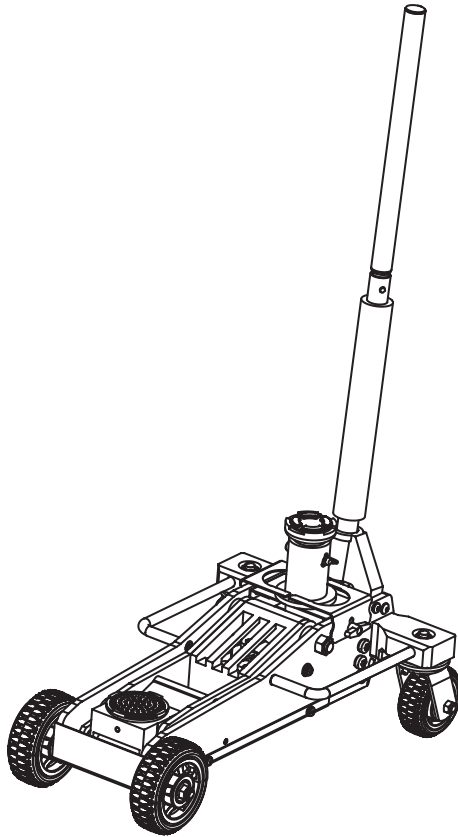


STRONGWAY™

3-TON PROFESSIONAL OFF-ROAD JACK

OWNER'S MANUAL



▲ 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# 115140

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**.

SAFETY MARKINGS

⚠ WARNING!

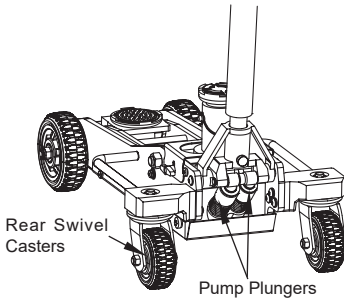
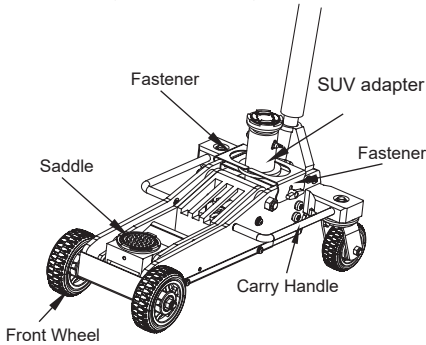
1. Study, understand, and follow all instructions before operating this device.
2. Do not exceed rated capacity.
3. Place the Jack on a flat, level surface. Only use this Jack on a hard, stable, clean, dry surface that is capable of sustaining the weight of the Jack and the load it is stabilizing.
4. Keep work area clean and well lit. Cluttered or dark areas invited accidents.
5. Lifting device only. Immediately after lifting, support the vehicle with appropriate means.
6. Do not move or dolly the vehicle while on the jack.
7. Lift only on areas of the vehicle as specified by the vehicle manufacturer.
8. No alterations shall be made to this product.
9. Only attachments and/or adapters supplied by the manufacturer shall be used.
10. Do not get under or allow anyone under the vehicle until it has been supported by jack stands.
11. Center load on saddle prior to lifting.
12. Use wheel chocks or other blocking device on opposing wheels before using jack.
13. Never use the jack on a lawn mower or on a lawn tractor.
14. Do not use the jack for any use other than the manufacturer specified usage.
15. Do not rock the vehicle while working on or around equipment.
16. The following are not recommended for supporting on this equipment: Foundations, Homes, Mobile Homes, Trailers, RV's, Campers, nor Fifth Wheels, etc.
17. Failure to heed these markings may result in personal injury and/or property damage.

TECHNICAL SPECIFICATIONS

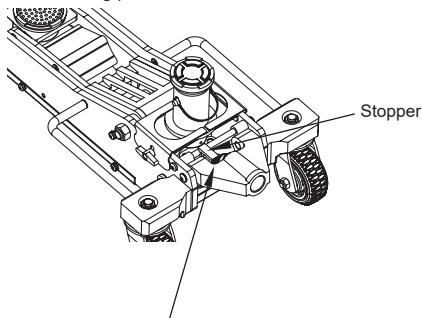
Item No.	Capacity		Lifting Range Min. (inch)	Lifting Range Max. (inch)	Lifting Range Min. (cm)	Lifting Range Max. (cm)
115140	Without adapter	3 TON	6.14	21.73	15.6	55.2
	With SUV adapter		10.63	28.98	27	73.6

ASSEMBLY

1. Familiarize yourself with the jack.



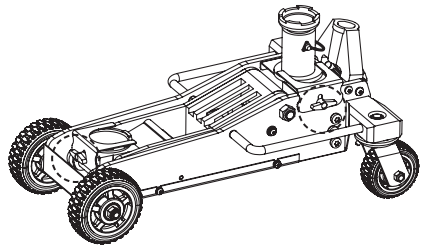
2. Prior to assembly, carefully remove the stopper attached to the handle socket. **CAUTION:** The socket will tend to spring upward when the stopper is removed. To prevent possible injury, place one hand on the top of handle socket and then carefully remove the stopper. After removing, slowly allow handle socket to rise back into resting position.



⚠ WARNING!

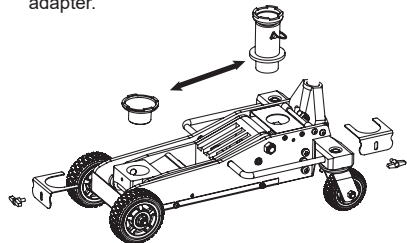
Once retaining stopper is removed, **SLOWLY** allow handle socket to rise back into resting position. Use **CAUTION** when removing retaining stopper, handle socket will spring forward rapidly.

3. Securely fasten the low profile saddle and the SUV adapter with the fastener. (Firmly tighten to secure the low profile and the SUV adapter during movement.)

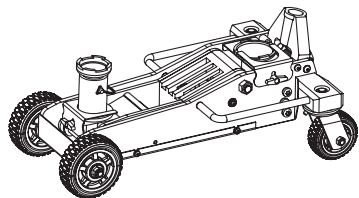


4. To switch between SUV height to low profile:

a. Release the fasteners and remove the saddle and adapter.

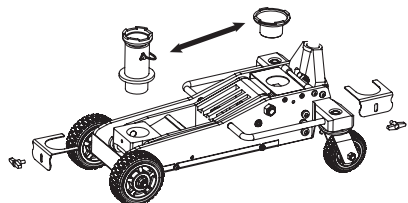


b. Put the low profile saddle in the saddle bracket plate, and fasten with the fastener. Put the SUV adapter in the cover plate, and fasten with another fastener. (Firmly tighten each position to secure the SUV adapter during movement.)

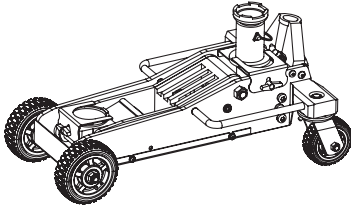


5. To switch between SUV height to low profile:

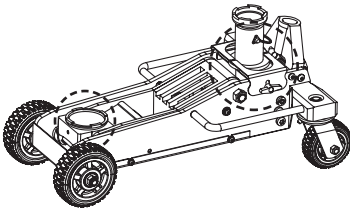
a. Release the fasteners and remove the saddle and adapter.



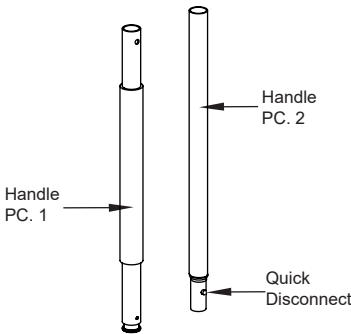
- b. Put the low profile saddle in the saddle bracket plate, and fasten with the fastener. Put the SUV adapter in the cover plate, and fasten with another fastener. (Firmly tighten each position to secure the SUV adapter during movement.)



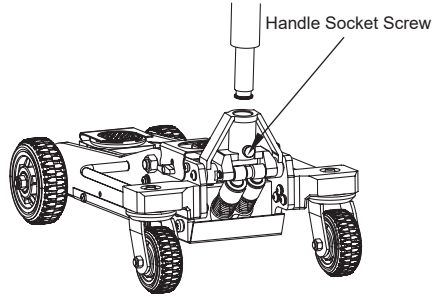
NOTE: Do not fasten the low profile saddle during using. Put the two fasteners in the cover plate.



6. Refer to picture below when performing assembling handle sections. Press Quick Disconnect on handle piece 2, this will allow slide handle pieces 1 and 2 to connect, align the holes on both sections to allow quick disconnect to trigger. Quick disconnect will automatically pop out when hole position is correct.



7. Unfasten the screw located in the Handle Socket to insert the assembled handle.



8. Line up the square hole located at the bottom of the handle over the square bolt inside the Handle Socket.
9. Secure the handle in place by tightening the screw in the handle socket without any vehicle on the jack. Cycle the lift up and down several times to ensure the hydraulic system is operating properly. (Perform the System Air Purge Procedure before first use.)

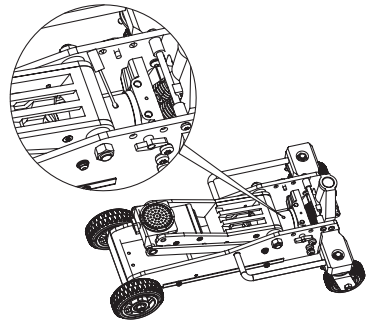
⚠ WARNING: Do not lift or carry the jack by the handle. Handle could dislodge and jack may fall, resulting in possible injury or property damage.

SYSTEM AIR PURGE PROCEDURE

IMPORTANT: BEFORE FIRST USE

Perform the following System Air Purge Procedure to remove any air that may have been introduced into the hydraulic system as a result of product shipment and handling. This step is to be completed without any weight on the jack.

1. Remove cover plate.
2. Turn release valve counter-clockwise on full turn to the open position.
3. Rapidly pump the handle 6-8 times. Leave handle in down position to expose oil fill plug.
4. With a flat blade screwdriver, unscrew the oil fill plug slightly to purge trapped air from system. (For RUBBER OIL PLUGS, use caution not to tear or puncture the oil plug).



5. Replace Cover Plate.
6. Turn release valve clockwise to the closed position.
7. Jack is now ready for use. Check for proper pump action. (Repeat all the steps if necessary).

BEFORE USE

Park vehicle on a flat, level, solid, surface safely away from oncoming traffic. Turn off the vehicle's engine. Place the vehicle's transmission in "PARK" (if automatic) or in its lowest gear (if manual). Set the vehicle's emergency brake. Then, chock the wheels that are not being lifted.

1. Before using this product, read the owner's manual completely and familiarize yourself thoroughly with the product and the hazards associated with its improper use.
2. Perform the air purge procedure. (See System Air Purge Procedure.)
3. Check that the pump operates smoothly before putting the jack into service.
4. Inspect before each use. Do not use if bent, broken or cracked components are noted.

OPERATION

⚠ WARNING: THE RATED CAPACITY OF JACK STANDS IS PER PAIR, NOT THE INDIVIDUAL CAPACITIES COMBINED UNLESS SPECIFICALLY NOTED ON THE PRODUCT BY THE JACK STAND MANUFACTURER. DO NOT EXCEED RATED JACK STAND CAPACITY. ENSURE THAT THE VEHICLE SUPPORT POINTS ARE FULLY SEATED IN THE SADDLE OF BOTH JACK STANDS. USE A MATCHED PAIR OF JACK STANDS PER VEHICLE TO SUPPORT ONE END ONLY. FAILURE TO DO SO MAY RESULT IN THE LOAD SUDDENLY FALLING, WHICH MAY CAUSE PERSONAL SERIOUS INJURY AND/OR PROPERTY DAMAGE.

RAISING THE JACK

1. Block the vehicle's wheels for lifting stability. Secure the load to prevent inadvertent shifting and movement.
2. Position the jack near desired lift point.
3. Set the Parking Brake in the vehicle.
4. Refer to the vehicle manufacturer owner's manual to locate approved lifting points on the vehicle. Position the jack so that the saddle is centered and will contact the load lifting point firmly.
5. Assemble the handle; ensure to align with slots.
6. Close the release valve by turning it clockwise until it is firmly closed.
7. Before raising the vehicle, double-check and verify that the saddle is centered and also has full contact with the lifting point.

8. Pump the handle to lift until the saddle contacts the load. Continue to pump the jack handle to lift the vehicle to the desired height. After lifting, support the load with appropriately rated vehicle support stands before working on the vehicle.

⚠ CAUTION: NEVER WIRE, CLAMP OR OTHERWISE DISABLE THE LIFT CONTROL VALVE TO FUNCTION BY ANY MEANS OTHER THAN BY HAND. USE THE HANDLE PROVIDED WITH THIS PRODUCT OR AN AUTHORIZED REPLACEMENT HANDLE TO ENSURE PROPER RELEASE VALVE OPERATION. DO NOT USE EXTENSIONS ON THE OPERATING HANDLE.

LOWERING THE JACK

1. Raise load high enough to allow clearance for the jack stands to be removed, then carefully remove jack stands.
2. Remove support stands.
3. Grasp the handle firmly with both hands. Securely hold on to the jack handle so your hands do not slip and ensure the release valve does not rapidly lower.
4. Carefully open the Release Valve by slowly turning the handle counter-clockwise. (Do not allow bystanders around the jack or under the load when lowering the jack.)
5. After removing jack from under the load, keep jack in the lowered position to reduce exposure to rust and contamination.

⚠ WARNING: USE EXTREME CAUTION WHEN LOWERING THE JACK. THE JACK HANDLE MAY TURN RAPIDLY. OPENING THE RELEASE VALVE TOO FAST CAN CAUSE THE JACK TO LOWER RAPIDLY. FAILURE TO HEED THESE WARNINGS COULD CAUSE SERIOUS INJURY OR DEATH.

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 unbinding; 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 by lifting 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

This equipment will not operate safely without proper lubrication. Using the equipment without proper lubrication will result in poor performance and damage to the equipment. Some parts in this equipment are not self-lubricating. Inspect the equipment before use and lubricate when necessary. After cleaning, lubricate the equipment using a light penetrating oil or lubricating spray.

- Use a good lubricant on all moving parts.
- For light duty, use lubrication once a month.
- For heavy and constant use, it is recommended to use lubrication every week.
- NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES!

Rust Prevention

Check rams and pump plungers on the power unit assemblies daily for any signs of rust or corrosion. Without a load, lift the equipment as high as it goes and look under and behind the lifting points. If signs of rust are visible, clean as needed.

Grease Fittings

Some models contain grease fittings that will regularly need to be greased and lubricated.

How the Jack Operates

With release valve closed, an upward stroke of the jack handle draws oil from the reservoir tank into the plunger cavity. Hydraulic pressure holds the valve closed, which keeps the oil in the plunger cavity. A downward stroke of the jack handle releases oil into the cylinder, which forces the ram out. This raises the saddle. When the ram reaches maximum extension, oil is bypassed back into the reservoir to prevent an over extended ram stroke and possible damage to the jack. Opening the release valve allows oil to flow back into the reservoir. This releases hydraulic pressure on the ram, which results in lowering the saddle.

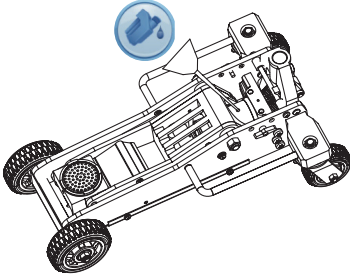
Storing the Jack

1. Lower the Lifting ram.
2. Place the handle in the upright position.
3. Store in a dry location, preferably indoors.

Note: If the jack is stored outdoors, be sure to lubricate all parts before and after use to ensure the jack stays in good working condition. Always store the jack in the fully retracted position when stored in outdoor or caustic environments that can cause corrosion and/or rust.

TO ADD OIL TO THE JACK

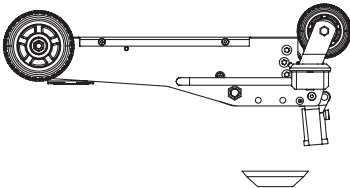
1. Position the jack on level ground and lower the saddle.
2. Remove the cover plate.
3. Remove the oil plug.
4. Fill the oil tank until oil level is just beneath the lower rim of the oil fill hole.



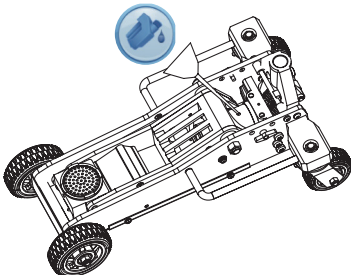
5. Replace the oil plug.
6. Replace the cover plate and perform the Air Purge Procedure.

TO REPLACE JACK OIL

1. Position the jack on level ground and lower the saddle.
2. Open release valve by turning handle counter-clockwise.
3. Remove cover plate.
4. Remove the oil plug.
5. Turn the jack on its side to drain old oil from the oil fill hole.



6. Position the jack on level ground and keep saddle in the lowered position. Fill the oil case until oil level is just beneath the lower rim. Keep clear of dirt and other foreign materials when pouring the oil.



7. Replace the oil plug.
8. Replace the cover plate and perform the Air Purge Procedure.

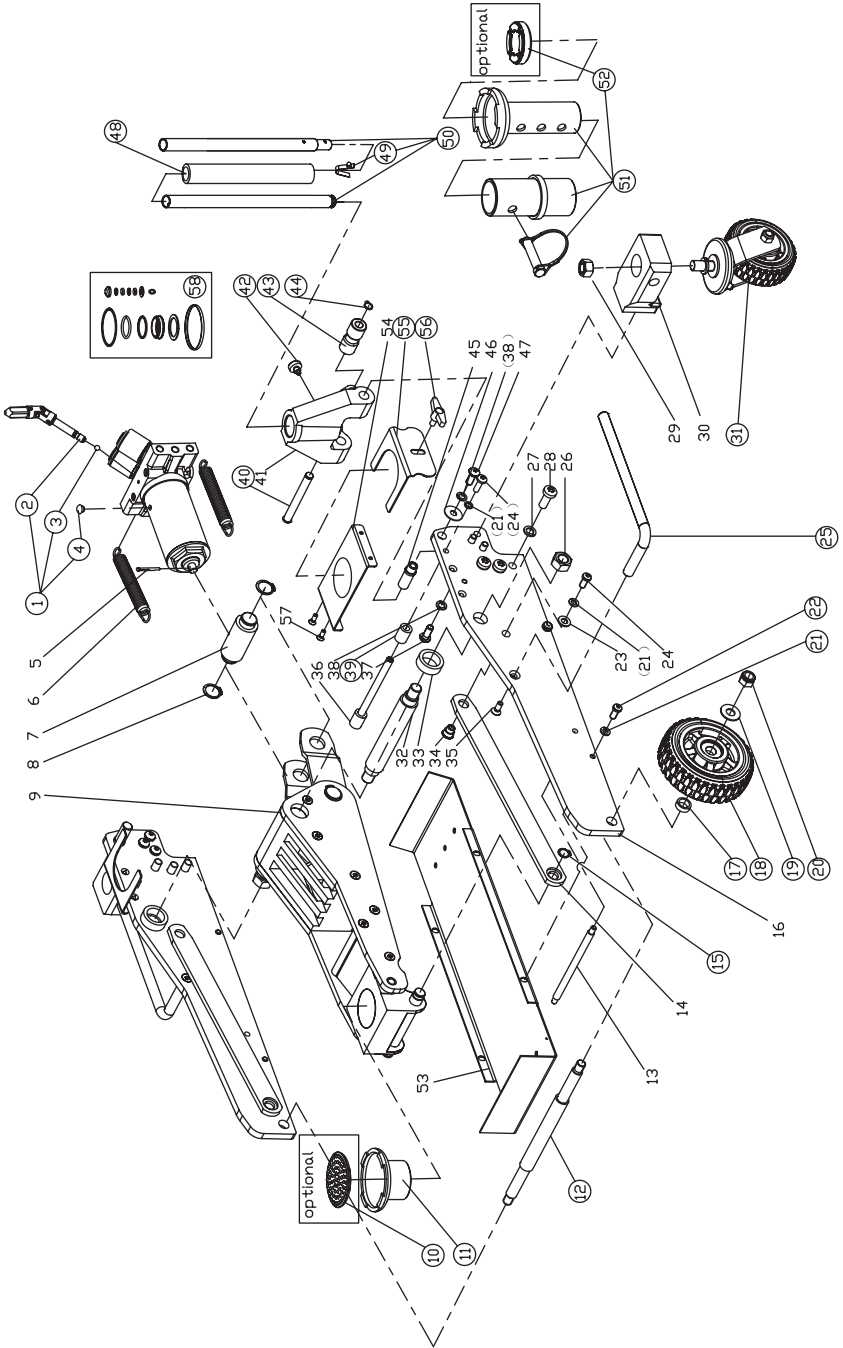
⚠️ ADDITIONAL WARNINGS:

- DO NOT USE MOTOR OIL IN THE JACK.
- ONLY USE ANTI-FOAMING JACK OIL.
- ALWAYS USE A GOOD GRADE HYDRAULIC JACK OIL.
- DO NOT USE HYDRAULIC BRAKE FLUID, ALCOHOL, GLYCERIN DETERGENT, MOTOR OIL OR DIRTY OIL.
- USE OF A NON-RECOMMENDED FLUID CAN CAUSE DAMAGE TO A JACK.
- AVOID MIXING DIFFERENT TYPES OF FLUID AND NEVER USE BRAKE FLUID, TURBINE OIL, TRANSMISSION FLUID, MOTOR OIL OR GLYCERIN. IMPROPER FLUID CAN CAUSE PREMATURE FAILURE OF THE JACK AND THE POTENTIAL FOR SUDDEN AND IMMEDIATE LOSS OF LOAD.
- DISPOSE OF HYDRAULIC FLUID IN ACCORDANCE WITH LOCAL REGULATIONS.

ADDITIONAL LUBRICATION:

1. Periodically check the pump piston and ram for signs of rust or corrosion. As needed, thoroughly wipe with a clean, non-scratching, oil-soluble cloth. NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES!
2. When not in use, store the jack with pump piston and ram fully retracted.

ASSEMBLY DIAGRAM



REF#	PART#	DESCRIPTION	QTY
1	T830003XL.2	Power unit assembly	1
2	T830023.4.1(asm)	Universal joint assembly	1
3	GB/T 308	Steel ball Ø6mm	1
4	TF1201C-29	Oil plug	1
5		Cotter pin Ø4x45mm	1
6		Return spring	2
7		Coupling connector	1
8		C-clip Ø25mm	4
9		Lifting arm assembly	1
10	T815016CL-1	Saddle pad	1
11	TZ830027H.5	Saddle	1
12	T830003XDL-5	Shaft for front wheel	1
13		Position rod	1
14		Connected bar	2
15	GB/T 894.1	C-clip Ø16mm	2
16		Side frame	2
17	T830003XDL-4	Sleeve for front wheel	2
18	T830003XDL.1	Front wheel	2
19	GB/T 97.1	Washer M14	2
20	GB/T 889.1	Nut M14	2
21	GB/T 859	Spring Washer M8	8
22	GB/T 70.2	M8x16	4
23		Washer M8	2
24		M8X25	4
25	T830003XDL.2-2	Carry handle	2
26		Nut M18	2
27		Spring Washer M12	6
28		M12x30	6
29		Nut M16	2
30		Caster base	2
31	T830003XDL.4	Rear Caster Assembly	2
32		Supporting shaft	1
33		Bush for supporting shaft	2
34		Connecting rod pintle	2
35		Flat-head socket cap screw M8x20mm	2
36		Limited rod	1
37		Button-head socket cap screw M10x30mm	6
38		Spring Washer M10	2
39	T8205011CL-1	Nglon sleeve	2
40	T825011CT.2-2	Pin for roller	1
41		Handle socket	1
42	QLZ2C-1a	Handle socket screw	1
43	T825011CL.2-3	Contact roller	1
44	GB/T 859	C-clip Ø10mm	2
45		Handle socket pin	2
46		Washer M10	2
47		M10X25mm	2
48	T83508-9	Foam protective pad	1
49	T83508.5-4	handle lock pin	1
50	T830003XL.5	Handle assembly	1
51	TZ830027H.4	Height saddle assembly	1
52	T830027H-5	Saddle pad	1
53		Bottom protection plate	1
54		Cover plate	1
55	T830003XDL-2	Saddle fixed plate	2
56	T830003XDL-7	Z-Hand screw M8	2
57	GB/T 845-ST4.8X16	Tapping Screw ST4.8x16mm	4
58	T830023.MF	Seal kit	1

TROUBLESHOOTING

JACK WILL NOT LIFT AT ITS WEIGHT CAPACITY	SADDLE LOWERS UNDER LOAD	PUMP STROKE FEELS SPONGY	SADDLE WILL NOT LOWER	POOR JACK LIFTING	SADDLE WILL NOT LIFT ALL THE WAY	HANDLE MOVES UP WHEN JACK IS UNDER LOAD	PROBABLE SOLUTION (Make certain that the jack is not supporting a load while attempting a solution.)
X	X	X		X			Release valve is not completely closed. Turn handle clockwise. Perform the System Air Purge Procedure.
X							Weight Capacity Exceeded. Decrease the weight or change to a higher capacity jack.
X				X			Air is in the hydraulics. Perform the System Air Purge Procedure.
X		X		X	X		Low oil level. Add oil as required.
			X				Oil reservoir is overfilled. Drain excessive oil. Lubricate moving parts.
			X				Jack is binding or foreign obstruction. Check the locking pin and release handle to make sure they are functioning properly.
X				X		X	Valves may be blocked and may not close fully. To flush the valves: 1. Lower the Saddle and securely close the Release Valve. 2. Manually lift the saddle several inches. 3. Open the release valve and force the saddle down as quickly as possible.
X	X			X			Power unit malfunctioning. Replace the power unit.

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 ONE YEAR 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.

STRONGWAY™

Distributed by
Northern Tool + Equipment Co., Inc.
Burnsville, Minnesota 55306
NorthernTool.com
Made in China