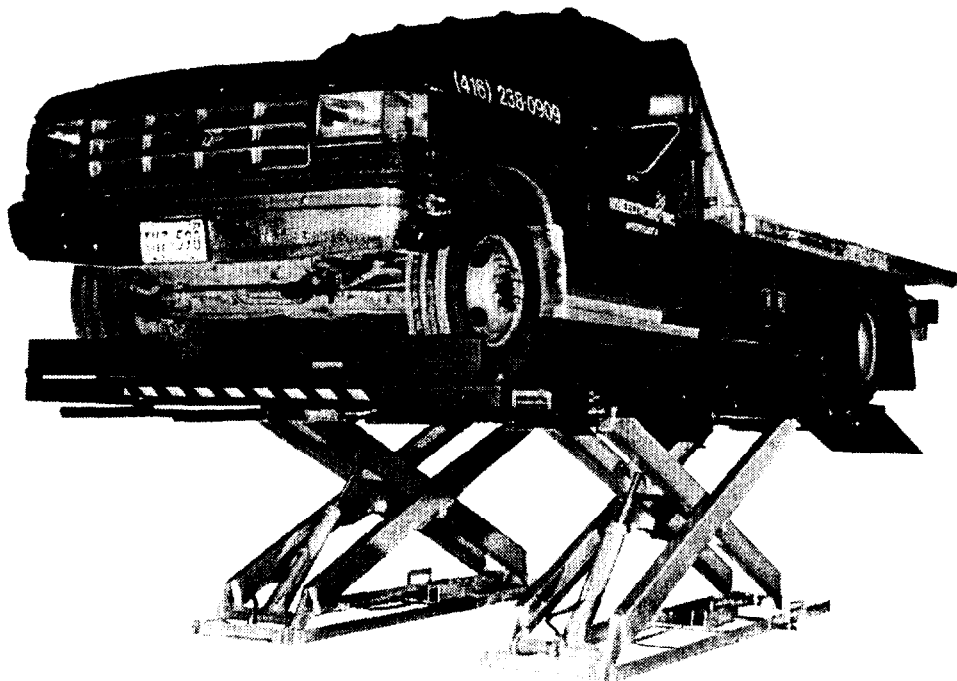


**space  
saver®**

**12000 SERIES**



**INSTALLATION AND  
OPERATION MANUAL**

**SAVE THESE INSTRUCTIONS  
READ ALL INSTRUCTIONS**

AUTOMOTIVE SERVICE EQUIPMENT  
**WHEELTRONIC LTD.**

6500 MILLCREEK DRIVE, MISSISSAUGA, ONTARIO L5N 2W6  
TEL: 905-826-8600 • FAX: 905-826-7800

DECEMBER 1997 6-0607

## **SPACE SAVER--INSTALLATION MANUAL**

### **THE FOLLOWING APPLIES TO ALL LIFTS**

#### **IMPORTANT SAFETY INSTRUCTIONS**

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate the lift with a damaged cord or if the lift has been damaged -- until it has been examined by a qualified serviceman.
4. Do not let cord be positioned under the lift or in any area where it could be crushed or come in contact with hot or moving parts.
5. If an extension cord is necessary, a cord with a current rating equal to or greater than that of the lift should be used. Cords rated for less amperage than the lift may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
6. Always unplug the lift from the electrical outlet when not in use. Never yank the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.
7. To protect against risk of fire, do not operate lift in the vicinity of open containers of fuel (gasoline).
8. Adequate ventilation should be provided when working on internal combustion engines.

**SAVE THESE INSTRUCTIONS**

# SPACE SAVER--INSTALLATION MANUAL

## 12000 SERIES SPACE SAVER HOIST

### GENERAL SPECIFICATIONS

Maximum capacity	12,000 lbs.
Overall length	255 inches
Overall width all models	92 inches
Maximum wheel base alignment models	172 inches
Maximum wheel base service models	182 inches
Collapsed height	8-3/4 inches
Shipping weight ALIGNMENT model	4980 lbs.
Shipping weight SERVICE model	4750 lbs.

### CHECK CONTENTS OF ACCESSORY BOX WITH PACKING LIST ENCLOSED IN BOX

### TOOLS REQUIRED FOR INSTALLATION OF 12000 SERIES HOIST:

25' hose 1/4" hydraulic hose, 3/8" JIC female fitting each end  
Rotary hammer drill or similar 1/4", 1/2" concrete drill bits  
Tube cutter for 3/8" diameter tubing  
Tube bender  
Flaring tool (single flare) 37 deg. JIC  
4 foot level  
Wrenches  
Hammer (for anchor installation)  
Pry bar (for shim installation)  
Side cutters (for cutting shipping Straps)  
Tape measure  
Bar (positioning hoist)

**NOTE:** FOR INSTALLATION ASSISTANCE CALL WHEELTRONIC LTD.

(800) 268-7959

(905) 826-8600

## SPACE SAVER--INSTALLATION MANUAL

1. Please take time to read these instructions completely. A quick check of the contents of the accessory box would also decrease the overall time of installation.
2. Gather the tools required for installation.
3. After selecting the location best suited for your hoist, mark on the floor an outline matching the dimensions listed below that is applicable to your model:

ALIGNMENT Model 172 wheelbase (12005)	202" x 92"
SERVICE Model 172 wheelbase (12006)	202" x 92"

4. Draw a center line down the middle of the outline starting at the front of the hoist location and ending at the rear.
5. Draw a line perpendicular to the center line, 38" back of the 172" w/b models from the front line of the hoist outline. This line should be parallel to the front outline.
6. Check the floor in the outline for the the highest point using the 4' level. Mark this location, you will refer to it later during the leveling procedure.
7. Remove the straps holding the accessories box (and the sliding JACK BEAMS if so equipped) and place in a convenient location near the installation area.
8. Remove the steel straps surrounding the two Main Frame Assemblies and position units in the locations previously marked out.
9. Check that base frames are 20" away from the center line at both the front and rear of the hoist and the front angle is on the line drawn in step 5.

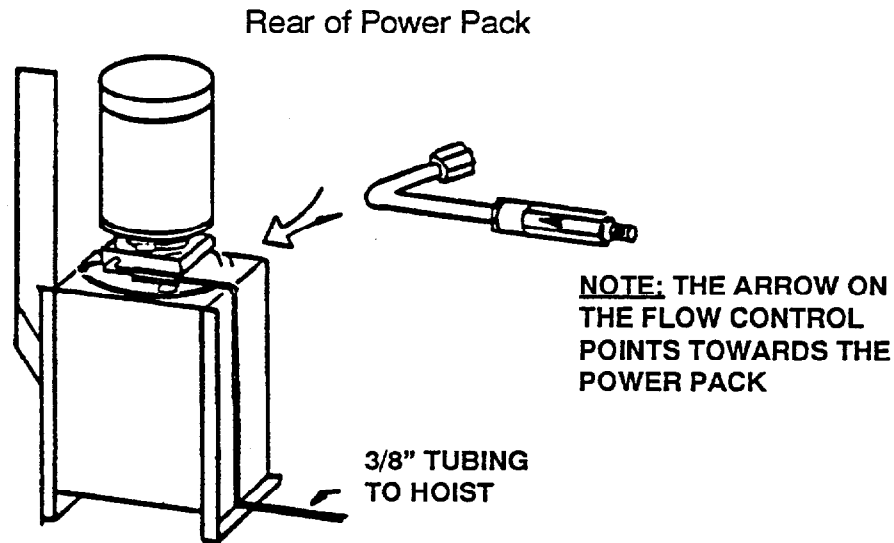
## SPACE SAVER-- INSTALLATION MANUAL

### HYDRAULIC INSTALLATION

10. Select a position best suited for the power pack, keeping in mind the hydraulic inlet is on the driver's side; hydro should be easily accessible. You may now add the four gallons of hydraulic fluid (ISO 32) to the reservoir of the power pack.
11. Cut the cable tie holding the flow control valve to the pendant control cable. Install the flow control valve on the rear of the power pack with the arrow on the valve pointing towards the power pack. (fig.1)

WHEN WORKING WITH HYDRAULIC LINES AND VALVES IT IS IMPORTANT TO KEEP ALL COMPONENTS CLEAN AND FREE OF DIRT.

NOTE: ALL HYDRAULIC CONNECTIONS ARE 37 1/2 JIC FLARES.



12. Using a hydraulic tube bender, form the hydraulic line to run from the flow control (previously installed in step 9) to the hydraulic inlet fitting located on the hoist baseframe. After all the lines are cut and formed, install the nuts and sleeves and then flare the ends of the tube.
13. If you have purchased the factory air kit option you should now cut and form the air supply line, from the hoist to desired location for customer connection to their shop air supply.
14. Tighten all the supply lines. You may now anchor the hydraulic power pack (floor or wall mount).

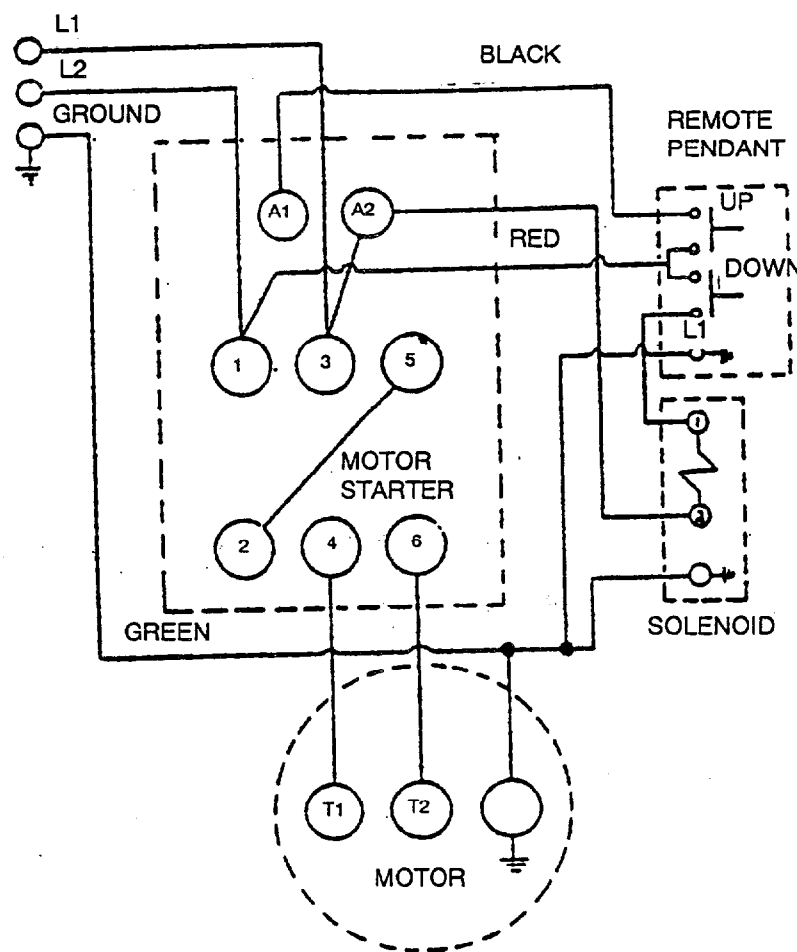
## SPACE SAVER-- INSTALLATION MANUAL

15. Connect the center hydraulic line to the outlet side of the driver side baseframe, to the inlet side of the passenger side baseframe. Tighten the line in place so it runs along the floor giving it a low profile.
16. UNBOLT THE SHIPPING CLAMPS HOLDING EACH BASEFRAME TO ITS RESPECTIVE DECK. THERE ARE TWO CLAMPS ON EACH SECTION.
17. **ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A QUALIFIED ELECTRICIAN!!!!!!** Please refer to Fig. 2, the electrical diagram. Select a position for the remote hand control pendant to be hung from the ceiling. Hang in a position so the safety pedal may be reached easily.

### NOTE:

**THE CONTROL PENDANT SHALL BE INSTALLED IN SUCH A MANNER THAT THE CONTROL PENDANT CANNOT ENTER THE 18" HIGH LEVEL ABOVE THE FLOOR (CLASS 1 DIVISION 2 HAZARDOUS LOCATIONS).**

Fig. 2 Electrical Diagram 220V/1PH



## SPACE SAVER-- INSTALLATION MANUAL

18. Raise hoist to 10 to 12 inches then lower. Repeat this procedure three times to relieve air from the hydraulic system. Check for leaks at all connections.

### SAFETY INSTALLATION

19. At this point of the installation the hoist will go up uneven. When one cylinder is fully extended continue to raise the hoist until both cylinders are fully extended, by jogging the up button on the hand control. Turn off power supply to power pack.
20. Flip the safety bar weldments (#22, fig. 6) back out of the way. Slide each of the safety release rods (#26, fig.6) through the holes closest to the rear of each baseframe.

### NOTE:

Install rod with the flat section in the middle of the rod on top and pointing up toward the front of the deck when the slots on either end are parallel to the ground. (Fig. 3)

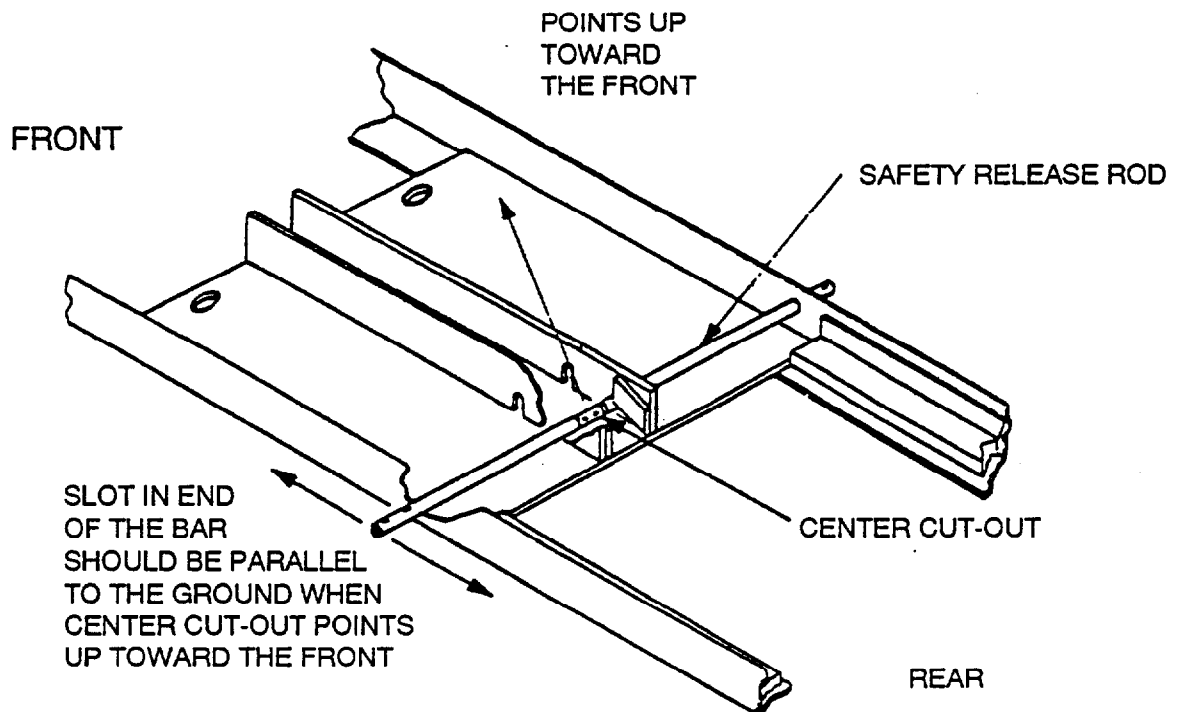


Figure 3  
Safety Release Rod Installation

## SPACE SAVER-- INSTALLATION MANUAL

21. Install the rectangular safety release tab (#25, fig.6) using 2 \* 1/4-20UNC x 3/4" long hex bolts and lockwashers. Be sure to install one tab on each release rod.
22. Install foot pedals (#24, fig.6) one on the outside of each safety release rod, using for each pedal 2 \* 1/4-20UNC x 1-1/4" long hex bolts, nuts and lockwashers.
23. Install the pedal safety guards (#37, fig. 6). One on each baseframe using the 1/4-20UNC x 2-1/2" long hex bolts and lockwashers provided.
24. Install the safety release connecting rod (#16, fig.6) between the safety bars using 1/4-20UNC x 1-1/4" long hex bolt, nut and lockwasher, using one on each side.
25. Place the safety bar weldments back in their engaged position. Turn power back on.
26. Make sure there are no people, tools, or obstructions under the platforms before stepping on the safety pedal, then press down button on the control. Stop lowering at approximately four feet from the floor. Release foot pedal and lower the hoist down onto its safeties.

### INSTALLING FRONT AND REAR TIE BAR

27. Have 2 \* 1/2" x 13UNC x 1-1/2" long hex bolts, flat washers, lockwashers and nuts ready to support the tie bar when it is raised into place.
28. Raise the rear tie bar into place making sure the slotted holes are up and nose-like protrusion is pointing toward the front of the unit. The vertical members on the tube should be on the outside of the deck skirts. Line up each vertical section slot with the respective slot on the deck and place the bolts with washers through; one each side. Put the flat washers and lockwashers and nuts on the inside of the decks. **DO NOT TIGHTEN!!**
29. Install 2 \* 1/2" x 13UNC x 1-1/2" long hex bolts, flatwashers and lockwashers to each end of the tie bar positioned under the deck.  
**DO NOT TIGHTEN!!**
30. Now install the remaining 2 \* 1/2"-13UNC x 1-1/2" long hex bolts, flatwashers and lockwashers to the tie bar.  
**DO NOT TIGHTEN!!**  
Baseframes should be level before tightening, see levelling procedure (next page).



## SPACE SAVER-- INSTALLATION MANUAL

### SPACE SAVER - INSTALLATION - FRONT TIE BAR

31. Have 2 \* 1/2" x 13UNC x 1-1/2" long hex head bolts, flatwashers, lockwashers and nuts ready to support the front tie bar when it is raised into place.
32. Raise the front tie bar into place making sure the wheel stop brackets are up and nose-like protrusions are pointing toward the rear of the unit. The vertical members on the tube should be on the outside of the deck skirts. Line up each hole with the respective holes on the deck and place the bolts with washers through; one each side. Put the flatwashers and lockwashers and nuts on the inside of the decks.  
**DO NOT TIGHTEN!!**
33. Install 2 \* 1/2"-13UNC x 1-1/2" long hex bolts, flatwashers and lockwashers to each end of the front tie bar positioned under the deck.  
**DO NOT TIGHTEN!!**
34. Now install the remaining 1/2"-13UNC x 1-1/2" long hex bolts, flatwashers and lockwashers to the front tie bar.  
**DO NOT TIGHTEN!!**  
Baseframes should be level before tightening, see leveling procedures.

### LEVELLING PROCEDURE

**THIS IS A VERY IMPORTANT PROCEDURE AND TIME MUST BE TAKEN TO DO IT CORRECTLY.**

35. The highest point on the floor, noted from step 6, is the point from which the baseframe will be levelled. A quick check using the 4' level across the baseframes should again verify that this is the highest point.
36. Starting at the corner closest to the highest point, check the length of the baseframe edge with the 4' level and shim as required. Note the five critical positions that shims must be placed on each baseframe (fig. 4).
37. Continue shimming across that base and make it level, front and rear.
38. Once one frame is completely level, level the inside rails of the baseframes to one another.
39. Now level the remaining outside half of the last baseframe by placing level across that unit and shimming as required.

## SPACE SAVER--INSTALLATION MANUAL

40. A quick check across, along and between each baseframe will ensure the levelling procedure was carried out successfully. Re-adjust tie bars if necessary.
41. Raise and lower the hoist completely several times. This allows the hoist to settle as well as ensuring its proper operation.
42. **FOR THOSE UNITS EQUIPPED WITH A JACKING BEAM NOW IS THE TIME TO INSTALL THE JACK.** Consult the jacking beam instructions (page 11) attached.
43. Using a 1/2" concrete drill bit, drill through the floor in the eight anchor bolt location holes (fig. 4) positioned on each baseframe.
44. Insert the 1/2 x 4-1/2" wedge anchor bolts, place a flatwasher and nut on each anchor. **TIGHTEN SECURELY!!**

**RAISE AND LOWER HOIST TWICE. NOW RAISE THE HOIST TO FULLY EXTENDED HEIGHT THEN LOWER ON TO TOP SAFETY.**

# SPACESAVER--INSTALLATION MANUAL

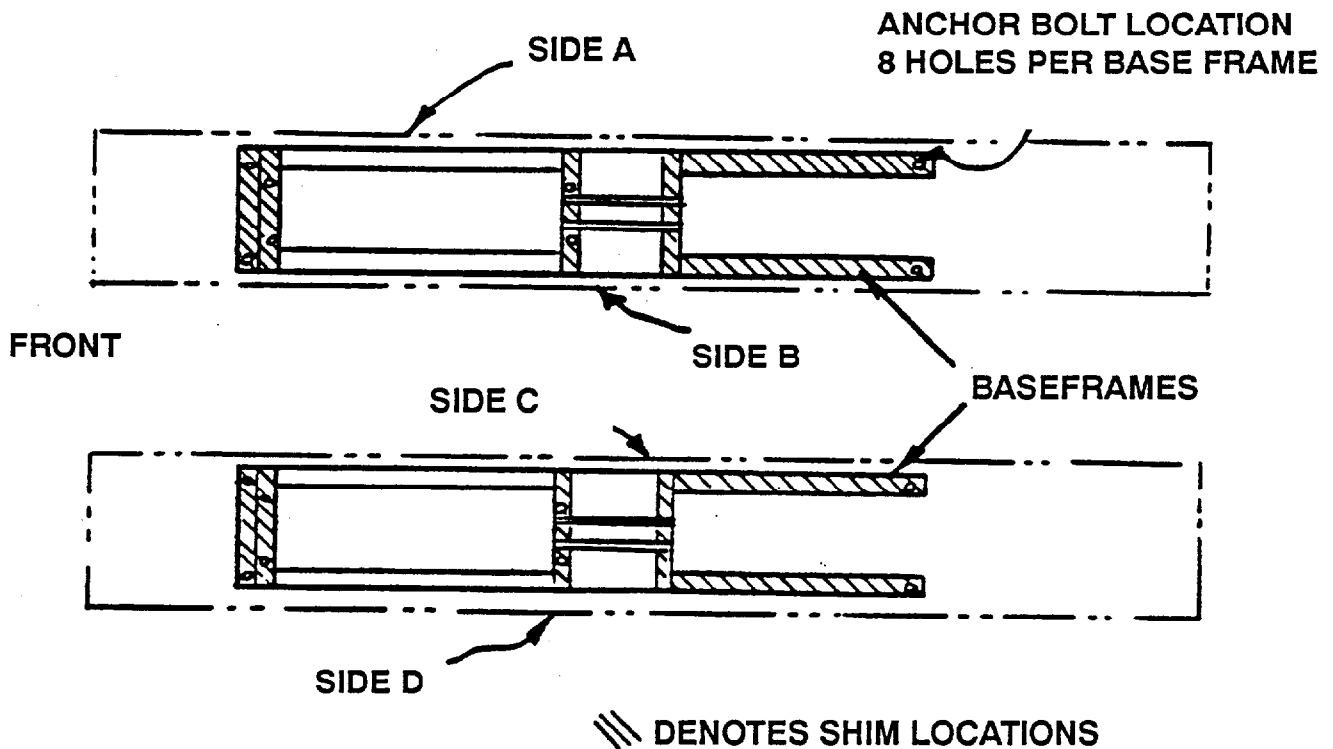
## LEVELLING EXAMPLE: Fig 4

Assuming the front passenger corner is the highest point level in the following order:

- shim along side A
- shim across from side A to side B (check along side B from front to back. Passenger side baseframe should now be level)
- shim across from side B to side C (check along side C from front to back)
- shim across from side C to side D (check along side D from front to back)

Both baseframes should now be level from front to back and side to side.

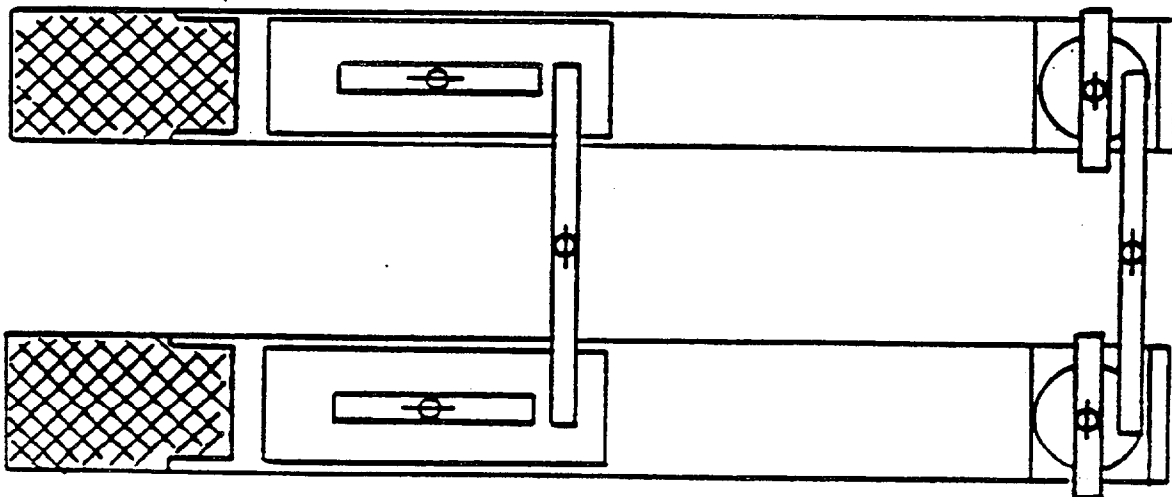
**Figure 4**



# SPACESAVER--INSTALLATION MANUAL

## FOR ALIGNMENT MODEL 12005

45. Unpack and place the triangular wheel stops on the front of the decks. Install front triangular wheel stops using brackets provided (see exploded drawing, fig. 6).
46. Unpack the levelling legs as marked on the legend mounting hardware and place in their respective locations. **NOTE:** On the alignment model 12005 the **REAR** levelling legs fold up towards the rear. The **FRONT** levelling legs towards the front.
47. Position but do not tighten all levelling leg brackets. The levelling legs should hang in the brackets and swing freely. Thrust washers are provided to take up any side play in legs, install if required.
48. Check that legs hang perpendicular to the ground **BEFORE** tightening leg bracket bolts.
49. Check and adjust the decks for level using the 4' level. Both the front turn plate cutouts and rear steer plates should be checked (fig. 5).



**FIG.5** LEVELLING POINTS WITH LEVELLING LEGS DOWN  
ALIGNMENT HOIST ONLY.

## **SPACESAVER--INSTALLATION MANUAL**

51. Level the decks by adjusting the "**LEVELLING FEET**" on each levelling leg.
52. When the decks are completely level raise the hoist and tighten the jam nuts on each adjustable foot.

### **FOR ALL MODELS**

53. Place the center cover over the safety mechanism between baseframes and check the safety linkage does not rub on the cover when disengaging the safety.
54. Drill the floor, using a 1/4" masonry drill bit, in the four locations on the cover.
55. Drive the 1/4" anchor nails through the holes in the covers.
56. Install the narrower line covers using the same method as described in number 54.
57. Install the approach ramps to the rear of each deck using the ramp pins and secure with cotter pins. The ramps are to be installed under the rear wheel stop.

## **SPACESAVER--INSTALLATION MANUAL**

### **INSTALLATION INSTRUCTIONS 6000 LB. JACKING BEAM**

1. Remove jacking beam from shipping carton. Remove the keeper brackets. Place the Jack Beam on the Space Saver hoist making sure the roller wheels are centered on the jacking beam track.
2. Raise the Space Saver hoist to a comfortable working height. Re-install the keeper brackets (#8, fig. 1) located under the jacking beam.
3. Connect coiled air hoses supplied to the air inlet on the power pack for permanent installation. Install 1/4 NPT plugs or compatible air fitting to work with shop air tools to the extra outlets provided at the front and rear of the hoist.
4. Store the risers in holding brackets located on the top of the jacking beam.
5. All personnel operating the Space Saver jacking beam must be fully trained on its operation as described by manufacturer.

## **SPACE SAVER-INSTALLATION MANUAL**

### **THE FOLLOWING APPLIES TO ALL LIFTS**

#### **IMPORTANT SAFETY INSTRUCTIONS**

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate the lift with a damaged cord or if the lift has been damaged -- until it has been examined by a qualified serviceman.
4. Do not let cord be positioned under the lift or in any area where it could be crushed or come in contact with hot or moving parts.
5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the lift should be used. Cords rated for less amperage than the list may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
6. Always unplug the lift from the electrical outlet when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
7. To protect against frisk of fire, do not operate lift in the vicinity of open containers of fuel (gasoline).
8. Adequate ventilation should be provided when working on internal combustion engines.

#### **SAVE THESE INSTRUCTIONS**

## SPACE SAVER--INSTALLATION MANUAL

### SPACE SAVER HOIST OPERATING INSTRUCTIONS

#### RAISING

1. If hoist is equipped with Jacking Beam(s) be sure the Jacking Beam(s) are positioned at the front or mid travel of the hoist, fully down, with the risers removed and stored. **NEVER STORE JACK BEAMS AT REAR OF THE HOIST.**
2. Be sure the **SPACE SAVER HOIST** is in the fully down position.
3. Position the vehicle on the hoist ensuring the resulting load on each deck is as equal as possible. Under no circumstances should a vehicle be lifted if the weight distribution is unbalanced by 10% on either side of the center line between the decks.

**NOTE:** The vehicle is positioned correctly when the distance from the center of the tires to the inside edge of the decks is equal on both decks, for both the front and rear tires. Vehicles positioned in this manner will have their center of gravity positioned mid-way between the decks, and the resulting weight distribution will fall within the 10% specified limit. Incorrectly positioned vehicles on the hoist will increase the possibility of one deck leading or lagging during raising or lowering of the entire hoist.

4. Check that there are no obstructions above hoist that could damage the hoist or vehicle.
5. Raise hoist by depressing the up button on the remote pendant control. Raise the hoist up, past the desire working height until the mechanical safety drops into position. Now lower the hoist down onto both mechanical safeties.

**NOTE: NEVER WORK UNDER A VEHICLE OR THE HOIST UNLESS IT IS POSITIONED ON BOTH MECHANICAL SAFETIES!!!!**

#### LOWERING

6. Check that there are no obstructions under the hoist or vehicle. Be sure the Jacking Beams are fully lowered and positioned at the front or mid-section of the hoist.
7. Raise the hoist until tension on the mechanical safeties is released, stop raising.
8. Step on the safety release pedal located on the side of the baseframe.



## SPACE SAVER--INSTALLATION MANUAL

9. Press the down button on the remote pendant control. The operator should always keep their attention on the operation of the hoist while raising or lowering.
10. Be sure the hoist is completely lowered before driving the vehicle off the hoist.

## 6000 JACKING BEAM OPERATION

### POSITIONING OF VEHICLE ON JACKING BEAM

1. The vehicle must be positioned correctly on the hoist prior to lifting the vehicle with the jacking beam (refer to page #12 SPACE SAVER HOIST OPERATION).  
**LIFTING AN IMPROPERLY POSITIONED VEHICLE WITH JACK BEAM INCREASES THE POSSIBILITY OF ONE DECK LEADING OR LAGGING THE OTHER DECK.**
2. Move the Jacking Beam to desired pickup area and connect air line if not permanently connected.  
NOTE: ease of positioning while jacking beam is not under load due to the roller assemblies. When the jacking beam is under vehicle load the jack rests on its structure and cannot be moved.
3. With the jacking beam positioned at desired working location, select the proper lifting pad. Insert the chosen lifting pad into lifting arm.  
NOTE: LIFT VEHICLE AT MANUFACTURER'S RECOMMENDED PICKUP POINTS ONLY.
4. With the vehicle's center of gravity properly centered between the decks, the jacking beam can be used to wheel-free the vehicle. Select lifting points that are same distance from the center line of the vehicle, ie. position the jack beam riser pads so they make contact at the same point on each side of the vehicle.

### RAISING THE JACK BEAM:

5. Turn hydraulic knob to closed (clockwise) position.
6. Press air lever, hold until jacking beam is at full working height and the automatic safety is in place.  
NOTE: NEVER WORK ON A VEHICLE UNLESS THE SAFETY LOCK IS ENGAGED AND THE JACKING BEAM CANNOT BE LOWERED.

## **SPACE SAVER--INSTALLATION MANUAL**

### **LOWERING THE JACKING BEAM:**

7. To lower the jacking beam, raise the jack up and release the safety lock using the safety release lever.  
NOTE: The safety lever must be manually held in the released position.
8. Turn the hydraulic knob to the opening (counter clockwise) position to release pressure allowing the jacking beam to lower to its full down position.
9. Never operate a jacking beam that is not in proper working order or in a manner not recommended by the vehicle or jacking beam manufacturer.
10. **CAUTION: KEEP HANDS CLEAR AT ALL TIMES.**

### **RAISING OR LOWERING SPACE SAVER HOIST WITH A VEHICLE ON THE JACKING BEAM**

1. If the vehicle's weight is evenly distributed between the two decks (as described in the SPACE SAVER HOIST OPERATION INSTRUCTIONS) the decks should remain level during raising and lowering the hoist.
2. If the decks remain level, after the lift has been operated, the vehicle has been positioned correctly.
3. The vehicle can be raised on the jacking beam by selecting lifting points that are equal distant from the center line of the vehicle, (as described in the Jacking Beam operation section of this manual).

**CAUTION:** If the vehicle weight is not evenly distributed between the two decks, or if one deck leads the other during operation of the hoist, DO NOT raise or lower the hoist with a vehicle elevated on the jacking beam.

**NEVER WORK UNDER THE HOIST UNLESS IT IS POSITIONED  
ON BOTH MECHANICAL SAFETIES.**

**ALWAYS ENSURE THE JACKING BEAM SAFETY IS ENGAGED  
WHENEVER A VEHICLE IS SUPPORTED BY THE JACK BEAM.**

## **SPACE SAVER--INSTALLATION MANUAL**

### **RECOMMENDED MAINTENANCE SPACE SAVER**

The hoist should be greased at least once every two months. There are six points on each hoist that will take grease: four on the scissor hinges and one on each of the two cylinder rod eyes.

The fluid level in the reservoir should be checked periodically. Be sure the hoist is in the down position.

The roller tracks should always be kept clean and free of debris. This area should be checked before any lifting and lowering of the hoist.

Once monthly the alignment units resting on their levelling legs check the decks for level as described in step 48 of the installation manual. This should be done at least once every week.

**DO NOT ATTEMPT TO LIFT A VEHICLE EXCEEDS  
THE LIFT'S RATED LIFT CAPACITY OF 12,000 POUNDS.**

### **RECOMMENDED MAINTENANCE JACKING BEAM**

#### **6000 LBS. SERIES:**

1. Inspect the jacking beam on a daily basis before operating to ensure the jacking beam is in proper working condition.
2. Make certain that the automatic safety drops into place when the jacking beam is raised and that it will release when held in the down position during lowering.
3. Check the hydraulic fluid when jacking beam is in the lowered position by removing the filler nut.
4. Keep the air source clean and make certain that an air filter is used to keep dirt out of the air motor.
5. Keep the entire jacking beam as clean as possible at all times.