



Installation Instructions

E4OD/4R100/5R100

(including most Ford Trucks- Gasoline/Diesel/2WD/4WD)
Deep Oil Pan

Part Number 40290, 40295

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(see www.bmracing.com for the latest vehicle fitment applications and model years)

Congratulations! You have just purchased one of the finest cast aluminum pans available for the Ford E4OD/4R100 Transmission. The **B&M E4OD/4R100/5R100 TORQUE-SHIFT Cast Aluminum Deep Oil Pan** has been designed to work on most **1989 and newer** Ford trucks with the E4OD/4R100 transmission. The **B&M E4OD/4R100/5R100 TORQUE-SHIFT 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 drain plug feature allows regular transmission maintenance and oil changes without the usual mess associated with "dropping the pan."

This **B&M E4OD/4R100/5R100 TORQUE-SHIFT Cast Aluminum Deep Oil Pan** can be installed by anyone with minimum mechanical experience. It is however, 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 **B&M E4OD/4R100/5R100 TORQUE-SHIFT Cast Aluminum Deep Oil Pan**.

When installing your Deep Oil Pan there are several other B&M products you may wish to consider:

TRANSMISSION OIL COOLER: We feel that it is very important that every vehicle should have a transmission oil cooler in addition to the radiator heat exchanger. Heat is the major cause of transmission failures, and an oil cooler is an inexpensive safeguard against overheating. **B&M** offers a wide range of transmission coolers to suit every need, which are available at your **B&M** dealer.

TRICK SHIFT PERFORMANCE ATF: Trick Shift performance automatic transmission fluid is the industry's leading performance ATF. A specially blended oil with foam inhibitors, extreme pressure agents and shift improvers, this fluid assures protection while delivering the fastest possible shifts. You literally "Pour in performance." 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! Note: 4WD models may not need to be left to install pan. 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.

INSTALLATION

STEP 1. Drain the oil pan. Loosen and remove the oil pan bolts one at a time, 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. **B&M** recommends that the filter be changed at this time (the pan was designed to be used with a heavier duty OE TORQUESHIFT (5R100) filter; FORD 3C3Z-7A098-AA or equivalent). **Note: The increased depth of the pan will not properly allow the use of other types of filters found on other 2wd and 4wd E4OD's.**

STEP 3. Clean the old gasket off of the case and install the new gasket and new deep pan. **Note: if a reusable gasket was removed, clean, inspect and reuse unless gasket is damaged.** Use the supplied pan bolts and washers; **Do not use original bolts** (torque to 10 ft.lbs.). Do not overtighten as this can cause leaks. Make sure drain plug is tight.

STEP 6. Lower vehicle and add seven quarts of ATF or **B&M Trick Shift ATF.**

NOTE: 5R100 TORQUE-SHIFT transmission models must only use MERCON SP transmission fluid to avoid damage to the converter and transmission internal components. MERCON SP is currently only available through FORD dealerships.

STEP 7. 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 Oil Pan Gasket
- 1 Drain Plug
- 1 Drain Plug Gasket
- 20 M8-1.25 x 20 mm Bolts
- 20 M8 Flat Washers

Tools List

- Drain Pan
- 3/8” Ratchet & 3” Extension
- 10 mm Socket
- 6 mm Allen Wrench
- 3/4” Box Wrench
- Screwdriver
- 12 Quarts ATF
- Jack & Jack Stands