

Installation Instructions for 1997-2006 TJ Jeep's

Fiberglass Replacement Bodies and Parts

Getting started: We recommend that you take pictures as you dismantle your Jeep. These pictures will help you when you re-assemble the component parts. Save your body tub and all parts, as you will need these for measurements later.

Pay very close attention to your electrical wiring. Tag and mark all plug in electrical components that you take apart or remove. Bag and mark all bolts that you remove even though you will replace most of the bolts with new bolts. We recommend that you use grade 5 or grade 8 bolts. Depending on the year of your jeep some bolts are SAE standard (American Standard) others will be metric.

The fiberglass body is thicker than the steel body and adjustments will have to be made to compensate for the extra thickness. If you make a mistake don't worry because is relatively easy to repair fiberglass. There will be subtle changes made by the factory for each of the model years. We make a body tub that will work for all of the years. We have placed steel plates in the critical areas of the body, which will help you when bolting your body to the frame mounts. We have also placed steel plates in the critical areas of the body tub for mounting of the hinges. If they are not drilled and tapped you can do this if necessary. Mark and save all body mounting rubber.

Drain the radiator. While it's draining, remove the cowl plate and hood. Take pictures of the engine compartment area. Disconnect and remove the battery.

Remove the trays from the fender supports braces.

Remove everything that is bolted to the inner fenders; try to keep the wiring harness in tack. Remove the fenders.

Remove the strut rods fastened from the cowl to the grill.

If you have air conditioning you must purchase a special tool called a spring compressor.

You must release the pressure in the airlines of the air compressor before attempting to release the spring of the air compressor line. Place a rag around the bleed valve to prevent oil from going all over. Follow the instructions from the tool manufacturer. The tool can be purchased from any auto parts store. Make sure you cover both ends of the air conditioner lines so no dirt or dust enters. Tape a plastic bag over each line.

Remove all components bolted to the firewall (remember to take photo's).

You will need to remove the brackets from the firewall by drilling out all the spot-welds, you can do this once the body is removed later. Make a sketch with measurements of the location of the brackets that you will need when rebuilding the Jeep.

Remove the doors and the hardtop or soft-top. Remove the seats and the seat belts.

Remove the bolts from the roll bar at the windshield frame, remove the other roll-bar bolts then with help remove the roll bar from the vehicle.

Remove the windshield hinges then remove the windshield frame.

Removal of the steering column:

Remove the bolt from the steering column shaft. Remove the steering column retainer and gasket that bolts to the firewall. Remove the inside bolts holding the steering column in place. Remove the plastic dash pieces around the steering column. Remove any wiring attached to the steering column. Pull the column up and out of the Jeep.

Disconnect the brake and or clutch rods from the swing pedals; unbolt the master cylinder and the hydraulic clutch bolts and nuts. Remove any wiring attached to the swing pedal bracket. Remember to tag and mark all wiring. Remove the swing pedal bracket.

Removing the dash:

Remove the four studs nuts on top of the cowl windshield section. Remove the bolts holding the dash on the front side. Remove the glove box door to gain access to the two nuts holding the dash to the inside heater bracket. The dash should come out as a unit but you will have to disconnect some of the wiring. Please tag and mark the wiring that you unplug. Disconnect the vacuum lines behind the glove box. Disconnect the antenna wire from the radio connection. Remove the dash.

The heater has studs that go through the firewall you must remove the nuts holding the heater. Remove the heater hoses. Remove any air ducts connected to the heater. Then remove the heater from the Jeep.

Remove the emergency brake and shifter boots then remove the emergency brake cable. Remove the transmission cover and then remove the emergency brake handle and shifter. Remove the four bolts holding the transfer case shifter bracket, these are located inside the vehicle on the driver side. Make sure that the transfer case is in the neutral position before removal. Remove the wiper arms then remove the cowl cover plate. Disconnect and remove the wiper motor assembly. Remove the vacuum box located inside the fender support bracket; cover all vacuum ports and lines so dirt cannot get into them. Remove the tailgate, rear lights, gas filler and anything else attached to the body. Draw a line or measure the distance from the body to a reference point on the rear cross member, you will use this line or measurement to locate the new glass body. Remove all body mounting bolts then with help remove the body tub from the frame.

There are many brackets on the body that you must re-use. All of these are spot-welded to the body. You must either drill the spot welds or use a spot weld removal tool to remove these. Please take pictures of the location of each bracket. Take measurements of the location of each bracket. We have done some for you see our instruction photos. On the 2003-2006 models there is a rear gas canister located on the passenger side rear under the rubber molding. You have to unplug the wiring and remove the bracket holding the canister. You will have to alter the canister bracket, to make it work with our fiberglass body.

While the body is off of the frame now is the time to clean and make any necessary repairs. Check all your brake lines and gas lines. Clean and paint the frame if necessary.

INSTALLING THE NEW FIBERGLASS BODY

Remove the master cylinder-clutch plate from the steel body, measure and mark the location of this plate.

Transfer the dimensions to the fiberglass body, and then bolt the plate on the firewall. Remove the steering column mounting bracket from the steel body then mount this bracket to the fiberglass body. Remove the heater bracket from the inside of the steel body then transfer and mount this to the glass body. Remove the computer mounting plate from the steel body, and then mount this to the cowl. Remove the wiring mounting brace from the steel body and mount this to the glass body. Measure and mark the heater mounting holes (4) total. Transfer these to the fiberglass. Measure and mark the hole for the heater and air conditioner tubes. The heater should be up against the fiberglass top cowl. Remove the plastic heater air intake box from the steel body, position this; mark the location, and then cutout the hole in the top of the cowl. Position and mount the heater then mount the plastic air box. Make sure that the heater and air box are mated. There is a computer air bag sensor bracket located in front of the shifter this also must be removed and transferred to the fiberglass body.

Measure and mark the holes for the transmission cover and emergency brake bracket transfer these to the glass body. Cut out the holes.

Measure and mark the holes for the rear seat and seat belts, transfer these to the fiberglass body. Then mount the seat belts and seat brackets to the fiberglass body. You will not be able to get to these bolts once the body is mounted.

Cut out the hole for the water vent discharge; be careful, as the plastic end must fit snugly and snap into place. Mount the wiper motor make sure that the arms move freely without obstruction. Cut out the steering column hole, to the size of the column rubber boot. Transfer mark and cut out any other holes necessary in the firewall at this time.

With help position the body on the frame, it will help if the frame is setting level. The body will be approximately 1/2" forward of the rear cross member. You must measure from the frame to each side of the body. Measurements should be at two different locations, one in the front and one at the rear of the body. Measure from the top of the frame mount to the bottom of the body to determine the height of the body mounts. Allow 1/4" additional for compression of the rubber. The fiberglass body thickness may vary and it is possible that the body mounts may vary. The back body mounts should be approximately 2 1/2" high. If you keep the body level with the frame you will be able to determine the length of each mount. We have provided steel plates within the bottom body brace, you will have to drill and tap with a 7/16"-14NC tap, from the bottom. There are six body mounts that will be drilled and tapped three per side from the front.

Cut your rubber spacers position them and then bolt the body to the frame. Use fender washers under the head of each bolt. You will have a rubber spacer between the frame and body, and another rubber below the frame mount bolted with 7/16" Bolts and fender washers.

With the body bolted in place you can now begin installation of all the component parts.

Please keep in mind that fiberglass is **NOT** a ground and additional ground wires will have to be installed as needed. You can purchase a ground buss bar from any electrical supply store. You ask what is a buss bar? To better explain what this is, look inside your main electrical box of your house. You will see a group of terminals on the right side with white and copper wires attached to it. This is a buss bar. Mount the buss bar to your firewall where you have an open space. Run a 12-gauge wire from the battery to this buss bar. From the buss bar you can then ground all of the electrical components. Things that will need grounds are all lights front and rear, the dash, your computer, the air bag module, horn, steering column, heater, motor and frame. If something does not work properly then add a ground to the component.

Install the swing pedal; gas pedal, master cylinder and hydraulic clutch.

Install the dash and plug in any electrical connectors. Make sure that you run a ground wire to the dash. There are ¼” nut-certs provided in the cowl to mount the dash. Install the Four-wheel drive shifter bracket, this bracket and pivot arm attaches to the floor. Since the bracket is under the transmission skid plate it is very difficult to get at this bracket. Make sure that the bracket is in line. You may have to adjust the shifter rod. After installing the shifter check to make sure you have all positions necessary. The transfer case should be in the neutral position. Install the air bag computer. Install the transmission shifter cover and rubber boots. Install the emergency brake bracket and handle. Install the center console. Cut out the hole for the rear wiring harness and run the harness along the driver side, Make sure you run a ground wire with this harness because the rear lights will have to have a ground wire attached to the light.

Install the steering column and bolt the column to the steering column bracket previously installed. Run a ground wire to the column or the mounting bracket.

With help place the roll bar in position, before drilling check to make sure the door latch brackets will fit from the roll bar to the door latch fiberglass extension. Mark and drill the mounting holes then bolt the roll bar in place. Make sure you back up the fiberglass floor with steel plates or use large fender washer to spread out the load on the underside. Position and mount the door striker latch brackets. These may have to be adjusted to suit the doors, when the doors get mounted. Place the two front support bars in place bolt these to the roll bar then position and mount the windshield frame and bolt the support bar to the windshield frame. If you have a hardtop position it on the body and check the fit between the hardtop and windshield frame.

Once you are happy with the fit, position mark then drill and tap the holes for the windshield hinge on the body cowl. Bolt the windshield in place.

With the windshield in place you can now position the doors. Hang the door on the windshield hinge but keep the door-supported, place the lower door hinge in position mark the mounting holes. Remove the doors then drill and mount the lower door hinges to the body. Keep in mind that you also will be mounting the inner door lower mounting bracket and door strap pins.

Remove the steel formed channel from the bed rails of the steel body by drilling the many spot welds holding them in place. Clean and remove any burrs. Place these bed rails on the new body tub mark the spot weld holes and transfer these to the glass body. Drill and mount the rails using an 82 Deg. countersunk bolt to secure them to the body. The bed rails hold the plastic soft top ends in place. They are not needed for the hardtop but in case someone wants to use a soft top we recommend that you use them.

Measure and transfer the front seat mounting holes to the glass body. Place the front seats in the vehicle with the seat brackets in place. Make sure the marked holes are close to being correct. Remove the seats then drill the mounting holes, measure and mark the position of the jack mounting plate. Transfer these to the glass body and mount the bracket in place. Bolt the seats in place again using a back up plate or fender washers to spread the load. Install the rear seats using the mounting brackets already installed.

Make sure all the internal wiring is plugged together and that all grounds are connected.

Put the grill in place and start the center bolt holding the grill to the frame. You may have to shim the grill to get the proper height. Make sure you have the shroud on the radiator and check for clearance around the fan blade. Install the front fenders bolting them to the grill and to the body tub. The bottom of the fender should match the bottom of the body. There are two fender support brackets; one is used for the battery tray. Set the supports in place mark the mounting holes, drill and mount these brackets to the cowl. Bolt the battery tray to the passenger support. Since the fenders are so light you will not have to bolt the brackets to the fender.

Mark drill and mount the Air Box and Fuse Box to the passenger fender.

Mark drill and mount the horn and squirter bottle to the driver side.

The horn will require a ground. Mount the overflow tank to the grill. Mount the computer to the cowl passenger side and make sure to ground the box.

Set the hood on the cowl and grill, place the hood hinge in position and mark all the mounting holes. Drill and tap the holes and bolt the hood hinge to the cowl and hood. You may have to shim the hood hinge at the cowl to get the proper height and fit with the fenders.

Note: We have used SAE standard on our nutcerts, the dash has 1/4" – 20NC.

We have provided steel plates in the body for drilling and tapping of the mounting holes for the tailgate hinge. The Tailgate must be centered in the opening of the body tub before drilling the mounting holes. Make sure that the rubber seal is on the tailgate before mounting the tailgate latch assembly. From the existing old body measure and transfer the mounting holes for the taillights. The taillights will have to have a ground in order to work properly.

We hope these instructions will give you the basics, if you have any questions please feel free to call us at 330-549-2235 we will be happy to answer your questions.

