Model No. _____

Serial No. _____

RC 5500 Series
AC Traction
Service & Parts Manual



Crown 2007 PF15343 3/07

Printed in U.S.A.

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8. Remove the sealant residue from the surface of the bearing holder (21) and the mounting plate (30) with parts cleaner. Place a shop rag over the exposed gears to prevent contamination.
9. With the sub-assembly removed, visually inspect the components. Wheel hub assembly should rotate freely. If the sub-assembly does not move freely or is damaged, replace the sub-assembly.
10. Inspect the gear assembly (25) for damage or excessive wear. Replace as needed.
11. Rotate the gear to align the internal retaining ring (26) with the gear assembly slot. Reaching through the slot with retaining ring pliers, compress the retaining ring from the ring groove and remove the gear assembly.
12. Inspect the bearing (27) for damage. Replace as needed.
13. With the gear assembly removed and the mounting plate (30) free of sealant residue, inspect the surface and dress down any gouges or score marks with an emery cloth. Cover exposed gears to prevent contamination.

Drive Unit Gear Assembly Replacement/Installation

1. Refer to Figure 20858. Lay the large internal retaining ring (1) over male bearing seat on bottomside of the gear assembly (2). Press the ball bearing (3) onto the bearing seat. Assure that the bearing is pressed on squarely and is completely seated, and that the retainer ring spins freely, not pinched between bearing and gear assembly shoulder.
2. Install the small external retainer ring (4) into gear assembly ring groove, captivating the bearing to the gear assembly.
3. Install the gear assembly with captive bearing (1-4) into the appropriate RH or LH mount plate bearing bore using slight pressure from a tool such as a small rubber mallet.



Figure 20858

4. Refer to Figure 20859. Rotate the gear to align the captive internal retaining ring with gear assembly slot. Reaching through slot (1) with retaining ring pliers, snap the ring into the groove, securing the gear assembly to the mount plate.

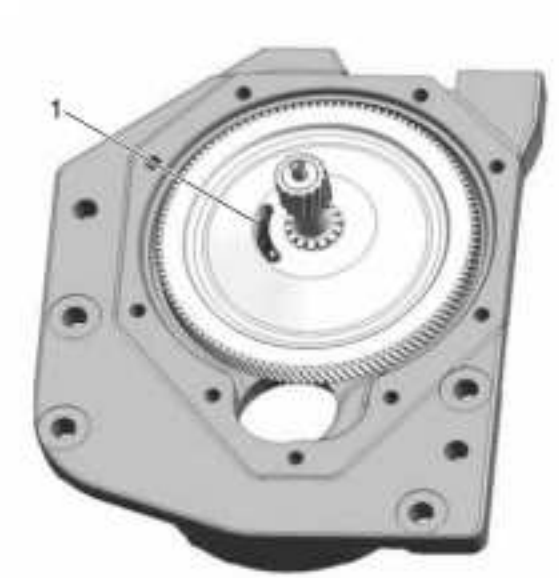


Figure 20859

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Lift Chains

Lift chains are highly important components on fork lift trucks. The chain system on your mast was designed for efficient, reliable transmission of lifting force from hydraulic cylinder(s) to the mast, platform (if present) and forks. Safe, uninterrupted use of your lift truck depends on the proper care and maintenance of the lift chains.

Most complaints of unsatisfactory chain performance can be traced directly to inadequate maintenance. Highly stressed precision chains require periodic maintenance to deliver maximum service life.

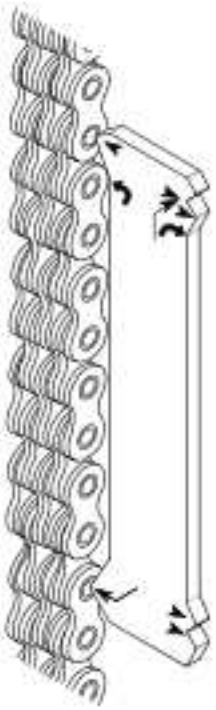
Inspection

After every 100 hours of truck operation, lift chains should be inspected and lubricated. When used in an extremely corrosive environment, inspect chains every 50 working hours. During inspection, check for the following:

Wear

As the chain flexes on and off pulleys, the joints gradually wear.

The "stretch" a chain develops during usage is due to material being worn off of pin outside diameter and pin hole inside diameter on the inside plates.



Roller and Leaf
Chain Wear Scale

Figure 16844

Chain wear can be measured by using a 106440 wear scale or a steel tape (Refer to Figure 16844). When chains have elongated 3%, as represented on scale "A" (19 mm [0.75 in] or 25 mm [1.0 in] pitch chain) or scale "B" (16 mm [0.625 in] pitch chain) of the wear scale, they should be discarded. On chain with 19 mm (0.75 in) between pins, for example, 305 mm (12.0 in) of chain contains 16 pitches or links. When 16 pitches measure 314 mm (12.375 in) the chain should be replaced. On chain with 16 mm (0.625 in) between pins, 20 pitches or links equal 318 mm (12.5 in). When 20 pitches measure 327 mm (12.875 in) the chain should be replaced. Crown currently uses 16 mm (0.625 in) pitch (20 links in 318 mm [12.5 in]), 19 mm (0.75 in) pitch (16 links in 305 mm [12.0 in]) and 25 mm (1.0 in) pitch (12 links in 305 mm [12.0 in]) chain. When checking chain wear, be sure to measure a segment of chain that operates over a pulley. Do not repair chain(s) by cutting out the worn section and splicing in a new piece. If part of a chain is worn, replace lift chain(s). If truck has a matched set of lift chains replace both chains at same time.

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This electrical diagram index lists wiring diagrams with the area or component(s) of the truck covered by each diagram. Exceptions indicated are listed below.

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HGTS2

Height Switch 2

Location: mast at variable heights below staging.

Purpose: provides lift/tilt interlock at specified heights and specified degrees of tilt for trucks with 10° forward tilt for Quad/TT.

Data: wire normally closed. Closed when fork carriage reaches specified heights. 36VDC.

Adjustment: none required.



Figure 15902

HGTS3

Height Switch 3

Location: mast at variable heights above staging.

Purpose: provides lift/tilt interlock at specified heights and specified degrees of tilt for trucks with 10° forward tilt for Quad/TT.

Data: wire normally closed. Closed when fork carriage reaches specified heights. 36VDC.

Adjustment: none required.



Figure 16240

HGTS4

Height Switch 4

Location: mast at variable heights above staging.

Purpose: provides lift/tilt interlock at specified heights and specified degrees of tilt for trucks with 10° forward tilt for TT.

Data: wire normally closed. Closed when fork carriage reaches specified heights. 36VDC.

Adjustment: none required.



Figure 16241

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Traction Motor

NOTE

If truck is equipped with DC traction motors, traction motor removal is not necessary for replacement of motor brushes as access holes located in the front of the power unit permit brush replacement while traction motors are still mounted to drive unit.

Traction Motor Removal

1. Chock steer wheel and disconnect the battery. Refer to Control of Hazardous Energy section.
2. Remove front power unit cover.
3. Remove the mast. Refer to Removing Mast procedures in the Control of Hazardous Energy section of the service manual.
4. Remove the drive unit assembly. Refer to Drive Unit Removal procedures in this section of the manual.
5. Disconnect brake connector and disassemble brake from traction motor. See "Parking Brake Removal" procedures in the Brake section of this service manual.
6. Support the weight of the motor while removing the four motor mounting bolts.

CAUTION

Traction motor is heavy, approximately 35 kg (75 lb).

7. Remove the motor.

Traction Motor Installation

1. Clean the mount plate motor pilot bore with parts cleaner. Ensure both surfaces are free of dirt and oil.
2. Assemble the four motor mounting bolts, with washers, into the motor end housing.
3. Assemble traction motor to the pilot bore taking care that the motor shaft pinion is guided smoothly into the mating gear mesh.
   - The terminal block on the motor is to be positioned upward relative to the truck.
   - Ensure the motor is mounted squarely onto the mount plate with no shavings or debris between the two faces.
   - Do not draw motor onto pilot using fasteners. This may result in binding or shaft misalignment.
4. Align and assemble bolts into the mount plate and torque the bolts using the sequence shown in Figure 20860. Torque bolts to 31.3 - 36.7 Nm (23 - 27 ft lb).

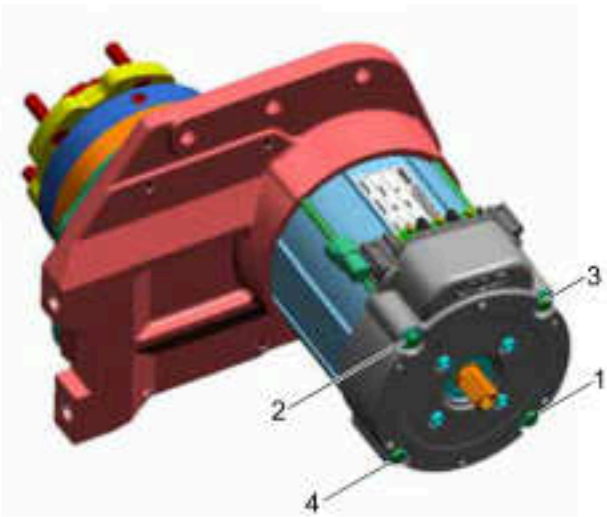


Figure 20860

5. Assemble brake to motor. Refer to Brake chapter.
6. Install the drive unit assembly. Refer to "Drive Unit Installation" procedures (follows).
7. Install the mast (reverse mast removal steps). Refer to the parts pages for screw/bolt torque specifications.
8. Install power unit cover.
9. Connect battery and remove wheel chocks.
10. Verify proper truck operation.

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