



OWNERS MANUAL

SAFETY PRECAUTIONS:

- Make sure the trailer is properly connected to the tow vehicle before loading.
- Never ride on the trailer
- Do not let children play on the trailer. Keep children away when loading the trailer.

SAFETY CHECK LIST:

- Ensure that the towing vehicle as well as the hitch is capable of towing the trailer. Check your vehicle owner's manual for trailer ratings.
- Inspect the trailer and all of the parts before each use.
- Check the operation of all lights. Properly functioning lights are mandatory on a trailer.
- Make sure wheel bolts are tight. Torque to 85-ftlbs. Re-tighten after the first 50 miles.
- Check the tire pressure. Proper inflation pressure is listed on the sidewall of the tire.
- Re-pack the wheel bearings every 5000 miles, or a minimum of once every year.
- Check that the trailer coupler is fastened securely onto the correct size trailer ball.
- Make sure the safety chains are attached to the trailer and towing vehicle.
- Do not exceed the Gross Vehicle Weight Rating (G.V.W.R.) which is shown on the trailer serial / certification label located on the tongue of the trailer or given to you by the dealership in which you purchased the trailer.
- Balance and secure the load on the trailer. Refer to the Trailer Loading section in this manual.
- Lubricate the coupler, the hitch ball and the springs at least once a year to stop corrosion and keep parts moving freely.

TOW VEHICLE CAPACITY:

It is important that your tow vehicle is capable of towing the trailer you purchase. Check your vehicle handbook, stickers on the door jamb, glove box, or under the hood. If this fails, talk to your vehicle dealer.

TRAILER CAPACITY:

Make sure the trailer load does not exceed your vehicle's trailer and tow vehicle carrying capacity. Never overload your trailer. Each trailer has a maximum payload and should not be exceeded. Overloading your trailer could cause serious damage to your trailer as well as the towing vehicle. Please refer to your trailer serial / certification label located on the frame of the trailer for capacity details. The Gross Vehicle Weight Rating (G.V.W.R.) is: The Weight of the Trailer + The Maximum payload the trailer can carry. The trailer weight and the payload must not exceed this (G.V.W.R) weight rating.

For Example: A trailer with a GVWR of 2,000 lbs and trailer weight of 500 lbs can hold a 1500 lb evenly distributed load at speeds not to exceed 55 m.p.h. under normal driving conditions.

TRAILER COUPLER / BALL

The hitch ball capacity on the tow vehicle must equal or exceed the trailer's GVWR. For example, a trailer with a 2" coupler can only use a 2" ball with the proper capacity.

- Check your vehicle hitch. It must be firmly attached to the vehicle's frame. If there are signs of damage to the hitch or frame do not use it to tow a trailer.
- Check the condition of the trailer ball. Make sure it is the proper size for the trailer. It should be smooth and attached firmly to the hitch. Scored or rusty balls will cause excessive wear and should be replaced.

To Adjust the coupler to the ball:

- Set coupler and tongue on to the correct size trailer ball on your vehicle.
- Raise the locking lever and adjust the nut underneath the locking lever to tighten or loosen the coupler.
- The coupler is adjusted properly when it is as tight as possible on the ball and the locking lever can still be opened and closed.

CAUTION

Balls and couplers of the same size may have different weight ratings. Always check and confirm that they are the same size and have the same capacity. Trying to judge the size of a towing ball visually can be deceiving. The capacity is usually stamped on the top of balls and couplers.

WARNING

Connecting a 2” coupler on a 1 7/9” ball or a 2 5/16” coupler on a 2” ball could lead to serious injury or death.

SAFETY CHAINS:

Your trailer’s safety chains provide additional insurance that the trailer will not detach from the tow vehicle when in motion.

Be sure to crisscross the chains under the trailer tongue. Attach the chain on the right side of the trailer tongue to the hole or ring on the left side of the hitch, and the chain on the left side of the trailer tongue to the hole or ring on the right side of the hitch. This will prevent the tongue from dropping to the road if the trailer coupler separates from the hitch. The chains should have just enough slack to allow tight turns.

WARNING

Don’t forget to attach the safety chains properly to the tow vehicle. This can result in separation of the trailer and can lead to collision injury or death.

TIGHTENING LUG NUTS:

It is your responsibility to check the torque on the lug nuts. Loose lug nuts may cause you to lose a wheel on the trailer. Torque the lug nuts to 85 ft-lbs. Re-tighten after the first 50 miles.

TIRES:

Your trailer is supplied with tires that correspond with its gross vehicle weight rating (GVWR). Check the sidewall of your new tires for load capacities and air requirements (psi). Be familiar with these requirements. Replacement tires must be rated the same as the original tires.

TIRE PRESSURE:

The leading cause of tire failure is under-inflation. It causes over heating, irregular wear, loss of control and accidents. A tire may not have sufficient air pressure even though it appears to be full. The weight of your trailer and load are carried by the air in your tires. Proper air pressure will provide optimum handling, traction and durability.

Check your tire’s air pressure regularly. Proper air pressure must be maintained.

Always check tire pressure when the tire is cold. (In the morning prior to leaving). The air in the tire heats up and expands naturally during normal driving. This normal expansion is accommodated for in the vehicle manufacturer’s air pressure recommendation outlined on the sidewall of your tire.

WARNING

It is dangerous to tow your trailer in an overloaded condition. Overloading causes tires to overheat, and may lead to sudden tire failure and serious personal injury or death at the time of the overloading or at some later date.

It is dangerous to drive on tires with too little air pressure. This will cause your tires to overheat, and can lead to sudden tire failure and serious personal injury or death.

LIGHTING & WIRING MAINTENANCE

Your trailer is supplied with lights that are 12 volt and D.O.T. approved. The towing vehicle supplies all of the 12 volt electrical power.

GROUNDING

It is essential for your electrical lighting and braking system to be properly grounded. The trailer's electrical connector should be grounded to the tow vehicle's battery or frame. The following diagram shows the standard flat four connector used on your Northstar trailer.

WARNING

Neglecting or forgetting to connect the trailer's electrical system to the tow vehicle will result in a lighting or braking system (if so equipped) that will not operate and can lead to lost control, collision, injury, or death. Test that the trailer lighting and brakes are working before you begin to tow.

<u>SYMBOL</u>	<u>COLOR</u>	<u>DESCRIPTION</u>	<u>OPERATION</u>
G	Green Wire	Passenger side (right)	Right Signal / Brake
B	Brown Wire	Running Lights	Taillight Marker/ Side Marker
Y	Yellow Wire	Drive Side (Left)	Brake
W	White Wire	Ground	Trailer Ground

Brighter Light = Brake & Signal

Dimmer Light = Running Lights

To Test the Vehicle Wiring: You will need a 12V tester. Attach the wire clamp of the tester to the ground wire on the vehicle plug. Then touch the tester pin into one of the vehicle plug contacts. Turn on the corresponding vehicle operation i.e. Running lights. This will illuminate the tester light if the vehicle wiring is correct. Follow the same procedure for the signal lights and brake lights.

To Test the Trailer Wiring: After having confirmed that the vehicle trailer plug is operating properly, connect the trailer plug to your vehicle. Proceed to test each of the lights and power leads using your 12V tester. Follow the wiring legend and diagram to test each corresponding wire for power when the trailer light is not operating.

Always be sure to check your brake, running and signal lights before each use. Ensure that all of your connections are solid and that all wiring is in good condition.

Note: Bare or pinched wires will cause a short in the trailer wiring, which will cause the vehicle fuse to blow. A solid ground is required for your lights to work properly. All contacts must be to bare metal. Light covers should be well maintained and kept clean. Ensure that your lights are always visible, not obstructed by your load.

TRAILER LOADING AND UNLOADING

It can be dangerous to improperly load or unload your trailer. The trailer and the tow vehicle must be connected in a straight line and, if possible, on level ground. Liquid loads present a special stability problem since the load is redistributed each time a stop or turn is executed. The driver needs to use caution by driving more slowly and steadily. Wide loads and long loads should be appropriately marked in accordance with state and local regulations. Be sure that any load carried in your trailer does not extend beyond the frame of your trailer. Never place loads on side only.

Follow these guidelines when loading your trailer:

1. Always distribute the weight evenly.
2. Center the load over the axle, keeping approximately 10% of the weight on the tongue.
3. Center the load from side to side
4. Secure your cargo into the trailer properly and in compliance to local laws.

ATV TRAILER LOADING

Ensure that the ramps are firmly attached to the trailer before loading ATV's. On the 2 place side load trailer, the ramps are made with a channel shape that is designed to lock onto the top rail of the trailer.

SECURING THE LOAD

Place chains or straps so they pull against each other when tightening. This will help ensure that the equipment or load is stabilized to prevent both sideways and front to rear movement.

Different configuration of equipment or loads will necessitate different tie down points. Some study will be needed to properly meet this requirement. Ensure that all pins, latches, gates and ramps are in place and secured.

WARNING

Never load or unload a trailer that is not properly connected to the tow vehicle. This may lead to serious injury and damage. Never tow a trailer when the load has not been properly secured. Unsecured loads can lead to serious injury or damage.

TOWING TIPS:

When a trailer in tow, you're operating a vehicle combination that's longer, heavier, and sometimes wider and taller, then you're used to. So, you'll have to make some compensating adjustments in your normal driving practices.

Slow Down. Moderate to slow speeds put less strain on your car and trailer.

Take a test drive. At least one short trial run before your first trip will help. Familiarize yourself with your trailer's operating characteristics. It also will let you know that the lights, brakes, hitch, etc., are working properly.

Allow Extra Time and Space. You'll need both when passing and stopping, especially if your trailer is not equipped with brakes.

Check Rear View Mirrors. Doing this frequently will let you know that your trailer is riding properly. We recommend outside rear view mirrors on both sides of your tow vehicle. Keep an eye on the tires for any signs of damage.

Swing Wider. You need to make wider swings at curves and corners because your trailer's wheels are closer to the inside of a turn than the wheels of your car or truck. Be careful when pulling into gas stations. Increase your following distance. Your vehicle will not stop as quickly when pulling a trailer. Increase the distance that you normally follow another vehicle to allow more stopping distance.

Pass With Extra Care. It takes more time and distance to get around a slower vehicle and return to the right lane with a trailer in tow.

Avoid Sudden Stops and Starts. This can cause skidding, sliding, or jackknifing, even if your trailer has brakes. Avoid quick stops while turning. Smooth, gradual starts and stops will improve your gas mileage.

Signal Your Intentions. Let surrounding vehicles know what you intend to do well before you stop, turn, change lanes, or pass.

Sift to a Lower Gear. A lower gear will help ease the load on the transmission and engine when going over steep hills, sand, gravel, or dirt roads. If your tow vehicle has an “overdrive” gear, shifting out of overdrive to a lower gear may improve your gas mileage.

TRAILER LICENSING

Have the MSO form (Manufacturers Certificate of Origin) filled out and signed by your dealer, transferring ownership to you. This form will be given to you by the dealer that you purchased your trailer from. Take the MSO form along with the bill of sale to your local Department of Motor Vehicles. After paying appropriate fees they will issue to you a title or registration, and a license plate.

NORTHSTAR TRAILER WARRANTY

Your Northstar Trailer is warranted to the original owner to be free from defects in material and workmanship for the period of one year, from the time of purchase. The obligation under this warranty is limited to the replacement or repair at the manufacturer's factory, or at a point designated by the manufacturer, of such part as shall appear to the manufacturer upon inspection of said part to have been defective in material or workmanship. Northstar is not obligated to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts.

Northstar reserves the right to improve any product through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products of previous manufacture.

Costs incurred for service, labor, or other expenses which have been incurred by the buyer without express approval or authorization by Northstar will not be accepted.

LIMITATIONS AND EXCLUSIONS TO WARRANTY

- **Trailer that has not been serviced properly.**
- **Overloading or abusing the trailer.**
- **Use of service parts not supplied by Northstar Trailers**
- **Parts such as tires that require replacement in the ordinary course of use due to normal wear.**
- **Any consequential damages for breach of this or any other warranty expressed or implied whatsoever.**
- **Repair or replacement under this warranty is the exclusive remedy of the customer.**

WARRANTY PROCEDURE

- **Send defective parts or components freight prepaid to Northstar Trailers. Collect shipments will be refused.**
- **If damage is due to misuse or abuse, owner will be charged for parts, labor and freight.**
- **If any of the components are found to be faulty due to defective materials or workmanship, they will be repaired at no charge and returned freight prepaid.**