



For exploded diagram and part number information, refer to the Spare Parts Catalog available on our website at www.rockshox.com.

Contact your local distributor or visit the RockShox website at www.rockshox.com for ordering information.

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WHY DO YOU NEED TO REPLACE YOUR SUSPENSION FORK BUSHINGS?

Suspension fork bushings are considered a 'wear and tear' part and require regular maintenance, depending on frequency of riding, riding terrain, rider body weight, use of disc brakes, and the type of fork you ride. The more you ride, the more frequently your bushings need to be replaced.

SYMPTOMS OF WORN BUSHINGS

- Headset may feel loose
- Fork may knock when ridden

HOW TO CHECK FOR LOOSE BUSHINGS

1. Hold the front brake lever tight, and rock the bike back and forth. If the fork feels like it's knocking, or the headset feels loose, proceed to steps 2 and 3.
2. Check the fork: Wrap your fingers around the dust seal and upper tube area. Rock the bike back and forth once again. Listen and feel if there is any play between the upper tube and the dust seal. If so, the bushings are loose.
3. Check the headset: Wrap your fingers around the headset upper cup, or lower cup/race areas. Holding the brake, rock the bike back and forth and feel if the headset is loose. If so, tighten the headset and check again.



PARTS NEEDED

Visit your local SRAM dealer for parts you will need. If the parts are not in stock, your dealer can place an order with their SRAM distributor. For a more comprehensive list of RockShox spare parts, check out the Spare Catalog at www.rockshox.com.

DUST SEAL KITS	
11.4307.250.000	PILOT/SID DUST SEAL KIT
11.4307.298.000	PSYLO/DUKE DUST SEAL/FOAM RING KIT
11.4308.850.000	REBA/PIKE DUST SEAL/OIL SEAL/FOAM RING KIT
11.4307.312.000	BOXXER DUST/OIL SEAL REPLACEMENT KIT
BUSHING KITS	
11.4307.251.000	SID, PILOT, JUDY BUSHING KIT (10mm Upr, 20mm Lwr)
11.4307.280.000	DUKE BUSHING KIT (30mm Upr/30mm Lwr)
11.4307.296.000	PSYLO BUSHING KIT (30mm Upr/45mm Lwr)
11.4308.851.000	REBA/PIKE BUSHING KIT (30mm Upr/30mm Lwr)
11.4305.621.000	BOXXER BUSHING KIT (10mm Upr/76mm Lwr)

TOOLS AND LUBRICANTS NEEDED

STANDARD SHOP TOOLS

- Plastic Mallet
- Oil Pan
- Work bench with mounted vice
- 24mm Socket Wrench
- 22mm Socket Wrench (00-02 Boxxer)
- 10mm Socket Wrench (SID DualAir fork, 05 Reba, 05 Pike Air, 02 Duke Race, 02 Psylo Race)
- 5mm hex wrench
- Flat-head screw driver
- Shock Pump (Air forks only)
- Clean rags
- Oil mixing syringe

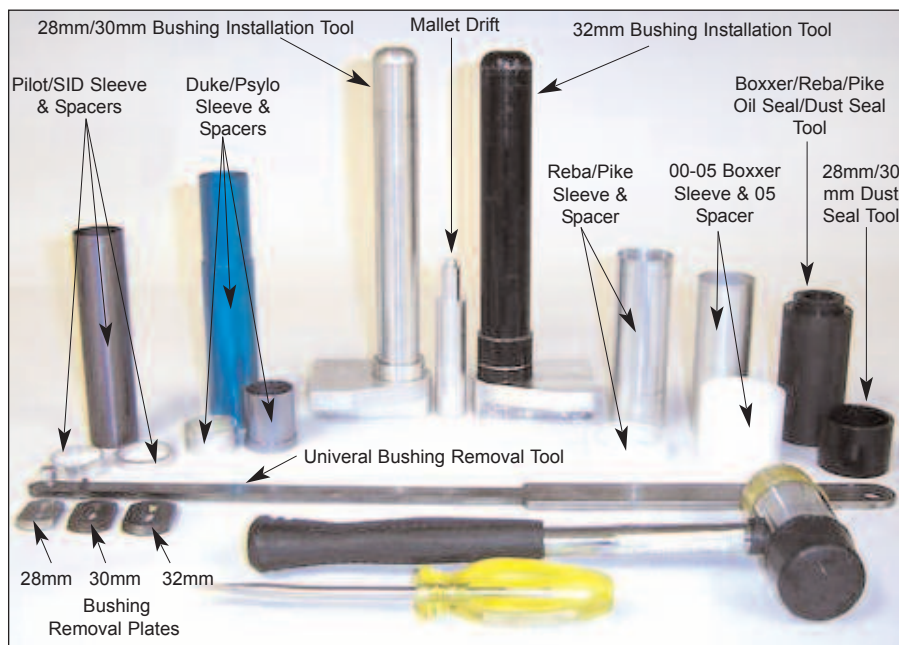
LUBRICANTS

- Isopropyl Alcohol/Spray Bottle
- RedRum or 15wt suspension fork oil
- Oil Soluable Grease
- 5wt Suspension Fork Oil



ROCKSHOX BUSHING TOOLKITS

11.4306.351.000	FORK BUSHING REMOVAL TOOLKIT (32MM/30MM/28MM)
11.4306.352.000	FORK BUSHING INSTALLATION TOOLKIT (30MM/28MM)
11.4306.353.000	32MM BUSHING INSTALL TOOL (BOXXER/REBA/PIKE)
11.4306.354.000	PSYLO/DUKE BUSHING INSTALLATION SLEEVE KIT
11.4306.357.000	BOXXER BUSHING INSTALLATION SLEEVE KIT
11.4307.498.000	JUDY/PILOT/SID BUSHING INSTALLATION SLEEVE KIT
11.4309.121.000	REBA/PIKE BUSHING INSTALLATION SLEEVE KIT
11.4307.499.000	PSYLO/DUKE BUSHING REMOVAL PLATE KIT
11.4308.585.000	DUST SEAL INSTALLATION TOOL (28MM/30MM)
11.4308.722.000	BOXXER/REBA/PIKE DUST/OIL SEAL INSTALLATION TOOL



REMOVAL: DUST SEALS, OIL SEALS AND BUSHINGS

SEE THE APPROPRIATE COMPLETE SERVICE GUIDES FOR FORK DISASSEMBLY AND ASSEMBLY PROCEDURES.

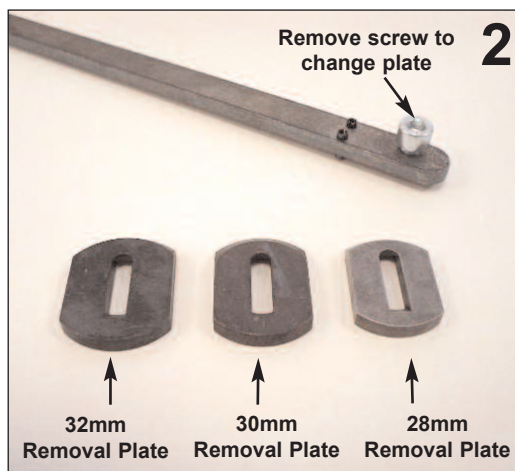
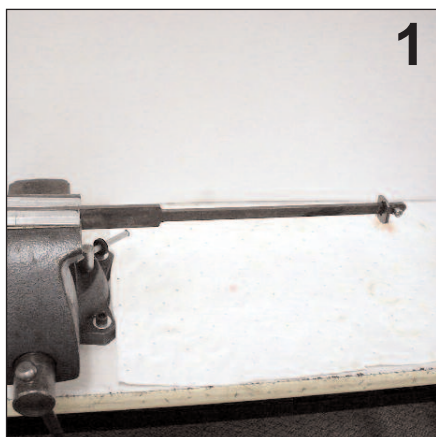
DUST SEAL / OIL SEAL REMOVAL (ALL FORK MODELS: SID, BOXXER AND PIKE PICTURED)

1. Using a medium to large flat-head screwdriver, pry the old dust seal from the lower leg (fig. 1).
2. Remove the oil foam ring (fig. 2).
3. 2000 and 2001 Judy, SID and Psylo forks feature an inner oil seal, located just below the dust seal. To remove this oil seal, use a flat-head screwdriver to pry the seal from the lower leg. The improved current Samurai dust seal eliminates the need for the oil seal.
4. All Boxxer, Reba and Pike forks feature an inner oil seal. You will need to remove this if you plan to replace it (Boxxer pictured).
 - a. **2000 - 2002 Boxxer:** Remove snap ring and large washer.
 - b. Using a flat-head screwdriver, pry the oil seal out of lower leg and discard. To protect the lower leg paint, place a rag in between the lower leg and the screwdriver (fig. 3 & 4).



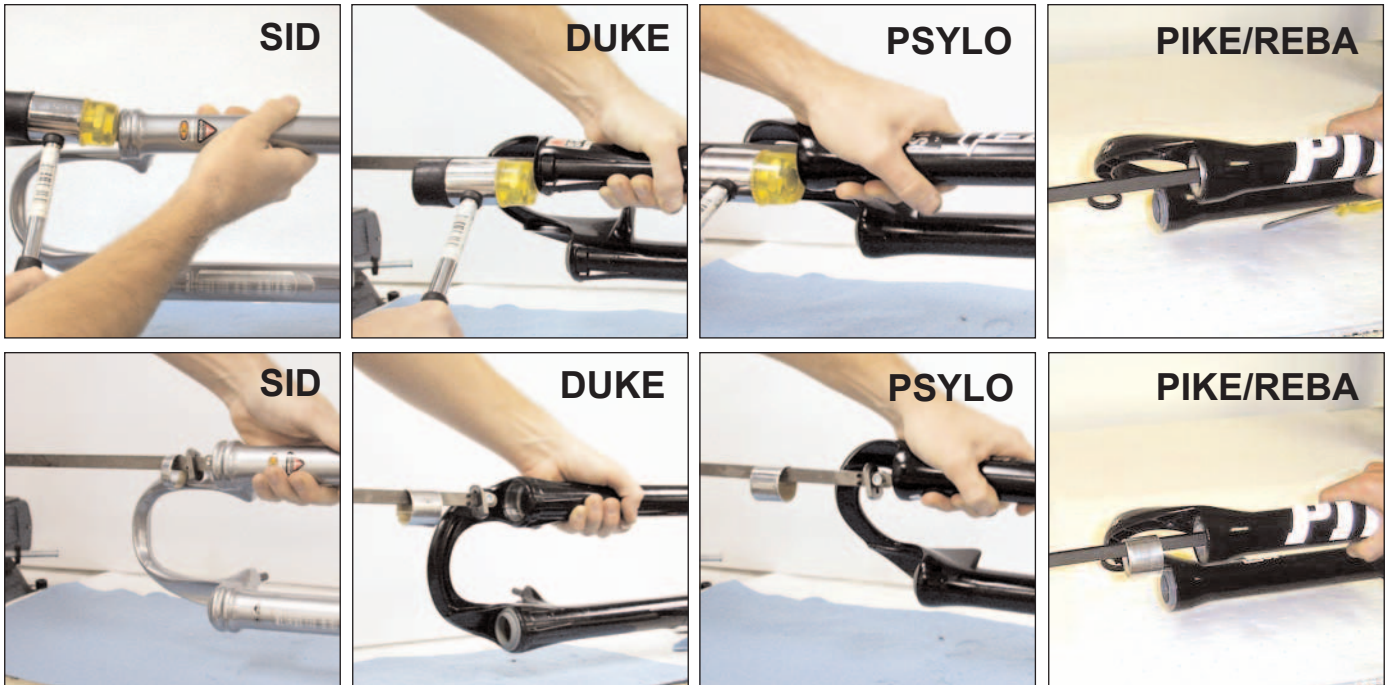
..... REMOVE WORN BUSHINGS: ALL MODELS

1. Clamp Bushing Removal Handle/Puller tool into bench vice. Clamp vice tight (fig. 1).
2. With the correct bushing removal plate installed onto handle end, slide lower leg over the removal plate, below the upper bushing. (fig. 2)
 - 28mm Plate (Judy/Pilot/SID)
 - 30mm Plate (Duke/Psylo)
 - 32mm Plate (Boxxer)
3. Slide the removal plate past the upper bushing, pull lower leg away from puller, and hook the flat end of the plate secure under the bushing. The removal plate pivots when inserted. When plate is secure under bushing, begin to remove (fig. 3).

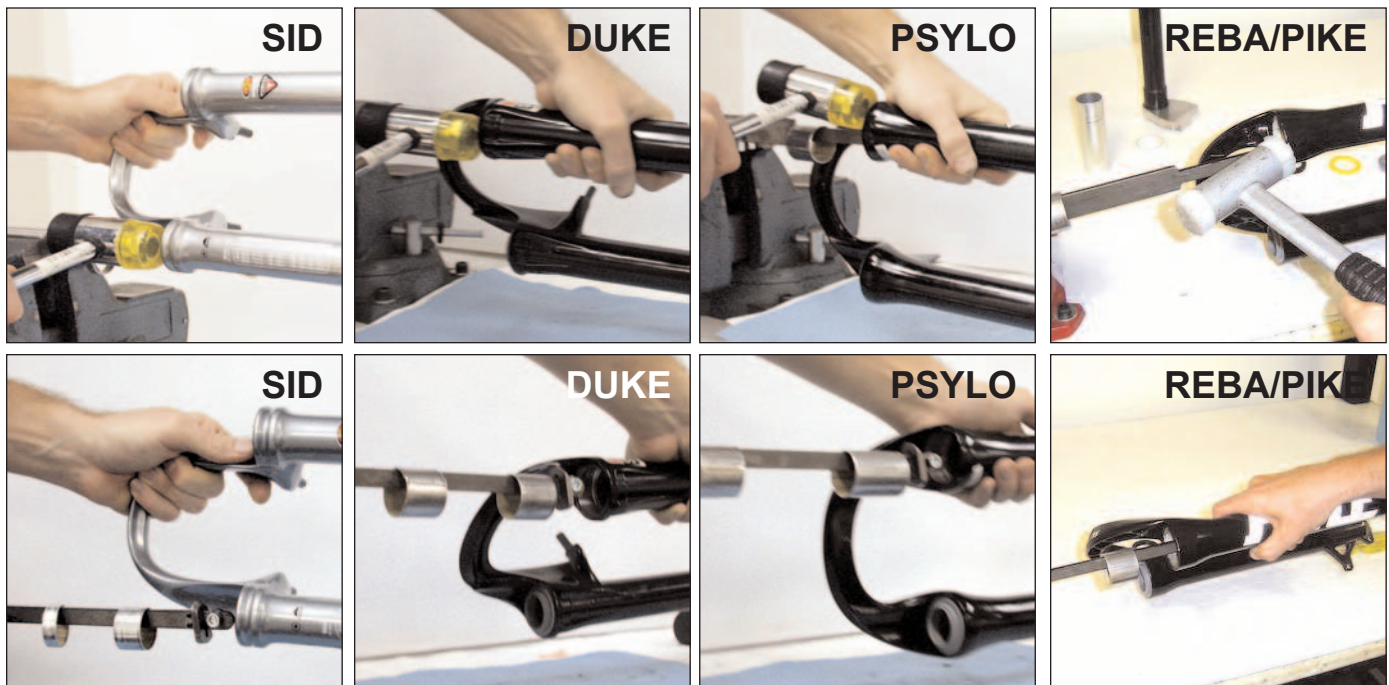


4. To pull the upper bushing free from the lower leg, using a plastic mallet, firmly hit the top of the lower leg on the flat dust seal surface-area, until bushing pulls free.

NOTE: SAME PROCEDURE FOR BOXXER.



4. To pull the lower bushing free from the lower leg, slide the removal plate past the lower bushing, and hook the flat end of the plate secure under the bushing. Again, firmly hit the top of the lower leg, flat dust seal surface area, until bushing pulls free. Longer lower bushings require more force.
5. Repeat other side.



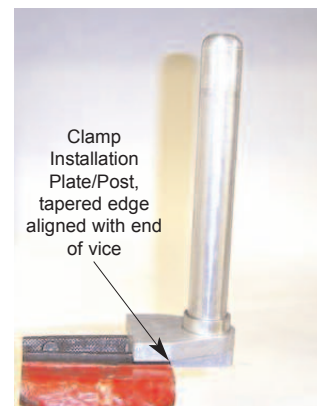
BUSHING INSTALLATION

..... BUSHING INSTALLATION: 28MM (PILOT & SID)

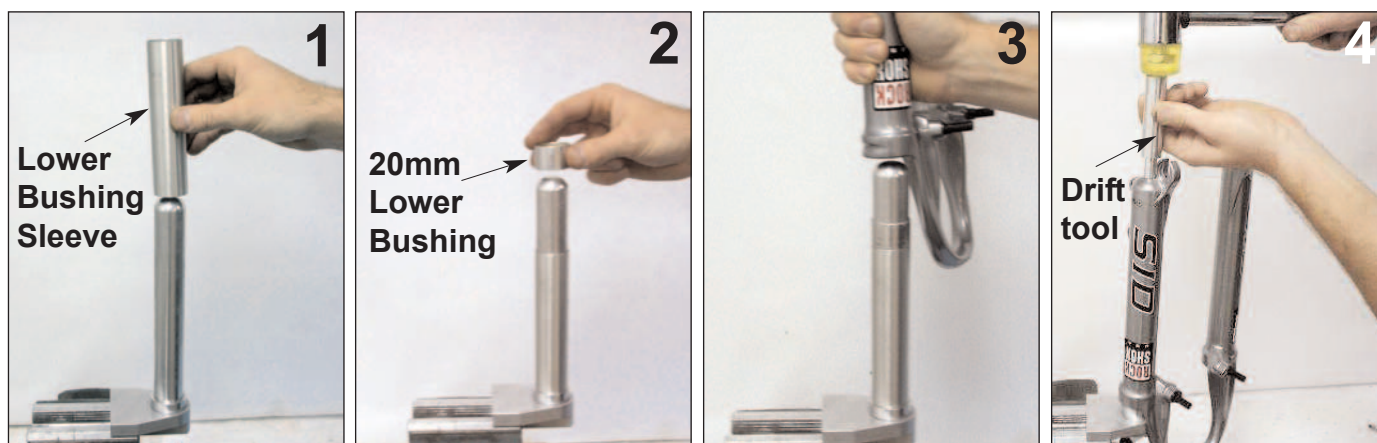
PREPARATION: CLAMP 28MM/30MM BUSHING INSTALLATION TOOL INTO BENCH-MOUNTED VICE.

LOWER BUSHING: 28MM JUDY/PILOT/SID

1. Slide lower 28mm Judy/Pilot/SID bushing sleeve onto bushing installation post (fig. 1).
2. Slide 20mm lower bushing onto top of lower bushing installation sleeve (fig. 2).
3. Slide lower leg over installation post, and rest on top of lower bushing (fig. 3).
4. Insert the mallet drift tool into the lower leg shaft hole, and hold in place with one hand (fig. 4).
5. Using a plastic mallet, hit the drift to press the bushing into the lower leg (fig. 4).
6. Hit the drift until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 4).
7. Repeat on other side.



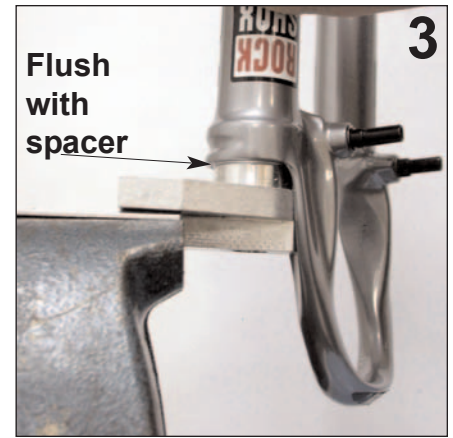
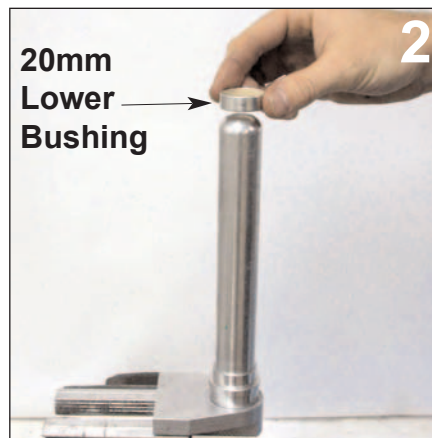
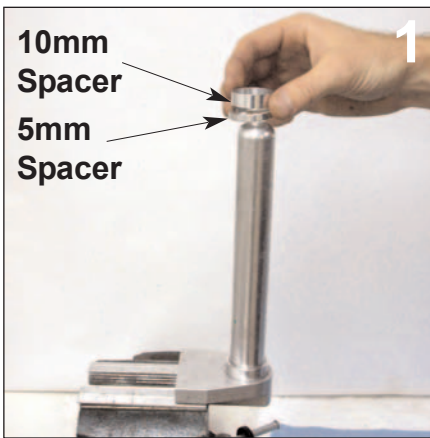
NOTE: SID LOWER LEG PICTURED. SAME PROCEDURE FOR PILOT AND 00-02 JUDY.



UPPER BUSHING: 28MM JUDY/PILOT/SID

1. Remove lower bushing installation sleeve from bushing installation post.
2. Slide 5mm Judy/Pilot/SID upper bushing installation spacer onto bushing installation post (fig. 1).
3. Slide 10mm Judy/Pilot/SID upper bushing installation spacer onto bushing installation post. Spacer will rest on top of 5mm spacer (fig. 1).
4. Slide 10mm upper bushing onto bushing installation post. Bushing will rest on top of 10mm spacer (fig. 2).
5. Slide lower leg over installation post, and rest on top of upper bushing (fig. 3).
6. Insert mallet drift tool into the lower leg shaft hole, and hold in place.
7. Using a plastic mallet, hit the mallet drift to press the bushing into the lower leg.
8. Hit the drift until the lower leg dust seal ridge is flush with the installation post plate. You will feel the stop point as the bushing is 'set' into lower leg (fig. 3).
9. Remove lower leg from tool. Inspect bushing. Bushing should be flush with the top of the dust seal counter bore step. Do not press bushing below bore step. It is best to tap the bushing in, then remove lower leg and check the fit. Continue to tap bushing until it is flush with bore step (fig. 3).
10. Repeat other side.

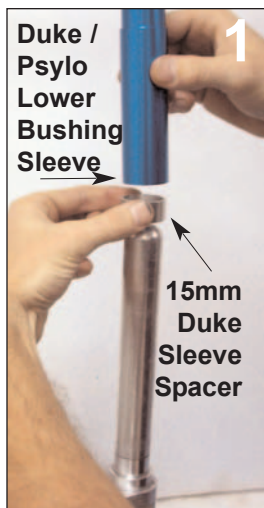
NOTE: SID LOWER LEG PICTURED. SAME PROCEDURE FOR PILOT AND 00-02 JUDY.



..... BUSHING INSTALLATION: 30MM DUKE

LOWER BUSHING: 30MM DUKE

1. Slide lower 15mm Duke lower bushing sleeve spacer (for 30mm lower bushing) onto installation post (fig. 1).
2. Slide the long Duke/Psylo lower bushing sleeve onto bushing installation post. The sleeve will rest on top of 15mm spacer (fig. 1).
3. Slide 30mm slotted bushing (thin-walled) onto top of lower bushing installation sleeve (fig. 2).
4. Slide Duke lower leg over installation post, and rest on top of lower bushing (fig. 3).
5. Insert the mallet drift tool into the lower leg shaft hole, and hold in place (fig. 4).
6. Using the plastic mallet, hit the mallet drift tool to press the bushing into lower leg (fig. 4).
7. Hit the drift until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 5).
8. Repeat on other side.



UPPER BUSHING: 30MM DUKE

FOR IMAGES, SEE PSYLO UPPER BUSHING INSTALLATION (SAME PROCEDURE)

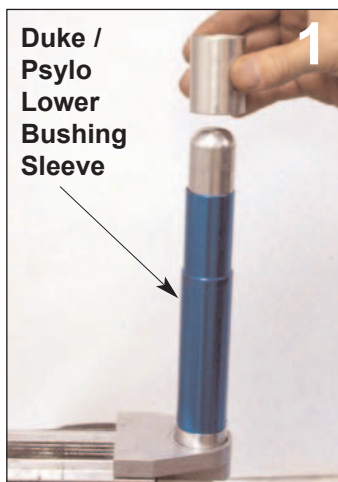
1. Remove Duke lower bushing sleeve and spacer from bushing installation post.
2. Slide Duke/Psylo upper bushing installation sleeve onto bushing installation post. Bushing will rest on top of Duke/Psylo upper installation sleeve (fig. 1).
3. Slide 30mm Duke (thick-walled) upper bushing onto bushing installation post. Bushing will rest on top of Duke/Psylo upper bushing installation sleeve (fig. 2).
4. Slide Duke lower leg over installation post, and rest on top of upper bushing (fig. 3).
5. Insert the mallet drift tool into the lower leg shaft hole, and hold in place (fig. 4).
6. Using the plastic mallet, hit the mallet drift tool to press the bushing into lower leg (fig. 4).
7. Hit the drift until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 5).
8. Remove lower leg, and check bushing. Upper bushing should be flush with top of dust seal counter-bore step.
9. Repeat on other side.

..... **BUSHING INSTALLATION: 30MM PSYLO**

LOWER BUSHING: 45MM PSYLO

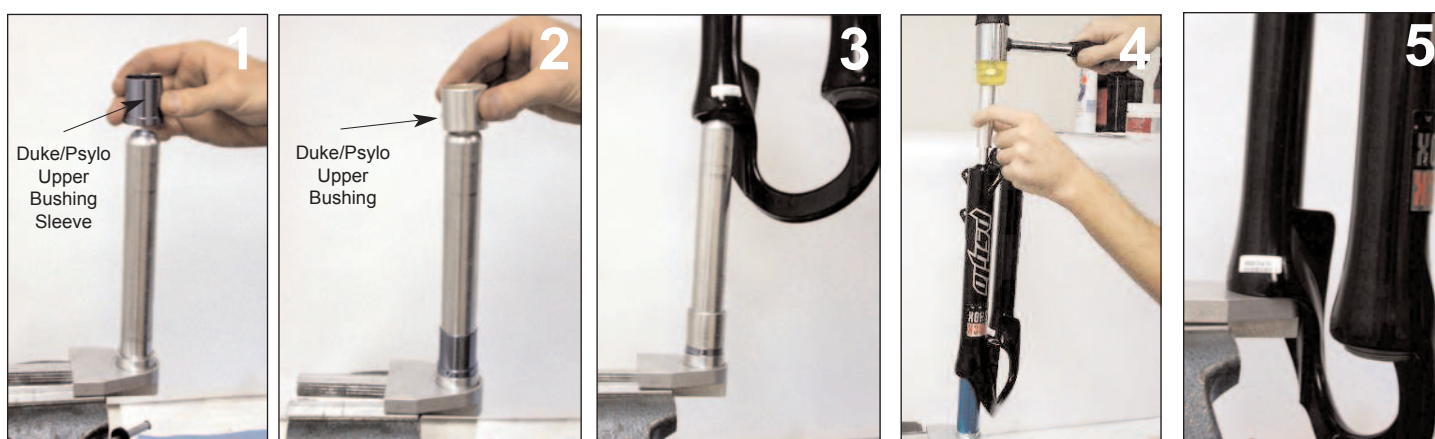
IMPORTANT: 45MM LOWER BUSHING NOT COMPATIBLE WITH 2001 PSYLO LOWER LEGS. FOR 2001 PSYLO LOWER LEGS, REPLACE LOWER LEG ASSEMBLY WITH 2004 LOWER LEG ASSEMBLY IF BUSHINGS NEED TO BE REPLACED.

1. Slide the Duke/Psylo lower bushing sleeve onto bushing installation post. (fig. 1)
2. Slide 45mm slotted bushing (thin-walled) onto top of lower bushing installation sleeve (fig. 1).
3. Slide Psylo lower leg over installation post, and rest on top of lower bushing (fig. 2).
4. Insert the mallet drift tool into the lower leg shaft hole, and hold in place (fig. 3).
5. Using the plastic mallet, hit the mallet drift tool to press the bushing into lower leg (fig. 3).
6. Hit the drift until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 3).
7. Repeat on other side.



UPPER BUSHING: 30MM PSYLO (COMPATIBLE WILL ALL PSYLO LOWER LEGS)

1. Remove Duke/Psylo lower bushing sleeve from bushing installation post.
2. Slide Duke/Psylo upper bushing installation sleeve onto bushing installation post, thin side up. (fig. 1)
3. Slide 30mm Psylo upper bushing (thick-wall bushing) onto bushing installation post. Bushing will rest on top of bushing installation sleeve. (fig. 2)
4. Slide lower leg over installation post, and rest on top of upper bushing. (fig. 3)
5. Insert mallet drift tool into Psylo lower leg shaft hole, and hold in place. (fig. 4)
6. Using a plastic mallet, hit the mallet drift tool to press the bushing into the lower leg. (fig. 4)
7. Hit the drift until the lower leg dust seal ridge is flush with the installation post plate. You will feel the stop-point as the bushing is 'set' into lower leg. (fig. 5)
8. Remove lower leg from post tool and check upper bushing. Bushing should be flush with the top of the dust seal counter-bore step.
9. Repeat other side.



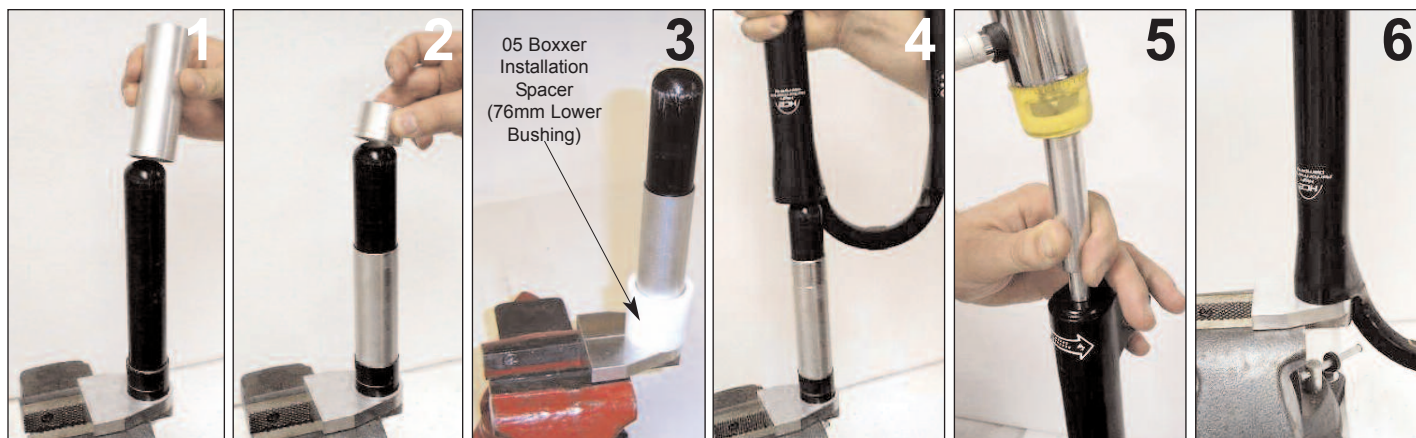
..... **BUSHING INSTALLATION: 32MM BOXXER**

LOWER BUSHING: 30MM & 76MM BOXXER LOWER BUSHING**76MM 2005 BOXXER LOWER BUSHING**

NOTE: 05 BUSHING IS NOT COMPATIBLE WITH 00-04 BOXXER LOWER LEGS. BOTH PROCEDURES INCLUDED.

PREPARATION: CLAMP THE BOXXER BUSHING INSTALLATION POST TOOL INTO VICE.

1. **2000-2004 BOXXER:** Slide the Boxxer lower bushing sleeve onto bushing installation post (fig. 1).
2005 BOXXER: Slide 05 Boxxer lower bushing installation spacer over post tool, and rest at bottom on plate (fig. 3).
2. **2000-2004 BOXXER:** Slide 30mm bushing onto top of lower bushing installation sleeve (fig. 2).
2005 BOXXER: Slide 76mm lower bushing on top of lower bushing installation sleeve (not pictured).
3. Slide Boxxer lower leg over installation post, and rest on top of lower bushing (fig. 4).
4. Insert the mallet drift tool into the lower leg shaft hole, and hold in place (fig. 5).
5. Using the plastic mallet, hit the mallet drift tool to press the bushing into lower leg (fig. 6).
6. Hit the drift until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 6).
7. Repeat on other side.



UPPER BUSHING: 10MM BOXXER

(COMPATIBLE WITH 00-05 BOXXER LOWER LEGS)

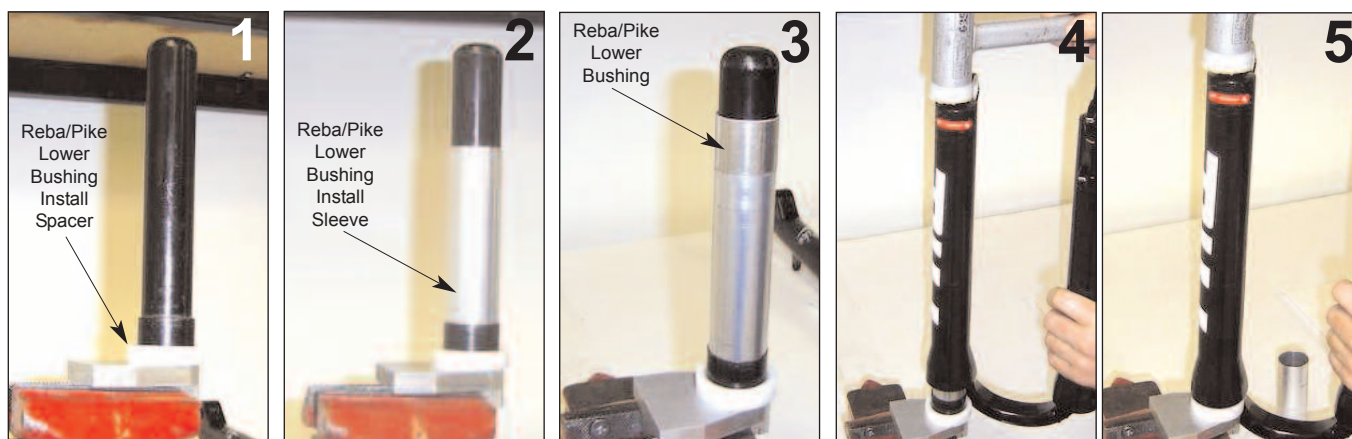
1. Remove Boxxer lower bushing sleeve, and 05 lower bushing spacer (if used on 05 Boxxer lower leg) from Boxxer bushing installation post.
2. Slide 10mm Boxxer upper bushing onto Boxxer bushing installation post (fig. 1)
3. Slide lower leg over installation post, and rest on top of upper bushing (fig. 2).
4. Insert Boxxer mallet drift tool into the lower leg shaft hole, and hold in place (fig. 3).
5. Using the plastic mallet, hit the mallet drift tool to press the upper bushing into lower leg (fig.3).
6. Hit the drift until the lower leg dust seal ridge is flush with the upper bushing/oil seal step in the lower leg. The 'stop-point' on the post tool is about 5mm above the plate. You will feel the stop-point, as the bushing is 'set' into the lower leg. Remove the lower leg from ths installation post, and check the bushing fit. The top of the bushing should be flush/level with oil seal step in the lower leg (fig. 4).
7. Repeat on other side.



.....BUSHING INSTALLATION: 32MM REBA/PIKE.....

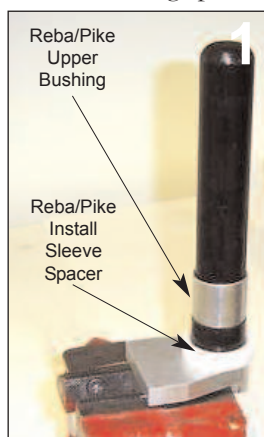
LOWER BUSHING: 30MM REBA/PIKE (PIKE PICTURED, SAME PROCEDURE FOR BOTH)

1. Slide the Reba/Pike lower bushing sleeve spacer onto 32mm bushing installation post. (fig. 1).
2. Slide Reba/Pike lower bushing installation sleeve on 32mm bushing installation post (fig. 2).
3. Slide Reba/Pike 30mm slotted lower bushing onto the top of the lower installation sleeve (fig. 3).
4. Slide lower leg over installation post and rest on top of lower bushing (fig. 4).
5. Reba: insert mallet drift tool into the lower leg shaft hole and hold in place.
6. Using a plastic mallet, hit the bottom of the lower leg (Pike), or the mallet drift tool (Reba) to press the bushing into the lower leg (fig. 4).
7. Hit the lower leg, or mallet drift, until the lower leg dust seal ridge is level with the top of the installation post spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg (fig. 5)..
8. Repeat on other side.



UPPER BUSHING: 30MM REBA/PIKE (PIKE PICTURED, SAME PROCEDURE FOR BOTH)

1. Remove Reba/Pike lower bushing sleeve. Leave lower bushing spacer on installation post/base tool (fig. 1).
2. Slide 30mm Reba/Pike upper bushing (non-slotted) onto 32mm bushing installation post. (fig. 1).
3. Slide lower leg over installation post, and rest on top of the upper bushing (fig. 2).
4. Reba: insert mallet drift tool into the lower leg shaft hole and hold in place.
5. Using the plastic mallet, hit the mallet drift tool (Reba), or bottom of lower leg (Pike), to press the upper bushing into lower leg (fig. 2).
6. Hit the drift until the lower leg rests flush on top of install spacer. You will feel the stop-point, as the bushing is 'set' into the lower leg. Remove the lower leg from the installation post, and check the bushing fit. The top of the bushing should be flush/level with oil seal step in the lower leg. (fig. 2)
7. Repeat on other side.



INSTALLATION: DUST SEALS, FOAM RINGS, & OIL SEALS

..... PILOT / SID / DUKE / PSYLO

SID LOWER LEG PICTURED. SAME PROCEDURE FOR PILOT, DUKE AND PSYLO.

1. Soak new foam rings in 5, 10 or 15wt suspension oil (fig. 1).
2. Slide 28mm/30mm Dust Seal Installation Tool over 28mm/30mm Bushing Installation Post tool (fig. 2).
3. Slide new dust seal over bushing installation post tool and fit on top of Dust Seal Installation tool (fig. 3).
4. Slide oil-saturated foam ring over bushing installation post tool and fit on top of dust seal. Seat the foam ring inside the under cavity of dust seal (fig. 4).
5. Using a clean rag and isopropyl alcohol, clean the inside of the dust seal area of the lower leg (fig. 5).
6. Slide lower leg onto bushing installation post, on top of new dust seal. Using a plastic mallet, lightly tap on the lower leg drop-out until dust seal seats inside lower leg, flush with the top of lower leg dust seal step (fig. 6).
7. Dust seal should be press-fit snug into the lower leg (fig. 7).
8. Repeat on other side.



..... **REBA / PIKE / BOXXER**

SAME PROCEDURE FOR REBA, PIKE, AND BOXXER. BOXXER PICTURED.

1. Apply grease or 15wt suspension oil to the inside of the Reba, Pike or Boxxer lower leg oil seal counter-bore. (fig. 1)
2. Insert the oil seal onto the stepped end of the 32mm Oil Seal Installation tool (fig 2).
3. Using the 32mm Oil Seal Installation tool, insert the oil seal down and into the oil step in the lower leg. Apply pressure on all sides of the oil seal to seat it into place (fig. 3 & 4).

BOXXER NOTE: THE 2000-2002 OIL SEAL WASHER AND SNAP RING ARE NO LONGER REQUIRED WHEN REPLACING OIL AND DUST SEALS. NO NEED TO RE-INSTALL. 2004 DUST SEAL KITS DO NOT INCLUDE THE OIL SEAL WASHER AND SNAP RING.

4. **Reba/Pike:** Insert new oil-saturated foam ring onto lower leg and on top of newly installed oil seal.
5. Insert new dust seal into the other (wide) end of the 32mm dust seal installation tool (fig. 5).
6. Insert dust seal into lower leg, and press straight down evenly to seat into lower leg (fig. 6).
7. Dust seal should be press-fit snug and flush into lower leg (fig. 7 and 8).

REBA / PIKE NOTE: CHECK FOAM RING UNDER DUST SEAL. FOAM RING SHOULD NOT PROTRUDE FROM DUST SEAL AND OIL RING. IF SO, ADJUST FOAM RING INSIDE LOWER LEG, FLUSH ALL ON SIDES.

8. Repeat on other side.



FINISHING UP!

1. Spray entire completed lower leg assembly with isopropyl alcohol.
2. Wipe lower leg assembly clean with a rag.
3. Check decals and replace if necessary.
4. Refer to the 'Lower Leg Removal and Installation Service Guide' or the fork model service guide for installation procedures.