

## Installation Guide for 1982-2003 S10 2WD



### **Hardware and Parts List**

All motor mounts come with a lifetime warranty and free replacement upon return of any mount or bracket.

Quantity	<u>Item:</u>
2	Frame Brackets
2	Motor Mounts
1	Transmission Crossmember
2	Transmission Crossmember Brackets
1	Polyurethane Transmission Mount and Spacers
1	Hardware pack

#### **Installation Notes**

- This kit uses our LH8 oil pan.
- The body seam lip in transmission tunnel might need to be bent over to clear certain transmissions.
- The engine and transmission can be installed together, but you will need to un-bolt the body bushings and lift the body off the frame slightly..
- If you are using our headers, you will need to remove the steering shaft to install the driver's side header.
- Stock low mount a/c compressor will not work without heavy frame modifications.
- Must us high mount accessories, cannot be used with factory LS F-Body or GTO
  accessory systems. We suggest using a corvette harmonic balancer and water pump
  with Kwik Performance alternator and a/c accessory bracket kits. This will give you room
  for the radiator. Camaro and truck LS accessories stick out further off the front of the
  engine causing radiator and fan interference

**Step 1:** Locate the motor mounts and loosely bolt them to the engine using the supplied 10mm allen head bolts, now loosely bolt the Driver's Side (LEFT) and Passenger's Side (RIGHT) frame brackets to the engine mounts using the supplied  $\frac{1}{2}$ "-13 x 4" long bolts and nylon lock nuts. (The bolts will be tightened after the engine is set in place and everything is lined-up)

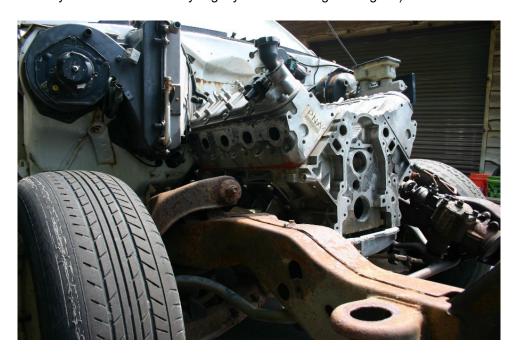


(Detailed view of driver's side motor mount and frame bracket on engine)

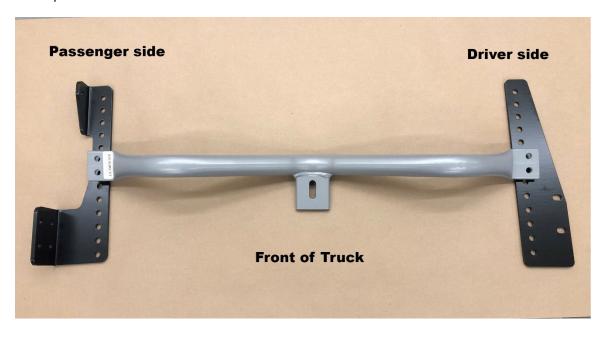


(Detailed view of passenger's side motor mount and frame bracket on engine)

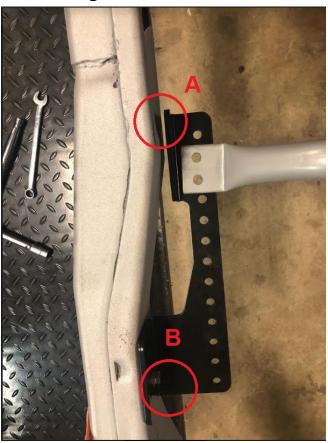
**Step 2:** Lower the engine into the chassis and align the frame bracket to frame bolt holes and loosely install the factory bolts (94-03 models) or the 3/8-16 x 1" bolts, flat washers and nylon lock nuts for (82-93 models). (Note: if installing the engine and transmission together you will need to loosen the body bolts and lift the body slightly while installing the engine.)



**Step 3:** Lift the rear of the transmission using a floor jack. Install the crossmember frame brackets to the frame on both sides. For 1994-03 trucks you will use existing holes in the frame. See top view below.



# 1982-1993 S10 Passenger Transmission Crossmember Bracket



- 1. Align bracket using the lower front bolt hole in bracket with the lower hole in frame (note B in illustration) using a 3/8"- $16 \times 1$ " grade 8 bolt with a nylon lock nut.
- 2. Align the bracket to be level with the frame and tighten the bolt to hold bracket to frame.
- 3. Drill a 25/64" hole through in the upper front bolt hole on the bracket through frame, then install and tighten the 3/8"- $16 \times 1$ " grade 8 bolt with a nylon lock nut.
- 4. Drill a 25/64" hole through the frame in the rear of the bracket (note A in illustration).
- 5. Install the supplied  $\frac{1}{4}$ " spacer between the frame and bracket and install and tighten the  $\frac{3}{8}$ "-16 x 1  $\frac{1}{4}$ " grade 8 bolt with a nylon lock nut.

NOTE: The passenger side bracket will sit slightly higher than the driver's side bracket, it is designed this way.



**Step 5:** Once you have checked to make sure that everything is installed correctly and lined up go back and tighten the engine mount to block bolts, engine mount to frame bracket bolts, frame bracket to frame bolts, transmission mount to transmission bolts, transmission mount to crossmember bolts and transmission crossmember to frame bolts.

#### Finished -

Road test your vehicle and familiarize yourself with the new LS power. After the first test drive recheck all bolts to make sure they are tight. Contact us if you have any questions or need assistance during the installation.

Thank you for using MuscleRods products - proudly made in the USA!

770-751-0687