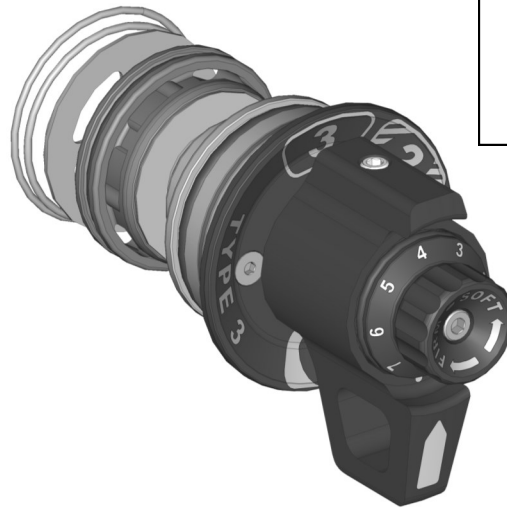


## 3.3 Fast Adjust Upgrade Kit

Kit # 00-10-33-400-160 Universal, Modular Cartridge System, Series 3 / Type 3, **ALL 4**, 1.60" Bore

Kit # 00-10-33-100-160 Universal, Modular Cartridge System, Series 3 / Type 3, **Single**, 1.60" Bore



Refer to video online for more information on installing the Falcon 3.3 Modular Cartridge.

### Important Notes:

Prior to beginning this install, or any installation, read through the instructions entirely to familiarize yourself with the required steps and evaluate if you are experienced and/or capable to personally perform these step and modifications. A factory service manual should be used in conjunction with these instructions and installation.

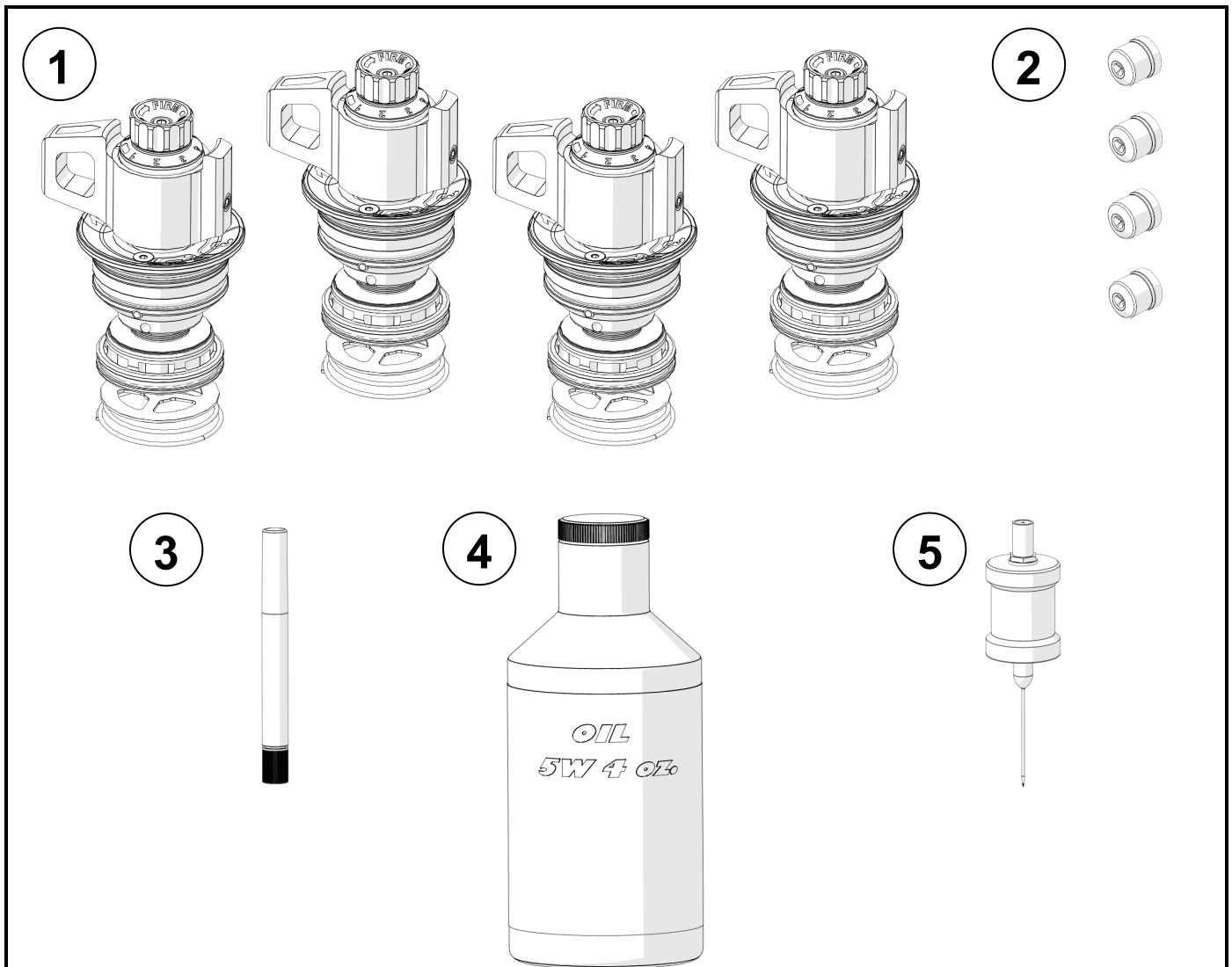
Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

**Re-charging your Shocks:** Before starting this install, make sure you have a way to re-charge your shocks to 100 psi. **Incorrect charge pressure can alter shock behavior and could ultimately lead to failure.** Your Falcon Shocks were originally charged with nitrogen from the factory, and it is recommended that they be re-charged with nitrogen if possible. However, compressed air can be used if nitrogen is not readily available.

**Caution:** It is important to keep your shocks clean during disassembly and cartridge installation. To help insure that the install is clean, make sure your work area and shocks are cleaned thoroughly before and through out the entire process. Failure to keep your shocks clean could cause leaks or malfunction.

### Tools needed:

- 3/16", 5mm, 2.5mm, 2mm Allen Sockets or Wrenches
- Pick
- Plyers
- Air Compressor or Air Pump Capable of 100 psi.
- General Mechanics Tools



Item #	Part Number	00-10-33-400-160 Full Kit (ALL 4)	Qty
1	00-10-33-100-160	Universal, Modular Cartridge System, Series 3 / Type 3, Single, 1.60" Bore	4
2	15-01-01-001	Seal (S), Plug, Needle Type, 0.250 OD x 0.250 Total Length	4
3	242001	Turbo-Lock Blue Thread Locker	1
4	35-01-01-002	Oil/ Grease (S), Oil, Redline, 4oz Bottled / 5 weight	1
5	50-05-01-008	Tool (S), Nitrogen, Needle Adapter, Schrader Valve / Complete Assembly	1

Item #	Part Number	00-10-33-100-160 Single	Qty
1	00-10-33-100-160	Universal, Modular Cartridge System, Series 3 / Type 3, Single, 1.60" Bore	1

During this install it is best to keep your new parts in the bag until the instructions have you install them. Keeping them in the bag will help you maintain cleanliness.

1

Remove the Falcon Shocks from the vehicle following the steps (in reverse) used to install them.

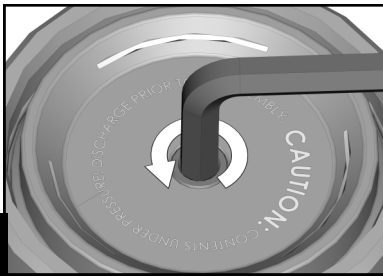
Clean the Falcon Shocks as well as possible, focusing mostly on the cartridge and the charge port sections of the shocks. A pressure washer and/or soapy water with a scrub brush will be helpful to do this.

2

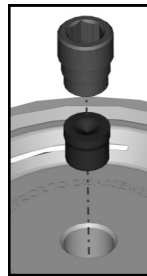
**Falcon 3.3 Fast Adjust Upgrade Kit Install**

Slowly loosen the charge port set screw.

**Note:** The rubber plug behind the set screw can be blown out of the charge port and get lost. These rubber plugs will be replaced but take care not to lose the set screw. To do this keep the allen wrench in the set screw and apply pressure on it until all the gas leaks out. A rag or towel can be used to cover the port to help catch the set screw.



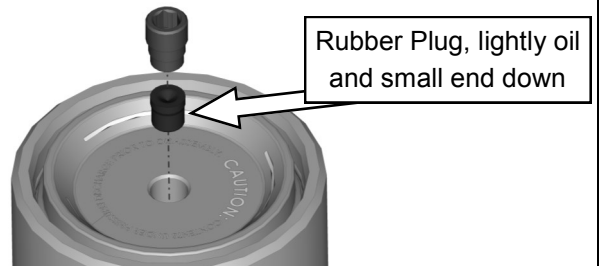
3



Completely remove the set screw to make sure that the shock is fully discharged.

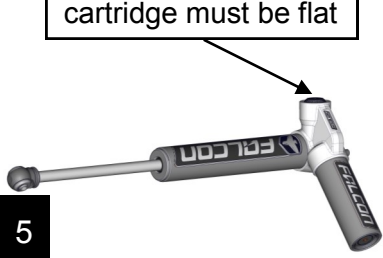
Lightly oil and install the new rubber plug by pressing it into place with the tip of an allen wrench (small end down). Reinstall the set screw and completely tighten it down, then loosen it back out 1/2 turn.

4

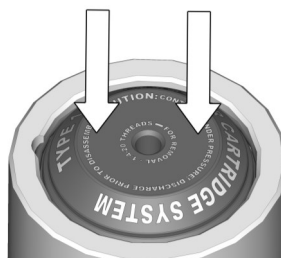


**Note:** Use a soft clap to hold the shock. The cartridge must be flat or oil will spill out. Push down on the top of the cartridge, this will reveal the snap ring. Clean out any dirt that may have been trapped in the snap ring groove.

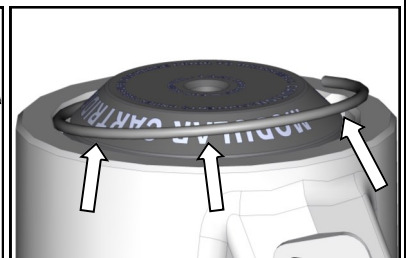
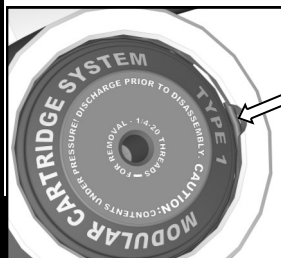
cartridge must be flat



5



Remove the snap ring. Use a pick and press it behind and under the snap ring where the access notch is. Press the snap ring toward the center and then pry it upward. Follow the snap ring around the cartridge, with your finger, pushing it toward the center and pulling up slightly.



**Note:** The earlier 3.1 cartridge (black) came with a set screw in the center of it that will need to be removed for the next step.

The latest 3.1 cartridge (black) comes with a threaded hole that is all ready for the next step.

And the 3.2 cartridge (gold) have an adjustment pin in the center that is not removable and it has a threaded hole in it that will be used for the next step.

3.1 with  
set screw

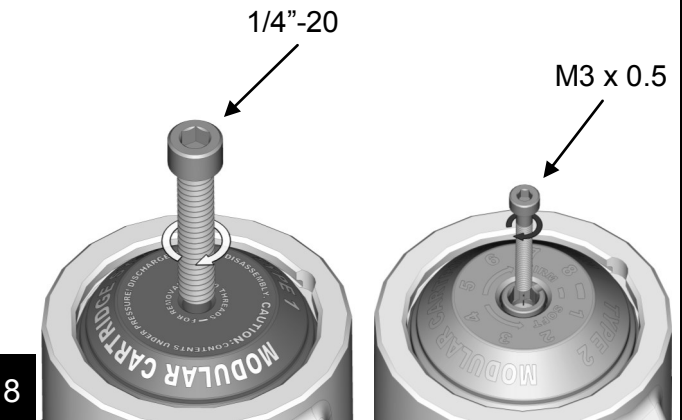
3.1 no  
set screw

3.2 with  
adjust pin



7

Thread the correct bolt into the center of the cartridge.



8

Using pliers, pull the cartridge out with a slow and steady pressure. The cartridge has an O-ring that will become lodged in the snap ring groove. When this occurs apply side pressure to the bolt/cartridge in a circular motion while still pulling upward to work the O-ring past the snap ring groove.

**Note:** When the O-ring clears the snap ring groove the cartridge can come out quickly resulting in excessive loss of oil.

Holding your hand over the top of the cartridge can help prevent it from popping out, losing oil, and making a mess.

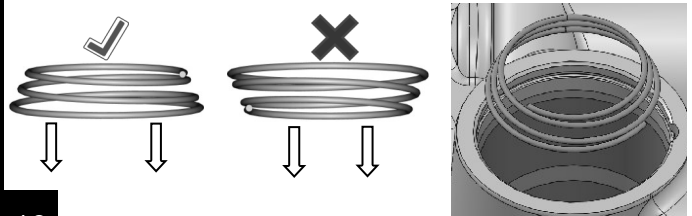


9

If upgrading from a **3.1** cartridge, install the provided tapered spring.

If upgrading from a **3.2** cartridge ensure that the spring is oriented correctly. The tapered spring is installed with the **larger diameter end first**.

(See image)



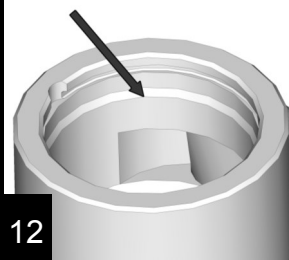
10

Remove the black 8 position knob and bolt with 2.5mm allen. Loosen the red 3 position knob set screw, with a 2.5mm allen, enough to clear the hole in the adjustment pin and remove knob. O-ring surfaces will come pre-greased. Make sure this grease is kept clean and is not removed. This grease ensures proper knob function. Remove the 2 bolts, with a 2mm allen, from the face plate and remove plate.



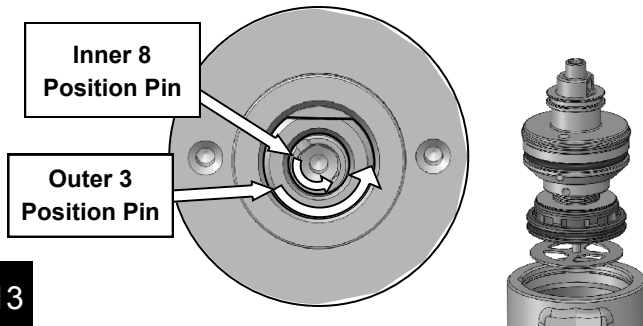
11

Use the provided oil and fill the cartridge chamber to lower taper line( see image). Excess oil will spill out and over the sides. This is normal and a crucial step for elimination of air pockets in the shock. Place shop towels under and around the shock to help with the mess.



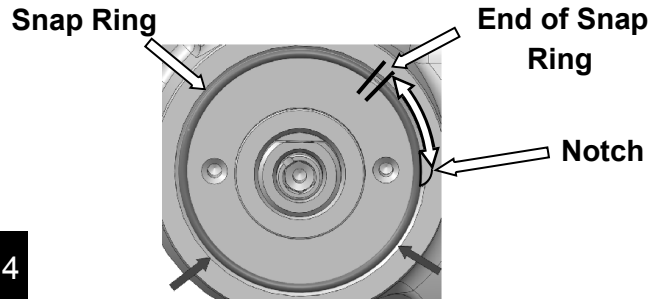
12

The 8 position and 3 position adjustment pins must both be turned all the way counter clockwise for installation. The outer 3 position adjustment pin can be turned by hand. For the inner 8 position adjustment pin use a 5mm allen wrench. Once both pin are clocked slowly lower the 3.3 cartridge into the housing.



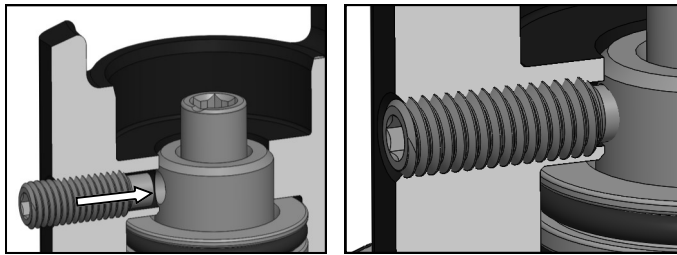
13

Press cartridge down firmly until it stops, exposing the snap ring groove. Install snap ring into the groove, ensuring the end of the snap ring is just past the notch in housing (see image). This will aid in future disassembly if needed.



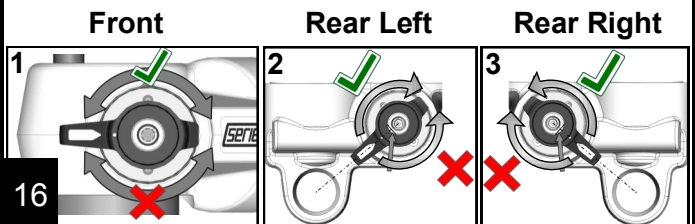
14

Temporarily install the red 3 position knob so the new 3.3 cartridge can be clocked. The set screw needs to go into the hole on the side of the adjustment pin (as seen in illustration).



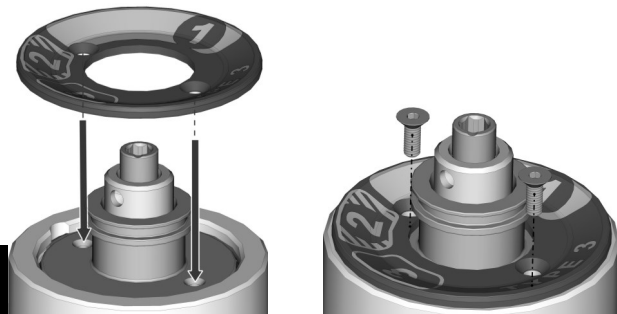
15

The cartridge needs to be clocked so the knob can sweep through a safe path. The front shock knob needs to sweep up and away from the tire. For the rear, the knob needs to sweep up and away from the ground to be protected behind the shock body.



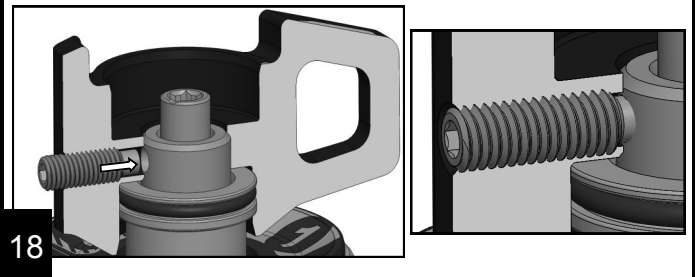
16

Position the trim plate onto the 3.3 cartridge, keeping in mind the sweep of the 3 position knob. Apply a couple of drops of blue thread locker on the threads of the 2 screws and install into cartridge. **Torque screws to 8 in-lbs.**



17

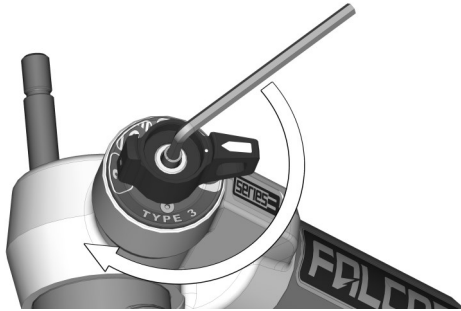
Install the red 3 position knob. Install the set screw with a couple of drops of blue thread locker. The set screw needs to go into the hole on the side of the adjustment pin. **Torque set screw to 8 in-lbs.**



18

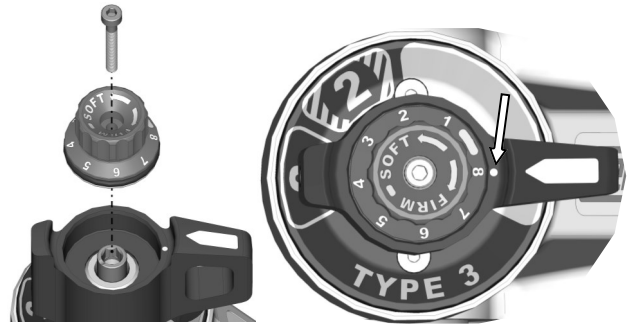
With a 5mm allen wrench clock the 8 position adjustment pin by rotating it clock-wise until it stops.

**Note:** Do not force the adjustment pin. Rotation should be smooth and easy and you will be able to feel it when it stops.



19

Install the black 8 position knob with the 3mm x 22mm bolt and a couple of drops of blue thread locker (line up the # 8 with the mark on the 3 position knob as shown in illustration). Press down on the black knob firmly and **torque 3mm bolt to 4 in-lbs.**

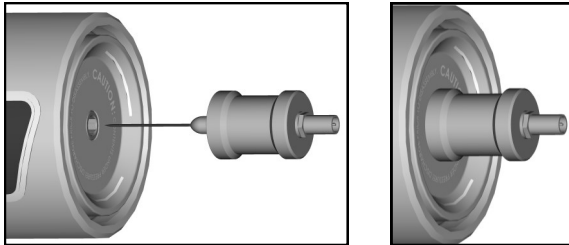


20

**Note:** Check that the set screw is open 1/2 turn, as explained in step 4.

Remove the protective cap from the needle and press it into the center of the set screw that was used to discharge the shock. Press the needle all the way in until it stops and is flush with shock. Charge the shock to 100 psi. and remove the needle.

**Torque the set screw to 50 in lbs.**



21

Test the function of the knobs after the shock is charged to make sure they cycle correctly.

Repeat the process on the rest of your shocks.

Reinstall the shocks back onto the vehicle following your Falcon shock installation instructions.