

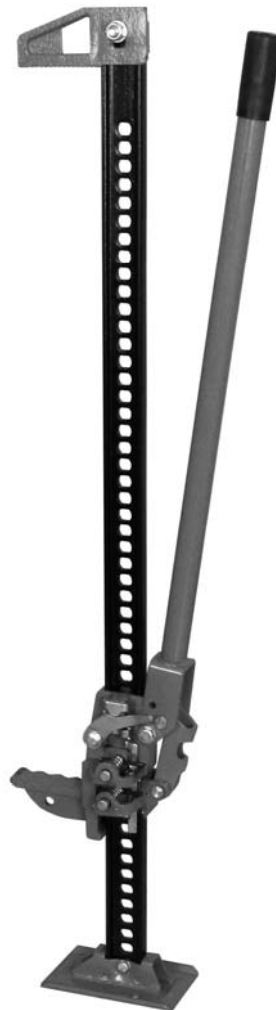


Model No.:	Stock No.:
Serial No.:	
Purchased from:	
Date purchased:	

Operating Instructions and Parts Manual

3-1/2 ton Farm Jack

Model FJ-3-1/2A



JET
427 New Sanford Road
LaVergne, Tennessee 37086
Ph.: 800-274-6848
www.jettools.com

Part No. M-440436
Revision A1 06/2014
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1.0 Warranty and Service

JET® warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. 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.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days – Parts; Consumable items; Light-Duty Air Tools
1 Year – Motors; Machine Accessories; Heavy-Duty Air Tools; Pro-Duty Air Tools
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories
5 Year – Woodworking Machinery
Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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3.0 About this jack and manual


The JET Model FJ-3-1/2A Farm Jack is a multi-purpose mechanical tool with the functions of a jack, hoist, winch, crane, and clamp. It is simple and easy to operate, inspect and service, and is especially suited for field operations. With regular maintenance your JET Farm Jack will provide years of dependable service.

The jack is manufactured to high quality standards in compliance with ANSI/ASME B30.1 safety standards.

This manual is provided by JET covering the safe operation and maintenance procedures for the JET Farm Jack. This manual contains instructions on set-up, safety precautions, general operating procedures, maintenance instructions and parts breakdown.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the jack transfers ownership, the manual should accompany it.

 **WARNING Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!**



4.0 Safety warnings

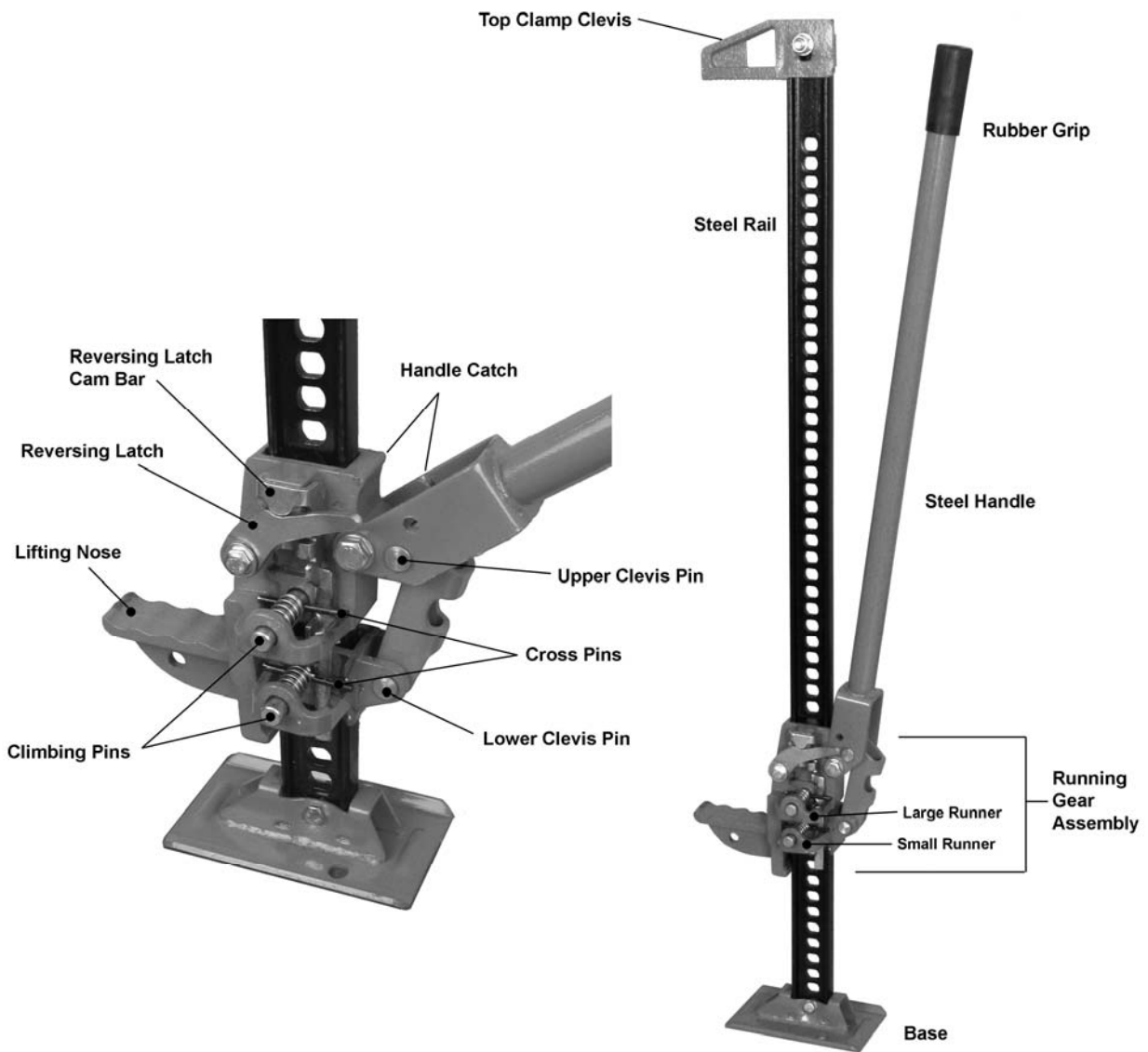
1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the jack and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. This jack is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a farm jack, do not use until proper training and knowledge have been obtained.
5. Visually inspect and check operation of jack prior to each use.
6. Use on hard, level surface only when using as a jack.
7. Always keep jack clean and oiled. Front and back of rail must be kept free from rust. Jack will not operate safely without proper lubrication.
8. Improper use of this jack may be highly hazardous and may cause serious injury or death.
9. Do not exceed rated capacities of the jack.
10. Lifting capacity decreases as lifting nose distance from base increases.
11. Always chock and block (stabilize) load to be lifted, as *jack will not stabilize load* to prevent it from falling.
12. Never use jack on curved or tubular bumpers. The vehicle could slide off the jack and fall causing serious injury or death.
13. Never attempt to raise more than one wheel at a time and do not lift wheel more than 2" above the ground.
14. Never work under a raised load unless load has been transferred to jack stands or suitable supports. As a precaution, insert 1/2-inch diameter bolt (not included) into rail immediately below lifting mechanism.
15. Always place handle in upright position until it catches, before tripping the reversing latch to lower load. This will prevent handle from moving up or down rapidly, which could cause serious or fatal injury if handle comes into contact with your head or body.
16. Always keep your head away from travel path of handle.
17. Always keep a firm grip with both hands on handle when using this jack. Maintain firm footing and balance while pumping handle.
18. Improper lowering of loads can be dangerous. During lowering, the weight of the load pushes *up* against the handle. If your hands slip off the handle, or the handle is in horizontal position when you trip the reverse latch, it may move up very fast. If your head is in the travel path of the handle, it could strike you causing serious or fatal injury.
19. Place complete lifting nose under object to be lifted, to prevent shifting of load.
20. Do not drop weight onto lifting nose.
21. All persons must stay clear of load being lifted, lowered, pulled, winched or clamped.
22. If raised load falls, it can cause serious injury or death.
23. Never push lifted load off jack.
24. Jack must be loaded with 50kg (110 lb) or more to lower load step-by-step. Otherwise lifting nose (and load) will drop.
25. If any part of the jack fails to work properly, discontinue use and have jack repaired at an authorized JET service center.
26. Never attempt to repair jack while jack is under load.
27. Do not modify jack.
28. Do not use extension on handle. Warranty is void if handle extension is used.
29. Always use genuine factory replacement parts only.
30. When operating tools, wear impact-resistant protective eyewear with side shields that meets ANSI Z87.1 requirements.
31. Do not operate this tool while tired or under the influence of drugs, alcohol or any medication which might impair your judgment.
32. Failure to comply with all of these warnings may result in loss of load, damage to jack, personal injury and/or property damage.

Familiarize yourself with the following safety notices used in this manual:

CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible tool damage.

WARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

5.0 Features and Terminology



Figure

6.0 Specifications

Model number FJ-3-1/2A
 Stock number 440436

Capacities:

Lift capacity (Rated capacity established with load at 1 foot height)..... 3200 kg (7000 lb)
 Winching/pulling capacity..... 2500 kg (5,500 lb)
 Clamping capacity..... 350 kg (770 lb)
 Minimum lifting nose height..... 110 mm (4.3 in)
 Maximum lifting nose height..... 1030 mm (40-1/2 in)
 Lift per handle stroke..... 19 mm (3/4 in)
 Total travel of running gear assembly along rail (approximate) 92 cm (3 ft.)

Materials:

Runner body..... cast iron
 Rail..... steel
 Climbing pins..... zinc plated steel
 Handle..... steel
 Base..... zinc plated steel
 Reversing latch zinc plated steel
 Paint finish..... powder-coat

Dimensions and Weights:

Rail (LxWxThk)..... 1230 x 50 x 10 mm (48 x 2 x 0.4 in)
 Lifting nose (LxW) 100 x 37 mm (4 x 1-1/2 in)
 Lifting nose hole diameter 14 mm (0.55 in)
 Rail holes (diameter) 14 mm (0.55 in)
 Base dimensions..... 180 x 115 mm (7 x 4-1/2 in)
 Handle length..... 750 mm (30 in)
 Handle diameter 32 mm (1-1/4 in)
 Shipping carton dimensions (LxWxH) 124 x 24 x 14 cm (49 x 9-1/2 x 5-1/2 in)
 Net weight 13 kg (29 lb)
 Shipping weight..... 16 kg (35 lb)

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET, reserves the right to change specifications at any time and without prior notice, without incurring obligations.

6.1 Base hole centers

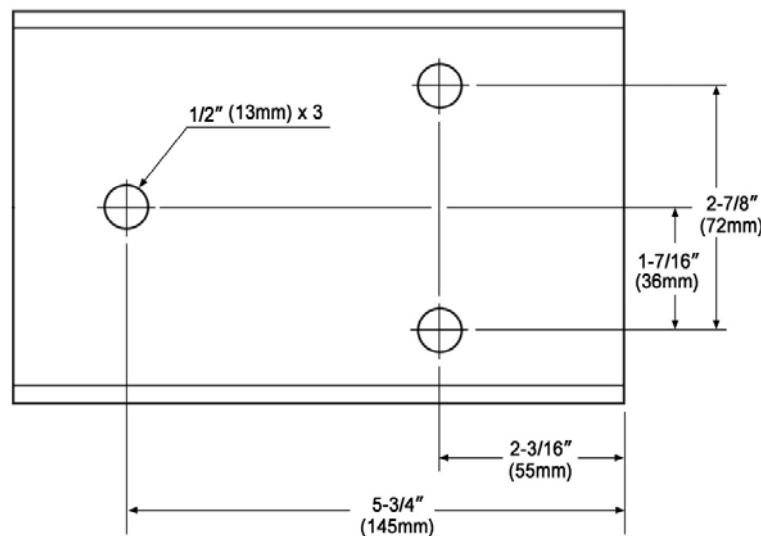


Figure 2

7.0 Lubrication

Keep jack clean and oiled. Use a light penetrating oil, or silicone spray – do not use grease or motor oils. Before every operation, inspect and make sure the following areas of the jack are lubricated (Figure 3).

Lubrication of these parts is essential to ensure proper jack operation and will prolong the life of the jack.

1. Front and back edges of rail. Keep edges of rail free from rust.
2. Upper clevis pin
3. Cross pins
4. Lower clevis pin
5. Climbing pins and springs
6. Reversing latch and pivot bolt
7. Reversing latch spring.

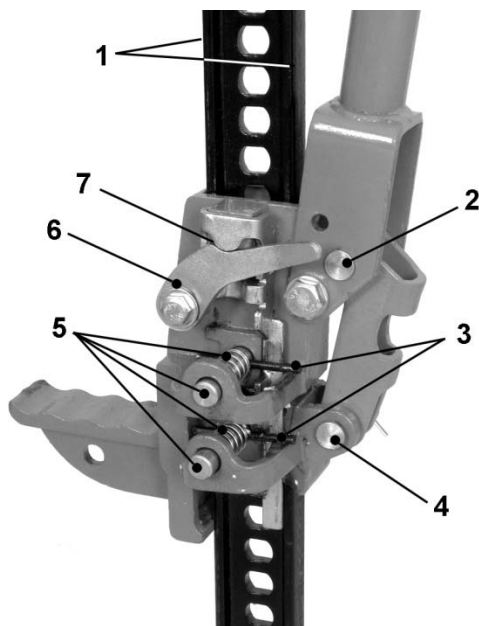


Figure 3

8.0 Pre-Operation Inspection

Prior to operation, test jack on a hard level surface with no load. Pay close attention to climbing pin and complete running gear assembly operation. There should be no binding of moving parts.

Make sure there are no cracks or bends in the rail, the handle, or the running gear assembly. Climbing pins and springs should be in good condition. Rail holes should be clear of obstructions.

If a problem is found with the jack, do not use until problem has been resolved.

9.0 Operation

9.1 Lifting

⚠WARNING Do not exceed the 7000 lb lift capacity. Do not use jack to support the load. Do not raise more than one wheel per lift, and no higher than 2-inches from ground. Chock and block (stabilize) load prior to lift. Never get under a load without jack stands or other suitable support. Never use jack on curved or tubular bumpers. Always place handle completely upright before tripping reversing latch – this will prevent handle from swinging up rapidly, which could cause serious or fatal injury if it contacts your head or body. Always use two hands with firm grip on handle and keep head out of travel path of handle. Always lower load slowly with extreme caution. Failure to comply may cause serious injury or death.

1. Place jack base on hard, level surface capable of supporting the jack and the load to be lifted.
2. Position handle upright until it secures in the catch on the running gear assembly.
3. Lift reversing latch until it locks in raised position. Pull straight up on handle to raise lifting nose into contact with load (pumping handle not necessary).
4. Place entire lifting nose under object to be lifted, to prevent load shifting during operation. Rail must be pointing straight up.
5. Always keep a firm grip with both hands on the handle. Pump handle slowly to raise jack (load lifts on each down-stroke). Climbing pins should alternately engage rail for proper step-by-step operation.
6. Always chock and block (stabilize) load, as jack itself will not stabilize load. This will prevent load from shifting or rolling as you lift. *Keep all persons clear from load being raised or lowered.*
7. Never work under a raised load unless load has been transferred to jack stands or other suitable supports.
8. Insert a grade-5, 1/2" bolt (not included) through a hole in the rail immediately below lifting mechanism, as a safety precaution.
9. Always keep handle upright when not operating jack.

To lower jack:

10. Position handle upright until it catches. Push reversing latch downward. **NOTE:** Jack must have 50kg (110lb) load minimum to lower jack step-by-step, otherwise lifting nose will drop immediately.

11. Pump handle with both hands firmly and slowly for proper step-by-step operation (load lowers on each up-stroke), until load is completely lowered.

Note: Load will produce upward pressure on the handle.

9.2 Winching

⚠WARNING Do not exceed the 5500 lb. winching capacity, or damage to jack and/or personal injury may occur. Working load of each chain or strap must be greater than the jack winching capacity. Exceeding winching capacity may cause top clamp clevis to bend or break causing load to shift, or the chain/strap to snap back, resulting in injury and/or property damage.

Refer to Figure 4.

The procedure below is based upon more travel being needed beyond the jack length, and involves attachment of a third chain or strap to act as tensioner while repositioning runner assembly. If the travel required is less than total travel of jack runner, a third chain or strap will not be needed.

1. Position top clamp clevis parallel to rail and secure with nut (*18mm or adjustable wrench*).
2. Remove base if necessary (*13mm or adjustable wrench*), and attach one end of a tensioner chain or strap to a hole in the rail. Reinstall base.
3. Securely attach one end of another chain or strap to the load (object to be winched). Secure opposite end of chain/strap to top clamp clevis on jack. If chain/strap won't fit through hole of clevis, use a shackle.
4. Position runner assembly at beginning of its travel along the rail.
5. Secure a third chain/strap to a fixed object, and connect its opposite end to lifting nose of jack.
6. Begin winching, using similar procedure to that of lifting (*section 9.1*).
7. When runner assembly reaches end of travel, hook tensioner chain as far back as possible toward fixed object.

8. Trip reversing latch, allowing the tension to be absorbed by tensioner chain.
9. Return runner assembly to beginning of travel, and reconnect fixed object chain without slack as far behind tensioner chain as possible.
10. Begin winching again. The tensioner chain will slacken.
11. Repeat process as needed.

9.3 Clamping

⚠WARNING Do not exceed the 770 lb. clamping capacity, or damage to jack and/or personal injury may occur. Exceeding clamping capacity may cause top clamp clevis to bend or break resulting in injury and/or property damage.

Refer to Figure 5.

1. Securely fasten top clamp clevis in 90° position to rail. The top clamp clevis may be secured to any hole along the rail.
2. Object should be centered between top clamp clevis and lifting nose.
3. Pump handle as needed to clamp object in place.

10.0 Storage

1. Lower lifting nose completely.
2. Position handle upright until it catches.
3. Lift reversing latch until it locks in "up" position.
4. Store jack in upright position, preferably indoors in a clean and dry location. If stored outdoors, use suitable cover to protect jack from moisture.

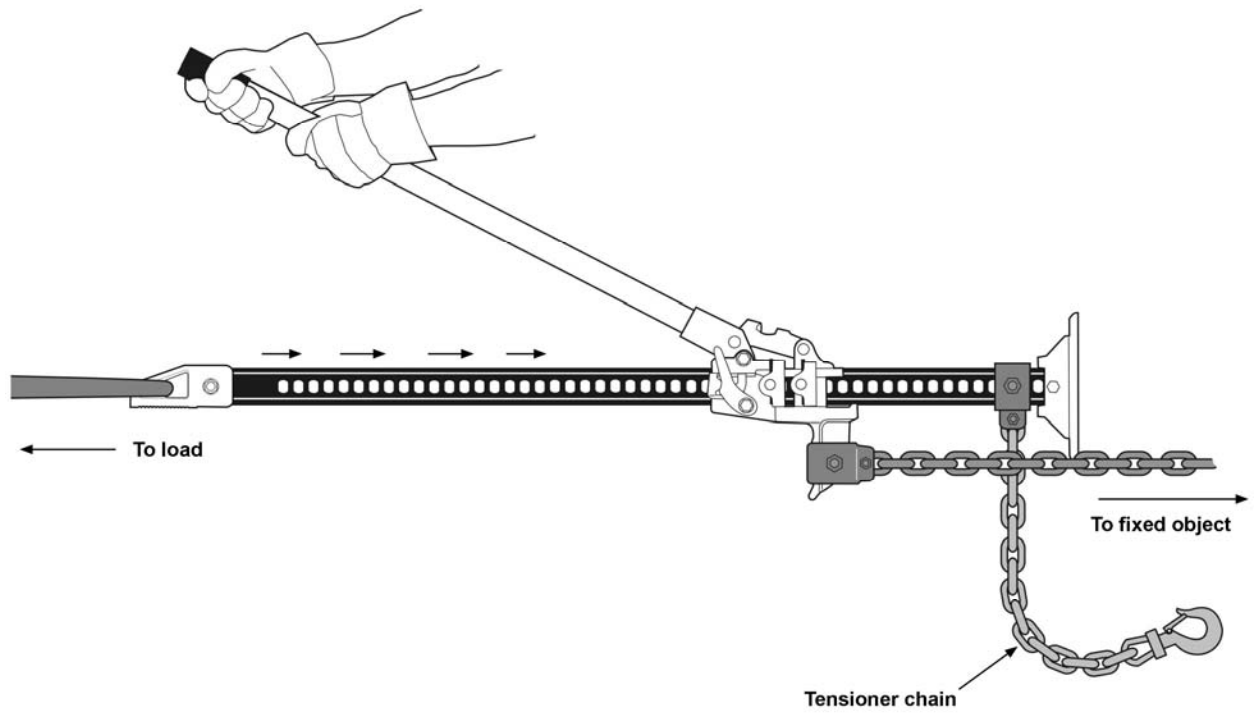


Figure 4
Winching operation

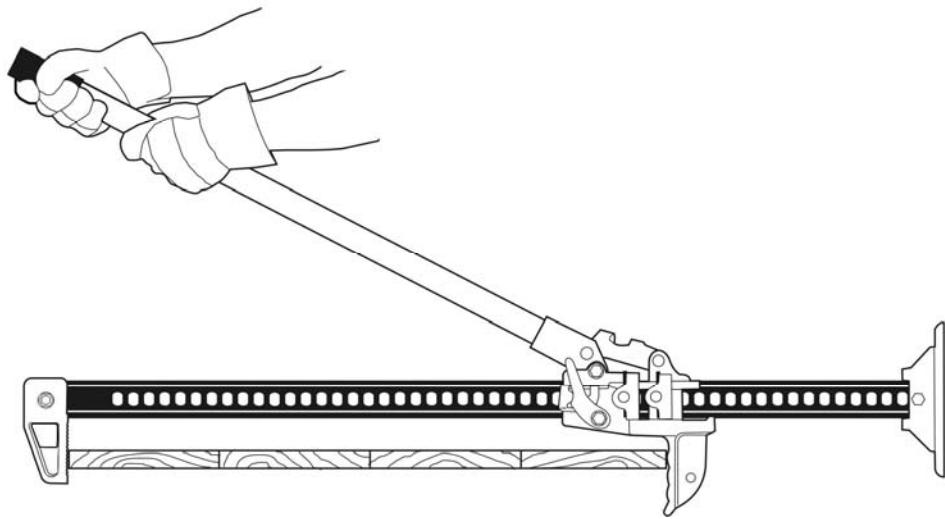
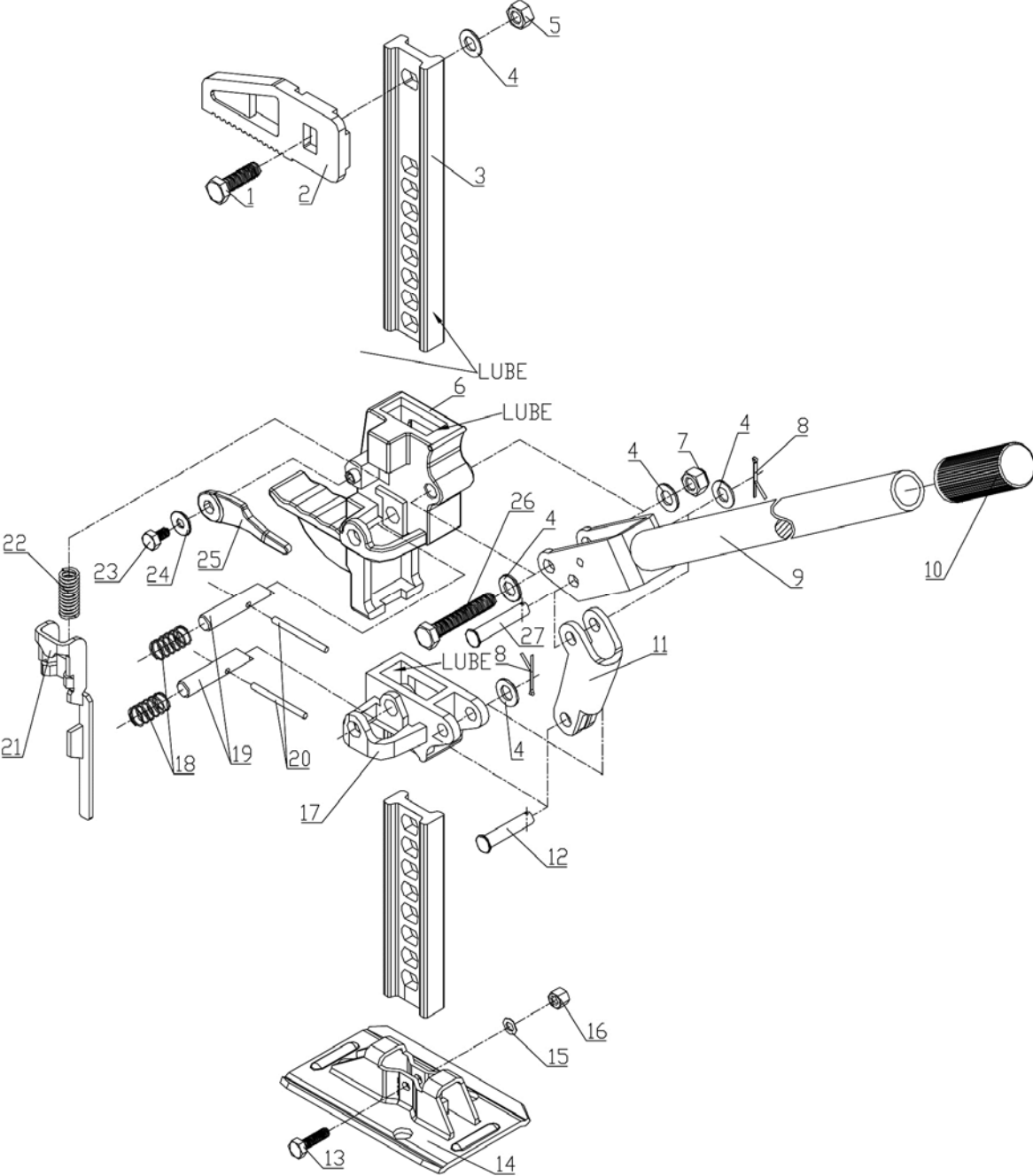


Figure 5
Clamping operation

11.0 Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, www.jettools.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

11.1.1 FJ-3-1/2A Farm Jack – Exploded View



11.1.2 FJ-3-1/2A Farm Jack – Parts List

Index No	Part No	Description	Size	Qty
1	TS-1492041	Hex Cap Screw	M12 x 40	1
2	FJ3A-2	Top Clamp Clevis		1
3	FJ3A-3	Rail		1
4	TS-2360121	Flat Washer	M12	5
5	TS-1540081	Hex Nut	M12	1
6	FJ3A-6	Large Runner		1
7	TS-2342121	Lock Nut	M12	1
8	FJ3A-8	Cotter Pin	Ø2.5x30 mm	2
9	FJ3A-9	Handle		1
10	FJ3A-10	Rubber Grip		1
11	FJ3A-11	Connecting Arm		1
12	FJ3A-12	Lower Clevis Pin		1
13	TS-1490051	Hex Cap Screw	M8x30	1
14	FJ3A-14	Base		1
15	TS-1550061	Flat Washer	M8	1
16	FJ3A-16	Hex Nut	M8-L	1
17	FJ3A-17	Small Runner		1
18	FJ3A-18	Climbing Pin Spring		2
19	FJ3A-19	Climbing Pin		2
20	FJ3A-20	Cross Pin	Ø5x60 mm	2
21	FJ3A-21	Reversing Latch Cam Bar		1
22	FJ3A-22	Reversing Latch Spring		1
23	FLJ45-4	Hex Cap Screw	M8x15	1
24	TS-1550061	Flat Washer	M8	1
25	FJ3A-25	Reversing Latch		1
26	TS-1492071	Hex Cap Screw	M12x70	1
27	FJ3A-27	Upper Clevis Pin		1
	FJ3A-28	Complete Running Gear Assembly (includes #4,6-12,17-27)		1
	FJ3A-ID	I.D. Label (not shown)		1
	FJ3-WL	Warning Label (not shown)		1

J E T

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