

## Before you assemble the dolly...

### WARNING

Read all instructions before assembling or operating the tow dolly. Failure to understand how to assemble or operate the tow dolly could result in property damage, personal injury or even death.

### Musts for installation safety

1. Assembler must use all bolts and parts supplied as instructed.
2. Assembler and owner must read and understand all instructions and heed all warnings within the owner's manual and the literature packet before loading any vehicle onto the dolly.
3. Owner must check with and comply with all local, state, federal or provincial requirements regarding tow dollies.

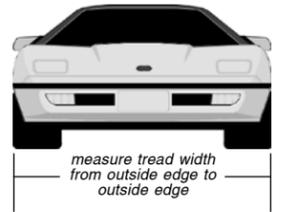
4. Assembler must always wear eye protection while assembling the tow dolly.
5. Assembler must show owner how to properly load, unload and tow his vehicle.
6. Assembler must caution owner to use a trailer ball, ball mount and receiver that is rated at 5,000 pounds or more.
7. Assembler must use solid wooden blocks or adequate stands for support while assembling the dolly.
8. Assembler must torque all bolts according to the enclosed chart (Figure 4).
9. Vehicles must be loaded with front wheels on dolly. Owner must be sure that any rear wheel drive vehicle is towable on dolly without damaging the transmission. Rear wheel drive vehicles may require a drive line disconnect to prevent transmission damage.
10. Assembler must stress importance of owner sending in product registration card. The warranty is only valid if the owner sends in his product registration card within 30 days. Warranty registration will allow us to expedite a claim or contact the customer should the need arise.

### Required tools

- torque wrench
- 1/2" socket
- 9/16" socket
- 3/4" socket
- 13/16" socket
- socket wrench
- 1/2" wrench
- 9/16" wrench
- 3/4" wrench

### Axle and ramp positioning chart

Position of axles and ramps	Minimum tread width	Maximum tread width
Axles narrow; ramps narrow	32"	68"
Axles wide; ramps narrow	32"	68"
Axles wide; ramps wide	40"	76"



## For wide axle assembly...

### Use these instructions ONLY for wide axle assembly

The wide axle setup is the most versatile, since the ramps can be adjusted to accommodate either narrow or wide vehicles.

Note: if the tow dolly axles are changed from wide to narrow, or from narrow to wide, the tow dolly must be realigned. See the section titled "Alignment instructions" in the owner's manual.

**1A.** Start by opening the box and unloading everything except the main bed of the dolly. Tear the walls of the box down and place solid wooden blocks or stands underneath each side of the frame so that the bottom of the main bed is about eight inches off the ground.

Now, use the "Axle and Ramp Positioning Chart" (above) to measure the overall tread width of the vehicle to be towed, and to determine the position for the axles and ramps.

**2A.** Attach one of the axles – Starting on one side, pull the axle out so the three holes in the top of the axle align with the three holes identified as **W5**, **W6** and **W7** in Figure 1. Insert 1/2" x 4 1/2" bolts with washers through **W5**, **W8** and **W9**. Install washers and lock nuts on the opposite side. Do not insert bolts through **W6** or **W7** at this time.

**3A.** Attach one of the ramps –

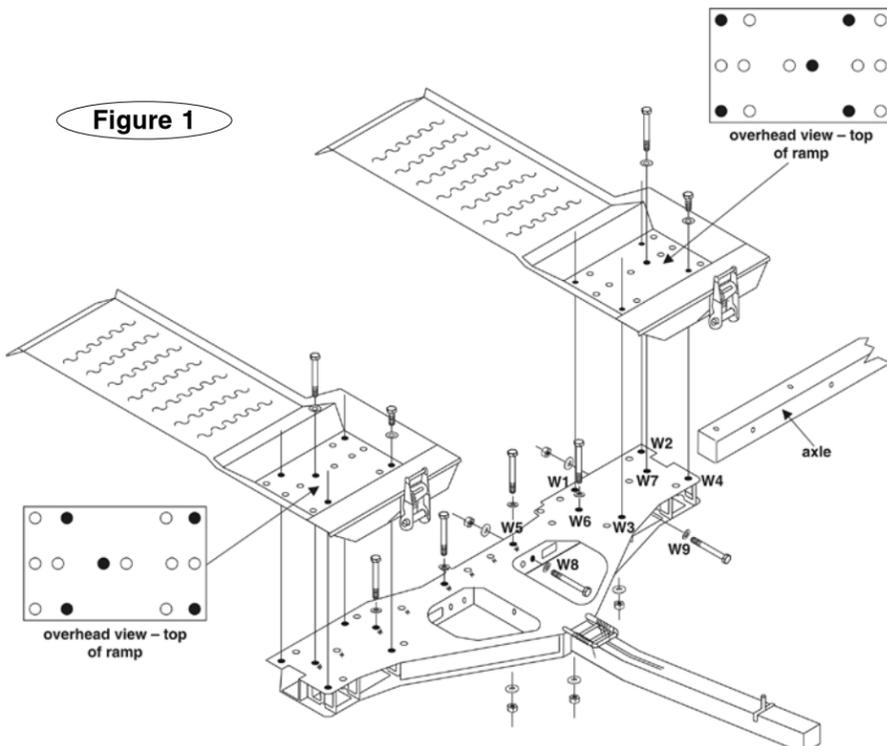
### CAUTION

When installing the ramps, use extreme caution not to pinch, crush, cut or otherwise damage the attached wiring or plugs. If electrical components are damaged, they will not function.

Since the axle is being assembled in the wide setting, the ramp can be mounted in either the narrow or wide position.

To attach the ramp at the wide setting, line the ramp holes (as shown in Figure 1) with the main bed holes **W1** through **W4**. With the ramp in position, insert and tighten the four 1/2" x 1" bolts and washers.

To attach the ramp at the narrow position, line the ramp holes (as shown in Fig-  
continued on next page



## For narrow axle assembly...

### Use these instructions ONLY for narrow axle assembly

Note: if the tow dolly axles are changed from narrow to wide, or from wide to narrow, the tow dolly must be realigned. See the section titled "Alignment instructions" in the owner's manual.

**1B.** Start by opening the box and unloading everything except the main bed of the dolly. Tear the walls of the box down and place solid wooden blocks or stands underneath each side of the frame so that the bottom of the main bed is about eight inches off the ground.

Now, use the "Axle and Ramp Positioning Chart" (above) to measure the overall tread width of the vehicle to be towed, and to determine the position for the axles and ramps.

**2B.** Attach one of the axles – Starting on one side, remove the two 5/16" x 2 1/4" bolts that go through the tie rod assembly (See Figure 3.). Next, pull the axle and tie rod assembly out so the three holes in the top of the axle align with the three holes identified as **N5**, **N6** and **N7** in Figure 2. With the wheels straight, line up the holes in the outer tie rod assembly with the inner holes.

Now, insert 1/2" x 4 1/2" bolts with washers through **N5**, **N8** and **N9**. Install washers and lock nuts on each of these bolts as shown. Do not insert bolts through **N6** and **N7** at this time.

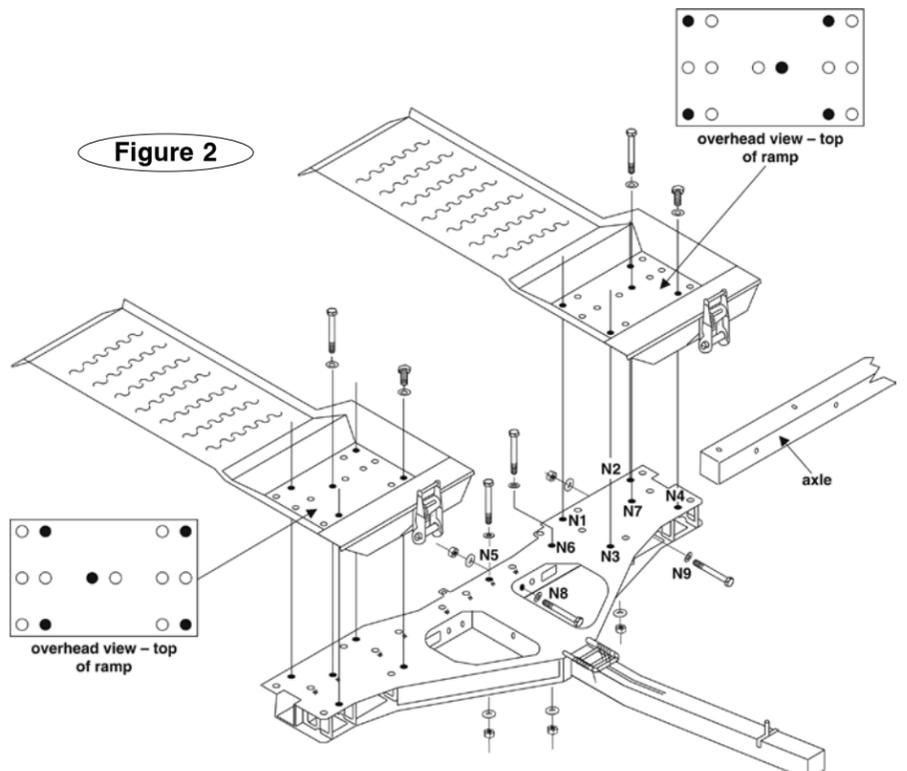
**3B.** Attach one of the ramps –

### CAUTION

When installing the ramps, use extreme caution not to pinch, crush, cut or otherwise damage the attached wiring or plugs. If electrical components are damaged, they will not function.

Since the axle is being assembled in the narrow setting, the ramp can only be mounted in the narrow position.

To attach the ramp in the narrow position, line the ramp holes (as shown in Figure  
continued on next page



## Wide axle assembly

continued from preceding page

ure 2) with the main bed holes **N1** through **N4**. With the ramp in position, insert and tighten the four ½" x 1" bolts and washers.

**4A.** Secure one of the axles – If the ramps are placed in the wide setting, insert ½" x 4½" bolts with washers through the ramp and into holes **W6** and **W7** on the bed (Figure 1). Install washers and lock nuts on the underside of these bolts.

If the ramps are placed in the narrow setting, insert two ½" x 4½" bolts with washers through the ramp and into holes **N6** and **N7** (Figure 2). Install washers and lock nuts on each of these bolts.

### WARNING

**It is imperative that all five of the ½" x 4½" bolts are used (on each side) to secure the axle to the main bed. All five holes will line up if the axles and ramps are in the correct position.**

**Failure to install and secure all bolts as instructed may cause the axle to separate from the main bed, resulting in property damage, personal injury or even death.**

**5A.** Secure the ramp and axle on the other side – Repeat Steps 2A - 4A to secure the ramp and axle on the other side.

You must install the ramp and axle on the other side at the same width position as you did for the first side.

**To finish the assembly, go to step 6 below.**

## Narrow axle assembly

continued from preceding page

2) with the main bed holes **N1** through **N4**. With the ramp in position, insert and tighten the four ½" x 1" bolts and washers.

**4B.** Secure one of the axles – Insert a ½" x 4½" bolt through the ramp and into hole **N7** on the bed (Figure 2). Insert another ½" x 4½" bolt through the main bed and axle at hole **N6** (Figure 2). Install washers and lock nuts on each of these bolts.

Install and tighten the two 5/16" x 2¼" bolts, nuts and washers on the tie rod assembly, as shown in Figure 3.

### WARNING

**It is imperative that all five of the ½" x 4½" bolts are used (on each side) to secure the axle to the main bed. All five holes will line up if the axles and ramps are in the correct position. Failure to install and secure all bolts as instructed may cause the axle to separate from the main bed, resulting in property damage, personal injury or even death.**

**5B.** Secure the ramp and axle on the other side – Repeat Steps 2B - 4B to secure the ramp and axle on the other side.

You must install the ramp, axle and tie rod on the other side at the same width position as you did for the first side.

**To finish the assembly, go to step 6 below.**

## To finish the assembly... (First, complete steps 1a through 5a for wide axle assembly, or 1b through 5b for narrow axle assembly.)

Now that the axles and ramps have been assembled, install the fenders, tires, tongue and stabilizer bars...

**6.** Install the fenders – Position one of the fenders onto the five bolts protruding from the back side of the hub assembly. Install the flat washers. Now, secure the fender to the axle assembly using the washers and nuts, as shown in Figure 3. Plug the fender wiring harness into the main wiring harness. Repeat on the opposite side.

**7.** Install the tires – Install the tire and wheel assemblies on both the driver's and passenger's side. Finger-tighten all lug nuts for now. Remove the wooden blocks or stands – the tires will now support the tow dolly.

### WARNING

**Do not pinch, crush, cut or otherwise damage the wiring harness while positioning the tongue. If the harness is damaged, the tow dolly brake, turn signal and marker lights will not function.**

**Drivers behind the tow dolly will not be alerted by turn signals or brake lights, which may cause a traffic accident, resulting in property damage, personal injury or even death.**

**8.** Install the trailer tongue – The trailer tongue has a fishwire pre-installed through its length. Position the tongue near the center of the main bed and securely connect the fishwire to the wiring harness on the main bed.

The tongue marker light wire protrudes through a slot in the top of the tongue, near the coupler. Pull the wire harness through the tongue, being careful not to entangle the marker light wire. Leave some slack in the harness for maneuvering.

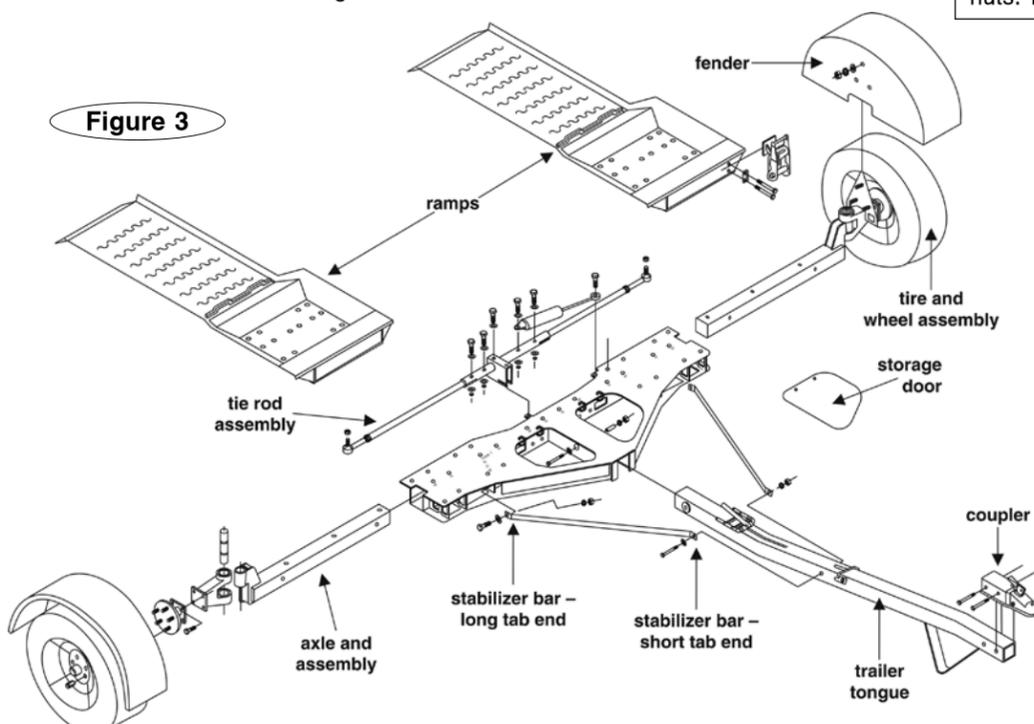
Now, push the marker light wire through the slot in the tongue, and connect it to the mating bullet connector.

Insert the widest part of the tongue through the notch on the bottom of the bed and raise the tongue up until it fully engages the center channel. Now, push the tongue straight back, while pulling the excess wiring harness through the tongue.

Open both storage compartment doors and insert the 1" x 4" bushing into the center channel and tongue.

Now, insert the ½" x 5½" bolt through the bushing and secure with a lock nut. Be sure to use a flat washer under the bolt head and nut.

**9.** Attach the stabilizer bars – Attach both stabilizer bars to the tongue with a ½" x 5" bolt, washers, and locking nut. Be sure to attach the long tab end of the stabilizer bars to the main bed and the short tab ends to the trailer tongue. Note that this bolt goes completely through the tongue and is used to attach both stabilizer bars. Bolt the opposite ends to the bed, using ½" x 1½" drilled bolts. Install washers and castle nuts to all bolts as shown in Figure 3.



### CAUTION

**Do not over-tighten the stabilizer bolts. If the bolts are over-tightened, the bed will not tilt down. If tightened correctly, the bed will tilt and the bolts will be secure.**

**10.** Now, torque all bolts (except the stabilizer bolts) used in the assembly process according to Figure 4. Do not torque the bolts that secure the stabilizer bar to the bed of the dolly – refer to the caution statement above.

The lug nuts must be evenly tightened onto the wheel hubs. Gradually tighten each lug nut three or four times, using the crossing pattern shown in Figure 5. Torque to 90 foot pounds. The lug nuts must be checked for tightness every 50 miles during the first 200 miles. Check for tightness every 3,000 miles or six months thereafter.

### WARNING

**Do not over-tighten the lug nuts. If the lug nuts are over-tightened, road vibrations will loosen them, which may cause a wheel separation, resulting in property damage, personal injury or even death.**

**11.** Test the lighting – Test the tow dolly to be certain that the marker lights, turn signals and brake lights are all functioning properly. The wiring is coded as follows:

TM	Brown.....	taillights and license plate light
S	Blue or black.....	tow dolly brakes
RT	Green.....	right turn
LT	Yellow.....	left turn
GD	White.....	ground for tow dolly

**12.** Adjust the electric brakes – The tow dolly is equipped with electric brakes. For the electric brakes to function, a brake controller must be installed in the motorhome.

Refer to the manufacturer's instructions to set the controller to the appropriate weight for towing; be certain to reduce the braking force if the dolly is ever towed unladen.

### How to convert from wide ramps to narrow ramps...

Starting on one side, remove the bolts attaching the ramp to bolt holes **W1** through **W4** (See Figure 1.), as well as **W6** and **W7**. Reposition the ramp to the narrow setting and install and tighten the short bolts through bolt holes **N1** through **N4** (See Figure 2.). Now, install and tighten the long bolts into bolt holes **N6** and **N7**. Be certain to use washers under all bolt heads, and under any removable nuts. Repeat for the other side.

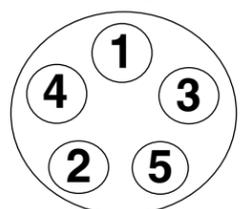
Figure 4

#### Bolt torque chart

Bolt size	Torque
¼"	12 ft./lb.
3/8"	38 ft./lb.
½"	90 ft./lb.
12mm	63 ft./lb.
Lug nuts	90 ft./lb.

Figure 5

#### Torque pattern for wheel lug nuts



Use this crossing pattern when tightening the lug nuts on the wheels.