

McLaren Mc B B INSTRUCTIONS

If you looked at all the pieces in the box, you've probably noticed that this kit is different from anything you've built before. Construction will sometimes challenge your patience and abilities, and construction time will probably be three or four times the amount you are used to. You will proceed slowly even if we hadn't already told you to do so! The reward for passing this test will just possibly be the finest car model you have ever created.

The real cars appear at first glance to be simple, straightforward race cars, but they were in fact fairly complex, large and very "dense" machines. As much as the molding process will allow, this kit has endeavored to capture that complexity. Due to the close proximity of the parts in the real car, certain compromises must be decided upon before the onset of construction. This instruction sheet will take you through the steps required to produce the desired end result. Decide **now** just how you want to display the finished model.

While you will discover building variations of your own choosing, we recommend the following options for display:

- Car assembled as a complete chassis with the body panels displayed separately.
- Car displayed with the body panels on the chassis. Much of the internal detail will not be seen and may therefore be omitted from the chassis
- Variations on the above. Examples: Doors glued in place with the front and rear body panels displayed separately. Front body glued in place along with doors. Engine cover and rear panel displayed off the car, etc.

As on the real car, the engine cover is a tight fit. You may wish to alter the construction sequence to accommodate this tightness. Putting the cover in place before the wing is installed will make the cover easier to put in place but will make the wing more difficult to deal with.

These are the kinds of decisions that you the modeler will be called upon to make, but don't worry, we'll let you know when to make them and what your options are.

As you can see, this kit is more than just "assembly." You will become involved in the construction

Every effort has been made to represent the real car in both styrene and vinyl. The molding of the vinyl parts allows the builder to construct an exact replica of virtually every detail on the M8B. In

order to represent these vinyl lines and have them interface with the plastic parts, there will be situations where two parts will want to occupy the same space. Think of it this way: the plastic body panels on this kit aren't much thinner than the panels on the real car! Reducing the dimensions of the real car to 1:24 scale is simply not possible with injection molded plastic. Because of this disparity, it is much easier to build the car with the body panels displayed off the car or to construct the kit with body in place and some details omitted. Leaving out certain vinyl parts will allow the body to be more easily placed on the chassis. The door panels may be closed or opened to display the detail on the fuel tank tops. Hinges are provided to make the doors functional, but constructing the kit this way will give up authenticity for function. An option would be to glue the doors permanently into the desired position. The piano hinge on the lower outer edge of the door panels may be glued to the top of the chassis. Super detailers may opt to use the kit vinyl parts as a guide and to utilize aftermarket "plumbing," as these materials are very thin and will allow slightly more clearance if the body is placed on the chassis. These items are available in better hobby shops.

By the time you finish this kit, you will have developed a close relationship with the real McLarens. They were not quite the simple machines we remember.

These cars left the factory with the majority of the chassis unpainted. The bodies of the factory team cars obviously were painted in Team McLaren orange, while "customer cars" were often delivered in unpainted gelcoat fiberglass or painted at the factory in the customer's choice of color. There was a wide variation in many of these "customer car" colors, as an occasional shunt and subsequent repair could result in another "slight variation" in the original color. We recommend that you carefully study all available photos of the real cars and use your judgment as to what color you apply to the body. In the meantime, we have researched the

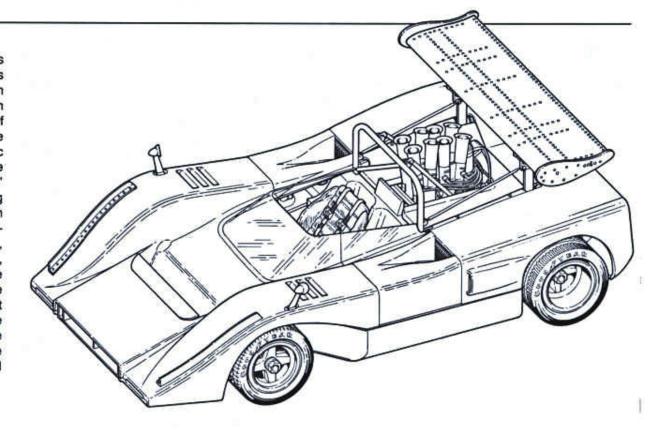
"proper" color for this kit and suggest that you use Tru-Match #7 Orange (#1011). As for the engines, most were painted flat or semi-gloss black, but an occasional all-aluminum finished power plant can be found in contemporary photos. As may be expected, there were many variations in the colors of auxiliary and component parts. Our recommendations can be used as a guideline, as many cars were finished in these colors. You may use your favorite metalizers or metallic paints for the unpainted components, while flat and semi-gloss black will effectively replicate most of the other painted surfaces.

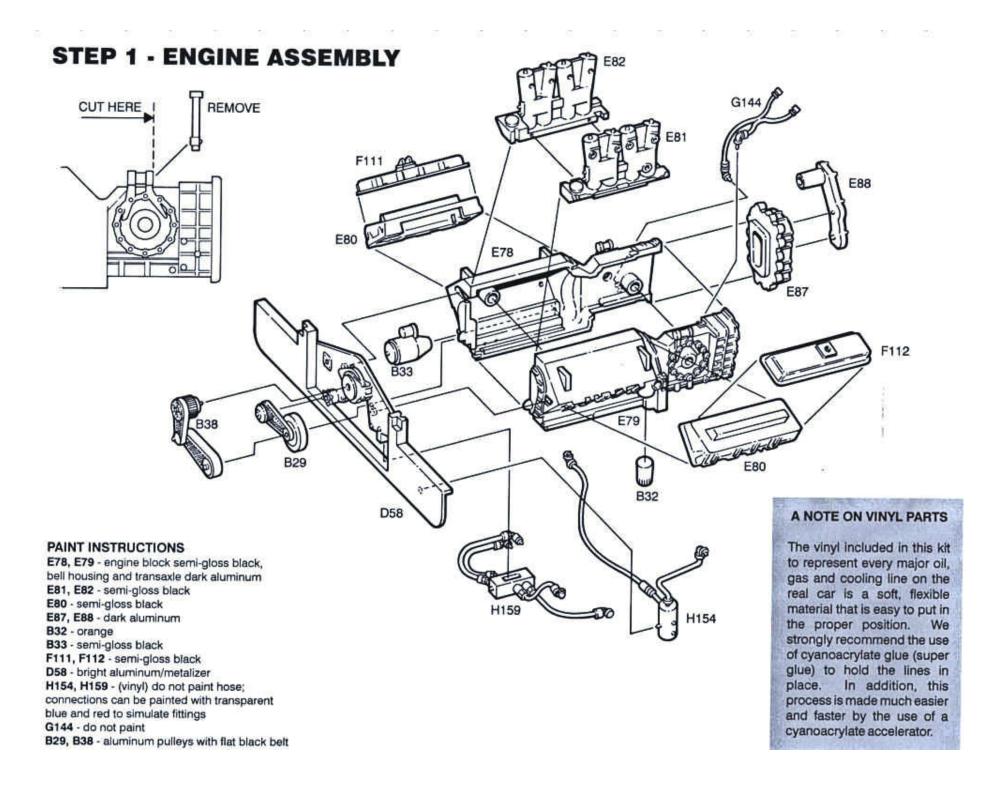
IMPORTANT

As always, study these instructions and the kit components before beginning assembly. Everyone says this, but with this kit it is a critical part of the assembly process. You can find yourself in trouble if you do not pay attention to what we have already discovered for you. Assembly is straightforward and logical and will give you the opportunity to see just how the real cars were built. We have made every effort to keep things "in scale," so use extra care in removing and handling the many small parts. Do not remove the vinyl lines until you are ready to

install them. Many of these lines look similar and are easy to mix up, so test fit and then test fit again. The vinyl lines have been molded in the appropriate color and can be enhanced by painting the connections first with bright silver paint and then applying a thin coat of clear blue or clear red acrylic paint. The vinyl lines may be glued in place with your favorite brand of cyanoacrylate glue, contact cement or an adhesive like Pliobond. All components should be painted and finished before assembly, since many will become inaccessible after assembly.

In 1966, North American racing officials created the most awesome series of races ever witnessed. Group 7 cars would race in the Can-Am Challenge. It was to be an "anything goes" class that allowed engines of any size and configuration. Wings, ultra wide tires, four wheel drive and trick aerodynamic devices were the rule rather than the exception. Virtually nothing was "banned." Race car designers had a field day building some of the most potent machines to ever turn a lap. The series attracted some of the bestknown names in road racing. Ford, Ferrari, March, Porsche, Chaparral, BRM, Bryant, Shadow and, of course, McLaren. In the nine years that the series ran, the top drivers in the world competed for dollars and glory at speeds that clearly made them the fastest race cars in the world. By the time the series came to an end, two names emerged and became etched in road racing history - McLaren and Porsche.

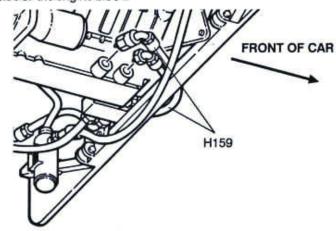




	Before you begin actual assembly, you must first remove the engine cover	starter solenoid pointing upwards.
	supports from the rear of the engine block halves. Using the illustration above as a guide, cut just behind the horizontal cylinders as shown to remove the vertical support posts from each engine half. Smooth and clean up.	Carefully remove the fill tabs on the bottom of the right valve cover (F111) and the left valve cover (F112). Glue the valve covers to the tops of the cylinder heads.
	Glue the right engine/transaxle half (E78) to the left engine/transaxle half (E79).	Glue the vinyl oil pump and scavenger lines (H159) to the locator on the
	Glue the right injector stacks (E82) to the left injector stacks (E81). Be sure to keep these parts parallel to each other vertically.	bottom opening of the engine plate/ rear bulkhead (D58), locating from the rear side of the bulkhead so all lines remain placed to the rear.
	Resp those parts parametre dustrother vertically.	Glue the oil screen filter and lines (H154) to the locating hole on the left side of
	Before gluing the heads onto the block, be sure the spark plug holes are cleaned out so as to make the upcoming installation of the spark plugs easier. Now glue the two heads (E80) to the engine/ transaxle. The right head will be located slightly back from the front of the block.	the engine plate/rear bulkhead. The longer line should pass under the forward edge of the engine. The other ends of both lines will be located later in the assembly process.
	located slightly back normal climate and slightly	☐ Glue the transaxle oil cooler lines (G144) to the top and side of the transaxle.
	Glue the transaxle cover (E87) to the rear of the transaxle. Glue the shifter housing (E88) to the transaxle cover.	The other ends of these lines will be attached in a later step.
	modnig (200) to the harrown	Glue the engine assembly to the engine plate/rear bulkhead (D58).
	Glue the injector assembly into the vee between the heads. Make sure the	
_	injectors are vertical. The round hole goes to the front and the square hole to the rear.	☐ Glue the engine balancer/fuel pump drive (B29) to the front of the engine.
	The Court	Glue the oil pump drive (B38) to the front of the engine balancer/ fuel pump
	Glue the oil filter (B32) to the left side of the engine block.	drive (B29) and the engine plate/rear bulkhead (B58).
	Glue the starter (B33) to the right side of the engine block and the bell housing. The tapered end of the starter glues to the bell housing with the	Finally, glue the two lines from the oil pump/scavenger (H159) to the bottom front right side of the engine block.
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THE NOT-SO-LITTLE ENGINE THAT COULD

The engines that powered the McLarens were simple and very efficient. The massive horsepower and torque provided by these big-block 7-liter aluminum powerplants made the 1500 lb. M8B little more than a way to strap an engine to the driver's back. Conventional carburetors were shunned because they were not capable of delivering instantaneous response to the throttle. So the fuel delivery system became Lucas fuel injection - the first choice of the drag racing set. This configuration produced an engine capable of delivering enormous (635-690) horsepower and torque, a combination that literally tried to twist the engine around itself. Broken crankshafts were common. Power to weight ratios in the area of one horsepower for every two and one half pounds of weight spelled trouble for anyone foolish enough to misuse the throttle. Hardly any car produced today can match the performance of this "antique."



DID THEY MEET THE EPA FUEL MILEAGE FIGURES? Hardly. Three to five miles per gallon was considered an "economy run."

STEP 2 - HEADER ASSEMBLY

We will now assemble the most complex portion of this kit. The relationship of the suspension components in the real cars often required the removal of parts to gain access to the desired location, especially in the area of the header/engine supports. This kit has included all of these pieces and has attempted to keep them both in scale and in the correct location. Due to this extremely tight environment, you may elect to leave certain parts off due to the difficulty in maintaining this

OIL SCREEN FILTER

PAINT INSTRUCTIONS

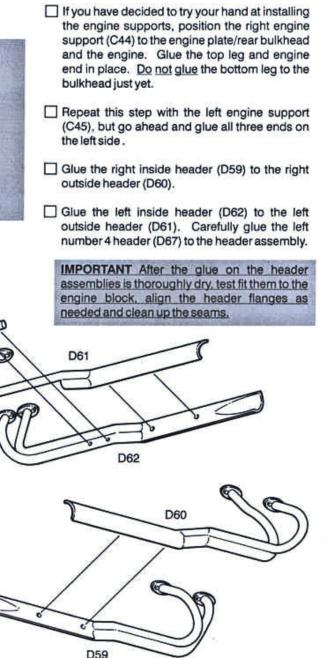
C44, C45 - semi-gloss black.

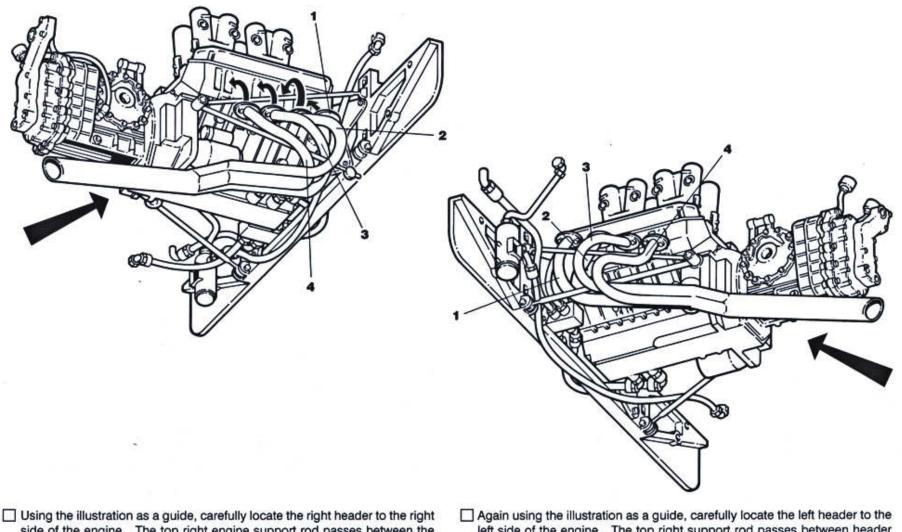
D59, D60, D61, D62, D67 - semi-gloss black

AND LINES (H154) OMITTED FOR CLARITY "real world" relationship. The engine supports that pass through the exhaust headers may be left off without dramatically affecting the visual impact of the finished kit. They are very hard to see when the engine assembly is completed. This decision is left to the builder. This assembly is challenging and will tax your patience at times. But it can be done! Bottom line - leaving those engine supports off will greatly simplify construction.

DO NOT GLUE NOW

C45

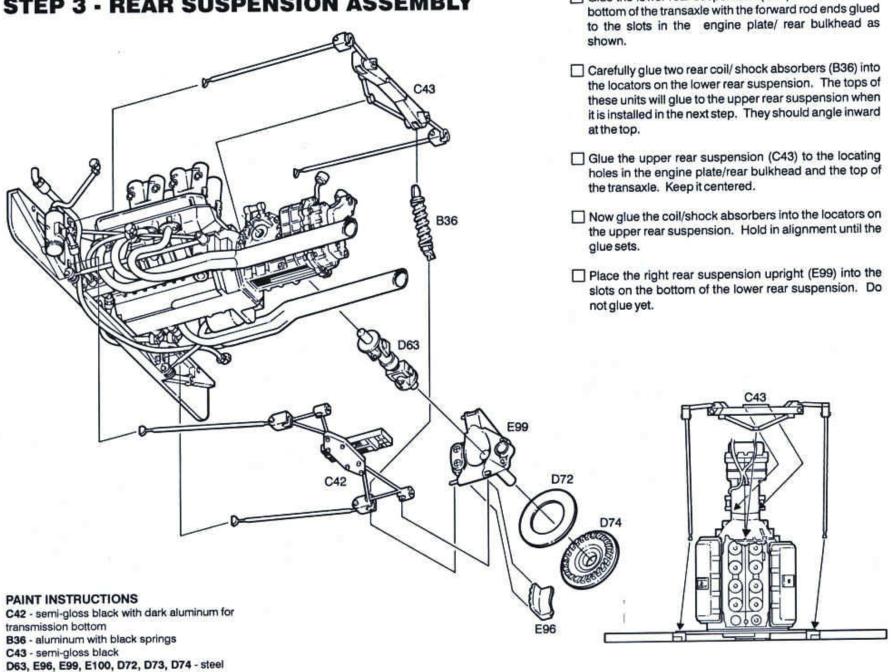




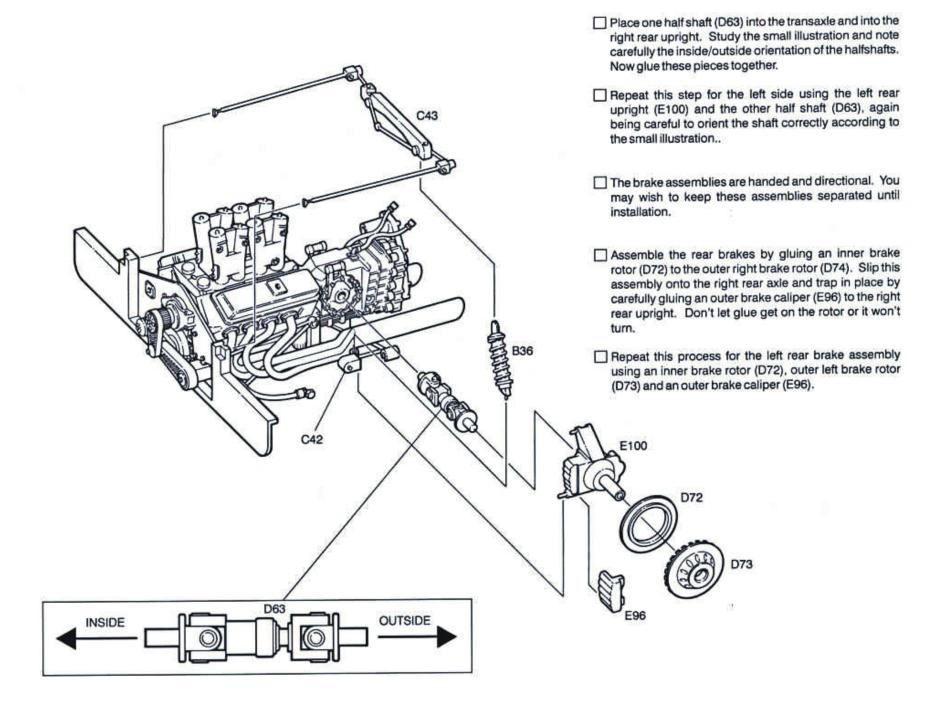
Using the illustration as a guide, carefully locate the right header to the right side of the engine. The top right engine support rod passes between the number 1 and 2 header pipes, while the lower engine support rod passes between the number 3 and 4 header pipes. The best way to position the header is to first thread the lower right engine support rod between pipes 3 and 4, then ease the header into position as you pass pipe 2 over the upper rod and pipe 1 under the upper rod as shown. You may even find it beneficial to glue flanges 1, 3, and 4 to the head, then glue flange 2 into position after they have completely dried. Be patient and study the drawings for the proper location of the headers to the head. It can be done! You should be able to see the spark plug holes when the headers are properly in place.

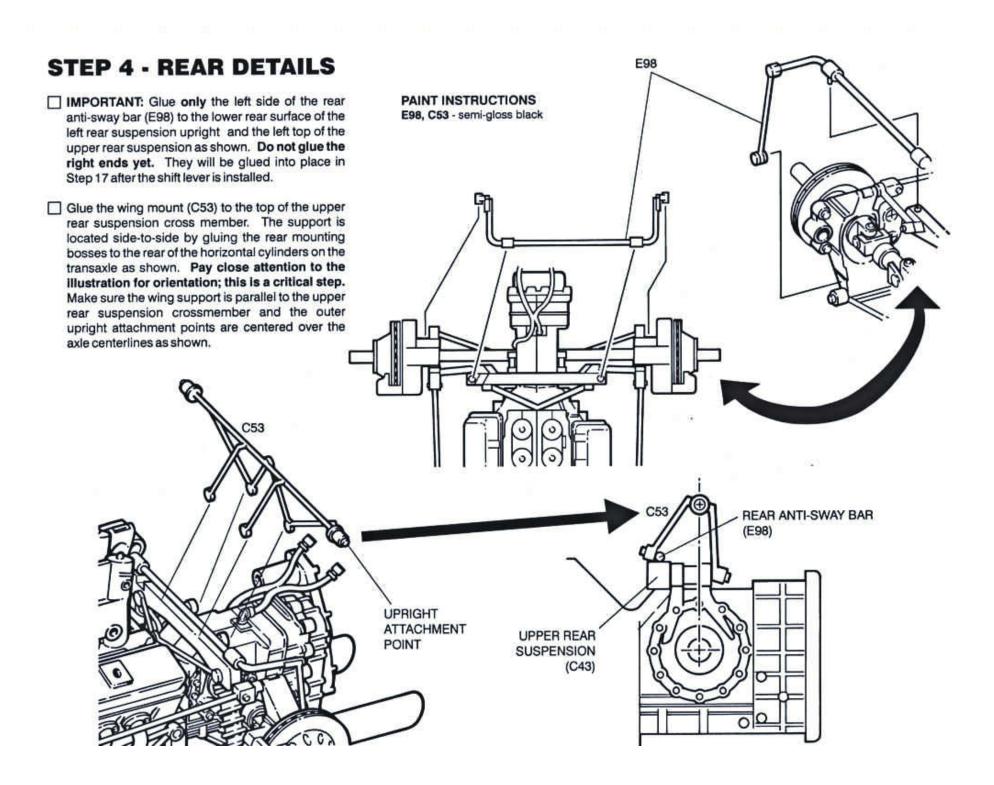
- Again using the illustration as a guide, carefully locate the left header to the left side of the engine. The top right support rod passes between header pipes number 2 and 3. The lower rod also passes between the number 2 and number 3 header pipes. Glue the left side flanges to the head. As you work, be careful to keep both header assemblies horizontal to the bottom of the engine.
- After all the header pipes are in place and the glue sets, but before the glue is thoroughly dry, carefully and lightly reposition the tail pipes into horizontal alignment relative to the transaxle rear.
- Now glue the bottom leg of the right engine support (C44) to the bulkhead.

STEP 3 - REAR SUSPENSION ASSEMBLY

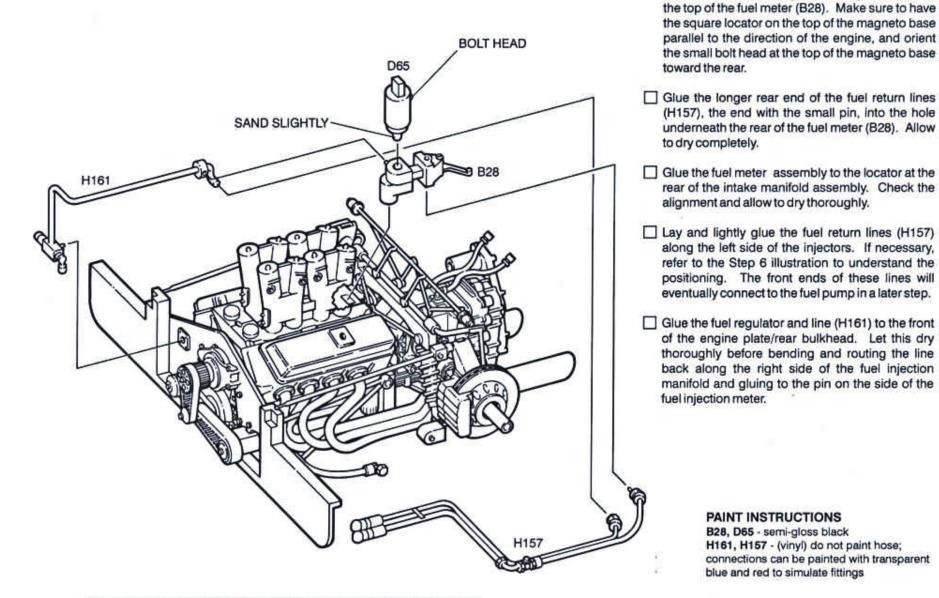


Glue the lower rear suspension (C42) to the slot in the



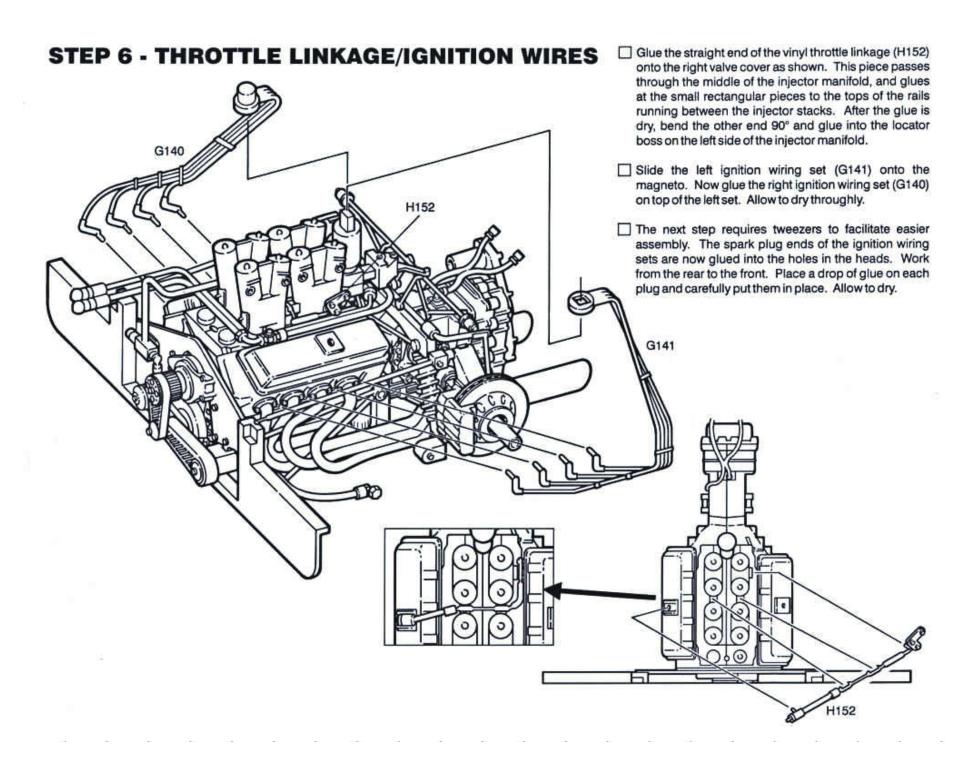


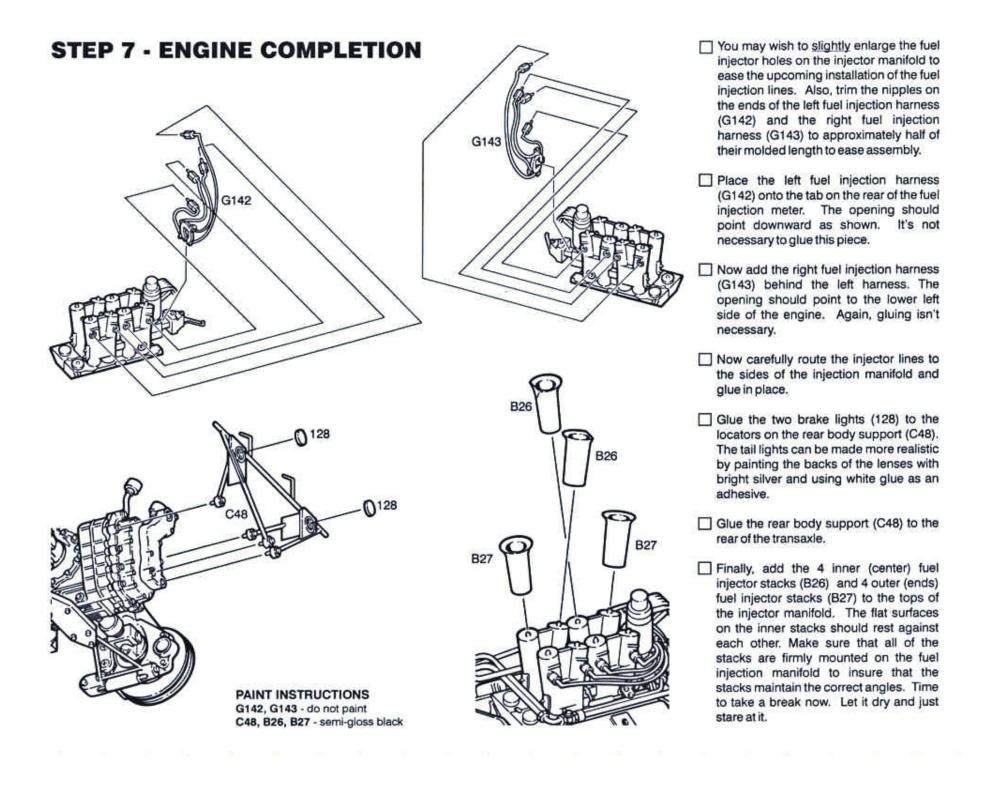
STEP 5 - FUEL INJECTION/MAGNETO

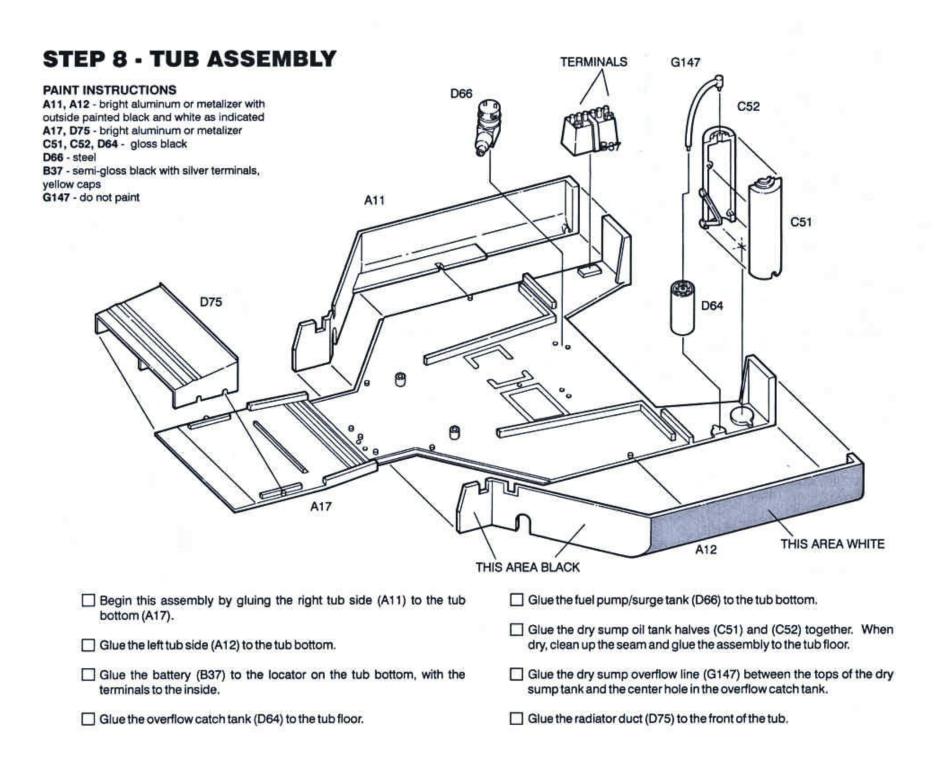


After sanding the circumference of the round pin slightly on the bottom of the magneto base (D65) to allow for a better fit, glue the magneto base to

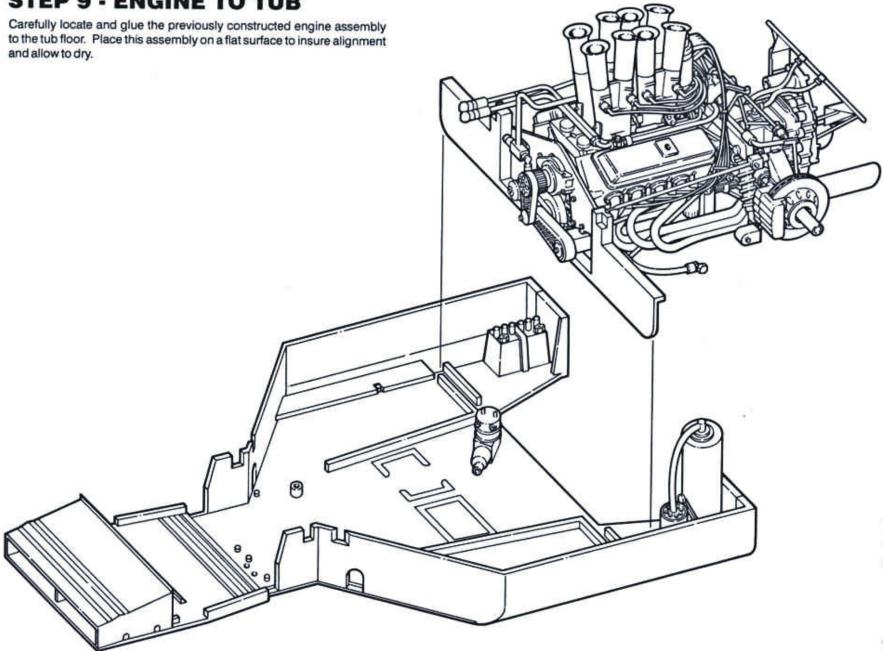
SOME PREVIOUSLY ASSEMBLED PARTS OMITTED FOR CLARITY



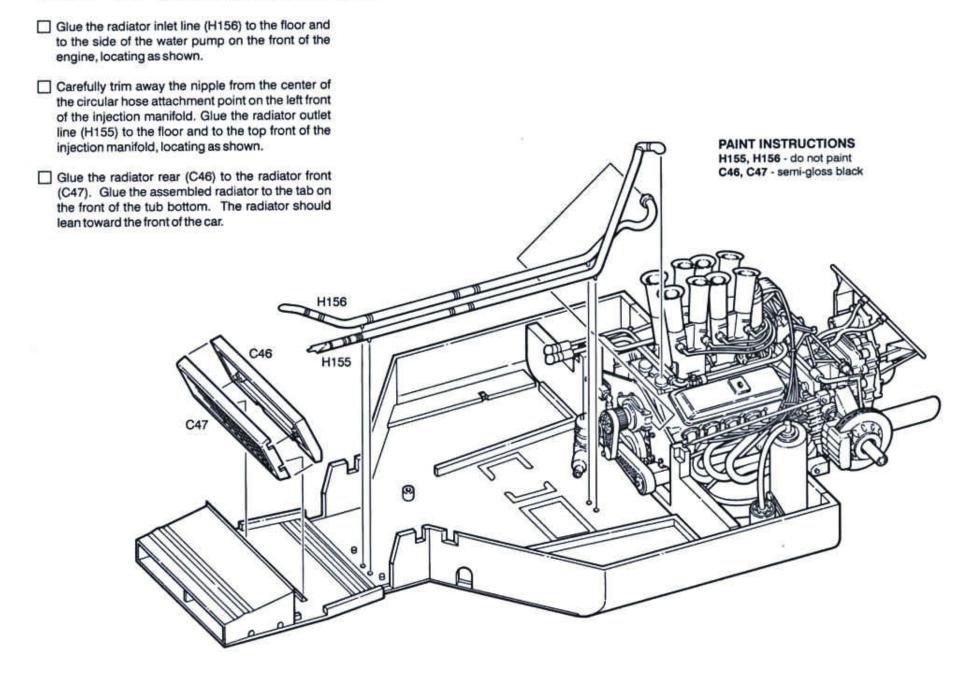




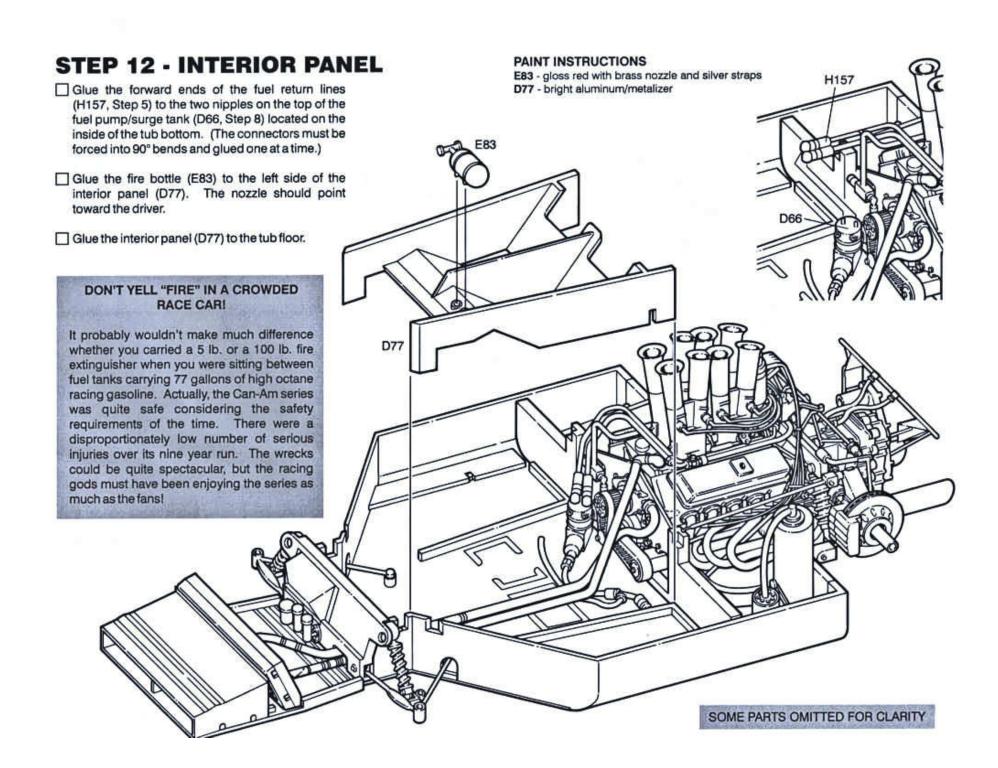


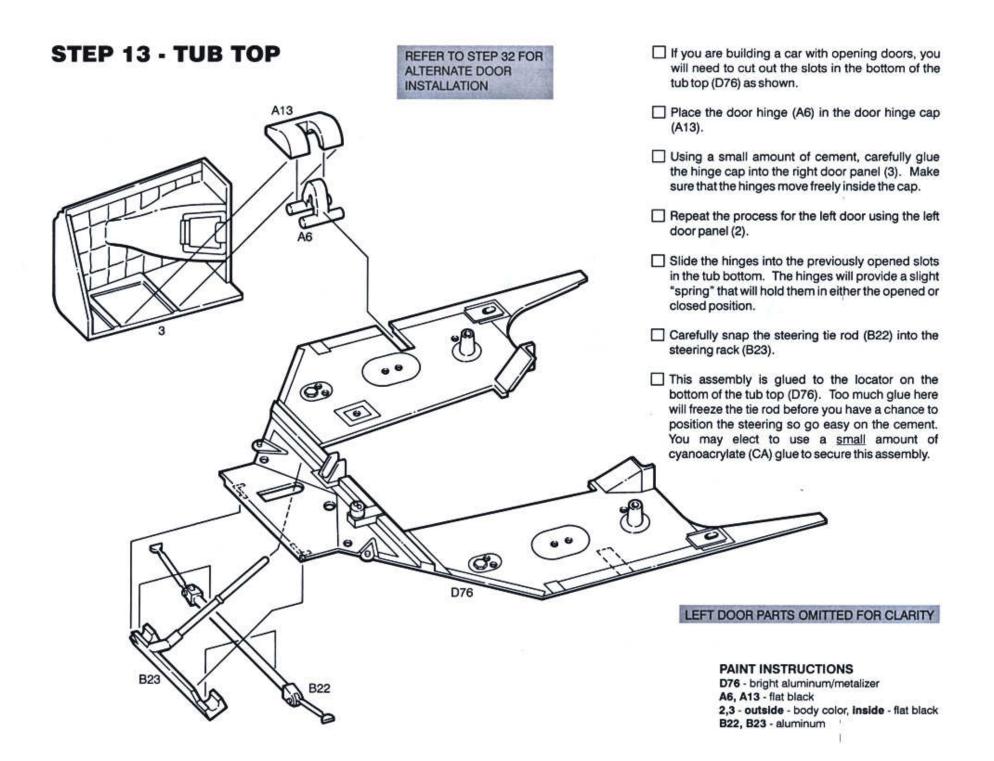


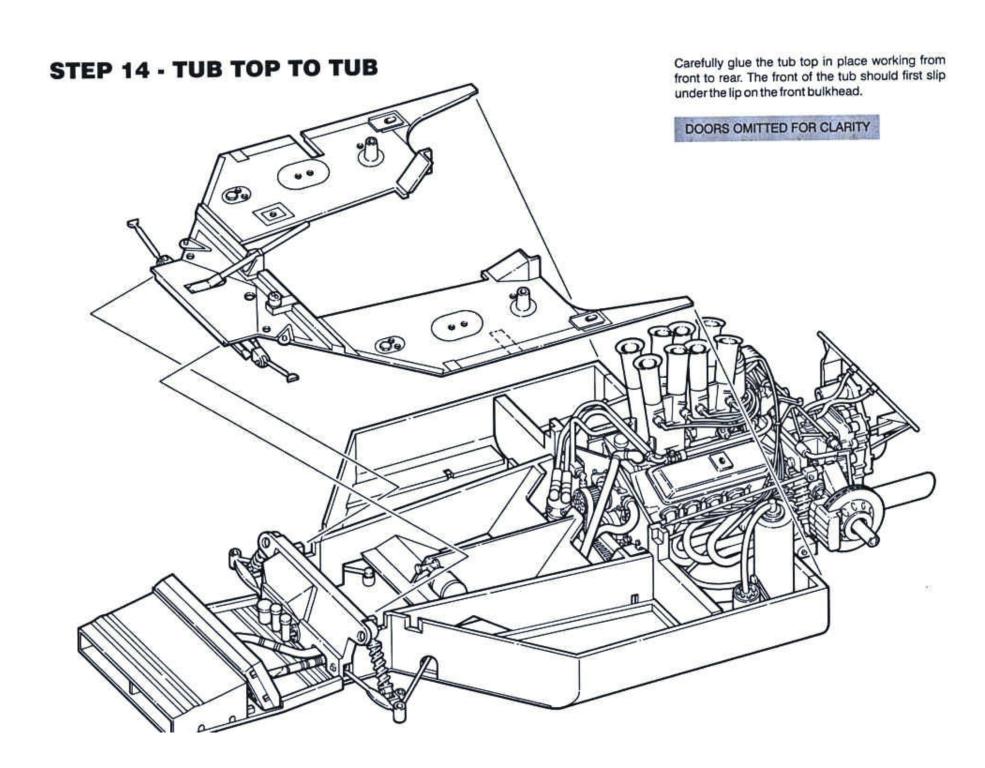
STEP 10 - RADIATOR/HOSES

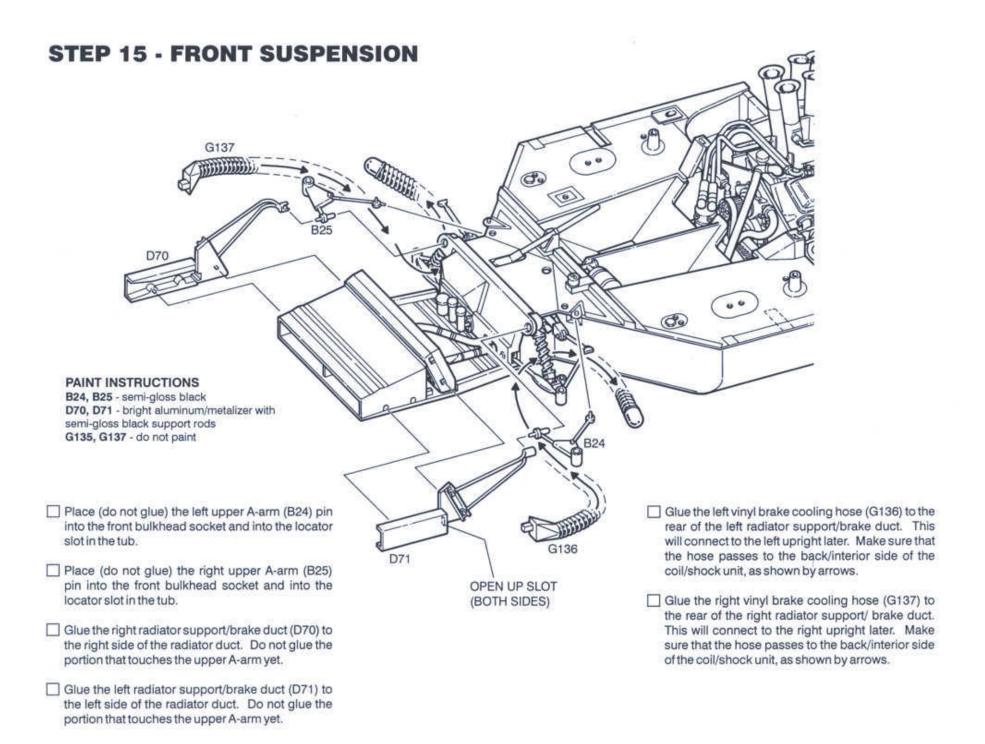


PAINT INSTRUCTIONS STEP 11 - FRONT BULKHEAD H151 - (vinyl) do not paint hose; connections can be painted with transparent blue and red to simulate fittings E84, E89, E90 - aluminum D68 - bright aluminum/metalizer B34, B35 - semi-gloss black B30, B31 - aluminum with black springs RADIATOR AND INLET D68 AND OUTLET LINES OMITTED FOR CLARITY Glue the front bulkhead to the tub floor as shown. Glue the left lower A-arm (B34) to the tub floor and the locating hole in the slot on the lower outer bulkhead. ☐ Glue the fuel tank pickup line (H151) to the fuel pump/surge tank as shown. The remainder of this piece ☐ Glue the right lower A-arm (B35) to the tub floor and the should be left loose, and will be more positively located by locating hole in the slot on the lower outer bulkhead. the notch in the interior panel to be installed in the next step. (This part is not visible when the model is complete Glue the left front coil/shock absorber (B30) to the forward and may be omitted.) locator on the lower A-arm and the top of the front bulkhead. The hole in the shock top points forward. Glue the pedal unit (E84) to the front bulkhead (D68). ☐ Glue the right front coil/shock absorber (B31) to the Glue two brake hydraulic reservoirs (E90) and the clutch forward locator on the lower A-arm and the top of the front hydraulic reservoir (E89) to the front of the front bulkhead. bulkhead. The hole in the shock top points forward.

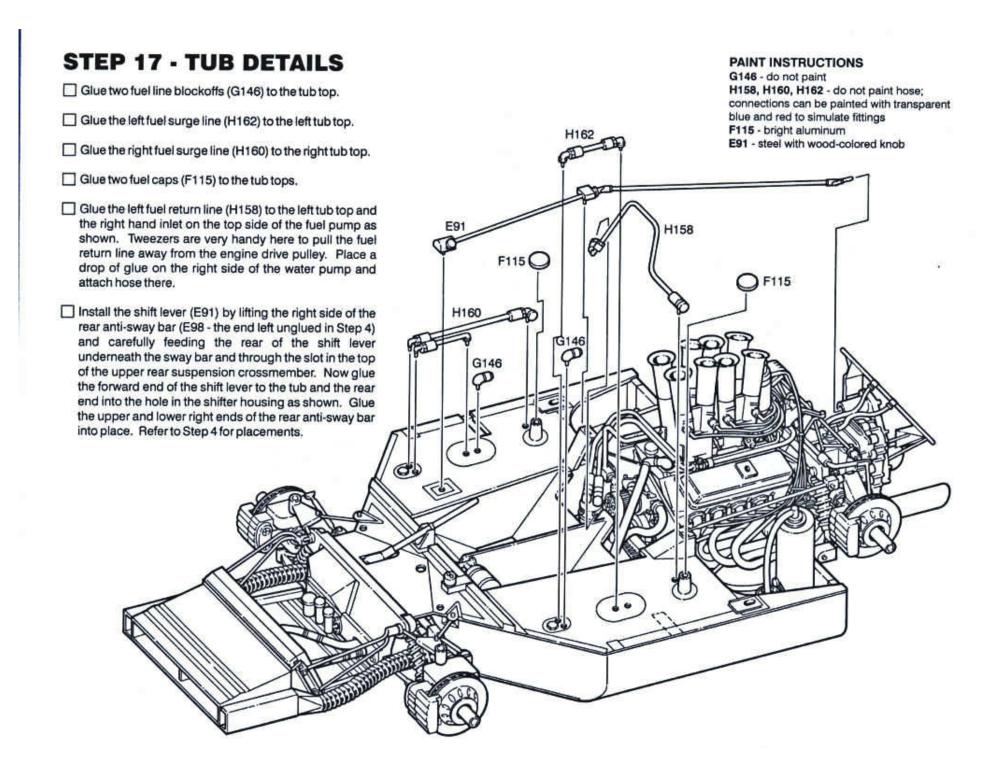


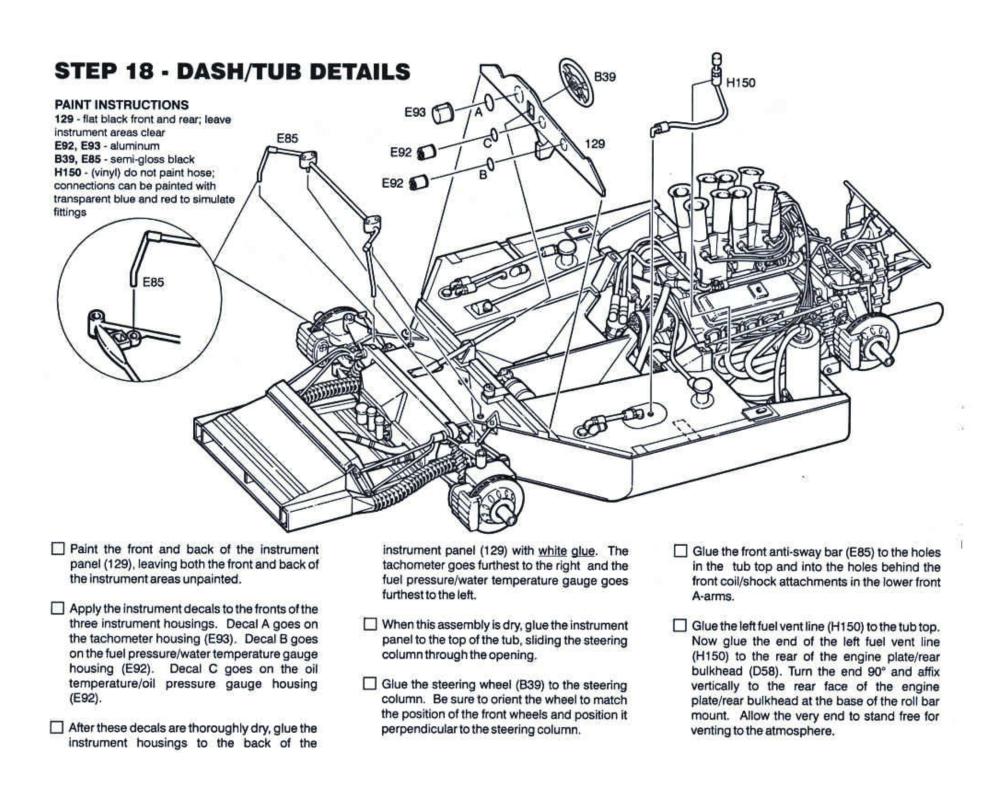






STEP 16 - FRONT BRAKES/HUBS ☐ Snap the left and right front uprights in place between the left and right upper and lower A-arms. The steering may be posed at this time by locating the Remember, the disc brake rotors are handed and steering tie rods into the slots in the inside upper rear should be kept separate until installation. of the uprights and gluing them in place. Working one side at a time, glue all elements of the first side (except Assemble the left front brakes by gluing an inner brake the rear of the brake cooling hose) into position, rotor (D72) to the outer left brake rotor (D73). Slip this posing the one spindle as desired. assembly onto the left front upright (E95) and trap in place by carefully gluing an outer brake caliper (E96) After that side is completely dry, glue all elements of to the left front upright. Don't let glue get on the rotor the other side. When all glue sets, glue the rear of the or it won't turn. brake cooling hoses into place. Repeat this process for the right front brake assembly You may now glue all of the previously unglued using an inner brake rotor (D72), outer right brake suspension components. rotor (D74), an outer brake caliper (E96) and the right front upright (E94). PAINT INSTRUCTIONS D72, D73, D74, E94, E95, E96 - steel





STEP 19 - REAR PLUMBING

Glue the rearmost oil line on the previously installed oil								
		scavenger						
bottom inside center of the dry sump oil tank where it								
comes in contact with the tub floor.								

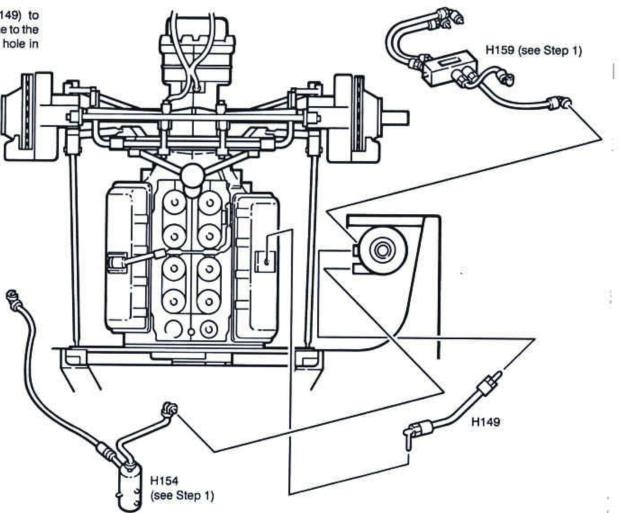
Glue the end of the previously installed oil screen filter line (H154, Step 1) to the forward most hole in the inside top of the dry sump oil tank.

Trim the nipples on the oil blowby line (H149) to approximately half their lengths and glue the line to the top of the left valve cover and to the rearmost hole in the inside top of the dry sump oil tank as shown.

NOTE: The final connections for these lines will be made in Step 21.

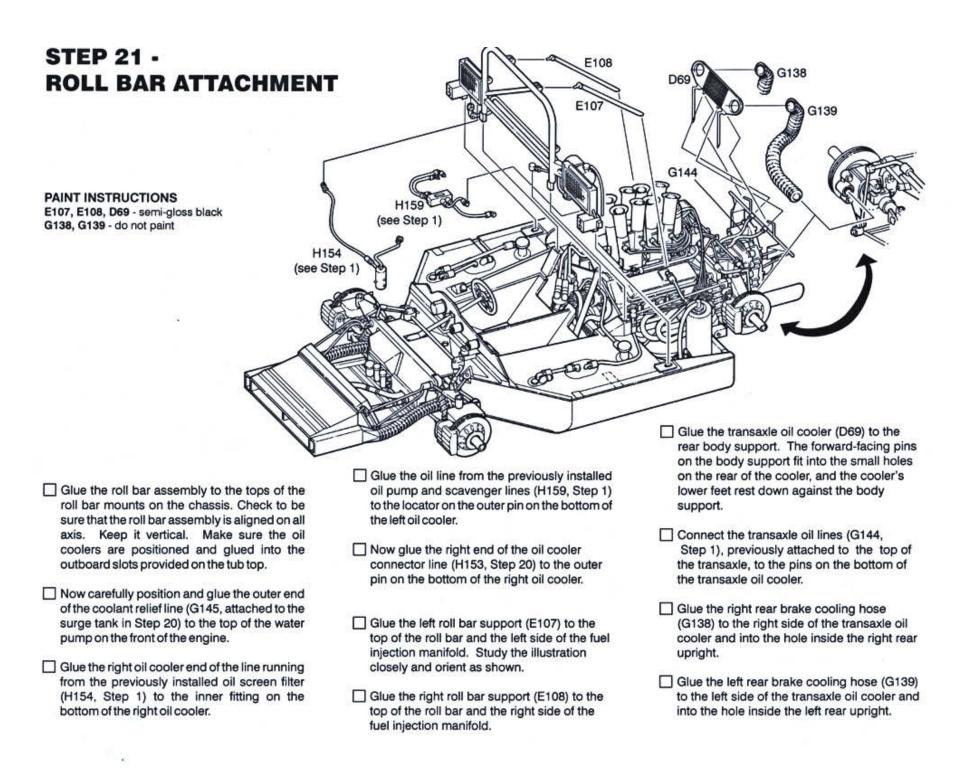
PAINT INSTRUCTIONS

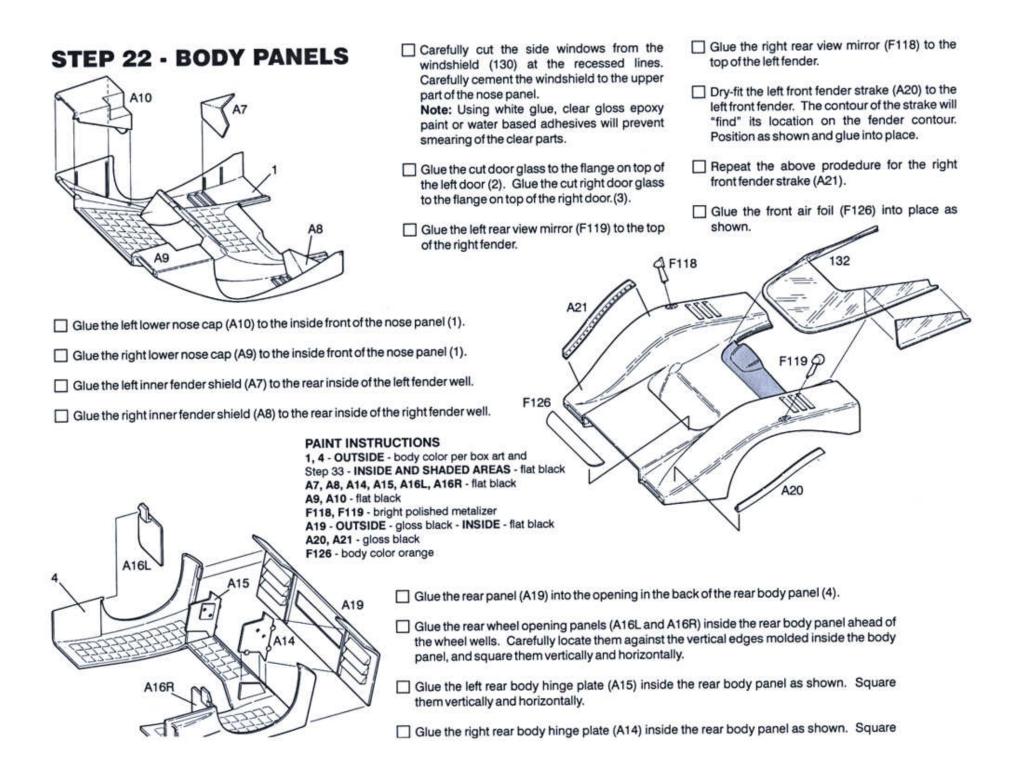
H149 - do not paint hose; connections can be painted with transparent blue and red to simulate fittings.



STEP 20 - ROLL BAR ASSEMBLY

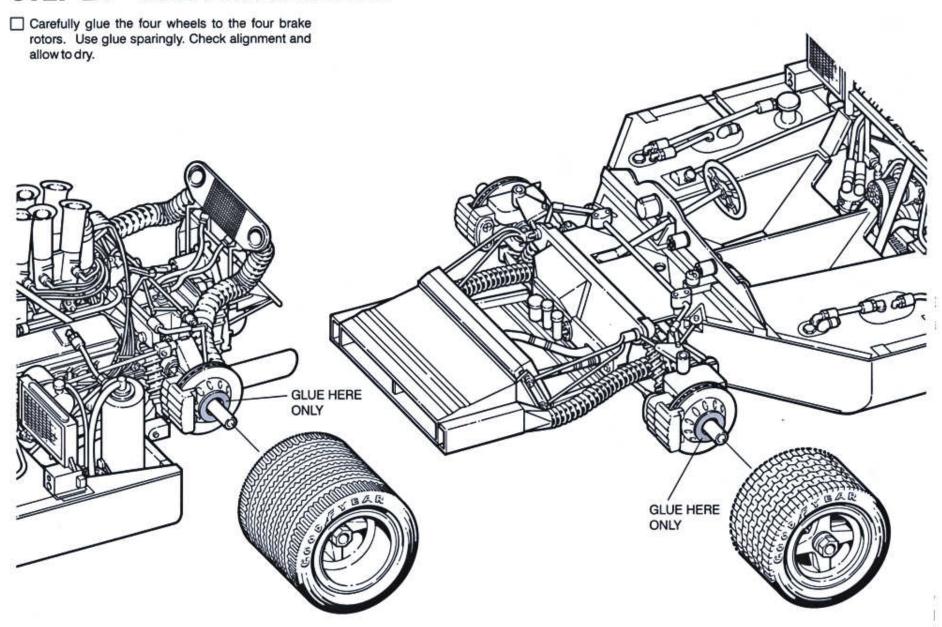
Glue the surge tank (E97) to the slot on the inside rear of the left oil cooler (C49).	Glue the right oil cooler (C50) to the right side of the roll bar.		Hika
Glue the coolant relief line (G145) to the hole in the inside projection on the surge tank as shown. The other end will glue to the top of the water pump after the roll bar assembly is added to the tub.	Dry position this sub assembly into place in order to make sure these parts are aligned and thoroughly dry before proceeding. Lift the sub assembly off and glue the oil cooler connector line (H153) to the inner pin on the bottom of the left oil cooler. This line runs		
Glue the coolant overflow line (G148) to the side of the surge tank. The bottom end of this line will mount to the top of the catch can after the roll bar assembly is added to the tub.	behind the roll bar, and the right end will later be glued to the outer pin on the bottom of the right oil cooler.	2	
Glue this assembly to the left side of the roll bar (E109). Before the glue sets, quickly proceed through to the end of this step.	E109		C50
C49			GLUE LATE
	H153		
	G148	PAINT INSTRUCT E97 - bright aluminu G145, G148 - do no C49, C50, E109 - se	um ot paint





Carefully remove the small fill tabs on the STEP 23 - WHEELS/TIRES ☐ Slide a front tire (133) onto an inner front wheel side (inside) of the wheel nuts. The wheel (F122). wheel nuts (F113) are now glued onto the ☐ The depressed lettering on the tire sidewalls Glue an outer front wheel (F124) to the inner wheels. This may best be accomplished by centering the nut on the wheel by using a may be filled with white paint and any excess wheel. Be sure to align the pin with the socket toothpick or a paint brush handle to center the paint removed before it dries. when assembling the wheels. Repeat this nut. Allow to dry. assembly with the other front wheel. ☐ Carefully remove the overflow "spiders" from the 4 outer wheel rims (F124 and F125). ☐ Slide a rear tire (134) onto an inner rear wheel W-1-D-E W-1-D-E TIRES (These overflows keep the thin rims from (F123). warping after they are removed from the The Can-Am series was one of the first mold.) ☐ Glue an outer rear wheel (F125) to the inner types of racing to recognize the benefits of rear wheel. Repeat for the other rear wheel. lots of rubber on the ground. Goodyear provided the teams and individual entrants with the kind of tires that could and did put the power where it had to be -SOCKET on the track. This was no small feat considering the horsepower that these F122 SOCKET cars could call up on demand, not to mention the braking requirements. By the close of the series, some of the competitors were running engines that were producing well over 1000hp! What is now considered "normal" in race cars was "cutting edge" back then. PIN PIN REMOVE REMOVE PAINT INSTRUCTIONS F122, F123, F124, F125 - bright polished metalizer F113 - steel

STEP 24 - WHEEL ASSEMBLIES



STEP 25 - SEAT/BELTS

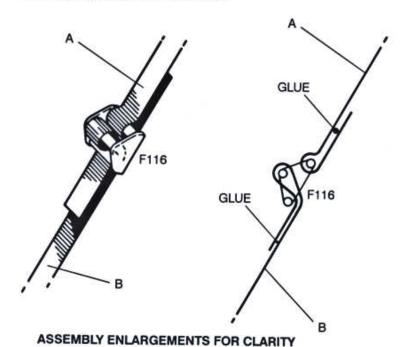
Seat belt material is provided for the assembly of five-point seat belts. Use the templates provided, take your time and use CA or water based glue to assemble.

☐ The lap belts consist of two tangs (F114) and one seat belt section B.

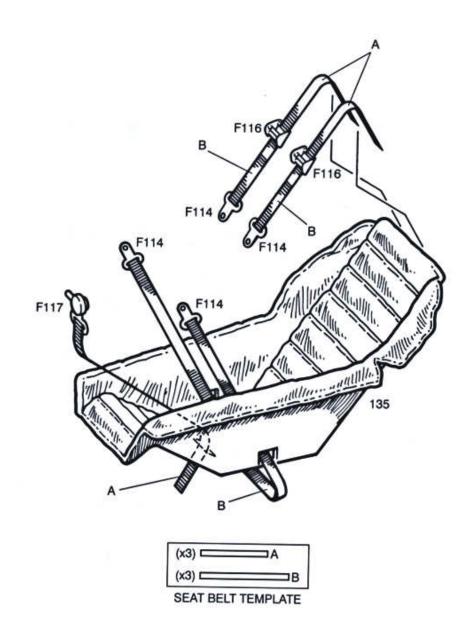
□ Each shoulder belt uses two tangs (F114), two adjusters (F116) and one each seat belt sections A and B.

The anti-submarine belt uses the main buckle (F117) and one seat belt section A.

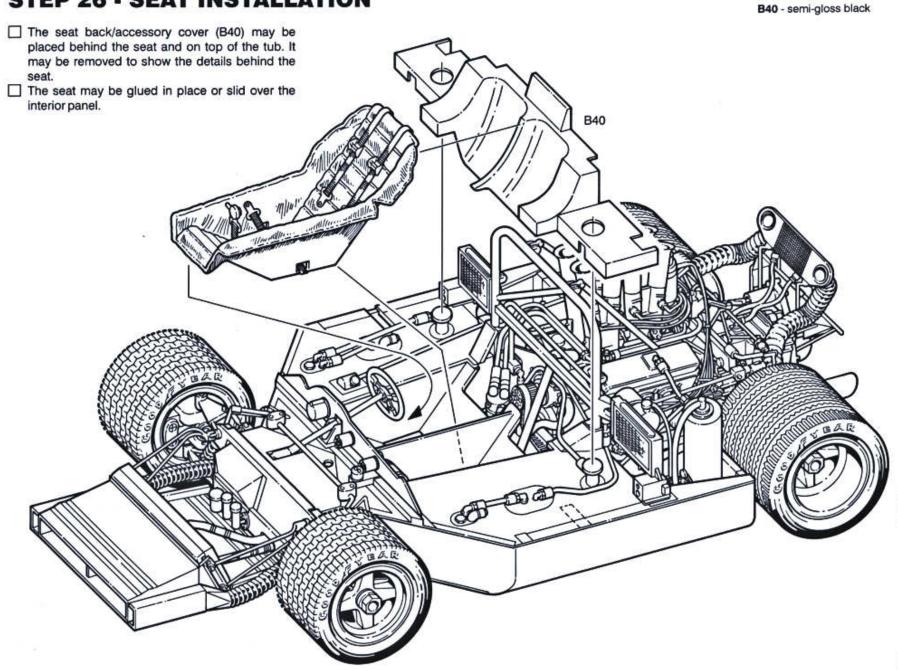
When the seat belts are assembled, pass them through the openings in the seat pad (135) and glue them to the bottom or back of the pad as shown. This pad was little more than a vinyl covering for the metal tub underneath.

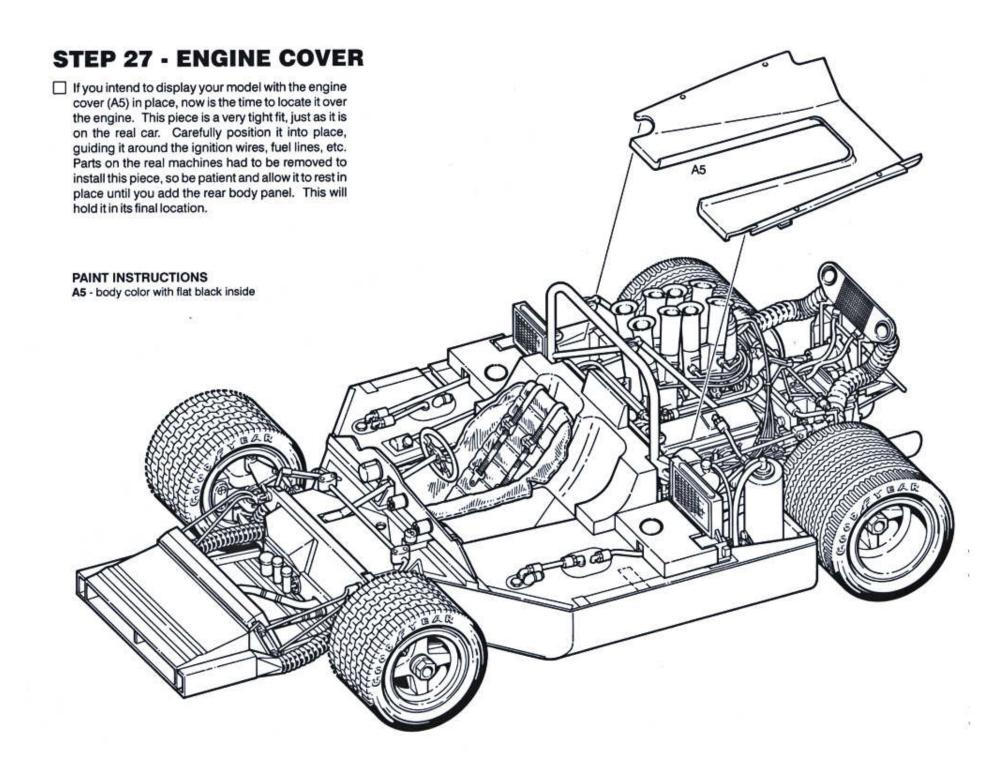


PAINT INSTRUCTIONS F114, F116, F117 - steel

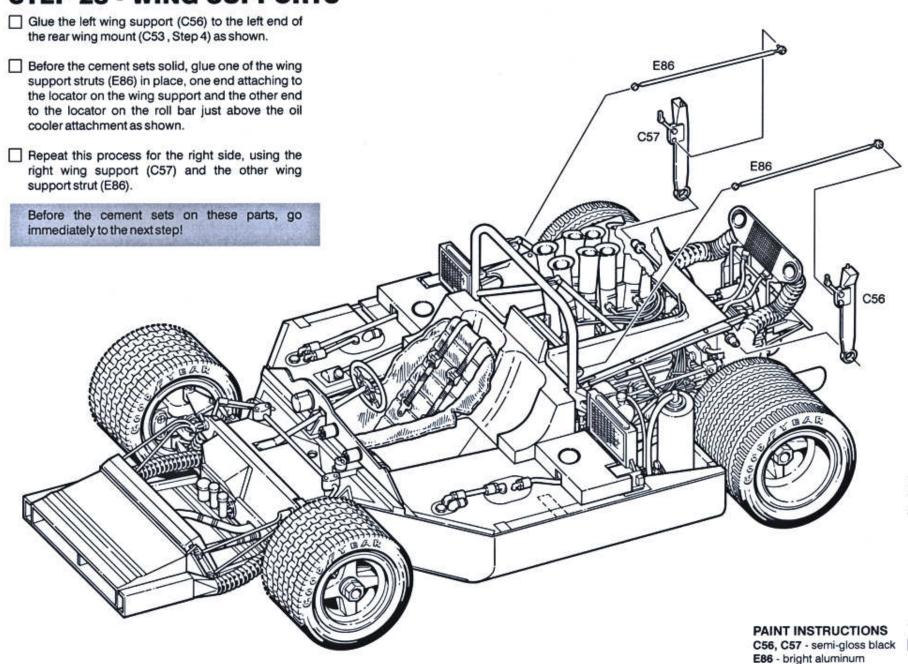


STEP 26 - SEAT INSTALLATION

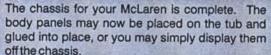


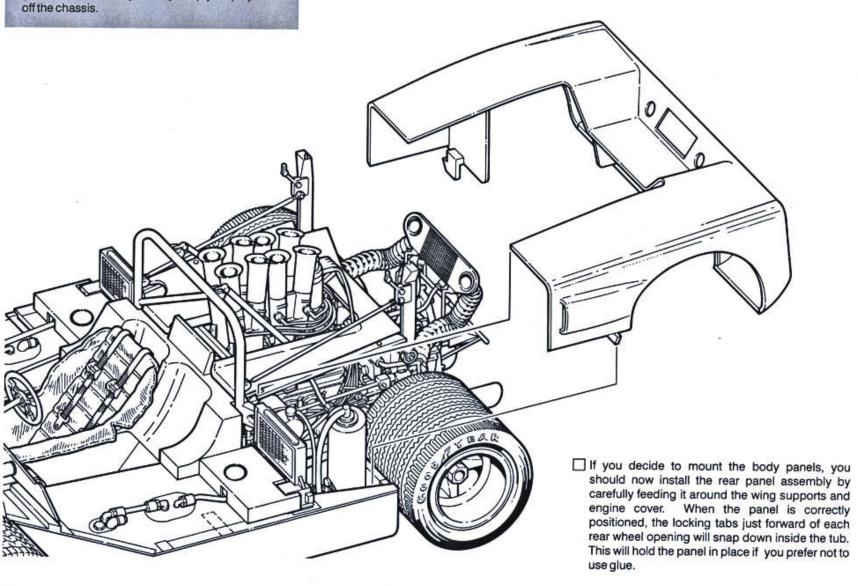


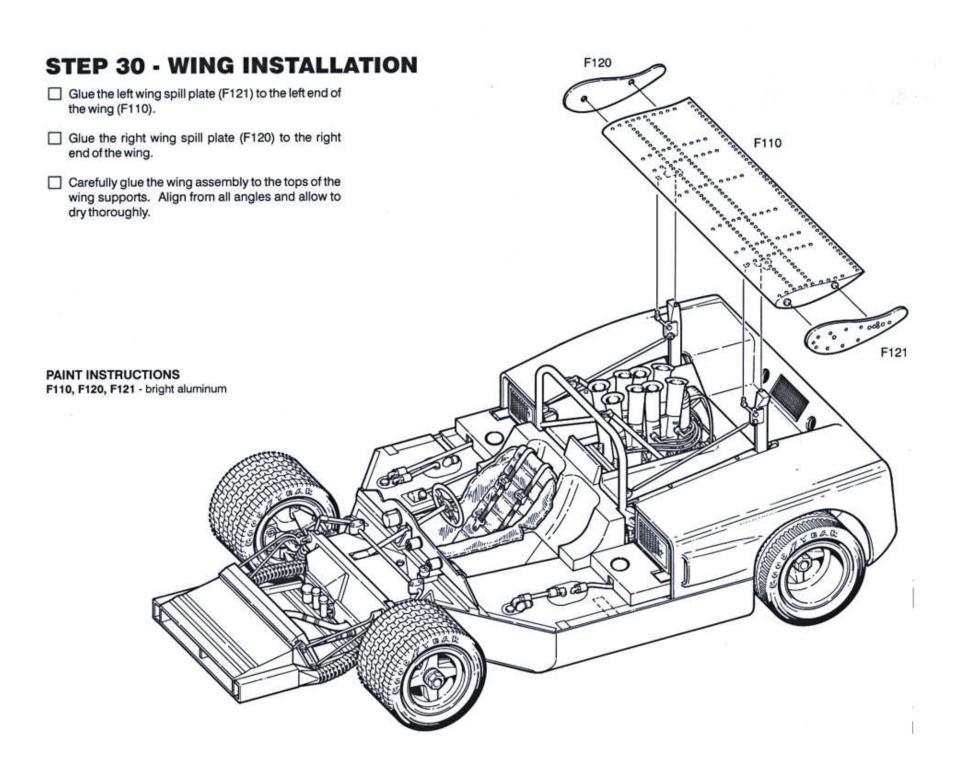
STEP 28 - WING SUPPORTS



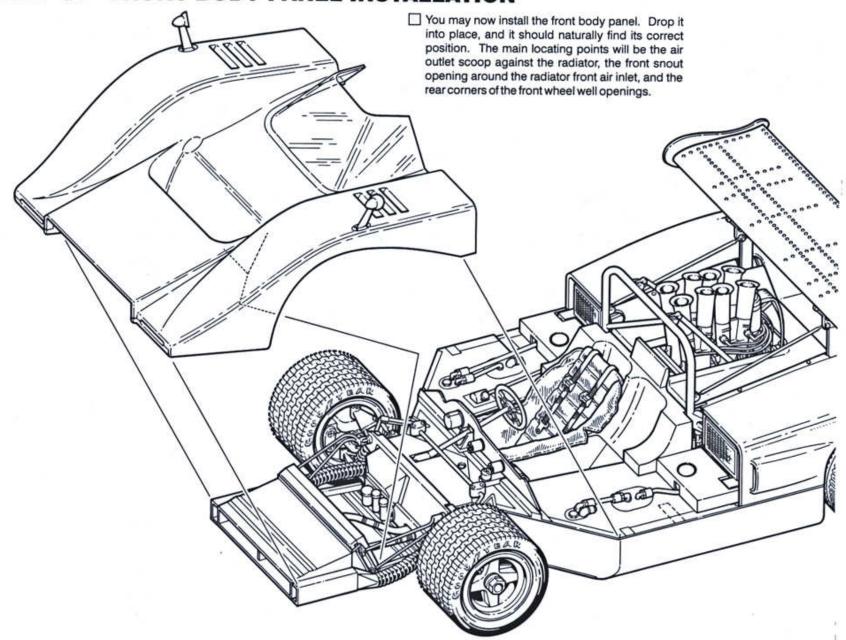
STEP 29 - REAR BODY PANEL INSTALLATION



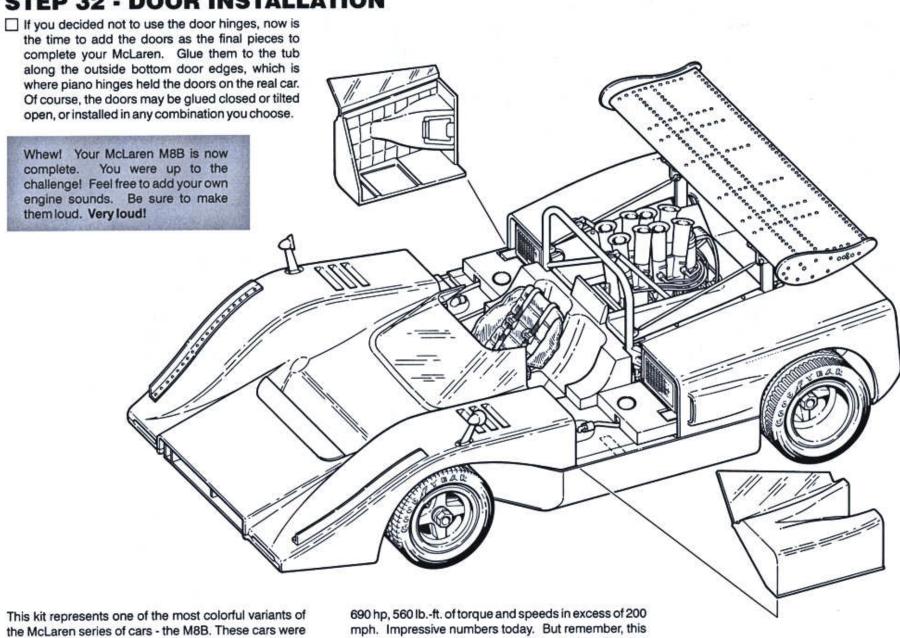




STEP 31 - FRONT BODY PANEL INSTALLATION



STEP 32 - DOOR INSTALLATION



This kit represents one of the most colorful variants of the McLaren series of cars - the M8B. These cars were raced under McLaren sponsorship as well as in the hands of private customers. Were they powerful? Pressing hard with the right foot could produce up to 690 hp, 560 lb.-ft. of torque and speeds in excess of 200 mph. Impressive numbers today. But remember, this was in the '60's! They just don't build 'em like that anymore. Further reading about this incredible era can be found in the Pete Lyons book "Can-Am."

STEP 33 - DECAL PLACEMENT

