



MODEL QTG SJ1, QTG SJ2

## LEVELING JACK OWNER'S GUIDE

*Please Read Carefully Before  
Installation and Operation*

This leveling jack is a high quality mechanical device and must be properly installed, maintained, and operated to ensure years of trouble-free operation. Read and understand these instructions before proceeding with the installation.

### RATED LIFT CAPACITY

This leveling jack is designed to level and stabilize the front and rear of most motorized recreational vehicles by reducing the amount of suspension free-play when parked for camping. Each individual jack is rated at 5000 lbs.



### SAFETY PRECAUTIONS

**WARNING** - Never attempt to use this leveling jack to lift excessive weight or tires off the ground.

**WARNING** - Never use a cheater bar... use only the handle supplied.

**WARNING** - Never operate vehicle without jacks fully retracted.

**WARNING** - Never use this leveling jack as a tire changing jack.

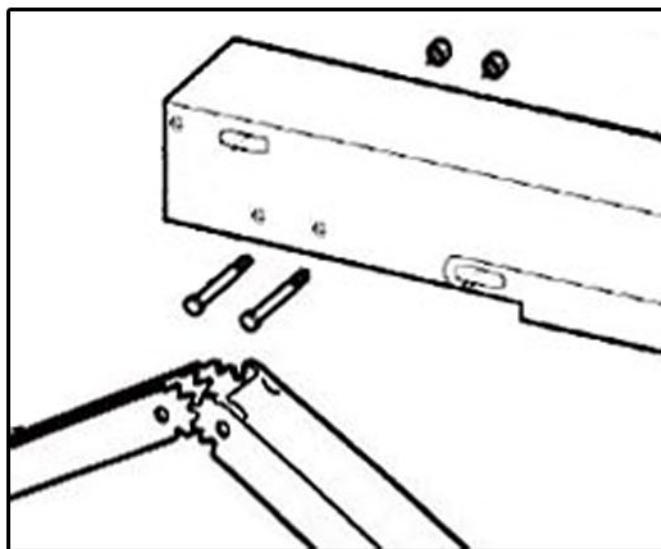


FIG. 1 Make sure the teeth on the jack arms are aligned to keep foot pad parallel with upper channel

### ASSEMBLY (QTG SJ2)

- 1) Remove components from box
- 2) Scissors mechanism must be inserted in and attached to the main channel using 2 each - 3/8" x 3 1/4" bolts and 3/8" lock nuts. Side holes toward the upper ends of the jack arms must be aligned with the lower holes in the ends of the main channel (see Fig. 1).
- 3) Insert the nut plates into each end of the main channel and hold in place with 2 - 3/8" x 1" bolts, one at each end of nut plate and on opposite sides. (see Fig. 2)
- 4) Follow installation instructions for standard QTG Levelers.

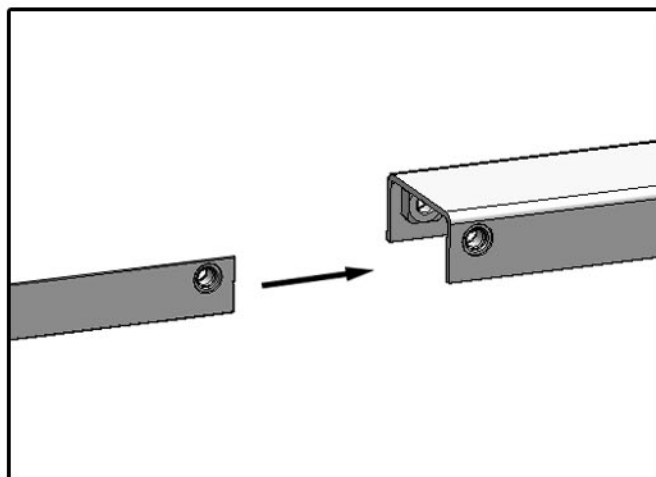


FIG. 2

### ASSEMBLY (QTG SJ1)

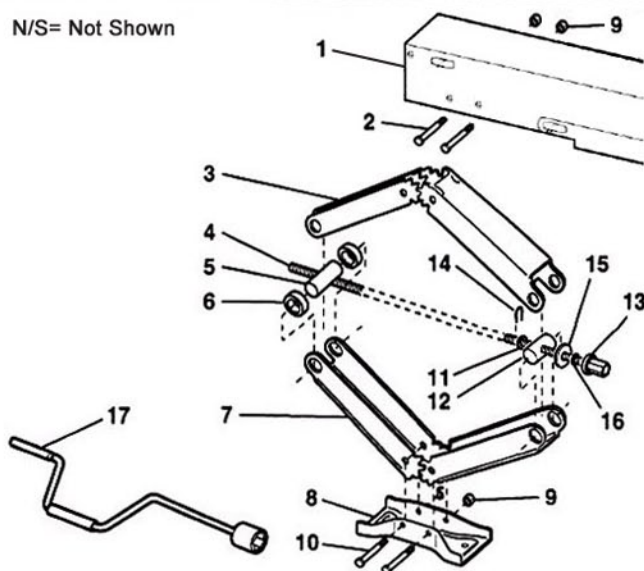
Repeat steps 1, 3, and 4 above.

For operation and maintenance tips, refer to the Scissors Jack instruction sheet included in this package.



## PARTS LIST

N/S= Not Shown



INDEX NO.	PART NO.	DESCRIPTION	QTY. REQ.
1	P265501	50" Channel (Special)	1
2	857066	3/8-16 x 3" Hex Head Bolt	2
3	857024	Upper Arm for 24" Jack	2
4	857086	Drive Screw for 24" Jack	1
5	857061	Drive Trunion	1
6	857064	Plastic Spacer Bushing	2
7	857026	Lower Arm for 24" Jack	2
N/S	P858111	Channel Nut Plate	
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
N/S	P265504	Hardware Pack	

## INSTALLATION INSTRUCTIONS

**IMPORTANT: READ AND UNDERSTAND ENTIRE INSTALLATION INSTRUCTIONS BEFORE ATTEMPTING TO INSTALL LEVELING JACKS.**

The following installation instructions are for a typical Class "C" Motorhome. While other applications may require different bracketry and hardware, the following installation instructions will serve as a typical guideline.

**IMPORTANT: PARK THE MOTORHOME ON A HARD, FLAT, LEVEL SURFACE. PUT THE TRANSMISSION IN PARK POSITION AND APPLY THE EMERGENCY BRAKE.**

### TOOLS REQUIRED:

3/8" Drive Socket Wrench

9/16" Hand Wrench (Open and Closed Ends)

9/16" Deep Socket with 6" Extension

Floor Service Jack

## REAR OF VEHICLE

**STEP 1.** Assemble the leveling jacks by sliding the jack sections into both ends of the center channel as shown in Figure 3. When the desired length of the assembly is obtained and holes are aligned, install the bolts, washers and

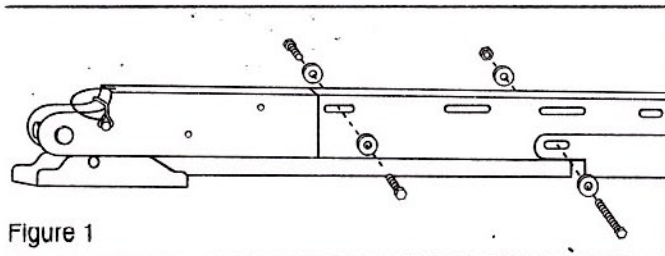


Figure 1

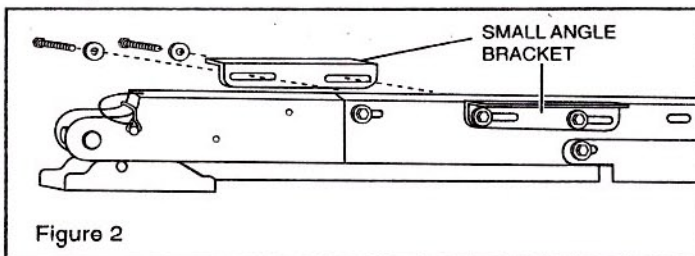


Figure 2

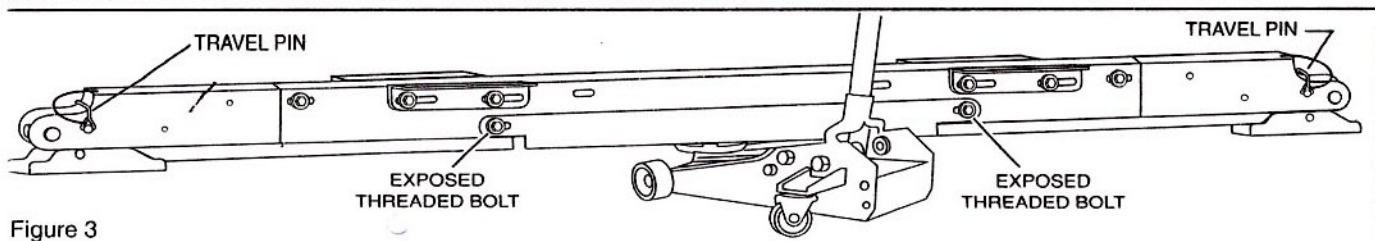


Figure 3



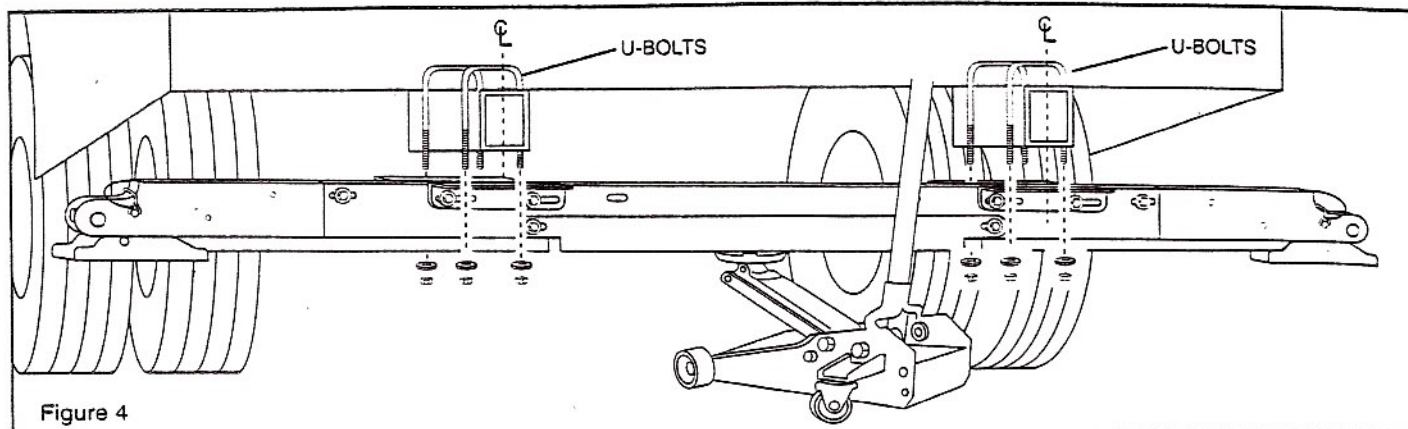


Figure 4

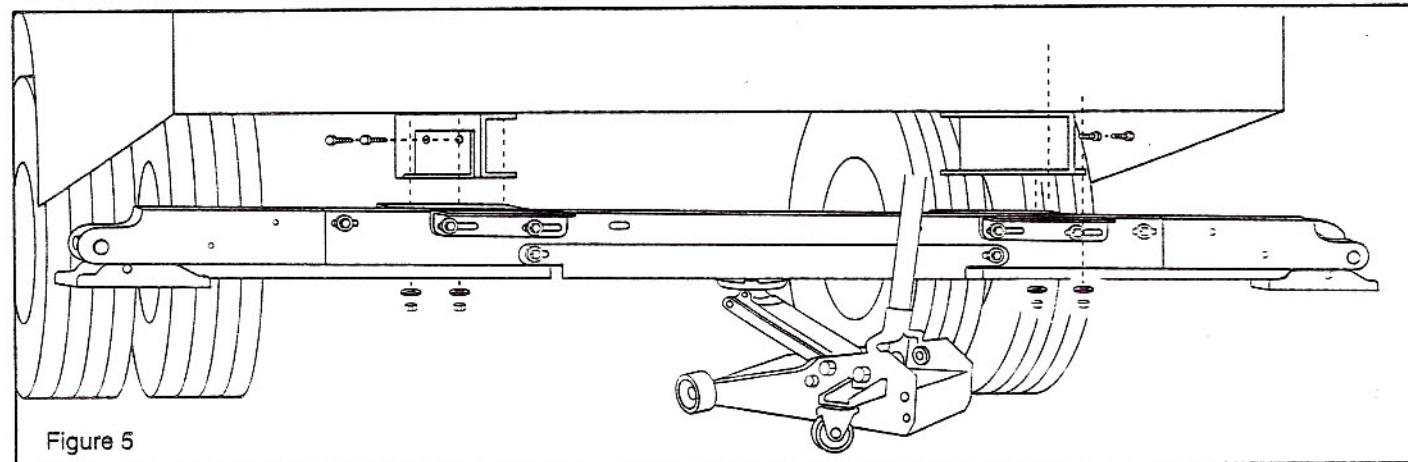


Figure 5

nuts as shown in the driver's side figure 1. Hand tighten the bolts and nuts to allow for fine adjustment of the length.

**STEP 2.** Install two small angle brackets on each leveling jack. Figure 2. Do not tighten the bolts. Balance the leveling jack assembly on the lift saddle of an automotive floor jack as shown in figure 3. Make sure the side of the leveling jack assembly with the two exposed threaded bolts is facing the rear of the motorhome. Also make sure the travel pins are installed from the rear of the motorhome.

**STEP 3. NOTE:** The rear leveling jack assembly must be installed on the RV frame in back of and as close to the rear wheels as possible without interfering with under vehicle components. Never install the leveling jack assembly on an extended vehicle subframe.

Push the floor jack with leveling jack assembly in towards the rear of the motorhome. Pump the floor jack up until the top of the leveling jack assembly is touching the motorhome frame. At the same time make sure the holes of the small angle brackets are aligned on either side of their respective vehicle frames as shown in figure 4. It may be necessary to slide the small angle brackets from side to side to position the holes correctly.

**STEP 4.** Install four U-bolts over the vehicle frame as shown in figure 4 making sure the bolts fit through the corresponding holes in the small angle brackets. Install the washers and locknuts but do not tighten.

**NOTE:** If U-bolts cannot be used due to obstruction by under vehicle components, weld or bolt the optional angle bracket adapters to the outside webs of the frame rails as shown in figure 5. Secure the small angle brackets to the optional angle bracket adapters as shown in figure 5.

**STEP 5.** Remove the floor jack. Complete steps 2 and 3 of the Operating Instructions (Lowering the Jacks) in order to extend both drop legs. Make sure the hand grip of the crank handle clears the side of the RV when the drop leg engages with the bolt in the support leg. If more clearance is required, pull each jack leg to its respective outboard direction. Make sure the entire leveling jack assembly is centered on the motorhome by having the exposed ends of the assembly at equal distance from the outside of the body. See figure 6. Tighten all bolts and nuts on the leveling jack assembly.

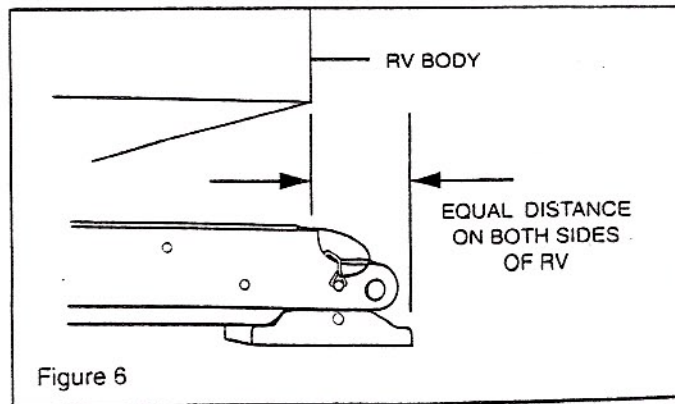


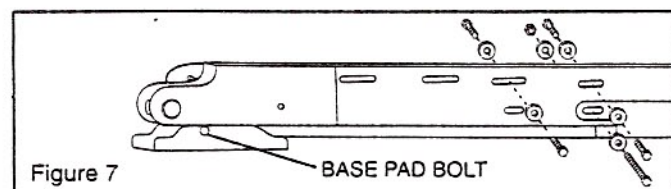
Figure 6



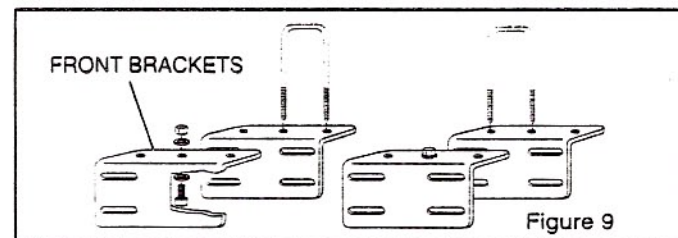
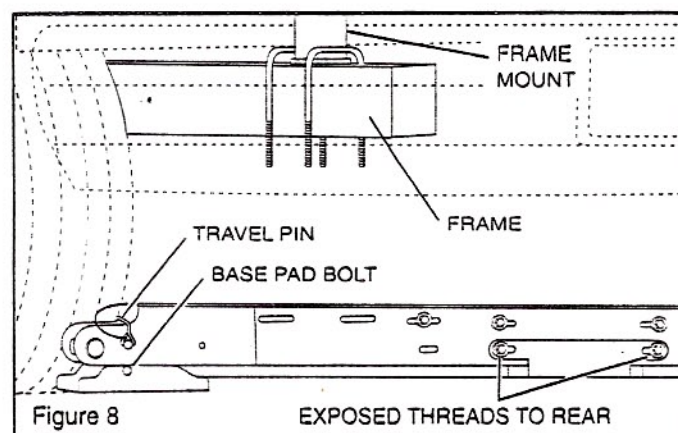
# INSTALLATION INSTRUCTIONS

# FRONT OF VEHICLE

**STEP 1.** Assemble the leveling jacks by sliding the jack sections into both ends of the center channel as shown in figure 3. When the desired length of the assembly is obtained and bolts are aligned, install the bolts, washers and nuts on both ends of the center channel. Figure 7 shows driver's side. Hand tighten the bolts and nuts to allow for fine adjustment of the length.



**STEP 2.** Make sure the side of the leveling jack assembly with the two exposed threaded bolts is facing the rear of the motorhome. Also make sure the travel pins are installed from the front of the motorhome. It may be necessary to reverse the base pad bolts so the nut ends face the front of the vehicle and away from the tire turning radius. Figure 8.

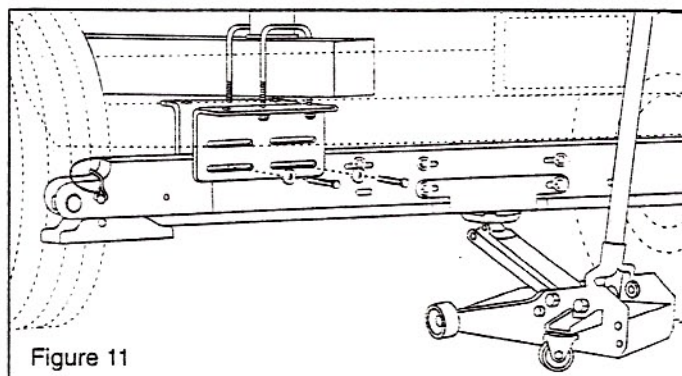
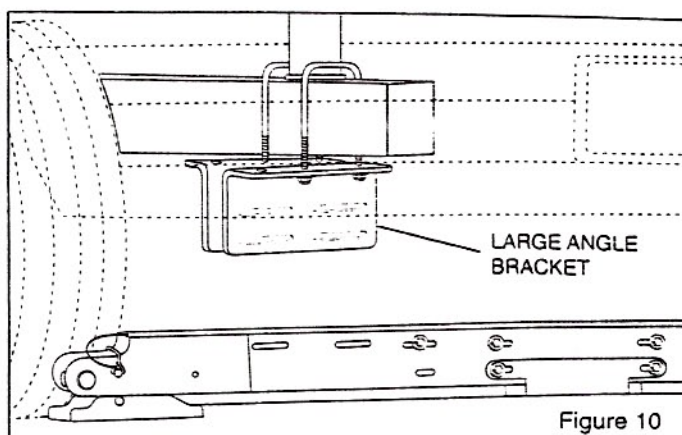


**STEP 3.** Install four U-bolts over the motorhome frame as shown in figure 8. It may be necessary to cut a small notch from the plastic splash guard on late model motorhomes to allow the front U-bolts to drop into place. The U-bolts should straddle on either side of the front body frame mounts. See figure 9 for optional installation on Ford Class "C" Motorhomes 1991 and older.

**NOTE:** The two front brackets will bolt through existing holes in the vehicle's bumper.

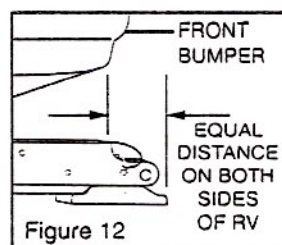
**STEP 4.** Install the large angle brackets on the U-bolts with the washers and locknuts provided. See figure 10. Do not tighten the locknuts.

**STEP 5.** Balance the leveling jack assembly on the lift saddle of an automotive floor jack as shown in figure 11. Push the floor jack with leveling jack assembly in towards the front of the motorhome. Align the assembly with the large angle brackets. Slowly pump the floor jack



up until two slotted holes in the sides of the large angle brackets line up with the threaded holes in the leveling jack assembly.

**STEP 6.** Fasten the large angle brackets to the leveling jack assembly with the bolts and washers provided. Install the bolts loosely. Remove the floor jack. Complete steps 2 and 3 of the Operating Instructions (Lowering the Jacks) in order to extend both drop legs. Make sure the hand grip of the crank handle clears the side of the RV when the drop leg engages with the bolt in the support leg. If more clearance is required, pull each jack leg to its respective outboard direction. Make sure the entire leveling jack assembly is centered on the motorhome by having the exposed ends of the assembly at equal distance from the outside of the body. See figure 12.



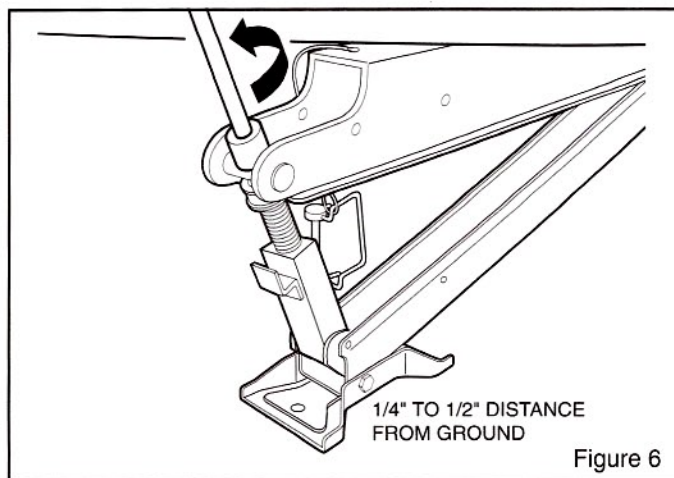
**STEP 7.** Tighten all bolts on the leveling jack assembly including the ones that attach the large angle brackets to it. Pull the U-bolts and leveling jack assembly as far forward as possible towards the bumper before tightening the locknuts on the U-bolts.

**CAUTION:** Turn the vehicle's steering wheel all the way to the left and then all the way to the right making sure that no part of the leveling jack assembly interferes with the tire turning radius. If interference is observed, loosen all four U-bolts and pull the entire leveling jack assembly towards the front of the vehicle away from the tires. Once the assembly has been repositioned, hold in place while U-bolts are tightened. **FAILURE TO CHECK FOR TIRE CLEARANCE MAY CAUSE SEVERE DAMAGE TO THE VEHICLE AND/OR LEVELING SYSTEM.**

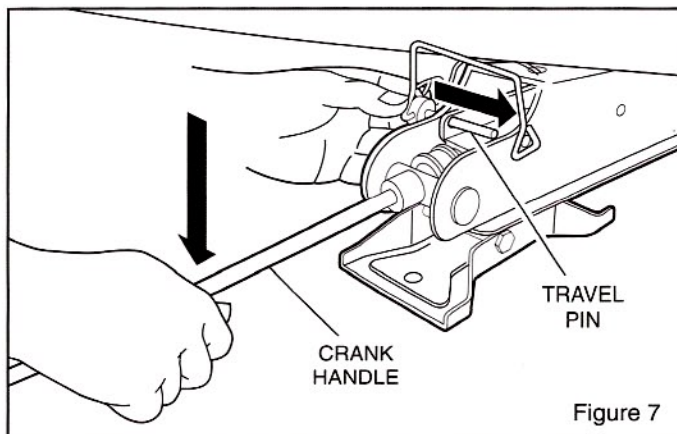


## RAISING JACKS FOR TRAVEL

STEP 1. Release pressure on the jacks on the high side of the RV first and then on the jacks on the low side of the RV. Turn the crank handle in a counter-clockwise direction until each jack pad is slightly off the ground. See figure 6.



STEP 2. For each jack push crank handle downward until the drop and support legs swing up into traveling position. Using one hand to push down on the crank handle, use the other hand to insert the travel pull pin through the two holes in the main channel and two holes in the support leg. See figure 7. Make sure the detent wire is placed over the exposed end of the travel pin.



NOTE: If the holes in the main channel and the support leg do not line up, make sure the jack pad is level and/or the travel locking tab is not interfering with the support leg bolt. If the travel locking tab is interfering, turn the crank handle in a clockwise direction until the tab clears the bolt. See figures 8a, 8b and 8c.

STEP 3. For each jack turn the crank handle in a counter-clockwise direction until it stops and snugs up into the locking travel position. See figure 8c.

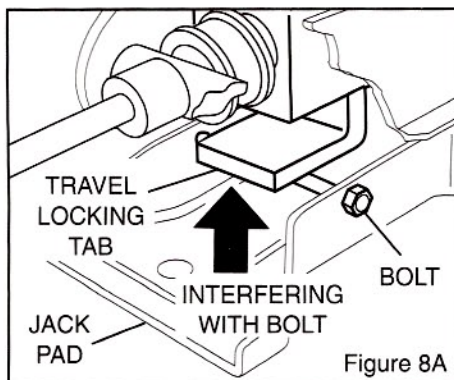


Figure 8A

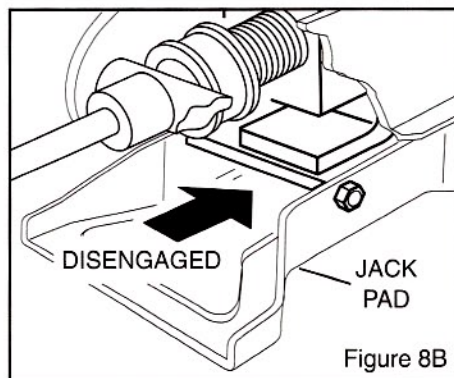


Figure 8B

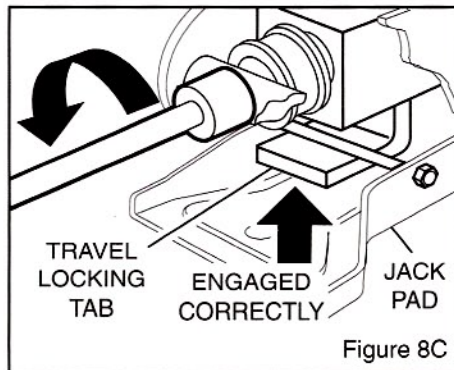


Figure 8C

## MAINTENANCE

1. Visually inspect all pins, shafts and channels for excessive wear or damage before each use. Replace and/or repair worn or damaged components immediately.
2. Remove road grime and dirt from main channel, drop leg and screw jack when necessary. After cleaning, coat assembly with a silicone spray or similar lubricant.
3. Grease screw and bearing assembly when necessary. Use extreme pressure grease.

CONTACT NORCO INDUSTRIES FOR FURTHER SERVICE INFORMATION.

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