

INSTALLATION INSTRUCTIONS

P/N: C4022, C4027, C4028, C4030, C4031 C4032, C4053, C4054, C4055, C4056 MID-MOUNT ENGINE PLATES

Competition Engineering Mid-Mount Engine Plates are designed to work in conjunction with our Aluminum Front Motor Plates to further eliminate torsional stress within the chassis. Installation of a mid-mount engine plate allows easier transmission swaps as well as helping to align the drivetrain.

NOTE: A limiting device is required to prevent the engine from moving forward and backward in the chassis. This consists of a link mounted between the side of the engine block and the frame rail. A front motor plate is recommended if you plan to remove the stock motor mounts.

PARTS LIST

- 1) Mid-Mount Plate
- 4) Mounting Plate Gussets
- 4) 3/8"-16 Locknuts
- 1) Flywheel Shim (C4031 only)

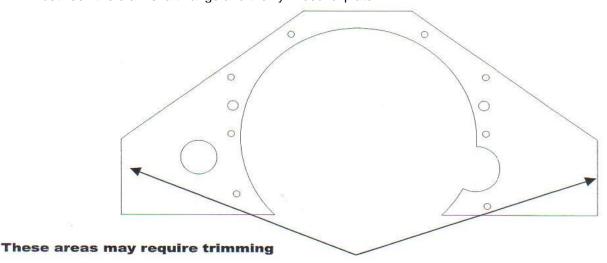
- 2) Mounting Plates
- 4) 3/8"-16 x 1.25" Bolts
- 4) Washers

INSTALLATION

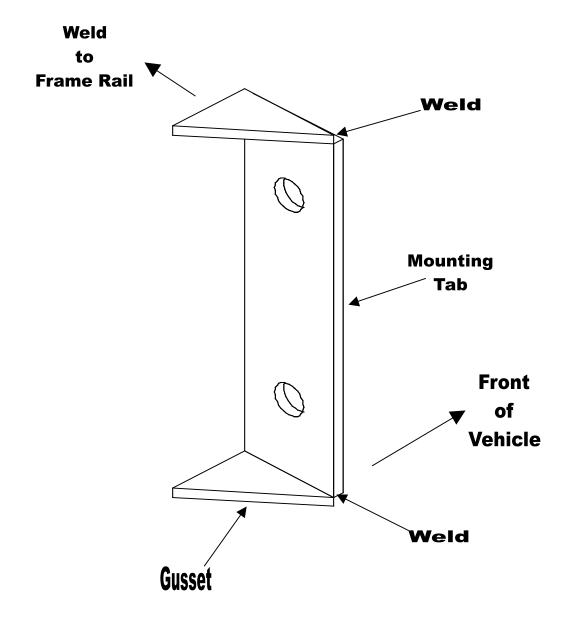
- 1. Remove the transmission from the vehicle.
- 2. Using the shipping box, make a template of the plate by tracing it and cutting it out.
- 3. Bolt the template to the rear of the block and determine if trimming is necessary.
- 4. Install the headers and check for interference. Mark the template to indicate where trimming is required.

NOTE: Be sure that the crossmember location has been determined and is in place before installation of the mid-mount plate.

- 5. Trimming the plate:
 - a. Remove the template from the block and trim it on the marks made previously.
 - b. Place the template on top of the mid-mount plate and trace the outline of the template.
 - c. Trim the plate to size. Use a fine tooth (24 teeth per inch) saw blade to cut the plate.
 - d. Use the following guidelines for trimming the plates to fit these applications.
 - 1. For 1967-69 Camaro/Firebird and 1968-74 Nova, Omega, Ventura with SBC: trim 3/8" off the clutch linkage side of the plate.
 - 2. For 1967-69 Camaro/Firebird and 1968-74 Nova, Omega, Ventura with BBC: trim 3/8" off the starter side of the plate.
 - 3. For 1970-81 Camaro/Firebird with SBC and BBC: trim 1" off starter side and 3/4" off the bottom of the plate.
- 6. Once the proper location of the engine/transmission assembly has been determined you can mount the mid-mount plate using the supplied mounting tabs. The tabs should be mounted behind the mid-mount plate and welded securely in place.
- 7. After the tabs are welded you can drill the four 13/32" holes for the supplied mounting bolts.
- 8. A steel shim has been supplied with the C4031 Mid-Mount Kit to move the flywheel/flexplate the same distance as the thickness of the plate. This will eliminate clutch and torque converter engagement problems. This shim installs between the crankshaft flange and the flywheel/flexplate.



TYPICAL MOUNTING BRACKET INSTALLATION



For Technical Assistance, Call Competition Engineering's Tech Line at (203) 458-0542, 8:30am – 5:00pm Eastern Time

COMPETITION ENGINEERING 80 CARTER DRIVE • GUILFORD, CT 06437 PHONE: (203) 453-5200 • FAX: (203) 453-6906