

# **INSTALLATION INSTRUCTIONS**

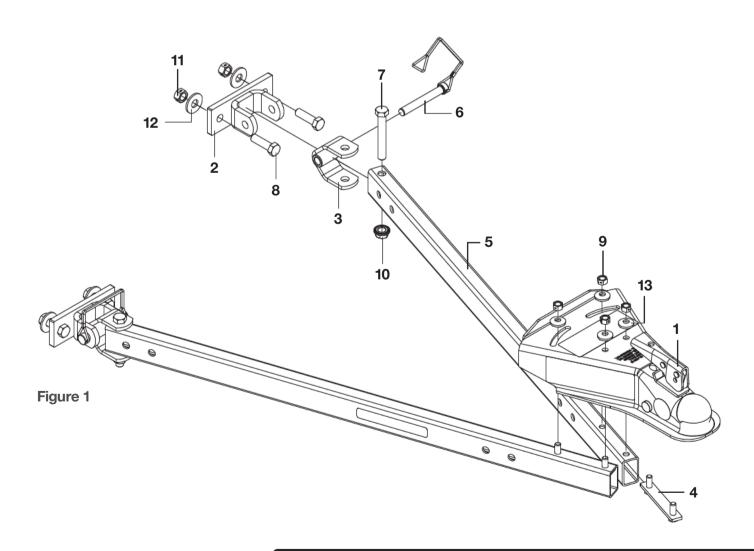
WARNING: NEVER EXCEED YOUR VEHICLE MANUFACTURER'S RECOMMENDED TOWING CAPACITY

## **ADJUSTABLE TOW BAR**



## **PARTS LIST**

Item#	Qty	Description
1	1	Coupler assembly
2	2	Clevis mount weldment
3	2	Connector weldment
4	2	Bolt plate weldment
5	2	Tow bar arm
6	2	Safety pin, 1/2"
7	2	Hex head cap screw, 1/2" - 13, 3 1/2", grade 5
8	4	Hex head cap screw, 1/2" - 13, 1 3/4", grade 5
9	4	Hex nut, center lock, 3/8" - 16, grade 5
10	2	Hex nut, top lock flange, 1/2" - 13, grade 5
11	4	Hex nut, center lock, 1/2" - 13, grade 5
12	4	Flat washer, 1/2"
13	4	Conical washer, 3/8"



# CLEVIS MOUNT INSTALLATION

#### Notes:

Installer / owner is responsible for locating rigid mounting points to attach clevis mounts. A structure may need to be fabricated to allow the tow bar to be attached to the frame of the towed vehicle.

It is recommended that clevis mounts be secured to a flat, nearly vertical area of the bumper.

Clevis mounts should be spaced equally from center line of vehicle. Recommended clevis mount spacing is 26" to 41", with 33" preferred.

### Step 1

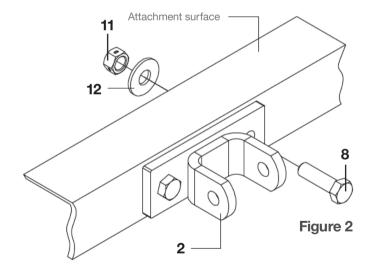
Mark both centers of the clevis mounts (#2) on the attachment surface at the desired width.

### Step 2

Using the clevis mount as a template, drill two 1/2" holes into the attachment surface, both sides.

### Step 3

Secure the clevis mount to the attachment surface with 1/2" - 13 x 1 3/4" hex head cap screws (#8), 1/2" flat washers (#12) and 1/2" - 13 center lock hex nuts (#11). See Figure 2. Torque all 1/2" fasteners to 75 ft-lbs.



# HOOK-UP INSTALLATION

### Step 1

Secure connector weldments (#3) to tow bar arms (#5) with  $1/2" - 13 \times 3 \ 1/2"$  hex head cap screws (#7) and 1/2" - 13 top lock flange hex nuts (#10). Tighten the 1/2" hardware until contact is made with both sides of the tow bar arms. See Figure 3. **NOTE:** Tow bar arms (#5) must swing freely; back off hardware slightly if necessary.

#### Step 2

Attach the tow bar assemblies to the previously installed clevis mounts using 1/2" safety pins (#6).

#### Step 3

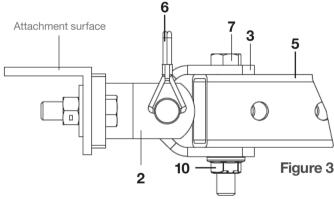
Loosely secure the coupler assembly (#1) to the tow bar arms (#5) using the bolt plate weldments (#4), 3/8" conical washers (#13) and 3/8" - 16 center lock hex nuts (#9).

#### Step 4

Center the coupler assembly with the towed vehicle and torque the 3/8" fasteners to 31 ft-lbs.

#### Step 5

Attach the tow bar coupler to the 2" ball of the towing vehicle. **NOTE:** Insure that the tow bar coupler is straight and that the height difference between the ball and the clevis mount does not exceed 6". Adjust ball height to make the tow bar level.



Tighten hardware until contact is made with both sides of the tow bar arm. Tow bar arms must swing freely; back off slightly if necessary.

# BEFORE EVERY TOWING USE

Adjust the coupler to fit the trailer ball by turning the nut under the coupler. The coupler latch needs to engage the coupler and the coupler must not be loose on ball. See figure 4.

The coupler latch must be secured with either a clip or a coupler lock (sold separately). See figure 4.

Attach two safety chains between the vehicles (sold separately). **NOTE:** Individual safety chains must have a break strength equal to or exceeding the gross weight of the towed vehicle.

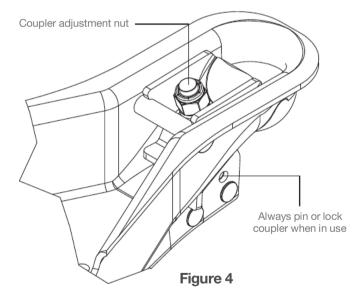
Connect the appropriate wiring for stop, turn, tail and marker lights (sold separately).

Only tow a vehicle and tow with a vehicle in good condition.

Check for proper clearance between vehicles in a turning situation.

Unlock the steering wheel for towing to allow the front wheels of the towed vehicle to 'track'.

Set transmission for towing according to the owner's manual. Verify recreational towing procedures in the vehicle owner's manual.



# TOWING PRECAUTIONS

Avoid sharp turns and rough terrain.

Check all attachments after each use and periodically on a long trip.

Do not back up while the vehicle is attached. Damage to both vehicles and towing system may occur.

Prior to towing, check that all the towing accessories and attachment points are secure and in proper working order.

Ensure that your towing vehicle is of adequate size to properly control your towed vehicle. Stopping distances will increase; adjust your driving accordingly.

Never exceed the lowest rating of any part of the towing system. Consult the vehicle owner's manual for towing limits.

### **WARNINGS**

This product has been designed to tow motor vehicles with four wheels. It is intended for light- and medium-duty applications. Not to exceed a maximum gross weight of 5,000 lbs.

Do not exceed vehicle manufacturer's recommended towing capacity.

Periodically check that all fasteners are tight and that all structural components are sound.