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FOR MANX SR ASSEMBLY MANUAL

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SUGGESTED SEQUENCE OF ASSEMBLY

OBTAIN AND MODIFY DONOR CAR
PREPARE CHASSIS, CLEAN, SANDBLAST, PAINT
INSTALL ALL CHASSIS HARDWARE, INCLUDING ENGINE/TRANS
INSTALL INSTRUMENT PANEL BECAUSE BOLT PAN TO CHASSIS
INSTALL STEERING WHEEL COLUMN
LAYOUT ELECTRICAL WIRING, LIGHTS, RADIO, ANTENNA ETC
ALIGN & BOLT PAN TO CHASSIS
ATTACH TOP INNER SECTION
ATTACH FENDERS
INSTALL REAR BUMPERS
INSTALL DOORS
INSTALL REAR WINDOW
INSTALL TOP OUTER LINER
INSTALL WINDSHIELD & TARGA TOP
INSTALL COWL PANEL
INSTALL WINDSHIELD WIPERS & WASHER
INSTALL HEADLIGHTS IN HOOD
INSTALL HOOD & HOOD HINGES
INSTALL REAR DECK
INSTALL SIDE WINDOWS
INSTALL SIGNAL LIGHTS & OTHER ELECTRICAL COMPONENTS
INSTALL BATTERY
DOUBLE CHECK EVERYTHING AND FIRE ER UP........
HELPFUL HINTS

A. The assembly goes much faster and easier if you have a friend help. Some of the parts are large and hard to align by yourself.

B. We have furnished two tubes of black silicone seal with the kit. Use this silicone to better seal your car on most matting surfaces, including the pan/inner liner gasket.

C. It is useful to have a wiring diagram of your V.W. That way, you can splice into the 15 or so wires in the steering column without too much trouble.

D. Take your time. Do not be afraid to drill out a pop rivet and redo it if you don't have it aligned right. A small alignment problem early in assembly, could cause a bigger problem latter.

E. The lighting system furnished is easy to install. Check your local regulations about side marker lites for height etc. The rectangular headlights provided with the optional hood are the 165 MM lites designed for todays 4 headlite systems. Focusing is done by shining the lite brackets in the hood. This lite may not meet local regulations. If the 200MM lites is required, please ship the 165 MM lites back to us and we will replace them with 200 MM assemblies. These will be harder to mount because of the hood modification and some bracket fabrication.

F. The windshield alignment is critical when installing the removable top and side windows. In fact, we found that installing the windshield after the doors are aligned and rear top installed made the whole process easier and saved us from having to redrill holes in the dash and body liner. This does mean the cowl panel cannot be installed until after the windshield is in place.

G. Gauges can be installed easier in the dash before installing the dash in the car.

H. Installing the rear window is tough. It demands a lot of patience and dexterity. You may opt to have a local car window shop do this. You can do it, but progress is slow.

I. We have furnished threaded pop rivets for the side windows, in case you elect to make them removable. This is a nice feature and the mounts fit snugly enough to allow one threaded rivet per bracket in the door in place of the two described in the manual.

J. We do not supply an external door latch with the standard kit. This means you will have to secure two additional cable pulls to open the doors when the windows are installed. Our optional electric door latch comes with an external access device and a lock. Another latch that can be used is the American Motors, Gremlin door handle which mounts flush and does not detract from the lines of the car.
K. Read the entire manual twice before attempting any assembly. This will acquaint you with the entire process. You will find that the bulk of your assembly time will be in reading the directions and a mock run of the assembly step.

L. We have made the fiberglass thick for extra strength. Where two fiberglass surfaces mate together, they may need to be sanded down for smoothness. A hand held grinder is very useful in the process.

M. When mounting fenders to the inner liner it is helpful to temporarily use bolts and nuts in the door well area to pull fiberglass up tight prior to inserting rivets. Also, make sure when drilling holes in door well that the upper layer of doorsill rubber is not drilled through. In this way the rivets are covered by the doorsill rubber.
# MANX SR PARTS LIST

## Basic Body Kit

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<tr>
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<th>Description</th>
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<tr>
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<td>4-04</td>
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<td>Top - Outer Section</td>
</tr>
<tr>
<td>1</td>
<td>4-06</td>
<td>Top - Inner Section</td>
</tr>
<tr>
<td>1</td>
<td>4-07</td>
<td>Hood</td>
</tr>
<tr>
<td>1</td>
<td>4-08</td>
<td>Rear Deck</td>
</tr>
<tr>
<td>1</td>
<td>4-09</td>
<td>Door - Left</td>
</tr>
<tr>
<td>1</td>
<td>4-10</td>
<td>Door - Right</td>
</tr>
<tr>
<td>1</td>
<td>4-11</td>
<td>Door Liner - Left</td>
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<tr>
<td>1</td>
<td>4-12</td>
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<td>1</td>
<td>4-13</td>
<td>Cowl Panel</td>
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<tr>
<td>2</td>
<td>4-49</td>
<td>SR Emblems</td>
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<tr>
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<td>4-50</td>
<td>Manx Shield (Small)</td>
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<td>4-51</td>
<td>Manx Emblem</td>
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<tr>
<td>2</td>
<td>4-102</td>
<td>Side Windows</td>
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<tr>
<td>2</td>
<td>4-103</td>
<td>Plexiglass Inserts</td>
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<td>Targa Top</td>
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<td>Windshield Support</td>
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<td>Door Mounting Plate for VW Latch</td>
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<td>4-26</td>
<td>Front Body Support</td>
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### Assembly Completion Kit: (cont'd.)

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<tr>
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<td>Bumperette Brace - Right</td>
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<tr>
<td>4-30</td>
<td>Rear Body Support Bracket - Left</td>
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<td>4-31</td>
<td>Rear Body Support Bracket - Right</td>
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<td>4-32</td>
<td>Rear Body Support Angle - Left</td>
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<td>4-33</td>
<td>Rear Body Support Angle - Right</td>
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<td>Rear Body Support Rod</td>
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<td>&quot;S&quot; Hook</td>
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<td>4-37</td>
<td>Spring</td>
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<td>4-38</td>
<td>Turnbuckle</td>
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<tr>
<td>4-52</td>
<td>Rear Deck Latch Assembly</td>
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<td>4-53</td>
<td>Hood Latch Pin Assembly</td>
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<td>4-54</td>
<td>Door Release Cable Assembly</td>
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<td>4-56</td>
<td>Fastener Kit</td>
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<td>4-57</td>
<td>Doorsill Rubber Trim</td>
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<td>Rear Window Rubber Trim</td>
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<td>Top &amp; Body Rubber Trim</td>
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<td>4-60</td>
<td>Hood &amp; Body Rubber Trim</td>
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<td>Rubber Foam Stripping</td>
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<td>U Clamp - Front</td>
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<td>Hood Retainer Cable</td>
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<td>Window Braces</td>
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### Legal Lighting Kit:

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<tr>
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<td>Headlight</td>
</tr>
<tr>
<td>4-40</td>
<td>Turnsignal - Front</td>
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<tr>
<td>4-41</td>
<td>Turnsignal - Rear - Left</td>
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<tr>
<td>4-42</td>
<td>Turnsignal - Rear - Right</td>
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<tr>
<td>4-43</td>
<td>Side Marker - Front (Amber)</td>
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<tr>
<td>4-44</td>
<td>Side Marker - Rear (Red)</td>
</tr>
<tr>
<td>4-45</td>
<td>Reverse Lamp</td>
</tr>
<tr>
<td>4-46</td>
<td>License Plate Lamp</td>
</tr>
</tbody>
</table>
## SR Fasteners

### Pkg. #1
**Body Liner**
- 20 bolts: 5/16" - 18x2-1/2"
- 20 flat washers: 5/16" - 3/4"
- 20 lock washers: 5/16"
- 20 hex nuts: 5/16"

### Pkg. #2
**Bumperettes**
- 8 hex head bolts: 5/16" - 24x1-1/2"
- 4 fender washers: 5/16"
- 8 lock washers: 5/16"
- 4 flat washers: 5/16"

### Pkg. #3
**Dashboard**
- 6 hex head bolts: 5/16" - 18x1-1/2"
- 12 fender washers: 5/16"
- 6 lock washers: 5/16"
- 6 hex nuts: 5/16"
- 15 bolts: 3/16" - 10-32x1"
- 15 washers: 3/16"
- 15 hex nuts: 3/16"

### Pkg. #4
**Body Sides, Top Rear Fender**
- 12 hex head bolts: 5/16" - 18x1-1/2"
- 24 flat washers: 5/16" - 3/4"
- 12 lock washers: 5/16"
- 12 hex nuts: 5/16"

### Pkg. #5
**Body Sides, Door Well**
- 34 pop rivets: 3/16" - 5/8"
SR Fasteners, cont'd.

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<thead>
<tr>
<th>Pkg. #6</th>
<th>Body Sides, Front Fender</th>
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<tbody>
<tr>
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<td>3/16&quot;</td>
</tr>
<tr>
<td>10</td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>12</td>
<td>3/16&quot; - 5/8&quot;</td>
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<tr>
<td>4</td>
<td>5/16&quot;</td>
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<td>4</td>
<td>5/16&quot;</td>
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<td>1/4&quot; - 20x3/4&quot;</td>
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<td>12</td>
<td>1/4&quot;</td>
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<tr>
<td>12</td>
<td>1/4&quot;</td>
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<td>12</td>
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<tr>
<td>2</td>
<td>5/16&quot; x 3/4&quot;</td>
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<tr>
<td>2</td>
<td>5/16&quot;</td>
</tr>
<tr>
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<tr>
<td>8</td>
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<tr>
<td>8</td>
</tr>
</tbody>
</table>
### Assembly To Door Well
- 8 1/4" - 20x3/4" Flat head bolt
- 8 1/4" Lock washer
- 8 1/4" Hex nut

### Door Latch Assembly
- 16 3/16" - 10-32x1" Bolt
- 16 3/16" Lock washer
- 16 3/16" Hex nut
- 12 3/16" Flat washer

### Door To Arm
- 8 5/16" - 18x1-1/2" Hex head bolt
- 8 5/16" Fender washer
- 8 5/16" Lock washer
- 8 5/16" Hex nut

### Pkg. #11  Cowl Panel
- 6 3/16" - 10-24x1/2" Pan head screw, T.C.S. - Type F

### Pkg. #12  Door Panel (Liners)
- 50 3/16" x 1/2" Pop rivet

### Pkg. #13  Outer Top (Rear Deck)
- 14 3/15" x 1/2" Pop rivet

### Pkg. #13  Rear Body Support Angle
- 6 5/16" - 18x1" Bolt
- 6 5/16" Flat washer
- 6 5/16" Lock washer
- 6 5/16" Hex nut

### Rear Body Support Brackets
- 2 5/16" - 18x2-1/2" Hex head bolt
- 10 5/16" - 18x3/4" Hex head bolt
- 4 5/16" Fender washer
- 12 5/16" Lock washer
- 12 5/16" Hex nut
SR Fasteners, cont'd.

<table>
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<th>Pkg. #14</th>
<th>Rear Bumperette Brace</th>
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<td>5/16&quot;</td>
<td>Lock washer</td>
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<tr>
<td>4</td>
<td>5/16&quot;</td>
<td>Hex nut</td>
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<table>
<thead>
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<th>Engine Compartment Crossbar</th>
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<tbody>
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<td>Hex head bolt</td>
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<tr>
<td>4</td>
<td>5/16&quot;</td>
<td>Lock washer</td>
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<td>4</td>
<td>5/16&quot;</td>
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<tr>
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<td>Hex nut</td>
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<tr>
<td>4</td>
<td></td>
<td>Flat washer</td>
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<table>
<thead>
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<tr>
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<td>3/16&quot; 10-24x1/2&quot;</td>
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<td>1</td>
<td>3/16&quot;</td>
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<td>Washer</td>
</tr>
<tr>
<td>1</td>
<td>3/16&quot;</td>
<td>Hex nut</td>
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* Windshield Fastener Kit (#4-67) *

| 6        | 5/16" - 18x1-1/2"    | Bolt |
| 6        | 5/16"                 | Fender washer |
| 6        | 5/16"                 | Lock washer  |
| 6        | 5/16"                 | Hex nut      |
DISASSEMBLING THE VW SEDAN

The following parts are needed to complete the Manx SR from a Volkswagen Beetle sedan. We suggest that a complete VW Beetle sedan wreck (usually a roll over) be purchased; preferably a 1961 or later model (engine No. starting at 5,000,001 five million one). Do not try to use a VW Combi, truck, Karmann-Ghia, Porsche or Variant, although the engine, transaxle, wheels and instruments could be used from these models. The Porsche transmission mount would need considerable rework.

The advantage of buying a complete wrecked sedan is that all of the parts are in one package, representing a considerable saving since the small items such as wiring, switches, speedometer, hand brake, turning indicators, etc. are normally overlooked by the seller. Also, any undamaged sheet metal is saleable to body shops or other individuals.

The parts you must save are as follows:

1. Battery.

2. 1961 or later gas tank, saving the 4 rectangular washers.

3. Steering column, remove clamping bolt at bottom end of shaft. Save all of the steering column assembly. Remove 2 bolts and clamp at upper end of the column and save. When removing steering column clamp from the body, save the rubber band at upper end and rubber grommet at lower end, as these will be used later.

4. Remove and save: speedometer, drive cable, ignition switch if not part of steering column, light switch, 1958 or later windshield wiper, windshield wiper switch, horn, and any instruments you desire to use.

5. Brake reservoir.

6. Rear view mirror and from the later models, the sun visor combination can be used with some rework.

7. Front floor mats.

8. After all the above items have been removed and saved, the body is ready for removal from the chassis. Bolts will be found under the back seat, rear fender running boards and gas tank.
I. Disassembling the VW sedan, cont'd.

9. Remove the body and save the rubber mounting strip from the perimeter of the chassis.
SHORTENING THE VOLKSWAGEN BEETLE SEDAN ChASSIS

After the removal of the body, all the running gear is still attached to the floor pan; i.e. front axle and wheels, final drive, engine and rear wheels. These need not be removed.

Step 1: With a putty knife remove all sound deadening material from the rear of the floor pan to just forward to the emergency brake lever and under the front seats.

Step 2: Remove the main brakeline from the "T" fitting at rear. Bend open tabs along the left side of the floor tunnel from the rear up to the vicinity of the emergency brake. Remove rubber grommet at the rear of the floor pan where the main brake line goes through to the "T" fitting. Extract the main brake line through the hole and gently bend the main brake line forward, out of the way, toward the pedals.

Step 3: Remove the access cover at the forward end of the floor pan.

Step 4: Remove the access cover at the rear end of the floor pan.

Step 5: Remove the bolt from the front end of the coupling between the final drive and gear lever linkage through rear access hole, leaving the coupling on the final drive.

Step 6: Remove the 2 bolts at the gear lever, when removing the gear lever, note position of the shift guide plate under the gear lever cover -- the shift guide plate incorporates the reverse lock-out which is positioned on the right, or passenger side, of the car and points up.

Step 7: Extract the gear lever linkage tube through the front access cover.

Step 8: Remove the emergency brake cables. Remove the snap ring at the pin on the emergency brake lever and remove the lever.

Step 9: Remove the pedal assembly, throttle wire, and clutch cable.

Step 10: Remove the battery hold-down and ground strap.

Step 11: Remove the heater control wire and replace the handle.
II. Shortening the VW sedan chassis, cont'd.

Step 12: Replace the rear access cover. Using a sharp scribe, scribe a line around the covers edge onto the surface of the tunnel top of the floor pan. Remove the access cover. Measure in 1/2 inch and scribe a new line parallel to the outside line or outside edge of where the cover had been, leaving enough metal to keep the clutch and throttle wire tubes secure. You will now enlarge the rear access hold by cutting along the inside line. The cover, when replaced, will cover this new hole by 1/2 inch.

Step 13: Remove the rear half of the body mounting rubber and fold forward. This will later be glued back down after shortening the floor pan.

LAYOUT

Step 14: (See Fig. 1). The section to be removed will be 14 1/4" plus or minus 1/4". Using the rear of the four seat tracks as a starting point, scribe a line even with the rear ends of the seat tracks directly across the floor pan. To insure accuracy, a piece of thin sheet metal at least 4" wide by 14" long can be bent around the tunnel to scribe against. The lowest portions of the floor should be scribed with the help of a straight piece of wood cut to fit. Next, make a stick exactly 14 1/4" long (be sure the ends are cut square). This will be used to layout the second line across the floor pan. Using the 14 1/4" stick as a measure, place one end even with, and at right angles to, the first line scribed just behind the seat tracks. At the opposite end of the stick, scribe a small mark. Continue doing this from one side of the floor pan, over the tunnel and to the opposite side. Now, using the sheet metal and the straight wood from the first line, scribe through the marks, completing the second line. These two lines, 14 1/4" apart, indicate the section to be removed from your floor pan. There will be two darts taken from the rear corners of the floor pan to accomplish a straight line along each side. (See Step 21). NOTE: It is very important to accurately shorten 14 1/4" (80-inch wheelbase with trailing arms level) for the Manx SR.

Step 15: Next, cut the lines on the tunnel only making sure you do not cut any of the control tubes inside. Now, remove this section of the tunnel by cutting along the lower corners between the previous two cuts. If the tunnel top can not easily be removed, there may be control tubes still fastened to it inside by tabs. Other cuts made in this section of the tunnel top will be required all the while inspecting underneath by prying up slightly until you are able to unfasten the control tubes without damage.

Step 16: With the control tubes thus exposed, you will find the two tubes nearest the top leading to the emergency brake. Hacksaw these two tubes off directly behind the emergency brake opening, or even with the rear of the seat tracks. Sometimes it is necessary to braze these remaining short tubes back onto the bracket just under the emergency brake opening as they will be loose and inadequate to become emergency brake cable guides. Using the cutting torch, reach through the enlarged rear access hole and cut the emergency brake tubes near the torsion bar housing. Older models pass under the torsion bar housing and later models pass over the top

Step 17: Cut the heater cable guide tubes fore and aft as they will no longer be used, unless the same heating system is to be incorporated in your completed car; this
involves considerable reworking of the left-hand heater box at the engine.

Step 18: Just inside the rear access hole, the throttle, clutch and, on early models, the choke guide tubes, pass through the left, or driver's side, where they are welded to the floorpan. Using the torch, cut through the weld and the tubes, leaving them unfastened.

Step 19: Next, finish cutting the floorpan and remove the 14 1/4" section. It is advisable to use a disc grinder on most of the worst bumps and irregularities left from the torch cutting at this point.

Step 20: The repositioning of the two halves can be accomplished with the aid of the usual boxes, blocks, 2 saw horses and planks, or if the wheels are still of the chassis, a pair of stands or jacks supporting the rear half, and a hydraulic rolling garage jack under the front half makes an easy job of it. After bringing the two halves together, a few measurements can be taken to insure proper length, diagonal, and wheel track measurements. While moving the two halves together, previously-loosened clutch, throttle, choke guide tubes and gas line must be pulled through and out the rear of the floorpan. These will all be longer than necessary and may be shortened later as you see fit. The clutch guide tube is the only critical one as it must be cut precisely to accommodate the flexible clutch cable guide tube that is positioned just above the final drive cover. (See Step 22).

Step 21: To weld the two sections together, you must start by a series of tack welds not more than 6" apart, beginning with the lower corners of the tunnel, alternating tack welds from one side of the floorpan to the other on 6" centers. Repeat process between previous tack welds, leaving 8" unwelded on the outside ends until the darts are taken from the rear corners of the floorpan. The enclosed pattern marked, "Floor Pan Dart Template", should be cut out with scissors and copied onto light sheet metal.

Place your sheet metal template with point "A" on the aft corner of the floor pan, and point "B" on the outside edge of the floor pan. The template edge "B-C" should align with the previously cut edge of the aft floor pan section. Scribe onto the floor pan around the inboard edge of the template from point "A" to point "C". Use a small square to insure a perpendicular projection down into the deepest area of the floorpan. (See Fig. 2). While maintaining point "A", swing the "B-C" end of the template inward until the template's outside edge, "A-B", aligns itself with the outside edge of the forward section of the floor pan. Again, scribe around the inboard "A-C" edge of the template, using the small square where needed to project downward on to the floorpan. (See Fig. 3). These two scribed lines indicate the dart to be removed.

Remove the dart with a cutting torch, which will completely disconnect the rear corner of the floor pan. (See Fig. 4). When rewelding the rear corner of the floor pan back into place, make sure to align with the front sections of the floor pan in both fore and aft and sideways dimensions. (See Fig. 5).
II. Shortening the VW sedan chassis, cont'd.

There will be a small remaining hole to be filled by a piece trimmed from the 14 1/4" section of the floor pan previously removed. Finish welding the floor pan by welding one small section at a time and moving to another area to minimize warping. There will be a small amount of heating and pounding the metal down to align for welding on the lower corners of the rear half of the tunnel on all models. The earlier models need some of this treatment all around the rear half of the tunnel. After you complete the welding, don't forget to turn the whole thing over and weld the bottom of the tunnel. If the running gear is still attached, it will stand on the side of its wheels.

Step 22: After brazing the throttle, clutch, and choke (on earlier models) back into place just inside the rear access hole, the flexible clutch cable guide tube must be installed. Hacksaw the clutch guide tube off approximately 1-3/4" behind the floor pan, or about even with the face of the final drive mounting plate below it. Install the flexible clutch cable guide tube between the guide tube on the floor pan and the boss cast on the final drive cover (earlier models, a steel bracket). This flexible guide tube should be installed with enough preload to sag approximately 1". If the cable guide tube is preloaded too much on the vehicles with fully synchronized transmission, it will make the cable stiff in operation and can create noises or cause breakage of the cable. This condition can be rectified by shortening the guide tube on the floor pan after removing the tube and cable. If the sag is insufficient, operation of the clutch will cause juddering. This condition can be rectified by inserting washers between the guide tube and the boss cast on the final drive cover.

Step 23: The 14 1/4" of extra length you will now have on the clutch cable can be taken up either in a loop or by cutting and clamping back together with two of the wire rope clamps provided just forward of the rear, or adjustable end of the cable, between the clutch throw-out arm and the boss on the final drive cover.

Step 24: The emergency brake cables are to be clamped together in the same manner as above, inside the rear access hole of the tunnel with the four remaining wire rope clamps.

Step 25: After installation of the throttle wire, cut the cable at the carburetor and install new cable end.

Step 26: The main brake line is to be inserted back through the hole provided in the rear of the floor pan, reinstall the rubber grommet and bend back the remaining metal tab at the lower corner of the tunnel and floor around the brake line. Be sure to make the line as snug as possible without kinking, as it is now exposed inside the car. The easiest route to take behind the floor pan is to turn toward the outside of the car along the torsion bar housing, up, over and back toward the "T" fitting. Tapping or clamping it down to the torsion bar housing will insure it against rattles or possible damage from chafing through, resulting in the loss of brakes.
R SHIFT LEVER INSTALLATION

27: Before reassembling the gear shift lever, the linkage tube must be shortened by 14 1/4" also. Now, using that 14 1/4" stick that was used in the layout of the floor pan, mark the tube so that the straight portion of the rear will be removed. Next, the most critical and accurate line must be made. Lay the tube on a flat surface and scribe a line along the side of the tube, parallel to its axis and, at the same height, a line that will serve to eliminate any change of rotation when the two halves are rejoined. Now, remove the 14 1/4" section with a hacksaw. Before welding back together, make certain the line along the side is perfectly realigned. Now weld. Be sure to grease freely at the gear lever and bushing when installing; and don't forget to safety-sire the set screws at the coupling.

The bolts (two) on top of the tunnel are part of the adjustment. By loosening and sliding the cover plate forward or backward and tightening again, you will find that the top or bottom of the shift pattern can be controlled.

28: Remove seat rails, as new seat adjuster are provided.
FLOOR PAN DART TEMPLATE

ALIGNED WITH OUTSIDE EDGE OF FLOOR PAN; POINT A WITH Apex CORNER OF FLOOR PAN

CUT OUT TEMPLATE
(FLOP FOR OPPOSITE SIDE)
III

MOUNTING BODY LINER

Using 1-1/4" x 1-1/4" x 5" wood spacers, cut each into 2 pieces to fit underside of VW floorpan side channels.

Use sanding block and 36/40 grit sandpaper to sand edges. Turn liner upside down and sand lower edges.

If your chassis doesn't have one of the front suspension adjusters- such as a "select-a-drop", we suggest you install one before you mount the body liner. Without one, your finished Manx SR will probably sit a little high in the front.

Glue shortened rubber mounting strip from stock VW to perimeter of chassis. Set body liner in place on chassis. Carefully align body liner- front, rear and sides. Use wedges between tunnel and the body to force the body outward. Double check the alignment very carefully to make sure the body is properly located fore and aft and to the sides and straight with centerline of chassis. When you are satisfied that the body liner is on straight, hold one of the wooden spacers (rear part) in place and drill a 5/16" hole through the liner, floorpan and wooded spacer using one of the existing holes, near the rear of the chassis as a guide. Use one of the bolts and nuts provided (Package #1) to locate floorpan. Repeat this on other side near the rear. Tighten these two bolts just enough to hold liner in position. Now complete drilling through liner and spacers using original holes in floorpan as a guide. Install one bolt and nut near front of chassis on each side and tighten (evenly with rear) enough to securely hold liner in place. The remaining nuts and bolts will be installed later.

Place #4-63 clamps (2) on lower front torsion bar tube about 4" in from each shock tower. Mount one #4-26 plate on each clamp and install nuts finger tight (See Figure 31) Hold (or clamp) remaining #4-26 plates in place and drill 5/16" holes through fiberglass using 5/16" trusshead bolts from Pkg #7. Secure these plates to the fiberglass (the screw head and fender washers go inside luggage area). After side panels are mounted these plates will be drilled and bolted together.
IV

INSTALLING INSTRUMENT PANEL & WINDSHIELD

Use a small block of wood and 36 or 40 grit sandpaper to carefully smooth edges of dashboard. When sanding edge of recess for lower windshield bar, use masking tape or duct tape to protect vinyl texture of dash from scratches.

Install instruments and switches. If you don't have hole saws of the proper size, scribe a circle on the dash the size of the recess on the speedometer bezel, allowing enough room for the mounting ears, and drill a series of small holes inside the scribe line. With a suitable file, cut to scribe line. Mount the speedometer. It may be necessary, for some instruments to fit properly, to use a small sanding disc to thin the fiberglass from the backside, near the edge of the hole.

Set the dash into the body liner. Mark where the lower edge of dash rests in the ledge on each side of the body liner. Remove the dash from the body liner. Evenly space and drill 4 holes on each ledge within this line (A-Fig. 41).

FIGURE #41
IV. Installing Instrument Panel & Windshield cont'd.

D. Re-install dash into body liner making sure it is completely fitted into the recess. Drill and install (2) 10-32 x 1" bolts (Package #3) in the lower edge of the dash (A-Figure 42). Drill carefully to insure that holes go through liner flange with room for nut and washer.

E. Install windshield. To do this, lay windshield flat on dash (with slotted edge of frame up) and slip lower windshield edge into channel at front of dash panel. Carefully lift top of windshield until lower legs of windshield have seated in recess provided in liner. Make sure windshield legs bottom in this recess (B-Fig 42).

With someone holding windshield legs down, drill through lowest hole (5/16") in windshield frame through the fiberglass and install 5/16 x 1-1/2" bolt (Package #17 with washers and nut. Repeat on other side. Now, hold top of windshield down (C-Fig 42) and drill top hole on each leg, install bolts. Then drill and install center bolts on each leg.
Installing Instrument Panel & Windshield cont'd.

While pressure is being applied to top rear edge of dash (E-Fig 42), drill through dash sides and body liner (F-Fig 42) and install 5/16" x 1-1/2" hex head bolts (Pkg. #3).

Drill remaining holes in lower dash edge (A-Fig 42). Use holes drilled earlier in body liner and drill up from bottom. Use remaining 10-32x1" bolts from Pkg. #3.

Scribe a center line in groove provided on bottom of dashboard for steering column. Make and tape 7/8" spacers in this groove (A-Fig #43). Hold a pilot rod on these spacers and line up with the center line.

Mark the spot where the rod touches the forward body wall of the body liner. This should be the approximate center of the 1-3/4" diameter steering column. Drill a small pilot hole (B-Fig. 43) at this point and pass pilot rod through the liner to the steering box. The box may have to be loosened and rotated slightly. Carefully widen the hole until alignment is achieved. Now you can drill the hole to the 1 3/4" diameter required.

Place steering column in hole and attach to steering box. With the column held securely in place, drill two holes through underside of dash and bolt column in place.

Position windshield support (#4-15) in center of dash/windshield. Drill (5/32") holes in underside of windshield fram and use 10-24 x 1/2" T. C. S. (Thread cutting screws) (Package #17) to fasten. Drill 3/16" hole in dash and fasten with 10-32 x 3/4" flat head screw (Pkg. #17).
V

MOUNTING FENDERS & FITTING DOORS

Sand all edges of fenders and inner top section with a sanding block and 36/40 grit sandpaper. Using a grinding tool (mushroom sander recommended), grind underside of body liner (to an even thickness) at all mounting edges. This will be necessary particularly at corner (A-Fig. 51).

Align top inner section (#4-06) with body liner. At the rear corners of top inner section (A-Fig. 52), push forward and inward to locate. At the front of top inner section locate by aligning surfaces flush as shown (B-Fig. 52). C-clamp the body liner and top inner section together along flanges.

![Diagram of mounting process]

Drill the six 5/16" holes on each flange (C-Fig. 52) spacing five of the holes evenly along flange and putting the sixth one at the rear tip. Now set the top inner section aside.

Next, position a fender in place. To do this, it will be necessary to remove the body liner bolts on this side. Fenders can be propped in position by wedging 2 x 4's into corners (D-Fig. 51) at front and rear of door opening and the floor. C-clamps can
V. Mounting Fenders & Fitting Doors, cont'd.

be used at front and rear. Check for spots where grinding might be needed (check corner A-Fig. 51) to insure proper fit...check for even fit along mounting surface. The width of body liner and fender at rear of door opening should be 2-9/16" as seen in Fig. 53.

FIGURE #53

2-9/16"

E. Install door sill rubber trim #4-57, let rubber trim hang over equally at each end. The lower flap is wedged between fender and body liner (Fig. 54). Retain a 7" width at door sill (center) - (A-Fig. 54). Make sure rubber trim is pushed all the way in along entire length of door opening. (Note: do not trim edges until later).

FIGURE #54

F. To fasten body liner and fender around door opening, space evenly and mark for 17 holes along length of door sill trim. Drill (3/16") the six holes in middle of door opening (Fig 51) and pop rivet (Package #5) through body liner, rubber trim and fender (Fig 54).
VI

ASSEMBLING THE DOORS AND DOOR LINERS

A. To position the door liners (#4-11 and #4-12) in as far as possible along the top edge (A-Fig. 61), grind the front and rear upper corners of the door liners so as to clear the build-up of material at the inside corners of the door panels.

B. It is necessary to locate the door mounting plates (#4-25) in the doors so that the door liner may be notched around it. To locate the center of the hole for the door latch pin, (on bottom of door) measure 20" from the rear corner (A-Fig. 62) and 1-7/8" in from the outside edge.

Drill a pilot hole and cut out with a 1-1/2" hole saw. Center the door mounting plate (#4-25) over this hole (B-Fig. 62) and drill the mounting holes (3/16""). While the plate is held in place, mark around it (on the inside of the door). Cut the bottom edge of the door liner so that it will fit around the door mounting plate when it is fitted into place.
V. Mounting Fenders & Fitting Doors, cont'd.

G. After fender has been secured through the center section of door opening, place door in opening with rubber sill trim (#4-57) held only by pop rivets at center of door and check fit. If door will not fit down deep enough within the fender opening shims must be placed between body liner and fender spreading fenders fore and aft enough to accommodate a flush fitting door.

If door will not fit inboard toward the centerline of the car enough to fit flush with fender, fiberglass material may be removed from both the body liner behind the rubber trim and some material from the door itself. Proceed riveting fender with the door constantly being checked for fit.

H. Drill and rivet the front and rear of door well.

I. Using the pre-drilled holes in body liner, drill the holes through fender at top rear (C-Fig. 52).

J. Cut a 45" piece of rubber foam stripping (#4-61), peel the backing, and stick on the rear windowledge of the body liner (D-Fig 101). Replace top inner section on car and bolt (5/16" x 1-1/2" - Pkg. #4) the top inner section, body liner and fender together.

K. Line up top edge of front fender flange and top edge of body liner flange and clamp. Drill six evenly spaced holes (3/16") and pop rivet (Pkg. #6, Fig. 51).

L. Run a 5/16" drill through the holes already in the top inner section and the body liner and drill through the lower fender, bolt together with 5/16 x 2-1/2" bolts (Pkg #1-Fig 54).

M. Evenly space and drill 5 holes around front edge of fender and through the body liner (3/16"), (E-Fig. 51). Rivet together.

N. Repeat procedure on other side.
Assembling The Doors And Door Liners, cont'd.

With the door laying flat on color surface, make a wood spacer (C-Fig 61), to hold liner flush with lower edge of door (D-Fig. 61).

Get about 2 dozed extra strong clothes pins or "C" clamps. Mix a small amount of the bonding material (provided in the fastener kit) according to the instructions on the container. Smear the bonding material along the top ledge of the door (A-Fig. 61) and place the door liner into position. Use the clothes pins or clamps (about 2" apart) along the top edge to hold it in place while it is bonding. (let it cure evenly before proceeding).

Evenly space 25 holes (3/16") along the front, rear and bottom of door and door liner and install pop rivets (Pkg. #12) (E-Fig. 61). Remove wooden block.

Grind down the top edge of door evenly to match the door liner (F-Fig 61).

If there is any interference at the edge of the door when rechecking fit into the fender, it may be necessary to sand the edge of the door (A-Fig. 63).
A. Assemble only the door hinge housing (#4-23) and the two straps (#4-20) (Fig 71) using the four carriage bolts, lockwashers and hex nuts (Package #10).
Mounting The Door Hinge, cont'd.

Slide the straps all the way out from the housing and tighten. Construct a cardboard template of the largest face of the door hinge housing, showing the large rectangular opening and the four 1/4" holes.

With the front wheels removed from the chassis, place the door hinge housing up inside the fender against the door opening. Carefully slide it up and down vertically and from side to side horizontally until it is firmly seated against the underside of the door opening. The upper and lower outside corners should be touching the inside of the body as shown (A-Fig. 72).

While you hold the housing in this position, have a helper drill the two upper 1/4" holes through the housing and fiberglass.

Place the cardboard template in the corresponding position on the outside of the door opening and mark with a pencil where the housing is underneath. Now temporarily bolt housing in place with two 1/4" bolts and drill an exploratory hole (A-Fig. 73) near the lower outside corner of the large rectangular opening using the template guidelines (Fig. 73).

Using the drill with a sawing effect, extend the exploratory hole towards the outer, lower corner of the housing underneath, and proceed until the corresponding corner the housing is located.
Mounting The Door Hinge, cont'd.

Re-align the template, if necessary, and drill the lower two 1/4" holes into the door hinge housing. Countersink all four 1/4" holes and mount the housing using the 1/4-20x3/4" flat head bolts provided in Pkg. #10. If you have nothing better, you can use the same drill to make a series of holes and remove the fiberglass from the large rectangular opening between the four 1/4" bolts. Use a coarse file to finish the edges even with the opening in the door hinge housing underneath.

Grease the bushing (#4-19), place it into the door hinge arm (#4-22) and assemble the arm to the hinge straps (#4-20) with a 5/16x4" hex head bolt (Pkg. #10). This bolt also holds the support tab (#4-21) on the windshield side of the hinge (Fig. 71). The slotted end of the support tab fastens under the nut of the middle windshield bolt. (The bolt may need to be twisted slightly to fit properly). Assemble, but don't tighten the bolts yet.

Put the door into the door opening and tape it in place after it is properly lined up. Swing the door hinge arm up to the door and move it forward or back (sliding the slotted straps) until it lays flat against the door. Now tighten all the door hinge bolts. Still holding the door hinge arm against the door, use a bent scribe and mark the four holes onto the door.

Remove the door and drill the four holes (5/16"). Replace the door into the door opening. Attach the arm to the door with the 5/16x1-1/2" hex head bolts (Pkg. #10).

If, when closing the door, it is too far in or out (from side to side, and at rear), it may be necessary to shim with gasket material, aluminum sheet, etc., between the door and the door hinge arm on one side.
VII. Mounting The Door Hinge, cont'd.

I. Now install the spring. With the "S" hook (#4-36) on one end of the spring (#4-37), reach inside the fender and hook the "S" hook into the hole at the bottom of the door hinge housing. Holding the spring in place with one hand engage the turnbuckle (fully extended) into loose end of the spring and into hole on the end of the door hinge arm (door open) with the hook facing downward (Fig. 71).

J. Adjust the turnbuckle until the door will stay in full up position. Don't tighten any more than necessary.

K. Now close the door. If the spring tension causes the front of the door to lift up above the fender line, loosen the four bolts which hold the door to the arm and insert a temporary shim (try 1/8") (A-Fig. #74).

Tighten the bolts a little and try the door. If necessary, try a thicker or thinner shim until the front of the door is even with the front fender when the rear of the door is held down.

L. When a shim of the right thickness has been found, mark its position on the arm. Unbolt and remove the door hinge arm from the car. Lay the hinge flat on a clean surface and mark its outline. Position the shim by the marks (A-Fig. 75) on the arm and draw a new line (B-Fig. 75).

Clamp the arm in a vise and bend (C-Fig. 75) with a heavy hammer until it fits the new outline. When it is reshaped, bolt it back in the car.
If it is in good condition, use the hood latch assembly from your pirated VW. You will need to purchase another hood latch assembly so you have one for each door.

Fasten the door mounting plates (#4-25) into doors (B-Fig. 62) with 10-32x1" trusshead bolts (Pkg. #10).

Mount the latch pin (from VW latch assembly) into the door mounting plate (A-Fig. 81).

Dab a bit of black paint on the tip of the latch pin and carefully close the door. Drill a 1/4" pilot hole where the latch pin leaves a mark on the door sill. Using this pilot hole, cut a 2-1/8" hole.

Using the VW latch as a guide, lay out and drill the four mounting holes (3/16").
E. Make two mounting plates (A-Fig. 82) for door release cables (#4-54) if you desire to attach your door release knobs in the door panel. (It can also be mounted in the door opening of the body liner or even the dashboard). Fasten cables in place and route through hinge opening (B-Fig. 82). Fasten cable so that it will no catch when door is opened and closed.

With the cable ends sticking out through the front wheel openings, attach the latch to the cable. Adjust cable and secure with set screw.

F. Push the latch back through the open section between the body liner and fender. Reach forward through the rear wheel opening and hold the latch up into place (Fig. 81). Fasten latch in place with 10-32x1" trusshead bolts and washers (Pkg. For better alignment, washers must be added at the rear (B-Fig. 81) and the front lip of the latch should be bent to allow better fit (C-Fig. 81).
GAS STRUT INSTALLATION

The gas rod is designed to replace the spring and turnbuckle assembly in the door hinge. This mechanism is quieter and eliminates the exposure of the spring in the fender well.

Steps:

A. If door is already installed, open door and disconnect from "S" hinge. Carefully lay door aside.

B. Drill 3/16" holes 1 and 2 according to figure #1. (NOTE: the side A and B in the figure when locating holes in "S" hinge.

C. Pop rivet the mounting bracket to the hinge.

D. Using template #1, mark and drill holes in fender well.

E. Attach bottom bracket of gas strut to inside of fender well with washers on outside.
Gas Strut Bottom Bracket
Mounting Holes

DRIVER'S SIDE
Reverse for Passenger's side

Bottom Edge of Fender
Installing Cowl Panel (#4-13) & Windshield Wipers

Block the edges with 36/40 grit sandpaper as usual.

Drill holes (3/8'') through the locater dimples as shown (A-Fig. 91) and grind or sand the back side to make sure the surfaces around the holes are flat.

Next, cut 4 lengths of adhesive-backed foam stripping (#4-61). Cut one 43'', one 31'' and two pieces of 4'' and glue in place as shown (B-Fig. 91).

Next, rock the cowl panel into position (A-Fig. 92), making sure it is forced upward as far as possible (B-Fig. 92).
IX. Installing Cowl Panel (#4-13) & Windshield Wipers, cont'd.

E. Drill 6 holes with 5/32" drill (3 on each side) through cowl panel and into windshield frame (C-Fig. 91). Use 10-24x1/2" T.C.S. screws which make their own threads.

F. Seal the corners of the cowl panel with duct tape and/or Body Caulking compound as needed (D-Fig. 91).

G. Install wiper motor assembly.
1. From rear window (#4-16) peel protective paper back from edges approximately 2 inches and cut off.

3. Invite your friends over to help.

C. Install rear window rubber trim (#4-58) onto fiberglass edge of window opening (Fig. 102). (NOTE: If necessary, tape in place (B-Fig. 101).
X. Installing Rear Window -#4-16

D. Install rear window into rubber molding in opening. It may be necessary to lubricate the rubber molding with liquid soap. When window is in place, force the rubber molding lock into place. This will squeeze the rubber tightly around the window. Make sure the window is pushed forward and taped in place temporarily (C-Fig. 101) until outer section is installed.

J. Drill two 3/16" holes thru aluminum frame at point "F" and install pop rivets. This will secure window to body.
FIGURE #111

B. Position the rear body support angles (#4-32 & #4-33) (A-Fig. 112).

FIGURE #112
Mounting Rear Body Support Hardware, cont’d.

Clamp rear body support angles to the rear torsion bar housing with U-bolts (#4-64) as shown (B-Fig. 112). Do not tighten at this time.

Clamp the rear body support brackets to the rear body support angles.

Place the engine compartment crossbar (#4-27) in position with the channel section pointing upward (flat side down) and flush the corners with the ends and the side of the rear body support angles (B-Fig. 111). Drill one of the holes (5/16") in each end and bolt together with 5/16"xL" bolts and nuts (Pkg. #15).

Square up the rear frame work (carpenters square?) and tighten the two bolts.

Drill and bolt the other two holes on the engine compartment crossbar.

Position the rear body support angles by holding them upward and forward (C-Fig. 112). Drill 5/16" holes up through the fiberglass and bolt in place with 5/16"x1" trusshead bolts (Pkg. #113).

Tighten up the nuts on the U-clamps (#4-64).

Align the body support brackets with the body support angles and drill (5/16") through the body support angle. Use 5/16x3/4" bolts (Pkg. #13) to fasten. To drill the rear-most hole, you must drill through the fiberglass wheel well (D-Fig. 112). In this hole use 5/16x2-1/2" bolts and space the fiberglass out from the body support bracket with the rear wheel well spacers (#4-71).

As shown (A-Fig. 113), locate and drill the holes in the fiberglass (5/16") for the bumperettes. Now hold the bumperette braces (#4-28 & #4-29) in place, against the body support angles and check to make sure the holes line up. If they need adjustment use a round file on the fiberglass. If they line up properly drill the holes out to 3/8". Using 4 of the 5/16x1-1/4" bolts (fine thread) (Pkg. #2), bolt through the bumperette brace, screw in enough to pull things together but don’t tighten yet. Use a clamp to hold the side plate of the bumperette brace against the rear body support angle. Drill the (5/16") holes through the side plates of the bumperette brace and bolt with 5/16" bolts provided in Pkg. #14.

Position the rear body support rods (diagonal struts - #4-34). Upper holes in the support rod bolt in common under one of the two rear bolts which fasten the top inner section. The lower holes bolt in common with one of the two holes attaching the bumperett support to the body support angle. If adjustments are needed, move the holes in the support strut. Now bolt together firmly all the rear brackets, bumperette braces and bumperettes, the upper shock absorber mount and the U-bolts at the front of body support angles.
Set the top outer section (#4-05) in place carefully and pull forward until it touches edge of top inner section firmly (A-Fig. 121). Check the gap along bottom edge (B-Fig. 121). This gap should be adjusted to 1/8" by careful grinding and sanding to fit. The upper edge of the top inner section will probably need adjustment by sanding (C-Fig 121). Also, completely sand the contact surfaces (A-Fig. 121) to give a proper surface for the bonding you will be doing soon. NOTE: Edge (C-Fig 123) in very important. This positions and holds the rear window in place. Make sure these surfaces are making contact with the lower edge of the rear window.

When the fitting process is completed, cut three lengths of rubber trim (#4-59) (B-Fig. 122). 2-45" lengths should be cemented with trim cement on the bottom edge of top outer shell as shown (B-Fig. 121 & G-Fig. 122). Another 75" length should be cemented to the edge of top outer shell above the rear window as shown in A-Fig. 123.

Next, attach the "SR" emblems (#14-49) on the top outer shell (D-Fig 121). Check the outward spacing of the sides of the top outer shell and adjust by grinding the flange on the top inner section as shown (A-Fig. 122).
XII. Mounting Top Outer Section, cont'd.

C. Now, your top outer shell should be ready to attach. Clamp it carefully in place and drill seven (3/16") holes equally spaced on each rear mounting surface through top outer section and fender as shown (B-Fig. 123). At this time, pop rivet only the rear hole on each side (Rivets in Pkg. #13). The other 6 holes (per side) will be riveted later, after the front edges of the top sections are bonded together.

D. Mix about half of the bonding material provided. Prop up the top outer shell with two small blocks approximately 2" high and apply the bonding material on both surfaces evenly. Remove the blocks and clamp top sections with strong clothes pins every 2" to distribute even pressure all along bond. Next, finish pop riveting rear area (B-Fig. 123). Allow time to cure.
XIII

INSTALLING FUEL TANK

A. WARNING: Cigarette smoking may be hazardous to your health. The SR is made
to accommodate a 1961 or later VW fuel tank. Most fuel tanks may be installed
without any modifications if they are turned around 180° from their original position.
If you install the tank this way, you should loosen and turn the fuel outlet tube
around 180° also.

If you desire to use your original cable operated fuel gauge (it is possible that
some years might work), you must mount the fuel tank in its original position
and this means you will have to relocate or shorten the gas filler neck so that
the hood will close. (NOTE: fill the tank with water before using torch to cut or
weld tank).

B. Cut foam rubber stripping (4-61) and place around fuel tank opening in body liner.
Place tank into opening and check clearances. (NOTE: on some models, it may
be necessary to make a depression in the bottom of the tank for clearance). At
this point, hook up the fuel line.

C. The tank mounts into the SR with the 4 standard VW fuel tank mounting tabs.
Place 2 tabs on each side of the tank (not on the front or rear) and drill through
for the 5/16" bolts provided in Pkg. #16 and bolt in place.
MOUNTING HOOD

Block sand edge of hood (#4-07) smooth with 36/40 grit sandpaper. Paint back side flat black. Attach the Manx shield to the hood. Now polish the emblem for good luck. Two lengths of rubber (#4-60) are supplied as a seal below the hood and as trim over the pop rivets fastening the body liner and fender in front. Flatten the rivets down so that the rubber will fit over smoothly. Glue the rubber dow with contact cement and rivet or screw at each end.

Strike a centerline on the bumperette mounting surfaces which are on the front of the hood. Transfer the hole centers to the hood and drill the two 5/15" mounting holes on each side. Bolt the bumperettes (#4-17) in place with the 5/16x24" bolts provided in Pkg. #2.

NOTE: It is easier to install headlight buckets into hood at this point, before mounting hood.

Drill six 1/4" holes on each side of the piano-type hood hinge (#4-18); drill holes equally spaced and in an alternating, diagonal pattern.

Centerline section through hood & hinge

Body Liner

Hood

Hinge

FIGURE #141

Center the hinge on the bottom edge of the hood with the car (see section detail Fig. #141). Drill through the fiberglass and bolt hinge in place with fasteners from Pkg. #8.
E. Place the hood in position, carefully aligning in all directions. Be sure it is forced toward the windshield firmly. Mark the remaining 1/4" hinge holes and drill through the front of the body liner. Bolt with remaining 1/4" bolts in Pkg. #8.

At this point, it may be necessary to notch front edge of the body liner on each side for clearance beneath the headlight wells.

Install hood latch pins (#4-53) into the holes drilled earlier in cowl panel (#4-13). Put a dab of paint on the point of each pin. Now close the hood while holding pressure toward rear (windshield). Open hood and drill a 3/8" hole up through the marks on each side of the hood. Close hood and check the location of the hood over pins. Next, pop rivet the 2 hood-pin locating plates in place with pop rivets (Pkg. #9).

Two lengths of cable are supplied as hood retainer straps (#4-66). Fasten one end under a mounting bolt of the headlight bucket. Open hood to desired amount (standing vertically). Drill a 3/16" hole through the body liner on each side located 18" back from the front lip and 2" down from the top edge (just ahead of the fuel tank).

Insert the loose ends of the hood retainer cables through these holes and pull out slack. Lock these cables in place by knotting on underside or use small cable clamps.
INSTALLING REAR DECK

Sand edge of rear deck (#4-08) and paint underside with flat black paint.

Position "Manx" emblem (#4-51) and drill holes.

Place two 18" lengths of rubber foam stripping (#4-61) in drip rail along each side of engine compartment, covering the pop rivets. Next, cut 37" length of rubber trim (#4-59) and temporarily place on body liner edge (D-Fig. 123) below rear window. Do not cement it in place yet as this edge may need some trimming for clearance.

The SR rear deck is designed to be used without any hinges so that it can be easily removed for engine work. To install rear deck, hold it above engine compartment with the front lip pointed somewhat downward. Slip this front lip under edge of body liner, just below edge of rear window, making sure it is centered so that the side edges will land on the foam rubber stripping. If there is any binding when you lower the deck, sand these edges for additional clearance.

Install rear deck latch assembly (#4-52) by drilling and attaching the hooks on the lower outside corners of the rear deck on a slight angle as shown (Fig. 151). Attach rubber strap and retainer in line with the hook on the bottom side of the fender panel, approximately 5" from hook to screw so that the rubber is stretched tightly when hooke
FINISHING DETAILS

The most important finishing detail in keeping with the intended SR theme is the lower fender design line in the rocker panel area. Using masking tape to obtain a clean painting edge, simply paint flat black along the lower design line of the fender leading fore and aft into the fender wells themselves.

SUGGESTIONS:

1. Battery bracket is left to the discretion of the builder because there are a number of alternative placements; i.e. forward, under the hood (necessitates long battery cables, but improves weight distribution); or placed in the engine compartment, using stock battery cables.

2. The steering wheel should be no larger than 14" diameter for ease of entry and exit.

3. The interior of the car is recommended to be kept in black. The instruments with black faces and trimming bezels, repeating the black anodized windshield can be carried through to the steering wheel as well. We recommend black.... (black is beautiful).

4. Caster shims available at VW makes for straighter steering at highway speeds, especially in crosswinds.

5. Replace sedan windshield wiper blades and arms with VW truck arms and blades.

6. Because of the high, unsprung weight ration of the Manx SR, it is imperative that all four wheels be carefully balanced.
XVII

TARGA TOP AND WINDOW INSTALLATION

These instructions are based on the fact that you have already predrilled and installed windscreen. If you have not, this will be the time that the windscreen will be installed.

A. Place (do not bolt) windscreen back in position.
B. Set targa top lip securely in windscreen frame notch, making certain that targa top is centered in windscreen.
C. Check spacing at rear of targa, which should be parallel to the V-notch in the rear canopy and between 1/4" and 1/2" from the rear edge of the V-notch.
D. Redrill windscreen mounting holes, if and as necessary, and remount windscreen frame securely in this exact position.
E. Replace windscreen support rod. This generally requires a new hole in the dash.

Window Installation

A. Place both windows on car, locking front lips in windscreen frame slot.
B. Adjust windscreen, targa top, and windows into proper alignment - all joints should appear straight and even.
C. Bottom edge of window should be located at center of top flat of the door. Make the first trim at the bottom of window as necessary to locate at this point with 1/16" to 1/8" clearance between bottom of window and door top.
D. Mark center of targa top rain gutter on rear canopy V-notch. Remove targa top and grind or file a semi-circular groove in the rear canopy V-notch to fit the targa top rain gutters.
E. Reinstall targa top and windows. Make final trim on bottom of windows for proper clearance, as necessary.
F. Remove windows; install top latches.
G. Take each 55" section of pinchwelt - place lip (inside of pinchwelt) toward inside of car. Drill and rivet pinchwelt to top flat of door using (5) 1/8" pop rivets (in spread portions of pinchwelt). After pinchwelt is attached to door, close the spread portions.
XVII. Targa Top And Window Installation, cont'd.

H. Insert bottom edge of window securely (all the way down) into pinchwelt and relocate and install window.

Window Mounting Brackets

I. With one person inside car and another outside, locate the smaller rear bracket on the door and window.

J. With outside person holding the window, using a 3/16" bit, drill through the angled hole into the door.

K. Insert 10-24 x 1-1/2" bolt and finger tighten nut.

L. Holding window from outside, inside man drills (3) 3/16" holes. Pop rivet, using large head rivets, from outside.

M. Drill bottom hole 3/16" diameter, but do not bolt or rivet yet...this allows for adjustment and will be secured after front bracket is installed.

N. Repeat rear bracket installation on other side.

O. Place front bracket in position - scribe outline or location of bracket.

P. Open door carefully. Locate bracket in scribed position.

Q. Drill 3/16" diameter angled hole into door.

R. Insert 10-24 x 1-1/2" bolt and finger tighten nut.

S. Drill (3) 3/16" top holes from inside toward outside and rivet in place from outside toward inside.

Final Window Adjustment

T. Close door carefully, with person inside car.

U. Outside man to make certain that front window lip is properly located in windshield slot and that alignment of windows to targa top is correct.

V. Pry bottom of bracket as necessary to align window with proper clearance from targa.

W. Shim bottom of bracket away from door as necessary.

X. Pop rivet or insert bolt and tighten.

Y. Adjust rear bracket - align, pry, shim, and rivet or bolt in place securely.
XVII. Targa Top And Window Installation, cont'd.

Touch-up

A. Rear canopy V-notch grooves - finish with black epoxy or urethane to prevent feathering of fiberglass from exposure to elements - seal securely.

B. Paint all exposed rivets heads black.

C. Using acetone, or a similar solvent, remove wax from fiberglass: window upper edge - above targa raingutter, window rear edge, targa top - rear edge. Apply 1/4" x 3/4" foam weatherstripping to avoid fiberglass contact and to weather seal.

D. Seal joint between pinchwelt and door with black silicone cement and, after it's dry, trim to clean edge.
Supplement

Wireing The SR

The SR kit comes with a custom wiring harness with its own set of instructions. The harness is designed to tie into the stock VW cockpit indicators, gauges, switch and steering column, to make your job easy. If you use other gauges and switches, it is no problem to tie into them. After studying the instructions, you can lay the harness out beside the car and mount the connectors you choose to the wire ends. All lights should be mounted first.

Warning: Make sure the battery is disconnected before starting.

As with any part of the assembly process, should you run into any problems, please feel free to call us.
Many of our customers use custom tail lights for their Manx SR instead of using the standard lights we supply. This caused us to develop a wiring harness that can satisfy both needs.

The wiring harness that is supplied is set up for a dual tail light assembly. That is, it expects for there to be two separate bulbs in each tail light. This is what you find in most late model cars (especially the ones that have amber turn signals). We supply a tail light that uses only one bulb for all tail light functions.

If you use another tail light that uses the dual bulb condition, then you can use the wiring harness as is. If you plan on using our tail light, then you will need to acquire a converter. We will be happy to send to you, free of charge, this converter if you request it.

We are sorry for any inconvenience that this may cause you, but it was important to have a wiring harness that can handle both conditions.
INSTRUCTIONS FOR AMERICAN CUSTOM WIRE HARNESS

The American Custom Wire Harness contains every possible item to give you an easy and complete unit to install. For proper installation of the American Custom Wire Harness, lay unit along for the various electrical units and tag with some kind of mark. All the wire will help you not to refer to the wire diagram on this wire harness due to various wire lengths when installed.

Includes the following features:

* Completely wired harness to a covered 6 fuse, fuse box.
* All necessary connectors for early or late starters.
* Easy to connect turn indicator and parking light wires.
* Emergency 4-way Flasher wires.
* Simple to follow wire gauge and color code.
* Complete wiper motor wire kit.
* 4 pre-fastened front to rear harness supports.

WIRE DIAGRAM FOR PARKING LITE - WIPER MOTOR - 4 LITE EMERGENCY FLASHER

To install your Parking Lite, ground base of lamp to chassis. Use roll of 16 gauge wire in fitting package to wire "HOT" from Park Lamps to Number 57 on Lt. Sw.

1. Run 16 BL from fuse box to S4 on Wp. Sw. then to S4 on Wiper Mt.
2. Run 16 BL from Wp. Sw. to S1 B on Wp. Mt.

NOTE
To operate - turn toggle switch on & turn indicator to left or right turn position.

To use your turn signals as a 4-way Flasher, connect two 16 gauge wires to the brown and yellow signal wires and to (ON-OFF) toggle switch.
ENGINE SECTION (NO TAG)
ONLY 1 HEAVY WIRE (RED)
STARTER (BATTERY CABLE)

ENGINE SECTION (A)
ORANGE BRAKE LIGHT SWITCH
PINK COIL
PURPLE STARTER SOLENOID
WHITE BRAKE LIGHT SWITCH
LT. GREEN TEMPERATURE SENDER
LT. BLUE OIL PRESSURE SENDER
PURPLE/WHITE - TACHOMETER

ENGINE SECTION
BLACK/WHITE AC-COMP
WHITE ALT EX.
RED ALT BT.

HEADLIGHT SECTION (A)
BLUE R. TURN
LT. BLUE L TURN
GREEN HORN
TAN LOW BEAM
BROWN PARK LIGHTS
LT. GREEN HIGH BEAM

HEADLIGHT SECTION (A)
GRAY/WHITE ELEC. FAN

RADIO SECTION
SPEAKER WIRE SPEAKERS
SPEAKER WIRE SPEAKERS
PURPLE/BLACK POWER ANTENNA
RED/BLACK RADIO B+ IGN
RED RADIO B+ CONSTANT

HEADLIGHT SECTION (B)
BLUE/YELLOW TO DIMMER SWITCH
RED/BLACK LIGHT SWITCH B+
BROWN PARK LIGHTS (18GA)
BROWN TAIL LIGHTS (14GA)
BROWN DASH LIGHTS (18GA)

ACCESSORY SECTION B+
GRAY/WHITE ELEC. FAN SWITCH
BLACK/WHITE A/C SWITCH
BLUE WIPER SWITCH
TAN CIG LIGHTER

ACCESSORY SECTION SWITCHES
BLACK/WHITE A/C THERMOSTAT
GRAY/WHITE FAN SWITCH

DOOR LOCK SECTION (B)
YELLOW/BLACK L DOOR LOCK B+
YELLOW L PWR WINDOW B+

INSTRUMENT PANEL
LT. BLUE L TURN LIGHT
LT. GREEN TEMP GAUGE
RED/WHITE GAUGE B+ & VOMETER
PINK FUEL GAUGE
GREEN HIGH BEAM LIGHT
PURPLE/WHITE TACHOMETER
BLUE R TURN LIGHT
LT. BLUE OIL GAUGE (TAG)

TAIL SECTION
GREEN/BLACK TRUNK LIGHT B+
PINK FUEL SENDER
PURPLE/BLACK POWER ANTENNA
GREEN RIGHT TURN
YELLOW LEFT TURN
BROWN TAIL LIGHT
WHITE DOME LIGHT B+
YELLOW/WHITE ELEC FUEL PUMP

SPEAKER SECTION
SPEAKER WIRE REAR SPEAKERS
SPEAKER WIRE REAR SPEAKERS

DOOR LOCK SECTION (A)
YELLOW/BLACK R. DOOR LOCK B+
YELLOW R PWR WINDOW B+
GRID = GROUND