



FW3010

FW3010 FIFTH WHEEL OPERATING 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.

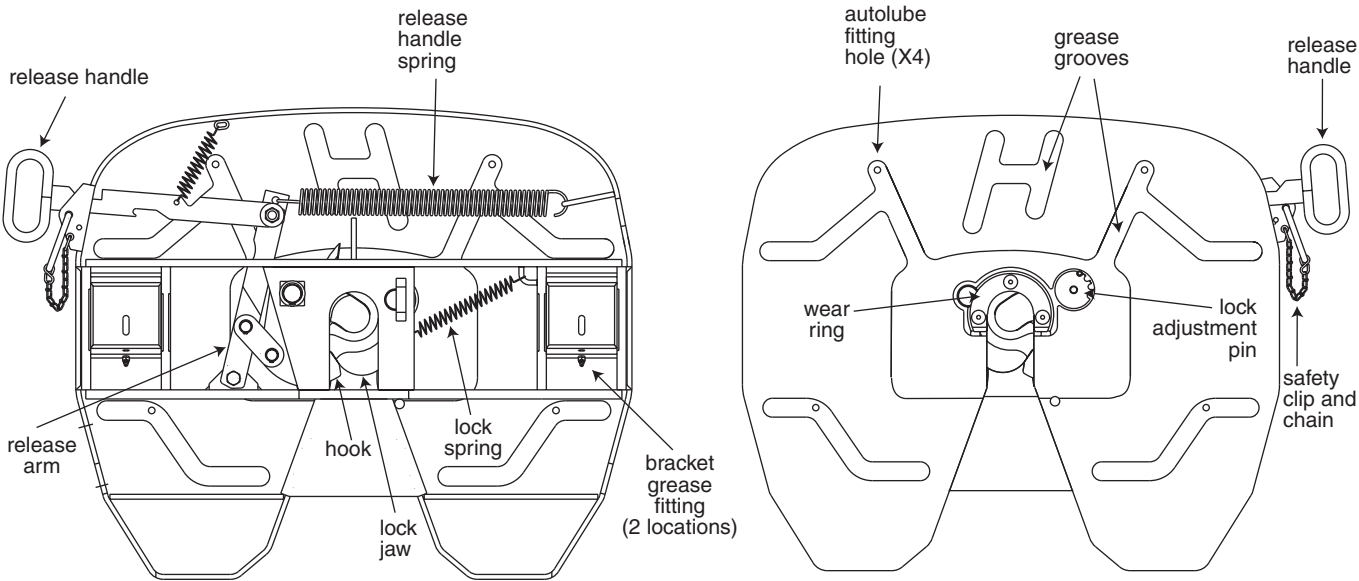
These instructions apply to the proper operation of your fifth wheel only. There are other important checks, inspections, and procedures not listed here that are necessary, prudent, and/or required by law.

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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"
FW3010-140	150 kN	20 tonne	140 mm
FW3010-160	150 kN	20 tonne	160 mm
FW3010-190	150 kN	20 tonne	190 mm
FW3010-230	150 kN	20 tonne	230 mm

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

"ISO/DIN Style" Mounting Bracket

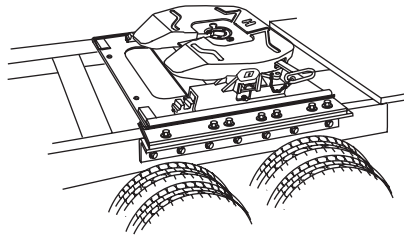
Fifth Wheel Model No.	D-Value	Max. Vertical Load	Fifth Wheel Height* "H"
FW3010-150	150 kN	20 tonne	150 mm
FW3010-180	150 kN	20 tonne	180 mm
FW3010-200	150 kN	20 tonne	200 mm

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

2. Operating Instructions

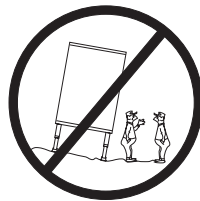
2.1 Pre-service inspection

- 1** Inspect the fifth wheel mounting



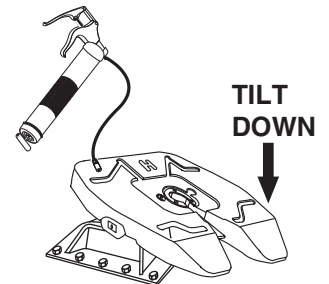
- Tighten loose fasteners
- Replace missing fasteners
- Repair/replace cracked components

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



- 3** Lubricate the fifth wheel-to-trailer contact surface with grease

Tilt ramps down

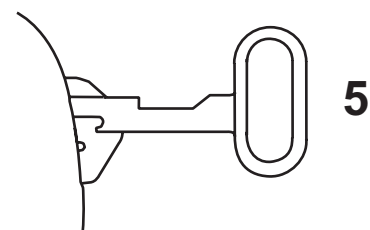
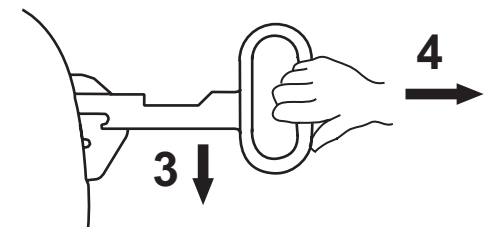
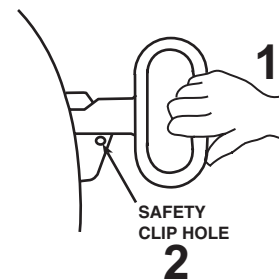


- 4** Make sure the locks are open



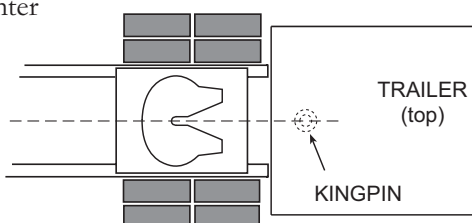
If locks are closed:

- 1 Grip handle
- 2 Remove safety clip from hole
- 3 Slide handle back (to disengage lock)
- 4 Pull handle out
- 5 Ensure that the locks swing fully open and that the handle remains in the ready to couple position as shown

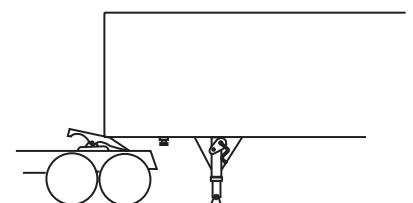


2.2 Trailer coupling procedure

- 1** Center kingpin with fifth wheel center



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



2. Operating Instructions

2.2 Trailer coupling procedures (continued)

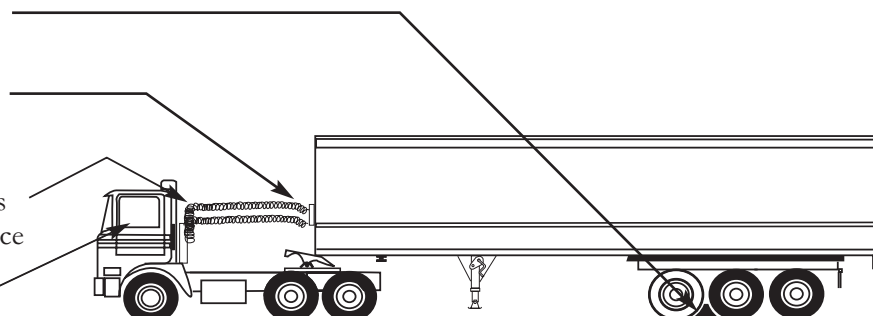
3 Chock trailer wheels

4 Connect brake lines and electrical cable

5 Support slack in lines to prevent interference

6 Set trailer brakes

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



OK

100 - 150 mm

FIFTH WHEEL MUST LIFT TRAILER

FIFTH WHEEL TILTED DOWN

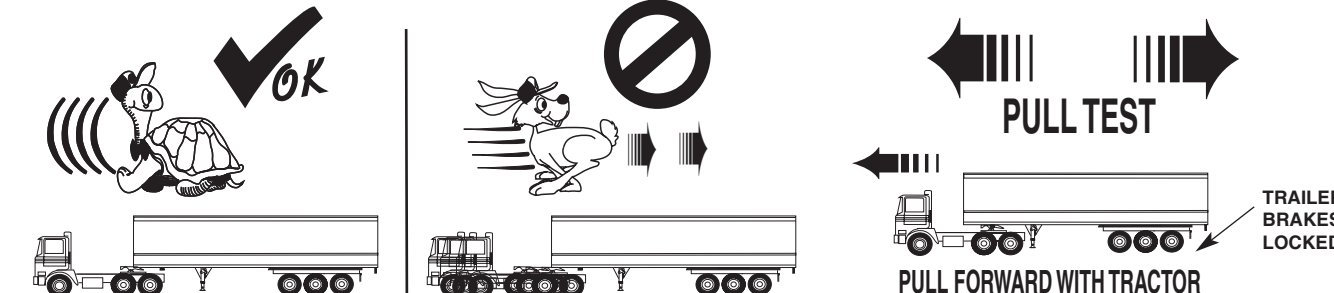
USE LOW GEAR

WRONG

FIFTH WHEEL WILL NOT LIFT TRAILER

8 SLOWLY back into trailer

9 Do a pull test



PULL FORWARD WITH TRACTOR

10 Visual inspection / Safety clip

GET OUT OF TRACTOR

Visually check that the fifth wheel is locked and insert safety clip

1 - 2 - 3



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 king pin as shown

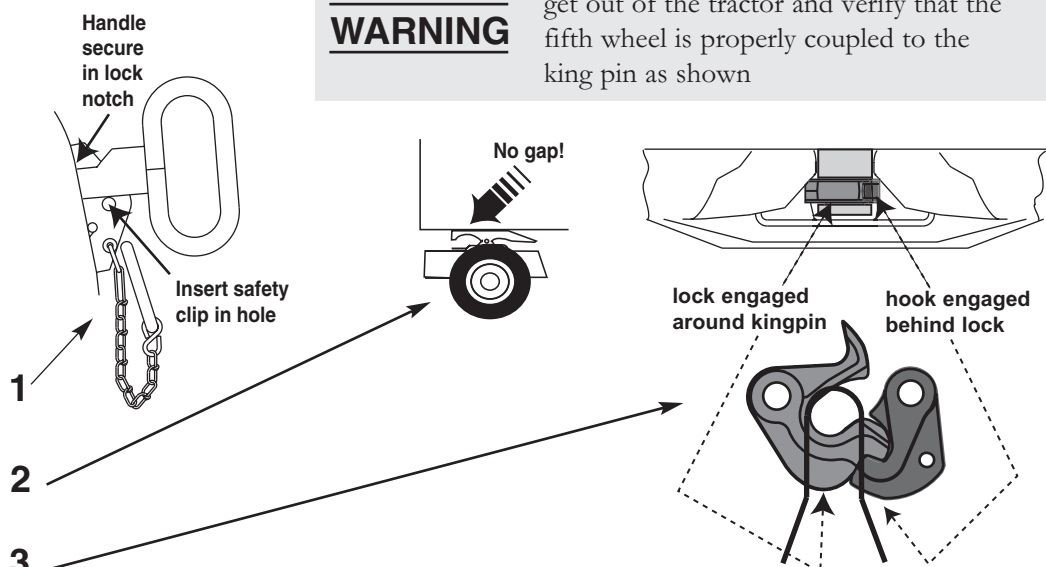
Handle secure in lock notch

Insert safety clip in hole

No gap!

lock engaged around kingpin

hook engaged behind lock



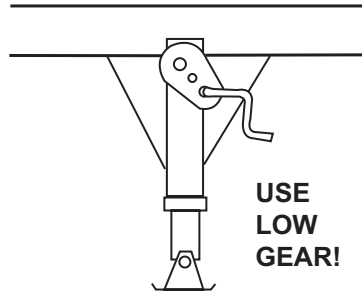
2. Operating Instructions

2.2 Trailer coupling procedures (continued)

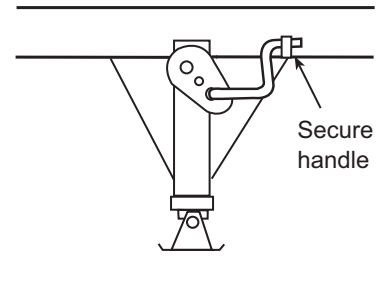


If you do not obtain a proper couple, repeat the coupling sequence.
DO NOT USE ANY FIFTH WHEEL THAT FAILS TO OPERATE PROPERLY.

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



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



- 12** Re-check brake lines and light cord. Remove wheel chocks, continue with pre-trip inspection.

2.3 Trailer uncoupling procedure

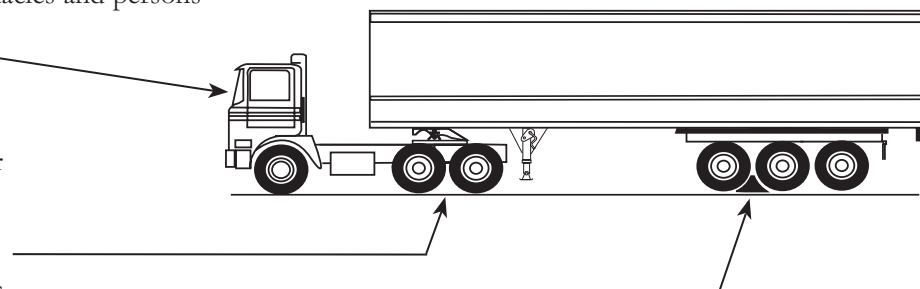
- 1** Position tractor and trailer on firm, level ground clear of obstacles and persons

- 2** Set trailer brakes

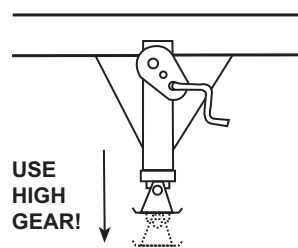
- 3** Slowly back tractor tightly against trailer

- 4** Set tractor brakes

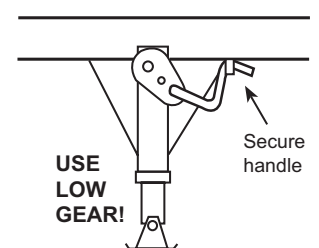
- 5** Chock trailer wheels



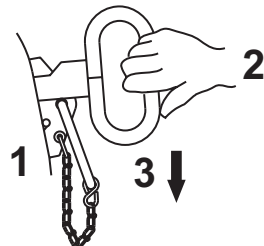
- 6** Extend landing gear until pads just touch the ground



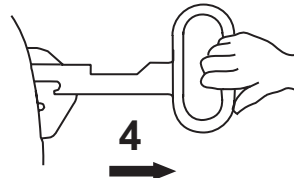
- 7** Switch to low gear and crank an additional 4 - 8 turns



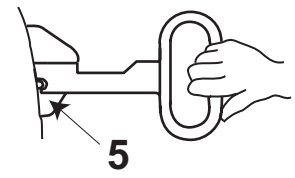
- 8** Unlock fifth wheel with release handle as follows



- 1 Unhook safety clip
2 Grip handle
3 Slide handle back



- 4 Pull handle out



- 5 Hook handle notch on unlock pin

- 9** Disconnect brake lines and electrical cable

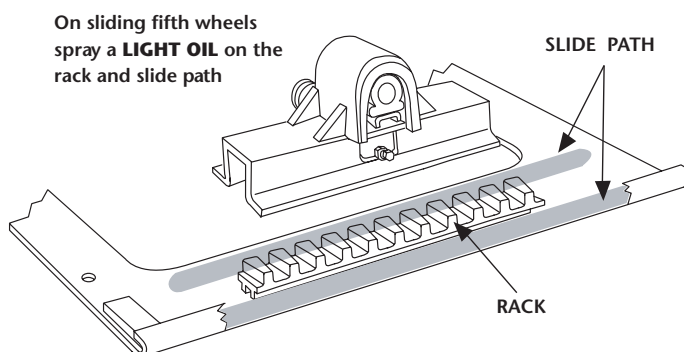
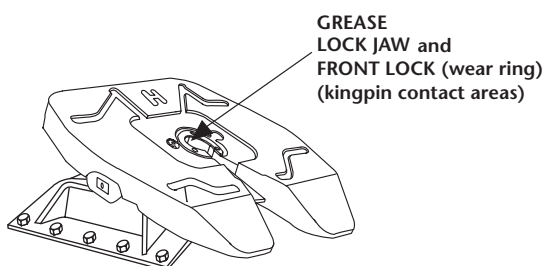
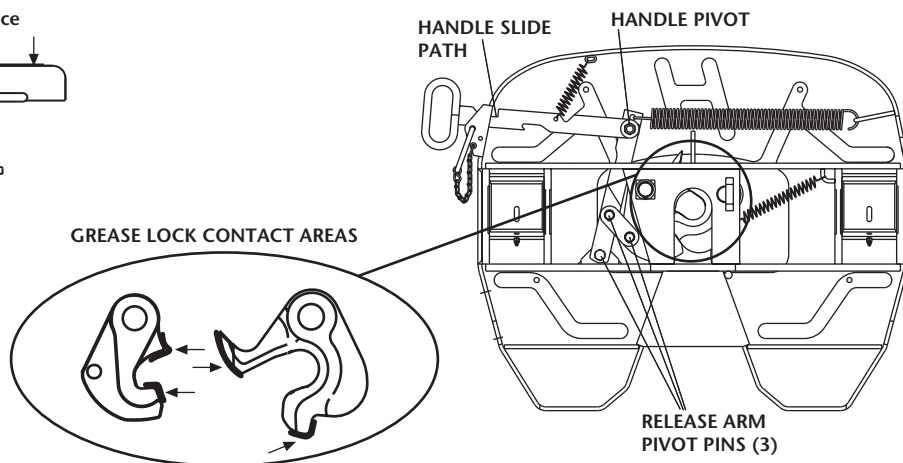
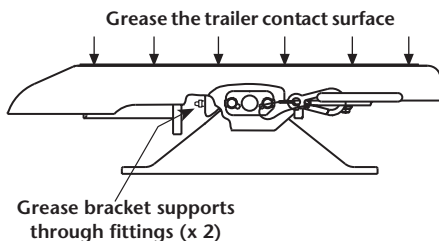
- 10** Release tractor brakes and slowly drive away from trailer

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



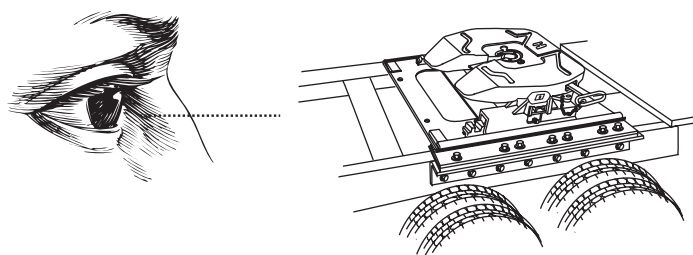
3.2 Required Inspections and Adjustments

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

3.2.1 General Fifth Wheel Inspection

Inspect the fifth wheel mounting and fifth wheel assembly

- Tighten loose bolts and fasteners
- Check bolt and fastener torque
- Replace missing or damaged bolts
- Replace bent, worn, or broken parts



Use only genuine Holland parts kits

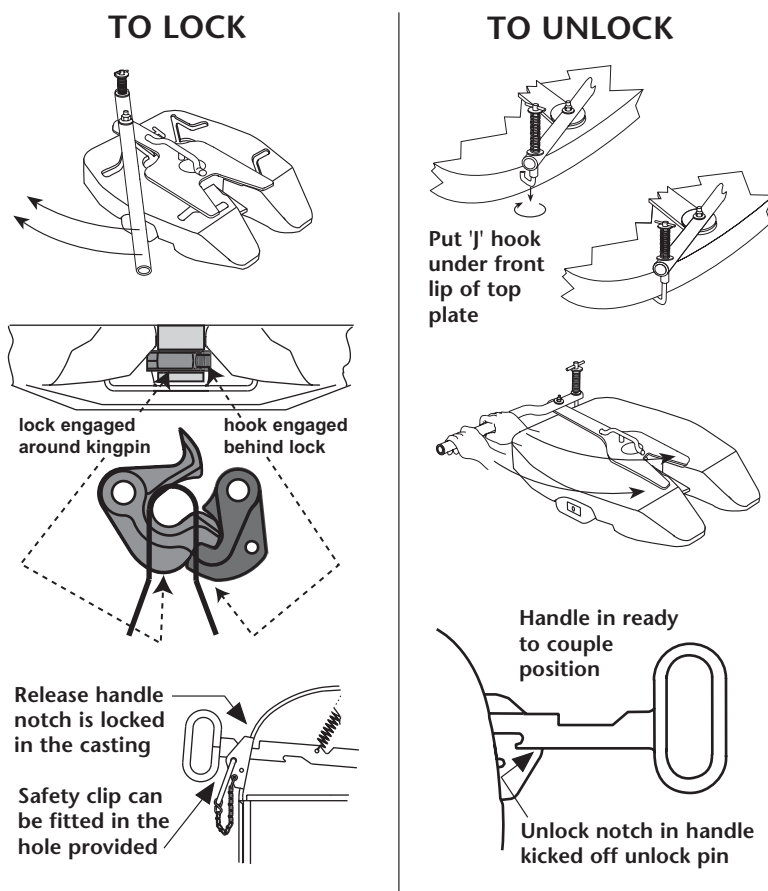
3. Maintenance Procedures (continued)

3.2 Required Inspections and Adjustments (continued)

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

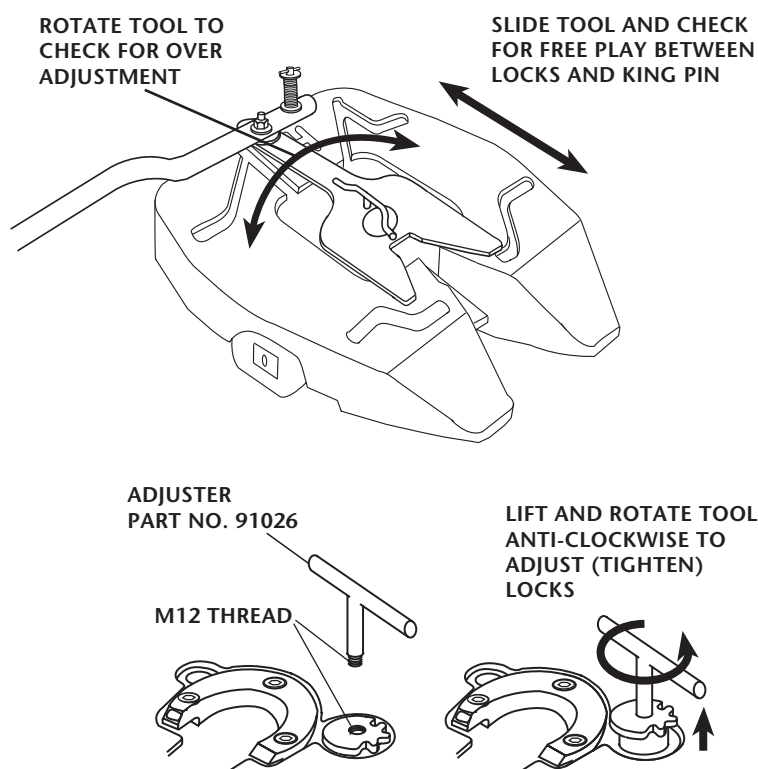
3.2.2 Inspection of Locking Mechanism

- 1 Verify the proper operation of the fifth wheel by locking and unlocking the fifth wheel using a Holland Kingpin Lock Tester TF-TLN-1000 or TF-TLN-5001
- 2 Set tool on the fifth wheel and rotate the handle to lock
- 3 Push down and rotate the 'J' hook under the fifth wheel, then pull the handle back to unlock
- 4 After each attempt, verify that the fifth wheel is properly locked, as shown
- 5 After unlocking verify that the handles 'kicks off' the unlock pin into the ready to couple position



3.2.3 Lock Adjustment Procedure

- 1 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
- 2 Slide the adjustment tool forward and backward to check for play between locks and king pin. Ensure that the tool remains flat with full contact on fifth wheel top plate. If free play exceeds 1.5 mm adjust locks
- 3 To adjust locks screw adjuster into adjustment pin as shown, lift pin to clear locating peg and rotate anti-clockwise to tighten locks. Push down pin on next notch. Adjust only one notch at a time.
- 4 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.....

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 king pin and the tool should rotate freely.
- 6** Re-check for free play in locks by sliding the adjustment tool. If there is still excessive free play in the locks repeat procedure and adjust one more notch.

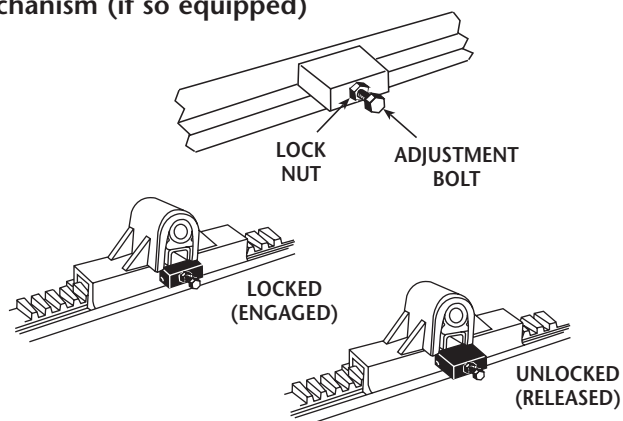
NOTE : If there is still excessive free play in the locks with the adjuster pin on the last (fourth) notch then the fifth wheel should be rebuilt using lock repair kit RS-91034 or full overhaul kit RS-91033-2



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
- 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



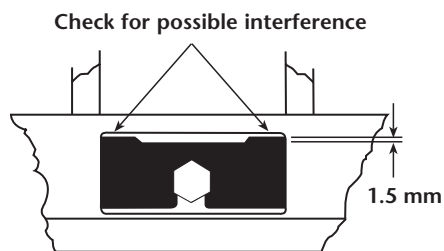
Proper adjustment of the sliding bracket locking plungers must be performed at installation and maintained at regular intervals using the adjustment bolts for both plungers. Proper adjustment is required for proper operation, load transfer, and load distribution

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 1.5 mm as shown. Re-install and adjust 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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