

MANUAL

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SPECIFICATIONS

Capacity	1 Ton
Overall Length	41.7"
Width.....	28.5"
Height	33.1"
Locking Positions.....	8
Shipping Weight.....	121 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 and support 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.
-  • User and bystanders must wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Inspect the engine stand before each use. Do not use if damaged, altered, modified, in poor condition, or has loose or missing hardware or components. Take corrective action before using the engine stand.
- 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. No alterations should be made to this product.
- Do not use beyond rated capacity.
- Use only on hard level surface capable of supporting the load.
- Lock mounting plate rotating mechanism before applying a load.
- Make sure all mounting hardware is securely tightened and setup is stable before rotating engine.
- Always use high strength SAE grade 8 bolts for mounting engine to mounting head fingers.
- Make sure widest set of mounting head fingers are nearest the ground when mounting engine to stand.
- Assure the load is centered, balanced and secured to the mounting head and fingers. The engine's weight should be balanced within one inch of the mounting head's rotational axis.
- Release rotational locking device slowly and carefully. Off center load may make the load and handle rotate in either direction when the rotational locking device is released.
- Rotate the engine using the handle or device provided.
- Lock the wheels and/or casters before working on the engine.
- Adequately support the vehicle before starting repairs.
- Never loosen mounting head bolts or engine mounting bolts unless engine is supported by a crane or hoist.
- Only attachments and/or adapters supplied by Sunex® shall be used.
- Do not use stand to dolly or transport engine.
- **Do not crawl under engine or place any part of your body under engine at any time.**
- Refer to engine manufacturer's service manual for proper lifting points, mounting points and bolt sizes. Mounting bolts should be torqued at appropriate amount to maintain load.
- 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.

OWNER'S MANUAL

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.

SETUP

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

1. Install the front wheels (#25) in the front of left (#23) and right legs (#24) with the bolts (#16), washers (#17) and nuts (#13) provided.
2. Assemble the middle swivel casters (#1) to the bottom frame (#7) with the bolts (#15) and nuts (#6) and tighten.
3. Assemble the rear swivel casters (#3) to the bottom frame (#7) with the bolts (#4), spring washers (#5) and nuts (#6) and tighten.
4. Loosely assemble the upright mast (#11) to the bottom frame (#7) with the bolts (#12) and nuts (#13). Make sure the extended end of the receiver tube at the top of the upright mast is pointing toward the front of the legs (#23) and (#24).
5. Loosely assemble one end of mast braces (#9) to the inboard sides of the frame side tubes with the bolts (#8) and nuts (#13). Loosely assemble the opposite ends of the mast braces (#9) to the upright mast (#11) with the bolt (#8) and nut (#13). Tighten all hardware mentioned in steps 4 and 5.
6. Align the two holes in the legs (#23) and (#24) with the corresponding holes in the bottom frame (#7) and secure them in the frame with the pins (#2) and R-Clips (#14). Make sure to put the left and right legs in the intended sides of the bottom frame (#7).
7. Install the tube of the rotating plate (#20) in the top tube of the upright mast (#11) and lock it in place with the pin (#10).
8. Secure the fingers (#18) to the rotating plate (#20) by inserting the bolts (#19) with washers (#26) through the loops in the fingers and then passing the bolts through the holes in the plate (#20). Secure the bolts to the plate with the washers (#17) and nuts (#13).
9. Install the handle (#22) through the holes in the rotating plate tube (#20) and secure it by pushing on the handle cap (#21) on the handle.

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.

1. Consult the vehicle or engine manufacturer for service manuals and/or technical bulletins that provide information on suggested engine mounting tips, proper size and type mounting bolts and the engine's center of balance. The engine's center of balance will have to be aligned with the rotational axis of the engine stand's mounting head.
2. Drain oil and coolant and remove clutch bell housing and flywheel from engine before mounting. Attach an engine lifting bar or sling to the engine and secure the bar or sling to a shop crane or hoist. Slowly lift the engine from its compartment, making sure no other vehicle components, wires or hoses obstruct the free movement of the engine. Raise the engine high enough so its center of balance is close to the rotational axis of the stand's mounting head.
3. Make sure the four mounting head fingers are loosely connected to the mounting head plate. Secure the four mounting head fingers to the bell housing end of the engine with the appropriate bolts and washers. Reposition the mounting head, fingers and engine so the engine's center of balance is within one inch of the mounting head's rotational axis. Tighten all bolts to a sufficient torque requirement that prevents any slippage.
4. Slowly lower the crane or hoist so the engine stand supports full weight of the engine. To check engine balance and secure setup of the engine to the stand, slowly rotate the engine by turning the handle. If balance or setup are not stable, rotate the engine to its original position, raise the crane or hoist so the weight of the engine is removed from the stand and make the correct adjustments. After adjustments are made, tighten all bolts. This adjustment procedure may have to be duplicated several times until correct. After the setup is balanced and secure, the lifting bar or sling can be removed from crane or hoist.
5. To remove the engine from the stand, connect the lifting bar or sling to the crane or hoist and raise the engine high enough to take the weight off the stand. Carefully remove the bolts that connect the four mounting fingers to the engine. Be aware there will be a slight movement of stand as total engine weight is transferred to crane or hoist.

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.

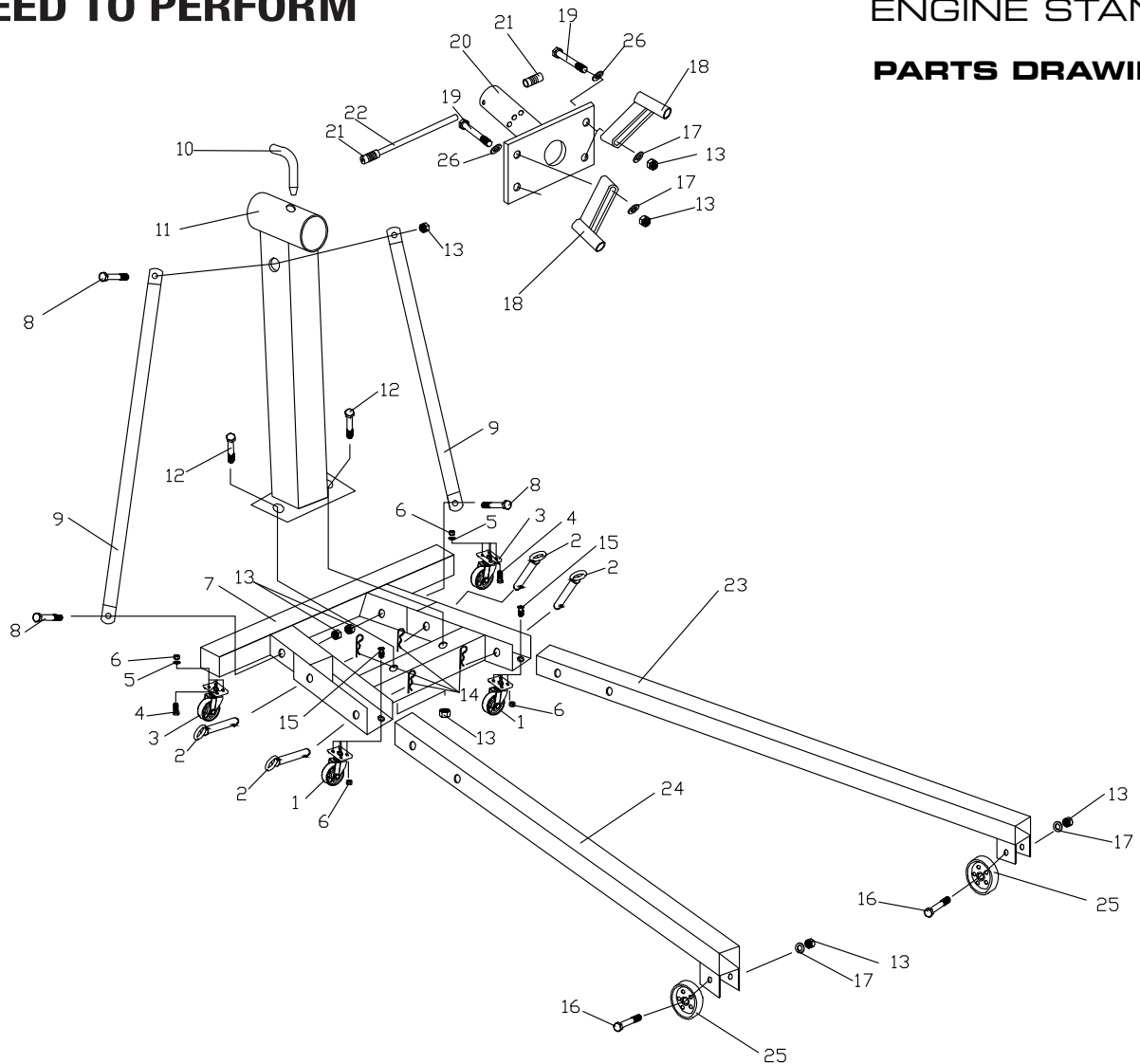
1. Always store the engine stand in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The engine stand must be cleaned of water, snow, sand, grit, oil, grease or other foreign matter before using.
2. Lubricate the wheels, casters, zerk fittings, gear and rotating shaft with a general purpose grease.
3. Every engine stand owner is responsible for keeping the engine stand label clean and readable. Use a mild soap solution to wash the external surfaces of the stand. Contact Sunex for a replacement label if your stand's label is not readable.
4. Inspect the stand before each use. Do not use the stand if any component is cracked, broken or bent. Do not use the stand if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the stand again.

SUNEX^{HD}

GUARANTEED TO PERFORM

MODEL 8400
CAPACITY: 1TON
ENGINE STAND

PARTS DRAWING



ITEM NO.	PART NO.	Description	QTY
1	RS840001	Middle Swivel Caster (incl #2, #6, & #15)	2
2	RS840002	Pin	4
3	RS840003	Rear Swivel Caster (incl #4, #5 & #6)	2
4		Bolt	8
5		Spring Washer	8
6		Nut	16
7		Bottom Frame	1
8		Bolt	3
9		Mast Brace	2
10	RS840010	Pin	1
11		Upright Mast	1
12		Bolt	2
13		Nut	11
14		R-Clip	4

ITEM NO.	PART NO.	Description	QTY
15		Bolt	8
16		Bolt	2
17		Washer	4
18	RS840018	Finger Kit (incl #13, #17, #19 & #26)	4
19		Bolt	4
20		Rotating Plate	1
21		Handle Cap	2
22		Handle	1
23		Left Leg	1
24		Right Leg	1
25	RS840025	Front Wheel Assembly (incl #13, #16 & #17)	2
26		Washer	2
Not Shown	RS8400PLK	Label Kit	1

* Hardware Kit - RS8400HK (incl #2 (4), #12 (2), #13 (11) & #14 (4))

Only items identified by part number are available separately.

All bolts and pins need to be assembled loosely to fit properly and then tightened before use.

Discover other automotive lifts and stands on our website.