

# Installation instructions

## For set # 3.1172

### 84-91 Corvette Motor Mount Insert

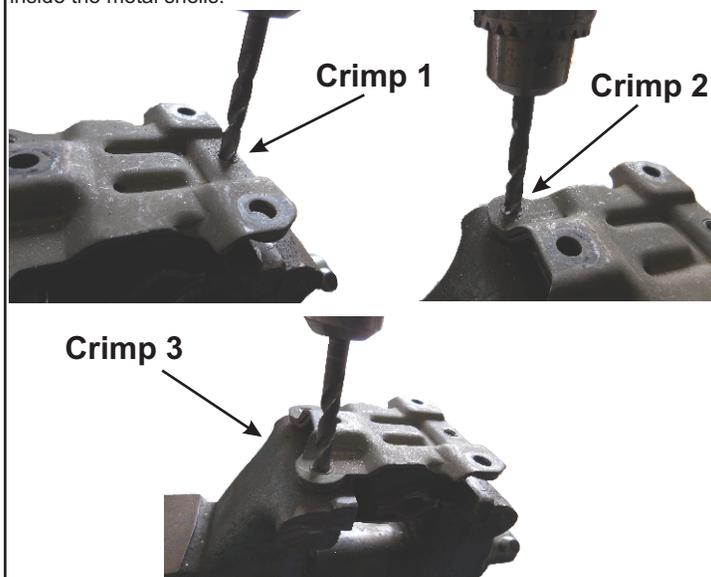


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It is recommended that if you are unfamiliar with this type of work that you refer to a qualified service center specializing in this type of work. It is also recommended that if you choose to do this work yourself that a factory service manual be obtained for the proper procedures pertaining to removal, replacement and proper torque specifications for your vehicle. This instruction set is intended as a guideline for the safe installation of Energy Suspension's polyurethane bushings, once you have removed the factory components from your vehicle. **NOTE: BE SURE VEHICLE IS SECURELY SUPPORTED BEFORE GOING UNDERNEATH.** Before loosening the motor mount bolts, find a suitable jacking location near the front of the engine block. Do not lift on crankshaft pulleys or oil pan. Severe damage could occur to these components. If available, use an engine hoist to raise engine. Raise the engine to a height necessary to remove load from the engine mounts. Remove the 5" long engine mounting bolts. Raise the engine again to allow enough clearance between the engine mounting brackets and motor mounts. **NOTE: BE CAREFUL NOT TO CAUSE DAMAGE TO OTHER ENGINE COMPONENTS BY RAISING THE ENGINE TOO HIGH, i.e., DISTRIBUTOR CAP ON FIREWALL, FAN, etc.** Remove bolts securing motor mounts to front cross member. Remove mounts one side at a time. **NOTE: IT MAY BE NECESSARY TO FABRICATE A SPECIAL TOOL TO HOLD THE LOCK NUTS LOCATED INSIDE THE CROSS MEMBER.** Remove motor mounts from the cross member and inspect the metal shells for damage. **NOTE: IT IS EXTREMELY IMPORTANT THAT THE METAL SHELLS BE UNDAMAGED.**

#### STEP - 1

To separate the two metal halves of the motor mount, you will need to drill out three crimps with a 3/8" drill bit. After separation, remove any burrs or sharp edges. Clean out any dirt and grease that may have accumulated inside the metal shells.



#### STEP - 3



Place the assembly into a vise or large clamp, leaving access to the drilled out holes. Use enough clamping force to hold the two metal shells together, without permanently deforming the metal (a slight amount of metal bending may occur, which is normal). To temporarily hold the assembly together, place the provided tie-wraps into the drilled holes, inserting them from the bottom side, leaving the locking end of the tie-wrap on the top side, as shown. Tighten the tie-wrap as tightly as possible, taking care not to break them. Make sure the tie-wraps are holding firm while releasing the clamp or vise. The metal shells may separate slightly, this is normal. However, excessive separation will cause the mounting bolts to not reach through the crossmember and allow the nuts to start on the bolts. Cut the ends of the tie-wraps off, being sure not to leave any sharp edges.

#### STEP - 2

Reassembling motor mounts: This motor mount insert can go into the metal shells one way. Put the polyurethane motor mount insert into the metal shell. Align the bottom backing plate making sure that all bolt holes line up. **HINT:** Due to the many different metal configurations from foreign and domestic manufacturers, it may be helpful to apply a thin coating of grease or dishwashing detergent to the polyurethane insert, at metal contact points before installing. This will allow the insert to seat, in turn allowing proper bolt alignment.



**NEW POLYURETHANE INSERT**



**OLD O.E. RUBBER INSERT**

#### STEP - 4

Reassemble motor mounts into engine compartment, leaving all bolts loosened until the 5" long bolts going through the brackets have been successfully installed. Tighten all bolts to factory specifications. If so desired, you may remove the remaining portion of the tie-wraps.

**NOTE:** The ENERGY SUSPENSION Polyurethane motor mount insert will restore your engine to its original height. If adjustments have been made to other engine components, such as, fan shroud, fuel lines, etc, due to sagging, worn motor mounts, these components will need to be readjusted back to their original locations. **Also, be sure to check hood clearance before closing.**

**HINT:** Due to the many different metal configurations from foreign and domestic manufacturers, it may be helpful to apply a thin coating of grease or dishwashing detergent to the polyurethane insert, at metal contact points before installing. This will allow the insert to seat, in turn allowing proper bolt alignment.

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30/MAY/17 BRH ECN 17037