



Trailer Owner's Manual

With the purchase of your new, professionally built ATV trailer you have added an exciting new dimension to your ATV enjoyment. You can now fish, hunt, and explore the recreational landscapes and trails across the country. Your new trailer makes any desert, mountain, or field area in the country "homeland." Your trailer has been designed and built to provide you with many years of convenient, trouble-free service. Give your trailer the proper care and maintenance to be sure it will continue to perform safely and satisfactorily. Please read and follow the warnings and instructions in this manual carefully. All trailers are not exactly alike, be sure to read and comply with all warning labels and information on your trailer and supplied about your specific model.

Happy Trailering!

TRAILER CHECKLIST

Please read the owner's manual over carefully before you begin using your trailer.

SAFETY PRECAUTIONS

"Make sure the trailer is properly connected to the tow vehicle before loading.

"Never ride as a passenger on the trailer.

"Use the trailer in a manner consistent with manufacture specifications.

SAFETY CHECK LIST

- "Make sure the towing vehicle is capable of towing the trailer.
- "Check the coupler and hitch ball for the correct rating and size. Lubricate the coupler and the hitch ball at least once a year to stop corrosion and keep parts moving freely.
- "Make sure safety chains are attached to the tow vehicle and the trailer.
- "Inspect the trailer, tires, coupler and all of the parts before each use.
- "Make sure that all fasteners and latches are properly secured.
- "Inspect the operation of all lights and turn signals. Properly functioning lights are mandatory on every trailer.
- "Wheel lug nuts should be properly tightened. Recheck after the first 50 miles.
- "Check that the tires are properly inflated. The proper tire pressure is listed on the sidewall of the tire.
- "Secure all ramps and gate latches before moving the trailer
- "Make sure the load is balanced, has the proper tongue weight and is securely tied down.
- "Do not exceed the Gross Vehicle Weight Rating (G.V.W.R.) on the trailer. This rating is listed on the VIN serial tag located on the tongue of the trailer.
- "Check that the wheel bearings are properly adjusted and maintained. Grease the wheel bearing every 5000 miles or once a year.
- "Make sure trailer brakes are properly adjusted and working (if trailer is equipped)
- "Before traveling put the trailer swivel tongue jack in the locked travel position.
- "By law, all trailers are equipped to meet applicable federal safety standards. Check state and local requirements regarding brakes and any additional equipment that may be required.

TRAILER CAPACITY

It is very important not to exceed your trailer and tow vehicle carrying capacity. Never overload your trailer. Each trailer has a maximum payload that should not be exceeded. Overloading your trailer could cause serious damage to your trailer, the towing vehicle as well as property damage. Please check the VIN certification label located on the frame of the trailer for load carrying capacity details.

The total weight of your ATV, fuel, batteries, gear and trailer must not exceed the trailer's Gross Vehicle Weight Rating (GVWR). The Gross Vehicle Weight Rating (G.V.W.R.) is: The Weight of the unloaded Trailer + The Maximum payload the trailer can carry. For Example: A trailer with a GVWR of 2,000 lbs. and a Shipping Weight of 500 lbs. can hold 1500 lbs. of properly distributed load.

If you don't know the correct weight of your recreational vehicle, don't guess-have it weighed. This can usually be done at a local lumber yard, feed and fertilizer store, truck weight station, etc.

Be careful not to overload your trailer by putting heavy baggage, camping gear, etc., in the trailer or strapped to the recreational vehicle.

TRAILER LICENSING

The MCO form (Manufacturers Certificate of Origin) should be completed, transferring ownership to you. 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 if required in your state.

Trailer laws covering such items as brakes, license plates, etc., will vary from state to state. Be sure that your trailer is in full compliance with your state laws, as well as in the states you plan to travel. If you need assistance with this information, contact your nearest state motor vehicle department.

TRAILER COUPLER / BALL

Check the hitch on your tow vehicle; it should 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. Inspect the condition of the trailer ball, it should be smooth and attached firmly to the hitch, scored or rusty balls will cause excessive wear and should be replaced. Make sure the hitch ball and the trailer coupler are the proper size and rating.

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 correct ball diameter is marked on the trailer coupler.

WARNING - Do not exceed the maximum trailer weight rating or the maximum tongue rating of your hitch. This can cause a failure of the hitch and can lead to an accident, causing serious injury. Be sure that the total weight of your load and trailer combination does not exceed the hitch's load capacity; the maximum weight it can handle is stamped on the hitch.

The hitch also should provide a place for attaching the trailer's safety chains, two rings or holes on either side of the hitch ball. A truck or van using a "step bumper" as the hitch platform will need to have chain attachments such as eye bolts as well as a hitch ball installed according to the Society of Automotive Engineers SAE J684 Standard.

To ensure that the load is riding properly, the trailer should be in a level position when hitched to the tow vehicle.

WARNING - Failure to properly engage the hitch ball in the coupler ball socket and securely close and lock the coupler latch mechanism can cause the trailer to detach from the tow vehicle. This may cause serious injury or property damage.

WARNING - Failure to replace the coupler or latch assembly if either shows any evidence of wear or damage can result in serious injury or property damage.

The trailer coupling is designed to have the required strength when a hitch ball is properly in its socket. It is necessary to exercise care when connecting or disconnecting the trailer and the hitch ball. Care should also be taken not to damage the coupling when it is detached from the tow vehicle (i.e., dropping it on the ground or backing the tow vehicle into the trailer)

The coupler socket should not be allowed to lay on the ground where debris can enter the socket and cause excessive wear when the trailer is next hitched up or cause the locking mechanism to jam.

If the coupler becomes damaged it must be repaired or replaced before towing. When the coupler is placed on the ball, the latch should close firmly. Keep the latch mechanism clean and lightly oiled. Periodically check the attachment of the coupler to the trailer. This attachment is important and often overlooked.

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 - Failure to properly attach safety chains between your trailer and tow vehicle can result in a run-away trailer should the trailer coupler become detached from the hitch, causing serious injury or property damage. If for any reason you find it necessary to replace a safety chain, ensure that it is correctly rated for your trailer. Do not use or substitute any lighter weight chain.

Note: Safety cables may be substituted for safety chains provided each cable and attaching hardware have a minimum breaking strength equal to or greater than the trailer's Gross Vehicle Weight Rating (GVWR)

Trailers with brakes have a third chain or cable called the break-away chain. This chain automatically activates the trailer brakes if the coupler detaches from the tow vehicle. Attach this cable or chain with enough slack to permit tight turns.

LIGHTING & WIRING MAINTENANCE

Your trailer was manufactured with lights that are D.O.T. approved. 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. Test that the trailer lighting and brakes are working every time before you begin to tow.

The following diagram shows the standard flat four connector used on your trailer. The towing vehicle supplies all the electrical power. Check for bare or pinched wires that could cause a short in the trailer wiring, which may cause the vehicle fuse to blow.

WIRING DIAGRAM - SYMBOL COLOR DESCRIPTION OPERATION

G - Green Wire Passenger Side (Right)= Right Turn Signal & Brake

B - Brown Wire= Running Lights, Taillight Marker & Side Marker Lights

Y - Yellow Wire Drive Side (Left)= Left Signal & Brake

W - White Wire= Ground Trailer Ground

Brighter Light = Brake & Signal

Dimmer Light = Running Lights

"Check operation of all functions-tail lights, brake lights, turn signals, etc.

"Light covers should well maintained and kept clean.

"Ensure that your lights are always visible, not obstructed by your load.

"Check each light for burned out bulbs, broken lenses, and loose connections.

"Inspect the tow vehicle electrical wiring and the trailer electrical harness for frayed wires and loose connections.

"Make sure all ground connections are clean and tight, lubricate with a silicone spray when needed.

TIRES

Because they are often exposed to water, trailer wheels and tires require more attention than the wheels and tires on your tow vehicle. The three major items to check are lug nuts, lubrication and tire pressure.

Loose lug nuts may cause you to lose a wheel on the trailer. Be sure to frequently check for loose or missing nuts. Make certain a replacement nut is an exact match for the original. Also, ensure that the wheel bolts and nuts are clean and grease free. It is your responsibility to check the torque on the lug nuts. Re-tighten after the first 50 miles. 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.

The leading cause of tire failure is under-inflation, it causes overheating, irregular wear, loss of control and accidents. A tire may not have adequate 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 is necessary for

maneuverability, traction, durability and safety. Check your tire's air pressure regularly. It is important that you always maintain proper air pressure. Always check tire pressure when the tire is cold before you've moved the trailer. The air in the tire heats up and expands naturally during normal driving. This normal expansion is accounted for in the vehicle manufacturer's air pressure recommendation on the sidewall of your tire.

WARNING - It is dangerous to tow your trailer in an overloaded condition. Overloading the trailer will exceed the load carrying capacities of the tires and can cause tires to overheat and may lead to sudden tire failure which could cause serious personal injury at the time of the overloading or at some later date.

Check your trailer's tires often and when they become worn or damaged, replace them promptly with the same type, size and capacity as the original tires. For safety and convenience, it is recommended that you always carry a spare wheel and tire.

HUBS

WARNING - Keep wheel bearings lubricated. Failure to properly lubricate may cause bearing failure and possible wheel loss resulting in serious injury or property damage.

Water can penetrate the smallest opening. When a warm hub is submerged in cold water, the water is drawn into the hub around the seals. Your best protection against wheel bearing damage from water is to always keep your hub assembly fully lubricated. Only repack the bearings with a quality wheel bearing grease and fill the hub cavity with grease to allow as little room as possible for air or water per manufacturer's specifications.

Attention should be given to wheel bearings that have been submerged. When water contacts bearing surfaces without the wheel being turned, rust and bearing damage may begin. Bearings should be inspected after long periods of non-use and before long trips.

When on a trip, make it a habit to check the wheel hubs periodically and each time you stop for fuel. If the hub feels abnormally hot, visit or call the nearest service station for advice.

TRAILER LOADING AND UNLOADING - WEIGHT DISTRIBUTION

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.

Improper weight distribution and not enough tongue weight can cause a trailer to "fishtail" (sway from side to side) as it moves down the highway, putting excessive strain on both trailer and towing equipment, increasing gas consumption, and possibly causing an accident. The most effective way to guard against fishtailing is to make sure that the load on your trailer is properly distributed.

Always distribute the weight properly, keeping approximately 15% of the weight on the tongue. The importance of adequate tongue weight on the hitch ball cannot be overemphasized. Center the load from side to side. Secure your cargo into the trailer properly and in compliance with local laws.

Wide loads and long loads should be appropriately marked in accordance with state and local regulations. Ensure that the ramps are firmly attached to the trailer before loading ATV's.

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.

Ensuring that your ATV is held securely in place on the trailer, especially when underway, is extremely important. If it is not properly secured your ATV can be damaged, or it may shift or fall off the trailers while being towed. Tie-downs for holding the ATV on the trailer may not be provided by your dealer. Regardless of your trailer's make or model, there are two key areas to consider:

Front Tie-Downs: A tie-down should be attached to hold the ATV down to the trailer. Do not rely on just the weight of the ATV to hold it in place. Besides keeping your ATV from sliding around, they also keep your ATV on the trailer during quick stops or minor collisions. Be certain that lines do not pass over any edge that will cause chafing.

Rear Tie-Downs: As noted previously, it is very important to be sure that the ATV remains in place when parked or underway. Special rear tie-downs are available for this purpose. Check often to be sure the rear tie-downs are securely locked in place and that they are tight enough to prevent any movement of the ATV. Check by rocking the ATV on the trailer, if it does not remain firmly in place on the supports, tie-downs should be tightened or re-rigged.

Make sure that all pins, latches, gates and ramps are in place and secured before moving the trailer.

TRAILER JACKS

WARNING - A wheel-equipped jack is intended for lifting and minimal positioning of the trailer coupler over the hitch ball. The jack is not intended to be wheeled excessively and should never be rolled over bumps or through other obstructions. In the case of a swing-up style jack, failure to properly secure the plunger pin in the proper position may result in serious injury or property damage.

With the exception of trailers carrying lightweight loads, it is generally necessary to use a jack to lift the coupling of a loaded trailer from the hitch ball and to move the trailer around when it is disconnected from the towing vehicle. The trailer tongue should be lowered to a minimum height before moving the trailer around on the jack wheel.

Like any mechanical assembly, a jack requires maintenance to function properly over a long period of time. Follow the manufacturer's recommendations for lubricating drive gear, rack and pinion, casters and jack wheel bearing.

If your trailer jack is designed to swing up out of the way when the trailer is hooked up to your tow vehicle, be certain it is in its fully locked position before attempting to move the trailer.

Be sure to block the trailer wheels before trailer is detached from the tow vehicle to eliminate dangerous trailer movement.

Attaching your trailer to the tow vehicle

When hitching your trailer, you should always observe each item of the "Trailer Checklist" printed in the front of this booklet. Hitching your trailer to your tow vehicle can be a one-person job, but it is easier if you have a second person to help you. Here are the basic steps:

1. Raise the front end of the trailer so the coupler is higher than the hitch ball. Make sure the coupler latch is open.
2. Back your tow vehicle as close as possible to the trailer. Do not pull the trailer to the tow vehicle, the trailer will not brake when rolling on a hill, even if the trailer has brakes.
3. Place the couple over the hitch ball and lower the coupler until it is around the ball and not riding on top of the ball.
4. Lock the coupler to the hitch ball. Be sure it is in the locked position and securely in place; lift up on the trailer tongue. If it comes loose from the ball, unlock and go back to step 3.
5. Be certain the jack is fully raised and locked in the travel position.
6. Use of a weight-distributing hitch is not recommended.
7. If your trailer has a surge brake break-away cable or chain, attach it to tow vehicle, making sure there is enough slack for tight turns.
8. Attach the safety chains (see "Safety Chains" section).
9. Connect trailer wiring harness to lighting system connection of tow vehicle and check for proper operation (see "Trailer Lights" section).

TOWING TIPS

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

Slow Down: Going fast is a major cause of vehicle/trailer combination accidents. Slower speeds are not as hard on the vehicle, trailer and load. Slow down for curves, bad weather, bad roads, and highway exits. Also, many states have lower speed limits for vehicles towing trailers.

Take a test drive: Before you make your first trip with your trailer, make at least one short trail run to familiarize yourself with its handling characteristics and to be sure everything is working properly—light, brakes, hitch, etc.

Pass and Stop with Extra Care: You'll need more time and space when passing and stopping, especially if your trailer is not equipped with brakes. Pass with care and return to the right lane.

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 When Turning: Trailer wheels swing closer to the inside of turns than the wheels on your tow vehicle when turning. This means you should swing wider around curves and corners. Be careful when pulling into gas stations.

Don't Tailgate: 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 and Stop with Extra Care: You'll need more time and space when passing and stopping, especially if your trailer is not equipped with brakes.

Avoid Sudden Stops and Starts: Even if your trailer has brakes, a sudden stop could cause it to skid, slide or even jackknife. Be especially careful to avoid the necessity for quick stops while turning. Smooth, gradual starts and stops will improve your gas mileage and put less strain on your tie-downs, etc.

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

Shift 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.

Going Downhill: Swaying happens more often going downhill. Slow down before starting down a hill. If your trailer is equipped with Surge brakes, use intermittent braking to control your speed, do not shift into a lower gear. Going too fast can make the trailer sway and can lead to loss of control.

Watch the Wind: Be prepared for sudden changes in air pressure and/or wind buffeting when larger vehicles pass you from either direction. Slow down a little and keep a firm hold on the steering wheel.

Always Be Courteous: Make it as easy as possible for faster-moving vehicles to pass you. Keep to the right side of the road and be prepared to slow down if they need extra time to return to their proper lane.

If a Problem Occurs: The general rule is to stay cool. Don't panic and don't do anything more suddenly or violently than you may have to. A sudden bumping or "fishtailing" may be due to a flat tire. Do not panic, brake or accelerate to attempt to "drive out of it." Stop slowly and in a straight line. If conditions

permit, allow your vehicle to coast to a very slow speed and try to avoid breaking when the towing vehicle and trailer are not in line.

If your trailer begins to "fishtail" as you accelerate to highway speed, back off a little and it should cease. If it begins again as you accelerate, stop and check your load. It is probably not evenly distributed side to side, or it is too far back so the hitch weight is too light. Redistribute your load before continuing.

TRAILER WARRANTY

Your trailer is warranted to the original owner to be free from defects in material and workmanship for the period of one year, from the date 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. Echo Trailers LLC is not obligated to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts. Costs incurred for service, labor, or other expenses which have been incurred by the buyer without express approval or authorization by Echo Trailers LLC will not be accepted. Echo Trailers LLC 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.

LIMITATIONS AND EXCLUSION TO WARRANTY

Damage or defects caused by the following will not be covered:

"Trailer that has not been serviced properly.

"Overloading or abusing the Trailer.

"Use of service parts not supplied by Echo Trailers LLC or an approved supplier.

"Parts such as tires that require replacement in the ordinary course of use due to normal wear.

"Parts such as tires and axles that are covered by their manufacturer's warranty.

"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. Send defective parts or components freight prepaid to Echo Trailers LLC. 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.