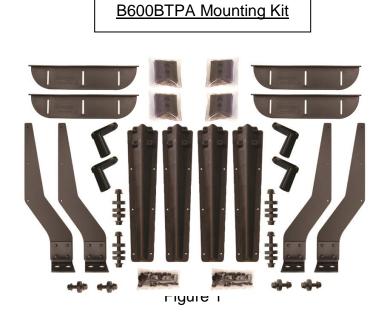


Fender Mounting Instructions for MINTA1554, MINTA910, MINTF1554 & MINTF900 Fenders

<u>STEP 1</u>

- A. Unpack all cartons and lay out parts.
- B. Compare the parts with hardware kit B600BTPA 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
PB501026	26.5 COMPOSITE TAPERED BKT	4
PBLOCK	COMP BRACKET BACKING BLOCK	4
I31C300BSF/RBZ	5/16- X 18 X 3 HEX WASH HEAD B	16
I31C100BSF/RBZ	5/16-18 X 1 HEX WASHER HEAD BL	24
131N150WFEZ	5/16 X 1 1/2 FENDER WASHER	24
I31CNCF/RBZ	5/16-18 CLASS F FLANGE LOCK	40
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 F 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 G 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



<u>STEP 2</u>

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

Revised 04/01/2016

Page 1

B. Bolt the fenders together. A pack of 5/16 x 1" bolts, 5/16" nuts and 5/16" x 1- ½" fender washers is included in the kit. Use four bolts per joint. Recommended torque is 10-15 ft-lbs.

<u>STEP 3</u>

- A. In some cases TF44 or TA53 will need to be cut down to accommodate a shorter wheel base.
- B. 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.
- C. Drill five 1/4" holes through the fender using the holes in PMTF44EC as a guide.
- D. Use five ¼" x ¾" 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.

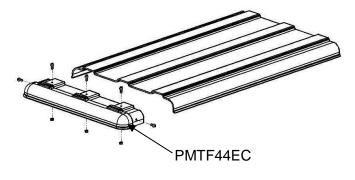


Figure 4

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 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 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 ³/₄" minimum gap required in Step 4B.

a. For an air suspension system, place a 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 ³/₄". to the measurement from Step 4A.

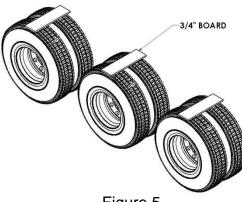


Figure 5

STEP 5

- A. Position the fenders exactly where they will be mounted.
 - a. Visually pick and mark the locations that the brackets will bolt to the frame.
- 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. Figure 6 shows a truck with flaps and fenders.

> **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.

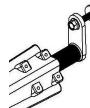
- C. Spacers are supplied to bring the steel swivel away from the frame in the event of any obstructions (Figure 7).
 - c. The ideal setup is to mount the steel swivel directly to the frame.

NOTE: Use spacers only when necessary. Revised 04/01/2016



Figure 6



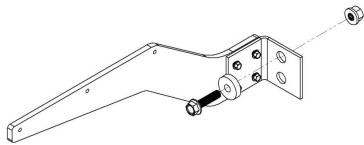


1/2" SPACER

Figure 7

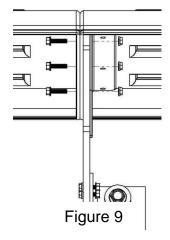
Page 3

- E. Install center bracket assembliy (Figure 8).
 - 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.

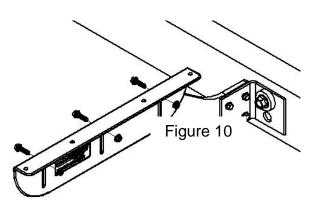


See IMPORTANT assembly Instructions for center bracket PB5069 & PB5067, last page of this form.

- F. Install the center brackets as close to where the fenders join together as possible (Figure 9).
 - a. Drill three 5/16" holes through the fenders using the holes in bracket PB5069 as a pattern.
 - b. Use three 5/16" x 1 ¼" bolts to bolt the center bracket and fenders together.
 - c. Use 5/16" fender washers and 5/16" nuts provided with the kit on the inside of the fenders.
 - d. Recommended torque for all 5/16" hardware is 10-15 ftlbs.



- G. 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 fenders to the center bracket assembly (Figure 10).
 - 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 assembly is level. Recommended torque is 10-15 ft-lbs for all 5/16" hardware.



Tip: PB5071 has slotted mounting holes to allow proper height adjustment and clearance for the fenders.

- H. Drill four 5/16" holes through the fender using the holes in bracket PB5071 as a guide (Figure 11).
 - a. Install the 5/16" x 1 ¼" 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 ftlbs.

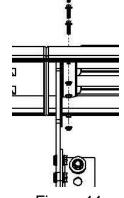


Figure 11

 A. If possible, position the mounting brackets so they are located within 15" of the bottom of the fender. This protects against wind blowing the leading edge of the fender back into the tire (Figure 12).

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

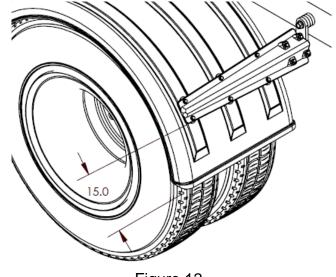
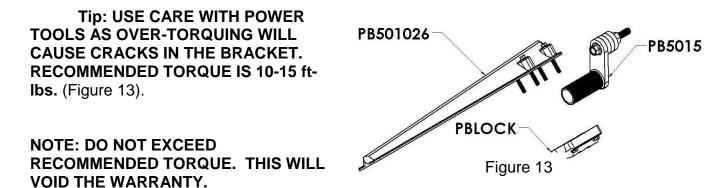


Figure 12

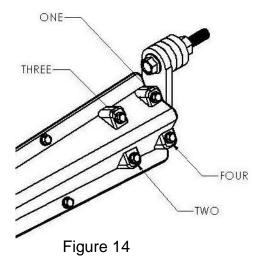
<u>STEP 6</u>

A. Use four 5/16" x 3" bolts to attach the bracket (part number PB501026) and the backing block (part number PBLOCK) to the steel swivel (part number PB5015).



TIP: Do not completely tighten one side of the backing block before moving to the other

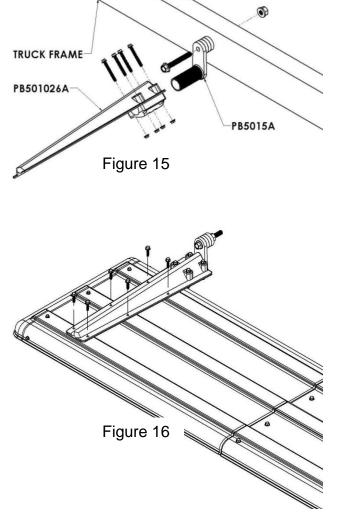
side. Alternate tightening bolts as pictured in Figure 14. Make sure to only tighten halfway and then repeat the pattern in Figure 7 until backing block is flush against the bracket (PB501026).



<u>STEP 7</u>

A. Once the brackets are placed in position with the fender, 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 15).
 Recommended torque is 160-170 ft-lbs.

B. If using the optional PMTF44EC, make sure to mount PB501026 far enough from the end so it doesn't interfere with the bolts used for PMTF44EC (Figure 16).



<u>STEP 8</u>

- A. Attach the bracket (PB501026A) to the fender.
 - a. Drill six 5/16" holes through the fender using the holes in bracket PB501026A as a pattern.
 - b. Install the 5/16" x 1" bolts through the bracket and into the fender.

- c. Use six 5/16" fender washers and 5/16" nuts provided with the kit on the underside of the fender.
- d. Tighten the bolts to recommended torque of 10-15 FT-LBS. Hand tightening with Torque wrench is recommended. DO NOT EXCEED RECOMMENDED TORQUE.
- Make sure the fenders are square and aligned (Figure 17). Twists or bows in the fender will fatigue the material over time.

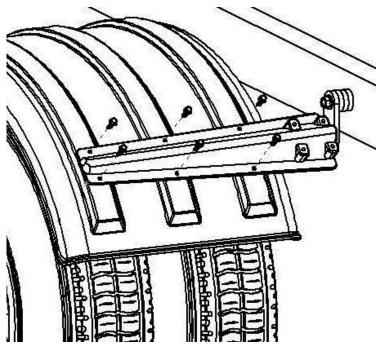


Figure 17

<u>STEP 9</u>

- 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 5/8" X 4-1/2" HEX BOLTS IN THE FRAME TO MAKE SURE THEY DO NOT LOOSEN OVER TIME.

Ē		Þ		1		œ	,			o	D		т	
თ								(u)	1 1			7	1
								(N))_					2
4								4) 				7	4
0	. H			8AG 3/29/2016	4	ω	2	la la	ITEM	3 ⁴ 3 ⁴				
ω		Coang	REFER TO PRINT	R EFER TO PR INT	131CNCF/RBZ	131 C125BSF/RBZ	PB5069	PB5067	PART NUMBER		RECOMMENDED TORQUE FOR ALL 5/16 HARDW / CAUTION: OVERTIGHTENING THE HARD WARE PLASTIC ARM AND COLLID CALISE IT TO FAIL	Assemble a left hand and right hand arm assembly as shown. The bolt head (MUST) be on the metal plate sic The serration on the bottom of the bolt head will dama the plastic arm. Use the nut on the plastic arm side. Tighten from the bolt head side so the nut does not spi on the plastic arm. If the locknut is ever loosened after has been tightened it is highly recommended to repla the locknut.		- u
2			INFE PIACE DECMAI ±020 ONE PIACE DECMAI ±025 ZERO PIACE DECMAI ±22	UNIES CIMERAGE SPECHED DIMENSECHER INCHE CIERCAUSS OF NINCHE CIERCAUSS OF NINCHE CIERCAUSS CIERC			BRK	BRKT,5	170			Assemble a left hand and right hand arm assembly as shown. The bolt head (MUST) be on the metal plate side. The serration on the bottom of the bolt head will damage the plastic arm. Use the nut on the plastic arm side. Fighten from the bolt head side so the nut does not spin on the plastic arm. If the locknut is ever loosened after it has been tightened it is highly recommended to replace the locknut.		~
	SCALE: 1:4	жн: А мп.ю.	-		,RBZ,FLNG-L	CS, RBZ, SERR	BRKT, 5069, PE, CNTR, .5	BRKT, 5067STL, CNTR, ANGL	DESCRIPTION		HARDW ARE I DWARE WIL	ht hand arm assembly as be on the metal plate side. of the bolt head will damage in the plastic arm side. de so the nut does not spin nut is ever loosened after it nut is ever loosened after it	Z	REVISIONS
	85068A-8507	85068A-85070A	PLSTC, CNTR, BRKT, ASSY, INSRT	SPRAY CONTROL SYSTEMS INC BLOOMING PRAIRIE, MIN 55917	HDWR, NUT, RBZ, FLNG-LOCK, 5/16-18	HDWR, HHCS, RBZ, SERR, 5/16-18X1.2	NTR, 5	'R, ANGL	ž		ALL 5/16 HARDW ARE IS 10-15 FT-LBS The hard ware will damage the Dause IT to fail	ambly as plate side. will damage side. as notspin as notspin hed after it hed after it	DATE	
-	HET 10F1	OA www.	Y,INSRT	TEMS INC. N 55917		00	2	2	QIY.		S The		APPROVED	1
20	38	⊳	8		30 - 3	œ	,	32 St		0	D	14 11	m	(=_}\}}