



1000-LB. ENGINE STAND



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# 47033

Thank you very much for choosing a Strongway product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

INTENDED USE

This engine stand is used to mount an automotive type of engine when removed from a vehicle. This device is designed to provide access to the engine for servicing and/or rebuilding. The stand incorporates a locking, rotating mounting plate so that the user can turn the engine for ease of access. The stand also incorporates wheels and casters to allow mobility across a smooth, flat surface.

DO NOT USE FOR ANY PURPOSE OTHER THAN THOSE USES OUTLINED ABOVE!

DO NOT EXCEED RATED CAPACITY OF ENGINE STAND!

TECHNICAL SPECIFICATIONS

	Description
Item	47033
Maximum Capacity	1,000 lbs.

Safe Operating Temperature is between 40°F – 105°F (4°C - 41°C)

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.



CAUTION: Do not allow persons to operate or assemble this engine stand until they have read this manual and have developed a thorough understanding of how the engine stand works.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY CONSIDERATIONS

USE AND CARE

- **Do not modify the Engine Stand in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the **Engine Stand** was designed.
- **Always check of damaged or worn out parts before using the Engine Stand.** Broken parts will affect the **Engine Stand** operation. Replace or repair damaged or worn parts, or missing parts immediately.
- **Store idle.** When **Engine Stand** is not in use, store it in a secure place out of the reach of children. Inspect it for good working condition prior to storage and before re-use.
- **Not for use by children** or people with reduced mental capacity.
- **Do not use under the influence of drugs or alcohol.**
- **Ensure children and other bystanders** are kept at a safe distance when using **Engine Stand**.

INSPECTION

- Inspect the **Engine Stand** carefully before each use. Ensure the **Engine Stand** is not damaged, excessively worn, or missing parts.
- Do not use the **Engine Stand** unless it is properly lubricated.
- Using a **Engine Stand** that is not in good clean working condition or properly lubricated may cause serious injury.
- Inspect the work area before each use. Make sure it is free and clear of any potential hazards.

DO NOT OPERATE OR REPAIR THIS EQUIPMENT WITHOUT READING THIS MANUAL.

SAFETY MARKINGS



WARNING:

1. Study, understand, and follow all instructions before operating this device.
2. Do not exceed rated capacity.
3. Use only on hard, level surfaces.
4. Lock mounting plate rotating mechanism before applying a load.
5. Lock the wheels/casters before working on the engine.
6. Rotate the engine using the handle or device provided.
7. Assure load is centered and secured to mounting attachments.
8. Off-center loads may make the load and handle rotate in either direction when the rotational locking device is released.
9. Release rotational locking devices slowly and carefully.
10. No alterations shall be made to this product.
11. Only attachments and/or adapters supplied by the manufacturer shall be used.
12. Never work directly under a supported load.
13. Do not use this crane for any use other than the manufacturer specified usage.
14. Failure to heed these markings may result in personal injury and/or property damage.

 **GENERAL SAFETY INSTRUCTIONS**

*** Do Not Overload Engine Stand**

Do not overload this **Engine Stand** beyond its rated capacity. Overloading this **Engine Stand** beyond its rated capacity can cause damage to or failure of the **Engine Stand**.

*** Always Use on Hard Level Surfaces**

This **Engine Stand** is designed only for use on hard level surfaces capable of sustaining the load. Use on unstable or other possible loss of load.

*** Center Load on Engine Stand Mounting Plate**

Off-center loads and loads lifted when the **Engine Stand** is not level can cause loss of load or damage to the **Engine Stand, persons or property**.

*** Use EXTREME CAUTION when Engine Stand is moved or dollied while Engine Stand is in use.**

***Do not move Engine Stand unless tools, materials and people are clear.**

When the **Engine Stand** is being moved, make sure everyone is standing at least six feet away. Be sure there are no tools or equipment left under or around the **Engine Stand** before moving.

*** Always move the Engine Stand slowly and with caution. Tipping can occur if a load is not centered and stable**

*** Wear ANSI-approved safety glasses and heavy-duty work gloves during use.**

*** Stay alert. Use caution and common sense when operating Engine Stand.** Do not use Engine Stand if you are tired, incoherent, dizzy, or under the use of drugs or alcohol.

Training

-Read this manual before use. Do not allow anyone who has not read this manual, and/or does not understand the requirements, to use the **Engine Stand**.

Spectators

-Do not allow bystanders around the **Engine Stand** or under the load supported only by the **Engine Stand**. -Do not allow anyone in the vehicle while the **Engine Stand** is in use. Keep all bystanders away from **Engine Stand** when in use.

Additional Notes:

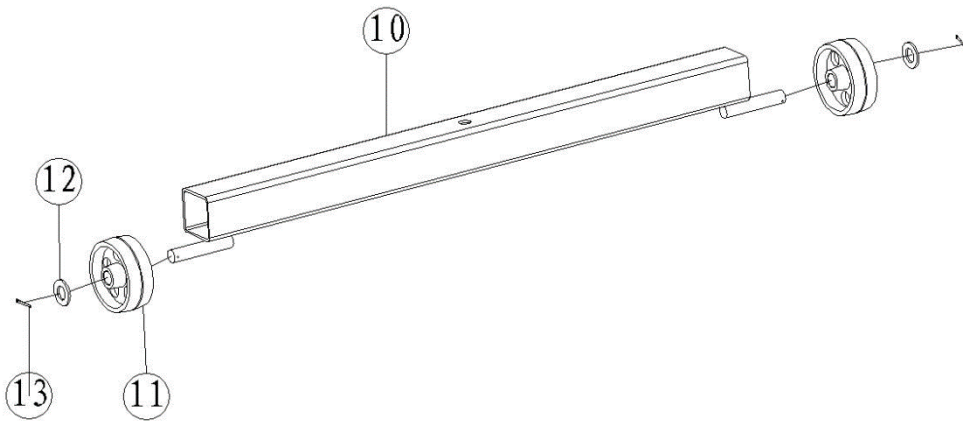
Save the receipt, warranty and these instructions.

ASSEMBLY

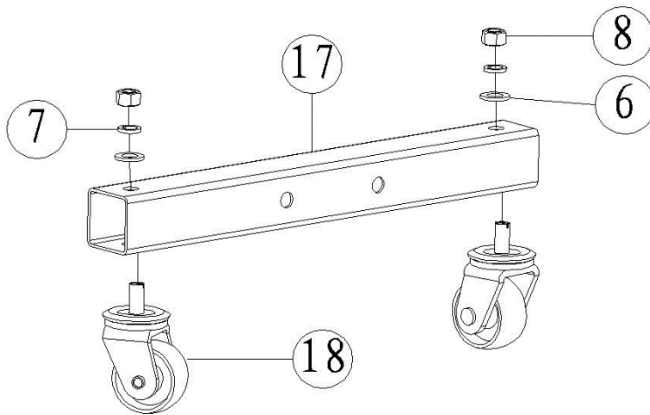
Use the exploded drawing as your guide to assembly. Lay all parts and assemblies out in front of you before beginning. The following procedure is recommended:

All numbers in parenthesis () refer to the index number from the parts breakdown.

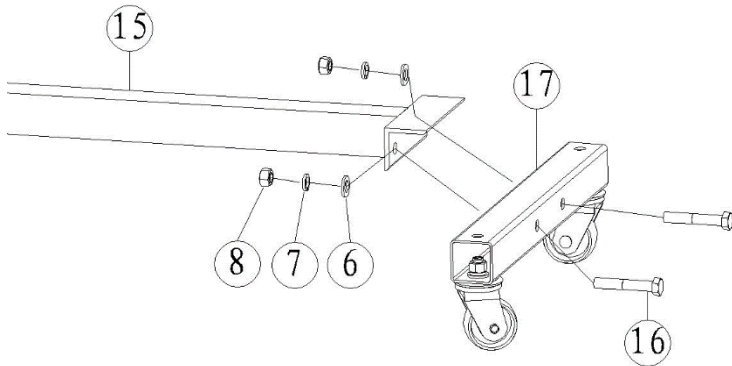
1. Familiarize yourself with Engine Stand.
2. Attach the rear casters (11) to the rear leg (10) with washer (12), and pin (13),



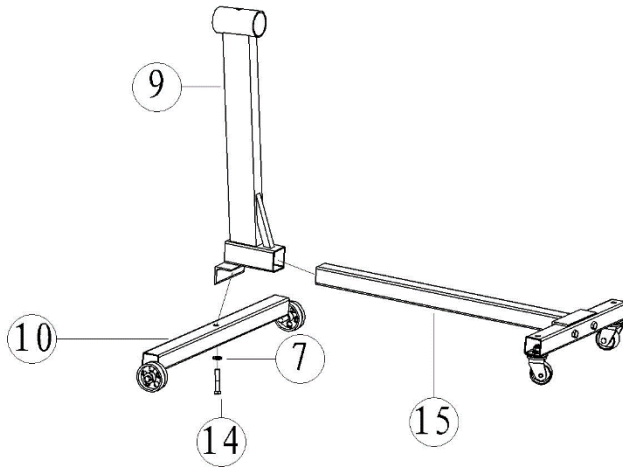
3. Attach the rotating casters (18) to the front leg (17) with washer (6), spring washer (7) and nut (8).



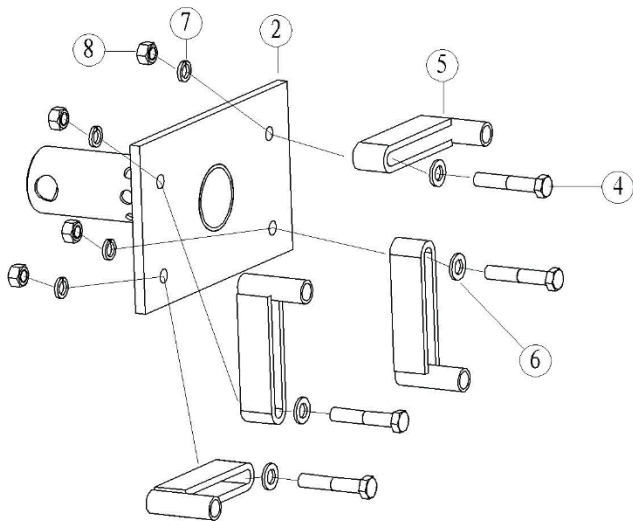
4. Attach the cross member (15) to the front leg (17) with bolt (16), washer (6), spring washer (7) and nut (8).



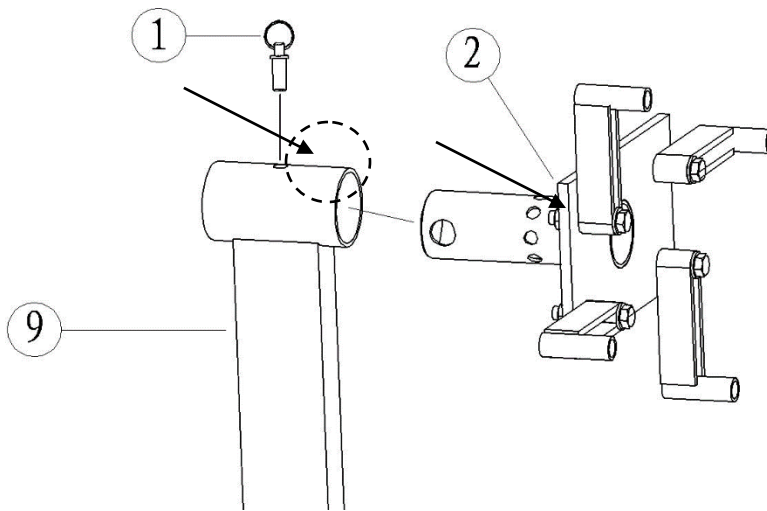
5. Attach the main post (9) and cross member (15) to rear leg (10) with bolt (14) and washer (7).



6. Attach the head plate assembly (2) to the mounting arm (5) with bolt (4), washer (6), spring washer (7) and nut (8).




7. Insert the head plate assembly (2) into the head plate collar of the main post (9). Then line up one fixed position hole on the head plate assembly (2) with the main post stop hole (9), and assemble them by inserting the stop pin (1).



8. Check that all hardware has been tightened before use.
9. Engine Stand is now ready for use.

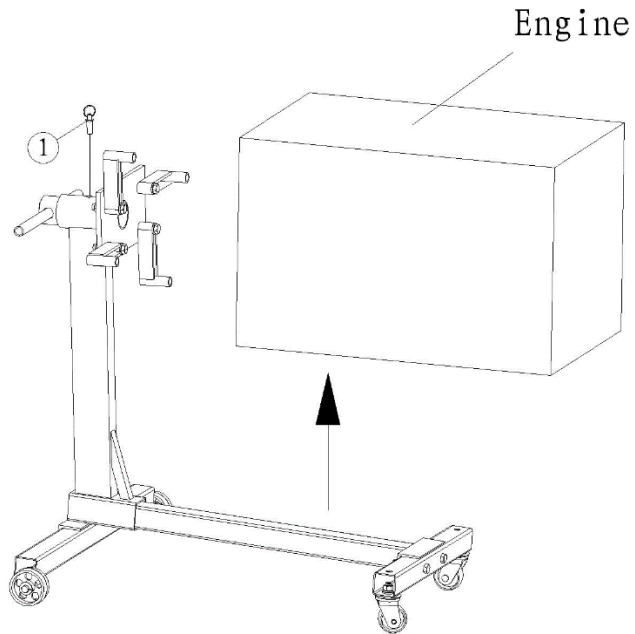
BEFORE USE

 **WARNING:** Failure to heed these warnings may result in personal injury, property damage and/or death.

- Study, understand and follow all warnings and instructions before using this stand.
- Do not exceed rated capacity. Use only on hard, level surfaces capable of sustaining the load.
- Lock mounting plate-rotating mechanism before applying the load.
- Be sure engine is centered and secured to mounting plate before applying load to stand. Off center loads may make the load and handle rotate in either direction when the rotational locking device is released.
- Release the rotational locking device slowly and carefully.
- Do not attempt to move the loaded stand across a floor having cracks or other obstacles that could impede movement.
- Never work directly under a supported load.
- Visually inspect stand for damage before use. Check for cracked welds, bent metal and loose, damaged or missing parts.
- Use only attachment and adapters supplied and approved by the manufacturer. Do not make any alterations to this product.

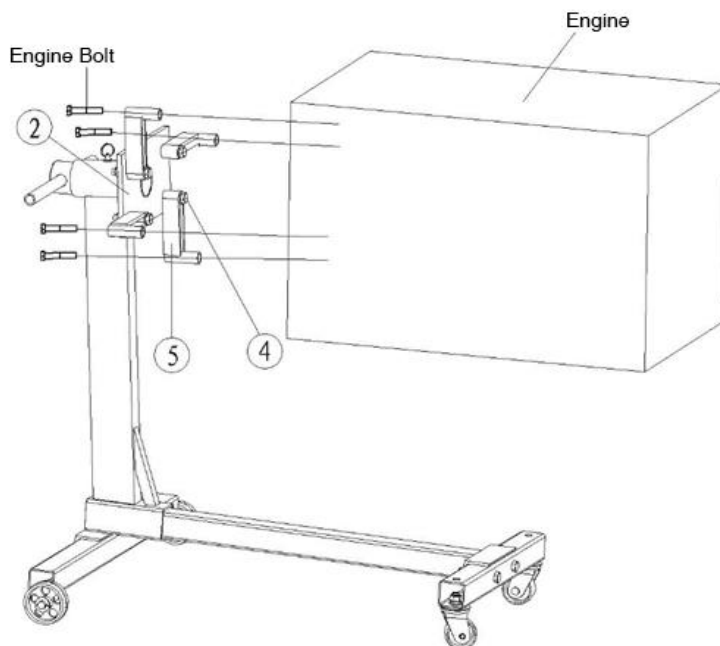
OPERATION

1. Use the stop pin (1) to lock the head plate assembly with the head plate collar. Using an engine hoist, suspend the engine level with the head plate assembly.

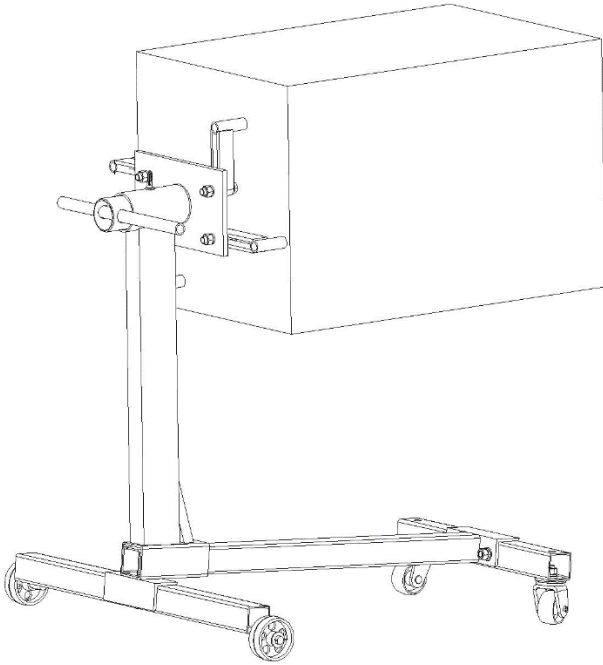


2. With the mounting arms (5) loosened, use the correct size engine bolts to attach arms to the engine.

(ENGINE BOLTS ARE NOT INCLUDED WITH ENGINE STAND.)



3. Make sure the engine is centered and level on the head plate assembly, then tighten the mounting arms to the engine first, and then tighten the mounting arms to the head assembly.



4. .Check and verify that all attaching hardware on the engine, mounting plate assembly and mounting are tight. After engine is secure SLOWLY lower the hoist transferring load to the engine stand.

MAINTENANCE INSTRUCTIONS

If you use and maintain your equipment properly, it will give you many years of service. Follow the maintenance instructions carefully to keep your equipment in good working condition. Never perform any maintenance on the equipment while it is under a load.

Inspection

You should inspect the product for damage, wear, broken or missing parts (e.g.: pins) and that all components function before each use. Follow lubrication and storage instructions for optimum product performance.

Binding

If the product binds while under a load, use equipment with equal or a larger load capacity to lower the load safely to the ground. After un-binding; clean, lubricate and test that equipment is working properly. Rusty components, dirt, or worn parts can be causes of binding Clean and lubricate the equipment as indicated in the lubrication section. Test the equipment without a load. If the binding continues contact Customer Service.

Cleaning

If the moving parts of the equipment are obstructed, use cleaning solvent or another good degreaser to clean the equipment. Remove any existing rust, with a penetrating lubricant.

Lubrication

Inspect the equipment before use and lubricate when necessary.

After cleaning, lubricate the equipment using a light penetrating oil or lubricating spray.

-Also apply a thin coat of grease to the mounting plate rotating mechanism as necessary

-Use a good lubricant on all casters and moving parts.

Rust Prevention:

If signs of rust are visible clean as needed and lubricate.

Storing the Engine Stand

1. Place the handle in the resting position on the back of the mounting plate.
2. Store in a dry location, recommended indoors.

Note: If the Engine Stand is stored outdoors, be sure to lubricate all parts before and after use to ensure the Engine Stand stays in good working condition.

PARTS LIST

Index #	Description	Part Number	Qty.
01	Stop Pin	T23401-1	1
02	Head Plate Assembly	T23401D.3	1
03	Handle	T23401D-2	1
04	Bolt M12x65	GB5780-86	4
05	Mounting Arm	T23401D.1	4
06	Washer 12	GB95-85	8
07	Spring Washer12	GB93-87	9
08	Nut M12	GB41-86	8
09	Main Post	T23401D.2	1
10	Rear Leg	T23401D.4	1
11	Rear Caster	T23401D-1	2
12	Washer14	GB95-85	2
13	Pin 2x22	GB91-86	2
14	Bolt M12x80	GB5780-86	1
15	Cross Member	T24541D.2	1
16	Bolt M12x70	GB5780-86	2
17	Front Leg	T24541D.1	1
18	Caster	T23401.6	2

Safe Operating Temperature is between 40°F – 105°F (4°C - 41°C)

REPLACEMENT PARTS

For replacement parts Customer Service at **1-800-222-5381**. Not all equipment components are available for replacement; illustrations provided are a convenient reference of location and position in the assembly sequence. When ordering parts the following will be required: Model Number, Serial Number and Description.

The distributor reserves the rights to make design changes and or improvements to product lines and manuals without notice.

For replacement parts and technical questions, please call 1-800-222-5381.

Limited Warranty

Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Strongway product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your trailer incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights, which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.



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