

## MANUAL

### CONTENTS:

Page	1	Specifications
	2	Warning Information
	3	Setup, Operating and Maintenance
	4	Trouble Shooting and Warranty Information
	5	Exploded View Drawing
	6	Replacement Parts



### SPECIFICATIONS

Low Height.....	5"
Raised Height .....	22"
Length .....	55-1/2"
Overall Width .....	17"
Handle Length .....	45-3/4"
Saddle Diameter.....	5.75"
Shipping Weight .....	225 lbs.

## WARNING INFORMATION



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### WARNING

**WARNING:** Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



### IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS.

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Sunex for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

## THE NATURE OF HAZARDOUS SITUATIONS

### WARNING

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of the equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping or slipping of loads caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

## METHODS TO AVOID HAZARDOUS SITUATIONS

### WARNING



- Read, study, understand & follow all instructions before using.
- Inspect the jack before each use. Do not use if damaged, altered, modified, in poor condition, leaking hydraulic fluid or unstable due to loose or missing components. Make corrections before using.
- Use only on a hard level surface free from obstructions so the jack is free to reposition itself during lifting and lowering operations.
- Lift only on areas of the vehicle as specified by the vehicle manufacturer.



- User and bystanders must wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Do not use jack beyond its rated capacity. Do not shock load.
- **This is a lifting device only. Immediately after lifting, support the vehicle with jack stands capable of sustaining the load before working on the vehicle.**
- Center load on saddle. Be sure setup is stable before working on vehicle.
- Do not move or dolly the vehicle while on the jack.
- Do not use any materials that may serve as risers, spacers or extenders between the stock lifting saddle and the load.
- Do not use any adaptors that replace the stock lifting saddle unless approved or supplied by the jack manufacturer.
- Always lower the jack slowly and carefully.
- Do not use (or modify) this product for any other purpose than that for which it was designed without consulting the manufacturer's authorized representative.
- This product may contain one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands thoroughly after handling.*
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

## CONSEQUENCES OF NOT AVOIDING HAZARDOUS SITUATIONS

### WARNING

Failure to read this manual completely and thoroughly, failure to understand its OPERATING INSTRUCTIONS, SAFETY WARNINGS, MAINTENANCE INSTRUCTIONS and comply with them, and failure to comply with the METHODS TO AVOID HAZARDOUS SITUATIONS could cause accidents resulting in serious or fatal personal injury and/or property damage.

## OWNER'S MANUAL

### SETUP

#### PLEASE REFER TO THE EXPLODED VIEW DRAWING IN THIS MANUAL IN ORDER TO IDENTIFY PARTS.

1. In order to install the handle assembly (#54) in the handle socket (#32), first align the main handle tube with the largest hole in the handle socket and the lock pin rod with the smaller hole in the handle socket.
2. Make sure the lock pin rod is in the down/lock position before insertion in the handle socket. Once the main handle tube and lock pin rod are aligned with their respective holes in the handle socket, push the handle assembly in the handle socket so the end of the handle tube engages the release valve mechanism in the bottom of the handle socket and the lock pin rod engages one of the three (3) locking holes in the (#1) frame.
3. Now rotate the "T" handle portion of the handle assembly so it is perfectly aligned with the jack before tightening the (#36) bolt, (#35) washer, and (#34) nut. Tighten the bolt, washer, and nut so the handle cannot rotate. Disengage the lock pin rod by pulling up on the lever and engaging the lever with the slot in top of the handle assembly. The handle assembly should be free to pump up and down.
4. In order to check for proper handle assembly alignment with the handle socket, see if the lock pin rod will engage with the three locking holes in the frame. Also, turn the release valve knob at the top of the handle assembly left and then right to see if the release valve u-joint in front and below the handle socket is rotating simultaneously with the turning of the knob.
5. Before Use: Air may become trapped in the hydraulic system.

#### PURGING AIR FROM THE HYDRAULIC SYSTEM:

- a. Rotate the knob at the top of the handle assembly in a clockwise direction until tight.  
Now turn it in a counterclockwise direction two full turns.
- b. Activate the foot pump pedal (#33) about 15 times.
- c. Rotate the knob at the top of the handle assembly in a clockwise direction until tight.
- d. Activate the foot pump until the lift arm is raised to maximum height. You should experience a full pump stroke with each incremental pump of the pedal.
- e. Repeat steps "a" through "d" until all air is purged from the system.

### OPERATING INSTRUCTIONS



This is the safety alert symbol used for the OPERATING INSTRUCTIONS section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

**IMPORTANT:** Before attempting to raise any vehicle, check vehicle service manual for recommended lifting surfaces.

#### OPERATION:

1. **To raise load:** Turn the knob at the top of the handle assembly in a clockwise direction until tight. Position the jack under the load. Proceed to pump the handle or the foot pedal in order to raise the lift arm to the load. As the saddle at the end of the lift arm gets closer to the load, reposition the jack so the saddle will contact the load firmly and the load is centered on the saddle. Make sure the saddle is correctly positioned. Remember that foot pedal pump operation is only used to quickly raise the saddle to the load. The handle pump operation of the jack is used to lift the load. Raise the load to the desired work height. Place jack stands of appropriate capacity at the vehicle manufacturer's recommended support areas that provide stable support for the raised vehicle. **DO NOT CRAWL UNDER VEHICLE WHILE LIFTING VEHICLE OR REMOVING THE JACK STANDS!** Once jack stands are positioned, turn the knob at the top of the handle assembly in a counterclockwise direction VERY SLOWLY. Lower the load to rest on the jack stands. Inspect the relationship between the jack stands and load to make sure the setup is stable and safe. If the setup is not stable or safe, follow the preceding steps until corrected. NOTE: Once the hand pump operation has ceased, the handle assembly can be locked in any of the three (3) handle locking positions. Typically, the handle locking positions are used for moving the jack around the shop, keeping the handle out of the way or preventing the handle from being pumped.
2. **To lower load:** Follow the procedures mentioned in "To raise load" section of the OPERATING INSTRUCTIONS in order to raise the load off the jack stands. Once the load has cleared the jack stands, remove the stands from under the load and away from the work area. Turn the knob at the top of the jack's handle assembly very slowly in a counterclockwise direction until the load is completely lowered to the ground. Once the jack's lifting saddle has cleared the load, remove the jack from under the load. **CAUTION:** Keep hands and feet away from the hinge mechanism of the jack. **DO NOT CRAWL UNDER VEHICLE WHILE LIFTING VEHICLE OR REMOVING THE JACK STANDS!**

### PREVENTATIVE MAINTENANCE



This is the safety alert symbol used for the PREVENTATIVE MAINTENANCE section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand, grit, oil, grease or other foreign matter before using.
2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to all zerk grease fittings, caster wheels, front axle wheels, elevator arm, handle base pivot bolts, release mechanism and all other bearing surfaces. Worn parts resulting from inadequate or no lubrication are not eligible for warranty consideration.

## PREVENTATIVE MAINTENANCE CONTINUED

3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by an authorized service center.

**IMPORTANT:** In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid, or transmission oil in the jack. Use Chevron Hydraulic Oil AW ISO 32, Unocal Unax AW150 or hydraulic jack oil.

4. Every jack owner is responsible for keeping the jack labels clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components.

5. Inspect the jack before each use. Do not use the jack if any component is cracked, broken, bent, shows sign of damage or leaks hydraulic fluid. Do not use the jack if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the jack again.

6. Any hydraulic repairs within the warranty period must be performed by an authorized service center.

## INSPECTION

Visual inspection should be made before each use of the jack, checking for leaking hydraulic fluid and damaged, loose or missing parts. Each jack must be inspected by a manufacturer's repair facility immediately if subjected to an abnormal load or shock. Any jack which appears to be damaged in any way, is found to be badly worn, or operates abnormally **MUST BE REMOVED FROM SERVICE** until necessary repairs are made by a manufacturer's authorized repair facility. It is recommended that an annual inspection of the jack be made by a manufacturer's authorized repair facility and that any defective parts, decals or warning labels be replaced with manufacturer's specified parts. A list of authorized repair facilities is available from the manufacturer.

## PROPER STORAGE

It is recommended that the jack be stored in a dry location with all wheels touching the ground on a relatively level surface.

## TROUBLESHOOTING

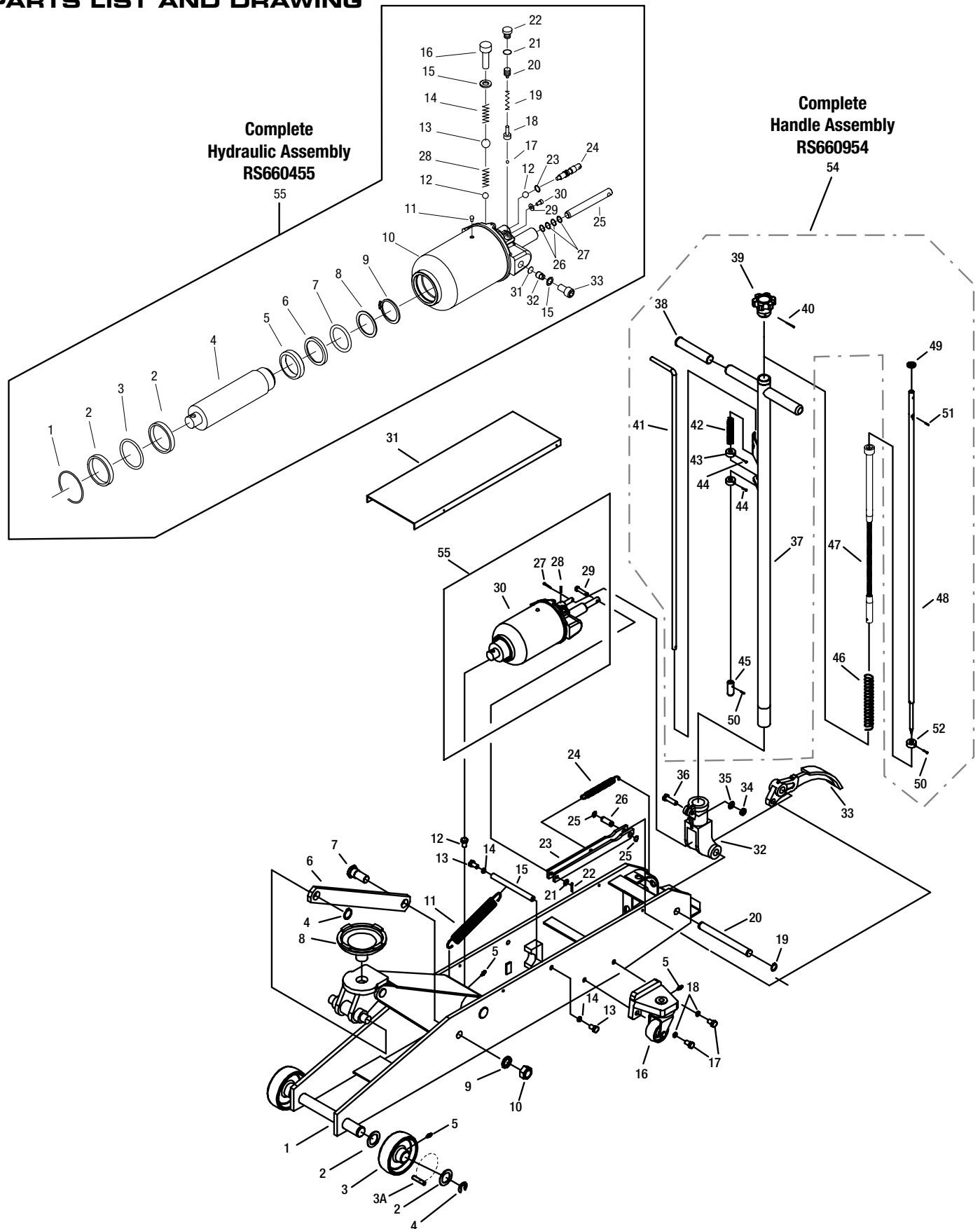
Important: Service jacks are self-contained devices used for lifting, but not sustaining, a partial vehicular load. In accordance with ASME-PASE Load Sustaining Test: "A load not less than the rated capacity...shall not lower more than 1/8" (3.18mm) in the first minute, nor a total of .1875" (4.76mm) in 10 minutes." Lowering within this range is considered normal operation and is NOT a warrantable defect.

PROBLEM	ACTION
1. Unit will not lift rated load.	Purge air from hydraulic system by following procedure under SETUP.
2. Unit will not sustain rated load or feels "spongy" under rated load.	Purge air from hydraulic system as above.
3. Unit will not lift to full height.	Purge air from hydraulic system as above.
4. Handle tends to raise up while the unit is under rated load.	Pump the handle rapidly several times to push oil past ball valves in power unit.
5. Unit still does not operate.	

## OWNER/USER RESPONSIBILITY

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this jack. Personnel involved in the use and operation of equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warning shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents. Owner and/or user must study and maintain for future reference the manufacturers' instructions. Owner and/or user is responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer.

## PARTS LIST AND DRAWING



## PARTS LIST AND DRAWING

Index No.	Part No.	Description	Qty.	Index No.	Part No.	Description	Qty.
1		Frame	1	29		Pin	1
2		Washer	4	30		Hydraulic power unit	1
3	RS660403	Front wheel (incl. #2,3,3a,4,5)	2	31		Cover plate	1
3A	RS660403A	Roller bearing set	2	32	RS660932	Handle socket	1
4		Snap ring	4	33	RS550511	Pedal	1
5		Grease fitting	5	34		Nut	1
6		Rod link	2	35		Washer	1
7		Bolt	2	36	RS550535	Bolt Kit (incl. #34,35,36)	1
8	RS660408	Saddle	1	37		Handle	1
9		Lock washer	2	38		Handle grip	2
10		Nut	2	39	RS660939	Knob	1
11		Spring	1	40		Pin	1
12		Bolt	1	41		Control rod	1
13		Bolt	2	42		Spring	1
14		Lock washer	2	43		Washer	2
15		Shaft	1	44		Bolt	2
16	RS660416	Rear caster wheel assembly	2	45		Pin	1
17	RS660417	Caster bolt kit [(incl. #17 (2), 18 (2))]	4	46		Spring	1
18		Washer	4	47	RS660448	Flex release assembly	1
19		Snap ring	2	48		Convey rod	1
20		Pin	1	49		Washer	1
21		Washer	1	50		Pin	2
22		Pin	1	51		Pin	1
23		Link assembly	1	52		Washer	1
24	RS660929	Spring	1	54	RS660954	Handle assembly (incl. #37-45, 48-52)	1
25	RS550510	Snap ring	2	55	RS660455	Complete hydraulic block assembly	1
26	RS550509	Pedal pin	1				
27		Pin	1				

Only index numbers identified by part number are available separately.

### POWER UNIT

Index No.	Part No.	Description	Qty.	Index No.	Part No.	Description	Qty.
1	*	Snap ring	1	18	*	Ball seat	1
2	*	Washer	2	19	*	Spring	1
3	*	O-ring	1	20		Bolt	1
4		Piston rod	1	21	*	Sealing washer	1
5	*	Piston ring	1	22		Bolt	1
6	*	Sealing washer	1	23	*	O-ring	1
7	*	O-ring	1	24	RS6570024	Release valve rod	1
8	*	O-ring Retainer	1	25		Cylinder pump	1
9	*	Snap ring	1	26	*	O-ring	2
10		Oil hydraulic assembly	1	27	*	Nylon gasket	2
11	*	Oil filler plug	1	28	*	Spring	1
12	*	Steel ball	2	29		Washer	1
13	*	Steel ball	1	30		Bolt	1
14	*	Spring	1	31	*	Filter Screen	1
15	*	Copper washer	2	32		Throttle Valve	1
16		Bolt	1	33		Cover Screw	1
17	*	Steel ball	1				

Asterisked index numbers available in repair kit only, RS6604ARK