

Things to Know Before You Tow

*The right equipment adds safety,
simplicity and convenience*

Lawrence Wheeler



*PRE-DEPARTURE CHECKLIST SHOULD ALWAYS
INCLUDE A TEST OF DINGHY AND COACH BRAKE/
TAILLIGHTS ONCE EVERYTHING IS CONNECTED.*

It seems the more people use their coaches, the more advantages they find to having an auxiliary vehicle.

Families can go sightseeing and leave the motorhome at a base camp. Shopping trips and visiting friends' homes no longer require breaking camp and lumbering into town, traveling down narrow streets and looking for an extra-large parking space. And, upon return, there's no need to wheel the rig back into place, drag out the lawn chairs and barbecue grill and replay the

whole process of leveling and hooking up.

Additionally, the dinghy can stow gear securely when motorhome storage is filled, and there is the security of having a spare set of wheels in the event of a breakdown or other emergency.

However, it isn't for free; towing a dinghy will affect the acceleration, fuel economy and braking of any motorhome, at least to some degree. Proper selection of a dinghy and towing equipment will enable you to safely and conveniently enjoy the benefits of auxiliary transportation.



XL-7

tow a Suzuki and your odometer won't be spinning



THE 2005 SUZUKI XL-7.

We've designed all our 4WD SUVs, so they won't rack up miles when towed. So the XL-7 is the perfect getaway vehicle for your next RV trip. With available third-row seating, room for seven and rear air conditioning, everybody stays calm, cool and collected. XL-7 also comes with a standard V6, so you can make tracks when you need to. And since your mileage stays low, resale value stays high. The new XL-7. Take it along for the ride on your next family adventure. XL-7 4WD starts at \$22,894.¹

AMERICA'S #1 WARRANTY²
100,000 MILES • NO DEDUCTIBLE • FULLY TRANSFERABLE



For more information, visit suzuki.com

MAKE THE SMART MOVE

(1) MSRP. XL-7 EX 4WD shown \$26,394 MSRP. MSRPs include freight, but exclude government fees and dealer charges. (2) All new Suzukis come standard with a 100,000-mile/7-year powertrain limited warranty. See dealer for complete warranty details. SUVs handle differently than ordinary passenger cars. Federal law cautions to avoid sharp turns and abrupt maneuvers. Always wear your seatbelt. For specific details, read your owner's manual. © American Suzuki Motor Corporation 2004. Suzuki, the "S" logo, and Suzuki model names are Suzuki trademarks or ®.

THINGS TO KNOW BEFORE YOU TOW

The Selection Process

The first and essential step in selecting a dinghy vehicle is to make sure it is approved by its manufacturer for flat towing (see accompanying ratings), unless a specific towing accessory (such as a transmission lube pump) is available for that specific model as an aftermarket add-on, or towing on a dolly is planned. Buyers should confirm flat-towability in the vehicle owner's manual before the purchase is finalized.

An economical four-passenger compact car can double as a family's second car when not traveling, but even a larger vehicle can be towed if luxury models are more your style, providing its weight is within the towing limit of your chassis (see accompanying article, "Chassis Considerations"). Back-country enthusiasts may prefer a four-wheel-drive (4WD) dinghy. A seven-passenger SUV with a roof rack can take

a group of anglers, all their gear and a boat into places no motorhome could ever reach.

When selecting a dinghy, first determine the maximum towing limit of your motorhome and

then decide what vehicles fall within that limit. Towing limits aren't the only factor to consider, but they help to eliminate many choices based on weight alone. The weight rating of the motorhome's hitch receiver is another concern, although most are adequate, and receivers

can be upgraded.

However, an upgraded hitch receiver cannot increase the specified towing limit set by the coach manufacturer.

Using the formulas in the accompanying story, you can calculate the maximum weight of a loaded dinghy your motorhome can safely

tow and still protect the coach warranty.



THE TOW BAR ATTACHES TO DINGHY QUICKLY AND EASILY WITH A PAIR OF HITCH PINS; TELESCOPING BARS FURTHER EASE THE HOOKUP.

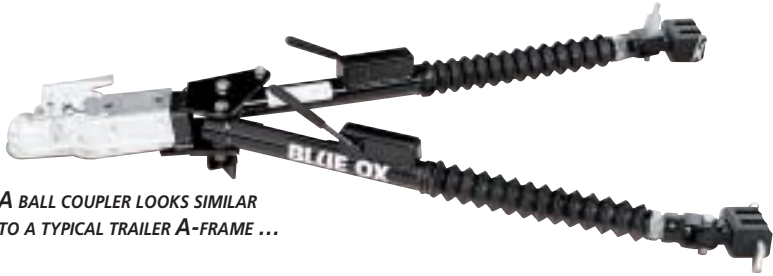


WHILE DRIVING YOUR DINGHY, THE STOWED TOW BAR REMAINS ON THE COACH, TUCKED OUT OF HARM'S WAY.



SIMPLE BALL-COUPLER TOW BAR IS IDEAL FOR VEHICLES LIKE WRANGLER, BRONCO.

THINGS TO KNOW BEFORE YOU TOW



A BALL COUPLER LOOKS SIMILAR TO A TYPICAL TRAILER A-FRAME ...



... WHILE A MOTORHOME-MOUNTED TOW BAR ELIMINATES NEED FOR A BALL MOUNT.

Flat-Towing

The vehicles most frequently used as dinghies can be flat-towed (four wheels on the ground) without any drivetrain modification.

Most flat-towed dinghies track so well that many motorhome drivers have commented, "You don't even know it's there." Front-wheel-drive (FWD) vehicles with manual transmissions and most 4WD vehicles with manual transfer cases are

among the easiest and most economical to tow.

Some auto manufacturers even produce FWD vehicles equipped with automatic transmissions that are flat-towable. They are popular because the expense of towing equipment is minimal, and readying for towing involves fewer steps. Many popular vehicles have these desirable flat-tow capabilities. Proper towing will not void the warranty on vehicles endorsed by the manufacturers as flat-towable.

Some vehicles do require special procedures,



SAFETY CABLES ARE REQUIRED. INSTALLED, THEY MUST BE CROSSED TO CATCH THE TOW BAR IN CASE OF EMERGENCY.

Before You Tow

Make sure your equipment is rated for the dinghy's weight and that you are not exceeding your motorhome's gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR).

- Confirm hitch height is correct.
- Confirm all hitch bolts and tow-bar and baseplate fasteners are securely tightened.
- Confirm all hitch and wiring connections are engaged and secure, all safety chains or cables are attached, and all locking pins are properly installed.
- Connect brake system and breakaway device.
- Check motorhome and dinghy for proper function of taillights, brakelights and turn signals.
- Check tire pressure of all tires on motorhome and dinghy — including spare tires.
- Make sure the dinghy is set up for towing: steering unlocked, hand brake off, gear selector in position specified by manufacturer, ignition in proper position, lube-pump switch, driveshaft coupler, 4WD transfer case and hubs (if applicable) in proper position.

THINGS TO KNOW BEFORE YOU TOW



**DROP RECEIVERS KEEP
MOTORHOME-MOUNTED
TOW BARS LEVEL.**

such as removing certain fuses before towing, or starting the engine every 200 miles to circulate transmission fluid. These practices, while inconvenient, are designed to prevent drivetrain damage and must be incorporated into the towing routine.

Equipment

Check the rating of your hitch receiver to ensure that it is rated for the heaviest load you intend to pull. If a receiver is already installed on your coach, the weight limits and class should be clearly visible on it.

Adjustable-height drop receivers allow the tow bar to ride level. Receivers should be bolted (not welded) in place, using at least Grade 5 bolts and lock washers, locking nuts or thread-locking sealer.

Tow bars are available in three basic styles. A-frame tow bars (offered as “solid” or “folding”), while the most economical, are designed to fit a limited number of baseplates (mounting brackets) or specific

applications (the folding design will fit a wider range than the solid design). They are strong, but heavy, and require storage space when not in use. Hitching is easier with a helper to guide alignment.

There also are two styles of self-aligning tow

bars: dinghy-mounted and coach-mounted. Coach-mounted units are the most desirable, as there is less chance of damage when not in use. Hitching is a one-person operation. Highly adaptable, self-aligning tow bars fit a broad range of vehicles by attaching to model-specific baseplates: Class III (5,000-lb.) or Class IV (10,000-lb.) models are available. Contact tow-bar manufacturers to find out if baseplates are offered for the dinghy you plan to tow.

All 50 states require properly rated safety chains or cables to keep the dinghy from separating from the motorhome if the tow bar or ball fails. Safety chains or cables should be connected securely to the dinghy and crossed under the tow bar, then

As You Go

- Observe the speed limit for towing in each state or province you are traversing.
- Maintain adequate stopping distance from the vehicle in front of you. A minimum five-second interval is recommended.
- Avoid towing in snowy or icy conditions.
- Pay particular attention to traffic merging onto the freeway, and be prepared to take evasive action to avoid “daydreamers.”
- Plan ahead — Most flat-towed dinghies cannot be backed more than a few feet, so it's necessary to focus on easy ingress and egress. Most tow-bar manufacturers will not warrant damage caused by backing. Dollies tend to jackknife quickly. It's better to disconnect the dinghy, and drive to a safe place to reconnect.
- Avoid having to make tight turns; they put a lot of pressure on tow bars.
- Towing in deep sand or gravel may cause the dinghy's front wheels to turn completely to one side. If this happens, you must manually re-center them before continuing.
- Walk around the motorhome and dinghy to inspect all connections, check tire pressure and look for signs of trouble every time you stop.

The Unified Tow Brake by US GEAR TRULY Makes You Safe & Legal



Remote Control
Mounts in
Motorhome Cockpit



"Our Tow Brake is permanently installed and protects us all the time. Our buddy's tow brake has to be reinstalled each time, but quite honestly, he usually leaves it disconnected and stowed away. It's a lot like seat belts, if you're not using them, you're not safe or legal."

Bob & Bobbie

Available from your local RV dealer

www.usgear.com

800-874-3271 xt. 650

THINGS TO KNOW BEFORE YOU TOW

secured to the hitch receiver. They should be long enough to allow full turning without binding, but not drag when slack.

Safe flat towing of a dinghy requires a tail-light/brakelight system activated by the motorhome's lighting and braking systems.

Several companies sell aftermarket wiring kits that allow the dinghy's taillights to be connected directly to the motorhome's trailer-harness plug. Diodes are usually required to prevent electrical feedback from damaging their sensitive electronic components. Check with your mechanic or wiring-kit supplier to find out what your vehicle will need.

Alternately, a light bar or magnetic taillights can be attached to the rear of the dinghy before towing. These systems use their own harnesses, eliminating the need to connect to the dinghy's electrical system. However, they must be attached for towing and stowed away when the dinghy is disconnected for use, and they can easily be stolen.

Other Towing Options

Should you choose (or already own) a vehicle that is not flat-towable as produced, there are retrofit kits for many models. One retrofitter, Remco Manufacturing, estimates 80 percent of passenger vehicles can be modified to serve as dinghies with its line of retrofit products.

For rear-wheel-drive (RWD) and some 4WD applications, driveshaft couplers enable the driveshaft to be easily disconnected from the transmission or differential by a cable or lever mounted near the driver's seat. These kits run about \$650 and can be installed in about three hours.

A transmission-lube pump can be mounted and plumbed into some automatic transmissions to keep fluid circulating while the vehicle is in tow.

Other FWD vehicles can be adapted using a Remco axle-lock disengagement device. Check with your dealer to make sure a specific modifica-



LUBE PUMPS ALLOW TOWING OF SOME AUTOMATIC TRANSMISSION-EQUIPPED VEHICLES NOT MANUFACTURER-APPROVED FOR FLAT TOWING.

tion does not affect the dinghy's warranty.

Tow dollies also offer an alternative to flat towing, although they take up space in camp. Remember that the weight of the dolly must be figured in with the total weight of the dinghy.

Trailers track better than dollies, but they take up even more precious space in camp.

Also, the weight of the trailer drastically cuts into the total weight that can be pulled behind a motorhome, thereby

making this method a distant third choice.

Brakes

Emergency-stopping a motorhome can be a challenge; add 3,000 to 6,000 pounds of dinghy pushing from behind, and the need for effective dinghy braking becomes apparent.

There are numerous styles of braking systems available — cable-activated economy models, electric-solenoid-activated models, vacuum-operated units, air-pressure units and more. Some can be left in place, once installed; others are put in place each time the vehicle is towed. An on-board braking system should incorporate breakaway detection and dinghy-brake activation.

There are a number of other accessories for dinghy towing. Rock guards protect against road debris; tire-pressure monitors warn of low dinghy-tire pressure; and a color rear-view camera system can be helpful in detecting fire, smoke or other dinghy trouble. ■

For More Info

Automatic Equipment Manufacturing
(Blue Ox), (800) 336-4336, aemfg.com.
Remco Manufacturing, (800) 228-2481,
remcotowing.com.
U.S. Gear Corporation, (800) 874-3271,
usgear.com.