

L2984 Rev. A 04/10

1.0 IMPORTANT RECEIVING INSTRUCTIONS

Visually inspect all components for shipping damage. Shipping damage is **not** covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repair and replacement costs resulting from damage in shipment.

2.0 SAFETY



WARNING: Lockout power to electric motor (or other prime mover) before installing the screw end adaptor or before performing any adjustments, maintenance or repairs. Be certain that the motor cannot be automatically started. Failure to observe these precautions may result in serious personal injury or death!

- Follow appropriate safety precautions to avoid personal injury or property damage during screw end adaptor installation. Enerpac cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect product and/or system operation. Contact Enerpac if there are any questions or concerns regarding screw end adaptor installation, application or use.
- Stay clear of moving and rotating parts in the Uni-Lift® system. Install guards (user supplied) as required.

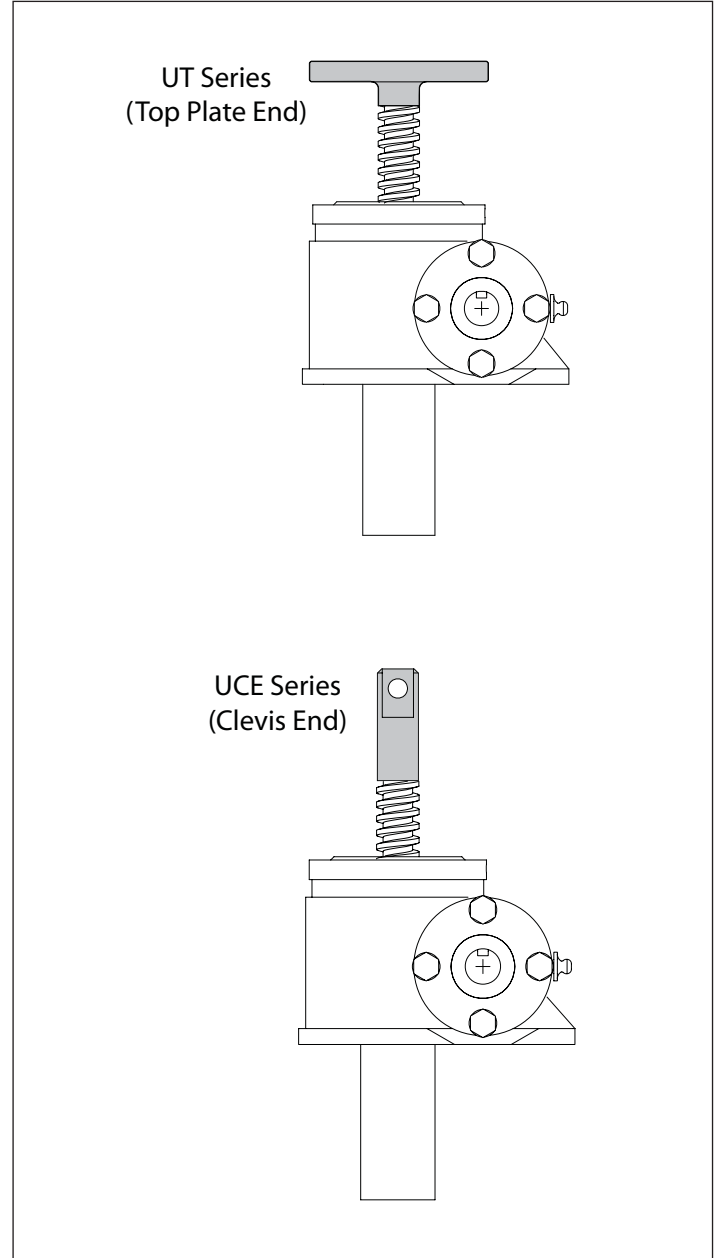


WARNING: Failure to install guards may result in serious personal injury or death.

- Contact Enerpac before incorporating Uni-Lift® products into a man lift or other people moving device (special design requirements apply).

3.0 INSTALLATION

- Refer to the instructions on the following pages of this document for detailed screw end adaptor installation instructions.
- Comply with and adhere to all applicable safety codes for your area, such as: building codes, elevator codes, AISC Steel Construction specifications, and applicable regulations and standards (including OSHA Title 29, Chapter 1910-219 and ANSI B15.1) **Note:** applicable safety codes, regulations and standards will vary depending on country and local requirements.
- Test for proper operation before placing the Uni-Lift® system into operation. Check for any indications of misalignment, binding or loose components. Verify proper shaft rotation.
- Contact Enerpac or your Enerpac distributor if there are any questions or concerns regarding installation of the screw end adaptor or any related equipment.



4.0 INSTALLATION INSTRUCTIONS - ENERPAC UNI-LIFT® SCREW END ADAPTORS

4.1 Introduction

To provide linear travel, the load screw on translating style Uni-Lift® actuators must be restricted from rotation. This is typically achieved by using either a top plate or clevis end adaptor, mounted on the V-thread end of the load screw. These accessories are commonly referred to as “screw end adaptors”.

To restrict load screw rotation, the plate or clevis side of the adaptor must be attached to a stationary (non rotating) load or its mounting structure.

Note: Screw end adaptors are for use only with translating style Uni-Lift® actuators. Do not attempt to install a screw end adaptor on a rotating style actuator.

4.2 Installation Procedure

The following procedure is provided only as a guide. The method of installation and the integrity of the connection is the responsibility of the installer.



WARNING: To prevent loosening of the screw end adaptor during Uni-Lift® operation, the adaptor must be fully threaded onto the load screw and pinned in a positive manner, as described in the following procedure.

Refer to Figures 1 and 2 during the following steps.

1. Thread the screw end adaptor onto the V-thread end of the load screw until it is fully installed and snug against the Acme thread. There should be no gap between the edge of the Acme thread and the mating surface of the adaptor.
2. Locate the pilot hole on the flange of the screw end adaptor. Refer to the “drill bit size” column in tables 1 and 2 for the required drill bit needed to complete this procedure. Drill bit size will vary, depending on actuator model.



WARNING: Use face shield and other personal protective equipment (as required - in accordance with all applicable laws and regulations) when drilling in the following step.

3. Carefully begin drilling at the pilot hole. Drill through the pilot hole, through the center of the V-thread and completely through the opposite side of the adaptor flange.

4. Install roll pin (included in adaptor kit) to secure the screw end adaptor to the load screw. **Note:** roll pin size information is provided in tables 1 and 2 for reference.
5. After installation, check that the roll pin is fully installed. Verify that each roll pin end is flush with the face of the adaptor flange.

4.3 Attachment to Structure and Load

UT Series Top Plate End Adaptor:

- Be sure the depth of the tapped holes in the structure attached to the load is at least 1-1/2 times the diameter of the mounting bolt thread.

- Be sure the grade of bolts used and the material of the structure is sufficient to support the load.

UCE Series Clevis End Adaptor:

- The clevis pin (user provided) must be of the proper size to fit the clevis hole (See Table 2, item G) of the adaptor. To ensure proper operation and long wear, the clevis pin must be manufactured from a high-strength alloy steel.

- Be certain that the clearance between the flat face of the male clevis and the corresponding surface of the female clevis is held to a minimum. This will help reduce the bending load on the clevis pin.

All Screw End Adaptors:

- Proper alignment is required to make sure that no side loads are applied to the adaptor.

- Verify that the adaptor is securely attached to the structure and restricted from rotation so that linear travel will occur.

- In applications where only one Uni-Lift® actuator is used, a linear bearing arrangement (user provided) may be required to prevent the load and load screw from rotating. See Figure 3.

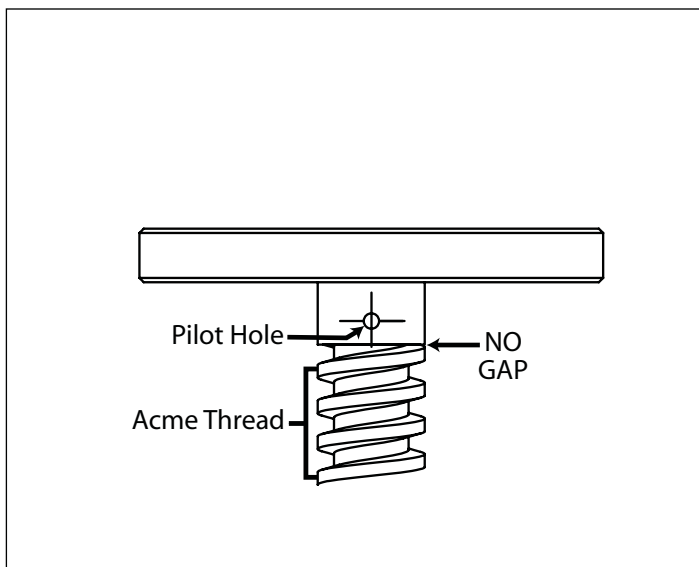


Figure 1, UT Series Pilot Hole Location

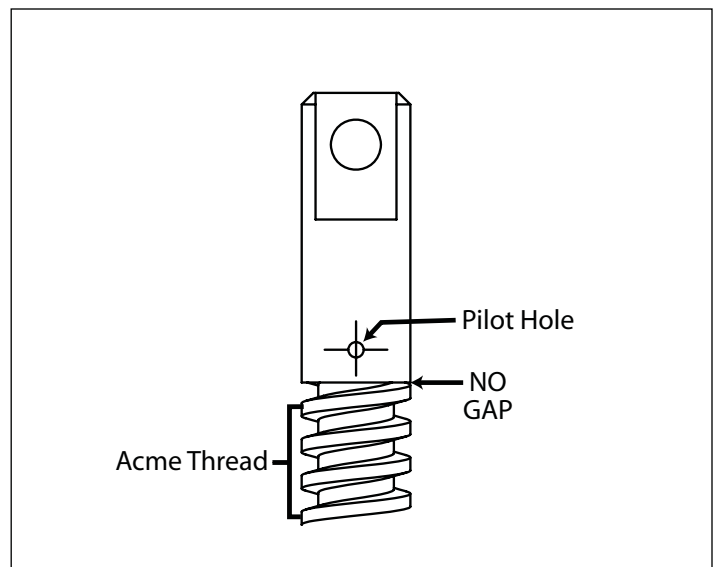
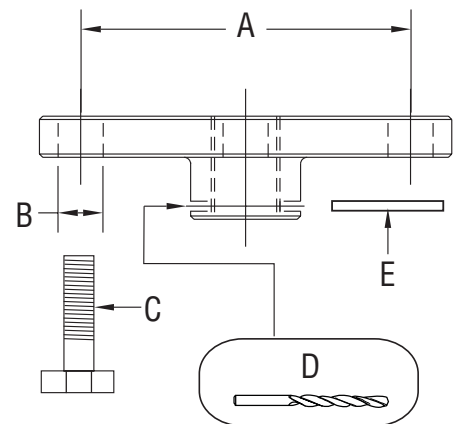


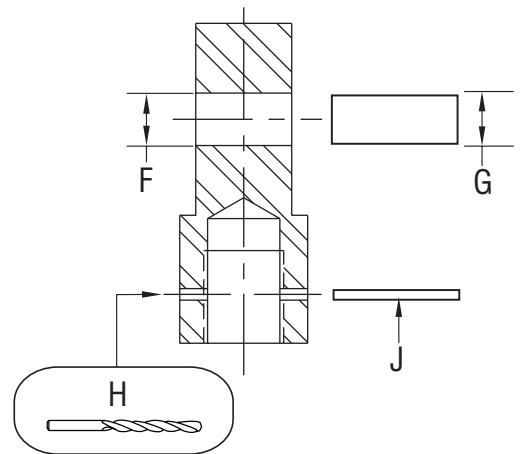
Figure 2, UCE Series Pilot Hole Location

Uni-Lift Actuator Model	A	B	C	D	E
	Bolt Circle	Bolt Hole Diameter	Recommended Bolt Size (user supplied)	Drill Bit Size (for pilot hole)	Roll Pin Size
MA5	1.50"	0.28"	1/4"	1/16"	1/16" x 7/16" Lg
MA15	1.50"	0.28"	1/4"	1/8"	1/8" x 9/16" Lg
MA20 / M1 / B1	2.50"	0.44"	7/16"	1/8"	1/8" x 5/8" Lg
M2 / M3 / B2	3.00"	0.41"	3/8"	1/8"	1/8" x 15/16" Lg
M4 / M5 / B5	3.00"	0.69"	11/16"	3/16"	3/16" x 1-1/2" Lg
M8 / M10 / B10	4.13"	0.81"	3/4"	1/4"	1/4" x 1-5/8" Lg
M15 / M20 / B20	4.13"	0.81"	3/4"	5/16"	5/16" x 2-1/4" Lg
M25	5.50"	0.81"	3/4"	3/8"	3/8" x 2-3/4" Lg
M30 / B30	6.00"	1.06"	1"	3/8"	3/8" x 2-3/4" Lg
M40	8.00"	1.06"	1"	1/2"	1/2" x 2" Lg ♦
M50/B50	8.75"	1.38"	1-5/16"	1/2"	1/2" x 2" Lg ♦



♦ Two roll pins (item E) are used for models M40, M50 and B50.

Uni-Lift Actuator Model	F	G	H	J
	Clevis Hole Diameter	Recommended Clevis Pin Diameter (user supplied)	Drill Bit Size (for pilot hole)	Roll Pin Size
MA5	0.20"	3/16"	1/16"	1/16" x 7/16" Lg
MA15	0.27"	1/4"	1/8"	1/8" x 9/16" Lg
MA20 / M1 / B1	0.33"	5/16"	1/8"	1/8" x 5/8" Lg
M2 / M3 / B2	0.41"	3/8"	1/8"	1/8" x 15/16" Lg
M4 / M5 / B5	0.66"	5/8"	3/16"	3/16" x 1-1/2" Lg
M8 / M10 / B10	0.78"	3/4"	1/4"	1/4" x 1-5/8" Lg
M15	0.91"	7/8"	5/16"	5/16" x 2-1/4" Lg
M20 / B20	1.03"	1"	5/16"	5/16" x 2-1/4" Lg
M25	1.28"	1-1/4"	3/8"	3/8" x 2-3/4" Lg
M30 / B30	1.28"	1-1/4"	3/8"	3/8" x 2-3/4" Lg
M40	1.88"	1-13/16"	1/2"	1/2" x 2" Lg ♦
M50/B50	1.79"	1-3/4"	1/2"	1/2" x 2" Lg ♦



♦ Two roll pins (item J) are used for models M40, M50 and B50.

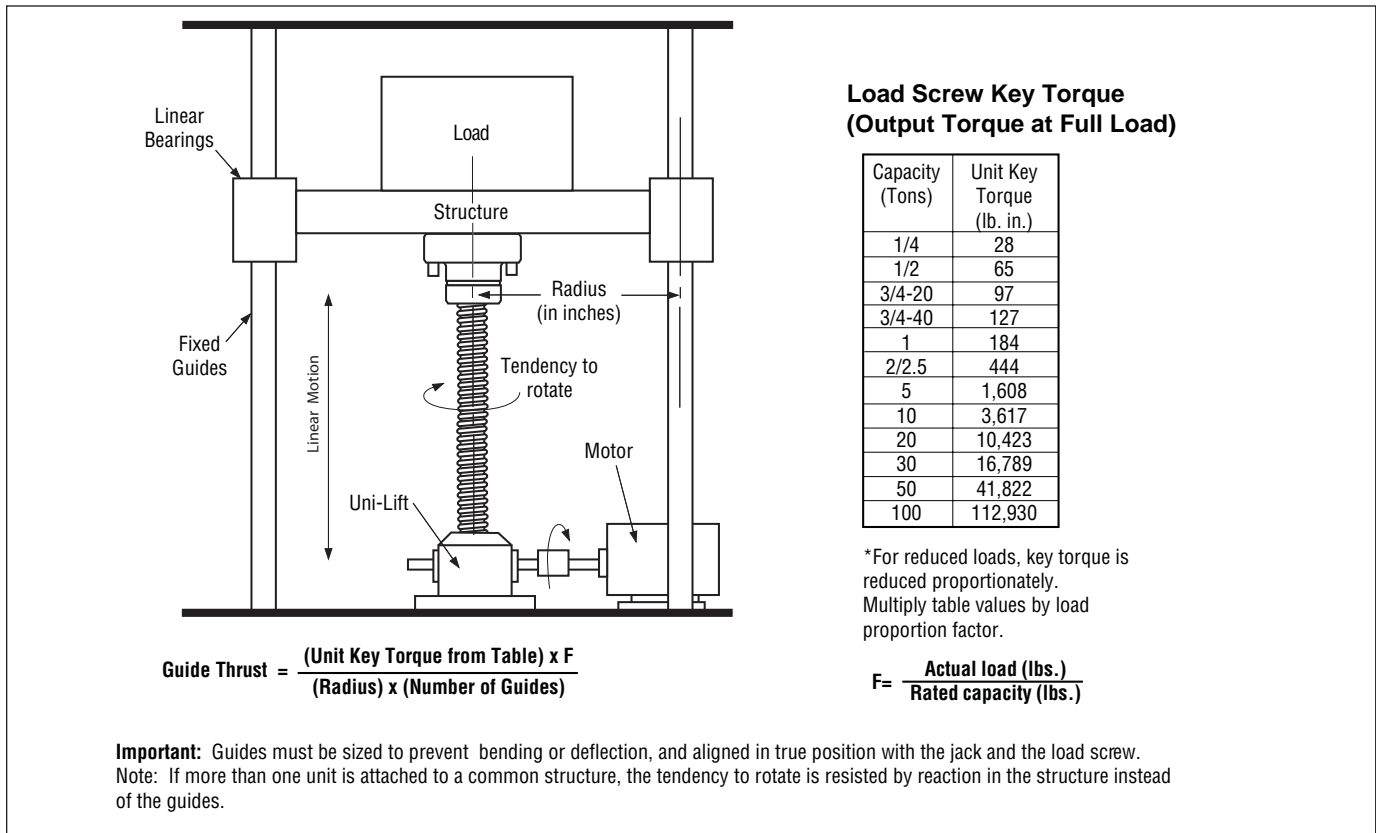


Figure 3, Using a linear bearing arrangement to secure the load in applications where only one actuator is used. (typical)

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