1. All fifth wheel maintenance must be performed by a qualified service technician using proper tools and safe procedures.

2. Use only genuine Holland parts.

3. Wear safety goggles during disassembly and assembly of the fifth wheel.

4. Keep fingers away from all potential pinch points in the fifth wheel.

5. Do not weld on this product other than as directed in this manual. Do not deviate from the instructions contained in this manual. Any changes or deviations from these procedures will void all warranties, express or implied, unless prior written consent is obtained from Holland.

6. Always verify proper operation and adjust the fifth wheel following the procedures contained in this manual before placing it back in service.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>QTY.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XA-08988</td>
<td>1</td>
<td>Cam Plate</td>
</tr>
<tr>
<td>2</td>
<td>XB-07431</td>
<td>1</td>
<td>Washer (2 1/8” dia. x 3/16” thick)</td>
</tr>
<tr>
<td>3</td>
<td>XB-10035</td>
<td>1</td>
<td>Bolt (5/8”-18 x 2” HHCS)</td>
</tr>
<tr>
<td>4</td>
<td>XB-PW-1732-1-116</td>
<td>3</td>
<td>Washer (1 1/16” O.D.)</td>
</tr>
<tr>
<td>5</td>
<td>XB-07291</td>
<td>1</td>
<td>Spring, Compression</td>
</tr>
<tr>
<td>6</td>
<td>XA-09041</td>
<td>1</td>
<td>Release Handle</td>
</tr>
<tr>
<td>7</td>
<td>XB-08559</td>
<td>2</td>
<td>Washer (1 1/8” dia. x 1/8” thick)</td>
</tr>
<tr>
<td>8</td>
<td>XB-08987</td>
<td>2</td>
<td>Lock Nut (3/8”-16)</td>
</tr>
<tr>
<td>9</td>
<td>XB-08974</td>
<td>2</td>
<td>Shoulder Bolt (3/8”-16)</td>
</tr>
<tr>
<td>10</td>
<td>XA-09040</td>
<td>1</td>
<td>Cam Spacer</td>
</tr>
<tr>
<td>11</td>
<td>XA-09039</td>
<td>1</td>
<td>Handle Guide</td>
</tr>
<tr>
<td>12</td>
<td>XA-09043</td>
<td>1</td>
<td>Yoke Stop Block</td>
</tr>
<tr>
<td>13</td>
<td>XA-1706-1</td>
<td>1</td>
<td>Yoke Shaft</td>
</tr>
<tr>
<td>14</td>
<td>XA-1507-1</td>
<td>1</td>
<td>Roller, Cam (white)</td>
</tr>
<tr>
<td>15</td>
<td>XB-21-5-375-1750</td>
<td>2</td>
<td>Roll Pin (3/8”)</td>
</tr>
<tr>
<td>16</td>
<td>XB-1030</td>
<td>1</td>
<td>Washer (2 1/4” O.D.)</td>
</tr>
</tbody>
</table>

1. 1.0” DIA. x 3/8” THICK CAM ROLLER (WHITE) (between thick washer and thick spacer inside cam plate)
2. 2 1/8” DIA. x 3/16” THICK WASHER (between bolt head and cam plate)
3. 5/8”-18 x 2” BOLT
4. 11/16” O.D. PLAIN WASHER
5. SPRING
6. RELEASE HANDLE
7. 1 1/4” DIA. x 1/8” THICK WASHER (between cam plate and yoke)
8. 3/8”-16 LOCKNUT
9. 3/8”-16 SHOULDER BOLT
10. 2 5/8” DIA. x 3/16” THICK WASHER (between bolt head and cam plate)
11. HANDLE GUIDE
12. NEW 3/16” THICK YOKE STOP TO BE CENTERED SIDE TO SIDE AND FLUSH WITH THE TOP OF THE OLD STOP
13. YOKE SHAFT
14. 1.0” DIA. x 3/8” THICK CAM ROLLER (WHITE) (between thick washer and thick spacer inside cam plate)
15. 3/8”-16 LOCKNUT
16. 3/8”-16 SHOULDER BOLT
17. 2 1/4” DIA. O.D. WASHER (above the cam plate)
18. 1 1/4” DIA. x 1/8” THICK WASHER (between cam plate and yoke)
19. MEASURED FROM HORIZONTAL CENTERLINE OF LOCK PINS TO TOP OF YOKE STOP BLOCK
20. 3 1/4” ROLL PIN
21. SECTION A-A
22. CAM PLATE
23. BRACKET PIN
24. TACK WELD 4 PLACES
25. 11/8” TACK WELD 2 PLACES
26. 3 1/4” ROLL PIN
27. CAM PLATE
1. Disconnect the air line, remove the fifth wheel top plate from the mounting brackets, and place the fifth wheel upside down on a level working surface.

2. Close the locks by prying each of the locks as shown below until the yoke snaps closed.

3. Disconnect the air cylinder from the cam plate and the mounting tab on the casting. Discard the clevis pins, washers, and cotter pins.

4. Remove the yoke bolt (see figure below). Discard the bolt, washers, and roller.

5. Remove the cam plate-to-casting pivot bolt (see figure). Discard the washers. Keep the bolt, roller, and nut for re-assembly.

6. Lift the cam plate and disconnect it from the release handle rod. Discard the cam plate.

7. Remove the release handle rod and discard the handle rod, spring, and both washers.
**DISASSEMBLY continued**

8. Keeping the spring in place, slide the yoke shaft out through the front of the fifth wheel. Discard the yoke shaft.

9. Remove the handle guide washer.

**REASSEMBLY**

1. Position **NEW** handle guide (**Item 11**) on inside rib of fifth wheel and weld in place as shown. **NOTE:** Handle guide (**Item 11**) has a $1\frac{1}{4}''$ diameter, a $\frac{1}{4}''$ thick wall, and is $\frac{1}{2}''$ thick.

**CAUTION**

When welding, use a procedure and filler metal which assures a sound, good quality weld which protects the welding operator and others. Overwelding may cause distortion or damage and underwelding may not develop sufficient strength. An AWS E70XX or E60XX 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.

**DO NOT USE THE WHITE CAM ROLLER (ITEM 14) AS A SUBSTITUTE FOR THE HANDLE GUIDE.**
2. Measure the distance between the yoke stop block and the centerline of the lock pins as shown below.
   If the distance is 3\(\frac{3}{4}\)”, the yoke stop location is correct. Proceed to Step 4.

3. If the distance is 3\(\frac{1}{2}\)” or less, you must tack weld a new yoke stop (Item 12) in front of the existing stop as shown below. Center the stop side-to-side and flush with the existing stop so that it adds an additional 5/16” thickness.

4. Assemble washers (Item 4) and spring (Item 5) onto the NEW release handle rod (Item 6) as shown below. Then insert the straight end of the release handle rod through the NEW handle guide (Item 11).

5. Insert the “S” bend of the new release handle rod (Item 6) into the bottom hole in the NEW cam plate (Item 1) as shown.

6. Position the NEW cam plate pivot hole over the casting lug as shown. Slide a NEW 1\(\frac{1}{4}\)” washer (Item 7) between the cam plate and the casting lug with the rounded side of the washer facing the cam plate.

**NOTE:** When installing washers (Items 2, 7, and 16), the rounded edge of the washers must always face the cam plate.
7. Re-install the roller into the cam plate and place a **NEW** 21/4˝ washer (*Item 16*) on top of the roller, with the rounded edge facing the cam plate.

8. Re-install the 1/2˝-20 x 13/4˝ bolt through the washers, roller, and top plate lug. Secure the bolt with the 1/2˝-20 nut. Tighten securely, then check for free movement of the cam plate.

9. Slide the **NEW** yoke shaft (*Item 13*) into the casting, through the spring and into the yoke. Carefully align the recessed hole in the yoke shaft with the threaded hole in the yoke.

10. Slide the 25/8˝ dia. x 3/8˝ thick spacer (*Item 10*) between the yoke and the cam plate.

11. Place the white roller (*Item 14*) into the cam plate track as shown. Then place a 25/8˝ washer (*Item 2*) over the roller, with the rounded side of the washer facing the cam plate.

12. Check the alignment of the recessed hole in the yoke shaft. Then install the **NEW** 5/8˝-18 x 2˝ bolt through the washers, roller, and cam plate and into the threaded hole in the yoke. Make sure the bolt enters the recessed hole in the yoke shaft and tighten securely. Check for adequate clearance between the bolt (*Item 3*) and washer (*Item 2*). The washer must spin freely. If it doesn’t, remove bolt (*Item 3*), drop a small, flat washer into the bolt hole, put Loctite on the threads of bolt (*Item 3*), then install and tighten securely.

13. Re-attach the rod end of the air cylinder to the remaining hole in the cam plate using a **NEW** shoulder bolt (*Item 9*), **NEW** washer (*Item 4*), and **NEW** flanged lock nut (*Item 8*). Make sure the head of the bolt is oriented as shown. Tighten the shoulder bolt to 45 ft-lbs. maximum torque.

14. Re-attach the opposite end of the air cylinder to the mounting tab on the casting using a **NEW** shoulder bolt (*Item 9*), and **NEW** flanged lock nut (*Item 8*). Tighten as described in Step 13.
15. Check the air lines for signs of chafing or other damage and make certain the air breather hole on the air cylinder end cap is open. Repair as needed.

If the fifth wheel does not operate properly, **DO NOT USE IT!** Either disassemble and repeat rebuilding procedures or contact your nearest Holland representative for assistance. Locations and phone numbers can be found on Page 8. Never use a fifth wheel that does not operate properly.


17. Using a Holland lock tester, close the fifth wheel locks. Verify that the locks are properly closed around the kingpin. Activate the fifth wheel release switch and remove the lock tester. Repeat this step three times to verify proper operation.

The fifth wheel is now ready for operation.