MANITOU

CARTRIDGE ANSWER.

SX

MACH 5

SERVICE MANUAL

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TABLE OF CONTENTS

MANITOU PRECISION SUSPENSION

CONGRATULATIONS FOR CHOOSING THE LATEST STATE OF THE ART MOUNTAIN BIKE SUSPENSION FORK AVAILABLE. THE 1996 LINE OF MANITOU FORKS ARE THE ONLY FORKS UTILIZING THE POSI-LINK ANTI-FLEX BONDED SYSTEM. ALTHOUGH THE FORK IS SIMPLE IN DESIGN IT MUST BE PROPERLY CARED FOR. IT IS MANDATORY TO READ THIS MANUAL ENTIRELY PRIOR TO WORKING ON YOUR MANITOU FORK. THIS MANUAL COVERS THE 1996 MANITOU SX SUSPENSION FORK.

Your Manitou Fork is fully assembled and ready to be installed onto your bicycle. Manitou suspension forks are available in three steer tube diameters 1" STD (25.4MM), 1.125 O.S. (28.6MM), and 1.250 EVO. (31.8MM) and five lengths, 5 1/2" (140MM), 6 1/2" (165MM). 7 1/2" (190MM), 8 1/2" (215MM), and 12" (305MM) Threadless. Aluminum Threadless steerers are available in the O.S. and EVO. sizes. The forks are delivered with stock, red, MicroCellular polyurethane compression elastomers. Expanded ride kits are available for all fork models through your dealer carrying Manitou products.

The new Posi-Link bonded system permanently attaching the honeycomb magnesium arch to the magnesium outer legs provides improved stiffness and steering precision for the 1996 forks. The suspension spring rates are provided by six 2" long high resilient MicroCellular polyurethane elastomers. Compression and hand adjustable rebound damping is provided by the proven Manitou through shaft damping system. A black 3/4" 2nd stage and an orange 3/4" 3rd stage elastomer provides smooth progression and absorption for large hits. The specially matrixed polymers provide simple yet effectively tuned and maintenance free off road performance. Standard travel for the SX is 2 1/2" (63.5MM). Softer and more firm elastomers can be combined in the damping stack to adjust ride stiffness and rebound performance and are easily changed by removing the adjuster mechanism. Fine tune adjustments are made by dialing in the desired preload with the new ergonomic adjuster knob located on top of the fork crown. Improved alignment and bushing life are obtained with the enlarged upper and lower bushings.

CONSUMER SAFETY INFORMATION

IMPORTANT: The Manitou Fork is a competition off road fork, and as such, does not come with proper reflectors for on road use. Have your dealer or mechanic install proper reflectors to meet the Consumer Product Safety Commission's (C.P.S.C.) Requirements for Bicycles Standard if the fork is going to be used on public roads at any time. If you have questions regarding C.P.S.C. Standards contact your dealer.

1. Never remove or have the steer tube removed from the crown. The steer tube is press fit assembled at the factory. Pressing the steer tube out will permanently damage the crown beyond repair and render it unsafe for use.
2. Any other alterations or modifications to your fork are probably unsafe. Contact Answer Products Technical Support prior to modifying your fork in any way for safety information.
3. Do not use the Manitou Fork if any parts are broken, bent, cracked, or damaged. Contact your dealer or Answer Products Technical Support, (805) 257-4411, if you have any questions concerning the integrity of your fork.
4. Answer Products recommends that you periodically inspect your fork for wear and damage. Inspect the Crown, Inner Legs, and Outer Leg Dropout areas for cracks or damage. Before every ride check the elastomer stack to insure that the elastomers are not fractured and that proper preload exists and that the positive rebound stop is in order to insure that the fork does not over extend.

INSTALLATION INSTRUCTIONS

Figures 1, 2, &3

Insure that the proper steer tube diameter and length has been delivered with your Manitou. The steer tube may need to be cut to length to fit your bicycle head tube. If you are not familiar with this procedure or do not have the proper tools to cut the steer tube it is recommended that you seek a qualified bicycle mechanic to perform installation.

WARNING: The steer tube is a one time precision press fit at the factory and cannot be removed from the crown. Replacement of the entire crown/steerer assembly must be done to change steer tube lengths or diameters. Removing and replacing the steer tube will result in an unsafe condition and should never be done.

Note: Some low profile brakes may not clear the brake arch. Remove the brake post and install the thicker brake post spacers available at your dealer. Align holes in spacer inward and torque brake post to 90-110 INCH-LB (10-12 N-m).

1. Remove old forks from bicycle.
2. Measure and cut the steer tube to fit your bicycle head tube.
3. Remove crown race from old forks and press onto Manitou steerer until seated on crown (Figure 1).
4. Clean and grease headset bearings and races of bicycle.
5 Install lower bearings on fork crown race.
6. Insert steer tube into head tube of frame.
7. Install upper bearings and race, tighten either the headset nut or the threadless stem bolt until slack just disappears.
8. Install washer and headset lock nut or for threadless stems tighten the stem pinch bolts.
9. Install stem and handlebars to desired height and torque stem bolt/clamping system to manufacturers instructions.

FIGURE 1: RACE INSTALLATION

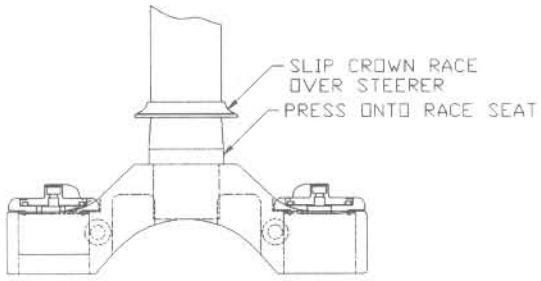


FIGURE 1B: BRAKE ARCH CLEARANCE

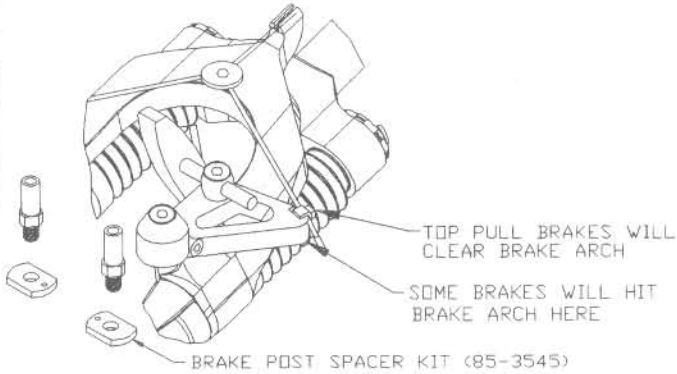
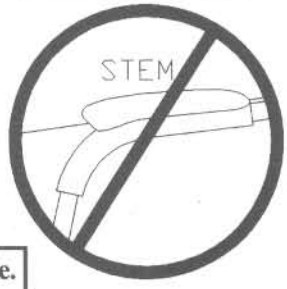


FIGURE 2: BRAKE CABLE ROUTING

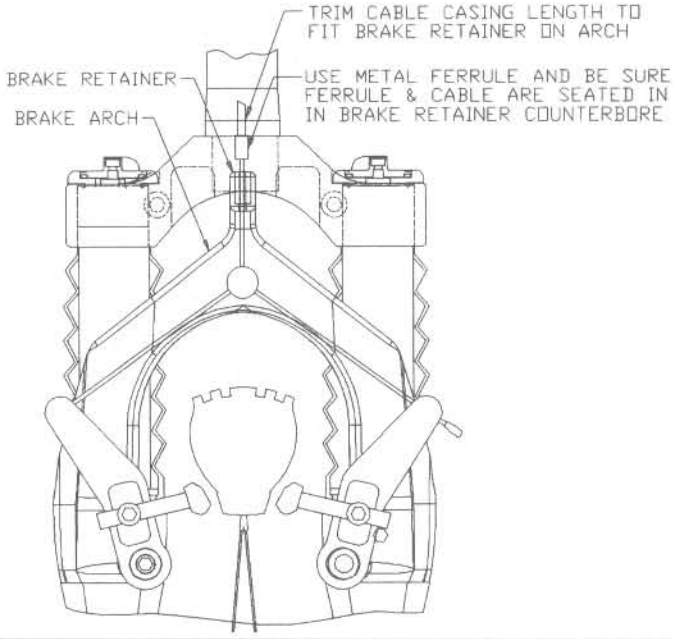


IMPORTANT: Do not run your brake cable through the stem cable system of your bicycle. Bypass the stem routing completely and go directly to the brake arch of the Manitou Fork.

10. Install cantilever brakes and adjust per manufacturers instructions.

Note: All 96 Manitou Forks are equipped with a secondary catch dropout.

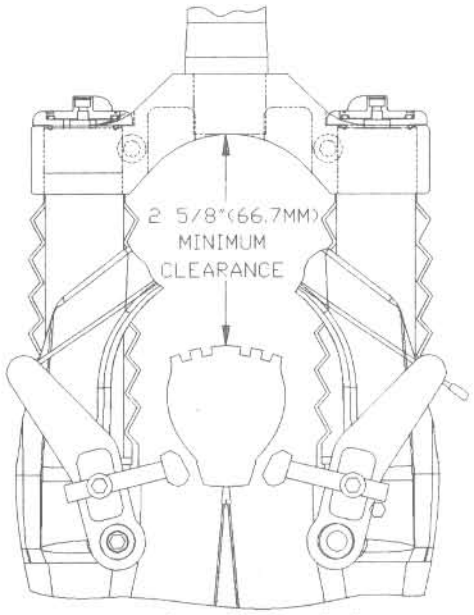
11. Adjust front wheel quick release to clear the 0.275" (7MM) thick secondary catch dropout. The quick release must be tightened after it is properly seated into the dropout counter bores. Insure that there is adequate thread engagement (4 or more threads with the release adjusted to lock) due to the wider adjustment. Install front wheel to bicycle per manufacturers specification.
12. Obtain new brake inner and outer cable.
13. Trim outer cable length to fit into new brake cable retainer on brake arch. Do not use old retainer.



IMPORTANT: When installing wheel or any new tire be sure to check the minimum tire as shown in figure 3. Measure from the highest point on the tire to the bottom of the crown. Minimum clearance is 2 5/8" (66.7MM).

WARNING: Do not lower the fork tubes in the crown. This reduces the amount of adjuster engagement in the leg and constitutes an unsafe condition that may cause rider injury.

FIGURE 3: TIRE CLEARANCE



SPARE PARTS
Tables 1&2

Spare parts can be ordered through your dealer. If you have any problems that you cannot resolve with your dealer, you may call Answer Products Technical / Warranty Service Department at (805) 257-4411, 8:00 AM to 5:00 PM Monday through Friday.
NOTE: ELASTOMER SPARE PARTS APPEAR IN TABLE 3 ON PAGE 10.

TABLE 1: SPARE PARTS

PART NAME	PART NUMBER
BRAKE POST	040921
BRAKE POST SPACER	040943
CROWN PINCH BOLTS (6MMx25MM)	040809
INNER LEG, RIGHT	040916
INNER LEG, LEFT	041050
COMPRESSION ROD	041027
COMPRESSION ROD SCREW	060268
DUST SEAL RETAINING RING	040929
DUST SEAL	040920
FORK BOOT	040922
FOAM DONUT WIPER	040976
BUSHING UPPER & LOWER	040918
BUSHING SPACER	040919
ADJUSTER ASSEMBLY, REPLACEMENT	040963
OWNERS MANUAL	040948
BRAKE POST SPACER KIT	85-3545
SX 96 OUTER LEG / ARCH ASSEMBLY	85-3602
FORK BOOTS, BLACK 96 FORKS	85-3609

ADJUSTER ASSEMBLY
(040953)

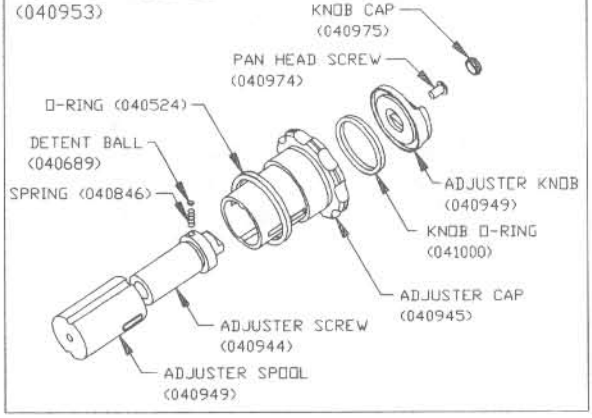


TABLE 2: CROWN/STEERER ASSEMBLY GUIDE

STEER TUBE LENGTH	STEER TUBE DIAMETER: 1.000 IN (25.4 MM) STANDARD	1.125 IN (28.6 MM) OVERSIZE	1.250 IN (31.8 MM) EVOLUTION
5.5 IN (140 MM)	85-3560	85-3570	85-3580
6.5 IN (165 MM)	85-3561	85-3571	85-3581
7.5 IN (190 MM)	85-3562	85-3572	85-3582
8.5 IN (216 MM)	85-3563	85-3573	85-3583
12.0 IN CM (305 MM) THREADLESS	85-3565	85-3575	85-3585
12.0 IN AL (305 MM) THREADLESS		85-3576	85-3586

CROWN/STEERER ASSEMBLY
FITS ALL 96 CROSS COUNTRY FORK MODELS
(INCLUDES ALL PARTS SHOWN)

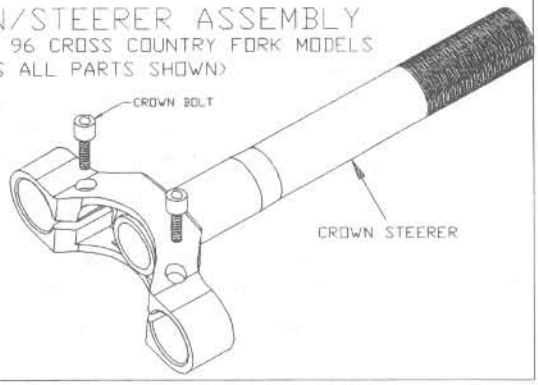


FIGURE 4: MANITOU SX FORK SCHEMATIC

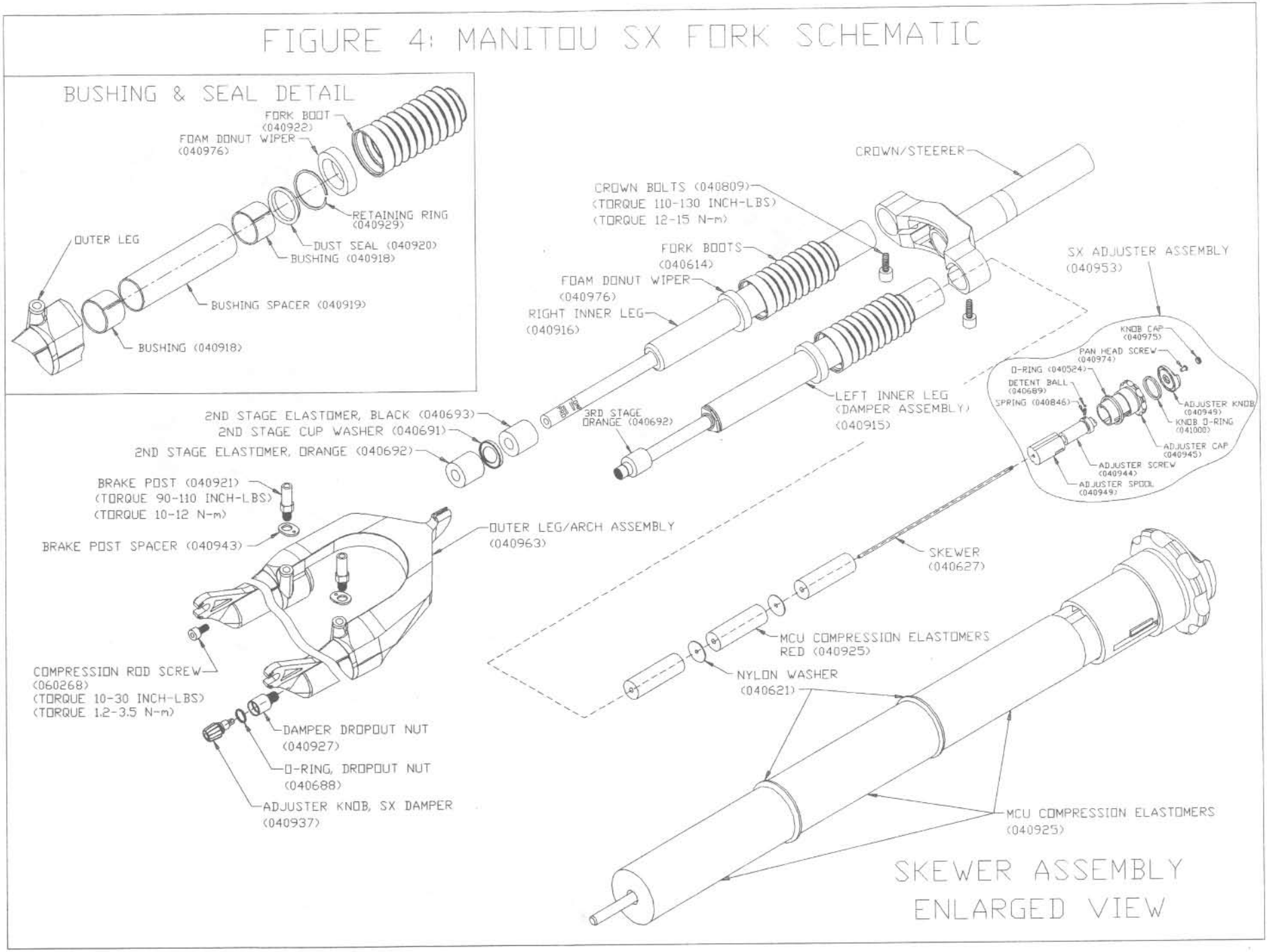
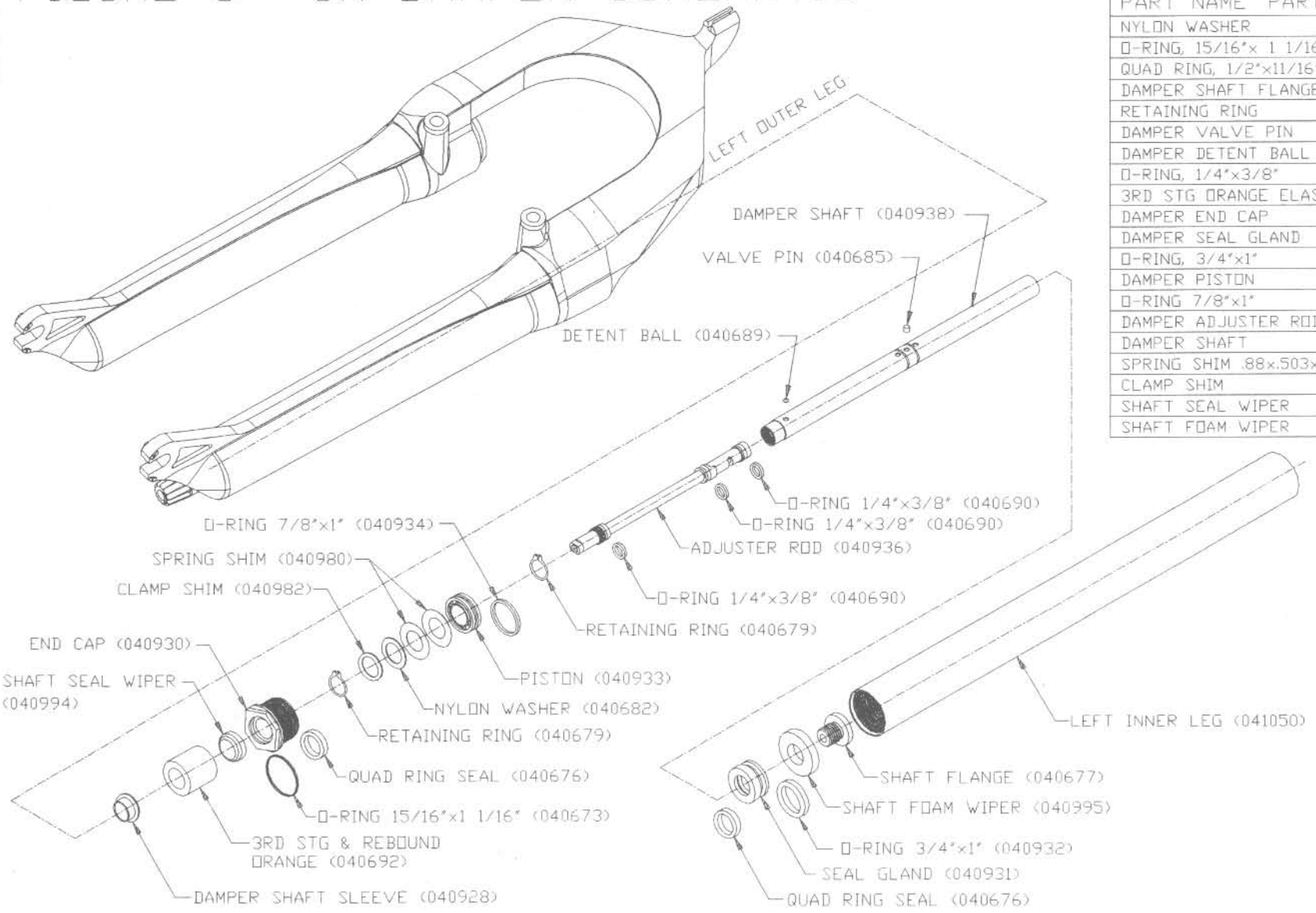


FIGURE 5: SX DAMPER SCHEMATIC



DAMPER SPARE PARTS	
PART NAME	PART NUMBER
NYLON WASHER	040682
O-RING, 15/16"x 1 1/16"	040673
QUAD RING, 1/2"x11/16"	040676
DAMPER SHAFT FLANGE	040677
RETAINING RING	040679
DAMPER VALVE PIN	040685
DAMPER DETENT BALL	040689
O-RING, 1/4"x3/8"	040690
3RD STG ORANGE ELAST	040692
DAMPER END CAP	040930
DAMPER SEAL GLAND	040931
O-RING, 3/4"x1"	040932
DAMPER PISTON	040933
O-RING 7/8"x1"	040934
DAMPER ADJUSTER ROD	040936
DAMPER SHAFT	040938
SPRING SHIM .88x.503x.005	040980
CLAMP SHIM	040982
SHAFT SEAL WIPER	040995
SHAFT FOAM WIPER	040995

MAINTENANCE

NOTE: The Manitou should not be used if any parts appear to be or are damaged. Contact your local dealer or Answer Products for replacement parts.

Your Manitou Fork is nearly maintenance free. However, moisture and contamination may build up inside the fork. Although this may not affect the performance of the Manitou, to insure long life it is recommended that the fork be periodically disassembled, cleaned, dried and re-greased. **Note: Frequent cleaning and re-oiling of the foam donut wiper located under th e fork boots will keep the fork performing well and prevent wear and damage to internal parts.** When cleaning the fork, it is **NOT RECOMMENDED** to direct water spray at the seals.

Before every ride you should:

1. Ensure that quick release skewers are properly adjusted and tight.
2. Wipe the inner legs clean & check entire fork for any obvious damage.
3. Check headset slack.
4. Insure that the front brake cable is properly seated in the cable retainer & check brake adjustment

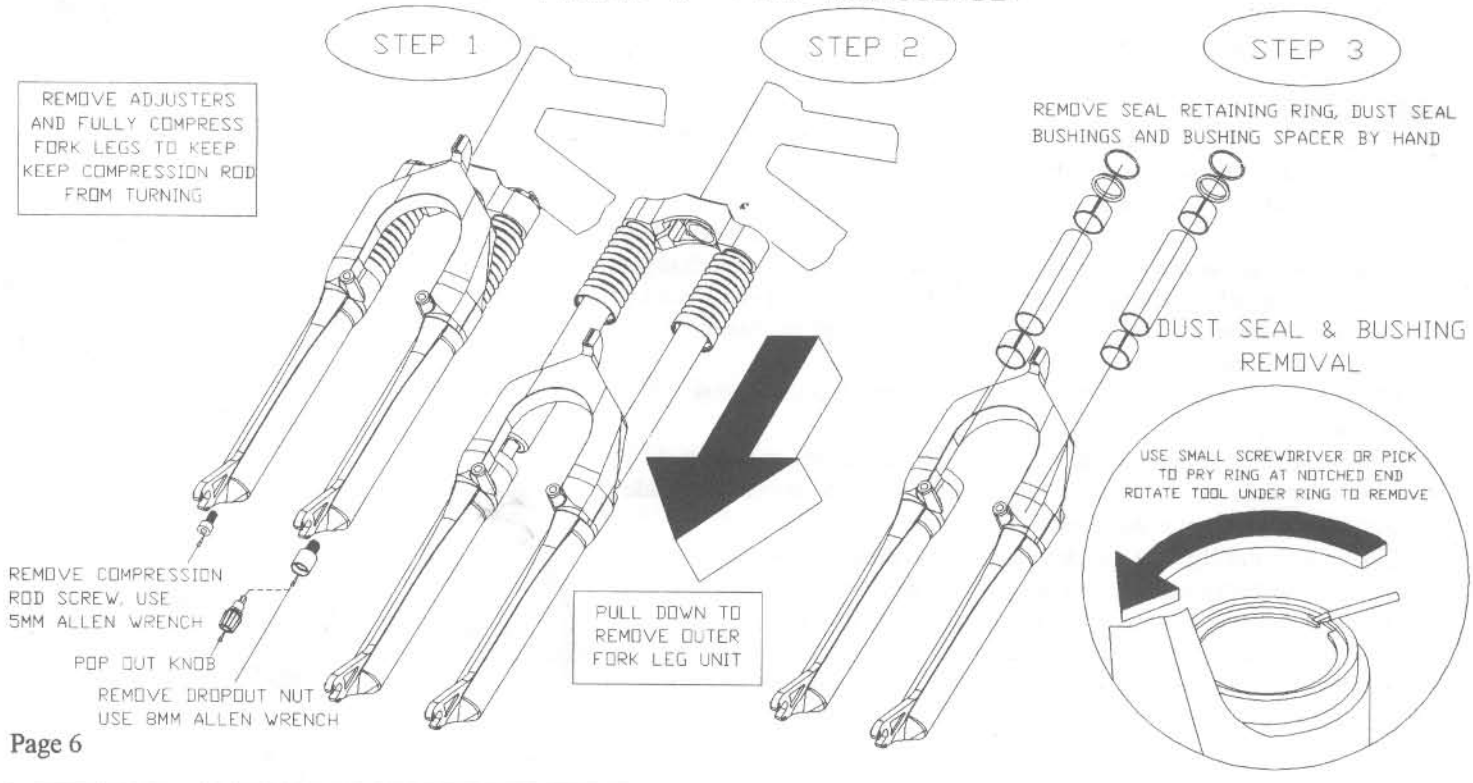
GENERAL DISASSEMBLY

NOTE: The Fork does not need to be removed from the bicycle for general disassembly-assembly or cleaning and the inner legs may be left in the crown. It is also not necessary to disassemble the 96 Manitou Forks for compression elastomer replacement. Elastomer replacement is accomplished by removing the adjuster assembly per figure 7

Removal of outer leg / arch assembly Figure 6:

1. Use a 5MM allen wrench to remove the 6MM lower compression rod screw from the right leg dropout. Pop out the damping adjuster knob from the left leg dropout. A small screwdriver may be helpful. Use a 8MM allen wrench to remove the dropout nut. Fully compress the fork to prevent the compression rod and damper shaft from turning while removing the screws.
2. Pull outer leg assembly down to remove from the inner legs and crown.
3. Remove fork boots and foam donut wiper.
3. Use a small screwdriver or pointed tool to remove retaining ring, Figure 6 view.
4. Remove dust seal and upper bushing.
5. Remove bushing spacer by hand.
6. Remove lower bushing. It may be necessary to use a small hook like a spoke to catch the bottom edge of bushing and pull it out.

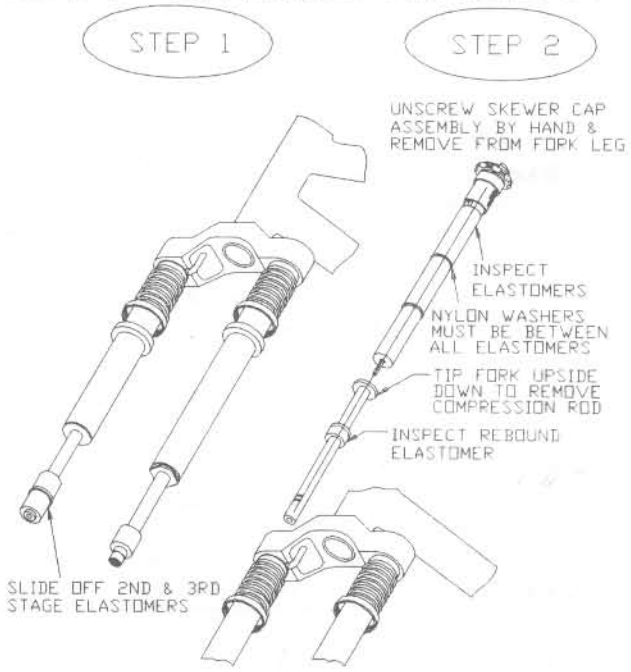
FIGURE 6: FORK DISASSEMBLY



Skewer & Compression Rod Removal Figure 7:

1. Slide off 2nd and 3rd stage elastomers from right leg compression rod.
2. Unscrew and remove the adjuster skewer assemblies by hand.
3. Turn fork upside down to remove the compression rod. If forks are installed on the bicycle give the rod a quick upward thrust and catch it as it pops up above crown.

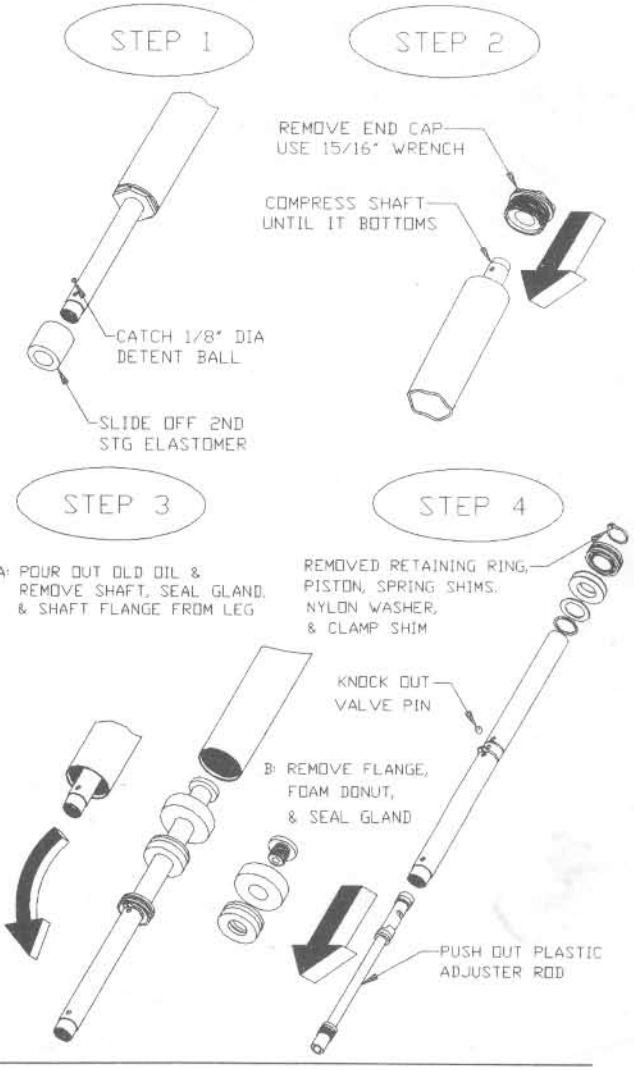
FIGURE 7: COMPRESSION ROD REMOVAL



Left Inner Leg Damper Disassembly Figure 8:
Note: Damper disassembly is best done with the left inner leg removed from the crown. Complete disassembly is not recommended unless all seals need to be changed.

1. Slide off 2nd stage elastomer and catch the 1/8" diameter detent ball. The ball is held in by the elastomer.
2. Compress the shaft until it bottoms out in the leg and remove the end cap. Pour out the oil and discard appropriately. Replace oil with Silkolene 2 1/2 weight or equivalent oil. For complete disassembly continue with step 3.
3. Pull the shaft out of the inner leg. The flange on the end of the shaft will pull out the seal gland. **Note: The seal gland may be tight in the leg.**
4. Using a 5MM allen wrench, remove the shaft flange, foam donut wiper, and seal gland from the shaft.
5. Remove retaining ring, piston, and shim stack from top end of shaft. Knock shaft against soft surface, like rubber, to remove the valve pin and push out the plastic adjuster rod from top end of shaft.
   Note: The retaining rings must be replaced every time they are removed from the shaft. Do not remove them unless necessary.

FIGURE 8: DAMPER DISASSEMBLY



DAMPER INSPECTION

1. Check the shaft for scratches, wear at the retaining ring grooves and other obvious damage.
2. Check the damper bore of the inner leg for deep gouges.
3. Check the seal gland and end cap seal grooves for damage.
4. Check shims for permanent bends or damage.
5. Check all other parts for obvious damage, replace if necessary.
6. Replace all seals and retaining rings that have been removed.

INSPECTION

1. Check the fork boots and foam donut wiper for tears, wear through or other obvious damage.
2. Check the dust seal for tears or damage. Replace if needed.
3. Inspect the lower and upper bushing for excessive wear or damage. **Note: The upper and lower bushing are identical and may be interchanged.** Check the drag between the bushings and the inner legs. Drag should be very slight, enough to hold the weight of the inner leg but not more. Replace if necessary.
4. Check all elastomers for splitting, cracks or other obvious damage. Replace if necessary.
5. Check the preload adjuster and skewer. Replace if bent or damaged.
6. Check the outer leg / arch assembly for nicks or deep gouges on outside and inside. Replace if damaged.
7. Check the inner leg O.D. for deep gouges and other obvious damage. Minor wear resulting in color change is not detrimental to the gold anodized surface. Replace if wear is excessive or damaged.
8. Check inner legs at the bottom of the crown for cracks or for flaking anodize. Replace if cracked or if gold anodize is beginning to flake.
10. Check the underside of the crown for cracks. Replace if cracked.

RE-ASSEMBLE

Left Inner Leg Damper Figure 9:

1. Install three o-rings onto adjuster rod and one onto piston.
2. Install quad seal and o-ring into seal gland.
3. Install quad ring and shaft seal wiper into end cap.
4. Grease all seals lightly with a seal grease.
5. Put on the lower retaining ring first. Open the retaining ring just enough to slide on shaft without scratching shaft.
6. Gently push plastic adjuster rod into shaft until groove in rod lines up with the center hole in the shaft. Be careful not to damage o-rings as they slide past the holes in the shaft.
7. Drop in the valve pin and slide on the clamp shim, nylon washer, two spring shims, piston, and retaining ring.
8. Slide seal gland onto shaft. Put the quad ring end of the seal gland on first. Do not damage the quad ring seal.
9. Slide on the foam donut wiper and screw on shaft flange.
10. Insert shaft and gland assembly into inner leg. Gently work the seal gland o-ring past the threads in the inner leg.
11. Fully compress the shaft to bottom the seal gland in the inner leg.
12. Fill with 2 1/2 weight Finishline or Silkolene fork oil.
13. Stroke the shaft slowly until air bubbles come to the surface. Let them settle and add oil until it is half way up the threads.
14. Find the bleed hole in the end cap. Install by holding the leg at a 45 degree angle with the bleed hole up. Screw in cap without O.D. o-ring by rotating leg until seated and excess oil bleeds out. Back off, install o-ring, and torque to 30-50 IN-LB (3.4-5.6 N-m).
15. Place detent ball into hole in shaft and slide on 2nd stage elastomer over it.

Bushings and Seals Installation Figure 10:

1. Install both bushings with bushing spacer between them
2. Lightly grease the inside diameter of both bushings.
3. Install dust seals.
4. Install seal 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 10 view. Install the ring so the end gap is oriented straight back. This will leave ring in the best position for removal later.

Compression Rod & Boots Figure 11:

1. Clean all parts thoroughly.
2. Grease compression rod lightly. Be sure rebound elastomer is installed onto compression rod.
3. Drop compression rod down into inner legs. Shake inner leg to get rod through inner leg plug.
4. Slide on black second stage, cup washer, and orange 3rd stage elastomer.
5. Lightly oil foam donut wipers and slide boots and foam donuts onto inner legs.

FIGURE 9: DAMPER ASSEMBLY

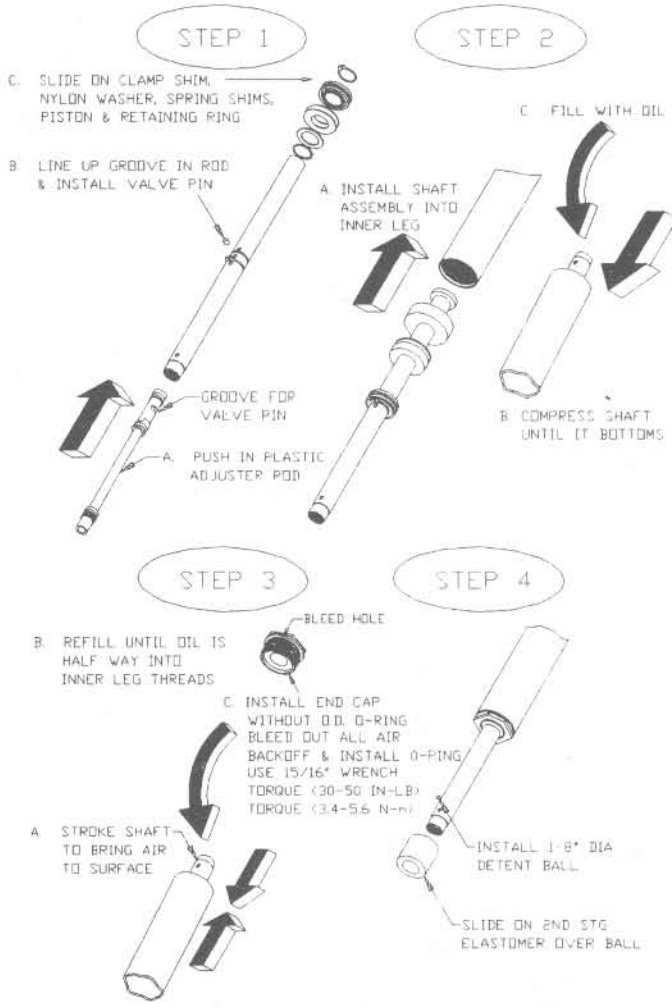
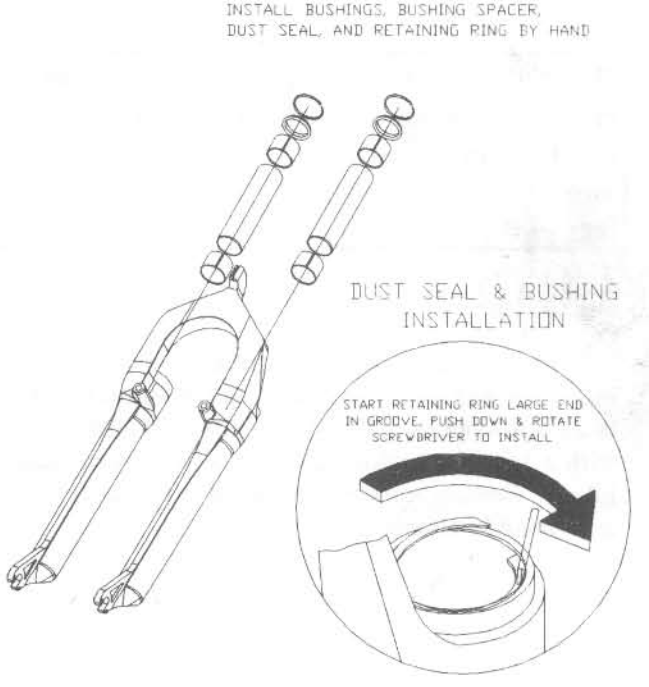


FIGURE 10: SEAL & BUSHING ASSEMBLY



Outer Leg Assembly Figure 12:

1. Slide Outer leg / Arch assembly onto inner legs and fully compress.
2. Install and torque 6MM compression rod screw and dropout nut to 10-30 inch-lb. (1.1-3.5 N-m).
3. Pop in damper adjuster knob. O-ring holds knob in place.
4. Slide skirt of fork boots onto the outer leg groove. Be sure the lip snaps into the groove.
5. Clean adjuster cap threads and skewer thoroughly. Clean threads on inside of inner leg.
6. Slide on MCU elastomers with a nylon washer between each elastomer.
7. Install skewer assembly into inner leg just hand tight.

INNER FORK LEGS & CROWN

During normal maintenance the inner fork legs do not need to be removed from the crown. It is recommended that the torque joints be left undisturbed.

Disassembly Figure 13:

1. Loosen the two 6MM allen screws located in the crown.
2. Remove adjuster assemblies.
3. With twisting movement remove the inner fork legs.

Re-assemble:

1. Clean mating surfaces of crown and inner fork legs.
2. Install inner fork legs into crown until they bottom up against the step at the top of the crown.
3. Install adjuster assemblies until hand tight.
4. Tighten and torque two 6MM allen bolts to 110-130 inch-lb. (12-15 N-m).
5. Inspect to verify minimum clearance between tire and crown per figure 3, page 3.

WARNING: Do not over tighten or under tighten crown pinch bolts. Tighten only to 110-130 inch-lb. (12-15 N-m) . Over tightening may collapse inner legs and bind skewer threads. Under tightening may cause legs to slip in crown.

BRAKE ARCH

NOTE: The 96 Mach 5 brake arch is permanently bonded to the outer legs and is not removable. If the unit is damaged or if the bond is broken or seperated it must be replaced. Using the fork with a damaged brake arch bond is unsafe and could cause serious injury. Contact Answer Products if you suspect that your brake arch bond is damaged.

FIGURE 11: COMPRESSION ROD ASSEMBLY

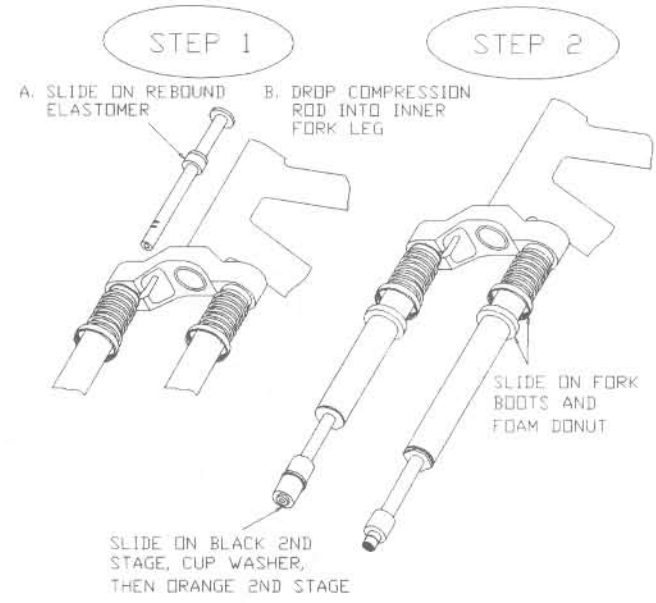


FIGURE 12: OUTER LEG ASSEMBLY

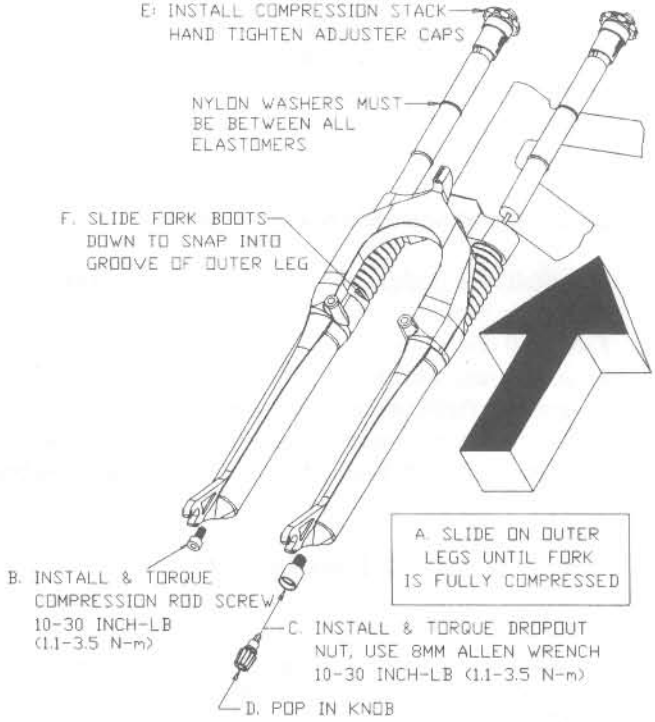
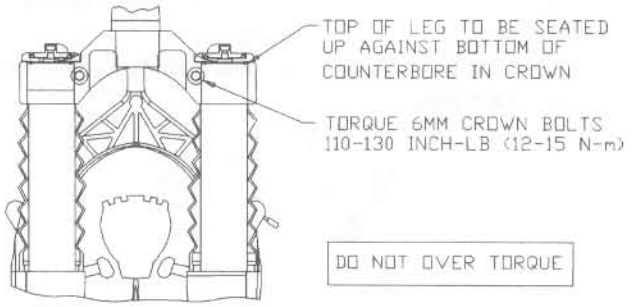


FIGURE 13: INNER FORK LEGS & CROWN



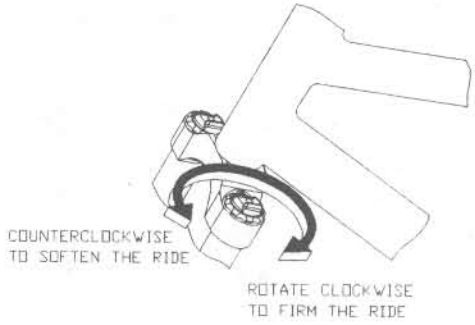
ADJUSTING RIDE QUALITIES Figures 14 & 15

Manitou forks offer a wide adjustment range to suit individual riding preference and rider weight by simply changing MicroCellular elastomers. Fine tune adjustments can be made using the preload adjusters located on top of the fork crown and changing the damping by using the damping adjustment located at the bottom of the left dropout. Each production fork comes w an all red compression stack appropriate for an aggressive rider of 155-180 lb. Softer, blue and harder, yellow elastomers available from your authorized Manitou Dealer..

Fine Tuning Figure 14:

Fine tuning adjustments are made by rotating the adjuster knobs located on top of the crown. Rotating the knob clockwise will firm the ride, adding preload to the compression stack. This will firm the initial travel for small bumps but will not limit the full travel for large bumps. Rotating the knobs counter clockwise will soften the ride. Five revolutions of the adjuster knob will take the adjuster from full soft to the extreme firm ride setting, changing the preload 1/2 inch (12.7MM). It is not necessary to have the right and left adjusters set exactly the same.

FIGURE 14: FINE TUNING SX



Fine Tuning the Damping Figure 15:

Fine tuning adjustments are made by rotating the adjuster knob located at the bottom of the left dropout. Rotating the knob clockwise will increase the low speed compression and the rebound damping, rotating the knob counter clockwise will reduce the amount of low speed compression and rebound damping. Full adjustment, nine clicks of the detent, will almost lockup the fork preventing it from returning after compression. It is not recommended to ride the fork will full damping. Large changes to the compression damping can be accomplished by disassembling the left damper leg and changing the shim stack and/or oil weight. The SX damper is built at the factory with SAE 2 1/2 weight oil. It is not recommended to exceed SAE 5 weight. Tuning the shim stack is described in detail in the race tuning instructions.

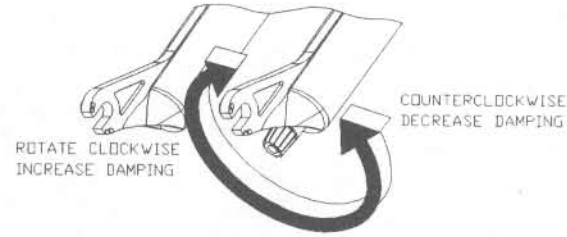
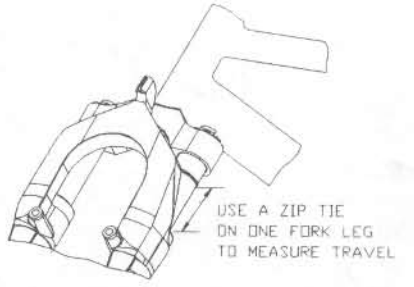


FIGURE 15: ZIP-TIE TRAVEL INDICA



Elastomer Replacement Tuning:

Normal riding should result in 2 1/8"- 2 1/4" (57.2MM) of travel. Large hits should use full travel. Using a zip tie as shown in Figure 15 is a good way to measure travel. To do this you must remove the fork boots, test ride, and then replace the fork boots. An excessively soft compression stack will rely too heavily on the second stage elastomer. A mushy feel with frequent noticeable bottoming will occur. A excessively firm compression stack will not use full travel. If your forks are too soft or too firm and need elastomer replacement remove the adjuster assemblies, replace the elastomers and ride test. Table 5 can be used as a starting point for selecting the correct elastomers. Disassembly of the fork is not required. Soft and firm ride kits are available through your dealer as an accessory. The soft ride kit is a complete set of blue compression elastomers and the firm ride kit is a complete set of yellow compression elastomers. For the Pro any combination of colors can be used to obtain the ride that suits your preference, although it is not recommended to use a soft elastomer like blue in a stack of hard elastomers like yellow. The soft elastomer will be overpowered by the firm ones.

TABLE 3: ELASTOMER RIDE KITS SX

COLOR	STIFFNESS	RIDE KIT	PART NO.
BLUE	SOFT	SOFT RIDE	85-3590
RED	MEDIUM	STOCK RIDE	85-3591
YELLOW	FIRM	FIRM RIDE	85-3592
SX REBOUND RUBBER			040684
SX 2ND STAGE ELASTOMER, BLACK			040693
SX 3RD STG ELASTOMER, ORANGE			040692
2ND STAGE CUP WASHER			040691
NYLON WASHER			040621

TABLE 4: ELASTOMER SETTING CHART

TERRAIN OR STYLE / RIDER WEIGHT	SMOOTH MILD	MEDIUM AVERAGE	ROUGH AGGRESSIVE
90-130 LB (41-59 KG)	ALL BLUE	BLUE & SOME RED	MOSTLY RED
130-160 LB (59-72 KG)	BLUE & SOME RED	MOSTLY RED	RED
160-190 LB (72-86 KG)	MOSTLY RED	RED	RED & YELLOW
OVER 190 LB (86 KG)	RED	RED & YELLOW	YELLOW

TROUBLE SHOOTING

Fork seems to "top out" or has a slight clunking feel when front wheel comes off the ground:
Excessive preload or insufficient rebound damping will result in a "top out" . Selecting elastomers that better fit your weight and riding style and having the preload adjuster set mid to low range and increasing the rebound damping will eliminate "top out".

The fork feels less active and is not getting the travel it used to when it was new:
Chances are that the fork is developing stiction. Cleaning and applying fresh oil to the foam donut wiper will help however every two months complete disassembly, cleaning, and re-greasing is especially after mud rides. This will keep the fork in good shape and working like new.

Outer legs feel loose on inner legs and bushings, a knock or rock can be felt when pushed from side to side:
The bushings may be worn. Disassemble per instructions, check both the upper and lower bushings for excessive damage and replace if necessary. Clean, grease, and reassemble.

CYCLE COMPUTER INSTALLATION INSTRUCTIONS Figure 16:

Follow the instructions in your owners manual with the following exceptions:

1. Remove the front wheel and locate the receiver on the top of the right dropout.
2. Use the template to locate any holes drilled in the dropout in the acceptable region.
3. Use a center punch or nail to punch mark the location of the hole in the right dropout.
4. Drill 1/8" dia. hole through the dropout.
5. Attach the receiver to the dropout by passing a zip tie through the hole and the receiver and tighten it securely (see sketch).
6. Attach the wire to the wheel side of the fork leg using zip ties or a strip of electrician's tape. Wind the wire around the brake arch and then the front brake cable casing on its path up to the handlebar mount. Do not attach the wire to the bicycle frame or any other part that does not turn with the handlebar and fork. Doing so will reduce the life span of the wire.

Note: The drill template shows the acceptable region to drill a 1/8" (3MM) dia. hole through the dropout. Drilling in other areas could damage the dropout and render that fork unsafe to use. The template also shows the recommended location for the Avocet receiver. Use the newer Avocet adjustable receiver identified by its lateral ratchet slider. Old Avocet receivers are fixed position and will not perform correctly on the Manitou Fork.

FIGURE 16: CYCLE COMPUTER MOUNTING