



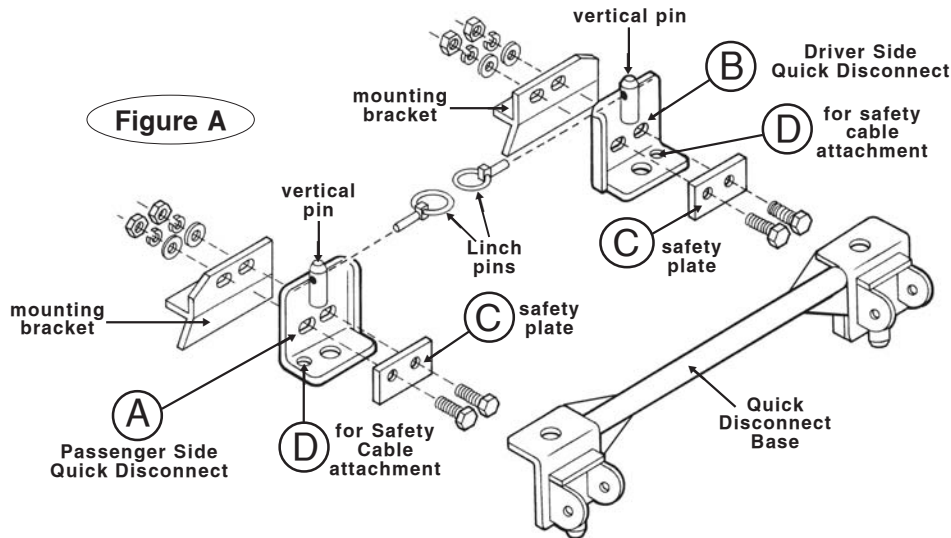
# Falcon ALL TERRAIN INSTALLATION INSTRUCTIONS

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

852482-01

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**Owners and installers must read the installation instructions and carefully note the warnings!**



**TOW BAR RATED  
AT 6,000 LBS.**

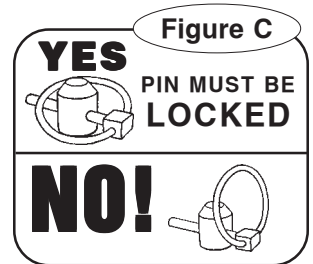
**Parts List:**  
(2) Quick Disconnects (A and B)  
(2) Safety Plates (C)  
All mounting hardware

**1**

First, mount the quick disconnects – parts “A” and “B” – to the mounting brackets. Before you start, note that parts “A” and “B” have an extra hole – “D” – designed for safety cable attachment. Mount parts “A” and “B” so that the “D” holes are to the outside. Also, mount both parts “A” and “B” so that the vertical pin on each is facing upward, as illustrated in Figure A above. Attach part “A” to the passenger side, and part “B” on the driver side. Use the supplied ½” x 1½” bolts, the safety plates (“C”), flat washers, lock washers and nuts to attach them. Do not tighten – leave loose for now – they *will* be tightened later.

**3**

Both linch pins **must** be inserted through the upper holes in the vertical pins in parts “A” and “B,” as illustrated in Figure B, and **locked** as illustrated in Figure C, to keep the QD base secure. ROADMASTER recommends replacing at least one linch pin with a padlock (part number 301 or part number 302) to prevent accidental release or theft.



## WARNING

Use all mounting hardware and both safety plates. If all supplied materials are not used, the quick disconnects, the quick disconnect base, or other components may vibrate loose, which may cause property damage, personal injury or even death.

## CAUTION

The quick disconnects (parts “A” and “B”) must be centered on the mounting brackets for the tow bar to be centered. If parts “A” and “B” are mounted too far to the left or the right, it will cause excessive tire wear, which is not covered by warranty.

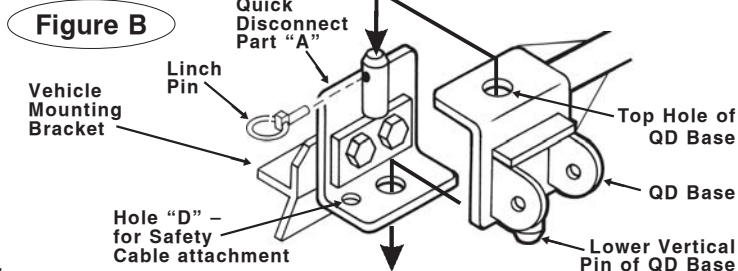
**2**

Now, mount the Quick Disconnect (“QD”) base by lowering it so that the vertical pins of the quick disconnects “A” and “B” extend upward through the top holes of the QD base. At the same time be sure the lower vertical pins of the QD base slide through the lower holes on parts “A” and “B.” Refer to Figure B.

**4**

Adjust the spacing of quick disconnects “A” and “B” until the QD base slides on and off easily. Now, torque all bolts to 75 ft./lbs. If safety cables are required for your ROADMASTER tow bar bracket (Refer to the tow bar bracket instructions.), use a quick link to attach the long safety cables to the “D” holes located to the outside of quick disconnects “A” and “B.”

The quick links are also used to connect the short safety cables to ROADMASTER XL, MX and EZ series tow bar mounting brackets.



## WARNING

Unless the safety cables are attached to the quick disconnect mount properly, through hole “D,” the safety cables will not keep you from losing your towed vehicle in the event the tow bar comes off the quick disconnect mount. Failure to correctly attach the safety cables may result in property damage, personal injury or even death.



# INSTALLER MUSTS FOR SAFETY

## 1. THE INSTALLER MUST STRESS TO THE OWNER THAT THE TOW BAR CONNECTION AT THE MOTORHOME AND THE TOWED VEHICLE MUST BE WITHIN THE 'SAFE ZONE.'

Towing with the tow bar at an upward or downward slope puts undue strain on the entire towing system. Do not tow if the tow bar is not within the 'Safe Zone' – no more than 3 inches above level or no more than 4 inches below level (See "Stay within the 'Safe Zone,'" below, for further information.).

## 2. THE INSTALLER MUST SHOW THE OWNER HOW TO PROPERLY OPERATE THE TOW BAR.

Carefully read the section "Here's How It Works" and familiarize yourself with the features of the tow bar. Demonstrate them to the owner, and have the owner do a few "practice runs." You not only impress your customer with your thoroughness, but will start your customer off on a safer and happier towing experience.

## 3. THE INSTALLER MUST CAUTION THE OWNER TO USE A RECEIVER HITCH FOR THE MOTORHOME THAT IS RATED HIGHER THAN THE ACTUAL WEIGHT OF THE VEHICLE, INCLUDING ALL OF ITS CONTENTS.

The receiver hitch must have a minimum capacity of no less than the weight of the towed vehicle and all its contents. (The **FALCON** All Terrain non-binding tow bar is rated at a maximum of 6,000 lbs. carrying capacity; therefore ROADMASTER uses 6,000 lbs. as a standard for rating the weight capacity of all supplementary towing equipment, as well as the towed vehicle and all its contents.)

## 4. THE INSTALLER MUST STRESS THE IMPORTANCE OF OWNER SENDING IN WARRANTY.

New owners are to be urged to send in the **Product Registration Card** as soon as possible. This will enable ROADMASTER to expedite any claim or update important information concerning the **FALCON** All Terrain tow bar.

## 5. THE INSTALLER MUST BOLT THE TOW BAR TO A BRACKET ATTACHED TO THE TOWED VEHICLE'S FRAME OR UNIBODY.

The **FALCON** All Terrain non-binding tow bar is designed as a bolt-on device only. Virtually all vehicles require a mounting bracket assembly that is connected safely to the frame, unibody or chassis and extends beyond the bumper. Using a mounting bracket kit designed by ROADMASTER takes the burden of doubt away from the installer.

Under no circumstances should the tow bar be welded to the vehicle, nor should any of the pre-punched mounting holes be altered. Never heat, bend or weld a ROADMASTER tow bar or it will weaken metals, resulting in non-warranty failure. In fact, any welding or altering of the tow bar will void the owner's warranty.

## 6. THE INSTALLER MUST ADVISE THE OWNER TO USE 6,000 LB. OR HIGHER RATED SAFETY CABLES.

A frame-to-frame safety cable is legal in ALL states.

## 7. THE INSTALLER MUST READ INSTRUCTIONS THOROUGHLY BEFORE MOUNTING THE TOW BAR.

Proper mounting of the tow bar is of utmost importance. Proper centering and height positioning of the tow bar will give the owner a safe, dependable and trouble-free towing system.

## 8. THE INSTALLER MUST BE SURE THAT THE VEHICLE IS SUITABLE OR ADAPTABLE FOR TOWING.

Not all vehicles can be safely towed as manufactured. A few models are not towable under any condition and others require additional equipment such as a transmission lube pump, axle lock, driveline disconnect or free-wheeling hubs to make them towable. Failure to properly equip the towed vehicle will result in severe damage to the transmission. Also, the steering wheel MUST be unlocked for towing. Check the manufacturer's specifications for the proper towing procedures.

## 9. THE INSTALLER MUST NOT USE THE TOW BAR AS A GROUND FOR WELDING.

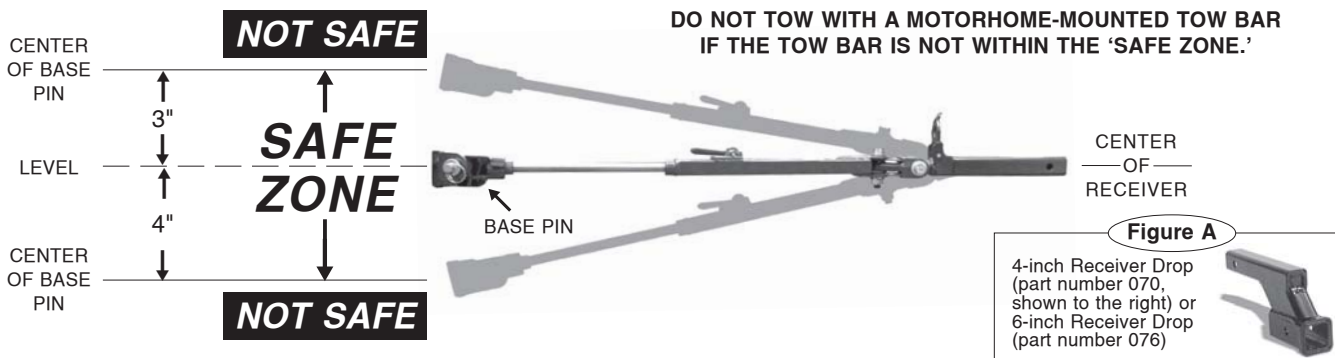
Connecting a ground to the A-frame of the **FALCON** All Terrain non-binding tow bar will cause current to flow through the locking spring, which will detemper the spring and destroy the locking mechanism. **Under no circumstances should the tow bar be welded to the vehicle, nor should any of the pre-punched mounting holes be altered.** In fact, any welding or altering of the tow bar will void the owner's warranty.



### WARNING

Failure to follow these instructions may result in property damage, personal injury or even death.

## STAY WITHIN THE 'SAFE ZONE.'



Towing with a motorhome-mounted tow bar which has an upward or downward slope puts undue strain on the entire towing system. **DO NOT TOW if the tow bar is not within the 'Safe Zone' – no more than 3 inches above level or 4 inches below level.** Towing a vehicle with a tow bar that is not within the Safe Zone will result in significant wear and tear on the tow bar and brackets, significant wear and tear on the vehicle's suspension and frame, and the eventual failure of your towing system.

To determine if your tow bar is within the Safe Zone – First, connect the motorhome and car on level ground. Measure the distance from the center of the motorhome receiver down to the ground. Then, measure the distance from the center of one of the base pins down to the ground.

Compare these two measurements. To be within the Safe Zone, they cannot be more than 3 inches apart if the base pin is above the motorhome receiver, or 4 inches apart if the base pin is below the motorhome receiver.

If your tow bar is not within the Safe Zone, you will need to either:

1. Purchase a 4-inch or 6-inch receiver drop (part number 070 or 076, Figure A, above). This will increase or decrease the height of the motorhome receiver by 4 or 6 inches. Or,
2. Otherwise change your hitching equipment to bring the tow bar within the Safe Zone.

Towing more than 3 inches above level or 4 inches below level will void the ROADMASTER Warranty.



### WARNING

Failure to follow these instructions may result in property damage, personal injury or even death.



**WARNING**

Use caution when handling the tow bar to be sure that your hands, fingers or any part of your body do not get caught between any moving components. Doing so can result in pinching, crushing or cutting, causing personal injury.

**Connecting the Vehicle**

1. Follow the "Installation Instructions," on the first page, to mount the **FALCON** All Terrain Quick Disconnect (QD) base.
2. Drive the vehicle to be towed up to the rear of your motorhome, within 3 to 3½ feet of the hitch receiver. The vehicle doesn't have to be perfectly on center, just close. Put the vehicle in gear (park), set the emergency brake and chock one of the wheels.
3. With the **FALCON** All Terrain tow bar in the folded position, insert it into the motorhome's hitch receiver, and secure it with the Hitch Pin and Clip.
4. Firmly hold both tow bar arms and rotate them so that they are vertical.

**WARNING**

Never let go of the arms when they are in the vertical position. The arms can fall and cause severe injury if any part of your body is in the way.

5. Push the release latch forward, to bring both arms down to a horizontal position. Standing to one side, swing both arms away from you, aligning the outermost arm with the tabs on the Quick Disconnect base. Using the included Base Pin, attach the arm and secure it with a linch pin or optional padlock. Now, swing the other arm to the opposite side and connect it in the same manner.

**WARNING**

Both base pins must be installed and locked. Failure to properly secure both base pins will result in the loss of the towed vehicle, causing property damage, personal injury or even death.

6. Attach the safety cables (or chains) and plug in your light wiring harness, according to the supplier's instructions. Before towing your vehicle, be sure the **steering is unlocked**, the transmission is in the proper setting, and the emergency brake is released. **Check the manufacturer's specifications, or check the owner's manual, or talk to your installer for the proper towing procedures or requirements.**

**WARNING**

Do not tow your vehicle until the tow bar is secure, with all pins and/or locks. Unless your tow bar is secured to both vehicles with all designated pins and/or locks, you will lose your towed vehicle, which may cause property damage, personal injury or even death.

**WARNING**

Do not tow a vehicle using tow bar mounting brackets, safety cables, hitch receiver, or any supplementary towing equipment rated less than the actual weight of the towed vehicle and all its contents. If any supplementary towing equipment is not rated at or above the weight of the vehicle and all its contents, it may fail during towing, resulting in property damage, personal injury or even death.

When you drive away, steer briefly to the left and then to the right, to extend, self center and lock the tow bar. Always stop at this time. Check the tow bar to ensure that both arms are locked, before assuming highway speed. Check the other components of your towing system, to ensure that they are fully engaged.

**WARNING**

If you use any kind of receiver extension, the tow bar **MUST** be no more than 3 inches off level. **DO NOT TOW** if the **FALCON** All Terrain tow bar is more than 3 inches out of level while using a receiver extension. Extensions cause the towing system to swing much higher and lower going over dips. The enlarged arc of motion creates excessive strain on the tow bar, brackets and frame, which can cause the towing system to fail, resulting in property damage, personal injury or even death.

**Disconnecting the Vehicle**

1. Detaching your towed vehicle is essentially the reverse of connecting it. First, always try to park on level ground, with the towed vehicle in line with the motorhome. This will eliminate most of the tension between the vehicles, allowing for an easier disconnect.
2. Disconnect any towing accessories, wiring harness, cables, etc.
3. Lift the lever on the Freedom Latch to release the locking mechanism. Usually, one of the latches will require more pressure to release. This is the arm that has the majority of the tension between the two vehicles.
4. Put the car in gear (park), set the emergency brake, and chock one of the wheels.

**WARNING**

Always put the towed car in gear (park), set the emergency brake and chock one of the wheels before releasing the locking mechanism. Failure to do so may cause a runaway vehicle or may crush you between the towed car and the motorhome, resulting in property damage, personal injury or even death.

5. Remove the base pins and store the **FALCON** All Terrain on the motorhome by reversing the hook-up procedure (under "Connecting the Vehicle"). ROADMASTER recommends replacing at least one of the linch pins with a padlock (part number 301 or part number 302) to prevent accidental release or theft.

**WARNING**

Failure to follow these instructions may result in property damage, personal injury or even death.

**WARNING**

**NEVER BACK UP WHEN TOWING YOUR VEHICLE.**

Backing up while the towed vehicle is attached will easily "jackknife" the vehicle being towed. This will result in damage to the towed vehicle, hitch, tow bar assembly, and/or the motorhome.

ROADMASTER assumes no responsibility for any damage that is caused by improper use, such as backing up while the towed vehicle is attached. Damage caused by improper use is not covered under warranty.

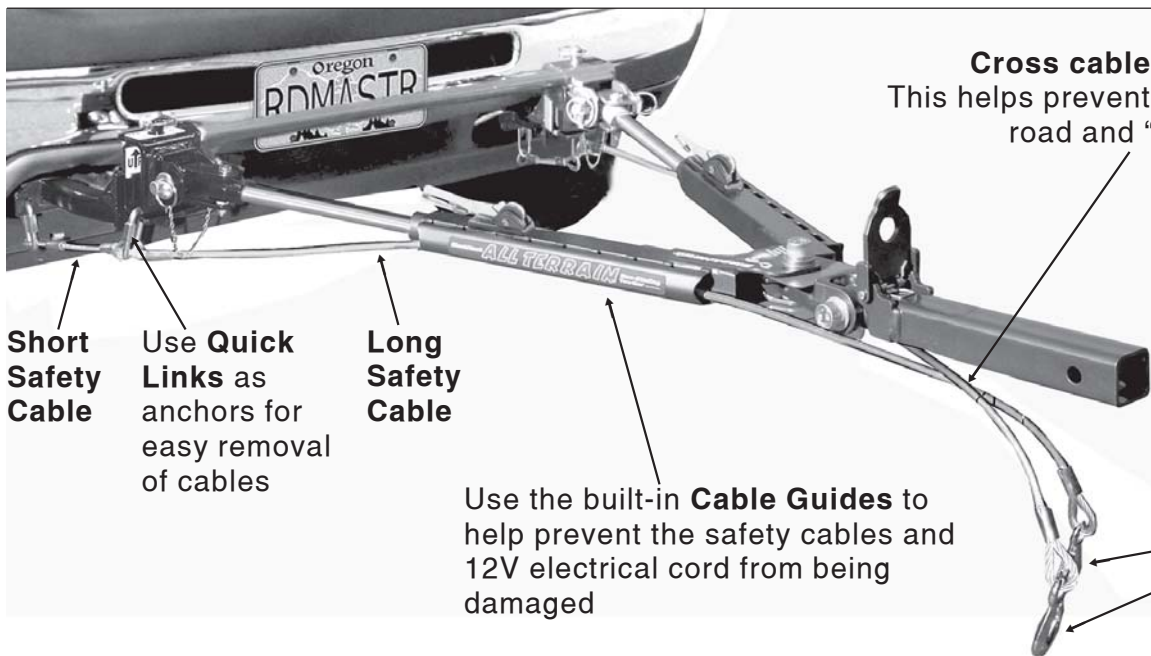
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# SAFETY CABLE INSTALLATION

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**Short Safety Cable**  
Use **Quick Links** as anchors for easy removal of cables

**Long Safety Cable**

Use the built-in **Cable Guides** to help prevent the safety cables and 12V electrical cord from being damaged

**Cross cables under hitch and stinger.**  
This helps prevent the tow bar from hitting the road and “pole vaulting” if the tow bar separates from the hitch receiver.

Connect **snap hooks** to steel loops on receiver or frame of towing vehicle

Some ROADMASTER tow bar mounting kits with removable arms, such as the one above, use two safety cables on each side. Each **long safety cable** runs from the towing vehicle to a **Quick Link** attaching it to one of the Quick Disconnects.

Each **short safety cable** is connected from this Quick Link to another Quick Link, attaching it to the **mounting bracket**. The mounting bracket is bolted to the frame of the towed vehicle.

See the section in the owner’s manual titled “Connecting the Short Safety Cables,” as well as the ROADMASTER bracket kit instructions, for further information.

## **! WARNING**

**USE ONLY 6,000 LB. (or higher) RATED SAFETY CABLES.** Cables must be carefully routed so that they cannot become pinched, frayed, scraped or damaged. Also, make sure your cables are routed so that they will not drag when going over dips or low spots. **DO NOT USE CABLES** if they show any signs of wear or damage. Immediately discontinue towing and replace the cables. Failure to follow these instructions will cause cable failure, resulting in property damage, personal injury or even death.

## **! DANGER**

**DO NOT TOW YOUR VEHICLE UNTIL TOW BAR IS SECURE WITH ALL PINS AND/OR LOCKS.**

Unless your tow bar is secured to both vehicles with all designated pins and/or padlocks, you *will* lose your towed vehicle.

## **! WARNING**

Failure to follow these instructions may result in property damage, personal injury or even death.

## **! CAUTION**

**SAFETY CABLES MUST CONNECT THE TOWING VEHICLE TO THE TOWED VEHICLE FRAME TO FRAME.**

*FOLLOW SAFETY CABLE INFORMATION ON THIS PAGE AND IN OWNER LITERATURE PACKET.*

## **! WARNING**

Failure to follow these instructions may result in property damage, personal injury or even death.

### **ROADMASTER WARRANTY**

Refer to the Falcon All Terrain owner’s manual for the complete Roadmaster Limited Warranty.