



B100PBA

Fender Mounting Instructions for MIN100, MIN150, MIN1600, MIN161200, MIN1900, MIN2200, MIN221800, MIN2260, MIN2480, MIN9950 & PM202/302/1021 Fenders

STEP 1

- A. Unpack all cartons and lay out parts.
- B. Compare the parts with hardware kit B100PBA as shown in Figure 1.

Part Number	Description	QTY
PB5019	5.75" 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
PB5030	26" Paddle Bracket	4
PB5054	Paddle Bkt Clmp 2 1/4 AccuSeal	4
I31C62BSF/NPAT	5/16-18x5/8 Serr Flange Bolt Z	24
I31N125WFEZ	5/16X1 1/4 Fender Washer Z	24



Figure 1

STEP 2

- A. Measure the suspension travel on the truck. 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 the 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 $\frac{3}{4}$ " 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.

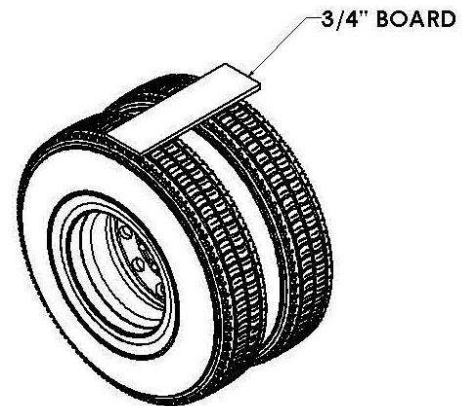


Figure 2

STEP 3

- A. Position the fenders over the tires exactly where they will be mounted.
- B. Insert the paddle bracket (PB5030) onto a swivel bracket (PB5019) as shown in Figure 3.
- C. Hold the bracket assembly over top of the fenders and against the truck frame to visually mark the locations where the brackets will bolt to the frame.
 - a. Try to use existing holes in the frame to attach the PB5019. It is possible to remove any existing frame bolt and replace it with the supplied bolt in the bracket kit.

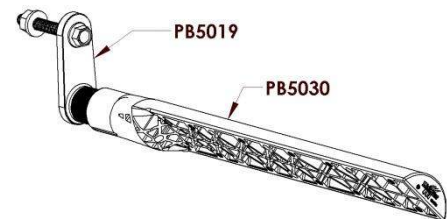


Figure 3

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. Figure 4 shows a truck with flaps and fenders.



Figure 4

NOTE: When installing any fender equipped with a built in light box 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. Figure 5 shows an example of a lightbox fender equipped with mudflaps.



Figure 5

b. When possible it is best to bolt the steel swivel bracket directly to the frame as shown in Figure 6. There are two mounting holes in the swivel bracket to choose from. If using the mounting hole inside the pipe as shown in Figure 6 the excess flat steel may be trimmed off to provide a cleaner look.

c. For situations where frame components are in the way of the PB5019 swivel bracket, trim off the pipe component of the swivel bracket and substitute a round spacer to gain clearance around the obstruction.



Figure 6

i. If spacers are required, determine the minimum number of spacers needed to clear the obstruction.

ii. Trim off the pipe of the PB5019 to provide room for the spacers. There are three lines cut in the pipe to act as a guide. See Figure 7 for a detailed view.

NOTE: Use spacers only when necessary.

Trim PB5019 on the appropriate guide line when using 1, 2, or 3 spacers.

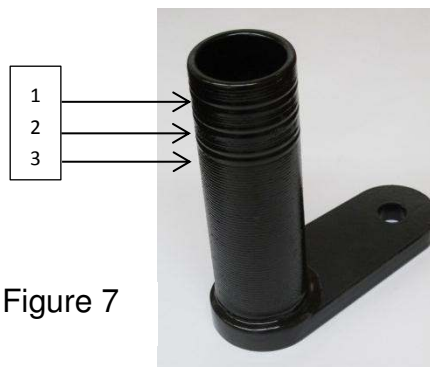


Figure 7

- D. 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 8).

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.

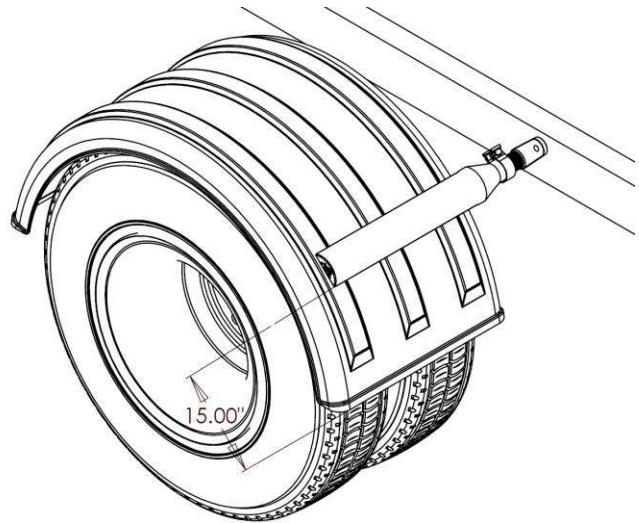


Figure 8

STEP 4

- A. Bolt the remaining PB5019 swivel brackets to the truck frame as shown in Figure 9 and tighten the nut so the brackets suit the desired position of the fender. **Recommended torque for the 5/8" X 4-1/2" bolts is 160-170 ft-lbs.**
- B. Slide the PB5030 brackets onto the PB5019 swivel brackets that are mounted to the frame.
- Make sure the base end of the PB5030 is fully engaged into the PB5019.**
- C. Rotate the PB5030 so it makes good contact with the fender.

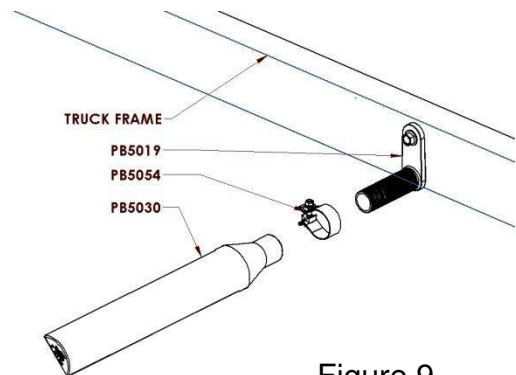


Figure 9

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.

STEP 5

- A. Attach drilling template.
- Unpack the provided paper drilling templates that match the PB5030 bracket as shown in Figure 10.



Figure 10

- b. Insert the drilling template between the fender and PB5030 bracket as shown in Figure 11 and align it with the edges of the bracket.
- c. Verify that the fenders are resting square and aligned over the tire. Twists or bows in the fender will fatigue the material over time.



Figure 11

- d. Apply tape to the tabs of the template and secure the tape to the ribs of the fender as shown in Figure 12.
- e. Remove the fender from the wheels and confirm that all templates are secure.



Figure 12

B. Drill Mounting Holes

- a. Drill 3/8" holes through the fender using the paper template as a guide. There is one template provided for every PB5030 bracket.
 - i. For MIN100, MIN150, MIN2200, MIN221800, MIN2260, MIN2480 & MIN9950 fenders use the 6 bolt holes circled in Figure 13.

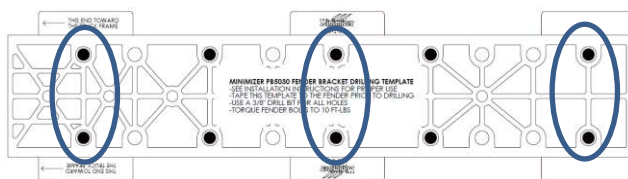


Figure 13

- ii. For MIN1600 and MIN1900 fenders use the 6 bolt holes circled in Figure 14.

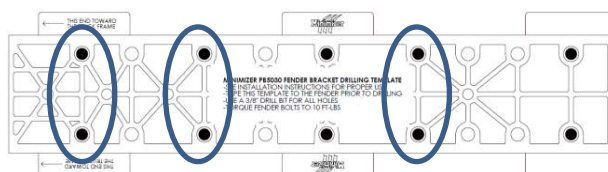


Figure 14

iii. For MIN221800 fenders use the 4 bolt holes circled in Figure 15.

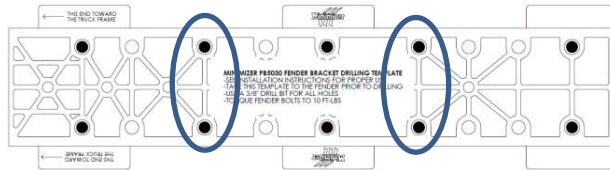


Figure 15

STEP 6

- A. Attach the bracket (PB5030) to the fender.
- With the bracket separated from the truck, install six 5/16" x 5/8" bolts and fender washers through the fender and into the bracket. **Turn each bolt approximately 2 full turns. Do not fully tighten.** See Figure 16 below.

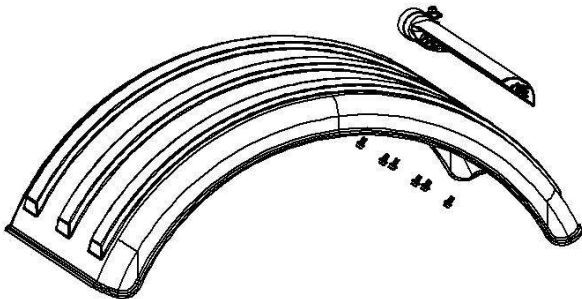


Figure 16

STEP 7

- A. Attach the fender and PB5030 to the PB5019 swivel.
- Carefully lift the fender & bracket assembly with PB5054 tube clamp over the tire and slide the PB5030 brackets onto the PB5019 swivel brackets mounted on the frame.
 - Position the PB5054 tube clamp 1/4" inside the edge of the paddle bracket as shown in Figure 17.
 - Torque the tube clamp to 50 ft-lbs.** using a 15mm wrench or deep well socket.
 - Figure 18 shows a close up photo of properly torqued PB5054 tube clamp.



Figure 17

STEP 8

- A. Tighten all 5/16" fender bolts to 10 ft-lbs. Impact wrenches are not recommended.



Figure 18

STEP 9

- 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.