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SCREW JACKS Operational Manual Reference # - 54209 Rev. - B Date - 0111



### **IMPORTANT - READ CAREFULLY**

This manual contains important information about the correct installation, operation and maintenance of this equipment. All persons involved in the installation, operation and maintenance of this equipment must be thoroughly familiar with the contents of this manual. To safeguard against the possibility of personal injury or property damage, follow the recommendations and instructions of this manual. Keep this manual for reference.

### WARRANTY STATEMENT

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SIMPLEX products are warranted to be free of defects in materials and workmanship under normal use for as long as the original purchaser owns them, subject to the guidelines and limitations listed. This warranty does not cover: normal wear & tear, cosmetic items, abuse, overloading, alterations, improper lubrication, or use in a manner for which they are not intended. If the customer believes a product is defective, the product must be delivered, or shipped freight prepaid, to the nearest SIMPLEX Authorized Service Center for evaluation and repair.

### **RECEIVING INSTRUCTIONS**

Important! Make sure to inspect all of the components for shipping damage. If damage is found, notify carrier at once. Shipping damage will not be covered by warranty. The carrier is responsible for all loss associated with shipping damage.

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### - Note -

This Operational Manual is intended as a technical guideline only. SIMPLEX accepts no liability for any use or reliance made of any information in this Operational Manual. All information, illustrations and specifications in this Operational Manual are based on the latest information available at the time of publication. SIMPLEX reserves the right to make changes at any time without notice. Equipment operators and installers shall be responsible for ensuring that a safe working environment and safe systems of work are in place before operating the equipment.



# **Screw Jacks**

## **1.0 SAFE OPERATING PROCEDURES & SAFETY PRECAUTIONS**



CAUTION: Prior to use, the operator should be instructed by a qualified person in the safe and proper use of the jack for the specific application.



**IMPORTANT**: Simplex makes no claim that the jacks covered by this document are suitable for any general or particular use and the user assumes all liability arising therefrom. In addition, to comply with the requirements set forth by ANSI B30.1 Chapters 1-1, 1-2 and 1-3, all jacks should be examined by a qualified person prior to each use for damage, proper lubrication, and wear.



**IMPORTANT**: The jack should be operated through one complete travel cycle prior to application of load to verify that all mechanisms properly function, and the jack is in good working condition.



WARNING: Never exceed the rated capacity or travel of the jack. Select a jack of greater capacity than the estimated load allowing a large margin of safety.



**CAUTION**: Never use a jack that is damaged, dirty, improperly lubricated, or malfunctioning. Jacks that fail inspection must be removed from service until repaired by an authorized service center.



**WARNING**: Do not lift human cargo. Do not allow personnel on or under the load until lifting is complete and the load is secure with proper load supports installed in accordance with OSHA safety and health standards. Ensure that supports have been inspected and approved by a safety engineer or qualified person of authority.



WARNING: Any jack exceeding 40.7 LBS (18.5 Kg) should be positioned or transported by mechanical means using the lift point indicated on the jack decal.



**IMPORTANT:** Prior to operating the jack to lower the load, read operating instructions. Operator should perform the lowering process and follow the procedure above, taking precautions that all personnel and parts of the human body are clear of the load before lowering.



**WARNING:** Never apply lever force to extend the jack after contact with immovable objects has occurred. Never kick, jump on, stand on, or straddle the lever bar. Do not strike with a hammer or force the lever in a rocking motion. Such actions create a personal injury hazard, the jack could become dislodged causing the load to drop, and jack working parts could also become damaged and fail.



**WARNING:** The capacity and model number is permanently marked on the side of each jack housing and depicts the maximum load to be sustained by each model. The maximum screw travel is also listed in the table below by jack model and capacity. Do not exceed jack capacity or travel.



**CAUTION:** The jack capacity is the rated load that the jack is designed to sustain under controlled conditions. The rated load is the maximum gravity load to be applied at the load point axial to the jack screw only. Controlled conditions are conditions of application in an ambient temperature range of -20.25 °f to 140.25 °f, where the jack is evenly supported on a solid foundation, protected against wind, side loads and other external forces, such as shock loads or vibrations.



**CAUTION:** As a safety precaution, remove the lever bar from the head after lifting is complete and when jacks are not in operation. Accidentally striking an unattended lever bar projecting from the jack could dislocate or dislodge the jack causing the load to drop. Unattended lever bars could present a trip hazard.

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## **2.0 TECHNICAL SPECIFICATIONS**



	Sustaining	Dimensions (mm)				Handle	Weight
	Capacity (tonnes)	Α	В	С	D Cap Diameter	Effort / Ton (kg)	(kg)
		Closed Height	Stroke	Base Diameter			
SJ156		248	95	121	73	7,3	4,5
SJ158	10,9	295	146	140		7,3	5,4
SJ1512	1	397	248	159		7,3	7,3
SJ208		298	127	152	79	6,8	7,7
SJ2010	18,1	349	178	165		6,8	9,1
SJ2012		400	229	171		6,8	10,9
SJ258	21,8	330	108	165		6,8	12,7
SJ2512		432	210	184	83	6,8	16,8
SJ2518		584	362	216		6,8	23,6

## **3.0 JACK OPERATING INSTRUCTIONS**

Place the jack on a firm foundation, capable of supporting the expected load. Make sure the jack base is properly aligned pe 2 ndicular to the load and that the base is fully supported. Also, be sure that the jack is properly supported at the lifting point in a manner that the jack cannot slip or the load cannot shift.



**CAUTION**: The operator should make sure that the area is clear of personnel and objects obstructing working space required to safely move the jack lever bar in both the counter clockwise and clockwise direction. The operators head and body should be positioned to one side of the lever bar in a manner to prevent serious injury should the lever bar suddenly swing unrestricted.



**WARNING**: Use the simplex lever bar recommended for the specific jack model. The lever bar to be used should not exceed the length specified in the table. Lever bar extenders must not be used.

To operate, insert the lever bar illustrated in (2) into the selected hole of the jack's 4-way head. Make sure that the lever bar engages full length of the hole. Grip the lever bar firmly, and exerting a controlled force, turn screw clockwise to extend or counter clockwise to retract, moving the bar to the adjacent hole between rotations of the screw.



**WARNING**: Do not exceed the jack travel shown in the table. Read warning and caution notes and observe the screw during operation as illustrated in (3), to make sure that the bottom of the screw is never extended beyond the top of the safety peephole. Exceeding maximum travel could result in loss of stability and cause the load to topple. Do not continue to apply force to the lever bar after the load makes contact with immovable objects, or when maximum travel is reached.

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## **4.0 MAINTENANCE & LUBRICATION INSTRUCTIONS**

- 1. Comply with the inspection, testing and maintenance requirements of ANSI B30.1 as determined from use, experience or as specified by a qualified person of authority.
- ANSI B30.1 Safety Standards Please visit www.ansi.org and type "jacks" in the search window.
- 2. Keep jack clean, free of grit, and in good working condition.
- 3. Lubricate all load screw threads with #2 graphite grease.
- 4. Lubricate periodically other working parts with a good grade of SAE 20 wt. Oil avoid lubrication of base and cap load surface.

