Congratulations.
You’re Running
With The Largest
Platform Trailer
Manufacturer
In The World.
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Congratulations!
You have just purchased the finest trailer on the road today.

This manual has been prepared to assist you in the safe operation and maintenance of your FONTAINE trailer. It contains important information on the proper use of your FONTAINE trailer and the major components and optional equipment included.

WARNING: This symbol is used throughout this manual to call attention to procedures you must follow exactly. Carelessness or failure to follow instructions may lead to death or serious personal injury.

CAUTION: This symbol indicates a procedure you must follow exactly or damage to components or equipment may occur. Serious personal injury may also result from failure to follow this procedure.

NOTE: This symbol is used throughout this manual to call attention to operations, procedures and instructions that are important for proper service. It may also indicate information that can make service quicker or easier.

All operator instructions are provided for assistance in the proper operation of your trailer. Specific component operating instructions and your company’s procedures should be consulted. These may include DOT and employer training programs or instructions.

This manual includes periodic safety checks that the trailer operator should perform.

FONTAINE TRAILER COMPANY
It is important that every trailer owner and/or operator have an organized Trailer Preventative Maintenance program (TPM). The United States Department of Transportation requires by law that maintenance records be kept on every commercial highway vehicle. It is to your advantage to be able to show that regularly scheduled TPM inspection checks have been made on every piece of equipment operated.

A regular TPM program will not only assure you that you will get the most usage from your trailer, but will also assist in demonstrating that the equipment has been properly maintained.

You can get help in setting up and operating a trailer preventative maintenance program by sending for a “Maintenance Manual for Trailers and Containers”. Write to the Truck Trailer Manufacturers Association, 1020 Princess Street, Alexandria, Virginia 22314.

**IMPORTANT**

Read this manual carefully. Should you have any questions, contact a FONTAINE factory representative immediately.

1-800-821-6535

This manual should be kept with the trailer at all times and should be left with the trailer when it is sold.

www.fontainetrailer.com
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OPERATING LIMITS AND RESTRICTIONS

This FONTAINE trailer was designed for operation within legal highway speed limits on reasonable road surfaces for the type of service it was built to perform in accordance with the following:

1. This trailer was built to carry cargo within the limitations of two weight ratings on the identification plate. These ratings, GAWR and GVWR, are:
   a. The GAWR (gross axle weight rating) is the structural capability of the lowest rated member of the running gear components: suspension and spring system, hub, wheels and drums, rims, bearings, brakes, axles, or tires.
   b. The GVWR (gross vehicle weight rating) is the structural capability of the trailer when supported by the kingpin and axles with the load uniformly distributed throughout the cargo space.

2. This trailer will carry a total payload of the Gross Vehicle Weight Rating (GVWR) less the weight of the trailer. The load must be uniformly distributed.

   NOTE: The maximum load indicated on the identification plate may or may not be a legal load on the highway you plan to use.

3. The cargo should be properly loaded, blocked, and braced to prevent load shifts and to comply with the following sections of the Department of Transportation Regulations, Subpart 1 – Protection Against Shifting and Falling Cargo:
   - Section 393.100 - General rules for protection against shifting or falling cargo.
   - Section 393.102 - Securement systems. To properly secure cargo, it is important that the working load limits of tie
down assemblies be known. As well as the working load limit of the anchor points.

- **Section 393.104** - Blocking and Bracing.
- **Section 393.106** – Front-end structure. Your trailer may or may not be equipped with a “rated” bulkhead. It is your responsibility to ensure compliance with 393.106.

Beginning March 1, 1998 all trailers are required by law to have anti-lock brake systems on at least one axle per FMVSS-121 (49CFR 571.121). A “4S-2M” system means there are 4 sensors and 2 modulator valves controlling the axles while a “2S-1M” system is 2 sensors and 1 modulator valve. Refer to the manufacturer of the ABS system for specific information on the various components.
Decals are an important part of the trailer operation. Knowing where decals are located and what information they convey will help in the maintenance of the trailer, the safe operation of the trailer and in maintaining compliance with state and federal regulations.

NOTE: If any of these decals are missing contact Fontaine Trailer Company for replacement information. The following decals represent the standard decals and their locations at the time of printing / trailer manufacture.

Front Decals . . .

Front View of Trailer

( A1 ) Proper Coupling Decal

( A2 ) Continuous Power Decal
DECAL LOCATIONS

Front Decals continued . . .

Front View of Trailer

( A3 ) Final Inspection Decal
( A4 ) Annual Vehicle Inspection Decal
( A5 ) Air Pressure Decal
( A6 ) Additives Decal
( A7 ) ABS Decal

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(B1) The area labeled “B1”, is located on the main beam web, on both the road side and the curb side, in front of the Landing Gear.

This decal relates to the main beams of the trailer.

*CAUTION*

The main beams of this trailer are constructed of High-Strength High-Tensile Steel. Do not drill holes or weld on these beams.

(B1) Main Beam Decal (1-road side and 1-curb side)

FONTAINE TRAILER COMPANY
(B2) The area labeled “B2”, is located on the main beam web, on the road side only, in front of the foremost suspension. Vendor decals related to the suspension or the operation of the suspension are located in this area.

Examples of decals located in this area...

NOTE:
This is only a representation of some of the decals that may be found in this area. It is not all, or the only, nor must all the ones shown be placed here. These are only examples of decals that may be found here.
Examples of the decals that may be found in area B2 are . . .

1. Fontaine: Automatic slack adjuster decal # 50507065
2. Fontaine: Wheel Torque Specifications #50507097
3. Webb Wheel: Warning #SD002 ©
4. Webb Wheel: Danger Torque Specifications #SD-002 ©
5. Binkley: Suspension Maintenance Recommendations

( B3 ) The area labeled “B3” is located on the road side rub rail in front of the landing gear.

This decal is used on trailers with aluminum side rails, where winches are mounted onto the side rail. It shows the direction the strap is allowed to be pulled.
DECAL LOCATIONS

Side Decals continued . . .

(B4) The area labeled “B4” is located approximately mid-way of the Coil Package. The Coil Package itself is generally located mid-way between the trailer king pin and the center of the trailer suspension.

This decal is used on trailers supplied with a Coil Package. Coil Packages are extra supports located underneath the floor to help support a coil of steel.

NOTE: If any of these decals are missing contact Fontaine Trailer Company for replacement information. In some instances decals may be updated or replaced by other decals. The preceding decals represented the standard decals and their locations at the time of manufacture.
Preventative Maintenance

Frequent inspection and preventative maintenance are important in the life of any machine. Your FONTAINE trailer is no exception. Proper care and maintenance will protect the long life of your trailer and may eliminate unnecessary repair costs and downtime.

NOTE: A list of component manufacturers and information on contacting them is provided in the APPENDIX of this Operator’s Manual.

Pre-trip Inspection

1. Check Tires and Wheels
   a. When using an air gauge, do all the tires have the correct air pressure?
   b. Is the tread of the tires in good shape?
   c. Is there any visibly damage to the tires?
   d. Do the lugnuts fit properly and have the correct torque?

2. Check Electrical and Air Connections
   a. Are the gladhands tight?
   b. Do all the lights function properly?
   c. Does the power cable fit tight?
   d. Do any lights have broken or cracked lenses which could lead to shorts?

3. Check Suspension and Components
   a. Inspect the suspension area for cracks or bends.
   b. If equipped with air suspension, do all air bladders inflate?
   c. If equipped with spring suspension, are there any broken or missing springs?
   d. Do tires show any sign of misalignment or unusual / uneven wear?
   e. Does the trailer ride level and at the correct ride height?

FONTAINE TRAILER COMPANY
4. Check Brakes and Components
   a. Do brakes engage and disengage properly?
   b. Are brakes noisy when applied?
   c. Does the anti-lock braking system (ABS) warning lamp operate properly?

**Periodic Maintenance**

1. Clean and protect light connections.
   Fontaine trailers are equipped with sealed light systems, however they still need to be checked and cleaned. Apply lubricant to all cleaned connections to help prevent corrosion.

2. Grease fittings
   Make sure all grease fittings and lube points are adequately greased.

3. Check wheel bearing oil.
   Visually inspect seal and hub cap for leakages and hub oil level (if oil bath type). If no oil is seen through the plastic window on the hub, take out the rubber plug and feel for oil.

4. Check slack adjuster.
   The slack adjuster provides equal pressure to all brakes. Your Fontaine trailer has automatic slack adjusters that must be kept within specified tolerances to work properly.

**NOTE:** Slack adjuster check and replacement procedures can be found in the BASIC MAINTENANCE section of this Operator’s Manual.
5. Check ride height control valve.
   The ride height control valve controls the air springs, increasing or
decreasing air pressure to compensate for loads. Inspect the hoses and
fittings for leaks and measure for proper ride height. Make any
needed adjustments.

NOTE: Information on checking ride height and height control
valve adjustment procedures can be found in the SUSPENSION SYSTEM section of this Operator’s Manual.

6. Adjust wheel bearing torque.

NOTE: For instructions on wheel bearing adjustment refer to the
axle manufacturer instructions such as Meritor Maintenance
Manual 14. A list of component manufacturers and their
contact information is provided in the Appendix Section of
this Operator’s Manual.

NOTE: For trailers equipped with the Hendrickson Long-life Sys-
tem Wheel End, DO NOT REMOVE the hubcap without
first contacting Hendrickson technical service at 800-455-
0043 in the U.S. or 800-668-5360 in Canada.
LANDING GEAR

TRAVEL DIRECTIONS:
Rotate crank clockwise to extend landing gear.
Rotate crank counterclockwise to retract landing gear.

NOTE: Landing Gear Bolts . . .
Use a minimum 5/8” Grade-5 bolt on all Landing Gear connections except on cross pipe.
On cross pipe use a minimum 5/16” Grade-5 bolt

NOTE: Torque Chart . . .
5/16” Grade - 5 . . .  17 Ft Lbs Dry . . .  13 Ft Lbs Oiled
5/8” Grade - 5 . . .  150 Ft lbs Dry . . .  110 Ft Lbs Oiled
**GEAR LOCATIONS:**
For low speed, extension or retraction, push crank in.
For high speed, extension or retraction, pull crank out.

**CAUTION:**
1. Do not over extend landing gear.
2. Never drop trailer on landing gear. Always extend landing gear until the landing gear foot contacts the ground, then lift the trailer approximately 1 inch before removing the tractor from the trailer.
3. Always ensure that the landing gear foot rests on a hard surface capable of supporting the trailer and load (hard ground, concrete etc.). If necessary, place foot pads on a support plank to prevent the landing gear from sinking into the surface.
4. Always retract landing gear fully before moving the trailer.
5. Always store the crank in the crank holder after extending or retracting the landing gear.
6. Replace all damaged or worn parts.
7. Failure to replace worn or damaged riser nut and retracting screw assembly could cause a failure.
SUSPENSION SYSTEM

AXLE ALIGNMENT

Use the following procedures to check the alignment of trailer axles:

SINGLE AXLE TRAILERS

1. Raise or lower the landing gear legs to put the trailer in a level position.

2. Remove the outer wheels or the outer tires and rims, depending on the wheel equipment.

3. Remove any parts from under the chassis that can interrupt measuring the distance between the kingpin and the ends of the axle.

4. Attach a steel measuring tape to a hook and the hook over the kingpin. Measure the distance "A" and "B" from the kingpin to the ends of the axle. The difference between the "A" and "B" measurements must not exceed 1/8" (3.2 mm).

TANDEM AXLE TRAILERS

Measuring the alignment of a tandem axle trailer is not very different from the measuring procedure for single axle trailers. The trailer must be correctly positioned before making the necessary measurements.

1. Move the trailer forward and backward over a level floor, two or three times with the last movement forward, to permit the suspension to become correctly aligned to center the front and rear wheel tracks.

2. Raise or lower the landing gear legs to put the trailer in a level position.
3. Remove the outer wheels or outer tires and rims.

4. Remove any parts from under the chassis that can interrupt measuring the distances between the king pin and the ends of the forward axle.

5. Attach a steel measuring tape to a hook and the hook over the kingpin. Measure the distances "A" and "B" from the king pin to the ends of the forward axle. The difference between "A" and "B" measurement must not exceed 1/8" (3.2 mm). See Page 31.

6. Measure the distance "C" and "D" between the front and rear axle centers. The differences between "C" and "D" measurements must not exceed 1/16" (1.6 mm).

**HOW TO CORRECT THE ALIGNMENT OF AXLES**

**NOTE:** The limits of 1/16" (1.6 mm) and 1/8" (3.2 mm) are the maximum limits for correct alignment of the axles. These small limits make accurate measurements important.

To correct alignment measurements that are not within the limits, inspect the suspension for worn, broken or loose parts. Adjustment to the suspension, and the replacement of worn or broken parts, must be made to put the axles into alignment.

**CAUTION:** Carefully follow the service instructions made available by the suspension manufacturer when you work on this component. Information on how to contact component manufacturers can be found in the Appendix Section of this Operator’s Manual.
CHECKING TRAILER RIDE HEIGHT

PREPARATION

1. Unload the trailer and park it on flat, level ground that is free of stones and debris.
2. Chock the wheels (Figure 1).
3. Check air pressure in tires. If necessary, inflate tire(s) to proper pressure.
4. Maintain pressure in the air system.

DESIGNED KINGPIN HEIGHT MEASUREMENT

1. Measure the trailer's kingpin height. The trailer may or may not be connected to a tractor during the measurement.
2. If necessary, adjust the landing gear to place the trailer at the designed kingpin height. The standard design kingpin height for a Fontaine Trailer is 49 inches. Contact Fontaine Trailer Company if you are unsure of your trailer's designed kingpin height.
3. Verify the measurement of the kingpin height on the other side of the trailer.

NOTE: When the trailer and tractor are connected, the tractor’s 5th wheel height must be equal to the designed kingpin height of the trailer. If the 5th wheel height does not equal the designed kingpin height, disconnect the tractor from the trailer.

NOTE: When the trailer is not connected to a tractor, measure the distance from the ground to the kingpin mounting plate. Air pressure to the suspension must still be maintained.
DESIGNED RIDE HEIGHT MEASUREMENT

1. Locate the suspension ID tag on the front of the HT hanger, the front crossmember of the HS slider bogie or on the inside of the suspension beam for the Intraax (Figure 2 for HT series and Figure 3 for Intraax).

2. Check the indicated (underlined) number in the following examples to find the designed ride height.

   HT product: HT230-14-001
   HS slider:   HS190T-14-4801A
   Intraax:    AA230TBA..I 14A1A01...

3. Measure the ride height (Figure 4). The designed ride height is the distance from the center of the axle to the mounting surface of the suspension. Measure from the bottom of the flange to the top of the axle and add half of the axle’s diameter to the measurement shown on the tape measure. If necessary, adjust the height control valve.

   NOTE: To determine the ride height, add half of the axle’s diameter to the measurement shown on the tape measure. For example, a 5” diameter axle would have 2-1/2” added to the measurement.

HEIGHT CONTROL VALVE ADJUSTMENT

1. Realign the position of the lever arm for minor adjustments of the height control valve (Figure 5).

2. Remove the plastic locating pin.

3. Push the control arm up to raise or down to lower the ride height until the distance
between the vehicle frame and the center of the axle matches the suspension ride height.

4. After adjusting the ride height, reinsert the plastic locating pin into the adjusting block and bracket on the height control valve.

If additional or major adjustments are necessary, adjust or replace the linkage.

**NOTE:** There must be a minimum of 80 psi air pressure in the air reservoir to open the brake protection valve and allow air to flow through the height control valve.

**NOTE:** A 5 to 10 second delay may occur before the height control valve will allow air to flow to or from the air springs.

**ROUTINE MAINTENANCE**

**AIR BRAKE MAINTENANCE**

Successful maintenance of the air brake system depends upon systematic inspection and repair at regular intervals. The length of these intervals depends upon the trailer operation and mileage.

Adjustments, inspections and minor repairs that can be performed by the operator are listed below. These procedures must include immediate replacement of all worn or damaged parts.

**RESERVOIR TANK**

The first requirement in an air brake system is clean air at proper pressure. The operator must open the drain cock on the underside of the reservoirs until all moisture has escaped.

Drainage should be done periodically to remove water and sludge from the system. This is especially important in cold weather to forestall freezing and obstruction of the lines and valves. Each tank must be drained completely to insure removal of condensation. After removing moisture, close the drain cock and inspect reservoirs for looseness or damage. Make sure all connections are tight and brake lines are properly supported.

FONTAINE TRAILER COMPANY
GLADHANDS

Inspect gladhands to insure proper operation without obstructions. With the trailer connected to the truck tractor and air in the system, coat the gladhands and mounting with soapsuds to make sure there is no leakage. Be certain gladhands seals are in good condition and not saturated with grease, oil or other foreign material. We recommended annual replacement of gladhands seals.

BRAKE TUBING, LINES, FITTINGS & HOSES

Visually inspect brake lines and hoses for loose connections, chafing, cracks, breaks, cuts, bruises, broken-out sections and deterioration. Replace immediately upon first sign of the above. Exercise extreme caution when working or welding around nylon tubing, if so equipped. It is recommended that tubing in areas where welding operations are performed be removed prior to welding operations and reinstalled after welding is completed. If tubing removal is not practical, the tubing must be shielded from welding sparks and/or heat damage.

SERVICE AND SPRING BRAKE CHAMBERS

Visually check air chamber clamp bands and mounting nuts for tightness. Torque chamber mounting nuts 75 to 100 ft. lb. Check chambers for damage or dents and sign of leaks.

CAUTION: Disassembly and repair of any spring brake is a dangerous and complex task that should not be undertaken by an inexperienced mechanic. Special tools and information are required if serious personal injury is to be avoided. Refer these repairs to your FONTAINE dealer.

AIR VALVES

Inspect all air valves for leaks. If excessive leakage is found, the valve must be repaired or replaced. We recommend that air valves be replaced when necessary with new or rebuilt valves. Replacement maintenance and seal kits are available from Your FONTAINE Dealer. Call 1-800-821-6535 for the FONTAINE Service Center and dealer nearest you. Inspect brake drums. Any accumulation of mud, dirt or rust on the drums should be removed. Any broken or cracked drums should be removed from service.

BRAKE LINING

Inspect and check the brake lining thickness. Brake lining must be replaced if excessively worn or if coated with oil, grease, or foreign material.

Call 1-800-821-6535
For Fontaine Service Center And Dealer Nearest You
Website: www.fontainetrailer.com

FONTAINE TRAILER COMPANY
ANTI-LOCK BRAKING SYSTEM

Meritor WABCO Easy-Stop™ Anti-lock Braking System (ABS) is standard equipment on all Fontaine trailers. The system monitors wheel speed at all times and improves vehicle stability and control by reducing wheel lock during braking.

CAUTION: ABS information in this Operator’s Manual was provided by Meritor Wabco and is specific to its products. If your trailer is equipped with another manufacturer’s Anti-Lock braking system, you must contact Fontaine or the manufacturer of the braking system, for the instructions specific to that braking system.

Electronic Control Unit (ECU) Malfunction

In the event of an ECU malfunction, the ABS, in the affected wheels, is disabled. The affected wheels should continue to operate in a non ABS braking mode, if the braking valve itself has not failed. The ABS should continue to operate on the wheels unaffected by the ECU malfunction.

Two ABS indicator lamps (one on the dash of the tractor and one on the side of the trailer) let the driver know the status of the system.

ABS Indicator Lamp

The ABS Indicator Lamp (amber) is located on the road side (driver side), near the rear marker lamp (red). The lamp is identified with the letters ABS. This lamp indicates the status of the trailer ABS.
ANTI-LOCK BRAKING SYSTEM

If the ABS lamp comes ON and stays ON when you apply the brakes to a moving vehicle, there is an ABS malfunction. It is normal for the lamp to come On and go OFF to perform a bulb check, but it should not stay ON when the vehicle is moving above 4 mph. As with any safety system, it is important not to ignore this indicator. If the indicator lamp indicates a malfunction, the vehicle can be operated to complete the trip. However, it is important to have the vehicle serviced as soon as possible using the appropriate maintenance manual to ensure proper braking performance and to ensure that the benefits of ABS remain available to the driver.

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**Blink Codes**: Blink codes are the number of times the ABS lamp blinks on and off. The number of blinks refers to the problem area. See Meritor Wabco Maintenance And Troubleshooting Manual for complete details.
Knowing how to couple and uncouple correctly is basic to safe operation of combination vehicles. General coupling and uncoupling steps are listed below. Different tractors require different techniques, so learn the details for coupling and uncoupling the tractors you operate.

**WARNING:** Incorrect coupling and uncoupling of your trailer can result in accidents causing serious injury or death. Not all tractors are identical. Be aware of the differences in the vehicles you operate.

**COUPLING TRACTOR-SEMITRAILERS**

1. **Inspect the Fifth Wheel**
   - Check for damaged or missing parts.
   - Check to see that mounting to tractor is secure – no cracks in frame, etc.
   - Be sure that the fifth wheel plate is properly greased; failure to do so could cause severe friction leading to loss of control.
   - Check if fifth wheel is in proper position for coupling (Wheel tilted down towards rear of tractor, jaws open, and safety unlocking handle in the automatic lock position).
   - If you have a sliding fifth wheel, make sure it is locked.
   - Make sure the trailer kingpin is not bent, broken, or damaged in any way.

2. **Inspect Area and Chock Wheels**
   - Make sure area around vehicle is clear.
   - Be sure trailer spring brakes are on.
   - Check that all trailer cargo is secured against movement.

3. **Position Tractor**
   - Put the tractor directly in front of the trailer.
   - Check position, using outside mirrors, look down both sides of trailer.

**CAUTION:** Never back a tractor under a trailer at an angle. Pushing the trailer sideways can damage the landing gear or other structures of the trailer.
4. Back Slowly
   • Back until fifth wheel touches the trailer.
   • Do not impact the trailer.

5. Secure Tractor
   • Apply the parking brake.
   • Shift the transmission into neutral.

6. Check Trailer Height
   • The trailer should be low enough so that it is raised slightly by the tractor when the tractor is backed under it. Raise or lower the trailer as needed. Make sure the trailer is proper height and the kingpin and fifth wheel are aligned.

7. Connect air Lines to Trailer
   • Check glad hand seals and connect tractor supply (emergency) airline to trailer supply (emergency) glad hand.
   • Check glad hand seals and tractor control (service) airline to trailer control (service) glad hand.
   • Make sure airlines are supported where they cannot be hung-up or damaged while tractor is backing under trailer.

8. Supply Air to Trailer
   • From the tractor cab, push in “air supply” knob or move tractor protection valve control from the “emergency” to the “normal” position to supply air to the trailer brake system.
   • Wait until the air pressure is normal.
   • Check brake system for crossed airlines.
   • Shut engine off to hear brakes.
   • Apply and release trailer brakes, listen for the sound of trailer brakes being applied and released.

WARNING: Do not walk or stand between tractor and trailer. Tractor movement can cause serious injury or death.

CAUTION: If trailer is too high, it may not couple correctly to the tractor. If it is too low, the kingpin may be struck and bent or the front of the trailer may be damaged.
• Check the air brake system pressure gauge for signs of major air loss.
• When sure the trailer brakes are working properly, start the engine.
• Check to see that air pressure is up to normal.

9. **Lock trailer Brakes**
   • Pull out the “air supply” knob, or move the tractor protection valve from “normal” to “emergency”.

10. **Back Tractor under the Trailer**
    • Shift into lowest reverse gear.
    • Back tractor slowly under trailer to avoid severely impacting the kingpin.
    • Stop when the kingpin is locked into the fifth wheel.

11. **Check that Connection is Secure**
    • Raise trailer landing gear slightly off ground.
    • Gently pull the tractor forward while the trailer brakes are still locked.
    • Fifth wheel should be locked into kingpin at this time.

12. **Secure Vehicle**
    • Shift the transmission into neutral.
    • Apply parking brakes.
    • Shut off engine and be sure someone else will not move the truck while you are under it.

13. **Inspect Coupling**
    • Use a flashlight if necessary.
    • Make sure there is no space between upper and lower fifth wheel. – If there is space, something is wrong! The kingpin may be on top of closed fifth wheel jaws; trailer would come loose very easily.
    • Look into the back of the fifth wheel with caution. Make sure the fifth wheel jaws have closed around the shank of the kingpin.
    • Check that the locking lever is in the “lock” position.

**WARNING:** Make sure the parking brake is engaged and the tractor cannot be moved before placing any part of your body between the tractor and trailer. Tractor movement can cause serious injury or death.
14. Connect Electrical Cord and Check Airlines
   • Plug the electrical cord into the trailer and fasten the safety catch.
   • Check both airlines and electrical line for damage.
   • Make sure air and electrical lines will not be crushed or damaged by any of the vehicles moving parts.
   • Visually inspect to see that the ABS light functions correctly when the power cord is connected. If the light stays on or comes on during use, have the ABS unit repaired at once.

15. Raise Front Trailer Supports (Landing Gear)
   • Use low gear range (if equipped) to begin raising the landing gear.
   • Once free of weight, switch to high gear range.
   • Raise landing gear all the way up.
   • After raising the landing gear fully, secure the crank handle.
   • When full weight of trailer is resting on tractor, check for clearance between rear of tractor frame and landing gear.
   • Check that there is enough clearance between the top of the tractor tires and the nose of the trailer.

   CAUTION: Never drive with the landing gear partially down; it could hang on railroad tracks or other objects.

UNCOUPLING TRACTOR-SEMITRAILERS

1. Position Rig
   • Make sure the surface of the parking area can support the weight of trailer.
   • Have tractor lined up with trailer. (Pulling out at an angle can damage landing gear.)

2. Ease Pressure on Locking Jaws
   • Shut off trailer air supply to lock trailer brakes. Ease pressure on fifth wheel by backing up gently (this will help to release the fifth wheel locking lever).
   • Put parking brakes on while tractor is pushing against the kingpin. This will hold the rig with pressure off the locking jaws.
3. Lower the Landing Gear
   • If trailer is empty – lower the landing gear until it makes firm contact with the ground, turn crank in low gear a few extra turns; this will lift some of the weight off the tractor. (Do not lift trailer off the fifth wheel.) This will make it easier to unlatch the fifth wheel and easier to re-couple.

4. Disconnect Airlines and Electrical Cable
   • Disconnect airlines from trailer. Connect airline gladhands to dummy couplers at back of cab or couple them together.
   • Hang electrical cable with plug down to prevent moisture from entering it.
   • Make sure lines are supported so they won’t be damaged while driving the tractor.

5. Unlock Fifth Wheel
   • Raise release handle lock.
   • Pull the release handle to the “open” position.
   • Stay clear of the rear of the rear tractor wheels to avoid serious injury in the event vehicle movement.

6. Pull Tractor Partially Clear of Trailer
   • Pull tractor forward until fifth wheel comes out from under trailer.
   • Stop with tractor frame under trailer (Prevents trailer from falling to ground if landing gear should collapse or sink.)

7. Secure Tractor
   • Apply parking brake.
   • Place transmission in neutral.

8. Inspect Trailer Supports
   • Make sure ground is supporting trailer.
   • Make sure landing gear is not damaged.

9. Pull Tractor Clear of Trailer
   • Release parking brakes.
   • Check the area, then drive the tractor clear.
ACCESSING DECK

Use caution when accessing the trailer deck. Enter and leave the trailer deck only from a dock as high as the trailer floor, or by means of a ladder or stairs. Do not attempt to use items such as lights or light brackets as “footholds” when accessing the deck. The lights or brackets may break causing you to fall resulting in an injury to yourself or others.

CAUTION: Walk carefully on trailer deck. Use caution to avoid slippery conditions which may result from water, ice, dirt or cargo being carried.

CAUTION: Never attempt to stand or walk on the trailer deck when the trailer is moving. This could cause you to lose your balance and fall from the trailer resulting in serious injury or death.

CAUTION: Use caution when entering or leaving deck under wet or icy conditions. Side rails, front skirts, and tail skirts can become slippery resulting in a fall. Falls from the trailer deck can result in serious injury or death.
ANCHOR POINTS
WORKING LOAD LIMITS

NOTE: All working load limits (WLL) pertain to standard test results performed by Fontaine Trailer Company or a qualified testing facility.

NOTE: Anchor Points describe points that are considered part of the trailer, NOT the securing devices, such as chains, cables or straps. Securing devices must be of a sufficient design not to cut into or deform the anchor point, and be rated equal to or greater than the WLL of the anchor point to obtain maximum ratings. Customer specified anchor points are designed for specific units and will be rated on a per customer basis.

CAUTION: All anchor points must have a visual inspection prior to use. If an anchor point is visibly damaged (deformed, bent, torn, ripped, cracked or any other structural defect is found) DO NOT USE it as an anchor point.

WARNING: Side Rails (such as 6” structural channel or 6” extruded aluminum side rails) are not considered anchor points and should not be used as such.

WARNING: DO NOT exceed the Working Load Limits of any anchor point.
Figures 1 thru 9 are representative of the methods used for testing standard anchor points.

Figures 10 thru 14 are representative of some of the special anchor points installed by Fontaine.

**Figure -1**  
"1 - PIPE SPOOL WRAP "  
Steel WLL = 5400 lbs (2449 kgs)  
Alum. WLL = 5400 lbs (2449 kgs)

**Figure -2**  
"1 - POCKET / 1– PIPE SPOOLED"  
Steel WLL = 5400 lbs (2449 kgs)  
Alum. WLL = 5400 lbs (2449 kgs)

**Figure – 5**  
"1 - POCKET HOOK "  
Steel WLL = 5400 lbs (2449 kgs)  
Alum. WLL = 4000 lbs (1814 kgs)

**Figure –6**  
"1 - POCKET WRAP "  
Steel WLL = 5400 lbs (2449 kgs)  
Alum. WLL = 5400 lbs (2449 kgs)
ANCHOR POINTS
WORKING LOAD LIMITS

Figure – 5a
“DOT WRAP ” ( Strap Only )
( Single Wrap )
Steel WLL = 5000 lbs ( 2268 kgs)
Alum. WLL = 5000 lbs ( 2268 kgs)

Figure – 5b
“DOT WRAP ” ( Strap Only )
( Double Wrap )
Steel WLL = 5000 lbs ( 2268 kgs)
Alum. WLL = 5000 lbs ( 2268 kgs)

Figure – 6
“RECESSED CHAIN TIE-DOWNS”
WLL = 5400 lbs ( 2449 kgs)

NOTE: Chain tie downs have the same Working Load Limit whether mounted in the side rail or recessed into the floor.

WARNING: When hooking to a Chain Tie-Down ALWAYS hook between two chain links. NEVER hook between the chain Tie-Down Cap and a chain link.
ANCHOR POINTS
WORKING LOAD LIMITS

Figure – 7
“SLIDING WINCH” (In Winch Track)
WLL = 5400 lbs (2449 kgs)

Figure – 8
“SLIDING WINCH” (On Aluminum Side Rail)
WLL = 5400 lbs (2449 kgs)

Figure – 9
“RECESSED WINCH” (Between Floor Sills)
WLL = 5400 lbs (2449 kgs)
WARNING: Container locks are anchor points for containers only. Container locks MUST be properly extended and locked into Container Corner Castings before transporting a container. Use a minimum of 4-Locks per Container.

NOTE: This is a representation of a standard container lock. Type, style and design may change with design requirements, or customer specifications.

WARNING: When placing a container on a trailer NEVER place any part of your body between the container and the trailer.
### LOCKING INSTRUCTIONS for Standard Container Locks

( Lock in Retracted Position Figure-10 )

1. Using your hand push up on the bottom of the lock assembly until it clears the upper part of the lock assembly.
2. Turn the entire inner locking assembly 90-degrees and set assembly into shallow aligning slot on top of lock. ( Figure 12 )
3. Set the container on trailer using the extended assembly as a guide.

**Warning:** When placing a container on a trailer **NEVER** place any part of your body between the container and the trailer.

4. Turn the upper part of the locking assembly 90 degrees and lock into place. ( Figure-12 )

---

### “LASHING RINGS”

<table>
<thead>
<tr>
<th>Figure – 13</th>
<th>“LASHING RING”</th>
<th>Recessed In Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WLL = 5400 lbs (2449 kgs)</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Figure – 14</th>
<th>“LASHING RING”</th>
<th>Side Rail Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WLL = 5400 lbs (2449 kgs)</td>
<td></td>
</tr>
</tbody>
</table>

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**CAUTION:** Lashing Ring Working Load Limits are for standard mountings only. Working Load Limits on lashing rings may vary with design. DO NOT exceed standard WLL without documentation of design change and rating.
BULKHEAD SECUREMENT

A Bulkhead (Header Board) is a vertical member across the front of the trailer. The Bulkhead must be secured to the trailer properly to obtain the full load rating shown on the Bulkhead nameplate. Ratings are based on FMCSA Regulations Section 393.106—Front End Structures.

Securement Requirements

(2) Fontaine Tie-Down Assemblies, or
(2) ½” x 1 ½” grade 5 hex bolts, (4) ½” flat washers, and
(2) ½” hex nuts.

The Tie-Down Assemblies (or the bolts, washers and nuts) are installed one in the roadside stake pocket and the other in the curbside stake pocket. (See Figure 1)

*Follow bulkhead manufacturers instructions for non-Fontaine bulkheads

CAUTION: The Bulkhead MUST BE SECURED before trailer is transported. Always check Bulkhead bolts during the pre-trip inspection for lose or broken bolts. Tighten any loose bolt and replace any broken, bent or missing bolts.

Tie-Down / Bolt Torque Specifications:
1/2” GR-5 . . . 75 Ft. Lb. Dry . . . 55 Ft. Lb. Oiled
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SLIDING SUSPENSIONS

WARNING: Failure to lock a sliding suspension can cause loss of vehicle control, property damage, serious bodily injury and death. Always check to ensure that lock pins are fully engaged in the trailer frame or slider rail before use.

When a Trailer is equipped with a sliding suspension . . .

Follow these procedures.

1. Make sure the suspension is securely locked into place.
   The suspension is locked into place when the main body of each lock pin extends through the holes in the rails.

2. Inspect the suspension carefully to ensure it is properly positioned and the main body of each lock pin does extend through the holes in the rails.

3. Check area around and under trailer to be clear of obstructions or personnel.

4. Apply the trailer brakes and gently rock the trailer backwards and forwards to make sure the sliding suspension is secure.

NOTE: Reference the suspension manufacturer’s recommendations for more detailed operating instructions, cautions and warnings.

FONTAINE TRAILER COMPANY
SLIDING SUSPENSIONS
POSITIONING

1. Set both the tractor and trailer brakes.
2. Remove locator bar and place locator bar into desired hole location.
3. To release the lock pins:
   A. For suspensions with manual locking pins (shown above), pull the operating handle all the way out and lock in place.
   B. For suspensions with air assisted lock pins, activate release by flipping the switch on the slide box.
4. Release the tractor brakes and carefully drive forward or backward until the sliding suspension is at the desired location.
5. Release the operating handle and visually check all lock pins for locking. The main body of each lock pin must extend through the holes in the rails.
6. Lock the locator bar in both body rails immediately behind the slider.
7. With the trailer brakes applied, gently rock trailer backward and forward to ensure sliding suspension is properly locked and follow proper operating procedures before pulling trailer. The lock pin must be checked at each stop to ensure each is locked.

Note: Locator bars are not used on Hendrickson AAZNT air ride sliders.
WARNING: If spare tire is not properly secured, in the carrier, it can dislodge during transit, become a projectile, and cause death or serious injury to people in its path.
* Limit one tire per carrier.
* Tire must have a diameter between 38” and 46”.
* Tightly wrap the safety chain around the tire with the end clasp fastened back into the chain.
* Do not use the carrier if the chain or carrier is broken, damaged or missing parts.

FONTAINE TRAILER COMPANY
TIRE CARRIER
BOLT-ON TYPE

CAUTION: Always check the tire carrier bolts during the pre-trip inspection for lose or broken bolts. Tighten any lose bolt and replace any broken, bent or missing bolts.

Bolt Torque Specifications:
- 3/8” GR-5 ... 30 Ft. Lb. Dry ... 23 Ft. Lb. Oiled
- 1/2” GR-5 ... 75 Ft. Lb. Dry ... 55 Ft. Lb. Oiled

WARNING: Proper torque must be maintained on each bolt that connects the tire carrier to the trailer. If the tire carrier becomes lose from the trailer, it may fall off, become a projectile and cause death or serious injury to people in its path.
TIRE STORAGE AREA
Between Main Beams

WARNING: If spare tire is not properly secured, in Storage Area, it can dislodge during transit, become a projectile, and cause death or serious injury to people in its path.

- Limit one tire per Storage Area.
- Tire must have a diameter between 30" and 38".
- Tightly wrap the safety chain around the tire with the end clasp fastened back into the chain.
- Do not use the Storage Area if the Chain is missing, damaged, or broken.
- Securement Requirement . . . Use minimum of 4/0 Double Loop Chain, Strap or Cable with a minimum working load limit of 70 lbs.
TELESCOPIC TRAILER OPERATION

Fontaine trailers equipped with telescoping beams allow the operator to change the unloaded length of the trailer. Fontaine uses two systems for maintaining air and electrical connections over the length of telescopic trailers.

**Continuous Electrical and Air Line System:**
Does not require disconnection of the air or electrical lines when changing the length of the trailer.

**Non-Continuous Electrical and Air Line System (Quick Disconnects):**
Requires the air and electrical lines to be disconnected before adjusting the trailer length and reconnected at the desired stop location.

Before attempting to adjust the length of your trailer, determine which system you have, then follow the directions for that system.

**WARNING:** Never attempt to change the length of a loaded trailer. The decks of the front and rear sections will separate. This may cause the load to shift causing damage to the cargo and trailer. Shifting or falling cargo may cause serious injury or death to the operator or bystanders.

**NOTE:** All loads hauled with the trailer in the extended position must be self-supporting loads. These loads must be supported at the upper coupler area and over the suspension area of the trailer.

**Continuous Electrical and Air Line System**

To change the unloaded trailer length:

1. Apply trailer brakes.
2. Remove safety pins from the locking pins (Both Sides).
3. Activate the lock pin flip switch.
4. Move tractor to the desired position.
5. Deactivate lock pin flip switch.
6. Rock tractor back and forth as required to align locking pins with holes in inner beam.
7. Visually check to ensure that the locking pins are fully inserted into the beam holes (Both Sides).
8. Reinstall safety pins (Both Sides).

**WARNING:** Make sure all persons are clear of trailer before attempting to move tractor. DO NOT move the tractor if anyone is underneath the trailer or between the front and rear sections. Failure to heed this warning could result in serious injury or death.

**CAUTION:** Failure to fully insert locking pins could result in damage to equipment and possible injury to the operator.

Non-Continuous Electrical and Air Line System (Quick Disconnects)

To change the unloaded trailer length:

1. Apply trailer brakes.
2. Disconnect air lines (Quick Disconnects) and electrical line (7-way) located near the main beam locking pins.
3. Remove safety pins from the locking pins (Both Sides).
4. Activate locking pin flip switch.
5. Move tractor to the desired position.
6. Deactivate locking pin flip switch.
7. Rock tractor back and forth as required to align locking pins with holes in inner beam.
8. Visually check to ensure that locking pins are fully inserted into the beam holes (Both Sides).
9. Reinstall safety pins (Both Sides).
10. Reconnect air lines (Quick Disconnects) and electrical line (7-way) at the new locking pin location.

**WARNING:** Make sure all persons are clear of trailer before attempting to move tractor. DO NOT move the tractor if anyone is underneath the trailer or between the front and rear sections. Failure to heed this warning could result in serious injury or death.
INSTRUCTION DECAL
Fontaine trailers equipped with telescoping beams must have one of the following instruction decals attached to the main beam of the trailer near the locking pin assembly. If your instruction decal is missing or becomes damaged, contact Fontaine Trailer Company customer service to obtain a new decal.

CAUTION: Failure to fully insert locking pins could result in damage to equipment and possible injury to the operator.

Continuous Air Line Decal  Non-Continuous Air Line Decal
REAR UNLOADERS

Fontaine trailers equipped with the optional rear unloader mounting package have the rear of the trailer designed to accept the Moffett M5000 or the Princeton Unloader forklifts. Always check to insure the mounting package on the trailer is appropriate for the forklift you plan to use.

Read and understand the OPERATOR’S MANUAL for the forklift you plan to use before attempting to transport it on your Fontaine Trailer. Always maintain the clearances specified by the forklift manufacturer.

**CAUTION:** Driving over abrupt drop-offs and steep inclines may damage the lift trucks rear wheel. Follow all instructions in the lift truck operator’s manual to avoid serious injury.

**WARNING:** DON’T RISK SERIOUS INJURY OR DEATH FOLLOW THESE INSTRUCTIONS
- Read and understand the forklift OPERATOR’S MANUAL before attempting to transport it.
- Read, understand and follow all SAFETY SIGNS on the forklift.
- Always park trailer in a position to permit safe loading and unloading of the forklift.
- Safety chains and binders must be in place and secure when transporting the forklift.
- Do not put any part of your body between the forklift and the trailer.
- Operate the forklift carefully when loading and unloading. Keep people away.
- Do not allow people or parts of the body under the forklift.
- Lower forks immediately after unloading forklift from the trailer.

**WARNING:** Before attempting to transport a forklift:
1. Hitch pins must be installed in hanger plates (if applicable).
2. Safety chains must be connected.
3. Electrical connector (7 pin) must be connected.

FONTAINE TRAILER COMPANY
REAR UNLOADERS

Trailers with the rear unloader kit installed are required to have a Rear Impact Guard which complies with N.H.T.S.A. Articles 571.223 and 571.224. Your Fontaine Trailer is equipped with a hinged bumper tube that has been tested to ensure compliance with the rear underguard regulations. When hauling a forklift, the tube will swing out of the way to allow the lift to be installed.

NOTE: In order to maintain compliance with federal regulations for Rear Impact Guards, the bumper tube must be positioned as shown in Figure B with the lock pin in place when there is NO FORKLIFT INSTALLED on the trailer.

Figure A: Bumper tube positioned to allow forklift to be loaded.

Figure B: Bumper tube positioned for trailer operation with no forklift.
BASIC TRAILER MAINTENANCE

NOTE: The information provided in this section is intended to provide suggested basic maintenance procedures. Refer to the vendor component suppliers in Appendix Section of this Operator’s Manual for more detailed maintenance instructions.

KINGPIN AND FIFTH WHEEL AREA
Inspect the kingpin for excessive wear, rough edges, looseness, broken or chipped out areas and cracks. Any kingpin showing such condition must be replaced at once. Do not, under any circumstance, weld the kingpin to compensate for wear. Once a kingpin has been heated its physical characteristics are changed and its subsequent performance cannot be predicted. Contact Fontaine Trailer Company Customer Service for proper replacement services.

Check and inspect the fifth wheel area for cracks or breaks and for secure attachment to the trailer. Any welding performed in this area is to be restricted to those welds specified by Fontaine and is to be performed in the manner prescribed by Fontaine.

NOTE: Fontaine recommends that only an authorized Fontaine dealer perform repairs in the kingpin area.

REAR IMPACT GUARDS
Your new Fontaine Trailer has been designed & tested to meet the requirements of N.H.T.S.A. article 571.223 and 571.224.

The rear bumper should be checked during regular maintenance for cracks, bonds & etc. If repair is needed please refer to T.M.C. Recommended Practice 732 (T).

WHEEL AND RIM CARE
Standard wheels on your Fontaine trailer are aluminum or steel disc wheels. Wheel nuts are inspected and tightened to specifications at the factory and are checked again at pre-delivery. To maintain the correct torque on the wheels of a new trailer the nut torque must be checked periodically. During normal highway operation of a new trailer, this check should be made at the first 100, 500, and 1,000 miles and every 5,000 miles thereafter. Severe service conditions may require more tightening. Loose wheel nuts may cause shimmy, uneven tire wear, and vibration. Elongated stud holes in the wheels may result from loose hub nuts. Wheel and hub nuts must be torqued to proper specifications to provide maximum service life.

FONTAINE TRAILER COMPANY
Disc Wheel Mounting Instructions For 6 & 10 Stud Hubs With BALL SEAT Mounted Disc Wheels

Rims must be correctly assembled, using the correct capnuts and must be correctly aligned to assure maximum service life and maximum safety.

1. All parts must be clean, free of rust, dirt or paint.
2. Position the inner wheel over the studs being careful not to damage the threads.
3. Install inner capnuts and tighten to 50 FT.LBS. in the sequence shown.
4. Position the outer wheel over the inner capnuts being careful not to damage the threads.
5. Install the outer capnuts and tighten to 50 FT.LBS. in the sequence shown in Step 3. Then tighten to full torque using the same sequence.
6. After the first 50 to 100 miles of service the capnut torque should be rechecked.
   A. Loosen the outer capnuts.
   B. Check the torque of the inner capnuts in the tightening direction.
   C. Tighten the outer capnuts to 50 FT. LBS. in the sequence shown in Step 4. Then tighten to full torque using the same sequence.

<table>
<thead>
<tr>
<th>THREAD SIZE</th>
<th>TORQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Capnut</td>
<td>450 - 500 Ft. Lbs</td>
</tr>
<tr>
<td>3/4-16 and 1 1/8-16</td>
<td></td>
</tr>
</tbody>
</table>

CAUTION: The torque listed is for dry threads with no lubricant. Proper capnut torque is important. Insufficient torque can cause stud breakage and damage. Over torque can over stress the studs and strip the threads.

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FONTAINE TRAILER COMPANY
Disc Wheel Mounting Instructions for 8&10 Stud Hubs used with HUB PILOTED Disc Wheels.

1. **All** parts must be clean, free of rust, dirt or paint.
2. Position the inner wheel over the studs being careful not to damage the threads.
3. Position the outer wheel over the studs being careful not to damage the threads.
4. Install the flange nuts and tighten to 50FT.LBS. in the sequence shown.

Then tighten to full torque using the same sequence.

<table>
<thead>
<tr>
<th>THREAD SIZE</th>
<th>TORQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange Nuts M-22 x 1.5</td>
<td>500 - 550 Ft. Lbs</td>
</tr>
</tbody>
</table>

**CAUTION:** The torque listed is for dry threads with no lubricant. Proper capnut torque is important. Insufficient torque can cause stud breakage and damage. Over torque can over stress the studs and strip the threads.

5. After the first 50 to 100 miles of service the capnut torque should be retightened to 500-550 ft. lbs.
6. Make sure the surface on the disc wheel, which is contacted by the flange nut is flat.
7. Disc wheel mounting surfaces should not have more than 1-1/2 Mil. thickness of paint. Excessive paint thickness can cause loose disc wheels.

**NOTE:** Before installing two piece cone lock capnuts, lubricate the contact surfaces between the cap nut and the washer with an SAE30W oil. This will minimize corrosion between the mating surfaces. Wheel studs on both the right and left side hubs of vehicles utilizing the hub-piloted wheel system have right-hand threads.
SELF ADJUSTING SLACK ADJUSTER

Operational Check

Functional operation of the slack adjuster can be performed on vehicle by:

1. Block wheels to prevent vehicle from rolling.

2. Check that the push rod is fully retracted, apply air to release spring brake.

3. Manually de-adjust brakes (turn adjustment hex counterclockwise) to create an excessive clearance condition. (A ratcheting sound will occur)

4. Make a full service brake application, on release, allow sufficient time for brake to fully retract. During the brake release, observe rotation of the adjustment hex (attaching a wrench on the hex will make this rotation easier to see). This rotation indicates that an excessive clearance condition has been determined by the slack adjuster, and it is making an adjustment to compensate. On each subsequent brake release the amount of adjustment and pushrod travel will be reduced until the desired clearance is achieved.

5. Refer to the Slack Adjuster manufacturer's literature for proper pushrod stroke.

NOTE: Refer to the Slack Adjuster manufacturer recommendations for complete details on maintenance, inspection and troubleshooting of this component. A list of component manufacturers and their contact information is provided in the Appendix Section of this Operator’s Manual.

Maintenance

During normal chassis lube, adjusters should be inspected for damage. Check anchor brackets to ensure that they are tight.

During reline, check the de-adjustment torque. Place a torque wrench on the 7/16” adjusting hex. Turn the torque wrench counterclockwise and check that the clutch does not slip at a torque less than 13 Ft. Lbs. A ratcheting sound will occur while backing off. If clutch slips at a lesser torque, the adjuster must be replaced.
Lubrication

The Self-Adjusting Slack Adjuster should be lubricated in conjunction with the lubrication prescribed for vehicle chassis. The lubrication interval should not, however, exceed 5,000 miles or 3 months. No special grease is required, however the use of moly-disulphide loaded grease or oil is not recommended since it may lower friction capabilities in the adjusting clutch parts, and decrease automatic adjustment reliability.

Inspection

1. During normal lubrication intervals, visually inspect slack adjuster and anchor bracket for damage. Check that anchor bracket is tight and the control arm is in its "Full Release" position (refer to manufacturer literature).
2. Maintaining proper brake adjustment and brake balance cannot be accomplished by the slack adjuster alone. The condition of foundation brake components has a direct bearing on the effectiveness of brake adjustment; therefore, periodic inspection of these components is necessary.
   a. BRAKE CHAMBERS
      Check that brake chamber mounting bolts are tight and proper alignment is maintained to avoid interference between chamber pushrod and chamber housing. Verify that the brake chamber pushrod length is equal on opposing brake chambers of the same axle.
   b. CAMSHAFT BUSHINGS
      Optimum brake adjustment cannot be achieved when worn bushings are used.
   c. WHEEL BEARING ADJUSTMENT
      Accurate wheel bearing pre-load is necessary to maintain proper alignment between the brake drum and brake shoes.
TIRE MAINTENANCE

INFLATION PRESSURE:
The most critical factor in tire maintenance is proper inflation. No tire or tube is completely impervious to loss of air pressure. To avoid the hazards of under inflation, lost air must be replaced.

Driving on any tire that does not have the correct inflation pressure is dangerous and will cause tire damage.

Any under inflated tire builds up excessive heat that may result in sudden tire destruction. The correct inflation pressures for your tires are a function of many factors including: load, speed, road surface and handling. Consult your tire dealer for the proper inflation pressures for your application.

Check inflation pressures on all your tires at least once a week, including spares, before driving when tires are cold, especially when more than one driver uses vehicle.

CAUTION: Failure to maintain correct inflation pressure may result in sudden tire destruction, improper vehicle handling, and may cause rapid and irregular tire wear. Therefore, inflation pressures should be checked weekly and always before long distance trips.

Pressure should be checked when tires are cold, before they have been driven over the road. The ideal time to check tire pressures is early morning. Driving, even for a short distance, causes tires to heat up and air pressures to increase.

Never bleed air from hot tires as your tires will then be under inflated. Make sure to check both tires in a dual fitment. Pressures should be the same.

Use accurate tire gauge to check pressures. (Do not use "Tire Billys" to hit tires as an inflation check. This is an unreliable method.)

For optimum tire performance it is usually best to use the tire inflation pressure recommended by the tire manufacturer for the particular axle load. Exceeding this pressure could result in reduced traction and tread life.

TIRE INSPECTION

While checking inflation pressures, it is a good time to INSPECT YOUR TIRES. ANY TIME YOU SEE ANY DAMAGE TO YOUR TIRES OR WHEELS/RIMS, SEE ANY OF YOUR TIRE DEALERS AT ONCE.

Before driving, inspect your tires, including the spare, and check your air pressures. If your pressure check indicates that one of your tires has lost pressure of four pounds or more, look for signs of penetrations, valve leakage, or

FONTAINE TRAILER COMPANY
wheel/rim damage that may account for air loss.

Always examine your tires for bulges, cracks, cuts or penetrations. If any such damage is found, a Tire dealer must inspect the tire at once. Use of a damaged tire could result in tire destruction, property damage and personal injury.

**DRIVE CAREFULLY**

All tires will wear out faster when subjected to high speeds as well as hard cornering, rapid starts, sudden stops and frequent driving on surfaces that are in poor condition. Surfaces with potholes or rocks and other objects can damage tires and cause vehicle misalignment. When you drive on such surfaces, drive on them carefully and slowly, and before driving at normal or highway speeds, examine your tires for any damage, such as cuts or penetrations.

**DO NOT OVERLOAD**

The maximum load that can be put on a truck tire is dependent upon the speed at which the tire will be used. Consult your Tire dealer and this data book for complete information on the allowable loads for your tires in your application. Tires that are loaded beyond their maximum allowable loads for the particular application will build up excessive heat that may result in sudden tire destruction, property damage and personal injury.

Do not exceed the gross axle weight ratings for any axle on your vehicle.

**DRIVE AT PROPER SPEEDS**

The maximum speed at which tires can be operated is indicated in the tire manufacturer's data book. This speed varies for each type of tire and depends on the type of application. Consult your Tire dealer for assistance in determining the maximum speed for your application. You should not exceed reasonable speeds indicated by the legal limits and driving conditions.

**CAUTION:** Exceeding the maximum speed for which your tire is rated can result in sudden tire destruction, property damage and personal injury.

WHEN DRIVING AT HIGHWAY SPEEDS, CORRECT INFLATION PRESSURE IS ESPECIALLY IMPORTANT. However, at these speeds, even with correct inflation pressures, a road hazard, for example, is more difficult to avoid and if contact is made, has a greater chance of causing tire damage than at lower speed. Moreover, driving at high speed increases the possibility of an accident as a greater distance is required to bring your vehicle to a safe stop.

**BALANCING**

Under normal conditions, truck tires do not need to be balanced. Common practice is to check tire balance if a ride complaint is made by the driver. Before removing the tire-wheel assembly from the vehicle, check for radial and lateral
runout. Bent wheels and rims or improper mounting can cause excessive runouts. If balance is still required, a simple static balance with bubble balance or a wall mounted axle bearing and hub type gravity balance should be sufficient.

**ROTATION**

Tires should be rotated only when necessary. If the tires are wearing evenly, there is no need to rotate. If irregular wear becomes apparent or if the wear rate on the tires is perceptively different (from axle to axle), then the tires should be rotated in such a manner as to alleviate the conditions.

**STORAGE**

All tires should be stored in a cool dry place indoors so that there is no danger of water collecting inside them. Serious problems can occur with tube-type tires when they are mounted with water trapped between the tire and tube. Due to pressurization, the liquid can pass through the inner liner and into the casing plies.

This can result in sudden tire failure. Most of the problems of this nature have been due to improper storage that allowed water to enter the casing. This is a particular problem with tube-type tires because of the difficulty in detecting water that collected between the tire and tube. When tires are stored, they should be stored in a cool place away from sources of heat and ozone such as hot pipes and electric generators. Be sure tires do not contact surfaces which could deteriorate the rubber. TIRES EXPOSED TO THESE SUBSTANCES COULD BE SUBJECT TO SUDDEN FAILURE.

**RECOMMENDATIONS FOR THE USE OF DYNAMOMETERS**

Severe damage can result in the crown area of radial truck tires when run on dynamometers for extended periods. Quite often the damage is internal and not discovered until after the vehicle has been put back in service.

**PROPER MOUNTING ON VEHICLE**

When wheel assemblies are mounted on a vehicle, be sure that the valves do not touch the brake drums or any mechanical part of the vehicle.

Tires mounted in duals must be matched so that the maximum difference between the diameters of the tires does not exceed 1/4 inch or a circumferential difference of 3/4 inch. Failure to properly match dual tires will result in the tire with the larger diameter carrying a disproportionate share of the load, which can cause sudden tire destruction.

**DUAL SPACING**

It is also important that sufficient space is provided between dual tires to allow
air to flow and cool the tires and to prevent the tires from rubbing against one another.

To make sure dual spacing is correct, simply measure the two tires from center to center of the tread, and refer to the minimum dual spacing required by the tire manufacturer.

**TIRE MIXING**

**CAUTION:** Improper tire mixing can be dangerous. On vehicles with four or more wheel positions, radial and non-radial tires should not be mixed in a dual fitment.

**LIGHTING MAINTENANCE**

**LIGHTS AND WIRING**

The lighting system for your trailer is a heavy duty, 12-volt, 30-amp system. The 7-way receptacle is located on the front of the trailer near the gladhands. The jumper cable from the truck tractor plugs into the trailer’s 7-way receptacle to complete the electrical circuit to the trailer. The receptacle is equipped with a hinge type cover to protect it from exposure to dirt and water. The same light switches that control the lights on the truck tractor control trailer lights.

Proper maintenance of the lighting system requires periodic cleaning of lamps and reflectors to assure maximum visibility of the tractor and trailer. Use a damp cloth to wipe the lenses. A dry cloth will cause the dirt to act as an abrasive and scratch the lenses. A daily cleaning can well be worth the time invested, plus, it is a good safety practice. Maintenance of the lighting and wiring system consists of an occasional inspection to see that all wiring connections are tight. Make sure the lighting units are securely mounted, and that the wiring is not pinched or damaged. Inspect lights, couplings, and sockets for their serviceability and replace as required.

**NOTE:** All Fontaine trailers manufactured after March 1, 1997 are wired to provide constant power to the trailer’s antilock brake system (ABS) from the **CENTER PIN** of the main 7-way connector at the front of the trailer. If you need help determining how your particular trailer is wired contact Fontaine Trailer Company at 1-800-821-6535.
TURN SIGNAL AND HAZARD FLASHER SYSTEM

The turn signal lever and hazard flasher switch are located in the truck tractor. To operate the turn signals, the ignition switch must be in the ON position. The hazard flasher system is operated independently of the ignition switch in most cases. All turn signal lights can be made to flash simultaneously by pulling out the activating knob on the hazard flasher switch.

Two flasher units are used for the trailer. One unit is used in the turn signal circuit, and the other for the hazard flasher system located in the truck tractor. The most common problems with the turn signals and hazard flasher system are defective flashers, burned-out bulbs, blown fuses, defective switches, or faulty wiring.

REFLECTORS

Reflectors are located on the front, sides, and rear sections of the trailer. They should be kept clean by wiping with a damp cloth. Replace any reflectors that are cracked or broken.

STOP, TAIL, TURN, MARKER & IDENTIFICATION LIGHTS

To remove lens and bulb with grommet mount installation, insert a screwdriver under the lens flange and pry lens out of the soft housing. To remove lens with flange mount installation, remove screws or rivets. Disconnect from plug and wire assembly. To replace lens and bulb with grommet mount installation, reconnect the plug and wire assembly, tilt the lens slightly, and push lens into soft housing. To replace the lens and bulb with flange mount installation, reconnect the plug and wire assembly align mounting holes in re-insert screws.

LICENSE LAMP

To remove license bulb from the license lamp, remove the mounting screws and remove license lamp cover. Follow same instructions as for the clearance, marker, and identification lamps above. Re-install cover using the mounting screws.
NOTE ON LUBRICATION:

Use a standard, LP-2 chassis grease for all lubrication points having fittings. Apply grease with a suitable pressure type grease gun that fits the lubrication fittings. The gun may need a flexible extension on it to enable you to reach certain fittings.

Clean each fitting and wipe off old accumulated grease before applying fresh lubricant. When old grease is forced from the joint, the part has been adequately lubricated.

Replace faulty or broken lubrication fittings. Use a rag to clean all lubrication fittings before applying lubrication. The person doing the lubricating has an opportunity to inspect parts of the vehicle that are relatively inaccessible. Any noticeable leaks of grease, excessive rusting of the chassis parts, broken, bent or damaged bolts and brackets, or other defective members should be reported for corrective action.

WHEEL BEARINGS AND HUBS

The wheel bearings on your Fontaine Trailer may be oil or grease lubricated. Before attempting to service this part, determine which type of lubricant is used and follow the appropriate service procedures. Change the lubricant whenever it is contaminated or when the wheel end cavity is disrupted by removing spoke wheel or hub. Fontaine recommends changing the lubricant every 12 months or 100,000 miles, whichever comes first. Always follow the instructions of the axle manufacturer when servicing wheel end components. A list of component manufacturers is provided in the Appendix Section of this Operator’s Manual.

To check the oil level, make sure the trailer is on level ground. Wipe the hubcap clean with a rag and inspect the lubricant level. The hub should be filled with all-weather oil SAE 80W-140 (or equivalent) to the level indicated by a mark on the hubcap. MINIMUM LEVEL ALLOWABLE - 1/4 inch mark. If the lubricant level is low, remove the center plug and add oil to proper level.

DO NOT OVERFILL.

Many Fontaine Trailers now come equipped with the Hendrickson Long-life System (HLS) Wheel End. These wheel ends do not require service for up to 5 years or 500,000 miles. To determine if your trailer is equipped with this system, inspect the hubs for the label shown at left or contact Fontaine Trailer Company.

NOTE: For trailers equipped with the Hendrickson Long-life System Wheel End, DO NOT REMOVE the hubcap without first contacting Hendrickson technical service at 800-455-0043 in the U.S. or 800-668-5360 in Canada.
LANDING GEAR (TWO SPEED)

Under normal operation conditions, your landing gear should never require lubrication. However, grease zerks are provided in the leg and the gearbox housing if necessary. Follow the landing gear manufacturers instructions for service and maintenance. A list of component manufacturers can be found in the Appendix Section of this Operator’s Manual.

BRAKE CAMSHAFTS

Lubricate the brake camshaft bearings with chassis grease. There are four fittings located on each axle.

BRAKE SHOES

When brakes are relined, apply an even coat of lubricant or equivalent between contact face of anchor pin brushing, brake shoe area, and spider faces. Coat anchor pin completely. Wipe off all excess grease.

BRAKE ROLLER AND CAM HEADS

When the wheels and hubs are removed, place a light film of lubricant on cam roller follower shafts, journals, and the top and bottom surface of the S-cam.

SUSPENSION

Refer to the suspension manufacturers instructions for details on the correct maintenance of your suspension. A list of component manufacturers can be found in the Appendix Section of this Operator’s Manual.

FIFTH WHEEL

Check the fifth wheel locking jaws or hook (depending upon the model) and support brackets for lubrication fittings and lubricate as required.

HYDRAULIC OIL RESERVOIR

Whenever the hoist is lubricated, the condition and level of the oil in the reservoir tank should be checked. Dirty oil is the main cause of expensive pump and cylinder repairs. Dirty oil is detectable and should be replaced before considerable damage is done to the system. A sample from a dipstick will show its condition. Place a drop of the sample on a blotter, cloth or paper. Any noticeable residue means dirty oil.

RESERVOIR LEVEL CHECK

Measure oil level with the trailer hoist cylinder in the center position. The trailer must be hooked up to the truck tractor. Remove the reservoir filler cap and inspect oil level. Use care in filling reservoir so that dirt or other foreign ma-
material does not get into the hydraulic system. Rectangular tank - fill to two inches below flange of reservoir. Cylinder tank - fill to four inches below flange of reservoir.

Do not overfill. Install reservoir filler cap.

There must be enough space to hold all the oil when the cylinder is retracted, with some space to allow for expansion when the oil is hot.

**DRAINING OIL RESERVOIR**

The hydraulic oil should be changed at least once a year or sooner if it becomes contaminated. Drain the system by removing the reservoir drain plug. Catch all oil in a suitable container. Reinstall the plug and fill reservoir to required level with the proper type and grade of oil.

**OIL RECOMMENDATIONS**

- Use standard SAE 5 or 10 weight hydraulic oil.
- Detergent oils are not recommended because the additives attack the cylinder packing.
- Never use crank case draining, transmission oil, kerosene, fuel oil, water, or any non-lubricating fluids.
- Never thin oil with kerosene or fuel oil in winter operation. Either of these will cause packing to swell resulting in plungers sticking. Good low viscosity hydraulic oils are available on the market.
TRAILER MAINTENANCE SCHEDULE

TRAILER MAINTENANCE SERVICES REQUIRED

In addition to the pre-trip daily inspection, the services listed below are Fontaine’s suggested maintenance service intervals for keeping your trailer in peak operating condition.

SCHEDULED MAINTENANCE SERVICE
Each 5,000-Miles or Once a Month
(Whichever comes first)

- Check kingpin and upper coupler.
- Check electrical and ABS system for proper operation.
- Check secondary and parking brake system (if applicable) for proper operation.
- Check tires and wheels. (Torque wheel nuts to proper torque).
- Check axle oil level, add oil if required.
- Check wheel seals for leaks.
- Check tires for proper tire pressure.
- Drain any moisture from air reservoirs.
- Check accessories operated with air from brake system.
- Inspect brake system gladhands, hoses, tubing, chamber valves, and reservoirs for leaks or damage.
- Inspect trailer structure and clean out / remove any build-up of mud, dirt, ice, snow or chemicals.
- Check chamber push rod travel and adjust brakes.
- Check lining thickness.
- Visually check axle alignment.
- Inspect splashguards.
- Check tire carrier, mounting and lock chain.
- Check hydraulic system for damage or leaks.
- Inspect U-Bolts and torque to specification

Each 20,000-Miles or Four Months
(Whichever comes First)

- Inspect brake drums and wheels.
- Inspect brake linkage and shoes.
- Inspect brake lines and hoses for chafing, looseness and deterioration.
- Test brakes for action, side pull, and synchronization.
- Run complete system check of ABS system.
- Make soapsuds test for air leaks in entire air system.
- Check axle alignment.
Steam clean complete chassis and inspect.
Check undercarriage components.
Check springs, hangers, and bushings.
Inspect kingpin for excess wear, rough edges, looseness, broken out areas and cracks.
Clean kingpin plate and all welds.
Check all bolts, nuts and rivets for looseness.
Lubricate cam heads, rollers, and anchor pins.

NOTE: All maintenance periods are recommendations based on average operating conditions. A trailer operated principally on gravel or dusty roads, or through unusual amounts of water may require maintenance more frequently.

NOTE: Observe the day-to-day care recommendations. Watch for the symptoms described below and have any needed adjustments made promptly at your local FONTAINE SERVICE CENTER. Use only the recommended lubricants and parts conforming to Fontaine specifications. To find a service center near you contact your local Fontaine dealer or call 1-800-821-6535.
TROUBLESHOOTING
ANALYZING & DIAGNOSING TRAILER SERVICE

To directly assist in keeping your trailer on the road and rolling, the following troubleshooting guide has been prepared for your convenience. You can avoid serious delay and downtime in servicing your trailer if the cause of the trouble can be diagnosed and corrected quickly by you.

BRAKES

BRAKES WILL NOT RELEASE

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low Air Pressure</td>
<td>1. Check air line connections &amp; verify sufficient air in tank</td>
</tr>
<tr>
<td>2. Brake shoes bound up at cams</td>
<td>2. Lubricate brake operating parts.</td>
</tr>
<tr>
<td>5. Damaged brake assembly.</td>
<td>5. See your nearest FONTAINE SERVICE CENTER.</td>
</tr>
</tbody>
</table>

NO BRAKES OR INSUFFICIENT BRAKES

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Source of air supply shut off at tractor</td>
<td>1. Push control valve IN</td>
</tr>
<tr>
<td>2. Low brake line pressure</td>
<td>2. Check air pressure gauge on tractor - Inoperative compressor</td>
</tr>
<tr>
<td>3. Brake lines between tractor and trailer not properly coupled</td>
<td>3. Properly couple brake lines</td>
</tr>
</tbody>
</table>

SLOW BRAKE APPLICATION OR RELEASE

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lack of lubrication</td>
<td>1. Lubricate brake operating parts</td>
</tr>
<tr>
<td>2. Excessive travel in brake chamber</td>
<td>2. Adjust brakes</td>
</tr>
<tr>
<td>3. Restriction in hose or line</td>
<td>3. Replace brake hose or line</td>
</tr>
<tr>
<td>4. Defective brake valve</td>
<td>4. Replace brake valve</td>
</tr>
</tbody>
</table>

FONTAINE TRAILER COMPANY
## BRAKES GRABBING

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Foreign material on brake lining</td>
<td>1. Reline brakes</td>
</tr>
<tr>
<td>2. Brakes out of adjustment</td>
<td>2. Adjust brakes</td>
</tr>
<tr>
<td>4. Damaged brake chamber or internal assembly</td>
<td>4. See your nearest Fontaine Service Center</td>
</tr>
<tr>
<td>5. Leaky or broken hose between relay valve and brake chamber</td>
<td>5. Replace or repair as required</td>
</tr>
</tbody>
</table>

## BRAKES DRAGGING

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Out of adjustment</td>
<td>1. Adjust brakes</td>
</tr>
<tr>
<td>2. Binding cam, anchor pins or chamber rod end pin</td>
<td>2. Lubricate and free up</td>
</tr>
<tr>
<td>3. Damaged brake assembly or brake drum out-of-round</td>
<td>3. Replace. See your nearest Fontaine Service Center</td>
</tr>
</tbody>
</table>

## WHEELS, TIRES AND ALIGNMENT

### PULLING HARD

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Broken or cracked spring</td>
<td>1. Replace complete spring</td>
</tr>
<tr>
<td>2. Uneven load distribution</td>
<td>2. Rearrange load for proper distribution</td>
</tr>
<tr>
<td>3. Weak spring</td>
<td>3. Replace complete spring</td>
</tr>
<tr>
<td>4. Axle out of alignment</td>
<td>4. Align axles</td>
</tr>
<tr>
<td>5. Tracking to one side or excess tire wear</td>
<td>5. Align axles</td>
</tr>
</tbody>
</table>

## WHEELS, HUBS AND TIRES

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tire wobble due to uneven rim clamping</td>
<td>1. Torque tighten all rim clamps</td>
</tr>
<tr>
<td>2. Burnt, worn or damaged wheel bearings</td>
<td>2. Replace bearings</td>
</tr>
<tr>
<td>3. Bent wheel or rim</td>
<td>3. Replace wheel or rim</td>
</tr>
<tr>
<td>4. Bent axle</td>
<td>4. Replace or straighten axle</td>
</tr>
<tr>
<td>5. Leaking oil</td>
<td>5. Replace wheel seals</td>
</tr>
</tbody>
</table>
SCUFFED TIRES

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Over and under inflation</td>
<td>1. Inflate to proper pressure</td>
</tr>
<tr>
<td>2. Excessive speed on turns</td>
<td>2. Reduce speed</td>
</tr>
</tbody>
</table>

TRACKING TO ONE SIDE

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leaf spring broken</td>
<td>1. Replace complete spring</td>
</tr>
<tr>
<td>2. Bent axle</td>
<td>2. Replace or straighten axle</td>
</tr>
<tr>
<td>3. Axles out of alignment</td>
<td>3. Align axles</td>
</tr>
</tbody>
</table>

LOSS OF TIRE AIR PRESSURE

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Puncture in tire</td>
<td>1. Repair or replace tire</td>
</tr>
<tr>
<td>2. Faulty valve or valve core</td>
<td>2. Replace valve assembly or core</td>
</tr>
</tbody>
</table>

UNEVEN TIRE WEAR

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Over and under inflation</td>
<td>1. Inflate to proper pressure</td>
</tr>
<tr>
<td>2. Loose wheel stud nuts or clamps</td>
<td>2. Tighten wheel stud nuts or clamps</td>
</tr>
<tr>
<td>3. Loose or tight wheel bearing</td>
<td>3. Adjust bearings</td>
</tr>
<tr>
<td>adjustment</td>
<td></td>
</tr>
<tr>
<td>4. Axle bent or out of alignment</td>
<td>4. Straighten, align, or replace axle</td>
</tr>
<tr>
<td>5. Tires not properly matched</td>
<td>5. Match tires</td>
</tr>
<tr>
<td>6. Improper brake actuation</td>
<td>6. Correct brakes as required</td>
</tr>
<tr>
<td>7. Rapid stopping</td>
<td>7. Apply brakes slowly when approaching stop</td>
</tr>
<tr>
<td>8. High speed driving on turns</td>
<td>8. Reduce speed</td>
</tr>
</tbody>
</table>
# LANDING GEAR

## DIFFICULTY IN TURNING HANDCRANK

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bent crank shaft</td>
<td>1. Straighten or replace shaft</td>
</tr>
<tr>
<td>2. Bent cross shaft</td>
<td>2. Replace shaft</td>
</tr>
<tr>
<td>3. Lack of lubricant or correct lubricant</td>
<td>3. Lubricate in accordance with lubrication chart</td>
</tr>
<tr>
<td>4. Gears or components damaged</td>
<td>4. Free up or replace</td>
</tr>
<tr>
<td>5. Jackscrew nut jammed</td>
<td>5. Replace inner leg assembly</td>
</tr>
</tbody>
</table>

# ELECTRICAL SYSTEM

## WIRING, FUSES & CIRCUIT BREAKERS

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Wires burned</td>
<td>2. Replace wiring</td>
</tr>
<tr>
<td>3. Contact points dirty or corroded</td>
<td>3. Remove lamp unit and clean</td>
</tr>
<tr>
<td>4. Loss of ground at bulb</td>
<td>4. Repair as necessary</td>
</tr>
</tbody>
</table>

## COMPLETE LOSS OF TRAILER LIGHTS

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Broken main harness</td>
<td>1. Repair or replace wire</td>
</tr>
<tr>
<td>2. Blown fuse or breaker</td>
<td>2. Replace fuse</td>
</tr>
<tr>
<td>3. Broken ground lead between tractor and trailer</td>
<td>3. Check, repair or replace jumper cable if equipped</td>
</tr>
<tr>
<td>4. Loose or corroded connection in ground lead between tractor and trailer</td>
<td>4. Repair or replace</td>
</tr>
</tbody>
</table>

## DIM OR FLICKERING LIGHTS

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Battery on tractor not sufficiently charged</td>
<td>1. Charge battery</td>
</tr>
<tr>
<td>2. Damaged wire in jumper cable</td>
<td>2. Repair or replace wire</td>
</tr>
<tr>
<td>3. Dirty or corroded contact blades</td>
<td>3. Clean contact blades</td>
</tr>
<tr>
<td>4. Loose connection</td>
<td>4. Repair as necessary</td>
</tr>
<tr>
<td>5. Poor ground at socket</td>
<td>5. Repair as necessary</td>
</tr>
</tbody>
</table>

FONTAINE TRAILER COMPANY
### HYDRAULIC SYSTEM

#### CYLINDER WILL NOT OPERATE

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Insufficient oil level</td>
<td>1. Fill reservoir to proper level</td>
</tr>
<tr>
<td>2. Restriction of oil flow</td>
<td>2. Remove restriction</td>
</tr>
<tr>
<td>3. Pump is worn</td>
<td>3. Repair or replace pump</td>
</tr>
<tr>
<td>4. Hydraulic hose not connected</td>
<td>4. Connect a hose</td>
</tr>
<tr>
<td>5. Restricted control linkage</td>
<td>5. Check and repair linkage</td>
</tr>
<tr>
<td>6. Broken key or keyway in drive</td>
<td>6. Repair or replace key or keyway</td>
</tr>
</tbody>
</table>

#### CYLINDER WILL NOT HOLD

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Air in hydraulic system</td>
<td>1. Bleed system by making several cycles</td>
</tr>
<tr>
<td>2. Valve control level not in hold</td>
<td>2. Check and repair linkage</td>
</tr>
<tr>
<td>position</td>
<td></td>
</tr>
<tr>
<td>3. Worn control valve</td>
<td>3. Replace or repair valve</td>
</tr>
<tr>
<td>4. Worn pump</td>
<td>4. Replace or repair pump</td>
</tr>
</tbody>
</table>

#### NOISY PUMP

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Air in hydraulic system</td>
<td>1. Bleed system of air</td>
</tr>
<tr>
<td>2. Restriction of oil flow</td>
<td>2. Drain tank and remove restriction</td>
</tr>
<tr>
<td>3. Insufficient oil supply</td>
<td>3. Fill reservoir</td>
</tr>
<tr>
<td>4. PTO running at excessive RPM</td>
<td>4. Lower PTO RPM's</td>
</tr>
<tr>
<td>5. Water in oil</td>
<td>5. Drain system and replace oil</td>
</tr>
<tr>
<td>6. Dirty or contaminated oil</td>
<td>6. Drain system and replace oil</td>
</tr>
<tr>
<td>7. Use of wrong viscosity or type</td>
<td>7. Drain. Replace with recommended oil</td>
</tr>
<tr>
<td>oil</td>
<td></td>
</tr>
<tr>
<td>8. Worn or damaged pump</td>
<td>8. Replace pump</td>
</tr>
</tbody>
</table>

Call 1-800-821-6535
For FONTAINE SERVICE CENTER
And Dealer Nearest You

www.fontainetrailer.com

FONTAINE TRAILER COMPANY
REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying FONTAINE TRAILER COMPANY.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in any individual problems between you, your dealer, or FONTAINE TRAILER COMPANY.

To contact NHTSA you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (366-0123 in Washington, DC area) or write:

NHTSA
U.S. DEPARTMENT OF TRANSPORTATION
400 7th Street SW, (NSA-11)
Washington, DC 20590

You can also obtain other information about motor vehicle safety from the NHTSA Hotline.

FONTAINE TRAILER COMPANY
P.O. Box 619
Haleyville, AL 35565
Toll-free: 1-800-821-6535
www.fontainetrailer.com
APPENDIX

Component Manufacturers:

SUSPENSION:

Hendrickson  
Trailer Suspension Systems  
2070 Industrial Place SE  
Canton, OH 44707-2600  
Phone: (800)-455-0043  
www.hendrickson-intl.com

Hutchens Industries, Inc.  
P.O. Box 1427  
Springfield, Missouri 65801-1427  
Phone: (800)-654-8824

AXLES:

ArvinMeritor  
2135 West Maple Road  
Troy, MI 48084 USA  
Phone: (800)-535-5560  
www.arvinmeritor.com

Dana Corporation  
1235 Commerce Dr.  
Lugoff, SC 29078-9164  
Phone: (803) 438-6779  
Fax: (803) 438-7146

BRAKE SYSTEMS:

Meritor WABCO  
Vehicle Control Systems  
2135 West Maple Road  
Troy, MI 48084 USA  
Phone: (800)-535-5560  
www.meritorwabco.com

Sealco Commercial Vehicle Products  
215 East Watkins Street,  
Phoenix, Arizona 85004  
Phone: (602) 253-1007  
www.sealcocvp.com

Haldex Brake Products  
10707 N.W. Airworld Drive  
Kansas City, MO 64153-1215  
Phone: (816) 891-2470  
www.hbsna.com

MGM Brakes  
8530 Cliff Cameron Drive  
Charlotte, NC 29269-9786  
Phone: (800) 527-1534  
www.MGMBrakes.com

Meritor (Auto Slacks)  
Meritor Heavy Vehicle Systems  
2135 West Maple Road  
Troy, MI 48084 USA  
Phone: (800)-535-5560  
www.drivetrainplus.com

FONTAINE TRAILER COMPANY
TIRE INFLATION SYSTEMS:

Hendrickson
Trailer Suspension Systems
(See Above)

Meritor WABCO
(See Above)

LIGTHS / HARNESS:

Truck-lite Company, Inc.
310 E Elmwood Ave.
Falconer, NY 14733
Phone: (800) 562-5012
www.truck-lite.com

Phillips Industries
12012 Burke Street
Santa Fe Springs, CA 90670
Phone: (800) 423-4512
www.phillipsind.com

Grote Industries, Inc.
2600 Lanier Drive
Madison, IN 47250
Phone: (812) 273-1296
www.grote.com

WHEELS

Hayes Lemmerz International, Inc.
Akron Operations
428 Seiberling Street
Akron, OH 44306-3282
Wheel & Rim Customer Service:
Phone: (800) 337-0457 or 0458
http://ch.hayes-lemmerz.com

Alcoa Inc. Wheel Products
1600 Harvard Avenue
Cleveland, OH 44105
Phone: (800) 242-9898
www.alcoa.com

Accuride Corporation
7140 Office Circle
P.O. Box 15600
Evansville, IN 47716-0600
Phone: (888) 770-7282
www.accuridecorp.com

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Call 1-800-821-6535 For
Fontaine Service Center and Dealer Nearest You
www.fontainetrailer.com

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