

## Manitou Comp Refresh Kit

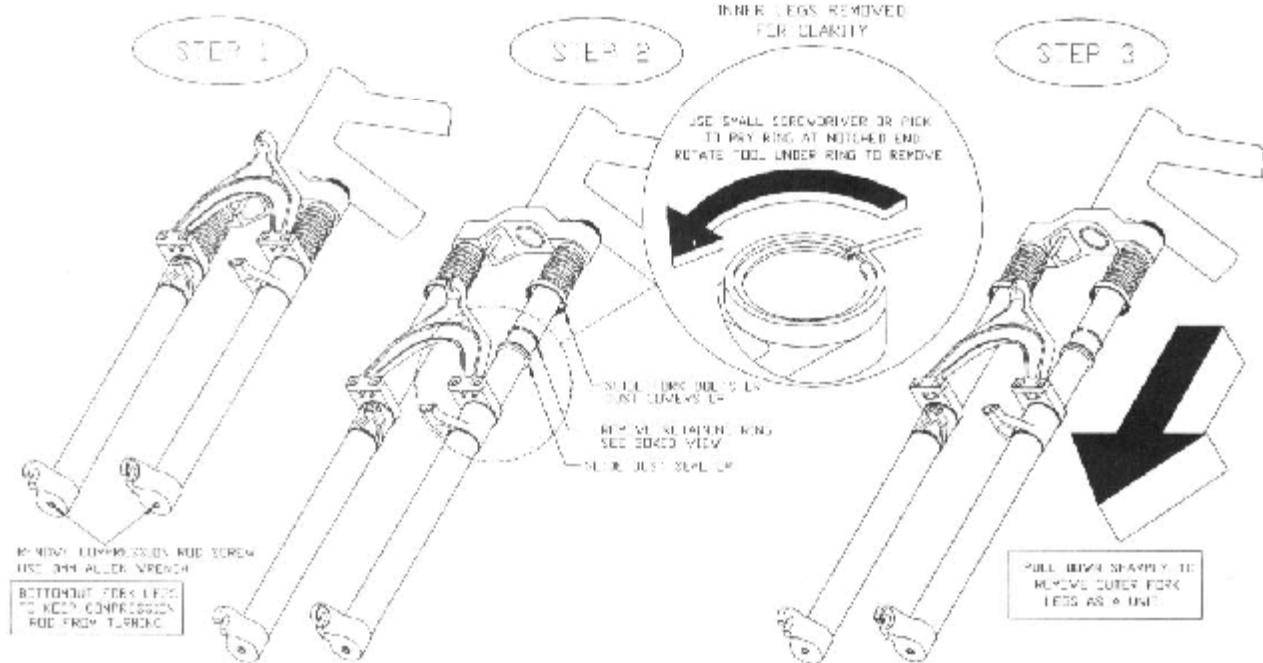
### GENERAL DISASSEMBLY

**NOTE:** The cantilever brakes, brake arch, and inner legs DO NOT need to be removed for general disassembly or cleaning. We recommend you AVOID DISASSEMBLING these components unless absolutely necessary. Fork crown and inner legs may be left installed on bicycle during disassembly. It is also not necessary to disassemble the 95 Manitou Forks for compression elastomer replacement. Elastomer replacement is accomplished by removing the adjuster assembly per figure 7.

### Removal of outer legs Figure 6:

1. Remove both SMM lower compression rod screws. Bottom out fork to prevent the compression rod from turning while removing screws. Pull outer legs down gently to get more room to work with the seal.
2. Lift fork boots or dust seal cover off of flange boss and slide it up inner fork leg.
3. Use a small screwdriver or point tool to remove retaining ring (Figure 6).
4. Pry up dust seal until it is above flange.
5. Pull outer leg assembly down sharply to force upper bushing out of the flange. It maybe necessary to pull several times before upper bushings pops out of the flange.

FIGURE 6: FORK DISASSEMBLY

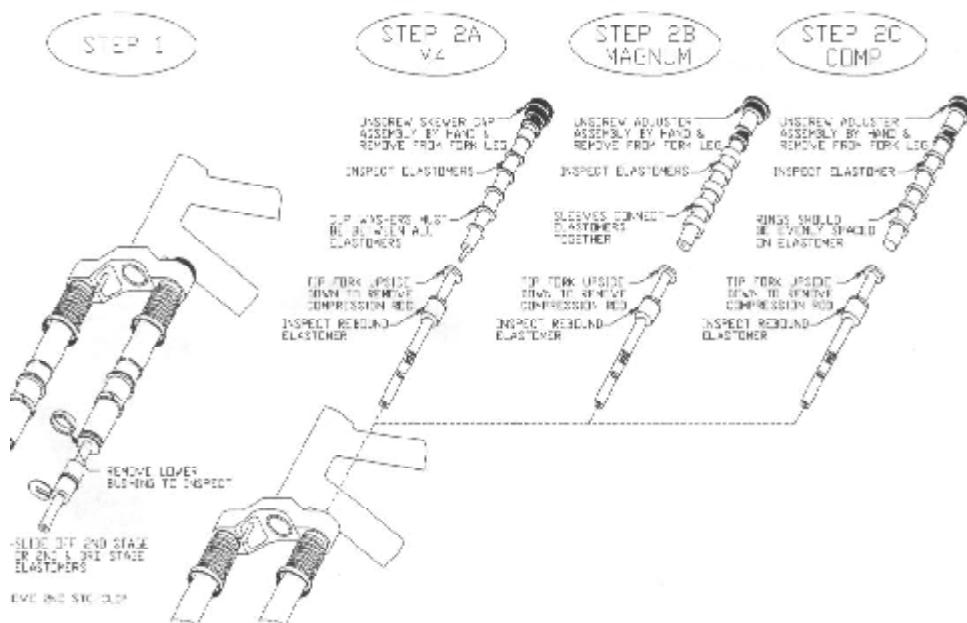


### Skewer & Compression Rod Removal Figure 7:

1. Remove 2nd stage clip from the groove in compression rods.
2. Slide off the second stage elastomers.
3. Unscrew and remove the adjuster assemblies by hand.
4. Turn fork upside down to remove the compression rods. Giving the rods a quick upward thrust and catching them works also.
5. Remove the lower bushing if desired.

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**FIGURE 7: ELASTOMER & COMPRESSION ROD REMOVAL**



### **REASSEMBLY**

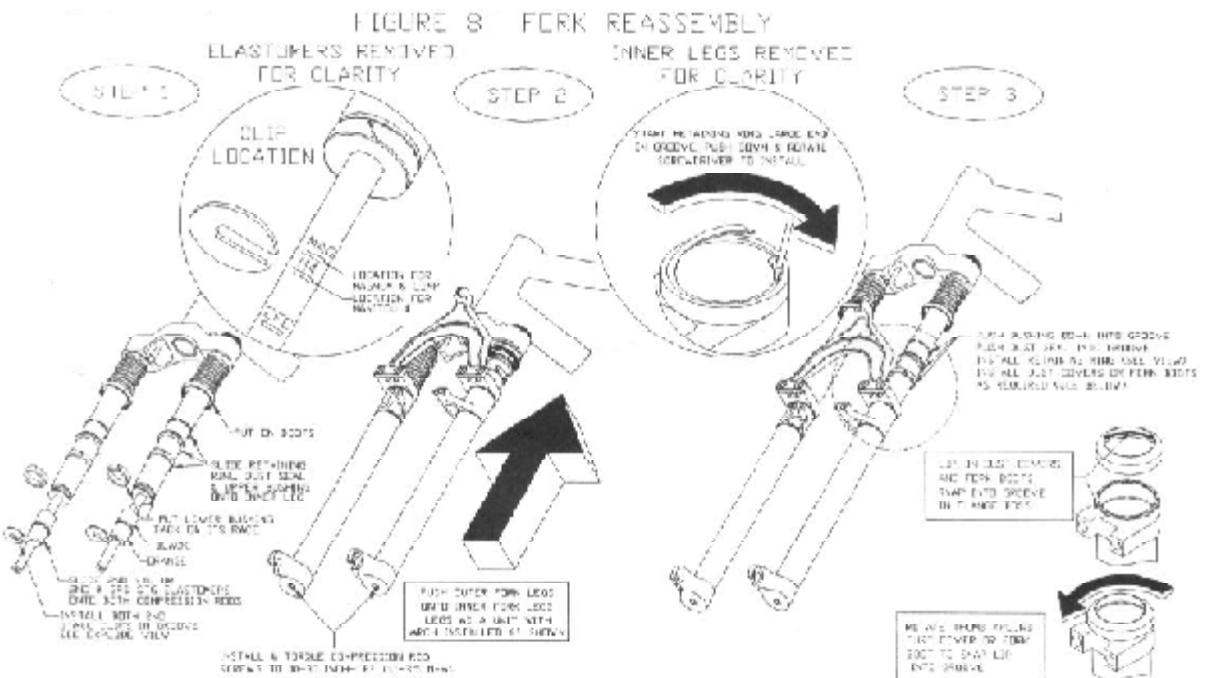
#### **Compression Rod Installation Figure 7 & 8**

1. Clean all parts thoroughly.
2. Slide fork boots or dust cover, dust seal, retaining ring, and upper bushing onto inner legs.
3. Grease Compression rods lightly.
4. Drop compression rods down into inner legs. Shake inner leg to get rod through inner leg plug.
5. Clean adjuster cap threads thoroughly. Grease threads on inside of inner leg.
6. Grease aluminum skewer and install desired compression elastomers. A cup washer must be between every elastomer (M4 only).
7. Back off adjusters in soft setting and install skewers assemblies into inner legs (M4 only).
8. Position adjuster clip in desired groove of adjuster body to set preload (Magnum & Comp).
9. Assemble elastomer and sleeves together, stick into adjuster body, and install elastomer stack into inner leg (Magnum only).
10. Slide on 3/4" black second stage elastomers until just past clip groove.
11. Slide on 2nd stage cup washer and orange 3rd stage elastomer just past clip groove (M4 only).
12. Install 2nd stage clip. **Note:** The grooves are marked, see view Figure 8. Use the top groove for Magnum and Comp and the middle groove for M4. The clip must be in the proper groove to avoid bottoming the tire on the crown. Riding with the clip missing or in the wrong groove is unsafe.
13. Grease and install lower bushing on inner leg plug

#### **Outer leg Installation Figure 8**

1. Install outer legs as a unit onto inner legs. Force lower bushings past flange area until dropouts contact compression rods.
2. Install and torque both 5MM compression rod screws to 10-30 inch-lb. (1.1-3.5 N-m).
3. Using a screwdriver like tool push the upper bushing into the flange. Take care not to damage bushing or scratch the inner leg.
4. Using similar tool push the dust seal down into its cavity.
5. Install retaining ring by starting the wide end in the flange groove. Pushing down with a screwdriver, rotate to feed ring into the groove, see figure 8 view). Install the ring so the end gap is oriented straight back. This will leave ring in the best position for removal later.
6. Slide fork boots or dust seal covers down inner fork leg onto the flange boss. Be sure the lip snaps into the groove in the flange boss.

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## Fine Tuning Magnum & Comp:

Fine tuning adjustments are made by removing the adjuster assembly, removing the adjuster clip and replacing it in a different groove. The groove closest to the top is the softens setting, while the groove closest to the bottom provides maximum preload and is the most firm setting.

FIGURE 11: FINE TUNING MAGNUM & COMP

