LOAD RITE

Trailer Operator's Manual

IMPORTANT INFORMATION ENCLOSED

Please read immediately!

LOAD RITE Trailers, Inc.
265 Lincoln Highway
Fairless Hills, PA 19030
215-949-0500

January 2005 Rev-C

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CONGRATULATIONS!

You have purchased a truly exceptional piece of equipment. Your LOAD RITE trailer is the finest of its type, incorporating many features as standard equipment.

Your LOAD RITE trailer is designed and built to give many years of safe and satisfactory service. In addition to our design efforts, we stand ready to assist you with any problems or questions you may have regarding the normal operation and maintenance of your new trailer. Because we are a leading manufacturer, your dealer has ready access to replacement parts, technical advice and prompt service.

In order to establish your warranty, the warranty card must be completed and mailed at the time of purchase. For your records, fill in the same information on the opposite page. If you have any questions regarding the completion of your trailer warranty information, your dealer or LOAD RITE Customer Service will be more than happy to help you. Your product warranty is not in effect until it is registered with LOAD RITE'S Warranty Department.

IMPORTANT - PLEASE READ

Please read this manual thoroughly and completely. A basic understanding of your trailer is necessary for satisfactory and SAFE operation.

We reserve the right to change specifications, designs, or discontinue models at any time without notice and/or incurring obligations.

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 Load Rite Trailers, Inc.

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 individual problems between you, your dealer, or Load Rite Trailers, Inc.

To contact NHTSA. you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, DC area) or write to: NHTSA, U.S. Department of Transportation, 400 7th Street SWNSA-11, Washington, DC 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Year _____ Model _____

Serial # (VIN) _____

Dealer _____ Purchase Date _____

GENERAL SPECIFICATIONS

LOAD RITE is a registered member of the National Marine Manufacturers Association (NMMA) and the North American Trailer Manufacturers (NATM) association.
All LOAD RITE trailers are designed and built to meet all US DOT specifications and NMMA certification.

I. CAPACITY

Imprinted on your trailer certification plate (VIN sticker located on the front left side of your trailer) is the GVWR capacity. The GVWR represents the combined weight of the trailer and the load which it was designed to carry. The actual carrying capacity is the GVWR less the weight of the trailer. Carrying capacity includes the boat, motor, fuel and gear. ***If rated capacity is exceeded, the warranty is void.***

II. TRAILERING COUPLINGS AND BALLS

Trailer couplings are permanently marked with the following information:

A. The coupler manufacturer's name or initials.
B. Model or Part Number.
C. Ball diameter, for which rating (GVWR) shall not exceed the gross trailer weight.

Do not use a different size ball than recommended.

CLASS I COUPLER	2,000#	GVWR	1-7/8" Ball, 3/4" Shank
CLASS II COUPLER	3,500#	GVWR	2" Ball, 3/4" Shank
CLASS III COUPLER	5,000#	GVWR	2" Ball, 1" Shank
CLASS IV COUPLER	7,500#	GVWR	2-5/16" Ball, 1" Shank
	8,000#	GVWR	2" Ball (special application, stamped)
	10,000#	GVWR	2-5/16" Ball, 1-1/4" Shank
	13,000#	GVWR	2-5/16" Ball, 1-3/8" Shank

To adjust your standard non-brake coupler (Class I, II and III) to your trailer ball, simply adjust the nut on the bottom of the coupler. Couplers should be adjusted to a snug fit on the ball so that the 'play' is removed, but not over-tightened as to create wear. Class IV couplers and hydraulic brake actuators usually need no adjustments, but may require periodic greasing via the grease fitting where applicable.
Be sure the ball and hitch ratings match or exceed the gross load (GVWR, trailer weight and capacity) of your loaded trailer.

III. SAFETY CHAINS

(Towing)
Your trailer is equipped with two towing safety chains or cables. They are bolted to the base of the tongue at two separate fasteners. When attaching your trailer to the tow vehicle, connect each of the safety chains or cables to a separate point on your hitch per the hitch manufacturer's instructions.
(Bow)
The bow safety chain adjacent to the winch is an added safety feature. We highly recommend that you use it. After sliding the "S" hook through the bow eye of the boat, adjust the chain as tight as possible by securing it at the key hole slot on the winch support bracket.
Always tie the boat securely at the bow and stern. Do not depend only on your winch line to secure your boat.

IV. WIRE COLOR CODE AND LIGHTS

The following wire color code function is used:

- ***White*** – ground
- ***Brown*** (2) – taillights, sidemarker lights, and clearance lights for each side of the

trailer

- ***Yellow*** – left turn and stop light
- ***Green*** – right turn and stop light
- ***Blue*** – disc brake free-backing solenoid, to be wired into tow vehicle back up lights

The above wires each correspond with individual circuits on the tow vehicle. Refer to your dealer, hitch installer, or local automotive repair shop to have the proper vehicle connector installed.

To avoid trouble with the trailer lighting system, LOAD RITE recommends the following:

A. Make certain the tow vehicle is equipped with a proper harness connection to avoid overloading circuits.
B. With annual maintenance, remove light lenses and spray metal components with WD40' or apply a light coating of petroleum jelly.
C. Always carry spare light bulbs.

Tail light bulb - #1157
Marker light bulb - #194
3 light rear bar bulb - #L1895

V. WINCHES

LOAD RITE boat trailers are equipped with a hand winch designed for long life and trouble free launching and loading. Periodically, the gears of your winch should be lubricated with an all-purpose grease.
Check the winch rope or cable for cuts or frayed fibers at each use. Replace immediately if any sign of wear is evident.
Be sure to spool the cable or rope across the drum. To extend cable or rope life, avoid a criss-cross overlap pattern while retrieving.

VI. SECURING THE CARGO FOR TRAILERING

Tie down the boat securely at the stern with either belly type straps, ratcheting tie downs, or with a good line.
In addition to the winch cable or rope, use the bow safety chain. Again, do not to depend on the winch line alone to secure the boat to the trailer. Be certain that the bow is resting snugly on the bow rollers. Any loose cargo should be secured within the boat or to the deck of a flat top trailer.

VII. ALL BOLTS, NUTS, AND FASTENERS

Upon initial trailer inspection, and on a regular basis, check all bolts and nuts for proper tension.

VIII. BEARINGS AND HUBS

NOTE: Check wheel bearings periodically by the following procedure:
CAUTION - With the trailer connected to the tow vehicle on level ground, set the tow vehicle parking brake and chock the wheels.

A. Chock the trailer wheel opposite the hub to be removed. Place chocks both in front and behind the tire.
B. Position the service jack on the frame as near the wheel to be removed as possible.
C. Rotate the elevated wheel and listen for any noise. If your trailer is equipped with brakes, be certain that the brake shoes are not dragging. Feel the wheel for any roughness in its rotation.
D. A quiet and smooth rotation indicates that the bearings are in good shape. If a noise, grinding sound or roughness in rotation are evident, please contact your dealer for proper procedure.
E. At this time the wheel bearing adjustment should be checked. At the factory, LOAD RITE

sets the proper torque to maximize bearing life but on occasion it may be necessary to make an adjustment due to normal wear. To check if bearing adjustment is needed, grip the edge of the wheel to see if it rocks, or can move laterally. If the wheel moves at all, an adjustment is necessary.

First, remove the bearing protector or dust cap (refer to the section on bearing protectors in Section F) and the bearing retainer or cotter pin. Always replace the retainer or cotter pin with new. DO NOT REUSE! Tighten the spindle nut a little more than "finger tight" (approximately 20-24 inch pounds). When the nut is tensioned properly the wheel should rotate easily and have no end play. Reassemble the reverse of disassembling *using a new retainer or cotter pin*.

NOTE: Bearing adjustment should be checked after the first 75 miles of service and every year after.

F. If needed, grease hubs carefully after launch or before storage. Do not add grease when hub is cold, too much grease could damage brake shoes and hub seal.

Smaller trailers are built with a steel dust cap or plastic bearing buddy and can only be properly lubricated by repacking by hand at the end of each season. Bearing protectors can also be added as an option.

Larger trailers are equipped with a patented lubrication system which incorporates an internally cored spindle and grease fitting. This allows the hubs to be easily greased without disassembly, and assures lubrication to the inner bearing. Using a high temperature NLGI #2 wheel bearing grease and a hand-operated grease gun, apply grease after each immersion of a warm hub into ambient water. This will displace any water introduced during the rapid cooling process. Lubricate each wheel periodically or before a long trip with a few pumps.

NOTICE: It is required that once a year, each wheel be pulled, and the following items visually inspected and replaced if necessary: bearings, bearing races, seals and brake components. Repack with new grease and reassemble using a new cotter pin.

All work should be performed by a qualified mechanic.

To remove your bearing protector or dust cap, place a piece of wood against the side of it. Carefully strike the wood with a hammer. Then place the wood on the opposite side, and restrike. Continue this procedure until you have "walked" the protector out of the hub.

To reinstall your bearing protector or dust cap, line it up with your hub, place a block of wood over the front of the protector and carefully tap the wood with a hammer.

NOTE: All *bearing* protector caps are designed to fit tightly into the hub. Take extra care in *aligning* the protector cap with the hub.

IX. TIRES

To determine the proper tire and rim size and capacity specified for your model, refer to your Vehicle Identification Number certification plate located on the front left side of your trailer. Recommended tire air pressure can be found on the certification plate and on the tire sidewall. ***Always check tire pressures when cold. Always fill to the maximum rated cold pressure.***

Should the certification plate be damaged or otherwise illegible, the dealer or manufacturer can determine the proper tire, rim size, and pressure.

When jacking up the trailer to change tires, follow the same procedure as outlined above when checking hub bearings.

X. BRAKES AND ACTUATOR

Contact local department of motor vehicle authority to determine brake requirements for the locality in which the trailer is to be registered. For safety, LOAD RITE recommends brakes on ALL axles where available.

The brake system requires DOT 3 hydraulic brake fluid. Check the actuator reservoir regularly. Braking components should be thoroughly dry before storage for optimal service life. CAUTION: Wet brakes operate less efficiently. Use care in operating the trailer immediately after immersion while launching or loading.

XI. FINISH

After exposure to saltwater, wash the trailer thoroughly with freshwater at the first convenient opportunity. Galvanized trailers may occasionally show a rust spot or surface discoloration. If this occurs, touch up with cold galvanizing spray paint. This product can be obtained through any LOAD RITE dealer, most paint, hardware, or marine stores.

TRAILER ADJUSTMENTS (Adjustable units only)

LOAD RITE trailers are designed to be fully adjustable. Available models are designed to adjust to most any variation in width, hull and bow design. Due to tremendous variance in boat hull designs and the universal nature of LOAD RITE designs, some compromises may have to be made to achieve the optimum fit.

LOAD RITE trailers are adjusted in a neutral position at the factory. At the time of purchase the trailer may require adjustments to assure optimum fit of boat to trailer.

Below is a brief list of possible adjustment options for most adjustable trailers:

I. THE WINCH STAND ASSEMBLY

The basic winch stand assembly is designed to allow for two basic adjustments. The first is for height and the second is for hull position.

To adjust the height, loosen the fasteners clamping the winch support to the near vertical post. Reposition to the desired height and retighten. Proper height is determined when the winch line is level with the bow eye of the boat. The winch line should attach to the bow eye after passing beneath the winch roller.

To adjust for boat hull position, loosen the U-bolts and slide the winch stand along the tongue, either forward or backward until optimum bow roller to boat hull contact is achieved.

Hull position relative to the trailer is very important. This position determines where the boat will sit on the support system. If the winch stand is positioned incorrectly on the tongue, the rear support system may not be in proper contact with the hull.

II. TONGUE WEIGHT

The axle assemblies, spring or torsion, are attached to the main frame with U-bolts. To adjust the tongue weight loosen these u-bolts and slide the assemblies forward or backward as required.

Caution: Be sure not to damage the brake line or wire harness. When complete, be certain the axle is perfectly perpendicular to the direction of forward travel.

Moving the assemblies forward will decrease tongue weight. Moving the axle rearward will increase tongue weight.

The actual weight can be determined using a simple scale per the diagram that follows.

Place the scale on a platform so that the tongue is about the same height as the hitch of the intended tow vehicle. LOAD RITE recommends ideal ball height at 18" to 21" from ground level to ball centerline. The recommended tongue weight should be the following:

For trailers 2000 lbs. and under, the tongue weight is approximately 7% of the gross weight (GVWR).

For trailers over 2000 lbs., the tongue weight should equal approximately 5% of the gross weight (GVWR).

III. ROLLER POSITIONING

Roller trailers offer a great amount of adjustability and can be made to accommodate most boats.

The cross bars, spanning across the trailer between the main frame rails, offer multiple height positions on most models. Some models may offer more than one longitudinal position along the frame. The pivot bars run parallel to the frame members and are mounted on brackets on top of the cross bars. Pivot bars can be adjusted in or out to suit hull width and chine location requirements. The roller assemblies, mounted at each end of

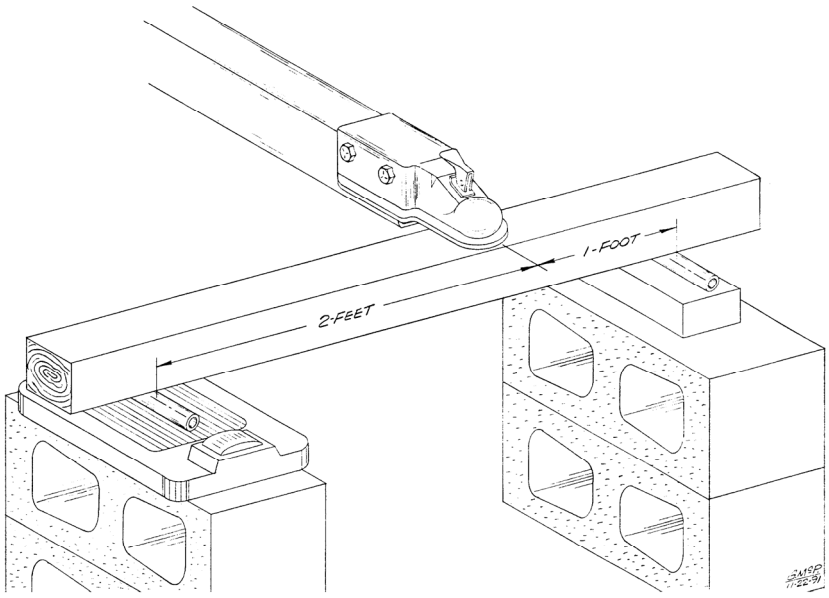
DETERMINING TONGUE WEIGHT (TW)

NOTE. Gross trailer weight (GTW) is the weight of the trailer fully loaded. (Trailer, boat, motor, fuel and accessories). Tongue weight (TW) is the downward force exerted on the hitch ball by the trailer coupler. In most cases, it should be 5 to 7 percent of GTW.

Tongue weights of up to 250 lbs. can be measured on a household scale by resting the trailer coupler on the scale and placing the scale on a block so that the coupler is at its normal towing height of 18" to 21" to tow ball centerline. The trailer must be fully loaded and level.

For heavier tongue weights, place a household scale and a brick of equal thickness as the scale upon blocks spaced three feet apart as shown below. Set a length of pipe on each and rest a beam across the pipes. Re-zero the scale to correct for the weight of the beam and pipe. Securely block the trailer wheels. Rest the trailer coupler on the beam as shown, one (1) foot from the brick and two (2) feet from the scale.

To obtain the actual tongue weight, multiply the scale reading by three (3). For greater tongue weights, place the scale and brick four (4) feet apart rest the coupler on the beam three (3) feet from the scale and multiply the scale reading by four (4).



Tongue Weight Diagram
For tongue weights in excess of 200 lbs.

the pivot bar, offer a range of adjustability, as well (on some of the smaller roller model trailers, the rollers are fixed with no adjustment).
NOTE: It is important to remember that boats with *longitudinal* strakes or chines should have the rollers adjusted to run on the flat area of the hull between the strakes or chines.
Also please note that the rollers should be lubricated at least once a year, preferably at the start of the season, and possibly a second or third time depending on the amount of usage and water immersion. Use a marine grade white grease to lube the roller hub.
CAUTION - The boat should be removed from the trailer while ALL adjustments are being performed.
Make certain that all fasteners are properly tightened BEFORE the boat is reloaded onto the trailer.

OPERATING INFORMATION

I. TOWING VEHICLE INFORMATION
Check with your marine dealer to determine the proper towing vehicle capacity for the size load to be trailered. Some tow vehicles may require over-sized tires, heavy duty suspension, heavy duty radiator and/or an extra battery. To avoid overloading the lighting circuits, most vehicles require a trailer towing package. You may also wish to have a tachometer, vacuum gauge, transmission temperature gauge and/or an engine oil gauge installed.

II. LAUNCHING YOUR BOAT
Skill and practice will allow proper handling of a boat at the loading ramp.
Stop before reaching the ramp area, without blocking traffic, and remove any tie-downs securing the boat. Tilt the engine or drive unit up, replace the transom drain plug, etc. It is recommended that a safety line be attached to the boat so that it can be held in place after launching
IMPORTANT: Do not disconnect the winch line or bow safety chain until you are at the water and ready for launch.
Once prepared for launch, back down the ramp to the water. If at all possible, avoid submerging the trailer's wheel bearings or brakes. This will be unavoidable with most bunk models.
At this point, check that the safety line is clear and moved to the proper side of the boat for launching depending on ramp position. Proceed to unfasten the bow safety chain. Securely hold the winch handle, reverse the winch lock and begin unwinding the line.
Care must be taken at this time to hold the winch handle securely. A free-spinning winch handle can be very dangerous. If the winch handle begins to free-spin, DO NOT attempt to stop it by hand.
On an average ramp grade, the boat should gently roll back into the water. If the boat does not move, unwind 6 to 8 inches of winch line, lock the winch, and give the boat a shove. Once the boat begins to move, unlock the winch and wind the boat down into the water.

III. LOADING AT THE RAMP
As in launching, prepare for loading before reaching the ramp. Attach the winch line to the bow eye of the boat and winch the boat onto the trailer. Never allow the winch line to unreel all the way. Always keep at least 3 turns of the cable around the drum of the winch.
On full roller trailers it is not necessary to have the boat in perfect alignment with the trailer before loading. Given sufficient time and patience, the boat will automatically align itself as it is being winched on the trailer. Wind and water conditions can affect alignment. Connect the bow safety chain as soon as it reaches the bow hook.
Bunk type trailers are designed to load the boat by floating it on to the trailer. They should be submerged so that only the very front of the bunks are visible above water
Once the boat is completely on the trailer and the bow safety chain is attached, pull the trailer away from the ramp area, and out of the way of other boat trailers.
Proceed to fully secure the boat to the trailer before exiting the ramp parking lot.

IV. LOADING MISALIGNMENT

Occasionally a boat will load and be misaligned with the trailer centerline. Below is a partial list of some possible causes:

A. Trailer rollers are not equally spaced from one side of the trailer to the other.
B. Ramp is slanted from one side to the other. Angling trailer into the water will sometimes help this situation.
C. Boat does not float level in the water in unloaded position.
D. Occasionally, a boat hull is not sitting squarely on the assembly jig as it is bolted to the deck. This results in a hull with a slight twist through its longitudinal axis. This situation normally does not affect the performance characteristics of the craft.

Tidal, wake, or other water current conditions could float the hull off trailer center while loading.

TROUBLESHOOTING

A. Excessive travel in actuator mechanism:

Possible cause:	*Corrective action:*
Low fluid in master cylinder reservoir; air in hydraulic lines.	Refill master cylinder and bleed system.
Leaking primary cup in master cylinder; ports closed or restricted with dirt; defective hoses; leaking check valve fails to hold hydraulic pressure.	Check all components and make corrections required.
Excessive lining-to-drum clearance.	Adjust brakes or replace linings.
Leaks in hydraulic lines.	Replace defective lines.

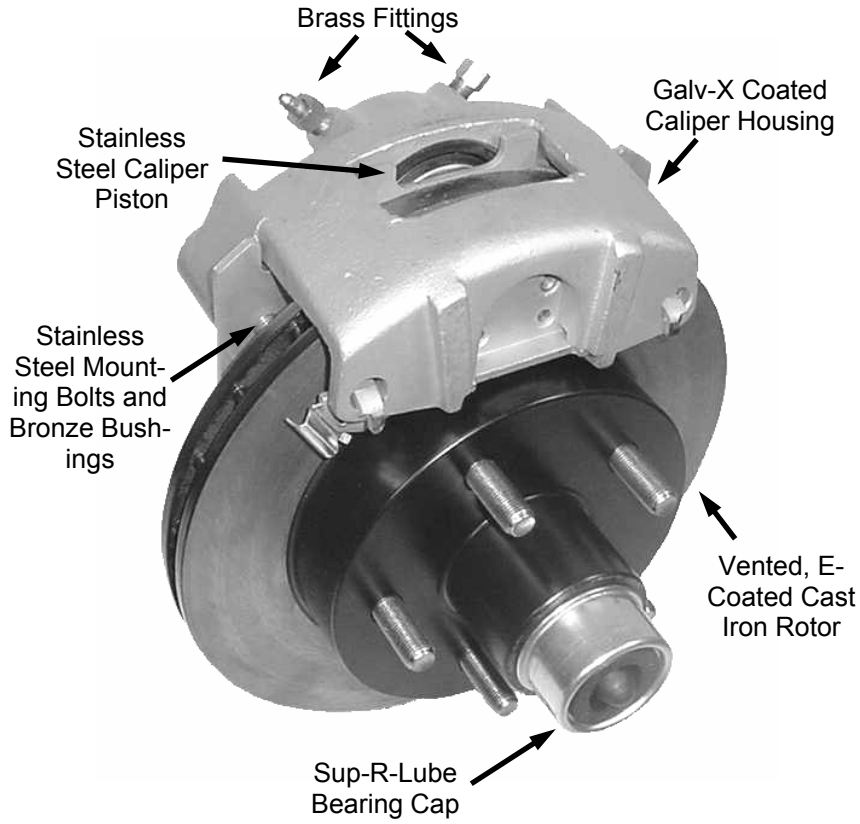
B. Pressure build-up in hydraulic system:

Possible cause:	*Corrective action:*
Master cylinder piston fails to stop, keeping compensating port closed.	Check all components and repair as required.
Contaminated fluid causing rubber cups to swell.	Drain, flush and replace fluid, replace cups and rubber hoses.
Hose cylinder ports closed or restricted with dirt, or weak return spring.	Overhaul or replace.

C. Brake noise

Possible cause:	*Corrective action:*
Worn or cracked drums or machined beyond allowable oversize limits.	Replace drums.
Vibration with loose bolts, out-of-round drums.	Tighten hub bolts, recondition or replace drums.
Shoe clatter, lining coated with grease.	Correct cause of grease leakage, reline and grind for proper contact.
Vibration with loose bearing adjustment or rough bearing action.	Adjust and lubricate bearings or replace.

Guide to the Safe Operation of Your *LOAD RITE* Trailer Equipped with Disc Brakes



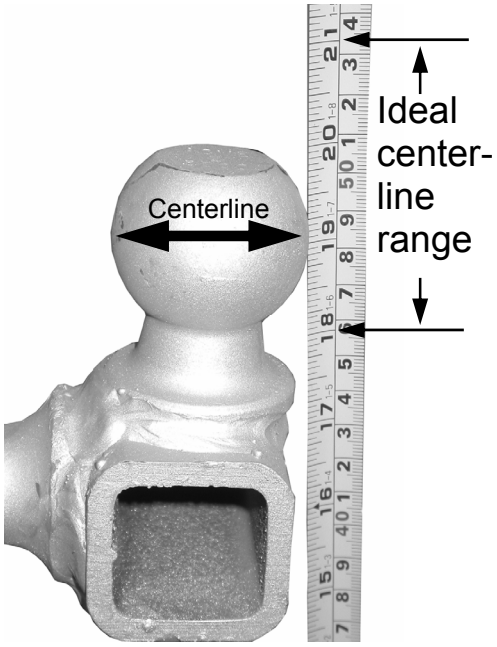
IMPORTANT NOTE

LOAD RITE reserves the right to change product specifications without notice. The components of your trailer may differ from those pictured. Performance will not be effected.

PROPERLY ATTACHING YOUR TRAILER TO THE TOW VEHICLE

Mechanical attachment of your trailer to the tow vehicle

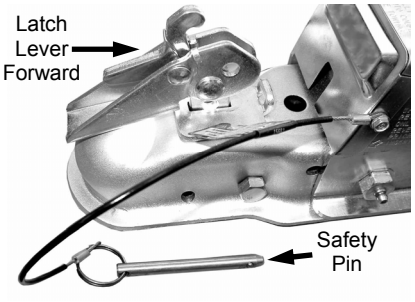
Depending upon capacity, your trailer is equipped with a braking actuator that accepts either a 2” or 2-5/16" diameter tow ball with a centerline 18” to 21” from the ground. Look at the side of the actuator for this requirement, and make certain your tow vehicle is properly equipped and set up.



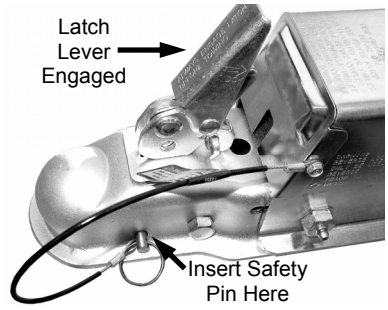
IMPORTANT SAFETY NOTE

Standard 2” tow balls are rated at 6,000 pounds capacity. This will safely serve all applications up to 6,000 pounds GVWR. If your trailer is rated in excess of 6,000 pounds GVWR, a heavy duty 2” tow ball should be attached to the actuator at delivery.

If this ball is not present, *immediately verify with your dealer if the 2” heavy-duty ball is mandated for your application*. Again, use of the heavy-duty 2” ball applies to all boat and trailer combinations with a GVWR between 6,000 and 8,000 pounds.



Actuator - Latch Open

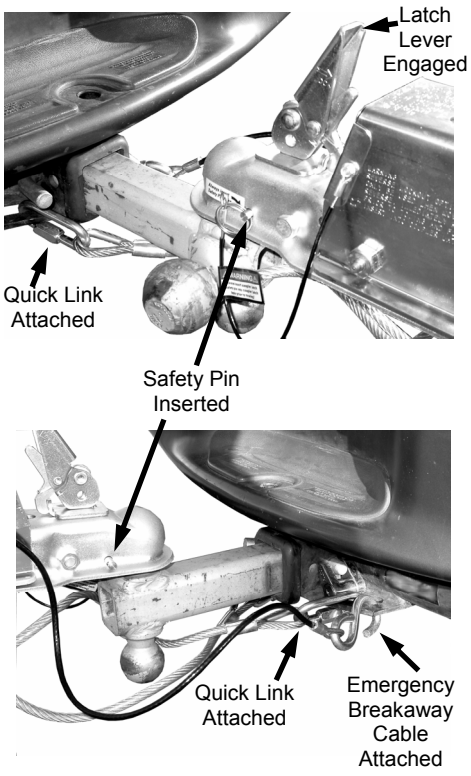


Actuator - Latch Engaged

Attach the safety cables from the trailer to their proper and respective attachment points on the tow vehicle. Make certain the quick-link fasteners are properly positioned and completely tightened. Attach the safety brake activation cable from the actuator to the tow vehicle adjacent to one of the quick links.

Your trailer should now be properly and safely mechanically attached to your tow vehicle. Proceed to electrical system attachment.

Once you are certain that your tow vehicle is equipped with a properly sized, rated, and positioned ball, raise the trailer on the tongue jack so that the ball of the tow vehicle can be maneuvered directly beneath the ball socket of the actuator. Remove any safety lock pins from the actuator lever and move the lever to the forward position. Crank the handle of the tongue jack and lower the actuator socket over the tow vehicle ball. Once you are certain the actuator is fully seated on the ball, move the latch to the engaged position and insert the safety pin through the actuator slider in the hole located directly behind the ball socket. Continue to lower the tongue jack to its fully retracted position. Rotate the jack to its horizontal position for travel.



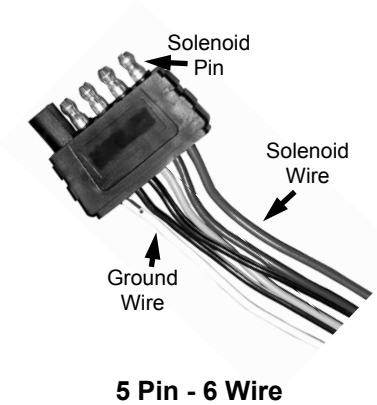
Properly Attached Trailer

Electrical system attachment of your trailer to the tow vehicle

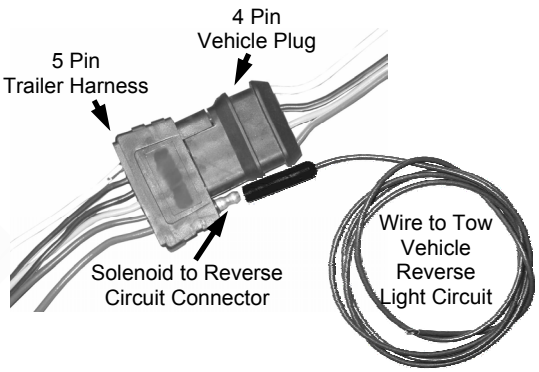
Your trailer is equipped with a six-wire, five-connector wiring harness. The colors function as follows:

- ***White*** – ground
- ***Brown*** (2) – taillights, sidemarker lights, and clearance lights for each side of the trailer
- ***Yellow*** – left turn and stop light
- ***Green*** – right turn and stop light
- ***Blue*** – disc brake free-backing solenoid, to be wired into tow vehicle back up lights

The above wires each correspond with individual circuits on the tow vehicle. Refer to your dealer, hitch installer, or local automotive repair shop to have the proper vehicle connector installed.



5 Pin - 6 Wire
Trailer Harness

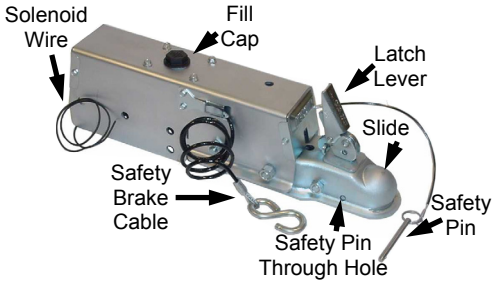


5 Pin
Trailer to 4 Pin

If your tow vehicle is equipped with a five-wire, four-connector harness, it will be necessary to retrofit the vehicle with the proper connector. Alternatively, the five-wire four-connector tow vehicle harness can be used with the six-wire five-connector harness. If the trailer is equipped with disc brakes, the exposed terminal must be wired to the reverse light circuit of the tow vehicle for proper brake operation while backing the rig.

OPERATING YOUR TRAILER EQUIPPED WITH DISC BRAKES

The disc brakes on your trailer function under the surge principle. As the tow vehicle brakes are applied, the trailer pushes, or "surges", against the tow ball. This action generates pressure in the trailer hydraulic system and causes the brake calipers to squeeze the brake pads and grip the rotors.



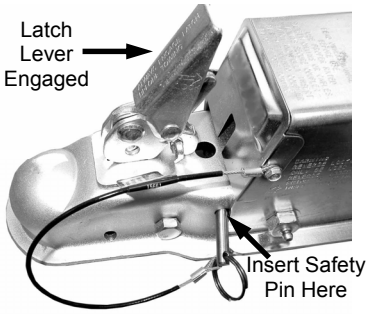
light circuit on the tow vehicle and the vehicle gear selector in reverse position, the actuator free-reverse solenoid is energized. When energized, a third port in the solenoid bleeds all hydraulic line pressure and fluid flows directly to the actuator master cylinder reservoir. The wheels then rotate freely in reverse.

CHECK FLUID LEVEL

Remove the fill cap and check the brake fluid level at each use.

<u>Always top off with DOT 3</u> brake fluid as needed.

While operating the vehicle in reverse, pressure is applied to the trailer hydraulic system as the tow ball pushes back on the actuator. With the solenoid wire properly attached to the reverse



Actuator - Emergency Backup Engaged

IMPORTANT SAFETY NOTE

Once properly wired, the tow vehicle / trailer rig may be safely operated on the highway.

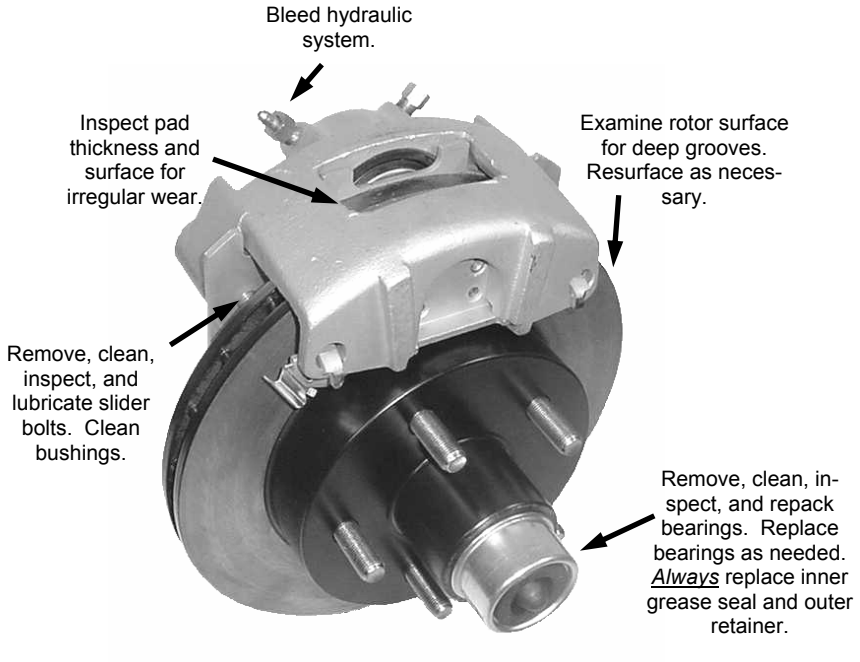
<u>In an emergency</u>*, the trailer may be jockeyed about the yard or ramp by any vehicle through utilizing the tethered lock pin placed in the left side of the actuator inner slide adjacent to the fixed housing. This hole does not go through both sides of the slide. *<u>This feature is for emergency trailer movement only, and is not designed to supplant use of the solenoid system under roadway operation.</u>

MAINTAINING YOUR TRAILER EQUIPPED WITH DISC BRAKES

The disc brakes on your trailer have been engineered for the rigorous duty of a marine environment. An E-coated rotor and Galv-X coated caliper resist external rust. A stainless steel caliper piston and brass fittings fight internal corrosion. Stainless steel mounting bolts and bronze slider bushings promote even wear for season long performance.

Like any mechanical system, the disc brakes on your trailer require periodic inspection and preventive maintenance. LOAD RITE recommends this service be performed annually for optimum, reliable system performance. The end of the season is the ideal time to perform preventive maintenance on your trailer.

Annual Hub and Disc Brake Maintenance Overview



REGULAR MAINTENANCE NOTE

Add grease easily at any time by removing the rubber grommet on the bearing cover and exposing the standard grease fitting.

To prevent inopportune maintenance problems, LOAD RITE recommends you grease this way after each water immersion.

DISC BRAKE MAINTENANCE PROCEDURE

Work on only one wheel at a time. Begin by removing each wheel and visually inspecting brake pad thickness. This will help indicate the amount of remaining pad life. Examine the faces of each rotor for signs of uneven wear. Run a fingernail across each face. If this test indicates ridges or other imperfections exist in the rotor face, you may want to consider having the rotors resurfaced. Resurface the rotors in pairs and always replace the pads when resurfacing the rotors.

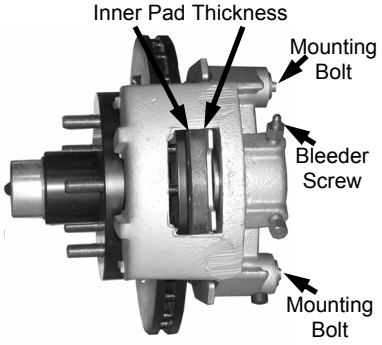
IMPORTANT SAFETY NOTE

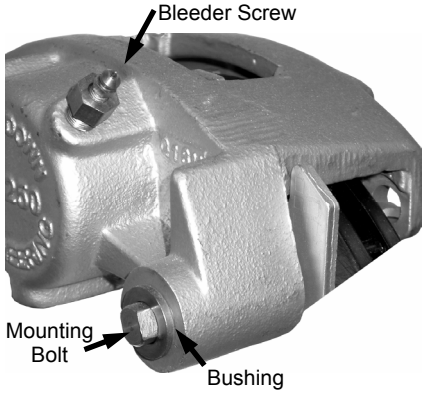
Never raise a trailer wheel off the ground for service unless the trailer is safely attached to the tow vehicle, and one wheel on each side of the trailer is fully chocked.

Remove the bolts securing the caliper to the mounting bracket. Inspect the face of the brake pad in the same way you inspected the rotor. Replace the pads if there are any surface irregularities or if the pads have 3/16" or less material from the surface to the most shallow rivet. If one pad needs replacement, always replace all of the pads on the same axle. Always resurface the rotors when replacing the pads.

Secure the caliper to the frame and out of the way of the rotor with a zip tie or bungee cord. ***Do not allow the caliper to hang from the brake hose!***

Remove the outer bearing protector. Remove the locking mechanism and large outer nut from the spindle.



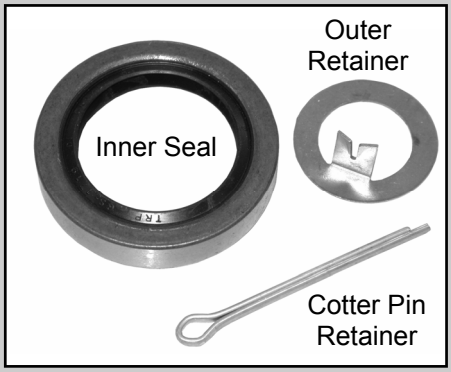


Carefully remove the rotor from the spindle taking care to prevent the outer bearing from falling out of the rotor. Remove the outer bearing and set aside. Invert the rotor so the inner seal is visible. Remove the inner seal and discard. Replace with a new seal at reassembly. Remove the inner bearing and set aside.

Wipe each bearing with a clean cloth. Be careful to remove all excess and contaminated lubricant. Wipe the spindle clean with a clean cloth. Examine all bearing and spindle surfaces for discoloration or pitting. If evidence of either, replace all affected components. In the case of evidence of water contamination, replace all bearings and seals immediately.

SERVICE NOTE

***Always* replace these items at each hub service! Retainer design may vary by model.**



Pack each bearing with high-temperature lithium based NLGI #2 wheel bearing grease. Reassemble in the reverse order of disassembly. Remember to install a new seal and a new spindle nut locking device.

Reinstall the caliper over the rotor and secure with the stainless mounting bolts. Apply blue Loctite to the threads of the slider bolts. Torque to 20 lb. ft. if coarse threads, 35 - 40 lb. ft. if fine thread.

Install the wheel. While rotating the wheel, torque the spindle nut to 20 lb. ft. Loosen ¼ turn and retighten by hand until snug. Securely fit the spindle nut locking device.

Torque the wheel lugs to 80 – 95 lb. ft. Repeat all of the above for each wheel on your trailer.

Bleed your brakes

Bleeding the brake hydraulic system at each caliper should be part of annual trailer maintenance. Brake fluid absorbs moisture and becomes ineffective at converting hydraulic pressure to braking action. It is possible for the brakes to become ineffective or even lock during operation if the fluid is not serviced annually.

LOAD RITE
TRAILERS INC

LOAD RITE Trailers, Inc.
265 Lincoln Highway
Fairless Hills, PA 19030
215-949-0500