

TOWING TIPS

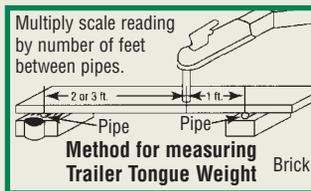
HOW TO TOW SAFELY

1. ASK QUESTIONS:

Towing vehicle	Trailer
What is the:	What is the:
Make and model?	Type of trailer?
Model year?	Gross trailer weight?
Vehicle maximum towing capacity?	Tongue size?

2. DETERMINE THE TOWING WEIGHTS

The most important factors in choosing the correct towing equipment is the gross trailer weight (GTW) and tongue weight (TW).



For the trailer: Gross trailer weight is the weight of the trailer completely loaded. To determine actual GTW, the trailer should be placed on a vehicle scale. To determine an approximate GTW, review the weight chart on Page 43. Select a similar trailer and find the corresponding trailer length. The Gross Trailer Weight provided is a stock trailer. Adjust the chart weight accordingly to the actual load.

Tongue weight (TW) is the downward force exerted on the hitch ball by the trailer coupler. Usually, TW is 10% to 15% of GTW. Tongue weight may be measured using a bathroom scale, by resting the trailer coupler on the scale and placing the scale on a box so the trailer is at normal towing height. Load the trailer as if being towed.

For the tow vehicle: The vehicle's maximum towing capacity is determined by the manufacturer. This is found in the owner's manual.

3. SELECTING THE RIGHT HITCH

With the correct Gross Trailer Weight (GTW) and Vehicle Towing Capacity, the correct trailer hitch can be selected. Refer to page 59, the weight guide chart, to match the GTW to a trailer hitch.

Class I Hidden Hitch is designed for vehicles towing 2,000 lbs. GTW or less, 200 lbs. TW. In some cases, Class I Hidden Hitch may tow up to 2,500 lbs. GTW, 250 lbs. TW. A typical Class I application is used for towing small utility trailers. Passenger vehicles are most suited for Class I applications.

Class II Hidden Hitch is designed for vehicles towing 3,500 lbs. GTW, 300 lbs. TW. A typical Class II application is used for towing large utility trailers, boats or campers. Sport utility vehicles, minivans, large passenger cars, and mid-size pick-up trucks are suited for Class II Hidden Hitches

Class III & IV Hidden Hitch Receivers have the towing capacity of up to 6,000 lbs. GTW or less, 600 lbs. TW. The towing capacity may be increased to a maximum of 10,000 lbs. GTW, 1,000 lbs. TW using a weight distribution system. The GTW and TW must conform to the vehicles maximum towing capacity. Refer to the

vehicle owner's manual. All pick-up trucks, full size vans and sport utility vehicles may use a Class III receiver.

Class V Hidden Hitch MAGNUM Receivers have the towing capacity of 8,000 GTW, 1,200 TW; 14,000 lbs. GTW, 1,700 lbs. TW with weight distribution. The MAGNUM is designed for only full-size pick-up trucks.

4. SELECT THE PROPER ACCESSORIES

Once the correct trailer hitch is selected, towing accessories complete the towing package. The following accessories are required. Several types of each accessory are available. Consult the noted page number for exact requirements.

1. Trailer ball - mounted on the drawbar or ball mount. The ball size must match the trailer coupler size. See page 22-23.
2. Drawbar/Ball mount - Hidden Hitch products have removable ball mounts. See page 18-19.
3. Trailer coupler - required on a trailer. See page 35.
4. Electrical and wiring - all tow vehicles must be properly wired. See page 39-49.
5. Brake control - required when towing a trailer with electric brakes. See page 50-51.
6. Safety chains - required when towing - See page 36.

HITCHING UP TIPS

Hitching a trailer to your tow vehicle is usually a one-man job, but it is easier if someone helps.

Here are the basic steps:

1. Back your tow vehicle as close as possible to the trailer; it's easier and safer to do this than to pull the trailer to your car or truck.
2. Release the coupler locking device.
3. Raise the front end of the trailer coupler directly over the hitch ball; then lower it until it is seated on the hitch ball, covering it completely.
4. Check under the coupling to ensure the ball clamp is below the ball and not riding on top of it.
5. Latch the coupler to the hitch ball. Make sure it's locked in place by lifting up the trailer tongue. If the coupler comes loose from the ball, unlatch it and go back to Step 3.
6. Make sure your jack is fully raised.
7. If you have a weight-distributing hitch with spring bars, follow the above procedure, then attach the spring bar chain to the trailer and tighten it until your trailer and car are in a normal level position.
8. If your trailer has a surge brake, breakaway cable, or chain, attach the cable or chain to your tow vehicle, allowing enough slack for you to make tight turns.
9. Attach the safety chains and criss-cross them under the ball mount to ensure they do not drag.
10. Connect the trailer wiring harness to the lighting system of your tow vehicle and check its operation (see the 'Pre-Trip Checklist').

TOWING TIPS

SAFETY TIPS

Trailer Tactics: With a trailer in tow, you're 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 driving practices.

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

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

Allow Extra Time and Space: You'll need both when passing and stopping, especially if your trailer has no 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 on your tow vehicle.

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.

Pass with Extra Care: It takes more time and distance to get around a slower vehicle and return to the right lane when you've got a trailer in tow.

Watch the Wind: To avoid swaying, be prepared for sudden changes in air pressure and wind buffeting when larger vehicles pass from either direction. Slow down a bit and keep a firm hold on your steering wheel. Aim straight down your lane.

Conserve Fuel: You'll go farther on a tank of gas at moderate speeds. Higher speeds increase wind resistance against the trailer and reduce your gas mileage significantly.

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.

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.

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

Don't Tailgate: Allow at least one car and trailer length between you and the vehicle in front for each 10 mph on your speedometer.

If a Problem Occurs: Don't panic. Stay cool. Say you experience a sudden bumping or fish-tailing. It may indicate a flat tire. Don't jam on the brakes or mash the accelerator in an attempt to drive out of it. Instead, come to a stop slowly as you keep driving in as straight a line as possible. If conditions permit, coast to a very slow speed and try to avoid braking, except when your wheels are straight and your trailer and tow vehicle are in line with each other. If your trailer begins to fishtail as you accelerate to highway speed, back off the accelerator a bit. This should stop the fishtailing. If it begins again as you increase speed, stop and check your load. It probably isn't distributed evenly from side to side, or it's too far back to put a sufficient load on the hitch ball. It is recommended that about 10% of the trailer load be on the hitch. Redistribute the load as necessary before continuing.

THE 'PRE-TRIP CHECKLIST'

TOW VEHICLE Walk around the vehicle and check these items:			TRAILER Walk around the trailer and check these items:		
ITEM	OK	NEEDS ATTENTION	ITEM	OK	NEEDS ATTENTION
Coolant level in radiator	-----	-----	All lights operate properly	-----	-----
Coolant level in coolant recovery reservoir	-----	-----	All tires (tire pressure and tread wear)	-----	-----
Radiator cap fits properly	-----	-----	All wheel lugs	-----	-----
Water level in battery	-----	-----	Safety chains connected and criss-crossed	-----	-----
Battery terminals free of corrosion	-----	-----	Breakaway switch and lanyard	-----	-----
Radiator hoses (flexible and tight)	-----	-----	Coupler locking-pin (if used)	-----	-----
Fan belt tight? Worn?	-----	-----	Trailer electric cable connected & secure	-----	-----
Transmission fluid level	-----	-----	Trailer lights and turn signals functioning with tow vehicle	-----	-----
Condition of transmission fluid (if fluid is pinkish-oil OK, if fluid is dark brown, you need your transmission serviced)	-----	-----	Tongue jack fully up	-----	-----
Transmission fluid cooler hoses and connections	-----	-----	Dolly wheel removed (if appropriate)	-----	-----
Engine oil level (how many miles since last oil change?)	-----	-----	Load distributed in trailer so that proper tongue weight is maintained (about 10% on trailer load)	-----	-----
Power steering fluid level	-----	-----	Trailer is level when attached	-----	-----
Hose & connections to power steering	-----	-----	Bearings greased	-----	-----
Spark plug wires snug	-----	-----	Coupler size matches ball size	-----	-----
Air filter (when was it last changed?)	-----	-----	Pin & clip installed through drawbar of hitch	-----	-----
Fluid in windshield washer reservoir	-----	-----			