



ULTIMATE CUSTOMS

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V8 MOTOR MOUNT KIT for MAZDA **Install Instructions**

1. Remove old Drivetrain - Mark all electrical connections with Tape.
2. Measuring forward from the existing mount, mark the frame at 3 1/4"
SEE DIAGRAM A
3. Line up your mark on the frame with the groove on your new motor plates.
4. Clamp the new mount to the frame with a C-Clamp, making sure the top edge of the mount is flush with the top of the frame.
SEE DIAGRAM B
5. Mark and Drill with a 3/8" diameter drill thru the frame.
(Fasten with 3/8" x 3" Bolts, Washer & Nut) **SEE DIAGRAM C**
6. Repeat for opposite side.
7. The old motor mounts can now be cut off. The new mounting plates accept Standard G.M. (Rectangular) Basemounts.
Part No. GM-459021/Block Mount - 334970
8. Remove existing frame crossmember (Located below existing Factory Mounts) **DIAGRAM 13-2**
9. Measuring in from each end of the Factory Crossmember, mark a line at 3" and cut crossmember at this point (Save the end pieces)
10. Install the Two end pieces back thru factory location.
11. Install the new crossmember as shown in **DIAGRAM D**
12. Fasten with new 1/2" bolts supplied.

13. The transmission install is based on using a **CHEVY TH 350** transmission. If your Truck was equipped with a Standard transmission, your tranny crossmember need not be moved. Proceed with install. If your Truck was equipped with an Automatic transmission, you will have to purchase a Standard Transmission Crossmember from your local MAZDA Dealer **Part No. 86-87 AA**. Simply Bolt the Standard Crossmember to the Factory mounts on the frame and proceed with install. At this point old Automatic Transmission Mounts may be removed.
14. Your transmission crossmember stays in the factory location. You have to elongate the factory holes with a 3/8" file. Refer to **DIAGRAM 14-26**
15. Elongate each hole 1/2" in length towards the outside of the truck. **SEE DIAGRAM E**
16. Install Factory G.M. (Rectangular) Transmission Mount. **Part No. 22112275 - 472143**
17. Install Motor and Transmission. **PLEASE NOTE:** A small Body Massage is required in the Tranny Tunnel on the drivers side where it meets the Firewall. **SEE DIAGRAM F**

DRIVESHAFT

- You will have to construct a New Driveshaft for this install.
The factory driveshaft contains small U Joints to weak for this install.
1. The Pinion Flange will have to be modified to receive the new Spicer U Joint Flange.
 2. Count the threads visible in Front of the Flange Nut and remove nut & flange. (It is very important to do this. If you do not install the flange nut to the previously recorded amount of thread visible, you will collapse the crush collar inside the differential, causing the internal gears to misalign)
DIAGRAM 8-4
 3. A new flange mounting plate will have to be welded to the factory pinion flange and machined round in a lathe.
 4. The new flange now can be drilled to receive the Spicer U Joint Flange. **SEE DIAGRAM G**
(All this work can be done by your local Driveshaft Shop)
Your Driveshaft Shop will require the measurement from the Tail Stock Seat to the Front of the Pinion Flange. With this dimension, they will be able to construct your new shaft without your Truck going to their shop.

RADIATOR

Your Rad has to be re-cored to a 3 Core Tight Fin Pattern. Specify to your local Rad Shop to Re-core your Rad back to Factory Dimensions.

1. To install your new Rad you will have to remove the grill and Bumper so that the Rad can be installed from the front.
2. Remove the Hood Catch and Support Bar. **SEE DIAGRAM H**
3. Trim your Rad opening as outlined in White in **DIAGRAM I**. This can be done with Tin Snips or a Jlg-Saw.
4. The 4 Tabs on the Rad will also have to be trimmed as marked in White. **SEE DIAGRAM J**
5. The inside lip of your Rad Support has to be rolled under to clear the upper Rad Tank. This Area is marked in White. **SEE DIAGRAM K**. This procedure can be done with a Rubber Mallet.
6. Install the New Rad from the front of the Rad Support as shown in **DIAGRAM L**. Bolt it back up to the Rad Support using the Factory Bolts.
7. Use Rad Hoses (Upper & Lower) from a 1989 S-10 4 Cylinder.
Upper Hose - **G.M. Part No. 15547876**
Lower Hose - **G.M. Part No. 15547877**
Upper - Install on Rad and trim to fit length to motor.
Lower - Install on Block and trim 6 1/2" from Rad end.

HEATER HOSE

1. On the passenger side of the engine block, run hose from outlet to Heater Outlet.
2. On the Drivers side use the factory MAZDA heater hose attached to the water pump and cross over to the Driver's side of the engine block. Using a Steel Coupler, join a length of heater hose from the coupler to the other Heater Outlet.

WIRING

1. Coil Positive wire needs to be extended to rear of engine bay with a Female Blade connector which attaches directly to the HEI Distributor.
 2. Factory MAZDA sending units (ie. Temp, Oil) need to be adapted to fit CHEVY engine. Lengthen wiring as required.
 3. Positive Battery Cable from original MAZDA Starter attaches to positive terminal of the New CHEVY Starter. Solenoid lead needs to be modified with a eyelite connector and attached directly to the S terminal of the CHEVY Starter solenoid.
 4. If retaining Factory MAZDA alternator, the only modification needed is to lengthen the 3 alternator wires to the Driver's side of the engine compartment and purchase the ULTIMATE CUSTOMS alternator bracket. SEE DIAGRAM M
 5. If using G.M. alternator, prior to 1986 model, wires need to be lengthened to the Driver's side of Engine Compartment. The heavy gauge Black Wire attaches to the threaded terminal of the G.M. Alternator.
 6. The BLACK/WHITE wires from the MAZDA alternator harness is connected to the RED wire of the G.M. pig tail connector. The WHITE/BLACK wire in the MAZDA harness is connected to the BROWN wire of the G.M. pig tail connector.
- Check charging system with Voltmeter.

THROTTLE CABLE

Remove your Factory cable and discard it.

You will require a short **G.M. Cable Part No. 1248086**

Simply install this cable through the fire wall and attach to throttle lever. Attach the opposite end to the carb with the proper Brackets and Clips.

DISTRIBUTOR

You can use a standard HEI Distributor. Test fit the Dist. & Cap. As you see, a small portion of the sheet metal lip located above the Distributor, has to be removed. This can be done with Tin Snips and a Grinder.

SPEEDO

If your Truck originally had an Automatic Transmission, you already have the right cable. If your Truck was a Standard, you will require a Automatic Speedo Cable from MAZDA.

The end that attaches to your MAZDA Transmission will also attach to the CHEVY Transmission with a Small modification. You will have to trim the drive portion that protudes from the cable to approx. 1" in length.

Hold cable in a Vise and carefully file the Inner Drive Cable square to match that of the speedo output on your CHEVY Transmission. After a snug fit has been acheived, simply screw the MAZDA cable to the CHEVY transmission.

Speedo Cable - **MAZDA # Upper - UDO360080B**

Lower - UDO360070A

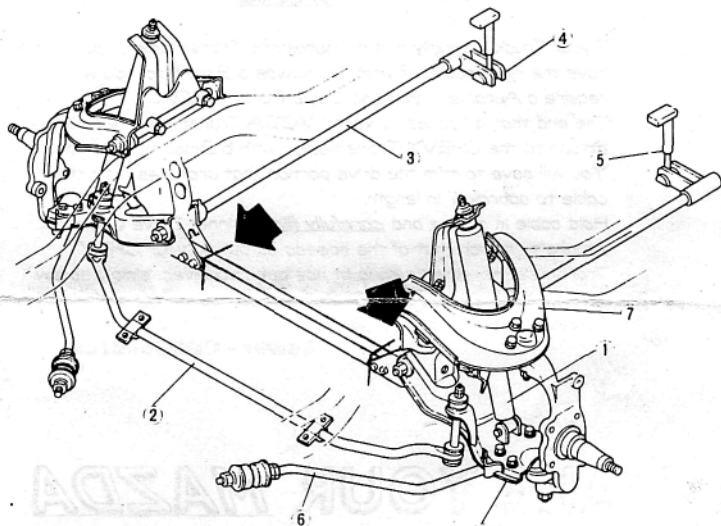
TAKE YOUR MAZDA

AND CHEV IT !

OUTLINE

STRUCTURAL VIEW (FRONT SUSPENSION)

NOTE: For Maximum Exhaust Clearance, we recommend "Log" Style Exhaust Manifold, commonly found on 80 - up MALIBU, or 84 - up CAMARO (The manifold goes up and over spark plugs)



Cut on the lines as indicated by Arrows.

Discard the remaining center section.

Replace the end pieces to their Stock location and bolt up New Cross/Skid Plate (SEE DIAGRAM D)

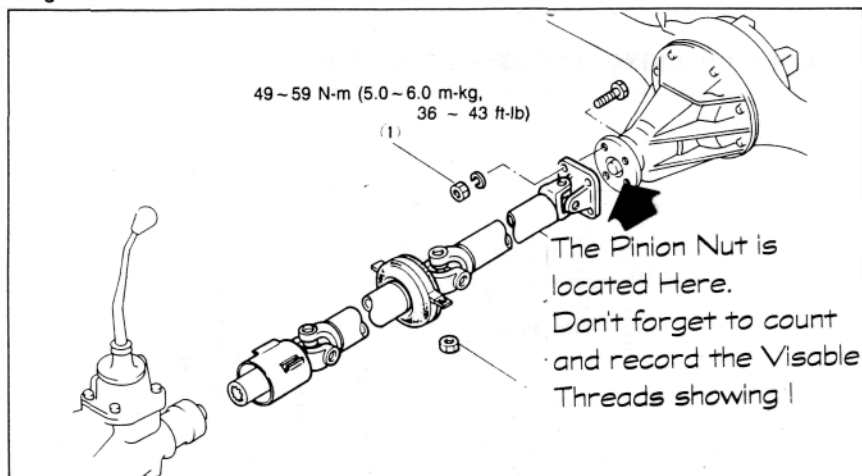
58U13X-601

- 1. Shock absorber
- 2. Stabilizer
- 3. Torsion bar spring

- 4. Anchor arm
- 5. Anchor bolt
- 6. Tension rod

- 7. Upper arm
- 8. Lower arm

Long Bed

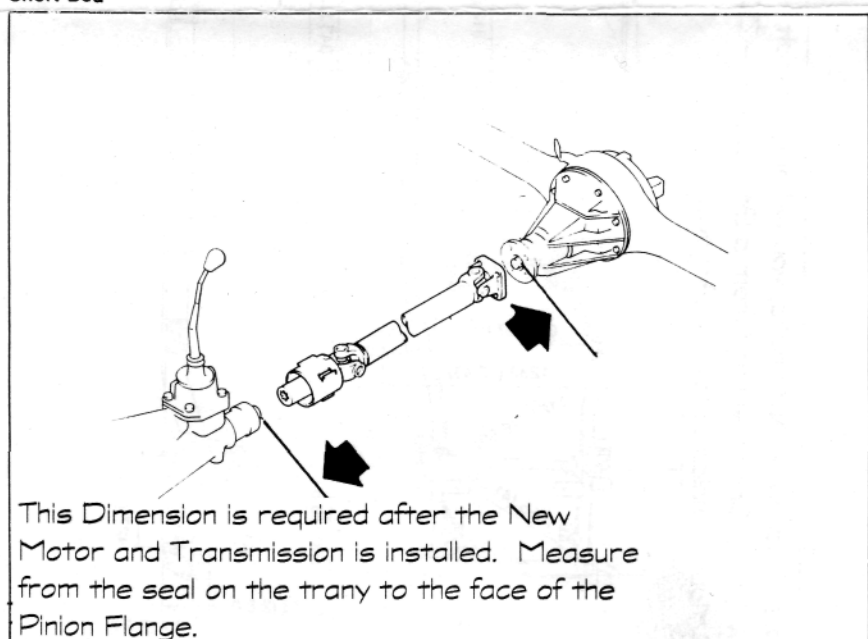


5BU08X 009

1. Bolt and nut
2. Center bearing support nut
3. Propeller shaft

DIAGRAM 8-4

Short Bed

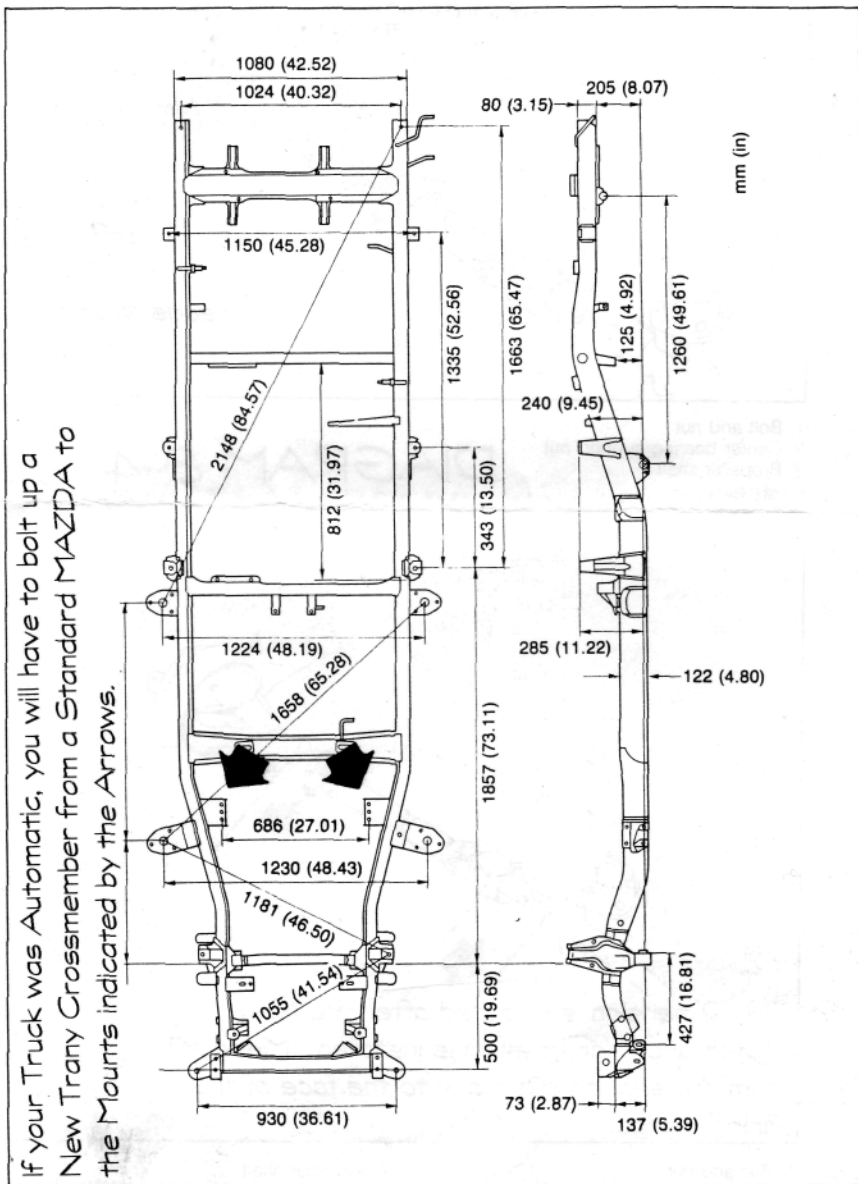


5BU08X 006

1. Bolt and nut

2. Propeller shaft

BODY CHECKING DIMENSION (Short Bed)



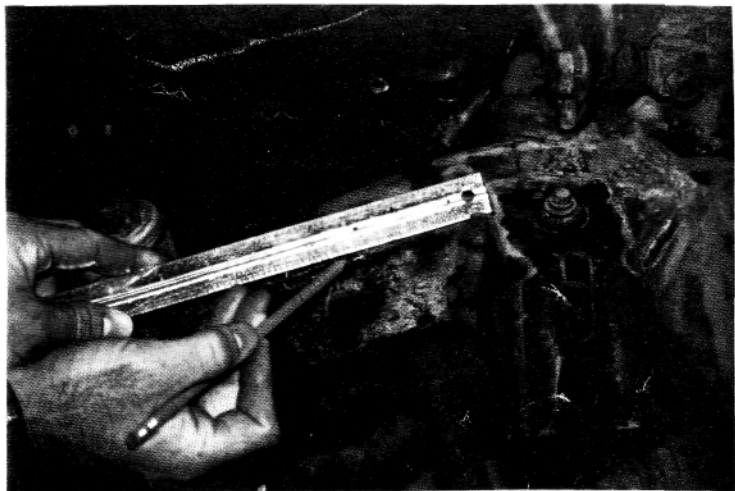
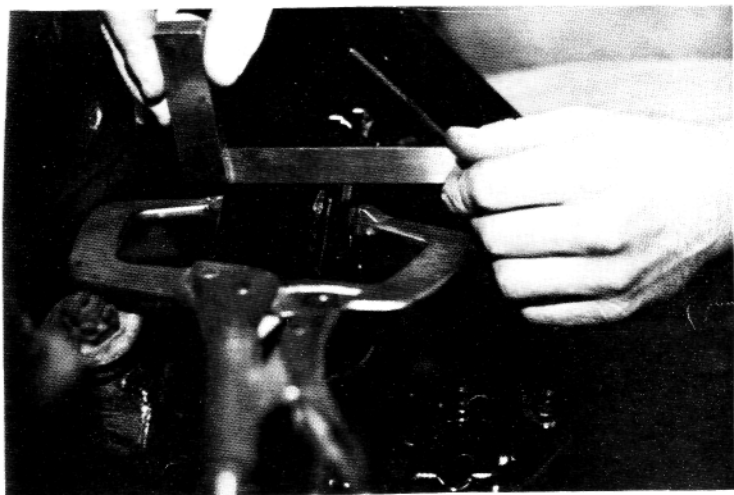


DIAGRAM **A**

DIAGRAM **B**



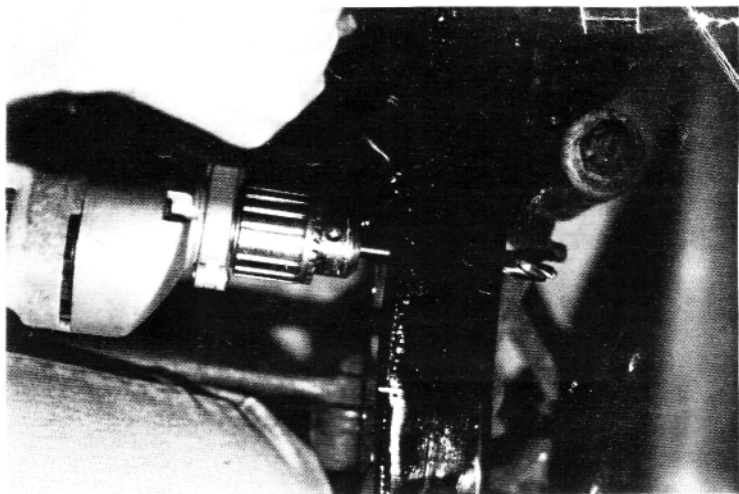
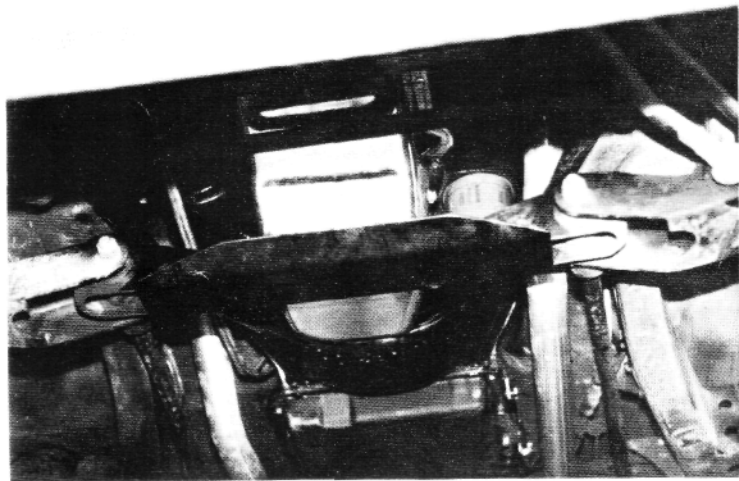


DIAGRAM **C**

DIAGRAM **D**



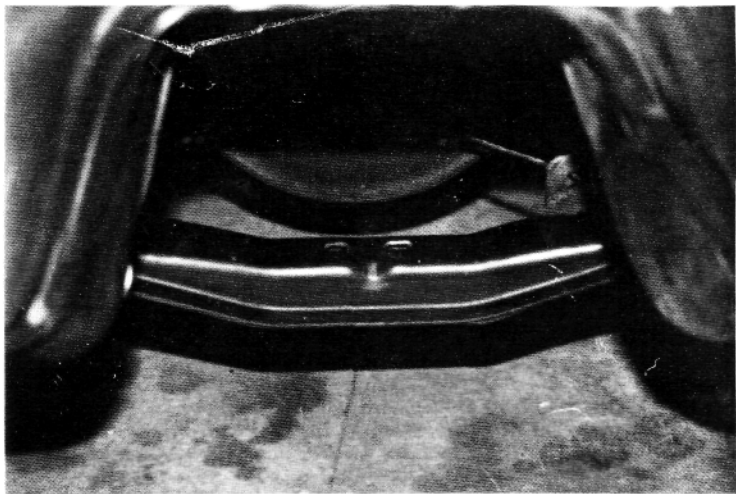
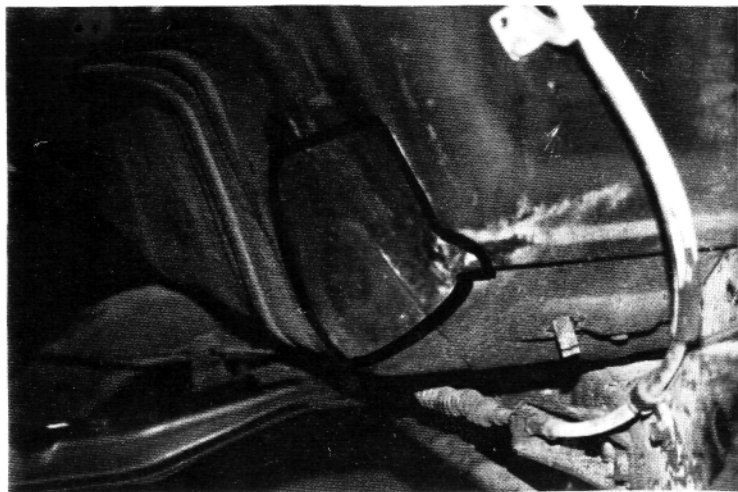


DIAGRAM **E**

DIAGRAM **F**



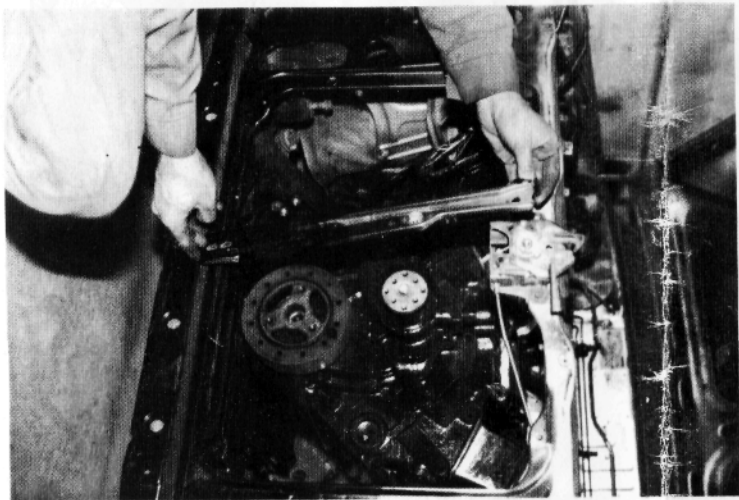
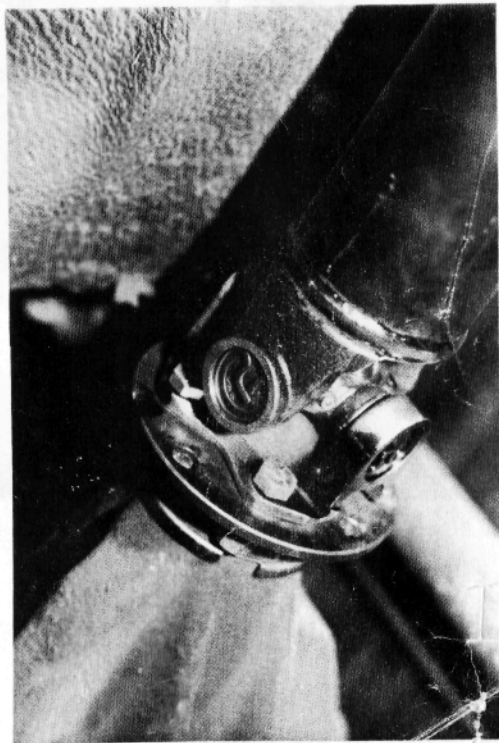


DIAGRAM **H**

DIAGRAM **G**



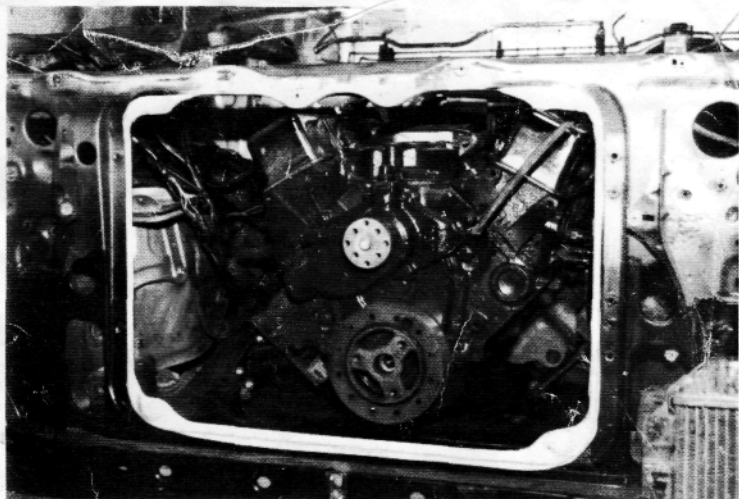


DIAGRAM I

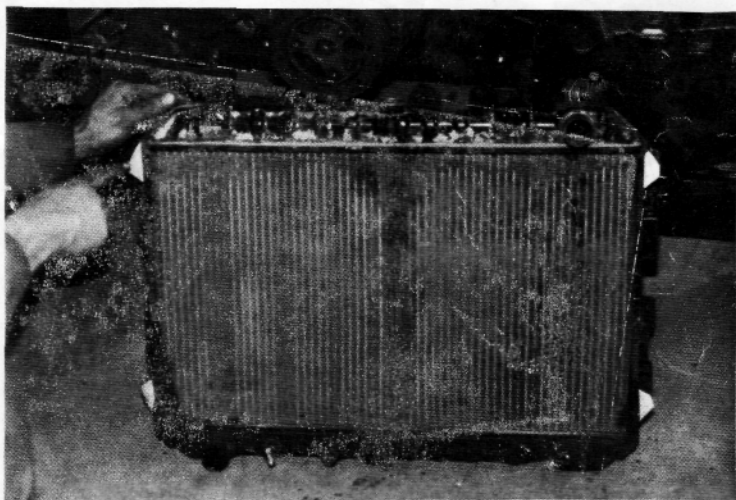


DIAGRAM J



DIAGRAM **K**

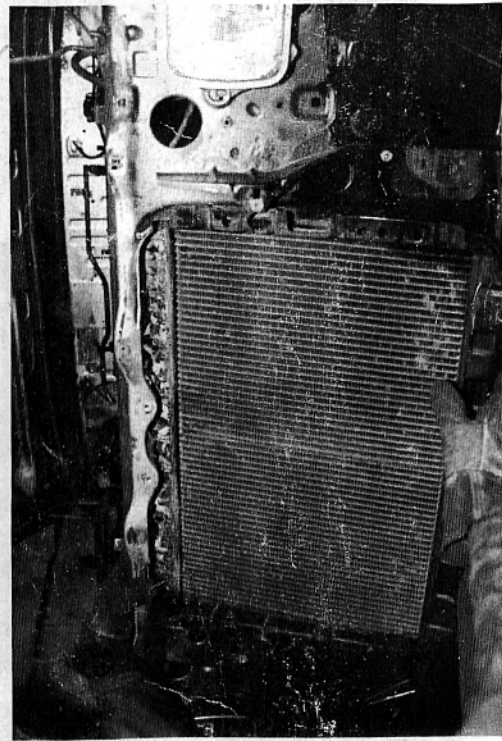


DIAGRAM **L**