Instructions for Use – FIT413
T-TECH® Fitting for Allison Transmissions

Caution:

T-TECH Automatic Transmission Fluid Exchange Machines are designed to bleed Automatic Transmission Fluid (ATF) into the overflow container if system pressures exceed 85 PSI. Please note that the FIT413 Kit cannot be used in conjunction with T-TECH Model No. JB100 because of pressure limitations of that early model.

When servicing an Allison 1000 transmission, it is critical to warm the vehicle up prior to service, as this transmission system can exhibit pressures up to 125 PSI when cold. After the fluid reaches normal operating temperature, the system pressure will drop to approximately 70 PSI and service can be performed.

Never exceed idle when servicing the Allison 1000 as doing so will raise the system pressure in excess of 85 PSI, forcing open the T-TECH pressure overflow valve and directing ATF into the overflow tank.

Instructions for Use

Please Note:

During the 2003 model year, GM changed the design of the fittings used to connect the Allison 1000 cooler line to the radiator. As a result, you will encounter different fitting requirements for these vehicles, based on model year. Your new T-TECH FIT413 Special Fittings Kit is designed to enable service, regardless of model year.

Your T-TECH FIT413 Kit contains 3 hose assemblies. The female hose assembly utilizes a universal fitting and will adapt to both the old and new Allison models. There are 2 male hose assemblies: the "short" nose male hose assembly is designed to fit older Allison 1000s while the "long" nose hose assembly will fit the newer 1000s. Care must be taken to match the correct male fitting to the application to avoid connection issues and leaking of fluid. As a double-check, always compare the transmission cooler line fitting to the FIT413 male hose assembly to ensure proper selection.

Step 1: Locate a transmission cooler line where it attaches to the radiator. Remove the plastic cover, sliding back onto the cooler line, exposing the "E" clip.

Step 2: Using a small hook, awl or screwdriver, remove the "E" clip from the radiator fitting. *(This clip will need to be reinstalled to hold the FIT413 male adapter in place during the ATF exchange.)*

Step 3: Remove the cooler line from the radiator fitting and match to the corresponding male hose assembly from the FIT413 Kit to ensure that the correct male hose assembly is used for the service.

Step 4: Reinsert the "E" clip back onto the radiator fitting and connect the proper FIT413 male hose assembly.

Step 5: Connect the FIT413 female hose assembly onto the transmission cooler line.

Step 6: Follow all safety and service procedures as outlined in your T-TECH Owners Manual.

Step 7: When service is complete, reverse the installation procedure. Always replace the "E" clip with a new one (Part No. FIT511) prior to connecting the transmission cooler line back into the radiator fitting.

Please Note: The "E" clips are easily stretched or bent when removed. The design of the "E" clips utilizes 3 pressure points to hold a line in place. If any of these points are compromised, the line may come out of the radiator, causing fluid leaks and the transmission to run low on fluid. It is strongly recommended that you install a new clip prior to final connection of the cooler line back into the radiator fitting.

Step 9: After reassembly is complete, test on the cooler line to ensure connection is secure. Reinstall the plastic cover back over the fitting to keep out dirt and debris.

Step 10: Check vehicle for leaks and proper fluid levels.

Clore Automotive • 8600 NE Underground Drive, Pillar 248 • Kansas City, MO 64161 • 800.328.2921 • www.cloreautomotive.com