

# Adjustable Tow Bar Model Number: 70142

- Quick-connect Hitch Pins
- Folds Up For Storage
- Universal Bumper Brackets
- Adjustable to fit a wide variety of vehicles
- Use Tow Bar safety chains 70248





This Instruction Sheet contains IMPORTANT safety information. Please read and keep for future reference.

# AWARNING

# READ and Follow all Instructions and safety messages before installing using the Adjustable Tow Bar.

## Failure to follow these instructions may result in DEATH or SERIOUS INJURY

#### ALWAYS tow safely.

- DO NOT exceed 5,000 lbs. total weight of towed vehicle.
- DO NOT allow passengers to ride in towed vehicle.
- DO NOT exceed 45 mph.
- DO NOT tow vehicles with damaged steering or suspension systems.
- NEVER exceed the lowest rating of any part of your towing system.
- ENSURE towing vehicle must weigh more than towed vehicle.
- ENSURE steering wheel of towed vehicle must be free to turn.
- CHECK all connections including hitch and ball before towing and often during your trip.
- REDUCE speeds on rough roads.
- If vehicle combination sways or seems unstable, gradually slow down, pull off the road to a safe location and
  inspect all connections. Instability increases with speed, and you may have to tow at a lower speed. Discontinue
  towing if instability persists. A combination that is stable and easy to control at low speed may be unstable at a
  higher speed. Stability decreases when going downhill. Start downhill slowly and maintain a low speed.

#### CHECK for proper installation.

- Installation of this product must conform to the following mounting instructions.
- This tow bar is to be installed using areas with adequate strength.
- The coupler must be level within 5° when attachment is complete.
- Bumper attachments should be reinforced as shown in these instructions.
- Attachments to the towed vehicles should be bolted not welded.
- Keep mounting surface of brackets as close to being flush with the front of the bumper as possible to allow free vertical travel.
- Attach tow bar to properly mounted brackets with pins and secure with attached wire.
- Adjust coupler for proper fit to the ball; See coupler adjustment section of instructions.

#### THIS WARNING IS GIVEN IN COMPLIANCE WITH CALIFORNIA PROPOSITION 65

**WARNING:** This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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#### Failure to follow these instructions may result in MINOR or MODERATE INJURY

ALWAYS remove tow bar when not towing.

# NOTICE

#### ALWAYS tow safely.

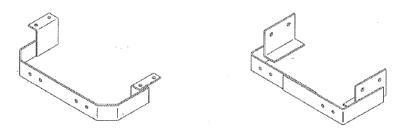
- Park vehicles on level ground for installation.
- Avoid suspension and brake components with attachments.
- Inflate tires of towed vehicle to maximum pressure recommended by tire manufacturer.
- Towing mirrors on both sides of towing vehicles add to safety by increasing visibility.
- Allow more time for accelerating, stopping, and maneuvering. Slow down well in advance of sharp curves, obstacles, or lane changes and before starting down hills.
- Do not make sharp turns from a complete stop. Some step bumpers restrict turning. Turning too sharply can damage the tow bar, hitch ball, and bumper.
- Towed vehicle's tail lights, turn signals, and brake lights should function when being towed, otherwise vehicle should be fitted with a temporary lighting system.

# FASTENER KIT CONTAINS THE BELOW ITEMS

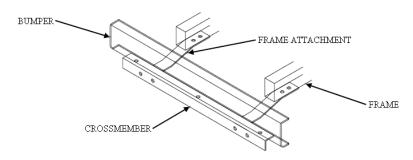
	Qty. (4)	01150-007 BOLT-HEX ½-13 X 1.75 GR5		Qty. (2)	02478 BOLT BLOCK ASS'Y
0	Qty. (4)	01160-008 WASHER-FLAT ½		Qty. (4)	01292-006 WASHER-CONICAL TOOTHED
	Qty. (4)	01173 LOCKNUT-HEX ½-13		Qty. (8)	01243 LOCKNUT-HEX 3/8-16
	Qty. (4)	01150-014 BOLT-HEX ½-13 X 3.50		Qty. (8)	01423-008 BOLT-HEX 3/8-16 X 2.00 GR5
	Qty. (2)	04624 LOCKNUT-FLANGE ½-13	0	Qty. (16)	01160-006 WASHER-FLAT 3/8

# TOWED VEHICLE ATTACMENT – <u>NOT INCLUDED</u> (SHOWN FOR DEMONSTRATION PURPOSES ONLY)

A base plate must be purchased or a structure must be fabricated to allow the tow bar to be attached to the frame of the towed vehicle. Some typical frame attachments are shown below. See your professional Installer/Fabricator to have attachments made and installed.



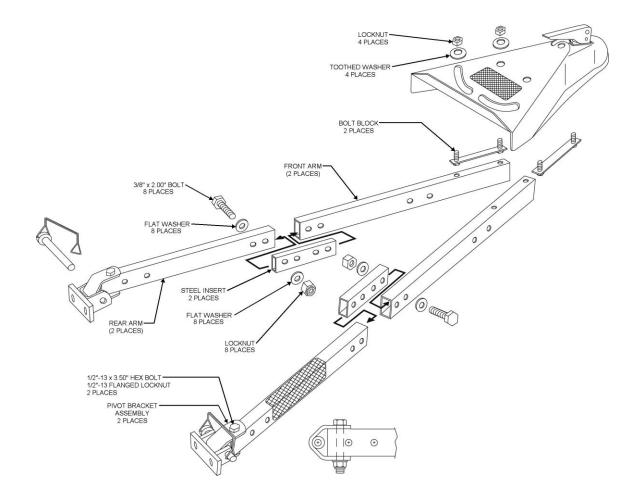
If the bumper is used for support, it must be reinforced with frame attachments. A typical way of reinforcing a bumper is shown below.



These frame attachments should be attached within 2" of where the tow bar brackets are to be attached. These frame attachments should be made from at least  $\frac{1}{2}$ " X 2" flat bar stock. Never attach through plastic fascia covering a bumper. This fascia must be trimmed, with customer approval, to provide secure attachment.

### **TOW BAR ASSEMBLY**

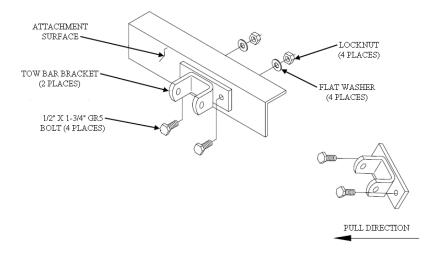
- 1. Attach the 2 front arms to the coupler using the (2) bolt blocks, (4) toothed washers and (4) 3/8" locknuts as shown in the drawing. Do not fully tighten the locknuts at this time. The front arms should be secured to the coupler but still able to swing open and closed.
- 2. Insert a steel insert into the open end of each front arm, and secure each one with (2) 3/8" X 2" bolts, (4) washers and (2) 3/8" locknuts. Tighten these locknuts to 32 ft-lbs.
- 3. Slide a rear arm over the remaining portion of the 2 steel inserts, and secure each one with (2) 3/8" X 2" bolts, (4) washers and (2) 3/8" locknuts. Tighten these locknuts to 32 ft-lbs.
- 4. Attach a pivot bracket assembly to the end of each arm with a <sup>1</sup>/<sub>2</sub>" X 3.50 bolt and <sup>1</sup>/<sub>2</sub>" flange locknut. Tighten locknut until it is snug against the pivot bracket, but not overtighten. Pivot brackets must be free to swing on the end of the arms. Back the nut off slightly, if necessary, so that pivot brackets can swing freely.



### **INSTALLATION**

**WARNING** Mounting bolts must point in fore-aft direction. Do not mount bolts in up-down or left-right direction.

- 1. Center tow bar on attachment surface, spreading side arms to at least 24", but no more than 41", and mark tow bar bracket centerlines.
- 2. Using tow bar brackets as a template, drill (2) two <sup>1</sup>/<sub>2</sub>" holes into attachment surface, each side.
- 3. Attach tow bar brackets to attachment surface using the 1/2" x 13/4" Grade 5 bolts supplied with the tow bar. Note: If longer bolts are needed, use 1/2"-13 Grade 5 bolts.
- 4. Fasten the tow bar brackets with flat washers and locknuts as shown below.
- 5. Tighten these fasteners to 75 ft-lbs.



### **HOOK-UP**

- 1. Attach tow bar to tow bar brackets with (2) two wire-lock pins as shown below.
- 2. Attach tow bar coupler to 2" ball of towing vehicle.
- 3. Center coupler on tow bar side arms so that tow bar is symmetrical about the centerline of the vehicles.
- 4. Tighten the (4) four 3/8" nuts which attach the tow bar side arms to the coupler to 31 ft-lbs.
- 5. Install safety chains as described in the next section.
- 6. Connect an adequate wiring harness so that stop lights, turn signals and tail lights operate on towed vehicle in conjunction with towing vehicles lights.
- 7. Read and follow warning labels on tow bar and shown below.

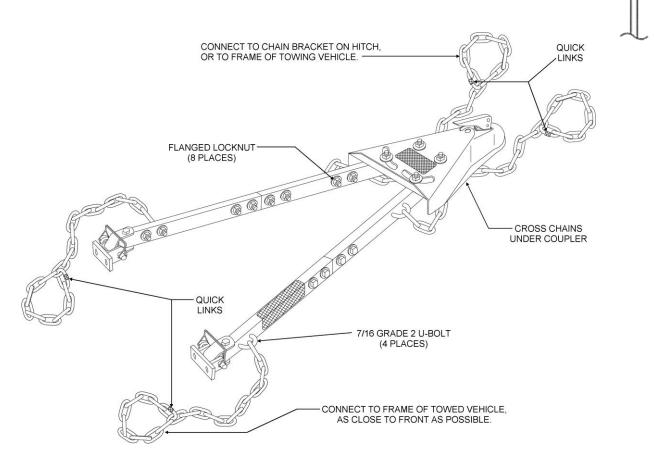
### **SAFETY CHAINS**

# **A** WARNING Connect safety chains (70248) to both vehicles and the tow bar itself as shown below.

- 1. Attach chains to tow bar with 7/16" Grade 2 U-bolts and flanged locknuts as shown below. Tighten each flanged locknut until at least 1/8" of U-bolt threads extend past locknut.
- 2. The chains at each vehicle will be looped to themselves using quick links as shown below. The nuts on the quick links must have full thread engagement.

/8"

- 3. Cross two chains under coupler and connect to chain bracket on hitch or to frame of towing vehicle, allowing only enough slack to permit turning.
- 4. Connect the other two chains to the frame of the towed vehicle as close to the front of the vehicle as possible. Allow only enough slack to permit the up and down pivoting of the tow bar.



### **COUPLER ADJUSTMENT**

- 1. With coupler locked onto a 2" ball, tighten the locknut until all parts are clamped solid. Do not overtighten. Just tighten enough to fully compress the helical spring.
- 2. Back locknut off <sup>1</sup>/<sub>2</sub> to <sup>3</sup>/<sub>4</sub> turn.
- 3. Check for proper couple/uncouple operation.

