

SH-1 Shift/Rear Brake Lever Bushing Installation Instructions

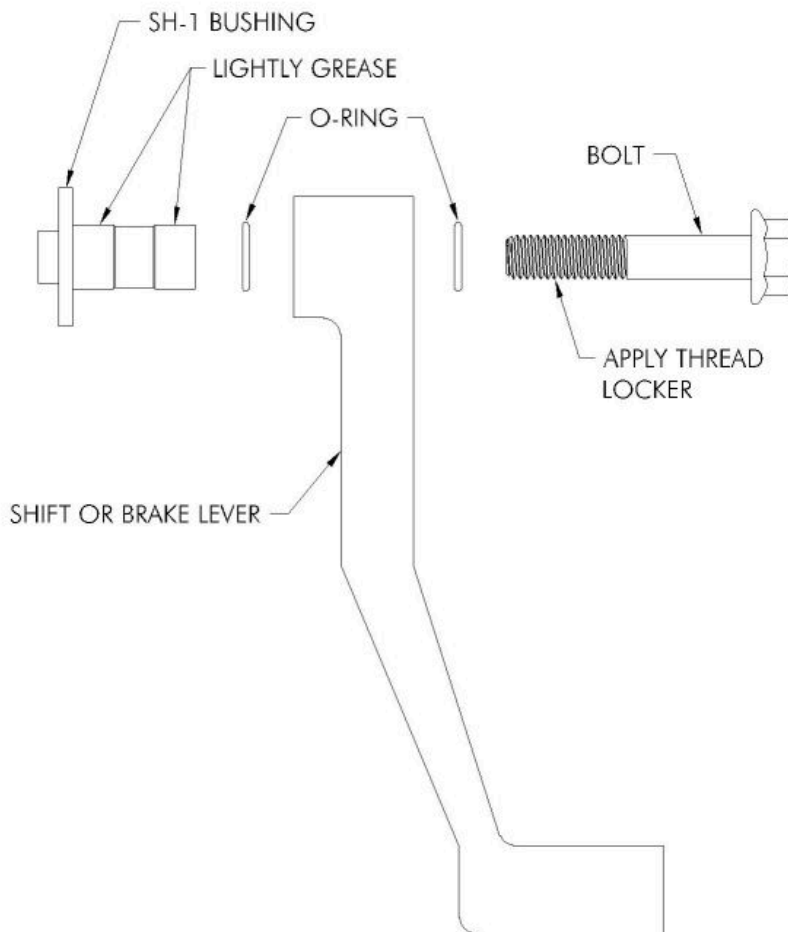
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Tools required:

- 12 & 13mm wrench
- 6mm hex key
- 4mm hex key (only for rear brake lever)
- Small flat blade screwdriver (only for rear brake lever)
- Drill
- Medium-strength thread locking compound
- Bearing, or similar, grease

Parts list:

- SH-1 Bushing
- M8x1.25 - 60mm bolt (2x)
- M8x1.25 - 45mm bolt
- M8x1.25 nylock nut (2x)
- 5/16" (8mm) drill bit



There are 2 ways to install this kit:

- **Option A**, which does not involve drilling out the threads in the frame: While being substantially stronger than the factory bolt, does have the same functional fault as the factory bolt in that if you manage to snap it off, there is no way to effect a repair on the road or trail.
- **Option B**, which does require drilling out the threads in the frame: This is even more robust than Option A, and in the *extremely* unlikely event that you do manage to snap the shifter bolt, allows you to simply swap in the extra bolt/nut (included) and keep riding.

SHIFT LEVER ONLY:

Option A (NO DRILL) Installation:

1. It is not necessary to remove the shift linkage rod from the shift lever
2. Remove the shifter bolt using a 6mm hex key and extract it from the shift lever, taking care not to lose the (2) o-rings
3. Slide one of the o-rings all the way onto the SH-1
4. Apply a thin film of grease to the SH-1 bushing
5. Slide the shift lever onto the SH-1
6. Place the other o-ring onto the SH-1
7. Apply thread locking compound to the threads of the 45mm (shorter) bolt
8. Thread the bolt into the frame and torque it to approximately 20nm (15 ft/lbs)

Option B (DRILL) Installation:

1. It is not necessary to remove the shift linkage from the shift lever
2. Remove the shifter bolt using a 6mm hex key and extract it from the shift lever, taking care not to lose the (2) o-rings
3. It is now necessary to drill the threads out of the hole where the pivot bolt was. The frame side plate is aluminum and drills very easily, but it is extremely important to ***use light pressure and low speed while drilling***. The drill bit will pretty much guide itself through the hole, but it is still prudent to make sure your drill remains square to the frame side plate at all times. If you are at all uncomfortable doing this step, find someone more qualified and/or experienced to help.
4. Slide one of the o-rings all the way onto the SH-1
5. Apply a thin film of grease to the SH-1 bushing
6. Slide the shift lever onto the SH-1
7. Place the other o-ring onto the SH-1
8. Slide the 60mm (longer) bolt through the SH-1 and frame, and thread the nut onto the back side
9. Tighten the nut to approximately 20nm (15 ft/lbs)

In the event that you forgot to toss the spare 60mm bolt and nut in your tool kit, and can't source the correct metric bolt, you can substitute a 5/16" x 2-1/4" bolt and nylock nut

REAR BRAKE LEVER ONLY:

Option A (NO DRILL) Installation:

1. Remove the (4) boot cover screws using a 4mm hex key
2. It is not necessary to remove the brake reservoir from the boot cover
3. Remove the brake lever bolt using a 6mm hex key and extract it from the brake lever, taking care not to lose the (2) o-rings. Disconnect the return spring and pull the pushrod out of the master cylinder boot.
4. Slide one of the o-rings all the way onto the SH-1
5. Apply a thin film of grease to the SH-1 bushing
6. Slide the shift lever onto the SH-1
7. Place the other o-ring onto the SH-1
8. Apply thread locking compound to the threads of the 45mm (shorter) bolt
9. Insert the pushrod back into the master cylinder boot
10. Thread the bolt into the frame and torque it to approximately 20nm (15 ft/lbs)
11. Using a small flat blade screwdriver, pry the return spring back onto the stud

Option B (DRILL) Installation:

1. Remove the (4) boot cover screws using a 4mm hex key
2. It is not necessary to remove the brake reservoir from the boot cover
3. Remove the brake lever bolt using a 6mm hex key and extract it from the brake lever, taking care not to lose the (2) o-rings. Disconnect the return spring and pull the pushrod out of the master cylinder boot.
4. It is now necessary to drill the threads out of the hole where the pivot bolt was. The frame side plate is aluminum and drills very easily, but it is extremely important to ***use light pressure and low speed while drilling***. The drill bit will pretty much guide itself through the hole, but it is still prudent to make sure your drill remains square to the frame side plate at all times. If you are at all uncomfortable doing this step, find someone more qualified and/or experienced to help.
5. Slide one of the o-rings all the way onto the SH-1
6. Apply a thin film of grease to the SH-1 bushing
7. Slide the shift lever onto the SH-1
8. Place the other o-ring onto the SH-1
9. Apply thread locking compound to the threads of the 45mm (shorter) bolt
10. Insert the pushrod back into the master cylinder boot
11. Thread the bolt into the frame and torque it to approximately 20nm (15 ft/lbs)
12. Using a small flat blade screwdriver, pry the return spring back onto the stud

In the event that you forgot to toss the spare 60mm bolt and nut in your tool kit, and can't source the correct metric bolt, you can substitute a 5/16" x 2-1/4" bolt and nylock nut