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**PUSH / PULL JACKS**  
**Operational Manual**  
**Reference # - 54217**  
**Rev. - A**  
**Date - 0510**



**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**

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, overload-ing, 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.



# Push/Pull 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.



**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.



**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 exceed the rated capacity or travel of the jack. If unable to calculate the load exactly, select a jack of greater capacity than the estimated load allowing a large margin of safety. Never apply more than the maximum handle effort to the lever bar of the jack.



**CAUTION:** A load should never be allowed to remain permanently retained by jacks only. After load positioning or tensioning operation is complete, substantial load supports or fixed retainers should be installed.



**CAUTION:** Do not exceed screw extension limit (Section 2.0). Do not apply lever force to retract 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 could cause damage and failure.

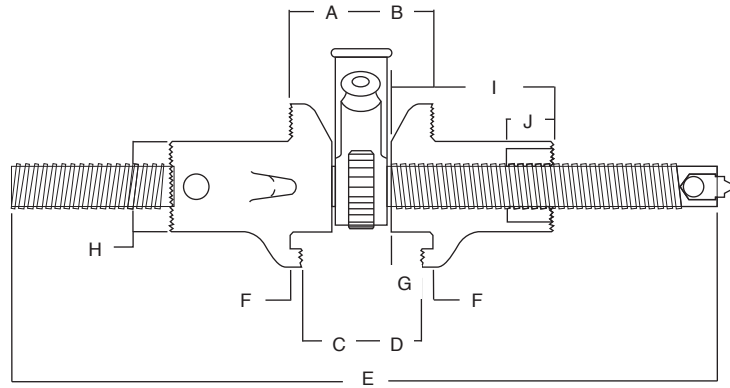


**CAUTION:** A sudden load surge to a unit, that is highly stressed in tension, could cause overload and tensile failure, creating a personal injury hazard.



**CAUTION:** Remove lever bar from the socket when not in use. An unattended lever bar projecting from the socket presents a personal injury hazard. Accidental contact with the lever bar could cause the jack to be dislodged causing the load to fall. Unattended lever bars can present a trip hazard.

## 2.0 TECHNICAL SPECIFICATIONS



Model	Dimensions (mm)									
	A	B	C	D	E	F	G	H	I	J
	Minimum	Maximum	Minimum	Maximum	Length	Length	Length	Length	Length	Length
PP610	86	206	73	193	254	8	19	60	81	32
PP61015	----	----	----	----	254	----	----	----	----	----

Model	Centered Capacity (Tonnes)	Hook/Toe Offset Load Capacity (Tonnes)	Travel (mm)	Handle Effort per ton (N)	Screw Diameter (mm)	Weight (Tonnes)
PP610	9,1	1,8	121	6,8	32	5,9
PP61015	9,1	1,8	----	6,8	32	2,3

## 3.0 JACK OPERATING INSTRUCTIONS

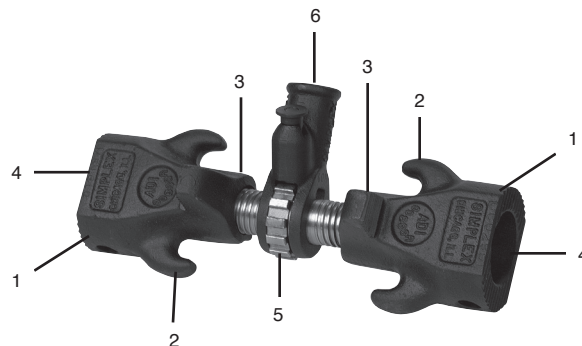
Position push/pull jack so it can be operated from the ground or in a manner where your footing is secure. The push/pull nuts (1) can be reversed for a wide range of pulling, spreader and pushing applications. Pulling applications can be configured with the use of a chain or cable attached to the hooks (2) on each end. Spreading applications require the toes (3) to be completely flush at each side of the load. Pushing applications require the nut ends (4) to be completely flush at each side of the load. The ratcheting socket (5) has two positions for expansion or pulling application. Pull the plunger knob (6) to change the position of the socket rotation.



**DANGER:** These jacks are not equipped with safety stops. Do not exceed the maximum screw extensions shown in the table (Section 2.0). Exceeding the travel length could cause thread failure and a personal injury hazard.



**WARNING:** Before each stroke and prior to exerting handle effort on the lever bar. Check to make certain that the pawl is engaged into the full tooth depth of the ratchet wheel.

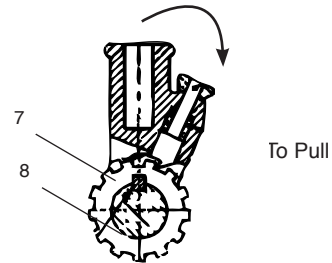
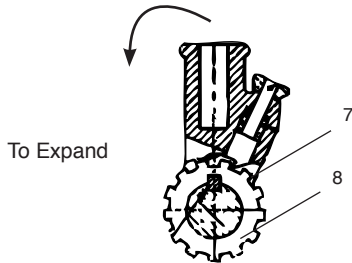


**TO EXPAND:**

With the right hand screw positioned to the left of the operator and the pawl (2) properly engaged into the ratchet wheel (3) , rotate handle (4) as shown to extend clevis eyelets.

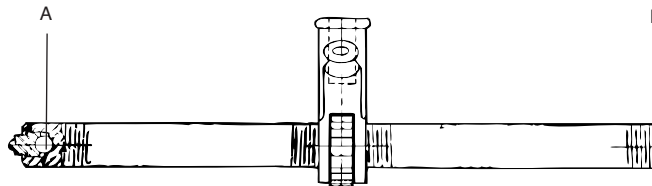
**TO PULL:**

With the right hand screw positioned to the right of the operator and the pawl (5) properly engaged into the ratchet wheel (6) rotate handle (7) to retract clevis eyelets.



**IMPORTANT:** To Reverse Plunger And Lever Action, Lift Plunger Knob Clear Of Holding Slot. Rotate One Half Turn, And Reseat Knob Firmly Into The Holding Slot.

- A) 1.25 - 6 ACME 2G Class Left Hand Thread**
- B) 1.25 - 6 ACME 2G Class Right Hand Thread**



**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](http://www.ansi.org) and type "jacks" in the search window.
2. Keep jack clean, free of grit, and in good working condition.
3. Lubricate load screw threads with #2 graphite grease.
4. Lubricate periodically other working parts with a good grade of SAE 20 wt. Oil.

