ENERPAC

Instruction Sheet

CYDA-15
Double-Acting Cylinder

L0038 Rev. O

Repair Parts Sheets for this product are available from the Enerpac web site at www.enerpac.com, or from your nearest Authorized Enerpac Service Center or Enerpac Sales office.

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.

SAFETY FIRST

2.0 SAFETY ISSUES

Read all instructions, warnings and cautions carefully. Follow all safety precautions to avoid personal injury or property damage during system operation. 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 when in doubt as to the safety precautions and operations. If you have never been trained on high-pressure hydraulic safety, consult your distribution or service center for a free Enerpac Hydraulic safety course.

Failure to comply with the following cautions and warnings could cause equipment damage and personal injury.

A **CAUTION** is used to indicate correct operating or maintenance procedures and practices to prevent damage to, or destruction of equipment or other property.

A **WARNING** indicates a potential danger that requires correct procedures or practices to avoid personal injury.

A **DANGER** is only used when your action or lack of action may cause serious injury or even death.

WARNING: Wear proper personal protective gear when operating hydraulic equipment.

WARNING: Stay clear of loads supported by hydraulics. A cylinder, when used as a load lifting device, should never be used as a load holding device. After the load has been raised or lowered, it must always be blocked mechanically.

WARNING: USE ONLY RIGID PIECES TO HOLD LOADS. Carefully select steel or wood blocks that are capable of supporting the load. Never use a hydraulic cylinder as a shim or spacer in any lifting or pressing application.

DANGER: To avoid personal injury keep hands and feet away from cylinder and workpiece during operation.

WARNING: Do not exceed equipment ratings. Never attempt to lift a load weighing more than the capacity of the cylinder. Overloading causes equipment failure and possible personal injury. The cylinders are designed for a max. pressure of 700 bar [10,000 psi]. Do not connect a jack or cylinder to a pump with a higher pressure rating.

Never set the relief valve to a higher pressure than the maximum rated pressure of the pump. Higher settings may result in equipment damage and/or personal injury.

WARNING: The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Install pressure gauges in the system to monitor operating pressure. It is your window to what is happening in the system.

CAUTION: Avoid damaging hydraulic hose. Avoid sharp bends and kinks when routing hydraulic hoses. Using a bent or kinked hose will cause severe back-pressure. Sharp bends and kinks will internally damage the hose leading to premature hose failure.

Do not drop heavy objects on hose. A sharp impact may cause internal damage to hose wire strands. Applying pressure to a damaged hose may cause it to rupture.

IMPORTANT: Do not lift hydraulic equipment by the hoses or swivel couplers. Use the carrying handle or other means of safe transport.

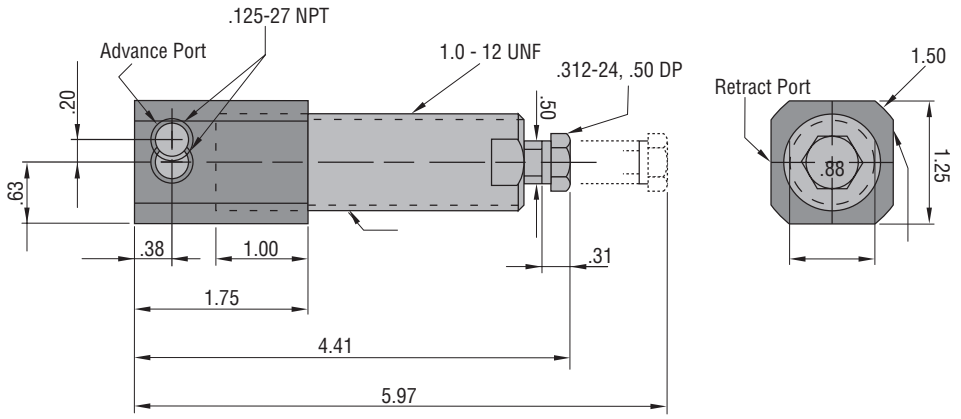
CAUTION: Keep hydraulic equipment away from flames and heat. Excessive heat will soften packings and seals, resulting in fluid leaks. Heat also weakens hose materials and packings. For optimum performance do not expose equipment to temperatures of 65°C [150°F] or higher. Protect hoses and cylinders from weld spatter.

DANGER: Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin, causing serious injury. If oil is injected under the skin, see a doctor immediately.

WARNING: Only use hydraulic cylinders in a coupled system. Never use a cylinder with unconnected couplers. If the cylinder becomes extremely overloaded, components can fail catastrophically causing severe personal injury.

WARNING: BE SURE SETUP IS STABLE BEFORE LIFTING LOAD. Cylinders should be placed on a flat surface that can support the load. Where applicable, use a

Figure 1



cylinder base for added stability. Do not weld or otherwise modify the cylinder to attach a base or other support.

Avoid situations where loads are not directly centered on the cylinder plunger. Off-center loads produce considerable strain on cylinders and plungers. In addition, the load may slip or fall, causing potentially dangerous results.

Distribute the load evenly across the entire saddle surface. Always use a saddle to protect the plunger.

IMPORTANT: Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the Authorized ENERPAC Service Center in your area. To protect your warranty, use only ENERPAC oil.

WARNING: Immediately replace worn or damaged parts by genuine ENERPAC parts. Standard grade parts will break causing personal injury and property damage. ENERPAC parts are designed to fit properly and withstand high loads.

1.0 FEATURES

1.1 At 3000 psi hydraulic pressure CYDA-15 will provide clamping force (push) of 1230 lbs. Retracing force (pull) at same pressure is 600 lbs.

1.2 CYDA-15 has a maximum stroke of 1.5 inches.

1.3 CYDA-15 can be operated by air or hydraulic pressure. Air pressure shall not exceed 200 psi, hydraulic pressure shall not exceed 3000 psi.

1.4 All pressure ports are located at one end (base). The base can be removed and multiple cylinders can be attached to a common manifold. See Figure 2.

1.5 Many mounting brackets and accessories are available for CYDA-15. Refer to Enerpac Workholding Catalog.

2.0 INSPECTION

Upon removal from the shipping container, the unit should be visually inspected for any shipping damage.

3.0 INSTALLATION

3.1 Remove and discard all protective plastic caps. The unit can be mounted on suitable Enerpac mounting brackets with other Enerpac accessories. Mount unit on bracket.

CAUTION: DO NOT USE ALUMINUM BASE AS A MOUNTING SURFACE.

3.3 Set operating pressure from 100-500 psi. Cycle the unit a few times until all air is bled out from the connectors. Then tighten connectors to prevent leakage. Reset hydraulic pressure to normal operating setting.

4.0 PERIODIC INSPECTION AND MAINTENANCE

The CYDA-15 require maintenance only when wear or leakage is noticed. Repair as required. Maintenance Kit CYDA-15K contains seals and instructions for repair of this unit. Overhaul maintenance, in most cases can be performed by the user and good results. Occasional visual inspection should be performed to detect any problem which would necessitate overhaul maintenance.

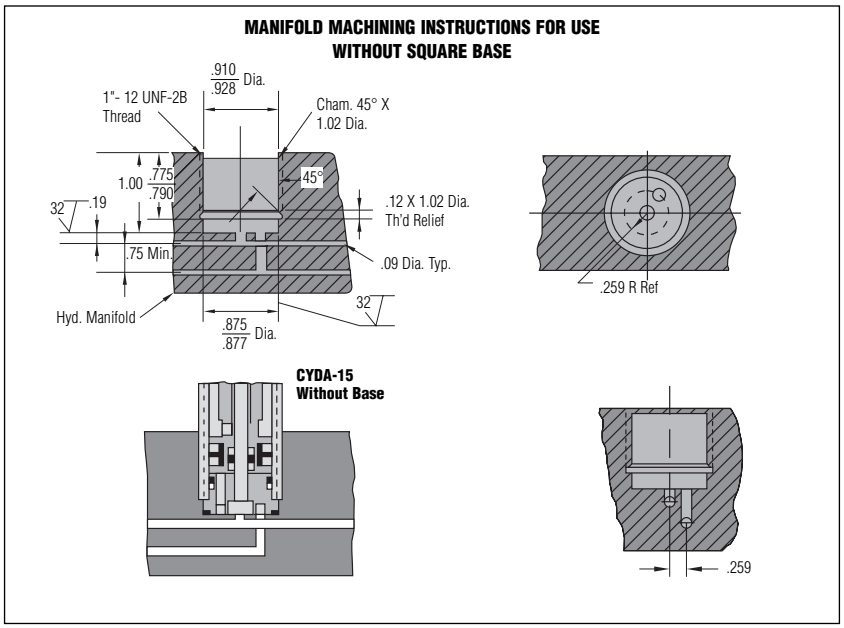


Figure 2