

Product: WHEEL SCRAPER
Model: 621G WHEEL SCRAPER CEP
Configuration: 621G Wheel Scraper CEP00001-UP (MACHINE)

Disassembly and Assembly 621G and 627G Wheel Tractor-Scrapers Machine Systems

Media Number -REN4248-01

Publication Date -01/08/2004

Date Updated -09/08/2004

i03538320

Piston Pump (Cushion-Hitch) - Assemble

SMCS - 5070-016; 5316-016

Assembly Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-0510	Driver Group	1
B	1P-1854	Pliers	1
C	1P-1857	Pliers	1
D	8T-5096	Dial Indicator Gp	1
E	5N-5561	Silicone Lubricant	1
F	9S-3263	Thread Lock Compound	1

Note: Cleanliness is an important factor. Before assembly, all parts should be thoroughly cleaned in cleaning fluid. Allow the parts to air dry. Wiping cloths or rags should not be used to dry parts. Lint may be deposited on the parts which may cause later trouble. Inspect all parts. If any parts are worn or damaged, use new Caterpillar parts for replacement.

Note: Apply a light film of 10W oil to all components before assembly.

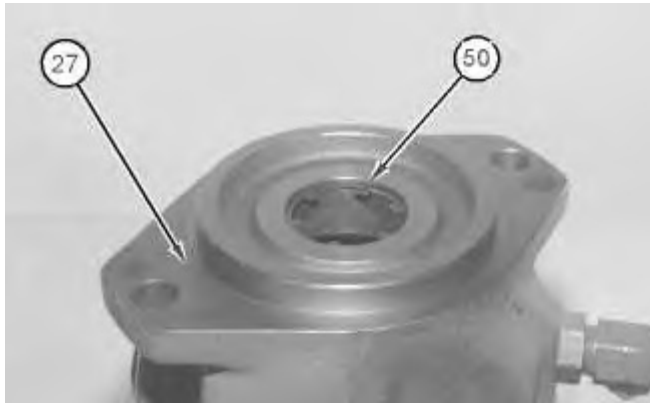


Illustration 1

g01071755

1. Use Tooling (C) in order to install retaining ring (50) to pump housing (27) .

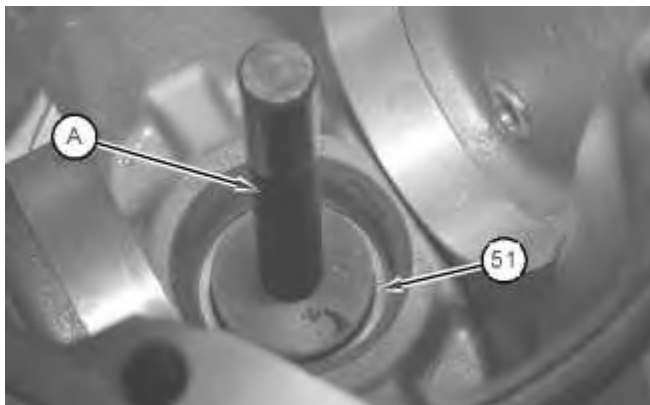


Illustration 2

g01071756

2. Use Tooling (A) in order to install lip seal (51) to the pump housing. The sealing lip of the lip seal should face toward the bearing cup. The lip seal must seat against the retaining ring.

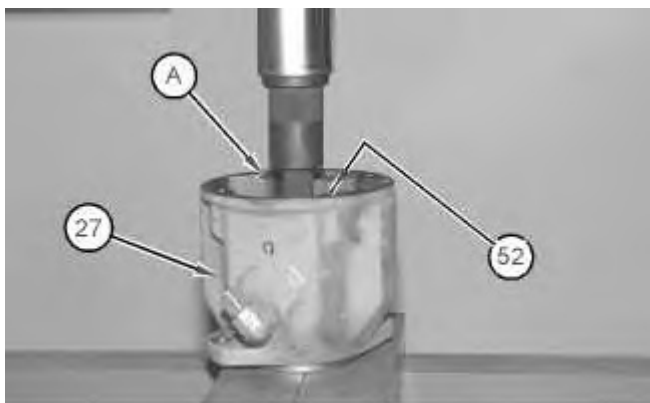


Illustration 3

g01071757

3. Lower the temperature of bearing cup (52) . Use Tooling (A) in order to install bearing cup (52) to pump housing (27) . Install bearing cup (52) until the bearing cup seats.
4. Use the following steps to determine the preload on the bearings of the pump assembly.

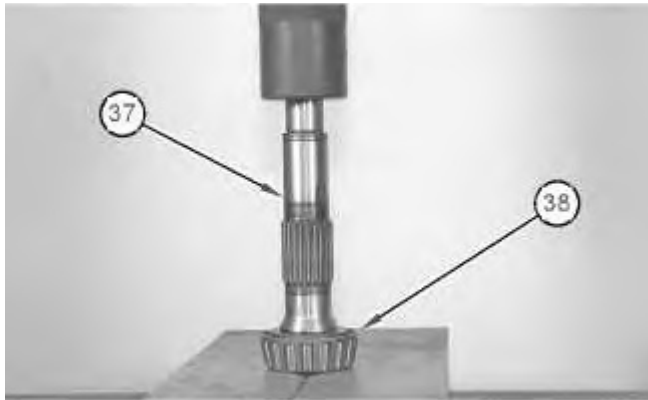


Illustration 4

g01071758

- a. Lower the temperature of shaft (37) . Use a suitable press in order to install shaft (37) into bearing cone (38) . Install shaft (37) until bearing cone (38) is seated onto shaft (37) .



Illustration 5

g01071773

- b. Install shaft (37) into pump housing (27) .
-



Illustration 6

g01071774

- c. Install shim (35) and bearing cone (34) on pump shaft (37) .

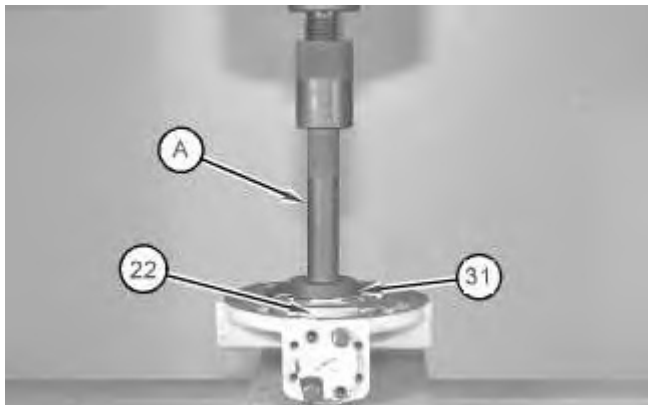


Illustration 7

g01071775

- d. Lower the temperature of bearing cup (31) . Use Tooling (A) and a suitable press in order to install bearing cup (31) in pump head (22) . Install the bearing cup until the cup is seated.



Illustration 8

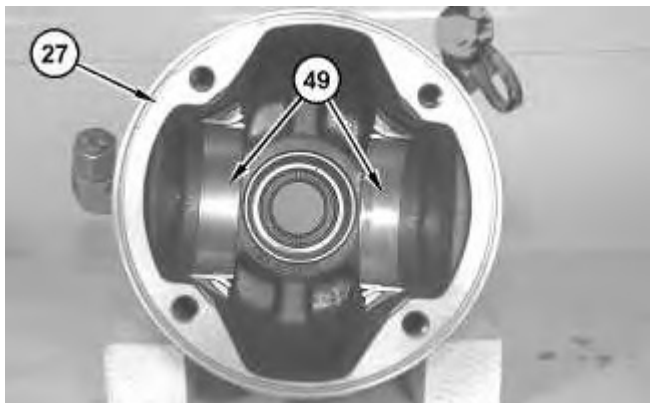
g01071776



Illustration 9

g01071778

- e. Position pump head (22) onto pump housing (27) . Install bolts (21) but do not tighten bolts (21) at this point.
- f. Use a feeler gauge to measure the distance between the pump head and the pump housing. Take measurements at three equal locations on the surface between the pump head and the pump housing.
- g. The average of the three dimension should be zero to 0.050 mm (0.0020 inch).
- h. If the dimension is not correct remove shim (35) . Refer to Illustration 6. To achieve the correct dimension, grind the shim or replace shim (35) .
- i. When the correct dimension is achieved tighten bolts (21) and then invert the pump assembly.
- j. Use Tooling (D) , a suitable screwdriver, and a set of slip joint pliers to check the end play on shaft (37) . If end play exists on the shaft, repeat Step 4 until the correct dimension is reached.
- k. Remove bolts (21) and pump head (22) from pump housing (27) . Remove bearing cone (34) and shim (35) from shaft (37) . Remove shaft (37) .
- l. Proceed with the assembly of the piston pump.



5. Install brass bearings (49) into pump housing (27) .

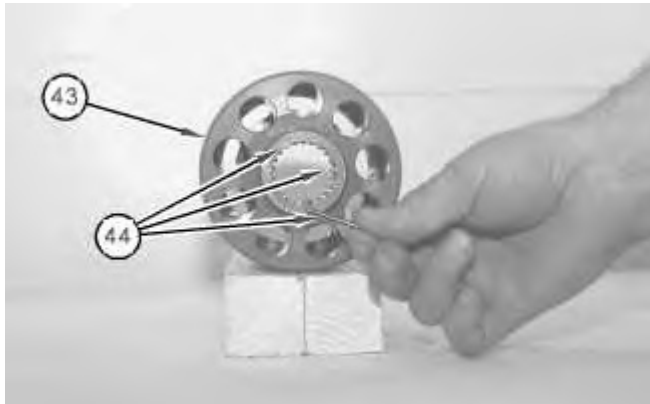


Illustration 11

6. Install pins (44) into barrel (43) .

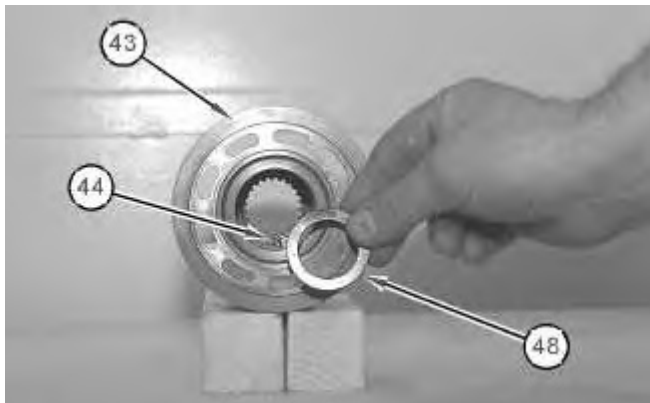


Illustration 12

7. Install seat (48) in order to secure pins (44) in barrel (43) .
-

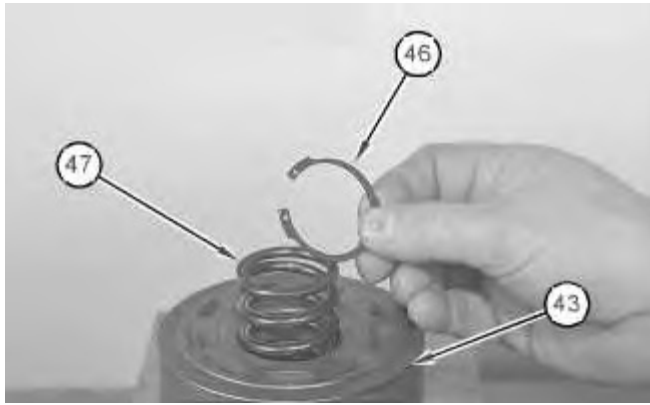


Illustration 13

g01071454

8. Position barrel (43) in a suitable press. Install spring (47) in barrel (43) . Position retaining ring (46) on top of the spring.

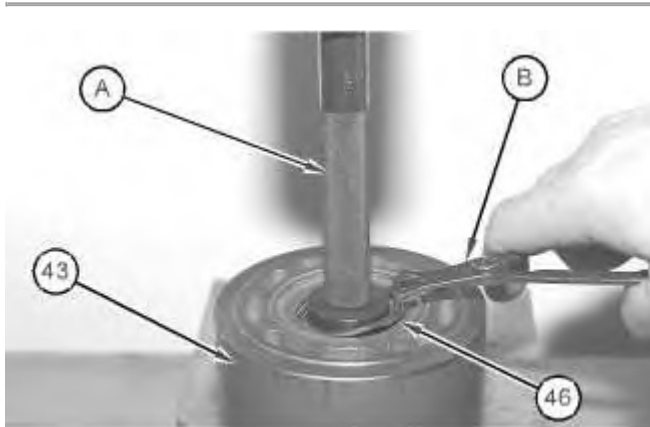


Illustration 14

g01071453

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.

9. Position Tooling (A) and the suitable press on top of the spring and inside of retaining ring (46) . Use Tooling (A) in order to depress the spring that is in barrel (43) . Use Tooling (B) in order to install retaining ring (46) that secures the spring in barrel (43) . Remove Tooling (A) .

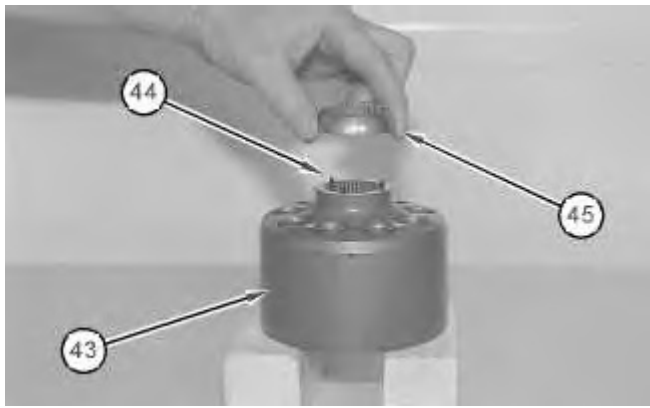


Illustration 15

g01071452

10. Install collar bearing (45) to pins (44) and barrel (43) .

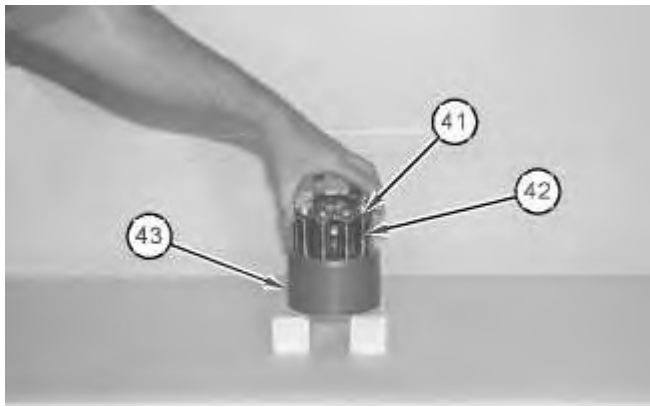


Illustration 16

g01071451

11. Install pistons (42) to the original positions in retraction plate (41) . Install pistons (42) and retraction plate (41) to barrel (43) . Pistons (42) must be installed to the original positions.

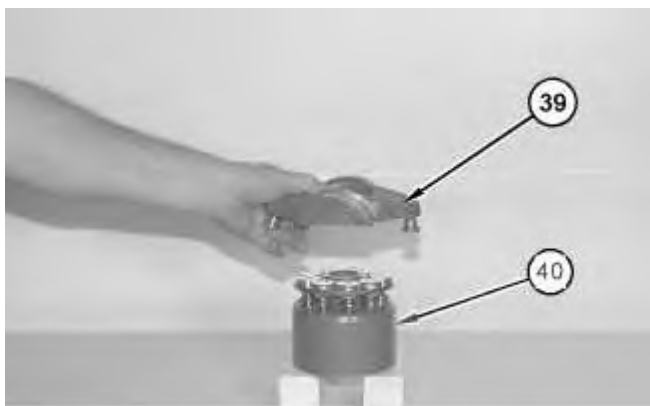


Illustration 17

g01071429



Download the full PDF manual instantly.

Our customer service e-mail:

aservicemanualpdf@yahoo.com