

# FIETH WHEELS

## OPERATING AND MAINTENANCE PROCEDURES



XA-3501-03505 Series

Yard Spotter Fifth Wheel Top Plates

### SAFETY INSTRUCTIONS

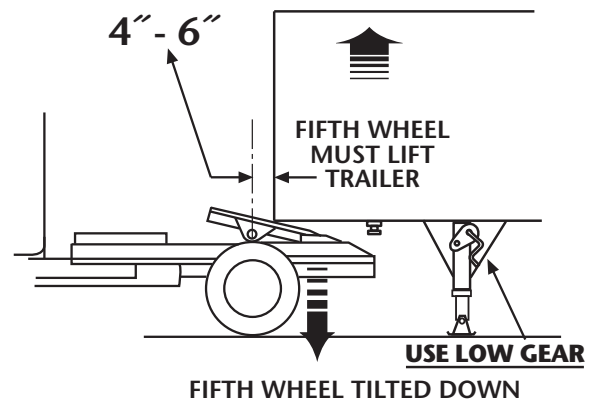
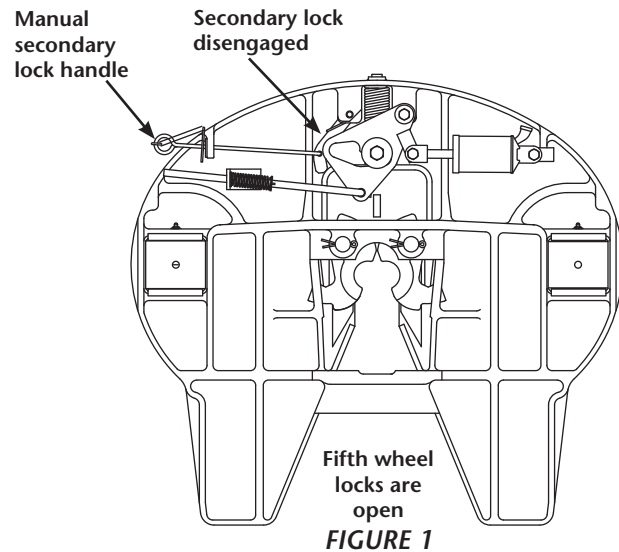
1. Failure to read, understand, and follow the important information contained herein may result in a hazardous condition, or cause a hazardous condition to develop.
2. Relative to tractor-trailer operations, there are other checks, inspections, and procedures not listed here, which are necessary, prudent, and/or required by law. The following is in addition to these and pertains to the fifth wheel only.
3. Perform these procedures in an area clear of obstacles and other personnel.

### CHECK EQUIPMENT PRIOR TO USE

1. Make sure the fifth wheel is properly lubricated.
2. Make sure the secondary lock is disengaged. (See **FIGURE 1**).
3. Make sure the fifth wheel locks are open.
4. Make sure the fifth wheel ramps are tilted down as shown in **FIGURE 2**.

### COUPLING

1. Back up close to the trailer, centering the kingpin in the throat of the fifth wheel. **STOP**. Set tractor brakes.
2. Block the trailer wheels, connect brake lines and set trailer brakes.
3. Check to see that the trailer is at the proper height for coupling. (The front of the bolster plate should contact the fifth wheel approximately 4" to 6" behind the fifth wheel's pivot point. If not, raise or lower the fifth wheel and, if necessary, the trailer landing gear, to obtain this position.)



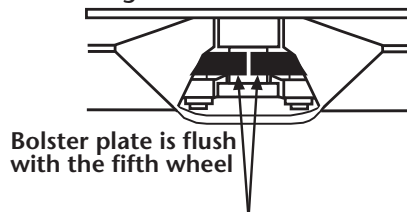
*continued*

- Back under the trailer and engage the fifth wheel locks with the trailer kingpin. Pull forward to test the completeness of the coupling as an INITIAL check. Set tractor brakes. Next, **visually** inspect the fifth wheel, as shown in **FIGURE 3**, to verify that it is properly locked.



Failure to verify a proper couple can result in tractor and trailer separation causing death or serious injury to you or others.

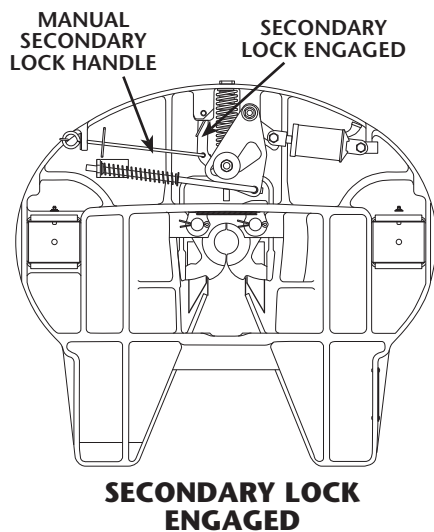
View looking into the throat of the fifth wheel



LOCKS COMPLETELY CLOSED AROUND KINGPIN

**FIGURE 3**

- If operation on public streets or highways is required, the manual secondary lock must be engaged. To engage the secondary lock, remove the hairpin clip on the secondary lock handle allowing the secondary lock to pivot and engage behind the locking yoke as shown in **FIGURE 4**.



**FIGURE 4**

- Remove blocks. Retract the landing gear, if necessary. Release trailer and tractor brakes. Raise trailer to desired height and move trailer.

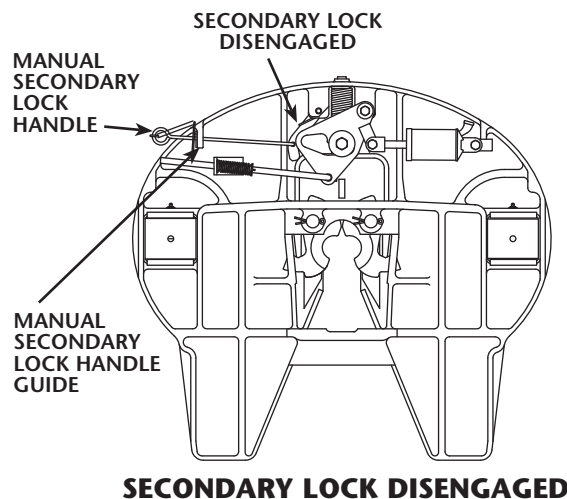


All elevating fifth wheels — when towing trailers in the elevated position — are less stable than conventional tractor-trailers and are sensitive to speed and maneuvers.

This unit is not recommended for operation on public streets and highways. When such trailer moves are necessary, the manual secondary lock on the fifth wheel must be engaged (see coupling procedure #5 at left) and the fifth wheel must be in the down position. Limit speed to 45mph maximum.

## UNCOUPLING

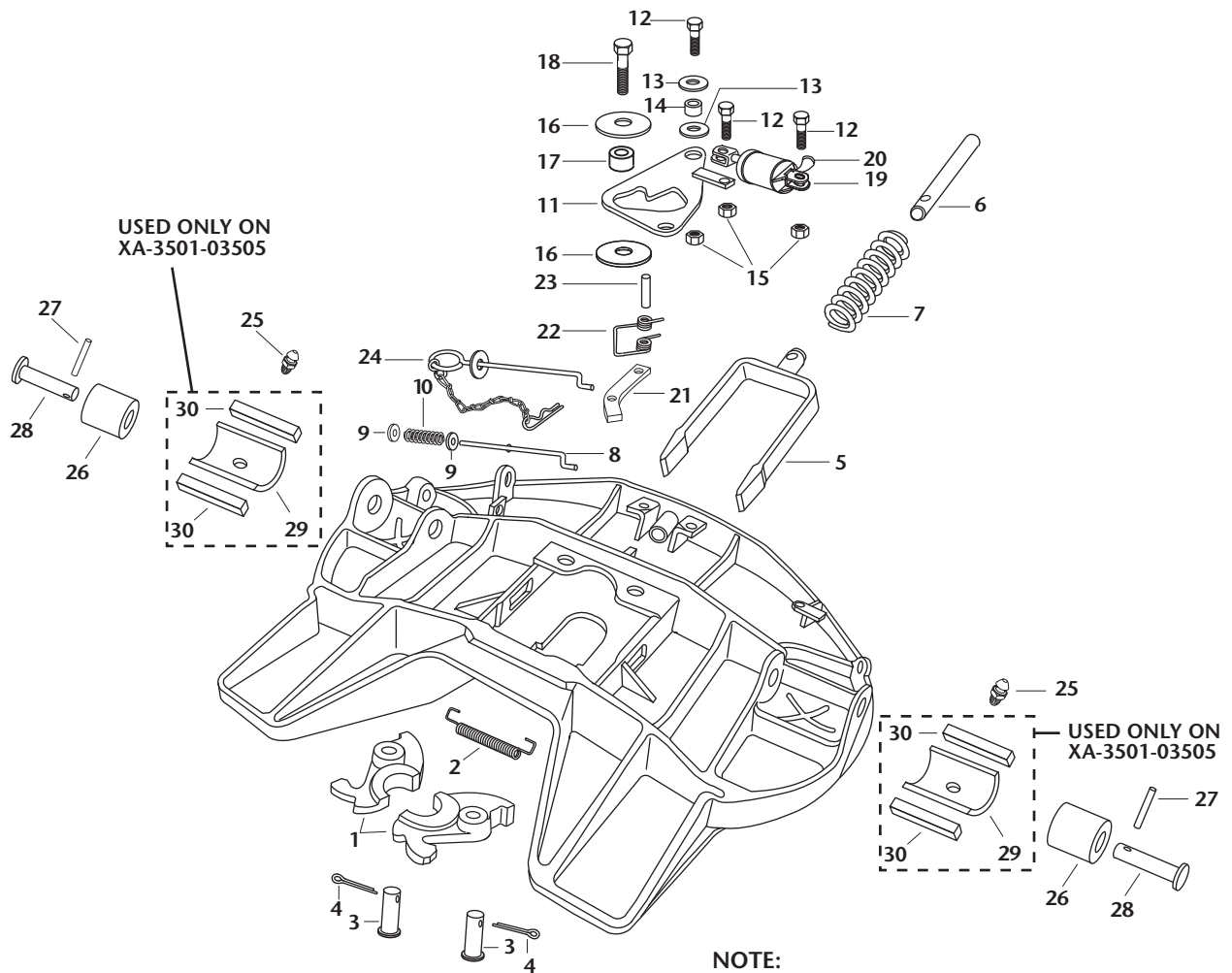
- Position yard spotter tractor and trailer on firm, level ground — clear of obstructions and people.
- Set trailer brakes, lower fifth wheel until the trailer landing gear touch the ground. Set tractor brakes.
- Block trailer wheels. Disconnect trailer air supply and electrical connection.
- If the manual secondary lock was engaged, remove the hairpin clip on the secondary lock handle, pull the secondary lock handle outward to disengage the secondary lock. While holding the handle out, re-insert the hairpin clip into the hole in the handle on the outside of the handle guide. (See **FIGURE 5**.)



**FIGURE 5**

- Actuate the fifth wheel control valve and hold it in to open the locks.
- While holding the lock control valve in, slowly pull out from the trailer.
- After driving completely free of the kingpin, release the lock control valve.

# XA-3501-03505 AND XA-3501-UB PARTS BREAKDOWN



**NOTE:**  
When replacing bracket bearings (*Item 29*), remove only one bearing stop block (*Item 30*) from each side. Replace bearings and install new stop blocks.

ITEM NO.	PART NO.	NO. REQ'D.	PART NAME	ITEM NO.	PART NO.	NO. REQ'D.	PART NAME
1*	XA-1704-X	1	Lock Set	16	XB-1030-1	2	Washer
2	XB-GT-13-1	1	Extension Spring	17	XA-1507-1	1	Cam Roller
3	XA-1313	2	Lock Pin	18	XB-CX-58-F-134	1	Hex Hd. Cap Screw $\frac{5}{16}$ "x1 $\frac{1}{4}$ "
4	XB-5	2	Cotter Pin	19	XA-2524-R-13-1	1	Air Cylinder
5	XA-07295-THK	1	Yoke	20	XB-698	1	45° Street Elbow
6	XA-1706-1	1	Yoke Shaft	21	XA-3528	1	Secondary Lock
7	XB-1505	1	Spring	22	XB-2149	1	Torsion Spring
8	XA-1707-5	1	Release Handle	23	XB-21-S-500-2750	1	Roll Pin
9	XB-PW-1732-1-116	2	Washer	24	XA-3546	1	Secondary Lock Handle
10	XB-1028-1	1	Compression Spring	25	XB-H-38	2	Grease Zerk
11	XA-1705-7	1	Cam Plate Sub Assembly	26	XB-0011	2	Rubber Bushing
12	XB-2083	3	Hex Hd. Cap Screw $\frac{1}{2}$ "x1 $\frac{3}{4}$ "	27	XB-21-S-375-1750	2	Roll Pin
13	XB-T-49	2	Washer $\frac{1}{2}$ "	28	XA-2016	2	Bracket Pin
14	XA-1029	1	Roller	29**	XA-03423	2	Bracket Bearing
15	XB-T-69-A	3	Lock Nut	30**	XA-0268	4	Bearing Stop Block

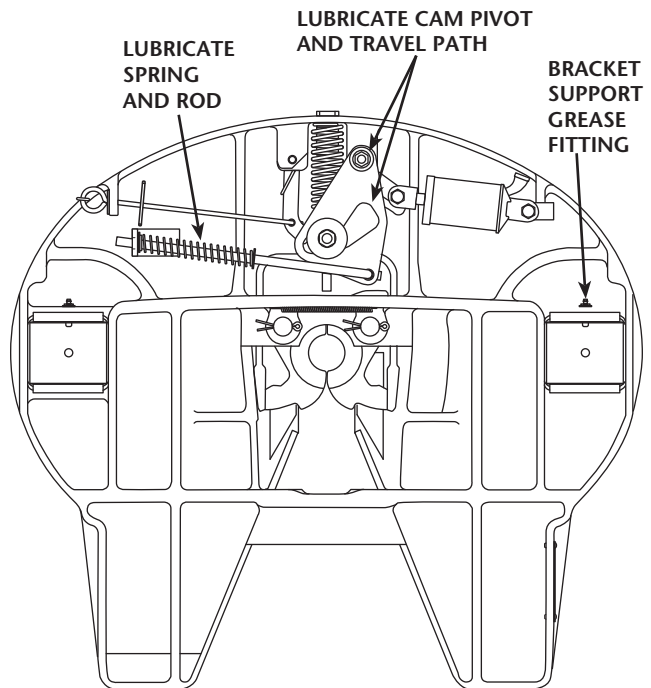
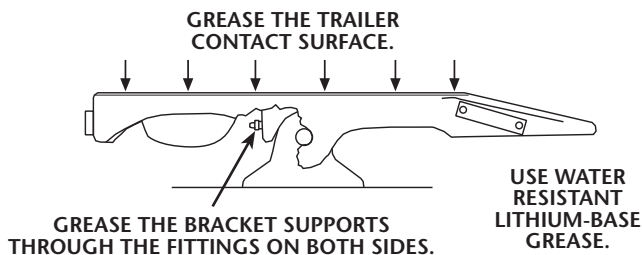
\* Sold only as RK-63504.

\*\* Used only on XA-3501-03505.

# PERIODIC MAINTENANCE OF XA-3501-03505 SERIES FIFTH WHEEL TOP PLATES

## WEEKLY

1. Apply grease to the bracket supports through the grease fittings as shown below.
2. Be sure the fifth wheel top plate is lubricated.
3. Check operation of the fifth wheel locking mechanism.



## MONTHLY

1. Steam clean the entire top plate thoroughly.
2. Inspect the fifth wheel top plate assembly.
  - Check for — and replace — any bent, worn, or broken parts.
  - Check for cracks in the top plate casting or any component part.

Replace as required using only genuine HOLLAND parts.
3. Check the fifth wheel locking mechanism for proper operation using a HOLLAND TF-TLN-1000 or TF-TLN-5001 Lock Tester. When checking, move the lock tester fore and aft when closed in the locks. If play exceeds 3/8", rebuild or replace the top plate. See your Holland Distributor for parts and ordering information.
4. Relubricate the entire fifth wheel as shown above.



**DO NOT** use any fifth wheel which does not operate properly.



**GO THE DISTANCE.**

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