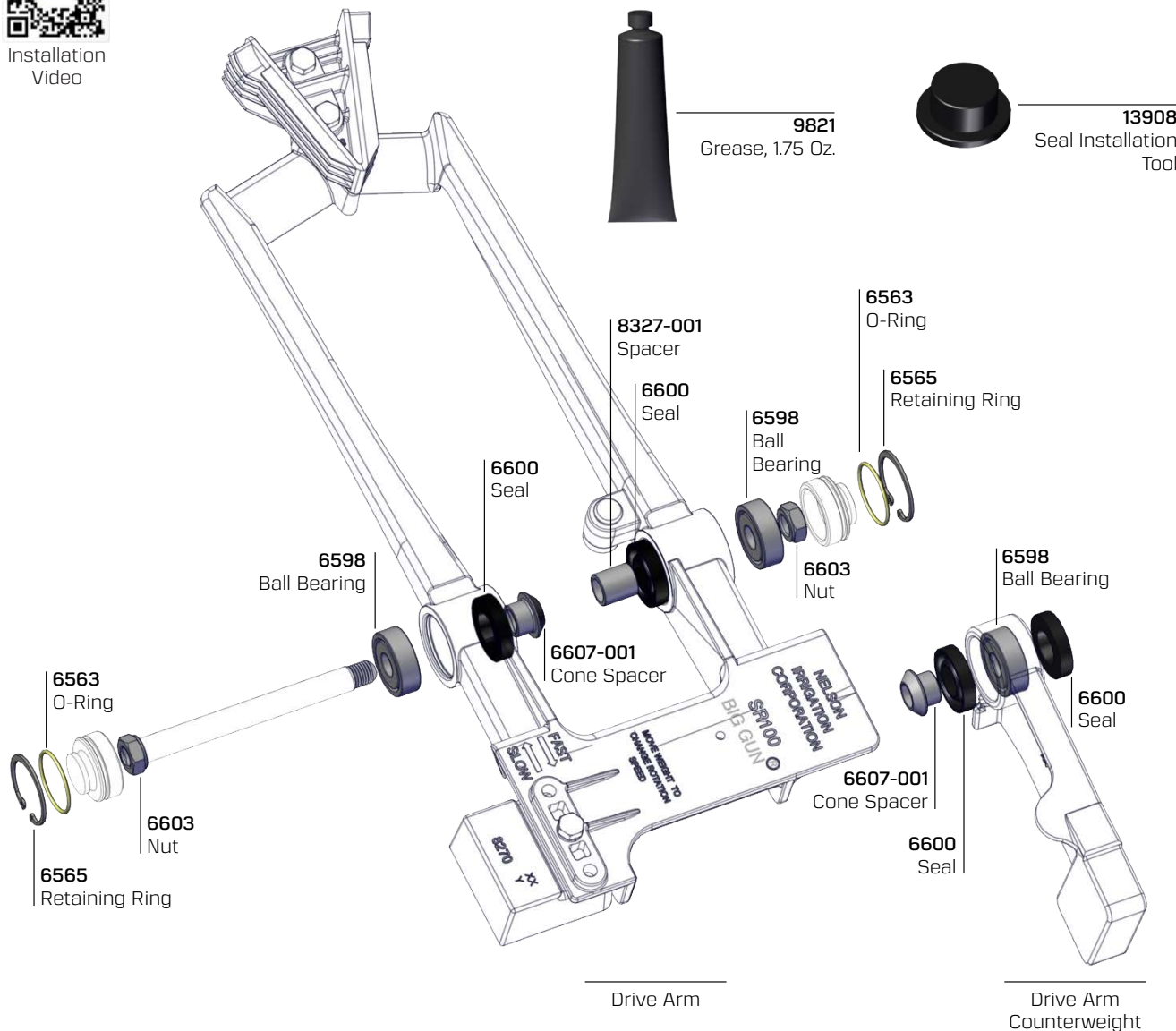


SR100/SR150 DRIVE ARM & COUNTERWEIGHT KIT



Installation Video



PARTS LIST

PART #	DESCRIPTION	QTY
6563	O-ring, -024	2
6565	Retaining Ring	2
6598	Ball Bearing, Stainless Steel	3
6600	Radial Lip Seal	4
6603	Nut	2
6607-001	Cone Spacer	2
8327-001	Spacer, Drive Arm To Counterweight	1
9821	Grease, Lubriplate 130-AA	1
13908	Tool, 100/150 Drive Arm Seal Installation	1

REQUIRED TOOLS

- Socket wrench (2), 11/16"
- 3/8" socket extension
- Pliers
- Retaining ring pliers
- Ball-peen hammer
- Flat-head screwdriver
- Punch
- Wood blocks (4)
- Flat piece of smooth metal or wood

DRIVE ARM DISASSEMBLY

STEP 1 - REMOVE DRIVE ARM

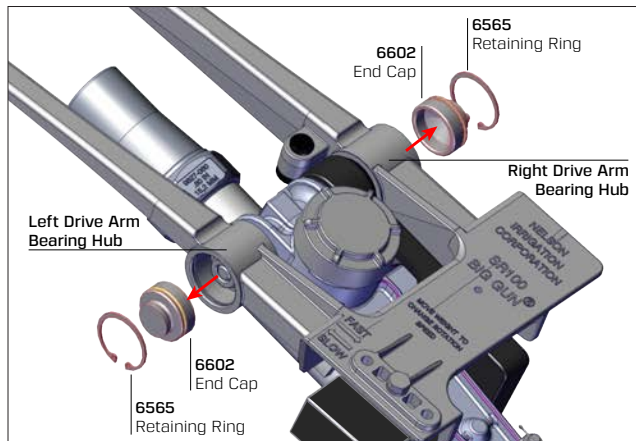


Fig. 1.

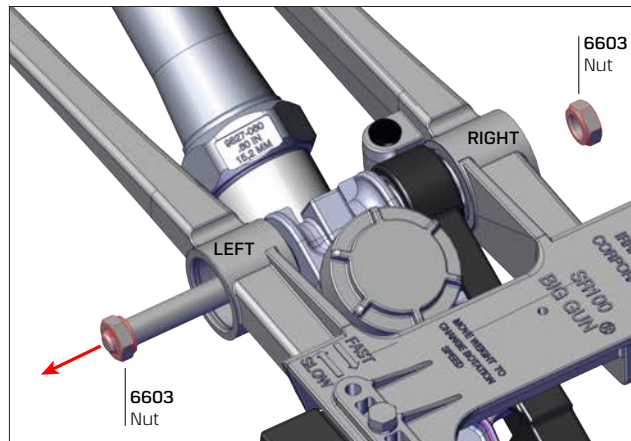


Fig. 2.

- A. Remove one #**6565** retaining ring from each drive arm bearing hub (left/right) using retaining ring pliers (see Fig. 1).
- B. Using pliers, remove one #**6602** end cap from each hub.
- C. Using two socket wrenches (11/16" sockets), remove the #**6603** nut from right end of the shaft. Push shaft in from right to left,
- D. Remove remaining nut from shaft and roll shaft on flat surface to check for straightness. If bent, replace shaft (order separately, #**8297**).

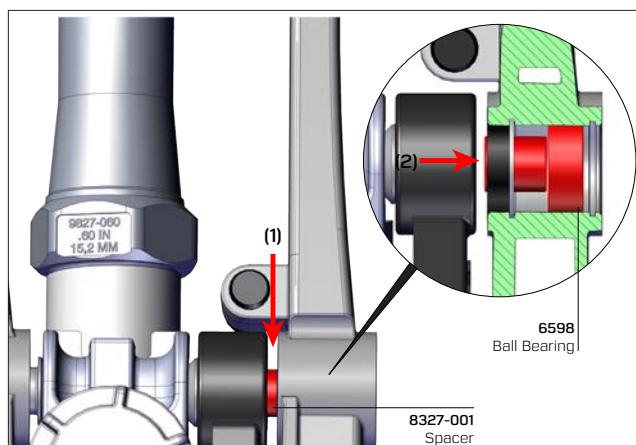


Fig. 3.

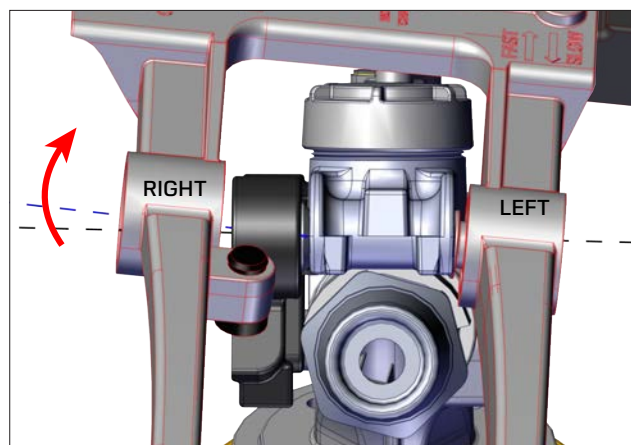


Fig. 4.

- E. Insert blade of screwdriver between right drive arm bearing hub and counterweight bearing hub as shown by arrow (1) in Fig. 3. Work blade against #**8327-001** spacer, and slide spacer and #**6598** ball bearing in direction indicated by arrow (2) in Fig. 3.
- F. Rotate right drive arm bearing hub up and remove drive arm from Big Gun (see Fig. 4.)

DRIVE ARM DISASSEMBLY (CONTINUED)

STEP 2 - REMOVE SEALS AND BEARINGS FROM COUNTERWEIGHT

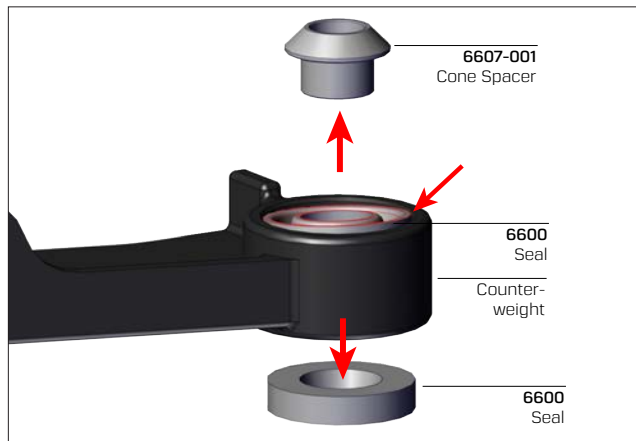


Fig. 5.

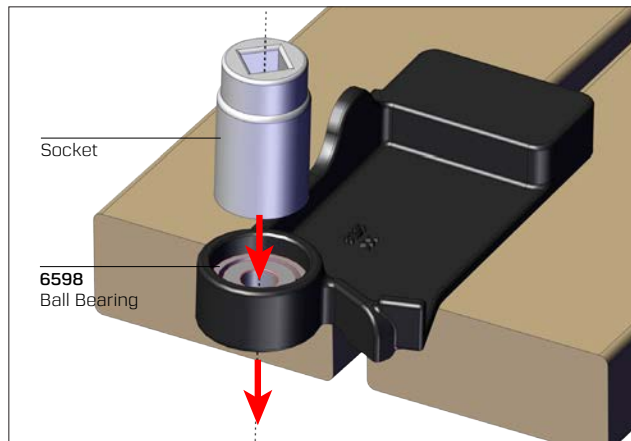


Fig. 6.

- As shown in Fig. 5, remove **#6607-001** cone spacer from counterweight.
- Insert screwdriver blade under lip of **#6600** seal and pry seal out.
- Turn counterweight over and remove opposite seal in same manner.
- Support counterweight as shown in Fig. 6. Use a socket (7/8") or similar tool with an outside diameter slightly less than 1.25" (30 mm) and remove **#6598** ball bearing by tapping on socket with ball-peen hammer.

STEP 3 - REMOVE SEALS AND BEARINGS FROM DRIVE ARM

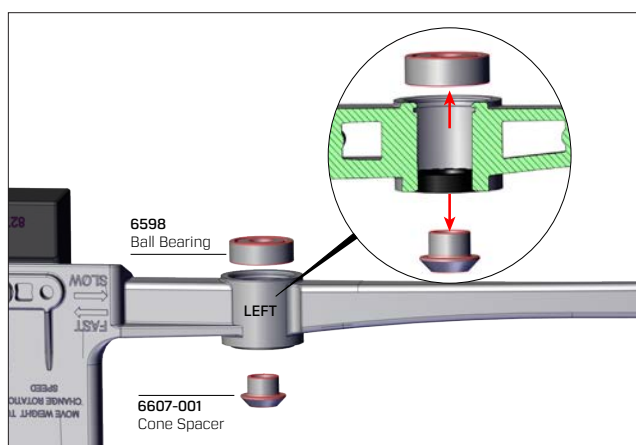


Fig. 7.

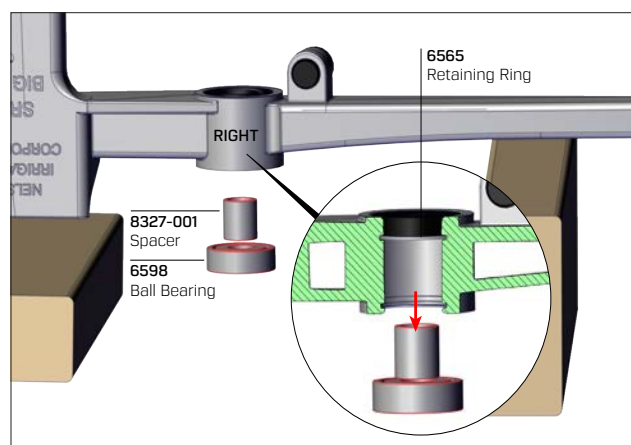


Fig. 8.

- Starting with LEFT drive arm hub, remove **#6607-001** cone spacer, and use finger pressure to push out **#6598** ball bearing in the direction shown in Fig. 7. If finger pressure will not remove bearings, use a screwdriver and hammer to lightly tap bearings out, positioning the drive arm as shown in Fig. 9 on the following page.
- In the RIGHT drive arm hub, push out the **#8327-001** spacer and **#6598** ball bearing in the direction shown in Fig. 8. See also Fig. 9 and caution on following page.

DRIVE ARM DISASSEMBLY (CONTINUED)

STEP 3 - REMOVE SEALS AND BEARINGS FROM DRIVE ARM (continued)

- C. Support drive arm using wood blocks as shown in Fig. 9. Push #6600 seal out of hub with screwdriver (or punch) and hammer.
- D. Turn drive arm over and remove #6600 seal from opposite hub.
- E. Clean all foreign material from hub bores.

CAUTION: Bore of RIGHT drive arm bearing hub contains retaining ring #6565. As shown in Fig. 8 and 9, this retaining ring is located between #6600 seal and #6598 ball bearing. The seal and bearing must be removed in the correct direction, or else damage to the drive arm hub will result!

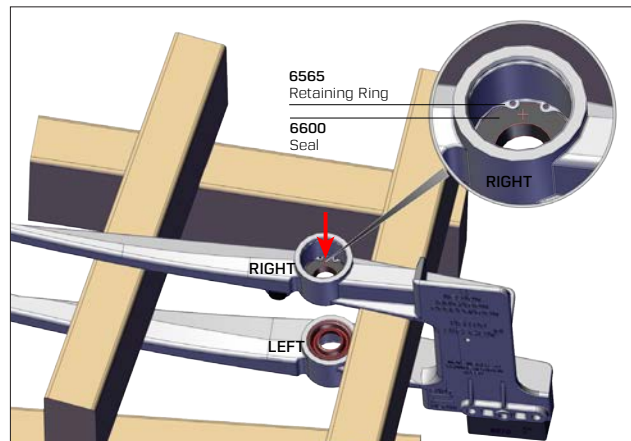


Fig. 9.

DRIVE ARM ASSEMBLY

STEP 1 - INSTALL NEW BEARING AND SEALS IN COUNTERWEIGHT

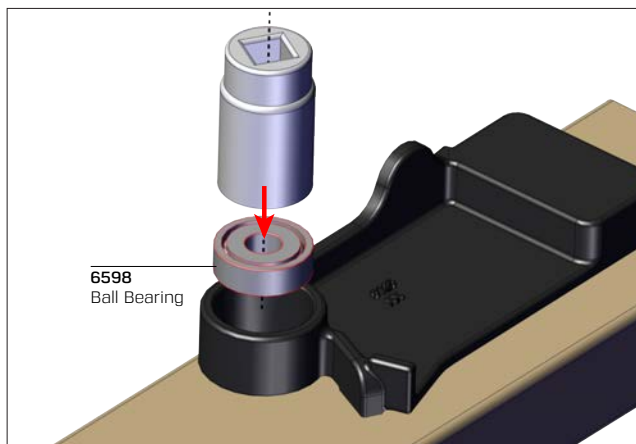


Fig. 10.

- A. With counterweight on flat surface, place new #6598 ball bearing in the bore. Using same socket and hammer that were used to remove old bearing, press new bearing into bore (see Fig. 10). Make sure bearing is centered. Fill both sides of bearing with #9821 grease.
- B. Position new #6600 seal over bore (flat side toward the bearing) as shown in Fig. 11. Place flat piece of smooth metal or wood on top of seal and use a hammer to lightly

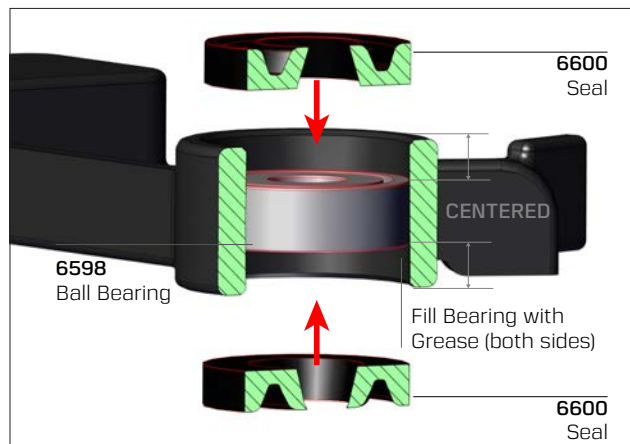


Fig. 11.

- tap seal into bore until seal contacts the bearing.
- C. Turn counterweight over and, in same manner, install new #6600 seal in bore. The bearing should remain centered with the seals inserted to equal depth.

IMPORTANT: Do not remove lubricant from lip of #6600 seals. Lubricant minimizes friction between seals and spacers and is essential to proper operation.

DRIVE ARM ASSEMBLY (CONTINUED)

STEP 2 - INSTALL NEW BEARINGS AND SEALS IN DRIVE ARM

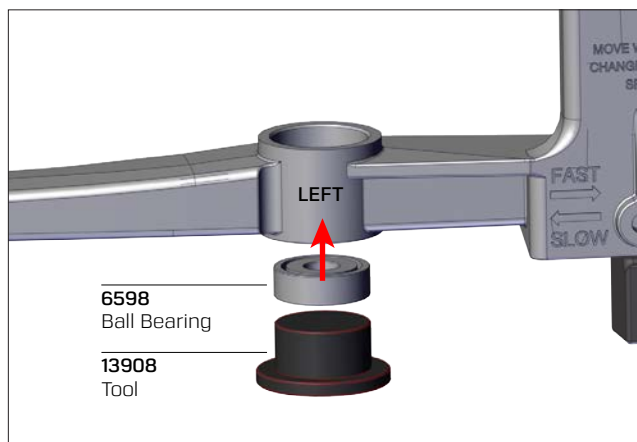


Fig. 12.

- A. From the outer side of the LEFT drive arm bearing hub, insert the **#6598** ball bearing followed by the **#13908** tool as shown in Fig. 12.
- B. Place new **#6600** seal over bore of LEFT hub from the inner side, with the flat side of the seal facing down. Place flat piece of

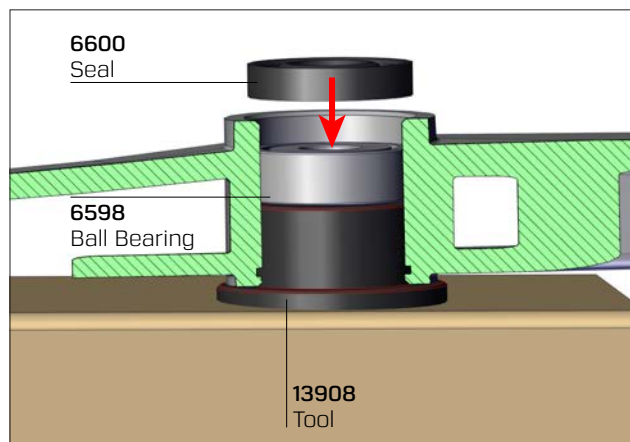


Fig. 13.

smooth metal or wood on top of seal. Insert punch or similar tool through bore of upper hub and let it rest on piece of metal or wood. Tap lightly on punch with a hammer and press seal squarely into bore of hub until seal and bearing bottom out on the **#13908** tool as shown in Fig. 13.

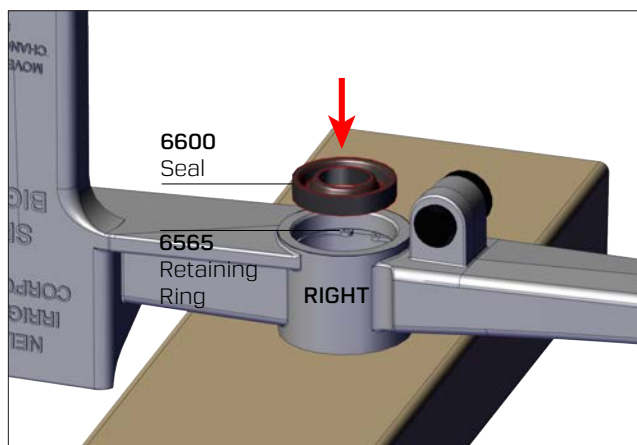


Fig. 14.

- C. Remove the **#13908**, turn drive arm over and press the **#6600** seal into the RIGHT drive arm hub in the same manner as step 2-B (see Fig. 14) until the seal is flush with the face of hub or bottoms out on the retaining ring.

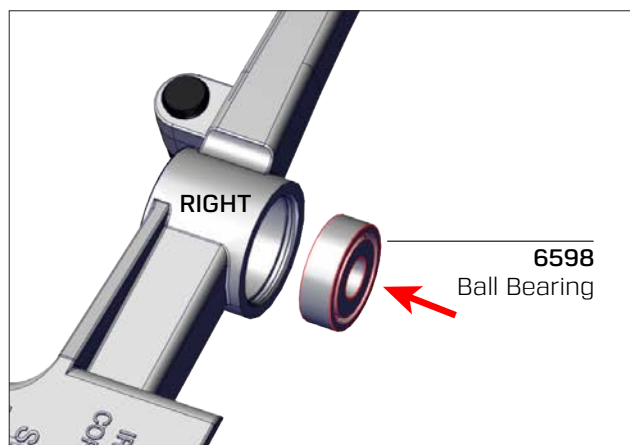


Fig. 15.

- D. Working from outer side of RIGHT drive arm hub, insert one new **#6598** ball bearing. Push the bearing into bore of hub with finger pressure (see Fig. 15).

DRIVE ARM ASSEMBLY (CONTINUED)

STEP 3 - INSERT SPACERS INTO DRIVE ARM AND COUNTERWEIGHT

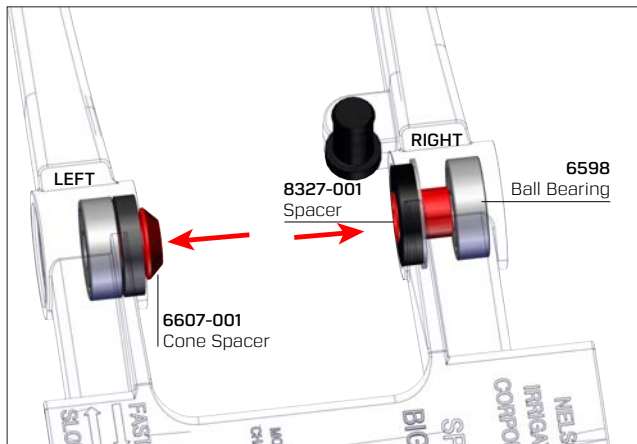


Fig. 16.



Fig. 17.

- A. Insert new **#8327-001** spacer into **#6600** seal of **RIGHT** drive arm bearing hub from left to right (see Fig. 16). Push spacer in until flush with lip of seal. Pushing spacer in will also push bearing to the right.
- B. Insert new **#6607-001** cone spacer into **#6600** seal of **LEFT** drive arm bearing hub.
- C. Insert new **#6607-001** cone spacer into **#6600** seal located on inner side of counterweight (Fig. 17).

STEP 4 - REINSTALL DRIVE ARM AND COUNTERWEIGHT

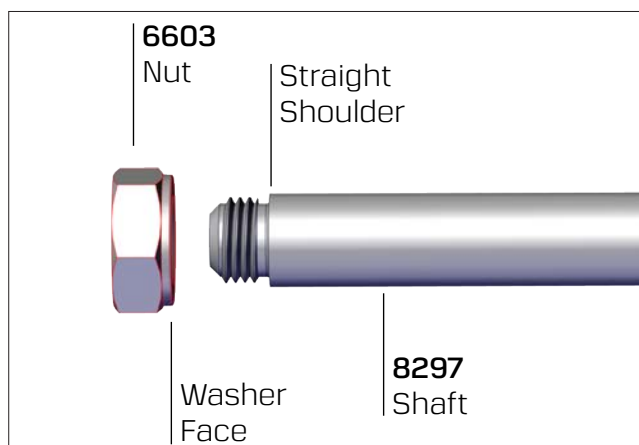


Fig. 18.

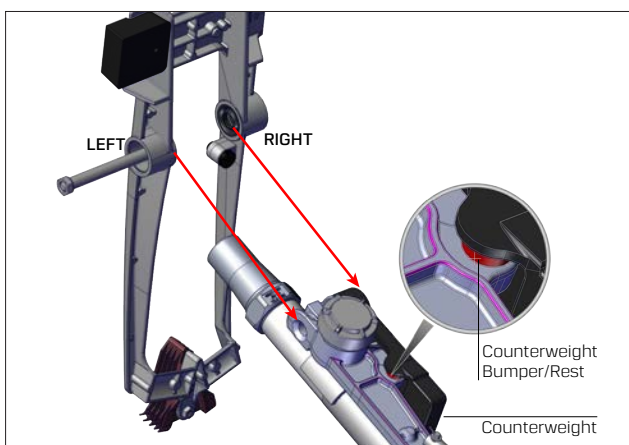


Fig. 19.

- A. Install **#6603** nut on straight shoulder end of **#8297** drive arm shaft with washer face of nut towards shaft (see Fig. 18). Screw nut all the way down until threads seat against shoulder of shaft.
- B. Place the counterweight in alignment on **RIGHT** side of gun, resting on the bumper of the shift lever (see Fig. 19). Grasp drive arm and hold vertically with drive vane down. Move drive arm hubs into position, engaging **RIGHT** bearing hub with counterweight. Roll **LEFT** bearing hub into position.

DRIVE ARM ASSEMBLY (CONTINUED)

STEP 4 - REINSTALL DRIVE ARM AND COUNTERWEIGHT

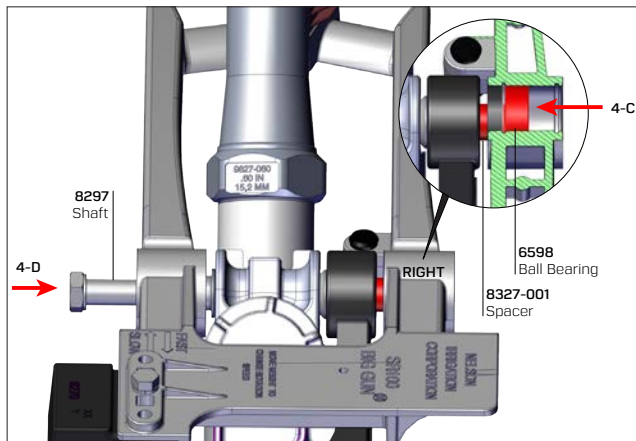


Fig. 20.

- C. With finger pressure, push #6598 ball bearing and #8327-001 spacer of RIGHT bearing hub to left and into position (see Fig. 20).
- D. Push #8297 drive arm shaft through bore of assembled components.

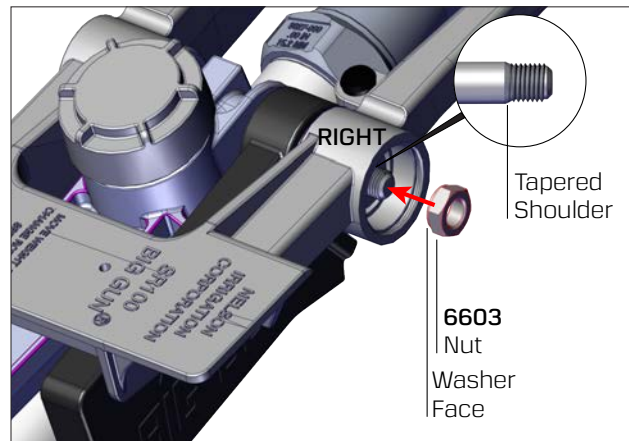


Fig. 21.

- E. Install #6603 nut onto shaft with washer face of nut towards the tapered shoulder of the shaft (see Fig. 21). Torque nut to 25 ft-lbs (34 N-m).

STEP 5 - FINAL ASSEMBLY

- A. Install new #6563 o-rings on #6602 caps.
- B. Pack both caps *and* both drive arm hubs with grease from #9821 tube.
- C. Using finger pressure, press caps into drive arm hubs. Excess lubricant will be forced out past seals and will purge hubs of air.
- D. Install one #6565 retaining ring in each hub, over the cap.

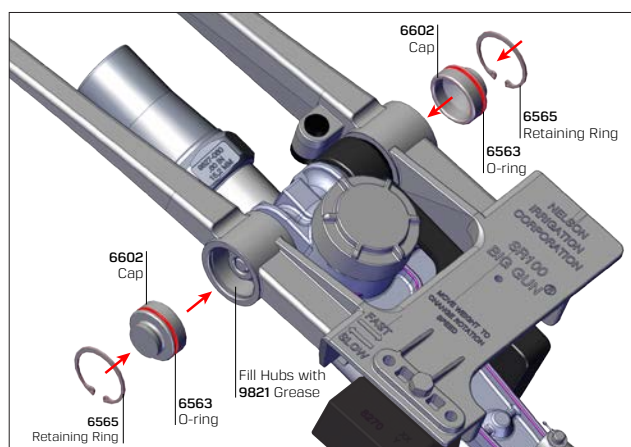


Fig. 22.

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