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## TRAILER OWNER'S MANUAL



REMEMBER TO REGISTER YOUR TRAILER @  
[WWW.RIDGELINEMFG.COM](http://WWW.RIDGELINEMFG.COM)

(On the Home page click on the green "LIFETIME WARRANTY" then click on the green "Register your product for our warranty")

**READ THIS MANUAL COMPLETELY BEFORE USING YOUR  
RIDGELINE TRAILER!!**

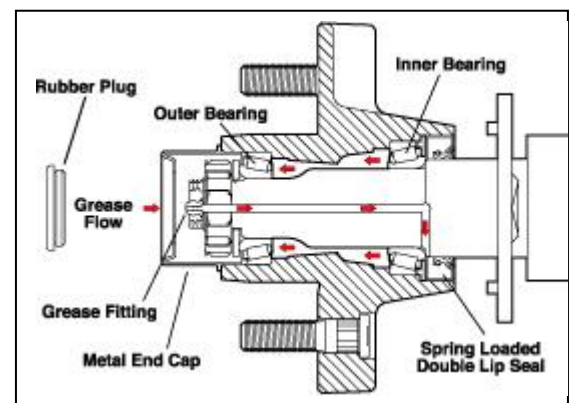
**Warning:** Failure to follow the manuals instructions may result in trailer or vehicle damage and severe or fatal injury to you and/or others. It is recommended to read your towing vehicles owners manual before towing a trailer, for any other additional information.

**IT IS UP TO YOU THE OWNER OR OPERATOR TO CHECK EACH AND EVERY ITEM BELOW BEFORE EACH USE OF YOUR RIDGELINE TRAILER!!**

- Wheel bearings need to be properly tightened and greased. Check them after the first 50 miles and every 1500 miles and/or annually. High moisture can affect the bearings, so check them under high moisture conditions.
- Pivot point bearings and fasteners are lubricated and tightened.
- Check trailer structure for any damaged, bent or cracked welds along with other structural parts. If there is damage, have the trailer repaired or serviced before you tow!
- Tires need to be inflated to proper air pressure; all lug nuts need to be tightened.
- Safety chains and couplers need to be secure and not be damaged.
- Make sure any electrical wiring is connected and working properly.
- If trailer has electric axles, check to make sure they are working properly and the breakaway lines are attached.
- Secure the load with proper straps and check them regularly while towing.
- Always place heavier items towards the front of the trailer. 10% of the total load is recommended. **DO NOT EXCEED RECOMMENDED COUPLER WEIGHT!**
- Use out-sets or receiver ball hitches to avoid jack knifing. Towing your trailer at an uneven level can cause axle and/or tire damage and negative tongue weight, which can cause damage to the tongue and/or coupler. Fish tailing is also caused by negative tongue weight.

### Greasing Bearings

- Ridgeline trailers are equipped with easy to lube hubs. Use high quality wheel bearing grease: pump in with a grease gun until you see grease coming back out of the metal cap.



### Adjusting the Bearings

- Remove the dust cap to expose the bearing nut.
- To remove locking device, use a cotter pin nut lock.
- If bearing and races are new, tighten bearing nut to 20-30ft-lbs thus making sure bearings are properly seated. If bearings and races are used, tighten to 5-10ft-lbs.
- Loosen nut until you can turn it with your hand.
- Retighten the bearing nut until it is finger tight, while tightening rotate the hub.

- Insert the locking device without backing the bearing nut off. If you cannot complete the locking device back off the finger tight nut to the nearest location.
- Put the metal cap and plug back on.

Any qualified service center can grease, adjust or replace your bearing, races or seal.

## Coupler Adjustment

**Warning:** When connecting your Ridgeline trailer to your vehicle, it is important to use the correct force to secure the coupler to the ball hitch. Too little can cause it to disconnect or rattle while towing. Too much force will make it hard to disconnect and may cause vibration while towing.

To change the amount of locking force on the coupler to the 2” ball hitch, follow the directions below:

- Release the hitch coupler-locking lever to its’ straight up position.
- Locate the adjustment nut which on the bottom of the coupler.
- Turn the nut clockwise to increase the tightness and counter clockwise to decrease the tightness.
- Mount your trailer coupler to the ball hitch.
- Push the locking lever into a horizontal position.
- Repeat these steps until a snug fit is obtained.

## Electrical Lighting System

All lights on a Ridgeline trailer are shock mounted and sealed units. This means you will need to replace the whole assembly when a light burns out.

## Tongue Connector and Harness

Electrical connector is mounted freely in a woven wire harness to prevent damage. The harness is run inside the tongue and framework to prevent damaged from road conditions and off road towing. For more details refer to the “Electrical Braking System” section.

Side Marker Lights: Amber (C146A), Red (C146R)

Rear Tail/Turn/Brake Light: Red (C421R)

License Plate Light: Clear (C146C)

Always check the tongue connector and clean with contact solution, clean when needed.

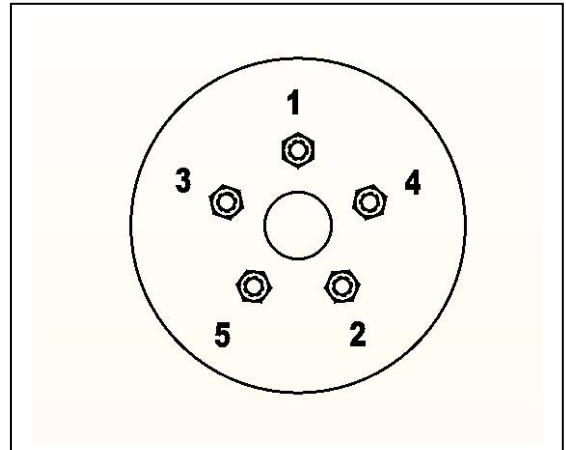
## Tires & Changing Tires

Tires are subject to the tire manufacturer's warranty. For full warranty visit our website @ [www.ridgelinefg.com](http://www.ridgelinefg.com).

Under inflated tires is the most common reason for tire failure. Always check the tire pressure and lug nut before you use the trailer. Tires should be replaced when there is 1/8" tread depth or if there is uneven wear. The use of a wheel chock is best when working on tires or axles!!

When changing your tires, jack up under the frame (the axle area is the best location). After replacing the tire, tighten all lug nuts by hand. This prevents cross threading. Tighten nuts in a 2-stage process (see diagram).

Be sure the tire pressure is at the right PSI.  
The PSI is on the sidewall of each tire.



## Load Capacity

To calculate the load capacity of each trailer the material strength, axles, tires, rim load and the coupler all play a part in that calculation. The VIN label has most of the information in regards to what your trailer weighs the tire size and load capacity. Exceeding the limits may cause injury to you and others as well as causing damage to the trailer and/or your vehicle.

## Tilt Lever

All tilt trailers are equipped with a tilt lever located on the tongue. Unlocking this lever allows you to tilt your trailer for loading/unloading. After loading make sure the lever is in the lock position and secure! When unlocking or locking use caution not to pinch fingers, hand or clothing.

## *Electrical Braking System*

Trailers with electric brakes have a general current max load of 9 amps at the vehicle side supply. A battery field test is a good method for checking the braking system. A flat level ground (use wheel chock) is the best place to perform this test. It is recommended that this is checked in the first 50 miles, and then every 1500 miles there after.

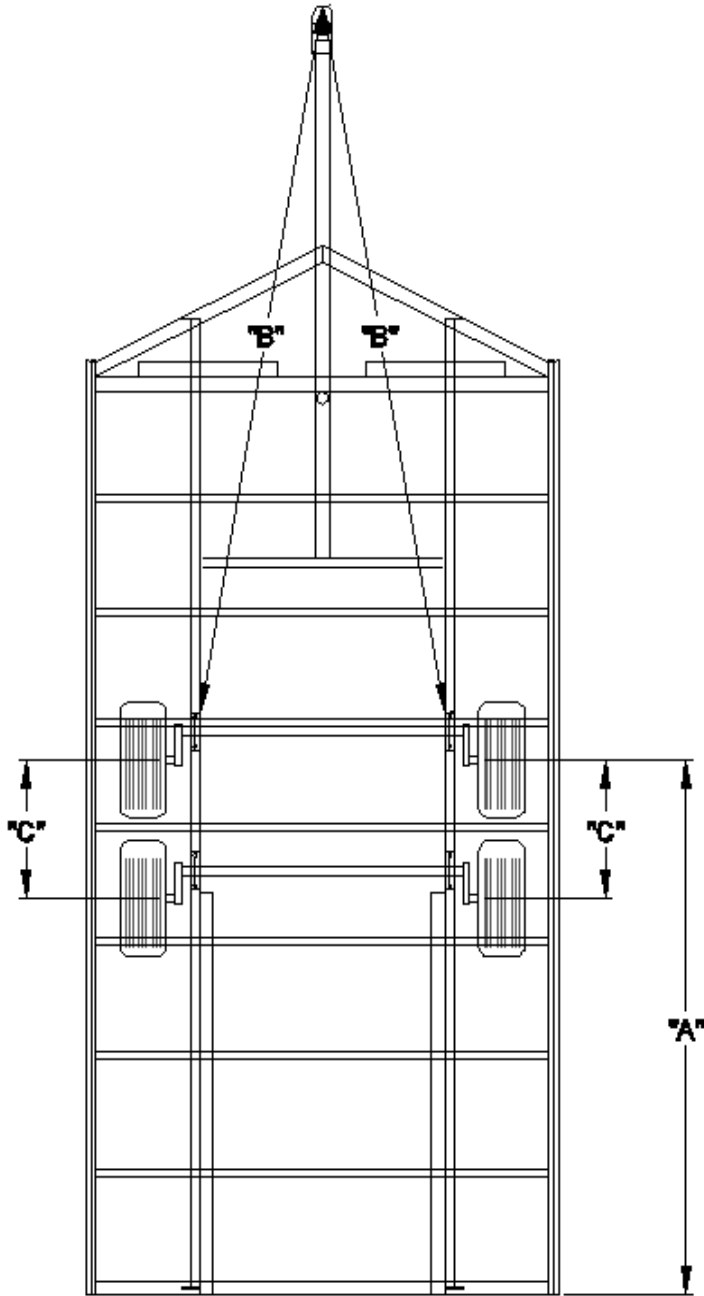
To perform this test you will need a battery, a jack and a second person. Jack the wheel up so it turns freely. Secure a ground and the negative wires to the trailer, then connect the positive battery lead to the brake connector and hold while a person applies the brake in the vehicle. As the brake is applied, grab the tire and try to spin. It should grab securely. If so, grease the spindle and follow this by another spin test. This needs to be done on all the tires. If at any point the tire spins while performing this test have the brakes serviced by a qualified technician.

## *Tie Downs*

Each Ridgeline trailer has tie downs to secure your snowmobiles. One tie down is needed for each sled. Keep in mind, if traveling longer distances your snowmobiles should also be secured by straps (not included with trailer). Road vibration can cause bolts to loosen. Even with tie downs and straps it is recommended that you check your load regularly.

## Axle Set-up/Configurations

If you are setting up, changing from single to tandem, or replacing your axle there are requirements that need to be followed to achieve the best towing ride. Axles need to be placed at certain intervals based on length of trailer. Below are the required measurements:



<u>Model Dimension</u>	<u>"A"</u>	<u>"C"</u>
12' Single	68"	
14' Tandem	92"	30"
16' Tandem	111"	30"
18' Tandem	112 1/2"	35"
22' Tandem	138"	32"

All measurements are from rear of trailer to center of Front **spindle**, as shown in diagram to the left as dimension "A".

**Note:** There must be min. of 3 1/2" between the top of the tire and any trailer stringer. Adjusting the axle slightly to meet this requirement will **not** adversely affect the functionality of the trailer.

NOTE: Follow chart above for axle spacing on tandem trailers. It is important that the axles are perpendicular to the centerline of the trailer, to prevent 'Dog Tracking' and excessive tire wear.

To check the axles alignment it is recommended to measure from the front of the trailers coupler to the front axle brackets, diagonally (as shown in "B"). There should be no more than 1/8" difference between both sides.

## Multi-Axle Assembly

Lay axles on floor and loosely bolt to brackets with ½” x 1” bolts, washers and nuts. Tandem assemblies should have 32” between each axle. Measure from front axle spindle center (grease Zerk) to the rear axle spindle center on each side, making sure they are the same measurement. If so, tighten the bolts on both sides of each axle, and then measure each side again, to insure no movement has occurred during tightening.

## Care & Maintenance

Use the checklist on page 1 of this manual to inspect your trailer for the safety of yourself and others. Inspections should be done from the front to the rear of the trailer. All bolts, nuts, pivot points, and bearings need to be tightened and lubricated appropriately. All welds and structural parts should be inspected for cracks, bends or other signs of damage. Check all lights to make sure they are working properly.

Keeping a log of all maintenance checks and service done is the best way to make sure your trailer is in optimal working condition. Broken, damaged or non-tightened parts can cause injury to yourself or others and damage your towing vehicle and individuals around the trailer. It is the owner/operator’s responsibility to inspect the trailer before each use to ensure that it is in safe working condition.

## Proper loading & Unloading

Loads should be placed on the trailer to apply the correct amount of tongue weight (10%), however do not exceed the coupler tongue weight. Weight should be equal on all tires to prevent uneven tread wear. If loading or unloading a heavy item always block up the rear of the trailer so the coupler does not disengage from the ball hitch. Traction and braking can be negatively affected by uneven loading, making it unsafe for travel the roadways. Make sure to check your coupler weight and your VIN label for GVWR.

## Warranty

Please visit our website @ [www.ridgelinemfg.com](http://www.ridgelinemfg.com) to register your trailer. For ten years Ridgeline warranties aluminum material and workmanship for defects that occur on the bed frame and tongue. All tires, lights, couplers, decking, axles, hubs, bearings, races and seals are subject to their manufacturer warranty. Wiring harness, tie downs, safety chains and tilt levers are subject to a 90-day warranty. All suppliers’ warranties are subject to change without notice. **All warranties are limited to the original owner and are not transferable.**