

STAG SOFT TOP INSTALLATION

By Tony Fox

Make sure that you read this thoroughly BEFORE discarding your old top and before starting the job.

The following is a sequence of events that I found worked well for me on previous installations of a new soft top. I have always used a mohair top from Aldridges in England and have been well pleased with the quality and fit. Installation works better with these tops on a nice warm day or warm workshop, the material will stretch and fit better.

A common fault with the Stag soft-top frame is failure of one or both header rail pivot joints, the hinge tabs protruding from the header rail break off at or near the pivot pin usually because the pivot pin has seized. These joints must flex so welding the whole joint solid is not the solution as it will fail again. The problem if you weld the joint solid is that you can't later access it with the soft top on should the weld fail later on. The correct solution is to fit new hinge tabs or a new header rail complete making sure the pivot is free. Also, check that the header rail has an even gap across the top of the windshield to avoid wind noise, remembering that when the new soft top is tensioned it will pull back on the header rail.

If you are replacing the webbing make sure you take notes of the distances between the hoops (rails) before you strip the webbing off. You will need to predetermine these positions before putting on the ragtop but you then need the hoops to match the flaps on the top. I've made a sketch which gives you the setting for the first two, the third never seems to be the same, so follow the advice further down this sheet. The majority measure 10 $\frac{1}{8}$ inches. So if yours is close to that, then go with it.

I **STRONGLY** recommend removing the rear seat before you start. When you replace the soft-top frame latch it is easy to have it slightly out of adjustment and then it won't release. With the seat in place you have a **PROBLEM** reaching the latch, with the seat out it is simple.

It is worth checking the action of the tonneau cover release cables at this point. Make sure that they are working smoothly and they latch and unlatch properly. I added a return spring to the far right latch to help pull the cables back. This helped in my case.

If you plan on replacing the Velcro strips then do so before starting the rag top installation, you can use these to help position the top when gluing. In addition, you can check the clearance between the aluminum channels that hold the Velcro and rubber seal above the doorframe to make sure the clearance is correct. It is possible to make changes at this point to make sure the rubber seal fits the chrome window frame, once the top is on it is not possible to adjust successfully. So, pop rivet the channels in place to trap the Velcro and then install the rubber seals to check the fit on the doorframe but don't forget to install the ABS covers as you pop rivet in place. Check that the door opens and closes nicely while fitting to the rubber seal.

While you are checking this area of the car make sure the rainwater drain hoses, which are at the front of the tonneau cover (just behind the "B" pillar), are free. They tend to get plugged up with silt after which rainwater will flood unnoticed inside the car under the rear seat and also into the hollow cross member under the seat. You never see this unless you happen to remove the seat and the damage has already been done.

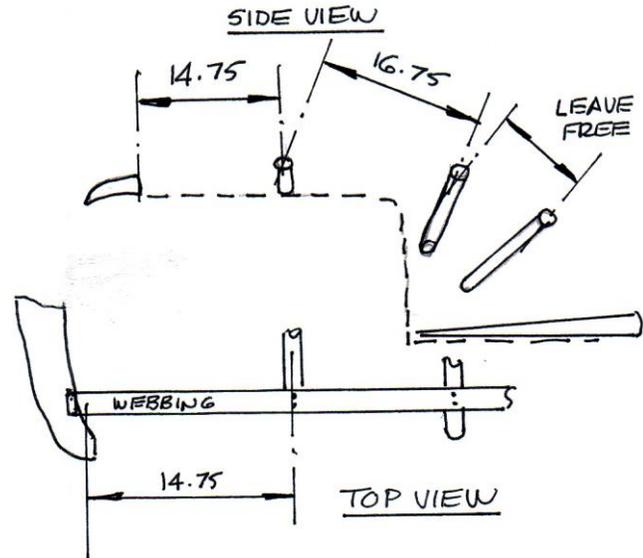
Don't forget that when you use contact adhesive if you don't like the look of a particular feature, undo it and start again. It is very forgiving in this respect. Use contact cement in the gel form, it doesn't drip as much.

Cover upholstery with a drop cloth to avoid contact with cement drips; it will mark your vinyl upholstery permanently. It's a good idea to lay the top out flat in a warm place for a couple of days to get rid of wrinkles before commencing.

These are the steps I followed; the numbers refer to pictures in the separate document set:

1. CHECK THAT FRAME IS WORKING CORRECTLY LATCH IT UP, FOLD IT DOWN AND MAKE SURE WIRE RETAINERS AT "B" POST ARE IN PLACE. MAKE SURE ELASTIC RETAINERS ARE IN PLACE THAT PREVENT SIDE PANELS FOLDING UNDER.

CHECK THE CLEARANCE BETWEEN THE HEADER RAIL AND THE TOP OF THE 'A' PILLAR, I'VE FOUND A COUPLE WHERE IT PINCHED THE MATERIAL, JUST GRIND A LITTLE OFF THE TIP OF THE HEADER RAIL. FOLD FRAME DOWN AND CHECK THE CLEARANCE BETWEEN THE REAR RAIL AND THE TONNEAU COVER HINGES, ALLOW ROOM FOR MATERIAL OF THE TOP. MAKE SURE FRAME IS CENTRAL, SIDE TO SIDE.



1a. THE WEBBING TENSION STRAPS ACROSS TOP AREN'T ESSENTIAL BUT DO COVER THE SEAMS ON THE SOFT TOP AND FINISH IT OFF NICELY. TO GET THE TENSION OF THE STRAPS TO MATCH THE TENSION OF THE TOP, SET THEM AT THE SPACING OF YOUR NOTES FROM YOUR OLD SET OR FOLLOW THE SKETCH SHOWN HERE. LEAVE THE THIRD & REAR FLAP FREE THEN WRAP AND GLUE AFTER TOP IS

IN PLACE. IF YOUR OLD ONE MEASURED 10 1/8 INS GO WITH THAT SETTING. (It is not easy to get the tension right on this rear stretch of webbing but at least this will work and will look tidy. You can get beige webbing now which better matches the lining material of the top. If you really want to get the whole thing to look good then paint the frame to match the liner of the top)

MARK CENTER OF TOP AND FRAME AT REAR WITH A CHALK LINE – CENTER OF CAR IS AT LATCH

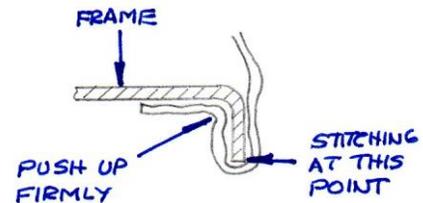
1b. INSERT STIFFENER STAYS FROM OLD SOFT TOP INTO 'B' POST PANELS. NEW TOPS DON'T COME WITH THESE BUT THE POCKET IS THERE, MAKE A SLIT AT TOP (IF NECESSARY, SOME COME WITH POCKET OPEN). STIFFENER IS PER SKETCH AND INSERT. STAY IS TURNED OUT AT ONE END WHICH GOES TO THE BOTTOM, TURNED OUT FROM THE CAR.

2. CHECK HORIZONTAL ALIGNMENT OF SIDE RAIL, IF IT SAGS ABOVE DOORFRAME, ADJUST AT TOP OF 'B' POST BY BENDING DOG LEG
3. CLOSE UP OF VELCRO
4. WIRE RETAINERS THAT PREVENT SIDE PANELS FOLDING UNDER.
5. MAKE SURE REAR FRAME FOLDS INTO WELL WITH UNIFORM CLEARANCE ESPECIALLY ALLOW ROOM TO CLEAR THE TONNEAU HINGES. REMOVE BACK SEAT VERTICAL

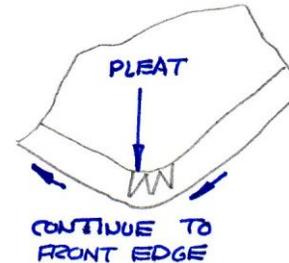
CUSHION SINCE THIS IS THE ONLY WAY TO ACCESS A REPOSITIONED HOOD LATCH THAT WON'T RELEASE OR A TOP THAT JAMS DOWN.

6. CHECK THE HEADER RAIL TO WINSHIELD FRAME FOR EVEN CLEARANCE, RIGHT AND LEFT SIDES. THE LAST TWO WE HAVE DONE NEEDED THE CORNER ON THE LEFT SIDE GROUND AWAY TO GIVE CLEARANCE FOR THE RAG TOP MATERIAL SO IT DOESN'T GET PINCHED.
7. CHECK FRAME WORKS O.K.
8. USE CONTACT ADHESIVE AND GLUE TO STITCH LINE AT REAR LOWER FLAP BENEATH REAR WINDOW, ALSO SIMULANEOUSLY GLUE REAR FRAME IN MATCHING CONTACT AREA ALL AROUND TO THE FRONT EDGE. LATCH IS CENTER
9. WHEN ADHESIVE IS TACKY PLACE TOP ON FRAME.

10. WRAP LOWER REAR FLAP OVER REAR FRAME WITH STITCH LINE ON EDGE OR MAYBE 1/16 IN. ABOVE FRAME STARTING FROM CENTER, USE PRE MARKED CHALK CENTERLINE ON TOP OF FRAME TO CENTRALIZE.



11. PUSH FABRIC UP UNDER FRAME, USE THE ROUND SHOULDER OF AN OPEN END WRENCH AT CORNERS UNDERNEATH – YOU WILL NEED TO FOLD A PLEAT IN AREAS (or make a series of snips). PUSH UP AFTER PULLING TIGHT AT CORNERS. – CONTINUE AFTER CORNERS ALONG REAR FRAME TO FRONT EDGE. SNIP WITH SCISSORS IN CENTER FOR LATCH BOLTS.



12. BOLT IN LATCH AND MAKE SURE IT LATCHES AND RELEASES BEFORE PROCEEDING (EASY TO RECIFY IF SEAT BACK IS REMOVED) DON'T RIVET RETAINER PLATES IN AT THIS POINT
13. CHECK FRONT LATCHES FOR CORRECT POINT OR PROFILE SO THAT THEY MATCH LEFT TO RIGHT. EARLY MODELS (1971) ARE BULLET NOSED, LATER ARE POINTED. EITHER WILL WORK.
14. PULL TOP FORWARD WITH REAR LATCH ENGAGED AS TIGHT AS POSSIBLE, MARK UNDER AND LIGHTLY ON TOP SURFACES OF THE TOP AT HEADER RAIL WITH CHALK.
15. APPLY ADHESIVE BEHIND CHALK MARK ON SOFT TOP AND THEN ON HEADER RAIL.
16. PULL TIGHT, MAKE SURE IT IS EVEN, NO RIPPLES. PULL THE TOP FORWARD A GOOD ¼ INCH OR MORE PAST THE CHALK MARK. ONE PERSON CAN DO THIS BUT TWO MAKE IT SO MUCH EASIER TO AVOID RIPPLES OR MESSED UP ADHESIVE.

17. 'B' POST - PLACE CHALK MARK AT BASE OF 'B' POST SO THAT WHEN GLUEING SIDE PANELS IN PLACE CORRECT VERTICAL TENSION AND POSITION IS ACHIEVED IN SIDE PANEL. IF YOU DO HAVE A HELPER, YOU CAN LOCATE THE 'B' POST FLAPS FROM INSIDE THE CAR WHILE YOUR HELPER HOLDS IT IN THE CORRECT POSITION ON THE OUTSIDE.

ALTERNATIVELY, APPLY GLUE TO THE NARROW EDGE OF THE VERTICAL PLATE TO THE REAR OF THE 'B' PILLAR (THIS IS THE PLATE THAT THE FLAP GLUES TO) THEN POSITION THE SIDE PANEL OF THE TOP AT THE RIGHT TENSION AND TOUCH IT TO THE GLUE TO PROVIDE A MARKER. NOW APPLY GLUE TO BOTH FACES AND THEN STICK THE TWO TOGETHER IN THE POSITION THAT PROVIDES THE BEST TENSION OF THE SIDE PANEL. THIS WILL HOLD THE SIDE PANEL IN PLACE LONG ENOUGH TO GLUE THE FLAP IN FRONT OF THE PLATE READY FOR SECURING WITH THE SEAL CHANNEL AND POP RIVETS. THIS IS THE EASIEST WAY OF GETTING THE BEST WRINKLE FREE TENSION ON THE SIDE PANELS.

18. RELEASE FRONT LATCHES READY FOR 'B' POST PLATE GLUEING.

19. GLUE SOFT TOP 'B' POST FLAP TO PLATE, GLUE CENTER HOOP RAILS LAST, POSITION AND TENSION HOOD TO SUIT. NOW YOU CAN FINISH OFF THAT THIRD AND REAR RAIL BY PULLING THE WEBBING TAUT AND THEN WRAPPING THE WEBBING STRAP AROUND THE RAIL AND GLUEING IT. THE RAIL FLAPS MAY NEED TRIMMING – USE MASKING TAPE ON UNDERSIDE OF LINER TO AVOID GETTING ADHESIVE ON UNWANTED AREAS. IT HELPS TO HAVE A SECOND PERSON OBSERVING THE TOP SURFACE WHEN STICKING TO THE RAILS AS EVEN A SLIGHT PULL CAN CAUSE UNEVENNESS (DEPENDING ON HOW PICKY YOU ARE).

20. POP RIVET WEATHER STRIP RETAINERS AT 'B' POST FRAME. POP RIVET REAR RETAINER METAL STRIPS AND THEN HEADER RAIL AFTER TRIMMING OFF SURPLUS MATERIAL.

SUMMARY!!

A. MAKE SURE FRAME GOES UP AND DOWN SMOOTHLY BEFORE STARTING AND DOESN'T CATCH ANYWHERE.

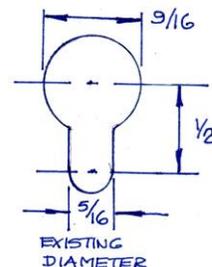
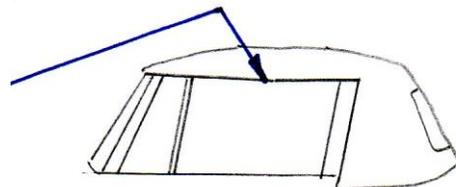
B. RELEASE CABLE SHOULD BE TUCKED AWAY

C. MAKE SURE TONNEAU CLOSES AND RELEASES PROPERLY

D. CHECK FRAME FOR BOWING ABOVE SIDE GLASS, BEND 'L' SHAPE BRACKETS IF NECESSARY. ALSO, MAKE SURE THE RUBBER SEAL FITS THE WINDOW FRAME CORRECTLY BEFORE INSTALLING THE TOP.

E. CHECK THAT HEADER RAIL JOINTS ARE O.K. THEY FLEX. (JOINT SHOULD NOT BE WELDED.)

F. REMOVE REAR SEAT



AND

(optional, slot the retainer bolt holes for easier removal, bolt heads can be simply hooked into the slot, this holds it in place but allows easy removal at a later date)

- G. MAKE SURE BALANCE SPRINGS ARE ON.
- H. IF YOU ARE REPAINTING THE FRAME, DON'T USE PETROLEUM BASED PAINT, USE ENAMEL.
- I. SIDE WIRES SHOULD BE ON TO STOP HOOD GETTING TRAPPED
- J. SIDE ELASTIC STRAPS SHOULD BE ON TO STOP HOOD FROM GETTING TRAPPED.
- K. COVER ALL SURFACES WITH DROP CLOTHS BEFORE USING CONTACT ADHESIVE. DROPPED ADHESIVE WILL MARK UPHOLSTERY PERMANENTLY.
- L. REQUIRES POP RIVET GUN WITH 0.25 IN. NOSE PIECE TO GET IN ALUMINUM CHANNELS, I GROUND TWO FLATS ON MINE.
- M. WHEN FOLDING COMPLETED TOP, ALWAYS PULL FOLDS BEHIND 'B' POST OUTWARDS BEFORE STOWING TOP. IF YOU DON'T, TOP CAN GET PINCHED AND WILL CAUSE HOLES. SO, AS YOU RELEASE HEADER RAIL AND START THE FOLD BACK PROCEDURE, PAUSE TO PULL OUT FOLDS. THE WIRE AND ELASTIC STRAPS ARE NOT COMPLETELY EFFECTIVE.
- N. MINE STAYS STOWED ALL SUMMER AND ERECTED DURING WINTER, KEEPS IT REASONABLY WRINKLE FREE.
- O. WHEN STOWING MINE I ALWAYS UNZIP THE PLASTIC WINDOW AND LET IT FALL FREELY INTO THE STOWAGE WELL, THAT WAY IT DOESN'T GET CREASED. THERE IS A GOOD 10 INCHES OF CLEARANCE IN THE WELL.

TOOLS AND MATERIAL REQUIRED

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| 1. contact cement , old formulae | 7. felt marker pen |
| 2. brush or foam rubber applicators | 8. drop cloth |
| 3. pop rivet gun with ground down nose piece | 9. scissors and sharp knife |
| 4. all correct pop rivets | 10. webbing |
| 5. chalk stick | 11. separate photo set |
| 6. rubber seals | 12. rag top |

