



# Installation Instructions

## **Chrome Steel Deep Oil Pan for TH-400**

Part Number 20289

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B&M Deep Oil Pans provide several advantages over the stock factory oil pan.

- The extra capacity provides increased oil volume for added cooling.
- The extra capacity ensures a large volume of oil for the transmission oil pump preventing oil pick-up starvation
- The added feature of a drain plug allows regular transmission maintenance and oil changes without the usual mess of draining the oil pan.

Special steel oil pans provide the above features with a minimum weight increase in a chrome plated stamped steel pan.

Aluminum oil pans have the added feature of additional cooling from inner and outer fins and providing improved case rigidity.

Before beginning, check the parts list on Page 2 of these instructions to make sure you have all the necessary parts. Also check the tool list on Page 2. A minimum of tools are required.

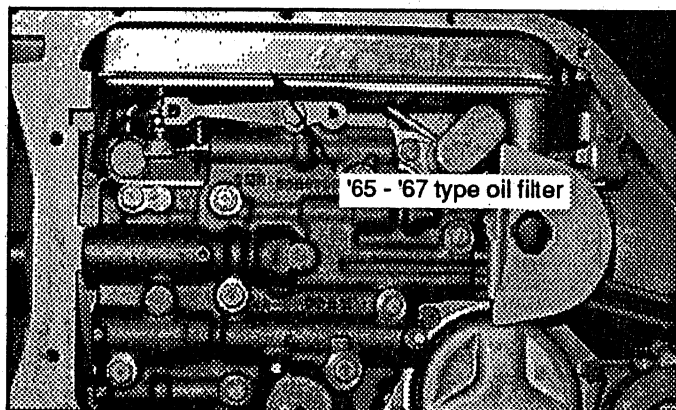


Figure 1

### TH-400 INTRODUCTION

This kit can be installed in a few hours by carefully following directions. Read all instructions first to familiarize yourself with the parts and procedures. Work slowly and do not force any parts.

Automatic transmissions operate at temperatures between 150°F and 250°F. It is suggested that the vehicle be allowed to cool for a few hours to avoid burns from hot oil and parts. The vehicle should be off the ground for ease of installation. Jack stands, wheel ramps or a hoist will work fine. Make sure vehicle is firmly supported!! Try to raise it 1-2 feet so you have plenty of room to work easily. Also have a small box or pan handy to put bolts in so they won't be lost and a drain pan to catch oil.

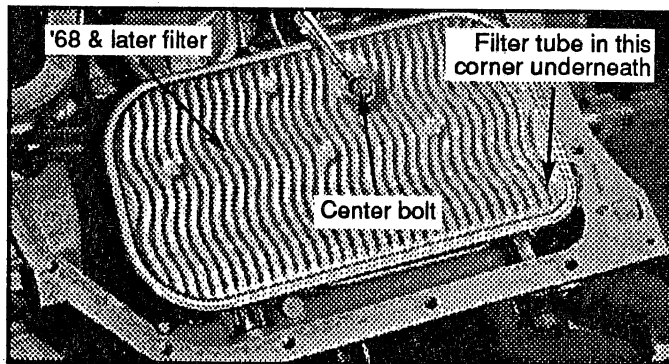


Figure 2

**STEP 1.** Drain oil pan. Loosen and remove oil pan bolts one at a time, working toward the front of the transmission. Remove the last two bolts slowly and the pan will tilt down to allow the last of the fluid to drain. If the pan sticks to the old gasket, pry it down slightly with a screwdriver before removing the last two bolts to break the seal. After the last bolt is removed the pan can be lowered and set aside.

**STEP 2.** The oil filter will now be exposed. Two types are common:

'65-'67: This filter is a long box-like unit which runs along the driver's side of the case (See Fig. 1). Remove it by grasping both ends of the box and pulling straight down carefully. Watch out for oil splatter. Remove the O-ring from the hole in the transmission case if it did not come out with the oil pick-up tube and discard it

'68-later: This filter is a large flat ripple surface filter in the center of the case held in with a bolt. (See Fig. 2) Remove the bolt (Note: It is a special shouldered bolt) and pull the filter

straight down. Watch out for oil splatter. If the pickup tube does not come out with the filter, pull it out of the case. Remove the O-ring from the hole in the transmission case, if it did not come out with the pick-up tube and discard it.

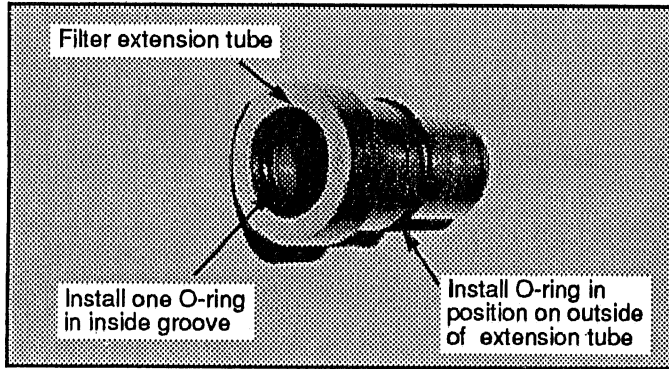


Figure 3

**STEP 3.** Inspect your oil filter. If it has varnish on it, or the transmission has more than 20,000 miles, we recommend you replace your filter.

**STEP 4.** Install two O-rings in position on the filter extension tube supplied with the kit. One of the O-rings fits on the end of the tube against the shoulder. The other O-ring fits in groove inside the large diameter. (See Fig. 3)

**STEP 5.** Lubricate the O-rings with ATF and push the extension tube onto the transmission end of your stock oil pick-up tube. Push the extension tube onto the pick-up tube until it stops against the shoulder on the pick-up tube. (See Fig. 4)

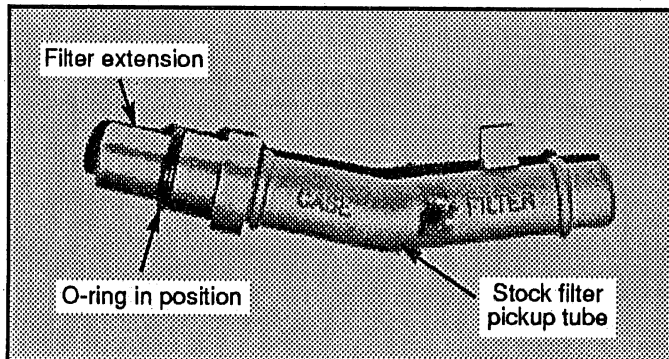


Figure 4

**STEP 6.** Install oil filter into case: '65-'67: Push oil filter/extension tube into the hole until the O-rings on the extension tube stop against the case. The filter will hang in mid-air. (See Fig. 5)

'68-later: Push the pick-up tube/extension tube into the hole until the O-rings on the extension tube stop against the case.

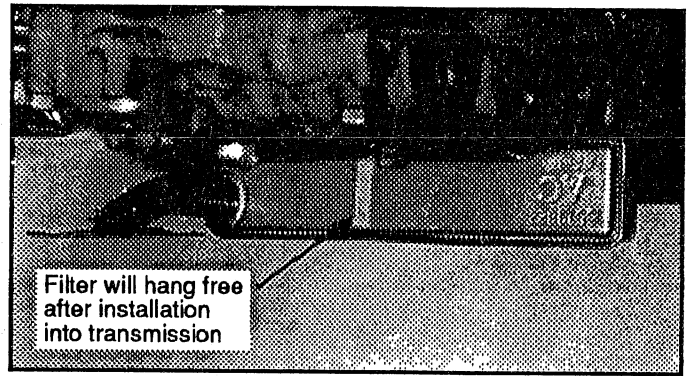


Figure 5

Install filter onto the end of the pick-up tube. Install 5/16"-18 x 1-1/2" bolt through hole in the filter. Thread 5/16"-18 nut onto end of bolt. Thread bolt into tapped hole in valve body until filter is level. Hold bolt in this position and tighten nut against valve body. (See Fig. 6)

**STEP 7.** Scrape old gasket off surface of case. Old gasket material can cause leaks. Install deep pan and new gasket onto transmission. Install washer bolts supplied with kit and tighten 12-13 ft-lbs. Do not overtighten as this can cause leaks. Install drain plug and tighten securely.

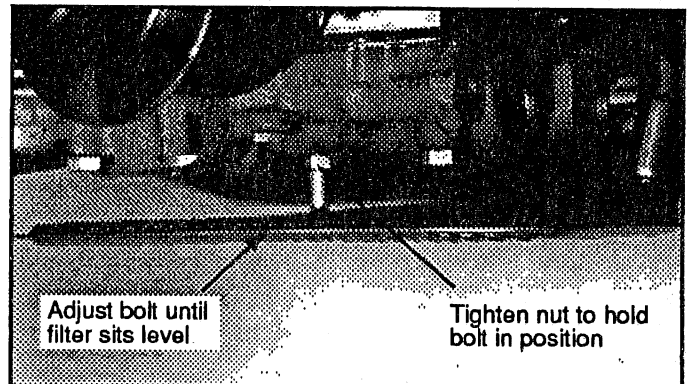


Figure 6

**STEP 8.** Lower vehicle but try to keep rear wheels off the ground, if possible. Add 6 quarts of B&M Trick Shift ATF. While Trick Shift is superior in heat capacity, lubrication and friction material performance, if Trick Shift is unavailable, we recommend Ford Type F fluid over Dexron or Type A.

**STEP 9.** Start engine and place shifter in Neutral position. Add fluid until oil level is between the Add and Full marks. Shift transmission through all gear positions. If the rear wheels are off the ground, allow the transmission to shift through all gears several times. Place selector in Neutral and check fluid level. Do not overfill as this will cause foaming and overheating. Check for leaks.

#### TOOL LIST

- 1 1/2" Socket - 3/8" drive
- 1 Speed Handle or Ratchet - 3/8" drive
- 1 1/2" Wrench
- 1 3/4" Wrench
- 1 Scraper
- 1 Torque Wrench 0 - 150 in. - lbs. (optional)

#### PARTS LIST

- 1 Oil pan
- 1 Drain plug and gasket
- 1 Pan gasket
- 1 Filter extension tube
- 2 Pickup O-rings
- 1 5/16" - 18 x 1-1/2" bolt
- 1 5/16" - 18 nut
- 13 Pan bolts
- 13 5/16" washers