2007 Fork Service Manual

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INTRODUCTION

This manual is intended to guide the user through basic service of Manitou front forks. Service is supported by the identification of common parts and assemblies that have been assembled into Service Kits. The purpose of this manual will be to describe conditions that may drive the need for service and to provide installation instructions for the kits.

Due to the time-consuming nature of suspension fork service, at this time our primary focus is to offer service kits that minimize the amount of downtime and labor involved.

Important information is highlighted in this manual by the following notations:

WARNING
Failure to follow WARNING instructions could result in severe injury or death to the person inspecting or repairing the suspension fork or the user.

CAUTION
A CAUTION a caution indicates special precautions that must be taken to avoid damage to the product.

NOTE
A NOTE provides key information to make procedures easier or clearer

GENERAL WARNING: Suspension forks by design can contain preloaded springs, gases and fluids under extreme pressure and warnings contained in this manual must be observed to reduce the possibility of injury or possible death. Following these instructions can help you reduce the risk of being injured. Any questions in regards to the information in this manual should be directed to Answer Products Customer Service at (661) 257-4411.

WARNING: Suspension forks uses preloaded spring(s) to provide compression spring resistance. This system must be relieved of preload prior to servicing. Failure to relieve air pressure could result in injury or possible death.

CAUTION: Suspension forks use precision machined aluminum and other soft alloy components. Using correct tools for assembly is essential to prevent damage.

FRONT SUSPENSION TERMINOLOGY

Air Cap – Top cap that threads into top of air/spring leg (this is the left leg of the fork as you are seated on the seat). Forks may be controlled with an air/spring or a coil spring. The air cap contains the Schrader Valve, which is used to control the spring rate or SAG of air forks.

Air Spring – A mechanism that is used to control the SAG of an air fork.

Arch – A support that connects the two outer lower legs of the casting so as to keep them moving in unison.

Black Nitrate Leg Coating – New coating for steel stanchion legs that reduces stiction.

Boss – The word used to describe an outer casting that has brake posts for V-brakes or cantilever brakes.

Bottom Out Bumper – A rubber or elastomer device that absorbs the shock that occurs when a suspension is compression to its limit.

Bushings – A cylindrical sleeve between a fork stanchion tube (inner leg) and a fork outer casting (slider), which facilitates the sliding movement between these two parts.

Cartridge Damping – Provides better oil flow, bump sensitivity, and improved damping control in long travel applications.

Click-It Remote – A handle-bar lever actuated system that controls the lock out function on front and rear suspension products. It is activated by pressing the Red Lock button and unlocked by pressing the Green Release Lever.

Coil Spring – A coiled piece of metal that acts as a spring to help suspend a fork.

Coil Spring Air Assist – A new feature for 2005 that utilizes a full length coil spring and allows you to increase the spring rate of the fork by adding air as a booster to that coil spring.

Compression – The phase of the suspension operation in which the wheel travels up, or travels closer to the frame. The suspension forks reaction to a bump in the trail.

Compression Damping – Restriction of the rate that the suspension compresses under load.

Convertible Travel – A system used to alter the travel of a suspension fork. It requires moving a travel clip on the compression rod to a different position. This operation is accomplished by disassembling the fork and physically moving the travel clip on the compression rod.

Crown Steerer Assembly – the stanchion legs (inner legs), the fork crown, and the steer tube pressed together as one assembly. This assembly is then finished by adding all of the fork internals and then outer casting (slider).

Damping – A function that modifies the rate of suspension compression or rebound.

Detent – An indentation that causes a rotating adjuster to stop at fixed increments.

Drop Out – The end of an outer casting (slider) where the wheel attaches.

Dust Boot – Usually a piece of rubber in the shape of a cylinder with baffles to allow it to compress as the fork compresses through its travel. Its function is to help keep dirt and water from getting into the inner legs of the fork.

E2 Air System – Lightweight alternative to coil springs for steel legged forks eliminates the need for spring changes for various rider weights.

FRONT SUSPENSION TERMINOLOGY (CONT.)

FFD – Fluid Flow Damping. A Manitou patented low cost oil damping system. The compression damping is non-adjustable and the rebound damping may be non-adjustable or adjustable damping.

Fork Crown – The component that joins the stanchion tubes (inner legs) to the steer tube of the fork.

Hydraulic Fork Oil – Oil used in suspension designs to provide damping. It has special characteristics that determine how it reacts when exposed to compressed air, how it changes viscosity when its temperature changes, and how it moves through valves.

Hydraulic Lock Out – a condition caused when the mixture of air and damping oil is out of balance. It is caused when there is too little air space in a chamber, not allowing the fork to compress through its travel.

IS2 Integrated Stem System – integrates top triple clamp with bar mount, eliminating the need for a stem. Flip Flop mount allows for 45mm or 60mm stem measurements and spacers allow bar height adjustments. Includes shims for both 31.8 and 25.4mm handlebars.

Infinite Travel System (IT) – A handle-bar mounted air travel adjust system that allows the rider to change the fork travel (and ride height) without a spring rate change. The travel can be changed from full compression to full rebound and at any place in between.

Intrinsic Damping– speed sensitive SPV based damping system for long travel applications. Provides better sensitivity to small bumps and superior bottoming resistance.

Lock Out – a special function that restricts the compression of the fork from moving. It is generally controlled by an external knob that is activated when a rider does not want the fork to move, thus eliminating extra energy needed to overcome the bobbing forces of the fork.

MCU – (Micro-Cellular Urethane) Special urethane that is filled with tiny air cells that act like springs when the elastomer is compressed.

No Boss - The word used to describe an outer casting that has no brake posts for V-brakes or cantilever brakes. This casting is to be used for disk brakes only.

No Tools SPV Volume Adjust – A new system designed to work with SPV as a control of the compression ramp up rate of the fork. It has a 4-position range of adjustments from linear to very progressive, adjustment doesn't require a socket.

No Tools Hex Lock Axle – Update of patented Hex Lock through axle provides simple and effective wheel removal system without requiring tools. Features dual quick release to remove pinch pressure and the axle is tighten and loosened with hand turned side tension bolt.

Oil Damping – A system that uses the resistance to oil flow through holes in a valve to provide a means to alter the rate of suspension compression or rebound.

Oil Level – The level of damping oil needed for the optimal damping performance of a suspension. It is measured as the air space distance between the top of the stanchion leg (inner leg) and the height of the oil inside of the leg. The fork must be completely extended in order to get an accurate measurement.

O-Ring – A soft, flexible neoprene or Buna rubber ring with a round cross-section, which is used for sealing and retention.

FRONT SUSPENSION TERMINOLOGY (CONT.)

Oil Weight – A description of the relative viscosity of oil, such as hydraulic oil. Oil with low weight numbers (5wt or 7wt) flows through the valving with less resistance than higher weight numbers (10or 15 wt).

One Point Five Standard - 1.5 inch interface standard for frame head tubes, headset, cups, stem, and steer tubes which allows for the lightest weight and strongest design in 170mm single crown forks. This design greatly improves the control and steering precision of the fork. It is used predominately on forks with longer travel and the intended use is for more hardcore, extreme riding.

Outer Casting – (see Slider)

Preload – A condition of compressing a spring or elastomer before the operating loads are put on the suspension, so that it provides a stiffer spring rate.

Piston – In front suspension, the part of the damper that slides back and forth inside of the damping leg that houses the valves. It can also refer to the air piston in the air/spring assembly that slides back and forth compressing the air, thus causing a change in the spring rate of the suspension.

Porosity – The condition or property of having pores in a material that will allow gas or liquid to pass through it.

Platform Plus Damping – A new damping system found on 2005 Rear shocks (featured on Metel and Radium's). This system will establish a pedaling efficiency platform similar to SPV, but is done through unique valving that is not adjustable (helps in bump control).

Rapid Travel II, Wind Down – Systems that are used to control the travel of suspension forks. Also known as RTII and WD. RTII is used for the specific purposes of controlling the travel in two conditions: climbing and descending. WD is an incremental travel adjustment between two set limits and does not affect the spring rate of the fork as severely as RTII.

Quad Ring seal – New seal that replaces standard o-rings in designs that require more efficient air and oil sealing methods.

Rebound – The phase of the suspension operation in which the wheel returns to its original position on the ground after compression.

Rebound Damping – Restriction of the rate that the suspension rebounds when the compression load is relived.

Remote Lock out system – A handle-bar lever actuated system that controls the lock out function on front and rear suspension products.

Reverse Arch Technology – Also known as RA. It is a system that is designed to move the arch of a fork to the backside of a fork, rather than the conventional front position. It was designed to provide greater rotational torque strength to an outer casting (slider), without adding additional weight to the fork.

Snap Valve SPV– High platform, low threshold SPV damping system that is resistant to pedaling induced movement but still offers bottoming resistance and small bump sensitivity.

Sag – The amount a suspension fork compresses at rest with a normal load (rider's weight).

Schrader Valve – Valve used to introduce air into a chamber.

FRONT SUSPENSION TERMINOLOGY (CONT.)

Seal – A part, usually neoprene rubber or Buna, that keeps contaminants out and/or working fluids in.

Semi Bath – A lubrication system that uses a lubricating oil to keep the bushing surface and stanchion legs (inner legs) as friction free as possible during movement of the stanchion legs.

Spring Rate – The rate at which the resistance of a spring increases as it is compressed.

SPV – (Stable Platform Valve) new damping system that allows the rider to set the pedaling platform that he desires to pedal most efficiently in all situations. It is dependent on the pressure that the SPV valve experiences from the movement of the wheel vs. the terrain and the platform that is set by pressure introduced to other side of the SPV valve through changes of air pressure working on the damping oil.

SPV Evolve – The latest version of SPV damping technology that has increased its performance with modifications to the original design.

Slider/Outer Casting – The tube (outer casting leg) of the suspension fork that0. remains fixed to the wheel. It slides up and down on the stanchion leg (inner leg).

Stanchion Clamps - (Double-Triple Clamps) the portions of the fork crown that clamp around the stanchion legs above and below the head tube of the bicycle frame on specific long travel applications.

Stanchion Legs – The suspension tube (inner leg) fixed to the fork crown. It remains stationary during the operation of the suspension.

Steer Tube – The long cylindrical tube that extends from the top of the fork crown. Its function is to be inserted into the bicycle head tube and attach the suspension to the bicycle frame.

Thru Axle – (Hex-lock) A device used for mounting a thru axle hub to special outer legs that are not made for standard quick release hubs. Manitou's Hex-lock (thru axle) system is a special patented system utilizing a hex shaped end that increases the stiffness of the fork and reduces slippage in the joint between the axle clamps and the axle.

Top Out Bumper – A rubber, coil spring, or elastomer device that absorbs the shock that occurs when the load is taken off a suspension so that it is allowed to rebound to its limits

TPC – (Twin Piston Chamber) a patented damping system that has independent pistons for rebound and compression. The system utilizes a mixture of air and oil in the damping leg of the fork to enhance the damping performance.

TPC+ - A variation of TPC that has added a floating piston to the compression damper to enhance the performance of the compression damping under the load of bigger hits.

Travel – The amount that a wheel moves between the most compressed and the most extended states of the suspension

Viscosity – A description of how a liquid flows. Liquids with higher viscosity are thicker flow less easily or quickly than liquids with low viscosity. This has an affect on the damping speeds of rebound and compression.

Volume Control – A new system designed to work with SPV as a control of the compression ramp up rate of the fork. It has a range of adjustments from linear to very progressive.

Wiper Seal – A rubber material that is used as a seal to keep dirt and water out of the outer casting legs. It is not designed to keep air pressure or extreme oil pressure in.

Fig. 1

Fig. 2

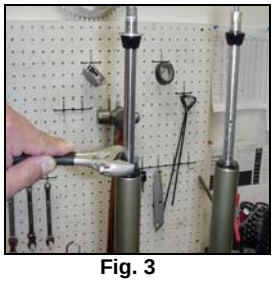


Fig. 3

Section 1: Damping Systems

FFD and TPC Damping System Service

Disassembly Instructions for FFD and TPC Damping

1. First the rebound knob will need to be removed. Screw the rebound all the way in (clockwise), and then remove the 2mm hex screw inside the knob by turning it counter- clockwise. Remove the knob by pulling gently away from the fork.
2. Use an 8mm hex wrench to turn the damper shaft **clockwise** until it can be pushed into the casting. (see Fig. 1)
3. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
4. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. The fork uses the Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.
5. **For forks with Non-Adjustable compression damping:**
    a. Using a 26mm socket unscrew the damping assembly top cap from the crown. It may be necessary to twist the assembly like you would be unscrewing a screw and gently pull upward to free the assembly from the crown. Fig 2 **(Note: there will be a small amount of oil that comes out of the inner leg, when the assembly is pulled from the crown)**
6. **For forks with Adjustable compression damping/Lock out**:
    a. Twist the knob all the way counter-clockwise to reduce the amount of compression damping on the system.
    b. Unscrew the 2mm Allen screw that holds the adjuster knob to the damping assembly.
    c. Remove the adjuster knob and unscrew the compression assembly from the crown using a 20mm socket. It may be necessary to twist the assembly like you would be unscrewing a screw and gently pull upward to free the assembly from the crown. Fig. 2 **(Note: there will be a small amount of oil that comes out of the inner leg, when the assembly is pulled from the crown)**
7. **For forks with Remote Lock-Out compression damping:**
    a. Make sure that the Lock out is in the off position.
    b. Unscrew barrel adjuster in a counterclockwise direction until it stops.
    c. Unscrew the set screw on the lever using a 2mm allen wrench.
    d. Pull the cable out of the lever and remove the housing from the cable.
    e. Unscrew the top cap of the Lock out assembly from the fork crown using socket (Answer p/n: 83-2503) or an adjustable wrench.
    f. Pull Lock out assembly out of crown by twisting the assembly like unscrewing a screw and applying an upward pressure. Slowly pull assembly out of crown and watch out for some excess damping oil to come out of inner leg as the piston at the end of the assembly comes out of crown.
8. Turn fork upside down over drainage pan to empty Damping oil from the inner leg. Stroke the Damper shaft on the bottom of the inner leg 3-5 times to purge the leg of oil that is caught below the Rebound piston.
9. Unscrew Damper end cap from the bottom of the right leg and then carefully pull the damping assembly out of inner leg. See Fig. 3

Assembly of FFD and TPC Damping System

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

10. Install the damping assembly into bottom of inner leg. Be sure to apply a thin layer of Prep M grease onto piston ring that is around the piston at top of assembly. Install the assembly and tighten end cap to specified torque value.
    NOTE: **Proper torque of the damper cap to 92 - 115 Kg/Cm (80 - 100inlbs) is critical; failure to tighten properly will result in system failure!**
11. Turn Crown/steer/leg assembly right side up, so that the crown of the assembly is facing you. Extend the damping assembly all the way out and then pour damping oil (P/N: 85-0023) into the right inner leg. Fill leg about ¼ full. Take a rag and cover the top of the right inner leg and then stroke the damping assembly up and down about 5 times. This will insure that oil gets below the piston and not create an air space.
12. Extend the damping assembly all the way out and then fill the inner leg to the specified oil level in the Fastener Torque and Setup Levels Chart at the end of the manual.

WARNING All top caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

13. **For forks with Non-Adjustable FFD:**
    a. Put a little bit of Prep M grease (Ref Answer Products PN 85-0031) on o-ring found on the lower piston of the FFD assembly.
    b. Install the FFD Assy into the top right hand of the crown/steer using a 27mm socket. Tighten per the Axel Schematic and Torque Specification Table.
14. **For forks with Adjustable compression damping/Lock out**:
    a. Fill right leg with damping oil using 5wt Motorex fork oil (Ref Answer Products PN 85-0023) to the height noted in the Axel Schematic and Torque Specification Table. Cover the opening at the top of the right leg of the crown/steer with a rag and cycle the fork six times. Recheck oil level and add/drain to meet the level requirement.
    b. Put a little bit of Prep M grease (Ref Answer Products PN 85-0031) on the urethane or brown rubber o-ring found on the lower piston of the Lock out assembly.
    c. Twist the Hex shaped aluminum shaft that sticks up from the top cap counter clockwise until it stops (the system is completely open to oil flow at this point).
    d. Using a motion like screwing in a screw. Twist the assy. and apply a little pressure to insert the piston part of the mechanism past the threads at the top of the inner leg. Then push the assy. into the leg until the threads on the cap intersect the threads inside the inner leg, screw the cap. Tighten per the Axel Schematic and Torque Specification Table.
    e. Once the cap is tightened, twist the Hex shaped shaft clockwise until it stops (this is the locked out position). Insert the springs into opposite holes in the top cap and then place the ball bearings on top of the springs (place a little dab of grease on spring to hold ball bearing in place).
    f. Place the adjuster knob onto the hex shaped aluminum shaft and seat it onto the top cap and ball bearing. Position the adjuster cap so that the lever part of the cap is at the farthest point to the back of the crown.
    g. Insert 2mm fixing screw and tighten to secure the knob. Twist the knob counter clockwise to activate the fork suspension. Compress the fork several times to circulate the oil through the system and then activate the Lock out system by moving the lever clockwise to its stopping point at the back of the crown. The fork should have approximately 5 mm of progressive travel before it locks out.

Assembly of FFD and TPC Damping System – Cont.

15. **For forks with Remote Lock-Out compression damping:**
    a. Fill right leg with damping oil using 5wt Motorex fork oil (Ref Answer Products PN 85-0023) to the height noted in the Axel Schematic and Torque Specification Table. Cover the opening at the top of the right leg of the crown/steer with a rag and cycle the fork six times. Recheck oil level and add/drain to meet the level requirement.
    b. Put a little bit of Prep M grease (Ref Answer Products PN 85-0031) on the urethane or rubber o-ring found on the lower piston of the Lock out assembly.
    c. Using a motion like screwing in a screw. Twist the assy. and apply a little pressure to insert the piston part of the mechanism past the threads at the top of the inner leg. Then push the assy. into the leg until the threads on the cap intersect the threads inside the inner leg, screw the cap down using the cut out 22mm socket. Tighten per the Axel Schematic and Torque Specification Table.
    d. With the lever in the released position (Red Lever will be up), install the Remote Lock-Out cable by inserting it into the bottom of the clamp and up through the lever. Pull the slack out of the cable and tighten down the 2mm anchor screw on the lever. You should have approximately a 2mm gap between the lever and the housing when it is properly installed. (See Figure 3)
    e. Run the cable of the top of the lever and then through the hole on the back of the lever.
    f. Bend the cable in towards the stem at a 90degree angle, trim the cable so that it is the same length as the lever itself and then install the cable end crimp. (See figure 4)
    g. Screw the barrel adjuster out in a clockwise direction until you just remove the slack in the cable. If you tighten the cable to much the lock out will not release and the fork will not move.

16. Turn completed crown/steer/leg assembly upside down, so that the compression rod and damper shaft are facing you. You will see a bottom out bumper on the damper shaft; slide this bumper down towards the end cap that is threaded into the inner leg. This will help in keeping the shaft extended as you install the outer casting. You could also insert air into the damper leg through the Schrader valve on top of the right leg (SPV models). This extra pressure will help to keep the shaft from moving.
17. Replace the o-ring at the end of the rebound shaft, if not you will risk having a leak in that area.
18. Extend the rebound damper out from end cap as far as it will go and then slide bottom out bumper towards the end cap as far as it will go. The bumper will help to hold the damper shaft in place as you are inserting the inner legs into the casting.
19. Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject **16cc's** of oil into each outer leg. It is recommended to use a syringe to inject oil.
20. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
21. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting. Tighten per the Schematic and Torque Specification Table for your fork.
22. Install rebound adjuster knob if applicable. Knob should turn uninhibited until the indicator is stopped by the casting (if applicable). If not, remove knob and reinstall on hex shaft in 1/6 turn increments until full travel is reached.
23. Install the compression rod screw and tighten per the Black Schematic and Torque Specification Table.
24. **For forks with the Wind Down system:** follow steps 2 – 5 from the Wind Down Travel Adjust assembly instructions.

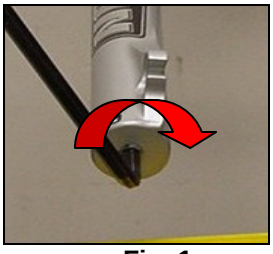


Fig. 1

Fig. 2

Fig. 3

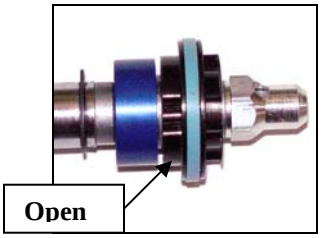


Fig. 4

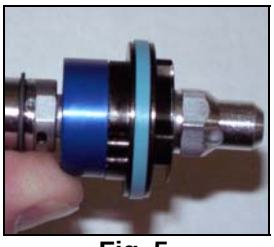


Fig. 5

SPV Damping System Service

Disassembly Instructions for SPV Damping

5. The rebound knob needs to be removed. Screw the rebound all the way in (clockwise), and then remove the 2mm hex screw inside the knob by turning it counter- clockwise. Remove the knob by pulling gently away from the fork.
6. Use an 8mm hex wrench to turn the damper shaft **clockwise** until it can be pushed into the casting. (see Fig. 1)
7. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
8. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. The fork uses the Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.

WARNING This fork uses compressed air as part of the SPV damping system and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

9. Remove Schrader valve dust cap from Red Hex Shaped Top Cap on the top right of the crown. Release all air pressure from the Schrader valve. (Fig. 2)
10. Remove SPV Volume Control Cap (Red Hex Shaped Top Cap) from top right of the crown with a 24mm Socket. Turn fork upside down over drainage pan to empty Damping oil from the inner leg. Stroke the Damper shaft on the bottom of the inner leg 3-5 times to purge the leg of oil that is caught below the Rebound piston.
11. Unscrew Damper end cap from the bottom of the right leg. (Fig. 3)
12. Pull the SPV Damping assembly out of inner leg. To check the function of the SPV valve: Visually inspect the gap between the SPV valve and the bottom of the damping piston. It should have approximately 1mm of space (Fig. 4). The valve should spring back to its open rested position after compressing it with your fingers (Fig. 5). If the valve is not responsive or all the time closed, it is bad and the assembly needs to be repaired or replaced.

Assembly of SPV Damping System

WARNING All top caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. Install SPV damping assembly into bottom of other inner leg. Be sure to check the function of the SPV valve and apply a thin layer of Prep M grease onto o-ring that is around the piston at top of assembly. Install the assembly and tighten end cap to specified torque value.(Fig. 6)
   NOTE: Proper torque of the damper cap to 92 - 115 Kg/Cm (80 - 100inlbs) is critical; failure to tighten properly will result in system failure!
2. Turn Crown/steer/leg assembly right side up, so that the crown of the assembly is facing you. Extend the SPV damping assembly all the way out and then pour damping oil (P/N: 85-0023) into the right inner leg. Fill leg about ¼ full. Take a rag and cover the top of the right inner leg and then stroke the SPV damping assembly up and down about 5 times. This will insure that oil gets below the piston and not create an air space.
3. Extend the damping assembly all the way out and then fill the inner leg to the specified oil level in the Fastener Torque and Setup Levels Chart at the end of the manual
4. Insert the Volume control assembly into the top of the right inner leg and tighten it to specified torque value. Be sure that you unscrew the red 16mm Hex shaped Volume control nut all of the way out counterclockwise until it is flush with the black outer surface of the cap, after you tighten the entire assembly into the inner leg.

Fig. 6

Fig. 7

Fig. 8

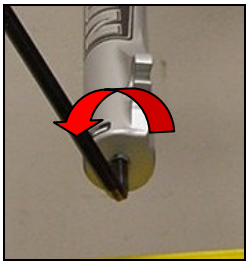


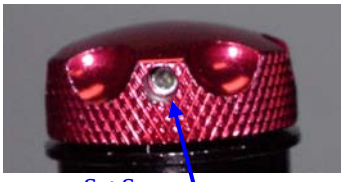
Fig. 9

Assembly of SPV Damping System-Cont.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. Turn completed crown/steer/leg assembly upside down, so that the compression rod and damper shaft are facing you. You will see a bottom out bumper on the damper shaft; slide this bumper down towards the end cap that is threaded into the inner leg. This will help in keeping the shaft extended as you install the outer casting. You could also insert air into the damper leg through the Schrader valve on top of the right leg (SPV models). This extra pressure will help to keep the shaft from moving.
2. Replace the o-ring at the end of the rebound shaft (Fig. 7), if not you will risk having a leak in that area. On the Nixon, Minute, and Stance Forks there are two different O-rings which may have been used on your fork. Use the same color o-ring as the original when you replace it, both styles will be included in your service kits (Fig. 8).
3. Extend the rebound damper out from end cap as far as it will go and then slide bottom out bumper towards the end cap as far as it will go. The bumper will help to hold the damper shaft in place as you are inserting the inner legs into the casting.
4. Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject **16cc's** of oil into each outer leg. It is recommended to use a syringe to inject oil.
5. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
6. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting (Fig. 9). Tighten per the Schematic and Torque Specification Table for your fork.
7. Install rebound adjuster knob if applicable. Knob should turn uninhibited until the indicator is stopped by the casting (if applicable). If not, remove knob and reinstall on hex shaft in 1/6 turn increments until full travel is reached.
8. Install the compression rod screw and tighten per the Black Schematic and Torque Specification Table.
9. **For forks with the Wind Down system:** follow steps 2 – 5 from the Wind Down Travel Adjust assembly instructions.
10. Pressurize the SPV system to 50psi and check for proper damping function.

Use: 8mm Allen wrench, 2mm Allen wrench, 11mm Nut Driver or open end wrench, Syringe for Semi Bath Oil, Air pump



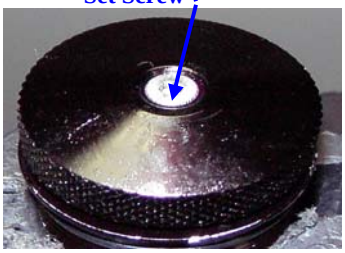


Fig 1 and 2

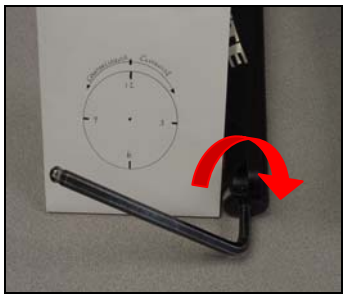


Fig. 3

Fig 4

Fig. 5

Fig. 6

Cartridge Damping System Service

All Cartridge Damping systems are serviced the same regardless of which forks they are used in, the only difference between the different models is the length of the cartridge body, compression assembly and/or in some instances the length of the rebound assembly. A chart of the dimensional differences is provided at the end of the section for your reference. All knobs, o-rings, seals and end caps are the same. One of the advantages to the system is the fact that you can service the system without having to remove the outer legs from the fork.

Cartridge Damper System Removal

Remove the cartridge from the fork:

1. Screw the rebound adjuster in clockwise fully so you are at the max. rebound position. Remove the rebound knob from the bottom of the fork by unscrewing the fixing bolt with a 2mm allen wrench. Pull the knob out of the rebound assembly.
2. Remove the compression knob from the top of the fork using a 2mm allen wrench. Remove the detent balls and springs after pulling off knob. (See Fig 1 and 2) Red knob is for CID systems and Black is TPC systems.
3. Invert the fork and insert 8mm Allen wrench into the end of the Rebound Shaft on the bottom of the right leg. Turn the wrench in a ***Clock Wise*** direction in order to loosen the damper shaft in the casting. (See Fig.3) You are turning the Damper Shaft in a way that causes it to disappear into the casting leg.
4. Screw in the Rebound Casting Plug (Answer P/N**-****) or a rubber stopper into the lower casting to keep the semi-bath from leaking out. **Note: if you suspect that the cartridge is leaking into the outer leg omit this step and drain the oil from the casting**. (See fig. 4)
5. Turn the fork back upright and remove the cartridge from the fork using a 22mm socket by unscrewing it counterclockwise.

CTPC+ Damper Rebuild Instructions

Disassembly

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-****) with the cartridge in an upright position.

1. Using a 22mm socket remove the TPC+ compression assembly from the cartridge by unscrewing it counterclockwise. Once you have completely unscrewed the assembly, pull it out of the cartridge.
2. Pour out the oil in the cartridge and using a **mm or adjustable wrench, remove the rebound assembly by unscrewing it counterclockwise. Once you have completely unscrewed the assembly, carefully pull it out of the cartridge so that you don't damage the piston rings on the threads in the cartridge.
3. Clean the cartridge body and check for scratch or imperfections in the inner walls of the tube.

Reassembly

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-****) with the cartridge upside down.

5. Lightly coat the piston ring on the rebound assembly with Motorex grease. Insert the assy. into the cartridge body being careful not to damage the piston ring on the threads. Also apply a small amount of blue Loctite to the threads of the end cap. (see Fig. 6)
6. Using a 22mm or adjustable wrench, tighten the rebound assy. end cap in a clockwise direction to 50 in/lbs (5.65 N-M).

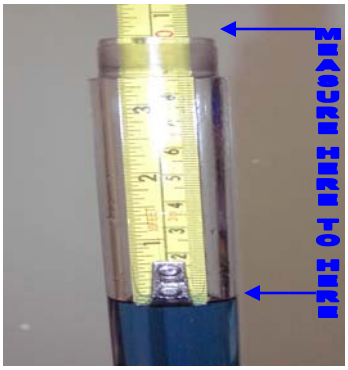


Fig. 7

Fig. 8

Fig. 9

Fig 10A

Fig. 10

Cartridge Damping System Service - cont.

Reassembly-Cont.

1. Turn the cartridge right side up and fill half way with Motorex 5w Shock oil. Stroke the rebound assembly several times to remove any air that maybe trapped under the piston. Pull the rebound assembly to the bottom of its stroke.
2. Finish filling the cartridge body to the correct level listed in table. In order to determine the proper oil level, measure from the top of the cartridge body to the top surface of the oil (see Fig. 7) or use Oil Level tool.
3. Lightly coat the piston rings on both pistons on the TPC+ compression assembly with Motorex grease. Apply a small amount of blue Loctite to the threads on the cartridge body. Insert the assy. into the cartridge body being careful not to damage the piston rings as they enter the cartridge body. (Fig. 8)
4. Using a 22mm or adjustable wrench, tighten the compression assy. top cap in a clockwise direction to 50 in/lbs (5.65 N-M).

CID (Intrinsic) Damper Rebuild Instructions

There are two types of CID dampers, one has an air backed IFP and the other has a spring backed IFP. Air backed IFP CID cartridges can be identified by the small 5-Sided (Pentagon) Schrader valve cap found in the top cap (See Fig 10A). Field service of spring IFP CID cartridges is not recommend as it is necessary to pull a slight vacuum on the CID Assy to make sure that the IFP is properly positioned. To do this you must have vacuum tool. Also a clear plastic tube is used in these instructions for demonstration purposes, actual cartridge is metal.

WARNING Air backed IFP CID cartridge dampers use compressed air as part of the damping system and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

Disassembly – Spring Backed IFP CID Cartridges

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-****) with the cartridge in an inverted position.

1. Using an adjustable wrench, remove the rebound assembly from the cartridge by unscrewing it counterclockwise.(Fig. 9) Once you have completely unscrewed the assembly, carefully pull it out of the cartridge so that you don't damage the piston rings on the threads in the cartridge.
2. Pour out the oil in the cartridge and using a 22mm socket, remove the CID Compression assembly by unscrewing it counterclockwise. Once you have completely unscrewed the assembly, pull the assy. from the cartridge body. (Fig. 10) Clean the cartridge body and check for scratch or imperfections in the inner walls of the tube. Next examine the compression assy., make sure that the CID valve body is free to move (i.e. will open and close), it is not necessary that it spring to the open position, only that it has full travel.

Reassembly – Spring Backed IFP CID Cartridges

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-****) with the cartridge right side up.

1. Lightly coat the piston ring and IFP on the CID compression assembly with Motorex grease and apply a small amount of blue Loctite to the threads of the cartridge body. Insert the assy. into the cartridge body being careful not to damage the piston ring and o-ring as they enter the body. Screw the top cap on about 6 turns. DO NOT tighten the top cap down before you pull the vacuum on the IFP.
2. Insert the vacuum tool (P/N **-****) into the open end of cartridge body, pull back fully on the plunger and hold for 60 seconds, this creates a vacuum to make sure that the IFP is fully extended. (Fig. 11)

Fig. 11

Fig. 12

Fig. 13

Fig. 14

Fig. 15

Cartridge Damping System Service - cont.

Reassembly – Spring Backed IFP CID Cartridges -Cont.

3. Using a 22mm socket wrench, tighten the CID top cap in a clockwise direction to 50 in/lbs (5.65 N-M).
4. Turn the cartridge upside down at 45 degree angle and fill half way with Motorex 5w Shock oil. Lightly tap the side of the cartridge body several times to remove any air that maybe trapped between the IFP and the CID Piston.
5. Turn the cartridge body so that it is fully upright and completely fill the body with 5wt shock oil (Fig. 12). Pull the rebound assy. out so that it is in the fully extended position, the valve assembly is closest to the end cap, from here slide the endcap back down the shaft 10mm. It is easiest to measure from the nut to the flange on the endcap. (see Fig. 13)
6. Lightly grease the piston ring on the rebound shaft. Carefully insert the assy. into the cartridge body taking care that the piston ring isn't damaged by the threads of the body.
7. As you tighten the cap down, oil and trapped air is going to bleed out of the small hole in the side of the cap. This is supposed to happen to insure that there is no air in the system. It is recommended to wrap a shop towel around the cartridge body below the end cap to catch this so it doesn't create a mess in the work area.
8. Stroke the rebound assembly several times to dislodge any air that is trapped in the CID. Allow the cartridge to sit for a few minutes, remove the rebound assy. Remove the rebound assy; fully refill the damper cartridge with shock oil. Degrease the rebound piston lightly as before and apply a drop of Loctite to the threads of the endcap.
9. Carefully insert the assy. into the cartridge body taking care that the piston ring isn't damaged by the threads of the body. Again you will have a small amount of oil and air bleed out of the hole in the endcap and this is normal.
10. Tighten down the end cap in a clockwise direction to 50 in/lbs (5.65 N-M)

Disassembly – Air Backed IFP CID Cartridges

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-*****) with the cartridge in an inverted position.

1. Using Answer service tool 83-2694, remove the pentagon Schrader cap found in the top cap, see figure 19A. Depress Schrader valve to release IFP charge air.
2. Using an adjustable wrench, remove the rebound assembly from the cartridge by unscrewing it counterclockwise.(Fig. 9) Once you have completely unscrewed the assembly, carefully pull it out of the cartridge so that you don't damage the piston rings on the threads in the cartridge.
3. Pour out the oil in the cartridge and using a 22mm socket, remove the CID Compression assembly by unscrewing it counterclockwise. Once you have completely unscrewed the assembly (Fig 15), pull the assy. from the cartridge body. Clean the cartridge body and check for scratch or imperfections in the inner walls of the tube. Next examine the compression assy., make sure that the IFP is free to move on the shaft, replace IFP Piston Seal.

Reassembly – Air Backed IFP CID Cartridges

Place Cartridge assembly in bicycle work stand or secure with Cartridge Clamp Blocks (Answer P/N **-*****) with the cartridge right side up.

1. Lightly coat the piston ring and IFP on the CID compression assembly with Motorex grease and apply a small amount of blue Loctite to the threads of the cartridge body. Insert the assy. into the cartridge body being careful not to damage the piston ring and o-ring as they enter the body. Screw the top cap and tighten per the Torque Chart.
2. Insert Answer service tool 83-2694 air pump adapter into the top cap Schrader, pump to 5.2 Bar (75psi). Reinstall pentagon Schrader Cap.

Reassembly – Air Backed IFP CID Cartridges (Cont.)

3. Follow steps 3 – 10 under “Reassembly – Spring Backed IFP CID Cartridge.

Cartridge Damper System Reinstallation

To reinstall the cartridge in the fork:

1. Make sure that the rebound adjuster is screwed in clockwise fully.
2. Replace the o-ring on the rebound shaft to match the one that was installed when you removed the assy. (either black or clear)
3. Slightly compress the fork and insert the Cartridge Damper System into the fork leg. Turn the cartridge clockwise to engage the threads of the rebound assembly.
4. Release the fork so it extends to its full travel. If you drained the Semi bath oil previously, add the proper weight and amount as listed in the table. Using a 22mm socket screw the top cap into the fork and tighten per the torque chart.
5. Invert the fork, remove the Rebound Casting Plug (Answer P/N**-****) or rubber stopper from the lower casting.
6. Insert an 8mm Allen wrench into the end of the Rebound Shaft on the bottom of the right leg. Turn the wrench in a ***Counterclockwise*** direction in order to tighten the damper shaft in the casting. (See Fig.16) You are turning the Damper Shaft in a way that causes it to thread out of the casting leg. The end of the damper shaft should be flush with the end of the casting. (See Below)

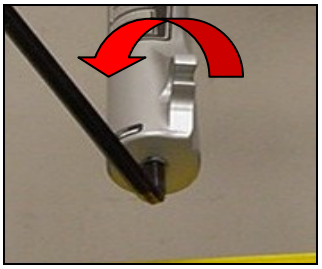


Fig. 16

7. Thoroughly clean the area in the end of the rebound shaft of any trapped semi-bath oil. Otherwise it will give the appearance that the fork is leaking.
8. Turn the fork upright, install the detent springs and balls in to the top cap. Install the compression adjusting knob and screw. secure them using a 2mm allen wrench and tighten per the torque chart.

Section 2: Crown Steer Assy Replacement

Starting in model year 2007, Manitou co developed with Trek Bicycles custom offset crowns for use in Fisher bikes incorporation the “Genesis 2” frame geometry. These forks have a “G2” sticker as shown below. If you need to replace the crown steerer in one of these models, please be sure to select the “Trek BBM” crown steer as a replacement from the applicable Service Kit list.

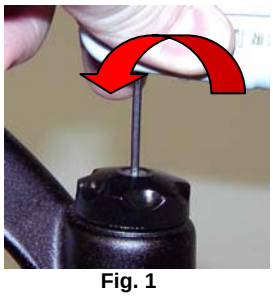


Fig. 1

Fig. 2

Fig 2A

Fig 2B

Section 3: spring Systems

Coil Spring Service Instructions

Removal Coil Spring Assembly

WARNING This fork uses a preloaded coil spring provide spring resistance. The spring must be relieved of its preload prior to servicing. Failure to do so could result in injury or possible death.

For Forks with Pre-Load adjuster assemblies (coil spring systems):
To Change the Spring:

1. Rotate the Pre-Load adjuster knob all of the way counter clockwise to reduce the pre-load on the spring. Rotate adjuster on top left of fork crown counterclockwise until it stops. This will relieve spring tension on the fork.
2. Remove the adjuster knob from the top of the Pre-Load adjuster assembly, by unscrewing the 2mm Allen head screw. (See Fig 1)
3. Use a 20mm socket and unscrew the remainder of the assembly from the crown. Pull the spring out of the fork. (See Fig 2)
4. Generously grease the new spring and insert it into the inner leg. The spring needs to seat onto the top of the compression rod.
5. Screw the preload assembly into the inner leg and tighten per the fastener torque guide at the end of this manual.
6. Install the adjuster knob and 2mm hex screw.

For Forks with Stage II Spring Rate Adjuster assemblies (coil spring systems):
To Change the Spring:

1. It is not necessary to adjust the knob all of the way counter clockwise prior to removal since this assy does not significantly load the spring.
2. Remove the adjuster knob from the top of the Pre-Load adjuster assembly, by unscrewing the 2mm Allen head screw. There are two detent balls and springs in the cap (See Fig 2A), be careful not to lose them when removing the knob.
3. Use a 20mm socket and unscrew the remainder of the assembly from the crown. Pull the adjuster out of the fork. (See Fig 2B)
4. Compress the fork slightly to allow the spring to rise above the crown and remove the spring.
5. Generously grease the new spring. The spring will have a “D” shaped hole on one end, insert the corresponding “D” fitting of the Stage II adjuster into it and insert the spring and adjuster into the inner leg. The spring needs to seat onto the top of the compression rod.
6. Screw the Stage II assembly into the inner leg and tighten per the fastener torque guide at the end of this manual.
7. Install the Two detent springs and balls into the top cap. Applying a small amount of

Fig. 2

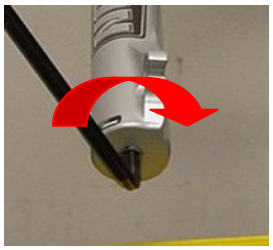


Fig. 3

Fig. 4

Fig. 5

For a complete teardown of the spring system including the compression rod:

1. You must remove the outer casting from the inner legs:
    a. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
    b. From the right leg dropout, if the fork has adjustable rebound, the knob will need to be removed. Screw the rebound all the way in (clockwise), and then remove the 2mm hex screw inside the knob by turning it counter clockwise. Remove the knob by pulling gently away from the fork Use an 8mm hex wrench to turn the damper **clockwise** until it can be pushed into the casting. (See Fig. 3)
    c. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. If the fork uses the Semi-bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed.
    d. Then remove the end cap from the bottom of the left leg and remove the compression rod and spring through the bottom of the leg. (See Fig. 4).
2. Turn the fork over, rotate the preload adjuster on top left of fork crown counterclockwise until it stops. This will reset the preload in the lowest tension setting when you rebuild the fork.
3. Remove the adjuster knob from the top of the Pre-Load adjuster assembly on the top of the crown on the left side of the fork, by unscrewing the 2mm Allen head screw.
4. Unscrew the assembly from the crown and then pull it out of the inner leg.

Installing Coil Spring Assembly

1. Reassemble the compression rod assembly and install in the fork leg.
2. Generously grease the spring and insert it into the inner leg. The spring needs to seat onto the top of the compression rod. (See Fig. 5)
3. Screw the preload assembly into the inner leg and tighten per the fastener torque guide at the end of this manual.
4. Install the adjuster knob and 2mm hex screw.

For Grease Forks

5. Lightly grease the bushings on the inside of the outer leg casting and on the lower portion of the inner legs below the boots using a thick grease such as Motorex Bike Grease 2000. Proceed to Step 7.

For Semi bath Forks

6. - Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject **16cc's** of oil into each outer leg (**45cc for Travis)**. It is recommended to use a syringe to inject oil.
7. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
8. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting. Tighten per the Schematic and Torque Specification Table for your fork.
9. Install rebound adjuster knob if applicable.
10. Install the compression rod screw and tighten per the Schematic and Torque

Fig. 1


Fig. 2

Fig. 3

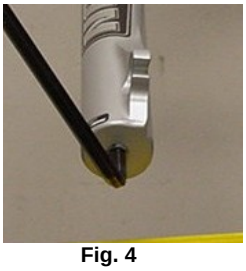


Fig. 4


Fig. 5

Wind-Down Travel Adjust Service Instructions

WARNING This fork uses a preloaded coil spring provide spring resistance. The spring must be relieved of its preload prior to servicing. Failure to do so could result in injury or possible death.

Removal Wind Down Travel Adjust Assembly

1. Make sure that the Travel Adjust is in its fully extended position (Fig 1). Rotate adjuster on top left of fork crown counterclockwise until it stops. This will relieve spring tension on the fork.
2. Remove the adjuster knob from the top of the Wind Down adjuster assembly on the top of the crown on the left side of the fork, by unscrewing the 2mm Allen head screw. Remove the o-ring that is located on the indicator dial.
3. Use a 28mm socket and unscrew the remainder of the assembly from the crown (Fig. 1). The spring will be attached to the bottom of the assembly (Fig. 3).
4. Pull the spring out of the Travel Adjust assembly.
5. If spring will not come out, you must take the outer casting off of inner legs:
    a. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
    b. From the right leg dropout, if the fork has adjustable rebound, the knob will need to be removed. Screw the rebound all the way in (clockwise) remove the 2mm hex screw inside the knob by turning it counter clockwise. Remove the knob by pulling gently away from the fork
    c. Use an 8mm hex wrench to turn the damper **clockwise** until it can be pushed into the casting. (see Fig. 4)
    d. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. If the fork uses the Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.
    e. Remove the end cap from the bottom of the left leg and remove the Wind Down compression rod assembly and spring as a single unit through the bottom of the leg (Fig. 4).
    f. On earlier production fork models, that there is a nylon washer at the top of the compression rod assembly that is holding the spring in place. Hold the spring in one hand and the compression rod assembly in your other hand and pull the apart from each other at a slight angle to each other.
    g. Once you have the two apart, remove the Allen bolt on top of the compression rod with a 4mm Allen wrench and remove the nylon washer. Re-install the bolt without the washer, it will not affect the operation of the Wind Down mechanism and insure that you will not have to take the whole fork apart in the future to change ride kit springs.
    h. **Note**: the spring that you remove should have another spring (booster spring) intertwined within it
6. If you had to remove the outer casting, reassemble the compression rod assembly and then follow instructions for Installation of Outer Casting.
7. Optional Ride Kits - If you need to adjust to overall ride characteristics either softer or firmer, purchase and/or install as follows (Kit Part Numbers can be found in the Service Part section of this manual):
    a. Soft - Remove the Booster Spring
    b. Firm - Purchase Firm Ride Kit and install the Booster Spring
    c. Extra Firm - Purchase Extra Firm Ride Kit and install the Booster Spring
8. To remove the booster spring from the main spring; grasp the flat end of the booster spring with a pair of needle nose pliers and twist it in a clockwise direction to unscrew it from the main spring.
9. To install a booster spring into a main spring catch the flat end of the booster spring under the flat end of the main spring and twist it counterclockwise into the main spring. Make sure that the booster spring is threaded all of the way down into and contained by the main spring. Before inserting it back into the inner leg.


Fig. 6


Fig. 7


Fig. 8

Fig. 9

Fig. 10

Wind-Down Travel Adjust Service Instructions – Cont.

Installation for Wind Down Travel Adjust Assembly-

WARNING All leg caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

If you removed the Outer casting:

1. Reassemble the compression rod assembly and install in the fork leg.(Fig. 6)
2. Generously grease the spring and insert it into the inner leg. The spring needs to seat onto the top of the compression rod. (Fig. 7)
3. Insert the wind down top cap assembly into the spring; the "D" shaped portion of the adjuster assembly must fit into the "D" shaped end of the main spring.
4. Screw the assembly into the inner leg and tighten per the fastener torque guide at the end of this manual.
5. Install adjuster knob and 2mm hex screw. Turn the knob counterclockwise until it stops. This insures that the fork is in its longest travel position. If the travel indicator arrow on the crown is not lined up with the maximum travel point on the indicator dial, continue to turn the knob counterclockwise until the indicator points to maximum travel.
6. **For Grease Forks** - Remove rubber fork boots from the casting and slide them onto the inner legs of the crown/steer assy. Lightly grease the bushings on the inside of the outer leg casting and on the lower portion of the inner legs below the boots using a thick grease such as Motorex Bike Grease 2000. Proceed to Step 8.
7. **For Semi bath Forks** - Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject **16cc's** of oil into each outer leg. It is recommended to use a syringe to inject oil.
8. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
9. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting. Tighten per the Schematic and Torque Specification Table for your fork.
10. Install rebound adjuster knob if applicable.
11. Install the compression rod screw and tighten per the Schematic and Torque Specification Table.

If you only removed the Top Cap:

1. Generously grease the spring and insert it into the inner leg. The spring needs to seat onto the top of the compression rod.
2. Insert the wind down top cap assembly into the spring; the "D" shaped portion of the adjuster assembly must fit into the "D" shaped end of the main spring. (Fig. 8) Screw the assembly into the inner leg and tighten per the fastener torque guide at the end of this manual.
3. Install adjuster knob and 2mm hex screw. Turn the knob counterclockwise until it stops. This insures that the fork is in its longest travel position. If the travel indicator arrow on the crown is not lined up with the maximum travel point on the indicator dial, then the fork must be reclocked.
    a. To Reclock the fork loosen the compression rod bolt on the bottom of the outer casting
    b. Continue to turn the knob counterclockwise until the indicator points to maximum travel on the knob.
    c. Retighten the compression bolt per the fastener torque guide at the end of this manual.

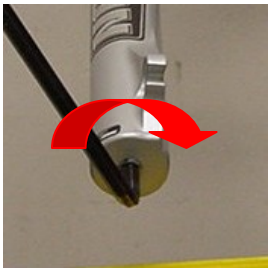


Fig. 1

Fig. 2

Fig. 3

Air Spring System Service Instructions

Removal of Air Spring and Compression Rod Assembly

WARNING This fork uses compressed air to provide spring resistance and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

1. Remove all of the air pressure from the Schrader valve on top of the crown on the left side (Black top cap), by depressing the Schrader valve. Be sure to hold fork with the top of the crown facing upwards. **Note**: When the air is released, there is a mixture of the oil and air inside the leg that maybe discharged.
2. If you have not removed the Outer casting follow these instructions, then proceed to next step:
    a. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
    b. From the right leg dropout, if the fork has adjustable rebound, the knob will need to be removed. Screw the rebound all the way in (clockwise) remove the 2mm hex screw inside the knob by turning it counter clockwise. Remove the knob by pulling gently away from the fork.
    c. Use a 8mm hex wrench to turn the damper **clockwise** until it can be pushed into the casting. (see Fig. 1)
    d. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. If the fork uses the Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.
3. Unscrew the end cap on the bottom of the inner leg and remove compression rod assembly. This will consist of a compression rod, bottom and top out bumpers, the end cap, and should be followed by a coil spring and then another rod (air push rod). This spring is the one that would be changed if the fork's SAG needed to be changed beyond the capabilities of the air pressure.

There are now two ways to remove the air piston from the inner leg:

A. An Air Piston Removal tool has been developed that will enable you to remove the piston without having to take the fork apart. (P/N: 85-8062**)**.
    1. Remove air dust cap covering the Schrader Valve.
    2. Depress Schrader valve to release air pressure.
    3. Remove air cap on top of leg with 20mm socket.
    4. Drain the oil off of the piston if it is present.
    5. Insert Air Piston Removal Tool into the air piston and turn handle counter-clockwise until tight to lock it in the air piston. Fig 2 for insertion example.
    6. Pull out the tool and the Air Piston will come with it. You may need to gently rock the piston back and forth to clear the threads in the top of the leg. Fig. 3
    7. See Installation of the Air Piston for Air Spring Forks instructions on next page

B. Without this tool, you will need to follow the procedures in the following section**.**
    10. Remove air dust cap covering the Schrader valve.
    11. Depress Schrader valve to release air pressure.
    12. Remove air cap on top of Left leg with 20mm socket.
    13. Remove left leg end cap and compression rod assembly from inner left leg. Then remove spring and Air piston rod.
    14. Use a long narrow rod approximately 18"/458mm long and no greater than ¼"/7mm in diameter and insert it into the left inner leg from the bottom of the leg. Be sure to direct the rod through the center of the negative spring assembly that is about halfway up the inner leg.
    15. Once the rod has contacted the air piston, use a rubber mallet and tap the piston out through the top of the inner leg. **Caution:** Do not allow rod used for pushing piston out to contact the inside wall of inner leg during procedure, the surface of the leg could be damaged.
    16. For Reinstallation see Installation of Assembly for Air Spring Forks

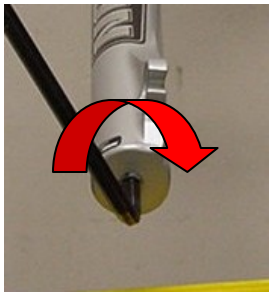


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

E2 Air System Service Instructions

Removal of Air Spring Rod Assembly

WARNING This fork uses compressed air to provide spring resistance and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

1. Remove air dust cap covering the Schrader valve.
2. Depress Schrader valve to release air pressure.
3. Remove air cap on top of Left leg with 20mm socket.
4. Remove rebound adjuster knob using a 2mm hex wrench.
5. From the right leg dropout, use 8mm hex wrench to turn the damper shaft clockwise until it can be pushed into the casting. (See Fig. 1)
6. Remove 11mm hex bolt (Compression Rod bolt) from bottom of Left leg.
7. Remove crown/steer/inner leg assembly from the outer leg casting.
8. Remove the bottom out bumper, washer and Spacer (if applicable) from the Compression rod. (See Fig. 2)
9. Push the Piston and Compression Rod out of the top of the leg by pushing on the Compression Rod. You may need to use a screwdriver or long allen wrench placed in the end of the Compression Rod to fully remove it from the leg as the leg is longer than the Comp Rod. (See Fig 3)
10. For Reinstallation see Installation of Spring Assembly for E2 Air Spring Forks

Assembly Instructions

Installation of Spring Assembly for E2 Air Spring Forks

WARNING All leg caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. Re-install the air push rod, positive spring (that has been well greased), and compression rod assembly. The Air Push Rods are color coded to the fork travel, a 120mm travel fork is red, 100mm is white, and 80mm is black. (See Fig. 4)
2. Apply a small amount of Prep M grease onto the threads at the top of the left inner leg with your finger.
3. Apply a small amount of Prep M grease around the outside diameter of the new air piston.
4. Insert the air piston, larger cupped side down (See photo below – Piston shown top up) into the inner leg through the threaded area at the top of the inner leg. Use your fingers to push the piston past the threads into the leg. (See Fig. 5)

5. Using a long screwdriver or rod, push the piston fully into leg sp that is in contact with the Compression Rod.
6. Pour about 3cc of a 40wt or greater automotive oil into the top of the piston and then install the air cap assembly. Tighten per the Fastener and Torque Values section.
7. Fully extend the damper shaft and slide the rubber bumper and spacers against the inner leg end cap, also slide the rubber bumper and spacers down to the end of the inner leg on the Compression Rod. Lightly grease the bushings on the inside of the outer leg casting using a thick grease such as Motorex Bike Grease 2000. Insert the crown/steer assembly into the outer legs to the upper bushing.

Fig. 1

Fig. 2

Fig. 3

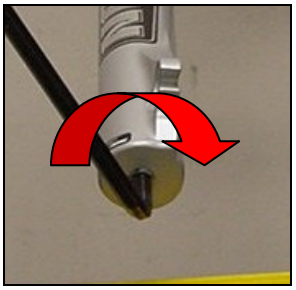


Fig. 4

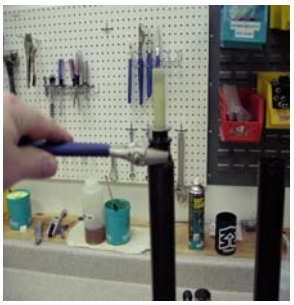


Fig. 5

Installation of Spring Assembly for E2 Air Spring Forks (Cont.)

8. Push the outer legs past the lower bushing and reinstall the 4mm bolt and tighten 8mm damper fitting in a **counterclockwise direction**. Tighten per the Fastener and Torque Values section.

***Use a shock pump (p/n 85-4069) to fill the air system to the recommended levels as outlined in Owner's Manual.

R7 Air System Service Instructions

WARNING This fork uses compressed air to provide spring resistance and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

Removal of Air Piston and Compression Rod Assembly

There are now two ways to remove the air piston from the inner leg.

A. An Air Piston Removal tool has been developed that will enable you to remove the piston without having to take the fork apart. (P/N: 85-8062**)**.

1. Remove air dust cap covering the Schrader Valve.
2. Depress Schrader valve to release air pressure.
3. Remove air cap on top of leg with 20mm socket. (Fig. 1)
4. Drain the oil off of the piston if it is present.
5. Insert Air Piston Removal Tool into the air piston and turn handle counter-clockwise until tight to lock it in the air piston. (Fig. 2 Demonstrates what you are trying to do)
6. Pull out the tool and the Air Piston will come with it. You may need to gently rock the piston back and forth to clear the threads in the top of the leg. The Compression Rod and negative spring will remain in the fork. (Fig. 3)
7. For reinstallation see Air Piston, see Installation of the Air Piston for R7 Air Spring Forks instructions on next page

B. Without this tool, you will need to follow the procedures in the following section**.**

1. Remove air dust cap covering the Schrader valve.
2. Depress Schrader valve to release air pressure.
3. Remove air cap on top of Left leg with 20mm socket.
4. Remove rebound adjuster knob using a 2mm hex wrench.
5. From the right leg dropout, use 8mm hex wrench to turn the damper shaft clockwise until it can be pushed into the casting. (Fig. 4)
6. Remove 11mm hex bolt (Compression Rod bolt) from bottom of Left leg.
7. Remove crown/steer/inner leg assembly from the outer leg casting.
8. Remove the end cap on the Left inner leg and remove Compression rod/ negative spring assembly. (Fig. 5)
9. Push the Air Piston out of the top of the leg by pushing on the Compression Rod. You may need to use a screwdriver placed in the end of the Compression Rod to fully remove it from the leg as the leg is longer than the Comp Rod.
10. For Reinstallation, see Installation of Spring Assembly for E2 Air Spring Forks

Fig. 6

Fig. 7

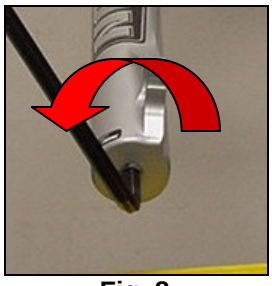


Fig. 8

Assembly Instructions

Installation of the Air Piston for R7 Forks

1. Apply a small amount of Prep M grease onto the threads at the top of the left inner leg with your finger.
2. Apply a small amount of Prep M grease around the outside diameter of the new air piston.
3. Insert the air piston, larger cupped side up (the end with the glide ring goes up, See Fig. 6) into the inner leg through the threaded area at the top of the inner leg. Use your fingers to push the piston past the threads into the leg.
4. Using a long screwdriver or rod, push the piston fully into leg sp that is in contact with the Compression Rod.
5. Pour about 3cc of a 40wt or greater automotive oil into the top of the piston and then install the air cap assembly. Tighten per the Fastener and Torque Values section
   ***Use a shock pump (p/n 85-4069) to fill the air system to the recommended levels as outlined in the R7 Fastener and Torque Values Chart in the back of this manual.

Installation of Air Piston and Compression Rod Assembly for R7 Forks

WARNING All leg caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. Re-install the Compression rod, Negative spring (that has been well greased), and end cap. Torque the end cap to 35-50 in-lbs. (Fig. 7)
2. Apply a small amount of Prep M grease onto the threads at the top of the left inner leg with your finger.
6. Apply a small amount of Prep M grease around the outside diameter of the new air piston.
7. Insert the air piston, larger cupped side up (the end with the glide ring goes up, See Fig. 6) into the inner leg through the threaded area at the top of the inner leg. Use your fingers to push the piston past the threads into the leg.
8. Using a long screwdriver or rod, push the piston fully into leg so that is in contact with the Compression Rod.
9. Pour about 3cc of a 40wt or greater automotive oil into the top of the piston and then install the air cap assembly. Tighten per the Fastener and Torque Values section.
10. Fully extend the damper shaft and slide the rubber bumper and spacers against the inner leg end cap, also slide the rubber bumper and spacers down to the end of the inner leg on the Compression Rod. Lightly grease the bushings on the inside of the outer leg casting using a thick grease such as Motorex Bike Grease 2000. Insert the crown/steer assembly into the outer legs to the upper bushing.
11. Push the outer legs past the lower bushing and reinstall the 4mm bolt and tighten 8mm damper fitting in a **counterclockwise direction**. (See Fig. 8) Tighten per the Fastener and Torque Values section.
    ***Use a shock pump (p/n 85-4069) to fill the air system to the recommended levels as outlined in the R7 Fastener and Torque Values.

Fig. 1

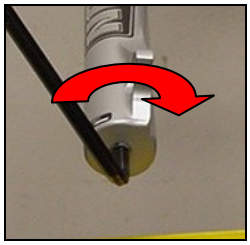


Fig. 2

Fig. 3

Fig. 4

IT Air System Service Instructions

Removal of IT Air Spring and Travel Adjust Assembly

WARNING This fork uses compressed air to provide spring resistance and must be relieved of pressure prior to servicing. Failure to relieve air pressure could result in injury or possible death.

1. **Important: Y**ou must remove all of the air from the left leg of the fork before disassembling the IT System. It is advisable to have the fork inverted and pointed away from your face, as there may also be a discharge of a mixture of air and oil when you depress the Schrader valve core (this is similar to the discharge when you depress the valve core on any of the Manitou Air or SPV forks).
2. On the bottom of the left leg (leg that has the Disk Brakes mounts on it), there is a Schrader valve protruding from it. Unscrew the valve cap and follow either of these two methods for releasing all of the air from the system. (See Fig. 1)
3. Depress the valve core and let all of the air out. Now depress the IT lever on the bike's handlebar and release it. Once again, depress valve core in the Schrader valve to release any air in the leg. Do this a couple of times, until all of the air is released.

a. If you have a helper, have them hold the IT lever on the handlebar down as you depress the valve core. This will let all of the air out at one time.

4. Now that all of the air is released, Remove the casting:
   a. From the left leg dropout (Left when sitting on the bike), use a 12mm wrench to remove the compression rod nut.
   b. From the right leg dropout, remove the rebound knob. Screw the rebound all the way in (clockwise), remove the 2mm hex screw inside the knob by turning it counter clockwise. Remove the knob by pulling gently away from the fork.
   c. Use a 8mm hex wrench to turn the damper **clockwise** until it can be pushed into the casting. (see Fig. 2)
   d. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. The fork uses a Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.
5. Use an Adjustable Wrench and unscrew the black end cap that is threaded into the bottom of the left inner leg. (See Fig. 3)
6. Pull the lower IT assembly from the inner leg. There may be a small amount of oil that comes out of the inner leg as you remove the lower IT assembly. This is the lubricating oil used to allow the air piston on the lower shaft assembly to move freely.
7. Now it is time to remove the IT upper assembly. Release the IT control wire from the control lever (if attached) by unscrewing the fixing screw on the lever that holds the cable tight. Use a 2mm Allen Wrench to unscrew this screw and then pull the cable out of the lever.
8. To remove the upper IT assembly, use a slotted 22mm 6 point socket (P/N: 83-2503), a 22mm Open End wrench, or an adjustable wrench. Unscrew it by turning counter-clockwise. **Note: Be aware of the IT control Wire spinning around when unscrewing the top cap** (See Fig. 4)
9. Pull the upper assembly out of the inner leg.

Assembly Instructions

Troubleshooting Tips

** If the fork starts to lose travel from an extended position to a shorter position by itself, the damage is most likely centered on the Quad ring around the outside of the piston.

**If the fork extends from a shorter travel to a longer travel by itself, the failure can be involving the smaller Quad ring that is located under the piston on the inside diameter of it where the shaft of the upper assembly intersects the lower assembly and piston. The shaft is sealed against leakage at this point to define the two different chambers. (Fig. 5) Always check two things when you have the system apart.

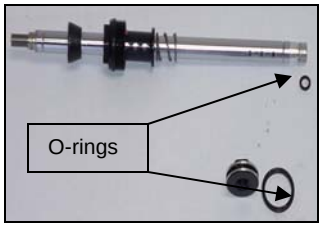


Fig. 5

**Use a straight edge and lay it next to the inner shaft that is attached to the top cap of the upper assembly to insure that that shaft is not bowed at any point. We found that in the assembly of these pieces, the shaft is pressed into the top cap and occasionally if it is over-pressed, the shaft will bow. This means that, where the bow is in the travel of the shaft, it will cause the Quad ring that it is passing through, to distort. Thus air transfers from one chamber to the other and the fork will extend by itself. If this is the case, you will need a new top assembly and an O-ring kit. (Refer to Figure 6)

Fig. 6

**Make sure that the valve core in the Schrader valve is tight and does not stick open or closed. If this is faulty, replace this valve core with a new one. Any bicycle tube valve core will work, as well as any valve cores that we currently use on any of our other products.

Note: Always replace all o-rings and seals provided in the IT O-ring kit, each time you take the system apart, this will insure that you receive maximum performance.

Installation of the IT Control Wire


Fig. 7

1. In order to change the inner control wire, start by following IT disassembly steps 1, 2, 6, 7, & 8.
2. Once you have the upper assembly out of the fork, use the adjustable wrench and the 12mm Open End wrench to unscrew the top cap from the shaft of the assembly. Refer to Figure 7 at the right.
3. As you unscrew the top cap, you will feel a little tension created by a spring that is under the cap. Separate the top cap from the shaft once you have completely unthreaded the two pieces.
4. Pull on the inner wire in order to remove the machined stopper with the cable end in it from the shaft.
5. You can now unhook the cable from the stopper and from the cable head end, pull the cable through the spring, the top cap, and the outer cable housing. Refer to Figure 8 at the right.
6. Reverse the above steps to replace the cable.
   Note: The inner cable can be replaced with a standard bicycle derailleur cable
   It is recommended to replace the two O-rings on the stopper each time that it is removed from the shaft, in addition to the Black Buna O-ring that is on the shaft below the threads.


Fig. 8

Replacement of Piston Quad Rings

1. Refer to Figure 10 for wrench placement. Hold the 12mm wrench in place on the flats that are on the piston seat and turn the piston with the adjustable wrench in a counter clockwise motion to unscrew the piston from the shaft.
2. Once the piston is off of the shaft, you will see a small Black Quad ring inside the top of the shaft that you just unscrewed the piston from. Replace this Quad ring with a new one from IT O-ring kit. Be sure that the new quad seal is seated in the shaft and rests flat against the shelf inside of the shaft. (Refer to Figure 9)
3. Install the Air Piston back onto the shaft in the reverse of the way you removed it. Tighten the piston to 15inlbs (1.7Nm) onto the shaft.
4. Remove the large Quad ring on the outside of the piston, Discard this Quad ring and replace it with a new one. Be careful not to twist it in the groove that it rests in.

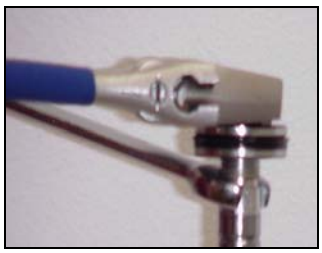


Fig. 10

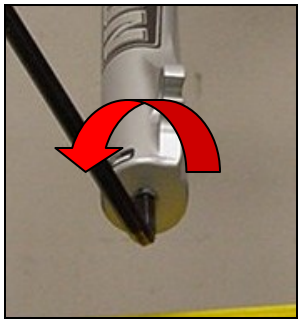


Fig. 11

Fig. 12

Assembly Instructions

Installation of the IT Air Spring and Travel Adjust Assembly

WARNING All leg caps for Damper and Spring systems must be properly tightened prior to use. Failure to do so could result in injury or possible death.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. It is recommended that when reassembling the IT system that you start by installing the lower assembly into the bottom of the inner leg first. Be sure to apply a small amount of Prep M grease to the Quad ring on the outside of the piston, in the hole in the piston and onto the threads of the inner leg before inserting the assembly into leg.
2. Twist the shaft assembly as you insert piston past the threads of inner leg. Tighten end cap to 25-35inlbs (2.8-3.9Nm). It might be necessary to use a socket and extension thru the top of the fork leg and engage the head on the top of the piston so that you can screw in the quad seal past the threads in the leg.
3. Put a small amount of Motorex grease on the end of the Upper Assembly shaft, and then insert the assembly into the fork inner leg.
4. As soon as contact is made with the hole in the top of the air piston/lower assembly, twist the upper assembly like screwing in a screw to guide the upper assembly shaft into the hole without damaging the Quad ring seal in the shaft of the lower assembly.
5. After reinserting the upper assembly into the fork but before screwing the top cap in, pour about 8-10cc's of Air Piston Oil (40wt. automotive oil maybe substituted) into the fork leg through the top of the crown.
6. Torque the top cap to **in/lbs using the slotted 22mm socket.
7. Replace the Outer Casting if it has been removed as follows:
    a. Replace the o-ring at the end of the rebound shaft, if not you will risk having a leak in that area.
    b. Extend the rebound damper out from end cap as far as it will go and then slide bottom out bumper towards the end cap as far as it will go. The bumper will help to hold the damper shaft in place as you are inserting the inner legs into the casting.
    c. Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject **16cc's** of oil into each outer leg. It is recommended to use a syringe to inject oil.
    d. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
    e. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting. (See fig. 11) Tighten per the Schematic and Torque Specification Table for your fork.
    f. Install rebound adjuster knob if applicable.
    g. Install the compression rod screw and tighten per the Black Schematic and Torque Specification Table.
8. Feed the inner wire through the cable housing and secure one end of the of the housing into the gold cable guide, then feed the end of the inner wire through the hole in the black cable stop on the lever.
9. The inner wire now feeds through the hole in bottom of the lever, over the top of the lever and through the hole in the back of the lever.
10. Pull the inner wire until there is no slack in the cable. Be sure to set a 2mm gap between the front of the lever and the top of the cable stop to insure that you have not over tightened the cable before you tighten the 2mm Allen bolt on the front of the lever to cinch the inner wire. (Refer to Figure 12)
11. The last step is to cut the inner wire that is left hanging on the backside of the lever and then installing the cable end to prevent it from fraying.
12. Pressurize the system and check for proper function. It is fastest if you have someone depress the control lever and hold it while you pump air into the system. This way the system equalizes immediately. If you do not have a second person to help, just add air to the system and then periodically depress the lever to equalize the pressure.

Fig. 1

Fig. 2

Fig. 3

Fig 4

Section 4: Outer Casting Service

There are two different ways that castings are retain on the fork legs, one version is accessed through the top of the fork legs and the other is accessed on the bottom of the each casting leg.

Disassembly Instructions for Style 1

WARNING This fork uses a preloaded coil spring provide spring resistance. The spring must be relieved of its preload prior to servicing. Failure to do so could result in injury or possible death.

1. Turn spring preload adjuster knob counter clockwise until it stops. Remove 2mm hex screw on spring preload adjuster knob and remove knob on the top left side of the fork.
2. Remove preload adjuster using 18mm socket.
3. Remove top leg cap on right hand side using 24mm socket. (Fig. 1)
4. Compress fork and remove the spring, MCU, and top cap assy. If you need to make a spring rate change separate the individual pieces, change to the required spring and reassemble.
5. Invert fork and tap on work bench to remove plastic spacer from inside of left inner leg.
6. Using a ¼ inch drive 4mm hex on an extension or Answer p/n 85-3006, remove the comp rod screws from inside the bottom of both inner legs. (See Fig 2 and 3)
7. Pull off outer leg from crown/steer assy.
8. To remove compression rods, remove the compression rod clips (slotted washer if installed) and the black rubber bottom out bumper. Feed the compression rod up through the inner leg.
9. The rubber fork boots can now be removed from the casting at this time and replaced if necessary.

Assembly Instructions

1. Remove rubber fork boots from the casting and slide them onto the inner legs of the crown/steer assy.
2. Lightly grease the bushings on the inside of the outer leg casting and on the lower portion of the inner legs below the boots using a thick grease such as Motorex Bike Grease 2000.
3. Reinstall compression rods into the inner legs if necessary.
4. Reinstall the bottom out bumpers and clips.
5. Slide the outer leg onto the crown/steer assy; make sure the arch is facing to the rear.
6. Using a ¼ inch drive 4mm hex on an extension or Answer p/n 85-3006, tighten the comp rod screws from inside the bottom of both inner legs. Torque per Fastener Torque and Setup Levels section.

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression rod bolts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

7. Snap boots over dust seal of outer leg casting.
8. Install plastic spacer into left inner leg. See Fig. 4 for order.
9. Grease spring heavily with Motorex Bike Grease 2000.
10. Extend fork and install the spring preload, MCU, and spring assy.
11. Tighten preload adjuster using 18mm socket to torque Listed in Fastener and Setup Levels section.
12. Install preload adjuster knob using 2mm hex screw.

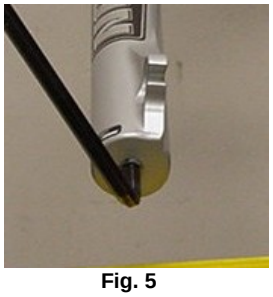


Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Disassembly Instructions for Style 2

1. From the left leg dropout (Left when sitting on the bike), use a 10 or 11mm wrench to remove the compression rod screw.
2. From the right leg dropout, if the fork has adjustable rebound, the knob will need to be removed. Screw the rebound all the way in (clockwise) remove the 2mm hex screw inside the knob by turning it counter clockwise. Remove the knob by pulling gently away from the fork.
3. Use a 8mm hex wrench to turn the damper **clockwise** until it can be pushed into the casting. (see Fig. 5)
4. Remove crown/steer/inner leg assembly from the outer leg casting by pulling firmly on the casting. If the fork uses the Semi bath Lubrication system, use caution as the oil that is in the casting will be released when the casting is removed, it is best to do this over some type of catch pan.

Assembly Instructions

WARNING When installing the outer Leg Casting to the Crown Steer Assy, Compression Rod bolts and Damper Shafts must be properly tightened prior to use. Failure to do so could result in injury or possible death.

1. Turn completed crown/steer/leg assembly upside down, so that the compression rod and damper shaft are facing you. You will see a bottom out bumper on the damper shaft; slide this bumper down towards the end cap that is threaded into the inner leg. This will help in keeping the shaft extended as you install the outer casting. You could also insert air into the damper leg through the Schrader valve on top of the right leg (SPV models). This extra pressure will help to keep the shaft from moving. (See Fig. 6)
2. Replace the o-ring at the end of the rebound shaft, if not you will risk having an oil leak in that area. (See Fig. 7) There are 2 styles of o-ring which are used, be sure to replace with a matching o-ring. (See Fig. 8)
3. Extend the rebound damper out from end cap as far as it will go and then slide bottom out bumper towards the end cap as far as it will go. The bumper will help to hold the damper shaft in place as you are inserting the inner legs into the casting.
4. **For Grease Forks** - Remove rubber fork boots from the casting and slide them onto the inner legs of the crown/steer assy. Lightly grease the bushings on the inside of the outer leg casting and on the lower portion of the inner legs below the boots using a thick grease such as Motorex Bike Grease 2000. Proceed to Step 6.
5. **For Semi bath Forks** - Press inner legs into casting about half way and then inject Semi Bath oil (5/40wt. synthetic oil, P/N: 85-0022) into outer casting, holding fork at 45 degree angle to the ground with bottom of fork in the air (drop outs up). Inject semi bath oil into each outer leg (See chart for correct amount). It is recommended to use a syringe to inject oil. (See Fig. 9)
6. Press inner leg assembly into outer leg casting until damper shaft contacts casting. Adjuster hex shaft should protrude slightly from casting.
7. Use an 8mm hex wrench to turn the damper shaft **counterclockwise**, threading it into the casting. Tighten per the Schematic and Torque Specification Table for your fork.
8. Install rebound adjuster knob if applicable.
9. Install the compression rod screw and tighten per the Schematic and Torque Specification Table.
10. **For forks with the Wind Down system:** follow steps 2 – 5 from the Wind Down Travel Adjust assembly instructions.

Use: 8mm Allen wrench, 2mm Allen wrench, 11mm Nut Driver or open end wrench, Syringe for Semi Bath Oil, Air pump

Fig. 1

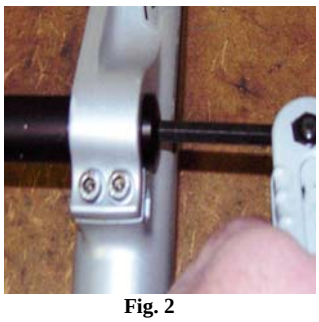


Fig. 2

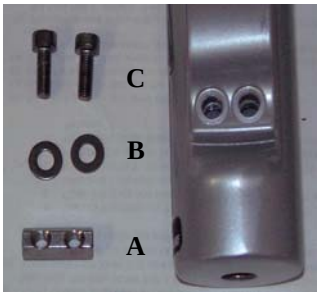


Fig. 3

Fig. 4

Fig. 5

32mm Leg Thru Axle and Quick Release Thru Axle Instructions

Standard Hex Thru Axle

Removal Instructions

Removal of Hex Thru Axle

1. Loosen the two 3mm clamp-fixing bolts on the right fork leg. (See Fig. 1)
2. Remove the Thru Axle nut from the right side of the Thru axle.
3. Loosen the two 3mm clamp-fixing bolts on the left fork leg.
4. Push the Hex Thru Axle out of the dropouts from left to right and completely remove it and the front wheel from the fork.

Assembly Instructions

Installation of Hex Thru Axle

1. Insert the Clamp Nuts (See Fig.3 – A) into the small hexagonal hole in each of the dropouts.
2. Insert 2 Spacer/Washers p/n 062876 (See Fig.3 – B) in the slot of each dropout. (See Fig. 4)
3. Start two clamp fixing bolts (See Fig.3 – C) in each dropout. Do not tighten these bolts down at this time.
4. Hold the wheel between the dropouts of the fork.
5. Insert Hex Thru Axle small hex first into the outside of the left drop out (as you are facing fork) and push it through the hub of the wheel, and into the right drop out.
6. Thread the Thru Axle nut into the end of the axle that is in the right drop out. Thread the Thru Axle Nut in about half way in; do NOT tighten it down fully.
7. Set the end of the axle flush with the outside of the left drop out. Tighten the 3mm clamp fixing bolts to specified torque value as called out in the Schematic and Technical Specification Chart at the end of manual.
8. Finish the installation by tightening axle nut to specified torque value and then tighten the clamp fixing bolts on the right drop out to the specified torque. **(See Fig. *)**

Quick Release Hex Thru Axle

Removal of the QR Thru Axle

1. Pull down on the QR lever on the right fork leg to relieve the tension on that fork leg. Fig. 5 shows the QR Lever in the open position.
2. Unscrew the QR Axle Bolt on the right hand side of the fork.
3. Pull down on the QR lever on the left fork leg to relieve the tension on that fork leg.
4. Unless you need to replace a component of the QR system, do not proceed further.
5. Remove the bolt in the center of the Pivot Cylinder of the QR Lever.
6. Remove the Pivot Cylinder from the Lever.
7. Remove the Shim, Adapter, spring and Hex Nut from each fork leg.
8. Inspect all parts for wear. If any parts show signs of wear, replace all components on the side as a system. Mixing new and used parts will result in accelerated wear when the parts are reassembled.

Fig. 6


Fig. 7


Fig. 8


Fig. 9

32mm Leg Thru Axle and Quick Release Thru Axle Instructions

Assembly Instructions

1. Install a Spacer/Washer p/n 062876 (See Fig 6–B) into the slot in the right drop out.
1. Install spring p/n 069641 (See Fig.6-C) into counter bore of the right drop out of the casting.
2. Install a Hexagonal Nut p/n 066484 (See Fig.6-A) into the small hexagonal hole in the drop out of the fork leg. (See Fig. 7)
3. Place an adapter p/n 066487 (See Fig.6-D) on top of spring; the adapter is symmetrical so its orientation is not critical. Place a shim p/n 069647 (See Fig.6-E) on top of adapter. (see Fig. 8)
4. Install pivot cylinder p/n 066479 (See Fig.6-F) into the bore of the QR Lever p/n 066490 (See Fig.6-G).
5. Install an M5x32 bolt p/n 069638 (See Fig.6-H) through the hole in the pivot cylinder that you installed in the QR Lever. The bolt head must sit in counter bore in the Pivot Cylinder.
6. Insert the M5x32 bolt through the shim, adapter and the spacer/washer and screw it into hexagonal nut in the drop out. The QR Lever should be oriented so that in the closed position it points up to the top of the casting. DO NOT tighten the bolt at this time. Make sure that the bolt is inserted through the spacer/washer, in the slot in the drop out, as they can slid around during assembly. (See Fig. 9)
7. Insert the Hex axle p/n 064590 into the casting, from left to right, starting with the end that has the small hex first.
8. Apply Grease to threads of Axle Bolt p/n 066471 and hand screw it into the Hex Axle, but only screw it in a few threads, do not tighten the Axle Bolt yet.
9. Make sure right lever is in closed position, as shown below. The torque setting on the QR Lever Bolt is: 30-40 lb-in [3,39-4,51 N-m] You want to use the lowest torque possible and still retain the axle properly:

   a. Start by first torquing the QR Lever Bolt to 30 lb-in [3.39 N-m].
   b. Open the lever and then close it, check for smooth operation of the lever and if the axle is properly retained.
   c. If it is possible to move the axle side to side, close the lever and increase the torque on the bolt by 2.5 in/lbs. and retry the lever
   d. Repeat the steps above until you achieve proper operation of the Quick Release.

10. Repeat # 1-10 for the other side of the casting.
11. Remove the Axle Bolt and the Hex Axle
12. Hold the wheel between the dropouts of the fork.
13. Insert Hex Thru Axle small hex first into the outside of the left drop out (as you are facing fork) and push it through the hub of the wheel, and into the right drop out.
14. Thread the Axle Bolt into the end of the axle that is in the right drop out. Thread the Axle Bolt in about half way; do NOT tighten it down fully.
15. Set the end of the axle flush with the outside of the left drop out. Tighten the QR on the left fork leg.
16. Hand tighten the Axle bolt on the right side drop out.
17. Finish the installation by tightening the quick release on the right fork leg.

Travis Thru Axle and Quick Release Thru Axle Instructions

Fig. 1

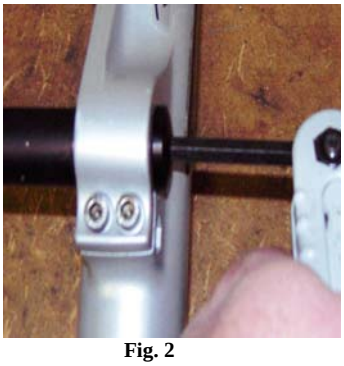


Fig. 2

Fig. 3

Fig. 4

Standard Hex Thru Axle

Removal Instructions

Removal of Hex Thru Axle

1. Loosen the two 3mm clamp-fixing bolts on the right fork leg.
2. Remove the Thru Axle nut from the right side of the Thru axle.
3. Loosen the two 3mm clamp-fixing bolts on the left fork leg.
4. Push the Hex Thru Axle out of the dropouts from left to right and completely remove it and the front wheel from the fork.
5. Check for any cracks around the Axle bearing area on the Outer Casting. If there are any found, replace the casting.

Assembly Instructions

Installation of Hex Thru Axle

1. Insert the Clamp Nuts into the small hexagonal hole in each of the dropouts.
2. Insert a Spacer/Washer (062876) in the slot of each dropout.
3. Start two clamp fixing bolts in each dropout. Do not tighten these bolts down at this time.
4. Hold the wheel between the dropouts of the fork.
5. Insert Hex Thru Axle small hex first into the outside of the left drop out (as you are facing fork) and push it through the hub of the wheel, and into the right drop out.
6. Thread the Thru Axle nut into the end of the axle that is in the right drop out. Thread the Thru Axle Nut in about half way in; do NOT tighten it down fully.
7. Set the end of the axle flush with the outside of the left drop out. Tighten the 3mm clamp fixing bolts to specified torque value as called out in the Schematic and Technical Specification Chart at the end of manual.
8. Finish the installation by tightening axle nut to specified torque value and then tighten the clamp fixing bolts on the right drop out to the specified torque. **(See Fig. *)**

Quick Release Hex Thru Axle

Removal of the QR Thru Axle

1. Pull down on the QR lever on the right fork leg to relieve the tension on that fork leg.
2. Unscrew the QR Axle Bolt on the right hand side of the fork.
3. Pull down on the QR lever on the left fork leg to relieve the tension on that fork leg.
4. Unless you need to replace a component of the QR system, do not proceed further.
5. Remove the bolt in the center of the Pivot Cylinder of the QR Lever.
6. Remove the Pivot Cylinder from the Lever.
7. Remove the Shim and Hex Nut from each fork leg.
8. Inspect all parts for wear. If any parts show signs of wear, replace all components on the side as a system. Mixing new and used parts will result in accelerated wear when the parts are reassembled.
9. Inspect for any cracks around the Axle bearing area on the Outer Casting. If there are any found replace, the casting.

Travis Thru Axle and Quick Release Thru Axle Instructions

Assembly Instructions

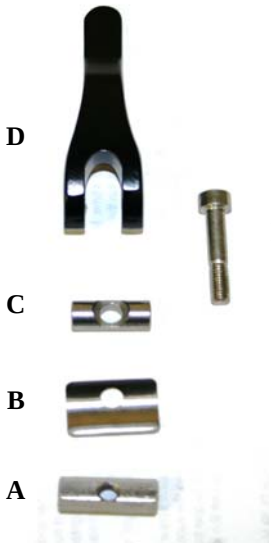


Fig. 5

Fig. 6

Fig. 7

Fig. 8

1. Install a Spacer/Washer (p/n 062876) into the slot in the right drop out.
2. Install a Hexagonal Nut p/n 066484 (See Fig.5-A) into the small hexagonal hole in the drop out of the right fork leg.
3. Place a shim p/n 066488 (See Fig.5-B) on top of drop out in the semicircular area. (See Fig.6)
4. Install pivot cylinder p/n 066479 (Fig.5-C) into the bore of the QR Lever p/n 066490 (See Fig.5-D).
5. Install an M5x32 bolt p/n 069638 (See Fig.5-E) through the hole in the pivot cylinder that you installed in the QR Lever. The bolt head must sit in counter bore in the Pivot Cylinder. (See Fig. 7)
6. Insert the M5x32 bolt through the shim, and the spacer/washer and screw it into hexagonal nut in the drop out. The QR Lever should be oriented so that in the closed position it points up to the top of the casting. DO NOT tighten the bolt at this time. Make sure that the bolt is inserted through the spacer/washer, in the slot in the drop out, as they can slid around during assembly. (See Fig. 8)
7. Insert the Hex axle (p/n 069635) into the casting, from left to right, starting with the end that has the small hex first.
8. Apply Grease to threads of Axle Bolt (p/n 066471) and hand screw it into the Hex Axle, but only screw it in a few threads, do not tighten the Axle Bolt yet.
9. Make sure right lever is in closed position, as shown. The torque setting on the QR Lever Bolt is: 30-40 lb-in [3,39-4,51 N-m] You want to use the lowest torque possible and still retain the axle properly:

   a. Start by first torquing the QR Lever Bolt to 30 lb-in [3.39 N-m].
   b. Open the lever and then close it, check for smooth operation of the lever and if the axle is properly retained.
   c. If it is possible to move the axle side to side, close the lever and increase the torque on the bolt by 2.5 in/lbs. and retry the lever
   d. Repeat the steps above until you achieve proper operation of the Quick Release.

10. Repeat # 1-10 for the other side of the casting.
11. Remove the Axle Bolt and the Hex Axle
12. Hold the wheel between the dropouts of the fork.
13. Insert Hex Thru Axle small hex first into the outside of the left drop out (as you are facing fork) and push it through the hub of the wheel, and into the right drop out.
14. Thread the Axle Bolt into the end of the axle that is in the right drop out. Thread the Axle Bolt about half way in, DO NOT tighten it down fully.
15. Set the end of the axle flush with the outside of the left drop out. Tighten the QR on the left fork leg.
16. Hand tighten the Axle bolt on the right side drop out.
17. Finish the installation by tightening the quick release on the right fork leg.

TROUBLESHOOTING

Symptom	Cause	Solution	Service Manual Section
Air Loss	Schrader Valve leaks	Tighten Valve core, replace bad parts as needed.	1
	Air Cap O-ring leaks	Make sure O-ring is seated properly, replace parts as needed.	
	Air Piston leaks	Check oil volume on top of piston, replace parts as needed.	
	Air Top Cap leaks	Check O-ring, tighten cap to proper Torque, and replace parts as needed.	
Oil leaks from Wiper Seals	Seal not seated properly	Remove Casting from Inner Legs, reinstall or replace seals	
	Nicks or scratches on inner legs	Replace Crown/Steerer/Inner Leg Assembly	
	Too much Semi Bath oil	Follow instructions for removal and installation of Outer Casting	
	Wear	Remove Casting from Inner Legs, reinstall or replace seals	
Oil leaks from bottom of Casting	Rebound damper shaft leaks	Replace Rebound Damping assembly	
	Rebound damper shaft O-ring damaged	Replace O-ring on threaded end of Rebound Damping assembly	
	Compression Rod Bolt leaks	Check O-ring on bolt to see if it is damaged and then reinstall	
Lack of Travel	Tight Bushings	Resize bushings or replace with new ones if damaged	
	Hydraulic lock out	Replace Rebound Damping assembly	
	Semi Bath oil volume	Follow instructions for removal and installation of Outer Casting	
	Damper oil volume	Check oil level, Replace Rebound Damping assembly if needed	
	Fork alignment	Visually inspect fork, call Answer Products Customer Service	
Fork Top out	Loss of Rebound Damping	Replace Rebound Damping assembly	
	Top out spring damaged	Inspect and replace Top out spring if needed.	
	Damping oil volume not correct	Check oil level, Replace Rebound Damping assembly if needed	
Fork Bottom out	Too much SAG	Refer to SAG Set up in Tuning section of Owners Manual	
	Bottom out Bumper damaged	Inspect and replace Bottom out Bumper if needed	
	Damping oil volume not correct	Check oil level, Replace Rebound Damping assembly if needed	

TROUBLESHOOTING (CONT.)

Symptom	Cause	Solution	Service Manual Page
Play in Fork	Loose bushings	Resize bushings or replace with new ones if damaged	
	Loose Compression Rod bolt	Tighten bolt to specified torque	
	Loose Rebound damping shaft	Tighten Shaft to specified torque	
	Loose press fit tolerances	Call Answer Products Customer Service	
Air Assist Problems	Various	See Air Assist Troubleshooting Guide	
Lock Out Problems	Various	See Lock Out Troubleshooting	
Remote Lockout Problems	Various	See Remote Lockout Section	

Manitou Fork Technical Information

2007 Oil Levels

				Level			
Platform	Model	Damping System	Travel	Minimum		Maximum	
				Inches	MM	Inches	MM
Axel	Elite, Super	FFD/Lockout	80/120	4.3	110	4.9	125
			70-100 RTWD	4.3	110	4.9	125
			90-120 RTWD	4.3	110	4.9	125
	Option	Remote L/O	80/120	4.1	104	4.7	119
			70-100 RTWD	4.1	104	4.7	119
			90-120 RTWD	4.1	104	4.7	119
Sliver	Comp, Elite, Super	FFD/Lockout	80/100	4.3	110	4.9	125
	Option	Remote L/O	80/100	4.1	104	4.7	119
Slate	Comp, Elite, Super, Platinum	FFD & TPC Lockout	80/130	4.3	110	4.9	125
			70-100 RTWD	4.3	110	4.9	125
			100-130 RTWD	4.3	110	4.9	125
	Option	Remote L/O	80/130	4.1	104	4.7	119
			70-100 RTWD	4.1	104	4.7	119
			100-130 RTWD	4.1	104	4.7	119
R7	Comp	FFD	80/100	4.3	110	4.9	125
	Elite	Platform +	80/100	2.9	73	3.4	88
	Super	L/O	80/100	4.3	110	4.9	125
	Platinum	Snap Valve SPV	80/100	4.2	108	4.8	123
	Option	Remote L/O	80/100	4.1	104	4.7	119
Relic	Comp, Elite, Super, Platinum	FFD & TPC Lockout	80/120	4.5	115	4.9	125
			70-100 RTWD	4.5	115	4.9	125
			90-120 RTWD	4.5	115	4.9	125
	Option	Remote L/O	80/120	4.1	104	4.7	119
Minute	Comp Air	TPC	100/140	3.9	100	4.3	110
	Comp/Elite	TPC	100/140	3.9	100	4.3	110
	Super	SPV	100/140	3.1	80	3.5	90
	Platinum		140mm IT TA	3.1	80	3.5	90

2007 Oil Levels (Cont.)

				Level			
Platform	**Model**	**Damping System**	**Travel**	**Minimum**		**Maximum**	
				Inches	**MM**	**Inches**	**MM**
Nixon	Comp	CTPC+	145	3.7	95	3.9	100
			160	3.9	100	4.1	105
	Elite	CTPC+	115-145 RTWD	3.7	95	3.9	100
			130-160 RTWD	3.9	100	4.1	105
	Super	CTPC+	145	3.7	95	3.9	100
			160	3.9	100	4.1	105
	Super Intrinsic	CID	145	*Full	*Full	*Full	*Full
			160	*Full	*Full	*Full	*Full
	Platinum Intrinsic	CID	145mm IT TA	*Full	*Full	*Full	*Full
			160mm IT TA	*Full	*Full	*Full	*Full
Gold Label	Series 1	FFD	80/100	4.3	110	4.5	115
	Series 2		80/100	4.3	110	4.5	115
Stance	Static, Blunt, Flow	FFD	80/170	3.3	85	3.7	95
			100/130 RTWD	3.3	85	3.7	95
			120/150 RTWD	3.3	85	3.7	95
	Kingpin	TPC+	150/180	8.7	220	9.4	240
Travis	Single 150mm	CTPC+	150	3.7	95	3.9	100
	Single 180	CTPC+	180	4.3	110	4.5	115
	Single 203	CTPC+	203	4.9	125	5.1	130
	Single Intrinsic 180	CID	180	*Full	*Full	*Full	*Full
	Triple 180	CTPC+	180	4.3	110	4.5	115
	Triple 203	CTPC+	203	5.5	140	5.7	145
	Triple Intrinsic 180	CID	180	*Full	*Full	*Full	*Full
	Triple Intrinsic 203	CID	203	*Full	*Full	*Full	*Full

*Consult the 2007 Service Manual for correct full damper bleed process.

Fork Torque Specifications						
Position	**Fitting** (Internal/ External) **- Size**	**Torque (Kg/Cm)**		**Torque (inlbs)**		**Solution applied**
Fork Assembly		**Min**	**Max**	**Min**	**Max**	
Brake Post	Ext. - 8mm (2 sided)	92	115	80	100	Red Loctite (impreg. threads)
End Cap (Spring & Damper)	Ext. - 24mm Hex	92	115	**80**	**100**	Greased (spring grease)
				CRITICAL!!!		
Top Caps (Spring & Damper / Plastic	Ext. - 20mm Hex / Ext. - 24mm Hex	52	63	45	55	NA
Top Caps (Spring & Damper / Metal	Ext. - 20mm Hex / Ext. - 24mm Hex	69	92	60	80	NA
Drop out bolt (Spring side)	Ext. - 11mm Hex / Ext. - 12mm Hex	52	63	45	55	NA
Drop out fitting (Damping side)	Int. - 8mm Hex	15	29	13	25	NA
Rebound -adjuster knob to -needle	Int. - 2mm Hex	5	7	4	6	Blue Loctite (Cartridge Dampers Only)
Triple Clamp lower crown	Int. - 4mm Hex	58	81	50	70	Blue Loctite
Triple Clamp upper crown	Int. - 4mm Hex	115	127	100	110	Blue Loctite
QRTA quick release screws	Int. - 4mm Hex	35	46	30	40	Blue Loctite
Std. thru Axle Clamp Screws	Int. - 4mm Hex	35	46	30	40	Blue Loctite
Std. / QRTA Thru Axle bolt	Int. - 6mm Hex	Hand Tight				Greased (spring grease)
Sub Assembly						
Air valve core	Ext. (?)mm (2 sided)	3	6	3	5	NA
Rebound Assy. Piston Nut	Ex. - 13mm Hex	14	17	12	15	Green Loctite
LO, Rem LO: Top Cap to Shaft	Ext. - 24mm Hex to Ext. 10mm (2 sided)	52	63	45	55	Red Loctite
LO: Piston to Shaft	Int. 6mm Hex to Ext. 10mm (2 sided)	46	58	40	50	Red Loctite
Rem LO: Piston seat to Shaft bottom	Custom fittings	46	58	40	50	Red Loctite
Rem LO: Plunger-top to -bottom	Custom fittings	6	12	5	10	Red Loctite
Rem LO: Shaft - upper to -lower	Custom fittings	52	63	45	55	Red Loctite
Rem LO: End plug to Piston seat	Custom fittings	6	12	5	10	Blue Loctite

TABLE 5 – DUAL CROWN SIZING	
CUP-TO-CUP MEASUREMENT*	DUAL CROWN SIZE
STANCE	
130-160 mm	Small (flat upper crown)
155-185 mm	Large (drop upper crown)
TRAVIS	
130-169 mm	Small (flat upper crown)
150-185 mm	Large (drop upper crown)
*Cup-to-cup measurement is the distance from the bottom of the lower headset cup to the top of the upper headset cup.	

SERVICE KITS

Axel

Platform		Axel								
Model		X-710	X-711	X-712	X-720	X-721	X-722	X-730	X-731	X-732
Code		Comp			Elite			Super		
Travel (mm)		80	100	120	80	100	120	80	100	120
Comp Damp FFD	A				85-5253					
Lock Out - TPC	A				85-5318					
Remote L/O Assy *	A				83-2407*					
Click-It Remote L/O Lever -Left *	A - STD Shock				83-5558*					
Click-It Remote L/O Lever -Right *	A - STD Fork				83-2629*					
Click-It Remote L/O Cable *	A				83-2973*					
Click-It Remote L/O Cable Guide *	A				83-2183*					
Click-It Remote L/O O-Ring Kit *	A				83-2408*					
Click-It Remote Lever Jelly Beans	A				83-2987 (10 Pack)*					
Rbnd Damp - Adj	B				85-5255					
Pre Load Adj	C	85-4810								
Air Cap	C	83-2398								
Crn/Str/Leg	D									
	***Blk AL S/T(26") STD/SM	83-5562	83-5563	83-2587	83-5562	83-5563	83-2587	83-5562	83-5563	83-2587
Outer Leg Assy	E									
STD	Black (26")	83-2125								
STD	Silver (26")	83-2131								
STD	Matte Silver	83-2338								
NB, STD DO	Black (26")	83-2126								
NB, STD DO	Silver (26")	83-2132								
NB, STD DO	Matte Silver	83-2335								
Sticker Kit	F - For Dark Colors	83-2588								
	F - For Light Colors									
Ride Kits	G									
	***WD Booster								83-2144*	83-2147*
	***Soft	83-2135	83-2138	83-2141	83-2135	83-2138	83-2141	83-2135	83-2138	83-2141
	***Medium	83-2136	83-2139	83-2142	83-2136	83-2139	83-2142	83-2136	83-2139	83-2142
	***Firm	83-2137	83-2140	83-2143	83-2137	83-2140	83-2143	83-2137	83-2140	83-2143
	***X-Firm	83-2610	83-2611		83-2610	83-2611		83-2610	83-2611	
	80	85-4921								
	100	85-4921								
	120	85-4921								
	70-100 RT Wind Down		83-2153*			83-2153*			83-2153*	
	90-120 RT Wind Down			83-2153*			83-2153*			83-2153*
Comp Rod Bottomout Spacers	H	83-5577	83-5578	83-5579	83-5577	83-5578	83-5579	83-5577	83-5578	83-5579
Air Push Rods	H									
	80	83-2592*			83-2592*			83-2592*		
	100		83-2593*			83-2593*			83-2593*	
	120			83-2594*			83-2594*			83-2594*
Bushing Kit	E	83-2596								
Air Piston Kit	G	83-5580								
Knob Kit	I	83-2595								
Boot Kit	J	85-5390								
Dust Seal Kit	K	83-5583								
O-Ring Kit	K	85-5555								
Click-It L/O Retro Kits (NOT WARRANTY I'	A				83-2977					
2006 Kit PN confirmed as 2007 kit	* Optional									

Sliver

Platform		Sliver					
Model		LX-710 LK-712	LX-720 LX 713	LX-720 LX 722	LX-721 LX-723	LX-730 LX 732	LX-731 LX-733
Code		Comp		Elite		Super	
Travel (mm)		80	100	80	100	80	100
Comp Damp FFD	A	83-3088					
Lock Out - TPC	A	85-5559					
Remote L/O Assy *	A	83-2404*					
Click-It Remote L/O Lever -Left *	A - STD Shock	83-5558*					
Click-It Remote L/O Lever -Right *	A - STD Fork	83-2629*					
Click-It Remote L/O Cable *	A	83-2973*					
Click-It Remote L/O Cable Guide *	A	83-2183*					
Click-It Remote L/O O-Ring Kit *	A	83-2408*					
Click-It Remote Lever Jelly Beans		83-2987 (10 Pack)*					
Rbnd Damp - Adj	B	83-3089					
Pre Load Adj	C	83-3239					
Air Cap	C	85-4473					
Crn/Str/Leg	D						
	***Blk AL S/T(26") STD/St	83-3090	83-3091	83-3090	83-3091	83-3090	83-3091
Outer Leg Assy	E						
STD	Black (26")	83-3092					
STD	Silver (26")	83-3096					
STD	Matte Black	83-3114					
NB, STD DO	Black (26")	83-3093					
NB, STD DO	Silver (26")	83-3097					
NB, STD DO	Matte Black	83-3115					
Sticker Kit	F - For Dark Colors	TBD					
	F - For Light Colors	TBD					
Ride Kits	G						
	***X-Soft	83-2779	83-2284	83-2779	83-2284	83-2779	83-2284
	***Soft	83-2280	83-2285	83-2280	83-2285	83-2280	83-2285
	***Medium	83-22281	83-2286	83-22281	83-2286	83-22281	83-2286
	***Firm	83-2282	83-2287	83-2282	83-2287	83-2282	83-2287
	***X-Firm	83-2283	83-2288	83-2283	83-2288	83-2283	83-2288
Comp Rod/	H						
	80	83-3116		83-3116		83-3116	
	100		83-3117		83-3117		83-3117
Air Push Rods	H						
	80	83-3240		83-3240		83-3240	
	100		83-3241		83-3241		83-3241
Bushing Kit	E	85-5324					
Air Piston Kit	G	85-5266					
Knob Kit	I	85-5584					
Dust Seal Kit	K	85-5265					
O-Ring Kit	K	85-5268					
Click-It L/O Retro Kits (NOT WARRANTY ITEM)	A	83-2989					
2006 Kit PN confirmed as 2007 kit	* Optional						

Slate

Platform		Slate								
Model		BR-710	BR-711	BR-712	BR-720	BR-721	BR-732	BR-730	BR-731	BR-732
Code		Comp			Elite			Super		
Travel (mm)		80	100	130	80	100	130	80	100	130
Comp Damp FFD	A	83-2174								
Lock Out - TPC	A	83-2276								
Remote L/O Assy *	A	83-2406*								
Click-It Remote L/O Lever -Left *	A - STD Shock	83-5558*								
Click-It Remote L/O Lever -Right *	A - STD Fork	83-2629*								
Click-It Remote L/O Cable *	A	83-2973*								
Click-It Remote L/O Cable Guide *	A	83-2183*								
Click-It Remote L/O O-Ring Kit *	A	83-2409*								
Click-It Remote Lever Jelly Beans		83-2987 (10 Pack)*								
Rbnd Damp - Non Adj	B		83-2175							
Rbnd Damp - Adj	B				83-2176					
Pre Load Adj	C	83-2177								
WD Adjuster Cap Assy	C								83-2178*	83-2179*
Air Cap	C	83-2184*								
Crn/Str/Leg	D									
	***Blk AL S/T(26") STD	83-3017	83-3018	83-3019	83-3017	83-3018	83-3019	83-3017	83-3018	83-3019
Outer Leg Assy	E									
STD	Black (26")	83-3052								
STD	Matte Black	83-3026								
STD	Matte Silver	83-3070								
NB, STD DO	Black (26")	83-3053								
NB, STD DO	Matte Black	83-3032								
NB, STD DO	Matte Silver	83-3071								
Sticker Kit	F - For Dark Colors	83-3037								
	F - For Light Colors	83-3038								
Ride Kits	G									
	***WD Booster								83-2208	83-2210
	***X-Soft	83-2201	83-2202	83-2203	83-2201	83-2202	83-2203	83-2201	83-2202	83-2203
	***Soft	83-2204	83-2205	83-2206	83-2204	83-2205	83-2206	83-2204	83-2205	83-2206
	***Soft WD								83-2207	83-2209
	***Medium	83-2211	83-2212	83-2213	83-2211	83-2212	83-2213	83-2211	83-2212	83-2213
	***Firm	83-2214	83-2215	83-2216	83-2214	83-2215	83-2216	83-2214	83-2215	83-2216
	***Firm WD								83-2217	83-2218
	***X-Firm	83-2219	83-2220	83-2423	83-2219	83-2220	83-2423	83-2219	83-2220	83-2423
	***XX-Firm	83-2612	83-2613		83-2612	83-2613		83-2612	83-2613	
Comp Rod/	H									
	80	83-2633			83-2633			83-2633		
	100		83-2633			83-2633			83-2633	
	130			83-2634			83-2634			83-2634
	70-100 RT Wind Down								83-3039	
	90-120 RT Wind Down									
	100-130 RT Wind Down									83-3040
	115-145 RT Wind Down									
	120-150 RT Wind Down									
	130-160 RT Wind Down									
	IT Bottom Assy									
	Lower Spring End Cap Assy									
Comp Rod Bottomout Spacers	H	83-2605	83-2606	83-2421	83-2605	83-2606	83-2421	83-2605	83-2606	83-2421
Air Push Rods	H									
	80	83-3042*			83-3042*			83-3042*		
	100		83-3043*			83-3043*			83-3043*	
	130			83-3044*			83-3044*			83-3044*
Bushing Kit	E	85-5321								
Air Piston Kit	G	83-3041*								
Knob Kit	I	83-2604								
Dust Seal Kit	K	83-2419								
O-Ring Kit	K	83-2418								
Click-It L/O Retro Kits (NOT WARRANTY ITE	A	83-2978								

Relic

Platform		Relic									
Model		NX-710 NX-713	NX-711 NX-714	NX-712 NX-715	K-620	K-621	K-622	K-640	K-641	K-642	
Code			Comp			Elite			Platinum		Trek BBM
Travel (mm)		80	100	130	80	100	130	80	100	130	120
Comp Damp FFD	**A**	85-5800									
Lock Out - TPC	**A**	85-5868*									
Remote L/O Assy *	**A**	83-2405*									
Click-It Remote L/O Lever -Left *	**A - STD Shock**	83-5558*									
Click-It Remote L/O Lever -Right *	**A - STD Fork**	83-2629*									
Click-It Remote L/O Cable *	**A**	83-2973*									
Click-It Remote L/O Cable Guide *	**A**	83-2183*									
Click-It Remote L/O O-Ring Kit *	**A**	83-2410*									
Click-It Remote Lever Jelly Beans		83-2987 (10 Pack)*									
Rbnd Damp - Adj	**B**	83-3046									
Pre Load Adj	**C**	83-2616									
WD Adjuster Cap Assy	**C**		83-3047			83-3047			83-3047		
Air Cap	**C**	85-5803									
IT Top Assy	**C**									*83-2440	
Crn/Str/Leg	**D**										
	***Blk AL S/T(26") ST	83-3048	83-3049	83-3050	83-3048	83-3049	83-3050	83-3048	83-3049	83-3050	83-3051
Outer Leg Assy	**E**										
STD	Black (26")	83-3052									
STD	Matte Black	83-3026									
STD	Matte Silver	83-3070									
NB, STD DO	Black (26")	83-3053									
NB, STD DO	Matte Black	83-3032									
NB, STD DO	Matte Silver	83-3071									
Sticker Kit	**F - For Dark Colors**	83-2424									
	F - For Light Colors	83-2278									
Ride Kits	**G**										
	***WD Booster		83-2147			83-2147			83-2147		
	***X-Soft	83-2279	83-2284	83-3072	83-2279	83-2284	83-3072	83-2279	83-2284	83-3072	83-2289
	***Soft	83-2280	83-2285	83-3073	83-2280	83-2285	83-3073	83-2280	83-2285	83-3073	83-2290
	***Soft WD		85-5847			85-5847			85-5847		
	***Medium	83-2281	83-2286	83-3074	83-2281	83-2286	83-3074	83-2281	83-2286	83-3074	83-2291
	***Firm	83-2282	83-2287	83-3075	83-2282	83-2287	83-3075	83-2282	83-2287	83-3075	83-2292
	***Firm WD		85-5853			85-5853			85-5853		
	***X-Firm	83-2283	83-2288		83-2283	83-2288		83-2283	83-2288		
Comp Rod/	**H**										
	60										
	80	83-3076			83-3076			83-3076			
	100		83-3076			83-3076			83-3076		
	130			83-3076			83-3076			83-3076	
	70-100 RT Wind Down		83-3082			83-3082			83-3082		
	90-120 RT Wind Down			85-5864			85-5864			85-5864	
	IT Bottom Assy									TBD	
	Lower Spring End Ca	83-3081									
Comp Rod Bottomout Spacers	**H**	83-3084	83-3085	83-3087	83-3084	83-3085	83-3087	83-3084	83-3085	83-3087	83-3086
Air Push Rods	**H**										
	80	83-3077			83-3077			83-3077			
	100		83-3078			83-3078			83-3078		
	120										83-3080
	130			83-3079			83-3079			83-3079	
Bushing Kit	**E**	85-5321									
Air Piston Kit	**G**	85-5266									
Knob Kit	**I**	85-5865									
Dust Seal Kit	**K**	85-5281									
O-Ring Kit	**K**	85-5282									
Click-It L/O Retro Kits (NOT WARRANTY ITE	**A**	83-2980									
2006 Kit PN confirmed as 2007 kit	* Optional										

R7

Platform		R7							
Model		M-610	M-611	M-620	M-621	M-630	M-631	M-640	M-641
Code		Comp		Elite		Super		Platinum	
Travel (mm)		80	100	80	100	80	100	80	100
Comp Damp FFD	A	83-2647							
Lock Out - TPC	A	83-2651*				83-2651			
Comp Damp Platform Plus	A			83-2648					
Remote L/O Assy *	A	83-2407*							
Click-It Remote L/O Lever -Left *	A - STD Shock	83-5558*							
Click-It Remote L/O Lever -Right *	A - STD Fork	83-2629*							
Click-It Remote L/O Cable *	A	83-2973*							
Click-It Remote L/O Cable Guide *	A	83-2183*							
Click-It Remote L/O O-Ring Kit *	A	83-2408*							
Click-It Remote Lever Jelly Beans		83-2987 (10 Pack)*							
Rbnd Damp - Adj	B	83-2652							
SPV Snap Valve Rebound	B	83-2653*						83-2653	
Air Cap	C	83-2654*						83-2654	
IT Top Assy	C	83-2317*							
IT Top Cable Guide	C	83-2318*							
IT HB Lever	C	83-2319*							
Crn/Str/Leg	D								
	***Blk AL S/T(26") SPV	83-2656	83-2659	83-2656	83-2659	83-2656	83-2659	83-2656	83-2659
Outer Leg Assy	E								
STD	Black (26")	83-2661							
STD	Matte Black	83-2673							
STD	Matte Silver	83-2674							
NB, STD DO	Black (26")	83-2662							
NB, STD DO	Matte Black	83-2683							
NB, STD DO	Matte Silver	83-2684							
Sticker Kit	F - For Dark Colors	83-2663							
	F - For Light Colors	83-2664							
Ride Kits	G								
	Negative Spring - STD	83-2665	83-2696	83-2665	83-2696	83-2665	83-2696		
	Negative Spring - Ti							83-2666	83-2697
Travel Adjust/	H								
Comp Rod/	H								
	80	83-2667		83-2667		83-2667		83-2667	
	100		83-2668		83-2668		83-2668		83-2668
	IT Bottom Assy	83-2321*							
Bushing Kit	E	85-5321							
Air Piston Kit	G	83-2669							
Knob Kit	I	83-2670							
Dust Seal Kit	K	85-5281							
O-Ring Kit	K	85-5282							
IT O-Ring Kit	K	83-2443							
Click-It L/O Retro Kits (NOT WARRANTY ITE	A	83-2977							
2006 Kit PN confirmed as 2007 kit	* Optional								

Minute

Platform		Minute											
Model		RG-710	RG-711	RG-712	RG-710	RG-711	RG-712	RG-720	RG-730	RG-731	RG-732		RG-740
Code		Comp			Comp Air			Elite	Super			Trek BBM	Plat.
Travel (mm)		100	120	140	100	120	140	100-130 RTWD	100	120	140	120	140
Comp Damp TPC	**A**	83-3143			83-3143								
Lock Out - TPC	**A**	*83-3144			*83-3144			83-3144					
SPV Volume Adj.	**A**							83-3150 (non-volume adjustable SPV air cap)					
Rbnd Damp - Adj	**B**	83-3145											
SPV Rebound	**B**								83-3146				
SPV Valve	**B**								TBD				
Pre Load Adj	**C**			83-3180									
Spring Cap	**C**	TBD											
WD Adjuster Cap Assy	**C**							83-3151					
Air Cap	**C**	*83-3150			*83-3150				83-3150				
IT Top Assy	**C**											83-3147	
IT Top Cable Guide	**C**											83-2318	
IT HB Lever	**C**											83-2319	
Crn/Str/Leg	**D**												
	***Blk AL S/T(26") SPV							83-3154	83-3155	83-3156	83-3157	TBD	
	***Blk AL S/T(26") LG	83-3152	83-3153	83-3154	83-3155	83-3156	83-3157						
Outer Leg Assy	**E**												
NB, STD DO	Black (26")	83-3022											
NB, STD DO	Matte Black	83-3034											
NB, STD DO	Matte Silver	83-3118											
NB, STD DO	Gloss Silver	83-3025											
NB, Hex Axel	Matte Black	83-3035											
NB, Hex Axel	Black	83-3023											
NB, Hex Axel	Silver	83-3026											
NB, Hex Axel	Matte Silver	83-3119											
NB, QR Hex Axel	Black	83-3024											
NB, QR Hex Axel	Silver	83-3027											
NB, QR Hex Axel	Matte Black	83-3036											
NB, QR Hex Axel	Matte Silver	83-3120											
Sticker Kit	**F - For Dark Colors**	83-2851											
	F - For Light Colors	83-2852											
Ride Kits	**G**												
	***WD Booster							83-2478					
	***X-Soft	83-3159	83-3164		83-3169	83-3174	83-2466		83-3169	83-3174	83-2466		
	***Soft	83-3160	83-3165		83-3170	83-3175	83-2469		83-3170	83-3175	83-2469		
	***Soft WD							83-2468					
	***Medium	83-3161	83-3166	83-3179	83-3171	83-3176	83-2471		83-3171	83-3176	83-2471		
	***Firm	83-3162	83-3167		83-3172	83-3177	83-2474		83-3172	83-3177	83-2474		
	***Firm WD							83-2473					
	***X-Firm	83-3163	83-3168		83-3173		83-2477		83-3173		83-2477		
Comp Rod/	**H**												
	100	83-3183											
	120		83-3183										
	145			83-3183									
	100-130 RT Wind Down							83-3181					
	IT Bottom Assy											83-3182	
Comp Rod Bottomout Spacer	**H**												
	100				83-3184				83-3184				
	120					83-3185				83-3185			
	130												
	140/145						83-3186				83-3186		
	160												
Bushing Kit	**E**	85-5964											
Thru Axel	**E**	TBD											
Thru Axel Quick Release Kit	**E**	TBD											
Air Piston Kit	**G**				83-3188				83-3188				
Knob Kit	**I**	83-3187											
Dust Seal Kit	**K**	85-5293											
O-Ring Kit	**K**	83-2486											
IT O-Ring Kit	**K**											83-2487	

Nixon

Platform		Nixon									
Model		G-610		G-620		G-630		G-640		G-650	
Code		Comp	Comp	Elite	Elite	Super	Super	Super Intrinsic	Super Intrinsic	Platinum Intrinsic	Platinum Intrinsic
Travel (mm)		145	160	115-145 RTWD	130-160 RTWD	145	160	145	160	145 IT	160 IT
TPC - Cartridge	A	83-3189	83-3193	83-3189	83-3193	83-3189	83-3193				
CID - Cartridge	A							83-3190	83-3194	83-3190	83-3194
Cartridge Damping Rebuild Parts											
Cartridge Rebound Assy	A	83-2813									
Cartridge TPC+ Assy	A	83-3191									
Cartridge CID Assy	A							83-3192			
Cartridge Body	A	83-2816	83-3197	83-2816	83-3197	83-2816	83-3197	83-2816	83-3197	83-2816	83-3197
Cartridge End Cap	A	83-2817									
Pre Load Adj	C										
Spring Cap	C	TBD									
WD Adjuster Cap Assy	C			83-3151							
Air Cap	C					83-3150					
IT Top Assy	C									83-3147	
IT Top Cable Guide	C									83-2318	
IT HB Lever	C									83-2319	
Crn/Str/Leg	D										
	***Blk AL S/T(26") SPV	83-3199	83-3205	83-3199	83-3205	83-3201	83-3207	83-3201	83-3207		
	***Blk AL S/T(26") SPV & IT									83-3203	83-3209
Outer Leg Assy	E										
NB, STD DO	Textured Black	83-2825									
NB, STD DO	Black (26")	83-2794*									
NB, STD DO	Matte Black	83-2457									
NB, STD DO	Matte Silver	83-2459									
NB, STD DO	Gloss Silver	83-2795*									
NB, Hex Axel	Textured Black	83-2826									
NB, Hex Axel	Matte Black	83-2458									
NB, Hex Axel	Black	83-2797*									
NB, Hex Axel	Silver	83-2798*									
NB, Hex Axel	Matte Silver	83-2460									
NB, QR Hex Axel	Matte Black	83-2823									
NB, QR Hex Axel	Matte Silver	83-2824									
NB, QR Hex Axel	Textured Black	83-2827									
Sticker Kit	F - For Dark Colors	83-2831									
	F - For Light Colors										
Ride Kits	G										
	***WD Booster			83-2478	83-3223						
	***X-Soft	83-2465	83-3211			83-2466	83-3216	83-2466	83-3216		
	***Soft	83-2467	83-3212			83-2469	83-3217	83-2469	83-3217		
	***Soft WD			83-2468	83-3221						
	***Medium	83-2470	83-3213			83-2471	83-3218	83-2471	83-3218		
	***Firm	83-2472	83-3214			83-2474	83-3219	83-2474	83-3219		
	***Firm WD			83-2473	83-3222						
	***X-Firm	83-2475	83-3215	83-2476		83-2477	83-3220	83-2477	83-3220		
Comp Rod/	H										
	145	83-3227									
	160		83-3228								
	115-145 RT Wind Down			83-3224							
	130-160 RT Wind Down				83-3010						
	IT Bottom Assy									83-3225	83-3226
Comp Rod Bottomout Spacers	H	83-3300									
Air Push Rods	H										
	145					83-2483		83-2483			
	160						83-3229		83-3229		
Bushing Kit	E	85-5964									
Thru Axel	E	83-2397									
Thru Axel Quick Release Kit	E	TBD									
Air Piston Kit	G					83-2494					
Knob Kit	I	83-2837									
Dust Seal Kit	K	85-5293									

Stance

Platform		Stance								
Model		F-610	F-611	F-620	F-621	F-622	F-630	F-631	F-640	F-641
Code		Static		Blunt			Flow		Kingpin	
Travel (mm)		80	100	130	150	170	100/130 RTWD	120/150 RTWD	150	170
Comp Damp FFD	A	83-2886								
Comp Damp TPC+	A	83-2888							83-2887	
Rbnd Damp - Adj	B	83-2890		83-2890		83-2891	83-2890			83-2891
Spring Cap	C	83-2894							83-2895	
WD Adjuster Cap Assy	C						83-2892	83-2893		
Crn/Str/Leg	D									
	***Steel S/T (26")	83-2896			83-2898		83-2896	83-2898		
	***Blk AL S/T(26") STD/SM								85-5903	
	***Blk AL S/T(26") LG								85-5962	
	***AL 1.5 S/T	83-2897			83-2899	83-2900	83-2897	83-2899		
	***R/L Inner leg (T/C Forks)									
	***Blk Al Top Clamp - Large								85-5965	
	***Blk Al Top Clamp - Small								85-5966	
NB, STD DO	Silver (26")	83-2427								
NB, STD DO	Matte Black	83-2361								
NB, Hex Axel	Matte Black	83-2363								
Sticker Kit	F - For Dark Colors	83-2364								
	F - For Light Colors	83-2365								
Ride Kits	G									
	***WD Booster						83-2371	83-2373		
	***X-Soft	83-2366			83-2367				83-2367	
	***Soft	83-2368			83-2369		83-2370	83-2372	83-2369	
	***Medium	83-2374			83-2375				83-2375	
	***Firm	83-2376			83-2377		83-2378	83-2379	83-2377	
	***X-Firm	83-2380			83-2381				83-2381	
	***XX-Firm	83-2614			83-2615				83-2615	
Comp Rod/	H									
	80	83-2901								
	100		83-2902							
	130			83-2903						
	145									
	150				83-2903				83-2903	
	170					83-2906				83-2906
	100-130 RT Wind Down						83-2904			
	120-150 RT Wind Down							83-2905		
	130-160 RT Wind Down									
	IT Bottom Assy									
	Lower Spring End Cap Assy	83-2907							83-2907	
Comp Rod Bottomout Spacers	H	83-2393		83-2394	83-2395		83-2396	83-2395		
Bushing Kit	E	85-5964								
Thru Axel	E	83-2397								
Thru Axel Quick Release Kit	E	TBD								
Knob Kit	I	83-2391								
Dust Seal Kit	K	83-2392								
O-Ring Kit	K	83-2838								
2006 Kit PN confirmed as 2007 kit	* Optional									

Gold Label Jump Series

Platform		Gold Label Jump Series	
Model		J-610, 611	J-620, 621
Code		Series 1	Series 2
Travel (mm)		80, 100	80, 100
Comp Damp FFD	**A**	83-2808	
Rbnd Damp - Adj	**B**	85-5126	
Spring Cap	**C**	83-2790	
Crn/Str/Leg	**D**		
	***Steel S/T (26")	83-2791	
	***AL 1.5 S/T	83-2793	
Outer Leg Assy	**E**		
NB, STD DO	Textured Black	83-2825*	
NB, STD DO	Black (26")	83-2794	
NB, STD DO	Matte Black	83-2457*	
NB, STD DO	Matte Silver	83-2459*	
NB, STD DO	Gloss Silver	83-2795	
NB, Hex Axel	Textured Black	83-2826*	
NB, Hex Axel	Matte Black	83-2458*	
NB, Hex Axel	Black	83-2797	
NB, Hex Axel	Silver	83-2798	
NB, Hex Axel	Matte Silver	83-2460	
NB, QR Hex Axel	Matte Black	83-2823*	
NB, QR Hex Axel	Matte Silver	83-2824*	
NB, QR Hex Axel	Textured Black	83-2827	
Sticker Kit	**F - For Dark Colors**	83-2803	
	F - For Light Colors	83-2804	
Ride Kits	**G**		
	***Firm	83-2805 (STD)	
	***X-Firm	83-2806	
Travel Adjust/	**H**		
Comp Rod/	**H**		
	80	85-4491	
	100		83-2789
Bushing Kit	**E**	85-5964	
Thru Axel	**E**	83-2397	
Thru Axel Quick Release Kit	**E**	TBD	
Knob Kit	**I**	83-2809	
Dust Seal Kit	**K**	83-5293	
O-Ring Kit	**K**	83-2838	
Grind Bolt	**K**	85-4487	
2006 Kit PN confirmed as 2007 kit	* Optional		

Travis

Platform		Travis						
Model		E-610	E-620	E-630	E-640	E-641	E-650	E-651
Code		Single 150mm	Single 180	Intrinsic 180	Triple 180	Triple 203	Intrinsic 180	Intrinsic 203
Travel (mm)		150	180	180	180	203	180	203
TPC+ - Cartridge	**A**	83-2908	83-2909		83-2911	83-2991		
CID - Cartridge	**A**	83-2912		83-2913			83-2915	83-2992
Cartridge Damping Rebuild Parts								
Cartridge Rebound Assy	**A**	83-2997			83-2996	83-2997	83-2996	83-2997
Cartridge TPC+ Assy	**A**	83-2917			83-2917	83-2993		
Cartridge CID Assy	**A**			83-2918			83-2918	83-2994
Cartridge Body	**A**	83-2916	83-2919	83-2919	83-2982	83-2995	83-2982	83-2995
Cartridge End Cap	**A**	83-2817						
Pre Load Adj	**C**							
Spring Cap	**C**	83-2921			83-2983			
Crn/Str/Leg	**D**							
	***Steel S/T (26")	83-2922						
	***Blk AL S/T(26") STD/SM				83-2926			
	***Blk AL S/T(26") LG				83-2927			
	***AL 1.5 S/T	83-2923	83-2924	83-2924				
	***R/L Inner leg (T/C Forks)				83-3231	83-3232	83-3231	83-3232
	***Blk Al Top Clamp - Large				83-2926			
	***Blk Al Top Clamp - Small				83-2927			
Outer Leg Assy	**E**							
NB, Hex Axel	Matte Black	83-2928						
NB, Hex Axel	Matte Silver	83-2929						
NB, QR Hex Axel	Matte Black	83-2930						
NB, QR Hex Axel	Matte Silver	83-2931						
NB, QR Hex Axel	Textured Black	83-2933						
Sticker Kit	**F - For Dark Colors**	83-2935						
	F - For Light Colors	83-2936						
Ride Kits	**G**							
	***X-Soft	83-2765	83-2770	83-2770	83-2770	83-2775		
	***Soft	83-2766	83-2771	83-2771	83-2771	83-2776	83-2781	83-2958
	***Medium	83-2767	83-2772	83-2772	83-2772	83-2777	83-2782	83-2959
	***Firm	83-2768	83-2773	83-2773	83-2773	83-2778	83-2783	83-2960
	***X-Firm	83-2769	83-2774	83-2774	83-2774	83-2779		
Travel Adjust/	**H**							
Comp Rod/	**H**							
	150	83-2962						
	180		83-2962	83-2962	83-2962		83-2962	
	200					83-2963		83-2963
Comp Rod Bottomout Spacers	**H**	83-2962						
Bushing Kit	**E**	83-2965						
Thru Axel	**E**	83-2966						
Thru Axel Quick Release Kit	**E**	83-2967						
Knob Kit	**I**	83-2837						
Dust Seal Kit	**K**	83-2969						
O-Ring Kit	**K**	83-2970						
2006 Kit PN confirmed as 2007 kit	* Optional							