

## Jaguar Series II FHC – Interior Restoration - Materials, Install Process, and Install Order – Summary of Steps

*Prepared by Doug Ehmann*

1. **Research** - A tremendous amount of research was required. Whereas much of the mechanical restoration process is covered in shop manuals and books, there is virtually nothing about the interior install. The kit sellers assume they will do the work, or an experienced Jaguar shop will do it. Thus I spent many hours/days researching the process and developing this document. The Jaguar Internet forum, [www.Jag-Lovers.com](http://www.Jag-Lovers.com) had much useful information (most of it accurate). The Jaguar kit suppliers have galleries of photos that help some. I took many hundreds of photos of other cars I saw at shows, or those of friends. I found one car identical to mine, that was almost all original and unrestored, and that helped a lot. A great information source – online photos and text, using a Suffolk & Turley kit: <http://etype.chrisvine.com/category/rebuild/bodyfittings/interior/>

For me, the interior work was very time consuming, and probably the most difficult part of the restoration. Patience is required. Think through every step, before cutting, gluing, punching, or riveting. Start with easier pieces, so you can learn along the way. In the end, the result was quite outstanding. You'll be proud of your work!

(Note the dates I completed these tasks are shown in parentheses. I left these in, if you want to trace the tasks I completed out of the order listed – for example, ordering parts, painting or trimming pieces so they ready for installation later, etc.)

### 2. **Select an interior kit.**

- a. I considered Suffolk & Turley (sold in the US by ClassicJaguar.com), BAS Ltd (USA/Canada), K&H Upholstery, ORSI USA, SNG Barratt (UK/USA), and Aldridge Trimming (UK).
- b. Ultimately, I purchased the Suffolk & Turley kit. It was the most expensive. But many recommended it as having best quality materials closest to original, best fit, and best support. The support was generally good. The kit came with NO instructions of any kind, and only some materials labeled. The cost of the kit was \$6,300; a 50% deposit was required, and the lead time for delivery was about eight weeks. Shipping was \$275.00.
- c. If I was doing this again, I might try a kit from BAS. Theirs has more work completed – like pieces around the console and hatch hinge covers. Their prices are a bit better, too. They seem like capable people. Their support was great, for the few parts they did trim for me.
- d. Components that come partly assembled – These included the door panels, rear hatch panels, wheel arches, and some side panels.
- e. Determine if you want the supplier to do any of the work for you, especially difficult components.  
Candidates:
  - i. Seats and headrests – I had Classic Jaguar do these. Much of the materials are leather, so you don't want to make mistakes. The seats are the most visible part of the interior. I've seen many that have been poorly done. There are tricks to getting these right. But the cost is significant – \$3,731.44. I had stripped and prepared the frames and metal parts myself, before sending them to Classic Jaguar. (2018/03/08)
  - ii. FHC rear hatch – covers for the latch and hinges – BAS did these for me. The original vacuum formed plastic covers are no longer available. Some people can form leather with heat and water. Other use Ambla, with a double-needle sewing machine to put in a seam. I replaced the chrome-plastic beading for hatch covers and latch, as BAS doesn't provide.

- iii. Gauntlet/'dome', around the shift lever – Same as the covers, above. Send leather and chrome-plastic beading. (Shipped on 9/4/2019, returned on 10/20/2019.)
- iv. Cost for items ii to iv: \$545. (Shipped on 9/4/2019, returned on 10/20/2019.)
- v. Console – no, did it myself.
- vi. Cantrails / A-pillar trim – no, did myself.

### 3. Other Materials to Purchase

- a. Adhesive/Contact Cement – The most recommended is Weldwood Landau Vinyl Top Adhesive. I purchased it from Fastenal, in gallon cans. It can be sprayed or brushed (you'll need to do both. My sprayer was best with an air pressure of 35psi. I bought two one-gallon cans, used about 1 and 1/3, with waste when I cleaned out the spray gun.
- b. Adhesive remover, in case you have some cleanup to do. 3M makes a good one, available at paint stores.
- c. Superglue ('CA' glue gel) - This can be used to 'chase' edges that are difficult to glue with contact cement'
- d. Glue sprayer, for use with a compressor. I bought an inexpensive sprayer at a car show. Harbor Freight has some, too.
- e. Brushes – Inexpensive 'chip' brushes or paint brushes, in ¼", ½", and 1" widths (a dozen in each size).
- f. Fasteners –
  - i. Clips of many types, used to attach panels to the body, trim strips, other. Ordered from SNG Barratt.
  - ii. Various screws, bolts, washers, pop-rivets, etc. to replace missing our poor-quality originals. If I didn't have, or couldn't find, originals that I could paint, or replate and polish, I used stainless-steel fasteners that were as close as possible to original size and look.
  - iii. Staple guns (pneumatic type, for use with a compressor) – I used two –
    - 1. Air stapler for 5/8" crown 18ga staples, Central Pneumatic from Harbor Freight (\$24.95). Also, staples with ¼" leg.
    - 2. Air stapler for 3/8" crown 22ga staples, 'Spotnails PS7116 air staple gun 3/8-in Crown. Uses BeA 71, Senco C staples', from StapleHeadquarters.com (\$59.99). Also, staples with 1/8" and 3/16" legs.
    - 3. Both staplers used an air pressure of 90psi.

### 4. Inventory all items that arrive in the interior kit, and original interior parts. Determine what still to order.

- a. Missing in my kit, to be sourced separately:
  - i. Visors – The kit came with material. My cores were shot, so I ordered new visors from BAS. (Ordered 6/11/2019)
  - ii. Arm rests (Ordered 6/11/2019, from BAS)
  - iii. Aperture chrome trim (Ordered 6/10/19, from SNGB)
  - iv. Gutter chrome trim (Ordered 12/23/19, from SNGB) – It would have been better to repair and re-plate the originals (not possible for me), since the reproduction items were very difficult to fit.
  - v. Radio facia panel - Ordered from BAS.
  - vi. Rear door surround – Ordered from SNGB.
  - vii. Body plugs – Ordered from Amazon – 2019/06/07
  - viii. Sheets of 1/8" black neoprene foam for luggage boards, tops of door panels, panel behind seats, panel at end below hatch. Two 48" x 80" sheets required. (Order this from FoamFactory.com) \$58.27.

- ix. Carpet studs - male and female (8 each).
  - x. Dash pad, instrument panel material, door and window seals, grommets, glove box liner, seat belts.
  - xi. Dynamat or Eastwood Acoustic Barrier – If you want to install heat and sound insulation in key areas.
- b. When the kit arrives, check each component, label them, then make sure each is stored without wrinkles or creases. Roll the sheets of vinyl and foam around a cardboard core, or bubble wrap.
  - c. Note the kit will include:
    - i. Leather – for the seats and console.
    - ii. Vinyl (13' x 4' roll) – For the rear luggage boards, cantrails, upper door panels, and small pieces.
    - iii. Ambla – This is a vinyl that is a bit heavier and stretchier than vinyl. It's for parts that like the wheel arches that have more contours, and some small parts that need the stretch (like the center console storage compartment box). In the case of my kit (Biscuit color), the Ambla was slightly darker than the vinyl. I was told the intent is for them to be the same color, but the Ambla and thinner vinyl take the dye differently, and the Ambla comes out darker.
- 5. Early steps, before installing interior:**
- a. Doors
    - i. Rubber seals for A-pillar – These are very much easier to install with the door off. Install on the A-pillar, and tape the bundle to the rest at the left side window post. That part can be installed later, as the doors and frames are installed and adjusted.
    - ii. Seal retainers on A-pillar.
    - iii. Install doors and adjust them. There may be some adjustment later, after all the seals and quarter lights (rear side windows) are in.
  - b. **Plugs, grommets, and clips** – Make sure all are installed.
- 6. Vinyl – Before starting to use it, develop a cutting plan**, and diagram large items. I made no mistakes/waste, and I did not have much excess when I was done.
- 7. Instrument panels**
- a. Cover panels with new vinyl.
  - b. Install gauges.
  - c. Connect all wiring.
- 8. Seats**
- a. Restore frames – metal, wood; repaint, springs, foam.
  - b. Covers and foam – installed by Classic Jaguar (very expensive, but great job). Set aside.
- 9. Seat belt mounts** – Locate and check all mounting studs.
- 10. Remove rear hatch door** (after marking hinge locations). (2019/10/20)
- 11. Rear Hatch Aperture** (must go in before headliner perimeter strips, rear casings, and courtesy light). This is a vinyl strip goes around the inside of the opening. Originals were the color of the interior. Reproductions are black rubber (2019/10/21)
- 12. Headliner** – Trim the material to the approximate size. Mark the center line on the material with chalk, and on the car. Mask the car before spraying the roof. Spray adhesive on the material (use a spatter pattern, and don't soak it). Spray the roof. You need a buddy to help install it, working from the center, out. Trim the edges as you go. Stuff some excess under the perimeter strips.
- 13. Top Perimeter Trim Strips**
- a. Foam, covers the perimeter trim strips all around the headliner.

- i. Make a template for cutting the foam to size. Trace an outline on newsprint. Mark this onto the foam. (2019/09/11)
  - ii. Glue the foam to the metal. (2019/09/14)
- b. Wool fabric (2019/09/26)
  - i. Test fit the Cantrails, to see how far from the bottom they will come up the wool fabric. They will cover the area that is glued. (2019/09/11)
  - ii. No adhesive is used with the piping, in the top area. Insert the piping under the metal trim pieces. (2019/09/15)
  - iii. Apply the wool fabric to side border panels by inserting beading and gluing the lower edge on the sides. Start in the right-front corner (quite tight there on my car). It may be necessary to pull the metal down slightly, using pliers with a flat hook. Note: The metal might be too close to the roof. Apparently, the Jag people hammered the panels closed after the material was installed. It may be necessary to pull it out slightly, before inserting the roll and material. *Don't pry against the top, as I understand this can dent the roof of the car.*
  - iv. Adhesive can be lightly brushed all around the rear corners, as the material is stretched and bonded, to eliminate wrinkles. On the sides, glue on the bottom  $\frac{3}{4}$ " to 1". This will prevent wrinkles by letting the material take its own shape. The Cantrails/"Crash Rolls" will also hold it into place.
- c. **Two rear side trim retainer pieces** join at the courtesy light.
  - i. The rear metal trim strips - Are covered with foam. I covered the strips (not the edge with teeth) with foam (1/8")
  - ii. Screw the pieces in place.
  - iii. Pull the fabric fully over the metal strips, and push the fabric edge under the teeth with a dull putty knife, tucking the beading until everything is tight and wrinkle-free (somewhat tricky).
- d. **Bracket/panel across front/Perimeter Trim Strip** (rearview mirror and visors attach).
  - i. Test fit the visors and mirror attachment (I mounted my mirror to the roof using a Series 1 mirror, as opposed to gluing the mirror to the windscreen as was done on Series 2 cars). 2019/06/08
  - ii. I needed to make a mounting piece for the mirror. Use flat metal, and tap three-holes for 10-28 bolts. 2019/06/08
  - iii. Recover the front panel with 1/8" foam and new wool.
  - iv. Apply material with adhesive. (2019/10/02)
  - v. Wait until after the windscreen is in to install the panel. (2020/01/03)
  - vi. Reinstall rear view mirror and visors. (2020/01/03)

**14. Install the courtesy light.** (2019/10/24)

**15. Install the 3<sup>rd</sup>, center brake light.** I installed this non-original LED brake light for safety purposes. *(There are too many rear-endings these days.)* (2019/10/24)

**16. Final electrical wiring test, including door switches, courtesy light, center brake light, bonnet lights.** (2019/10/26)

**17. Doors – frames and glass installed.**

- a. Install Dynamat inside doors.
- b. Install side mirror(s) bases.
- c. Rechrome frames (a long lead-time step, so plan ahead).
- d. Install rubber weather-strip and channels for glass.
- e. Install glass in frames.

- f. Install plastic sheeting moisture barriers, as per the originals. I used clear plastic tarp material, using the originals as a pattern.
- g. Install the window regulators in doors.
- h. Install rubber window scrapers in tops of doors.
- i. Install the frame and glass in the doors.
- j. Door panels – Do these later, after the sills are covered.

**18. Trim interior parts – Trim small, easy pieces, needed later, for practice**

- a. Strip, blast, repaint with POR-15 and Chassis Coat. (6/27/19)
- b. Cover foam areas – Foam goes to the edges, then use sandpaper on a block to radius the edges, to give a smooth appearance.
- c. Foam on small **interior panel in rear of hatch**. Small flat panel at the rear of the car, below the hatch door (foam and vinyl) (2019/09).
- d. **Rear access panel covers**, on the sides of the interior, behind the rear wheel arches - Make new plywood covers for the rear access holes. Use very thin marine plywood. Varnish on inside, and flat black paint on outside, so don't warp. Cover with neoprene foam, then vinyl. Staple with 7/16" leg, 3/8" crown staples. (2019/09/15)
- e. **Wiring Harness Cover**, will go in the driver's side upper left in footwell. Note that a long tail is left on the top end, which gets tucked under the instrument panel to hide wiring. (2019/10/03)
- f. **Trim pieces on rear door posts** (2019/10/09)
- g. 'Stand-up' panel, behind seats ('**Support Rail Assembly**' 114-49)
  - i. Test fit panel and screws or pop-rivets, mark all 10 holes. (2019/12/11)
  - ii. Cover with foam (one side and top) (2019/12/10)
  - iii. Cover with vinyl. (2019/12/14)

**19. Cantrails/'Crash Rolls' and metal trim**

- a. The cantrails above the door and rear side windows and below the rear side windows need to be installed before the weatherstripping. These get attached with screws that are under the upper edge seals in the door area, and the quarterlight panels. So the cantrails must go in before they are installed.
- b. The cantrails need to be stripped of the old vinyl, the foam preserved and re-used (the foam can almost always be reused), the metal cleaned and painted with POR-15, then re-covered with vinyl. Make sure to mark any mounting holes, before covering with material. (2019/10/13)
- c. Note the location of the cantrails is critical – too close, and the quarterlights won't close; too far and it won't look good. The key is to use the original mounting holes.
- d. These are said to be very difficult to cover. Also, getting the chrome piece back on the edge. Another possible candidate for a professional. Start on one of the lower cantrails, and see how it goes. (Note: patience is required, but it wasn't difficult.)
  - i. Note how the vinyl is cut before installing. Cut it to shape, not in a straight piece.
  - ii. The key here is to use the old material as a guide, when cutting the new material. The supplier didn't provide much excess material, so it's easy to misjudge, and run out of new material.
  - iii. When attaching the vinyl, only glue the edges, don't glue over the foam. The only exception is on the inside of corners - adhesive must be used to keep the vinyl from gapping in the concave areas. (2019/10/19)
  - iv. Mark screw holes as you go, so they will be easy to find when you install the piece on the car.
- e. Chrome beading – Remove, buff, determine if must replace. (2019/10/12). This need does not need to be replaced. In some spots, I needed to run a flat-blade screwdriver down the slot, to open the metal slightly. Part 110-17/BD24414. (2019/10/19)

- f. The cantrails are held in by screws or rivets that insert from the outside inward, under the rubber door and vent window seals, so these must go in before the seals.

Do not install yet. The top Cantrails must go after rear Casings. Bottom cantrails must wait for the casings just behind the door jambs, which must wait for the sills to be covered.

- 20. **Luggage boards** and parcel shelf – These can be done early, then set aside. They are fairly easy to do, and are good practice for more complex parts. There is some risk doing them before the rear wheel arch trim and rear casings are in, since the foam and vinyl may be bulkier than the original, and the boards will then be too wide.
  - a. Make new boards using 3/8" plywood. [2019/8/5]
    - i. Cut, bevel rear edges of rear boards. Mortise for hardware.
  - b. Foam – goes on the rear boards, center board, but not the forward board.
  - c. Vinyl – staple edges. Use 22ga, 3/8" crown, 3/16" leg staples, with a pneumatic staple gun. (2019/08)
  - d. Attach all hardware. (2019/08/31)
  - e. Rails
    - i. Marking rail locations - Install all four luggage boards in the car. Screw and bolt them in their positions. Use string to align the locations for the rails. Check the courses of the luggage rails, to make sure they line up and run straight from front to back, across all four boards. Use a water-soluble marker (I got one from JoAnn Fabric store) or chalk to mark the lines.
    - ii. Attach the rails. Screw them, not nails as were originals.
    - iii. Rubber inserts are pushed down from top. (See Interior.ppt p44, 45.) (2019/09/06)
    - iv. Where rubber inserts are cut on an angle on the ends, fill the revealed holes in the inserts with black silicone, and trim flat.

## 21. Hatch

- a. **Test fit latch and striker.** The latch may need shimming, to fit and open smoothly.
- b. **Rear hatch upper trim casing.** (2019/10/31)
- c. **Rear hatch glass defroster wiring** – Route a pigtail before installing lower trim casing.
- d. **Rear hatch lower trim casing.** (2019/10/31)

22. **Prep for rear wheel arches** – under and around the edges of the luggage boards – make sure everything is smooth (2019/12/6)

## 23. Rear wheel arches (2019/11/13)

- a. Hold up the arch vinyl, to note areas it should cover. I marked borders with pieces of masking tape. Also hold up rear T-casings, for same purpose. This will guide you to determine areas that need vinyl, and how much car be trimmed away. (2019/11/04)
- b. Install foam over the arches. Trim to shape, over the arches only, not the side walls or flat floor. (2019/11/04)
- c. Installing the vinyl – (2019/11/14)
  - i. Since the Series II E-Type have a piping seam:
    - 1. Mark the installed foam with a chalk line to determine where the piping seam should go. Make sure both sides run the length of the car in an identical manner. (2019/11/05)
    - 2. Glue just the piping seam with a 1" stripe of glue, and glue on the foam along the chalk line. Lay in the material from front to back, along the line.
    - 3. Now, only glue the top and bottom of the material, and the wall just above the arch and at the bottom. Gently pull the vinyl as needed, to install without wrinkles or bags.

24. **Small flat panel at the rear of the car, below the hatch door** – finished in an earlier step. Now install. (2019/11/14)

25. **Back Door Aperture Casings** (2019/11/26)

## 26. Hatch

- a. **Rear hatch hinge and latch covers.** (2019/12)
- b. **Reinstall hatch** (Best to wait until after all rear trim installed. But hatch glass and chrome trim are easier to install if the hatch is on the car.) (2019/11/25)
- c. **Rear window gasket** (must have upper and lower trim casing installed, as inside of gasket goes over vinyl trim). (2019/11/2)
- d. **Hatch glass.** (2019/12/29)
- e. **Chrome trim and finisher around glass** – I could not get the reproduction trim to conform to my original Triplex hatch glass and the rubber gasket. Adhesive would not have helped. So I cleaned, polished, and repaired my originals. They went in easily. (2020-01-15)
- f. **Rear hatch glass defroster wiring** – Connect wiring. (2019/11/25)
- g. **Hatch strut.** (2019/12)

## 27. Windscreen Glass

- a. 5-hour two-person job (including rear glass).
- b. Install glass, with rubber beading. (2019/12/29) - Mounted gasket on glass, then installed rope. Started on bottom edge, then pulled rope from inside to open the gasket over the metal edge. 'Slap' and pull the glass into place; do NOT push on it from one side, or it can break. Use a special tool to install the retaining strip into the center channel. No adhesive or sealer used (although many do recommend using 3M windshield adhesive/sealer). It's tight, and the rubber should be water tight.
- c. Install chrome trim around windscreen. - After some very gentle bending to get the reproduction pieces to conform to my Triplex windscreen glass and the rubber gasket, I did get the trim to stay in place with the pressure of the gasket lips alone. I had some 3M Automotive Urethane Windshield Adhesive, but I did not use it. (2020/01/09)
- d. Install A-pillar chrome trim - Should be glued. I used 3M Automotive Urethane Windshield Sealer and Adhesive. (2019/01/11)
- e. Wiper arms (2020/01/14) – Make sure the shafts are in the 'park' position when the wiper arms are pushed into place on the splined shafts.
- f. Add round 'Jaguar' decal on inside of windscreen. (2020/04/16)

28. **Visors and Rearview Mirrors** – prep mounts, chase threads (2019/06/06)

29. **Radar detector wiring, for mounting unit on a visor** – Install wiring before dash top and A-pillar trim (top Cantrail) is installed. (2019/12/30)

30. **Front headliner perimeter strip** (2019/12/30)

31. **Rearview mirror** – install (2020/01/03)

32. **Visors** – install (2020/01/03)

33. **Top Cantrails.** (2020/01/04)

34. **Scroll trim ('Chrome Finishers') on upper cantrail hockey sticks** – install (2020/01/06)

35. **Grab handle** – install (2020/01/04)

36. **Dash Top Pad** (install after the windscreen, as it's best to be out for glass install)

- a. Demister tubing – install. (2019/10/26)
- b. Dash top pad (2019/10/27)
- c. Double check wiring connections, before closing with dash top pad. (2020/01/05)
- d. Re-set Demister Tubes. (2020/01/05)
- e. Reinstall Dash Top. (2020/01/05)
- f. To get the tubes up higher, so the under-dash mill boards would fit, I put extender tubes at the base of the 'Y' joints, so they would fit up higher. (2020/01/11)

37. **Sound and heat insulation (Dynamat or Eastwood or Q-Pad) – Add this as you go. (2019/12)**

Basically, put this under all heat areas – above the exhaust system. [How much needed: One package of Eastwood Thermo-coustic sheets was just enough. “The bulkhead and transmission areas are where it is needed the most, as those are the hot spots. Do not put it on the transmission tunnel under the console- only at the front.

- Floors (2019/12)
- Footwells (2019/12/07)
- Transmission tunnel – It is important to install Dynamat underneath, as this area gets very hot. Make sure to not put any Dynamat around the screws for the gearbox cover. It’s important to install it underneath, but not around, the gearbox cover screws. Get it as low as possible, since radio panel sits on top, and is hanging up the instrument panel from tilting now. Check with radio panel, again.
- Firewall in front of trans tunnel.
- Top of trans tunnel cover/gearbox cover - Insulating padding over gearbox.
- Console - Trial fit. Mark where the edges go. Don’t put Dynamat or foam under key areas, that would make it difficult to fully seat the finished console, and so instrument panel doesn’t scrape when opened. (See previous notes.)
- Rear flat bulkhead – Butt the flanges, don’t go over them with the insulation material. Make a smooth, flat plane for the material to go over. Use silver duct tape to cover any seams, so it will be smooth when the vinyl is applied. See Rook, p228 photo. Note how any seams would show. (2019/12/05)
- Tap metal with your fingers, and listen for those that sound hollow, and need deadening material.
- Don’t cover these areas:
  - Under console.
  - Cross members.
  - Gas tank
  - Spare tire area.

38. **Rear Bulkhead area**

- a. **Wiring channels** on sides of interior – Cover these with silver duct tape (I ran a length of 1” masking tape under the middle of the duct tape, so the silver tape would not stick to the cloth loom). (2019/12)
- b. The **angled floor** between the front tilting luggage board and the hinged board – Cover with Dynamat only, as it will get carpet. (2019/12)
- c. **L-shaped piece where the hinged luggage board attaches** – Cover with vinyl, not ambla, to match the surrounding luggage boards. (2019/12)
- d. **Vertical bulkhead** behind seats - Install foam first, then ambla. (2019/12/09)

39. **Under dash panels (‘Millboards’) (3). (2020/01/11)**

40. **Sills, Carpet, Jute Felts, and Hardura** – Part numbers refer to plate 116, unless otherwise noted.

In general:

- Finished edges of carpet overlap non-finished edges.
- Felts on the flat surfaces are laid into position.
- Felts on vertical surfaces are glued with as little adhesive as possible. Often just on the top edges. Try to use screws and cup washers, instead of glue, to make the pieces removeable.

Install sequence:

- a. Identify all pieces and their locations on the car. (2020/03/08)



- b. Hardura and felt under glovebox. These tuck under the millboards. I did not want to glue it in, as would have made a mess, been unremovable, and looked bumpy. So I made an aluminum panel, glued that to the hardura, and the felt on top. Then used an existing captive nut + bolt, and screws from the millboard, to attach it. (2020/03/14)
  - c. Hardura and felt under steering column (2 pieces each). Did not use felt, as would have been too thick under steering U-joint. Attached with screws, so will be removable. (2020/03/13)
  - d. Carpet and felt on clutch housing (#13) – RHS. (2020/03/14)
    - i. Cut slots for the side radio mounting brackets.
    - ii. These felts and carpets need to be glued across the back, to get the carpet to conform to the sheet metal. Do not put felts under the carpet where the console and radio console will sit.
  - e. Carpet and felt on clutch housing (#14) – LHS. (2020/03/15)
41. **Sill trim** – foam and vinyl – both sides. (These must this go in before quarterlight casings, trim under bonnet latch handles, carpet). See ‘Sill trim’ notes, below. (2020/03/18)
- a. See Chris Vine – very helpful discussion and photos:  
<http://etype.chrisvine.com/category/rebuild/bodyfittings/interior/> (50% down).
  - b. It would have been helpful to install the door panels after the sills, to have better access to the forward end of the sills. But with the door panels on, can see how the sill foam, vinyl, and trim will clear properly.
  - c. Next, fit the triangular trim the goes on the door rear post. This is a part of the side trim panels. It screws in (see two holes). When done, set it aside.
  - d. Now the sill trim.
    - i. Replace the foam in the kit – JagLovers forum: “Much of the thin foam I got in my kit was way too flimsy and I replaced much of it with 1/8” closed cell neoprene foam. It gives a much more firm and original feel to areas like the sills and the top door panels. Where I used it on the sills, I trimmed it straight about 1/2” back from where the sill chrome goes, then the vinyl goes neatly over the foam edge and under the chrome.”
    - ii. Sill foam – Glue only the edges. (J-L: “Don’t make the mistake I made on the sills where I glued the thin foam padding all over and it came out all lumpy. Had to do it all over—just glue the very edge of the foam all around and leave it back about 1/2 ” from the edge of the door opening for the vinyl to drop down and the chrome trim strips will then fit.”) Before attaching, check the width of the chrome trim strips, to make sure the setback of the foam is correct.
    - iii. Start at the rear edge, by the door rear post. That’s the most critical end to fit. Fold over the rear edge, to make a clean edge, since I don’t think this will be covered by the vertical piece on the B-pillar (look for photos). The front edge is less critical, since the piece that wraps around the door front post (by the bonnet handle) will cover the front end of the sill trim. I did fold over the front outside edge of the vinyl.
    - iv. Sill chrome trim strips – see Treasured Motorcars photos 2019-06 and 2016-12. Slide IMG\_1421.jpg. The factory used 5-7 metal clips to secure the chrome strips. The reproduction clips are too thin, and they tear-up the vinyl and paint. I used a bit of 3M weatherstrip adhesive, and pushed the strips over the folded-over vinyl on the lip. It is very secure. And the weather-strip just below sill hold it, too.
    - v. Lower weather-strip – Clean the rubber well with adhesive remover to take off any mold release on the rubber. Also wipe the painted channel. Apply 3M Weather-strip adhesive to the channel, and the top edge of the rubber. Align the indentations in the seal with the two drains at the bottom of the door. Roll the rubber into the channel, and use a smooth paint brush

handle to push in the bottom edge of the rubber evenly. (2020/03/18).

Note: This may have been able to stay in place without adhesive.

- vi. Note2: This piece was much too wide. The doors would not close. I had to carefully sand away much, to that only about 1/8" protrudes out further than the sill chrome trim strips. The doors are still tight, but the weather-strip is taking a set, and the doors are starting to close more easily.
  - e. A-Post hardura and felt (in front of doors, underneath bonnet release handle - plate 124-2, 3) – both sides.
    - i. Felts – Trim them, and relieve areas around the wiring harness, to make the surface as smooth as possible for the hardura. Attach the felts with a light application of adhesive, on some edges and corners of the felts.
    - ii. Hardura – I did not need adhesive, and used screws and cup washers instead. (See my notes on plate 124 for locations of #4 screws. The top on the driver's – temporarily remove the wiring cover, and then re-attach it through the top of the hardura. On the passenger's side, use two similarly placed screws and washers. The bonnet release handle and screws will go through this piece. Punch clean holes. (2020/03/19)
  - f. Carpet – cross bars (#17, 18). (2020/03/19)
  - g. Carpet and felt on gearbox housing (#15) – RHS. (2020/03/19)
  - h. Carpet on gearbox housing (#16) – LHS. There is no felt on this side, as there is a pocket with felt, to allow access to the gearbox fill plug (check this side). The top is glued, and the bottom is fixed with snaps. The male snap is attached to the floor with #4 screws. (2020/03/20)
  - i. Carpets and felts – floor, both sides (#11, #12) (2020/03/20)
    - i. Felts
      - 1. Trim the large pieces to fit snugly into the footwells. (2020/03/15)  
Make a nice smooth surface on which the carpet will sit. Glue sides of felts together, to make one big piece that won't move around on the floor. (2020/03/15)
      - 2. Trim around the stud sockets.
      - 3. Lay felts into floor. Don't glue them to the carpets. If water gets into the footwells, you will want to be able to remove the carpets and felts, and dry them. The felts are like sponges, and will hold water and mildew, otherwise.
    - ii. Carpets
      - 1. Position the carpets, and locate stud positions. Punch holes.
      - 2. Reinstall the accelerator pedal and linkage.
      - 3. Lay carpets and insert studs.
      - 4. Lay the Lloyd mats on top of the carpet. Significant trimming required. And I sanded off the pointy nubs underneath, where they would contact the vinyl portions of the front carpets. (2020/03/21)
  - j. Carpets and felts – toe boards, both sides (#10). Trim the felts for a smooth surface for the carpets. Use two plastic studs to secure the bottom of the carpet. No glue was used. The felts and carpets are pushed into place, and tucked behind the side carpet and hardura. (2020/03/20)
  - k. Hardura under the seats – Fit these. Locate and punch holes for the seats and lower seat belt mounting bolts. (2020/03/21)
42. Rear luggage board – 'Hinged Extension Board Assembly for Luggage Floor' (plate 114) – Reinstall. This must go in before the rear vertical bulkhead ('Support Rail Assembly), as the retaining studs need to engage at the ends. (2020/03/23)

43. Rear luggage area.
  - a. Rear vertical bulkhead (must be done before quarterlight (B-pillar) casings installed, as the casings cover the screws on the sides of the bulkhead. (2020/03/23)
    - i. Brackets on front end of rear wheel arches. Tabs face rear. Rubber bumpers go in centers.
    - ii. Hinges.
  - b. Carpet – luggage area (#19). (2020/03/23)
44. **Quarterlight (B-pillar) Casings** (before quarterlight glass) (2020/03/23)
  - a. Trim in rear door posts (triangle pieces). Attach with three #4 screws and cup washers. This is done before the front section of the quarterlight casing gets folded over the B-pillar, since a flap of vinyl goes under the casing, and the same two bottom screws secure both pieces. See photos 2016-06 Interior.
  - b. Seat belts: Make sure to mark position for holes in covering material in car.
  - c. Make sure to fit the hatch hinge covers and latch and covers. (2019/09/18) (2019/11)
  - d. Trim hardboard panels ('casings') above wheel arches in rear, by the hatch opening – This goes in after the wheel arches, but before the cantrails and quarter-lights. (Rook p232). (2019/11)
  - e. Trim hardboard panels under quarterlights, that also wrap around the rear of the door openings. This goes in after the sills, and before the quarterlights, which are after the Cantrails.
  - f. Rear hatch release escutcheon and pull. (2020/03/23)
45. **Lower cantrails installed** - after side casings (before Quarterlight side glass). Secure with #4 flathead screws. (2020/03/24)
46. **Glass - QuarterLight side glass** – Quarterlights. (2020/03/26)
  - a. Rubber Seals for quarterlight windows.
    - i. Metal seal retainer strips are secured with pop rivets. Mine were still in the car.
    - ii. My glass is already in their frames, with the thin rubber seals.
    - iii. Seals go into the seal retainers, with the tall edge out, and the short edge in. No glue. Push in the outer edge, and work the inner edge under the retainer lip using a plastic trim tool or dull flat blade screw driver. Use some detail spray to lubricate as you work.
  - b. Fit the hinge end of the glass and frame assembly, with captive nuts in the roof. Special spacers can be used on top and bottom, as necessary (I bought extras). I found it easiest to disassemble the post from the glass/frame, install the post, then reattach the glass/frame with the five small bolts.
  - c. The catch ends have special wedge-shaped shims (Quarter Light Catch Packing Piece, BD27268) where they screw through the trim in the body work (above the wheel arches). Shims are on the parts list, and may be needed.
47. **Seat belts** – Install shoulder assembly and outer floor buckle. (2020/03/26)
48. **Rear luggage boards (3)** – Reinstall. Some fitting may be necessary, since the wheel arch trim and rear casings may be thicker than the original materials. (Note: I should have waited to do the boards until after this area was done.) I did need to trim on side of the left board by 1/8". (2020/03/27)
49. **Door Seals/Rubber** (must go after cantrails, since seals cover cantrail screw holes, but before door panels, in case must adjust door or side window frames). (2020/04/03)
  - a. A-pillar seal, from post, over door window frame – See early note that front part of this seal at A-pillar should go in before the door is installed.
  - b. Sill seal – Some reproduction seals are too firm, or stick out too far. They may need to be trimmed so that the door can be closed easily.
  - c. A-pillar seal remainder.
  - d. B-post seal – These are right and left-handed. The closed end is up. The short end in inside. The longer side curves rearward, with the open end rearward.

- e. B-post seal that goes on the triangular trim piece.

50. **Gutter/drip rail trim** – The reproduction parts should come with tabs on the end. The trim clips on the top edge, then rolls around on the bottom edge. If possible, repair and rechrome the original pieces, as my broken and kinked pieces, removed by the previous owner, would have gone on easily. I used reproduction parts from a well-known supplier. Although the quality was good, the pieces needed *many* hours of adjusting to fit. The contour was fairly accurate, only needing some minor bends at the corners. However, the channel was too narrow in most areas. I used an old pair of pliers, grinding out the jaws until the serrations were gone and smooth. Then I taped the bottom edge of the trim piece, and gently bent the channel out, half inch by half inch. The pieces were not marred. Slow and steady patience is required. When you're done with the adjustments, the parts should stay on by themselves with only the end tabs, and without glue or fasteners. For the final installation, I did use some urethane windshield adhesive to make sure the parts were firmly in place. Make sure to only bend the end tabs once, as I'm fairly sure they would break off with repeated bending. (2020/04/16)

51. **Door panels** (once door frames/shims adjusted) –

- a. Make sure the doors hang properly, with even gaps all around. The door panels will limit access to the hinge bolts. (2020/03/07)
- b. Top panels - Metal trim pieces that go on the tops of the door panels –
  - i. Strip, bead blast, prime, paint. (6/27/19)
  - ii. Trim with foam and vinyl. (2019/10/13)
  - iii. Attach window scrapers. (2019/10/15)
  - iv. Install. (2019/10/15)
- c. Door panels, with black recessed latch covers, chrome trim at bottom, chrome trim on top, window cranks, latch release, arm rests. Note: Do **not** install these until you are sure the door frames and doors (at hinges and latches) will not need adjustment.
  - i. Install chrome hardware –
    - 1. The chrome finisher strips (two per side, part #109-4) that screw to the doors. They secure the top trimmed panels and the tops of the fiberboard door panels are held in place by these. (2020/01/16)
    - 2. Chrome trim around the inside of the door handle recess. These are riveted with regular 1/8" aluminum rivets, and some have button-head rivets. The button-heads will secure the chrome trim strips. Important note: The button head rivets that sit on panels trimmed with foam and vinyl – these must have two very thin washers under each head, otherwise, the chrome trim strips that they hold will not snap on. Also, the rivets need washers on the back side to make sure they don't pull through the door panel particle boards. (2020/03/06)
  - ii. Install the metal clips on to the panels, that will hold them to the metal door shells. Use the old panels as guides. Generally, the clips all radiate outward. (2020/01/16)
  - iii. Install black recessed latch covers into the door panels. They require some trimming around rivets and clips. These covers are glued and stapled to the door panels. (2020/01/16)
  - iv. Angled sheet metal trim pieces on top forward parts of the door are covered with vinyl (2019/10/10). Also, chrome escutcheons for the courtesy light switches. Note: These must be installed before the door panels and front upper chrome finishers are installed. The excess vinyl on the inside edge of the trim pieces go under the finishers, and the door panels. (2020/03/06)

- v. Install the door panels on the door shells. One screw goes through each panel – through the chrome surround, the panel, a spacer, the black plastic recess cover, and then into a metal support in the door shell.
- vi. Snap the chrome trim strips over the button-head rivets.
- vii. Window cranks – Put the windows all the way up or down, and align the cranks forward.
- viii. Grab handles/arm rests – order new (6/10/2019). Use lock washers.

## 52. Console

### a. Pre-trim work

- i. Make sure the shifter will go into all gears. Check to make sure the mechanism does not interfere with the transmission tunnel cover, the shift boot retainer ring, the shifter boot, the shifter dome, the console. Adjustments are required on some cars.
- ii. Source correct console
  - 1. My original console was for a car with air conditioning. The non-a/c console is different. I found an original in a Jaguar scrap yard. But it was very rough. I was able to source a new reproduction from SNG Barratt. The quality was good, but I'm quite certain the dimensions of this reproduction, or the reproduction radio panel, were different than the originals. Much careful fitting was required. If I were to do it again, I would have restored my originals.
  - 2. Top section of console (Y-shape) that goes around the shifter
    - a. For Series II cars, cut a square opening for the ash tray. (2019/8/10)
    - b. Fabricate plywood inserts for the bottom. This is to hold screws that attach the two sections. Glue the two plywood to the metal. (2019/8/11)
  - 3. Paint the bare metal with primer and flat black paint. (2019/8/11)
- iii. Test fit the bare metal console and the radio panel.
  - 1. Lower trans Tunnel Finisher (gearbox cover) as much as possible
  - 2. Install the radio panel brackets that attach the upper rear corners of the radio panel.
  - 3. Install the console. A tough spot is getting it over the e-brake handle. It may be necessary to remove the cable at the back end, so make the handle more vertical. Or to remove the mount bolts at the e-brake base. ← I had no difficulty. Pull up the e-brake handle all the way; shift into 2<sup>nd</sup> gear. Tip the front down and over the shifter lever and e-brake handle. Tip side to side to get the knob at the end of the e-brake handle into the console slot.
  - 4. Check fit of radio panel. To install the radio panel, shift down into 3<sup>rd</sup> gear, and lower the e-brake handle. Note where attaches in top rear and bottom rear.
  - 5. Test fitting of the bare metal parts -- One potential problem with the fit of the console and radio panel is that if they are not fit correctly, you will not be able to lower the hinged center panel that holds gauges and allows access to the fuses. This is a common complaint and is most likely due to the console sitting too high on the carpet. My reproduction panel was a poor fit. I had to reshape metal from the bottom of the reproduction radio console to get it into the right position. (2019/07)
- iv. **Radio Panel** – Set aside. Some final fitting may be needed, so don't install the radio, speakers, and lighter yet.

### b. Shifter trim ('gauntlet') –

- i. Shifter dome - The original was vacuum-formed vinyl, which fit perfectly. That's no longer available. I sent mine to a professional, who used black ambla, which matches the original.

(Sent to BAS.) (2019/10) Or use leather. Soak in a bucket and massage into place. Constantly apply Lexol. May need to soak and massage multiple times. Once it's done, let it dry on the form. Then, take off, spray with glue, and attach. It can be done without sewing a seam. If you do sew a seam, it's easier. [In retrospect, I could have covered it with the supplied black ambla, myself.]

- ii. Chrome-plastic beading – Install, and trim length.
- iii. Shifter gaiter into dome and plastic chrome knob at end of gaiter. (2019/12/21)

**c. Console ('Tunnel Finisher') – trimming**

i. Console

1. Determine if you will have console done by a professional (BAS Ltd or Classic Jaguar), along with gauntlet and hatch hinge and latch covers. Send it out, if necessary. I did all this work myself, and was very pleased with the result.

2. E-brake gasket – glued in from the bottom (2019/12/21)

3. Side vinyl – (2020/04/22)

- a. Make sure the console metal surface is smooth, so the vinyl will not have any bumps.
- b. Some suggest using 1/16" or 1/8" foam below the vinyl. Two factory original consoles I examined did not have foam on the sides. Also, the seats can rub if the console is too wide.
- c. Trim both sides, and the rear.

4. Ski jump/Y piece that includes the emergency brake opening, ash tray opening, and opening for the shifter dome

- a. Wood core – I replaced the plywood core, using the old piece as a pattern.
- b. Leather covering - Some suggest using 1/16" or 1/8" foam below the vinyl. It appears the factory used a thin layer of felt. I chose not to use padding, as I wanted the console to sit as low as possible so that it does not raise the radio console so high that it would interfere with the opening of the center instrument panel. The cover is attached with adhesive.

c. Piping

- i. On rear and sides – This goes on just slightly above level with the top of the ski jump. Start in the rear, centering the piping. Apply adhesive to the piping to the stitching, and to the ski jump sides to just below the top. With the ski jump right side up, work the piping around the sides, making sure the piping is the correct height. Once the adhesive has set, then glue down the piping flaps to the bottom, being careful not to pull it so tight that it gaps the piping on top.
- ii. Piping around the shifter dome – On my car, it appears the factory attached this after the ski jump is attached to the tunnel finisher. Same process as the rear and sides, only the bottom piping flaps are glued to the tunnel finisher metal underneath, not the ski jump. [This was not going to work as well, so I did end up gluing the piping to the ski jump.]

ii. Center arm rest and storage compartment

1. Center arm rest

- a. My armrest cover was supplied in my interior kit. It's finished in leather.

- b. Put the foam inside the leather cover. I added 1/8" foam around the block of foam that was supplied. This filled the cover better, without sags. I also edged it against the perimeter seam, so it would not show through. I also added some cotton in corners to fill them, too. I stapled the leather to the plywood base, and this worked well. But the original was glued. (2020/04/23)
  - c. Attach the hinge to the arm rest, with the angled metal piece that limits the opening of the arm rest.
  - d. Trim the leather armrest at the hinge, so that it looks tidy.
  - e. Attach the masonite bottom panel. Originally, it was glued. I used four small screws or brads so it would be removeable, if necessary.
2. Storage Compartment ('Cubby') – A tricky piece to trim. The best approach –
- a. Clean and restore metal frame, as needed.
  - b. If you have extra ambla, use that to cover the frame since it has more stretch. Otherwise, use vinyl.
  - c. Cut the material a bit oversize,
  - d. The trick is to glue on the inside first, then roll the material over the outside like a sock.
    - i. Roll the material like a scroll. Starting on the inside, in the center of the back, glue to the corner. Let the glue set some, then work down the side to the next corner. Work around the back center. Make sure the material is set well in the corners, and bottom flanges. Let the adhesive dry well. Trim the bottom flush with the edge.
    - ii. Roll the material down the outside. Do this dry. If there are no bulges, glue the bottom around the bottom of the flange. Make sure the material meets nicely in back.
  - e. Attach the arm rest to the storage compartment frame, at the hinge.
- iii. Ash tray – Refinish with black crinkle paint, if necessary.
- iv. Assembly
- 1. Insert the ash tray assembly into the ski jump.
  - 2. Attach the ski jump to the tunnel finisher with screws from the bottom.
  - 3. Install the piping around the shifter dome (see above).
  - 4. Attach the shifter dome assembly, from the bottom, with screws into the wood of the ski jump, or the metal of the tunnel finisher. I used round-head screws, but ground the heads down as much as possible, as the shifter dome will sit on top of the shift lever rubber boot retainer. You need every millimeter of space here, so the radio console has room, and the center instrument panel can open.
- d. **Console** – install (after carpet). (2020/04/29)
- i. Console – Again, it's important for the console to be installed as low as possible, so that the radio console can be installed, and so that the center instrument panel can be tilted down. There should be nothing under the console bottom, on the floor. And the critical area is under the Y portion of the console. There should be no felt or insulation under the carpet, directly below the console. And trim the carpet away at the top, where it could raise the console. To install – Pull the e-brake handle all the way back. Put the shifter in 3<sup>rd</sup> gear. Angle the console over the shifter, then tip it side to side slightly to clear the end of the e-brake handle.

- ii. Radio and speaker panel – install in car. After the console is in, it's easiest to do the final trial fit the radio console by itself, without the radio, speakers, lighter, and face plate installed. This way you can see how it will fit, whether it will go in over the carpet, and whether the center instrument panel will tilt. In my case, my reproduction radio console needed further *significant* adjustment, especially around the bottom curved section, where it goes over the shifter dome. Once the fitting is done, install the faceplate, radio, speakers, and lighter in the new panel. Final install – Connect the wiring. Use two chrome or polished s/s bolts to go into the brackets, above rear. Nuts with domed heads will attach the panel at the bottom rear.
- iii. Attach the storage compartment frame with four screws into the tunnel finisher.

53. **Seat belts** – Install lower-console bolts and buckle.

54. **Seats** - installed. (2020/05/01)

55. **Steering wheel and center cap** (2020/05/01)

File: \Doug\Autos\Jaguar\Restoration\Jaguar – Interior Install Order – Summary of Steps – final.doc; 5/24/2019; 6/3/2019, 10/3/2019, 12/2019; 12/22/19; 12/29/2019; 3/7/2020; 5/1/2020; 5/27/2020; 5/30/2020