



### Frequently Asked Questions and Answers

Ghia Specifics

# Procedure for Removing the Body from the Pan

#### Q **Do Karmann Ghias and Beetles share the same mechanicals?**

A Yes, this covers the beam, the transmission, and the engine. The difference is that Ghias used disc brakes starting in 1967. Disc brakes can be installed on an early Ghia by using the spindles, splash-guards, rotors, and calipers from a donor vehicle. The gear lever and stock carburetor jetting on earlier Ghias (pre-1972) differed from concurrent Beetles, as well, although Beetle parts will substitute functionally.

#### Q **Can I use a Beetle tow bar to tow a Ghia?**

A Actually, "Yes" but with a caveat. The Ghia has a much longer nose than the Beetle, so you have to take that into account when towing, but more importantly, when turning. If you turn too sharp you will damage the headlight and fender on the side where you're turning.

For example, you're making a tight right turn while towing the Ghia. You have a 99% probability of breaking the headlight and bending metal on the right front fender of the Ghia. Just use caution and make wide turns, all while watching where that nose is going. If at all possible, get the tow bar lengthened about 18".

#### Q Will a Late model convertible top (67 and later) fit on an early Ghia and vice versa?

A No. The top and body panels, which support it, are completely different.

#### Q Will a Ghia body fit on a beetle floor pan?

A No. The Ghia floor pan is almost 7" wider and has a more pronounced arc at the foot well. The Beetle pan will not work; however, the Ghia and Beetle share the tunnel, or backbone. It is possible to cut the pan halves off of a Beetle chassis and weld in Ghia pan halves followed by mounting the Ghia body. Also note that the Thing and the Karmann Ghia share the same floorpan.

#### Q When did Ghias become 12-volt?

A 1967

#### Q How do I convert my coupe to a convertible?

• What are the largest wheels I can fit on my Ghia?

A You don't; you sell it and buy a convertible. The conversion, while theoretically possible, should not be attempted by anyone but an experienced professional, and will likely de-value the car in any event.

Q	What are the largest wheels I can ht on my onla:

A It varies from year to year, and even from car to car depending on whether the fenders gave ever been tweaked in an accident or the suspension has ever been lowered, etc. Generally speaking, 175 front, 195 rear. Rims size and offset are also factors.

#### Q How do I put different seats in my Karmann Ghia?

A Most aftermarket seats use 'adaptor tracks' that slide onto the stock rails and bolt up to the seats (Scat Enterprises, Corbeau, etc.) Anyone with decent fabrication skills can make some kind of adaptor set up to mount other seats from other cars.

#### **Q** Is it possible to convert an Autostick transmission to a manual?

A Yes, anything is possible. Parts involved include the actual transaxle, clutch kit, flywheel, clutch cable, pedal cluster, cable tube and time. Another viable option is to find a pghia pan that already has a manual transaxle and swap bodies.

# Q Where can I see Ghia rocker photos?

### A See below:

http://www.thesamba.com/vw/forum/album page.php?pic id=73113 http://www.thesamba.com/vw/forum/album page.php?pic id=73111 http://www.thesamba.com/vw/forum/album page.php?pic id=73110

#### Deck Lid differences

All deck lids across the production line will interchange. The differences are in the latch mechanism, size of the cooling vents, and in the case of later Ghias, the presence of the rain tray.

Early Ghia deck lids have smaller cooling vents and are of two-piece steel construction. Any water falling into the vents follows the inner steel tray and drains through holes in the bottom of the deck lid.

The vent sizes were increased in 1960 – 1967. In 1968, a plastic drain tray was incorporated beneath the cooling vents instead of the integral steel one. The drain tray uses two tubes on either side to divert water for drainage similar to the earlier Ghias. Many enthusiasts opt to install a later deck lid on an earlier vehicle for improved cooling.

The underside of the deck lid as covered with a rough, spray-on type noise insulation, which was painted body color.

#### Trunk Lid (aka Hood) differences

Ghia trunk lids are the same size across the production line, but have minor differences with the latching mechanism. The underside of the trunk lid as covered with a rough, spray-on type noise insulation, which was painted body color.

#### Quarter Window Glass differences

There are three different styles of quarter window glass across the years. From 1955 through 1959, the quarter window was not hinged and could not be opened. In 1960, the quarter window was hinged to the quarter window post using plastic hinges. This style lasted through 1970. From 1972 – 1974, the quarter window pillar became integral to the body and was covered with an anodized trim piece, and the quarter window itself was bonded to a steel stamping with integrated hinges. The quarter window latch pieces fit all year Ghias that have operating quarter windows.

#### Quarter Window body trim

There are four styles of trim used below the quarter window. The 1955 – 1959 chrome trim piece below the glass has a long arc up the rear roof pillar. From 1960 – 1971, the chrome trim piece turns upward approximately  $\frac{3}{4}$ " inch and either ends in a "sharp point" or "rounded point". The trim is held in place by several screws upon which the screw heads fit into slots on the underside of the trim. Trim adhesive was also used to secure the part in place. From 1972 – 1974, an anodized piece was utilized that was held in place with screws from the top.

#### **Chrome Lower Body Trim**

All Karmann Ghias came with two strips of chrome (actually polished bright aluminum) trim on the lower edge of the body. The cross section and length of the trim pieces changed from a sharperpeaked style to a rounder peak on later cars, and length of certain pieces changed in 1967 to match the larger rear wheel openings.

#### Nose Badges

The earliest Karmann Ghias used a one-piece nose badge with a blue and white enamel emblem in the center. In roughly September of 1957, this was changed to a one-piece badge with a matte chrome finish in place of the blue inset. There were no regional options available at any time (i.e., a "European" badge versus an "Export" badge). In mid-1962 (chassis # 4 764 156), the nose emblem changed to a two-piece aluminum assembly with a larger VW emblem. This version remained through 1974 production.

#### Convertible top moldings

Convertible tops had different moldings throughout the years. The earliest convertibles had three moldings: above the front windshield, above the rear plastic window and below the rear plastic window, following the body/top edge.

141 871 419 is the molding above the front windshield. It was stainless steel and disappeared after chassis 2 257 979. This molding never reappeared in any of the later cars.

151 871 425 is a stainless steel molding above the rear window. It was present until chassis **xxxxx**, at which point 151 871 425A was introduced. **What are the differences here???? In later years ???, this piece was changed to an aluminum piece.** 

141 871 431 is the molding below the rear window. Up until chassis 2 134 817 it was one-piece stainless steel. From 2 134 818 to **xxxx** 141 871 431A was a two piece stainless steel molding, with the joint of the two pieces centered under the rear window, covered by a C-clip. **In later years ???, this piece was changed to aluminum.** 

#### Seat Rail Specifics

#### Front Seat Specifics

#### **Rear Seat specifics**

The Karmann Ghia came with a rear seat in both the coupe and convertible from 1955 (56 model year) through 1973. VW discontinued installing rear seats for 1974, although a seat can be retrofitted, should the owner desire. The rear seats are also different, in that the coupe rear seat back and bottom measure NN inches wide, while the convertible rear seat and bottom measure NN inches wide.

http://www.thesamba.com/vw/forum/album page.php?pic id=98456 http://www.thesamba.com/vw/forum/album page.php?pic id=98457 http://www.thesamba.com/vw/forum/album page.php?pic id=98458

#### Door glass (coupe vs. convertible)

The door glass winder mechanism, slide rail assy, and other parts are all the same. The 1955 – mid 1959 Ghia used a different lift channel and subsequent Ghias and had thinner section window glass. The convertible glass has a different shape than coupe glass to allow for the geometry of the opening/closing of the top mechanism, and the lack of quarter windows.

#### Front and rear windshields

Throughout the production life of the Ghia, the metal openings for the front and rear windshields stayed the same. However, there were two distinct windshield/rubber seal/trim combinations, cutting over to the new style at chassis 146530702. The older windshield is the taller windshield, measuring 17-1/4 to 17-3/8 inches tall at the center. It accepts the stainless molding, which is in the shape of the letter 'C', and a rubber seal. The newer windshield is shorter, around 17 inches tall, and came with aluminum 'T' shaped molding and a matching seal. As long as the windshield/trim/rubber seals are matched together, they can be installed on any year Ghia. However, using an older-style windshield with a T shaped trim and T seal can result in leakage or breakage.

#### **Outer Door Handles**

Detailed thread on thesamba.com forums http://www.thesamba.com/vw/forum/viewtopic.php?t=189848

Image shows early and later styles (up to 1967) 56-63 on the right, 64-67 on the left <u>http://images.thesamba.com/vw/gallery/pix/297802.jpg</u>

1956 - 1963	1964 - 1967	1968 - 1974
<ul> <li>"hollow" handle back</li> <li>concave button</li> <li>larger button</li> <li>bolt on back</li> <li>Two c-clips holding lock mechanism in</li> </ul>	<ul> <li>Solid handle back (some have hollow handle too ?)</li> <li>flat style button</li> <li>smaller button</li> <li>lever on back</li> </ul>	<ul> <li>different style completely</li> <li>trigger and no button</li> <li>similar to beetle</li> </ul>

#### **Stock Battery Location**

Unlike other VW cars of the era, the Karmann Ghia battery was located in the engine compartment rather than under the rear seat. 1955-1965 vehicles had the battery to the right of the engine; 1966-1974 vehicles to the left. The area under the battery is prone to corrosion and rot from spilled battery acid.

#### Stock antenna location

Karmann did not install radios on vehicles that left that factory. Mostly, radios were a dealerinstalled option. It is commonly accepted that the "stock" location for the antenna is on the driver's side fender just forward of the windshield post, per a Factory technical bulletin. <u>http://www.thesamba.com/vw/forum/album\_page.php?pic\_id=239610</u>

#### Swan neck mirror location

The "swan neck" mirror was offered (as a mandatory option for North American cars, installed by dealers) from late October of 1956 through the 1965 Model Year. Correct location for mounting the mirror, per a Factory technical bulletin, was on the driver's side fender, just forward of the windshield pillar, above the top crease line of the fender. 1966 Model Year Ghias had door-

#### Wood Grain Dash

A "simulated" wood grain dash was standard on all Ghias from 1967 Model Year through 1971 Model Year. These cars also featured the two smaller (52mm diameter) fuel and clock instruments flanking the larger central speedometer. The 1972 – 1974 Model Year used a black pebble-faced dash face cover.

#### Dash Pad specifics

Several versions of dash pad were used during the course of the Karmann-Ghias' production, commencing in late January of 1959 production. The earliest couple of versions were easily identified by their ribbed surface pattern.

#### Bumpers (front)

Ghias from August 1955 - May 1956 had one-piece bumper blades with small over-riders and no overrider tubes. All Ghias from May 1956 through the 1971 Model Year had three-piece bumper blades of the same style. Taller over-riders with tube guards ("towel bars", also known as "Export bumpers") became available as an option (mandatory for North America and an optional extra for the rest of the world) in January of 1958. License plates are supposed to hang from the front "towel bar" and not be screwed to the center blade. The 1972 – 1974 Karmann Ghia has the square style (snowplow blade) bumper that is interchangeable with the concurrent Type 3 Notchback, Squareback, and Fastback. The inside of the bumper blades, as well as the over-riders, was painted silver. This is also true for the rear bumpers.

#### **Bumpers** (rear)

Ghias from August 1955 - May 1956 had one-piece bumper blades with small over-riders and no overrider tubes. All Ghias from May 1956 through the 1971 Model Year had three-piece bumper blades of the same style. Taller over-riders with tube guards ("towel bars", also known as "Export bumpers") became available as an option (mandatory for North America and an optional extra for the rest of the world) in January of 1958.

The differences lie in the rear corner pieces. Corner pieces from 1956 – 1966 will interchange, but will not interchange with cars produced from 1967 – 1971. The difference is the alignment hole behind the rear wheel, spaced to fit the revised, larger wheel opening of the 1967-1971 rear fenders. 1970 and 1971 Export bumpers' rear overrider bars do not wrap around the corners of the car, as do earlier versions. This is due to the larger, more lower protruding taillight lens of the 1970-1971 cars.

1970 and 1971 rear corner blades are different than 1967-1969 as well: the overrider tubes do not go all the way around the corner, and the depressions for the back up light provision are absent, since back-up lights became integral with the tail lamp lenses assy.

The 1972 – 1974 Karmann Ghias have the square style (snowplow blade) bumper. This bumper is interchangeable with the concurrent Type 3 Notchback, Squareback, and Fastback.

#### **Steering Wheel / Horn Ring vs. Horn Bar**

1955-September 1957 Ghias used the same steering wheel as the concurrent ("oval window") Beetle, which had no horn ring.

There were two versions (visually nearly identical but made of different materials) of the special, Karmann Ghia only steering wheel of September 1957 through July 1959 cars. The 1960 Model Year resumed to sharing the Beetle steering wheel as a matter of program (with occasional special colors being the only major difference).

For 1972 cars, a change was made to a new steering wheel design with four spokes and a large plastic "crash pad" which doubled as a horn button.

These are broken down as follows: 1956 - 1959 Ghia large horn bar 1960 - 1963 Ghia used the horn ring 1964 - 1970 Ghia used the horn bar 1971 Ghia used the horn ring 1972 - 1974 Ghia used the plastic horn cover.

#### Additional sources of information

Mike Gregoryat the <u>http://www.house-of-ghia.com</u> All the folks at <u>http://www.karmannghia.com</u> Jason Hamilton at <u>http://www.type-14.com/</u>

#### Information on replacement tires

See thesambe.com detailed thread: <a href="http://www.thesamba.com/vw/forum/viewtopic.php?t=193474">http://www.thesamba.com/vw/forum/viewtopic.php?t=193474</a> (much more information here)

560-15 COKER CLASSIC 2 3/4 INCH WHITEWALL TIRE #16577 http://www.coker.com/store/customer/product.php?productid=17401&cat=&page=1

SKU 55705 Weight 31.00 lbs Size Full 560-15 Price: \$ 101.00 Size: 560-15 Construction: 4 ply polyester Overall Diameter: 25.88 Load Capacity: 970 @ 32 psi Tread Width: 4.00 Cross Section: 4.80 Tubeless

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560-15 FIRESTONE 2 3/4 INCH WHITEWALL TIRE #17401 http://www.coker.com/store/customer/product.php?productid=17401&cat=&page=1

SKU 556660 Weight 31.00 lbs Size Full 560-15 Price: \$ 117.00 Size: 560-15 Construction: 4 ply polyester Overall Diameter: 25.79 Cross Section: 5.96 Tread Width: 3.80 Load Capacity: 970 @ 32 psi Tubeless

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560-15 U.S.ROYAL 2 1/4 INCH WHITEWALL TIRE #17404

http://www.coker.com/store/customer/product.php?productid=17404&cat=&page=1

SKU 55675 Weight 31.00 lbs Size Full 560-15 Price: \$ 118.00 Size: 560-15 Construction: 4 ply polyester Overall Diameter: 25.88 Cross Section: 4.80 Tread Width: 3.75 Load Capacity: 970 @ 32 psi Tubeless

#### Changing a Karmann Ghia Dash by Marlon Reid

Here the original dash is cut out of the car along the factory stamping lines - the pinch weld at the window lip, and the lap weld on the underside.







Painting the inside of the trunk, as well as the backside of the donor dash prior to installing it, makes it easier to get paint into all the nooks and crannies.



The donor dash is sanded, removing some factory runs in the red paint. From the bottom, you can see the holes where the spot welds were drilled out. Later, these holes are filled in with plug welds when attaching the dash to the car.



The welding begins! I did the pinch weld at the window lip first, then the lap on the bottom (plug welded to simulate the original spot welds), and finished with the welds at the door posts.



Here's a view from inside. You can see how painting it ahead of time makes for a better paint job. The only places I had to touch up on the inside are where my plug welds (rosette) on the underside of the dash burned off the paint in about 25 small spots along the seam.



The finished paint on the NEW dash.



I goofed up and put a run in the paint - just to the right of the glove box door. Luckily the horizontal trim piece should hide most of it. Ah heck, nobody's perfect - after all, it did have a few runs from the factory! You can make out some red paint I missed on the strap that holds the glovebox insert in place.

In the end, I'm quite happy with my results. I'm a novice welder, so it was a challenge for me!



Ghias through the mid-60 model year used 14mm ATF body bolts, while later cars used 13mm bolts.

- Remove the battery
- Disconnect fuel gauge wiring from fuel tank, or the mechanical fuel sender connection if equipped
- Unbolt and remove the fuel tank (4-bolts).
  - Disconnect steering shaft from the steering coupler (2-bolts).
  - Unbolt body from the beam connection bolts under fuel tank (2-bolts).
  - Disconnect brake fluid reservoir to master cylinder hose connections. Be careful not to spill brake fluid, as it will strip paint.
  - Disconnect electrical connections to master cylinder brake lights, dash dummy light.
  - On 55-60 Ghias, close the fuel tap and remove the cotter pin attaching the tap to the operating rod.
  - $\circ$  On 55-60 Ghias, disconnect the choke cable at the carburetor.
- Remove the Front Seats
- Remove Gear Shifter
- Under back seat:
  - Remove the body to tunnel cross rail bolts (4-bolts). Pre-'69 (swing-axle) cars have additional body bolts on the outer edges of the cross rail. Look for spots where massive amounts of factory-applied undercoating exist. Probe under this stub for the bolts.
  - FOR CONVERTIBLES: Remove the additional 2-bolts (one on either side) of the luggage tray. Click on this link to see their location:
    - http://www.geocities.com/gscurtis/hiddenbolts.jpg
  - $\circ$  Disconnect rear foot well heater louvers from the cable. (Cable comes out of tunnel.)
  - If your car has a gas heater, disconnect the relay from the wiring harness.
- Temporarily remove rear wheels.
  - Remove wheel-well to rear frame bolts. (1 per side they're often covered in crud and hard to even see. Soak with PBlaster first)
  - Reinstall the rear wheels.
- Under car:
  - $_{\odot}$  Disconnect the back up light switch pick-up from the transmission (if your car is equipped with backup lights, 1967+)
  - Remove the heat exchanger to heater channel hoses.
  - At the front driver's wheel, disconnect the speedometer cable and pull it out of the front hub assembly and into the trunk.
  - Remove the pan to heater channel bolts (9-per side, 14mm)
  - Remove the forward bulkhead bolts, located aft of the frame head (4-bolts, 17mm)
- Engine compartment:
  - Disconnect all electrical connections from the wiring harness to engine: starter coil lead, etc.

If your car has a gas heater, there may be some extra steps associated with this. There were several gas heater makes through the years.

If you plan to rebuild your engine during your restoration, removing the engine before lifting the body would be a good idea.

Make sure all bolts and wires are clear. Grab one fender of the vehicle and lift. The pan gasket can be stubborn, but use the weight of the car to break the seal. Two people with a lot of 'grunt power' can remove the body from the pan; however, either four people total or an overhead hoist will work better. DO NOT lift the body by running a strap through the interior and around the roof. This will distort and twist the roof. Run straps under the wheel-well areas.

I have the information I couldn't find. Would you add the following about the Z-Bar? I have the links to the pictures so you can embed them. Might need to tweak the body removal instructions to account for it. I will leave it to you for the wording.

The Z-Bar is on 1967 and 1968 models only. It goes though the body just behind the shock post as you can see in the pic but only on the right side, the drivers side is outside the body. 2 bolts on each side and it slides right out.





Right Side



Left Side

### Z- Bar Out of Car

