



B4850BTSA

Fender Mounting Instructions for MIN4050, MIN950 & MIN1550 Fenders

STEP 1

- A. Unpack all cartons and lay out parts.
- B. Compare the parts with hardware kit B4850BTSA as shown in Figure 1.

PART NUMBER	DESCRIPTION	QTY
PB5015	4.25" SWIVEL BRACKET	2
I62C450BFL8/RBZFT	5/8-11 X 4 1/2 HEX FLANGE BOLT	2
I62CNCG/RBZ	5/8-11 CLASS G FLANGE LOCK N	2
PB1/2"SPACER	1/2" POLY SPACER	6
PB100H	STAINLESS U BOLT KIT	1
PB5052	STAINLESS TUBE	2
PB5053	STAINLESS CLAMP - PB5052/SWIVL	1
PBRDR111069A	STAINLESS TUBE INSERT - BLACK	2
PB5067	STEEL ANGLE FOR PB5069	2
I62C250BFL8/RBZ	5/8-11 X 2 1/2 HEX FLG BOLT BZ	2
I62CNCG/RBZ	5/8-11 CLASS G FLANGE LOCK N	2
PB1/2"SPACER	1/2" POLY SPACER	2
PB5069	COMPOSITE CENTER BRACKET	2
I31C125BSF/RBZ	5/16-18 X 11/4 HEX WASH HEAD B	8
I31CNCF/RBZ	5/16-18 CLASS F FLANGE LOCK	8
PB5071	COMPOSITE ANGLE FOR PB5069	2
I31C125BSF/RBZ	5/16-18 X 11/4 HEX WASH HEAD B	14
I31CNCF/RBZ	5/16-18 CLASS G FLANGE LOCK	14



Figure 1

STEP 2

- A. Measure the suspension travel. This measurement is used to determine the distance between the fender and the wheel.
 - a. For air suspension systems, let the air out of the air bags.
 - b. For spring systems, measure from the stops on the springs to the bottom of the frame.

NOTE: For air suspensions with travel exceeding 6":

In some cases a travel stop may need to be installed to prevent such large gaps between fenders & tires. This will help with alignment and 5th wheel plate clearance. (Please call Minimizer @ 800-248-3855 for questions regarding this issue).

- B. Gap the fenders $\frac{3}{4}$ " over the maximum travel point of the suspension system. The goal is to make sure the fender does not rub on the tire. A gap larger than $\frac{3}{4}$ " may be necessary if using worn tires.

TIP: Establish the minimum gap required in Step 2B.

- a. For an air suspension system, place a $\frac{3}{4}$ " board on top of the tires after the air has been let out of the airbags (Figure 2). Place the fender on top of the board.
- b. For a spring suspension system, add $\frac{3}{4}$ " to the measurement from Step 2A.

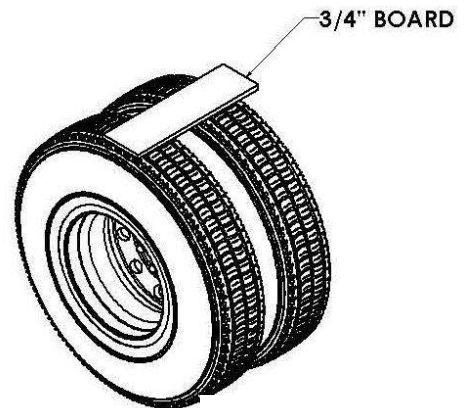


Figure 2

STEP 3

- A. Position the fenders exactly where they will be mounted (Figure 3).
- a. Visually pick and mark the locations that the brackets will bolt or weld to the frame (depending on mounting kit).



Figure 3

- B. Try to use existing holes in the frame to bolt through. It is possible to remove any existing frame bolt and replace it with the supplied bolt in the bracket kit.
- a. Splash guards are available if additional coverage is wanted with a half fender set (Figure 4).



Figure 4

- C. Spacers are supplied to bring the steel swivel away from the frame in the event of any obstructions (Figure 5).
- a. The ideal setup is to mount the steel swivel directly to the frame.

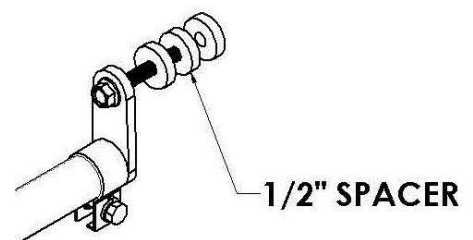


Figure 5

NOTE: Use spacers only when necessary.

D. Install center bracket assembly (Figure 6).

- a. Try to use existing holes in the frame to bolt through. It is possible to remove any existing frame bolt and replace it with the supplied bolt in the bracket kit.

Recommended torque for the 5/8 x 2-1/2" bolt with washer is 110-115 ft-lbs.

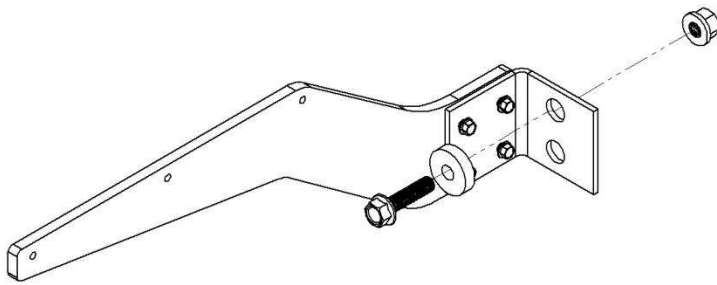


Figure 6

E. Install the center bracket as close to the end of the fender as possible (Figure 7).

- a. Drill three 5/16" holes through the fender using the holes in bracket PB5069 as a guide.
- b. Use three 5/16" x 1 1/4" bolts to bolt the center bracket and fender together.
- c. Use 5/16" body washers and 5/16" nuts provided with the kit on the inside of the fender. **Recommended torque for all 5/16" hardware is 10-15 ft-lbs.**

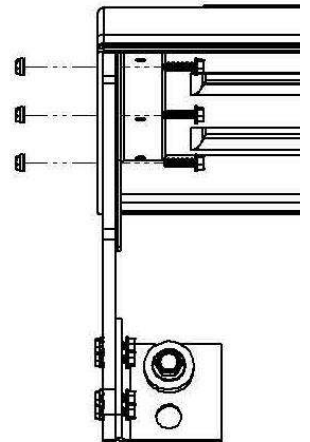


Figure 7

F. Some installations may not allow the center bracket to bolt through the end of the fender.

- a. In these cases use the plastic angle (PB5071) to connect the fender to the center bracket assembly (Figure 8).
- b. Use three 5/16" x 1" bolts, washers, and nuts to bolt PB5071 to the center bracket assembly. Do not tighten until these until the fender is level. **Recommended torque is 10-15 ft-lbs.**
- c.

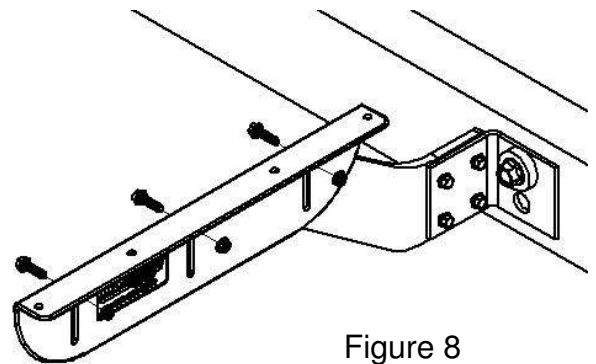


Figure 8

Tip: PB5071 is also used as a height adjustment for the end of the fender.

G. Drill four 5/16" holes through the fender using the holes in bracket PB5071 as a guide (Figure 9).

- a. Install the 5/16" x 1 1/4" bolts through the bracket and into the fender.

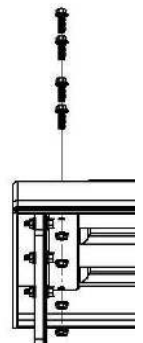


Figure 9

- b. Use 5/16" fender washers and 5/16" nuts provided with the kit on the underside of the fender.

- H. If possible, position the mounting brackets so they are located within 15" of the bottom of the fender. This guards against wind blowing the leading edge of the fender back into the tire (Figure 10).

Tip : If the front fender bracket is mounted higher than 15", refer to: <http://www.minimizer.com/instructions.html> for further suggestions on adding additional support.

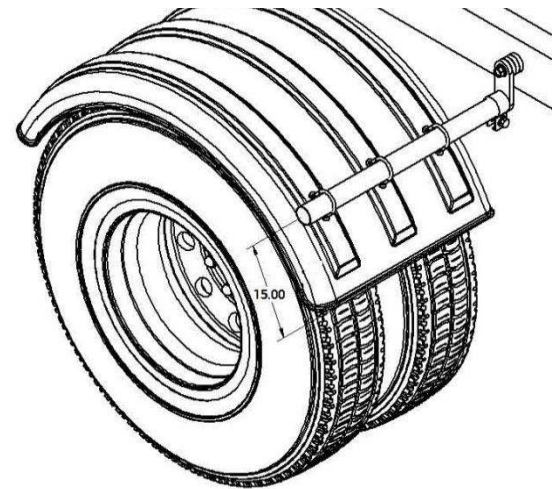


Figure 10

STEP 4

- A. Slide the stainless clamp (part number PB5053) and the mounting tube (part number PB5052) onto the steel swivel (part number PB5015).

Place plastic end cap (PBRDR111069A) into the end of the mounting tube (Figure 11).

Tip: Make sure the slot on the mounting tube is facing down towards the ground.

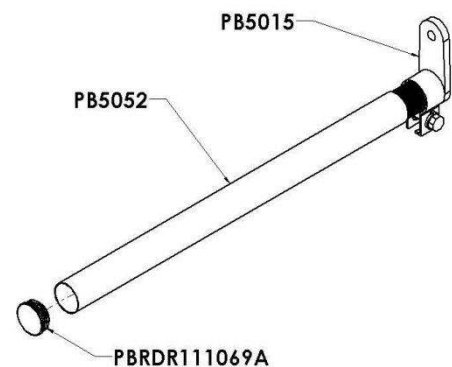


Figure 11

STEP 5

- A. Once the brackets are placed in position with the fender, securely tighten the 5/8" x 4-1/2" bolts that go through the PB5015 steel swivel to attach the swivel securely to the frame (Figure 12). **Recommended torque is 160-170 ft-lbs.**

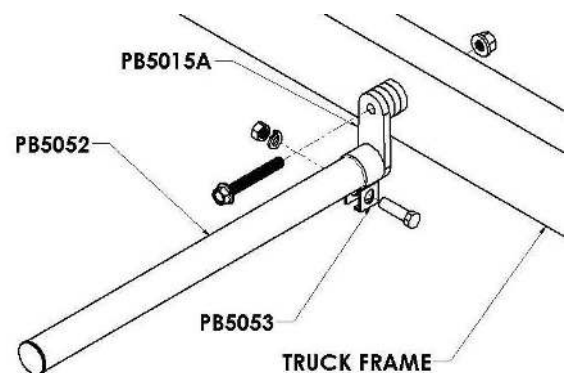


Figure 12

STEP 6

Position the tube clamp $\frac{1}{4}$ " away from the end of the stainless tube. The recommended torque for tightening the stainless clamp is 30 ft. lbs. Figure 13 shows an over-tightened tube clamp and Figure 14 shows a properly tightened tube clamp.

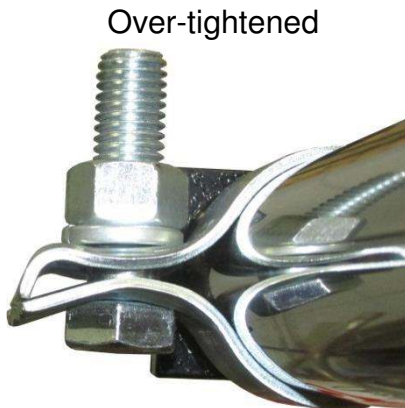


Figure 13



Figure 14

STEP 7

A. Attach the bracket (PB5052) to the fender.

- a. Drill six $\frac{5}{16}$ " holes through the fender using the holes in the fender washers as a pattern.
- b. Install the $\frac{5}{16}$ " x $2\frac{1}{2}$ " x $3\frac{1}{2}$ " U-bolts through the bracket and into the fender.
- c. Use two fender washers per U-bolt.
- d. Place one washer on the inside and outside of the fender. Use three U-bolts per tube.
- e. Make sure the fenders are square and aligned (Figure 15). Twists or bows in the fender will fatigue the material over time.
- f. Tighten the U-bolts. **Recommended torque is 75-90 in-lbs. Do not exceed recommended torque.**

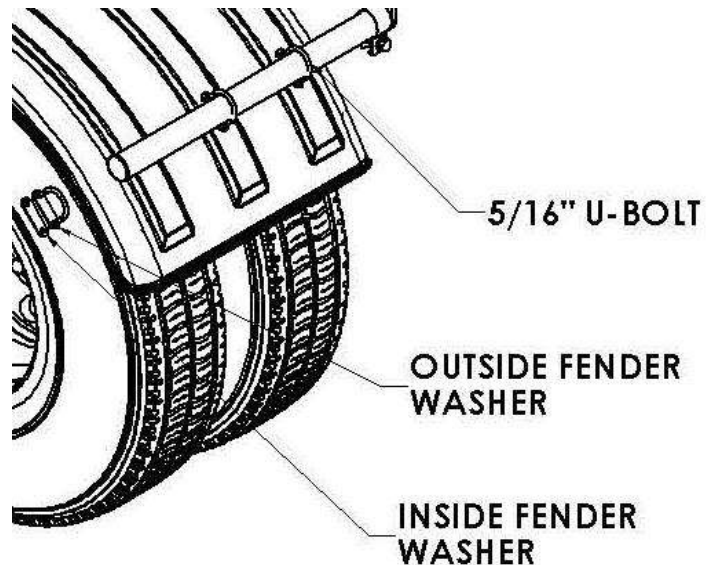


Figure 15

STEP 8

A. For trucks with air suspension, raise and lower the suspension one final time to confirm that there is adequate clearance between the fenders and wheels.

NOTE: ONCE FENDERS ARE IN SERVICE, OCCASIONALLY CHECK TORQUE ON THE $\frac{5}{8}$ " X $4\frac{1}{2}$ " HEX BOLTS IN THE FRAME TO MAKE SURE THEY DO NOT LOOSEN OVER TIME.

