



OWNER'S MANUAL

FSJ-40

Floor Service Jack

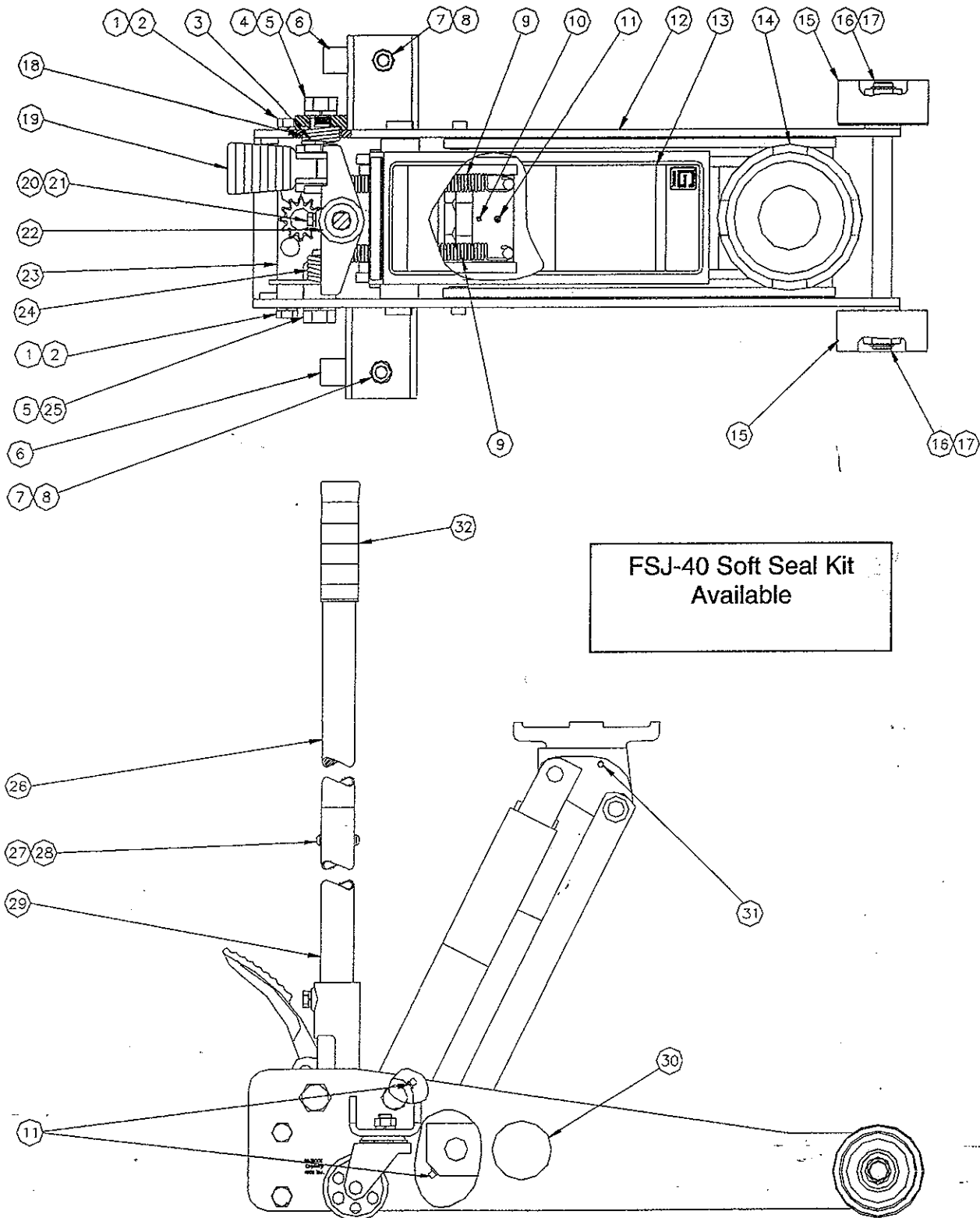


**READ THIS MANUAL CAREFULLY
AND RETAIN FOR YOUR RECORDS**

FSJ-40 PARTS LIST

96-001

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FSJ-40 PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	1-896-04022	Lock Washer, .520 I.D. X .765 O.D.
2	4	1-896-04018	Power Unit Assembly Bolt
3	1	1-896-04025	Pump Plunger Pin
4	1	1-896-04027	Left Hand Handle Pivot Bolt
5	2	1-896-04021	Lock Washer .845 I.D. X 1.230 O.D.
6	2	1-480-11030	Caster, Swivel Stem, 2 1/2 Dia.
7	2	0-204-11400	Washer, Lock, 1/2-13UNC, Medium, Steel
8	2	0-203-01400	Nut, Hex, 1/2-13UNC, Regular Steel Plated
9	2	1-896-04013	Spring, Extension, .670 O.D. X 5.940 Long
10	1	0-235-21006	Roll Pin, 3/16 Dia., X 1 1/4" Long
11	4	2-400-50000	Grease Fitting, 3/16 Drive
12	1	4-896-02001	Frame Weldment
13	1	3-670-00207	Ident. Placard, FSJ-40, Warning & Instructions
14	1	1-896-04035	Lift Pad, 2 Ton
15	2	1-896-04012	Wheel, 3 1/2 Dia. X 3/4 Bore
16	2	1-204-01704	Washer, 1.005 OD X .755/.765 ID X .065 Thick
17	2	1-230-12001	Retaining Ring, External, 3/4 Dia.
18	1	1-896-04014	Foot Pedal Spring
19	1	2-896-04028	Foot Pedal
20	1	1-896-04020	Lock Washer, .420 I.D. X .620 O.D.
21	1	1-896-04016	Lower Handle Assembly Bolt
22	1	2-896-01001	Handle Sleeve Subassembly
23	1	2-353-40055	Hydraulic Power Unit
24	1	1-896-04015	Handle Spring
25	1	1-896-04026	Right Hand Handle Pivot Bolt
26	1	2-896-04004	Top Handle Tube
27	2	1-896-04001	Handle Assembly Bolt
28	2	1-896-04002	Lock Washer, .265 I.D. x .417 O.D.
29	1	2-896-04003	Bottom Handle with Roll Pin Installed
30	1	1-670-10165	Information Placard, Made In USA
31	1	0-235-22008	Roll Pin, 1/4 Dia. X 2" Long
32	1	1-232-20148	Handle Grip

Troubleshooting

The following is a list of common problems and solutions. If the solution listed fails to correct the problem, call **Gray Automotive Customer Service At 1-800-821-7320**. Please have the model number and serial number of your jack available. The serial number is permanently stamped near the rear of the right hand frame rail.

PROBLEM

CAUSE / SOLUTION

Fails to lift load.

Low oil level. See Adding Hydraulic Fluid

Release knob open. Close release knob

Jack is overloaded. Use other lifting means.

Fails to hold load.

Release knob not securely closed. Turn release knob clockwise to tighten.

Reservoir leaks.

Oil fill plug not inserted properly or missing. Install properly / Replace if missing.

Reservoir is overfilled. Oil will leak from the oil fill plug if the reservoir is overfilled.

Adding Hydraulic Fluid

1. Remove the FSJ-40 from service.
2. The lift arm must be in the fully lowered position and the jack must be on a level surface.
3. Clean around the surface of the oil fill plug to prevent contamination of the hydraulic oil system.
4. Remove the oil fill plug. Visually check the hydraulic oil level. The fluid should be visible and just covering the hydraulic cylinder. If the fluid level is low, add a high grade hydraulic fluid equivalent to Mobil DTE #11 so the oil level just covers the cylinder. **CAUTION:** Do not use brake or transmission fluid. Use of the wrong fluid can deteriorate the seals and corrosion problems will occur.
5. Reinstall the oil fill plug. Clean up any spilled oil. Test the jack for normal operation.
6. If the lift pad still doesn't rise to proper height, repeat steps 1-5 above, this time adding two more ounces of oil. If this doesn't solve the problem, call Gray Customer Service at **800-821-7320**.

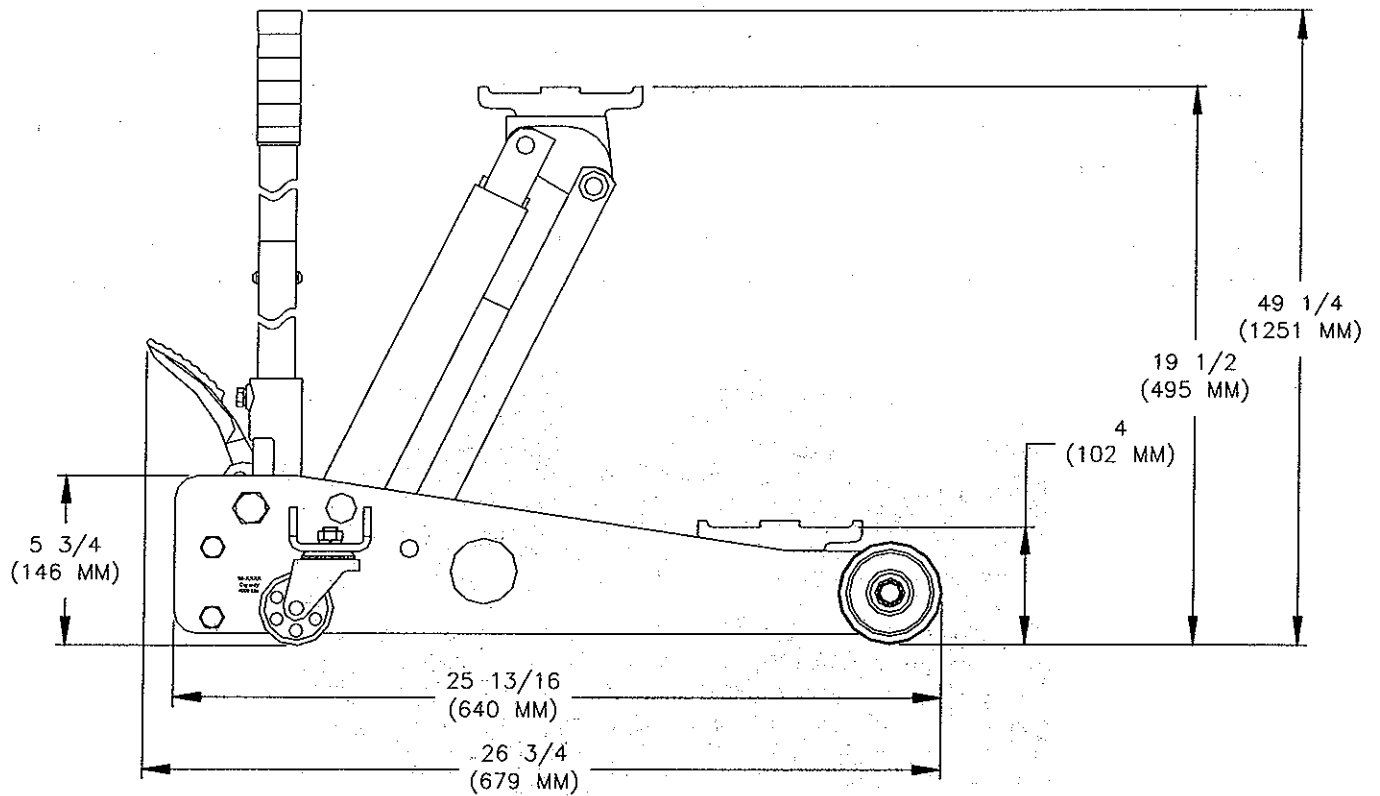
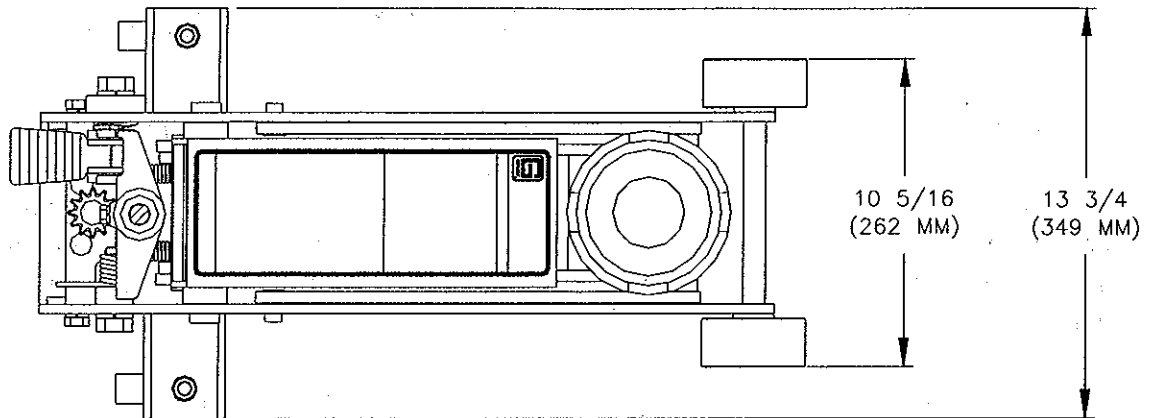
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Foreword

Thank you for your purchase. With Gray products, you take part in a long history of product engineering for the transportation service industry. Company founder J. H. Gray applied for his first automotive jack patent in 1921, and since 1952 Gray has been producing the highest quality hydraulic and pneumatic equipment available for the professional service technician. Our purpose is to provide you with quality equipment that makes your job easier, and with exemplary service after the sale. Please call Gray's customer service, at 1-800-821-7320 or 816-233-6121, with any comments or questions.

Specifications



Capacity	4,000 lbs. / 1,815 kg.
Weight	84 lbs. / 38 kg.
Minimum Saddle Height	4" / 102 mm
Maximum Saddle Height	19 1/2" / 495 mm
Width	13 3/4" / 349 mm
Chassis Length	26 3/4" / 679 mm
Chassis Height	5 3/4" / 146 mm

Safety

Owner and / or Operator Responsibilities

1. The use of portable automobile lifting devices is subject to certain hazards that cannot be prevented by mechanical means; rather only by the exercise of intelligence, care and common sense can such hazards be minimized or totally eliminated. It is therefore essential to have personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Persons impaired by medication, drugs or alcohol must not use portable automotive lifting devices. Examples of hazards are dropping, tipping, or slipping of motor vehicles or their components caused primarily by improperly securing loads, overloading, off centered loads, use of the lift on other than hard, level surfaces, and using the lift for a purpose for which it was not designed.
2. The Owner/Manager must make this manual available to all personnel using his Gray FSJ-40 Jack. They must read and understand the contents of this manual. If language barriers or other limitations require, the owner or manager must read and explain the contents of this manual as necessary to insure that all such persons observe and understand the proper procedures for use of the FSJ-40 jack.
3. Retain this manual. Make it available to all persons in need of the information contained herein. For additional copies of this owners manual, contact Gray Customer Service: **1-800-821-7320**.

To reduce the risk of serious personal injury and property damage from falling loads, follow all the instructions listed below and contained in the owner's manual.

1. Use the FSJ - 40 only on hard, level surfaces.
2. Do not use this jack in conjunction with any other equipment used to raise a vehicle.
3. Only the lift pad should contact the vehicle. Do not allow any other part of the jack to contact the vehicle.
4. The jack must be free to roll forward 8 inches during lifting and backward during lowering. Avoid any wheel obstructions such as uneven expansion joints, gravel, or tools. Load loss may occur if the rolling movement of the jack is impaired.
5. Do not use blocks or cribbing devices with this jack.
6. Maximum lifting capacity is 4,000 lbs. / 1,815 kg. Do not overload.
7. Use the FSJ - 40 only as a lift, not as a support stand. Never begin work on a vehicle until it is properly supported by support stands. When installing or removing support stands, keep your body from under the vehicle as much as possible. Remove the jack from the work area before servicing the vehicle.
8. Use the FSJ - 40 for lifting vehicles only.
9. Do not move or dolly the vehicle while on the jack.

Receiving Inspection

1. Before attempting to operate this jack, thoroughly read and understand this manual. Completely remove all tape and packaging.
2. Inspect the FSJ-40 Floor Service Jack immediately upon delivery. If shipping damage is evident, inform the delivering carrier immediately and contact Gray Customer Service at **1-800-821-7320**.
3. If for any reason this jack does not operate properly after reviewing the steps above, consult page 7, Troubleshooting in this Owner's Manual or call **GRAY'S CUSTOMER SERVICE HOTLINE TOLL FREE 1-800-821-7320** for further instructions and assistance. Please have the model number and serial number of your jack available. The serial number is permanently stamped near the rear of the right hand frame rail.

Notice - Any modifications to the jack or damage resulting from the lifting of a vehicle with other than the factory supplied lift pad or adapters shall void all warranties expressed or implied.

Operating Instructions

Operational Features

Manual Pump Handle: The jack can be operated by pumping the foot pump or handle to contact the load and then using the handle to lift the load.

4,000 lbs. / 1,815 kg. Capacity: This jack has the capacity to lift 4,000 lbs / 1,815 kg.

Lift Capabilities: The lift pad raises a high 19 1/2 inches for lifting vehicles the necessary height for easy servicing and removal and installation of major components.

Precise Release Control: The release handle offers precise control of lowering the raised vehicle on to stands or to the ground when vehicle servicing is finished. The release control is equipped with a full open stop to prevent loss of oil.

Easy Maneuverability: The rear swivel casters, heavy duty front wheels, and the handle allow for excellent maneuverability, easy handling and long life.

Warranty - The Gray Automotive Products Co. FSJ-40 Floor Service Jack is covered by a limited one year warranty.

FSJ-40 Jack Operation

1. To raise a vehicle, close the release by turning the handle clockwise. Position the lift pad properly to the vehicle, and pump the handle or foot lever while standing clear of the vehicle. Operate the jack to bring the lift pad into light contact with the vehicle beneath a manufacturer's recommended lift point. Check to make sure the lift pad contacts the lift surface squarely and the lift pad cup or lugs engage in a secure manner to prevent lift pad slippage and possible load loss.
2. Position adequate stands under the vehicle manufacture's recommended lift areas to provide stable support for the raised vehicle. Make sure all personnel are clear of the area. Lower the lift arm slowly by carefully turning the handle counterclockwise. When lowering the jack, it is important to keep the rate of lowering under control to assure the recommended vehicle lift points will properly rest on the stand pad. Lower the lift arm until the stands are supporting the entire load. The jack must be removed from the area before work on the vehicle begins.
3. To lower a vehicle, clear the area of personnel, tools and equipment. Position the jack so the lift pad will contact the vehicle properly. Rotate the handle clockwise to close the release and raise the vehicle. Remove the stands. Carefully open the release (rotate handle counter clockwise) to slowly lower the vehicle to the ground.

Lifting Instructions

1. This jack is designed for use only on hard, clean, smooth, and level surfaces capable of sustaining the load. Use on other than hard level surfaces can result in jack instability and possible loss of load.
2. Make sure the jack is free to roll forward during lifting and backward during lowering. There must not be any wheel obstructions or floor surface irregularities such as uneven expansion joints, gravel, tools or other obstacles to prevent the jack's wheels from rolling. Load loss can occur during raising or lowering of a load if rolling movement of the jack wheels is impaired.
3. Lift the vehicle using the vehicle manufacturer's recommended lift points.
4. Do **NOT** overload the jack. Maximum rated load is 4,000 lbs. (2 tons) / 1,815 kg. Overloading can cause damage or failure of the jack. **NEVER** use any other jack along with the FSJ-40 jack to lift a vehicle. If the FSJ-40 jack does not have enough capacity to raise a load, remove it and use a jack with adequate capacity. Failure to observe this instruction may lead to unstable or overload conditions which could cause failure of one or both of the jacks.
5. Use only the lift pad as the lifting contact means. Do **NOT** attempt to use any other part of the FSJ-40 as a lifting point. Do **NOT** use any kind of cribbing or adapters when raising or lowering vehicle.
6. Reposition the jack if the vehicle pulls or pushes the lift arm sideways.
7. The FSJ-40 jack is designed solely for the lifting of vehicles. Use of the jack for any other purpose constitutes misuse of the jack. Misuse of the jack voids all warranties expressed or implied.

8. After raising a vehicle, **NEVER** allow any part of your body to pass under it and **NEVER** begin work on the vehicle until it is properly supported by means of adequate stands. Once the vehicle is properly supported by adequate stands, the jack must be removed from beneath the vehicle before work on the vehicle begins.
9. Do **NOT** drive the vehicle off of the FSJ-40 jack, or attempt to move the vehicle at any time while it is supported by the jack.
10. Do **NOT** modify the FSJ-40 jack in any manner. Modifications to the jack will void all warranties expressed or implied.

Maintenance Instructions

WARNING: All inspection and maintenance procedures should be performed with the jack removed from service. Failure to do so may result in bodily injury or property damage.

NOTICE: The owner must appoint a knowledgeable person, to inspect the jack. Each jack must be inspected immediately if subjected to an abnormal load or shock. Regular inspections should be made weekly for daily use and monthly for intermittent use. Any jack which appears to be damaged in any way, is found to be badly worn, or operates abnormally **SHALL BE REMOVED FROM SERVICE** until necessary repairs are made. If you need assistance, contact Gray Customer Service (800)-821-7320.

If any of the problems noted below are observed, the jack **MUST BE IMMEDIATELY REMOVED FROM SERVICE** until all of the problems noted are corrected.

1. Inspect lift pad regularly and replace if it is cracked, chipped or shows signs of excessive wear.
2. The jack should raise and lower smoothly through its full range. Inspect the lift arm for damage such as permanent bends and/or twist.
3. Grease the jack once per month with a good bearing grease. There are grease fittings located on the pivot tube of the lift arm, the block on the rod end of the cylinder, and on each side of the drag link.
4. All controls should operate freely. Oil all rotating and sliding portions of jack monthly.
5. Inspect for oil leaks. If oil leaks occur, refer to the "Troubleshooting", page 7 of this manual.
6. Check hydraulic oil level in the oil reservoir. Refer to the "Adding Hydraulic Fluid", page 6 of this manual.
7. All warning and capacity labels should be readable and complete. Wash external surfaces of jack with a soap solution. If a pressure washer is used, care should be taken not to damage the placards.

Structural Inspection

Before each use, visually inspect all components of the FSJ-40 Floor Service Jack for signs of corrosion and/or excessive wear.

Note: The FSJ-40 **MUST** be removed from service and inspected for damage immediately if the jack is subjected to an abnormal shock or load.

Inspect the FSJ-40 daily as follows:

1. Visually inspect the jack frame and lift arm for signs of cracking, chipping, or excessive wear, including all welds.
2. Visually inspect all four wheels for cracking, chipping or excessive wear.
3. Visually inspect the lift arm for any permanent deformation such as bending or twisting. The lift arm should raise and lower smoothly. If the lift arm doesn't raise to full height, refer to the **Adding Hydraulic Fluid** section of this manual.
4. Visually inspect the power unit for oil leaks.

If any irregularities or problems are detected during an inspection, the FSJ-40 must be removed from service immediately and repaired. Contact Gray Customer Service toll free at **800-821-7320**.

Adding Hydraulic Fluid

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