Installation Instructions

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

IMPORTANT NOTICE!

Safety Definitions

WARNING indicates a potentially hazardous situation which, if not avoided, could result in property damage, serious personal injury or even death.

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE

Refers to important information and is placed in italic type. It is recommended that you take special notice of these items.
Required tools
1/4" Allen wrench, 9/16" wrench.

**WARNING**
Read all instructions before installing any of the kits. Failure to understand how to properly install the kits could result in property damage, personal injury or even death.

**Installation instructions**

1. Use a felt tip pen to mark one of the tow bar arms at the point where the round nut (Figure 1) attaches to the end of the tow bar arm (Figure 1).

   Do not move the round nut forward or backward from this position after the shoulder bolt is removed (in step 2). If the round nut is moved forward, the replacement shoulder bolt will not fit. If the round nut is moved backward, it will rotate off the tow bar arm. Refer to Figure 2.

   **WARNING**
   If the round nut is moved backward on the tow bar arm, the shoulder bolt will not hold the round nut in place. Towing vibrations will cause the round nut, and the swivel ear with it, to rotate off the tow bar arm. The tow bar arm will detach from the towed vehicle, causing the towed vehicle to separate or to be held by only one tow bar arm, which may result in property damage, personal injury or even death.

2. Remove the 3/8" lock nut from the bottom of the Allen head shoulder bolt connecting the swivel ear to the round nut (Figure 3). Discard the original swivel ear, shoulder bolt, washers and nut.

3. Attach one of the replacement swivel ears to the round nut – use one of the supplied Allen head shoulder bolts, two plastic washers (one against either side of the round nut), and one lock nut, as shown in Figure 4.

   **Note:** for 031 adapters ONLY – insert one of the metal washers against the lock nut, as shown in Figure 5.

   **Note:** so that the safety pin and chain (or cable) can be removed and connected easily, position the head of the shoulder bolt at the top of the tow bar – on the same side...
as the Autowlok button or Freedom Latch (Figure 6).

Before tightening the lock nut, make certain that the head of the shoulder bolt is flush to the swivel ear, as shown in Figure 6.

Torque the lock nut to 45 ft./lbs.

4. Check the mark on the tow bar arm to make certain the round nut has not moved backward.

5. Check for correct installation – the swivel ear should rotate NO MORE than 10º to 15º in either direction.

6. Repeat for the other swivel ear.
Complete your towed vehicle with a supplemental braking system from ROADMASTER!

Why do you need a supplemental braking system?

- **Safety** — in an emergency, stopping distance is the critical factor between a close call and a tow truck — or worse. Supplemental brakes take the load off the motorhome, and the motorhome and the towed vehicle brake in tandem, taking significantly less time and distance to come to a controlled stop.

- **It’s required** — According to the AAA, most states and many Canadian provinces now require supplementary brakes if the towed weight exceeds 3,000 pounds.

- **Chassis warranty** — Workhorse will void your motorhome chassis warranty (and insurance adjusters will void your policy) if you tow more than 1,000 pounds without supplemental brakes; Ford stipulates 1,500 pounds.

- **Wear and tear** — Because they aren’t braking for two vehicles, your motorhome brakes last longer.

- **Every other trailer on the road today has its own brakes** — fifth wheels, travel trailers, boat trailers and semi-trailers all have their own brakes. When you’re towing two or three extra tons, shouldn’t you have a supplemental braking system to stop it?

‘Set-it-and-forget-it’ braking

- **Nothing** to put in or take out to tow or drive.

- **Hidden from view** — As the name implies, InvisiBrake is hidden once installed. There’s no unsightly equipment to see in your car.

- **Simple operation** — works intuitively. No fuss, no hassle.

- **Charges your battery** — trickle-charges the battery while towing. Never drains your towed vehicle’s battery.

- **Power brakes** — InvisiBrake engages the power braking system, giving you the same power brakes whether towing or driving.

- **Includes a break away system and a monitor alarm.**

---

Portable, Proportional Braking

- **Proportional braking**
- **Constant self-diagnostic testing**
- ‘Power Save’ low battery protection
- ‘Terrain-Sensing Logic’
- Automatic brake protection
- Easily adjusts to individual braking preferences
- High-capacity air compressor
- Includes a break away system and a monitor alarm

‘Direct’ Proportional Braking

- Connects directly to the motorhome’s air or hydraulic braking system.
- Works in virtually any motorhome; ideal for motorhomes with air brakes
- Works in virtually any towed vehicle with power brakes
- Includes an LED motorhome monitor for a visual reference of braking activity
- Easily disconnects from the brake pedal — from towed car to road car in seconds!
- Includes a break away system and a monitor alarm

---

ROADMASTER

Towing and Suspension Solutions