Cobra Hardtop Kit

Installation Instructions

- **Stop!** Please read instructions carefully and completely before proceeding with the installation process.
- If you have questions, please let us help you by answering any questions, call

  (817) 219-8487 begin_of_the_skype_highlighting (817) 219-8487 FREE end_of_the_skype_highlighting mobile, or e-mail us at support@apeproducts.com.
- Professional fiberglass preparation and installation is recommended.

Parts included:

(1)	Hardtop shell (white gel coat)	(1)	Front Seal, foam weather strip (1/2 x 3/4)
(1)	Polycarbonate rear window	(1)	Sill Seal, foam weather strip (1/2 x 1-1/2)
(1)	Seal, rubber window	(2)	Front bracket assembly
(2)	Visor tabs	(2)	Rear clamps
(4)	Screws, #6 visor tab	(1)	Shipping/storage frame
(1)	Front Seal, rubber weather strip	(1)	Installation instructions

I n s t r u c t i o n s

Phase I - Trial Fit and Modification

Important notice: Perform all required trim and fit operations prior to bodywork and paint operations

1. If Cobra is equipped with optional visors, remove visors from tabs (leaving tabs on windshield frame) before preceding. Factory installed visors have the tabs pointing downward. Our design requires the tabs to be pointing downward when used to secure hardtop.
2. Place hardtop shell on intended vehicle. Carefully place front onto windscreen frame with frame placed into front channel. Lower rear sill to rest on rear deck of vehicle. (A soft piece of fabric or sheet will help protect rear deck area.)
3. Observe fitment of windscreen frame into front channel. Frame should rest fully into channel. A little removal of fiberglass material on the outer edge may be required. Remove the minimum amount of material that will match the hardtop's channel to the rounded windshield frame. Be careful to work both sides and keep hardtop flat. (Proper fitment will keep the hardtop from sliding/rocking from side to side.)
4. After the side edges have been trimmed out and up, then mark and trim the front edge to provide a uniform lip. (The front lip should fully cover the windshield frame plus about ¼".)
5. Once you have a good fit at the windshield frame, then proper fitment at the door jam/sill are is required. The inside corner of the hardtop should meet up with the gap between the door and quarter panel. Adjust fitment by adjusting the windshield rake angle and posts location. Slots in body may require modification to allow for rearward movement. Escutcheon plates should cover any gap created. (If original-style British side windows are planned, they should be used to help determine the proper windshield rake angle.)

6. A properly positioned hardtop will rest comfortable and squarely on the rear deck about 1/2" - 3/4" in front of the FFR external trunk hinges. It is okay to have slight gap (1/4" -1/2") between the hardtop and body sills at the forward edge. -- the rear clamps will draw the top down slightly.

7. The Hardtop is clamped to the vehicle using custom c-clamps--provided-- as shown. While this is one of the strongest parts of the FFR cobra structure, care should be used so as to not crack paint or structure.

8. The best method of securing the clamps is by squeezing the hardtop and body together using your hand, then close the clamp snug--using the large rotator dial--to hold in place.

DO NOT OVER TIGHTEN! The use of a wrench is NOT recommended.

9. A large 2" sill is molded into the hardtop's base. A low density, weather resistant 1/2" seal is used to conform and seal the hardtop to differing bodywork and shaping of the rear fenders. With the Hardtop gently snug-ed down with the rear clamps, check for gap variations. The seal will easily fill gaps up to 3/8" (Body work or body filler is generally not required.)

10. Release rear clamps.

11. **Front Clip Assembly**

    If cobra is equipped with optional visors you can;

    1. Remove visors prior to hardtop operation and use the existing outboard tab to secure hardtop, or
    2. Add another mounting tab midway between existing visor tabs.
       WARNING: This requires the separation of the glass from the frame before drilling and tapping additional mounting holes.
       Due to the risk of glass breakage we caution installers against this option.

12. Locate visor tabs and tab screws. Counter-bore tabs holes to allow 4-5 threads of screw to protrude from tab.

13. Install visor mounting tabs into outboard holes of windshield frame. Careful to use proper screws so as to not crack the windshield glass.

14. If hardtop's channel interferes with tabs, the fiberglass can be trimmed/notched upward to allow the tab to be slightly lower than fiberglass with the hardtop fully seating onto windshield frame.

15. Drill mounting holes for the front brackets into back edge of molded channel in hardtop. Using the backing plate as a guide locate the holes so that the backing plate will be as far up into channel yet still lay flush inside rear edge when installed. The plate should be centered above mounting tabs.

16. Trial fit front mounting clip according to diagram shown. Slight modification or bending of front clip may re required to ensure a secure grip on visor tab. (The clip is slotted to allow hardtop removal without removal of the clips or backing plates.)

Phase II - Bodywork and Paint

1. As with any fiberglass component, search out voids between the gel coat and shell structure. Pay close attention to tight radius around the edges of front lip, window edges and bottom edge. Also the seamline may require additional attention to eliminate any voids

2. Perform bodywork operations.

3. We recommend a high-build sandable gel-coat or polyester based primer be applied after bodywork has been performed.

4. Perform final sanding and paint preparation operations.

5. Perform paint operations.

Phase III - Trim and Final Assembly

1. Due to the risk of marking or damaging the freshly painted surface, the window installation might be best performed prior to any final polishing operations in the painting above.
2. **STOP:** Study the operation of the seal before proceeding with window installation. Note the locking feature of the seal, and the opening capability of the 1/4" (wider/shallower) slot.

   Installation of the rear window is awkward and requires patience. I've found that the best installation sequence is similar to the old VW bug sequence: i.e.,

   - The seal is placed on the window
   - The seal lock faces inside
   - The window/seal combination is worked into the opening from the inside, while gently pushing from the outside.

   To ensure the hardtop's window opening has not been made smaller, remove any build up of paint and primer material on the opening's **EDGE**. A brief session with 40 grit sandpaper will quickly clean up the edge.

3. Rinse away any contaminates from hardtop before preceding with window install.
4. Carefully place the hardtop on it's roof (upside down) on a padded floor butting up against a wall (also padded). The use of the wall will prevent the hardtop from moving around the floor when pressing the window into the opening.
5. Carefully peeling back only 2 inches of the protective masking around the window perimeter. Keep protective masking in place through out hardtop installation. Lexan® (Polycarbonate) will scratch easily and care is required in its handling.
6. Install the rubber seal onto the window. Starting at the bottom middle of the window, the seal is placed around the Lexan® window using the 1/8" (narrower/deeper) slot and the split/locking feature facing the inside.
   NOTE: there is a small notch in the rear window that is oriented to the upper driver's side.
7. Ensure that the window is fully seated in the rubber slot but **not overstretched.** (A gentle tautness is okay and required to keep the seal in place around the window during installation.)
8. Trim the seal's length to form a nice butt-joint (Use a fresh razor blade to effect a clean/straight cut.)
9. Using black electrical tape, tape the lower seal in place across the butt-joint area.
10. Take the window/seal to the hardtop opening and place the top (upside down and facing downward) into the hardtop opening from the rear. (About 24" of the fiberglass hardtop should be fully engaged into window seal slot along the top middle area.)
11. Check that the window is roughly centered in the hardtop opening, adjust side to side as required.
12. Next, press the bottom (facing upward) into the hardtop opening from the rear. (About 24" of the fiberglass hardtop should be fully engaged into window seal slot along the bottom middle area.)
13. Again check that the window is centered in the hardtop opening, adjust side to side as required.
14. Now comes the delicate part. Working from the center outward, carefully work the window/seal into and around the hardtop opening. A liberal use of a soapy water solution will keep things moving nicely. To help hold the window in place, begin locking the seal by tucking the seal's edge into the groove in the seal. Be sure the window/seal is seated and in place ahead of the locking operation or the seal can bind-up.

Do not force the seal or use a sharp instrument to tuck the lock the seal.

15. I've found it best to work the window top out and around the side, then around to the bottom were the butt-joint is located. (To keep the window bottom - nearest you - from popping out, lock a 10-12 inch portion along the butt-joint.)
16 Work slowly and use plenty of soapy water (as required).
17. Once the seal is completely locked, gently press window into seal all around the perimeter to ensure it is fully installed and flush.
18. In preparation of rear foam seal, clean and dry rear sill with rubbing alcohol.
19. Apply rear foam seal (1/2" x 1-1/2") to hardtop's bottom sill to protect painted body. A uniform 1/8" setback from outer edge is recommended.
20. In preparation of spray adhesive, mask of interior of hardtop along the length of channel.
21. Using hi-strength spray adhesive, apply the thin rubber weather strip to forward edge of hardtop channel. (This rubber will ride against the front of the window frame.)
22. After adhesive is fully dry, trim rubber flush with front edge of hardtop. Using a sharp razor blade carefully trim of the rubber with an inward bevel. Be careful not to cut into painted finish.
23. Reinstall front mounting clips to hardtop channel. (Remember, backing plate should lay flush into rear/top of channel.)
24. The final seal (low density 1/2 x 3/4) is placed into the base of the hardtop's channel to form a wind seal between the top of the window frame and the hardtop.
25. Congratulations! Hardtop is now ready for final installation to roadster. Happy Motoring with your new hardtop.
26. Clamp hardtop to rear using provided custom c-clamp as shown. While this is one of the strongest part of the FFR roadster's structure, care should be used. DO NOT OVER TIGHTEN! It should snugly hold hardtop but not so tight as to crack paint or structure.
27. The shipping crate is intended to be used for hardtop storage. Padding or carpet should be placed in all locations where the hardtop may contact the wood frame. The frame can be free-standing or mounted to the wall.