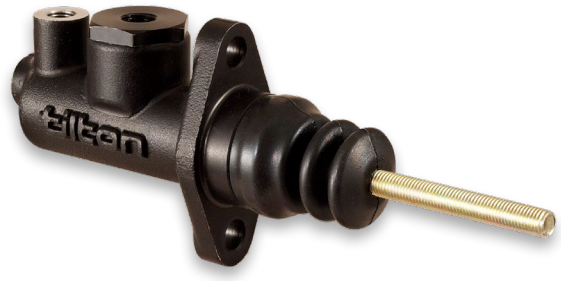
INSTALLATION INSTRUCTIONS

98-1236

76-Series Master Cylinder

ABS WARNING:
May not be suitable for use with some ABS (anti-lock braking) systems due to the high pressure pulsations that they may send back to the master cylinder, potentially damaging the high-pressure seal.



DESCRIPTION

Tilton master cylinders are engineered to provide optimum performance at a moderate cost. The master cylinders are made of lightweight aluminum and have a black anodized coating to prevent wear and corrosion. Tilton master cylinders set the standard for the industry and are a direct replacement for master cylinders that have a 2.25" spaced, 2-bolt mounting pattern.

The 76 Series master cylinders are specifically designed to be assembled with customer-supplied –4AN inlet fittings, hose and remote mount reservoirs. The inlet port is a 7/16-20 thread (–4AN) designed for a crush washer seal.

Installation Notes

- Mount the reservoirs above the calipers to prevent fluid bleed-back from the calipers to the master cylinders.
- Make sure that all of the parts are clean before assembling.
- Inlet port thread is designed for 7/16"-20 fittings.
- Top outlet is extra deep to work with 3/8"-24 banjo bolts to long AN3 fittings.

INSTALLATION

Master Cylinder

1. Remove the dust plugs from the master cylinder inlet and outlet ports.
2. The inlet adapter is pre-installed into the master cylinder a Tilton. Inlet adapter is designed for fittings with a 7/16" -20 thread. If inlet adapter is removed and needs to be re-installed, the proper torque into the master cylinder body is 25 lb-ft.
3. 76-Series master cylinders are shipped with AN3 plug installed into the rear outlet port. If routing of the break lines out of rear ports is desired, remove plug and install into top outlet port (unless port is being used for other purposes such as for pressure sensor, brake light switch, etc)
4. Top outlet port is extra deep for use wit 3/8" -24 banjo bolts or long AN3 fittings.

Direct Mount Reservoir

Tilton offers a direct mount reservoir (P/N 74-240) that is designed to mount to the master cylinder in place of installed inlet adapter.

1. Remove inlet adapter from master cylinder.
2. Installed reservoir in place of removed adapter and torque to 25 lb-ft.

Remote Reservoir

Tilton offer three remote reservoir options:

- Single chamber remote reservoir (P/N72-230)
- 3-chamber remote reservoir (P/N 72-577)
- Low profile 3-chamber remote reservoir (P/N 72-578)

1. Install 7/16"- 20 fitting into inlet port of master cylinder.
2. Connect inlet fitting to remote reservoir using AN4 braided lines.

Reservoir Options

72-578

72-577

74-240 74-230

BRAKE BLEEDING

Required Equipment

- Bleeder kit
- Proper wrenches
- An adequate supply of DOT 3 or 4 brake fluid
- If the vehicle has a dual master cylinder brake system then both of the systems must be bled simultaneously. See **Bleeding Order** section for proper order.

Priming Master Cylinder

1. Fill the master cylinder reservoir with brake fluid.
2. Slightly loosen the fitting at the master cylinder.
3. Gently depress and release the brake pedal until fluid emerges.
4. Tighten the fitting.
5. Select the bleeding order that fits your application from **Bleeding Order** section.

Brake Bleeding

1. Fill a clear bottle with enough brake fluid to keep the hose-ends fully submerged.
2. Attach the other end of the plastic bleeder hose to the caliper bleed-screw.
3. Be sure the hoses stay submerged throughout the procedure to prevent sucking air on the return stroke of the pedal.
4. Depress the brake pedal with slow and gentle foot pressure.
5. Open the caliper bleed-screw.
6. Allow the pedal to drop to the fully depressed position.
7. Close the caliper bleed-screw.
8. Allow the pedal to return to the relaxed position.
9. Wait several seconds and then repeat steps 4 through 8 until air has been removed from the system.

MAINTENANCE

The brake system should have the brake fluid replaced and the brake bleeding procedure performed before each event.

MASTER CYLINDER REBUILD KITS

Refer to this table for the appropriate rebuild kit.

BLEEDING ORDER

Fixed calipers, 2 Master Cylinders

1. Front & rear passengers side, inboard
2. Front & rear passengers side, outboard
3. Front & rear drivers side, inboard
4. Front & rear drivers side, outboard

Floating calipers, 2 Master Cylinders

1. Front & rear passengers side
2. Front & rear drivers side

Floating calipers, 1 Master Cylinder

1. Start at the caliper furthest from the master cylinder.
2. Work your way in, bleeding the next closest caliper.

Fixed calipers, 1 Master Cylinder

1. Start at the caliper furthest from the master cylinder. Bleed the inboard side and then the outboard side.
2. Proceed to the next closest caliper.

Upon Completion

After bleeding, minimal brake pedal travel should be observed. Properly bleeding the brakes does not require any power equipment or a massive amount of applied pedal force.

SCAN ME

Scan to watch a video on Tilton Pedal Assemblies: How to Bleed Brakes with Dual Master Cylinders/Balance Bar or visit www.tiltonracing.com/technical/technical-videos/