

# **Fitting boot lid (Trunk)**

## **PARTS REQUIRED TO FIT BOOT LID**

- 1.** A pair of hinges, Chrome SVA compliant are best (must have no radiuses smaller than 2.5mm)
- 2.** One Gas Spring 20" (510mm) open length, & fitting brackets (these can be fabricated buy the builder or supplied from RVD)
- 3.** 'T' Handle & claw lock, two rivnuts M6.
- 4.** Catch plate and pin. (These can be fabricated buy the builder or supplied from RVD)

## **Tools required**

- 1.** Hand drill & bits
- 2.** 6mm round file & 3mm needle file
- 3.** Die grinder and rotary burr (or drill & Burr)
- 4.** Selection of spanners (8,10,11,13mm,main sizes)
- 5.** Hole clamps 3/32" 2.4mm & 1/8" 3.2mm (skin pins)
- 6.** Tape measure or rule.
- 7.** Sander or grinder & sanding discs.
- 8.** Dust Mask & gloves

## **Method**

- 1.** First make sure that the edge of the boot lid is not too thick at the edges it should be a round 4.5mm to 6mm all the way round and flat and even on the inside.



2. Sand down by hand or with a power sander depending on the amount that needs to be removed. Make sure that you do not sand too close to the radius of where the inner skin raises away from the outer skin, try to avoid “Nicks” and grind marks on this section as well. Sand from the radius out to the outer edge and blend out flat.
3. Once the edge is the correct thickness sand a 1.5 mm (approximate) radius around the inside edge to remove the sharp edge produced by the thinning operation, this will also help the boot lid to find its own center when it is placed in position on the radiuses on the body opening.
4. With a tape / rule or depth gauge check the distance from the hinge pin the first stud on the hinge as shown below.



5. With the rule or depth gauge measure from the edge of the boot lid to where the marks are for the holes on the inner skin. **Note:** the holes marks are correct in the longitudinal line but can be out on the transverse line. And drill a two 6mm hole as shown below.



6. Once you have two 6mm holes repeat this operation on for the other side hinge, check the hole positions by positioning the hinge on the outside and note if the positions are out at all. If they are not totally correct “drag” the holes in to position and open up to around 7mm, the studs should now pass through the holes and the hinge fit flat on the outside of the boot lid. Repeat this on the other side. Place nuts on the stud’s finger tight at this point to hold the hinge in position that it will not fall off and the hinge pins are in a straight line with each other. **Note:** the Hinge studs are often 1/4” UNF and 5/16” UNF and not METRIC!

7. Its now a good time to fit the catch and handle, we have found that its best to fit two M6 rivnuts into the two bolt holes of the claw catch. This will save a lot of dropped nuts and (bad language that the kids may hear) as it is very tricky to fiddle the nut into place.



8. Cut the slots marked on the inner skin, drill the small bolt holes under size and test fit the lock on the inside of the inner skin.



9. File out the slot and bolt holes until the bolts and lock can be fitted easily. Drill and file the larger handle shaft hole out to allow the shaft to rotate freely.



- 10.** With a drill bit of around 6-7mm drill a hole though the center of the square shaft hole, as square as possible to the outside skin.



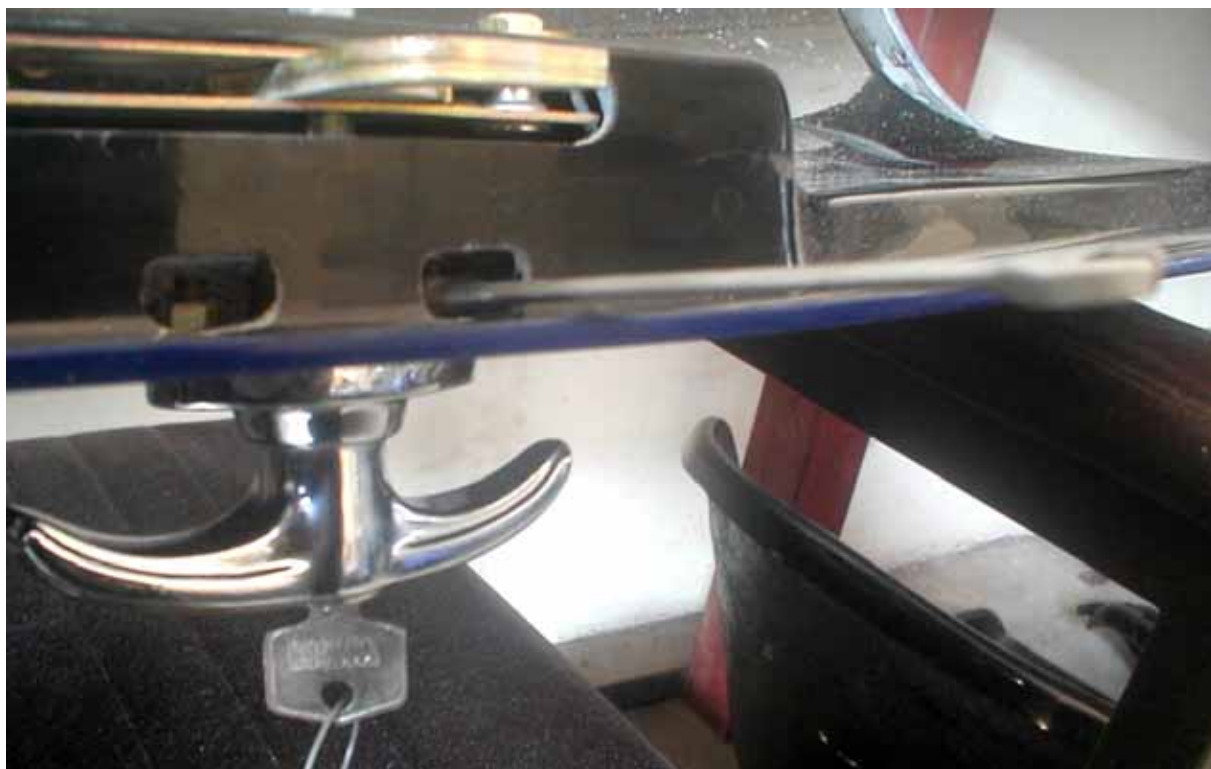
- 11.** Open up the hole from the outside until the shaft will fit through the lock, once you can pass the shaft through the outer skin and the lock, check that the mounting face of the T handle is parallel to the outer face of the boot lid. If it is not drag the hole over as you increase the size of the hole to take the base of the T handle.



- 12.** when the handle studs touch the outer skin make sure the handle is level and not at an angle to the edge of the boot lid, mark the two stud positions and dill and file until the handle fit up to the outer skin.



- 13.** To fit the nuts on the inside you will need to cut to small (or large if you get feed up trying to fit the nuts) in the inner skin. Fit the M5 nuts with long nose pliers, and tighten them with a ring spanner.



- 14.** Lay the boot lid into position with an even gap all the way round, and mark the position of the hinge bolts for the side to side position. This is best with one stud removed.



- 15.** Using the depth gauge mark the longitudinal position of the hinge, remember to allow a 3mm gap at the top edge of the boot lid and the body.
- 16.** Drill out to around 6mm Diameter, then check with the lid that the hole is accurate. If the holes are out of position move then over with a round file until the stud passes through the body, mark the second stud hole and drill and file out. **Note:** it's best to slot the holes a small amount to allow some adjustment, but only 2-3mm as you don't want to weaken the GRP or have the slot show out side of the hinge.



- 17.** Once you have all four holes in the body complete, you will need to cut an access hole in the boot bulkhead to allow you to fit the nuts to the four 5/16" UNF studs as shown below. This can be done by chain drilling and a file or with the ever useful die grinder and a suitable rotary burr.



- 18.** Make these holes as large as you require being able to fit the nuts and a large washer without too much hard work, and not too many nuts dropped down the back of the fuel tank. Fit the nuts on the studs just over finger tight at this point.



**19.** Shut the lid down slowly making sure that it dose not jam at any point and that the gaps are even. At this point it's best to have the boot lid sitting into the body below the main body surface. Remember that when the rubber seal is fitted it will push the edges of the panel up! To allow for this you can place small pieces of corrugated card taped around the boot seal area, to represent the rubber seal.



**20.** Fitting the GAS RAM you will need one 20" 90N ram and the RVD fitting kit or you can manufacture your own brackets. The hinges will only allow the boot lid to open to a certain angle; the ram should stop the lid opening to this point as it will also damage the chrome of the hinge if this happens.

**21.** With the lid open to the almost maximum measure straight up from the seal lip on the main body, and hold the bracket in position at 500mm from the seal lip. Pilot drill the bracket onto the inner skin of the boot lid. As below.



- 22.** Mark the position of the ball joint with a marker pen onto the boot lid at 90 degrees to the outside skin, around the edge of the boot lid so that it can be seen when the boot lid is closed. Remove the ram and measure the closed length, with the boot lid closed mark the closed length of the ram +3-5 mm on the main body with the pen from the ram end mark (you can see this in the right hand picture above and some previous marks)
- 23.** Line up the reinforcing plate and drill the center hole. Then pilot drill the smaller rivet holes, and pin in place on the hinge side only to allow the boot lid to be closed. Close the boot slowly and test that the ram does not jam or fowl and of the GRP. Make sure that the ram is not 100% closed when the boot lid is closed as this will no allow for any movement or adjustment 98% or there about is best. If it is not ok it best to move the top bracket and re-drill the pilot holes. When you are fully happy with your work and the operation of the ram and boot lid drill the rivet holes out to 3.2 mm 1/8".
- 24.** If you want to polish the brackets or chrome then for that "Bling" factor do not rivet at this point but fit after panting, if you have steel brackets or are not bothered by "Bling" then sand the mating faces and with a little PU adhesive rivet in place.
- 25.** Almost close the boot lid down and turn the handle to the closed position and mark the position of the catch pin with a marker pen.



- 26.** Fitting the Catch pin and bracket, measure from the center of the catch pin to the outside of the boot lid. Place the bracket inside the boot flat on the floor. you may need to remove some of the lip to allow the pin to come back to the correct measurement.



- 27.** Drill though the GRP boot floor and fit two M6 bolts with large penny washers on the underside, adjust as required, shut the boot lid and test the catch. This will need adjusting with the seals in place after painting and final fitting.

