3. Apply Tooling (H) to the surfaces inside the motor housing that make contact with bearing cones (42) .

4. Install inner bearing cone (42) on the motor housing.

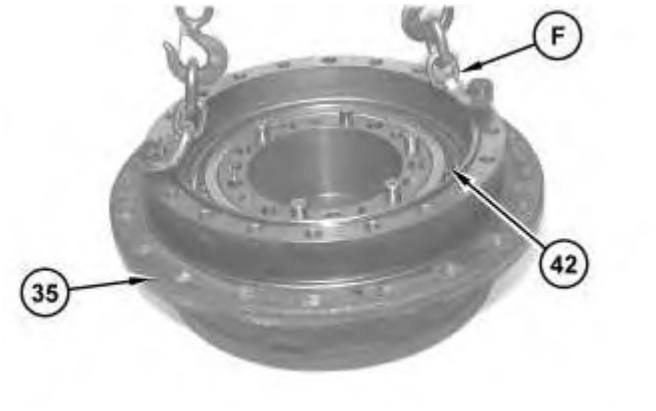

Illustration 2 g01208625

5. Attach Tooling (F) and a suitable lifting device to sprocket housing (35) . The weight of sprocket housing (35) is approximately 109 kg (240 lb). Install sprocket housing (35) on the motor housing. Carefully install outer bearing cone (42) on the sprocket housing.

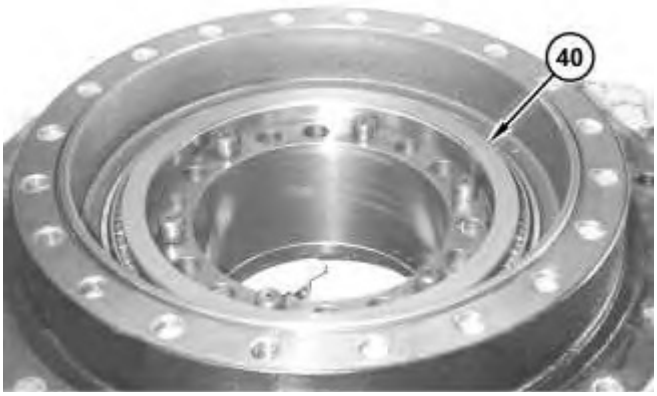

Illustration 3 g01208578

6. Adjust the bearing preload of the final drive. Determine the correct amount of shims (40) that are required for the proper bearing preload, as follows:

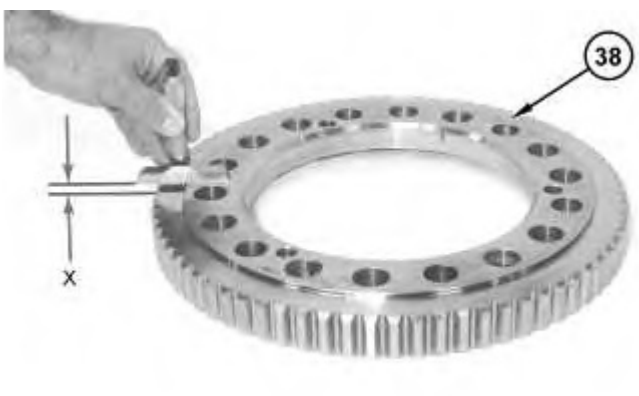

Illustration 4 g01208987

a. Use a depth micrometer in order to measure the step height of coupling gear (38) at several locations around the gear. Find the average for the measured dimensions around the gear and record the dimension. Call this Dimension (X) .

b. Apply a load of 4000 kg (8820 lb) to bearing cones (42) .

c. Rotate sprocket housing (35) several times in order to seat the bearing cones.

d. Reduce the load to 3000 ± 300 kg (6615 ± 660 lb).

Illustration 5 g00631001

e. While the load is still on the bearing cones, measure the distance between the top face of the motor housing and the top face of bearing cone (42) . Take measurements in several locations around the motor housing. Find the average of the measured dimensions, and record the dimensions. Call this Dimension (Y) .

f. Determine the correct thickness of shims (40) which are used between bearing cone (42) and coupling gear (38) . Use the following equation in order to determine the shim pack thickness.

   Shim pack thickness ... (Y) − (X) ± 0.05 mm (0.002 inch)

   Note: If two shims (40) are required, install the thinnest shim next to coupling gear (38) during final assembly.

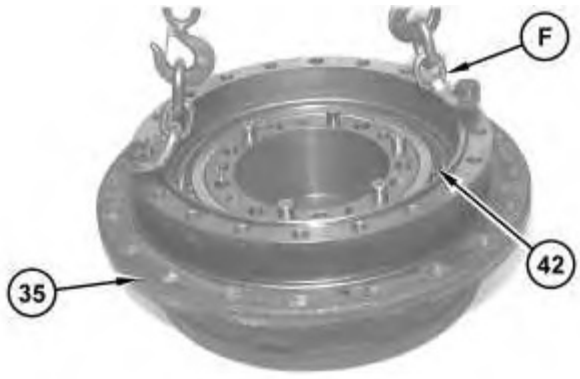

Illustration 6 g01208625

7. Attach Tooling (F) and a suitable lifting device to sprocket housing (35) . Separate sprocket housing (35) from the motor housing.

   ReferenceRefer to Disassembly and Assembly, "Duo-Cone Conventional Seals - Install".

   Note: The rubber seals and all surfaces that make contact with the seals must be clean and dry. After installation of the seals, put clean SAE 30 oil on the contact surfaces of the metal seals.

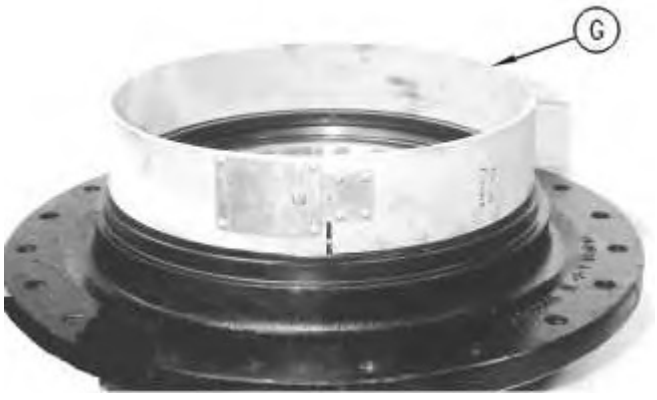

Illustration 7 g00631006

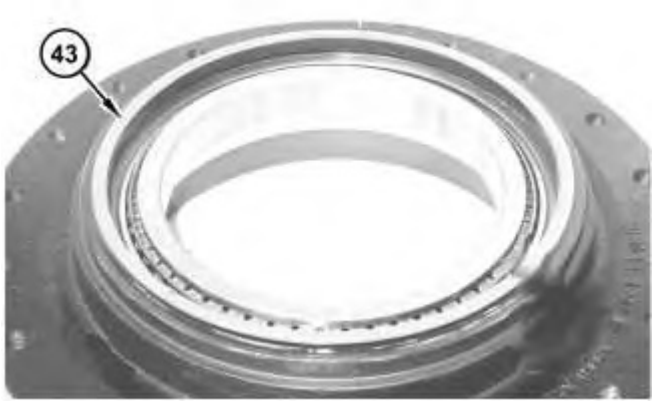

Illustration 8 g01208999

8. Use Tooling (G) to install Duo-Cone seal (43) in the sprocket housing.

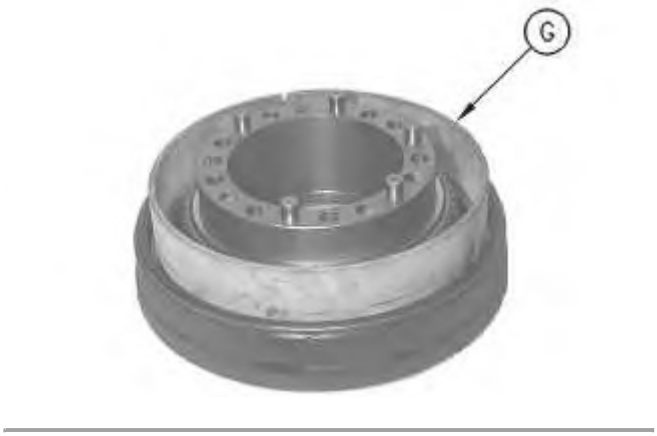

Illustration 9 g00631014

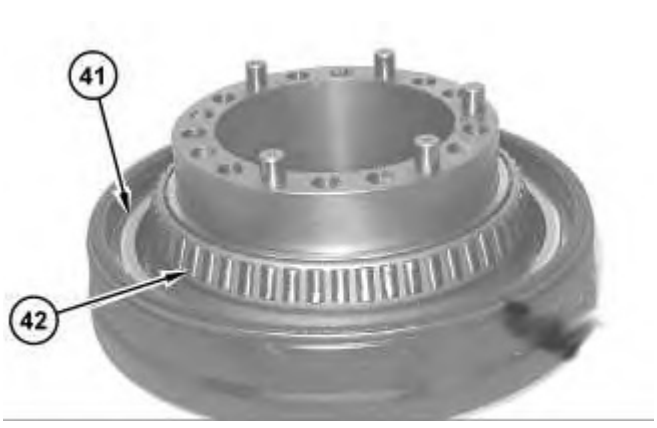

Illustration 10 g01208626

9. Use Tooling (G) to install Duo-Cone seal (41) in the motor housing.
10. ApplyTooling (H) in the bores for the locating pins that are in the motor housing. Reinstall the locating pins in the motor housing.

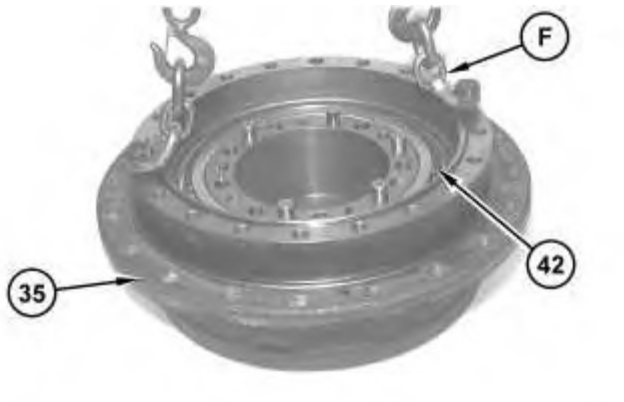

Illustration 11 g01208625

11. Make sure that inner bearing cone (42) is seated properly on the motor housing.

    Note: Do not scratch Duo-Cone seal (41) or damage the Duo-Cone seal in the main housing, or the motor housing during assembly of the two components. After installation of the main housing on the motor housing, there will be a small gap between the components. The gap between the components is caused by the Duo-Cone seal. This will be eliminated during the installation of coupling gear (40) .

12. Fasten Tooling (F) and a suitable lifting device to sprocket housing (35) . Carefully install the sprocket housing on the motor housing.

13. Install outer bearing cone (42) on the sprocket housing. Make sure that the outer bearing cone is properly seated.

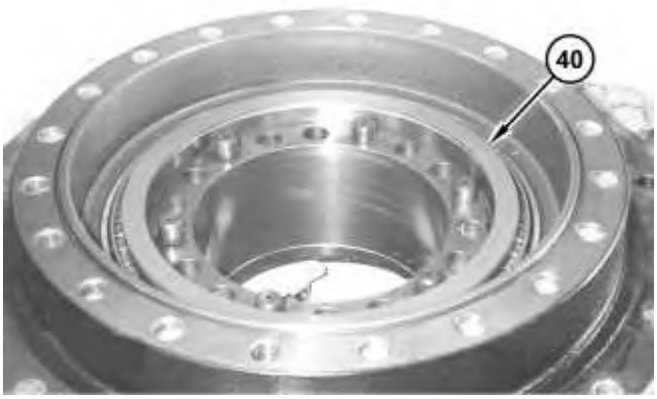

Illustration 12 g01208578

14. Install shims (40) that were determined in Steps 6.a through 6.f on the end of the sprocket housing. If shims were required, make sure that the thinnest shim is installed on top.

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