

MANUAL

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SPECIFICATIONS

Capacity.....	20 Ton @ 100 psig	Overall Width	8.9"
Minimum Height	8.66"	Saddle Diameter.....	.2"
Maximum Height with Adapter.....	23.35"	Wheel Diameter5"
Ram Travel.....	3.94"	Handle Length45"
Extension Screw Adjustment.....	2.78"	Shipping Weight	53 lbs.
Chassis Length.....	17.78"		

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 and follow all instructions before operating this device.
-  • Inspect the jack before each use. Do not use jack if damaged, altered, modified, in poor condition, leaking hydraulic fluid, or unstable due to loose or missing components. Make corrections before using.
-  • Lift only on areas of the vehicle as specified by the vehicle manufacturer.
-  • Wear eye protection that meets ANSI Z87.1 and OSHA standards (users and bystanders).
-  • Do not use jack beyond its rated capacity.
-  • **No persons should be under vehicle when jack is in use.**
-  • **This is a lifting device only. Immediately after lifting, support the vehicle with appropriate means.**
- No alterations shall be made to this product.
- Use only on a hard level surface.
- Always lower the jack slowly and carefully.
- Do not use saddle adapters or saddle extenders between the stock lifting saddle and the load.
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

 **WARNING:** This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm.

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 INSTRUCTIONS

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

1. Assemble the two handle halves together using the bolt and locknut provided, making sure the release shaft guide tabs are on the same side of the handle.
2. Insert the release shaft with knob through the top handle guide tab and then through the bottom handle guide tab.
3. The second release shaft half has a receiver on its end. Install the end of the release shaft with knob into the receiving end of the second release shaft receiver and secure them together with the screw provided.
4. Insert the handle assembly in the handle receiver of the jack base while simultaneously inserting the end of the release shaft into the release valve receiver at the base of the jack. Align the hole in the handle tube with the hole in the handle receiver of the jack and secure with the bolt and lock nut provided. Secure the release shaft to the release valve receiver with the screw provided.
5. Install the air quick disconnect of your choice in the air valve at the end of the hose. Affix the air valve to the "L" shaped bracket on the handle. Hook the shop's system air hose up to the air valve.
6. Sometimes air gets trapped in the hydraulic system during shipment. An air bound hydraulic system feels spongy when pumped.

PURGING AIR FROM THE HYDRAULIC SYSTEM

- a. Open the release valve by turning the knob at the top of the handle in a counterclockwise direction two full turns from the closed position.
- b. Depress the air valve for approximately 15 seconds.
- c. Close the release valve by turning the knob in a clockwise direction until tight.
- d. Depress the air valve until the ram raises to maximum height.
- e. Repeat steps "a" through "d" until all the 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. Become familiar with the identification and function of the operating jack components.
 - a. The ram is the shaft that comes out of the jack when you depress the air valve and lifts the load.
 - b. The ram is equipped with an extension screw which can be unscrewed to extend from the ram if there is not enough hydraulic stroke to raise the load to the desired height. If additional height is required, extension adapters can be inserted in the hole on top of the extension screw.
2. Chock the vehicle's tires that will not be lifted off the ground prior to lifting the vehicle and if available, apply the emergency brake or any other method of braking.
3. Position the jack at the designated lift point. Estimate the required ram travel to raise the vehicle to the desired height. If the desired vehicle height exceeds the entire ram travel, unscrew the extension screw to make up the difference and add an extension adapter if necessary. Turn the knob at the top of the handle all the way in a clockwise direction until tight.
4. With the jack in the lowered position, push the jack under the vehicle. **IMPORTANT:** Use the vehicle manufacturer's recommended lifting procedures and lifting points before lifting loads.
5. In most cases 100 psig input air pressure (do not exceed 200 psig) will lift the maximum capacity load not to exceed 20 tons. Depress the air valve until the top of the ram comes close to the designated lift point. Make sure the designated lift point is flat, parallel to the ground and free from grease, any kind of lubricant, and debris. Proceed with pumping the jack in order to lift the vehicle to the desired height. During lifting, inspect the position of the jack in relation to the ground and the ram in relationship to the load to prevent any unstable conditions from developing. If conditions look like they are becoming unstable, slowly lower the load and make appropriate setup corrections after the load is fully lowered.
6. When the vehicle or load is lifted to its desired height, immediately place safety support stands (jack stands) in their designated locations and adjust the stands' support columns up as close to the designated vehicle support points as possible. Although jack stands are individually rated, they are to be used in a matched pair to support one end of the vehicle only. Stands are not to be used to simultaneously support both ends or one side of a vehicle. Slowly and carefully turn the release knob in a counterclockwise direction to gently lower the vehicle onto the safety support stands (jack stands). Make sure the vehicle is safely supported by the safety support stands' (jack stands) saddles and not the locating lugs of the saddles. Inspect the relationship of the safety support stands (jack stands) with the ground and the safety support stand (jack stand) columns and saddles with the vehicle to prevent any unstable conditions. If conditions look unstable, close the jack's release knob and depress the air valve to raise the vehicle off the safety support stands (jack stands). Make the appropriate setup changes and slowly and carefully lower the vehicle onto the safety support stand saddles.
7. After the work is done, close the release knob and depress the air valve until the jack is high enough to remove the vehicle or load from the safety support stand saddles. Be sure load is stable. If it is not, lower load back onto safety support stands. Make appropriate setup corrections and repeat the step again. Remove the safety support stands from under the vehicle being very careful not to move the vehicle.
8. Turn the release knob in a counterclockwise direction very slowly and carefully to lower the vehicle or load down to the ground.

OWNER'S MANUAL

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 the threads on the extension screw. Do not lubricate any portion of the lift saddle and make sure the saddle is free from grease, any kind of lubricant, or debris before using the jack. Jacks found to be defective due to worn parts resulting from inadequate or no lubrication are not eligible for warranty consideration.
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 or its equivalent Unocal Unax AW 150.

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. Contact Sunex for replacement labels if not readable.
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.

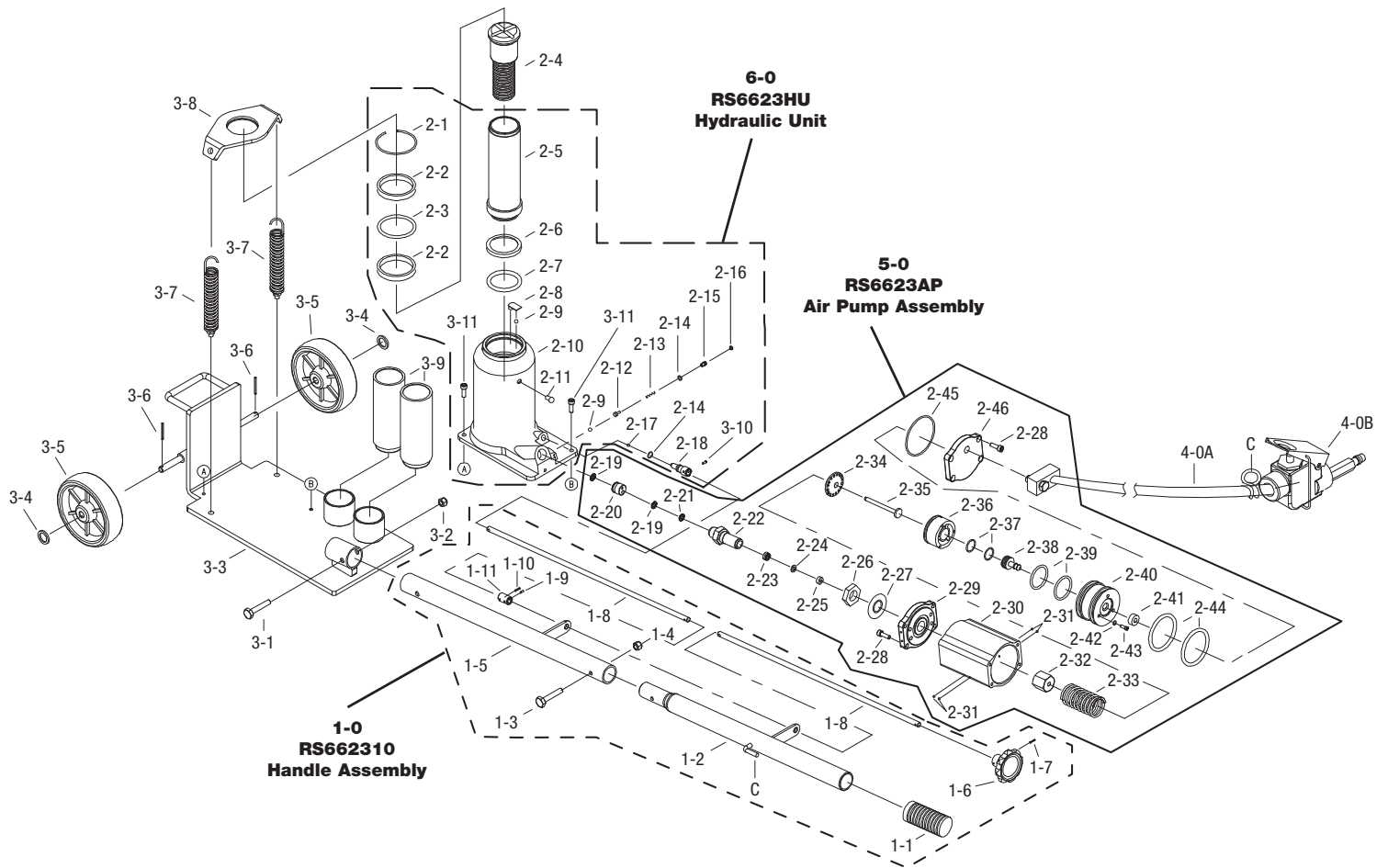
TROUBLESHOOTING

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.	Contact Sunex authorized hydraulic service center.

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 DRAWING



PARTS LIST

REF #	PART#	DESCRIPTION	QTY	REF #	PART#	DESCRIPTION	QTY
1-0	RS662310	Handle Assembly (incl. #1-1 to 1-11)	1	2-29		Front Cover	1
1-1		Handle Sleeve (incl. with #1-0)	1	2-30		Air Pump Housing	1
1-2		Rear Handle (incl. with #1-0)	1	2-31	**	Steel Ball (3)	4
1-3		Bolt (incl. with #1-0)	1	2-32		Nut	1
1-4		Nut (incl. with #1-0)	1	2-33		Spring	1
1-5		Front Handle (incl. with #1-0)	1	2-34		Washer	1
1-6	RS662316	Release Knob (incl. #1-7) (incl. with #1-0)	1	2-35		Cylinder Pump Plunger	1
1-7		Pin (incl. with #1-6) (incl. with #1-0)	1	2-36		Piston Body (A)	1
1-8		Convey Rod (incl. with #1-0)	2	2-37	**	O-Ring	2
1-9		Bolt (incl. with #1-0)	1	2-38		Air Release Rod	1
1-10		Pin (incl. with #1-0)	1	2-39	**	O-Ring	2
1-11		Bushing (incl. with #1-0)	2	2-40		Piston Body (B)	1
2-1		Snap Ring	1	2-41		Air Steel	1
2-2		Bushing	2	2-42	**	O-Ring	2
2-3	*	O-Ring	1	2-43		Screw	3
2-4	RS662324	Screw Rod Unit	1	2-44	**	O-Ring	2
2-5		Piston Rod	1	2-45	**	O-Ring	1
2-6	*	Sealing Washer	1	2-46		Rear Cover	1
2-7	*	O-Ring	1	3-1		Bolt	1
2-8		O-Ring Retainer	1	3-2		Nut	1
2-9	*	Steel Ball (4)	2	3-3		Frame	1
2-10		Body	1	3-4		Washer (incl. with #3-4, #3-6)	2
2-11	*	Oil Filler Plug	1	3-5	RS662335	5" Wheel Assembly (each) (incl #3-4 & #3-6)	2
2-12	*	Ball Seat	1	3-6		Pin (incl. with #3-4, #3-5)	2
2-13		Spring	1	3-7	RS662337	Spring/each	2
2-14	*	O-Ring	2	3-8	RS662338	Spring Hanger	1
2-15		Screw	1	3-9	RS662339	Adapter/each	2
2-16		Cap	1	3-10	RS6623310	Release Screw	1
2-17	*	Steel Ball (6)	1	3-11		Screw	2
2-18		Release Rod	1	4-0A	RS662340A	Hose	1
2-19	**	Copper Washer	2	4-0B	RS662340B	Air Valve	1
2-20		Oil Valve Assembly	1	5-0	RS6623AP	Air Pump Assembly	1
2-21	**	Nylon Gasket	1	6-0	RS6623HU	Hydraulic Unit	1
2-22		Pump Cylinder	1		RS6623LK	Product Label Kit (not shown)	1
2-23	**	Oil Seat	1				
2-24	**	Nylon Gasket	1				
2-25	**	Copper Washer	1				
2-26		Nut	1				
2-27		Spring	1				
2-28		Screw	8				

* Available in hydraulic repair kit - RS6623HRK (incl. #2-3, 2-6, 2-7, 2-9 (2), 2-11, 2-12, 2-14 (2), 2-17)

** Available in air pump repair kit - RS6623APK (incl. #2-19 (2), 2-21, 2-23, 2-24, 2-25, 2-31 (4), 2-37 (2), 2-39 (2), 2-42 (3), 2-44 (2), 2-45)

Only items identified by part number are available for purchase.