

Introduction

Congratulations! Having purchased a Car Mate Trailer affords the peace of mind that a wise consumer decision has been made.

Car Mate's commitment to quality, craftsmanship and customer service allows us to stake our claim as an industry leader. Car Mate meets or exceeds all standards of construction established by the National Association of Trailer Manufacturers (NATM).

Being attentive to consumer needs and industry changes, Car Mate is a leader by offering a product line that boasts quality and features that are second to none.

The following "Owner Guidelines" are just that – guidelines. A combination of cautions, suggestions, recommendations, facts and figures to make a first time owner's experience a positive one and offer a refresher course for the veteran. By reading and understanding these guidelines, everyone that now owns a Car Mate Trailer should have years of safe, worry free "trailer"ing".

Everyone at Car Mate Trailers is dedicated to offering the finest quality trailer on the market today. With thirty plus years of manufacturing experience combined with a sales and support staff focused on the needs of customers and dealers alike, Car Mate has that competitive edge needed to be a leader in today's trailer manufacturing industry.

Enjoy your new Car Mate Trailer!

Visit us on the World Wide Web!

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www.carmate-trailers.com



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Trailer Data

Date of Purchase _____

Model/Size _____ / _____

Serial Number _____

GVWR _____

Wheel/Tire Size _____ / _____

Color _____

Optional Equipment _____

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 Car Mate Trailers.

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 Car Mate Trailers.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov>; or write to:

Administrator

NHTSA

1200 New Jersey Avenue S.E.

Washington, DC 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Checklist

Read and understand the following instructions and warnings.

Always check before towing a trailer:

- ☐ Coupler, hitch and hitch-ball are properly sized.
- ☐ Coupler and safety chains are safely secured to hitch.
- ☐ Check all fasteners and connections.
- ☐ Tie-downs are being used properly to secure cargo.
- ☐ Wheel lug nuts are properly torqued.
(Please refer to "Torque Chart" inside back cover)
- ☐ Wheel bearings are properly adjusted and maintained.
- ☐ Load is within maximum load carrying capacity.
- ☐ Tires are properly inflated.
- ☐ All trailer lighting is working properly.
- ☐ Trailer brakes & brake controller are properly adjusted and working. *(If applicable)*
- ☐ Trailer is equipped to meet all federal DOT safety standards.
Check state and local requirements regarding brakes.
- ☐ Trailer wheels should be chocked and secured when loading.
- ☐ When loading a single axle trailer not connected to a tow vehicle, tipping may occur. Stabilizing the rear of the trailer is recommended (use jacks, blocking, etc.).

Warning: Never carry passengers inside trailer!

Registration: Warranty and Ownership

Car Mate Trailers Limited Warranty applies to first purchasers only. Warranty cards should be completed at the time of purchase or signed and returned by the 15th day after purchase to validate warranty. Warranty registration also makes it possible for the manufacturer to notify first purchasers in the unlikely event of a defect notification.

A Manufacturers Certificate of Origin (MCO) is issued at the time of purchase. This document is verification of ownership. State laws vary regarding the registering of trailers. Contact your state Department of Motor Vehicles to verify proper procedures.

***Please Note: Trailer laws covering such things as brakes, lights, safety chains, licenses, etc. also vary from state to state. Be sure trailer is in full compliance with specific state laws. Contact your state Department of Motor Vehicles for complete information.**

Gross Vehicle Weight Rating (GVWR)

Warning: The total weight of all cargo and trailer must not exceed the trailer's maximum load capacity. **Note:** Maximum load carrying capacity is the gross vehicle weight rating (GVWR) less the weight of the empty trailer.

The key to carefree "trailer" is the proper match of tow vehicle, trailer and cargo.

Load Carrying Capacity

Check the certification label attached by the manufacturer to the left forward side of trailer. It is required to show the Gross Vehicle Weight Rating (GVWR) which is the maximum towing capacity (trailer weight plus cargo weight). Be sure that the total weight of trailer and cargo does not exceed the GVWR.

If the correct weight of tow vehicle, trailer and cargo is unknown, don't guess – **weigh it!** This can be done at a local lumberyard, feed mill, truck stop, etc. Be careful not to overload trailer. If overloading occurs regularly, go to the next heavier rated trailer.

When towing a trailer, the vehicle combination is longer, heavier, sometimes wider and taller than the tow vehicle. Exercise extreme caution to allow for these differences.

Tips for Carefree “Trailer”

Take a “Shakedown Cruise”

Before taking the first trip, make at least one short trial run to become familiar with different handling characteristics and be sure everything is working properly – lights, brakes, hitch, etc.

Slow Down

There is less strain on car and trailer at moderate to slow speeds. Many states have lower speed limits for vehicles towing trailers.

Allow Extra Time and Space

More of both are needed when passing and stopping, especially if trailer is not equipped with brakes.

Check Rear View Mirrors

It is recommended to install outside rear view mirrors on both sides of the tow vehicle. Check mirrors frequently to be sure trailer is towing properly.

Swing Wider

Trailer wheels are closer to the inside of turns than the wheels of the tow vehicle. Be sure to swing wider at curves and corners.

Pass with Extra Care

When towing a trailer, more time and distance is needed to safely pass slower moving vehicles.

Watch the Wind

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

Conserve Fuel

Wind resistance can reduce gas mileage significantly, especially at high speeds.

Avoid Sudden Stops and Starts

Even if a trailer has brakes, a sudden stop may cause it to skid, slide or even jackknife. Be especially careful to avoid quick stops while turning. Smooth, gradual starts and stops will improve gas mileage and reduce strain on tie downs, etc.

Signal Your Intentions

Before stopping, turning, changing lanes or passing, use light signals to alert other vehicles.

Shift to Lower Gear

If tow vehicle has a manual transmission, using lower gears when going up steep hills or over sand, gravel or dirt roads will ease the load on your engine and transmission. If tow vehicle has an “overdrive” gear (manual or automatic) better gas mileage may be achieved in a lower gear.

Always be Courteous

Make it as easy as possible for faster-moving vehicles to pass. Keep to the right side of the road and be prepared to slow down if another vehicle needs extra time to pass.

Don't Tailgate

Allow at least one car and trailer length per 10 mph when following another vehicle.

If a problem occurs “stay cool”, don’t panic. One such problem may be a flat tire. A sudden bumping or “fishtailing” may occur. Don’t jam on the brakes or over accelerate to try and “drive out of it”. Stop slowly, in as straight a line as possible. If conditions permit, coast to a very slow speed and try to avoid braking.

Trailer Hitch

Warning: The total weight of a loaded trailer must not exceed the capacity of the tow vehicle hitch.

There are two basic types of trailer hitches: a weight-carrying hitch and a weight-distributing hitch. When towing lighter trailers with a passenger car, a weight-carrying hitch is adequate. A weight-distributing hitch may be recommended for heavier trailers. Before deciding which type of hitch to use, consult the vehicle manufacturers recommendation.

Be sure the total weight of a loaded trailer does not exceed the hitch’s load capacity. The maximum allowable weight is stamped on the hitch. Also, be sure the hitch ball is sized to match the coupler. The correct ball diameter is marked on the trailer coupler. The hitch should also 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 chain attachments such as eye bolts along with a hitch ball installed according to the Society of the Automotive Engineers SAE J684 Standard. Installing a light or heavy-duty hitch can be a major undertaking. The hitch and its installation

should meet the SAE J684 Standard. It is recommended that the job be done by a professional dealer.

Note: The trailer should be in a level position when hitched to the tow vehicle.

Safety Chains

Warning: Failure to properly attach safety chains between trailer and tow vehicle can result in a run-away trailer.

Safety chains on a trailer provide added insurance that it will not become detached from the towing vehicle. Be certain that safety chains are correctly attached between the tow vehicle and the trailer before each use.

As noted, the trailer hitch should provide a place for attaching safety chains, (holes or rings on both sides of the hitch ball). It is strongly recommended (required by most states) that safety chains crisscross under the trailer tongue, the chain on the left side of the trailer attached to the hole or ring on the right side of the hitch ball, the right side chain attached to the hole or ring on the left side of the hitch ball. This will prevent the trailer tongue from dropping to the road if the trailer coupler separates from the hitch ball. The chains should be rigged as tight as possible with just enough slack to permit tight turns. If replacement of a safety chain becomes necessary, do not substitute a lighter weight chain.

The Society of Automotive Engineers standard for safety chains:

Trailer Class	Trailer Weight	Minimum Breaking Weight
Class I	to 2000 lbs. GVWR	2000 lbs.
Class II	2000 to 3500 lbs. GVWR	3500 lbs.
Class III	3500 to 5000 lbs. GVWR	5000 lbs.
Class IV	5000 to 10000 lbs. GVWR	The GVWR of the trailer

Couplers

Warning: Failure to engage the hitch ball in the coupler ball socket and securely lock the coupler latch may cause the trailer to become detached from the tow vehicle while in use.

The trailer coupler is designed for maximum strength when the hitch ball is in its socket. It is necessary to exercise caution when the trailer is disconnected, not to damage the coupler in any way.

The coupling socket should not be allowed to rest on the ground where dirt and sand can enter the socket. This will cause excessive wear when the trailer is next connected or cause the locking mechanism to jam. If the coupler becomes damaged it must be repaired or replaced immediately. When the coupler is placed on the ball, the latch should close firmly and a locking pin placed through the coupler. Keep the latch mechanism lightly oiled and cleaned.

Warning: Always replace damaged couplers or latch assemblies before attempting to connect tow vehicle and trailer.

Lights

Warning: Check all trailer and tow vehicle lighting before each use.

State and Federal regulations require all types of trailers be equipped with turn signals, tail, stop, and side marker lights. Trailers 80 inches and wider also require clearance and identification lights. The manufacturer supplies these lights. It is the owner's responsibility to maintain lights in good working condition at all times.

A special wiring harness for connecting trailer lights to the lighting system of the tow vehicle comes with the trailer. Be sure the white ground wire from the connector is attached to the frame so that the hitch ball does not act as an electrical connection.

Hints to keep trailer lighting system in good working order:

- At least once or twice a year, trace the wiring system from the tow vehicle to the trailer and back. Look for bare wires, cracked or chafed insulation and corroded or rusted terminals. Be sure the white ground wire is still connected to the trailer frame. Replace any parts that are damaged or badly worn.

- A small amount of waterproof grease on plug contacts and light bulb bases will help to prevent rust and corrosion.
- Before every use, check for burned out or broken bulbs, cracked or broken light lenses, etc.

Note: Basic wiring diagrams are available on page 15.

Wheels and Hubs

Warning: Maintain proper torque on wheel lug nuts. Please refer to “Torque Chart” inside back cover.

Lug Nuts

Loose lug nuts can cause more than just annoying “wheel wobble”, wheel loss may occur. Before each use, check for loose or missing lug nuts. Replace missing lug nuts immediately. Be certain a replacement lug nut is an exact match for the original.

Lubrication

Unless trailer is equipped with water-protected hubs, avoid submerging axles and hubs in water. When traveling, regularly check wheel hubs. If hubs feel abnormally hot, bearings should be inspected before continuing.

Warning: Failing to properly lubricate wheel bearings may lead to bearing failure.

Tires

Warning: Maintain proper air pressure. Failure to do so will cause excessive tire wear, reduced fuel efficiency and may become a safety concern.

The most common cause of trailer tire trouble is under-inflation. It is important to maintain proper air pressure, indicated by the tire manufacturer on the tire’s sidewall or on the trailer manufacturer’s certification label. Always check air pressure when tires are cold. Tires heat up and air pressure increases after traveling only a short distance.

When trailer tires become worn or damaged, replace them promptly with the same type, size and capacity (not necessarily the same brand) as the original tires. For example some trailers are not designed for use with radial tires. If the original tires are not radials, do not replace with radials.

Effective September 1, 2005, all trailers under 10,000# GVWR will have a placard affixed proximate to the VIN tag and will show:

1. Trailer manufacturer's recommended cold tire inflation pressure for front, rear, and spare tires.
2. Tire size designations for tires installed at time of first purchase.
3. The phrase, "Tire and Loading Information."
4. The instruction, "See Owners Manual for additional information."
5. The tire identification code for any non-pneumatic spare tire assembly on the vehicle.
6. The cargo capacity statement, "The weight of cargo should never exceed XXX kilograms or XXX pounds."

Steps for Determining Correct Load Limit

1. Locate the statement "The weight of cargo should never exceed XXX kg or XXX lbs" on your vehicle placard.
2. This figure equals the available amount of cargo and luggage load capacity.
3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

Note: For safety and convenience, it is recommended to always carry a spare wheel and tire.

Brakes

Warning: Trailer brakes must be maintained in good working condition. Lack of adequate braking may result in control loss. If applicable, the tow vehicle **MUST** be equipped with an electric brake controller. Hydraulic surge brakes do not require an electric brake controller.

In most states, trailers with a Gross Vehicle Weight Rating (GVWR) of 3000 pounds or more are required by law to have brakes on all wheels (check with state DOT for specific requirements). Try brakes before each use and if trailer wheels are pulled for lubrication. Have brake linings regularly inspected, necessary adjustment made and any damaged or worn parts replaced. Wet brakes do not hold well. If wheels have been in water, several brake

applications at slow speeds will dry them out.

Each Car Mate trailer that is equipped with electric brakes has a gel-cell break-away battery. For this battery to remain charged, the tow vehicle must have a properly wired charge wire to the electrical connector.

“Getting Connected”

When connecting a trailer and tow vehicle, observe each item of the Trailer Check List. Connecting a trailer can be a “one man job” (made easier if a second person is available).

- Back the tow vehicle as close as possible to the trailer. This is easier and safer than pulling the trailer to the car or truck.
- Be sure the coupler-locking device is released.
- Raise front end of trailer. Position the coupler directly over the hitch ball and lower until it is all the way down.
- Check under the coupling to be certain that the ball clamp is below the ball and not riding on top of the ball.
- Lock the coupler to the hitch ball. Be sure the coupler is in the locked position and a locking pin is placed through the coupler. Lift up on the trailer tongue. If it comes loose from the ball, unlock and start again.
- Be sure tongue jack is fully raised.
- At this point the tow vehicle and trailer should be level.
- When using a weight-carrying hitch and the tow vehicle and trailer are not level, make hitch adjustments at the tow vehicle not the trailer (assuming the trailer weight is distributed properly).
- For a weight-distributing hitch with spring bars, follow the above procedures. Then attach spring bar chain or cable to the trailer and tighten until car and trailer are level.
- If the trailer has a break-away cable or chain, attach it to the tow vehicle, making sure there is enough slack for tight turns.
- Attach the safety chains (see “Safety Chains” section on page 8).
- Connect trailer wiring harness to lighting system of tow vehicle and check operation (see “Lights” section on page 9).

Weight Distribution

Warning: “Fishtailing” caused by improper tongue weight may result in loss of control of the tow vehicle and trailer.

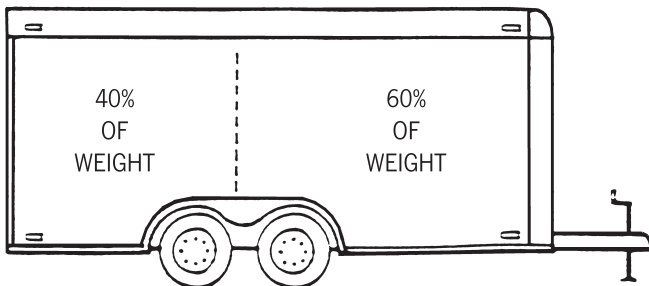
Improper weight distribution can cause a trailer to “fishtail” (sway from side to side). This puts excess strain on the tow vehicle and trailer, increasing gas consumption. Excessive “fishtailing” may cause an accident. The most effective way to guard against “fishtailing” is proper weight distribution. Position 60% of cargo weight forward of trailer axle (axles) center with 40% to rear of trailer axle (axles) center.

It is extremely important that approximately 10% of the total weight of the trailer and cargo be on the hitch ball when the tongue is parallel to the ground. For example, if the gross vehicle weight is 2000 pounds, the weight on the tongue should be approximately 200 pounds.

If the weight on the coupling ball does not fall within the proper range, take immediate steps to correct. If only a small adjustment is required, you may be able to solve the problem by shifting the cargo from front to back or vice versa. If this is not effective, a weight-distributing hitch will eliminate the problem. Check with your dealer for more information.

Note: The importance of proper weight distribution cannot be overemphasized.

POSITION LOAD AS PICTURED



Trailer Jacks

With the exception of lightweight trailers, it is necessary to use a trailer tongue jack to lift the coupler of a loaded trailer from the hitch ball and move the trailer about. The trailer tongue jack should be lowered to a minimum position before moving the trailer.

Like any mechanical assembly, the tongue jack requires maintenance to function properly over a long period of time. Drive gears, rack and pinion should be greased frequently. All other moveable parts should be oiled regularly.

Tips

Carry a "Trailer Kit". Include a spare wheel and tire, lug wrench and jack, wheel chocks, bearing grease, clearance light assembly, light bulbs, wheel bearings and road flares. Contact the nearest Car Mate dealer to confirm part sizes and availability.

Some insurance policies do not provide coverage when towing a trailer. Check your policy!

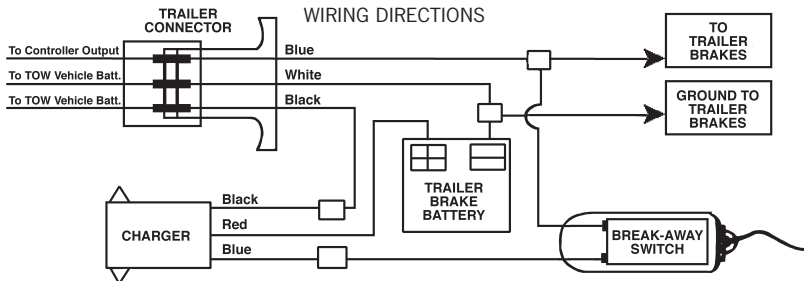
Storage

If trailer will not be in use for several months, the following steps will help insure proper performance when removed from storage and extend trailer life.

- If possible, park trailer in a protected area, garage, carport, etc.
- Service or repack wheel bearings according to manufacturer's instructions.
- Raise trailer and place blocks under trailer frame to take most of the weight off trailer springs and tires.
- Lubricate all moving parts.
- Tighten loose fasteners and connections.

CAR★MATE® BRAKE MASTER™

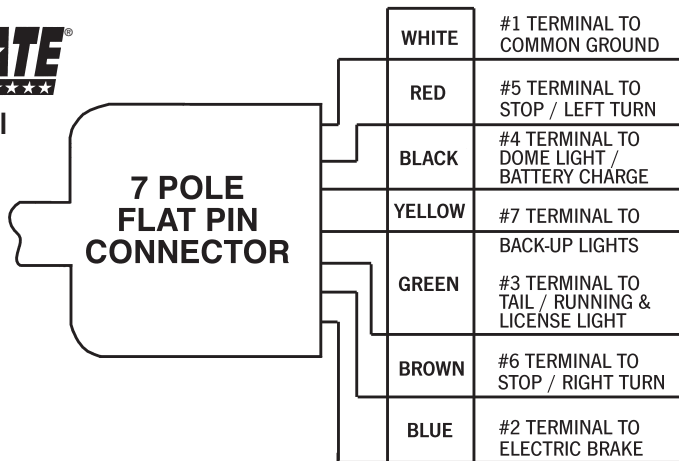
Break Away System for Single, Tandem, and Tri-Axle Trailers



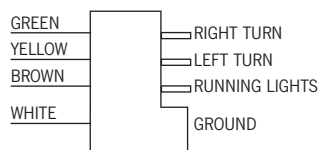
IMPORTANT NOTICE: The condition of the battery contained in this kit must be maintained, checked, and sufficiently charged prior to every trip!

CAR ★ MATE®
TRAILERS INC. ★ ★ ★ ★

12V Electrical Connectors



Note: Locate wires by function only. Color coding is not standard among all manufacturers.



Date	Service Performed	Date	Service Performed

Notes

[illegible]

Please take advantage of this service log to track the routine preventative maintenance of your Car Mate Trailer.