

## INSTRUCTION SHEET FOR COLLISION REPAIR SETS

### ECRK-4 4 TON

### ECRK-10 10 TON

Carefully inspect all components for shipping damage. If shipping damage is found, notify the carrier at once. The carrier is responsible for any damage resulting from shipment.

To avoid personal injury or property damage, please read, understand, and follow all safety instructions.

EAGLE PRO is not responsible for injury or damage resulting from unsafe and/or incorrect product use or system operation, or lack of proper maintenance.

**DANGER!** Is used only when your action or lack of action may cause serious injury or death.

**WARNING!** Is used when a potential danger exists that requires correct action to avoid personal injury.

**IMPORTANT!** Is used when action or lack of action can cause equipment failure.

## 01 SAFETY INSTRUCTIONS



### IMPORTANT!

- ◆ To avoid personal injury or property damage, please read, understand, and follow all safety instructions.
- ◆ Always keep work area clean and free of clutter.
- ◆ When not in use, tools should be properly stored to avoid damage .
- ◆ Operator must wear proper safety attire when working with hydraulic equipment. Work gloves, safety glasses, hard hats, approved safety shoes, and hearing protection and/or other required clothing should be worn while operating this equipment.



### DANGER!

- ◆ The hydraulic equipment user must be a qualified operator with correct training and work experience with hydraulic equipment. Lack of knowledge in any of these areas can lead to equipment damage or personal injury.
- ◆ Carefully inspect hydraulic pump before using . If any damage is found, discontinue use and contact your closest authorized EAGLE PRO Service Center.
- ◆ To avoid personal injury, do not modify or weld hydraulic equipment without approval of EAGLE PRO INDUSTRIAL TOOLS, INC.

- ◆ Always stay clear of loads supported only by hydraulic means. A cylinder is a load lifting device, not a load holding device. After a load has been raised or lowered it must always be supported mechanically.
- ◆ Use only rigid cribbing pieces to hold loads. Select solid wood or steel blocks that are capable of supporting the load.
- ◆ Keep hands and feet away from cylinder and work-piece during operation
- ◆ Never exceed equipment ratings. Never attempt to lift a load weighing more than the capacity of the smallest cylinder in the hydraulic system. Overloading will cause equipment failure and possible personal injury.
- ◆ Do not pick up the hydraulic pump by the hydraulic hose.
- ◆ Do not use kinked or damaged hydraulic hoses.
- ◆ Carefully inspect the hydraulic couplers on pump, hoses, and other hydraulic tools before using. Never connect tools with damaged couplers or damaged port threads. The damaged coupler(s) or damaged port threads may cause equipment failure and possible personal injury.
- ◆ Install couplers in a clean environment. Always prevent dirt or other debris from entering into the cylinder or tool. Dirt or debris will damage the tool and result in equipment failure and possible personal injury.
- ◆ Before removing or tightening hose(s) or coupler(s), always release hydraulic pressure in system .
- ◆ Never handle pressurized hoses; escaping oil under high pressure can penetrate the skin, causing serious injury. Seek medical aid immediately if injured.
- ◆ When the pump is not in use, release system pressure, remove the hose(s) and use the dust cap to recover the port.
- ◆ Do not drop anything on hydraulic hoses.
- ◆ Do not use equipment in temperatures of 150°F (65°C) or higher. Overheating will soften seals and weakens hose materials, resulting in oil leaks or other equipment failure.
- ◆ For hydraulic technical help or repair service, please contact the closet authorized EAGLE PRO Service Center. EAGLE PRO INDUSTRIAL TOOLS, INC. has no obligations under any warranty with respect to products that have been repaired by unauthorized personnel, modified, or damaged through misuse, abuse, accident, neglect, or mishandling.

## **02 OPERATION INSTRUCTIONS**

### **2.1 SETUP**

Assemble the hose between the hand pump and Cylinder, and hand-tighten the coupler. Determine the appropriate attachment for your application; assemble the attachment to the cylinder piston.

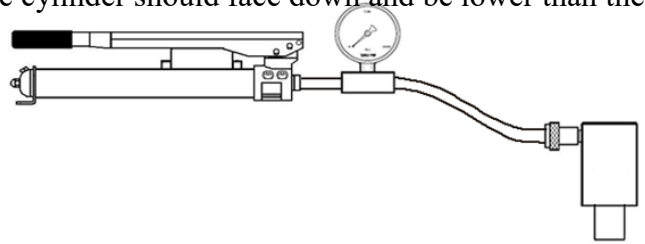
## IMPORTANT!

- The use of extension tubes or off-center attachments greatly reduces the capacity of the hydraulic system. When using extension tubes, put the shortest tubes on the ends of the setup, never put the shortest tubes in the middle of the setup.
- Some components in this set do not match the maximum pressure rating of the pump and Cylinder. Use a pressure gauge in the system to monitor hydraulic pressure. Refer to the instructions in this document for typical applications and load capacities.

## 2.2 BLEEDING AIR FROM THE SYSTEM

Air may accumulate within the system during shipment or after prolonged use; this air can cause the cylinder to operate erratically. Please follow the steps below to bleed the air from system.

- Position the cylinder and pump as the figure shows, the cylinder should face down and be lower than the pump.
- Fully extend and retract the cylinder several times
- without loading



## 2.3 OPERATION

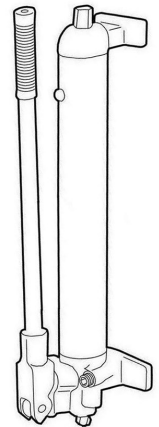
The hand pump may be operated in a horizontal position or in a vertical position with the head pointing down as shown.

- Turn the hand pump's release valve clockwise to close the valve.

**Important:** Please hand tighten the valve only, applying too much force to the valve may damage the

Valve.

- Operate the pump handle to produce the pressure in the cylinder, causing the piston to extend to the work position.
- Monitor the pressure gauge while completing the application.
- Slowly turn the hand pump's release valve counterclockwise to release the pressure; the release speed is controlled by how fast the valve is opened.



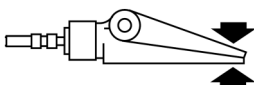
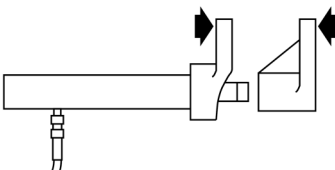
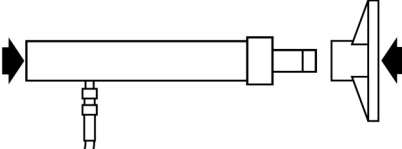
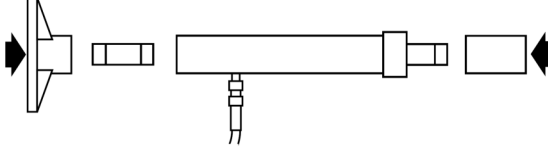
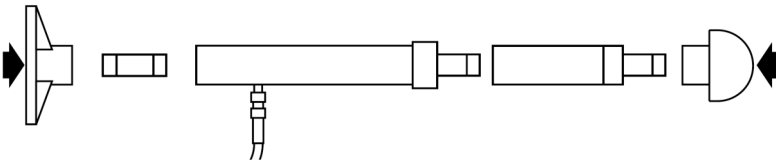
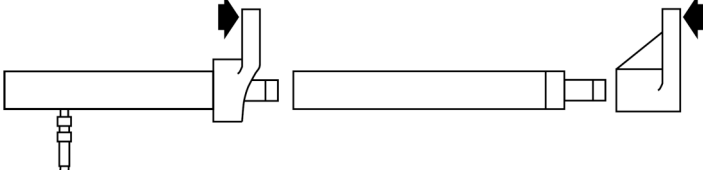
**Note:** The pump is equipped with an overload valve that will bypass oil back into the pump reservoir in an overload situation (when the system meets maximum pressure). In this case, continued pumping will have no effect on the system, if an overload situation commonly occurs, a higher capacity set is needed.

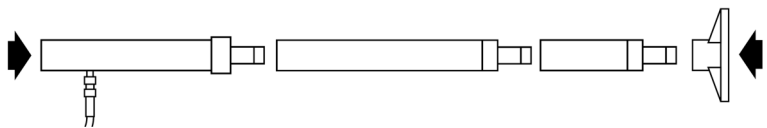
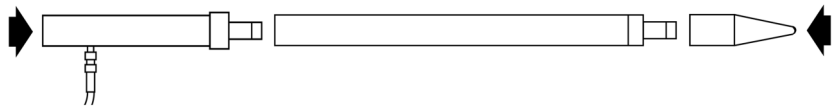
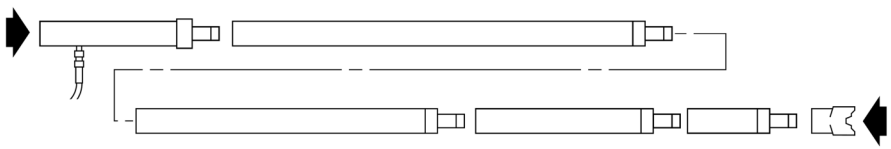
# 03

# APPLICATION LOAD CAPACITIES

## IMPORTANT!

When offset attachments are used, the rated capacity of the hydraulic system is reduced 50%. For each extension tube used the setup, the rated capacity is reduced another 50%. When using two or more extension tubes together, always position the shortest tube farthest away from the cylinder. Attached table shows the typical applications and load capacities.

Application	Rated Capacity When Used With Cylinder		
	% of Rated Capacity	4T	10T
		Ton/Lbs	Ton/Lbs
	-	0.5/1000	0.5/1000
	50%	2/4000	5/10,000
	100%	4/8000	10/20,000
	100%	4/8000	10/20,000
	50%	2/4000	5/10,000
	25%	1/2000	2.5/5000

Application	Rated Capacity When Used With		
	% of Rated Capacity	4T Ton/Lbs	10T Ton/Lbs
	25%	1/2000	2.5/5000
	50%	4000/2	10,000/5
	6%	0.24/480	0.6/1200

## 04 MAINTENANCE

For best performance and increased system life, please follow all precautions.

### Adding hydraulic oil

When oil level in hand pump is low, please add hydraulic oil. With cylinder fully retracted, set hand pump in its normal level position, remove oil filler screw. Fill until oil is within 3/8" of the oil filler screw hole opening, reinstall oil filler screw.

**IMPORTANT:** Please always use clean EAGLE PRO oil or other approved hydraulic oil, use of other unapproved oil or dirty oil will damage the cylinder and hand pump.

### Changing oil

For best performance and increased system life, completely replace hydraulic oil at least once per year.

### Lubrication

A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that pump assemblies move freely.

### Cleaning

Always keep cylinder, hand pump and other attachments clean, use dust cap to protect couplers.

### Storage

When not in use, cylinder and hand pump piston must be fully retracted. All components should be stored in the storage case.

# 05 TROUBLE-SHOOTING

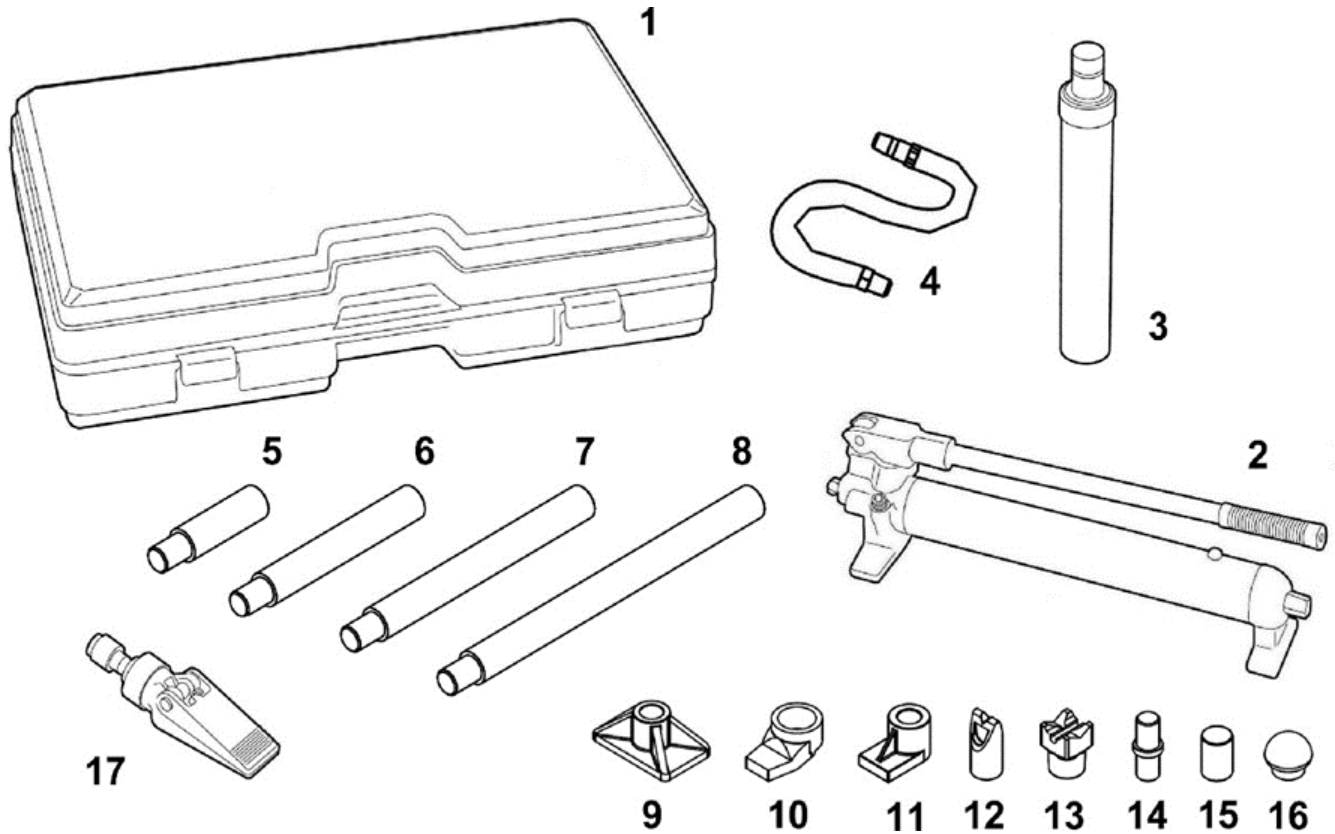


## WARNING!

EAGLE PRO Cylinders should be repaired only by a qualified operator or Authorized EAGLE PRO Service Centers. Use Only EAGLE PRO or other approved hydraulic oil. Release pressure in hydraulic system and disconnect hose(s) before making repair.

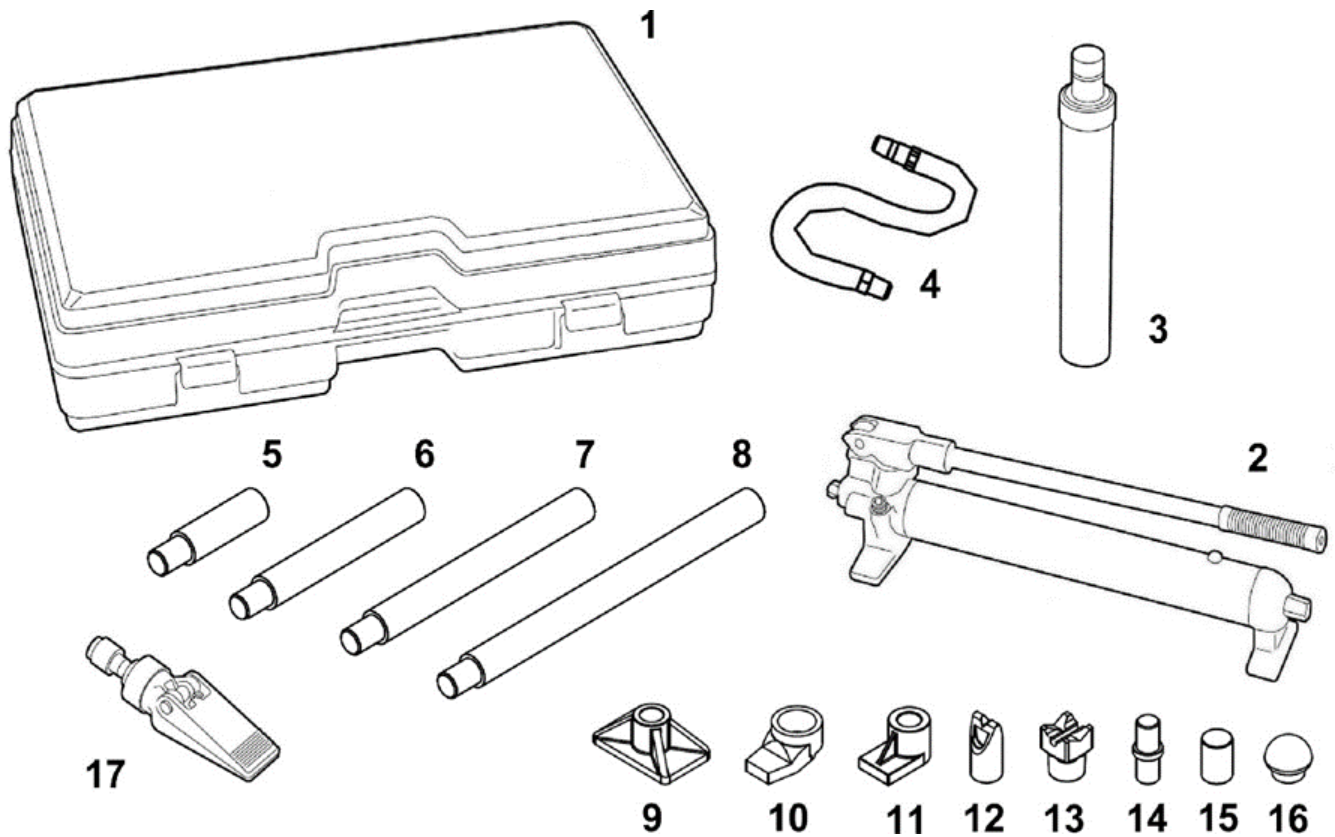
PROBLEM	CAUSE	SOLUTION
Hand pump is not producing pressure - cylinder does not advance, advances slowly, or advances in spurts	1. Pump release valve not fully closed	1. Fully tighten pump release valve
	2. Couplers not fully tightened	2. Inspect and fully tighten couplers
	3. Not enough oil in pump reservoir	3. Add more oil to reservoir according to instructions
	4. Air trapped in system	4. Bleed air from system according to instructions
	5. Pump or valve malfunctioning	5. Pump must be serviced by Authorized EAGLE PRO Service Center
	6. Cylinder piston binding	6. Inspect for cylinder damage. Cylinder must be serviced by Authorized EAGLE PRO Service Center
	7. Too heavy of a load	7. Do not lift more than the rated capacity of the cylinder
Hand pump does not maintain pressure	1. Leaky connection	1. Clean and reseal all threaded connections, and re-tighten
	2. Cylinder seals leaking	2. Replace worn seals. Cylinder must be serviced by Authorized EAGLE PRO Service Center
	3. Pump release valve not fully closed	3. Fully tighten pump release valve
	4. Pump or valve malfunctioning	4. Pump must be serviced by Authorized EAGLE PRO Service Center
Cylinder will not retract, or retracts slower than normal	1. Pump release valve not fully open	1. Locate and fully open release valve
	2. Couplers not fully tightened	2. Inspect and fully tighten couplers
	3. Pump reservoir is too full	3. Drain oil to full level - see Adding Hydraulic Fluid section
	4. Blockage in hose	4. Clean, or replace hose
	5. Air trapped in system	5. Bleed air from system according to instructions
	6. Return spring is damaged	6, 7. Cylinder must be serviced by Authorized EAGLE PRO Service Center
	7. Cylinder is damaged	

# 06 PARTS LIST



ECRK-4 Parts List

No.	Part Number	Description	Qty.	No.	Part Number	Description	Qty.
1	ECRK-4-1	Storage Case	1	10	ECRK-4-10	Spreader Toe(1-1/2"-16)	1
2	ECRK-4-2	Hydraulic Hand Pump	1	11	ECRK-4-11	Plunger Toe	1
3	ECRK-4-3	Cylinder(4"stroke)	1	12	ECRK-4-12	Wedge head	1
4	ECRK-4-4	Hose	1	13	ECRK-4-13	90°V-base	1
5	ECRK-4-5	4"Extension tube	1	14	ECRK-4-14	Male Connector	1
6	ECRK-4-6	8"Extension tube	1	15	ECRK-4-15	Serrated Saddle	1
7	ECRK-4-7	12"Extension tube	1	16	ECRK-4-16	Flex Head	1
8	ECRK-4-8	16"Extension tube	1	17	ECRK-4-17	Spreader W/Coupler	1
9	ECRK-4-9	Flat Base	1				



**ECRK-10 Parts List**

No.	Part Number	Description	Qty.	No.	Part Number	Description	Qty.
1	ECRK-10-1	Storage Case	1	10	ECRK-10-10	Spreader Toe(2-1/4" -14)	1
2	ECRK-10-2	Hydraulic Hand Pump	1	11	ECRK-10-11	Plunger Toe	1
3	ECRK-10-3	Cylinder(6" stroke)	1	12	ECRK-10-12	Wedge head	1
4	ECRK-10-4	Hose	1	13	ECRK-10-13	90° V-base	1
5	ECRK-10-5	5" Extension tube	1	14	ECRK-10-14	Male Connector	1
6	ECRK-10-6	10" Extension tube	1	15	ECRK-10-15	Serrated Saddle	1
7	ECRK-10-7	14" Extension tube	1	16	ECRK-10-16	Flex Head	1
8	ECRK-10-8	19" Extension tube	1	17	ECRK-10-17	Spreader W/Coupler	1
9	ECRK-10-9	Flat Base	1				