

Factory Five Racing, Inc.

Part Number: 13361

Revision: C

Effective Date: <u>5/27/2020</u>

By: Jesper Ingerslev

# **Carbon fiber Dash**

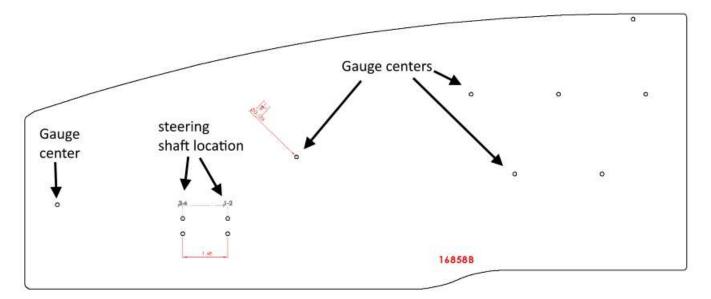
INSTALLATION INSTRUCTIONS

Gauge and steering shaft holes	2
Switch Holes	5
Glove Box	6
Assembly	8
Final Assembly	21



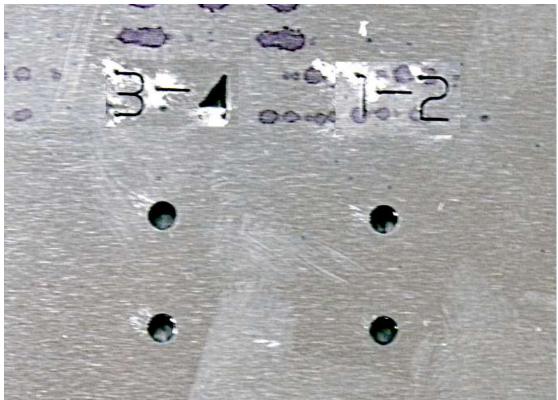
- **Solution** Drill, Marker,  $\frac{1}{8}$ ,  $\frac{7}{16}$ ,  $\frac{1}{2}$  drill bits, hole saws, Clamp, Masking tape, Philips head screwdriver, The Carbon dash uses different Glove Box hinge parts than the vinyl dash.
- The gauge template included will put the gauges in the locations shown above. If a different gauge pattern is desired, drill them where you like keeping in mind to leave room for the dash top  $\frac{3}{4}$ " tube.

### Gauge and steering shaft holes





Place the large template on top of the dash so that it lines up with the edge of the dash and the raised detail around the switch area and clamp in place carefully.



On the left side of the template are four holes for the steering shaft. The left two holes are for the Mk3 and current Mk4 while the right two are for the Mk1 and Mk 2 Roadster.

Use an  $\frac{1}{8}$ " drill bit to drill the two correct holes for the car being assembled.

Use an 1/8" drill bit to drill the centers of the small gauge holes.

If doing a Mk 3 or 4, drill the large gauge centers.

If doing a Mk 1 or 2, move the template over so that the Mk3 and 4 steering holes line up with the steering holes just drilled. Use another drill bit to keep these aligned while clamning the template. Drill the large gauge centers.

Remove the large template.



Use a 1.50" hole saw on the  $\frac{1}{8}$ " steering shaft holes to create the steering shaft slot.

Use an air saw or grinder and sand paper to finish the oval slot.

For the large Speedo and Tach holes the size depends on the gauges used. Use a tape measure to confirm the rough measurement of the gauges:

Autometer Ultra Lite -  $3^{5}/_{8}$ " hole FFR vintage -  $3^{7}/_{8}$ " hole

Use the correct hole saw to only drill the two large gauge hole locations. Insert a gauge to test fit the holes then remove. Use a tape measure to confirm the rough measurement of the small gauges:

Autometer Ultra-lite  $-2^{1}/_{16}$ " hole FFR Vintage -  $2^{1}/_{16}$ " hole

Use the closest hole saw size possible, 2" and use sandpaper or files to open up the holes as needed using a gauge to test fit.

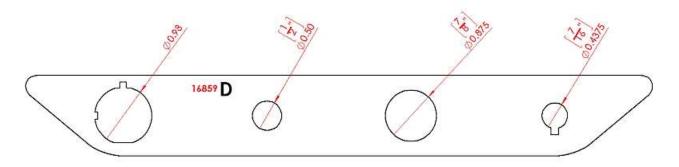
#### Switch Holes



Place the switch template in the bottom switch area and clamp in place.



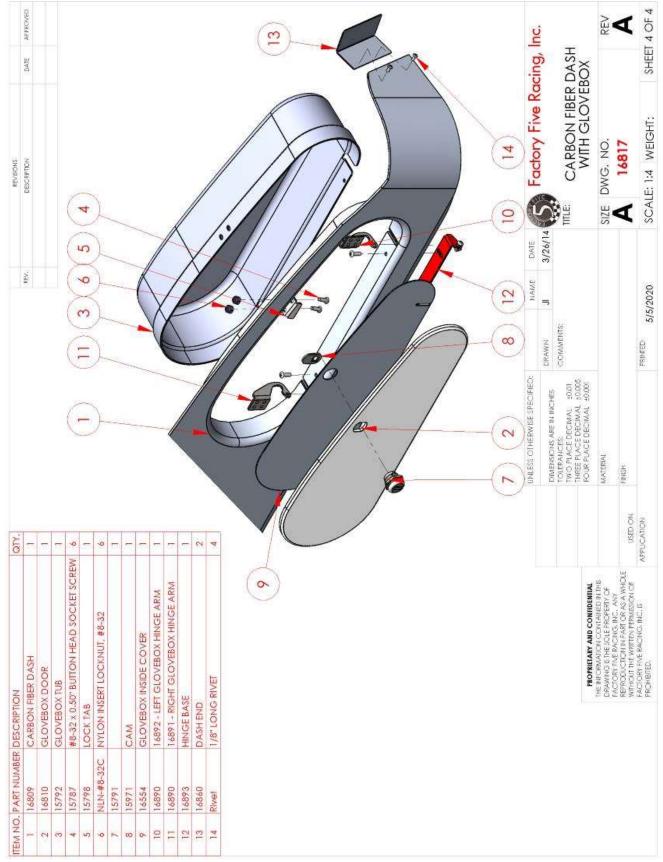
The switches are set-up for the following order from left to right, ignition, turn signal, horn and headlight. If you would like a different order cut the holes in a different order.



Use the template as a guide to drill the holes. The headlight switch will need a small file or slot using an 1/8" drill bit with the twmplate in place. The ignition switch is a little tricky with the notches and flat on the bottom to prevent it from rotating. One suggestion would be to cut the hole using a 1" hole saw then use the template permanently on the backside of the dash sandwiched between the switches and the dash to prevent the switch rotation. Another method is to use a 1" hole saw and really tighten the front ring nut.

#### Glove Box

- $11/_{32}$ " socket, ratchet,  $3/_{32}$ " hex key, clamps, masking tape, 220 grit sandpaper, channel-lock pliers, Philips head screwdriver, rag.
- General purpose 5-minute epoxy for metal to plastic, Flat piece of aluminum or wood, acetone or other paint thinner.



The following instructions show the optional padded dash in the pictures but the assembly is similar.



Rough up the backside of the glovebox door with sandpaper.



Rough up the side of the glovebox door aluminum that will go against the door with sandpaper.

Rough up the door hinge arm square area that will go against the glovebox door.

#### ASSEMBLY

Make sure to use a flat piece of aluminum or wood that completely covers the glovebox area.



Clamp a flat piece of aluminum or wood to the front side of the dash to set the location for the glove box door.



Insert the glove box door into the glove box opening. Hinge parts will not be on yet.



Pass the hinge arms through the door aluminum so that the arm tabs point outwards.



Use two of the screws provided to temporarily mount the hinge to the dash. Insert the screws through the hinge base, washers (used to space the hinge base away from the dash), dash and locknut. Tighten with the hex key and socket.

Use an  ${}^{11}/{}_{32}$ " socket and  ${}^{3}/{}_{32}$ " hex key to attach the hinge arms to the hinge base so that the hinge arm tabs point out.



Rotate the hinge arms and make sure that they sit flat on the backside of the door. If they do not, loosen the hinge base screws and move the base so that they do sit flat on the door then retighten the screws.

Wipe the sanded areas with acetone or other cleaner to make sure there is no sanding dust or mold release on the door.



Wipe the hinge arm tabs with cleaner.



Mix up a small amount of 5 minute epoxy as directed.



Put epoxy on the backside of the glovebox door and back side of th arm tabs that will go against the aluminum.

With tape on the clamp faces, clamp the hinge arms and aluminum to the door and let sit overnight.



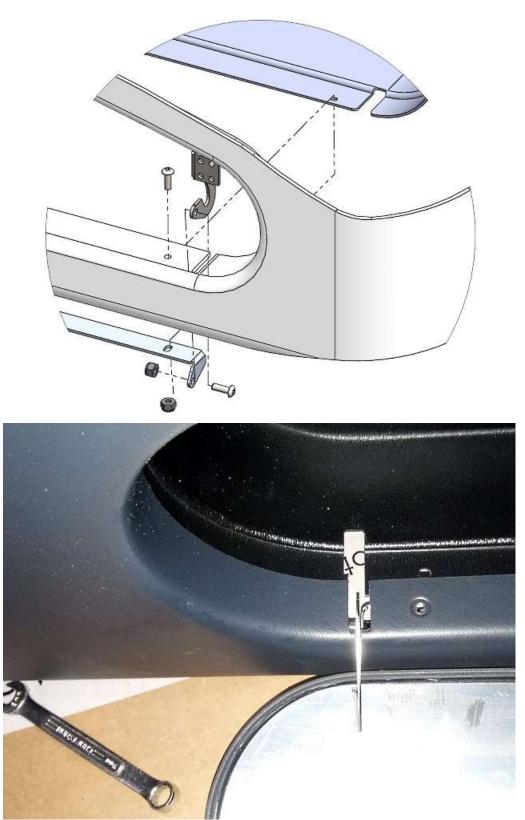
Once the epoxy has hardened (check the extra that is left from mixing), remove all of the clamps, flat board and tape.



Remove the screws from the hinge base.



Put the glove box tub on over the flange so the hinge arms go through the slots.



From inside the glove box, attach the screws through the flange, tub, and hinge base. Snug the screws up so the hinge base can just slide if pushed so that the door can get adjusted.

Place the dash face down on a flat surface so the glove box door is flush with the dash. Move the hinge base as needed to make this happen.

Carefully open the glove box door and tighten the screws.



Attach the lock tab to the glove box passing the screws through the lock tab, flange, and tub. As a starting point, center the screws in the slots and tighten. The lock tab will get adjusted later.



The glove box lock can be used with or without the trim ring as desired.



Insert the lock into the glove box door.



Tighten the nut on the backside using a pair of channel lock pliers.



Make sure the key is vertical in the lock and place the lock cam on the back of the lock.



Tighten the cam to the lock using a Philips head screwdriver.



Close and lock the glove box door.



If the door does not sit flush with the dash at the top, loosen and adjust the lock tab.

## Final Assembly



Insert and attach the gauges and switches in the dash.