



JOYCE/DAYTON CORP.

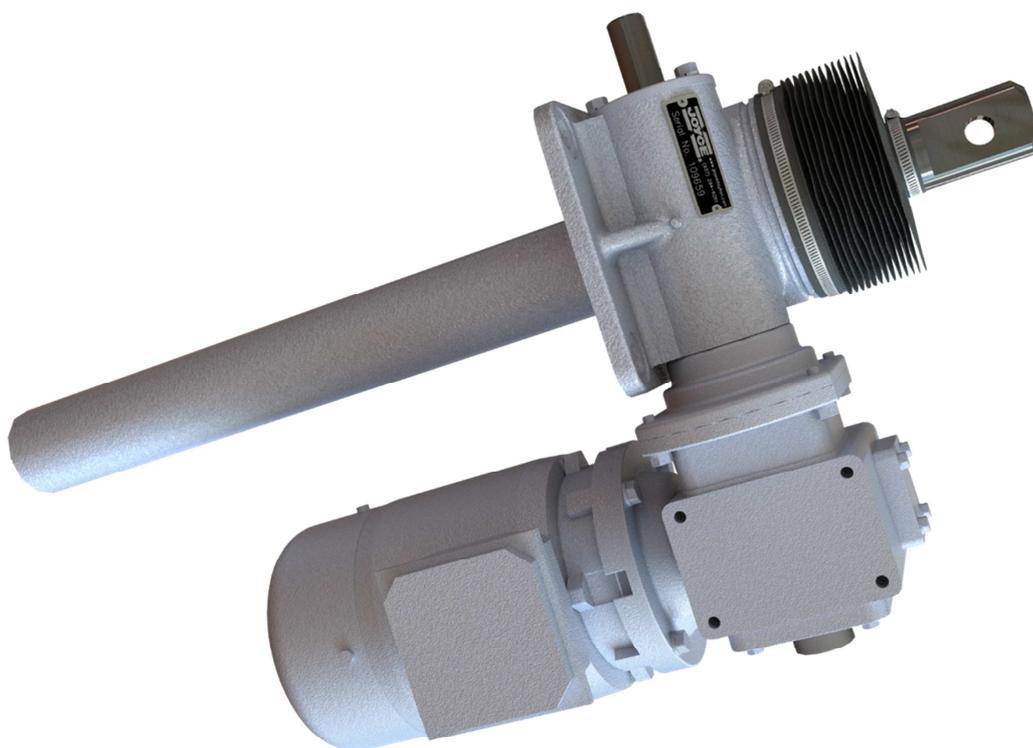
SOLAR SCREW JACKS

OPERATION AND MAINTENANCE MANUAL – FB0261

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The product described in this catalog is for industrial use only. It may not be used to lift or support people without prior written approval from Joyce/Dayton Corp. Recommendations in this manual for installation, operation and maintenance must be followed to ensure safe use. All persons responsible for the installation and use of Joyce Solar Screw Jacks must be familiar with the contents of this manual. Customer is responsible for providing travel stops.

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SECTION I

GENERAL INFORMATION

1-1 OPERATIONAL SPECIFICATIONS.

Environment	Outdoor
Temperature (Survival)	-22° to +140° F (-30° to +60° C)
Temperature (Operational)	+5° to 140° F (-15° to +60° C)
Humidity	0 to 100% with condensation
Rain	Up to 4 in/h (10 cm/h)
Solar Radiation	360 BTU/h/ft ² (1,000 Kcal/h/m ²)

For extreme cold weather operation, below 0° F, it is recommended that an insulated heat system be installed on the motor, jack and gearbox.

1-2 RECEIPT OF PRODUCT

All equipment should be inspected for damages immediately upon receipt. The customer should verify the receipt of the correct product and quantities. Any problems should be reported to Joyce/Dayton Corp. and the freight carrier as soon as possible. Products cannot be returned to Joyce/Dayton Corp. without a *Return Goods Authorization (RGA)* form (which can be requested from solar@joycedayton.com).

1-3 PRECAUTIONS OF USE AND INSTALLATION

1. Side loading of the lifting screw is not permitted in the dynamic operation of the jack. A limited side load is allowable in the static condition. Contact Joyce/Dayton for the allowable side load for a specific application.
2. In most applications, factory or manufacturer-assisted installation is not required. However, it is necessary that appropriate, qualified personnel perform the installation of Joyce/Dayton Products.
3. Joyce/Dayton jacks are not rated for shock-loading, extreme vibration or critical speed conditions (high speed or long-length screw). It is the responsibility of the user to ensure that these conditions are not imposed on a jack or power transmission equipment.

4. In the event that service or maintenance is required, the load must be secured or removed before any work can begin.
5. Never allow the jack to retract beyond the minimum closed position, as damage to the jack may occur.

1-4 GENERAL INSTALLATION INSTRUCTIONS

1. Ensure that all personnel who will service or operate equipment are familiar with its use and limitations.
2. Secure or remove the load before any installation procedures begin.
3. Be certain the rating of the jack meets or exceeds the load.
4. The jacks must be mounted on a structure sufficient to support the maximum possible load. The structure must be rigid. An under-designed structure could lead to bending of the lifting screw which causes premature failure.
5. When fastening the load to a jack, make sure the jack is in the retracted position. This positions the load accurately with respect to the jack screw centerline. Never pull the screw to one side to make connection with your structure. Fully extend the jack to make sure the load is aligned with the lifting screw.
6. Apply torque to all mounting bolts in a symmetric pattern to avoid damage to the sleeve.

SECTION II MAINTENANCE

2-1 LUBRICATION

1. Jacks are lubricated before leaving the factory.
2. For normal operation, jacks should be lubricated every 12 months. Grease through the fitting on the jack with hand or power operated equipment. Grease with No. 1.5 consistency grease. Do not allow jacks to operate without lubrication. It is the responsibility of the user to maintain sufficient lubrication of the jack and of the lifting screw.
3. The product listed below is recommended by the lubricant manufacturer to meet the requirements for normal operation. The listing of brand name is solely for the convenience of users of Joyce/Dayton equipment and their lubricant suppliers; it does not constitute any endorsement. Joyce/Dayton assumes no responsibilities for the quality, performance or availability of any listed products.

<u>COMPANY</u>	<u>BRAND NAME</u>
Mobil Oil	Mobilith SHC PM 460

4. Do not operate jack without lubrication.

2-2 RECOMMENDED MAINTENANCE ROUTINE

1. Perform regular inspections and lubricate every 12 months.
2. Inspect jack boot for wear or damage. Clean excessive dirt and grease from boot exterior.
3. Inspect jack housing, gearbox, and motor for damage or wear. Clean and touch up paint as needed.
4. Inspect jack screw for damage or wear. Apply a thin coat of grease to jack screw if needed making sure to remove excessive build-up of grime from screw threads.
5. Lubricate jack housing grease fittings with 3 shots from a standard grease gun.

2-3 SPARE PARTS AND MAINTENANCE KIT

1. Jack Boot – Contact Joyce/Dayton Corp. with jack serial number for correct replacement or spare boot.



2. Lubrication Kit – Part Number 08130768
 - 14 ounce lever action grease gun with 12 inch long flexible hose and fitting
 - 14 ounce tube of Mobilith SHC PM 460 grease
 - 1 shop rag
 - 2 pairs of disposable latex gloves (large)
 - 5 replacement grease fittings
 - 1 carrying case
3. Paint Touch-Up Kit – Part Number 08080532
 - 1 quart DuPont Corlar Epoxy Paint
 - 1 quart DuPont Corlar Activator
 - 2 32-ounce mixing cups
 - 1 shop rag
 - 2 2-inch wide disposable brushes
 - 2 pairs of disposable latex gloves (large)
 - 2 sheets of 600 grit sandpaper



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