

# **Owners Manual**

FW0070, FW0100, FW0165, FW1226, FW1560, FW1900, FW2000, FW2500, FW2555, FW2570, FW2870, FW7040, FW7090 Fifth Wheel

 Installation, Operation, and Maintenance Procedures





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### Introduction

This manual provides you information necessary for the proper installation of HOLLAND® Fifth Wheels.

**NOTE:** For technical support and genuine HOLLAND® fifth wheel replacement

components contact SAF-HOLLAND®
Customer Service at:

■ 1.888.396.6501

■ +86.592.6388.891

# Notes, Cautions, and Warnings

Throughout this manual, you will notice the terms "NOTE," "IMPORTANT," "CAUTION," and "WARNING" followed by useful product information. So that you may better understand the manual, those terms are defined as follows:

**NOTE:** Includes additional information to enable accurate and easy

performance of procedures.

IMPORTANT: Includes additional

information that if not followed could lead to hindered product performance.

### CAUTION

Used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, could result in property damage.

#### **▲**CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

#### **▲**WARNING

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

Read and observe all Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.



# 1. General Safety

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

All welding should be performed by an AWS certified welder using a low hydrogen process and AWS E70XX filler metal. Failure to weld correctly may cause distortion, damage, and/or result in insufficient strength and subsequent joint failure which, if not avoided, could result in death or serious injury.

Prior to welding take precaution to ensure that the tractor electrical system is not damaged due to the welding process.

- Keep work area clean. cluttered areas and benches invite accidents.
- 2. Keep fingers away from all potential pinch points in the fifth wheel.
- All fifth wheel maintenance MUST be performed by a qualified service technician using proper tools and safety procedures.
- 4. Use SAF-HOLLAND® Parts only.
- Use safety goggles. Glasses or goggles not in compliance with ANSI or CSA can cause serious injury when damaged or broken.
- Wear proper apparel. DO NOT wear loose clothing, gloves, neckties, jewelry (rings, watches, etc.) that can get caught in moving parts. Non-Slip footwear is recommended.

## Fifth Wheel Design and Intended Use:

- For pulling trailers with standard SAE kingpins which are in good condition and securely mounted or locked in position in the trailer.
- 2. For on-highway hauling applications.
- Within the capacities stated in SAF-HOLLAND® Literature.
- As Recommended in SAF-HOLLAND® Literature (available from SAF-HOLLAND® or SAF-HOLLAND® distributors).

# HOLLAND® Fifth Wheels are NOT Designed or Intended For:

- Use with non-SAE kingpins, such as kingpins which are bent, improper size or dimensions, not secured to maintain SAE configuration, or which are installed in warped trailer bolster plates.
- Tow-away operations which may 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. Installation

#### 2.1 General Recommendations

- Every user and installer using HOLLAND® products either recommended or not recommended by HOLLAND®, MUST thoroughly satisfy him/herself that the installation procedure used is appropriate for the vehicle, product and application.
- 2. Consult the HOLLAND® literature for fifth wheel capacities and applications.
- Consult the tractor manufacturer's body builder's book and the latest SAE and D.O.T. Standards for additional installation methods. HOLLAND® recommends the T.M.C. Recommended Maintenance Practice 603B for installation procedures.
- 4. Determine the proper fifth wheel position, or, in the case of a sliding fifth wheel, the range of proper positions. Proper positioning of a fifth wheel is important for weight distribution, swing clearance and handling characteristics. Refer to SAE J701a for proper placement, as well as the tractor manufacturer's body builder's book.
- Use Grade 8, 5/8" minimum diameter bolts and Grade "C" locknuts for mounting.
- 6. Bolt holes can be 1/32" larger in diameter than the bolt fastener. Bolts MUST be adequately tightened using torque ranges in foot-pounds for the recommended Grade 8, 5/8" diameter bolts. Larger diameter Grade 8 bolts and coated fasteners may be used.

- The bolts attaching the fifth wheel mounting angles to the truck frame require hardened steel washers under both the bolt and under the locknut, unless flanged head bolts or flanged head locknuts are employed.
- A minimum of 5 bolts are required to attach each mounting angle to the frame rail, and the distance between bolts MUST NOT exceed 8", except when cutouts are required in the mounting angles.
- Whenever a cutout is made on the mounting angle, such as required to by pass spring hangers, a 1" minimum radius should be used and bolts should be placed within 1 1/2", but not closer than 1" of the cut, fore and aft.
- The mounting angle should have a minimum thickness as shown in Table 1 and should be steel specification ASTM A 36
- 11. When initially positioning the fifth wheel for frame holes, the full length of the fifth wheel or slider mounting angles should seat flush on the top and side surface of the truck-tractor frame rails where channel-type rails are employed. There should NOT be a gap over the top of the truck frame rails. The base of the fifth wheel assembly and of the mounting angle members should seat flush on the top of the frame rail to prevent flexing and to give uniform weight distribution. It is also recommended to chamfer or smooth sharp edges and corners of mounting materials wherever contact is made with the tractor frame.



12. If the fifth wheel is to be mounted using a mounting plate (bracket with mounting base), refer to TABLE 1 for minimum plate thickness recommendations.

**AWARNING** DO NOT use U-bolts in fifth wheel installations. Use only new Grade 8 bolts and new Grade C lock nuts, sized 5/8" minimum diameter. Failure to do so may result in structural failure of the installation with a potential loss of the fifth wheel assembly, mounting structure, and/or trailer and may result in death or serious injury.

- 13. Trailer pick-up ramps are recommended at the rear of the truck-tractor frame.
- 14. When mounting to aluminum frames, follow the tractor manufacturer's recommendations. HOLLAND® has available a stationary mounting angle intended for use with aluminum frames. Contact SAF-HOLLAND® and SAF-HOLLAND® distributors for availability.
- 15. Review, in addition the specific information on the following pages for each type of fifth wheel mounting, as well as "Inspection and Lubrication Prior to Use" on page 13 of this publication.

Table 1

Fifth Wheel Vertical Capacity	Minimum Mounting Angle Thickness	Minimum Mounting Plate Thickness
12,000 lbs.	1/4"	1/4"
20,000 lbs.	5/16"	1/4"
40,000/45,000 lbs.	5/16"	5/16"
50,000/55,000 lbs.	3/8"	3/8"
62,500/70,000 lbs.	1/2"	1/2"
100,000 lbs.	3/4"	3/4"
165,000 lbs.	3/4"	1"



# 3. Stationary Fifth Wheel Installation

Prior to proceeding with the installation of the stationary fifth wheel assembly, carefully review the "General Safety Information" Section on page 3.

### 3.1 Bracket with Mounting Angle

- HOLLAND® brackets with mounting angle are provided with the bracket welded in the center of the 36" long angle with a 4" minimum horizontal and 3 1/2" minimum vertical leg size, and to a specific tractor frame width. Verify that the bracket and tractor frame width are the same.
- In addition to the information given in "Installation: General Recommendations" on page 4, follow the recommendations in *Figure 1, 2, and 3*.

**IMPORTANT:** The full length of the fifth

wheel mounting angle should seat flush on the truck frame when mounting to prevent flexing of the mounting angle and to give uniform weight distribution along the truck frame rail

(Figure 1).

IMPORTANT: Use 5/8" Grade 8 bolts and

Hardened steel washers or flanged locknuts (Figure 1). Torque according to bolt manufacturer charts.

# 3.2 Bracket for Angle Mounting

 HOLLAND® brackets for angle mounting are intended to be welded to mounting angles at the time of installation.

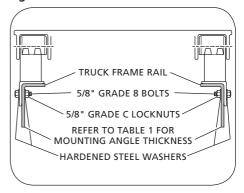
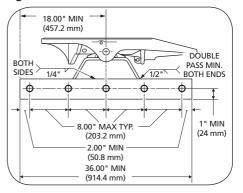


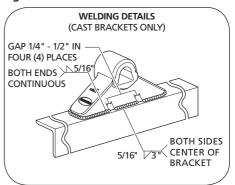
Figure 2





- 2. Refer to "Installation: General Recommendations" on page 4, for angle thickness and material (use 4" minimum horizontal and 3-1/2" minimum vertical leg size). The recommended length of each mounting angle is 36". it is recommended that each angle extend at minimum length of 18" forward of the fifth wheel pivot point, and not less than 12' to the rear (Figure 2). If angles shorter than 36" are required, the special recommendations of the tractor manufacturer should be obtained.
- In addition to the information given in "Installation: General Recommendations," follow the recommendations given in Figures 1, 2, and 3. The following sequence is suggested for both fabricated and cast brackets:
  - a. Securely position the mounting angle to the tractor frame.
  - b. Bolt the angles to the tractor as illustrated (*Figure 1 and 2*).
  - Position the brackets on the angles and verify the correct spacing to mount the fifth wheel.
  - d. For fabricated brackets (welded assembly), weld the bracket to the mounting angle with 1/4" fillet welds on both sides, and 1/2" groove welds on both ends, as illustrated (Figure 1 and 2). The welds should be continuous around the bracket and joined at the corners.
  - e. For cast brackets (single piece), weld with 5/16" fillet weld as illustrated (Figure 3). The welds MUST be continuous around the bracket ends.

Figure 3





## 3.3 Bracket with Mounting Base

- HOLLAND® brackets with mounting base are intended for installation on either corrugated or flat mounting plates.
- In addition to the information given in "Installation: General Recommendations" on Page 4, follow the recommendations in Figures 4, 5, and 6.

**IMPORTANT:** Attach the outboard angle to

tractor frame with hardware listed in *Figure 1*. Attach mounting plate to angle with the same number of bolts (in addition to attachment to fifth wheel support bracket) (*Figure 4 and 5*).

IMPORTANT:

Attach bracket and mounting plate as illustrated (*Figure 6*). Use center bolt of sufficient length to bolt through bracket, mounting plate and mounting angle.

3. Refer to "Installation: General Recommendations," on page 4, for angle thickness and material. The mounting angle should be 1" longer than the mounting plate, and be 36" minimum length. Use 3" minimum horizontal and 3-1/2" minimum vertical leg size. Longer horizontal legs may be required with narrow frame widths.

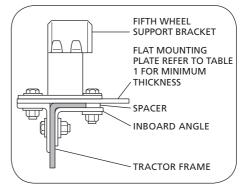


Figure 5

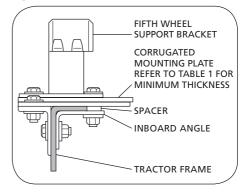
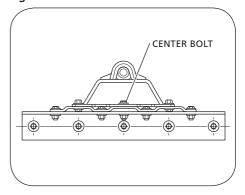


Figure 6



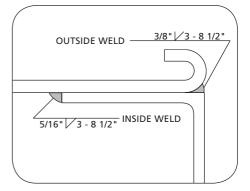


# 4. Sliding Fifth Wheel Installation

Prior to proceeding with the installation of the sliding fifth wheel assembly, carefully review the "General Safety Information" section on page 2.

#### 4.1 Inboard Angle Mounting

- Angles MUST be installed on the sliding fifth wheel base plate to facilitate mounting. Refer to "Installation: General Recommendations," on Page 4, for angle thickness and material.
- Use a mounting angle which is at least 2" longer than the slide base plate and 36" minimum length. Use 4" minimum horizontal and 3 1/2" minimum vertical leg size. The fifth wheel top plate and support bracket may be removed from the base plate for ease of handling.
- Position the angles on the slide plate for the required frame width. Be sure to keep the plate centered left to right and front to rear on the mounting angles.
- 4. Weld as illustrated (*Figure 7*). Make 5/16" fillet welds inside and 3/8" groove welds on the outside with skip welds 3" long on approximately 8 1/2" centers (weld 3", skip 5 1/2"). Weld inside opposite skip on the outside. ALSO WELD: The plate to the top of the angle at the ends of the plate.





5. Attach the slider plate and mounting angles to the tractor using recommendations in "General Recommendations"

**IMPORTANT:** The full length of the fifth

wheel mounting angle should seat flush on the truck frame when mounting to prevent flexing of mounting angle and to give uniform weight distribution along truck frame rail (Figure 8 and 9).

**IMPORTANT:** Use 5/8" diameter Grade

8 bolts minimum size, 5/8" Grade C locknuts and hardened steel washers or flanged locknuts. Torque to bolt manufacturer charts (Figure 8 and 9).

 Reassemble the fifth wheel top plate and bracket sub-assembly to the slider base plate if they were removed previously.

Figure 8

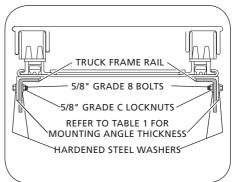
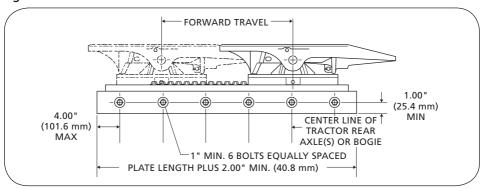


Figure 9





### 4.2 Outboard Angle Mounting

- If angles are not installed, refer to
   "Installation: General Recommendations,"
   on page 4, for thickness and material.
   Use 3" minimum horizontal and 3
   1/2" minimum vertical leg size. Longer
   horizontal legs may be required with
   narrow frame widths. The recommended
   length of each mounting plate is the same
   length as the slide base mounting plate.
- In addition to the information given in "Installation: General Recommendations," on page 3, follow the recommendations in *Figure 10 and 11*. The following sequence is suggested:

**IMPORTANT:** The full length of the fifth

wheel mounting angle should seat flush on the truck frame when mounting to prevent flexing of mounting angle and to give uniform weight distribution along truck frame

rail (Figure 10).

**IMPORTANT:** Use 5/8" diameter Grade

8 bolts minimum size, 5/8" Grade C locknuts and hardened steel washers or flanged locknuts. Torque to bolt manufacturer charts

(Figure 11).

- Securely position the mounting angles to the tractor frame and attach as illustrated (Figure 10).
   Follow the bolting recommendations as illustrated (Figure 9). Angles MUST be flush with the top of the tractor frame.
- b. Locate the slide base and center left to right and front to rear on the mounting angles. Clamp in place and drill 21/32" diameter holes using the mounting plate as a template if holes are not provided in the angle.

Figure 10

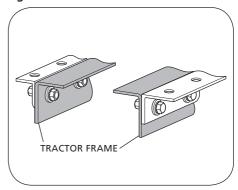
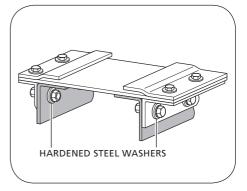


Figure 11





Align holes in the slide plate with C. outboard angle mounting holes and bolt using Grade 8 fasteners, hardened steel washers and Grade C locknuts. properly tightened (Figure 11). Use all mounting holes on the fifth wheel.

## 4.3 Adjustment of Sliding Bracket Locking Plungers

The slide locking plungers are given a preliminary adjustment during factory assembly. However, due to variations introduced during mounting (such as frame and material tolerances) a final adjustment MUST be made at the time of installation.

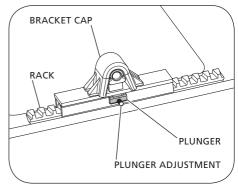
**ACAUTION** Adjust the locking plungers at installation, after one month of service, and at recommended maintenance intervals by use of the adjusting bolts provided on both sides. Failure to do so may result in accelerated wear of components, lower service life, improper load transfer, or improper load distribution.

# To adjust locking plungers:

- Loosen lock nut and turn adjusting bolt out (Figure 12).
- Disengage and engage the locking plungers. Check that the plungers are securely seated without binding.
- Turn the adjusting bolt in until it contacts the rack. Turn the bolt an additional 1/2 turn then tighten the locking nut securely.

Prior to proceeding with the installation of the sliding fifth wheel assembly, carefully review the "General Safety Information" on page 3.

Figure 12





#### 4.4 Installation of Slide Stops

- It is the responsibility of the installer to insure that slide stops are installed properly at all four corners of the slider plate.
- 2. Slide the bracket to the full rear position and engage the plungers in the rack.
- Locate rear stops under the curled edge allowing clearance to the bracket (approximately 1/8"). Clamp in place. This should position the stops approximately 1/4" to 1/2" from the edge of the rear of the plate (Figure 13 and 14).
- Slide bracket ahead out of the way and weld the stops in place as illustrated (Figure 13 and 14). The welds should be 5/16" fillet.
- Slide the bracket to the full rear position and check for clearance. Ensure the plungers on the sliding bracket seat properly into the rack with all teeth engaged.
- 6. Repaint as required.

# 4.5 Attachment of Air-Activated Slide Release (If Required)

- Mount the cab control valve in accordance with the instructions provided. It should be readily accessible to the driver, but protected to prevent accidental activation.
- Attach an air line, using appropriate fittings to the "air" or "in" port of the valve. Use an air source recommended by the tractor manufacturer. Use fittings and lines of suitable pressure rating.
- Connect an air line between the "cyl" or
  "out" port of the valve and the active side
  of the air cylinder. A bulkhead fitting may
  be placed at the front of the slide base
  plate, if desired. Use fittings and lines of
  suitable pressure rating and be sure line
  is run so as not to interfere with any other
  operation or component.
- 4. Check operation of the valve and cylinder

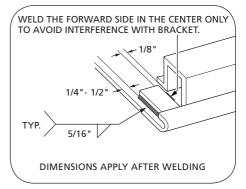
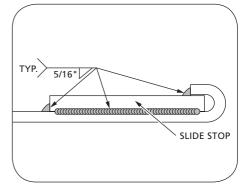


Figure 14





# 5. Inspection and Lubrication Prior to Use

- Review the installation. Be sure all nuts and bolts are in place and properly torqued/tightened. Be sure all necessary steps were properly followed and that all components removed to facilitate installation are reinstalled.
- Check the fifth wheel locking mechanism with a HOLLAND® TF-TLN-5001 (2") or TF-TLN-1500 (3 1/2") Lock Tester. Examine for proper locking as described in the "Operating Instructions" of this manual. This MUST be done to assure that the mechanism has not been damaged by shipment, handling, or storage.

# **▲**WARNING

Failure to properly install, operate, or maintain this fifth wheel could result in tractor and trailer separation causing death or serious injury to others.

- Apply grease to the bearing surface of the support bracket through the grease fittings on the side or front of the fifth wheel pockets. The top plate MUST be lifted up slightly to ensure proper application of grease.
- Apply a generous coating of grease to the top of the fifth wheel plate, where it will contact the trailer plate.

NOTE: Steps 3 and 4 are NOT required on HOLLAND® Low Lube™ and NoLube™ top plates.

Apply a generous coating of grease to the front lock and lock jaws.

# 6. Operating Instructions

# **▲**WARNING

Failure to read, understand, and follow the important information contained herein may result in a hazardous condition or cause a hazardous condition to develop.

#### **▲**WARNING

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.

# **▲**WARNING

Perform these procedures with the area clear of obstacles and other personnel.

# 7. Coupling Procedures

- 1. Check out the equipment before coupling.
  - Make sure that the fifth wheel is properly lubricated, that the locks are open, and that the ramps are tilted down in the proper position.
  - Make sure the mounting of the fifth wheel to the tractor frame is in good condition and is tight.
- Back up close to the trailer, centering the kingpin on the throat of the fifth wheel. Stop.
- Block the trailer wheels, connect the brake lines and light cord. Be sure any slack in the lines is supported so the brake lines DO NOT become tangled. Set the trailer parking brakes.



Ensure that the trailer is at the proper height for coupling. The leading edge of the trailer upper coupler plate should initially contact the fifth wheel top bearing surface 4" to 6" behind its pivot axis as the tractor backs under the trailer. Using low gear, raise or lower the trailer landing gear as required to obtain this position.

**AWARNING** 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.

- 5. Back the tractor under the trailer, keeping the trailer kingpin centered in the throat of the fifth wheel
- 6. After picking up the trailer with the fifth wheel, STOP, then continue backing until the fifth wheel locks firmly on the kingpin. Stopping helps prevent hitting the kingpin too hard.
- 7. Back up tightly against the kingpin. Then pull forward to test the completeness of the coupling as an INITIAL check.

**AWARNING** 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.

8. Visually check to see that the kingpin is in the fifth wheel locks, not overhanging the fifth wheel or caught in a grease groove. There should be no gap between the trailer bolster plate and fifth wheel (Figure 15 and 16). Ensure proper coupling by looking into the throat of the fifth wheel Check the locks as illustrated in Figure 15 for type "A" locks and Figure 16 and 17 for type "B" locks.

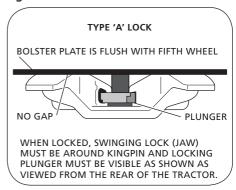


Figure 16

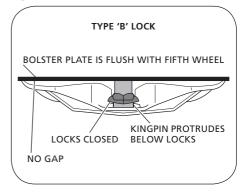
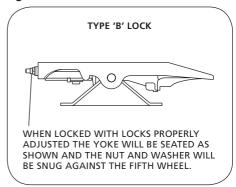


Figure 17





**AWARNING** 

If you DO NOT obtain a proper coupling, repeat this sequence. DO NOT use any fifth wheel which fails to operate properly.

- 9. If your fifth wheel is equipped with a manual secondary lock, engage it.
- Using low gear, retract the landing gear until unloaded. Then shift into high gear and continue cranking until they are fully retracted. Fold down or remove the crank handle and place it in the crank handle holder.
- 11. Check the brake lines and light cord.
- 12. Remove the wheel blocks and continue with pre-trip inspection.

# 8. Uncoupling Procedures

- Set trailer brakes with the tractor protection switch.
- 2. Back into the kingpin and set the emergency brake on the tractor.
- Bock the trailer wheels.
- Wind down the landing gears in high gear until they touch the ground. Shift to low gear and crank a few extra turns. DO NOT raise the trailer off the fifth wheel. It may be necessary to provide a base for landing gear in poor parking conditions. Fold down or remove the crank handle and place it in the crank handle holder.
- Disconnect the light cord and brake lines. Attach the dummy air coupling to keep foreign material from entering the brake lines.
- Unlock the fifth wheel, including the manual secondary lock if so equipped.
- Release the tractor emergency brake and pull out slowly from under the trailer. Let the trailer slide down the fifth wheel and pick-up ramps, being careful that the trailer landing gear touches the ground with minimal impact.

NOTE: When uncoupling the type "A" fifth wheel, it is normal for the release handle to move to the closed position. It is not necessary to pull the release handle to recouple.



# 9. Sliding Procedure for a Sliding Fifth Wheel

Stop the tractor and trailer in a straight line on level ground. Lock the trailer brakes.

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

- Release slide locking plungers as detailed below for the type of slide release:
  - Air Slide Release put cab control valve to the unlock position.
  - h. Manual Slide Release - pull release lever (Figure 18).
- 3. Check to see that both plungers have released as illustrated in *Figure 18 and* 19. If plungers DO NOT come out, lower the landing gear to relieve pressure on the plungers. This also allows the fifth wheel to slide easier.
- 4. Drive the tractor forward or backward slowly to position the fifth wheel.
- 5. After sliding the fifth wheel to the desired setting, engage the slide locking plungers as below:
  - Air Slide Release put control valve a. in lock position to retract plungers.
  - h. Manual Slide Release - trip release arm to allow plungers to retract.
- 6. Visually check to see that both plungers are retracted and fully engaged. Leaving the trailer brakes locked and moving the tractor slightly may be necessary to engage the plungers in the rack teeth. Raise the landing gear to the fully retracted position.

Figure 18

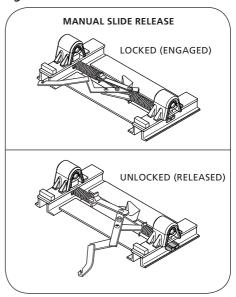
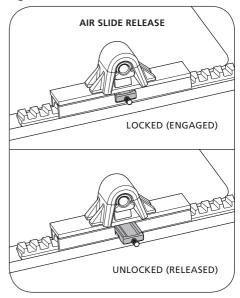


Figure 19





## **▲**WARNING

DO NOT operate the vehicle if the plungers are not fully engaged and landing gears are not fully retracted, as damage to the tractor, trailer, and landing gears may occur.

### 10. Maintenance Procedures

**AWARNING** Failure to read, understand. and follow the important information contained herein may result in a hazardous condition or cause a hazardous condition to develop.

# **▲**WARNING

All maintenance MUST be performed by qualified personnel using proper tools and safe procedures.

# **▲**WARNING

All Maintenance Must be performed while the tractor is uncoupled from the trailer.

# 11. As-Needed Lubrication

- Keep water-resistant lithium-base grease applied to the trailer contact surface of the fifth wheel plate.
- Apply grease to the bearing surface of the support bracket through the grease fittings on the side of the fifth wheel plate. The plate MUST be lifted up slightly to relieve weight on the bracket while applying grease.
- Spray diesel oil on the rack and slide path of the bracket on sliding fifth wheels.

# 12. Periodic Inspections and Adjustments

**NOTE:** All of the following MUST be performed every 30,000 miles or 3 months, whichever comes first. Perform the inspections after steam cleaning to assure a good inspection.

## 12.1 Inspection - General

- Inspect the fifth wheel mounting. Check torque and replace any missing or damaged bolts. Check for broken or distorted components and repair or replace as needed.
- 2. Inspect the fifth wheel assembly for bent, worn or broken parts. Replace with HOLLAND® parts only.

# 13. Fifth Wheel Locking **Mechanism Inspection** and Adjustment

1. Check the operation of the fifth wheel locking mechanism using a HOLLAND® TF-TLN-5001 (2" Kingpin) or TF-TLN-1500 (3 1/2 "Kingpin) Lock Tester. Inspect for proper locking as described in the "Operating Instructions" in this manual.

**AWARNING** DO NOT use any fifth wheel which DOES NOT operate properly.

Check adjustment of the fifth wheel locks and adjust as required. Use the procedure as follows for the appropriate locking mechanism. If the locks cannot be properly adjusted due to wear, the fifth wheel MUST be rebuilt or replaced. Contact you SAF-HOLLAND® Distributor to order the appropriate rebuilding kit of fifth wheel.

# **▲**WARNING

Improper adjustment can cause improper locking of the mechanism.



# 13.1 Type "A" Lock Adjustment

The lock adjustment screw is found in the crotch on the right side as illustrated (*Figure 20 and 21*).

- 1. Close the locks with the lock tester.
- Tighten the adjustment screw by turning clockwise until tight, using a 1/2" allen wrench or allen socket extension.
- Loosen the adjustment screw by turning it counter clockwise 1 1/2 turns. The locks are now properly adjusted.
- 4. Verify this adjustment by locking and unlocking several times.

# 13.2 Type "B" Lock Adjustment (Figure 22)

- 1. Close the locks and insert a 2" plug (HOLLAND® P/N TF-0237) in the locks.
- Check for a tight fit. The plug should be snug, but you should be able to rotate it by applying some force.
- If the plug fits loosely, tighten by rotating the nut on the shank counter clockwise. It may be necessary to tap the end of the yoke shank lightly to allow the nut to seat against the top plate.
- Repeat this procedure until the plug fits snug but can still be rotated. The locks are now properly adjusted.
- 5. Verify proper operation of the locking mechanism using the lock tester.

# Re-lubricate After Inspection and Adjustment.

Re-lubricate by applying a light rust-resistant oil to all moving parts.

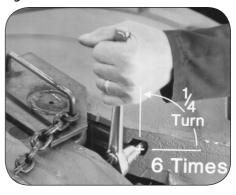


Figure 21

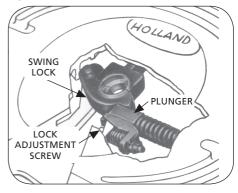
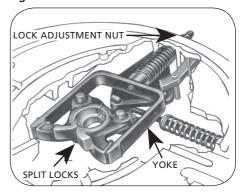


Figure 22





# 15. Sliding Mechanism Inspection and Adjustment

- 1. Adjustment of locking plungers:
  - a. Loosen locknut and turn adjusting bolt (counter clockwise) (Figure 23).
  - Disengage and engage the locking plungers. Check that the plungers are securely seated without binding. Turn adjusting bolt in (Clockwise) until it contacts the rack. Turn adjusting bolt an additional 1/2 turn, then tighten the locking nut securely.
- When locking plungers won't release to permit sliding of fifth wheel:
  - a. Check the air cylinder for proper operation and replace if necessary.
  - b. Check the plunger adjustment.
  - c. If adjusted plunger binds on the pocket (Figure 24), grind the top plunger edges 1/16", reinstall and adjust as above. Use a HOLLAND® TF-TLN-2500 Spring Compressor to remove and reinstall the plunger.
- 3. When locking plungers are too loose:
  - a. Check plunger adjustment.
  - b. Check the plunger springs for proper compression. Replace if necessary.
  - Check for plunger wear and replace if necessary. Use a HOLLAND® TF-TLN-2500 Spring Compressor to remove and reinstall the plungers. Adjust the plungers as described above.

# **▲**WARNING

Proper adjustment of the sliding bracket locking plungers MUST be performed at installation and maintained at regular intervals by use of the adjusting bolts provided on both sides. Proper adjustment is required for proper operation and for proper load transfer and distribution.

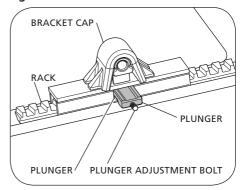
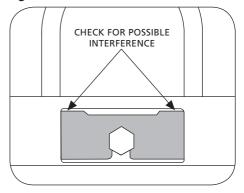


Figure 24











From fifth wheel rebuild kits to suspension bushing repair kits, SAF-HOLLAND Original Parts are the same quality components used in the original component assembly.

SAF-HOLLAND Original Parts are tested and designed to provide maximum performance and durability. Will-fits, look-alikes or, worse yet, counterfeit parts will only limit the performance potential and could possibly void SAF-HOLLAND's warranty. Always be sure to spec SAF-HOLLAND Original Parts when servicing your SAF-HOLLAND product.

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