

# XA-201-A-80-L AIR RELEASE OPERATING INSTRUCTIONS & MAINTENANCE PROCEDURES

Holland

**WARNING** You must read and understand the following instructions before operating your fifth wheel. Failure to follow all of the important maintenance procedures contained in these instructions may result in a hazardous condition or cause a hazardous condition to develop. All maintenance must be performed by a qualified person using proper tools and safe procedures. All maintenance must be performed while the tractor is uncoupled from the trailer.

**CAUTION** This air release option fifth wheel top plate is not intended to be mounted onto low mount stationary brackets (Part No. XA-7586 and XA-7886). Low mount brackets do not provide sufficient clearance for the air cylinder which can be damaged when the fifth wheel is articulated.

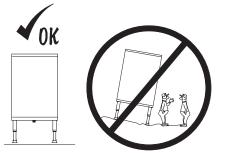
# **OPERATING INSTRUCTIONS**

## **Coupling Procedures**

- 1. Inspect the fifth wheel mounting.
  - Tighten loose fasteners
  - Replace missing fasteners
  - Repair/replace cracked components



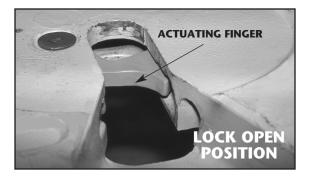
- NOTE: If you have a sliding fifth wheel, make sure both plungers are fully engaged (locked). (See *Page 4, Figure 4B*)
- 2. Make sure coupling area is flat, level and clear of persons and obstacles.

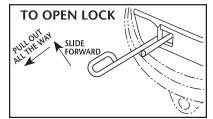


3. Lubricate the fifth wheel-to-trailer contact surface with grease. Tilt the ramps down.

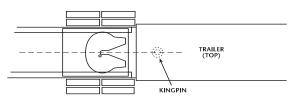


4. Make sure the locks are open. To open locks, slide the handle forward and pull it out to the maximum extension. The lock will swing to the open position. *Note: When you first receive your fifth wheel, you may have to pry open the lock.* 

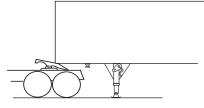




5. Center fifth wheel with kingpin.



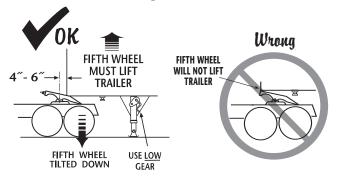
6. Back tractor close to trailer and **<u>STOP</u>**.



## **OPERATING INSTRUCTIONS**

## **Coupling Procedures (con't.)**

- 7. Chock trailer wheels. -Connect brake lines and light cord. -8. 9. Support slack in lines to prevent interference.  $(\bigcirc)$  $(\bigcirc$
- 10. Set trailer brakes.
- 11. Adjust trailer height so fifth wheel will lift trailer. Trailer should contact fifth wheel 4"-6" behind fifth wheel bracket pin.

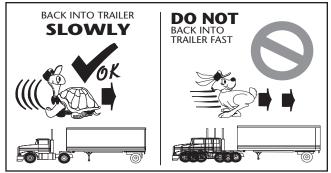


CAUTION

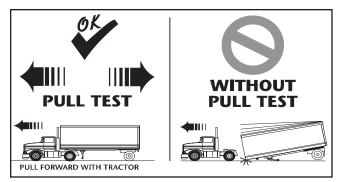
Attempting to couple with the trailer at an improper height

could result in a false or improper coupling and cause damage to the tractor, fifth wheel, or trailer.

#### 12. Slowly back into trailer.



13. Do a pull test as an **INITIAL CHECK**.



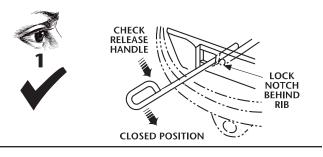


A direct visual inspection is required to assure proper coupling. Improper coupling can pass the initial pull test. Sound is unreliable. DO NOT take for granted that you are properly coupled. Get out of the cab and look. An improperly coupled truck and trailer could result in seperation and may cause death or serious injury to others.

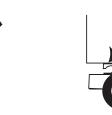
14. Visual Inspection.

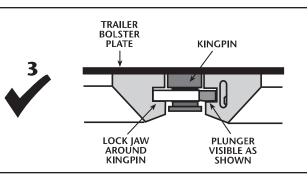
**GET OUT OF THE TRACTOR!** 

VISUALLY check that the lock is CLOSED!



NO GAP!







If you do not obtain a proper **A**WARNING couple, repeat the coupling sequence. DO NOT use any fifth wheel that fails to operate properly. An improperly coupled truck and trailer could result in seperation and may cause death or serious injury to others.

## **OPERATING INSTRUCTIONS**

#### **Coupling Procedures (con't.)**

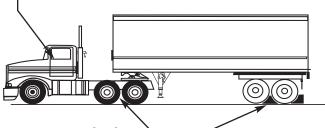
15. Retract landing gear until pads come off the ground.



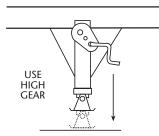
## **OPERATING INSTRUCTIONS**

#### **Uncoupling Procedures**

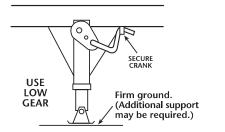
- 1. Position tractor and trailer on firm, level ground clear of obstacles and persons.
- 2. ┌ Set trailer brakes.
- 3. Slowly back tractor tightly against trailer.



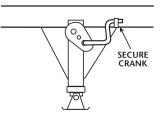
- 4. Set tractor brakes.  $\Delta$
- 5. Chock trailer wheels.
- 6. Lower landing gear until pads just touch the ground.



 Switch to low gear and crank an additional 4-8 turns. Do not raise trailer off the fifth wheel.

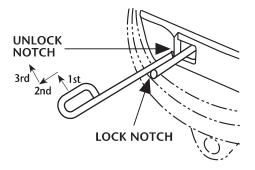


16. Switch to high gear, fully retract and secure crank handle.



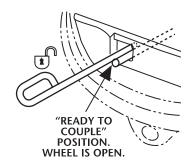
- 17. Re-check brake lines and light cord. Remove wheel chocks, continue with pre-trip inspection.
- 8. Disconnect brake lines and light cord. Attach brake line to dummy coupling to keep line clean.
- 9. Actuate the fifth wheel control valve to open the locks.
- 10. Slowly pull out from the trailer.

# IF MANUAL RELEASE IS REQUIRED, FOLLOW INSTRUCTIONS BELOW:



Release tractor brakes and slowly drive away from the trailer. Let the trailer slide down the fifth wheel and pick-up ramps, being careful that the trailer landing gear touch the ground with minimal impact.

**NOTE:** It is normal after uncoupling for the release handle to come off the unlock notch and move to a "ready to couple" position.



# **OPERATING INSTRUCTIONS**

## Fifth Wheel Slide Adjustment

- 1. Position tractor and trailer in a straight line on level ground.
- 2. Lock the trailer brakes.

The trailer must be stopped and CAUTION the trailer brakes locked to prevent damage to the tractor or trailer by uncontrolled sliding of the fifth wheel.

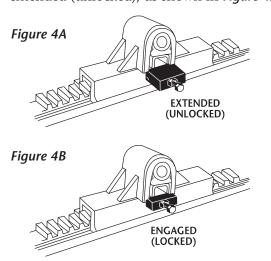
3. Release slide locking plungers.



Pull release lever, lift up and hook in place.

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4. Visually check that both plungers are fully extended (unlocked), as shown in Figure 4A.



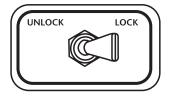
NOTE: If the plungers do not release, using low gear on the landing gear, raise the trailer to relieve pressure on the plungers. This will allow the fifth wheel to slide easier.

- 5. Slowly drive the tractor forward or backward to position the fifth wheel.
- 6. Re-engage the slide locking plungers. Verify that both plungers have fully engaged (locked), as shown in *Figure 4B*.

**NOTE:** Retract landing gear if lowered.



Move cab switch to lock position.







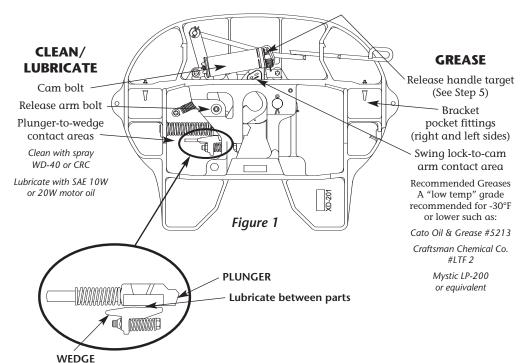
Do not operate the vehicle if the CAUTION plungers are not fully engaged (locked) and landing gear fully retracted, as damage to the tractor, trailer and landing gear may occur.

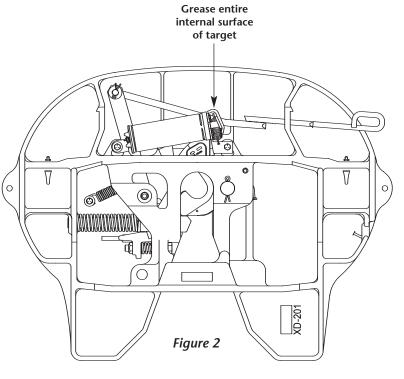
**WARNING** You must read and understand the following instructions before operating your fifth wheel. Failure to follow all of the important maintenance procedures contained in these instructions may result in a hazardous condition or cause a hazardous condition to develop. All maintenance must be performed by a qualified person using proper tools and safe procedures. All maintenance must be performed while the tractor is uncoupled from the trailer.

## **MAINTENANCE PROCEDURES**

### As-needed and Periodic Lubrication

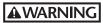
- 1. **IMPORTANT!** Always maintain adequate lubrication in fifth wheel locking mechanism. Relube as necessary (see *Figure 1*).
- 2. Keep a low temperature, water resistant lithium grease applied to the trailer contact surface of the fifth wheel.
- Grease the support bracket pockets through the grease fittings on the front of the fifth wheel bracket pockets (lift up slightly on the fifth wheel plate when applying grease).
- 4. Grease the target (welded to release handle) where the air cylinder shaft contacts it. No other areas on release handle requires grease (see *Figure 2*).
- 5. Check the operation by locking and unlocking using a Holland TF-TLN-5001 Lock Adjustment Tool. Verify that the fifth wheel is completely closed, as shown in *Figure 3A* on page 6.
- 6. For fifth wheels with sliding brackets: Release and slide fore and aft to assure the entire mechanism functions properly. Apply an aerosol spray lubricant or soap to the slide path. Apply Never-Seez<sup>™</sup> to the plunger (sides and top). Reposition and lock the plungers.





## **MAINTENANCE PROCEDURES**

#### **Required Inspections and Adjustments**



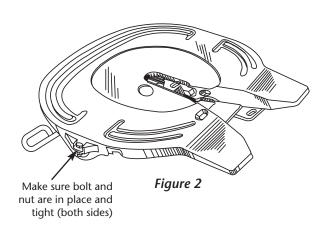
Do not use any fifth wheel that does not operate properly. If your

fifth wheel does not operate properly, contact your nearest Holland Representative for assistance. Failure to properly operate this fifth wheel could result in tractor and trailer separation and may cause injury or death to others.

Perform the following every six months or 60,000 miles, whichever comes first. Thoroughly steam clean all components before inspecting or adjusting.

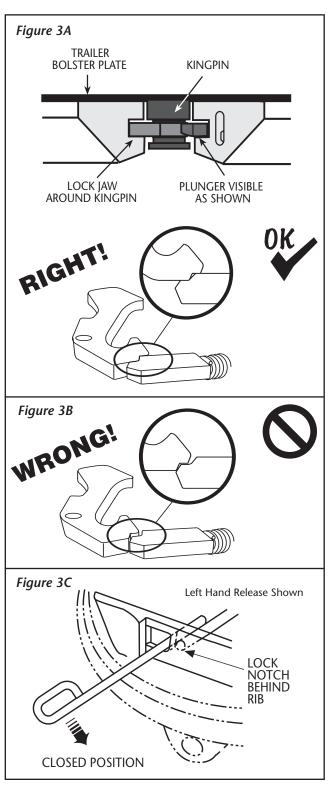
#### **General Fifth Wheel Inspection**

- 1. Inspect the fifth wheel mounting. Check torque and replace any missing or damaged bolts. Check for broken, worn or damaged parts, replace as needed.
- Thoroughly clean the fifth wheel locking mechanism every 6 months or 60,000 miles and relubricate (see *Figure 1*). Re-check operation with TF-TLN-5001 Lock Adjustment Tool.
- 3. Inspect the fifth wheel for bent, worn or broken parts. Replace with Holland parts only.
- 4. Make sure the bracket pin retention bolts and locknuts are in place and <u>tight</u>, as shown in *Figure 2*.



#### Inspection – Locking Mechanism

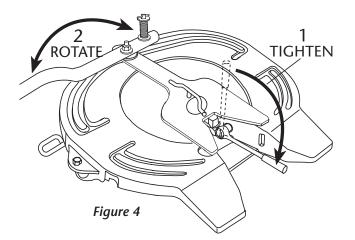
- Check the operation of the fifth wheel locking mechanism using a Holland TF-TLN-5001 (2" kingpin) Lock Adjustment Tool.
- 2. **IMPORTANT!** The lock is properly closed when:



## **Required Inspections and Adjustments (con't.)**

#### Adjustment – Locking Mechanism

- 1. Using **ONLY** a Holland TF-TLN-5001 Lock Adjustment Tool, lock the fifth wheel.
- Check the plunger it must be visible behind the lock and engaged on <u>both</u> steps, as shown in *Figure 3A*. If the plunger is not visible or not engaged on both steps (*Figure 3B*), turn the adjustment bolt counterclockwise 1/2 turn, then try to lock the locks again.
- 3. **Check the release handle** it must be fully retracted and the handle lock notch must be behind the rib as shown in *Figure 3C*.



- 4. Using a 15/16<sup>"</sup> socket, tighten the locks by turning the lock adjustment bolt clockwise 1/4 turn at a time. Remove the socket wrench from the bolt and rotate the lock adjustment tool, as shown in *Figure 4*, to check for resistance between the lock and lock adjustment tool.
- 5. Continue to alternate tightening (clockwise) the adjustment bolt 1/4 turn at a time, removing the socket wrench, and rotating the lock adjustment tool until you feel resistance against the lock adjustment tool. Once you begin to feel resistance, **STOP!**
- 6. **At this point, the fifth** wheel is **OVERADJUSTED** and **NOT** useable. Using an improperly adjusted fifth wheel could result in an improper couple and tractor seperation which may cause death or serious injury to others.
- 7. Loosen the adjustment bolt counter-clockwise **TWO FULL TURNS** (ie: one full turn is 360° rotation of socket). The lock is now properly adjusted.

- 8. Verify this adjustment by locking and unlocking several times using the Lock Adjustment Tool; check for proper locking (See *Figure 3A* and *Figure 3C*).
- 9. If there is a large amount of fore and aft movement with the adjustment tool when verifying adjustment, check to make sure the lock is engaged in <u>both</u> steps (*Figure 2*).

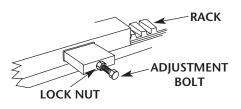
If the lock is only engaged on one step, repeat *Step 2* (above), of the Adjustment Procedure until the lock engages on both steps. (See *Figure 3A*.)

**WARNING** Improper adjustment can cause improper locking of the fifth wheel. If the fifth wheel does not operate properly, DO NOT USE IT! Repeat the above adjustment procedures or contact your local Holland Representative for assistance. Using an improperly adjusted fifth wheel could result in an improper couple and tractor seperation which may cause death or serious injury to others.

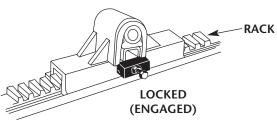
## **MAINTENANCE PROCEDURES**

#### Adjustment – Fifth Wheel Slide Mechanism

**1.** Loosen lock nut and turn the adjustment bolt out (counter-clockwise).



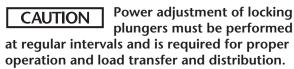
**2.** Disengage and engage the locking plungers. Verify that plungers have engaged properly, as shown.

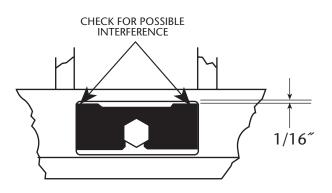


- **3.** Now tighten adjustment bolt until it contacts the rack.
- **4.** Turn the adjustment bolt clockwise an additional 1/2 turn, then tighten the lock nut securely.
- **5.** If plungers do not release fully to allow fifth wheel to slide:



- *a.* Check the air cylinder for proper operation. Replace if necessary.
- *b.* Check plunger adjustment as explained above.
- c. If a plunger is binding in the plunger pocket, remove the plunger using a Holland TF-TLN-2500 spring compressor. Grind the top edges of the plunger 1/16", as shown. Re-install and adjust the plungers as explained above.





- **6.** If the locking plungers are too loose:
  - *a.* Check plunger adjustment as explained above.
  - *b.* Check plunger springs for proper compression. Replace if necessary.
  - c. Check for plunger wear, and replace if necessary.

After inspection and adjustment, relubricate all moving parts with a light, rust resistant oil.

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