WHEEL FAIRING OPTION Ref Dwg 6-WFO-1, June 2006



The 3 wheel fairings are identical: there is no difference between the left and right side: the same fiberglass fairing is used for the main wheels and for the nose wheel.

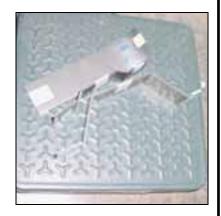




Side view: point is towards the front.



Weight of each fiberglass fairings approximately 2 pounds each.



Installation brackets; Total 6 pieces Weight approximately 1.5 lbs 6WFO-1, 2 and 3







The nose wheel fairing is cut in half along a diagonal line to fit around the nose gear leg – the wheel fairing can be removed without taking the wheel off.



Note: the ends of the axel make for an ideal location to hook on a tow bar.

Front view





Right wheel

Note: Wheel fairing have to be removed to add air: the stem is not accessible (all 3 wheels).





Cutout on the inboard side only, photo of right wheel.





left wheel fairing





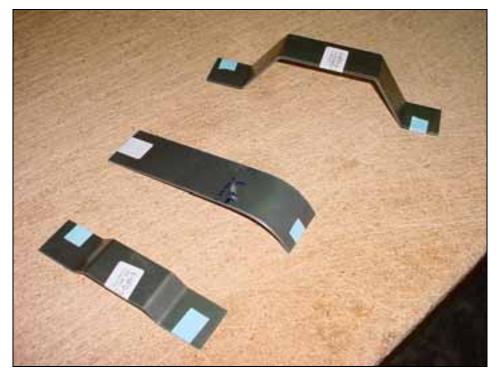
3 crews hold the wheel fairings in place. Photo of I/B screw

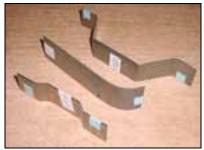


Wheel fairings do not interfere with the brake lines.



Inboard side of left wheel fairing, cutout for landing gear and brake calipers.





Steel brackets 4130

Top: O/B attachment bracket 6-WFO-1-1 (main wheels) middle: I/B attachment bracket 6-WFO-1-2 (main wheels) bottom: Nose wheel attachment bracket 6-WFO-1-3



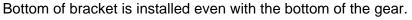
Photo of left wheel

Ref. drawing 6-WFO-1

I/B and O/B wheel fairing attachment brackets



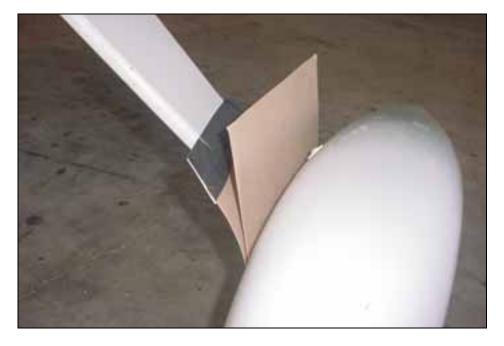
I/B Bracket 6-WFO-1-2 fits between the wheel axle and the outboard side of the rear.







Install nutplate with 2 rivets A3



To mark the location of the nut plate on the wheel fairing: fold a piece of cardboard in half, push the cardboard between the gear and the wheel fairing; to keep it from moving tape the edge to the gear. With the cardboard against the bracket, mark the location of the hole on the cardboard.

Note: Photo shown for illustration purpose only, fairing must be removed to mark the center of the nutplate on the cardboard.



Hold the cardboard on the wheel fairing to mark the center of the nut plate (pin hole in cardboard).

REMARK: First screw the wheel fairing to the outboard brackets before locating the screw in the inboard bracket.





Check: the filler stem for the inner tube does not interfere with the bracket.

Layout the location of the 2 middle in the O/B attachment brackets 6-WFO1-1

AN3H-3A bolts through the wheel axle, safety wire tied together.



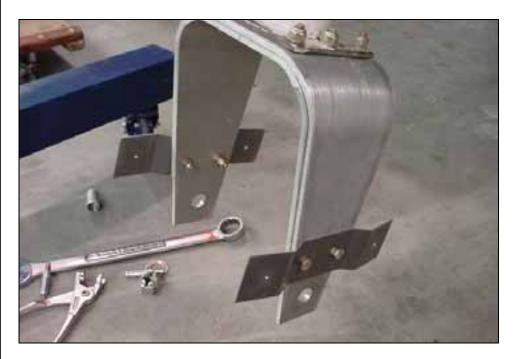
Drill the 2 pilot holes in the brackets.

Open the pilot holes in the bracket to 3/16" Install the nut plates on the bracket.



Center the bracket on the axel, back drill into the axel.

Tap the axel



Location of the bolts through the fork doubler 6G1-5



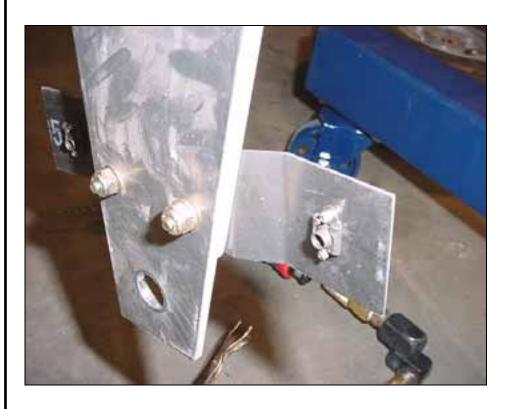
Check: the stem for the inner tube does not interfere with the location of the bolts at 70mm to the bottom of the wheel fork. If necessary install the nuts on the O/B side of the bracket and use a plastic cap instead of the yellow metal cap.



Right side: photo of outboard side of right bracket.



Viewed from the inboard side (left side)



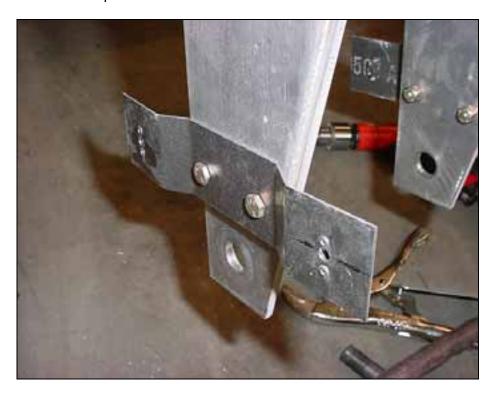
NOTE: 6-WFO-1-3 Revision 2

Changed 135 to 161 degrees Changed 11 to 5mm

COMMENT: Revision 1 parts can still be used: simply flatten out the bend and readjust the flanges in line with each other.

Critical dimension: distance across the left and right brackets should equal the width of the wheel fairing. Approximately 170mm

Install the nutplates.



2 rivets A3



Note: middle hole = 1/4" hole in the bracket.

REMARK: Oversize hole in the bracket to allow adjustment of the floating nut plates.





File a radius on the along the front edge of the fork doubler

Install the 2 front bolts for the nose gear leg to the wheel fork with the nut on the bottom side.





Detail of left side, filed radius along edge of fork doubler.



Position a wheel fairing with the nose against a wall.



320mm to the front edge



Layout the front and rear edge of the cutout for the gear and calipers.



485mm to the aft edge



130mm to the top edge.

IMPORTANT: Photo of left wheel fairing. For the right wheel fairing the cutout is on the opposite side.



Radius the corners, see page 4 for installation on gear.

Use sheet metal snips the cut the fiberglass. Best to trim a little, then see how it fits on the gear. Avoid trimming too much at once.