

1993-2002 Camaro 17" Strutless Wing Installation Instructions Part # 400117

- If you are installing the deck filler, the wing must be installed first.
- 4th Gen Camaro composite hatches are not always a consistent shape; side to side, car to car. Take some extra care when installing support struts and side plates. The shape & contour of side plates may need some hand tweaking to correctly fit the side of the car.
- For painted cars, tape back edge of body (2 people would be helpful).
- Before starting installation, remove interior panel from under side of hatch.
- Countersink screws are mounted in thick plastic, so be careful not to twist off when installing for the first time. Drill bit size is #37.
- Pan head screws are mounted in thin plastic. Drill bit size is #50.
- Drill bit # sizes to inches #28 .140 #37 .104 #50 .070.
- 1. **Start** by mounting outer struts with duct tape tightly stretched 2 –3 layers. Making sure strut is pulled up tight and a 1/32" gap between back edge of body and front tab. From the side sight across the tops of struts to assure they are somewhat level to each other. Add more tape to hold adjusted position and mount with 1 screw at each end using the lower hole at the rear. On the under side mount through very front, and 2 back holes on each side. Remember helpful notes E & F.
- 2. Mount center struts to wing sails (legs in) at front back and center with 3 bolts. Slide forward and light snug. Add lower and front mounting tabs to both struts and finger tighten. Also, don't forget center sail truss at front edge of wing between center struts.

- 3. Mount wicker at desired height and tighten leaning outer tabs off on each end for now.
- 4. Slide sail into position resting on outer struts, align slots and loosely bolt together in all 5 holes in each side. Firmly push center struts into position, keeping back edge of hatch to sail gaps uniform at outer struts, and progressively tighten 5 outer strut bolts on each side.
- 5. Next, make sure front portion of center struts are straight front to back, and parallel to each other by sight and tape measure. Mount struts on top tab nearest to center taillight lens. Then mount lower adjustment tabs at bottom edge of hatch, by drilling a #28 hole. Adjust center sail and tighten 4-adjustment screw on lower mounting tabs.
- 6. Now adjust front center strut tabs and accurately mark holes to upper and lower hatch surface. Lift hatch, remove counter sunk screws in side struts, unbolt and remove upper hatch panel. Drill all marked holes with #50 drill bit and fasten lower tab to surface. Remove upper tabs and fasten to underside of upper panel. Reinstall upper panel and bolt-upper tab to center strut. Reinstall countersunk screws on side struts and unbolt wing sail from side struts. Drill and fasten all remaining screws in side struts, remembering helpful notes E & F.
- 7. Apply adjuster tabs to side plate mount and fasten side plate mount to outer strut. Remove sail to outer strut leaving bolts loose. Loosen center strut bolts, adjust sail forward to desired gap to deck and tighten all 20 bolts on strut and 3 remaining on center truss.
- 8. Install outer wicker tabs, adjust and tighten. Install side plate and tighten bolts with second from the front, bolting through upper adjustment tab. Position sail and tighten adjustment bolts. Next pinch lower adjustment tab and side plate together, mark and drill a #28 hole, bolt together and tighten. Position side plate and tighten adjustment bolts. Some hand forming may be required to get front edge of side plate to fit 100% perfect.

9. Lastly, install long and short tabs along front edge of sail between inner and outer struts. With bolts finger tight, slide into position to flush on top of sail. Tighten bolts and install screws, but do not over tighten, just snug them, over tightening may change adjustment.

Benefits of a Racecraft Inc. Wing on your car

Wing Sail or Main Body

- A. Carries the air beyond the deck-lid of the car to the wicker.
- B. Drastically reduces drag from turbulent air on the back of the car.
- C. Assists in getting air out from underneath the chassis.
- D. Longer wings enhance all of these characteristics, plus moves the wicker back for more cantilevered down force beyond the centerline of the rear axle.
- E. Assists in shoot deployment.

Wicker

- A. Wickers create the majority of the down force and can be adjusted to 3 different heights to increase down force.
- B. Standard wicker height adjustments for all Racecraft wings is 3/8", 1/2", 5/8"

Side Plates

- A. Assist with all functions of the wing body mentioned above.
- B. Greatly enhances side-to-side stability to the back of the car especially above 150 MPH.

120-150 MPH

For cars running 150 MPH or less in the ¼ a 15" wing is the typical choice for most applications. Some classes limit you to a 6" or 10" wing, which is fine because anything is better than nothing. Because of the limited MPH the main benefit you will get from the wing is getting the turbulent air off the back of the car, and assist with getting air out from under the car, which helps reduce unwanted drag. Racecraft Inc. also offers for most wings a short wicker that adjusts from 0, ¼", 3/8". This option offers less drag for applications not typically struggling with back half traction (1/8" to ¼" Mile)

150-220 MPH

For these applications the longer wing is typically selected. The amount of air moving across the surfaces of the wing at this MPH can really be noticed by the driver especially with stability in the rear of the car & in some applications the down force can greatly be measured in your time slips. At this point the wicker is creating good down force and can add a lot of bite to a car that can typically have tire slippage at the 1/8" and beyond. Racecraft Inc. also offers for many of our wings a taller wicker that adjusts from 3/4", 1", 1 1/8" to further assist with big end traction.