Building the Dragon Roadster

Building your own car is supposed to be fun and exciting. The Dragon is a relatively simple car to build. As a roadster it is inherently easier to build than a coupe, and we have designed the car so that there is easy access to all components. It is a basic car, meaning that we haven't installed modern electronics, air conditioner, or other complicated systems or assemblies.

The following instructions are based on our experience of developing and building the prototype and our own 3 cars(The Blue ZZ-4, Ruby 427, and Yellow 415HP). The following information is accurate to the best of our knowledge but is limited to the components that we used. One of the beauties of building your own car is the freedom to build it the way that you want. You can make the car your own by using the parts and components that you choose and by using vent treatments, trim accents, and paint treatments that you like. It is your responsibility to make sure that the parts you choose are compatible with our frame, are safe, and are assembled correctly and safely.

The Dragon is a light, fast, low super car. Even with moderate power it is fast! And the car handles like a slot car, even with stock rubber bushings and without sway bars. Our secret is light weight, a stiff frame, a wide track, and a low center of gravity. You do not need expensive engines or suspension upgrades to have awesome performance. We want every one to have safe fun. It is your responsibility to drive the car in a safe responsible manner. Drive defensively! I drive the car like I would drive a motorcycle and assume that no body sees me(although everybody DOES)!

Building the car is supposed to be fun! Take your time. Measure twice and cut once. Use the right tools for the job. Wear safety goggles. Keep a fire extinguisher handy. Use jack stands! Have good lighting. In other words be safe, have fun, and don't make building the car a race. In every build there will be a time that things don't go right or as easily as you thought. You might become frustrated. This is the time to step back, take a deep breath and relax. There is a simple solution to every problem. Take everything one step at a time. We are here to answer any questions and to help solve any problem that you may have. Chances are that we or another builder has encountered any problem that you may come up against. We are here to help.

UPON RECEIVING YOUR KIT

Your kit has been delivered with the body mounted to the frame and with the doors, trunk, and flip up nose hinged and aligned. Who ever does your body work and paint will do the final fitting and either trim fiberglass or add filler to make all of the seams even and consistent. You will observe mould parting lines across the hood, around the trunk and along the rocker panels. These are normal and are the result of a parting seam in the mould. Again your body man will expect these and know how to take care of them.

The parts that come with the kit are either in the cockpit or the trunk. You will find an itemized list of parts in the trunk.

BEGINNING THE BUILD

You have a decision to make at the start. You can build the complete car and then have the body work and paint done. If you choose this order you actually build the car and then take it apart to have the body work and paint done. Most hot rods are built this way. However, since the Dragon body doesn't have anything structural attached to it, and since the tub and body are one unit and are easily removed, we do the body prep first and then send it to the painter. While the body is being painted, we can work on the chassis and the rest of the car.

Keep in mind that you will be cutting out openings for vents, lights, gauges, and exhaust. Fiberglass dust will get into every thing. I prefer not to have the dust flying around engines, and other components. It' easier to clean a bare frame than a finished car.

STEP 1 Remove the body from the frame. The nose removes by unbolting the two hinge bolts. Notice that there are spacers between the frame and the vertical supports in the nose. These may be of different thickness so keep track of which one goes where. Using two people lift the nose off of the car and set it aside.

Remove the main body and tub. This requires unbolting the body tabs front and back and bolts that attach the trunk to the frame. Use two or three people to lift off the body and set it aside.

STEP 2 ATTACHING THE FLOOR PANS

We didn't want to have only fiberglass between our butts and the road so we have provided aluminum floor pans and rivets to attach them. Your kit may have the pans positioned (There is a left and a right, but it will be obvious if you are trying to put them in the wrong position.) in which case they are only temporarily attached with a few rivets.

Flip the frame over. You will observe that the aluminum pans run down the center of the 4" frame rails and to the edge of angle iron the defines the edge of the foot boxes. The aluminum pans interfere with the placement of a floor jack and jack stands, so it is necessary to trim the aluminum in two places per side. Refer to the diagram for where to cut the floor pans.

Remove the floor pans by drilling out the rivets. (3/16" bit). Make the cuts per the diagram. If you are going to use a 5 point seat belt system you will want to drill a hole in the transmission cross member to attach the lap belt. Use a 7/16" bit to drill this hole. Find the center point between the main frame rail and the angle iron that supports the aluminum pan. Measure 1" down from the top of the cross member and drill a horizontal hole through the cross member. You can drill this hole with the body installed but it is easier to do it now. (refer to diagram)

With the hole drilled and the pans cut it, is time to reinstall them. Lay down a bead of silicone caulking on the frame around the perimeter to seal the pan. Attach the pan by using the existing holes. Drill 3/16" holes around the perimeter of the pan. Space the holes 3-4 " apart. Attach with the provided rivets. Please note that the rivets attaching the pan to the angle iron should be installed with the rivet head flush with the angle iron. This will prevent any interference that could occur between a rivet and the fiberglass tub. Use a grinder and remove any excess rivet that extends below the pan along the angle iron.

Flip the frame back over, setting it on four (padded) jack stands.

INSTALLING THE SUSPENSION AND STEERING

We like to install the suspension, steering rack, and wheels/tires at this time. It's a lot easier to roll a car onto a trailer to take it to the Body/Paint shop than to try and manhandle the frame/body.

Usually when you buy Corvette suspension, you will receive the front attached to the Corvette cradle. It will have the mono-leaf spring , shocks, and sway bar attached. The upper A-frames have bolts and conical spacers that attach them to the cradle. We provide new bolts but you will want to save the spacers as they are unique to Corvette.

The rear has four trailing arms that attach to a bracket that is bolted to the corvette frame. Sometimes the rear will come with the brackets and trailing arm bolts, sometimes not. Our frame comes with the necessary brackets installed and we provide new bolts, Your rear will probably have the spring, shocks, and sway bar attached. The rear sway bar is attached to the rear hub assembly with two u- shaped brackets. Save these brackets as they are reused as the front coil-over shock mounts.

You will want to disassemble the suspension, set aside the sway bars, springs, shocks, and related nuts and bolts. Now is the time to degrease the parts, clean and/or polish them and refurbish them. (A Chilton repair manual for C-4 Corvettes is helpful for disassembly and rebuild information. I recommend getting one.)

You will want to inspect and replace as necessary the tie-rod ends, steering rack, ball joints and bushings. It takes specialized presses to replace the lower ball joints and bushings. I recommend having this done by a professional. If you go to urethane bushings you will find that the large ones that go into the differential carrier won't fit. There is actually an aluminum sleeve that is pressed into the carrier in which the stock bushing is pressed into. New urethane bushings do not use this sleeve so it must be pressed out or cut out. We, carefully, used a sawsall and cut through the sleeve in several places from the inside out. With the sleeve removed the new bushings will fit.

If the suspension pieces that you purchased came with the bolts that attach them to the frame you can reuse most of them. The exception is the upper front A-frame bolts. The Corvette bolts are "keyed" and will not work with our brackets. We have provided new bolts for this application.

The remaining bolts pass through bushings and attach to brackets which we have welded to the frame. The Corvette uses metric sized bolts. We have provided new ½ in bolts. To use our bolts you must slightly enlarge the bushing sleeves. To do this use a ½" drill bit, in a drill press. Set the press to a slow speed, use oil on the bit, and drill through the sleeve slowly. If you try to drill quickly you probably will cause the sleeve to spin in the bushing. If this happens you will have to clamp the sleeve, drill it and then repress it into the bushing.

INSTALLING THE STEERING RACK

The steering rack is held in place by a clamp and by a bolt that goes through it and a bracket. Stock rack uses a rubber bushing between the rack and clamp. We do not use the bushing so simply cut it off with a utility knife. We have found that a 1985 rack has an aluminum sleeve that interferes with our clamp. It is impossible to mount the rack level. If this is your situation, exchange it for a different year rack. IT IS IMPORTANT FOR BUMP-STEER THAT THE RACK IS MOUNTED PROPERLY.

To ease installation, remove the exterior fluid lines from the housing. The fittings use a small rubber o-ring to seal the lines in the housing. Make sure that you don't lose these o-rings. The car is so light that power steering is not really needed. We have successfully used the standard corvette rack for manual operation by plugging the rack, where the power steering hoses would attach. You can get plastic threaded plugs from an auto parts store. These are metric threads. If you buy a rebuilt rack it will come with the plugs installed. For manual use, we leave off the other external lines. Cut the lines and remove the fittings that screwed onto the rack. Re-screw the fittings onto the rack with some type of filter inserted between the fittings. Use gauze or foam as a filter. When the rack is turned air will circulate through it. The filters will keep dirt from getting into the rack. If air flow is restricted or cut off the rack will turn hard.

If you are using power steering you will reconnect the exterior lines after the rack is bolted into place. Since the engine is set farther back than stock, the stock hoses will probably be too short. Depending on what pump you are using you may need to have a custom hi-pressure hose made. I used a 1968 Z-28 pump with a March pulley system. I found a hose at a local parts store that had the necessary fittings and length (once it was re-bent) to fit.

To insert the rack into its brackets, slide it right to left, while facing the car, through the vertical uprights that support the upper A-frame and shock mount. Once slid far enough to the left, the right side steering shaft arm will clear the supports for the drivers side A-frame and shock mount. (You may need to remove the tie-rod ends prior to insertion)

Once both shaft arms are through the A-frame/shock supports you can slide the rack to the right while twisting it so that the rack's mounting flange slides into the parallel mounting brackets that are welded to the frame. Line up the bolt hole in the racks flange with the holes in our brackets. Insert the provided bolt through the brackets and flange. Clamp the other end of the rack with the provided clamp and 2 bolts.

INSTALLING THE FRONT UPPER AND LOWER A-FRAMES, SHOCKS, AND SPINDLES.

The Dragon uses coil-over shocks. The shocks have rod end mounts, that is a single ½ inch bolt attaches the shock to the frame and lower A-frame bracket. Our frame has the needed bracket built in, but you will need to attach a bracket to the lower A-frame.

We use the U-shaped bracket that attaches the stock Vette REAR sway bar to the REAR hub assembly. To use this bracket you must re-drill the large, horizontal hole to ½ inch. Re-drill the smaller holes to 3/8 inch. Take your lower A-frame. You should have the spindle removed and all other external pieces removed at this point. With the A-frame lying flat, as it would if it were mounted to the car, you will see a 3/8 inch hole that is located to the inner side of the ball joint, about where the two legs of the A-frame converge to form a "Y". The hole is through the flat part of the A-frame, but is close to a thicker part of the casting. The bracket uses this hole as one of its mounting locations. When you look at the bracket you will see that the base of it is longer on one side. This longer side will mount towards the ball joint. It will be necessary to grind away a little of the thicker material of the A-frame so that the bracket will sit flush to the A-frame. Remove enough material so that the hole in the bracket lines up with the hole in the A-frame. Insert a 3/8 in bolt to locate the bracket. The bracket has two mounting holes, the A-frame just one. Drill a new hole through the A-frame (3/8 in) to match the second hole in the bracket.

Install the shock to the bracket. Use the provided bolts and washers to attach and to space the shock into the center of the bracket. Make sure that the bolts attaching the bracket to the A-

frame are installed through the bracket first. Attach the bracket to the A-frame with the provided bolts.

Install the lower A-frame to the frame. The A-frame is a tight fit to our brackets. Install both legs evenly into the brackets sliding them in from th ebottom. Use a hammer with a piece of wood as a persuader to tap the A-frame into place until the two mounting holes align with the brackets. On a couple of occasions, we have used a grinder to shave a little of the A-frame's bushings down to obtain a little more side clearance between the bushing and the brackets. You can reuse the Corvette mounting bolts or the new bolts that we've provided. In either case, we use white grease to lube the bolt before insertion. Install the bolts and tighten. Use caution when tightening suspension bolts. If you over tighten the bolts the bushings will become pinched in the brackets and suspension movement will be reduced. Refer to a repair manual for torque specs. After tightening, move the suspension piece to verify that it is not restricted. Also, on all nuts and bolts we use the appropriate locktite to help assure that a nut will not work itself loose.

Install the shock into the upper bracket. If the rod end of the shock that you are using hits the inside top of the shock mount and keeps its mounting hole from aligning with our bracket holes you would need to grind off a little material from the shock. Attach the shock to the bracket with the ½ in bolt that's provided. Use the provided ½ in washers to equally space the shock inside the bracket from side to side.

Install the spindle to the lower A-frame. Slide the spindle over the lower ball joint stud. Install the washer and castle nut. Torque down the castle nut enough so that it seats. Install the upper A-frame to the spindle by sliding the upper ball joint stud into the spindle. Install the washer and castle nut. Torque down the castle nut enough so that the ball joint stud seats.

Install the upper A-frame to the upper A-frame brackets. Corvette used a couple of different bolt hole spacings for their A-frames. You cannot reuse the Corvette mounting bolts with our frame. We have provided new ½-inch bolts. You will want to reuse the Corvette conical shaped spacers as they are unique and are needed to conform to the upper A-frame mounting shaft's contour. Also, save any shims as they may be needed when you get a wheel alignment. Attach the A-frame to the mounting brackets with the provided hardware.

Attach tie-rods to the spindles. Refer to your repair manual for torque specs for all attaching bolts, spindle nuts, tie-rod end nuts, and tie-rod end set nuts. Insert the proper size cotter keys through all castle nuts. Cut and bend as necessary to prevent a castle nut from coming loose.

INSTALLING THE REAR SUSPENSION

The rear-end attaches to the frame with 2 bolts that suspend the differential carrier from the horizontal 2x2 tubes on the frame. Four bolts attach the trailing arms (2 per side) to brackets that are welded to the kick-ups. A torque arm attaches to the differential with two bolts, the forward end attaches to the frame by a threaded heim joint . We have provided new bolts for everything except the 2 long bolts for attaching the torque arm to the differential housing. These are unique to Corvette, however, they should have come with the rear end that you purchased.

The best way to install the rear is as a complete unit with out the coil-over shocks.

1- **Jack up the frame and place it on jack stands.**
2- **Unbolt and remove the 2 braces that go from the 4" cross member to the angle iron body support.**

3- Pad the 4" cross member to prevent it from being scratched.
4- Slide the rear end into position. Lift up the rear end and slide a floor jack underneath it.
5- Slowly jack up the rear end.
6- As it is lifted, rotate the pinion vertically so that it will clear the rear 4 " round frame tube.
7- Continue jacking until you are able to attach the top trailing arms to the brackets.
8- Attach the top trailing arms with the provided bolts. You may notice that the bolts seem extra long. We did this on purpose so that the bushing rides on the shank of the bolt and not threads. Also, we use white grease to lube all bolts that pass through bushings. Do not tighten any bolts until the rear end is completely installed.
9- With the upper trailing arms attached to the frame, it is time to attach the differential carrier. This requires a combination of lifting (use the jack) and rotating. The rear end will want to hang with the pinion angled down. You will need to rotate the pinion up as you lift the rear.
10- Use a hammer and block of wood to tap the carrier into the brackets. Once the carrier is in position, it usually only takes putting some weight on it(step on it) to slide into place.
11- Align the holes of the brackets with the mounting holes in the carrier. Use a tapered punch to line up the holes.
12- Attach the carrier with the provided bolts.
13- Slide the lower trailing arms into position and bolt them in.
14- Attach the torque arm to the differential. Insert the bolts from the bottom. The nuts should be on top. Otherwise, you cannot remove these bolts if you need to take the rear end out of the car except by taking off the body.
15- Attach the front of the torque arm to the bracket with the provided bolt. There is a threaded rod end in the end of the torque arm. You will need to adjust this in or out so that it lines up with the bracket.
16- Using the torque specs from your repair manual tighten all of the bolts.
17- Check the movement of the suspension to make sure that is moves freely.
18- Attach the coil-over shocks to the lower shock mounts.
19- Attach the coil-over shocks to the upper mounts. Use the floor jack placed under the hub to lift the suspension up until the shock mounting hole lines up with the holes in the brackets. Depending on the shock that you use you may have to remove a little material from the top of shocks rod end. You will only have to do this if you can not get the holes in the upper shock bracket to line up with the hole through the shock. You can use a grinder to remove material as needed.

CONGRATULATIONS! THE SUSPENSION INSTALLATION IS COMPLETE!

With the engine/transmission and rear end installed you can measure for the drive shaft. We recommend Denny's Drive Shafts. They will send you a tech sheet to show you how to measure properly. Their drive shafts are beautifully made, are guaranteed not to break, and they use high quality Spicer U-joints. And, their prices were less than my local drive shaft company. Denny's phone # is 1-716-875-6640.

We have provided a drive shaft safety hoop and the hardware to attach it. Install the hoop after the drive shaft has been installed.

INSTALLING THE RADIATOR

The Dragon radiator is mounted low. The top of the radiator is lower than the thermostat housing in the intake manifold. So, you can not fill the cooling system at the radiator. If you did you would create an air pocket in the system which would cause it to over heat. Consequently we use a radiator without a filler neck.

Our mounts are designed for a CRC aluminum radiator 28" by 17". We install it with the drain petcock at the top. This allows us to bleed the system when filling. Simply leave the petcock open when filling until fluid, not air, comes out.

If you use a different radiator it will be necessary to fabricate brackets for your application. These are fairly simple to design and build; any competent welding shop should be able to handle the job.

Our brackets consist of 2 U-shaped channels. Slide the channels over the radiator, 1 per top, 1 per bottom, so that there is one per corner. Attach the channels to the radiator with 4 rivets per bracket. Be careful when drilling to not puncture the radiator. We place a thin piece of steel between the radiator and the flange that needs to be drilled through. Then, if you slip the bit hits steel, not soft aluminum.

Now attach the electric cooling fan to the radiator. Make sure that its mounted to flow air in the correct direction and that you wire it so that it flows air in the right direction. The engine will overheat if the fan is wired backwards!

Bolt the radiator to the upper and lower supports. Use the provided bolts.

You will notice that the radiator is mounted far forward of the engine. Because of this we do not use engine driven fans. They would not be effective in drawing air through the radiator. Use an electric fan with at least a 1650cfm rating, more if you are in a hot climate. We have driven in stop and go traffic with 100degree heat without overheating. But in the desert, we would recommend a higher rated fan.

The distance of the radiator from the engine is also too far for standard radiator hoses to reach. We have used aluminum tubing extensions with a rubber hoses to connect. However, this looks ungainly and requires a lot of clamps and many trips to the parts stores to find hoses that work. The best solution is to buy 36" flexible metal radiator tubing. These sets come is several levels of quality. Some use rubber ends, some have billet covers to conceal the ends, and they come with matching clamps. Summit Racing carries them. On installation, make sure to clamp the ends tightly. We double clamp the ends.

To fill the system you will need to use an in-line filler, between the upper radiator hose and thermostat housing, or a filler which replaces the thermostat housing. We think that the in-line one looks better and it doesn't interfere with large air cleaners as the other style can. Make sure to use a high quality radiator cap of at least 18lbs and utilize an over flow tank. The last thing you want is to have is radiator fluid overflowing and wetting your tires!

When you fill the system make sure to purge all of the air out of it. If you don't it will overheat!

FUEL TANK AND FUEL LINES

The type of induction system that you choose will dictate the type of tank and delivery system that you will need.

For a carburetor system a simple tank with a vent line and a single feed line is all that you need. Obviously a sending unit is needed if you want to run a fuel gauge. I had an aluminum tank made at a local welding shop that fits under the rear deck. This is the space between the cockpit and the trunk. The tank cost me $95 to which you have to add the cost of fittings, sending unit, and a fuel cell style gas cap. The total cost was about $200. The are advantages for this tank. It is completely supported by and surrounded by the steel frame that supports the rear end and roll bar. Its placement utilizes largely wasted space, and since it doesn't intrude into the trunk , the trunk is large and usable. The disadvantages are : there is not a lot of space between the top of the tank and the underside of the bonnet, which makes hooking up the fittings and lines difficult. A gas cap with a large opening is required so that you can reach in and remove the fuel cell cap. I used a GT-40 cap from E.R.A. for about $240. The tank holds about 12 usable gallons. Since we get 25-30mpg with the ZZ-4 powered car this is not a problem for us.

We have built several cars with a "street rod" style aluminum tank purchased from Summit Racing. It holds 16 gallons and comes with the sending unit. It has 4 flanges welded to it which are to be used to bolt it in. We cut off 2 of them and re-weld them to the top corners of the tank so that the tank bolts to the rear 2" by 2" crossmember. When facing the trunk, we mount the tank with the filler neck to the right and slide the tank as far right as possible. Support the tank off of the floor of the trunk so that the tank is not touching fiberglass. Use a spacer or a few washers between the lower mounting flange and the bottom of the trunk that is being supported by the angle iron that hangs from the rear cross-member. When you have determined the correct height and side to side location, mark the 4 holes that you will drill into the frame. Remove the tank and drill 5/16in holes. Bolt the tank in.

With this tank we use a Cobra style fuel cap. These are available in two styles. The first has a large filler neck designed so that a production style filler tube with a screw in cap can be used. The second style, which we have used, has a flange with a neck to which the filler hose to the tank connects via a hose clamp. Both styles are available from Shell Valley at 1-888-246-0900. You can buy a filler hose at the parts store to connect the filler neck to the fuel tank. However, the hose is stiff and it is difficult to slip it on. The second solution is to have a muffler shop bend exhaust pipe to fit and then use a straight piece on either end to connect them.

We have had a problem with these tanks. The fuel pick up tube has come off inside the tank at the fitting. When this occurs, the engine doesn't get fuel and you are stranded! The hose has only a slip on connection. The solution is to remove the filler neck from the tank and install a new pick up hose (it's just rubber fuel line) and use a hose clamp to hold it to the tank fitting.

The advantage of this tank is that it is inexpensive and that it is simple to install. The disadvantage is that the tank is not surrounded by steel, it is vulnerable. The other disadvantage is that it takes up too much usable trunk space.

Another option is to fabricate a carrier that would suspend a fuel cell in the trunk. This obviously results in a smaller trunk. The brackets are easy to fabricate. You can have them made of we could, for a charge, make them. A tank carrier can be made to slide into the parallel 2" by 2" rear frame rails. The fuel cell carrier could be made from 1 ¾" in tubing would surround the tank, secured by two bolts, one per side, giving some protection to the fuel cell. Since the rear of the trunk curves under, you need to make sure that the tank you use will clear and yet still hang lower than the 2" frame rails. You will want to use a tank that has the fuel pick up and vent fittings on the top. CHECK WITH THE FUEL TANK MANUFACTURER TO MAKE SURE THE TANK MEETS YOUR PERFORMANCE AND SAFETY NEEDS!!

All fuel tanks that I've seen spill fuel through the vent tube. Make sure that the tube is routed higher than the filler neck and that its located so that when fuel spills out, it doesn't get on the tires. Fuel on the tires could cause you to lose traction.

Engines that use a carburetor(s) only require 4 to 6 lbs of line pressure. Any more than this will cause fuel to be pushed past the needle valves in the carburetor causing the engine to run rich. You won't be able to correctly adjust the carb. If you run a high performance pump you will want to run a fuel pressure regulator. Also, run a fuel pressure gauge so that you can correctly adjust the regulator.

The fuel line that you run is up to you. Rubber lines are cheap, simple to install, and are readily available. Braided lines are more expensive, are more resistant to chaffing and heat, and look cool! But, I have seen them wear through so you still need to be careful with routing. Hard lines are available in steel or aluminum and can be run mounted to the outside of the frame or you can drill holes in the frame and run the lines internally. Make sure that the holes you drill are oversized and then seal them with silicone to prevent dirt and moisture from getting in the frame and to prevent the fuel line from rubbing against the frame tubes.

We run the fuel line on the inside of the truss, on top of the 4 " main frame rails. We hold them in place with zip ties. Make sure that you do not tighten the ties to the point of collapsing the line, which would restrict fuel flow. Also, do not use silicone as a sealant or gasket material where it comes in contact with fuel. Fuel eats silicone. Silicone will clog you lines, filters and pumps. We suggest installing a filter before the pump and a second between the pump and carburetor.

ELECTRIC FUEL INJECTIONS REQUIRE A DIFFERENT FUEL DELIVERY SYSTEM.

Typically a fuel injection system requires a high fuel line pressure of (40-50lbs) Fuel flows in an open loop. Meaning that fuel flows from the tank to the fuel rails and then back to the tank. This requires a return line to the tank. An electric fuel pump is mounted in the tank. We have not run a fuel injected system to date. You will have to research and design the system that you need. You probably will have to have a custom tank made. I would try to use the tank from the vehicle that you bought the engine from, if applicable.

THE ELECTRICAL SYSTEM

You will have to research and determine what your electrical requirements are based on the engine/transmission that you use and other systems, such as air conditioning, stereos, etc. Companies such as Street and Performance, Painless Wiring, and It's A Snap Wiring, can assist you.

The cars that we have built have been very simple. We use carburetors, manual transmissions, no AC or Stereo. Therefore, we've only needed basic wiring. We have made are own wiring loom, used a Painless system and a compact system from It's a Snap. We prefer the system from It's a Snap. Their # is 1-888-462-7628.

We like to do the final wiring, before the body is placed on the frame. The body should be painted and ready for installation. Place the body on some padded supports so that when standing between the foot-boxes the body is at a comfortable height. We mount the fuse box to the main tub underneath the dash, just forward of the switch panel. When standing between the foot-boxes, facing the firewall , the fuse box and switch plate panel are within easy reach.

The wiring system that you purchase will have detailed instructions. Take your time and follow them and you shouldn't have any problems.

Here is the process that we follow when wiring.

1- **Install the fuse box. Don't use screws to secure it, bolt it in.**
2- **Separate the wires into 4 groups. Group 1 goes to the gauges. Group 2 to the switch panel, Group 3 to the front of the car for lights, cooling fan, etc. Group 4 goes to the rear of the car for lights, fuel level sender, etc.**
3- **We run the wires that go from the front of the car and to the rear along the underside of the top edge of the transmission tunnel. We run the wires through flexible, plastic conduit and attach them to the fiberglass tunnel with rubber insulated cable clamps. (The conduit and clamps are available at any parts store.)**

4- **Find a spot to the passenger side of the fuse box and cut a hole in the fiberglass that is large enough for the wiring that is required to go both forward and back to easily pass through. We make a rubber gasket to insert into the hole that we cut. A rough fiberglass edge can easily wear through or cut a wire. We cut rubber fuel line to length and then split one side of the tubing. We silicone the inside of the tubing and then open up the split side and slide it over the fiberglass edge.**

5- **Place the wires that run to the rear of the car through the hole. Run them through the conduit and suspend them every 6-8 inches. When you get to the rear bulkhead, route the wires on top of the rear inner deck, along the passenger side of the inner trunk support until you get to the inner rear vertical panel to which the tail lights are fastened. You can fasten the conduit externally (Where it is visible) to the vertical trunk support or you can drill a couple of holes into the support and route the lines behind the support. The wiring harness comes with extra long wires. Do not cut them off until you do the final fitting at which time you will cut them to length. Always leave enough slack to allow for future changes or repairs.**

6- **One of the decisions that you will need to make is about tail lights. We went for a simple solution that we think looks good and works very well. Our kit includes Jeep/trailer style**

lights, they are designed to be mounted externally. We mount them internally to the rear vertical bulkhead. We cut three vent style slots into the body directly behind the light. The light shines through these openings. To finish off the body openings we glue stainless wire mesh to the inside of the body. To waterproof the opening, we cut 1/8 in thick lexan to shape and glue that in over the mesh. Cut the mesh and plastic so that one piece of each covers all three openings. When gluing the plastic, use enough to allow for the thickness of the screening. Our lights come with instructions, templates, and hardware.

We mount the lights so that they can easily be removed. Here's how:
Stand at the trunk facing the inside of it. Take a light bucket and place it, lens side, against the vertical mounting partition. Center the bucket both in height and width to the openings cut into the body. The bucket should be oriented so that the clear part of the lens is towards the side of the car. With a marker, trace the shape of the light. Cut out the opening, making it large enough so that the light can slide through it. Cut a piece of luan, plastic, fiberglass, of aluminum, in a rectangular shape, large enough so that it covers the tail light hole by 1-2 inches in all directions. Mount the light to this piece, insert the light into the cut out and simply screw the mounting plate the mounting partition. Repeat the process for the other side.

If you want to use our style of light openings but want red lenses to be exposed instead of the stainless steel this is what you can do. We have found that early 1980 Buicks have large enough taillight lenses to allow us to cut a piece to cover all three of our openings is one piece. Once you have the light buckets (junkyard piece) disassemble them. There is an inner red lens, it is this lens that you want to use. Use a hacksaw to cut a piece large enough to cover the body cut outs. Preheat an oven to 300Degrees. Place the lens on a cookie sheet and place it in the oven. Heat the plastic until it becomes pliable. Be careful to not over heat the plastic as it will shrink and discolor. Once pliable, quickly take the plastic and press it against the inside of the light opening. (Wear gloves, the plastic is hot!) Press the plastic until it conforms to the inside shape of the body. You may need to repeat the process several times as the plastic cools quickly and becomes rigid. Make sure that you pay attention to how the plastic is oriented in the opening so that any texture in the plastic is viewed as uniform. Glue the lens in place. Use the provided light buckets without the lens cover.

7- Other tail light options include British, external mounted Jaguar style, or custom fabricate your own.

8- Other wiring that goes to the trunk is for the fuel gauge. We run this wire and grounding wires in the trunk harness. REMEMBER THAT FIBERGLASS IS NOT CONDUCTIVE. THEREFORE YOU MUST GROUND TO THE FRAME.

9- Group 3 wiring runs to the front of the car. It includes wires for the lights, horn, electric cooling fan, coil/distributor, tachometer, alternator, water temperature, and starter. We have run these wires through the firewall just under the top of the foot box cover, on the engine side of the foot box. Again we use plastic conduit to enclose the wires and support them every 6-8 inches. Group 3 will split off, with a split occurring at the back of the engine. This group will of course be comprised of the wiring that is required for the engine.

10- We run the wires that are required for lighting, cooling, and horn, in conduit along the engine side of the foot box, across the front of it, and alongside the inside of the frame rails. We then have used a quick release wire coupler(trailer connector) at the frame, at the front of the car. With all of the wiring connections for lights, cooling fan, and horn running through the quick connect its simple and quick to disconnect the wiring in the event of your needing to completely remove the hood.

11- GROUNDING. Make sure that all of your grounds are done to the frame, not to fiberglass. Make sure that you ground the engine to the frame. Grounding straps are available at any parts store.

12- Group 1 wiring: Gauges. Wire the gauges per the instructions included with your harness. Since the dash is removable, install the gauges and wire them on a comfortable workstation. Pad the workstation so that you don't scratch the painted dash. We use a trailer wiring quick connect between the dash wiring and the chassis wiring so that the dash can be easily removed.

13- Group 2 wiring, the Switch Panel. The switch panel fits between the dash and the top of the transmission tunnel. We install the ignition switch, cooling fan switch,(if it's manual), horn button, headlight switch, headlight hi/lo beam switch, and turn signal switch in this panel. We leave the wires for these switches extra long so that the panel can be unscrewed and moved out of the way in case of dash removal and or wanting access to the fuse panel.

14- A word about switches. Since the car is a roadster it is advisable to use water proof switches. Make sure that you use switches of sufficient amperage rating. The turn signal switch must be 3 way, the center position is off. We haven't wired indicator lights in our circuits but it would be easy to do so. One source of them is Motolita out of Florida. Since we use a race style steering shaft and steering wheel connector we have not built a car with shaft mounted turn signals. It would be possible to do but you would have to fabricate a mounting bracket. We think the dash mounted switch is simple and cool.

INSTALLING THE STEERING SHAFT AND WHEEL

Your kit comes with a two piece steering shaft, an adjustable steering shaft support clamp, two heim joints, and a splined steering wheel hub with a quick release steering wheel connector.

The short shaft has two U-joints welded on, one per end. One of the U-joints has two set screws. This is the U-joint that connects to the Corvette steering rack. The other end has a smooth bore. It is designed so that the long steering shaft slides into the U-joint. It is secured by a provided 1/4in grade 8 fine thread bolt. We have left the shaft extra long. You determine the length of the shaft based on the steering wheel location that you prefer. Then you cut the shaft to length. You need to drill a hole through the U-joint and shaft to secure it. Use a drill press to drill a 1/4in hole through the top of the joint and steering shaft. DO NOT DRILL THROUGH THE OTHER SIDE. Change the bit to a smaller diameter and continue to drill the rest of the way through the shaft and joint. The bit needs to be smaller to allow enough material to make threads when you tap the hole with a 1/4in tap. CHECK THE INSTRUCTIONS WITH THE TAP TO MAKE SURE THAT YOU USE THE CORRECT DRILL BIT SIZE. When you bolt the shaft together use Lock Tight on both the threads in the shaft and joint and the nut.

The short shaft has a quality Borgenson U-joint welded to one end that fits the Corvette rack. It has two allen head set screws with two locking nuts, one per set screw. Back the set screws out until the U-joint will slide onto the Corvette rack's out put shaft. Apply locktite to the threads of the set screws and threads of the locking nuts. Slide the U-join onto the steering racks' out put shaft. Tighten the set screws tightly. Make sure that the set screws are actually tight to the the racks out put shaft. It is easy for the locking nuts to turn as you tighten the screws. If the nuts bottom out it may feel as though the set screws are tight when they are not. Once the set screws are tight, turn down the locking nuts until they are tight.

IT IS IMPORTANT THAT THE U-JOINT IS INSTALLED CORRECTLY. IF NOT, STEERING WILL BE LOOSE, THE CAR WILL FEEL TWITCHY, AND IT'S POSSIBLE TO LOOSE STEERING CONTROL.

INSTALL ALL OF THE STEERING COMPONENTS FIRST, CUT THE LONG STEERING SHAFT TO DESIRED LENGTH AND ALIGN THE SHAFTS BEFORE PERMENANTLY INSTALLING THE U-JOINT TO THE STEERING RACK.

The shafts are supported in two places with race quality heim joints. The Heim joints have 3/4in threaded shafts. We have provided 2 Jam nuts per joint. Thread a nut on each joint until it almost bottoms out. Once the joint is placed or threaded into its appropriate bracket you will use the remaining jam nut, one per joint.

You will adjust the joint up or down to place the shaft at a height to that places the steering wheel to your liking. Always make sure that the shafts are not rubbing or interfering with anything. Our heim joint brackets also allow for side to side adjustment. Once you have the shafts adjusted to your liking use the jam nuts to lock the heim joints in place.

The long steering shaft slides through a hole that you will drill through the dash and drivers side foot box cover. On the cars that we have built, the dash hole is centered side to side between the Tach and Speedometer. Vertically the bottom of the hole is level with the bottom of the flat gauge panel. We use a hole saw to cut out the holes, and we make the dash hole large enough so that the dash can be removed without removing the steering shaft.

The steering shaft comes with a quick release hub and steering wheel adapter. We made the steering wheel removable so that the shaft can easily be removed, for security, and to make it easier to get in and out of the car for large drivers.

The steering wheel that you choose bolts to the removable hub with the provided bolts. In some cases (Grant steering wheels) you will need to enlarge the mounting holes on the wheel to fit the bolts on the hub.

To install or remove the quick release hub there is flange ring that you squeeze towards you. The hub positively locks into place once you release the flange. Verify this upon installing the wheel by pulling the steering wheel towards you. IT SHOULD NOT COME OFF. MAKE SURE THAT THE WHEEL IS POSITIVELY LOCKED EVERY TIME THAT YOU REINSTAL IT. YOU DO NOT WANT IT TO COME OFF WHEN DRIVING.

SEAT BELT INSTALLATION

The frame has attachment brackets for a 5 point safety belt system. The brackets are for a shoulder harness, lap belts, and submarine belt. When purchasing your racing harness you will want to specify a floor mount shoulder harness as opposed to a roll bar mount.

Since we use a fiberglass tub for the seats it is necessary to cut slots wide and long enough for the belts to slide through. Cut the slots approximately ¼ in wide and 5in long. The first slot is centered at the top of the seat. The second and third are on either side of the seat and are for the lab belt. The final slot is centered, at the front of the seat and is for the submarine belt. Since the submarine belt is narrow you will cut a narrower slot, approximately 2in wide.

Use the provided hardware to attach the belts to the frame. Use Lock Tight on all nuts. Make sure that the shoulder harness passes over the steel frame cross member that runs directly behind the top of the seats.

INSTALLING THE ROLL BAR

The roll bar is pre bent and is designed to slide into two receivers that are welded to the top of the rear frame. You will have to cut holes in the body directly above the receivers to allow the roll bar to pass through.

The roll bar is sent to you extra tall. Cut it to the height that you want. The bar is held in place with one 5/16in bolt per side, which is provided. You will need to drill the holes through the

receiver and bar. Drill the holes from side to side so that it is easy to remove the bar with the body still installed.

WINDSHIELD WIPERS

We have not provided wipers with the kit as we planned to use the car only in NICE weather. However when we decided to make a top for the car in order to extend the driving season wipers were called for. We have installed two different systems.

The first system was very easy and inexpensive. We bought a single speed motor and arm from JC Whitney. The total cost was about $30. We only bought one and installed it on the driver's side. We made a simple bracket that we clamped to the cowl hoop with a muffler clamp. It was very easy to run power to it from the fuse box, and we just used the on-off switch that is on the wiper motor housing. The switch is easy to reach but it is hidden under the dash.

The Whitney wiper blade is 12in long and is straight as it was originally designed for flat glass such as you would find in a Jeep. Our glass is curved so the straight blade does not work well. We bought a flexible 12 in blade that is designed for Cobras from Motolita of Florida. This blade fit the arm and solved the problem. This system works pretty well especially if you treat the glass with Rain X to prevent fogging on the interior side.

The second system that we've installed was a synchronized two blade system that is the Cobra system. These systems run about $350 and are available from Shell Valley or Motolita. This system works well and is easy to install. Again you will need to make a bracket to attach the motor to the cowl hoop. It is necessary to wire a separate switch and you will need a system matching switch if you want the wipers to cycle to a home position when it is turned off. The one draw back of this system is that it is noisy.

WINDSHIELD INSTALLATION

Installing the windshield looks complicated but it really is straightforward when taken at one step at a time. Our goal for the mounting system was to make it look good and be strong enough to stand up to the force of air hitting it at speed. We have driven the car to 158mph without problems.

The mounting system consists of a contoured lip that is moulded into the body into which the bottom leading of the windshield will be glued. At the outside edge of the lip is a raised area with a hole in it. There is a fiberglass hoop, which has a ½ in threaded rod extending out of the bottom of legs of the frame. Bolted to the top of the truss tube is a metal bracket. This is how the windshield frame is attached to the chassis.

Our design puts all of the weight of the glass directly to steel. None of the weight is supported by fiberglass. The bracket that bolts to the truss has 1/2in diameter vertically mounted tube. The ½ in rods in the frame legs slide through these tubes. On each ½ in rod are two nuts. When you the frame you will remove the bottom nut from each leg. The idea is to have the weight of the glass/frame to rest on top of the tube by having the top nut resting on the tube. The height of the frame can be adjusted up or down by turning the top nut up or down. Adjust the frame height until the bottom edge of the fiberglass legs are just above the body. You can make a gasket to go in between or use black silicone caulking to fill in the gap.

The mounting brackets are designed to allow for fore and aft as well as side to side adjustment. The brackets are attached to the truss with a muffler clamp. Simply loosen the clamp nuts to adjust the bracket. Retighten it to lock them in place. You want to adjust the frame so that the

bottom edge of the fiberglass legs match the raised mounting pads which are on the body, front to back and side to side. Before shipping your kit we installed the windshield frame and adjusted it to fit.

The fiberglass frame is a hard piece to mould because of the tight radius that is required to make the channel into which the glass fits. Consequently there is the potential for there to be air bubbles between the gel coat and fiberglass. You will want to find these and fill them with filler before painting. Simply press down on the gel coat while running your finger over the surface. If the gel coat depresses or cracks you have found an air pocket. Sand out the bad area and use filler to smooth it out.

We mould the frame extra large. That is, the channels are deep which results in a "thick" looking frame. We prefer a lighter look so we trim the frame by removing material from the open channel side. We make the frame 1 ¾ in wide along the top and at the top of each leg. Then we taper each leg from 1 3/4in to 2 ¼ in wide from the top of each leg to the bottom. You can shape it any way you want. The top corners of the frame look better if the are radius instead of squared. When removing fiberglass, slowly creep up to the final dimension that you want, it's easy to remove too much material.

The frame is designed so that the glass slides into the channel. With the glass resting into the moulded body lip (use small pieces of foam weather striping to keep the glass from resting directly on the fiberglass.) the frame should slide over the glass. The ½ in rods should slide into the brackets as it is slid over the glass. However the rods which are glued into the frames legs will keep it from fitting properly. You will have to do two things. First remove any excess glue by grinding it out with a small die grinder. Remove the glue until you are down to the rod. Second it is necessary to remove some glass from both outside edges of the windshield. This is not difficult. You will use a disc sander with 40-60 grit paper to remove glass. When sanding the glass place it interior side down and support it the full width with a cardboard box or other material that will not scratch. Do not have the glass just supported at the edges.

Slide the frame on the glass and mark it 1 in above the top of the ½ in support rod. Remove the frame. Look at the glass, you will observe the outer edge of the glass is curved not straight. Take a straight edge and lay it from the top corner to the bottom. Mark this line. Using your sander, sand the glass to the line, keeping in mind that you may have to remove some extra material along the edge where it meets the support rod. MAKE SURE TO WEAR SAFETY GOGGLES. The proper way to sand glass is to bevel it on top and bottom first by holding the sander as a 45 degree angle to the glass. Then hold the sander at 90 degrees and remove material until the bevel is gone. Repeat this process as necessary. TIP: Always keep the sander moving, you don't want to sand in on place too long and overheat the glass. Remove enough material so that with the glass in the frame and in place on the body that the glass is free to move up and down as well as side to side. The goal is to eliminate any pressure points on the glass.

Once the glass is shaped to fit you can permanently install it. The glass is going to be glued to the contoured lip on the body and glued to the frame by running silicone around the glass and frame on both sides. Then you will run silicone across the bottom edge of the glass to trim it out to the body.

Here are a few tips. We have always used black silicone as we think it looks best. Where the bottom edge is glued would be visible. We use black vinyl (available at any sign shop) cut it to match the contour of the lower edge of the glass, making the top edge match the dash and adhere it to the front of the glass. This blackens out the glass and hides the glue. Keep the lower edge of the glass from resting on fiberglass by making small shims out of peel and stick hard foam weather striping. Place about 8 pieces evenly across the edge. After the glass is installed but before you run silicone across the front of the glass use a razor blade to trim them even with the front edge of the glass. Lay some heavy beads of silicone across the face of the moulded in support lip for the bottom of the glass. With the glass in the frame(not glued) install it to the car. Make sure the support rods slide into the mounting brackets. Adjust the frame for height, fore and aft

and side to side and bolt it in place. Center the glass in the frame by sliding it side to side. Once you're sure that the glass is not pinched go ahead and silicone it in.

The windshield is not designed to be a grab handle to enter or exit the car. This is something that you will have to instruct each passenger about. Also, be aware that glass is close to the outer edge of the frame do not attempt to mount a mirror or side wind deflectors by drilling, screwing of bolting anything to the frame.

PEDAL ASSEMBLIES

The Dragon is set up for floor mounted pedals. For the throttle We like a pedal from CNC part #cn174 from Afco racing products. (812-897-0900) This pedal is designed to pull the throttle cable. It has a flange on the ride side that lends itself to attaching the cable. The cable runs parallel with the engine side of the footbox then snakes up under the dash, through the firewall to the carb. You will need to fabricate a bracket that will bolt to the side of the footbox, by the pedal to lock the cable into place.

For brake pedals we like CNC or Wilwood assemblies. The brake pedal has provisions for two master cylinders while the clutch uses one. The clutch Master cylinder is a Girling style ¾ in bore. Make sure to order the correct fitting to connect a 3 AN line to the master cylinder. Different makes have different requirements.

The pedals are designed to bolt to the floor. Never bolt them only through the fiberglass bottom. You must use install the aluminum floor pan and bolt through this as well. We raise the pedals off of the floor ¾ in. You can fabricate a mounting plate out of steel or simply cut a plate of a good grade of 3/4in plywood. The ¾ in elevation is necessary for the master cylinders to clear the front cross-member if the pedals are mounted as far forward as possible. Even if not needed for elevation we like the plate because it stiffens the mount. The bolts go through the brackets, plywood, fiberglass, and aluminum to create a stiff sandwich.

When mounting the cylinders against the front of the footbox you will cut the appropriate size hole for the master cylinder's push rod to pass through. The fiberglass is sandwiched between the master cylinder and pedal's bracket.

If you mount the pedals farther back in the footbox you will cut out the front of the footbox and make a new one to fit inside the box at the spot you determine. Again, this piece will be sandwiched between the pedals and master cylinders. Once permanently mounted seal the edges with silicone.

CLUTCH LINKAGE OPTIONS

There is not room for a mechanical clutch linkage. Your choice is to use a hydraulic throw out bearing or an external slave cylinder, which activates the stock clutch arm.

A hydraulic throw out bearing is appealing because it's simple and compact. Hydraulic lines run into the bell housing through the clutch arm opening. (The clutch arm is eliminated.) The line's hook up to the throw out bearing which expands when activated to release the clutch. There are negatives to using this system. If repairs are needed you have to remove the transmission. There is limited travel with a hydraulic throw out so you must be precise in pre adjusting it. If not adjusted properly the clutch won't disengage or the slider part of the bearing can actually pop out of its housing. Both situations require removal of the transmission to repair. The hydraulic lines if not properly secured with in the bell housing can actually get sucked into the clutch fingers and get severed. Guess what you have to do to repair! Finally the rubber O rings in the bearing can dry out and leak, which again requires removal of the transmission to fix.

We prefer to use an external slave cylinder. It is extremely quick and easy to make repairs or replace it because it is easily reached by removing an inspection panel that runs parallel to the

engine along the inside of the driver's foot box. You will cut out an access opening in the side of the footbox. You can fabricate a cover for the opening out of sheet metal.

There are two types of slave cylinders that will work. The first is a push style made by CNC and it bolts to the engine block using stock mounting holes. The only downside to this system is that the cylinder is small so its throw is short. The clutch arm must be adjusted within close tolerances to work properly.

We use a pull cylinder made by Wilwood. To use this cylinder you must fabricate a bracket to mount it to the frame. Since the cylinder pulls the bracket would place to the rear of the clutch arm. We made a bracket that bolts to the angle iron support that runs along the footbox. Make sure that the cylinder is inline with the clutch arm and pulls straight. Use lock Tight on all adjustment nuts as the only trouble we've ever had with this system is the adjusters working loose. If the clutch seems to not be completely disengaging it is because the adjuster nuts are loose. Because the cylinder is a pull type the rod that attaches it to the clutch arm goes through a hole that you must drill into the arm. The hole will be where a pivot ball would contact the arm (The spot is concave). Drill a large enough hole to allow the arm to go through its full range of motion without binding.

If you hook up your clutch and it doesn't disengage completely check the clutch pedal before anything else. We have had the control rod that activates the clutch master cylinder bent which prevented it from not extending fully. This was caused by improper adjustment of the rod in the clevis that attached it to the pedal. It had been adjusted to tightly. When the pedal was depressed it bottomed out on the rod and bent it.

INSTALLING THE ENGINE AND TRANSMISSION

The Dragon frame is set up for Chevy early style wide and short engine mounts. Engine mounts come designed to attach to the frame with 7/16" diameter bolts. We use ½ in diameter bolts to keep the tolerances closer. You will need to enlarge the holes in the motor mounts to ½-inch, simply drill them out.

We have not drilled mounting holes in the transmission cross member for a couple of reasons. Their location will depend on the transmission that you run and the bell housing. We are making new frames with an adjustable trans mount. This mount can adjust forward or back you will drill two ½ in holes to bolt it to the frame. Remember that the engine sits 1 in to the passenger side. The trans mounting holes will be offset as well.

We recommend a scattershield bell housing especially if you plan to race. A clutch can come apart. When it does the pieces can easily slice through a standard bell housing. You can get a safety blanket that goes around an automatic trans as well.

The engine and transmission sit low in the chassis. Typically the bottom flange of the bell housing is the closest part of the car to the ground. We cut off the bottom flange. This can be done with a sawsall or with a plasma cutter. Scatter shields come with a plate that goes between the engine block and the bell housing. Racers usually leave this out but if using the car on the street you will want it installed to keep debris from getting inside the bell housing.

INSTALLING OUR HEADERS AND SIDE PIPES

Our headers are specifically built for our car. They are easy to install as there aren't any clearance issues. You will have to by header gaskets, header bolts, and two 5/16 by 3 in bolts to complete installation. The two 3 in bolts are used to hang the side pipes.

Bolt the headers to the engine. Cut out an opening at the front of the side pipe recessed area large enough to allow the turn out on the side pipe to slide through and into the header collector. The openings are different on each side as the drivers side cylinder head is farther forward on the block. Allow for ½ in of space between the exhaust and fiberglass.

Align the side pipe so that it runs parallel to the body and is spaced evenly into the recessed area. Drill a 5/16 in hole through the rear cross member that corresponds to the holes in the side pipe mounting flange.

Drill 3 3/16 in holes through the header collector and side pipes slip connection. Use stainless steel rivets to fasten the two pieces together. Do not use aluminum, it will melt.

Tips: You can cut off some of the collector if the side pipe needs to slide further in to line up. The baffle inserts have perforations along their length. Exhaust slides over the perforations not into them.

INTERIOR INSTALLATION

The Dragon comes with two snap in seat covers. Obviously, snaps hold them in place. Simple set the covers into the seats and screw in a snap stud for each snap that's sewn into the cover. There is also two velcro strips per seat. Peel and stick the velcro to the fiberglass seat so that when the cover is installed the sewn strips engage the strips on the seat.

If you purchased our complete interior kit you will have bound carpet pieces for the floor, foot box sides and trunk. Simply glue them by using a good quality upholstery adhesive. The trunk pieces have been left oversize and are designed too be cut to fit as needed.

The bolster that fits along the top rear of the cockpit is pre made and snaps in. Like the seats you will screw in a snap stub to correspond with snaps on the bolster.

There is a weather striping that slides onto the inner trunk opening flange. Simply tap it onto the flange with a mallet.

There is a flexible trim piece to go over the edges of the dash. Gently tap this on with a mallet and cut to fit with a pair of dikes.