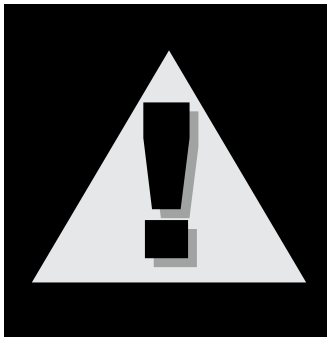




AMERICAN FORGE & FOUNDRY

MODEL NO.: 520

Model 520 20-TON AIR/HYDRAULIC AXLE JACK *Owner's Manual*



WARNING:

IMPORTANT: READ THESE INSTRUCTIONS AND ALL WARNINGS PRIOR TO USING THIS EQUIPMENT. UNDERSTAND ALL OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS. FAILURE TO DO SO COULD CAUSE AN ACCIDENT RESULTING IN SERIOUS OR FATAL INJURY AND/OR PERSONAL PROPERTY DAMAGE.

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 **SureWerx**[®]

Brand

surewerx.com/usa

520-INST-0922



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 these stands. It is also the responsibility of the jack 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 an authorized SureWerx USA repair center 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 secured 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 the 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
- Do not use the jack beyond its rated capacity
- No person should be under the vehicle when the 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 capable of supporting the load
- Do not move or dolly the vehicle while on jack
- 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. For more information go to www.P65Warnings.ca.gov



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

ASSEMBLY INSTRUCTIONS

PLEASE REFER TO THE EXPLODED VIEW DIAGRAM IN THIS MANUAL 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 in 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.
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. Air sometimes 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 a maximum height
 - E. Repeat steps "A" through "D" until all the air is purged from the system
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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. 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 lift 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 of the 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 the load
 5. In most cases, 100 psi input air pressure (do not exceed 200 psi) will lift the maximum capacity load. 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 the appropriate setup corrections after the load is fully lowered.
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6. When the vehicle or load is lifted to its desired height, immediately place safety support 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. Make sure the vehicle is safely supported by the safety support stands' saddles and not the locating lugs of the saddles. Inspect the relationship of the safety support stands with the ground and the safety support 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. Make the appropriate setup changes and slowly and carefully lower the vehicle onto the safety support stand saddles.
DO NOT CRAWL UNDER THE VEHICLE WHILE LIFTING VEHICLE OR PLACING OR REMOVING THE JACK STANDS.
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 the load is stable. If it is not stable, lower the load back onto the safety support stands. Make appropriate setup corrections and repeat the step again. Remove the safety support stands from under the vehicle, being 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.

INSPECTION

Prior to each use, visually inspect for leaking hydraulic fluid, 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 load. Any jack that 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 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.

PREVENTATIVE MAINTENANCE



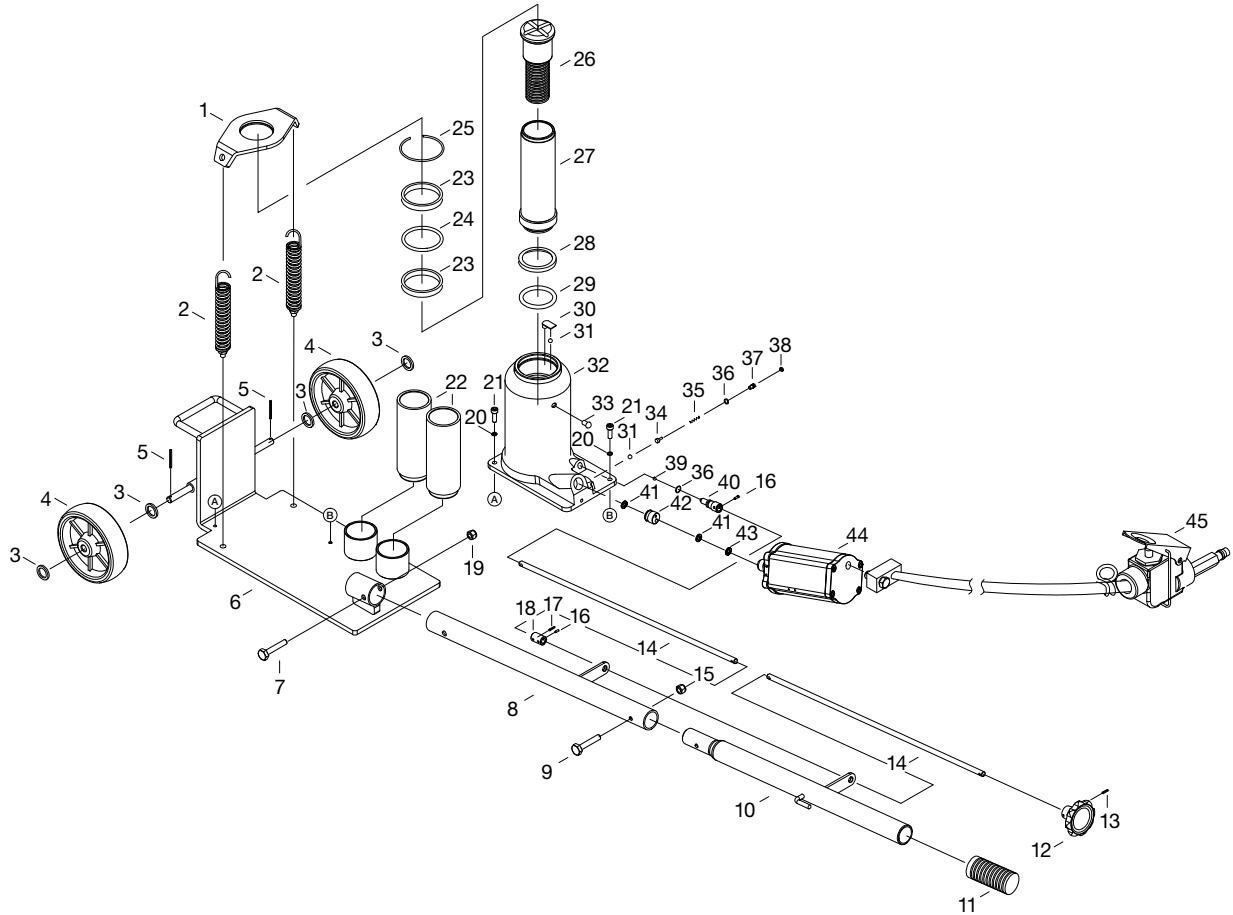
This is the safety alert symbol used for the **PREVENTATIVE MAINTENANCE** section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

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 of 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 centre.
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 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 centre.



TROUBLESHOOTING

Symptom	Causes	Remedy
Jack will not lift the load	<ol style="list-style-type: none">1. The release valve is not tightly closed2. The jack is overloaded3. Inadequate air supply	<ol style="list-style-type: none">1. Tighten the release valve2. Rectify the overload condition.3. Check and ensure adequate air supply
Jack bleeds off after lifting	<ol style="list-style-type: none">1. The release valve is not tightly closed2. The jack is overloaded3. The hydraulic unit malfunctions	<ol style="list-style-type: none">1. Tighten the release valve2. Rectify the overload condition3. Contact the local service centre
Jack will not lower after unloading	<ol style="list-style-type: none">1. The reservoir is overfilled with hydraulic fluid.2. Linkage binding	<ol style="list-style-type: none">1. Drain fluid to the proper oil level2. Clean and lubricate moving parts
Poor lifting performance	<ol style="list-style-type: none">1. Low fluid level2. Air is trapped inside the hydraulic system	<ol style="list-style-type: none">1. Ensure proper fluid level2. With the ram retracted, remove the oil filler plug. Pump the jack with the release valve open to pressurize the air. Reinstall the oil filler plug.
The jack will not lift to its maximum height.	Low fluid level	Ensure proper fluid level



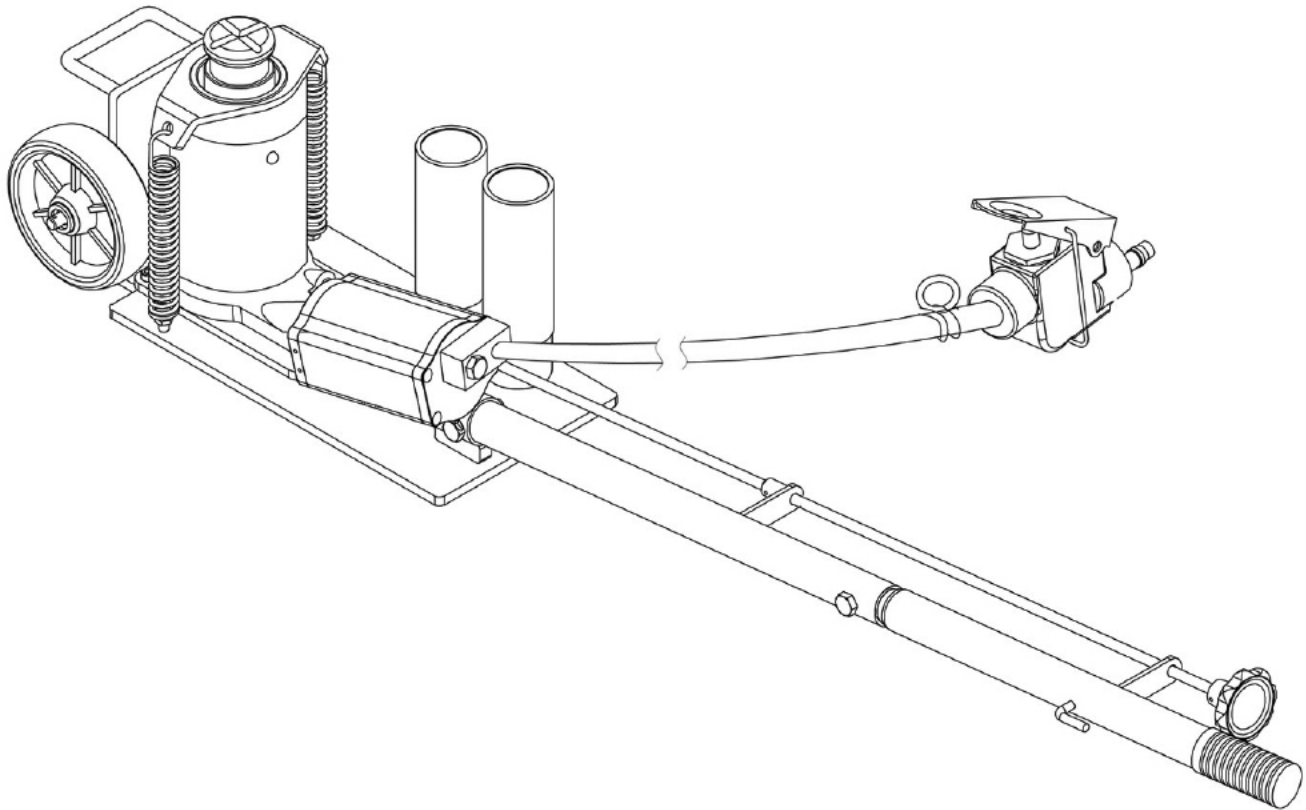
PART NUMBER	KIT DESCRIPTION	REF. #	KIT INCLUDES
520-2	Spring Support	2	Spring Set
		1	Spring Plate
520-32	Hydraulic Unit Complete	32	Complete Hydraulic Unit
520-RK	Repair Kit		Complete Repair Kit
		24	O-Ring
		28	Sealing Washer
		29	O-Ring
		33	Oil Fill Plug
		36	O-Ring (qty 2)
		41	Copper Washer (qty 2)
		43	Nylon Gasket
520-10	Handle ASM	10	Complete Handle Assembly
520-45	Air Hose w/ Valve	45	Air Hose w/ Valve
520-6	Frame	6	Frame
520-4	Wheel Complete	4	Wheel
		3	Washer x2
		5	Pin
520-22	Adapter Kit	22	Adapter Kit (contains 2)
520-44	Air Motor Complete	44	Air Motor Complete



Model 520 20-TON AIR/HYDRAULIC AXLE JACK

MODEL NO.
520

CAPACITY
20 Ton



SPECIFICATIONS

Model 520

Capacity: 20 Tons	Overall Width: 8.9 in.
Low Height: 8.66 in.	Saddle Diameter: 2 in.
Maximum Height: 23.35 in.	Wheel Diameter: 5 in.
Ram Lift: 3.94 in.	Handle length: 35.5 in.
Screw Extension Height: 2.78 in.	Shipping Weight: 55 lbs.
Chassis Length: 17.78 in.	



AMERICAN FORGE & FOUNDRY

LIMITED WARRANTY

SureWerx USA WARRANTS TO ITS CUSTOMERS THAT THE COMPANY'S SureWerx USA "AFF" BRANDED PRODUCTS ARE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS.

SureWerx USA will repair or replace its **SureWerx USA "AFF"** branded products which fail to give satisfactory service due to defective workmanship or materials, based upon the terms and conditions of the following described warranty plans attributed to that specific product. This product carries a ONE-YEAR warranty. During this warranty period, **SureWerx USA** will repair or replace at our option any part or unit which proves to be defective in material or workmanship.

Other important warranty information:

This warranty does not cover damage to equipment or tools arising from alteration, abuse, misuse, damage and does not cover any repairs or replacement made by anyone other than **SureWerx USA**. The foregoing obligation is **SureWerx USA's** sole liability under this or any implied warranty and under no circumstances shall we be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. If you have any questions about warranty service, please contact **SureWerx USA**. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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SureWerx, USA Inc.,
325 Corporate Drive, Elgin, IL USA 60123
surewerx.com/usa
affjaxx.com
800-323-7402

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