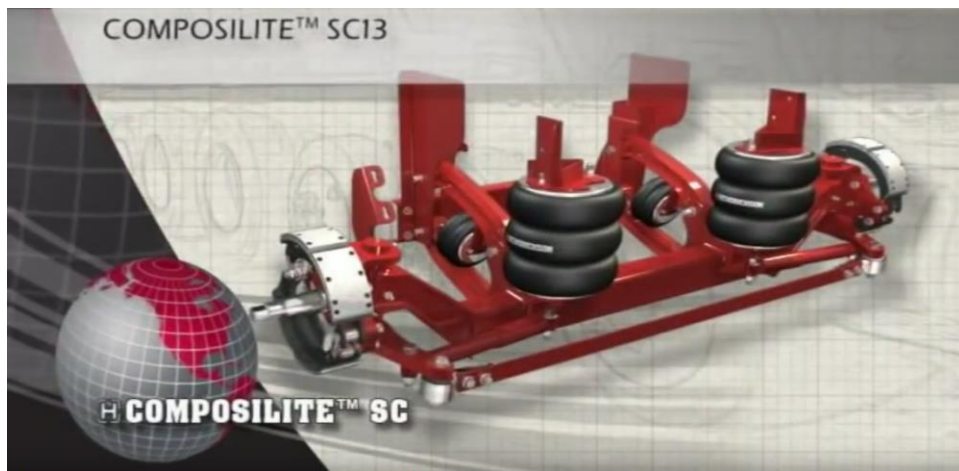
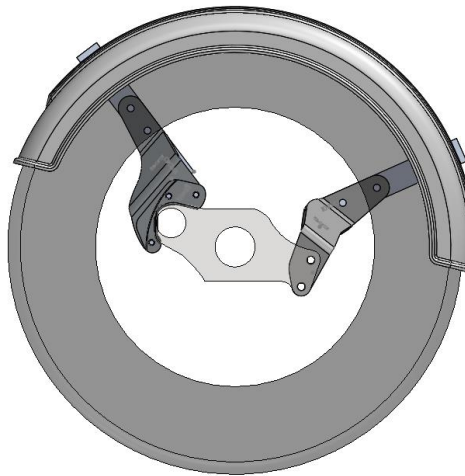


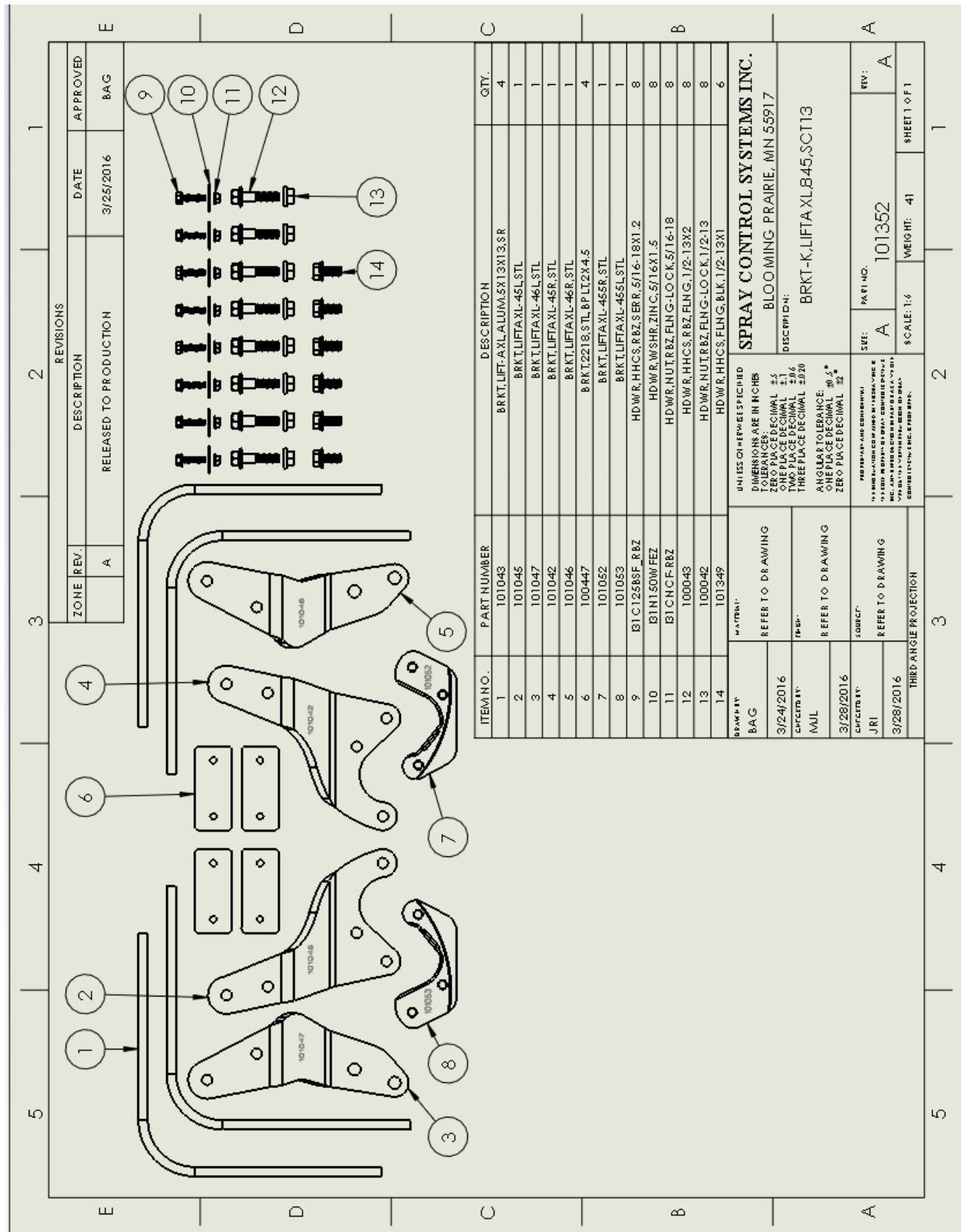


101352

**STEERABLE LIFT AXLE FENDER BRACKET KIT
INSTALLATION INSTRUCTIONS
FOR HENDRICKSON SCT13 or STT13 AXLE WITH MERITOR FWD CAM**



DESIGNED FOR USE WITH MINIMIZER MODEL 1612 & 2218 FENDERS



Fender Installation Steps

1. Remove the wheel from the axle on the right side of the vehicle
2. Remove the brake drum from the hub.
3. Remove the two-piece metal shield (if equipped) that is attached to the inside of the spindle backbone assembly as shown in Figure 1.
4. At the right front corner of the axle, fit bracket 101052 around the brake cam tube on the spindle backbone assembly as shown in Figure 2. The 101052 has a machined step that fits over the profile of the backbone. Clamp the 101052 in place and confirm that the machined groove of 101052 fits flush against the backbone. For proper fit it may be necessary to grind down the edge of the weld bead (around the brake cam tube and the backbone) slightly on the inboard side of the backbone. See Figure 3 below for an example. Paint will also need to be removed in the area where weld beads are placed.



Figure 1 - View of top shield



Figure 2 – Positioning bracket 101052



Figure 3 - Weld bead around brake cam tube

5. With 101052 clamped in position tack weld the bracket to the backbone in two places
6. Install the brake drum on the wheel hub and confirm that there is no interference between the drum, brake shoe, and the 101052 bracket. Once the clearance is confirmed, remove the drum.

7. Remove the brake shoe mechanism. Begin by removing the outer and inner retainer springs from the brake shoes. See Figures 4 and 5 for details.

8. Support the lower brake shoe assembly and remove the return spring. Set parts aside and remove the upper brake shoe. See Figure 6.

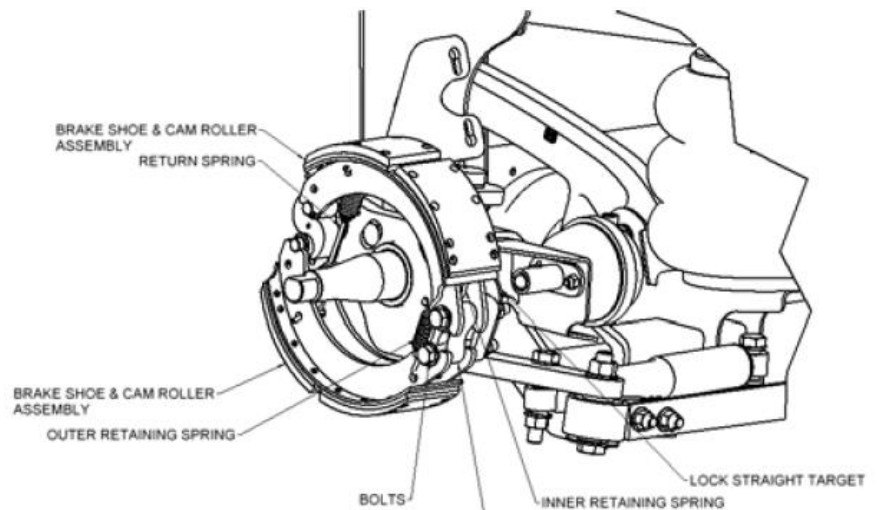


Figure 4 - Brake mechanism diagram



Figure 5 - Remove retainer springs



Figure 6 - Remove return spring and upper shoe

9. Remove the brake anchor pin bolts as shown in Figure 7.



Figure 7 - Remove anchor bolts

10. Three $\frac{1}{4}$ " x $\frac{3}{4}$ " weld beads are required (see Figure 7) to attach bracket 101052 to the backbone on the outboard side. Weld with an E7018 electrode or E70XX flux core wire. The camshaft washer may be rotated for ease of welding. Rotate it back to original position when finished.

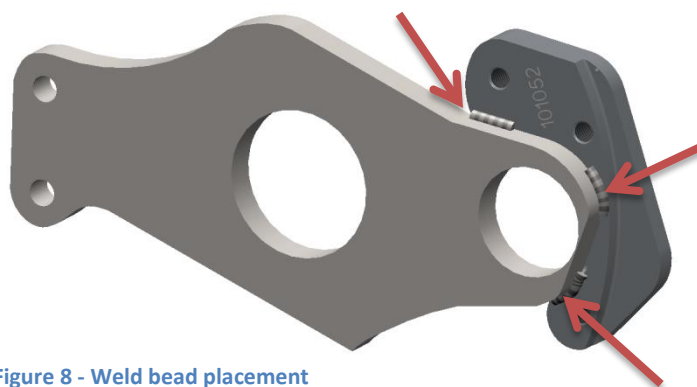


Figure 8 - Weld bead placement

11. Attach bracket 101042 onto part 101052 at the right front of the axle as shown in figure 9. Use three of the $\frac{1}{2}$ -13 X 1" flange bolts provided to attach the 101042 to the threaded holes. Recommended torque for the $\frac{1}{2}$ -13 bolts is 80 ft-lbs.



Figure 9 - Part 101042 attached to axle

12. Replace the existing anchor pin bolts with longer ones. In most cases use $\frac{5}{8}$ -11 X $5\frac{1}{2}$ " SAE Grade 8 bolts (not included). See Figure 10.

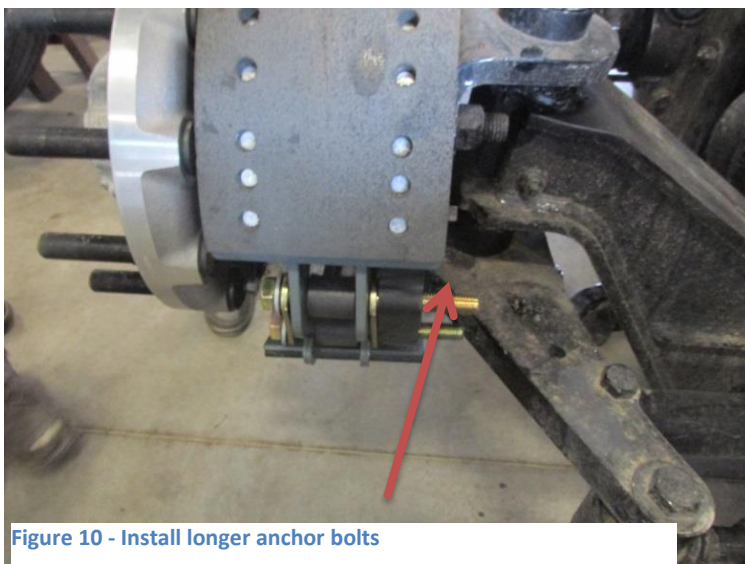


Figure 10 - Install longer anchor bolts

13. Install bracket 101046 over the anchor pin bolts that were installed in step 12. Replace the locknuts with new ones and torque the 5/8" anchor pin bolts to 220 FT-LBS.

14. Finish assembling the brake shoes and springs. Follow steps seven, eight, and nine, in reverse order.

15. Install the brake drum and wheel. Torque all wheel lugs to the truck manufacturer's specification.

16. Place the Minimizer fender over the tire and use wood shims to space the tire away from the fender. The minimum clearance between the tire and fender is $\frac{3}{4}$ ". 1.5" of clearance is recommended for most applications.

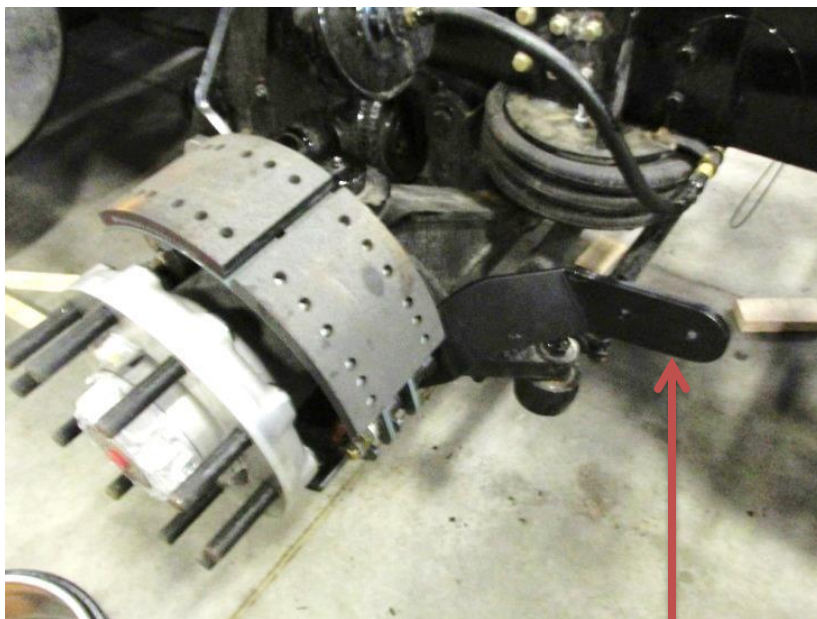


Figure 11 -View of rear bracket 101046

17. Clamp the 101043 aluminum arms to the inside face of the steel brackets with a vise grip. Make sure the inside end of the arm points directly toward the center of spindle. Adjust the arms so they align with the ribs of the 1612 fender as shown in figure 12. In order to align properly with the arms the fender must be oriented with the leading edge above the trailing edge. If installing Minimizer model 2218



Figure 12 - Model 1612 fender in position

fenders refer to steps 24 and 25 for further instructions about mounting the fender and backing plate.

18. With the front and rear arms clamped in place, measure and trim any excess material that extends past the bend in the mounting plate see Figure 13.

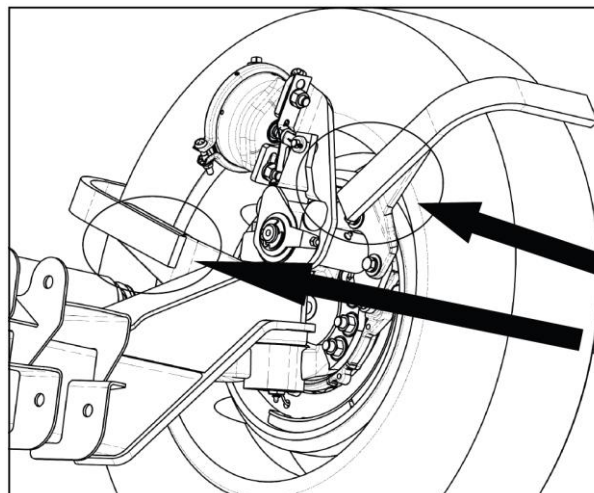


Figure 13 - Mark and trim arms

19. *Optional: Remove wheel for ease of marking the hole locations.*
20. Use the steel brackets attached to the axle as a template to mark the mounting hole locations in the aluminum arms see Figure 14.
21. Remove the aluminum arms and cut them at the marked line. Drill $9/16$ " diameter holes for mounting bolts.

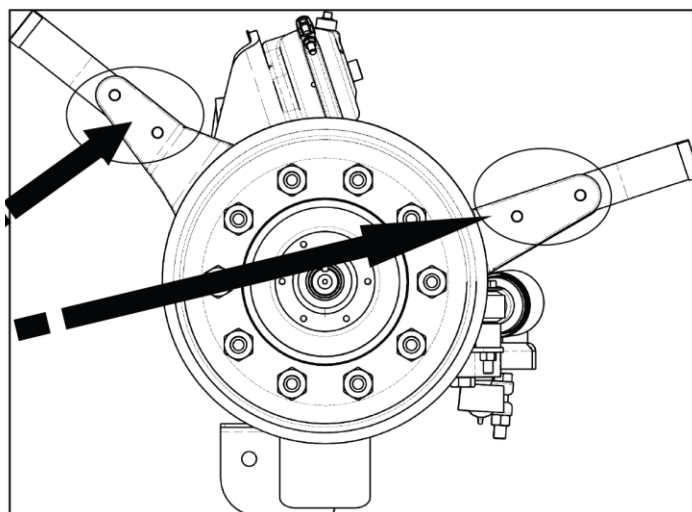


Figure 14- Locate mounting holes

22. Bolt the aluminum arms to the steel fender brackets using the $1/2$ " x 2" flange head bolts and the $1/2$ " top lock flange nuts as shown in Figure 15. Recommended torque is 80 ft-lbs.

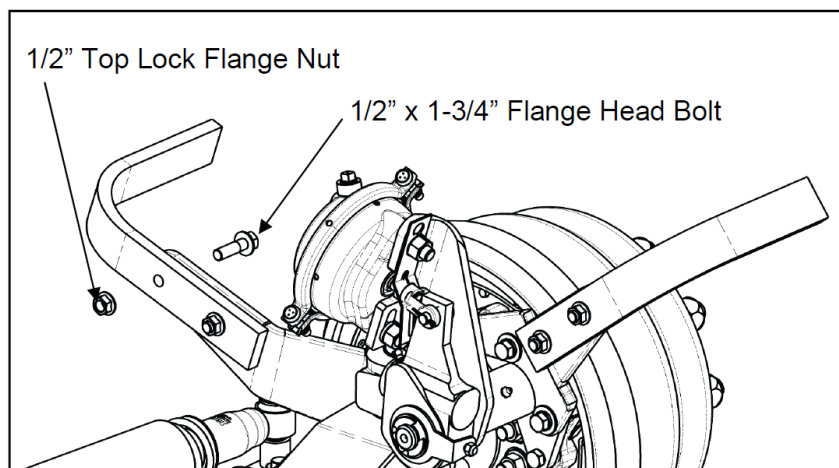


Figure 15 - Fasten aluminum arms

23. Install the 1612 fender on the aluminum arms. Make sure the fender is parallel to the tire. Drill two 11/32" diameter holes thru the fender to the arm. Use 5/16" bolts w/self-locking nuts (provided in kit) recommended torque is 5-7ft-lbs.

24. If installing the Minimizer model 2218 fenders the poly fenders are designed to be placed on top of the aluminum arms as shown in Figure 16. The aluminum arms attach to the fender in between the raised ribs.



Figure 16 – Minimizer 2218 fender in position

25. There are four steel backing plates (part number 100447) included in the bracket kit. The steel plates are to be installed on the exterior surface of the 2218 fender as shown in Figure 17. If installing fender model 1612 or any model other than 2218, the steel plates are not necessary and may be discarded.

- a. Align the steel plate so it is even (top to bottom) with the aluminum arm. Use one plate for each aluminum arm.
- b. Drill two 11/32" holes through the fender using the steel plate as a template.
- c. Drill two 11/32" holes in the aluminum arm using the fender and steel plate as a template.
- d. Use the 5/16-18"x 1-1/4" hardware to fasten the fender in between the aluminum arm and the steel plate.
- e. **Tighten the 5/16-18X1-1/4 bolts to a recommended torque of 5-7 ft-lbs. Do not exceed the recommended torque.**

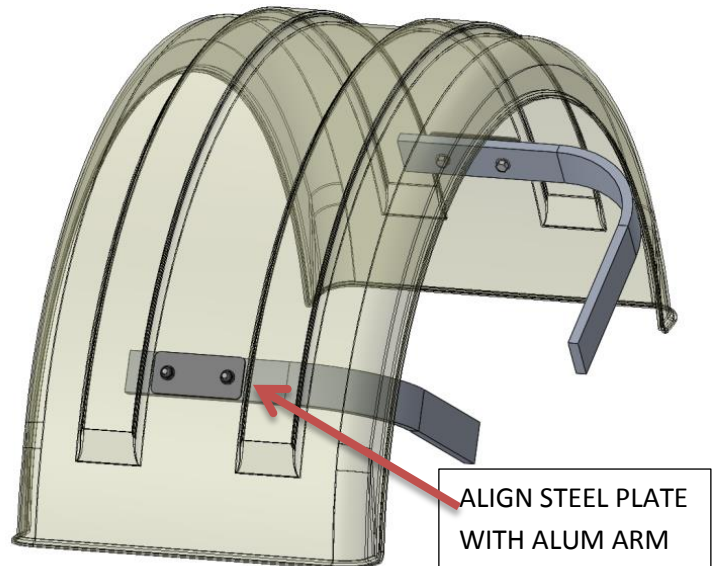


Figure 17 - Steel backing plate assembly

26. Failure to install the exterior steel plates at the time of installation will void the manufacturer's warranty on the 2218 fender component.

27. Repeat steps 1 thru 25 to install the brackets and fenders on the left side of the truck axle.