

Owner's Manual

'98 INDY S, INDY C, INDY XC, AND INDY SL MODELS

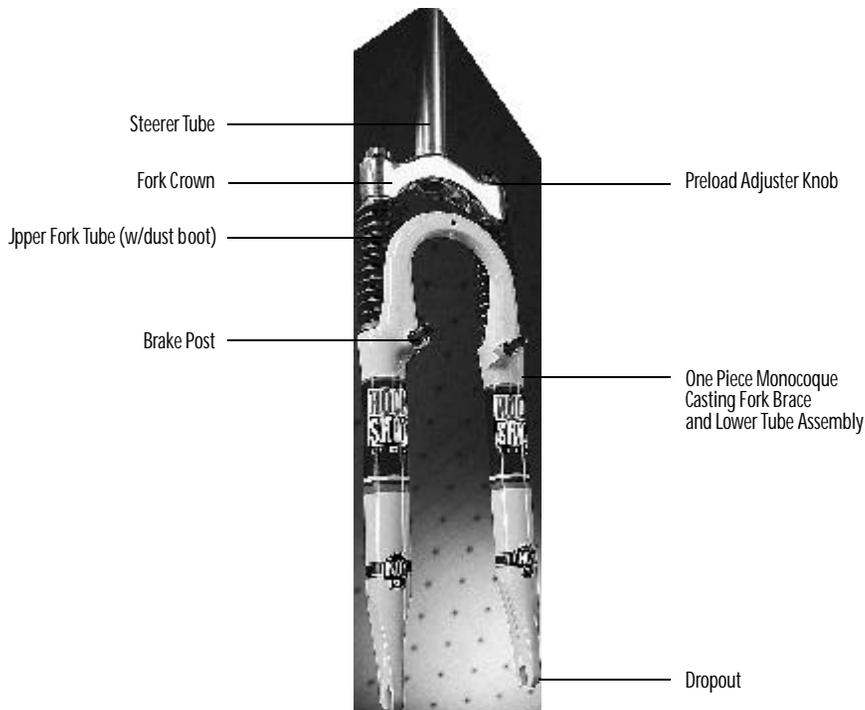


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Congratulations! You have purchased the best in mountain bike suspension. RockShox forks are made of lightweight, high-strength materials in state-of-the-art manufacturing processes. RockShox forks are designed to balance high performance with ease of maintenance. This manual contains important information about safe installation, operation, and maintenance of your suspension fork. We urge you to read it carefully, become familiar with its components, and follow our recommendations to help make your mountain bike experience enjoyable and trouble free.



INDY Features

- True "One-Piece" lower tube assembly
- Improved Type 2 Spring system, gives lively action of a coil spring and lightweight progressiveness of an elastomer. Very easy to tune for different riders. Available on all forks except the INDY S.
- Unique "Resi-wiper Seal" cleans and lubricates the upper fork tubes
- Easton tapered aluminum upper tubes (SL). Optimized for strength and stiffness
- Increased slider overlap provides smoother performance
- Super stiff alloy crown
- Oil bath* lubrication system

STANDARD EQUIPMENT FOR AFTERMARKET INDY FORKS INCLUDES:

48mm travel version for INDY S (hanger only)

- (1) medium elastomer spring - assembled in the fork

60mm travel version for Indy C

- (2) medium coil springs (110#) - assembled in the fork
- (2) medium spring rate adjusters (black) - assembled in the fork
- (2) soft spring rate adjusters (beige)
- (2) firm spring rate adjusters (gray)
- (1) bolt-on hanger kit

72mm travel version for Indy XC/SL

- (2) medium coil springs (110#) - assembled in the fork
- (2) soft spring rate adjusters (beige) - assembled in the fork
- (2) medium spring rate adjusters (black)
- (2) firm spring rate adjusters (gray)
- (1) bolt-on hanger kit

OPTIONAL EQUIPMENT

Bolt-on Hanger for all INDY and JUDY '98 model hangerless forks.

Coil Spring Sets - soft, medium and firm

72mm Long Travel Kit, INDY XC/SL

INDY Elastomer Kits

INDY Spring Rate Adjuster Kits

INDY MCU kits

INTENDED USE

The INDY is designed for off-road use, including fire roads, double track and single track. It is not intended to be raced downhill.

CONSUMER SAFETY INFORMATION

RIDING A BIKE IS DANGEROUS. NOT PROPERLY MAINTAINING OR INSPECTING YOUR BIKE IS EVEN MORE DANGEROUS. IT'S ALSO DANGEROUS NOT TO READ THESE INSTRUCTIONS. SO, IF YOU USE OUR STUFF, DON'T BE A DUMMY—READ THE INSTRUCTIONS.

- Brakes must be properly installed and adjusted. If the brakes don't work properly the rider could suffer serious and/or fatal injuries.
- This fork is only intended and approved for use with cantilever-type brakes mounted to the existing mounting posts. Forks with hangerless style braces were designed for 'V' type or hydraulic cantilever brakes. Do not use any cantilever brake other than those intended by the brake manufacturer to work with a hangerless brace. Do not route the front brake cable and/or cable housing through the stem or any other mounts or cable stops. Do not use a front brake cable leverage device mounted to the brace. Do not use disc-type brakes mounted to the outer lower tube. The lower tubes were not designed to sustain the stresses such brakes could place on them, and structural failure to the fork may result if any devices or type of brake other than a cantilever are mounted on the fork. Structural failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- Use extreme caution not to tilt the bicycle to either side when mounting the bicycle to a carrier by the fork drop-outs (front wheel removed). The fork legs may suffer structural damage if the bicycle is tilted while the drop-outs are in the carrier. Make sure the front wheel is fastened down with a quick release. Make sure the rear wheel is fastened down when using **ANY** bike carrier that secures the fork's drop-outs. Not securing the rear wheel can allow the bike's mass to side-load the drop-outs, causing them to break or crack. If the bicycle tilts or falls out of its carrier, do not ride the bicycle until the fork is properly examined for possible damage. Return the fork to your dealer for inspection or call RockShox if there is any question of possible damage (See International Distributor list by country on Page 21). A fork leg or drop-out failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- If the fork makes metallic topping out sounds, stop riding the bicycle immediately and have the fork inspected or call RockShox. Continuing to ride with the fork in this condition could result in the loss of control of the bicycle with possible serious and/or fatal injuries.
- Always use genuine RockShox parts. Use of non-RockShox after-market replacement parts voids the warranty and could cause structural failure to the fork, which may result in loss of control of the bicycle with possible serious and/or fatal injuries.

IMPORTANT: ROCKSHOX FORKS ARE DESIGNED FOR COMPETITIVE OFF-ROAD RIDING AND DO NOT COME WITH PROPER REFLECTORS FOR ON-ROAD USE. YOUR DEALER SHOULD INSTALL PROPER REFLECTORS TO MEET THE CONSUMER PRODUCT SAFETY COMMISSION'S (CPSC) REQUIREMENTS FOR BICYCLES STANDARDS IF THE FORK IS GOING TO BE USED ON PUBLIC ROADS AT ANY TIME.

Installation instructions

IT IS EXTREMELY IMPORTANT THAT YOUR ROCKSHOX INDY FORK IS INSTALLED CORRECTLY BY A QUALIFIED TECHNICIAN WITH PROPER TOOLS. IMPROPERLY INSTALLED FORKS ARE EXTREMELY DANGEROUS AND CAN RESULT IN SEVERE INJURIES.

1. Remove the existing fork and lower headset race from the bicycle. Measure the length of the fork steerer tube against the length of the RockShox steerer tube to determine whether it may need cutting to the proper length (on threadless steerer/Aheadset design). On threadless steerers (Aheadset design), make sure there is sufficient length to properly clamp the stem (Refer to stem manufacturer's instructions).

IMPORTANT: Do NOT add threads to RockShox steerers. The steerer tube crown assembly is a one-time press fit. Replacement of the assembly must be done to change the length, diameter, or headset type (threaded or threadless). Do NOT remove or replace the steerer tube, as this could result in loss of control of the bicycle with possible serious and/or fatal injuries.

2. Install the headset race (\emptyset 26.4mm for 1" steerers) firmly against the top of the fork crown. Install the fork assembly on the bike, making sure there is sufficient threads to properly lock the headset in place. On threadless steerers (Aheadset design), make sure there is sufficient length to properly clamp the stem (refer to stem manufacturer's instructions). Adjust the headset so you feel no play or drag.
3. Install the brakes according to the manufacturer's instructions and adjust the brake pads properly. Use the fork only with cantilever-type brakes mounted to the existing mounting posts.
4. On threaded steerers, insert the stem to a minimum depth according to CPSC and JIS standards. The stem must be inserted to a minimum engaging length not less than 2.5 times the stem diameter from the lowest end of the stem (not wedge, see Fig. 1).
5. Fit a brake cable to the RockShox fork brace mount. Forks with hangerless style braces were designed for 'V'-type or hydraulic cantilever brakes. Do not use any cantilever brake other than those intended by the brake manufacturer to work with a hangerless brace. Do not route the cable through the stem or any other mounts or cable stops. The cable should make a direct route from the brake lever to the RockShox fork brace mount and be able to freely move up and down with the suspension movement. It may be necessary to install a whole new cable.



Fig. 1

IMPORTANT: THE DISTANCE FROM THE TOP OF THE BRAKE CABLE HANGER TO THE BOTTOM OF THE BRAKE CABLE HOUSING STOP MUST BE A MINIMUM OF 12MM WITH THE BRAKES APPLIED. AN IMPROPERLY INSTALLED FRONT BRAKE CABLE COULD RESULT IN LOSS OF CONTROL OF THE BICYCLE WITH POSSIBLE SERIOUS AND/OR FATAL INJURIES.

6. Adjust the front wheel quick release to clear the dropout counter bore. The quick release nut must be tightened after the wheel is properly seated into the dropout counter bore. Make sure four or more threads are engaged in the quick release nut with the release adjusted to the lock. Orient the quick release lever in front of and parallel to the lower tube in the locked position.
7. The INDY forks are designed to use a maximum tire size of 2.2" wide or 335mm radius. After installing the fork or fitting a new tire make sure to check the tire clearance. Check tire size whenever you change tires. To do this, remove the spring stack (see instructions on page 6, "Overall Spring Rate Adjustment") and compress the fork completely to make sure at least 5mm of clearance exist between the top of the tire and the bottom of the crown. Using less than 5mm of clearance will cause the tire to jam against the crown when the fork is fully compressed. The upper tubes must always be engaged in the crown and must not extend above the crown more than 1mm.

TUNING YOUR INDY FORK

INDY forks can be tuned to your particular weight, riding style and terrain. Our forks are set up, initially, for the 140 to 180lb, all around rider who spends equal amounts of time riding every off-road terrain imaginable. To tailor the fork to your weight and riding style you can make tuning adjustments that suit your specific needs.

When tuning suspension, always make one change at a time and write it down. This takes patience, but allows you to understand how each change affects your ride. Keeping a record lets you know what changes you have tried that work and suggests what changes you might try. Ask a shop or local riders what they have found works well. These resources are typically the best bet, but don't hesitate to call RockShox about specific tuning needs when necessary. A list of phone numbers is on page 21.

RIDE HEIGHT AND SPRING PRELOAD ADJUSTMENT

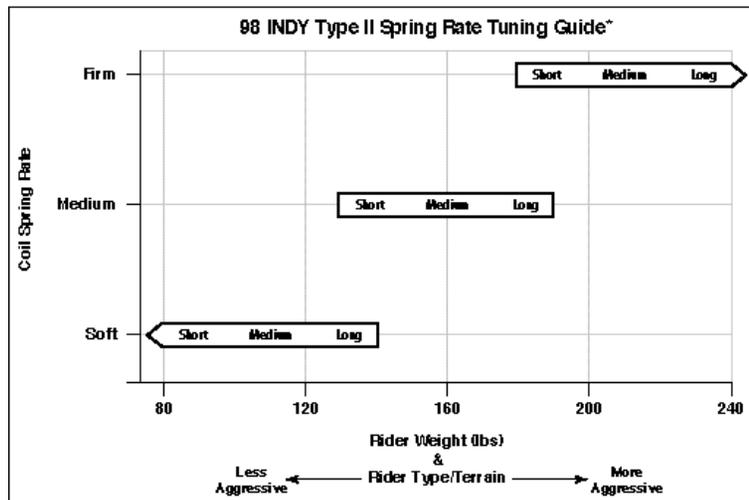
The fork is designed to sag when you are sitting on the bike. This sag allows the front wheel to stay in contact with the ground when braking and cornering over rough or uneven terrain. The optimum settings are 7 to 10mm sag for 72mm travel; 5 to 8mm for 60mm travel; and 3 to 5 mm for 48mm of travel.

Changing the preload alters the sag and firmness of the initial fork movement. To measure sag, install a zip tie in the upper tube so that it is flush against the Resi-wiper seal, sit on the bike with normal riding apparel, then step off your bike and measure the bottom of the zip tie to the top of the wiper. This measurement is the amount of sag. For example, heavier more aggressive riders need more spring preload to maintain proper ride height and allow more of the fork's travel to be used during bump impact.

Change Preload*: The top cap adjustment knob on each leg adjusts the sag of the fork (on the preload and in the spring stack). When the adjustment knob is turned full clockwise, the fork will sag the least and be the firmest. Turning the adjustment knob full counterclockwise makes the fork sag the most and be the softest.

THE PRELOAD ADJUSTMENT FOR THE INDY S IS ACHIEVED BY ADJUSTING THE PRELOAD KNOB ON LEFT LEG ONLY.

Quick Tip: right and left side is determined when you are straddling the bicycle frame facing forward.



TUNING GUIDE NOTES

- THE PRECEDING CHART IS INTENDED AS A TUNING GUIDE ONLY. ADDITIONAL TUNING MAY BE NECESSARY TO OPTIMIZE YOUR SUSPENSION FORK TO THE PARTICULAR RIDER'S WEIGHT, RIDING STYLE AND TERRAIN.
- AGGRESSIVE RIDER OR AGGRESSIVE TERRAIN MAY NEED TO ADJUST THE OVERALL SPRING RATE BY USING AN INCREASED RIDER WEIGHT (ACCORDING TO THE ABOVE CHART).

OVERALL SPRING RATE ADJUSTMENT (ALL MODELS EXCEPT FOR THE INDY S)

You want the fork to occasionally bottom out. If you are bottoming out too often or not using all the available travel then the overall spring rate should be changed. There are two ways to change the overall spring rate one is by changing the coil spring and the other is by changing the spring rate adjuster. Use the following instructions to change the coil spring in each leg.

TO CHANGE COIL SPRINGS OR SPRING RATE ADJUSTERS

- Unscrew top cap assembly using a 22 or 24mm open-end-wrench or socket.

IMPORTANT: HOLD THE LEGS VERTICALLY TO AVOID LOSS OF OIL WHEN THE TOP CAP IS REMOVED. THE INDY CONTAINS 10cc (2 TEASPOONS) OF OIL TO LUBRICATE AND RESIST CORROSION.

- Remove the spring stack assembly (top cap, coil spring, spring rate adjuster, spacer and elastomer). (Fig. 2)
- Pull the elastomer spacer from the coil spring and top cap.

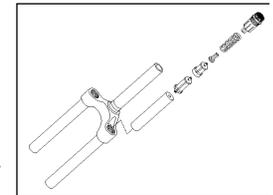


Fig. 2

NOTE: SEPARATION OF THE PLASTIC SPACER(S) IN THE SPRING STACK IS BEST ACCOMPLISHED BY TWISTING WHILE PULLING THEM APART.

- Remove the spring rate adjuster from the coil spring spacer. By using a shorter (softer) or longer (firmer) spring rate adjuster than stock, you can change the overall spring rate. You can also change the coil springs to alter the overall spring rate and to more closely meet your needs. To do this, pull the coil spring from the spring rate adjuster and replace it with a coil spring that has a softer or firmer rated coil spring.

The coil springs are as follows:

Spring Rate	Color Stripe
Soft	White
Medium	Yellow
Firm	Green

- Snap the appropriate spring rate adjuster (supplied with all after market forks) into each coil spring (alternative springs can be purchased as an aftermarket tuning kit).
- Clean and grease the MCU (INDY XC, SL) or elastomer (INDY C), and reassemble the spring stack assembly.
- As needed, replace any lost oil with 8wt. RockShox oil. Requirements for each fork are as follows:

Model	Amount of 8wt. Oil (per fork leg)
INDY S	10cc (2tsp.)
INDY C	10cc (2tsp.)
INDY XC	15cc (3tsp.)
INDY SL	10cc (2tsp.)

- 9. Install the cleaned and lightly greased spring stack assembly in the upper tubes, starting the top cap threads by hand. Do not cross thread.
- 10. Tighten the top cap until it is flush with the upper tube.
- 11. Using a 22 or 24mm socket and beam-style torque wrench, torque the top cap assembly to 30 or 40 In-Lb (3.4 - 4.5 Nm).
- 12. Repeat this procedure on both legs.

IF TERRIBLE YOU MAY NEED TO ADJUST THE TOP CAP KNOBS TO OBTAIN THE SAME SA/G/PRELOAD FEEL (SEE ABOVE).

OVERALL SPRING RATE ADJUSTMENT FOR THE INDY S

The INDY S does not come equipped with the Type 2 Spring System. This fork uses a solid elastomer spring in the left leg with a secondary bottom spring. The spring rate can be changed on this fork by replacing the single elastomer with one of an alternate spring rate. Alternate elastomer springs can be purchased as an aftermarket tuning kit (see "Optional Equipment" on page 3).

TO CHANGE THE ELASTOMER:

- 1. Follow steps one and two above ("To Change Coil Springs").
- 2. Then, replace the elastomer with one of a higher or lower spring rate.
- 3. As needed, replace any lost oil with 10cc (two teaspoons) of 8 wt. RockShox oil.
- 4. Complete the installation by following steps 8 through 10 above, "To Change Coil Springs".

Maintenance

INDY forks are designed to be nearly maintenance free. However, as long as moving parts are exposed to the elements, moisture and contamination can reduce performance. To maintain high performance, safety and long life, periodic maintenance is required. RockShox forks are engineered for easy service to help you keep the fork clean, lubricated and performing like new. Performing maintenance more often is necessary if you ride in extreme conditions.

The recommended tools and intervals for maintenance are listed below.

IMPORTANT: ALWAYS WEAR SAFETY GLASSES WHEN WORKING ON ROCKSHOX FORKS.

MAINTENANCE TOOLS

- Small tip internal snap ring pliers (INDY SL)
- Plastic face mallet
- 22mm 3/8" drive socket (6 point preferred) or open-end wrench
- 24mm 3/8" drive socket (6 point preferred) or open-end wrench
- 3/8" drive ratchet, for socket
- Long (6" minimum) 3/8" drive socket extension
- Long (4" minimum) 6mm hex 3/8" drive socket (4" + of hex wrench protruding from socket)
- 3/8" drive beam style in-lb. torque wrench
- Small straight blade screw driver
- Safety Glasses

LUBRICANTS AND CLEANERS:

- Degreaser
- RockShox 8wt oil (or fork oil without seal sweller additives)
- Judy Butter or high quality teflon fortified grease (no lithium grease)

IMPORTANT: FOR BEST PERFORMANCE, AVOID LITHIUM-BASED GREASES. SOME LITHIUM GREASES CAN BECOME STICKY, TURN GRAY AND CAKE UP WHEN USED TO LUBRICATE THE BUSHINGS. SMOOTH FORK ACTION IS GREATLY LIMITED AND PERFORMANCE IS GREATLY REDUCED WHEN THIS HAPPENS. IF YOU USE LITHIUM GREASE, CHECK GREASE QUALITY AND CONDITION AT EACH 25-HOUR SERVICE INTERVAL TO ENSURE GREASE IS PERFORMING PROPERLY. TRY USING ANOTHER TYPE OF LUBRICANT IF YOU EXPERIENCE PROBLEMS.

TORQUE TIGHTENING VALUES

Crown Bolts (INDY XC only)	60 in-lb	6.8 Nm
Top Cap Assemblies	30 to 40 in-lb	3.4 to 4.5 Nm
Brake Posts.	60 in-lb	6.8 Nm
Plunger Bolts	120 in-lb	13.6 Nm

REGULAR MAINTENANCE INTERVALS

BEFORE EVERY RIDE, INSPECT THE FOLLOWING:

- Front wheel and quick release for proper installation and adjustment
- Fork for any obvious damage (crown, brace, upper tubes, lower tubes and dropouts)
- Front brake cable for proper routing
- Front brake pads for proper contact with the rim
- Front brake lever for proper adjustment
- Headset for proper function and adjustment

AFTER EVERY RIDE, CLEAN AND DRY THE FORK, TAKING CARE NOT TO GET WATER IN THE FORK AT THE RESI-WIPER.

AFTER EVERY WEEK OR EIGHT HOURS OF RIDING

AFTER EVERY WEEK OR EIGHT HOURS OF RIDING, CLEAN AND OIL THE UPPER TUBES, RESI-WIPER SEAL AND CHECK FASTENERS FOR PROPER TORQUE. FOLLOW THIS PROCEDURE:

- Lift fork boots from lower tubes and wipe Resi-wiper seal and upper tube areas clean. Apply two to three drops of Teflon-fortified oil to the upper tubes at seal (Fig. 3).
- Refit fork boots into Resi-wiper seal groove using small blade screw driver. Engage boot with seal groove at the rear and rotate boot around the upper tube to fully engage its lower edge behind the brace. Hint: compress the boot and apply a small amount of oil to the mating surfaces.
- Check crown bolts and brake posts for proper torque (XC only). Refer to "Torque Tightening Values," page 9.
- Repeat procedure on other leg.

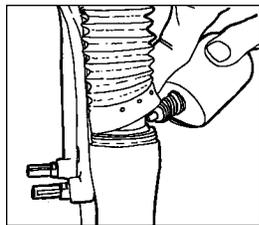


Fig. 3

AFTER EVERY MONTH OR TWENTY-FIVE HOURS OF RIDING

AFTER EVERY MONTH OR 25 HOURS OF RIDING, CLEAN AND GREASE THE SPRING STACKS, BUSHINGS AND RESI-WIPER SEAL. FOLLOW THIS PROCEDURE TO CLEAN AND GREASE THE SPRING STACKS:

- Unscrew the top cap using a 22 or 24mm wrench or socket. Remove the spring stack assembly and clean the stack with degreaser. Wipe the spring stacks dry.

IMPORTANT: THE SPRING STACK FOR THE INDY S IS ONLY IN THE LEFT FORK LEG. IT IS STILL NECESSARY TO REMOVE BOTH TOP CAPS OF THE INDY S.

- Inspect the Type 2 spring for compression set (See "Type 2 Spring Stack Specification" table on page 12). Since there is no coil spring for the INDY S inspect the solid elastomer unit for wear or damage. Replace coil springs or elastomer (for INDY S) as needed.
- Apply a thin coat of Judy Butter to the coil spring and elastomer (elastomer only on the INDY S). Add 10cc or 15cc of 8wt. oil in to each leg (see oil specifications on page 7).
- Install assembly in upper tube, starting top cap threads by hand.
- Torque top cap to 30 or 40 in-lb. (3.4 to 4.5Nm). Make sure cap is flush with the upper tube.

- o. repeat this procedure on the other leg.

DO THE FOLLOWING TO CLEAN AND GREASE THE BUSHINGS AND RESI-WIPER SEALS:

7. Mount the bike in a stand, disconnect the front brake cable, and remove the front wheel. (The brakes do not need to be removed.)
8. Remove the top caps and spring stack assemblies as described above. Compress the fork fully.
9. Insert a long (4" minimum) 6mm hex 3/8" drive socket on 6" long extension in one leg through plunger cap and engage hex completely in broach of plunger bolt. Gently tap on extension with mallet to ensure engagement. Install 3/8" drive ratchet in extension, stabilize one-piece lower tube assembly between your feet and legs, push down while turning counterclockwise to break plunger bolt free.

IMPORTANT: THE PLUNGER BOLTS ARE INSTALLED TO 120 IN.-LB. WITH MEDIUM THREADLOCK COMPOUND. THE FORCE REQUIRED TO LOOSEN THE BOLT IS SIGNIFICANT. THE PLUNGER BOLT HEAD WILL STRIPE IF THE 6MM HEX SOCKET IS NOT FULLY ENGAGED. THE BROACH ON THE BOLT IS DEEP TO PREVENT STRIPPING WHEN THE HEX IS PROPERLY ENGAGED.

10. Loosen plunger bolt completely and repeat procedure on other lower tube.
11. Slide off one piece lower tube assembly. Remove the fork boots (Fig. 4).
12. Clean the upper tubes and inspect for wear and/or damage (nicks, scratches, or dings).
13. Clean fork boots and slide onto upper tubes.
14. Pour oil out from lower tubes.
15. Clean internals of lower tubes, bushings (two per leg), and Resi-wiper seal. A long 3/8" drive socket extension wrapped in a lint-free rag works well.

IMPORTANT: CLEAN LOWER BUSHINGS APPROXIMATELY 4" FROM TOP OF LOWER TUBES.

16. Apply Judy Butter to the surface of the four bushings, the inside of the lower tubes, and the pocket in each Resi-wiper seal. Use a socket extension wrapped in cloth tape and dipped in Judy Butter to reach inside the lower tubes (Fig. 5). For INDY SL, lube inside of upper tubes from the bottom for a distance of 4.5"

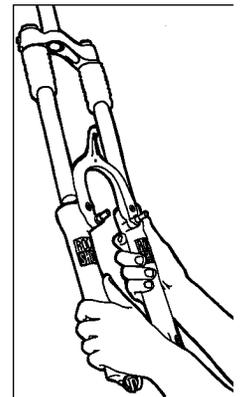


Fig. 4

DO NOT USE LITHIUM-BASED GREASE. IT CAN REACT WITH THE COATING ON THE BUSHINGS.

17. Replace oil inside the lower tubes with the required amounts listed on page 7.

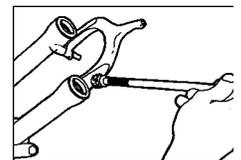


Fig. 5

18. The plunger assembly (plunger, bolt, greased top-out bumper and plunger cap) installs differently for base model INDY, C, XC, and SL. For the INDY, S, C, and XC, drop assembly down inside upper tube from the top. For the INDY SL, slide the plunger assembly into upper tube from the bottom along with clear plastic washer and retaining ring to hold it in place. Next, place dry, medium strength locking compound (blue Loc-tite) on threads of plunger bolt and allow to dry. Thread and torque plunger bolt to 120 in-lb (13.6Nm) using a torque wrench.

19. Refit fork boot into Resi-wiper seal groove using a small blade screwdriver. Engage boot with double seal groove at the rear and rotate boot around the upper tube to fully engage its lower edge behind the brace.

HINT: COMPRESSING THE BOOT AND APPLYING A SMALL AMOUNT OF OIL TO THE MATING SURFACE HELPS.

20. Install spring stack assembly in upper tubes starting top cap threads by hand.

1. Torque top cap to 50 or 40N·m (3.4 to 4.5ft·lb).
2. Repeat procedure on other leg.

SERVICE

THE FOLLOWING SECTION CONTAINS DETAILED SERVICE PROCEDURES FOR ALL INDIVIDUAL COMPONENTS OF THE INDY FORK.

CHANGING TRAVEL

The suspension travel on INDY forks can be changed by installing a different travel plunger kit. Follow the procedure titled **After every month or 25 hours of riding**, page 10, to remove one-piece lower tube assembly. Exchange standard plungers with longer units included in kit. Also, exchange spring stack parts (coil, spring rate adjuster, spacer and elastomer) with matching parts from the kit. Follow procedures under **After Every Month or Twenty-Five Hours of Riding**, page 10, to complete assembly.

IMPORTANT: INDY S, INDY C AND INDY XC PLUNGER ASSEMBLIES INSTALL DIFFERENTLY THAN THOSE USED IN THE INDY L. SEE "AFTER EVERY MONTH OR TWENTY-FIVE HOURS OF RIDING," PAGE 10, TO COMPLETE THE ASSEMBLY.

TYPE 2 SPRING REPLACEMENT

The Type 2 Spring System in INDY forks provide the lively action of a coil spring and the light weight responsiveness of an MCU spring (For INDY C it is a coil spring combined with a solid elastomer spring). However, over time, the springs can wear out, compromising performance. This is evident in compression set when the coil spring and MCU are shorter in a resting state than when they were new. Follow the table listed below as a guide to know when to replace the Type 2 Spring system. For removal, installation, cleaning and greasing the Type 2 springs follow the instructions under **After Every Month or Twenty-Five Hours of Riding**, (page 10).

TYPE 2 SPRING SYSTEM SPECIFICATION TABLE (ALL MODELS EXCEPT INDY S)

	Optimum (mm)	Replace (mm)
Coil Spring (C, XC, SL)	51 mm	46 mm
MCU (XC, SL)	115 mm	109 mm
Elastomer (INDY S, C)	154 mm	140 mm

INDY FRICTION DAMPER

Both the '98 INDY XC and SL use a friction damper system to enhance performance of the fork. This system includes a plastic friction retainer which contains an o-ring. The o-ring moves in both compression and rebound of the upper tubes. During movement, the o-ring creates friction (drag) on the plunger at the bottom of the fork. This friction is controlled by the design and lubrication of the oil bath system. The friction allows some damping of the spring. The friction is directional (more rebound damping is created than compression damping).

The o-ring is the only part that will see wear in the friction damper system. The o-ring should be replaced during any major service (i.e., bushing replacement) or when the friction damping performance becomes affected.

The o-ring is inside the friction retainer located at the end of each lower tube. The plunger must be removed from the upper tube to access it (see **After Every Month or Twenty-Five Hours of Riding**). The o-ring can

easily be removed from its groove in the friction retainer. Caution should be used when replacing this part to prevent cutting or tearing. (P/N 630-000495-00)

BUSHING REPLACEMENT

The high quality bushings in RockShox forks are designed to last many months of hard riding. The protective boots, a clean fork, routine greasing and maintenance are key to high performance and long bushing life. However, like all moving parts, bushings will eventually wear and need replacement. Increased fore and aft movement of upper tubes in lower tubes (similar to a loose headset) and/or slow action, even after a fresh greasing, signals the need to replace the bushings.

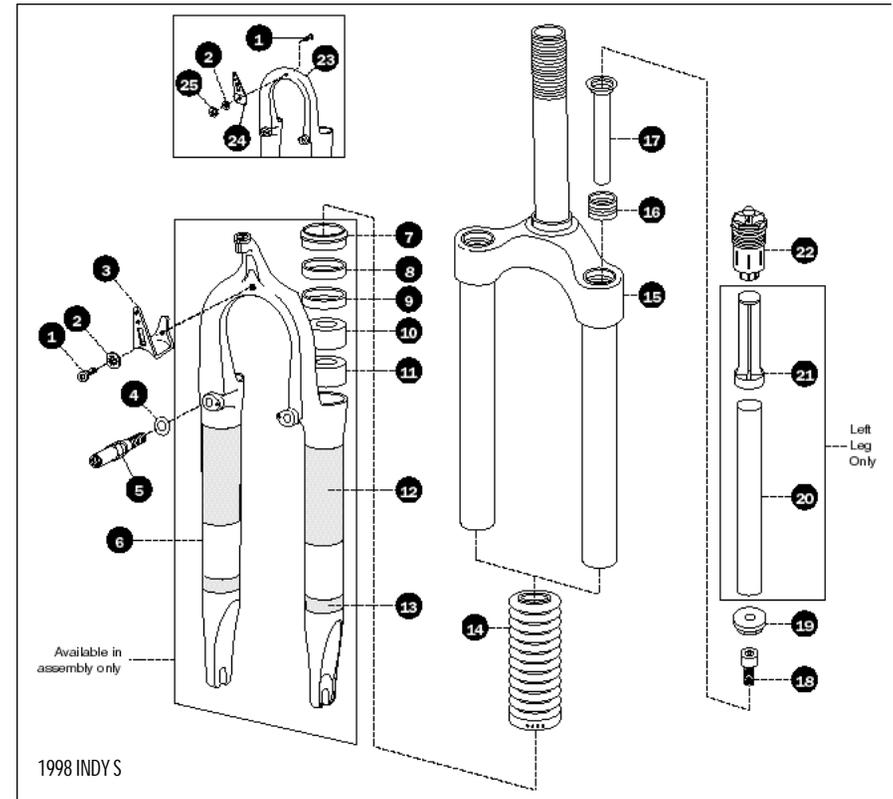
IMPORTANT: THIS SERVICE REQUIRES ROCKSHOX SPECIALTY TOOLS. WE RECOMMEND THIS LEVEL OF SERVICE BE DONE BY A QUALIFIED BIKE SHOP OR MECHANIC FAMILIAR WITH OUR PRODUCTS AND THIS PROCEDURE. BUSHING REPLACEMENT ADDENDUMS ARE AVAILABLE THROUGH YOUR DEALER OR THROUGH ROCKSHOX DIRECTLY.

Glossary of Terms

- Bottoming Out** – the condition when all suspension travel has been used up.
- Compression Stroke** – the “upward” motion of a fork which is moving in response to a bump impact.
- Damping Force** – the force required to move a shock absorber / damper (general oil) at any given speed.
- Forged** – a metal forming process which optimizes material structure using very large forces acting on a die mold in which material to be formed is placed.
- Geometry** – Descriptive term for the lengths and angles used in a bicycle design.
- Lead angle** – Angle the steering axis leans back from vertical.
- Oil bath** – oil reservoir system used for lubricating internal parts in the fork.
- One piece** – unitized lower leg assembly with both fork legs and fork brace cast as one piece.
- Preload** – The amount either in pounds or inches, a spring is compressed when fitted to an extended shock absorber.
- Rebound** – The extension or return direction of the shocks or suspension.
- Sag** – compression of the suspension caused by the rider's weight.
- Spring rate** – The amount of force required to deflect a spring a given distance.
- Tapered** – varying wall thickness of a tube. A design to optimize placement of material, allowing most efficient design considering the loads.
- Topping out** – the position of the fork at the “top” of the travel, or when the fork is fully extended. The action of complete extension of the fork.

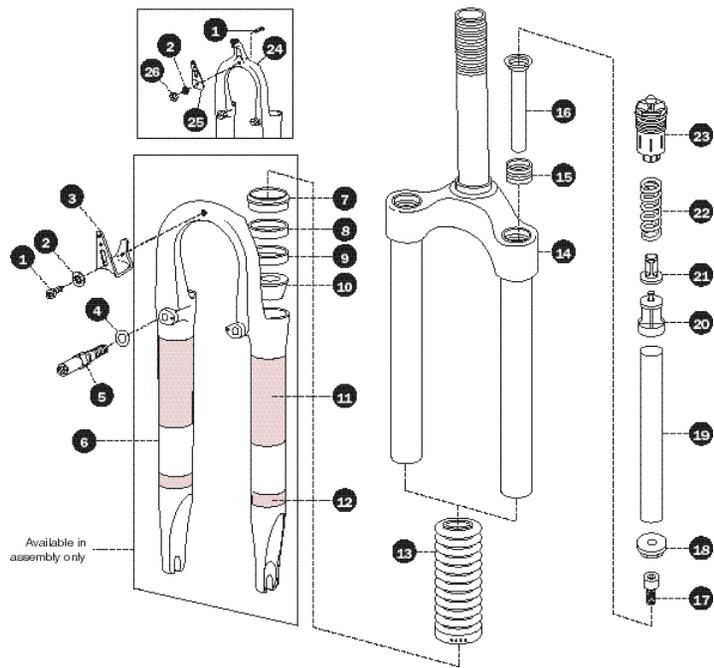
Follow the NORBA Code

- I will yield the right of way to other non-motorized recreationalists.
- I will use caution when overtaking another and will make my presence be known well in advance.
- I will maintain control of my speed at all times.
- I will stay on designated trails.
- I will not disturb wildlife or livestock.
- I will not litter.
- I will respect public and private property.
- I will always be self-sufficient.
- I will not travel solo when bikepacking in remote areas.
- I will observe the practice of minimum impact bicycling.
- I will always wear a helmet whenever riding.



Description

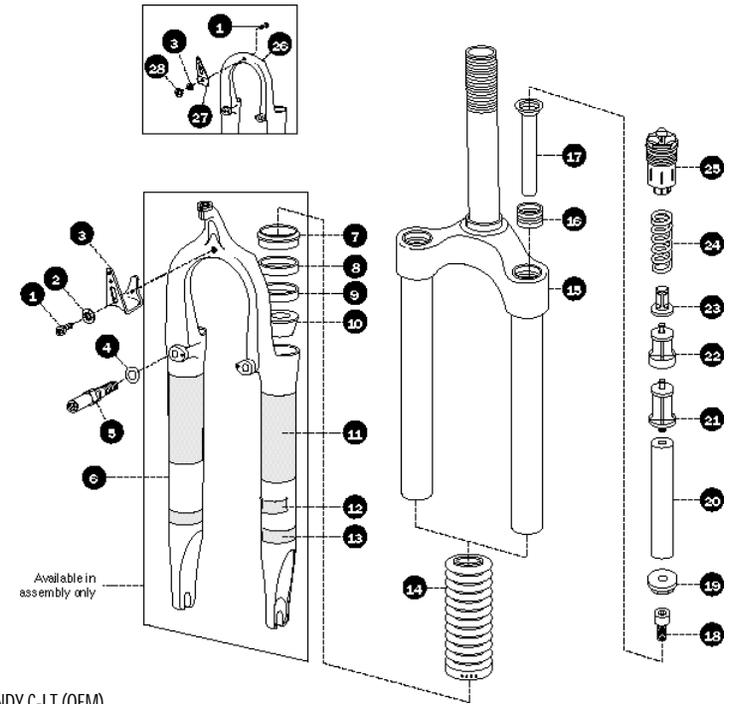
- | | | | |
|----|----------------------------------|----|------------------------------------|
| 1 | Reflector Bracket Screw | 16 | Top Out Bumper |
| 2 | Reflector Bracket Lock Washer | 17 | Plunger, Std |
| 3 | Reflector Bracket (Hanger-style) | 18 | Plunger Bolt |
| 4 | Brake Post Washer | 19 | Plunger Cap |
| 5 | Brake Post | 20 | Indy S Compression Bumper (Yellow) |
| 6 | Lower Tube Assy, Hanger, Black | 21 | Spring Spacer, Indy S |
| 7 | Indy Main Seal | 22 | Top Cap Assy |
| 8 | Upper Bushing | 23 | Lower Tube Assy, Hangerless, Black |
| 9 | Lower Bushing, 1.0" Slotted | 24 | Reflector Bracket (Hangerless) |
| 10 | Bumper Bottom, Indy S | 25 | Reflector Bracket Nut |
| 11 | Indy S Travel Spacer | | |
| 12 | Indy S Panel Decal, Black/Grey | | |
| 13 | Indy S Band Decal | | |
| 14 | Fork Boot, Standard Travel | | |
| 15 | Crown/Steerer/Upper Tubes | | |



1998 INDY C

Description

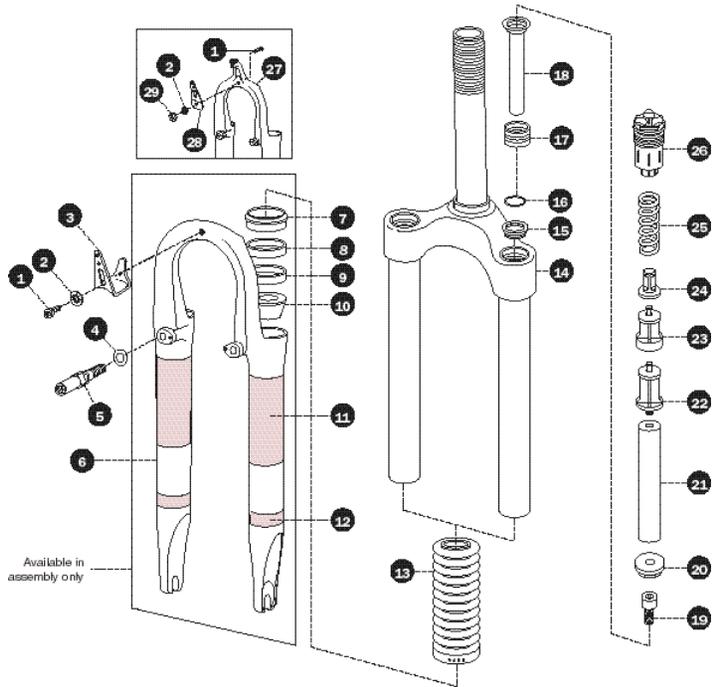
- | | |
|---------------------------------------------------|-----------------------------------|
| 1 Reflector Bracket Screw | 16 Plunger |
| 2 Reflector Bracket Lock Washer | 17 Plunger Bolt |
| 3 Reflector Bracket (For Hanger-style Fork Brace) | 18 Plunger Cap |
| 4 Brake Post Washer | 19 Compression Bumper (Purple) |
| 5 Brake Post | 20 Spacer, Urethane, Indy |
| 6 Lower Tube Assy, Hangerless, Cream | 21 Spring Rate Adjuster |
| 7 Indy Main Seal | 22 Tuning Spring |
| 8 Upper Bushing | 23 Top Cap Assy |
| 9 Lower Bushing, 1.0" Slotted | 24 Lower Tube Assy, Hanger, Cream |
| 10 Bottom Bumper, Indy | 25 Reflector Bracket (Hangerless) |
| 11 Indy C Panel Decal | 26 Reflector Bracket Nut |
| 12 Indy C Band Decal | |
| 13 Fork Boot | |
| 14 Crown/Steerer/Upper Tubes | |
| 15 Top Out Bumper | |



1998 INDY C-LT (OEM)

Description

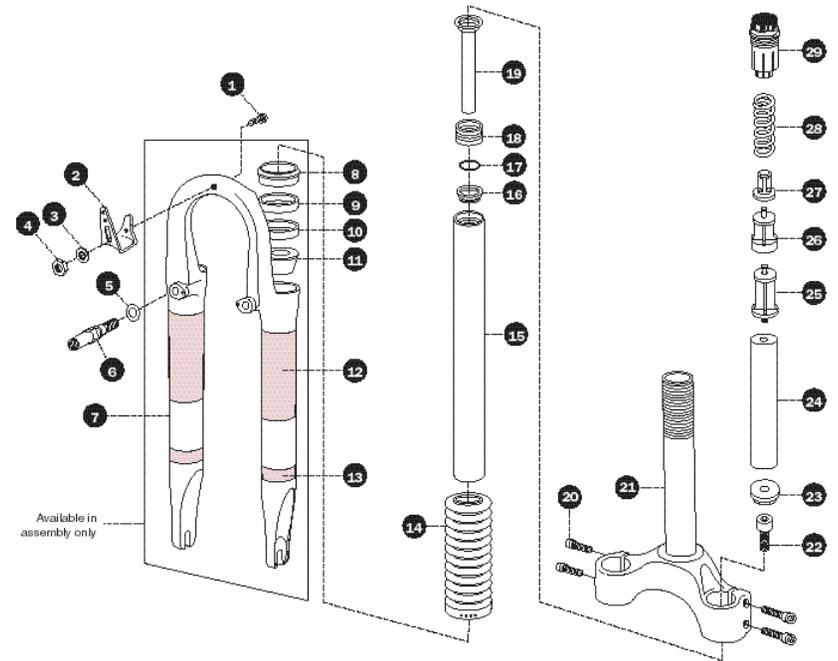
- | | |
|---------------------------------------------------|-----------------------------------|
| 1 Reflector Bracket Screw | 16 Plunger, Long Travel |
| 2 Reflector Bracket Lock Washer | 17 Plunger Bolt |
| 3 Reflector Bracket (For Hanger-style Fork Brace) | 18 Plunger Cap |
| 4 Brake Post Washer | 19 MCU Bumper |
| 5 Brake Post | 20 Spacer, MCU, Indy |
| 6 Lower Tube Assy | 21 Spacer, Urethane, Indy |
| 7 Indy Main Seal | 22 Spring Rate Adjuster |
| 8 Upper Bushing | 23 Tuning Spring |
| 9 Lower Bushing, 1.0" Slotted | 24 Top Cap Assy |
| 10 Bottom Bumper, Indy | 25 Lower Tube Assembly |
| 11 Indy C Panel Decal | 26 Reflector Bracket (Hangerless) |
| 12 Indy C Band Decal | 27 Reflector Bracket Nut |
| 13 Fork Boot, Long Travel | |
| 14 Crown/Steerer/Upper Tubes | |
| 15 Top Out Bumper | |



1998 INDY XC (OEM)

Description

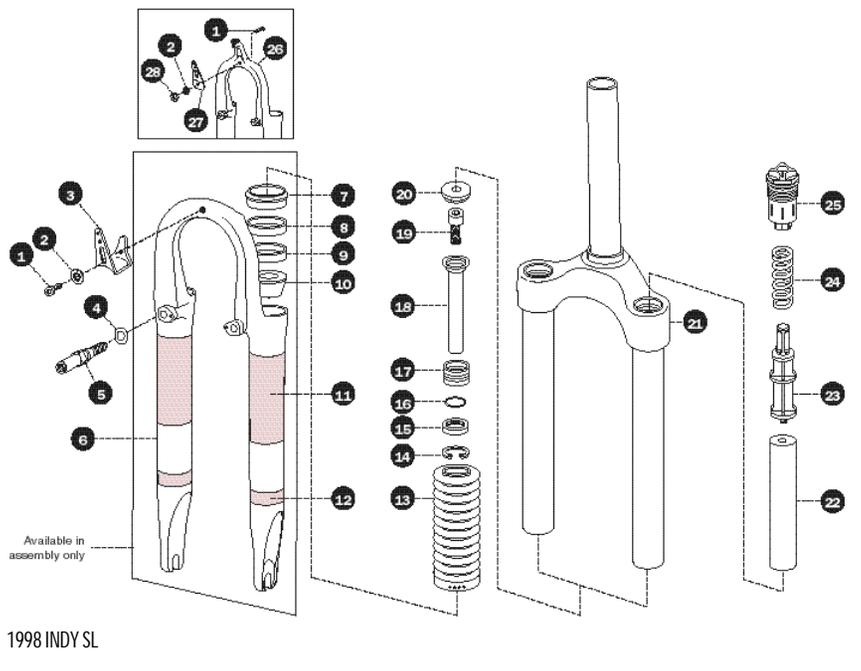
- | | |
|---------------------------------------------------|-----------------------------------|
| 1 Reflector Bracket Screw | 17 Top Out Bumper |
| 2 Reflector Bracket Lock Washer | 18 Plunger |
| 3 Reflector Bracket (For Hanger-style Fork Brace) | 19 Plunger Bolt |
| 4 Brake Post Washer | 20 Plunger Cap |
| 5 Brake Post | 21 MCU Bumper |
| 6 Lower Tube Assembly | 22 Spacer, MCU,Indy |
| 7 Indy Main Seal | 23 Spacer, Urethane, Indy |
| 8 Upper Bushing | 24 Spring Rate Adjuster |
| 9 Lower Bushing, 1.0" Slotted | 25 Tuning Spring |
| 10 Bottom Bumper, Indy | 26 Top Cap Assy |
| 11 Indy XC Panel Decal | 27 Lower Tube Assembly, Hanger |
| 12 Indy XC Band Decal | 28 Reflector Bracket (Hangerless) |
| 13 Fork Boot | 29 Reflector Bracket Nut |
| 14 Crown/Steerer/ | |
| 15 Friction Damper | |
| 16 Friction Damper O-ring | |



1998 INDY XC (AM)

Description

- | | |
|----------------------------------|----------------------------|
| 1 Reflector Bracket Screw | 18 Top Out Bumper |
| 2 Reflector Bracket (Hangerless) | 19 Plunger, Long Travel |
| 3 Reflector Bracket Lock Washer | 20 Crown Bolt (4 Required) |
| 4 Reflector Bracket Nut | 21 Crown/Steerer |
| 5 Brake Post Washer | 22 Plunger Bolt |
| 6 Brake Post | 23 Plunger Cap |
| 7 Lower Tube Assembly | 24 MCU Bumper |
| 8 Indy Main Seal | 25 Spacer, MCU,Indy |
| 9 Upper Bushing | 26 Spacer, Urethane, Indy |
| 10 Lower Bushing, 1.0" Slotted | 27 Spring Rate Adjuster |
| 11 Bottom Bumper, Indy | 28 Tuning Spring |
| 12 Indy XC Panel Decal | 29 Top Cap Assy |
| 13 Indy XC Band Decal | |
| 14 Fork Boot, Long Travel | |
| 15 Upper Tube, Butted | |
| 16 Friction Damper - Indy XC | |
| 17 Friction Damper O-ring | |



1998 INDY SL

Description

- | | |
|---------------------------------------------------|------------------------------------|
| 1 Reflector Bracket Screw | 18 Plunger |
| 2 Reflector Bracket Lock Washer | 19 Plunger Bolt |
| 3 Reflector Bracket (For Hanger-style Fork Brace) | 20 Plunger Cap |
| 4 Brake Post Washer | 21 Crown/Steerer/Upper Tubes |
| 5 Brake Post | 22 MCU Bumper |
| 6 Lower Tube Assembly | 23 Spring Rate Adjuster |
| 7 Indy Main Seal | 24 Tuning Spring |
| 8 Upper Bushing | 25 Top Cap Assy Indy SL |
| 9 Lower Bushing, 1.0" Slotted | 26 Lower Tube Assembly, Hangerless |
| 10 Bottom Bumper, Indy | 27 Reflector Bracket (Hangerless) |
| 11 Indy SL Panel Decal | 28 Reflector Bracket Nut |
| 12 Indy SL Band Decal | |
| 13 Fork Boot | |
| 14 Retaining Ring, Upper Tube | |
| 15 Friction Damper - Indy SL | |
| 16 Friction Damper - O-ring | |
| 17 Top Out Bumper | |

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