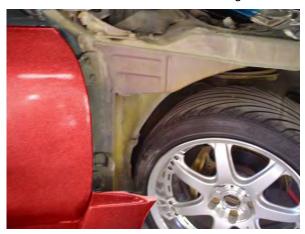
Install Lambo doors and actuators



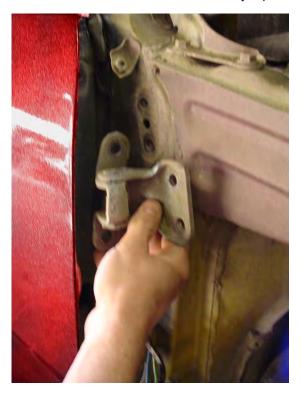
1. Lift the hood and remove left and right shield of front wheel.



2. With the door open pull out the rubber hose connecting the door and the door frame, draw out and cut the wire (wrap the two ends of cut wires with friction tape and record the given numbers. If the wires are long enough, it's not necessary to cut.) and then remove the rubber hose and wires



3. With door closed remove the factory top door hinge.



4. Test and draw the placement of the mechanism. Pay attention to the moving way of the swing arm and ensure the swing arm up to 90° do not touch the shield or fender. So the mechanism must be proper height, which can be tested by the shield.



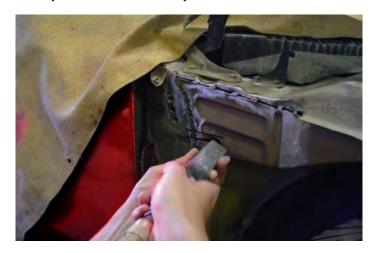
- G rind installation placement of the chassis or hammer any extrusions that may hinder base plates from sitting flat. Cut the base plate and door plate as needed.
 - B. After grinding the installation placement, test the proper distance with the shield and check and observe any places that may prevent the base plate and the swing arm from moving. In this situation you must draw a line around the base plate when it is in the proper, and then cut or hammer along the perimeter until everything clears.



C. In cars with small spaces between the chassis surface and the fender there will not be sufficient room to install. It can be solved as follows: with the position of the base plate determined, draw a line around the base plate when it is in the proper position, and then cut along the perimeter to allow the base plate to slide below the surface.



6. Determine the holding position and space. Draw the position of the safety arch on the base plate and cut it. Cut a slot in the chassis to accommodate the arch, and if the base plate is below the chassis surface for your application make additional space for adjustment with a hex key.





7. Next you should cover the base plate, door, and the rest of the parts of the door mechanism before welding with the exception of the surface that will get welded for the protection.



8. When door mechanism clings to chassis, and moves smoothly and is proper in both horizontal and vertical direction after testing again, weld spots around the perimeter of the base plate and the door plate. When you feel the welds are sturdy enough, remove the door hinge. You may observe and test whether the door is in the correct motion and position by swinging it out and up manually. Now you can make adjustments of the door.

Determine and draw on the shield or fender the position space of the swing arm's motion and cut it. Test it again and cut the inner lip to provide clearance for the swing arm.



10. Once you are satisfied with the operation and placement like opening, closing, lifting and falling of the door and door mechanism, hammer the hinge center axis of the mechanism from top to bottom and then remove the door. Make a strong weld around the entire perimeter of the base plate and door plate. (Parts must be prevented from heat from high temperature while welding.)





11. Grind, scuff the welds surface & mask undercoat paint & top coating to prevent rust.





12. Lube the moving surfaces of the door mechanism with heavy waterproof grease and then close the door, align the hinge holes and interpose the center axis to the holes form top to bottom and then hammer it well and smoothly.



13. When the door is open up to the maximum angle, clear the wires. Measure the wires and connect to the required length with other wires if it is not long enough. Remember to connect with the numbers while cutting and to mask the joints with the insulation tapes. Use zip ties to hold wires in place







- 14. Open the door and rotate it to the highest point, screw two ball joints into the swing arm and gas spring connecting plot respectively with gas spring screws and then determine and mark the spot where the ball joint will get mounted on the chassis.
- 15. Put the door down for now and disconnect the gas spring ball screw form the gas spring connecting plot and then hammer or grind the fixed position of the connecting plot and weld it well on the fixed place. Paint for dust prevention.



16. Open the door to the highest point and screw the gas spring ball points into the connecting plot and lock the ball points on the swing arm tightly at the same time. And test the doors motion. The swing arm should be parallel and not interferes with the gas spring or other parts when the door moves up and down.



17. With the door closed, test the door's horizontal motion until the door is aligned with the latch and closes perfectly. Adjust the safety arch until the door mechanism no longer interferes with the shield or fender when the door out all the way horizontally. Then set the horizontal motion screws to correspond with the angle that the safety arch rubs the inside of the lifting arm when up. The closer you make these two adjustments, the more sturdy the

door will feel going up and resting in the vertical position. Set the vertical height limiter adjustment as high as you wish provided that the door does not hit the shield or other parts.



18. If the door panel and/or door metal hits the shield or comes too close to the shield on the way up it must be cut. If the door panel must be cut first mark a line that will allow clearance. Then peel back the upholstery, make the cut and wrap the upholstery over the new edge with spray adhesive.





19 .Test it again until no any hinder and satisfied with everything; seal the screw adhesive to all the screw points.

 $20.\,$ Mount the shield, fender etc. and put down the hood. Proceed to next page if you purchase Remote Doors

Automatic Lambo Door Kit

Parts Included:

- 1. 2x Lambo Door Hinge Assembly
- 2. 2x Automatic Latch Assembly (A switch assembly inside)
- 3. 2x Shaved Door Kit
- 4. 2x Linear Actuators
- 5. 4x Linear Actuators mounting clevis
- 6. 4x Gas Struts
- 7. 2x Manual Control Switches
- 8. 22x 12v relays
- 9. 110x Relay Connectors
- 10. 16x Diodes
- 11. 2x B switch assembly
- 12. 2x C switch assembly
- 13. 2x D switch assembly
- 14. 4x 5/16 Socket Head Cap Screws

Installation Instructions:

- 1. Install the Lambo Door Hinge Assembly using the installation instructions that are included with the hinges.
- 2. Make sure doors open and close smoothly and are free from any binding or rubbing on other parts of the car.
- 3. Install the Linear Actuator with the door swung open but still in the down position. Extend the linear actuator out ½" from the collapsed position.
- 4. Install the C switch assembly underneath the linear actuator mounting clevis. Adjust the switch to make contact with the pivot block when the door is in the down position.
- 5. Install the B switch assembly as shown in the attached diagram. Adjustment of the B switch will be done later.
- 6. Install the D switch assembly as shown in the attached diagram and adjust the D switch all the way towards the outside of the car.
- 7. With the door still swung open position the latch assembly behind the hinge as shown in the attached diagram. The two set screws will need to be removed from the hinges to allow the latch to be positioned right. Position the latch release forks underneath the pivot block. The latch pin will need to make contact with the top of the pivot block to prevent the door from swinging close. Apply a small amount of bearing grease to the pivot block where the pin makes contact.
- 8. Tack the latch in several spots so it can be adjusted if necessary.
- 9. Using a 12v power source and a ground manually extend the linear actuator out until the door closes.
- 10. With the door closed adjust the D switch in so that it makes contact at the point when the door is closed.

- 11. Using the same 12v power source manually collapse the linear actuator. When the door is swung open the latch pin will pop out and will prevent the door from closing.
- 12. Using the same manual control system as the previous step extend the linear actuator out until the door is in the vertical position.
- 13. Adjust the B switch so it makes contact when the door is in the vertical position.
- 14. Manual collapse the actuator to bring the door to the down position. Using a screw driver retract the latch pin and check to make sure the pin retracts out of the way of the pivot block.
- 15. Manually extend the actuator until the door closes.
- 16. Manually collapse the actuator to double check the pin will pop out when the door is swung open.
- 17. Using the attached wiring schematics, route all the wires to the switches. It is recommended that the wires be soldered to the switch connectors.

The wiring schematic will wiring the driver side door to open when the #1 button is pressed and will open the passenger side door when the #2 button is pressed. Pressing either the #1 or #2 button a second time will stop the doors from opening. The #3 button will close both doors at the same time. Pressing the #3 button will stop the doors from closing. It is recommended that the doors be opened completely before closing.

ELECTRIC LAMBO DOOR WIRING SCHEMATIC

