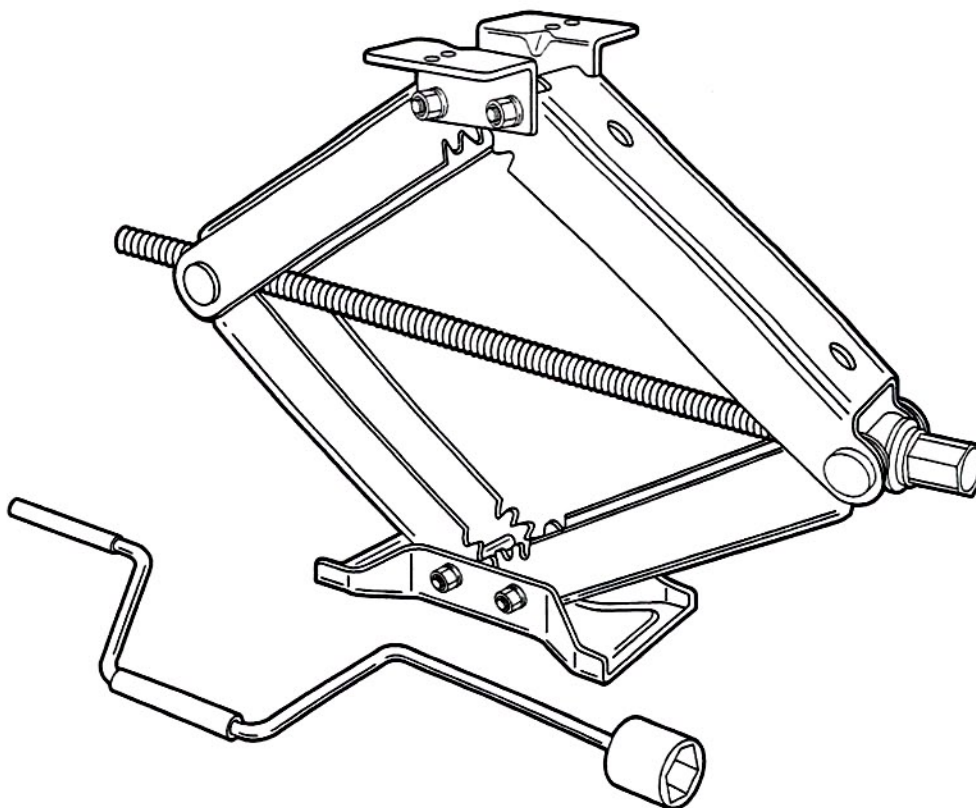


IMPORTANT: READ THE FOLLOWING INFORMATION BEFORE OPERATING YOUR:



MODELS 24002C, 24002D, 24003D, 24009, 24010, 24013
LEVELING SCISSORS JACK
FOR USE ON ALL RECREATIONAL VEHICLES

INSTALLATION AND OPERATING INSTRUCTIONS



THIS LEVELING SCISSORS JACK IS DESIGNED TO:
LEVEL AND STABILIZE THE FRONT AND REAR OF ALL RECREATIONAL VEHICLES BY REDUCING
THE AMOUNT OF SUSPENSION FREE-PLAY WHEN PARKED FOR CAMPING.



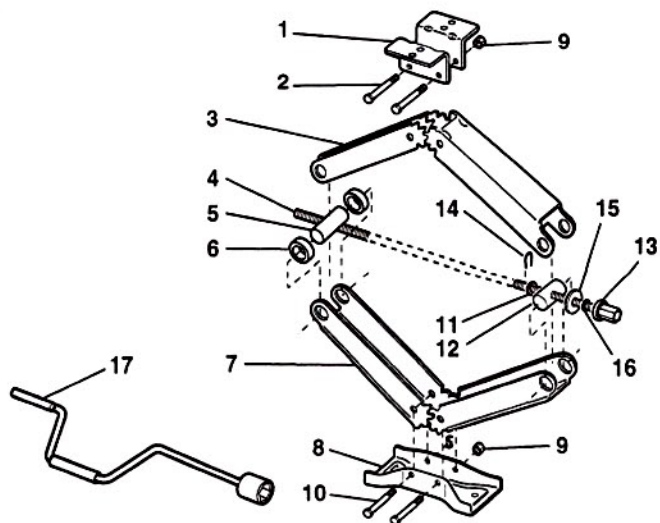
SAFETY WARNINGS:



- **DO NOT** ATTEMPT TO USE THIS SCISSORS JACK TO LIFT EXCESSIVE WEIGHT OR TIRES OFF OF THE GROUND - VEHICLE FRAME AND DOOR JAM DAMAGE MAY OCCUR. USE ONLY STOCK HANDLE SUPPLIED. DO NOT USE A CHEATER BAR ON HANDLE.
- **DO NOT** ATTEMPT TO USE THIS SCISSORS JACK FOR ANY PURPOSE OTHER THAN ITS INTENDED DESIGN.
- **DO NOT** USE THIS SCISSORS JACK AS A TIRE CHANGING JACK.

CAUTION: Some RV's may be designed and manufactured with sub-frames that are not capable of handling additional force over and above the intended strength to support the cabin weight. Contact your RV manufacturer for sub-frame strength information prior to using this Leveling Scissors Jack. NORCO CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGES DUE TO IMPROPER USE OF THIS PRODUCT. NORCO CANNOT BE HELD ACCOUNTABLE FOR THE STRUCTURAL INTEGRITY OF ANY RV FRAME.

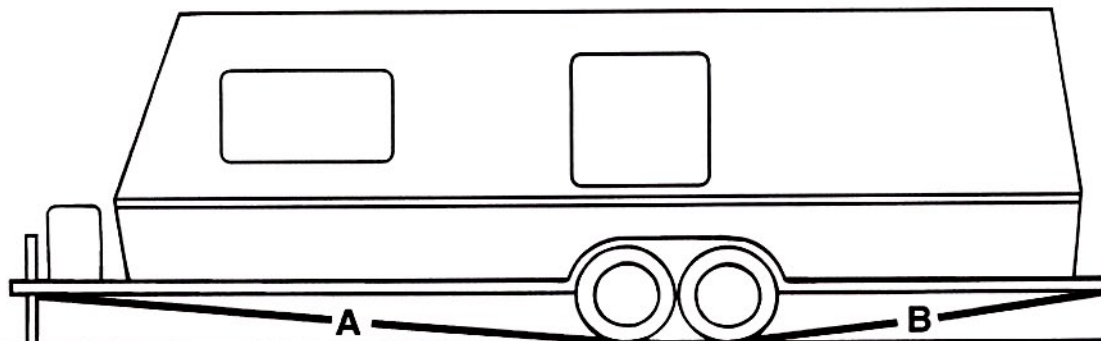
PARTS LIST



INDEX NO.	PART NO.	DESCRIPTION	QTY. REQ.
1	857022	Mounting Bracket	2
2	857066	3/8-16 x 3" Hex Head Bolt	2
3	857024	Upper Arm for 24" Jack	2
	857079	Upper Arm for 30" Jack	2
4	857086	Drive Screw for 24" Jack	1
	857049	Drive Screw for 30" Jack	1
5	857061	Drive Trunion	1
6	857064	Plastic Spacer Bushing	2
7	857026	Lower Arm for 24" Jack	2
	857054	Lower Arm for 30" Jack	2
8	857028	Base Pad	1
9	1014	3/8 -16 Nylon Locking Nut	4
10	857065	3/8-16 x 2-3/4" Hex Head Bolt	2
11	2112	5/8 x 1 x 3/16 Washer	1
12	857060	Stationary Trunion	1
13	857062	Thrust Bearing (Models 24010, 24013)	1
	2111/857083	Thrust Washer Assy. (Model 24009)	1
14	857076	Lock Pin	1
15	857067	Spacer/Bearing Washer	1
16	857075	O-Ring Brake	1
17	20037	Crank Handle	1
18	3152	Mounting Screws	4

DETERMINING CORRECT MOUNTING LOCATION

NOTE: CHECK GROUND CLEARANCE PRIOR TO INSTALLATION.



WHEN SELECTING PLACEMENT FOR INSTALLATION...

- Be sure that there is adequate ground clearance.
- Be sure that hex drive will be accessible.
- Be sure that Scissors jack does not interfere or come into contact with any under chassis component.

TRAVEL TRAILER AND 5TH WHEEL TRAILER MOUNTING PLACEMENT

STEP 1: PARK ON LEVEL GROUND

FRONT: Draw a string from the front corner of the trailer frame to the bottom of the front tire (A).

REAR: Draw a string from the bottom of the back tire to the back corner of the trailer frame (B).

NOTE: ANY OBJECT PROTRUDING BELOW THESE LINES CAN BE DAMAGED, DRAGGED OFF OR DESTROYED IN UNEVEN TERRAIN, ENTERING OR EXITING DRIVEWAYS, DRIVING OFF ROAD, ETC.

MOTORHOME MOUNTING PLACEMENT

STEP 1: PARK ON LEVEL GROUND

FRONT: Draw a string from the motorhome front frame extension behind the front bumper to the bottom of the front tire (A).

REAR: Draw a string from the bottom of the back tire to the back corner of the motorhome frame (B).

BEFORE PROCEEDING TO INSTALLATION - PERFORM THIS IMPORTANT TEST

To insure clearance for the jack in the closed position, clamp the jack to the vehicle frame using two "C" clamps or Vise Grips™. Close the jack with the crank handle and check to insure that the location chosen will allow the jack to close without coming into contact with or obstruct any under chassis components (ie: plumbing, exhaust, etc.)

CAUTION: Some RV's may be designed and manufactured with sub-frames that are not capable of handling additional force over and above the intended strength to support the cabin weight. Contact your RV manufacturer for sub-frame strength information prior to using this Leveling Scissors Jack. NORCO CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGES DUE TO IMPROPER USE OF THIS PRODUCT. NORCO CANNOT BE HELD ACCOUNTABLE FOR THE STRUCTURAL INTEGRITY OF ANY RV FRAME.

INSTALLATION

STEP 1. Park RV on level ground. Prevent wheels from rolling by activating emergency brake and/or by using tire chocks.

STEP 2. BEFORE PROCEEDING TO INSTALLATION - PERFORM THIS IMPORTANT TEST:

To insure clearance for the jack in the closed position, clamp the jack to the vehicle frame using two "C" clamps or Vise Grips™. Close the jack with the crank handle and check to insure that the location chosen will allow the jack to close without coming into contact with or obstruct any under chassis components (ie: plumbing, exhaust, etc.)

- Open the jack until it touches the ground. Recheck location and adjust as needed.

- Once in place apply enough pressure so jack cannot move during installation procedure. Remove clamps or Vise Grips™.

BOLT-ON INSTALLATION

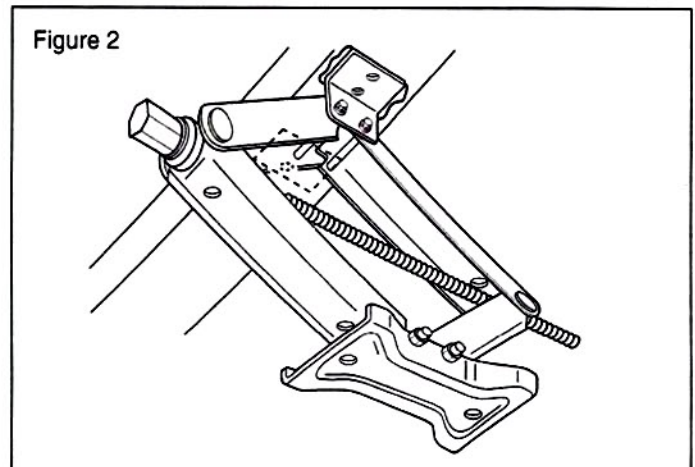
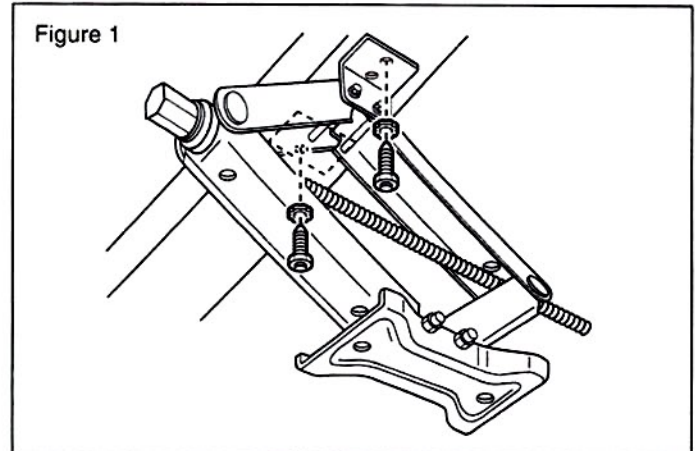
WARNING: BEFORE DRILLING HOLES BE SURE THE DRILL WILL NOT DAMAGE UNDER CHASSIS COMPONENTS WHICH MAY BE ROUTED INSIDE VEHICLE FRAME (ie: electrical, gas, water, generator fuel lines, holding tank plumbing, water heater). Refer to **STEP 1** and **STEP 2** above.

STEP 3. Using the mounting plate as a template, mark the locations of the four mounting holes on the vehicle frame. Remove the jack.

STEP 4. Mark the center of each hole location with a center punch and hammer.

STEP 5. Drill a 1/8" pilot hole and finish by drilling holes with a 5/16" diameter drill.

STEP 6. Reposition jack. Use a 9/16" socket and ratchet to install the jacks to the vehicle frame using four screws and four lock washers per jack (Figure 1).



WELD-ON INSTALLATION

Refer to **STEP 1** and **STEP 2** above.

STEP 3. Weld each mounting plate to the vehicle frame with 4 each 1" welds, as shown (Figure 2).

OPERATION

STEP 1. Park RV on level ground, prevent wheels from rolling, use tire chocks.

STEP 2. Level trailer fore and aft using tongue jack or landing gear.

STEP 3. Check level gauge for low side of trailer, crank down stabilizers on low side first, bringing the trailer to a fine level position.

STEP 4. Crank down stabilizers on opposite side of trailer to insure maximum stability. Then re-snug stabilizers on low side of trailer if necessary.

NOTE - BEFORE MOVING TRAILER: Crank up stabilizers to fully closed position and tighten 1/4 turn to secure in travel position (this prevents stabilizers from working open due to road vibration).

MAINTENANCE: Use small amounts of WD-40 or similar lubricant on drive screw threads and bolt locations as required.

WARNING • DO NOT ATTEMPT TO USE THIS SCISSORS JACK TO LIFT EXCESSIVE WEIGHT OR TIRES OFF OF THE GROUND - VEHICLE FRAME AND DOOR JAM DAMAGE MAY OCCUR. USE ONLY STOCK HANDLE SUPPLIED. DO NOT USE A CHEATER BAR ON HANDLE. DO NOT USE THIS SCISSORS JACK AS A TIRE CHANGING JACK.

IMPORTANT

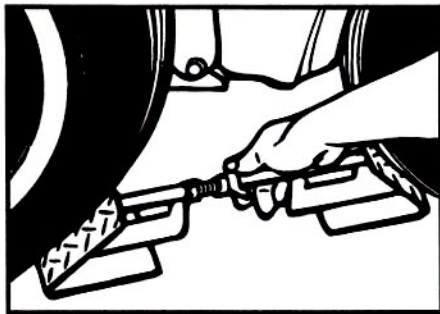
TRAVEL TRAILER AND FIFTH-WHEEL OWNERS

Since trailers are not equipped with a parking brake, BAL highly recommends using two tire locking chocks on a trailer to achieve improved front to rear trailer stability while camping. One of BAL's two different tire locking chock models (28000 or 28005) will work on your dual or triple axle trailer.

STANDARD TIRE LOCKING CHOCK

Model 28000

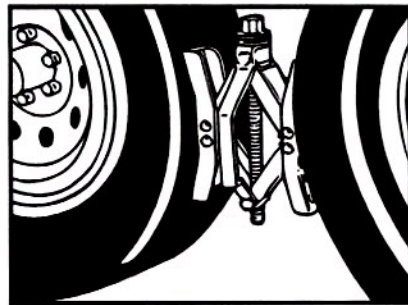
Fits between tires on the ground. Locks tandem wheels by applying opposing force to tires.



DELUXE TIRE LOCKING CHOCK

Model 28005

Used off the ground and between tandem tires. A hand operated ratchet wrench (included) turns a drive nut which extends or retracts the chocks.



FIFTH-WHEEL OWNERS

Fifth-wheel landing gear alone will not stabilize the front of your trailer. Achieve maximum stability with BAL's King Pin Stabilizer Jack model 25015, 25030 or 25035.

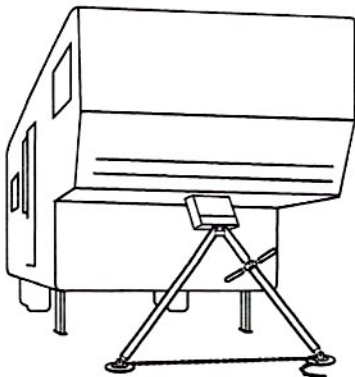
KING PIN STABILIZING JACKS

STANDARD Model 25015

Includes a telescopic leg on the jack tube side for longer reach when needed.

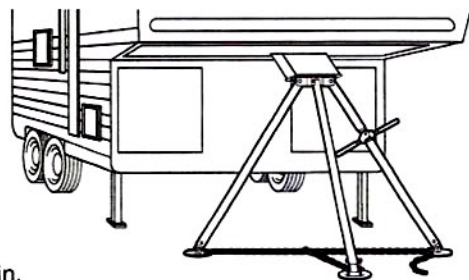
DELUXE Model 25030

Includes telescopic legs on both jack and support tube sides for longer reach when used in uneven terrain.



TRIPOD Model 25035

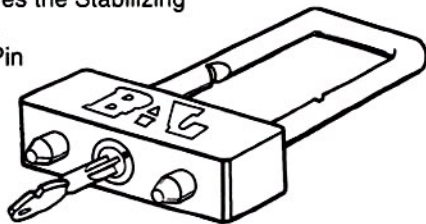
Provides additional front to rear stability and includes telescopic legs in all tubes for longer reach when used in uneven terrain.



OTHER FINE BAL PRODUCTS

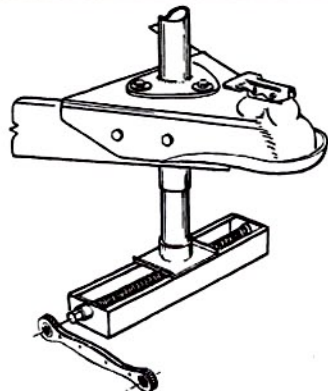
KING PIN LOCK Model 25020

The King Pin Lock secures the Stabilizing Jack to the king pin. It is designed to deter King Pin Stabilizing Jack and fifth-wheel travel trailer theft but can also be used independently of the jack to deter trailer theft.



TONGUE TWISTER Model 28100

Receives the trailer tongue jack leg and moves it side to side or diagonally to eliminate trial and error hitch alignment.



BAL
RV PRODUCTS GROUP

 NORCO INDUSTRIES, INC.

BAL is a registered brand name of Norco Industries Inc.
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