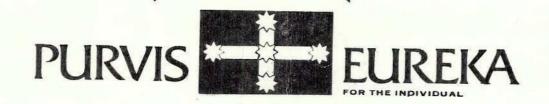




EUREKA by Purvis Cars



Purvis Cars announce the introduction of the new GT car, the EUREKA. Two years development and preparation have resulted in the completion of a truly unique road car. Already in production for 2 years in England and recently released in the U.S.A. the car has and is still receiving a fantastic reception. (The English car being the Nova, U.S.A. the Sterling).

Design work by Richard Oakes and engineering by Phil Sayers in England have combined to produce stunning looks yet functional behaviour. Incorporating mechanical components of the Volkswagen, the EUREKA has heralded a significant step forward for this breed of vehicle, the accent being on safety. Beautiful lines and well planned interior constitute the cars immediate attraction, while closer inspection will reveal an extremely high standard of finish achieved on the fibreglass body. This is largely due to the use of the same techniques involved in building a power boat hull, principally the use of "Woven Rovin" woven strand fibreglass, which gives extremely high tensile and comprehensive strength.

In places the body strength is up to 5/16" thick and truly rigid. Passenger protection, a subject causing much consternation, has been attended to by providing 7" wide box sections along the body sides and a similar construction at the nose, completed here by the spare wheel backed up against a fibreglass wall which also provides the two most forward chassis mounting points.

Two inherent faults in the use of theVolkswagen chassis through past designs have been the amount of flex found with a fibreglass body that has only been bolted to the chassis at the standard points and the rather poor roadholding experienced. To overcome these problems, the EUREKA has additional body mounting bolts, two each at both the front and rear suspension points, and it is hoped constructors will follow the fully detailed instructions for the adjustment of suspension. These are included with each kit, and adaption bears the fruit of true GT roadholding standards.

### FOREWORD

Congratulations, you have just become a member of a very elite group of individuals. Those who purchased and are willing to step forward, take tools in hand and complete the finest component car made in Australia . . . the EUREKA Coupe.

These instructions were specifically developed to assist you in the completion of your EUREKA. Based on our experience and those of our customers, the steps shown seem to be the most efficient.

It is most important that you read through these instructions from cover to cover prior to any assembly so that you might familiarize yourself with the basic steps. During assembly it is recommended that you refer to these instructions often to eliminate doing things incorrectly or out of sequence.

The quality of the finished product is in your hands. Remember, anything worth doing is worth doing right. Take your time, do not rush, give it some attention to detail and you will be proud to . . . . . OWN & DRIVE A "EUREKA".

These instructions cover the completion of a standard EUREKA (we have never seen a standard EUREKA). Most EUREKA owners have done certain little touches to their cars i.e., special bumpers, mild to wild paint jobs or striping, air conditioning, extra upholstery, etc. It is our hope that no two EUREKAS be exactly alike so go ahead, put a little of yourself into your EUREKA. After all, isn't that what it's all about! If we can assist you with information on some of your ideas, just let us know.

The feeling you get while driving a EUREKA is unlike anything achieved while driving any other type of automobile, in fact you may not believe it yourself. Funny things happen like being given preferred parking at night clubs, restaurants, at the golf club house, etc. Strangers have a way of becoming friendly almost on sight. It is reall difficult to describe because it's a feeling that only comes with the ownership of a truly personal automobile.

We of PURVIS CARS are looking forward to adding your name to the growing list of people who drive EUREKA'S.

In closing, we would appreciate a photo (colour snap shot) of car and builder upon its completion, as it is of extreme value to us for our log of owners.

"The EUREKA isn't just a product to PURVIS CARS, it's like a part of the family. It consumes our entire lives and we love it. Owning a EUREKA isn't like owning a car, it's like being part of a cult".

WELCOME TO THE "CULT".

### LOCATING A V.W. BUG.

Please keep in mind that the EUREKA was designed specifically for installation on a standard unaltered\* Type 1 Beetle chassis, 1956 through 1974. Given a choice, we would recommend 1969 or newer chassis because of late type suspension i.e., ball joint front suspension and double U-jointed half shafts at rear makes your EUREKA a much better handling machine than those put on older type chassis.

The EUREKA was not designed for, nor will it fit the Karmann Ghia chassis, Squareback, Fastback, Super Beetle or Bus chassis (although various bits of running gear is interchangeable with the Bug i.e., engines, trans-axles and some front suspension parts such as Ghia disc brakes).

When purchasing a V.W. it sometimes works out much cheaper to buy the complete car (this allows test driving all the running gear before you lay out the cash). The following check list should be helpful when looking over a V.W.

- 1. Check floor pan for rust, accident damage or warping.
- 2. Check front suspension for wear or damage.
- Check steering box for excess play.
- Check steering colum for straightness.
- 5. Check gas tank for leaks or damage (mainly at lowest point).
- 6. Check engine (have it checked by a mechanic if possible).
- Check trans-axle for noise or grinding. Check that it has all gears working and shifts well. Also check for cracks or leaks.
- 8. Check the brakes for wear, etc.

<sup>\*</sup> Unaltered: Steering remains stock, gear shift stays in same location, emergency brake stays in same location and floor pan is neither shortened, lengthened or made narrower. The entire chassis remains as it was manufactured by V.W.

### WHERE TO LOOK FOR A V.W.

- A. Foreign car repair shops:

  May have one that needs work or may know of one for sale.
- B. Dealers or used car lots:

  May have one that's a bit rough or with several smashed fenders at a reasonable price.
- C. Wrecking yards:
  May have one with blown engine or a roll over, etc.
- D. Check with local insurance companies for wrecked V.W.'s.

  Be sure to check for severe damage to chassis.

  (Particularly front end suspension damage).
- E. Put an ad. in the paper or on bulletin board of local super-

'In paralle deserging

It goes without saying that the newer the V.W. the newer your EUREKA. Bear in mind 6 volt electricals will have to be changed to suit our "complete 12 volt Wiring loom".

In addition to the abover year sight want to sove the windshield wanter component, radio and my other accessories your bug mighe have to the pictors.

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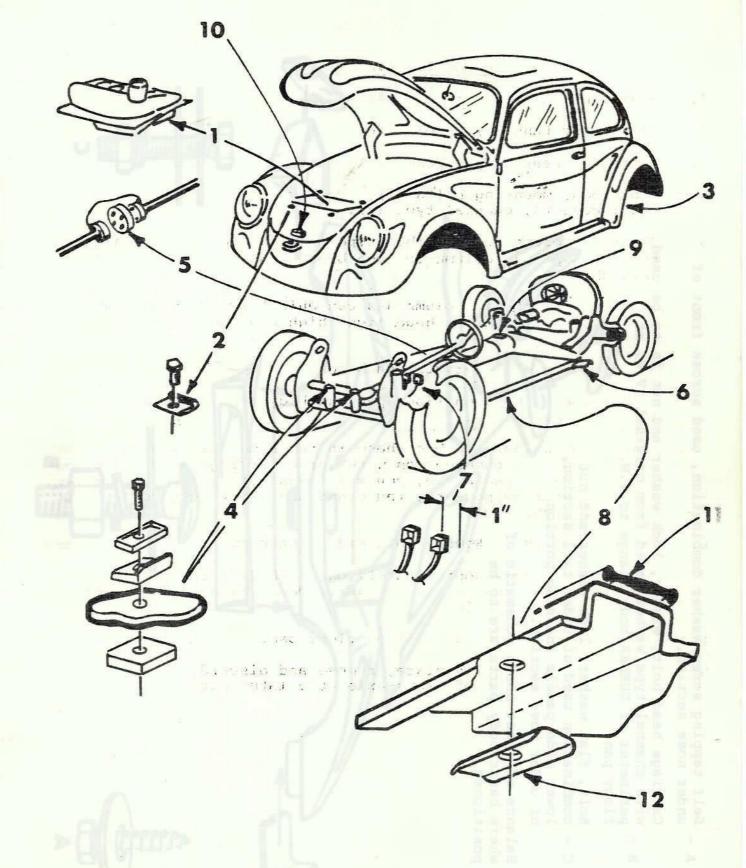
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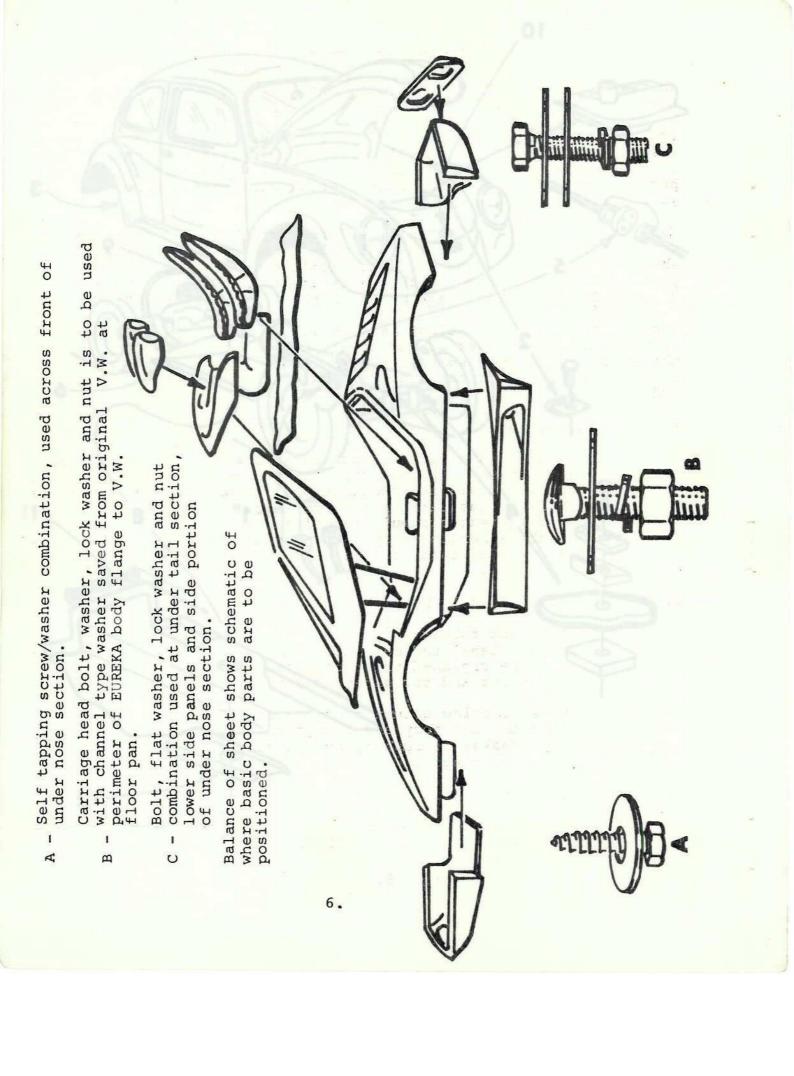
# THINGS TO SAVE OR DO

- 1. Fuel Tank (1).
- 2. Clamps for tank (4). Bolts for tank (4).
- 3. Bolts for rear body bracket (2). Washers for same (2).
- 4. Front body mounting bolts (2). Rubber spacers (4). Steel washers, channel type (2).
- 5. Steering column (collapsible type must be used), horn wire, rubber coupling, column to dash bracket and rubber grommet through body.

Using a late model, column has convenient switches on arms such as, wiper switch, head light high beam and flasher, washer etc.

- 10. Master cylinder reservoir and hoses.
- 11. Rubber gasket between floor pan and body (you may want to install a new one).
- 12. Steel body washers. Use these in the same position on EUREKA body, in combination with large carriage head bolts. In addition to the above, you might want to save the windshield washer components, radio and any other accessories your Bug might have.
- 6. Jacking points. Remove both sides (hacksaw).
- Bend clutch pedal approximately one inch (1") to the left, away from steering column. Easily done using 12" crescent wrench and screw driver.
- 8. Detail drawing of side rail on floor pan.
- Trans-axle inspection plate, remove and discard.
   Allows replacement of trans-axle at a later date.





### REMOVAL OF V.W. BODY.

This section applies specifically to the standard type I V.W. Beetle 1947 - 1974.

You may want to snap a couple of pictures of the old V.W. as you are about to create an entirely new and different type of machine.
... both in appearance and performance. The before and after photos make for interesting conversation when you've completed your EUREKA.

Many of the items that are not used from the V.W. may still be in good condition. They may be saleable to your friends, local body shops or to auto salvage yards so, don't overlook the value of parts left over. Some of the parts are to be used in the assembly of your EUREKA. These are noted in the "Things to Save" list.

Because of slight variations between V.W.'s construction from year to year and the changes or modifications that may have been made, the exact location of some of the equipment to be removed may vary. This is why a final check should be made before attempting to lift body from chassis.

# 1. Remove gas tank:

Remove 4 bolts and clip washers located around flange of gas tank (save these clip washers). Raise the tank and disconnect fuel line and drain all gasoline into a container. Remove gas tank (save the gas tank) and store in safe place with gas cap removed to prevent accumulation of fumes. It is recommended that the above mentioned operation be done in a well ventilated work area. (Tap tank at lowest point with screw driver to check for rust).

# 2. Remove steering column:

- A. Disconnect rubber coupling on steering box side by removin 2 bolts (label and save horn wire). Note: Rubber coupling should be replaced prior to assembly of EUREKA. It is inexpensive and for safety reasons it should be done.
- B. Remove steering column clamp at dash and pull steering column through body and into car. Note: Save clamp and rubber gasket or bushing around steering column at exit hole through body.

# Remove front body bolts (2):

These two bolts are now visible through opening formerly occupied by gas tank (save these bolts, washers and rubber spacers).

4. Remove brake cylinder reservoir:

Disconnect fluid line and drain into container, old fluid is to be discarded (save reservoir and hoses).

5. Speedo cable removal.

Remove spring clip in centre of left front axle hub. Pull cable out from back side then disconnect from speedometer (save cable).

- 6. Remove <u>all</u> floor pan bolts along perimeter of floor pan including those found under rear seat (save special V.W. channel shaped washers for floor pan bolts). If you miss any bolts, you will find it most difficult to remove body.
- 7. Removal or disconnecting things in the engine compartment: Disconnect throttle cable, manual choke cable or wire to automatic choke. Disconnect coil, voltage regulator, oil pressure sending unit.
- 8. Disconnecting things under rear of V.W.:

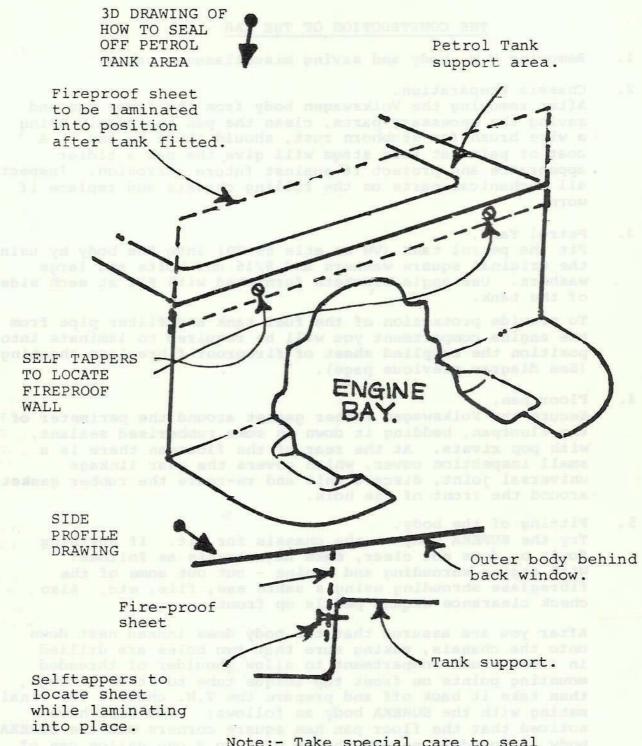
Jack up rear of V.W. and remove rear wheels exposing rear body brackets (one each side). Remove large bolt and washer where brackets mount to rear shock towers (save bolts and washers). Disconnect heater hoses from heater boxes. Replace wheels and drop V.W. back on the floor.

9. Removal of body from chassis:

(Be prepared to say goodbye to its familiar shape). Break the body loose from the chassis by lifting at the centre of each wheel opening - one at a time - moving from one opening to the next. When all corners are free, stuff a 4" x 4" block of wood between body and floor pan at each corner. Now you can visually check to see if anything is still connected - check for misc. wires, etc. If any, they can be disconnected or cut, because a complete wire harness is standard equipment with your EUREKA.

10. Assuming that everything is now disconnected, it's now time to call upon 4 or 5 of your friends to assist you in lifting the V.W. body from the chassis.

Having completed steps #1 through #10, you now have a stripped chassis to get prepared for your EUREKA and a body and miscellaneoud other parts to sell, trade or haul away. Preparation of the chassis is covered under section titled "Construction of Car".



Note: - Take special care to seal off the entire edge of sheet when laminating into position.

Use a simple fibreglass repair Kit to do the job.

# THE CONSTRUCTION OF THE CAR

- Removing V.W. body and saving miscellaneous parts.
- 2. Chassis Preparation. After removing the Volkswagen body from the floor pan and saving the necessary parts, clean the pan thoroughly using a wire brush for stubborn rust, should there be any. A coat of paint at this stage will give the pan a tidier appearance and protect it against future corrosion. Inspect all mechanical parts on the rolling chassis and replace if worn.
- 3. Petrol Tank. Fit the petrol tank (VW Be etle 69-70) into the body by using the original square washers and 5/16 unf bolts and large washers. Use angle brackets furnished with Kit at each side of the tank.

To provide protection of the fuel tank and filter pipe from the engine compartment you will be required to laminate into position the supplied sheet of fireproof fibreglass sheeting. (See diagram previous page).

- 4. Floor pan.

  Secure the Volkswagen rubber gasket around the perimeter of the floorpan, bedding it down on some rubberised sealant, with pop rivets. At the rear of the floorpan there is a small inspection cover, which covers the gear linkage universal joint, discard this and re-route the rubber gasket around the front of the hole.
- 5. Fitting of the body.

  Try the EUREKA body on the chassis for fit. If anything fowls or does not clear, make adjustments as follows:

  With engine shrouding and engine cut out some of the fibreglass shrouding using a sabre saw, file, etc. Also check clearance around pedals up front.

After you are assured that the body does indeed nest down onto the chassis, making sure that two holes are drilled in front trunk compartment to allow shoulder of threaded mounting points on front top torque tube to stick through, then take it back off and prepare the V.W. chassis for final mating with the EUREKA body as follows: You will have noticed that the floor pan has square corners and the EUREKA body is rounded, so you should pick up a one gallon can of window glazing putty (same as used to install a pane of glass in your house). Use approximately & of it at each corner (just put a big gob of it in each corner) then take approximately 3 tubes of Dow Corning or other brand of caulking compound and pick up one of those applicator guns (available at Hardware stores). Apply all this caulking all round the perimeter of the standard V.W. floor pan on

top of the rubber gasket. Now with several friends, help place the EUREKA body on chassis.

Wiggle or shake the body somewhat to settle the flange of the body down into all the muck you've put on top of the gasket.

Position steel Perimiter spacers along both sides of Main body return flange so they are a snug fit against sides of interior.

Now drill holes up through the holes in the V.W. chassis, through glass flange and steel spacer. Take extreme care <a href="NOT">NOT</a> to move spacer from original position when drilling etc., (this spacer will spread load from Bolt heads).

See diagrams page 23 (Look for "S" for steel spacer).

After the drilling is complete, use the carriage head bolts with large washers from inside the car down through the holes. Use stock V.W. channel type washer and lock washer and nut on bottom side.

Do not tighten any single bolt at this time, it should be done in a continuous cycle of snugging one up, then the next, etc., so that the body flange is pulled down evenly, squeezing out extra caulking and glazing putty, so that a nice water tight match is made. But in the end make sure that all bolts are tight. Bolt the rear suspension to the body by means of the brackets we supply. When installing body for the final time be sure rubber washers are on front axle torque tube housing. After body is installed, add the other rubber washers and stee washers along with original bolts that you saved on removal of V.W. body. After main body bolts are tight, recheck these two bolts one more time. After running car for 2 or 3 weeks, recheck all main body bolts.

- Place the dash into position and cut the appropriately positioned gear lever hole. It is advisable to cut a big enough hole so that the gear lever assembly can be removed through it if necessary. With the dash in position, climb inside the car and close the roof. This will enable you to position the dash accurately. Make sure there is an even gap approximately between the dash and the bottom of the windshield. Bolt the dash in using & bolts and large washers.
- 7. Steering column instructions:
  First, in the centre of opening for dash pod and the centre of dash facia, drill a 1/8" hole. If you look closely on the forward bulkhead, you will see an outline scribed in the body, approximately 1½" in diameter. Drill a 1/8" hole in the centre and insert a 1/8" piece of welding rod through dash and body. Check at steering box for alignment with rod. If it is off, move 1/8" hole in bulkhead to line up rod. Once aligned, bore

 $1\frac{1}{2}$ " holes in dash and body and install column, using 1/8" holes for pilots.

- 8. Wiring See attached diagram.
  In order to place the battery in the front, you must obtain about 13 ft. of battery cable and route down left side of car, strapped to edge of floor pan inside left side panel area to the starter-motor at the rear. It must be remembered that you will have to ground each electrical item independently. For access, the regulator needs to be positioned in the engine compartment and fastened to the inner wheel arch (or position suitable to loom layout).
- 9. Ducting & Heater defroster, fresh air vents.
  See diagram for routing. Heater vents are installed inside inner body. Route heater ducting through the side panels and attach them to the V.W. heater boxes on one end and at heater vents as shown. We suggest that the defroster hose be installed through body and dash as high as possible above heater vents to avoid the chance of interference with your feet.

It is advisable to fit a small electric blower to the fresh air pipe in the spare wheel compartment to increase the fresh air flow at low speeds. Almost any squirrel cage heater motor fan will work. From the air vent in the sides of the car, (above rear wheels) air must travel along a pipe into the engine compartment. This is to give adequate cooling. Fix all pipes with hose clamps.

10. Rear Suspension Setting (Normally required on pre-1969, swing arm chassis only!).

First remove the shock absorber and unscrew the three bolts which hold the trailing arm and the axle together. Unscrew the four bolts which locate and hold the trailing arm and torsion bar together. Pull off the end plate and rubber block, now pull the arm off the end of the torsion bar. This operation can be difficult for two reasons: (a) because of possible corrosion between the two parts and (b) because of the prestress between the trailing arm and the torsion bar.

The best approach to this problem is to knock a Cold Chisel into the gap behind the trailing arm. kA certain amount of caution must be used during this operation to avoid being struck by a "flying trailing arm". Slide torsion bar out and rotate arm upward approximately one to two splines giving approximately 1-2 inch drop in chassis height. More or less may be required due to varied strengths of torsion bar. Re-assemble using reverse procedure. This allows rear suspension to work in its normal fashion with the lesser degree of body weight. Retains normal ride clearances.

11. Fitting lower panels & under nose.

Drill ½" holes in the flanges at intervals of 10" in all panels except the rear section, where one hole in each corner will be adequate. Put the panels into position on the main body section and mark the hole positions on the main body flange then drill.

Bolt the panels in position with ½" u.n.f. nuts and bolts and large washers. Use the glove compartment hole in each side to gain access to the side panel bolts. The front panel is fitted in a similar way using the wheel arches for access. The front edge should be bolted with self tapping bolts and washers supplied. See detailed drawing.

The front and the side panels have also to be fixed under the floorpan with self tapping screws or bolts at 6" centres.

12. Seats (See attached drawing).

From the original Volkswagen seats, cut the runners and adjusters. Thoroughly clean and sand the runners and their locating slots in the seats. Bond the runners in position on the seats with epoxy or similar adhesive and bolt each end.

# 13. Interior:

We have supplied two fibreglass side panels with leather grained texture which conceal the hinge fixing bolts below each side window, trim these panels to fit, and fix with small self tapping screws or adhesive. Position and fit the instruments into the dash pod, connect all wiring and secure the dash pod in place with wing nuts from the underside of the dashboard. Switches are best fitted into the dashboard For sticking the carpets in position, use small sheet metal screws with washers. These are to be placed around perimeter of carpet.

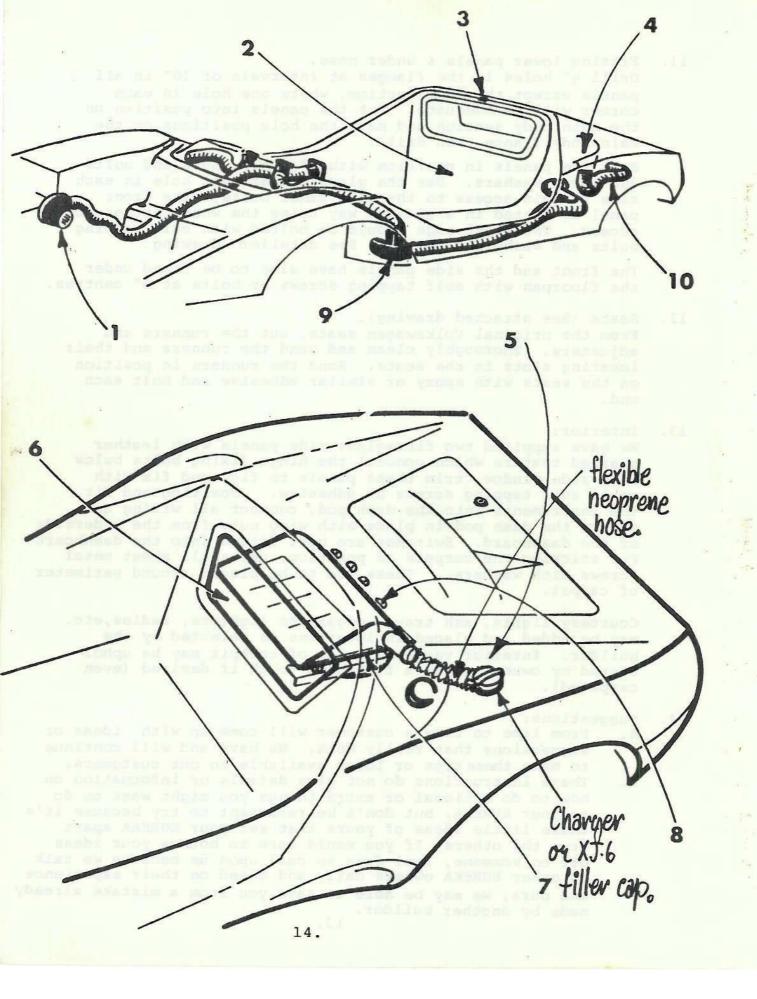
Courtesy lights, ash trays, cigarette lighters, radios, etc. may be added and placed in locations as selected by the builder. Interior vertical walls of cockpit may be upholstered by owner to add a finishing touch if desired (even carpeted).

14. Suggestions:

A. From time to time a customer will come up with ideas or suggestions that really work. We have and will continue to make these tips or ideas available to our customers.

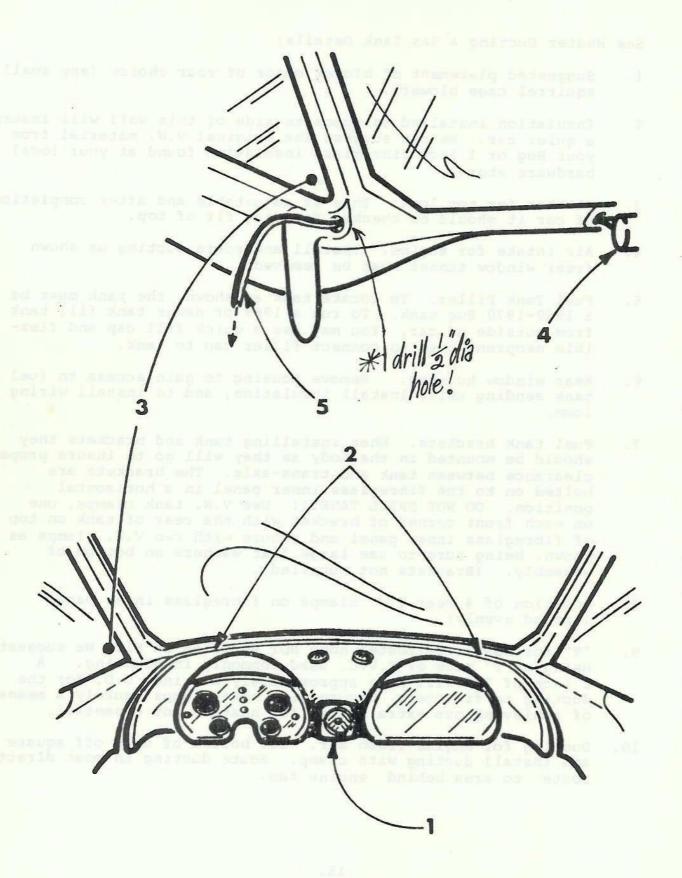
B. These instructions do not give details or information on how to do optional or extra things you might want to do to your EUREKA, but don't be reluctant to try because it's these little ideas of yours that set your EUREKA apart from the others. If you would care to bounce your ideas off on someone, feel free to call upon us because we talk to other EUREKA owners daily and based on their experience and ours, we may be able to save you from a mistake already made by another builder.

13.



See Heater Ducting & Gas Tank Details:

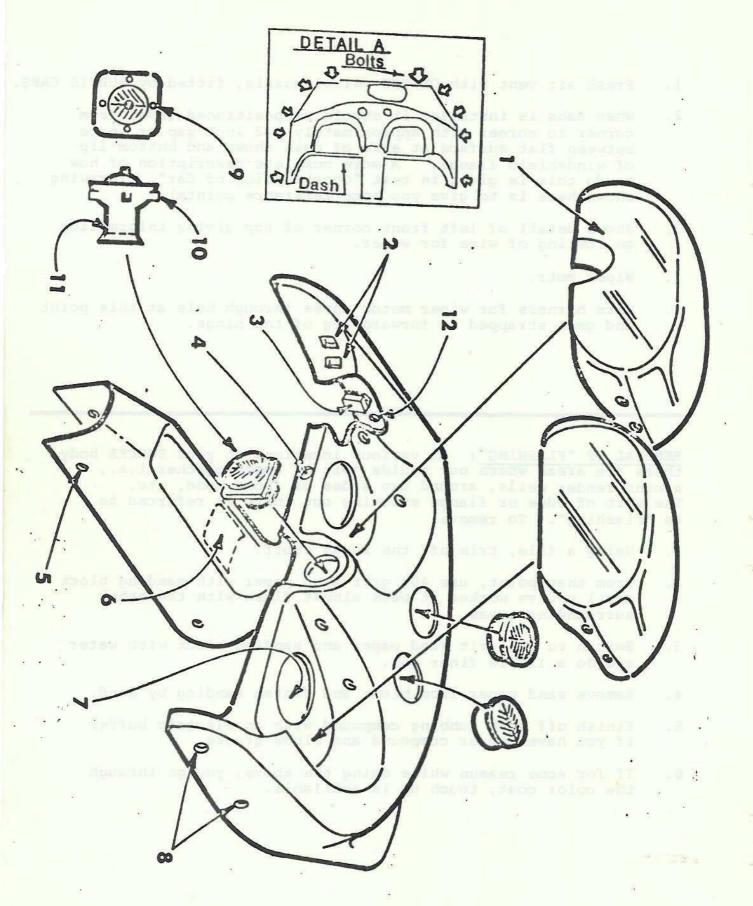
- 1. Suggested placement of blower motor of your choice (any small squirrel cage blower).
- 2. Insulation installed on opposite side of this wall will insure a quiet car. We can suggest the original V.W. material from your Bug or 1 inch fibreglass insulation found at your local hardware store.
- 3. Striker for top lock. This is adjustable and after completion of car it should be checked for snug fit of top.
- 4. Air intake for engine. Install and route ducting as shown (rear window tunnel must be removed).
- 5. Fuel Tank Filler. To locate tank as shown, the tank must be a 1969-1970 Bug tank. To run a 1969 or newer tank fill tank from outside of car. You may use a quick fill cap and flexible neoprene hose to connect filler cap to tank.
- 6. Rear window housing. Remove housing to gain access to fuel tank sending unit, install insulation, and to install wiring loom.
- 7. Fuel tank brackets. When installing tank and brackets they should be mounted in the body as they will go to insure proper clearance between tank and trans-axle. The brackets are bolted on to the fibreglass inner panel in a horizontal position. DO NOT DRILL TANK!!! Use V.W. tank clamps, one on each front corner of bracket with the rear of tank on top of fibreglass inner panel and secure with two V.W. clamps as shown, being sure to use large flat washers on bottom of assembly. (Brackets not supplied).
- 8. Position of 4 rear V.W. clamps on fibreglass inner panel (spread evenly).
- 9. "T" for heater/defroster hose NOT supplied in Kit. We suggest using a "T" made of P.V.C. used commonly in plumbing. A 2 inch of "T" will have approximately a 3 inch O.D. for the ducting to fit over. Secure with hose clamps (purely a means of achieving our extra outlet for heater) not essential.
- 10. Ducting for engine fresh air. Cut bottom of duct off square and install ducting with clamp. Route ducting in most direct route to area behind engine fan.



- 1. Fresh air vent with ON/OFF swivel nozzle, fitted by PURVIS CARS.
- When dahs is installed it should be positioned level from corner to corner with approximately 1/2 inch gap or space between flat surface at area of dash shown and bottom lip of windshield flange. A more complete description of how to do this is given in text "Construction of Car". (Drawing shown here is to give you some reference points).
- 3. Shows detail of left front corner of top giving information on routing of wire for wiper.
- 4. Wiper motr.
- 5. Wire harness for wiper motor comes through hole at this point and gets strapped to forward leg of top hinge.

REMOVAL OF "FLASHING": At various locations on your EUREKA body there are areas where our moulds join or come together i.e., around fender wells, around two sides of front hood, etc. The sort of edge or flange sticking out there is referred to as "Flashing". To remove:

- 1. Using a file, trim off the rough stuff.
- From that point, use 400 grit sand paper with sanding block until you've worked it back almost flush with the other surrounding areas.
- 3. Switch to 600 grit sand paper and sanding block with water and do a little finer job.
- 4. Remove sand paper from block and finish sanding by hand.
- 5. Finish off with rubbing compound with an electric buffer if you have one or compound and elbow grease.
- 6. If for some reason while doing the above, you go through the color coat, touch up is available.



- Drivers side dash pod (passenger side similar except contains no indentation for steering column).
- 2. Suggested location for wiper and head light switch (move to right side).
- 3. Location for fuse box (use 20 amp fuses). (Move to right side).
- Hole for steering column, use 1 1/2" hole saw (move to right side).
- Use self tapping screws through centre console into tunnel 5. (two on each side).
- Approximate location of cut out for shifter (mark approximate 6. centre line on floor pan with chalk prior to installing dash and console. After Dash/Console is mounted, location of centre of shifter is located by chalk mark on floor. Cut inspection hole, check for being in the right place, then enlarge by drilling side by side holes around perimeter of desired opening - dress up with file).
- 7. Cut access hole under dash pods for future maintenance.
- Typical location for bolts at dash to body (See detail "A"). 8.
- 9. Four screws for fastening in fresh air vent (Suggest you retain vent fitted by us).
- Cut off four (tits) using hack saw. (Suggest you retain vent fitted by us).
- Cut off flange at dotted line so ducting can slip over end. 11. (Suggest you retain vent fitted by us).
- Use this dash mounting bolt as common grounding terminal as 12. described in electrical text. (Install this bolt with threaded end towards inside of car).

All demister and fresh air vents have been fitted by PURVIS CARS.

## HINTS/SUGGESTIONS:

Sending Unit for Fuel Tank.

Standard V.W. sending unit may not be compatible with Fuel Gauge so use a new wending Unit. Simply remove the V.W. unit and replace with new unit (bend the arm so that a full reading is given when tank is full).

Check with your local V.W. dealer when matching gauge and sender unit.

WIRING. \*(Contact your nearest Auto Electrician).

The battery should be disconnected while you're in the process of wiring. After you're all done, turn everything off and hook up ground cable to battery. Then, just touch the positive cable (with #10 Red wire attached) to the positive terminal of battery. There should be no spark at all. If there is, check again to be sure everything is turned off. If the spark still occurs, try pulling one fuse at a time to see which circuit has a problem. If there is no spark, hook the positive cable to the battery and then check all functions for operation. Remember, for everything to operate, the circuit must be complete.

NOTE: All electrical equipment must be grounded as fibreglass will not conduct electricity. All grounds are black in harness and all grounds are supplied for equipment standard in the Kit.

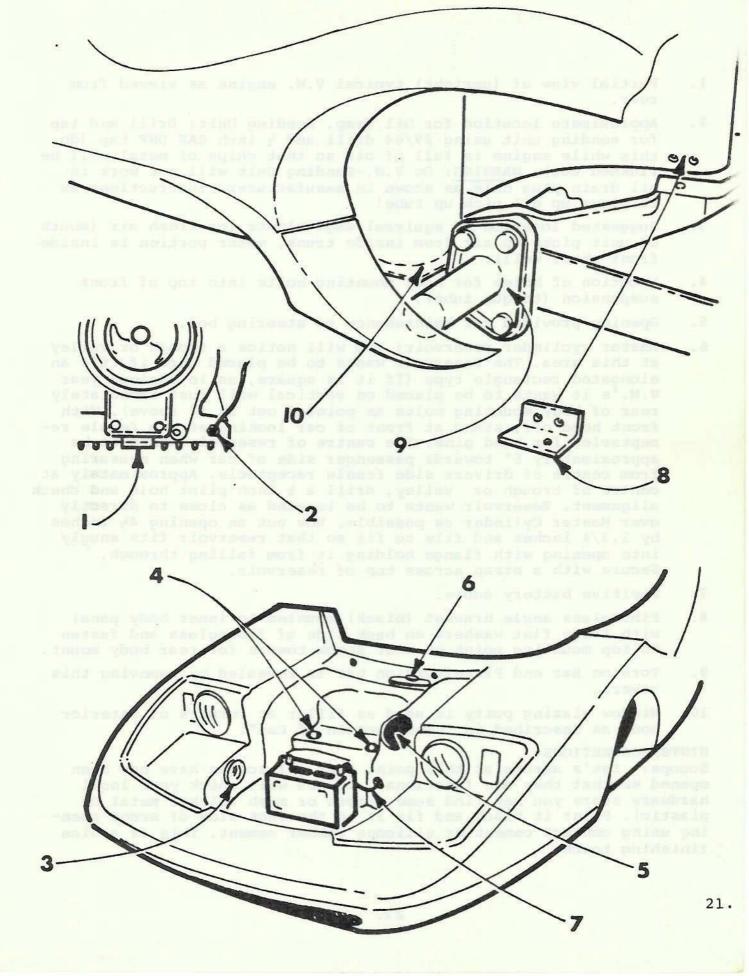
If you would like the ultimate in electrical protection, a battery switch can be installed (purchase from boat supply). If you install the switch, not only the battery cable but the hot wire (#10 Ga.)going into the fuse box must go thru switch. This type of switch shuts off all electricity to the car. It makes a good anti-theft device as well.

\* The address and phone number of our Auto Electrician is available to EUREKA builders.

### ADJUSTING THE TOP OF YOUR EUREKA.

- A. Remove interior side panels if they are installed (the leather grained black panels near side windows) exposing a stud and nut on the hinge assembly. It's the one with the slotted hole.
- B. While in the car with a 9/16" socket/rachet, loosen both the left and right side and then have someone close the top completely down and latched at the back. Now have a couple of buddys hold the two front corners of the top down with their full weight.
- C. While top is held down in this manner tighten the left one tight, then do the right side tight. If both are now tight, that's it, the top is now adjusted.
- \* All EUREKAS are shipped less final factory adjustment.

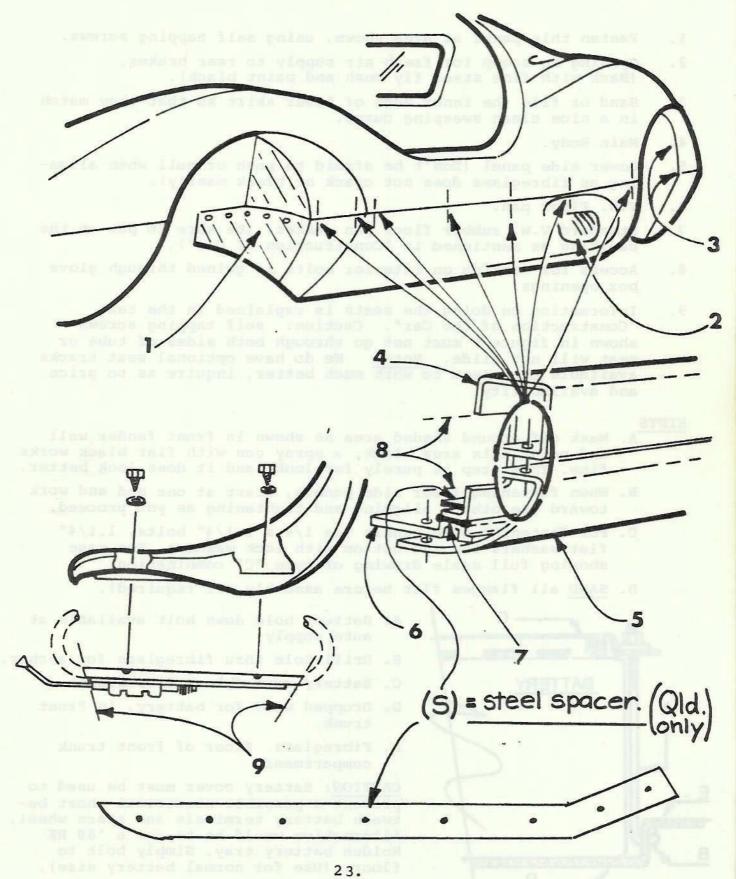
  If top seems to "clunk" or you feel a sort of loose feeling when lifting your top it may need adjustment. Otherwise an adjustment to the top may be required from time to time, especially if you travel rough roads as the vibration may work the nuts on the hinge loose and allow the adjustment to change.



- Partial view of (upright) typical V.W. engine as viewed from rear.
- 2. Approximate location for Oil Temp. Sending Unit: Drill and tap for sending unit using 29/64 drill and ½ inch SAE UNF tap (do this while engine is full of oil so that chips of metal will be flushed out). WARNING: On V.W.-Sending Unit will not work in oil drain plug hole as shown in manufacturers instructions as it plugs up oil pick up tube!
- 3. Suggested location of squirrel cage blower for fresh air (mouth of unit picks up air from inside trunk, motor portion is inside front wheel well).
- 4. Location of holes for body mounting bolts into top of front suspension (torque tube).
- 5. Opening provided for maintenance to steering box.
- Asster cyclinder reservoir: You will notice a trough or valley at this area. The reservoir wants to be placed here if it's an elongated rectangle type (If it is square, as in various year V.W.'s it wants to be placed on vertical wall just immediately rear of body mounting bolts as pointed out in #4 above). With front hood off, stand at front of car looking at two female receptacles for hood pins. The centre of reservoir wants to be approximately 6" towards passenger side of car when measuring from centre of drivers side female receptacle. Approximately at centre of trough or valley, drill a ¼ inch pilot hole and check alignment. Reservoir wants to be located as close to directly over Master Cylinder as possible. Now cut an opening 4½ inches by 1.3/4 inches and file to fit so that reservoir fits snugly into opening with flange holding it from falling through. Secure with a strap across top of reservoir.
- 7. Positive battery cable.
- 8. Fibreglass angle bracket (black) mounted to inner body panel with large flat washers on back side of fibreglass and fasten to top mounting point on rear shock towers for rear body mount.
- 9. Torsion Bar end Plate(torsion bar is revealed by removing this cover).
- 10. Window glazing putty is used as filler at corners of interior body as described in "Construction of Car".

### HINTS/SUGGESTIONS:

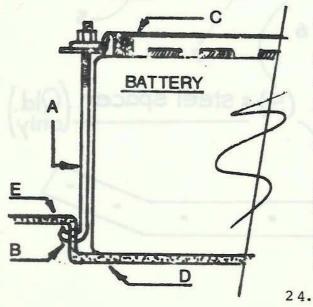
Scoops: Let's assume at this point that all scoops have now been opened so that they are functional. If you will check your local hardware store you may find some screen or mesh (either metal or plastic). Paint it black and fix it to the back side of scoop opening using contact cement or silicone rubber cement. This is a nice finishing touch.



- 1. Fasten this panel at area shown, using self tapping screws.
- Opening in scoop for fresh air supply to rear brakes.
   (Back with fine steel fly mesh and paint black).
- 3. Sand or file the inner edge of lower skirt so that they match in a nice clean sweeping curve.
- 4. Main Body.
- 5. Lower side panel (Don't be afraid to push or pull when aligning as fibreglass does not crack or break easily).
- 6. V.W. Floor pan.
- 7. Standard V.W. rubber floor pan gasket. (Be sure to put on the caulking as mentioned in "Construction of Car").
- 8. Access for working on interior bolts is gained through glove box openings.
- 9. Information on doing the seats is explained in the text "Construction of the Car". Caution: self tapping screws shown in figure 9 must not go through both sides of tube or seat will not slide. Note: We do have optional seat tracks available that seem to work much better, inquire as to price and availability.

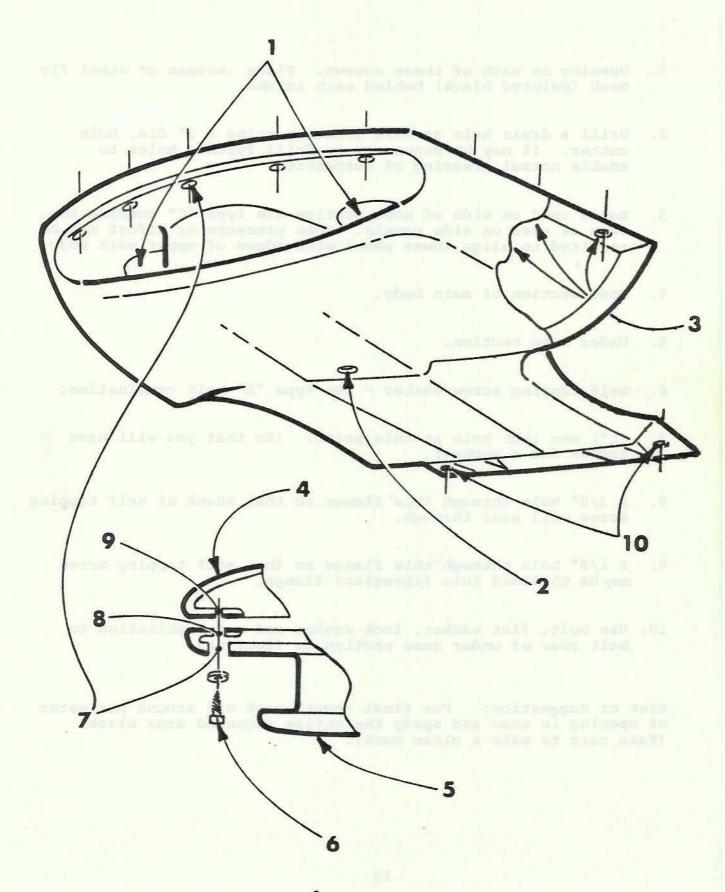
#### HINTS

- A. Mask off around shaded area as shown in front fender well and paint this area black, a spray can with flat black works fine. This step is purely for looks and it does look better.
- B. When fastening lower side panels, start at one end and work toward the other, aligning and tightening as you proceed.
- C. For fastening side panels use  $1/4 \times 1.1/4$ " bolts, 1.1/4" flat washers top and bottom with lock washers. See page showing full scale drawing of type "C" combination.
- D. SAND all flanges flat before assembly (if required).



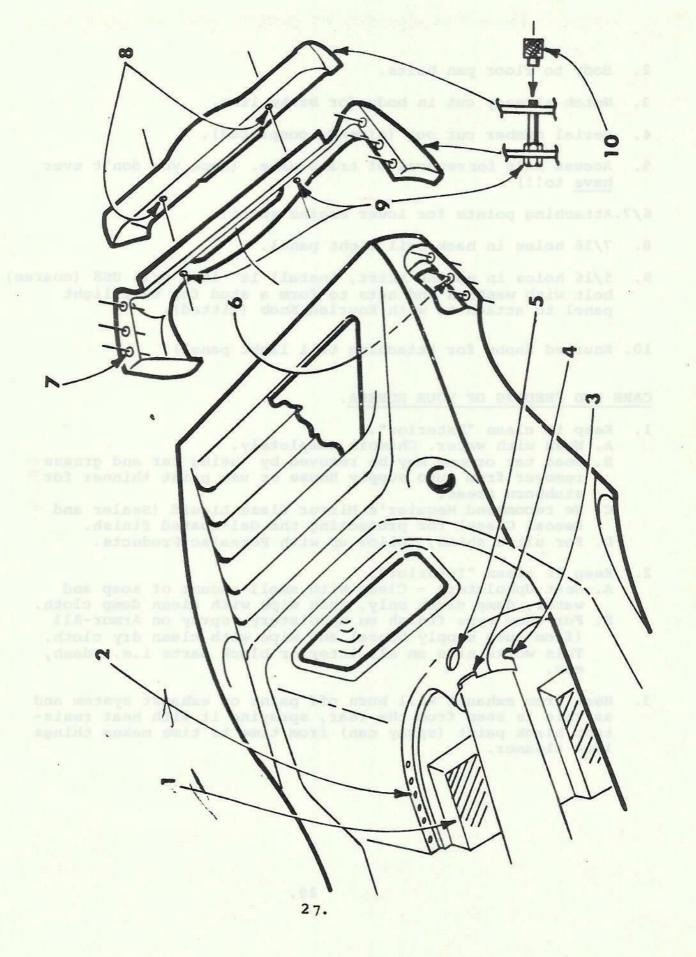
- A. Battery hold down bolt available at auto supply.
- B. Drill hole thru fibreglass for anchor.
- C. Battery cover (black fibreglass).
- D. Dropped well for battery, in front trunk.
- E. Fibreglass floor of front trunk compartment.

CAUTION: Battery cover must be used to prevent a possible electrical short between battery terminals and spare wheel. Alternative would be to use a '68 HK Holden battery tray. Simply bolt to floor. (Use for normal battery size).



- Opening in each of these screws. Place screen of steel fly mesh (painted black) behind each intake.
- 2. Drill a drain hole at this location using a 3" dia. hole cutter. It may be necessary to drill further holes to enable normal greasing of suspension.
- 3. Bolts used on side of nose section are type "C" combination, same as used on side panels. Some pressure or effort may be required to align lower panel with edges of upper main body.
- 4. Nose section of main body.
- 5. Under nose section.
- 6. Self tapping screw/washer See type "A" bolt combination.
- (1") one inch hole at this point. (So that you will have access for a socket).
- 8. A 3/8" hole through this flange so that shank of self tapping screw will pass through.
- 9. A 1/8" hole through this flange so that self tapping screw may be threaded into fibreglass flange.
- 10. Use bolt, flat washer, lock washer and nut combination to bolt rear of under nose section to floor pan.

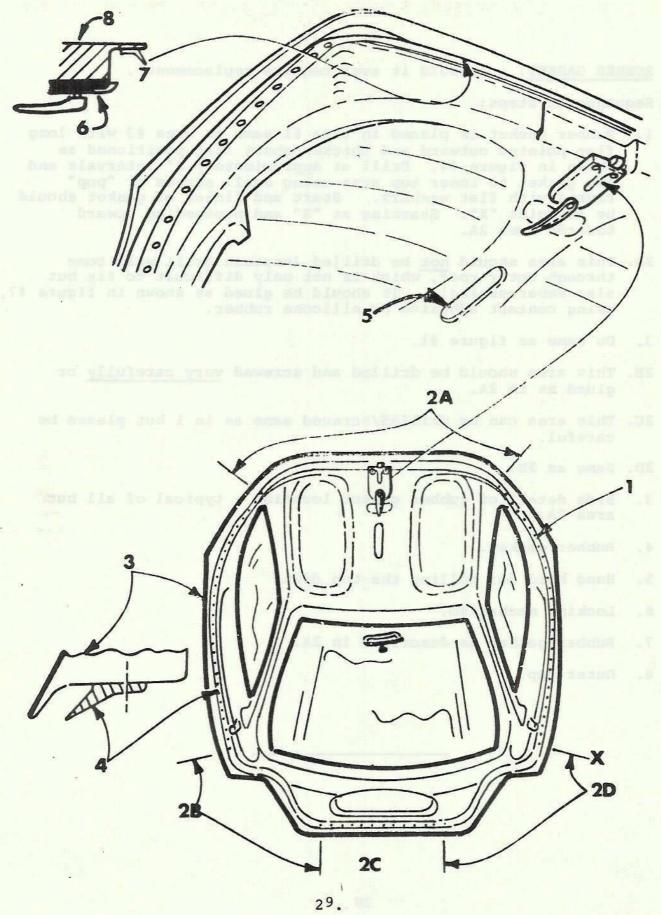
Hint or Suggestion: For final touch, mask off around perimeter of opening in nose and spray the entire recessed area black. (Take care to make a clean mask).



- 2. Body to floor pan bolts.
- 3. Notch already cut in body for brake line.
- 4. Serial number cut out (already completed).
- Access hole for removal of trans-axle. (Hope you don"t ever have to::)
- 6/7. Attaching points for lower engine skirt.
- 8. 7/16 holes in back tail light panel.
- 9. 5/16 holes in engine skirt, install 1½" long 5/16 USS (coarse) bolt with washers and nuts to form a stud for tail light panel to attach to with Knurled Knob (fitted).
- 10. Knurled Knobs for attaching tail light panel).

# CARE AND FEEDING OF YOUR EUREKA.

- Keep it clean "Exterior".
  - A. Wash with water. Chamois completely.
  - B. Road tar or scum may be removed by using tar and grease remover from auto supply house or use paint thinner for stubborn areas.
  - C. We recommend Mequiar's Mirror Glaze Liquid (Sealer and Reseal Glaze) for protecting the Gel-Coated finish.
  - D. For ultra shine, follow up with Porzalac Products.
- Keep it clean "Interior".
  - A. Seat Upholstery Clean with small amount of soap and water, damp cloth only, then wipe with clean damp cloth.
  - B. For show type finish on upholstery, spray on Armor-All (from auto supply house) and wipe with clean dry cloth. This works nice on all interior black parts i.e., dash, etc.
- 3. Heat from exhaust will burn off paint on exhaust system and as this is seen from the rear, spraying it with heat resistant black paint (spray can) from time to time makes things look cleaner.



RUBBER GASKET: (Should it ever require replacement).

# Sequence of steps:

- 1. Rubber gasket is placed in area #1 same as area #3 with long flap pointed outward and thicker short flat positioned as shown in figure #4. Drill at approximately 2" intervals and fix gasket to inner top area using small screws or "pop" rivets with flat washers. Start and finish of gasket should be at point "X". Starting at "X" and proceeding upward towards area 2A.
- 2A. This area should not be drilled (because drill will come through outer roof, which is not only difficult to fix but also embarrassing!). It should be glued as shown in figure #7, using contact adhesive or silicone rubber.
- Do same as figure #1.
- 2B. This area should be drilled and screwed very carefully or glued as in 2A.
- 2C. This area can be drilled/screwed same as in 1 but please be careful.
- 2D. Same as 2B.
- Side detail of rubber gasket location typical of all but area 2A.
- 4. Rubber gasket.
- 5. Hand hold for pulling the top down.
- 6. Locking mechanism.
- 7. Rubber gasket as described in 2A.
- 8. Outer top.

Producing an Instruction Manual for assembly of a product you manufacture seems like a simple task. You start by thinking that it can be done in 10-12 pages but as you begin to write, if your intent is for the customer to actually get the job done, you keep saying to yourself, "Are we really making it clear or simple enough?", and you write some more until you finally end up with 30 plus pages as this has become.

Don't let the number of pages sway your decision towards the negative regarding your ability to complete a EUREKA. Please keep in mind that many EUREKA Owners have completed their EUREKAS using the original instruction sheets, many of whom will envy the pages contained within this manual.

Realizing that even with our best efforts, it is possible we left out something or failed to clarify some particular point - all calls or letters with questions will receive top priority and answers to questions shall be secured immediately.

We welcome constructive criticism of this Manual and look forward to any suggestions that you may have toward improving it, so that future EUREKA purchasers might benefit.

Allan Purvis,
Managing Director,

George Robinson, Assembly Foreman.



DIMENSIONS - Luggage capacity 7 cu. ft. approx. Ground clearance 6.7 ins. approx.
BUILDING TIME - 70.80 hours approx.
TOOLS REQUIRED - Basic tool kit, metric socket set pistol

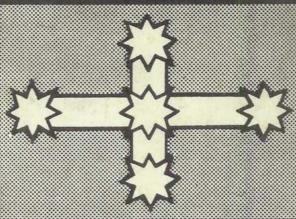
drill, screw drivers etc PERFORMANCE

drill, screw drivers etc.

PERFORMANCE Max speed 0.60mbh.

1500 cc single carb VW standard 100 14 secs approx.
1600 cc Type 3 VW standard 110 12 secs approx.
Autocavan 2200 cc 110 bhp. 125 8 secs approx.
Autocavan 2200 cc 145 bhp. 135 6 secs approx.
Autocavan 2200 cc 145 bhp. 135 6 secs approx.
PETROL CONSUMPTION Approx. 35 mpg. (1500 cc engine)
WEIGHT DISTRIBUTION Front 40° Rear 60° approx. using spare wheel and basic engines with petrol tank half full.
CURBSIDE WEIGHT 14 cwt approx depending on engine and general specification.
ELECTRICS 12 volt Standard VW Loom with additional earth wires Battery VW small 12 volt.
ENGINE COOLING Cool air drawn from body surface by centrifugal fan. 2200 cc engines require large additional oil cooler. We can supply the necessary ducting for this at extra cost.

extra cost
BODY MOUNTING POINTS. All original chassis mounts
MECHANICAL PART REQUIRED. Volkswagon Type 1
1967 onwards BEETLE Rolling chassis Steering column.
Petrol tank (9 gall. Top filler). Breaking system.
SUSPENSION. Standard VW with reset torsion bars. (We recommend you to use Comp. Shock Absorbers).
BREAKING SYSTEM. Preferably tandem type, front discs and rear drums, eq. 1969-1500 cc Beetle.
ENGINES. Volkswagon. 4 Cybinder Porsch and Autocavan.
TRANSMISSION. Volkswagon. 4 speeds. (for best results late, type. 3).



#### PAUSE AND CONSIDER.

in your construction manual could cause a delay, if not major difficulties, for the owner builder in regard to registration. (NO. your EURE+ A will not take a V8 motor!.)