Installation Instructions for RK-S06197 to be Used with XA-3501 Series Fifth Wheel

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TOOLS AND SUPPLIES REQUIRED TO COMPLETE THESE PROCEDURES:

1. Holland TF-TLN-5001 Lock Adj. Tool
2. Wrenches — End and Allen Wrenches
3. Oxy-Acetylene Torch
4. Putty Knife
5. Diesel Fuel (Solvent)
6. Grinder
7. Weld Tacking Fixture
8. Welder
9. 6˝ - 8˝ “C” Clamp or Welding Type Vise Grip Pliers
10. Straight Edge (At Least 12˝ Long)
11. Paint
12. Fifth Wheel Grease
13. Pliers

A. YOKE SHANK GUARD INSTALLATION INSTRUCTIONS:

1. Remove both battery cables to protect the tractor electrical system during the welding operation.

2. Clean and remove any large quantities of grease from the top plate surface to reduce the possibility of fire. Then (using a solvent such as diesel fuel) clean and remove all grease from the front flange and top plate bearing surface of the fifth wheel for a distance of at least 12 inches on each side of the yoke shaft and extending back approximately 6 inches on the top plate surface. Thoroughly dry surface. (See Figure 1)

3. Grind a 1/4˝ x 45 degree chamfer on the front top edge of the fifth wheel for a distance of 10 inches on each side of the yoke shaft centerline. (See Figure 1)

4. For best results, grind or power wire brush the paint from the fifth wheel front flange for a distance of at least 6 inches on each side of the yoke shaft centerline.
5. Insert a guard into the prototype fixture; hand tighten the “T” handle clamp. \textit{(See figure 2)}

6. Slide the square tube portion of the fixture over the yoke shaft nut and washers. \textit{(See figure 3)}

7. Use a 6”- 8” “C” clamp or welding type vise grip to hold the fixture in position against the fifth wheel, with the fixture resting on the machined top surface of the fifth wheel. \textit{(See Figure 3)}

8. Tack weld the guard to the front flange of the fifth wheel where the vertical ribs on the guard meet the fifth wheel. Next, tack weld the guard to the fifth wheel on the top surface of the guard.

9. Remove the fixture by loosening the “T” handle and clamp.

10. Pull the release handle and move the rubber washer on the yoke shaft outward and away from the fifth wheel. This is to protect the washer from the heat during the weld process.

11. Weld the vertical gussets to the fifth wheel flange, first with \(3/8\)” fillet welds at the outward facing joints. After this is complete, make a \(1/4\)” groove weld between the fifth wheel and guard on the top surface of the wheel. \textit{(See Figure 4)}

12. Using a straight edge approximately 12 inches long, check to make sure the guard is about \(1/16\) inch lower than the top surface of the fifth wheel and that the weld between the guard and the fifth wheel does not extend above the top surface of the fifth wheel. \textit{(See Figure 5)}

\textbf{CAUTION:}

When welding, use a procedure and filler weld which assures a sound, good quality weld which protects the welding operator and others. Over-welding may cause distortion or damage and under-welding may not develop sufficient strength. An AWS E70XX filler metal used in conjunction with either GMAW (gas shielded solid wire), FCAW (gas shielded flux core wire), or SMAW (AC or DC stick) is recommended. Take precaution to insure that the tractor electrical system is not damaged.
B. TILT STOP INSTALLATION INSTRUCTIONS:

1. Cut the old handle in two. (See Figure 7)
   Use any oxyacetylene torch for this procedure. However, be careful not to damage the release handle spring.

2. Remove the old release handle from the top plate.
3. Remove and save the washers and spring, noting the orientation when removing. Discard the old release handle.
4. Slide the release handle through the slot in the handle bracket. (See Figure 8)
   CAUTION:
   Note the bracket orientation. This is important. Attach it to the top plate as shown in Figure 8.

5. Slide the washers and release handle spring over the new release handle in the same orientation as noted in Step 3.
6. Install and spread a ⅛” x 1¼” cotter pin behind the washer as shown in Figure 8.
7. Slide the release handle assembly under the top plate. Slide the 90° bend of the release handle up through the bottom of the cam plate as shown in Figure 8.
8. Slide a ⅛” washer over the end of the release handle and rest it on top of the cam plate as shown in Figure 8.

C. DROP HANDLE INSTALLATION INSTRUCTIONS:

1. Clean and remove any large quantities of grease from the slide bracket to reduce the possibility of fire.
2. Using a solvent (such as diesel fuel), clean and remove all grease from the slide bracket in the area where the tilt stop is to be located. (See Figure 6)
3. Locate the tilt stops as shown in Figure 6.
4. Weld the tilt stops as shown in Figure 6.

FIGURE 6

1/4”
1.5”
PLACE TILT STOP FLUSH WITH EDGE OF TIE PLATE (as shown)
FILLET WELD 1.5” LONG IN 4 PLACES

FIGURE 7

BE CAREFUL NOT TO DAMAGE THE SPRING AND WASHERS WHILE CUTTING THE RELEASE HANDLE
CUT THE RELEASE HANDLE IN THIS AREA

FIGURE 8

CAM PLATE
COTTER PIN
MANUAL SECONDARY LOCK SLOT PREVIOUSLY UNUSED
RELEASE HANDLE
HANDLE BRACKET
FORMER RELEASE HANDLE LOCATION
9. Secure the end of the release handle with a 3/16˝ x 1 1/4˝ cotter pin. Spread the cotter pin.

10. Slide the handle bracket behind the casting adjacent to the manual secondary lock slot as shown in Figure 8.

11. Slide the 3/8˝ flat socket head cap screw from the outside of the casting through the manual secondary slot and through the handle bracket as shown in Figure 8.

12. Slide a 3/8˝ flat washer over the cap screw.

13. Secure this assembly with the 3/8˝ lock nut. Tighten securely.

D. OPERATIONAL CHECK AND MAINTENANCE PROCEDURES:

1. Check operation of the fifth wheel with a TF-TLN-5001 lock adjustment tool and adjust the locks if necessary. Check the clearance between the guard ribs and yoke shaft to assure free movement of the shaft under the guard. Check the operation of the release handle. The fifth wheel should operate as outlined in XL-FW302 (attached).

2. Paint the guard and front edge of the fifth wheel to prevent corrosion.

3. Re-grease the top surface of the fifth wheel as needed.

4. Re-attach the battery cables.