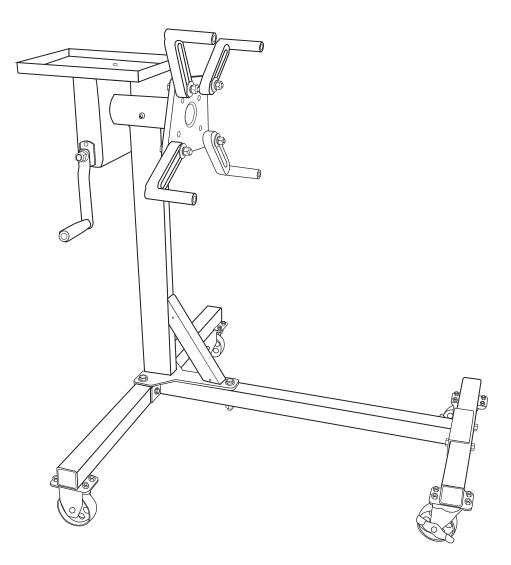


# 71000R - 1000 LB Rotating Engine Stand with Tool Tray

### **Owners's Manual & Safety Instructions**



### **SPECIFICATIONS**

Rated Capacity	1000 lbs.
Net Weight	90 lbs.
Shipping Weight	97 lbs.
Gear Ratio	60:1

Visit our website at: http://www.jackco.com Email our technical support at: contact@jackco.com

WARNING SYMBOLS AND DEFINITIONS		
	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.	
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.	
<b>ACAUTION</b>	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.	

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Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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 owns and personnel involved in the operation of the equipment who are careful, competent, trained, and quilified 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

- 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 beyond rated capacity.
- Use only on hard level surface capable of supporting the 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.
- Adequately support the vehicle before starting any 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 Jackco 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.
- Do not use (or modify) this product for any other purpose than that for which it was designed.
- 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.

#### **CONSEQUENCES OF NOT AVOIDING HAZARDOUS SITUATIONS**

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

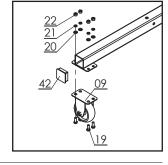
1. Install the casters to the front (10) and rear legs (09) using the hardware items (19, 20, 21 & 22). Be sure to insert bolts from the bottom side of caster plate

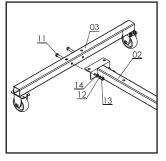
IMPORTANT: All hardware that assembles items 01, 02 & 04 together should be assembled loosely to ensure all bolts and pins fit through their designated holes.

2. Attach the center beam assembly (02) to the leg assemblies (01 & 03) using hardware items (11, 14, 12, 13).

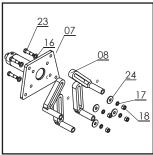
- 3. Place post (04) with gear box assembly onto base assembly as follows: Stand the post on the base and attach by passing bolt (15) through holes in the center beam assembly. Secure with hardware items 16, 17, and 18.
- 4. Now tighten all hardware that assembles 1, 2, 3 and 4 together.
- 5. Secure fingers (08) to mounting head (07) with hardware 23, 16, 24, 17 and 18 provided.

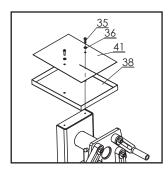
6. Place plate (38) onto the top of the gear box. Lay rubber (41) in the plate and secure with hardware items 35 and 36.

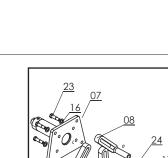




<u>04</u> <u>15</u>	15 0 <u>3</u>
16/00 17/18	







#### **OPERATING INSTRUCTIONS**



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

#### **OPERATION:**

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 assembly.

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.
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 gear crank 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.

#### **PREVENTATIVE MAINTENANCE**



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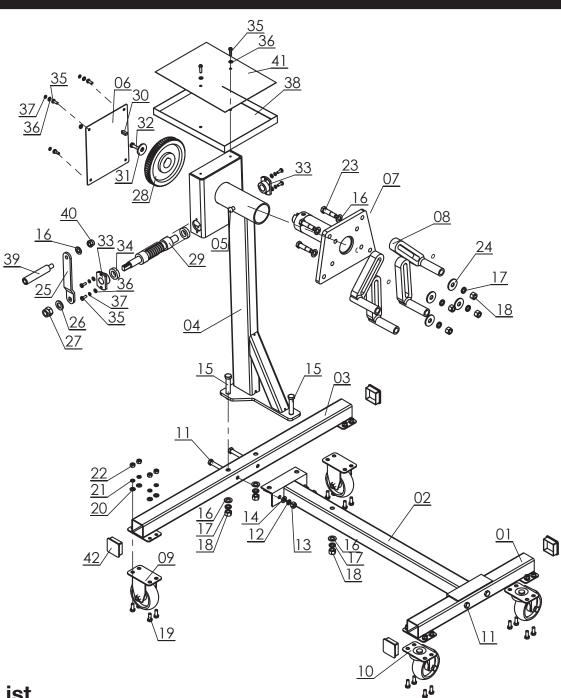
1. Always store the engine stand in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The engine stand must be cleaned of water, snow, sand, grit, oil, grease or other foreign matter before using.

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.

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.

### Assembly Diagram and Parts List



### Parts List

Part	Description	Qty
01	Front Beam	1
02	Middle Beam	1
03	Rear Beam	1
04	Main Post	1
05	Lubricating Fitting	1
06	Cover	1
07	Head Assembly	1
08B	Slotted Mounting Arm	4
08	Slotted Mounting Arm	4
09	Swivel Caster	2
10	Swivel Caster	2
11	Bolt M10*70	4
12	Spring Washer 10	5
13	Nut 10	4
14	Washer 10	4

Part	Description	Qty
15	Bolt M12*85	3
16	Washer 12	8
17	Spring Washer 12	7
18	Nut 12	7
19	Bolt M8*20	16
20	Washer 8	16
21	Spring Washer 8	16
22	Nut 8	16
23	Bolt M12*50	4
24	Washer 12	4
25	Handle Bar	1
26	Washer 14	1
27	Nut 14	1
28	Gear	1
29	Screw	1

Part	Description	Qty
30	Key	1
31	Block	1
32	Bolt M10*16	1
33	Bushing	2
34	Bearing	2
35	Bolt M6*16	10
36	Washer 6	10
37	Spring Washer 6	10
38	Plate	1
39	Handle	1
40	Nut 12	1
41	Rubber	1
42	Plug	4

#### Limited One Year Warranty

Jackco Transnational Inc. (Jackco) warrants all Jackco equipment and tools to the original purchaser against any manufacturing defect in material or workmanship for a period of one (1) year from the original date of purchase. If the defective equipment or tool is determined to be covered under this warranty, it shall be repaired or replaced at manufacturer's discretion without charge, provided that the equipment or tool must be returned with proof of purchase to the dealer and freight prepaid, if returned to the manufacturer. This warranty shall not apply to damage due to accident, negligent use, lack of maintenance, abuse or applications other than the specific function the equipment or tool is designed for.

No other warranties, expressed or implied, including those of merchantability or fitness for particular purpose shall be applicable to Jackco except as specifically stated herein. In no event shall Jackco be liable to any party for any special, direct, indirect, consequential, punitive damage of any nature caused by the sale or use of the equipment or tool.

Note: This warranty gives the original purchaser specific legal rights which may very from state to state.



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