



# Installation Instructions

## Cast Aluminum - Natural Transmission Pan

ALLISON 1000, 2000, 2400 TRANSMISSIONS

Part Number 70390

Congratulations! You have just purchased one of the finest cast aluminum pans available for the General Motors Allison Transmissions. This **B&M Cast Aluminum Deep Oil Pan** has been designed to work on most Chevrolet/GMC vehicles equipped with Allison 1000 transmissions. The **B&M Cast Aluminum Deep Oil Pan** provides several advantages over stock factory oil pans. The extra capacity provides increased oil volume and added cooling, while the aluminum construction increases case rigidity. The magnetic drain plug feature allows regular transmission maintenance and oil changes without the usual mess associated with "dropping the pan," and limits ferrous debris from circulating in the transmission. This **B&M Cast Aluminum Deep Oil Pan** can be installed by anyone with minimal mechanical experience. However, it is important to closely follow the instructions.

We recommend that you read through the instructions completely before beginning the installation, so you can familiarize yourself with the installation procedure. Check the tool list at the end of these instructions for the tools required to install your Deep Oil Pan. When installing your Deep Oil Pan there are several other **B&M** products you may wish to consider:

#### **TRANSMISSION TEMP GAUGE:**

Most transmission and converter fail-

ures can be traced directly to excessive heat. This accurate **B&M** Temperature Gauge comes with a light kit, color-coded dial face, anti-glare enclosure, wires, terminals, special sending unit, and T-fitting for easy installation. Available at your **B&M** dealer.

#### **INTRODUCTION**

This Deep Oil Pan can be installed in about an hour by carefully following the instructions. Transmission components are precision fit and dirt is the number one enemy of an automatic transmission. Cleanliness is very important, so a clean work surface from which oil can easily be removed is necessary.

Caution: Automatic transmissions operate at temperatures between 150°F and 250°F. It is suggested that the vehicle be allowed to cool off 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 - DO NOT WORK UNDER A VEHICLE IF IT IS SUPPORTED BY ONLY A JACK!** Try to raise the vehicle 1-2 feet so you will have plenty of room to work. Also, have a small box to put bolts in and a drain pan to catch oil.

**NOTE: This kit does not come with a transmission filter. Filter,**

**GM p/n: 29537965, should be obtained prior to installation.**

#### **INSTALLATION**

**STEP 1.** Drain the oil pan by removing the drain plug using a 14 mm socket (**See Figure 1**). After the oil has drained from the pan, loosen and remove the oil pan bolts one at a time using a 13mm socket, working towards 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 to break the seal before removing the last two bolts. After the last bolt is removed, the pan can be lowered and set aside.

**STEP 2.** The oil filter will now be exposed. Pull the filter out of the oil pump, being careful not to bend the filter pickup tube as it is plastic and may crack or break. If the seal remains in the pump and does not come out with the filter, remove it by using a flat head screw driver. Be careful not to damage the pump surface.

**STEP 3.** Install the supplied o-ring on the extension tube provided in the kit (**See Figure 2**). Lubricate the seal on the filter (GM p/n: 29537965) and the o-ring with new transmission fluid. **B&M** recommends that the filter be changed at this time. Place the extension tube on the oil filter. Install the



Figure 1

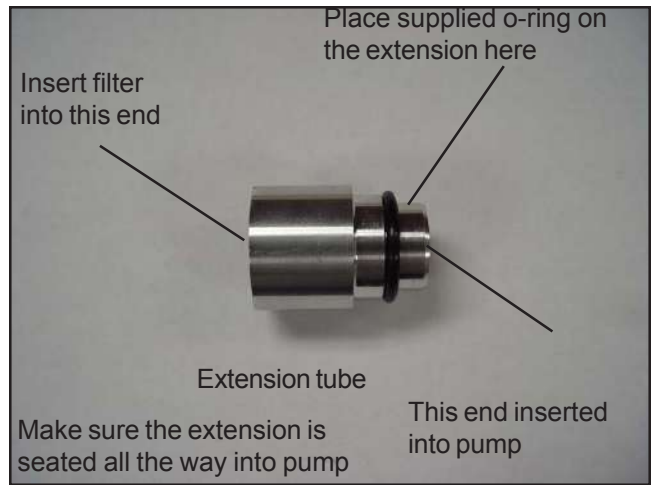


Figure 2

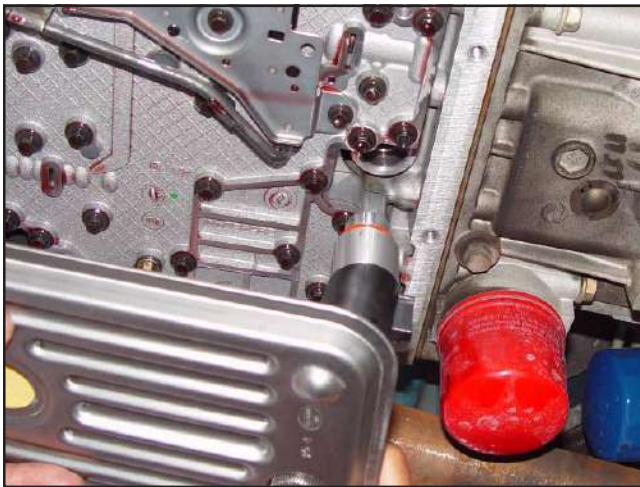


Figure 3



Figure 4

assembly into the oil pump bore (See Figure 3).

**STEP 6.** Re-install the reusable gasket (GM p/n: 29536526) and deep pan. Use the supplied pan bolts and washers and torque to 12 lbs-ft (See Figure 4) with a 6mm allen. Do not overtighten as this can cause leaks or damage to the transmission case. Using a 3/4" box wrench make sure the drain plug is tight.

**STEP 7.** If using a temperature sensor, install in provided 1/8" NPT port on front of pan, otherwise apply teflon tape to the threads and tighten 1/8" NPT plug.

**STEP 8.** Lower vehicle and add eight quarts of Dexron III.

**STEP 9.** Start the engine and place shifter in the neutral position. Add fluid until the oil level is at the "add" mark. Shift the transmission through all gear positions. Check the oil pan and gaskets for leaks. Once the transmission

has warmed up, add fluid to bring the level up to "full". Do not overfill as this causes foaming and overheating.

### Parts List

- 1 Aluminum Cast Oil Pan
- 1 Magnetic Drain Plug
- 1 1/8" NPT Pipe Plug
- 1 Drain Plug Gasket
- 1 O-ring
- 1 Filter Extension Tube
- 12 M8-1.25 x 25 mm Bolts
- 12 M8 Flat Washers

### Tools List

- Drain Pan
- 14 mm Ratchet
- 3" Ratchet Extension
- 13 mm Socket
- 6 mm Allen Wrench
- 3/8" Allen Wrench
- 3/4" Box Wrench
- Flat Blade Screwdriver
- 12 Quarts ATF
- Jack & Jack Stands