

330 P4 ENGINE INSTRUCTIONS

KIT PARTS TO BE MODIFIED, SUGGESTIONS, AND COLORS

1. **PAINTING:** Some parts are thin and fragile, so handle them carefully and don't go overboard with the paint, especially if lacquer is being used.

2. **COLORS:**

Coils - dark red

Distributor caps - black

Exhaust system - flat white

Everything else - various shades of metal, aluminum, magnesium, polished metal

3. **MODIFICATIONS TO KIT PARTS:**

1. Carefully remove engine cover from the main body. Resin replacements are available from HRM, if needed.
2. Remove the exhaust panel from the engine cover. A new one is provided in the kit. (Fig. 3).
3. Remove the tub extension from the rear of the interior (Fig. 1).
4. Remove the transaxle sump cover from the rear of the chassis (marked with an "X" in Fig. 2).
5. The rear of the chassis needs to be angled upward at a slight angle. Be careful so it doesn't break loose. Some adjustment will probably be necessary later on to get the engine cover to fit properly.
6. Glue the door scoop extension to each side of the body, fill the seam and prep for paint.

4. **SUGGESTIONS:**

1. Sparkplug and fuel injection lines need to be installed **BEFORE** the exhaust system is in place.
2. Glue the large plate to the underside of the engine cover. This will be used to align the fuel injection system later on. The air intakes will be installed after this plate is in place. (Fig. 5)

ASSEMBLY

Glue the cam covers to the cylinder heads. Be sure the script is right side up and facing the front and rear correctly.

The catch tank sits in the "vee" at the front of the engine. Attach the cap and glue in place. Glue the gearchange box to the side of the transaxle. The distributors fasten to the lower cam cover end on each side and are angled inward for clearance. (Fig. 3)

The fuel injection pump is provided in 3 pieces (front, center, end). The front piece contains the shaft that the center and end parts slide onto. The end part has a pin attached that fits the unit into a hole on the right rear on the "vee". Also note that pilot holes are provided for drilling holes for the lines. Be sure that the holes all face the front of the engine, each of the 3 parts should be offset slightly to each other for clearance of the lines.

Install the tanks onto the bulkhead and glue in place. The top of the bulkhead should be positioned

as far forward under the roof as possible, not flush with the edge. This will aid in the proper fit of the engine cover.

Glue the lower suspension arm/radius rod assembly from the kit and install the engine. Be sure the engine and bulkhead are securely fastened in place.

Glue the transaxle crossmember in place. The holes on either side should face the rear. Glue the calipers to the hub/disc assembly and install along with the drive axles, upper suspension links, sway bar and shocks. Be sure the adjustment pin on the shocks faces the rear. Brass rod is provided for the sway bar connectors. Cut to fit (Fig. 3).

Glue the coils to the 4 pin mounting plate. This fastens to the rear of the spare tire rest cast into the transaxle and is offset to the left. (Fig.3)

Glue the intake trumpets to the fuel injectors and install between the cam covers. They should be positioned even with the distributor end of the cylinder heads. This is when the engine cover with the underside plate installed comes into use. The tops of the trumpets should fit into the long slots on the engine cover plate. Use epoxy for installation so they can be adjusted. This will allow the engine cover to clear the intake trumpets and close properly. The air intakes can be glued to the plate. (Fig.5)

The right and left panels on either side of the transaxle can be installed now. First plug the exhaust panel to the rear of the chassis. (Fig. 3) Next, epoxy the panels in place to the chassis and the transaxle crossmember. Tape the engine cover to the body at the bulkhead, then raise the exhaust panel and chassis and hold in place (no gap) until the epoxy sets up. This should give a correct fit for the engine cover, with no gap between the body and the exhaust panel.

After the exhaust panel has been glued in place, the exhaust system can be installed. (Don't forget wiring the engine first.) Install the long header (front) first then the short (rear), stacking the tailpipes one on top of each other, the shorter one on top of the longer one. The small crossover pipes (look like handles) sit diagonally on top of the headers where they narrow into the tailpipes. (Fig.4)

The exhaust heat shields can be installed after the triangular fasteners are glued in place (3 each side, Fig. 3). The triangulated chassis braces fit next to each side of the engine block, under the exhaust headers, between the bulkhead and the transaxle crossmember, the upper portion angling outward. The taller end faces the bulkhead. The fuel tank fits to the left side of the tub, the filler tube lining up with the opening in the body. (Fig.2) See Fig. 2 for location of the 2 fuel pumps. The pump with the baseplate fastens to the inside of the lower body side panels between the third and fourth slots (counting from the top). Glue the tub enclosures in place. The air plenums fit into the openings between the bodywork and the bulkhead, the rear portions plugging into the openings in the tub enclosures (Fig. 2). The brake cooling hoses (marked R & L) fit into these same openings and sit up next to the brake rotors. The shifter linkage fits to the end of the gearchange box and into the hole in the bulkhead. Brass rod is provided for the upper radius rods and locates between the pickup points on the hubs and bulkhead.

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Any questions, please contact Harold Bradford at *Historic Racing Miniatures*, 14008 Adkins Road, Laurel, MD 20708. Phone 301-604-8591 or at historicracingminiatures@comcast.net.

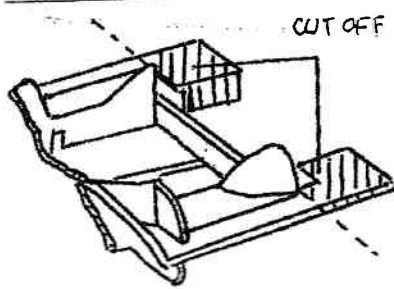


FIG. 1

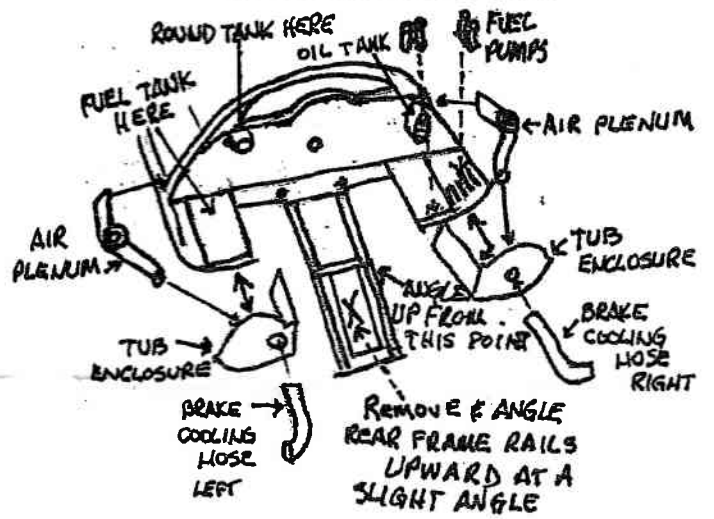


FIG. 2

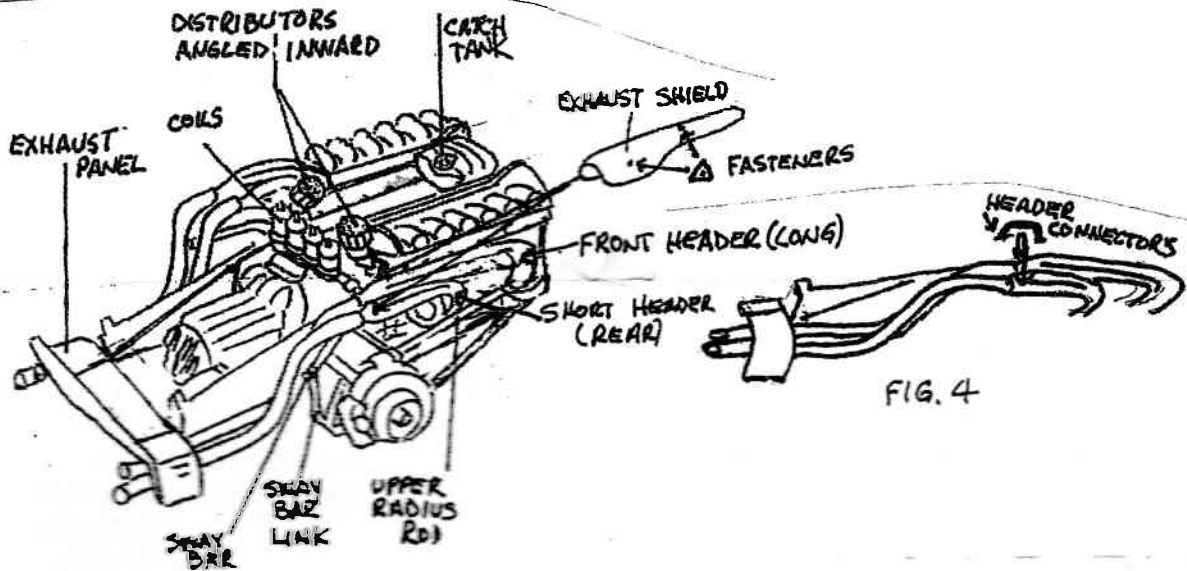


FIG. 3

FIG. 4

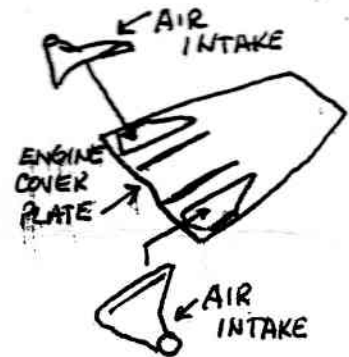


FIG. 5

PARTS LIST

ENGINE ONLY

BLOCK/TRANSAXLE (1)
CAM COVERS (2)
F. I. UNITS (2)
F. I. TRUMPETS (12)
DIST. BASE (2)
DIST. CAPS (2)
COIL MOUNT (1)
COILS (4)
EXHAUST PIPES (4)
EXHAUST SHIELDS (2)
EXHAUST SHIELD FASTENERS (6)
OVERFLOW TANK (1)
OVERFLOW CAP (1)
F. I. PUMP (3 PCS)
GEARCHANGE BOX (1)
EXHAUST CROSSOVER PIPES (2)

ENGINE BAY PARTS

TRANSMISSION BULKHEAD (1)
UPPER SUSPENSION LINKS (2) R & L
SWAY BAR (1)
DRIVE AXLES (2)
SHOCKS (2) R & L
REAR EXHAUST PANEL (1)
SIDE FRAMES (2) R & L
REAR HUBS/BRAKES (2) R & L
BRAKE CALIPERS (2)
FUEL TANK (1)
OIL TANK (1)
FUEL PUMPS (2)
TUB ENCLOSURES (2) R & L
TRANSAXLE PANELS (2) R & L
COCKPIT BULKHEAD (1)
DOOR SCOOP EXTENSIONS (2) R & L
COOLING PLENUMS (2) R & L
BRAKE COOLING HOSES (2) R & L
UPPER RADIUS RODS (2) BRASS ROD
SWAY BAR CONNECTORS (2) BRASS ROD
ENGINE COVER PLATE (1)
F. I. COOLING DUCTS (2) R & L
SHIFTER LINKAGE (1)