
BINAR Quick-Lift System

Install and Training

Original Document - July 1, 2015



What to expect

The installation, set-up, and training process takes an average of 1.5 days (12 hours) per unit. On the first day a Kundel Service Tech will be present to assist in the installation of your BINAR Quick-Lift System. Based on how prepared the work area is, the installation should take an average of 3 hours. After the unit is installed the next 2 hours will be spent going over the following items with a maintenance person, supervisor, and/or department manager; Daily inspection, Software installation, Operation/function of the Quick-Lift System, and proper use of tooling (if tooling applies). The remaining time for the first day will be spent training the workers on the floor who will be using the BINAR unit. The Kundel Service Tech will then spend another half day working more with the workers on the floor. If more time is needed or you would like the Kundel Service Tech to work with a second or third shift, arrangements can be made.



What you will need to provide

A Kundel Service Tech will be present to help assist in the installation of your BINAR Quick-Lift System. However the following list of items must be provided and made available by the end customer. Some items may only be required, but not limited to the BINAR Quick-Lift Arm units. Please make sure that all items are ready and present prior to the Kundel Service Techs arrival. Lack of any items could delay in the installation process, more time may be required resulting in increased cost for the installation.

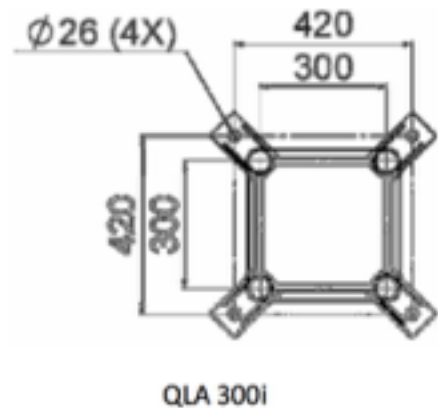
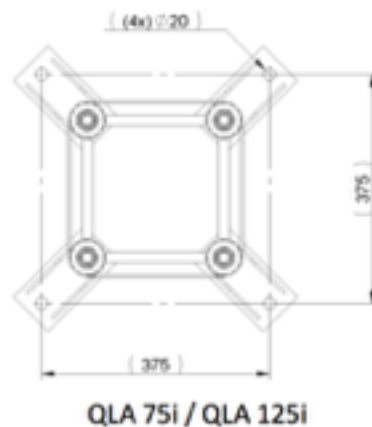
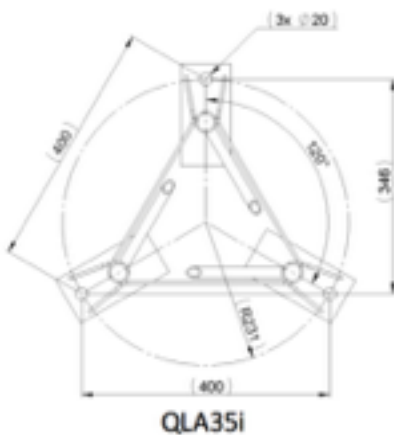
Tools

- Forklift truck
- Lifting slings (2)
- Concrete drill
- Concrete drill bit
- Machinist's level
- Blow pump or vacuum cleaner and bottle brush
- Sledgehammer
- Wrench set, size 24 mm (30 mm for QL-A 300i)

Electric Connection - 230 Single Phase, 50-60 Hz. The main fuse must be 10 A type C.

Anchors - Floor Connection

BINAR Unit	Qty.	Anchor Type	Torque Req.
QL-A 35i	Qty. (3)	HSL-3-B-M12/25	80Nm (59 ft/lb.)
QL-A 75i	Qty. (4)	HSL-3-B-M12/25	80Nm (59 ft/lb.)
QL-A 125i	Qty. (4)	HSL-3-B-M12/25	80Nm (59 ft/lb.)
QL-A 300i	Qty. (4)	HSL-3-B-M16/25	120Nm (88.5 ft/lb.)



Pneumatic Connection

All Quick-Lift Arm units are equipped with a plastic hose with the diameter of 10 mm. If pneumatics are required for powered gripper functions, the hose can be connected to an external compressed air system. The air must be clean, filtered 5 micron (.0001 inches), and dry with pressure of 6-8 bar (87-116 psi). The connection point should be equipped with a self-venting ball valve for future service and maintenance work.

The Quick-Lift Rail units are fixed with a 10 mm pneumatic press lock fitting to accept incoming air. Again, the air must be clean, filtered 5 micron (.0001 inches), and dry with pressure of 6-8 bar (87-116 psi). The connection point should be equipped with a self-venting ball valve for future service and maintenance work.



Installation process

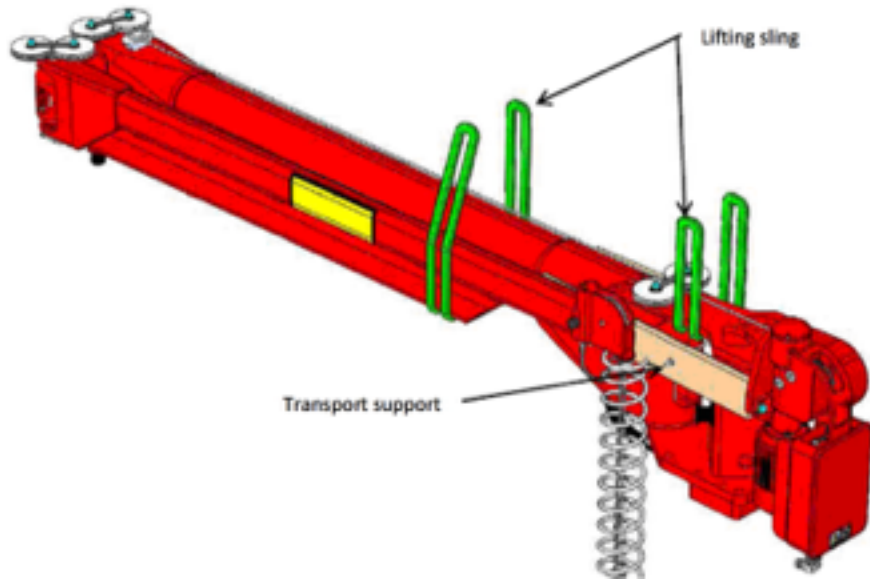


Quick-Lift Arm Units

For the installation of the Quick-Lift Arm the weight of the goods varies depending on the type of lifting device and type of suspension. A forklift is recommended for lifting the arm, and the same goes for the pillar suspension. When installing the pillar attaching the lifting slings around the pillars center of gravity is key to reduce and minimize damage to the paint finish.

Once the pillar is firmly anchored to the floor it is time to lift up the Quick-Lift Arm to set it in place. Prior to doing so you will want to loosen and remove the lock nuts and one washer on each of the adjustable leveling screws. You will then need to loosen the adjustable screws giving yourself about 1 inch of adjustment, and making sure each nut is level to each other.

When lifting the Quick-Lift Arm onto the pillar or other suspension method a forklift is key and the use of lifting slings should be used. The figure below shows approximate placement of the lifting slings, making sure you find the best center of gravity prior to lifting

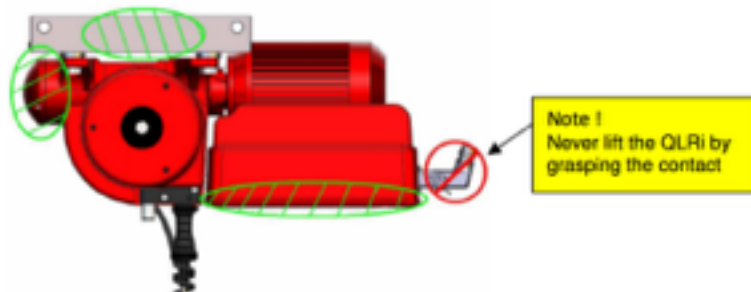


Make sure that the arm is horizontal by using the adjustable screws to make any necessary height adjustments. Next add the washers and tighten the nuts to their proper torque requirement.

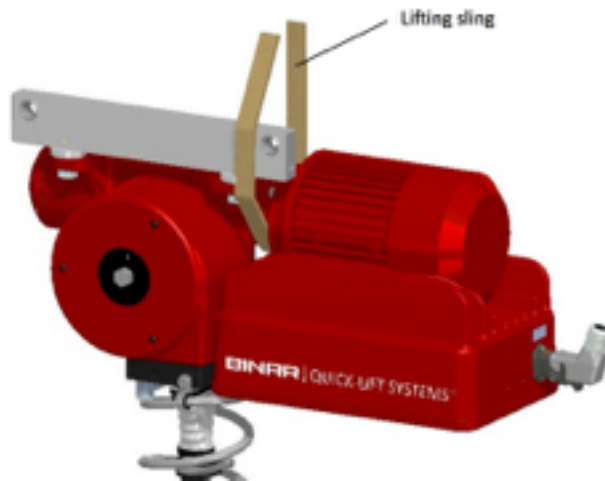
Pillar for QL-A Unit	Height Adjustment	Fastener	Torque Requirement
QL-A 35i	M16 Nut	M 16 Nut	197 Nm (145 ft/lb.)
QL-A 75i	M 55 Adjuster Nut	M 20 Nut	385 Nm (521 ft/lb.)
QL-A 125i	M 55 Adjuster Nut	M 20 Nut	385 Nm (521 ft/lb.)
QL-A 300i	M 55 Adjuster Nut	M 20 Nut	385 Nm (521 ft/lb.)

Quick-Lift Rail Units

Each Quick-Lift Rail unit come delivered in a crate, and the weight of the unit is about 35 kg (77 lb.). When lifting the Quick-Lift Rail units by hand be sure to place hands in desired areas.

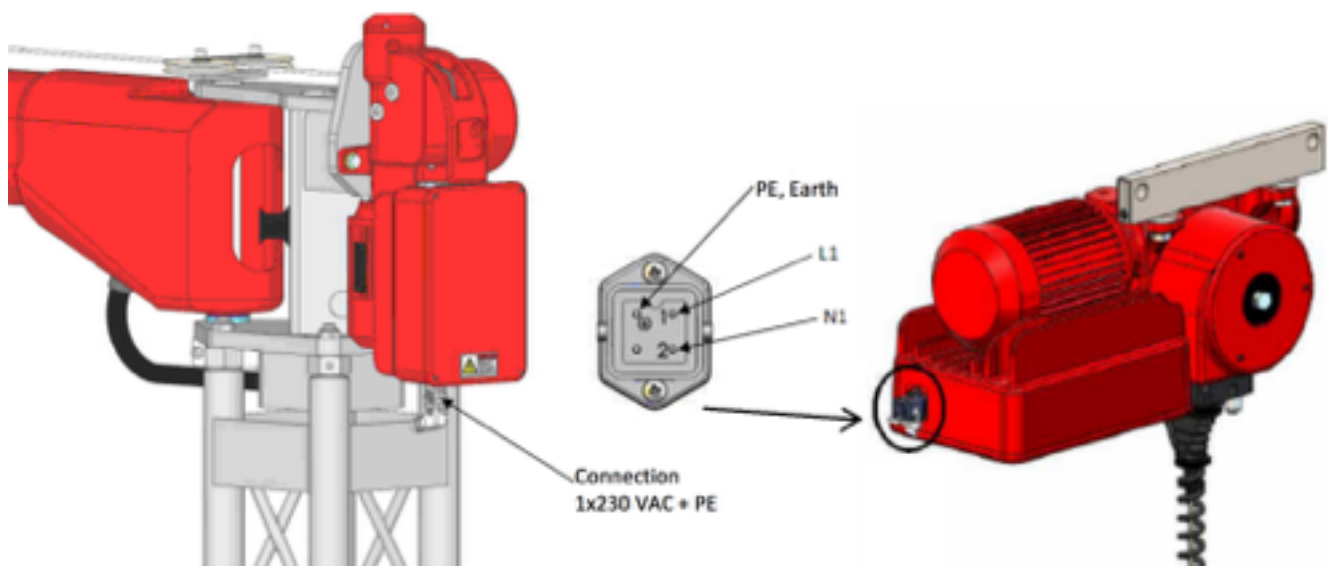


When lifting the rail unit with lifting slings, be sure to place the sling between the motor and gearbox.



Electric Connection

When wiring up any of the BINAR Quick-Lift units it is important to have a qualified personnel to install the disconnection device. An electrical disconnection device must always be installed. The disconnection must be installed in a suitable vicinity of the work area at a height of .6 - 1.9 m (2 - 6 ft.) from the floor.



Daily Inspection

At the start of each day of operation the operator needs to go through a routine inspection just like you would with any other piece of machinery. There is a daily inspection form available in the back of the BINAR documentation (pg. 117 17.3.1). *Wire, Maneuver Handle/Load Cell Box, Spiral Cable and Hose, and Abnormal Noise*

Software Installation and Use

Each BINAR Quick-Lift system comes with the proper software to make parameter settings in the Quick-Lift. The iLab program disc is supplied with the documentation on each Quick-Lift unit. The system requirements to operate iLab is Microsoft Window 7 (32-bit or 64-bit) the computer must have a USB port. iLab can be ran on other operating system, but is not supported by BINAR Quick-Lift System™

The computer can only communicate with the Quick-Lift unit through a USB cable. The USB-B connection is behind the little screwed cap on the front of either the load cell box or on the back of the maneuver handle.



Operation/Function of the Quick-Lift System

During the installation/training process the Kundel Service Tech will spend an average 8 to 10 hours working with the maintenance person, supervisor, department manager, and with the workers on the floor going over the installation of iLab, how to use the program, and operation/functions of the Quick-Lift System. Here you will get in-depth training and hands on experience. We'll cover trouble shooting as well as suggested inspections and maintenance of your Quick-Lift System.

Proper use of Tooling

During the hands on training the Kundel Service Tech will go over any custom tooling from; switching out handles, tooling change and use/proper care of the tooling. The goal during this time is minimize the barrier of acceptance for the user. The workers will see how easy it is to use the BINAR Quick-Lift System, and will not want to leave their work area. Here is where the ROI begins. The increase of production and safe work environment is where it is at.



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