

## PART # 20140 INSTRUCTION SHEET FRONT & REAR MOTOR KIT

FOR SMALL BLOCK CHEVROLET V-8 ENGINE & TURBO AUTOMATIC TRANSMISSION INTO CHEVROLET VEGA & MONZA, PONTIAC ASTRE & SUNBIRD, BUICK SKYHAWK & OLDSMOBILE STARFIRE

## **INSTALLATION INSTRUCTIONS:**

NOTE: Please read carefully before starting installation.

- Engine hoist should be used for this conversion. If hoist is not available, we strongly suggest the use of axle or jack stands for safety. Do not use bumper jack.
- 2. Remove stock engine, transmission and rear end.
- 3. Install front mounts to V-8 engine, using the top water pump holes, the original front mount holes and the 3/8" x 3" bolts included (Tap 3/8"-16 if necessary See illustration A). You must use the "SHORT" water pump found on 1955-68 models.
- Remove V-8 oil pan from engine and modify, so that it will clear steering. (See illustration B.)
- 5. Remove the idler arm and install the right-side mount, using the stock bolts and nuts to tighten. Weld along rear gusset. (See illustration C.)
- 6. Assemble engine and transmission. (Do not include starter at this time.)
- Lower engine and transmission into place. Mark transmission tunnel and firewall for proper clearance around transmission. Remove engine and transmission. Modify transmission tunnel and firewall as necessary.
- 8. Again position engine and transmission. Make sure transmission is centered on chassis. Next, install the transmission mount, using stock Chevrolet transmission mount, either #3870182, #3870184, #3895830 or #3935704, any of which are acceptable as only difference is in the rubber compound. (See illustration D.)
- Remove engine and transmission, modify and install starter. (See illustration E.)
   NOTE: Make certain to use short starter (late model) such as Chevrolet
   #1108381, which bolts to the block. Or a starter which bolts directly to Ansen or
   Lakewood style bellhousing.
- Lower engine into position. Make sure everything is again centered. Install the transmission.
- 11. Install right-side motor mount assembly. Do not tighten at this time.
- 12. Check to be sure everything has remained centered. Install the left-side motor mount. (See illustration F.) NOTE: Left side must be welded after engine is installed. Right-side mount weld (down sides) is optional.
- **13.** Install header system. A custom header system such as Hedman #68340 is suggested.
- Check for sufficient clearance on headers. Engine may be relocated slightly, if necessary. Tighten all bolts.
- **15.** If your car uses an automatic transmission, you may use a Hurst Dual Gate floor shift or similar unit which uses a cable.
- 16. If you are using a manual transmission, you must purchase the Trans-Dapt clutch cable bracket #20130. Also, purchase stock Chevrolet clutch cross shaft #3840836 from Chevrolet dealer.
- 17. If the heater is to be used, a short water pump heater hose nipple will be required to properly clear the front engine mount.

NOTE: This kit is offered only as an aid to making this conversion. It should be remembered that the Vega was designed to use a 4 cylinder engine and the installation of a V-8 can place unintended strain on other parts of the vehicle. Therefore, you should consider a late model narrowed rear end, heavy-duty springs or air cond. spacers in front to support the added weight, a larger fan or radiator (but check fan-blade clearance) and anything else which might take into consideration this modification.

