

You must read and understand the instructions in this manual before operating your fifth wheel.

These instructions apply to the proper operation of your fifth wheel only. Relevant national safety regulations apply for working with fifth wheel couplings, tractor units and semi-trailers. The appropriate safety information in the tractor unit and semi-trailer owner's manuals must also be followed.

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1. Safety Information

1.1 General Safety Information

It is important to read, understand, and follow the important information contained in these installation instructions. Failure to do so may result in a hazardous condition or cause a hazardous condition to develop.

Safety Signal Words

▲ DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.

▲WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

▲CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.

- 1. **Keep Work Area Clean.** Cluttered areas and benches invite accidents.
- 2. Keep fingers away from all potential pinch points in the fifth wheel.
- 3. All fifth wheel maintenance must be performed by a qualified service technician using proper tools and safe procedures.
- 4. Use only Holland Genuine Parts.
- 5. **Use Safety Goggles.** Glasses or goggles not in compliance with CE regulations can cause serious injury when damaged or broken.
- 6. **Wear Proper Apparel.** Do not wear loose clothing, gloves, neckties, jewelry (rings, wristwatches, etc.) that can get caught in moving parts. Non-slip footwear is recommended.

Fifth Wheel Design and Intended Use:

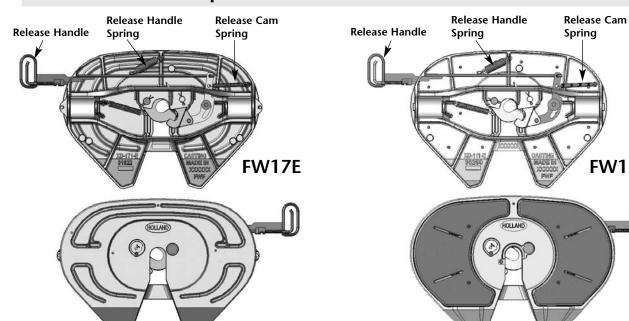
- 1. For pulling trailers with standard SAE, DIN 74080, or ISO 337 kingpins which are in good condition and securely mounted or locked in position in the trailer.
- 2. For on-highway hauling applications.
- 3. Within the capacities stated in SAF-HOLLAND literature.
- 4. As recommended in SAF-HOLLAND literature (available from SAF-HOLLAND or distributors of Holland brand products).

Holland Fifth Wheels are NOT Designed or Intended For:

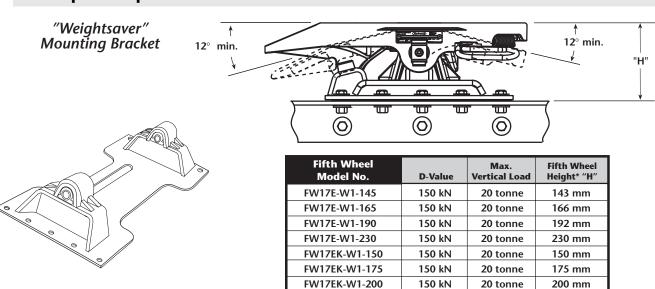
- 1. Use with non-standard (SAE, DIN 74080, or ISO 337) kingpins, such as kingpins which are bent, improper size or dimensions, not secured to maintain standard (SAE, DIN 74080, or ISO 337) configuration, or which are installed in warped trailer bolster plates.
- 2. Tow-away operations which damage or interfere with the proper operation of the fifth wheel.
- 3. The attachment of lifting devices.
- 4. The transport of loads in excess of rated capacity.
- 5. Off-highway applications and use.
- 6. Applications other than recommended.

2. Component Part Identification and Specifications

Identification of Component Parts



2.2 Important Specifications



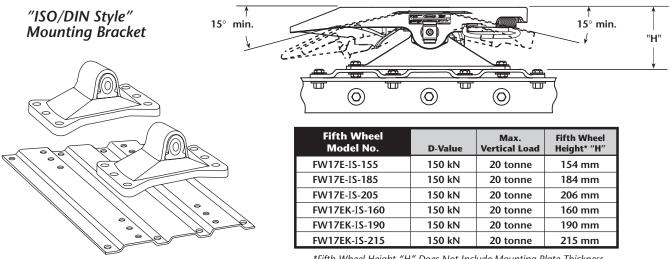
FW17EK-W1-240

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

20 tonne

240 mm

150 kN



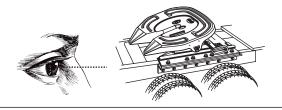
*Fifth Wheel Height "H" Does Not Include Mounting Plate Thickness

FW17EK

3. Operating Instructions

3.1 Pre-service Inspection

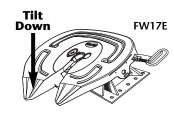
- 1. Inspect the fifth wheel mounting:
 - Tighten loose fasteners
 - Replace missing fasteners
 - Repair/replace cracked components



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



3. If your fifth wheel is a FW17E, lubricate the fifth wheel-to-trailer contact surface with grease. Tilt ramps down.



4. Make sure the locks are open.

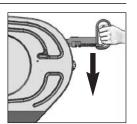


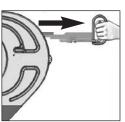


Locks are closed and the fifth wheel is locked.

DO NOT attempt to couple!

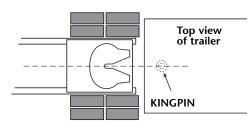
- **5.** If the locks are closed:
 - Grip handle.
 - Pull "trigger".
 - Slide handle back/left (to disengage lock).
 - Pull handle all the way out.
 - Ensure that the locks swing fully open and that the handle remains in the ready to couple position as shown.



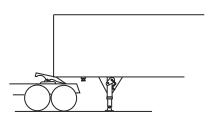


3.2 Trailer Coupling Procedure

1. Center the kingpin with the fifth wheel center.



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



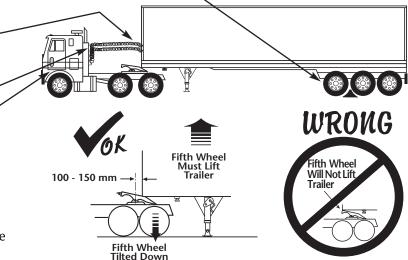
3. Chock trailer wheels.

4. Connect brake and electrical cables immediately before coupling.

5. Support slack in lines to prevent interference.

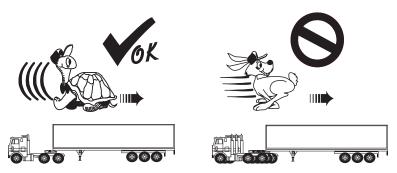
6. Set trailer brakes.

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.

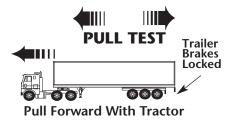


3.2 Trailer Coupling Procedure (continued)

8. **SLOWLY** back into trailer.



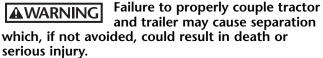
9. Do a pull test with the trailer brakes applied.

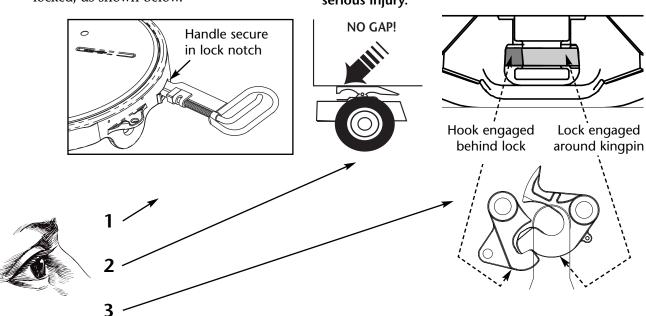


10. Visual Inspection

GET OUT OF THE TRACTOR

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

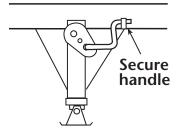




If you do not obtain a proper couple, repeat the coupling sequence. **DO NOT use any fifth wheel that fails to operate properly.**

Failure to properly couple tractor and trailer may cause separation which, if not avoided, could result in death or serious injury.

11. Follow instructions published separately for safe operation of the trailer to fully retract landing gear and secure crank handle.



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

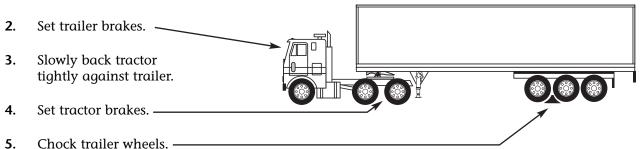
3. Operating Instructions (continued)

3.2 Trailer Coupling Procedure (continued)

DO NOT operate the vehicle without fully retracting the landing gear. Failure to fully retract the landing gear to attain sufficient ground clearance for transit may result in damage to the landing gear or components which, if not avoided, could result in death or serious injury.

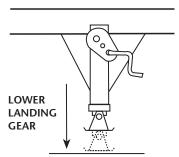
3.3 Trailer Uncoupling Procedure

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

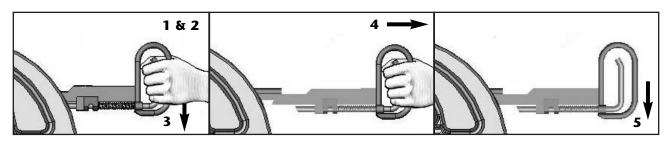


6. Extend landing gear until pads just touch the ground.

NOTE: Follow instructions published separately for safe operation of the trailer to transfer trailer weight off fifth wheel. Do not raise trailer off the fifth wheel.



7. Unlock fifth wheel with release handle as follows:



- 1. Grip handle
- 4. Pull handle out

5. Hook handle notch on casting.

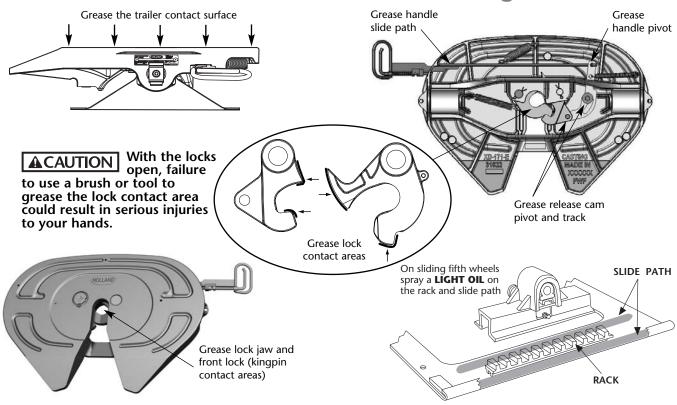
- 2. Pull "trigger"
- 3. Slide back/left
- **8.** Disconnect brake lines and electrical cables.
- 9. Release tractor brakes and slowly drive away from the trailer

4.1 As Needed Lubrication

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

If your top plate is a FW17EK, there is no need to lubricate the top plate. On all sliding fifth wheels, lubricate the slider as shown below.

Use water-resistant lithium-base grease

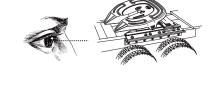


4.2 Required Inspections and Adjustments

NOTE: Perform the following every three (3) months or 50,000 km for the FW17E, and every six (6) months or 100,000 km for the FW17EK, whichever comes first. Thoroughly clean all components before inspecting or adjusting.

4.2.1 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 only Holland Genuine Parts.
- 4. Make sure the bracket pin retention bolts are in place and tight.
- 5. Inspect the components in *Figure 1* for wear. If any are worn, broken or damaged; replace them.
- 6. If your top plate is a FW17EK, confirm that the lube plates are in place and securely attached.
- 7. Clean the lube plates to remove dry, dirty residual grease that may have been left from the trailer skidplate.
- 8. Inspect the front lock insert (wear ring) for excess wear or damage. Replace if necessary.



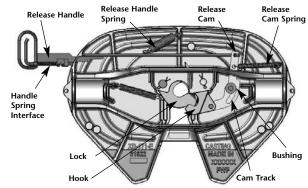


Figure 1

Use only Holland Genuine Parts kits

4.2 Required Inspections and Adjustments (continued)

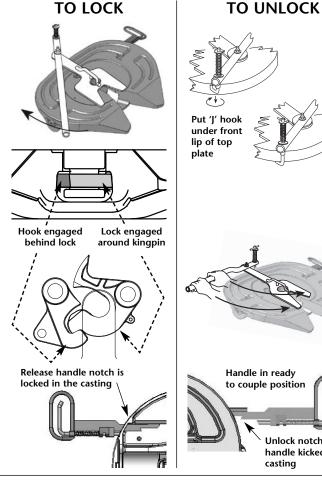
NOTE: Perform the following every three (3) months or 50,000 km for the FW17E and every six (6) months or 100,000 km for the FW17EK, whichever comes first. Thoroughly clean all components before inspecting or adjusting.

Inspection of Locking Mechanism 4.2.2

- 1. Verify the proper operation of the fifth wheel by locking and unlocking the fifth wheel locks using a SAF-HOLLAND Kingpin Lock Tester TF-TLN-1000 or TF-TLN-5001.
- 2. Set tool on the fifth wheel and rotate the handle to lock.
- Push down and rotate the "J" hook under the fifth wheel, then 3. 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 handle 'kicks off' the casting into the ready to couple position.

Do not use any fifth wheel that fails to operate properly.

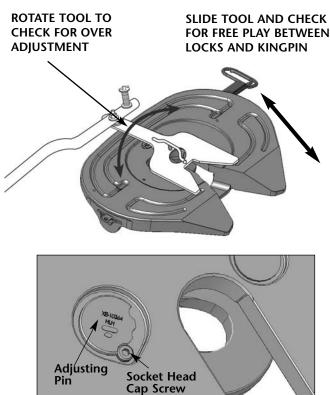
Failure to **▲**WARNING properly couple tractor and trailer may cause separation which, if not avoided, could result in death or serious injury.



4.2.3 **Lock Adjustment Procedure**

- Using **ONLY** a SAF-HOLLAND 1. TF-TLN-5001 Lock Adjustment Tool, lock the fifth wheel and verify that it is closed as shown above in Step 4.2.2.
- 2. 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.
- 3. 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.
- 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...



Unlock notch in handle kicked off casting

4. Maintenance Procedures (continued)

4.2 Required Inspections and Adjustments (continued)

- 4.2.3 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-91121 or full overhaul kit RS-91120 for the FW17E, and lock repair kit RS-91111 or full overhaul kit RS-91112 for the FW17EK. 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 SAF-HOLLAND.

Failure to properly couple tractor and trailer may cause tractor and trailer separation which, if not avoided, could result in death or serious injury.

4.2.4 Adjust the Sliding Fifth Wheel Mechanism (if so equipped) according to publication XL-FW1132-01.



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