

## Towing and Suspension Solutions

853803-03 08-14

6110 NE 127th Ave.

## Falcon 5250 replacement tow bar bushing and Autowlok™ button kit

part number 910003-50

### Installation Instructions

All specifications are subject to change without notice.

WARNING

Read all instructions before installing any of the kit components. Failure to understand how to properly install the components could result in property damage, personal injury or even death.

ROADMASTER, Inc.



### **IMPORTANT!** Before you begin the installation...

Check the serial number before beginning the installation. The serial number is located on the passenger side tow bar arm (Figure 1).

If the serial number is 23240 or lower, you must use different bushings from those included in this kit. Discard the two supplied gray bushings (Figure 4) and order two replacement bushings, part number 200031-00.

### To replace the bushing(s) only...

Note: to replace an Autowlok button only, see "To replace an Autowlok button..." on page three.

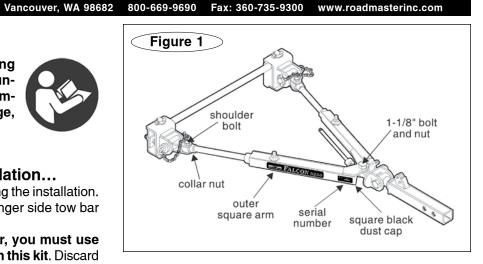
Note: it is not necessary to replace the bushings unless they have worked loose or are otherwise damaged.

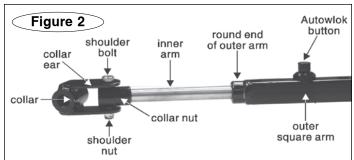
### 1. Repair only one tow bar arm at a time – the tow bar arm components are NOT interchangeable!

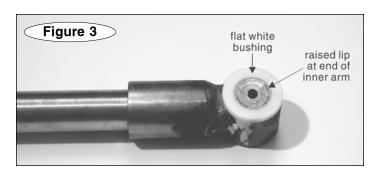
Starting with either tow bar arm, first remove the 1-1/8" bolt and nut (Figure 1) which connect the two tow bar arms. Note the location of each of the four white washers for reas-

- 2. At the end of the outer square arm (Figure 1), remove the square black dust cap (Figure 1).
- 3. Unbolt the shoulder bolt (Figure 2) and remove the collar (Figure 2). Save the small white washers (between the collar nut and the collar ears) for reassembly.

continued on next page







#### IMPORTANT NOTICE!

**Safety Definitions** 

Statements in these instructions identified as follows are of special significance.



#### WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in property damage, serious personal injury or even death.



#### A CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in property damage, or minor or moderate personal injury.

#### **CAUTION**

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

#### NOTE

Refers to important information and is placed in italic type. It is recommended that you take special notice of these items.

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continued from preceding page

Next, unscrew the collar nut (Figure 2) and remove it from the end of the inner arm.

**4.** Wrap a cloth around the end of the outer tubing. You will use this cloth to catch the Autowlok assembly as it clears the outer tubing. Then press the Autowlok button (Figure 2) down and push the inner arm (Figure 2) out of the hole created by removing the square black dust cap.

## **A** CAUTION

The spring is under pressure and will eject the pin when the spring assembly clears the outer tubing. To avoid personal injury, wrap a cloth around the end of the tubing and stand to one side, clear of the pin, as the Autowlok assembly clears the outer tubing.

Push the inner arm completely out.

**5.** Remove the old bushings – both the flat white bushing (Figure 3) and the gray bushing

(Figure 4).

6. Clean the interior of the outer arm with a water-soluble cleaner such as Voom RV (part number 9911) – spray a liberal amount of cleaner inside the arm, then push a piece of cloth through to the



other side. Repeat, if necessary, until the interior of the outer arm is clean.

#### **CAUTION**

Do not use petroleum-based products to clean or lubricate the tow bar. Petroleum will attract dirt and dust, which will impede the operation of the sliding inner arms and/or other components. Certain petroleum products may also corrode non-metallic components.

- 7. Inspect the surface at the round end of the outer arm (Figure 2), where the new gray bushing will be attached. If there is rust or corrosion, use extra fine (0000) steel wool, 3M "Scotch Brite" (fine pad) or a similar product to remove the rust or corrosion.
- **8.** Before attaching the new bushing, rinse the interior of the outer arm to remove all of the cleaner (and metal shavings, if you sanded the interior).

Dry the interior of the outer arm completely, by repeatedly pushing a piece of cloth through to the other end.

**9.** Follow the instructions on the supplied package of epoxy glue to mix and activate the glue. Apply a light coat of glue around the outside of the new bushing and, within 30 seconds, slide it into the round end of the outer arm (Figure 2), until it is flush with the hole.

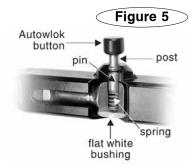
Note: this is an extremely tight fit. It will require substantial force to fully insert the new bushing.

Note: the glue will be cured in 24 hours, but it will be set in 10 minutes. Allow the glue to set for at least 10 minutes before towing.

**10.** Now, fit one of the included flat white bushings (Figure 3) onto the raised lip at the end of the inner arm (Figure 3). Then, test the fit – slide the inner arm into the outer arm.

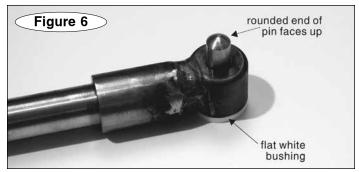
Note: if the flat white bushing is too wide to fit, use a

grinder to trim a small amount from the edges touching the inside of the outer arm. Trim an equal amount from each side, test-fit the bushing and trim more, if necessary, until the inner arm slides in and out easily.



**11.** On the other side, first

insert one of the supplied springs (Figure 5). Lubricate the flat side of one of the pins (Figure 5) thoroughly. Use a dry silicone aerosol, such as LubeMaster (part number 747). Then, insert the pin into the hole at the end of the inner arm,



so that the rounded end of the pin faces up (Figure 6).

Figure 5 shows the flat white bushing, spring and pin correctly positioned below the Autowlok button and post.

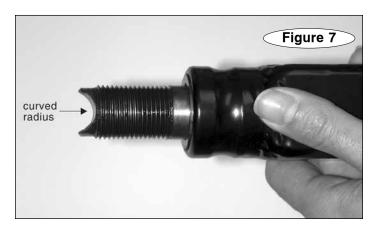
- **12.** Insert the inner arm back into the outer arm. When the inner arm is fully inserted, it will lock in position.
- **13.** Screw the collar nut back onto the inner arm, until the curved radius at the end of the inner arm (Figure 7) aligns to the hole through the collar nut.

Test-fit the shoulder bolt. If the collar nut is over-tightened, the shoulder bolt will not fit through. If this is the case, loosen the collar nut just enough to allow the shoulder bolt to be fully inserted.

## **WARNING**

Screw the collar nut back as far as it can go on the inner arm, while still allowing the shoulder bolt to fit through. If the collar nut is not threaded back to this point, towing vibrations will unthread the collar nut, and the tow bar arm will separate.

If the tow bar arm separates, the towed vehicle will not continued on next page



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be held in place, which may cause a loss of vehicular control, a traffic accident or loss of the towed vehicle, resulting in property damage, personal injury or even death.

**14.** Now, remove the shoulder bolt and position the collar ears (Figure 2) over the collar nut. Position the small white washers (which you removed in step 3) between the collar ears and collar nut, then bolt the collar ears back into place with the shoulder bolt.

Torque the shoulder nut to 45 ft./lbs.

Note: over-tightening the shoulder bolt will bind the collar and prevent it from pivoting properly. When it is tightened correctly, the collar should pivot easily.

Re-attach the square black dust cap.

- **15.** Replace the bushing on the other arm, if necessary, by repeating steps 2 through 14 above.
- **16.** Attach both tow bar arms with the 1-1/8" bolt and the four white washers and nut you removed in step 1.



Use all mounting hardware and kit components necessary to replace the bushing(s), and re-assemble the tow bar as described above. Failure to use all kit components, or to reassemble the tow bar correctly, may cause the tow bar to fail, which may result in property damage, personal injury or even death.

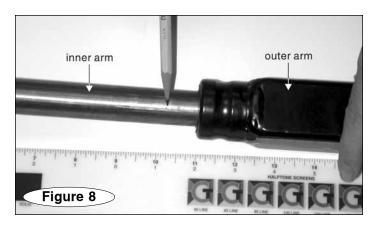
### To replace an Autowlok button...

1. It is not necessary to disassemble the tow bar to replace an Autowlok button.

First, open the tow bar and extend both arms until the buttons on both arms snap into the locked position.

Note: if the button is missing, it will be necessary to lift the post (Figure 5) up slightly as you extend the arm, so that the post will clear the inner arm weldment and inner arm bushing.

- 2. Set the tow bar stinger on any object that will allow the tow bar arms to rest at a convenient height to work on the button.
- **3.** With the arms fully extended and locked, draw a straight line with a pencil across the top of the inner arm (Figure 8), 3/4" from the edge of the black outer arm (Figure 8).
- **4.** Depress the button (or the post, if the button is missing) and slowly close the arm until the edge of the black outer arm (Figure 8) is even with the pencil line you drew in the



previous step.

This position will stabilize and support the pin so that the new button can be properly attached.

- **5.** Remove the old button (if present) with pliers or channel locks, being careful not to scratch the post (Figure 5).
- **6.** Clean any residue that may be on the exposed surface of the post.

Note: for easier attachment of the post (step 7, below), drop the button in boiling water for five minutes. The heat will make the button more flexible. If you choose this method, dry the button completely before applying the glue.

**7.** Follow the instructions on the supplied package of epoxy glue to mix and activate the glue, then apply enough to lightly cover the inside of the button. Next, apply enough glue to completely fill the grooves at the top of the post.

Within 30 seconds, position the button over the top of the post, and tap the button down over the post, as far as it can go, with a rubber mallet.

## **A** WARNING

Ensure that the button is tapped completely down, as far as it can go. If the button is not completely down, it will not depress the pin and spring far enough to lock or unlock the tow bar arm.

Both tow bar arms must be locked before towing. If they are not, the momentum of the towed vehicle will apply excessive force to the tow bar arms and other components of the towing system, which may cause the towing system to fail, resulting in property damage, personal injury or even death.

**8.** Allow 24 hours for the epoxy glue to set. The button can be depressed and released after approximately 10 minutes, but do not pull on the button for 24 hours.

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Falcon 5250 replacement tow bar bushing and Autowlok™ button kit

# **Installation Instructions**

