Advance Adapters has been developing engine and transmission parts for the popular GM S-series trucks and mini Blazers for well over 15 years. We have found the S10/S15 an easy vehicle to convert. We’ve strived to research every possible conversion problem or difficulty that you might encounter when converting your vehicle. For more detailed conversion installation procedures, we recommend you obtain our instruction manual GM001.

The parts we manufacture are available for either Chevy V8 or Chevy 4.3 V6, retrofitting the stock S10/S15 2.8L V6, 4 cylinder and stock 4.3 V6. Because of the diversity of applications, we do not offer complete conversion packages. We have grouped the conversion components by applications. Many of our components are necessary when converting your engine and or transmission. Items such as exhaust and radiators can be modified or sourced elsewhere.

**GENERAL CONVERSION INFORMATION:**

**Engines & Transmissions:** The S10 2WD was first introduced in 1982, and the 4WD model became available in 1983. These vehicles came stock with a 2.8L V6 or 4 cylinder, which proved to be underpowered. The transmissions used in these vehicles were either the 700R (60 degree bolt pattern) or T5. We offer the necessary components to install the Chevy 4.3 V6 or Chevy V8, utilizing either the TH350, 700R, or stock T5. These conversions for both the 2WD and 4WDs are very popular and can normally be performed without driveline modifications.

In 1988, the S-series pickups offered a 4.3 V6, and still utilized the 700R or the NV3500 transmission. These engine and transmission combinations seemed to be an excellent upgrade, but many people still wanted V8 power.

In 1996, the NV1500 was introduced behind 4 cylinder motors. (No adapters available to retain this transmission).

**Body Style Changes:** In 1994, the body style on the S10/S15 was redesigned, and the mini-blazer in 1995. Despite the exterior changes, the frame and chassis remained unchanged. Currently, engine conversions using our components have been performed on vehicles as new as 2000 (on 2WD vehicles), and 1997 (on 4WD vehicles).

Many questions arise when considering any engine swap. Some of these questions include: Year & size block to use, transmission choice, transfer case & axle strength, suspension requirements, body lift, cooling, exhaust, and installation time. A brief overview is covered in this section; however, these questions are covered in depth in the GM001 instruction manual. This conversion manual is included with all engine mount kits.

**Engine Selection:**
First check your local Department of Motor Vehicles for smog & engine requirements. Certain states, such as California, require the same year or newer engine as the vehicle. (The engine should be complete, retaining all smog equipment). Both the Chevy V6 & V8 fit well in these vehicles. All Chevy V8 blocks have the same physical dimensions and use the same motor mounts. Choosing the right block depends on the intended use of your vehicle and your state regulations. See Page 65 for additional engine information.

**Transmission Selection:**

**700R:** We commonly deal with two types of GM 700R transmissions. The S10/S15 used a 700R up against a 2.8L V6. This transmission differs in two areas from a 700R that was originally bolted to a V8. The first difference is the bellhousing bolt pattern. The 2.8L 700R version is commonly known as the 60 degree bolt pattern, and the 700R V8 version is known as the 90 degree bolt pattern. The bellhousing and transmission cases are integral (one unit). The second difference is the 2.8L 700R uses less clutch packs than the V8 700R. If you want to retain your 700R, you will need to switch your 2.8L 700R transmission casing to a V8 700R casing. (Note: S10/S15 equipped with a 700R and a 4.3 V6 have the 90 degree bolt pattern which will not need to be changed.)

**T5:** The T5s equipped in these vehicles are not recommended for bolting up to the Chevy V6 or V8; however, we do carry a bellhousing for customers that wish to retain this transmission on 1984 and newer vehicles. 2WD vehicles should never retain this 5 speed. 4WD vehicles 1982-83, that have a mechanical clutch or manual transmission and used with a 4 cylinder engine, should consider switching to an automatic transmission due to the cable-operated clutch linkage.

**NV3500:** This transmission is normally found up against the stock 4.3 V6 and does not require an adapter when converting to the V8.

**TH350:** This is the most popular transmission to be installed in combination with a V6 or V8 engine selection. On 2WD vehicles, a TH350 with a 9" tailhousing can be installed without driveshaft modifications. On 4WD vehicles, a TH350 replacing the 700R (using our adapter) can be installed without driveshaft modifications. When replacing a T5, no driveshaft modifications are necessary, but a stock adapter housing and transfer case shifter components are required. More information regarding the TH350 transmission can be found on Page 67.
Transfer Case & Axle Strength:
The S10/S15 4WDs used either a NP207 or NP231C transfer case. These transfer cases are chain-driven units and are built strong enough to handle the torque of the 4.3 V6 or V8.

The stock S10/S15 axles are adequate to handle most 4.3 V6 & V8 conversions. Caution should be used on 4WD vehicles running larger tires or conversions with high performance engines.

Suspension Requirements:
The installation of a V8 is about 175 lbs. heavier than stock. On 2WD applications, your front suspension will normally drop about an inch. We recommend using a heavy duty shock which will compensate for this drop, or you can change to an extended cab front coil spring which has a greater load rating. On 4WD applications, the suspension is normally equipped to handle the extra weight. Once completing any one of these vehicles, your front end alignment should be checked.

Body Lifts:
A body lift is not required on both the 2WD & 4WD versions; however, a body lift will always add additional tunnel & hood clearance.

Cooling Requirements:
When replacing a 2.8L or 4 cylinder, a radiator upgrade is normally required. We offer three choices of aluminum radiators: a single core radiator with plastic tanks, a custom BE COOL 2-core radiator for ultimate cooling, and a custom AA 2-core radiator. These radiators bolt in the stock location. You can also have your stock radiator reworked by a local radiator shop or have one custom built. On vehicles that were originally equipped with a 4.3L and converting to a V8, we recommend trying your stock radiator first.

Exhaust:
We offer headers for Chevy V8 2WD and 4WD applications. When using a newer block and retaining the smog equipment, stock Chevy manifolds off of a 1982 or newer low performance car work the best. These manifolds are very compact and the main exhaust remains level with the exhaust ports.

Average Installation Hours:
The average conversion time on most vehicles is 40-50 hours.

2WD S10/S15 & MINI-BLAZERS:

MOTOR MOUNTS: We manufacture bolt-in motor mounts for the early S10/S15 2WDs. They work in conjunction with the stock 2.8L frame mounts. If your vehicle was equipped with a 4 cylinder, it is necessary that you purchase and install a set of stock 2.8 L stock frame mounts, GM Part No. 22188284. If your vehicle is a later model S10/S15 that came equipped with a 4.3 V6 and are planning to upgrade to a V8, we manufacture a bolt-on mount for this installation.

P/N 713111 - Chevy V8 to 2.8L stock frame mounts
P/N 713119 - Chevy 4.3 V6 to 2.8L stock frame mounts
P/N 713123 - Chevy V8 to stock 4.3 V6 motor mounts (used also on Astro Vans)

These motor mounts listed above are slotted for fine-tune adjustments. On vehicles retaining the air conditioning, the engine must be set to the furthest rear position available on the motor mount. When this is done, clearance on the A.C. evaporator housing becomes crucial on the passenger side exhaust manifold. We manufacture a sheet metal cover that will allow the necessary ample clearance between the manifold and housing.

P/N 716421 - A.C. Evaporator housing cover

HEADERS: We manufacture two types of exhaust headers. Our headers are manufactured with a 5/16” header flange and 16 gauge tubing. Both types of headers use a slip type exhaust connection which aids in additional clearance when exiting from the engine compartment. These headers are available in Chrome or Non-plated (NP). We do not offer headers for the 4.3 V6 application.

P/N 717052 - SlickFit headers, Chevy V8 2WD (manifold style) (shown)
*P/N 717057 - SlickFit headers, Chevy V8 2WD (tubular style)
*(Should not be used on 1982 & 1983 vehicles)

RADIATORS: The following radiators are designed for Chevy V8 engine swaps.

P/N 716686 - Aluminum single row S10/S15 radiator
P/N 716694 - BE COOL Aluminum radiator (1982-94 w/ auto trans) (shown left)
(more information about BE COOL radiators can be found on Page 25)
P/N 716694-AA - Aluminum radiator (1982-94 w/ auto transmission)

High flow water pumps and miscellaneous components are listed on Page 64.
4WD S10/S15 & MINI-BLAZERS:

MOTOR MOUNTS: We manufacture bolt-in motor mounts for the early S10/S15 4WDs. They work in conjunction with the stock 2.8L frame mounts. If your vehicle was equipped with a 4 cylinder, it is necessary that you purchase and install a set of stock 2.8L V6 frame mounts, GM Part No. 22188284. If your vehicle is a later model S10/S15 that came equipped with a 4.3 V6 and are planning to upgrade to a V8, we manufacture a bolt-on mount for this installation.

- P/N 713107 - Chevy V8 to 2.8L stock frame mounts
- P/N 713118 - Chevy 4.3 V6 to 2.8L stock frame mounts
- P/N 713123 - Chevy V8 to stock 4.3 V6 motor mounts

These motor mounts listed above are slotted for fine-tune adjustments. On vehicles retaining the air conditioning, the engine must be set to the furthest rear position available on the motor mount. When this is done, clearance on the A.C. evaporator housing becomes crucial on the passenger side exhaust manifold. We manufacture a sheet metal cover that will allow the necessary ample clearance between the manifold and housing.

- P/N 716421 - A.C. Evaporator housing cover

OIL PANS: The 4WD applications require a special rear sump oil pan when converting to a Chevy V8. Depending on the year and style of the block, we manufacture three different oil pans for the V8 replacing the 2.8 V6, and the 4.3 V6. All pans come with a new pickup screen and oil plug. The 1986 & newer pans will work on LT1 & LT4 engines, but the pickup screen will not fit the LT1 & LT5 oil pump and we do not offer oil level sensor provisions. These pans do not work on LS1 engines.

Replacing the 2.8L & 4.3L:
- P/N 716410 - 1985 & earlier Chevy block, driver side dipstick 2.8L (shown)
- P/N 716411 - 1985 & earlier Chevy block, passenger side dipstick
- P/N 716420 - 1986 & up Chevy block, 1 piece rear main seal

OIL FILTER ADAPTER: These conversions require a remote oil filter adapter. This provides front driveshaft clearance.

- P/N 716083 - Chevy V8 oil filter adapter
- P/N 716085 - Chevy 4.3 V6 oil filter adapter

HEADERS: We manufacture two types of exhaust headers. Our headers are manufactured with a 5/16" header flange and 16 gauge tubing. Both types of headers use a slip type exhaust connection which aids in additional clearance when exiting from the engine compartment. These headers are available in Chrome or Non-plated (NP). We do not offer headers for the 4.3 V6 application.

- P/N 717053 - SlickFit headers, Chevy V8 (manifold style) (recommended)
- P/N 717052 - SlickFit headers, Chevy V8 (manifold style)

On P/N 717052, the passenger side header interferes with the stock shock tower. You will also need a shock tower relocation bracket, P/N 713113.

RADIATORS: The following radiators are designed for Chevy V8 engine swaps.

- P/N 716686 - Aluminum single row S10/S15 radiator (shown left)
- P/N 716694 - BE COOL Aluminum radiator (1982-94 w/ auto trans)

(more information about BE COOL radiators can be found on Page 25)

- P/N 716694-AA - Aluminum radiator (1982-94 w/ auto transmission)

AUTOMATIC TRANSFER CASE ADAPTER: Our adapter kit for the TH350 comes with an output shaft and adapter housing to retain the stock transfer case in its original location. On vehicles that were previously equipped with a 5 speed, it is necessary to purchase the following GM items: GM# 14049551 (shifter bracket) and GM# 15681328 (stock adapter). For information regarding TH350s, see Page 67.

- P/N 50-8500 - TH350 to stock S10/S15 NP207 & NP231 T/C

STOCK MANUAL BELLHOUSING ADAPTER: The stock T5 transmission can be retained with a stock GM bellhousing. We carry this bellhousing assembly under P/N 712547. This kit comes complete with a release lever, slave cylinder, release bearing, ball pivot, hose and special bellhousing index reducer. The pressure plate is a Centerforce 11”, P/N CF361877. The input shaft on this transmission is a 1” 14 spline. Centerforce manufactures for us a special clutch disc to fit this application, Part No. 716104. Manual transmission conversions are NOT compatible with vehicles 1982-83 that are equipped with cable clutch controls.

High flow water pumps and miscellaneous components are listed on Page 64.