

Tilton Master Cylinder Rebuild Instructions

A. Reservoir O-ring Replacement

1. Remove the reservoir or remote fitting from the master cylinder body.
2. Remove the old o-ring (9) from the master cylinder body.
3. Apply a small amount of rubber grease onto the new o-ring (9) and install it onto the master cylinder body.
4. Place the wire clamp onto the master cylinder.
5. Install the reservoir or remote fitting onto the master cylinder body. Make sure that the o-ring stays seated in the groove.
6. Position the wire clamp so that one wire of the clamp is above the o-ring and the other is below the o-ring.
7. Tighten the wire clamp. **Do not over tighten the wire clamp** or you may damage the reservoir. It should be "snug".

Tools required

- A pair of internal snap ring pliers and rubber grease (P/N RG-17)

B. Master Cylinder Rebuild (Refer to Diagram 1)

1. Remove the master cylinder from the vehicle and drain all of the residual brake fluid from the master cylinder.
2. Remove the rubber boot (1) from the pushrod end of the master cylinder body.
3. Remove the snap ring (2) that secures the piston using internal snap ring pliers.
4. Pay attention to how the piston components are installed in the master cylinder body.
5. Set the snap ring (2), retainer (3) and the pushrod (4) aside for now.
6. Gently slide the piston assembly (8) out of the master cylinder body.
7. Remove the spring (5), spring seat (6A or 6B) and the rubber spring cushion (7) from the master cylinder body.
8. Inspect the wall of the master cylinder bore for excessive wear. If excessive wear is apparent, then you must replace the master cylinder instead of rebuilding it.
9. Make sure that the inside bore of the master cylinder is clean before installing the new components.
10. Set the removed components aside and layout the rebuild kit in front of you while referring to **Diagram 1**.
11. Insert the new rubber cushion (7) into the piston bore.
12. Select either the new spring seat (6A) for disc brakes or the spring seat with a rubber seal (6B) for drum brakes and insert the selected spring seat into the piston bore. Make sure that it is inserted correctly by referring to **Diagram 1**.
13. Apply a small amount of rubber grease onto the rubber seals on the new piston assembly.

Installation notes

- Determine what type of spring seat is required for your application. The standard spring seat supplied in the kit is intended for disc brake systems.
- If you are using a drum brake system, you may want a spring seat with a rubber seal that acts as a 10 PSI residual pressure valve. This is not supplied in the rebuild kit, but can be ordered from Tilton.
- Prepare a clean work area for rebuilding the master cylinder.

14. Slide the small diameter end of the spring (5) onto the tip of the piston (8) and carefully slide the piston assembly into the master cylinder bore.
15. Make sure that the spring seat (6A) or (6B) is seated into the large diameter end of the spring and that the piston slides easily into the bore.
16. Insert the pushrod (4) into the piston and slide the pushrod retainer (3) and snap ring (2) over the pushrod (4).
17. Compress the piston spring by applying a slight force on the pushrod and retain the piston assembly with internal snap ring. Make sure the internal snap ring is seated in the groove of the master cylinder body. *This is best done with the body held lightly in a bench vise.*
18. Compress the piston a few times and make sure the piston slides freely.
19. Slip the rubber boot (1) over the pushrod and secure the boot onto the master cylinder body.
20. Install the newly rebuilt master cylinder into the vehicle and bleed the brake system.

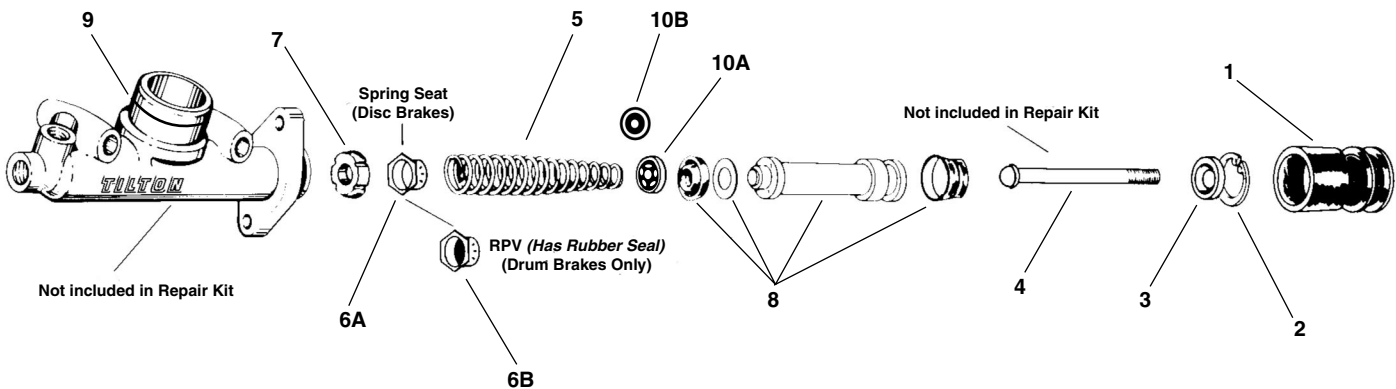


Diagram 1 - Master Cylinder Rebuild Kit

Note

- The following kits use the ring (10A): 74-750RK, 74-812RK, 74-875RK, 74-937RK, 74-1000RK, 74-1125RK. The ring will slide onto the piston tip.
- The following kits use the return spring base (10B): 74-625RK, 74-700RK. The return spring base will snap into the spring and slide onto the piston tip.