



FW17EK

FIFTH WHEEL

OWNERS MANUAL



⚠ WARNING

You must read and understand

the instructions in this manual before operating your fifth wheel.

Failure to follow all of the important operating procedures contained in these instructions may result in a hazardous condition or cause a hazardous condition to develop.

These instructions apply to the proper operation of your fifth wheel only. There are other important checks, inspections, and procedures not listed here that are necessary, prudent, and/or required by law.

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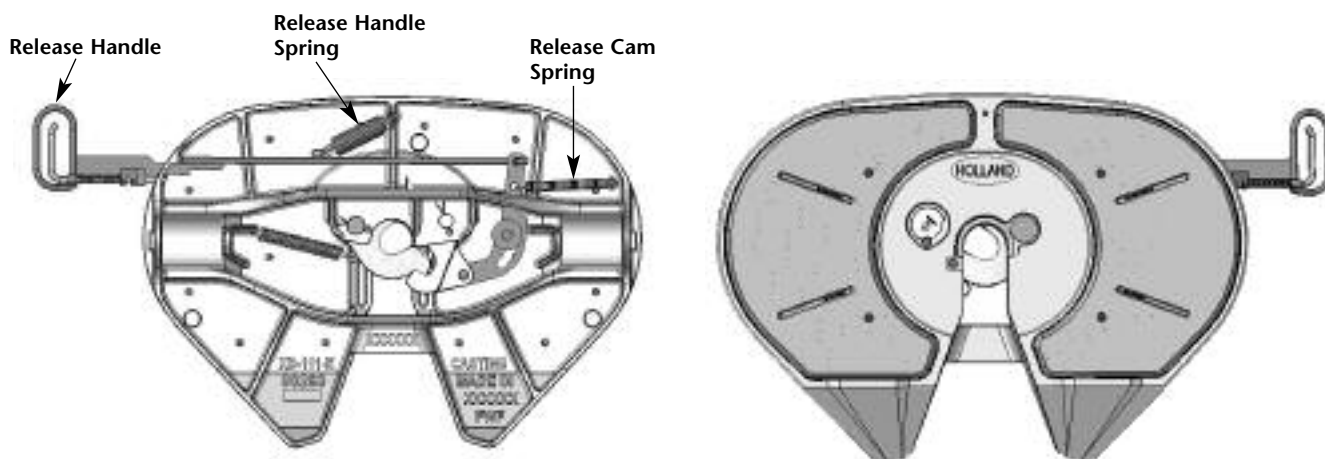
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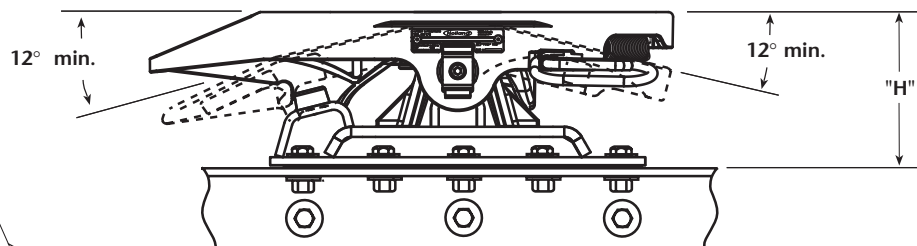
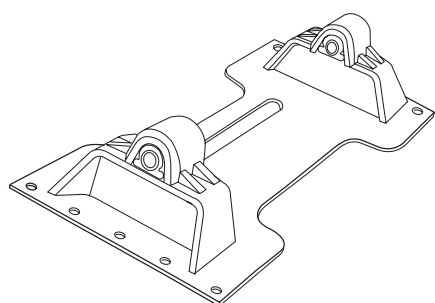
1. Component Part Identification and Specifications

1.1 Identification of Component Parts



1.2 Important Specifications

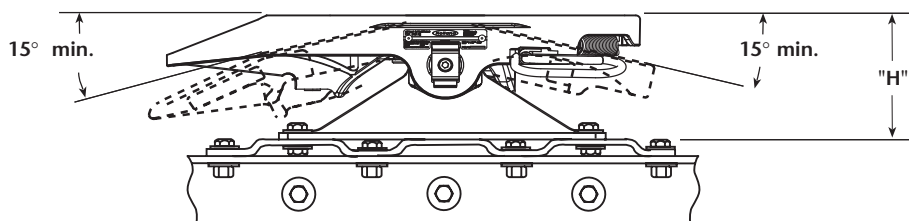
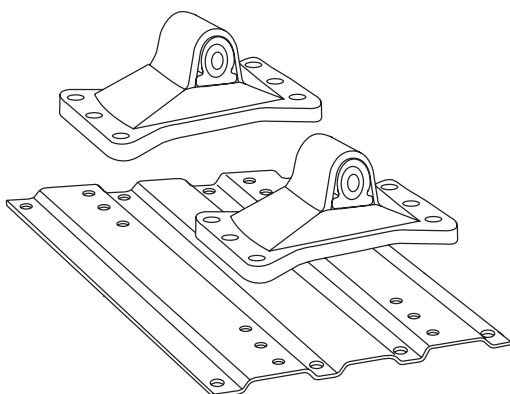
**"Weightsaver"
Mounting Bracket**



Fifth Wheel Model No.	D-Value	Max. Vertical Load	Fifth Wheel Height* "H"
FW17EK-W1-150	150 kN	20 tonne	150 mm
FW17EK-W1-175	150 kN	20 tonne	175 mm
FW17EK-W1-200	150 kN	20 tonne	200 mm
FW17EK-W1-240	150 kN	20 tonne	240 mm

*Fifth Wheel Height "H" Includes Weightsaver Mounting Plate Thickness

**"ISO/DIN Style"
Mounting Bracket**



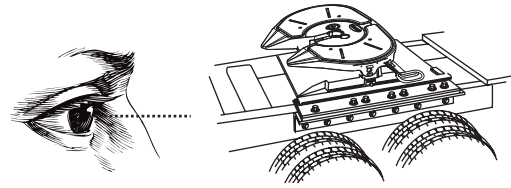
Fifth Wheel Model No.	D-Value	Max. Vertical Load	Fifth Wheel Height* "H"
FW17EK-IS-160	150 kN	20 tonne	160 mm
FW17EK-IS-190	150 kN	20 tonne	190 mm
FW17EK-IS-215	150 kN	20 tonne	215 mm

*Fifth Wheel Height "H" Does Not Include Mounting Plate Thickness

2. Operating Instructions

2.1 Pre-service Inspection

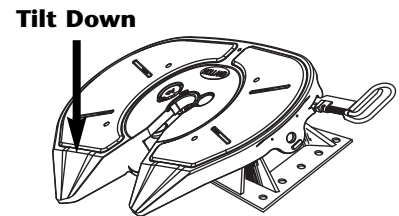
- 1 Inspect the fifth wheel mounting:
 - Tighten loose fasteners
 - Replace missing fasteners
 - Repair/replace cracked components



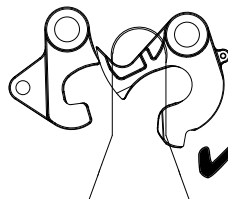
- 2 Make sure the coupling area is flat, level and clear of obstacles and persons.



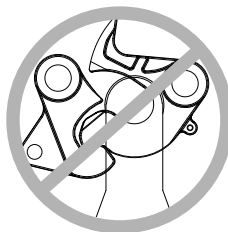
- 3 Tilt the ramps down.



- 4 Make sure the locks are open.



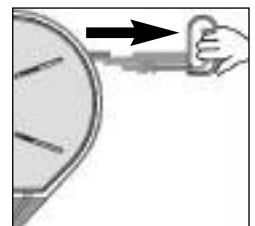
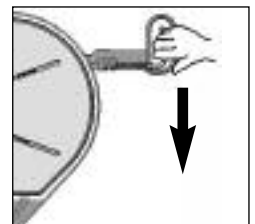
The locks are open and ready to couple.



Locks are closed and the fifth wheel is locked. **DO NOT** attempt to couple!

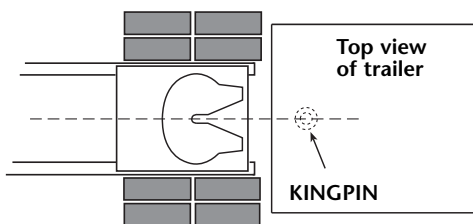
- 5 If the locks are closed:

- Grip handle.
- Pull "trigger".
- Slide handle back/left (to disengage lock).
- Pull handle all the way out.
- Ensure that the locks swing fully open and that the handle remains in the ready to couple position as shown.

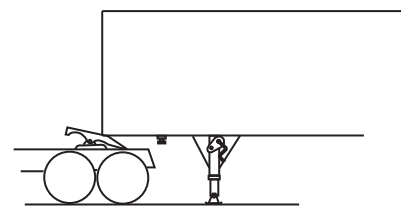


2.2 Trailer Coupling Procedure

- 1 Center the kingpin with the fifth wheel center.



- 2 Back the tractor close to the trailer and **STOP**.



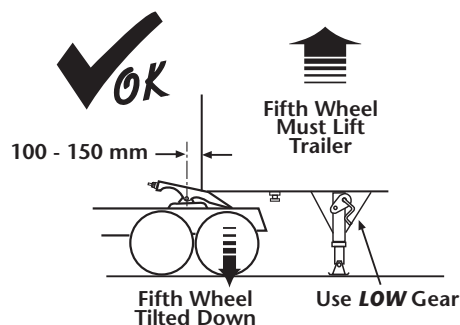
- 3 Chock trailer wheels

- 4 Connect brake and electrical cables immediately after coupling

- 5 Support slack in lines to prevent interference

- 6 Set trailer brakes

- 7 Adjust trailer height so fifth wheel will lift the trailer. The trailer should contact the fifth wheel 100 – 150mm behind the fifth wheel bracket pin.



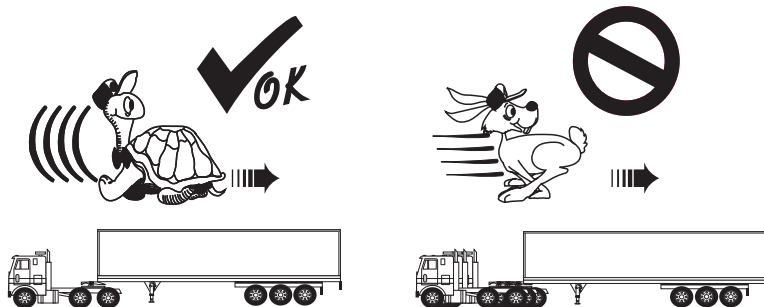
WRONG



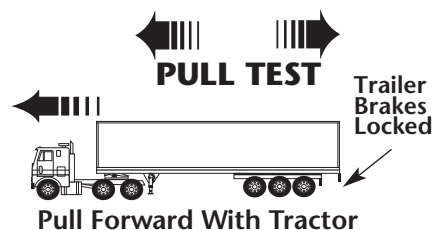
2. Operating Instructions (continued)

2.2 Trailer Coupling Procedures (continued)

- 8** **SLOWLY** back into trailer.



- 9** Do a pull test.

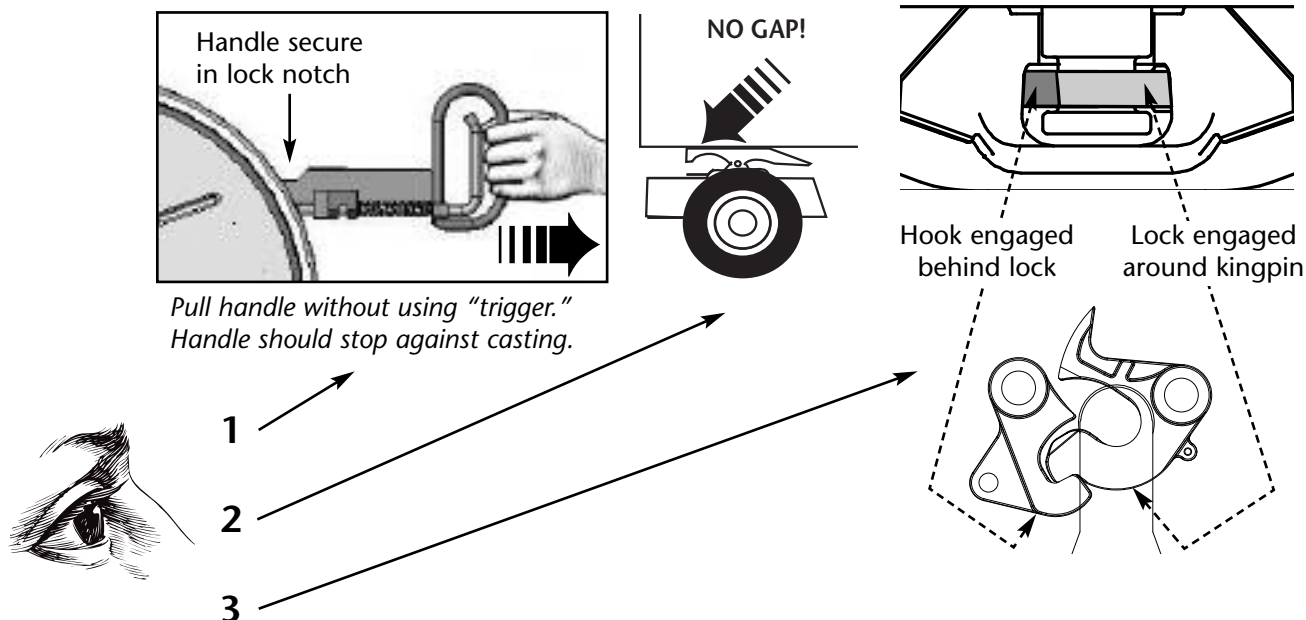


- 10** Visual Inspection
GET OUT OF THE TRACTOR

Visually check that the fifth wheel is locked, as shown below.

⚠ WARNING

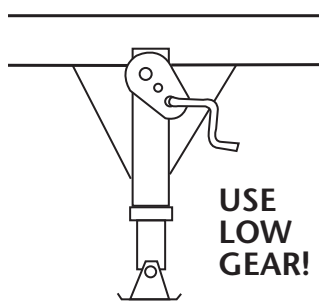
The coupling procedure is not complete without a visual inspection. You must get out of the tractor and verify that the fifth wheel is properly coupled to the kingpin as shown below.



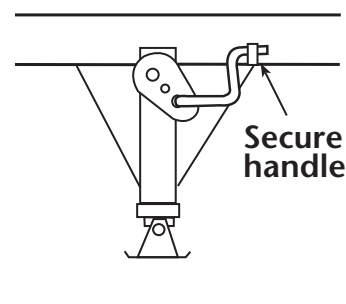
⚠ WARNING

If you do not obtain a proper couple, repeat the coupling sequence. **DO NOT** use any fifth wheel that fails to operate properly.

- 11** Retract landing gear until pads come off the ground.



- 12** Switch to **high gear**, fully retract, then secure crank handle.



- 13** Re-check brake lines and electrical cables. Remove chocks, continue with pre-trip inspection.

2. Operating Instructions (continued)

2.3 Trailer Uncoupling Procedure

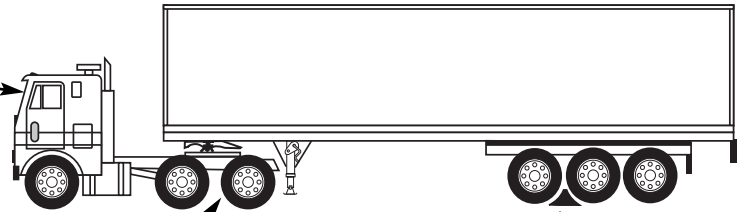
- 1 Position tractor and trailer on firm, level ground — clear of obstacles and persons.

- 2 Set trailer brakes.

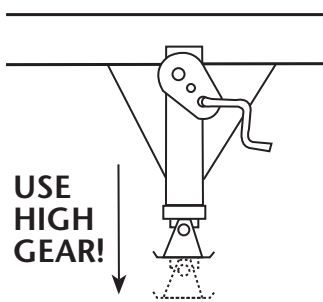
- 3 Slowly back tractor tightly against trailer.

- 4 Set tractor brakes.

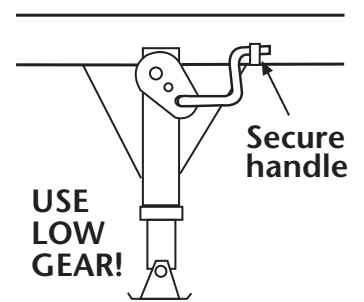
- 5 Chock trailer wheels.



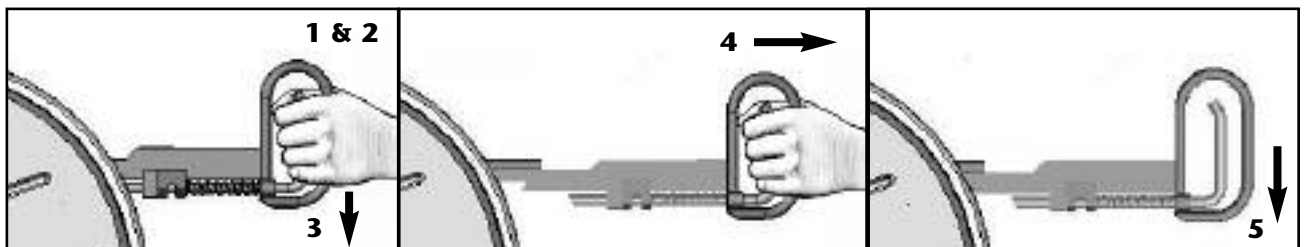
- 6 Extend landing gear until pads just touch the ground.



- 7 Switch to **low gear**, and crank an additional 4 – 8 turns.



- 8 Unlock fifth wheel with release handle as follows:



1. Grip handle
2. Pull "trigger"
3. Slide back/left

4. Pull handle out

5. Hook handle notch on casting.

- 9 Disconnect brake lines and electrical cables.

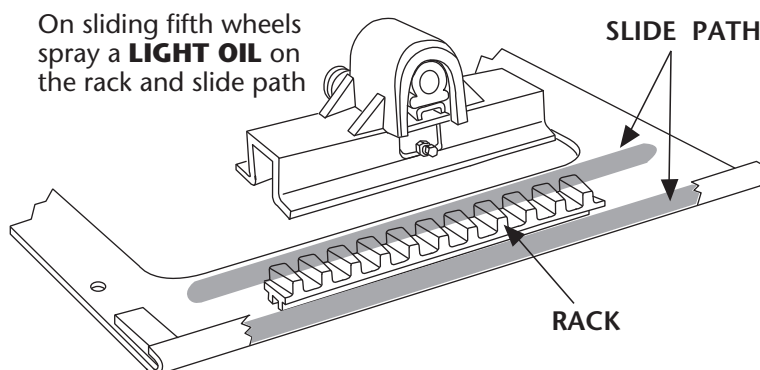
- 10 Release tractor brakes and slowly drive away from the trailer.

3. Maintenance Procedures

3.1 As Needed Lubrication

Note: Maintain adequate lubrication on the following surfaces by inspecting and re-lubricating at regular intervals.

Use water-resistant lithium-base grease

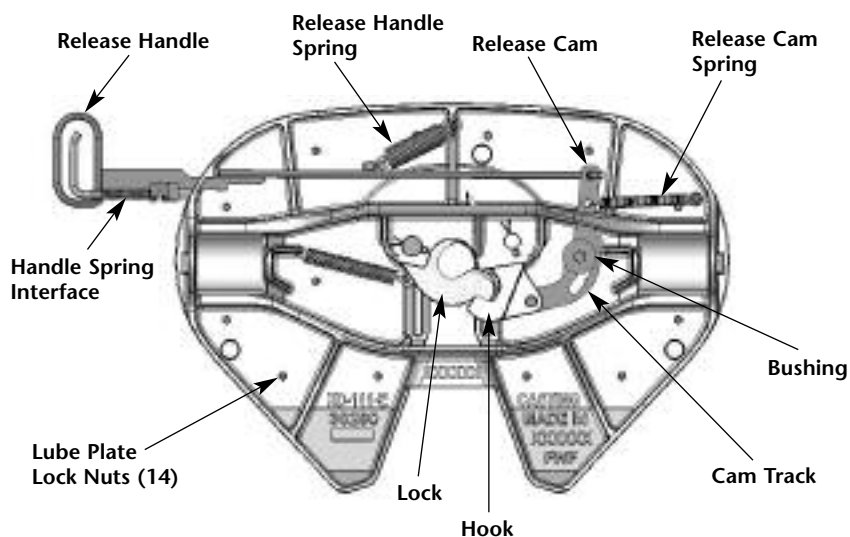
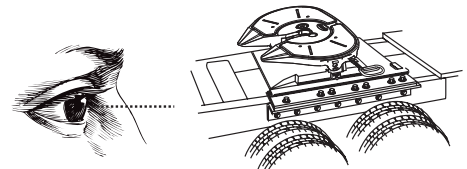


3.2 Required Inspections and Adjustments

NOTE: Perform the following every six (6) months or 10,000 km, whichever comes first. Clean all components of dirt and grit before inspecting or adjusting.

3.2.1 General Fifth Wheel Inspection

1. Inspect the fifth wheel mounting. Check the torque and replace any missing or damaged bolts. Check for broken, worn or damaged parts; replace as needed.
2. 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 are in place and tight.
5. Conform that the lube plates are in place and properly attached.
6. Clean the lube plates to remove dry, dirty residual grease that may have been left from the trailer skidplate.
7. Inspect the components in the figure below for wear. If any are worn, broken or damaged; replace them.
8. Inspect the front lock insert (wear ring) for excess wear or damage. Replace if necessary.



Use only genuine Holland parts kits

3. Maintenance Procedures (continued)

3.2 Required Inspections and Adjustments (continued)

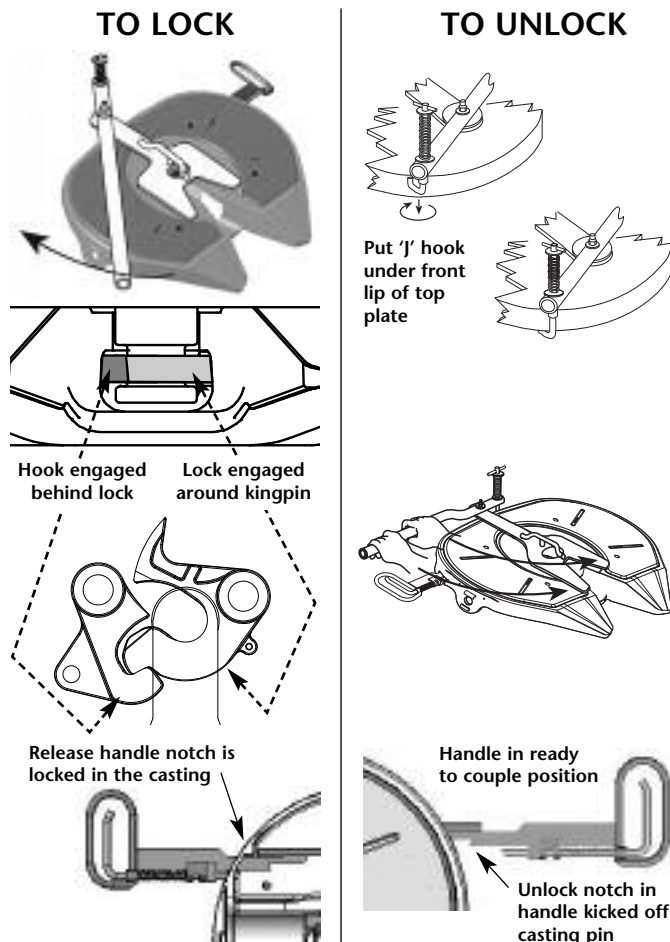
NOTE: Perform the following every three (3) months or 50,000 km, whichever comes first. Thoroughly clean all components before inspecting or adjusting.

3.2.2 Inspection of Locking Mechanism

- ❶ Verify the proper operation of the fifth wheel by locking and unlocking the fifth wheel locks using a Holland Kingpin Lock Tester TF-TLN-1000 or TF-TLN-5001.
- ❷ Set tool on the fifth wheel and rotate the handle to lock.
- ❸ Push down and rotate the “J” hook under the fifth wheel, then pull the handle back to unlock.
- ❹ After each attempt, verify that the fifth wheel is properly locked, as shown.
- ❺ After unlocking, verify that the handle ‘kicks off’ the unlock pin into the ready to couple position.

⚠ WARNING

DO NOT use any fifth wheel that fails to operate properly.

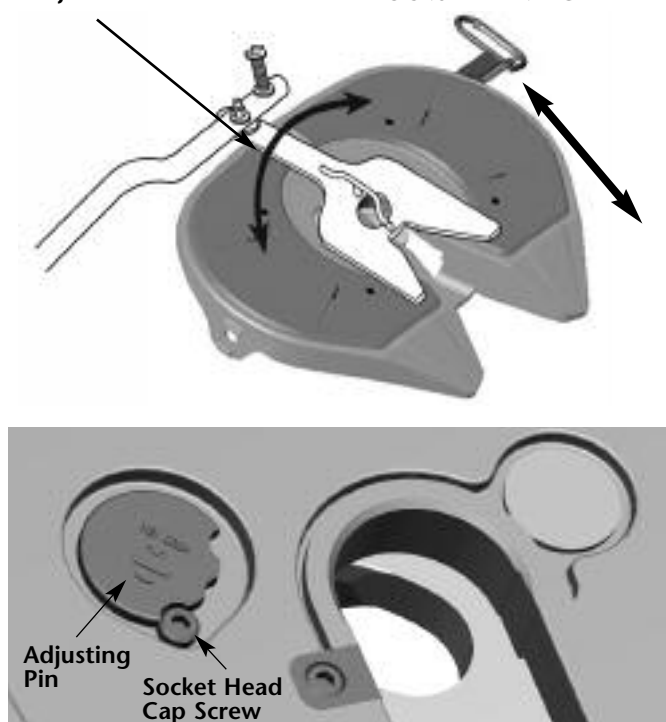


3.2.3 Lock Adjustment Procedure

- ❶ Using **ONLY** a Holland TF-TLN-5001 Lock Adjustment Tool, lock the fifth wheel and verify that it is closed as shown above in Step 3.2.2.
 - ❷ Slide the adjustment tool forward and backward to check for play between locks and kingpin. Ensure that the tool remains flat with full contact on fifth wheel top plate. If free play exceeds 1.5mm, adjust locks.
 - ❸ To adjust locks, unscrew the socket head cap screw until the head clears the adjusting pin and rotate the adjusting pin clockwise until the next notch lines up with the socket head cap screw. Adjust only one notch at a time. Re-tighten the socket head cap screw.
 - ❹ Verify the proper adjustment by locking and unlocking the fifth wheel several times with the lock tester. Check that the fifth wheel is properly locked, as shown above.
- Continued...

ROTATE TOOL TO CHECK FOR OVER ADJUSTMENT

SLIDE TOOL AND CHECK FOR FREE PLAY BETWEEN LOCKS AND KINGPIN



3. Maintenance Procedures (continued)

3.2 Required Inspections and Adjustments (continued)

3.2.3 Lock Adjustment Procedure (continued)

- 5 Rotate the lock adjustment tool from side-to-side to ensure that the locks are not overtightened. The locks should not grip the kingpin and the tool should rotate freely.
- 6 Re-check for free play in the locks by sliding the adjustment tool. If there is still excessive free play in the locks, repeat procedure and adjust one more notch.

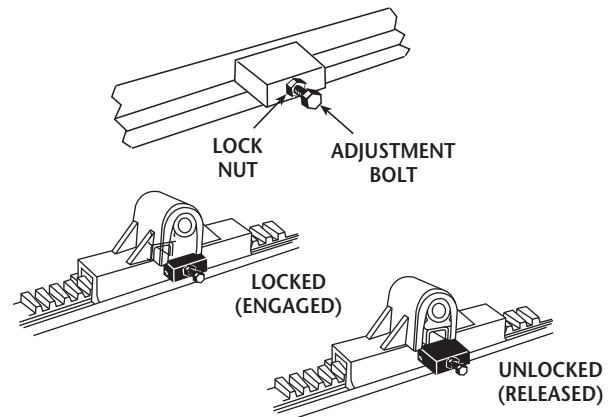
NOTE: If there is still excessive free play in the locks with the adjuster pin on the last (third) notch, then the fifth wheel should be rebuilt using lock repair kit RS-91111 or full overhaul kit RS-91112.



Improper adjustment can cause improper locking of the fifth wheel. If the fifth wheel does not operate properly, DO NOT USE IT! Repeat the adjustment procedures or contact Holland Europe.

3.2.4 Adjustment of the Sliding Fifth Wheel Mechanism (if so equipped)

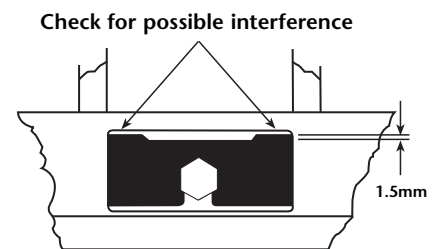
- 1 Loosen the lock nut and turn the adjustment bolt out (counter-clockwise).
- 2 Disengage and engage the locking plungers. Verify that the plungers have seated properly as shown below.
- 3 Now tighten the adjustment bolt until it contacts the rack.
- 4 Turn the adjustment bolt clockwise an additional 1/2 turn, then tighten the lock nut securely.



Proper adjustment of the sliding bracket locking plungers must be performed at installation, and maintained at regular intervals using the adjustment bolts for both plungers. Proper adjustment is required for proper operation, load transfer, and load distribution.

If the plungers do not release fully to allow the fifth wheel to slide:

- A. Check the air cylinder or the manual slide operating lever for proper operation. Replace if necessary.
- B. Check plunger adjustment as explained above.
- C. If a plunger is binding on the plunger pocket, remove the plunger using a Holland TF-TLN-2500 spring compressor. Grind the top edges of the plunger 1.5mm, as shown at right. Re-install and adjust the plungers as explained above.



If the locking plungers are too loose:

- A. Check the plunger adjustment as explained above.
- B. Check the plunger springs for proper compression. Replace if necessary.
- C. Check for plunger wear. If necessary, replace as described above.

After inspection and adjustment, re-lubricate all moving parts with a light, rust resistant oil.

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