



## B600BTSA

### Fender Mounting Instructions for MINTA1554, MINTA910, MINTF1554 & MINTF900 Fenders

#### STEP 1

- A. Unpack all cartons and lay out parts.
- B. Compare the parts with hardware kit B600BTSA as shown in Figure 1.

PART NUMBER	DESCRIPTION	QTY
PB5015	4.25" SWIVEL BRACKET	4
I62C450BFL8/RBZFT	5/8-11 X 4 1/2 HEX FLANGE BOLT	4
I62CNCG/RBZ	5/8-11 CLASS G FLANGE LOCK N	4
PB1/2"SPACER	1/2" POLY SPACER	12
PB100H	STAINLESS U BOLT KIT	2
PB5052	STAINLESS TUBE	4
PB5053	STAINLESS CLAMP - PB5052/SWIVL	2
PBRDR111069A	STAINLESS TUBE INSERT - BLACK	4
PB5067	STEEL ANGLE FOR PB5069	4
I62C250BFL8/RBZ	5/8-11 X 2 1/2 HEX FLG BOLT BZ	4
I62CNCG/RBZ	5/8-11 CLASS G FLANGE LOCK N	4
PB1/2"SPACER	1/2" POLY SPACER	4
PB5069	COMPOSITE CENTER BRACKET	4
I31C125BSF/RBZ	5/16-18 X 11/4 HEX WASH HEAD B	16
I31CNCF/RBZ	5/16-18 CLASS G FLANGE LOCK	16
PB5071	COMPOSITE ANGLE FOR PB5069	4
I31C125BSF/RBZ	5/16-18 X 11/4 HEX WASH HEAD B	28
I31CNCF/RBZ	5/16-18 CLASS F FLANGE LOCK	28
I31C100BSF/RBZ	5/16-18 X 1 HEX WASHER HEAD BL	16
I31CNCF/RBZ	5/16-18 CLASS F FLANGE LOCK	16
I31N150WFEZ	5/16 X 1 1/2 FENDER WASHER	32



Figure 1

#### STEP 2

- A. Lay the fenders out and clamp them together depending if the fender style is MINTA (Figure 2) or MINTF (Figure 3). This will make bolting them together much easier.



MINTA

Figure 2



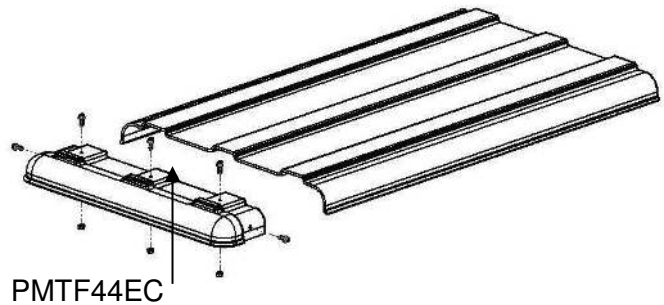
MINTF

Figure 3

### **STEP 3**

- A. Bolt the fenders together. A pack of 5/16x 1" bolts, 5/16" nuts and 5/16" x 1- 1/2" fender washers is included in the kit. **Use four bolts per joint and torque bolts 10-15 ft-lbs.**
- B. In some cases TF44 or TA53 will need to be cut down to accommodate a shorter wheel base.
- C. To install the end cap, cut the end of the center section off and clamp PMTF44EC to the unfinished end of the fender (Figure 4)
  - a. PMTF44EC can be used with either TF44 or TA53.
- D. Drill five 1/4" holes through the fender using the holes in PMTF44EC as a guide.
- E. Use five 1/4" x 3/4" Phillips truss head bolts and lock nuts to connect the fenders.

- a. **This is a hardware kit (PM10PK) that is sold separately from the bracket kit.**



### **STEP 4**

- 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.

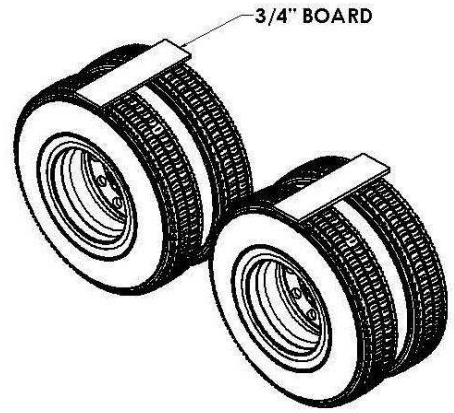
**NOTE: For air suspensions with travel exceeding 6":**

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 5<sup>th</sup> wheel plate clearance. *(Please call Minimizer @ 800-248-3855 for questions regarding this issue).*

- B. Gap the fenders 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 3/4" may be necessary if using worn tires.

**TIP:** Establish the minimum gap required in Step 4B.

- 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 5). Place the fender on top of the board.
- b. For a spring suspension system, add  $\frac{3}{4}$ " to the measurement from Step 4A.



## **STEP 5**

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

**Tip:** It is common for the front bracket to align with the existing quarter fender holes and the rear bracket to align with the holes left from the mud flap hanger.



**NOTE:** Depending on the length of the truck frame and the placement of the mud flap hangers, the fender may tuck inside the mud flap hanger.

**NOTE:** Do not drill into the weld or any other part of the light box. If a mud flap is mounted to the light box style fender and the mud flap is backed over, it may cause the interior welded plate to become loose. Slot the mud flaps to prevent this issue. This is NOT covered under warranty.



- C. Spacers are supplied to bring the steel swivel away from the frame in the event of any obstructions (Figure 6).
  - a. The ideal setup is to mount the steel swivel directly to the frame.

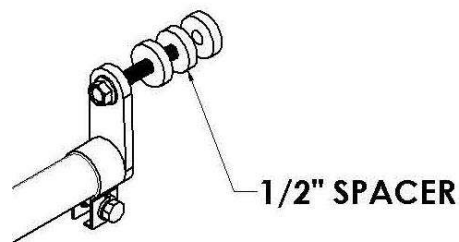


Figure 6

**NOTE: Use spacers only when necessary.**

- D. Install center bracket assembly (Figure 7).

- 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\"**

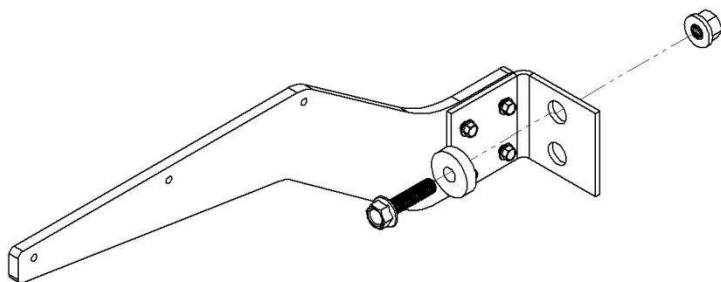


Figure 7

See **IMPORTANT** assembly instructions for center bracket PB5069 & PB5067, last page of this form.

- E. Install the center brackets as close where the fenders join together as possible (Figure 8).

- 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\" fender 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.**

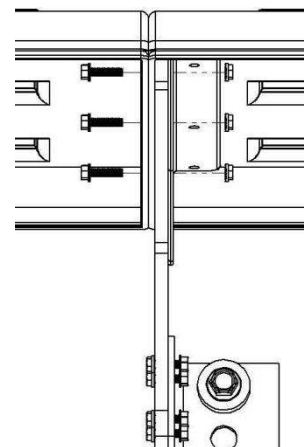


Figure 8

- F. Some installations may not allow the center bracket to bolt through the ends of the fenders.

- a. In these cases use the plastic angle (PB5071) to connect the fender to the center bracket assembly (Figure 9).
- b. Use three 5/16\" x 1\" bolts, washers, and nuts to bolt PB5071 to the center bracket assembly. Do not tighten these until the fender is level.

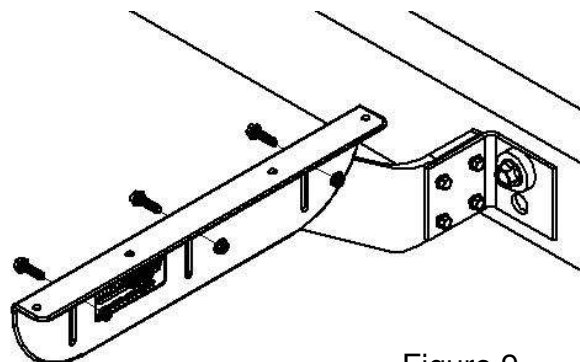


Figure 9

**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 10).

- a. Install the 5/16" x 1 1/4" bolts through the bracket and into the fender.
- b. Use 5/16" fender washers and 5/16" nuts provided with the kit on the underside of the fender.
- c. **Recommended torque for all 5/16" hardware is 10-15 ft-lbs.**

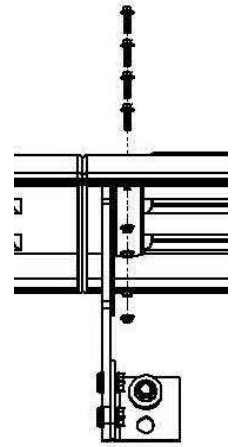


Figure 10

H. If possible position the brackets are within 15" of the bottom of the fender to avoid wind blowing the fender back into the tire (Figure 11).

**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.

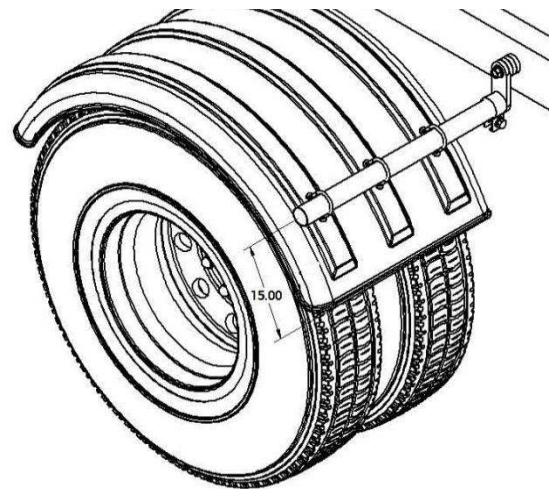


Figure 11

## **STEP 6**

A. Slide the tube 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 12).

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

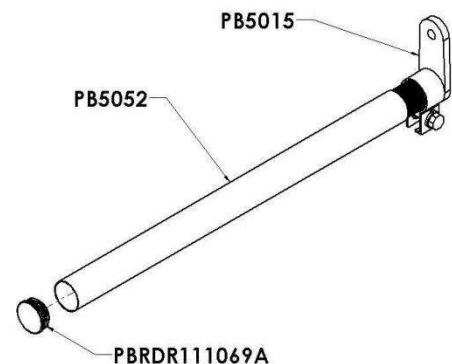
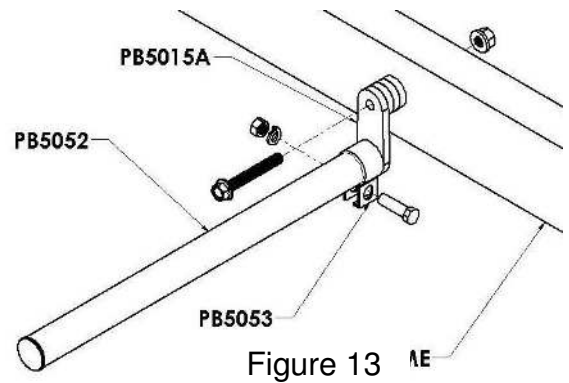


Figure 12

## STEP 7

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 13). **Recommended torque is 160-170 ft-lbs.**



## STEP 8

Position the tube clamp 1/4" away from the end of the stainless tube. Next, tighten the tube clamp (PB5053) to lock the mounting tube in place. **The recommended torque for tightening the stainless clamp is 30 ft. lbs.** Figure 14 shows an over-tightened tube clamp and Figure 15 shows a properly tightened tube clamp. **Over tightening the tube clamp will cause the clamp to make uneven contact and cause the tube to loosen up over time**

Over-tightened  
clamp



Figure 14

Properly tightened  
Clamp (30 ft-lbs.)



Figure 15

**TIP:** If using the optional PBTF44EC, make sure to mount PB501026 far enough from the end so it doesn't interfere with the bolts used for PBTF44EC (Figure 16).

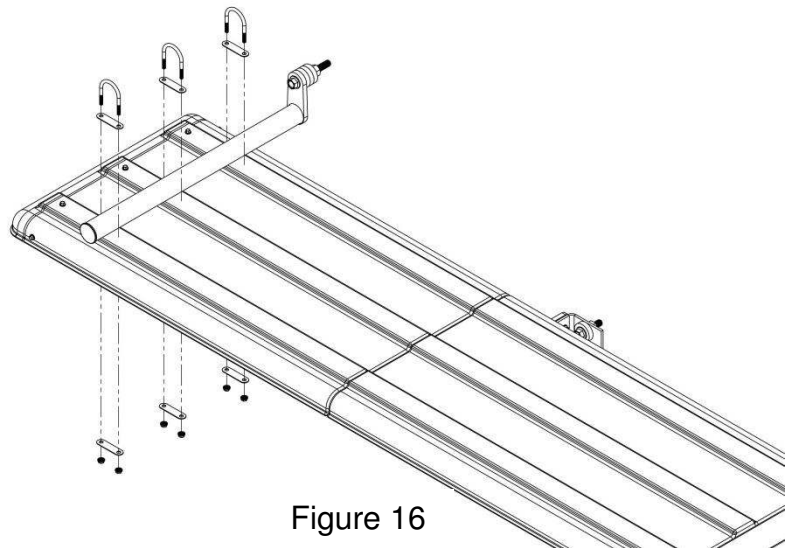
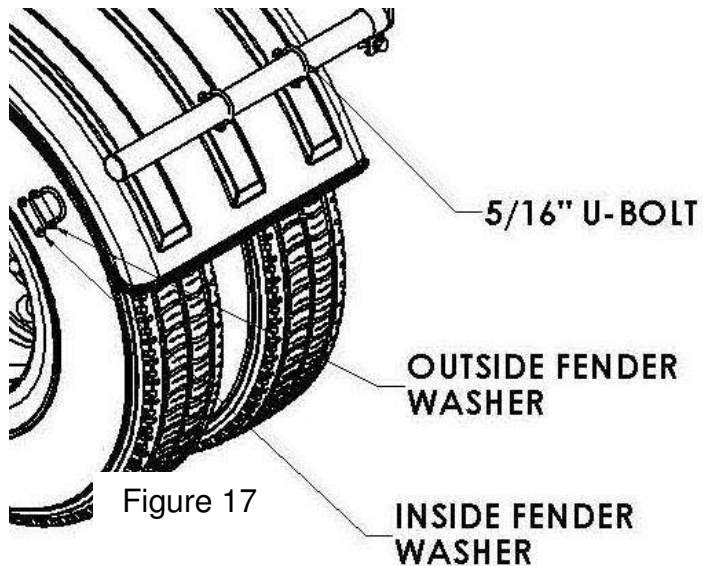


Figure 16

## STEP 9

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

- a. Drill six 5/16" holes through the fender using the holes in the fender washers as a pattern.
- b. Install the 5/16" x 2 1/2" x 3 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 fender bracket tube.
- e. Make sure the fenders are square and aligned (Figure 17). 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.**



## STEP 10

- 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.
- B. Recheck all brackets and bolts to ensure they are tightened to the recommended torque.

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

