

# 02450 TOW BAR



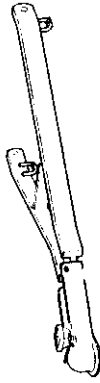
THIS TOW BAR IS TO BE INSTALLED BY THE PROFESSIONAL INSTALLER/FABRICATOR EXPERIENCED IN SELECTING VEHICLE ATTACHMENT AREAS WITH ADEQUATE STRENGTH.

DEALERS: GIVE THESE INSTRUCTIONS TO YOUR CUSTOMER

## PART NO. 02450 TOW BAR

FOR TOWING MEDIUM AND HEAVY WEIGHT VEHICLES. TOWED VEHICLE GROSS WEIGHT NOT TO EXCEED 5000 POUNDS. INTENDED TO BE USED WITH BRACKET AND CHAIN KITS SHOWN BELOW.

CAUTION: PROPERLY CONNECTED SAFETY CHAINS MUST BE USED WITH TOW BAR. SEE PAGE 3



GROSS TRAILER WEIGHT RATING OF HITCH AND BALL MUST EQUAL OR EXCEED ACTUAL WEIGHT OF TOWED VEHICLE. COUPLER FITS 2" AND 2-1/8" DIA. BALLS

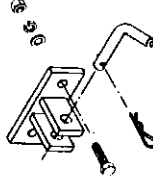
## GENERAL PURPOSE BRACKET KIT

THE BRACKET KIT REQUIRES FABRICATION OF REINFORCEMENTS ATTACHING TO VEHICLE FRAME.



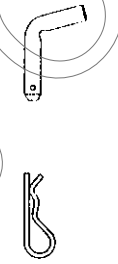
PART NO. 02451

CONTAINS: (2) BRACKETS, (2) PINS, (2) HAIR PIN CLIPS, (4) 1/2" X 1-3/4" GR 5 BOLTS, WASHERS AND NUTS.



## PINS AND CLIPS

SUPPLIED WITH BRACKET KITS ABOVE. MAY BE PURCHASED SEPARATELY.



PART NO. 01122 CLEVIS PIN  
PART NO. 01128 HAIR PIN CLIP

(2) OF EACH REQUIRED.

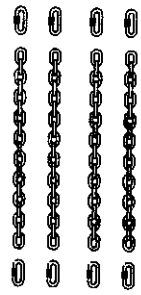
## SAFETY CHAINS REQUIRED

(TO BE PURCHASED SEPARATELY)

FOR TOWED VEHICLES NOT TO EXCEED 5000 LBS.

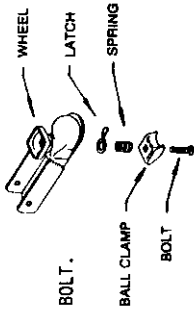
USE FOUR 30" X 8/10 STRAIGHT LINK MACHINE CHAINS, DRAW-TITE PART NO. 2489 OR EQUIVALENT AND EIGHT QUICK LINKS, DRAW-TITE PART NO. 2529 OR EQUIVALENT. THE MINIMUM BREAKING STRENGTH OF EACH CHAIN AND EACH QUICK LINK MUST EXCEED 5000 LBS.

(4) 30" CLASS III CHAINS P/N 2489  
(8) 5/16" QUICK LINKS P/N 2529



### COUPLER

COUPLER REPAIR KIT: DRAW-TITE PART NUMBER 02459 INCLUDES: WHEEL, LATCH, SPRING, BALL CLAMP, AND BOLT.



### TOW BAR TIPS

- ▷ ACTUAL WEIGHT OF TOWED VEHICLE MUST NOT EXCEED 5000 POUNDS.
- ▷ TOWING VEHICLE MUST WEIGH MORE THAN TOWED VEHICLE.
- ▷ USE THIS TOW BAR TO TOW ONLY VEHICLES IN GOOD CONDITION. DO NOT TOW VEHICLES WITH DAMAGED STEERING OR SUSPENSION SYSTEMS. DAMAGED VEHICLES SHOULD BE TOWED WITH A WRECKER OR TRANSPORTED ON A TRAILER OR TRUCK.
- ▷ FOLLOW TOWED VEHICLE MANUFACTURER'S TOWING RECOMMENDATIONS. FAILURE TO DO SO MAY RESULT IN TRANSMISSION DAMAGE, LOSS OF CONTROL OR LOSS OF CONNECTION. TRANSMISSION MUST BE IN NEUTRAL. PARKING BRAKE MUST BE RELEASED.
- ▷ PROPERLY CONNECTED SAFETY CHAINS MUST BE USED.
- ▷ WHEN PROPERLY INSTALLED, THE SAFETY CHAINS SHOULD PREVENT THE TOW BAR FROM DROPPING TO THE ROAD AND HELP MAINTAIN CONTROL IF ANY CONNECTION BECAME SEPARATED.
- ▷ STEERING WHEEL OF TOWED VEHICLE MUST BE FREE TO TURN.
- ▷ WHEN MAKING TURNS BEGIN BY ROLLING STRAIGHT FORWARD, THEN TURN THE WHEELS. THIS MINIMIZES TOWING FORCES AS WELL AS WEAR ON TOWED VEHICLE FRONT SUSPENSION AND TIRES.
- ▷ 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.
- ▷ TOWING MIRRORS ON BOTH SIDES ADD TO SAFETY BY INCREASING REAR VISIBILITY, AND ARE REQUIRED BY STATE LAWS.
- ▷ DO NOT ALLOW PASSENGERS IN TOWED VEHICLE.
- ▷ 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 EXCEED 45 MILES PER HOUR.
- ▷ IF VEHICLE COMBINATION SHAYS 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.
- ▷ SOME VEHICLES WITH POWER STEERING MAY "FOLLOW" BETTER WITH ENGINE IDLING.
- ▷ DO NOT BACK UP WITH VEHICLE IN TOW.
- ▷ CHECK ALL CONNECTIONS, INCLUDING HITCH AND BALL, BEFORE TOWING AND FREQUENTLY DURING YOUR TRIP.
- ▷ REMOVE TOW BAR WHEN NOT TOWING.



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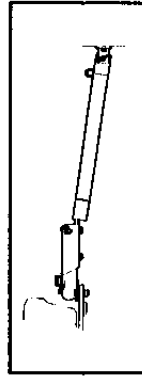
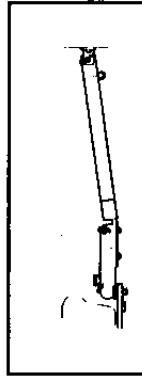
## INSTALLATION

### GENERAL INSTALLATION NOTES

THIS TOW BAR IS TO BE INSTALLED BY A PROFESSIONAL INSTALLER/FABRICATOR EXPERIENCED IN SELECTING VEHICLE ATTACHMENT AREAS WITH ADEQUATE STRENGTH. PARK VEHICLES ON LEVEL GROUND FOR INSTALLATION. THE TOW BAR MUST BE INSTALLED AS LEVEL AS POSSIBLE. THE COUPLER MUST BE LEVEL TO WITHIN 5° WHEN ATTACHMENT IS COMPLETE. TOW BAR STRUCTURE MAY BE TURNED OVER TO GIVE HEIGHT ADJUSTMENT. DRAWBAR MUST ALWAYS BE LOCATED INSIDE COUPLER CHANNEL. BUMPER ATTACHMENTS SHOULD BE REINFORCED AS SHOWN. ATTACHMENTS TO THE TOWED VEHICLE 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 CLIPS AS SHOWN. AVOID SUSPENSION AND BRAKE COMPONENTS WITH ATTACHMENTS.

### BRACKET MOUNTING

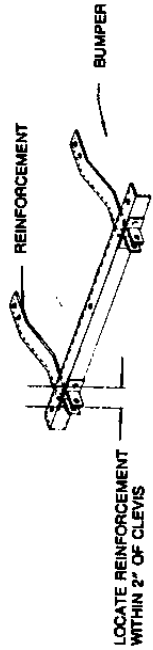
LOCATE THE HEIGHT OF THE BRACKETS SO THAT THE COUPLER IS AS LEVEL AS POSSIBLE. THE TOW BAR STRUCTURE CAN BE TURNED OVER TO GIVE HEIGHT ADJUSTMENT. THE DRAWBAR MUST ALWAYS BE LOCATED INSIDE THE COUPLER CHANNEL WITH A FLAT WASHER UNDER BOLT HEAD AND UNDER FLANGE LOCKNUT. THE TWO COUPLER MOUNTING POSITIONS ARE SHOWN BELOW. TIGHTEN 9/16" GR 5 COUPLER ATTACHING BOLTS TO 120 LB.-FT.



A STRUCTURE MUST BE FABRICATED TO ALLOW THE TOW BAR TO BE ATTACHED TO THE FRAME OF THE TOWED VEHICLE. SOME TYPICAL FRAME ATTACHMENT STRUCTURES ARE SHOWN BELOW.



IF THE TOW BAR IS MOUNTED TO THE BUMPER OF THE TOWED VEHICLE, THE BRACKET MUST BE REINFORCED WITH FRAME ATTACHMENTS. A TYPICAL BUMPER BRACKET REINFORCEMENT IS SHOWN BELOW

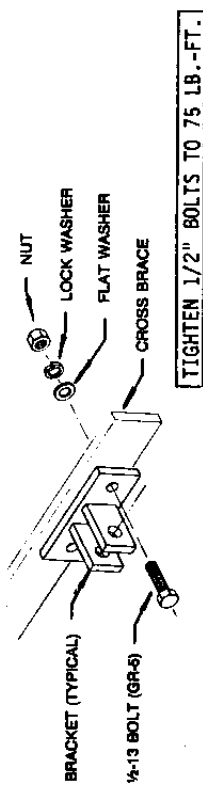


THESE REINFORCEMENTS SHOULD BE ATTACHED TO THE BRACKET WITHIN 2 INCHES OF THE CLEVIS (SEE ILLUSTRATION ABOVE) AND CAN BE BOLTED OR WELDED TO THE BRACKET.

## INSTALLATION

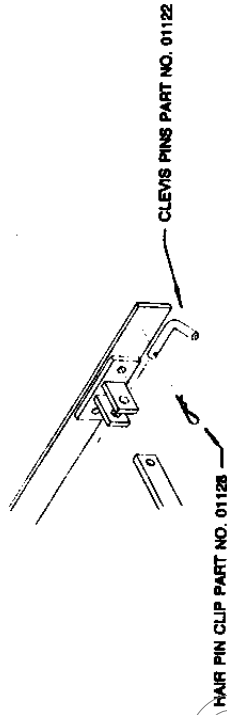
### BRACKET MOUNTING CONT'D.

AFTER THE STRUCTURE IS MOUNTED, PLACE THE CLEVIS BRACKETS (OPTIONAL SEE PAGE 1) ON THE CROSS BRACE, MAKING SURE THAT THE TOW BAR WILL BE CENTERED ON THE VEHICLE DRILL AND BOLT THE BRACKETS INTO PLACE WITH 1/2" GRADE 5 BOLTS OR WELD ACROSS TOP AND BOTTOM. SEE ILLUSTRATION BELOW.



### TOW BAR MOUNTING

AFTER THE BRACKETS ARE SECURED TO THE STRUCTURE THE TOW BAR CAN BE ATTACHED USING (2) PART NO. 01122 PINS AND (2) PART NO. 01128 CLIPS (PURCHASED SEPARATELY OR SUPPLIED WITH OPTIONAL BRACKET KIT SEE PAGE 1).



### SAFETY CHAIN INSTALLATION

1. CONNECT SAFETY CHAINS TO BOTH VEHICLES AND THE TOW BAR ITSELF AS SHOWN BELOW.
2. ATTACH CHAINS TO TOW BAR WITH QUICK LINKS AS SHOWN BELOW. THE NUTS ON THE QUICK LINKS MUST HAVE FULL THREAD ENGAGEMENT.
3. 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.
4. 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.
5. 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 TOW BAR.

