RUCC frames come with etching primer and chassis black paint or optional powder coating.

RUCC frames are made to accept Mustang II front suspension either stock components except the strut rods or tubular A arms. Stock shocks or coil-over shocks. Rear suspension is 79-93 Mustang which can be upgraded to a 9" Ford or IRS. The IRS uses the spindles, rotors, brakes and 8.8 rear end out of the Thunderbird with after market tubular a-arms and coil-over shocks.

#### 1.A SEALING CHASSIS:

Take a high quality caulking and seal all metal panels of the floor and firewall to the rails of chassis as shown in Fig. 1A.1 and 1A.2. The best time to do this is first before you have any other parts on your chassis. So you can stand your chassis on each side so it is easier to get to the underside of chassis.

#### 2A. FUEL LINE:

Run the fuel line down the top of the frame rail attaching it with rubber lined clamps and self tapping screws as shown if Fig. 2A.1.

#### 3/A. HOLES FOR WIRING IN FIREWALL:

Use template 3A.1 to locate the cut out for the wiring harness bulkhead connector and the attaching holes for the starter sylonoid and electric fan circuit breaker, if you are instaling a heater use Template 3A.2 as shown in Fig. 3A.2. For further heater instructions look in section #30 Heater and defroster. Cut out the center section for the wiring harness bulkhead connector then drill the four 15/64 attaching holes for the wiring harness bulkhead connector. Drill out the attaching holes for the starter sylonoid for 5/16 riv nuts and install the riv nuts. Drill out the attaching holes for the electric fan circuit breaker for #8 riv nuts and install the riv nuts as shown in Fig. 3A.3.

#### 4.A. BATTERY CABLE:

Run your battery cable down the top of the passenger side frame rail attaching it with rubber lined clamps and self tapping screws, as shown in Fig. 4A.1, then run it up the passenger side firewall to the starter sylonoid using riv nuts in firewall to hold the rubber lined clamps as shown in Fig. 4A.2.

Bettery clomps + screws/rivnits

### **Sealing Chassis**

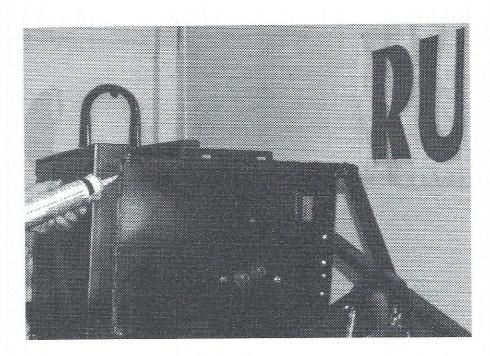
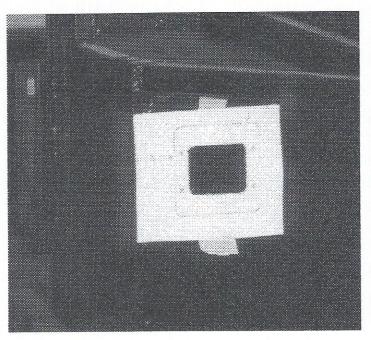


Fig.1A.1



Fig.1A.2

# Holes for Wiring Harness and Heater



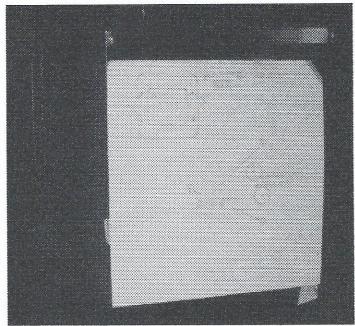


Fig. 3A.1

Fig. 3A.2

RUCC frames come with etching primer and chassis black paint or optional powder coating.

RUCC frames are made to accept Mustang II front suspension either stock components except the strut rods or tubular A arms. Stock shocks or coil-over shocks. Rear suspension is 79-93 Mustang which can be upgraded to a 9" Ford or IRS. The IRS uses the spindles, rotors, brakes and 8.8 rear end out of the Thunderbird with after market tubular a-arms and coil-over shocks.

#### 1. FRONT SUSPENSION:

For the front suspension you will need the steering rack, upper and lower control arms, spindles, rotors, calipers, caliper mounting brackets, springs, shocks, inner brake line brackets and all associated bolts, nuts and hardware from a 74-78 Mustang II or 74 - 80 Pinto. The front strut rods are purchased from RUCC. If you are going to use a front sway bar it needs to come from the Mustang II with a V8 or the optional one from RUCC. We recommend that you thoroughly rebuild the front suspension, replacing tie rod ends, ball joints, a-arm bushings, wheel bearings, seals, etc. Fig 1.1 shows the front suspension installed. Our stages II and III come with the a-arms, spindles, five lug rotors, calipers and brake pads already remanufactured and installed, our stage IV also includes the steering rack installed.

For front coil springs in the small block applications we recommend using the Mustang II front coil springs for the 4 cyl. without air and for those of you who want a little better handling but with a stiffer ride use the 4 cyl. with air springs. On big block applications use the 6 cyl. with air coil springs. You will have to shorten the springs by 3/4 to 1 1/2 coils. We suggest cutting 1/2 of a coil off at first then only about 1/4 of a coil at a time until you reach your desired ride height. We suggest a ride height of 4 3/4 inches measured from the ground to the bottom of the front crossmember, but this height could change depending on wheels and tires you have chosen. Until you have approximately 3,000 miles on your Cobra leave the ride height approximately 1/4 inch too high because the springs will settle about 1/4 inch. Only do your final spring cutting after you have the car completely assembled with correct wheels, tires, motor and transmission installed with all accessories and fluids. Cut the coil springs with a band saw, chop saw or something equivalent but not with a torch, plasma cutter or any other high heat method, as this will cause spring tension loss.

#### 2. REAR SUSPENSION:

You will need the rear axle housing, axles, brakes, control arms, springs, shocks, and all associated bolts, nuts and hardware from a 79-93 Mustang. The 86-93 5.0 used the 8.8 while the others used the 7.5 rear ends. We recommend that you rebuild the rear brakes, replace the control arm bushings, check out the axle bearings, seals, and third member, also change the fluid in the rear end.

Fig 2.1 Shows rear suspension upper control arm installed, shows rear suspension lower control arm installed, Fig 2.2 shows rear suspension lower control arm and rear spring installed. Our stages II, III and IV already have the rear axles with a 5 on 41/2 wheel stud pattern, axle housing, gears, remanufactured control arms and remanufactured brakes installed.

#### 3. BRAKES:

The stock Mustang II front brakes and 79-93 Mustang rear drums are very adequate for the light weight of the Cobra. For those who want more braking performance, use the 1975-78 Granada rotors along with the GM metric calipers and pads which will increase the rotor size to 11 inches with the stock Mustang II spindles. Fig 3.1 shows the stock front brakes installed and Fig 3.2 and 3.3 shows the optional 11 inch rotors with GM metric calipers and brackets installed. We also offer a rear disc brake conversion kit for the 7.5, 8.8 and 9 inch Ford rearends. Rear disc brake kit installed Fig 3.4. The IRS comes with rear disc brakes.

### **Front Suspension**

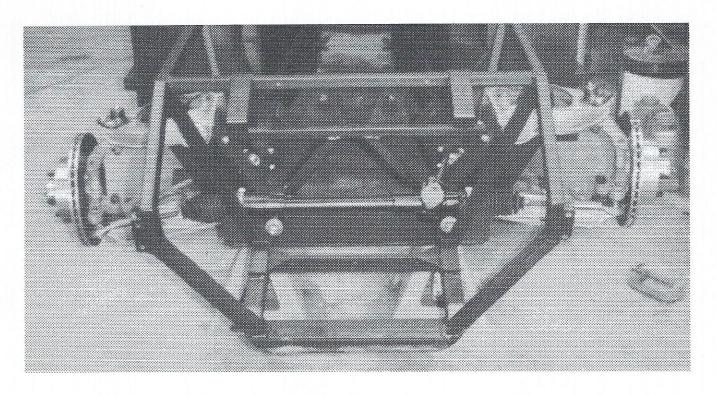


Fig1.1

## Rear suspension

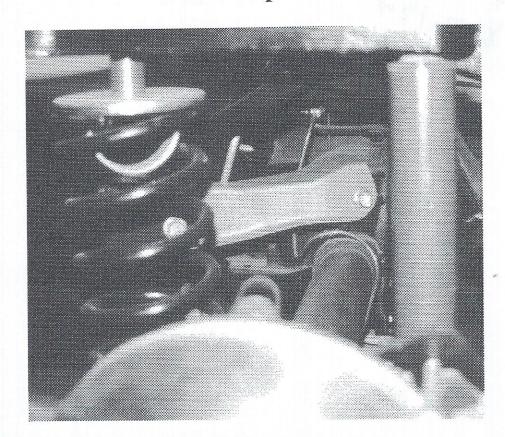


Fig 2.1

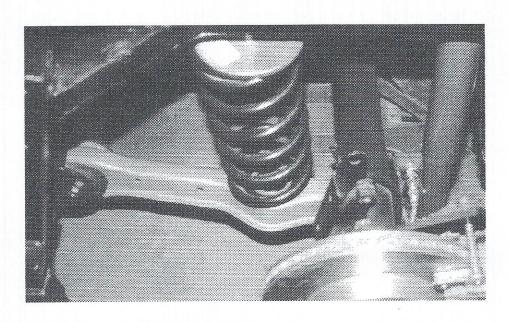


Fig 2.2

In ' front brake kit: The brake caliber mounting adapter bracket bolts to the stock Mustang II spindle, then

the GM metric caliber bolts directly to the caliber mounting bracket as shown in Fig. 3.3.

11" rear disc brake kit for the 8.8: Bolt the differential mounting plate to the axle housing flange as shown in Fig. 3.4. Then bolt your caliber mounting bracket to the differential mounting plate with the spacers in between the two brackets as shown in Fig. 3.5. Now you can install your brake rotor and caliber as shown in Fig. 3.6.

11" rear disc brake kit for the 9": Bolt the differential mounting plate to the axle housing flange be sure to have the bearing retainer plate in place as shown in Fig.3.7. Then bolt your caliber mounting bracket to the differential mounting plate with the spacers in between the two brackets as shown in Fig. 3.8. Now you can

install your brake rotor and caliber as shown in Fig.3.6.

Installing your master cylinders, remote reservoirs and hard lines. First, using template 3.1 as shown in Fig. 3.9, you will need to locate and drill the three 25/64 inch diameter holes for your bulkhead connectors in the drivers side firewall. Be sure to have the center of the clutch line hole 15 1/4 inches above the bottom of the frame rail as shown in Fig 3.10. Next use template 3.2 as shown in Fig 3.11 to locate and drill the three 1 inch diameter holes for your remote brake reservoir lines Fig 3.12. Install your three bulkhead connectors for the hard lines and your three rubber grommets to run your remote brake reservoir lines through the firewall. Then install your remote brake reservoir lines in the firewall as shown in Fig 3.13. Using a silicone spray will help with the rubber parts.

Pedals and master cylinders. Install your brake and clutch master cylinders on your brake pedal assembly according to the instructions supplied with them. Put the remote reservoir adapters on with the hose connector at approximately 10:00 to 11:00 clock as shown in Fig 3.14 using brake fluid as a lubricant so they will slip on more easily. Now you are ready to mount your brake pedal assembly, using four 1/4 x 20 x 3/4 inch long bolts with flat and lock washers through the top mount and two 5/16 x 18 x 1 1/2 inch long bolts with flat washer on top and flat washer, lock washer and nut on bottom of side pedal assembly mount. Fig 3.15 shows pedal Karge Master columber to rear brakes assembly installed.

Now install T fitting, coupler and brake light switch on front brake master cylinder. Install the adapter fitting for -3 AN lines to your rear brake and clutch master cylinders. Then connect your three flex lines from the master cylinders to the bulkhead connectors. The top bulkhead connector is for the clutch, the middle is for rear master cylinder and the bottom one is for the front brake master cylinder. Also, install your remote brake

reservoir lines to the master cylinders Fig 3.15.

Front brake lines.

Mustang II front brakes: Bolt your stock Mustang II front brake line flex hose frame mount to the front crossmember using the two pre drilled holes. Install your front brake flex hoses from your brake calipers to the stock frame mounts using the stock clips. Connect your front brake hard line to the lower bulkhead connector and run it down to the frame rail and then down the frame rail to the front crossmember using the nylon clamps provided in your brake line kit as shown in Fig. 3.16. Install the brass T fitting #? with female 3/16 inverted flare to the front brake hard line as shown in Fig. 3.17. Use the short piece of hard brake line to connect the 3/16 inverted flare fitting to the front drivers side flex line, you will have to bend to fit Fig 3.18. The passenger side front front brake hard line runs across the crossmember as shown in Fig. 3.19. Now connect the passenger side front brake flex line as shown in Fig. 3.20. The flex lines should clear all suspension components with the steering turned in both full lock positions and also at both ends of travel compressed and extended.

11" front brake kit: Connect your front brake hard brake line to the lower bulkhead connector and run it down to the frame rail and then down the frame rail to the front crossmember using the nylon clamps and self tapping screws provided in your brake line kit as shown in Fig. 3.16. Install the brass T fitting #? with female 3/16 inverted flare to the front brake hard line, then use the 3/16 to -4 AN adapter #? in the top of the T fitting,

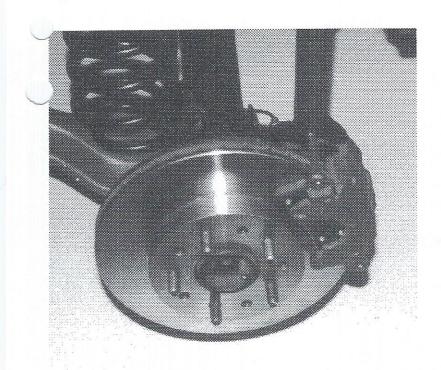


Fig. 3.6

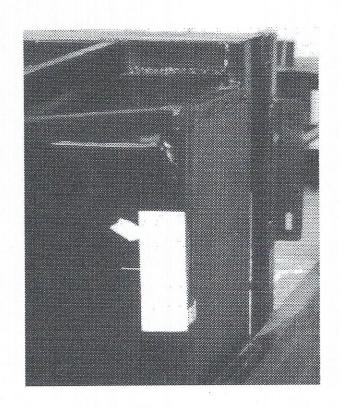


Fig 3.9

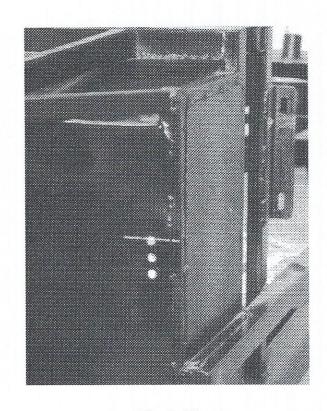


Fig 3.10

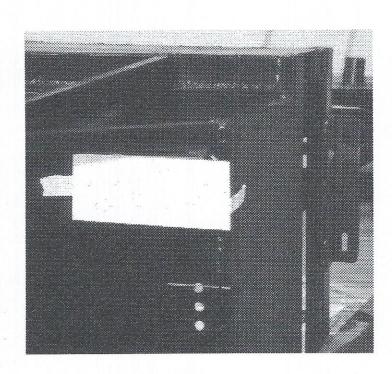


Fig 3.11

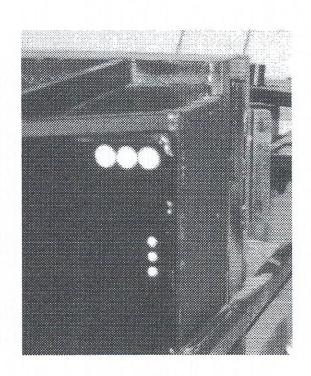


Fig. 3.12

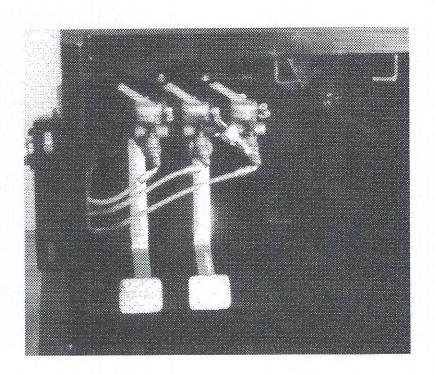


Fig 3.15

as shown in Fig. 3.21. The passenger side front front brake hard line runs across the crossmember as shown in Fig. 3.19. Bolt the adapter bracket #2 to the crossmember using the 2 predrilled holes in the crossmember then attach adapter with clip #?. For the drivers side stainless steal flex line use the 3/16 inverted flare to -4 AN adapter #? in the top of the T fitting as shown in Fig. 3.22. Use the -4 AN to 10mm adapters #? in the front brake calibers. Then attach the stainless steal flex lines as shown in Fig. 3.23. The flex lines should clear all suspension components with the steering turned in both full lock positions and also at both ends of travel compressed and extended.

Rear brake lines. Connect your rear brake hard line to the middle bulkhead connector and run it down to the frame rail and down the frame rail using the nylon clamps and self tapping screws to hold it in place as shown in Fig. 3.16. Mount a bulk head connector #? in the brake line mounting bracket at the top and back of the transmission tunnel. Connect your hard line to it as shown in Fig 3.24.

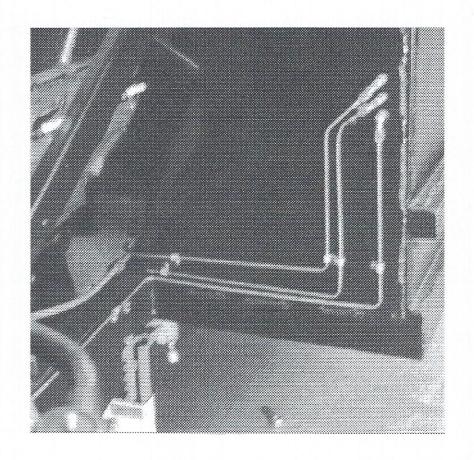
Stock rear drum brakes: Remove the stock rear brake hose to the differential. then install the 3/16 inverted flare fitting #? to the rear brake lines and install the 3/16 inverted flare to -3 AN adapter #? to the 3/16 inverted flare T fitting. Connect your stainless steel flex hose marked (Dif) to the Bulkhead connector on the frame and to the -3 AN part of the 3/16 inverted flare to -3 AN fitting that you installed in the T fitting as shown if Fig. 3.25.

Rear disc brakes: Bolt your brake line bracket to your third member and install The T bulkhead #? connector to it as shown in Fig. 3.26. Then install your rear steel braided flex line marked (Dif) between the bulkhead connector you installed on the frame and the T bulkhead connector you installed on the rear third member as shown in Fig 3.27. Then install your rear right and left rear axle housing hard lines. First attach them to the T Bulkhead connector then bend them by hand around the third member and down the axle tube. Install one of the 3/16 inverted flare to -4 AN adapter #?, to the end of hard line, then attach the adapter bracket #? to the 3/16 to -4 AN adapter using clip #? using adapter bracket as template mark axle housing so you can drill and attaching hole for adapter bracket. Drill pilot hole and use a self tapping screw to attach adapter bracket to rear axle housing. Install the two -4 AN to 10mm adapters #? in the rear brake calibers be sure to use the washer. Then attach your rear stainless flex lines. Fig. 3.28.

IRS: Attach your 3/16 inverted flare T fitting with attaching hole #? to the underside of drivers rear spring plate then install one of the 3/16 inverted flare to -3 AN adapter #? in the bottom side of the T fitting and two 3/16 inverted flare to -4 AN adapters #? in the two opposite sides of the T fitting. Then install the two -4 AN to 10mm adapters #? in the rear brake calibers be sure to use the washer. Then attach your rear stainless flex lines between the line and the calibers using the black clips to hold the flex line out of the way of shocks and suspension parts.

Clutch slave cylinder line. Connects to the top bulkhead connector, then runs down the firewall to the inner frame rail as shown in Fig. 3.16. Use one of the 3/116 inverted flare to -3 AN adapters in your master cylinder kits to connector your stainless steel flex line to your clutch hard line. The 1/8 pipe thread to -3 AN 90 fitting #? is for you clutch slave cylinder. Clutch slave cylinder hook up is as shown in Fig 3.?.

Brake cylinder reservoirs. You will need to decide after your body is on where you want to mount your remote brake reservoirs. We recommend either mounting the two brake reservoirs on the back side of the drivers front inner fender with the clutch reservoir mounted to the firewall or using a mounting plate just under the fiberglass drop behind the motor and mounting your reservoirs to it. Remember, the bottom of the reservoirs have to be above the top of the master cylinders. We have a radio enclosure available for the transmission tunnel and a mounting plate that bolts to it for the brake reservoirs to mount to. Fig.



**Fig 3.16** 

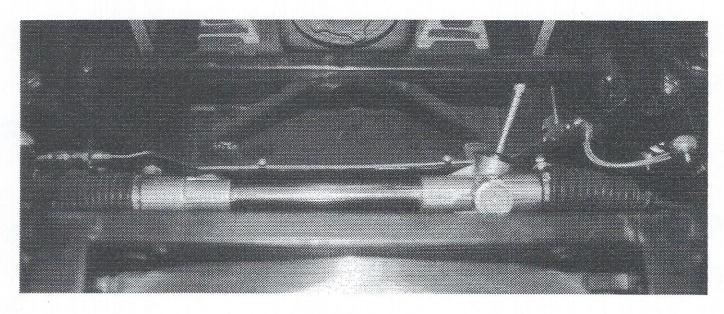


Fig 3.19

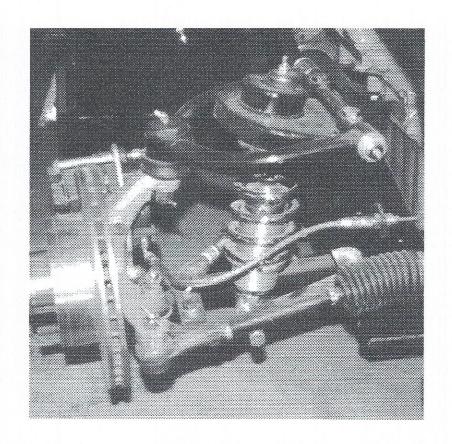


Fig 3.23

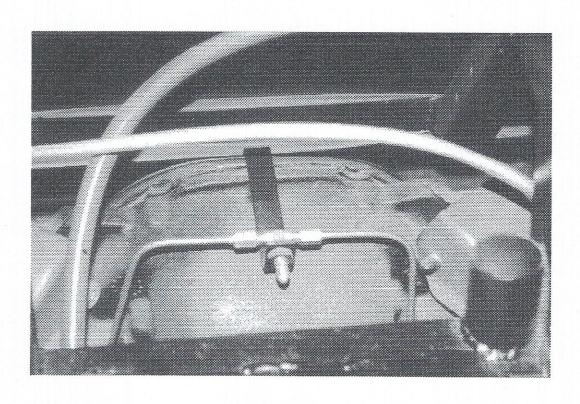


Fig 3.26



Fig. 3.29

#### 4. WHEELS and TIRES:

Wheels from 14-17 inch in diameter will work. Widths up to 8 inches wide can be used on the front with tire sizes up to 275 x 50's. When using 8 inch wide front wheels use a back spacing of 4 inches and when using 7 inch wide front wheels use a back spacing of 3 inches. Widths up to 10 inches wide can be used on the rear with tire sizes up to 305 x 50's. When using 10 inch wide rear wheels use a back spacing of 5 3/4 inches and when using 8 inch wide rear wheels use a back spacing of 4 3/4 inches. Assemblies with suspension already on them use a 5 on 4 1/2 bolt pattern for the wheels.

#### 5. ENGINE and TRANSMISSION MOUNTS:

Install your metal engine mounting pads to the frame, using 4 each 3/8 x 4 inch long bolts with lock washers and nuts to the lower frame rails through the predrilled mounting holes. To locate your transmission cross member, install the correct rubber engine and transmission mounts according to the chart below to your engine and transmission, then bolt your engine and transmission together. The engine-transmission assembly may then be lowered into place in order to bolt the engine mounts to their mounting pads. Using a jack to hold your transmission up in place, bolt the transmission crossmember to the transmission mount. Then drill one 3/8 hole through the transmission crossmember and the transmission crossmember mounting tap. Use the two each 5/16 x 18 x 1 inch grade five bolts supplied to bolt transmission crossmember to chassis.

Ford 289, 302, 351W and 351C all use the engine mounts from a 86 Ford Truck with a 302. Anchor part # 2323. Ford 390, 427, and 428 all use engine mounts from a 63-64 Ford and Mercury full size car. Anchor part #2222 & 2223. Install part # 2222 on the passenger side of engine and part # 2223 on drivers side of engine.

429 and 460 use the motor mounts from a

Ford transmissions use the transmission mount from a 69 Mustang with a four speed toploader transmission. Anchor part # 2253.

Small block and big block Chevys use the Motor mounts from a 67 Chevy truck with a small block.

Chevy transmission use part #

When using a Chevy big block use a Milodon oil pan with a 7 3/4 depth or equivalent. For the Generation 6 block use part # 31196.

#### 6. DRIVE SHAFT:

11,5

The length and ends on your drive shaft will vary according to which engine-transmission combination you have chosen. You will need a yoke and u-joint for your transmission and u-joint or u-joint and flange for your rear-end depending on which differential you have chosen. Slip your transmission yoke in place leaving about 3/4 yinch of slack before it bottoms out then measure the distance between the center of your u-joints. Take your pieces and measurement to your local drive shaft specialist to have them fabricate your driveshaft.

We recommend using a drive shaft safety loop available from RUCC or after market sources. There are drive shaft safety loop mounting taps welded to your frame rails on the back bone chassis. Cut the length of your drive shaft safety loop mounting arms down to match the width of the mounting taps drill new holes in safety loop mounting arms and taps. You may want to off-set your drive shaft safety loop to match the off-set in the third member.

7. RADIATOR:

The radiator from RUCC mounts between the saddles welded on the radiator-hood hinge support and the saddles on the front frame extension. Cut four 4" long strips from the 1/8 x 1/2 rubber strips that came with your kit. Glue them in the metal saddles with 3M Weather strip adhesive or equivalent. Then hold the radiator up in the upper saddles and bolt the lower frame section into place with the radiator resting in the lower saddles. Fig. 7.1 HINT: Using a strip of tape to hold the upper rubber straps in place.

Since the radiator filler is below the top of the motor, use an auxiliary filler such as shown in Fig 7.2.

One Ford 289, 302, and 351W you can use a Gates part #20827 for the upper radiator hose cutting it into to splice in the auxiliary filler as shown in Fig. On this engines you can use Gates part #21216 for the lower radiator hose as shown in Fig.

We recommend using a electric fan or fans for the radiator. There are many electric fans available on the market. We use the Black Magic fan and we have fan mounting brackets for this application and our RUCC made wiring harness that comes with the back bone chassis is also pre- wired for this application.

### 8 FUEL TANK:

For engines with carburetors, use the 82-84 Mustang fuel tank. For fuel injected engines using the stock fuel pump in the tank or external fuel pump and return lines, use the 86-93 Mustang fuel tank. You will need to straighten the flange around the sides of the fuel tank. The tank clamps in between the tank perimeter of the frame and the fuel tank mounting straps Fig. 8.1. You will need the fuel filler tube from an 82-93 Mustang, cut it off approximately 5 1/2 inches above the center of the bend where it comes out of the fuel tank. Fig 8.2. Then using a fuel resistance rubber hose 2 inches ID to connect the fuel filler adapter from the gas cap to the fuel filler tube from the gas tank be sure to use hose clamps. Or you can use the fuel filler hose kit sold by RUCC it comes with a metal tube for the gas tank and a 2 inch fuel resistance hose for connecting the gas cap adapter to the metal tube.

#### 9. FUEL PUMP:

The RUCC wiring harness has a provision for a electric fuel pump. The wire comes out of the harness with the fuel sending unit wires so you may mount the fuel pump where you desire. Alternatively, you can use a mechanical fuel pump.

#### 10. ALTERNATOR:

The RUCC wiring harness is designed for a one wire alternator. You can purchase a GM unit through your local parts store or RUCC. The GM unit is easily converted to the Ford brackets or you can purchase a Ford unit that has been converted for use with one wire through the street rod vendors.

#### 11. PARKING BRAKE:

We recommend a modified 79-93 Mustang parking brake cable assembly used in conjunction with either the Mustang II or the Pinto hand lever. The Pinto handle is shorter than the Mustang II's. The Mustang II or Pinto handle is mounted on top of the transmission tunnel where there is a bracket welded in the frame. Drill two 3/8 inch holes on 4 inch centers, 4 inches from passenger side of transmission tunnel and anywhere from 15 3/4 to 21

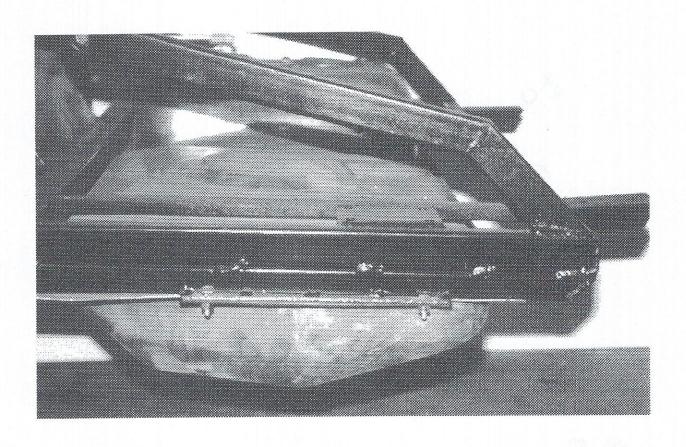


Fig. 8.1

1/2 inches back from where the transmission tunnel bends upwards for the front hole depending on what is comfortable for you to reach Fig 11.1 You may also use an after market parking brake handle and cable assembly from RUCC an other suppliers or a hydraulic valve switch can also be used.

#### 12. SHIFTER LINKAGE:

For automatic applications we recommend the early Mustang or Mustang II shifter handles with shortened linkage or you may use an after market shifter.

On standard transmissions, it depends on the transmission. A 4 speed top loader uses a Hurst shifter with the tall mounting bracket and the short handle with an RUCC adapter. The T5 uses a Hurst shifter.

#### 13. HEADERS and SIDEPIPES:

RUCC has headers and sidepipes for most Ford or Chevy V8 engines. You can get the headers in black paint or ceramic coated and the sidepipes in black paint, ceramic coated or chrome. The headers are mounted in the conventional manner with the sidepipes being a slip fit over the headers using springs to hold them together. After you have the sidepipes attached to the headers hold the back of the side pipes up so you can use the header mount as a template, using a center punch make an indention in the lower outer frame rail in the center of the sidepipe mount, Then drill a pilot hole for the self taping screw provided with you sidepipes. Attach using self taping screw and flat washer with a rubber grommet on each side of sidepipe mount.

#### 14. ACCELERATOR PEDAL:

We recommend using RUCC's custom accelerator pedal assembly. A standard Ford accelerator cable or an after market braided cable attaches to our pedal. For the Ford cable use template 14.1, drill two 5/16 inch holes for the accelerator pedal and two 1/8 inch and one 9/16 inch hole for the accelerator cable. The accelerator pedal bracket attaches to the front of the firewall with two 1/4 x 20 x 1/2 inch long bolts with lock washers, Fig 14.1 and 14.2. The accelerator cable passes through the 9/16 inch hole with two screws attaching it to the firewall. For the braided cable use template 14.3 drill two 5/16 holes for the accelerator pedal and one? inch hole for the accelerator cable. The accelerator pedal bracket attaches to the front of the firewall with two 1/4 x 20 x 1/2 inch long bolts with lock washers, Fig 14.1. The accelerator cable passes through the? inch hole and

15/32

#### 15. BODY MOUNTING and SEALING:

Once you are ready for final assembly, use sheet metal screws to attach your three cowl seal panels (Fig. 15.1) to the front cowl hoop with the lip facing forward, Fig 15.2. Now take your cowl seal starting at the bottom drivers side cowl panel and start slipping it over the edge of the panel. When you get to the top of the drivers cowl panel run it over to the top cowl panel and start slipping it over the edge for just a few inches, now mark where the drivers side panel ends and mark where the top panel starts, then slip it off far enough so that you can snip off the retaining part of the seal leaving the rubber ring intact between the two marks Fig 15.3, then slip it over the top panel and start the passenger side panel and repeat marking and snipping procedure, then slip it over the passenger side panel and cut off excess Fig. 15.4. Now run a bead of silicon down back edge of all three cowl panels and lay a bead about 3/8" high where seal goes between the top and side panels Fig 15.5.

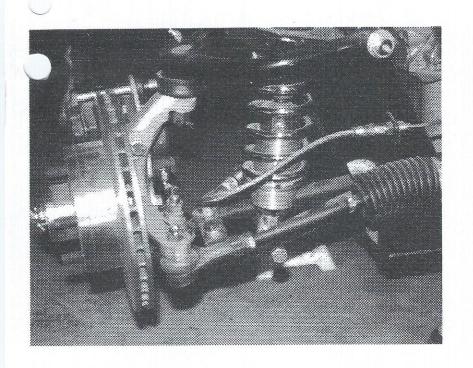


Fig 3.2

Fig 3.3

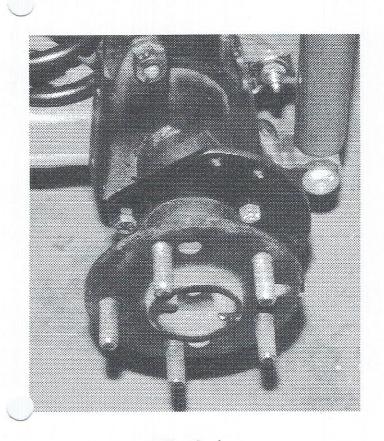


Fig 3.4

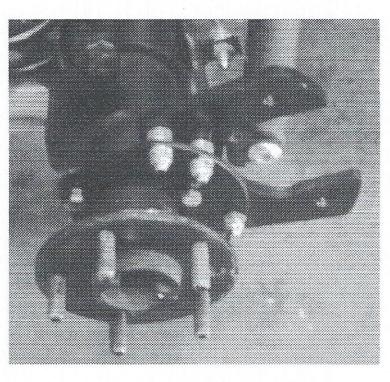


Fig 3.5

### **Headers & Sidepipes Body Hole Cut Outs**

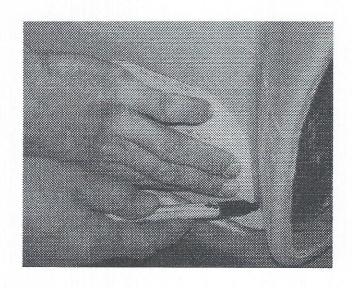


Fig.13.1

Fig.13.2

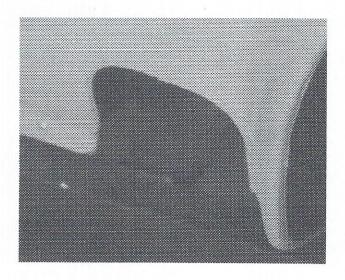
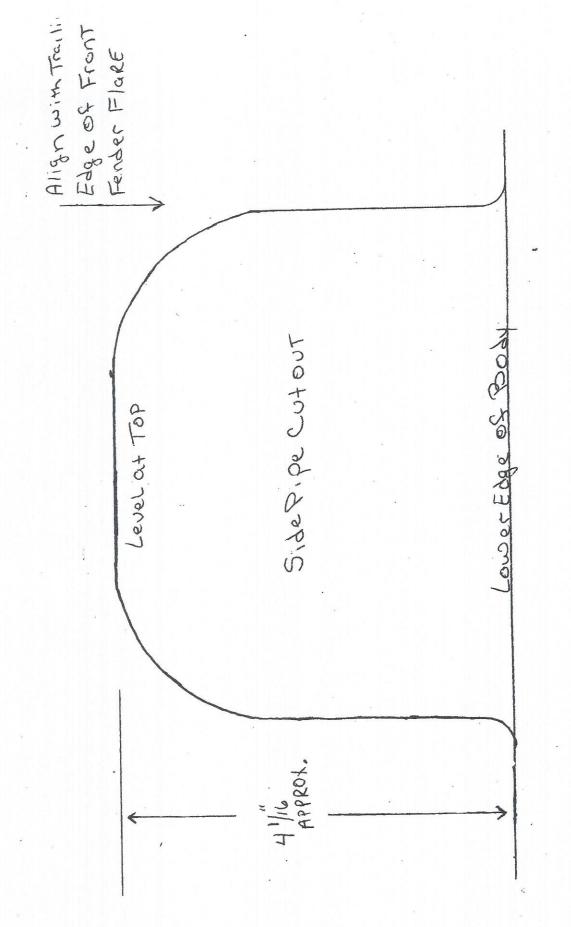


Fig.13.3



Template 13.1

Run a small bead of silicon up each door post, lay back panel in place but do not attach until the body has been mounted.

Set body in place, using screws to attach body to side frame rails with a strip of the rubber body mounting gasket in between the body and side frame rails. Bolt front of body down with two  $5/16 \times 18 \times 1 \text{ 1/4}$  inch long bolts through front body mount under oil cooler opening. Install your rear bumper mounts in the trunk with two each  $5/16 \times 18 \times 1$  inch long bolts through bumper mount, trunk floor and mount welded to frame.

Run a bead of silicon in between the back panel and flange on the body, then screw the back panel in place with

screws in the body flange, door post and floor. Then run a bead of silicon along the back panel and floor.

After door strikers and seat belts are in place, you can install you rear inner fender panels Fig 15.6. You will need to run a bead of silicon down the door post, then using screws attach your rear inner fender panels to the door post, then run a bead of silicon where they meet the body of the car.

#### 16. MOUNTING HOOD:

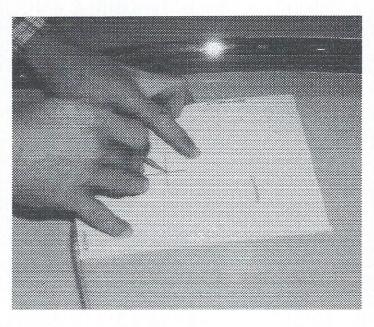
Your hood hinge mounts bolt to the radiator support tube Fig 16.1 with two each 1/4 x 20 x 1 3/4 inch long bolts, using flat washers on bolt head side and flat washer and nylon lock nut on the other side Fig 16.2. The hood height adjustment is with these mounts. The hood hinges bolt to the hood hinge mounts with one each 3/8 x 1/16 x 2 3/4 inch long pivot bolts with flat washers in between for side adjustment, start with one flat washer on each side of hinge and use nylon lock nuts on the pivot bolts, Fig 16.3. The hinges bolt to the hood with three each 5/16 x 18 x 3/4 inch long bolts with flat and lock washers. This is your fore and aft adjustment. Set your hood in place, adjust where you want it by putting paint sticks on each side. Fig 16.4. Now adjust height and tighten mount to radiator support tube first, then tighten the hinge to the hood, pull paint sticks and trial raise and lower hood. If side to side needs adjustment, move washers on the pivot bolt. When you have it adjusted, tighten the pivot bolt down, but not so tight that it binds the hinge, remember, it has a nylon lock nut so it won't back off.

#### 17. HOOD LATCHES OR HOOD PINS:

Use template 17.1 to locate holes in the hood as shown in Fig. 17.1 to mount latches. Use a short board to hold hood up off the car body, then drill a pilot hole through the inner and outer structure of the hood Then enlarge the pilot hole to 13/32 through both inner and outer hood structures, then enlarge the outer hood structure hole to 7/8. Place your hood latch handle in the hole you have just drilled line up the handle the direction you want it to point with the hood latched and mark your holes for the attaching screws with a scrip, as shown in Fig. 17.2, remove hood latch handle and drill holes for screws to 7/64 as shown in Fig. 17.3. Then reinstall your hood latch handles rise hood over and slip the hood latches over the 5/16 shaft mark with a scrip for the attaching screws, then drill holes to attach your hood latches reinstall your hood latch over the 5/16 shaft using two washer on each attaching screw as spacers, then mark 5/16 shaft at the bottom of the hood latch, then remove latch handle and cut shaft on your mark. While you have the hood latch handle off close the hood and use a center punch to mark the car body so you know where the center of the hood latch is so we can measure over and install the hood latch catches.

Hood pins: Use template 17.1 to locate the holes on the hood drill a pilot hole through all three the hood outer structure, inner structure and the car body. Drill the hole out to 1/2 inch in the body to mount hood pins. Assemble and mount hood pins according to Fig 17.4, then drill out the holes in the outer and inner structures of the hood to 3/4 inches, then shut hood. Put scuff plates over the pins and mark for holes to install screws, remove scuff plates, then drill 3/32 inch holes, run screws in holes, then remove screws and install scuff plates.

### **Hood Latch Handle**



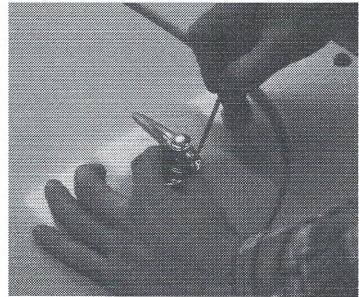


Fig. 17.1

Fig. 17.2

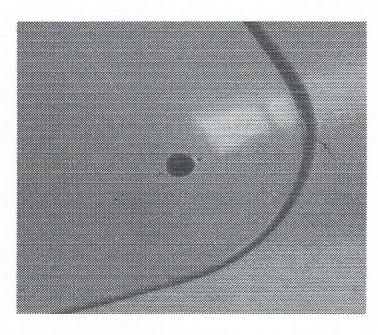


Fig. 17.3

#### 18. MOUNTING TRUNK LID:

Your trunk header bar is bolted to the inner trunk floor with four (two on each side) 1/4 x 20 x 1" long bolts with a flat washer and a nylon lock nut, Fig 18.1. The trunk hinge mounts bolt through the header bar with two each 1/4 x 20 x 1 inch long bolts with two 1/4 flat washers, nylock nut Fig 18.2, this is the up and down and side to side adjustment. The trunk hinges bolt to the trunk hinge mounts with one each 3/8 x 16 x 2 3/4 inch long pivot bolts with flat washers in between for side adjustment, start with one flat washer on each side of hinge and use nylon lock nuts on the pivot bolts, Fig 18.3. The hinges bolt to the trunk with three each 5/16 x 18 x 3/4 inch long bolts with flat and lock washers. This is your fore and aft adjustment. The easiest way to adjust trunk lid is with someone inside the trunk, then have someone adjust the trunk lid from outside, then the person inside tightens the bolts.

#### 19. TRUNK LATCH:

Drill 13/32 inch hole in divot of trunk through inner and outer skin, then enlarge the hole in the outer trunk skin to 1 inch diameter for the handle. Set the handle in place, mark the mounting holes locations using the handle as a template, remove handle and drill 1/8 inch mounting holes. Attach latch with gasket using two counter sunk head screws, Fig 19.1 Slide trunk latch over square shaft of handle, then using trunk latch as a template, mark and drill mounting holes for the trunk latch. Mark square shaft of trunk handle with latch to remove excess, then remove and cut square shaft off at your mark and reassemble. Mount the trunk latch with self tapping screws.

#### 20. MOUNTING DOORS:

Install the door latch striker plate to the door post using two each  $1/4 \times 20 \times 2$  inch long grade eight bolts, with two each flat washers, and one nylon lock nut, Fig 20.1. Now install the door latch striker to the door jamb and door latch striker plate with two each  $1/4 \times 20 \times 1$  1/4 inch long grade eight bolts, with one each flat washer and lock nut (Fig 20.2.), leaving these two bolts slightly loose. Install your door hinges to the door hinge mounting brackets that are welded to the rear cowl hoop using one each  $3/8 \times 16 \times 1$  1/4 inch long grade 8 bolts with two flat washers, one lock washer and nut (20.3). This is your door in and out adjustment and also door height adjustment. Now set the door in place, latching it in place, then bolt the door to the door hinges with 2 each 5/16  $\times$  18  $\times$  1 inch long grade 5 bolts with one flat washer per bolt (Fig 20.4). This is your door fore and aft adjustment, if you need to move the door more to the aft, add some body shims between the door hinge and the door hinge mounting bracket. Adjust back of door height and tighten door latch striker using an open end wrench between the door and door jamb, then finish adjusting the door with the hinge bolts.

#### 21. WINDSHIELD:

You will need to make two cutouts in the body for the windshield posts to pass through with Fig 21.1 showing the location of these cutouts. The easiest way to make these cutouts is with a die grinder or a jig saw. Once you have these cut outs made, set the windshield in place by placing the windshield post through the cutouts and down the inside of the cowl hoops. Now adjust the windshield angle. If you are planning to use the side curtains, install them at this point so they will serve as a guide to the angle of the windshield. Refer to section side curtain for instructions on installing the side curtains. If not using side curtains, the windshield angle should be set at about 47 degrees off vertical with the chassis level. To do this, use an angle finder on the outside post of the windshield, be sure to check each windshield post separately, set the angle, then using the top hole in the windshield post as a

### Windshield Cutouts and Rear Bow Holder Locations

Measure with tape laid flat agains top of cowl

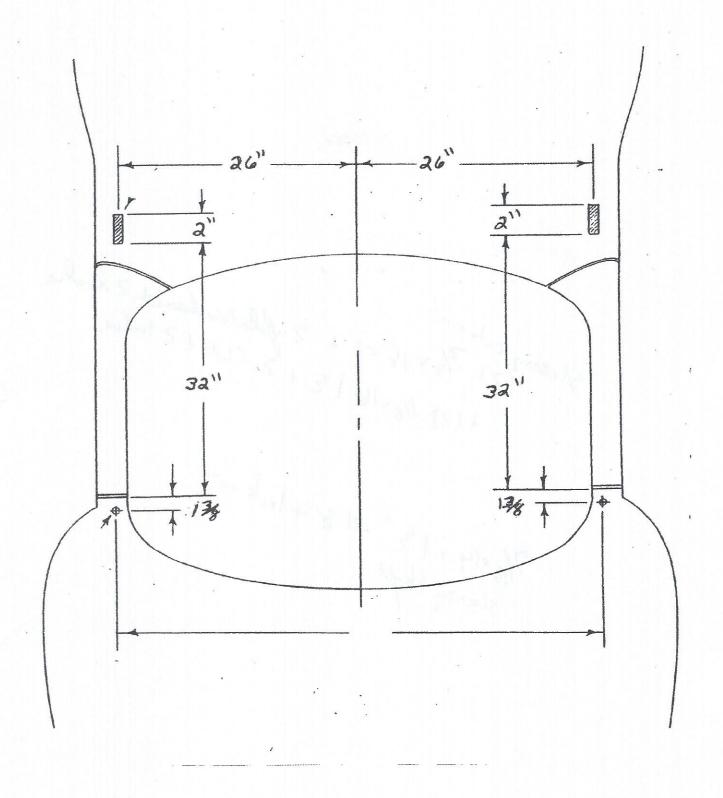


Fig 21.1

template, drill a 5/16 inch bolt hole through the top windshield mounting bracket that is welded in between the two cowl hoops and install a 5/16 inch bolt, then make sure your windshield angle is correct. Now drill a 5/16 inch hole through each windshield post and the lower windshield mounting bracket, Fig 21.2. Bolt the windshield in place with four 5 /16 x 18 x 1 inch long grade 5 bolts with one each flat washer, lock washer and nut per bolt, Fig 21.3. Note in some cases it may be necessary to shim in between the cowl hoop and the windshield. With this method of setting the windshield angle, it can be changed in the future if you want to install side curtains at a later date.

The optional stainless steel plates can be used to cover the cutouts made in the body for the windshield post or they may be finished and painted. In either case, the windshield post should be sealed from the underside with silicone.

#### 22. STEERING COLUMN:

We recommend using the stock steering column out of a 79-93 Mustang. Our wiring harness is designed to use either the stock switches in the column or the original style switches on the dash or a combination of both. If you decide to use the original style dash switches you can remove the switches from the column and make a sleeve

With a small hammer, knock the steering column lower mount up the column 5 inches from the end of the column if you are using the stock wiper switch on the column. If you don't use the stock wiper switch, you can move the mount further up the column, which moves the steering wheel closer to the dash depending on what is comfortable to you. Mount the steering column to the steering column mounts welded to the cowl hoops with 5/16 x 18 x ? inch long grade 5 bolts, with the end of the column going through the hole in the firewall. Hint: it is much easier to mount the dash with the switches off the steering column, then attach the switches to the column.

The steering shaft kit consists of one 3/4 inch male Hyme joint, one each 7/16 x 14 x 1 1/2 inch long grade 8 bolt and lock nut, two u-joints, one double D on both sides, the other double D on one side with the other side splined for the steering rack and two steering shaft extensions, one grooved to insert into the steering column on one end and a double D for u-joint on the other end, the other shaft is double D on both ends for the u-joints.

ammer, kno are using the sto you. Mount further up the cable to you. Mount the same as a 18 x? inch long grade 5 bound easier to mount the dash with

23. STEERING SHAFT KIT:

The steering shaft kit consists of bolt and lock nut, two u-joints splined for the steering rack one end and a double D

After you have for the steering rack one end and a double D

After you have for the steering rack one end and a double D

After you have for the steering rack one end and a double D

After you have for the steering rack one end and a double D

After you have for the steering rack one end and a double D

After you have for the steering rack one end and a double D After you have the steering column the distance from the dash that is comfortable to you, slip the 3/4 inch Hyme joint over the steering shaft that goes into the steering column, then install the steering shaft in the steering column with the 7/16 x 14 x 1 1/2 inch long grade eight bolt just slipped through for now to hold it in place while you measure and cut the steering shafts, then bolt the Hyme joint into its support bracket. Now take the u-joint for the steering rack, install it on the other steering shaft and the steering rack. Now line the shafts up where they will cross using the other u-joint to measure with and mark the two steering shafts for proper length, cut one shaft, install a u-joint and double check your measurement of the other shaft, then cut the other shaft and install as in Fig 23.1. Be sure you have full depth of shaft in u-joints.

#### 24. STEERING WHEEL:

There are many after market steering wheels with hub adapters available for the Mustang steering column. RUCC stocks 14" and 15" original style laminated wood steering wheels. The hub adapter has a center horn button that utilizes the stock Mustang horn contacts.

#### 25 WINDSHIELD WIPERS:

For windshield wipers, RUCC recommends using the original style Lucas unit which also came on the MG, MG Midget and Triumph Spitfire. These wiper motor kits are available through RUCC.

Fig 25.1 shows the locations in the body for the windshield wiper wheelboxes. Drill them out to 11/16 they should be drilled perpendicular to the windshield or at approximately 45 degrees angle to the body. The plastic spacer that the wheel box passes through should be trimmed approximately 1/4 of an inch to allow for the extra thickness of the fiberglass body. The wheelboxes are attached to the body according to Fig 25.2.

We recommend installing the wiper motor under the cowl hoop on the passenger side. Drill two 3/8 holes in the bottom of front cowl hoop tube for 1/4 inch rivenuts, the first hole should be 7 inches from the inside of the passenger side cowl hoop upright and the second should be 12 1/4 inches from the cowl hoop upright. Insert a 1/4 rivenut in each of these holes.

Cut a 1 1/4" long x 7/8" wide slot in the top of the cowl hoop 13 3/4 - 15 inches from the passenger side of cowl hoop and 1 7/8 - 2 3/4 from the back side of cowl hoop as shown in Fig. 25.2.

Wrap a piece of the 1 1/2 inch wide rubber strap around your windshield wiper motor then install your windshield wiper motor mount around the motor and rubber strap and bolt it to the underside of the cowl hoop with 1/4 x 1 bolts using the rivenuts you installed. Then run your windshield wiper tubbing through the slot in the cowl hoop sheer panel. Run the tubbing through the slot you cut in the cowl hoop then on to the wheelboxes Fig 25.3.

When installing the tubing which the drive cable passes through, it should not be kinked or bent too sharply as this will cause friction on the cable and the motor will not run properly. Fig 25.3

#### 26. LEMANS GAS CAP and ADAPTER:

Original 427 SC Cobras were equipped with a LeMans racing style flip open gas cap. RUCC offers this cap

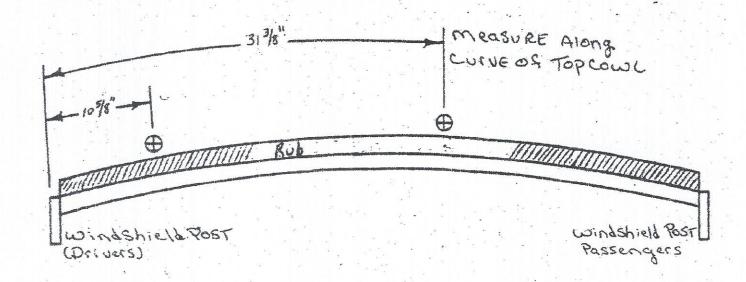
with an adapter for installing the cap to the body.

Use template 26.1 to mark the hole for the adapter as shown in Fig. 26.1. The center hole is drilled out to 2 1/2 inches with a hole saw like what is shown if Fig. 26.2. Then screw the cap on adapter, set it in the body, then turn the adapter so the gas cap is lined up where you want it, then mark the body for one of the holes and with a magic marker mark which hole in the adapter goes to the front, then remove cap and adapter. Using template, line up one of the holes to where you marked the hole in the body and then mark the rest of the holes. Drill the holes for the attaching screws to 13/64. Attach the adapter to the body with #10 x 32 screws, washers and nylon lock nuts be sure to use your gasket.

Now you can install your rubber filler hose in between the adapter and the metal filler tube coming from the

fuel tank. Be sure to use hose clamps when securing the filler tube.

### Windshield Wiper Hole Location



Template 25.1

### Gas Cap & Adapter

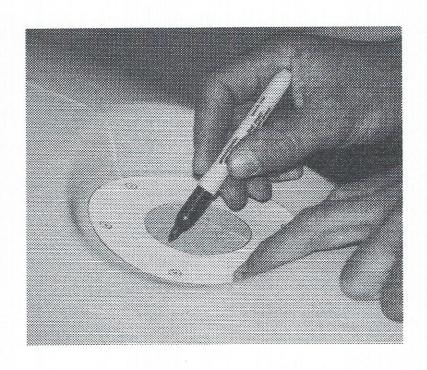
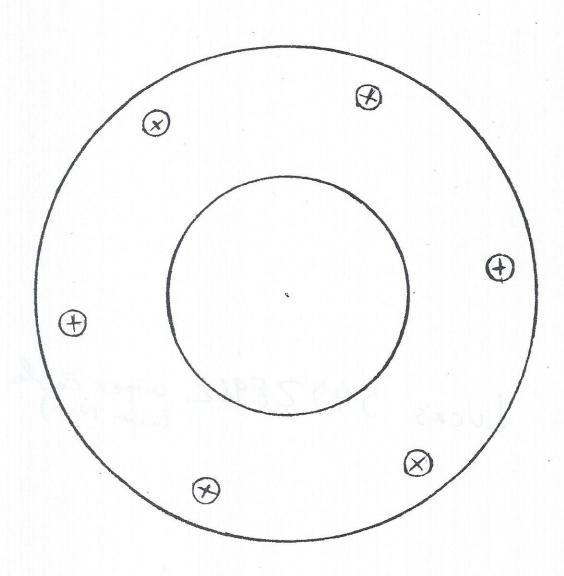


Fig. 26.1

### Gas Cap adapter template



Template 26.1

27. LIGHTS: Headlown Wagner H 6024 (veplows 6014)
Headlow holder: Wipac 55400 7" headlow mountingst

Use template # 27.1 to locate and mark holes for the headlights as shown in Fig 27.1 and 27.5, the small holes around the edge of the template are drilled to 13/64 the two larger holes one at the top and one to the passenger side are drilled to 11/32. Use template # 27.2 to locate holes for front parking/turn signals as also shown in Fig 27.1, and mark as shown in Fig 27.5. Drill the screw attaching holes to 13/64 and the center hole for the light to 1 1/4. Use template # 27.3 to locate and mark the hole for the taillights shown in Fig. 27.4 and 27.5. Drill the screw attaching holes to 13/64 and the center hole for the light to 1 1/4 as shown in Fig. 27.6. Use template # 27.4 for your license plate light. The headlights are installed using five each 5 mm screws with flat washers, lock washers and nuts. The front parking/turn signal lights use two each 5 mm screws with flat washers, lock washers and nuts. Your other lights all have mounting studs and use a flat washer, lock washer and 5 mm nuts.

#### 28. BUMPERS and OVERRIDERS or QUICK JACKS:

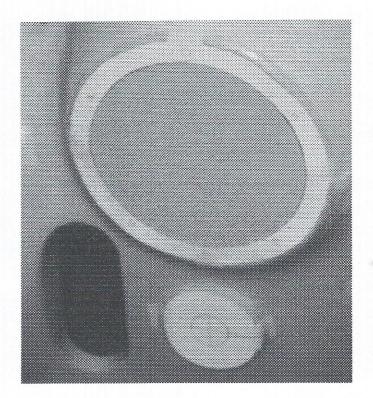
Cars are built in several different manners, without bumpers, overriders or quick jacks, just quick jacks or just overriders and with overriders and bumpers. The overriders can be used by themselves or with bumpers, but the bumpers must use overriders. Quick jacks are used by themselves. RUCC offers a bumper or overrider installation kit which consists of chrome spacer tubes, grommets, threaded rods and nuts. RUCC also offers a quick jack installation kit.

To locate holes for the overriders or quick jacks, refer to templates 28.1 and 28.2 for the front and Templates 28.3 and 28.4 for the rear. The front overriders or weight jack mounts use threaded rods and spacers which pass directly through the body to a chassis bracket Fig. 28.1. The rear overriders or weight jack mounts use threaded rods and spacers which pass directly through the body to the rear bumper mounting brackets that are bolted to the chassis sandwiching the trunk floor in between the mounting brackets and chassis, Fig 28.2. You have to mark and drill the rear bumper or weight jack mounting brackets using the holes you drilled in the body as a template Fig. 28.3. Fig 28.4 shows it installed.

#### **29. SIDE MIRRORS:**

The side mirrors are attached to the body with either rivenuts are screws. Mounting location is a personal preference. We recommend setting them in place where you like them and have a friend hold them there while you look at them from different angles then sit in the car and see if you can see behind you with them. The angle of the mirror can be adjusted by loosening the screw on the leading edge of the mirror adjust it then tighten the screw back up. We mount our mirrors 3 1/2 inches in front of the leading edge of the windshield post to the center of the rear most mounting screw, the front mounting screw is 3 1/2 further forward on the fender. We have the center of the rear most mounting screw 1 7/8 inches to the outside of the windshield post, the leading screw is 2 inches to the outside of the windshield post. To install the mirror you have to Remove the metal insert in the base of the mirror. Drill a hole in the longer mounting base that comes with the mirror and attach the long base with the screw that you took out to remove the metal insert. Then take the screw in the leading edge of the mirror out, the one you loosen to adjust the mirror, so you can remove the mirror head to get to the rear most attaching screw to install the mirror on the fender.

### Lights



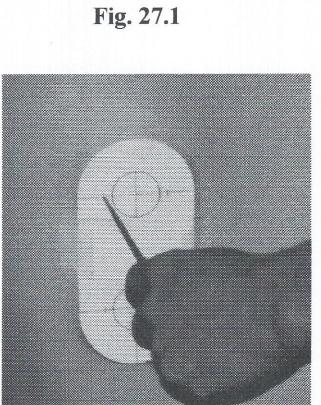


Fig 27.5

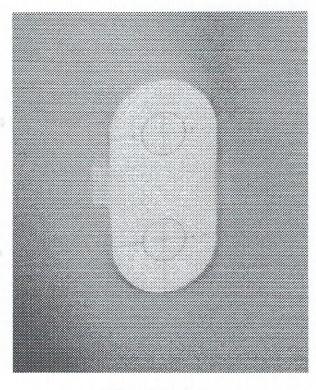


Fig. 27.4

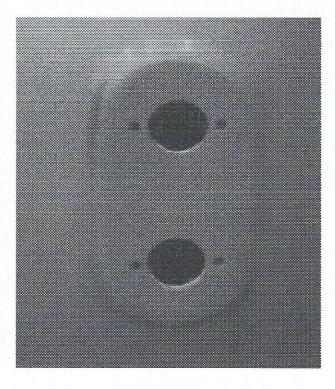
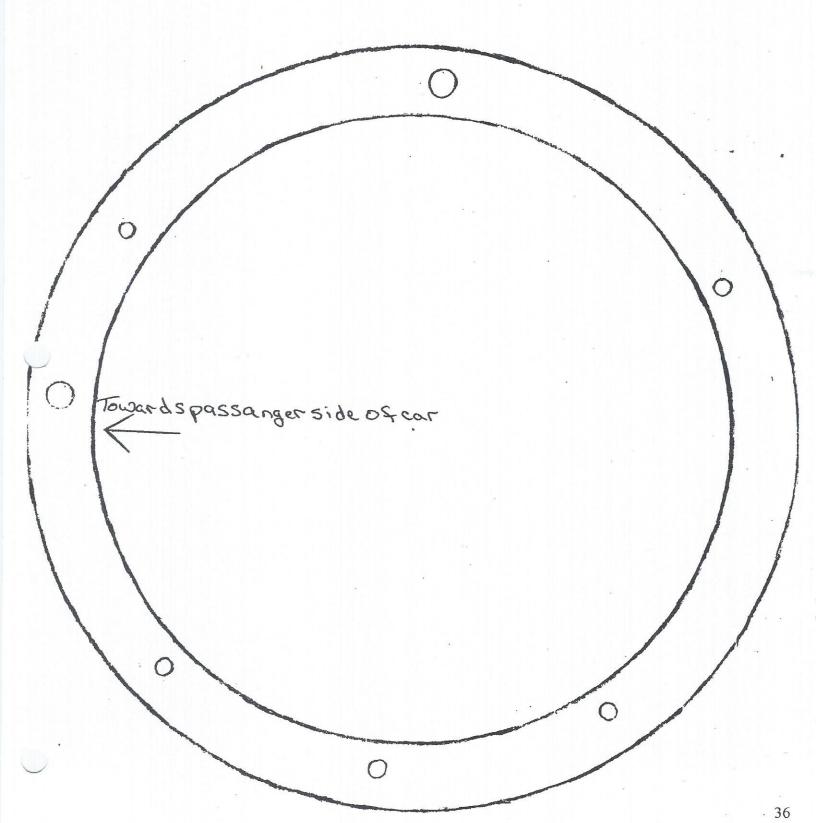


Fig 27.6

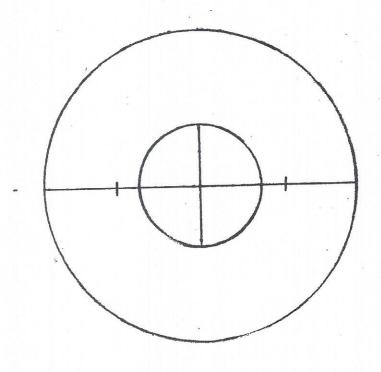
Drill Large holes out t 5/16 Drill small Holesout t 7/32

TOP

Template 27.1

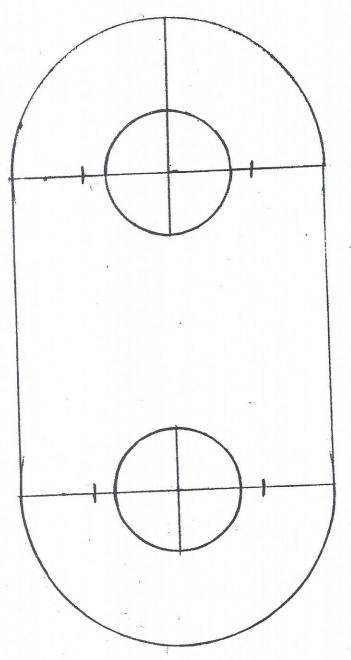


Drill Center Holes 1 1/4"
Drill mounting Holes 7/32



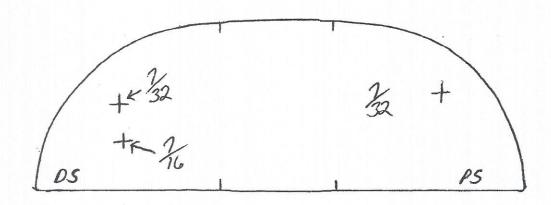
Template 27.2

Drill Center Holes 114" Drill mounting Holes 7/32"



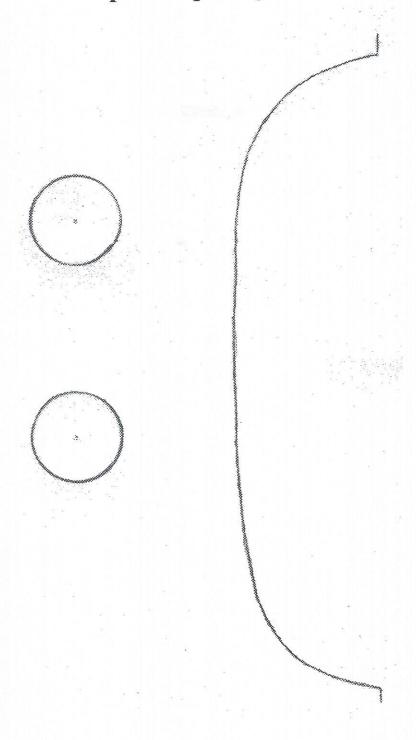
Template 27.3

### License plate lamp



Template 27.4

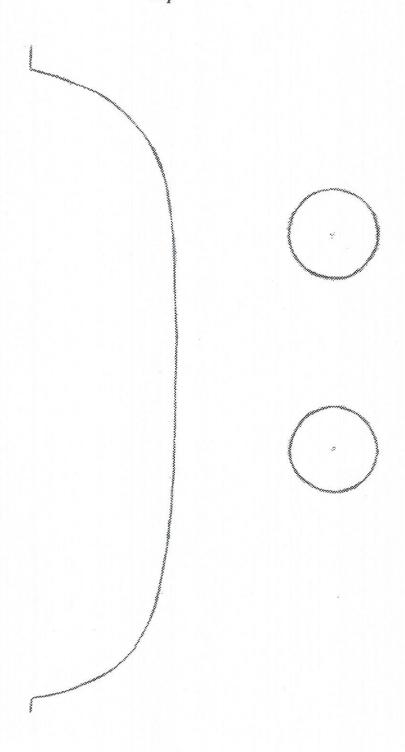
### Drivers side front bumper or quick jack



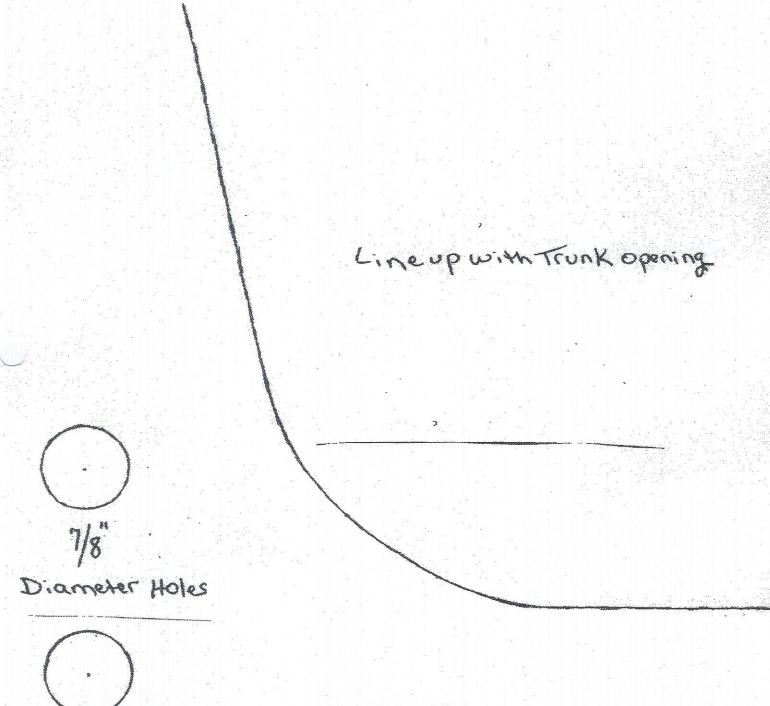
Template 28.2

### Passenger side front bumper or quick jack

Top

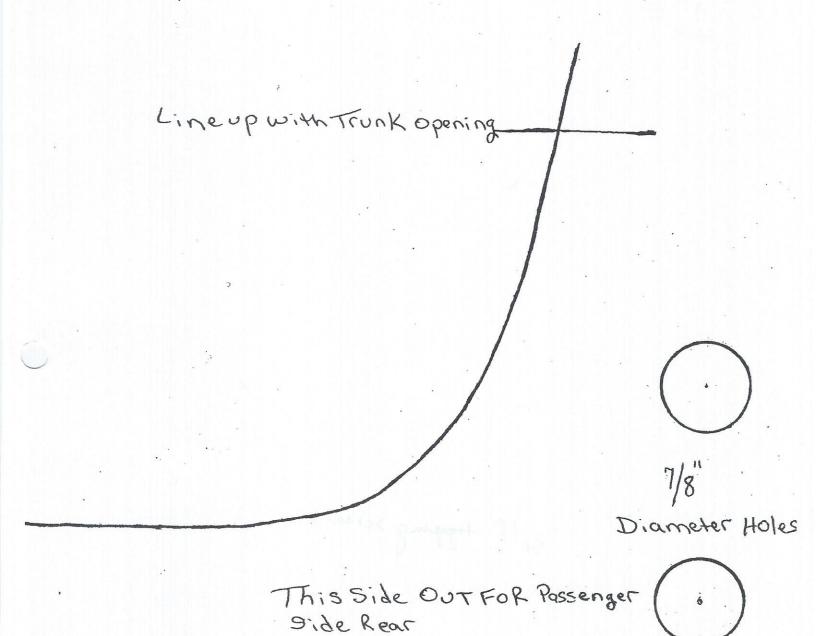


### **Drivers Rear Bumper or Quick Jack**



Template: 28.3

### Passenger Rear Bumper or Quick Jack



Template: 28.4

### 30. HEATER and DEFROSTER:

Use template #30.1 to locate your heater/defroster mounting holes and heater hose holes, as shown in Fig.30.1. Drill the three heater mounting holes to 3/8", and your heater hose holes to 1" as shown in Fig.30.2. Install the 5/8 ID rubber grommets in the 1" heater hose holes. Drill a 2 3/8 inch diameter hole using a hole saw in the top side of the cowl panel 16 1/4 inches from the passenger side of the cowl hoop to the center of hole and 2 13/16 inches from the back side of cowl hoop to center of hole as shown in Fig.30.3.

Knock out the round insert on the top of heater as shown in Fig.30.4 and 30.5. Remove the plug in the top side of the heater as shown in Fig.30.6. Now drill three evenly spaced? diameter holes in your heater hose mounting flange as shown in Fig.30.7. Now set your heater hose mounting flange on the heater where you knocked out the insert using the flange as a template drill a pilot hole for one of the 3 self taping screws in the heater, install the one screw using it to hold the flange in place then drill the remaining two pilot holes in the heater and install the remaining two screws.

Use some silicon spray or soapy water in the rubber grommets to help the heater hose tubes to slid through and mount the heater to the firewall using flat washers and lock nuts.

Attach a short piece of flex hose 7 inches long when mostly extended to the heater and the other end to one of the Y's. Attach a piece of flex hose 46 inches long when mostly extended to the side of the Y that is half blocked off and run it up over the passenger side of the cowl hoop. It will go around the windshield post and down behind the kick panel there you will install a vent register through the kick panel between the two cowl hoop uprights as shown in Fig.3.5. Attach a second piece of flex hose 20 inches when mostly extended to the other side of the Y and run it through the hole you cut out in the cowl hoop and attach it to a second Y Fig.30.6. Attach a ? inches long section of hose to the side of the Y that is half blocked off to run to the passenger side defroster. Use a ? inches long flex hose to connect a third Y. Connect a ? inches long section of flex hose to the side of the Y that is half blocked off to run to the drivers side defroster as shown in Fig.3.7. Connect a ? inches long section of flex hose to the Y and run it around the drivers side windshield post and down behind the kick panel there you will install a vent register through the kick panel between the two cowl hoop uprights as you did on the passenger's side.

#### 31. RADIO AND AIR CONDITIONER BOX:

Trial fit you radio box in the transmission tunnel you will have to slightly grind it to a custom fit. Attach it to the underside of the front cowl hoop tube and to the front lower tube of the transmission tunnel with self taping screws. We suggest using some kind of insulation on the inner side of the radio box and in the final assembly use silicon caulking to seal it to the transmission tunnel. Fig.31.1.

#### Wiring Harness

#### Front Section:

Cut a square hole in top right hand corner of the passenger side of firewall using Template E.1. Top of template should be 1/4 of an inch below top of firewall, side of template should be 1 3/8 inches to side of firewall as shown in Fig E.1. Using the template mark the location of the 4 mounting holes then drill them to 15/64. Finished mounting hole shown in Fig. E.2. This hole is to mount the wiring harness bulkhead connector. If you want to locate the starter solenoid, fan circuit breaker, and or heater mounting holes use Template E.2 as shown in Fig E.3. Drill the mounting holes for the starter solenoid for 1/4 inch rivenuts using a 11/32 drill bit, be sure and check the outside diameter (od) of the rivenut, different manufactures have different od's. Then drill the mounting holes for the fan circuit breaker for 8-32 rivenuts using a 1/4 drill bit, again be sure to check the od. Finished mounting holes shown in Fig. E.4.

Mount bulkhead connector in the firewall. Connect the two gray wires to the battery side of Ford Starter solenoid. Connect the *pink* wire to the I post on solenoid. Connect the *purple* wire to the S post on the solenoid. Run the 12 gauge red jumper wire from the battery side of solenoid to the electric fan circuit breaker. Connect the *red* wire to electric fan circuit breaker. The *yellow* wire is for the windshield washer pump.

#### Front Turn Signals:

Use the female 3 gang weatherpack connectors included in the kit for your turn signals. A on connector is for turn. B is for running light. C is for ground. Plug male 3 gang weatherpack connectors on wiring harness. A is blue. B is brown. C is black.

#### Headlights:

Use the male 3 gang weatherpack connectors included in the kit for the headlights. Pin A on the connector is for highbeam. Pin B on the connector is for lowbeam. Pin C on the connector is for a ground. Plug this into female 3 gang weatherpack connectors on the wiring harness. Pin A on the harness is green. Pin B on the harness is tan. Pin C on the harness is black.

Orill a hole in the frame to connect the ground wire eyelet.

The orange, green and brown wires that drop from the harness at the front by the passenger side headlight wires are for driving lights, horn and an accessory lead. The orange is for extra driving lights. The green is for the horn. The brown is an accessory lead.

#### Electric Fan:

The red wire is the hot lead to the fan from the fan circuit breaker located on the firewall. The black wire is the ground. The pink wire is the hot lead when the air conditioner is turned on. The red/white wire is the hot lead for the thermostatic control. The black/red wire is for the manual over-ride switch. Connect the black wire to the frame for a ground.

#### Engine:

Connect the male 6 gang weatherpack with pink, white, blue, blue/white, green and pink wires to the female 6 gang weatherpack on the front section. The pink (A) wire is the coil hot lead. The white (B) wire is for the tach. The blue (C) wire is for the oil pressure sending unit. The blue/white (D) wire is for the oil temperature sending unit. Oil temperature sending unit part # 280EE-F. The green (E) wire is for the water temperature sending unit. Water temperature sending unit part # 280EA. The pink (F) wire is for the air conditioner.

#### **Cockpit Section:**

Plug the malebulkhead connector in to the female bulkhead that you have bolted to the firewall...

#### Fusebox:

Mount the fusebox to the underside of cowl hoops about 3 inches from the passenger side upright with it running length wise with the car. See Fig E.2. Connect the red #2 hot lead from the solenoid to (BAT) or post #2. Connect the gray #2 headlight source wire to (BAT) or post #2. Connect the red #3 ignition switch wire to (IGN) or post #3. Connect the brown #4 accessory wire from the ignition switch to (ACC) or post #4. Connect the green #5 horn button wire to the (HORN BUTTON) or post #5. Connect the green #6 horn to the (HORN) or post #6. Connect the red #7 hot lead for instruments to (INST) or post #7. Connect the yellow #8 radio acc. wire to (RADIO ACC.) or post #8. Connect the orange #9 heat, vent, and air conditioner wire to (HVAC) or post #9. Connect the yellow #0 wiper motor wire to (WIPER) or post #10.

#### Opposite side:

Connect the purple #1 turn signal source wire to (TURN SIG.) or post #1. Connect the brown #2 hazard source wire to (HAZ.) or post #2. Connect the black/yellow #3 brake light signal wire to (E. FAN SIG.) or post #3. Connect the orange #4 brake light source wire to (E. FAN PWR) or post #4. Connect the orange/black #6 electric fuel pump wire to (COIL) or post #6. Connect the gray #7 running lights and dash lights wire to (CRT.LT) or post #7. Connect the orange #8 radio power wire to (RDO.B) or post #8. Connect the red/white #9 electric fan ignition switch activated to (P.WIND P.DOOR) or post #9. Connect the black/red electric fan manual switch activated to (PRK.LT) or post #10.

The first group of wires after the bulkhead connector are green, yellow, brown, tan, orange/black. Run these wires down the passenger side kick panel and then behind the seat through the rear panel. Install the 6 gang weatherpack connector on the back side of rear passenger compart panel. Connect the wires as follows to the weatherpack connector Green pin A, Yellow pin B, Brown 18 Gauge pin C, Orange/Black pin D, Brown 16 Gauge pin E, Tan pin F.

The first group of wires after the fusebox are 2 each pink 14 gauge, 1 each red, yellow, black/red orange. The pink to coil ballast from ignition switch, the pink #14 from coil ballast to the Ignition coil. The red #0A wire to wiper motor high, the yellow #0B wire to wiper motor low, the black wire is for wiper motor ground. The orange #9A to heater high, the red #9B to heater low.

Second group: Orange 18 gauge, yellow, brown, pink, orange 14 gauge. The orange #8 wire is for radio battery, the yellow #8 wire is for radio acc, the pink #20 wire is for the air conditioner.; the brown #18 wire is an acc. lead front; the brown # 19 wire is an acc. lead to the rear: the orange

#12 wire is for driving lights.

Third group: Tan, green, white, blue, blue/white, brown, red, black. The tan wire is for the fuel gauge. The green wire is for the water temperature gauge. The white wire is for the tachometer. The blue wire is for the oil pressure gauge. The blue/white wire is for the oil temperature gauge. The brown drop wires are for your gauge lights. Brown eyelets on end with diode wires into the headlight switch. Fig. E. 2. The red wires are the hot leads to the gauges. Black wires are grounds for the gauges, gauge lights and the indicator lights. Be sure to connect ground wire to frame.

Fourth group: Orange, orange, red. The orange #9 wire is the heater switch source. The orange #9A wire is the heater switch to heater HI lead. The red #9B wire is the heater switch to heater LOW lead.

Fifth group: 2 each orange/black, 2 each black/red. The orange/black #6 wire is the electric fuel pump switch source. The orange/black wire goes to the electric fuel pump. The black/red #0 wire is the electric fan switch source. The black/red #10 wire is the electric fan switch to electric fan lead.

Sixth group: 2 each red, 1 each pink, purple, brown. The red #3 wire is the ignition switch to the fuse box. The red #13 wire is the ignition switch source. The pink wire is ignition switch to the coil ballast. The purple wire is the ignition switch to the starter solenoid post S. The brown wire is the ignition switch to the fusebox (ACC) or post #4.

Seventh group: 2-yellows, 1-blue, 3-greens, 13-reds, 4- gray, 1- tan. The blue #0 wire is the wiper motor switch source. The red #0A wire is the wiper switch to the wiper motor high lead. The yellow #0B wire is the wiper switch to the wiper motor low lead. The yellow #00 wire is the washer switch to the washer pump lead. The gray #2 wire is the headlight switch source. The gray #2A wire is from the headlight switch to the headlight dimmer switch. The #2B wire is the headlight from circuit breaker source. The gray #7 wire is the running light source. The green #7 wire is the dimmer switch to the headlights highbeam lead. The green #7A wire is the dimmer switch to the highbeam indicator light lead. The tan #8 wire is the dimmer switch to the headlights lowbeam lead.

Eighth group: 1-gray, 1-green, 1-blue,1-blue/red,1-yellow,1-purple,1-orange,1-brown, 1-black/yellow. The gray #2A wire is the headlight switch to the headlight dimmer switch. The purple #1 wire is the turn signal switch source. The orange wire is the brakelight source. The blue/red wire is the right front turn signal lead. The blue wire is the left front turn signal lead. The dark and light blues wires together with diodes is the turn signal indicator light lead. The black/yellow wire goes to the brake light switch.

Section between cockpit and trunk:

The weatherpack connector with 6 wires connects to the cockpit section. The weatherpack connector with 5 wires connects to the trunk section. The drop with a tan, orange/black and black wires goes to the fuel tank area. The tan wire is the fuel sending unit. The orange/black wire is for the electric fuel pump. The black wire is a ground. Attach the black ground wires with a eyelet to the frame.

Trunk section:

Drill a hole in top right hand corner of the trunk liner. Put short leads yellow, green, brown, and black through the hole from trunk side with a grommet. Using a 6 gang weatherpack female

The mode

connector on the outside of the trunk connect the wires as follows. The green wire is A. The yellow wire is B. The brown wire is C. The black wire is D. Then connect to the male 6 gang weatherpack connector on the section between cockpit and trunk Use the 4 gang connectors supplied in kit for the tail lights. (see fig. E-3). The black and brown wires with the in line connector is for the tag light in the truck lid.

Block = (rreen > Red rear ZzHeadlightsource walk 1 = Bright Headlight 3 = Norma | Head light 5 - front left turnsig 6-rear left turn/bishe 9 - Flash input 7 - right rear town broke Right turn 2-3;5-6;5-9;6-9;1-11.
Right turn 2-3;6-11;1-8;19;8-9 8-front right tom sig 11 - Brahe light switchin 10-Hazard Flash in Bright 1-2,6-7,6-11,1-11 -2,56,5-9,6-9,7-11 -2,6-11,7-8,7-9,8-9 Hazard 1-2;5-6;5-7;5-8;5-10;5-11;6-7 6-8,6-10;6-11;7-8;7-10;7-11;8-10;8+1;10-11 5-6-7-8-10-11

Dedal asserbly + flat both both both 1/4-20-3/4 + flat both 1/4-20-3/4 + flat both 1/2 of 1/2 Word Side outside edge of Firewall Line this edge Drill center of Outch Live 15 HA Above Bottom of frame rail. Perr Brake Live Live this edge with outside edge of firewall. Clutch Rear Brake Line Fruit Brake Live Brackets Rear Both Con Front Report