

OPERATION AND PARTS MANUAL



JIMMY SERIES

MODELS:

JB5135, JB7135, JB5090, JB7090,

JB8090, JB9180, JB11090

HYDRAULIC REBAR BENDERS

MODEL JPU1

ELECTRIC-HYDRAULIC PUMP

Revision #9 (01/04/08)

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www.multiquip.com



THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

JIMMY SERIES HYDRAULIC REBAR BENDERS — SILICOSIS WARNING

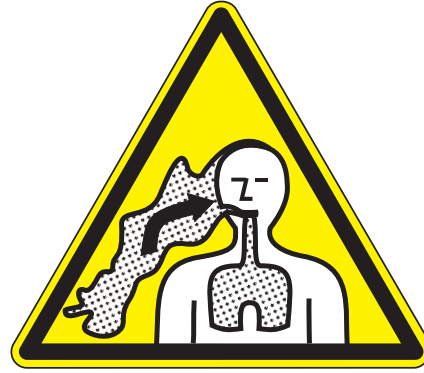
WARNING



SILICOSIS WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.

WARNING



RESPIRATORY HAZARDS

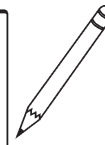
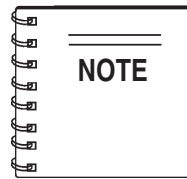
Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers or suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the materials being used.

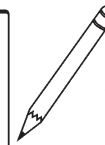
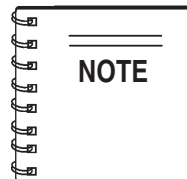
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As a continuing effort to update our parts book, contact the MULTQUIP literature department for the latest revision of your "Operation and Parts Manual"



Specification and part number are subject to change without notice.

PARTS ORDERING PROCEDURES

Ordering parts has never been easier! Choose from three easy options:

Effective:
January 1st, 2006



Order via Internet (Dealers Only):

Order parts on-line using Multiquip's SmartEquip website!

- View Parts Diagrams
- Order Parts
- Print Specification Information



If you have an MQ Account, to obtain a Username and Password, E-mail us at: parts@multiquip.com.

To obtain an MQ Account, contact your District Sales Manager for more information.

Goto www.multiquip.com and click on **Order Parts** to log in and save!

Use the **internet** and qualify for a **5% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Fax (Dealers Only):

All customers are welcome to order parts via Fax.

Domestic (US) Customers dial:

1-800-6-PARTS-7 (800-672-7877)

Fax your order in and qualify for a **2% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Phone: Domestic (US) Dealers Call:
1-800-427-1244

Non-Dealer Customers:

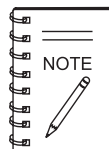
Contact your local Multiquip Dealer for parts or call 800-427-1244 for help in locating a dealer near you.



International Customers should contact their local Multiquip Representatives for Parts Ordering information.

When ordering parts, please supply:

- | | |
|---|--|
| <input type="checkbox"/> Dealer Account Number | <input type="checkbox"/> Specify Preferred Method of Shipment: |
| <input type="checkbox"/> Dealer Name and Address | <input checked="" type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> DHL |
| <input type="checkbox"/> Shipping Address (if different than billing address) | <input type="checkbox"/> Priority One <input checked="" type="checkbox"/> Truck |
| <input type="checkbox"/> Return Fax Number | <input type="checkbox"/> Ground |
| <input type="checkbox"/> Applicable Model Number | <input type="checkbox"/> Next Day |
| <input type="checkbox"/> Quantity, Part Number and Description of Each Part | <input type="checkbox"/> Second/Third Day |



All orders are treated as *Standard Orders* and will ship the same day if received prior to 3PM PST.

WE ACCEPT ALL MAJOR CREDIT CARDS!



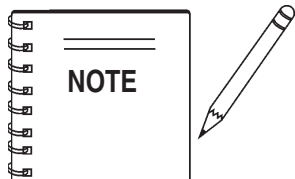
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JIMMY SERIES HYD. REBAR BENDERS— SAFETY MESSAGE ALERT SYMBOLS

FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operating Instructions could result in injury to yourself and others.



This Operation and Parts Manual has been developed to provide complete instructions for the safe and efficient operation of the **Jimmy Series Hydraulic Rebar Bender and Electric-Hydraulic Pump**.

Before using this hydraulic rebar bender and pump, ensure that the operating individual has read and understands all instructions in this manual.

SAFETY MESSAGE ALERT SYMBOLS

The three (3) Safety Messages shown below will inform you about potential hazards that could injure you or others. The Safety Messages specifically address the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.

DANGER

You **WILL** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.

WARNING

You **CAN** be **KILLED** or **SERIOUSLY** injured if you **DO NOT** follow directions.

CAUTION

You **CAN** be **INJURED** if you **DO NOT** follow directions.

HAZARD SYMBOLS

Potential hazards associated with the operation of the **Jimmy Series Hydraulic Rebar Benders and Electric Hydraulic Pump** will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message Alert Symbols.

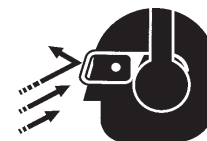
WARNING - Respiratory Hazards

ALWAYS wear approved **respiratory** protection when required.



CAUTION - Eye and Hearing Hazards

ALWAYS wear approved eye and hearing protection.



CAUTION - Accidental Starting Hazards

ALWAYS place the power control unit's **ON/OFF** switch in the **OFF** position when the rebar bender is not in use.



CAUTION - Equipment Damage Hazards

Other important messages are provided throughout this manual to help prevent damage to your rebar bender, other property, or the surrounding environment.

JIMMY SERIES HYDRAULIC REBAR BENDERS — RULES FOR SAFE OPERATION


DANGER

Read this manual!


Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the *Jimmy Series Hydraulic Rebar Bender and Electric-Hydraulic Pump*.


GENERAL SAFETY

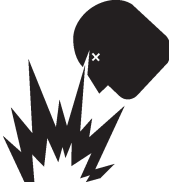
- **DO NOT** operate or service this equipment before reading this entire manual. 
- This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots, hard hat and other protective devices required by the job.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine. 
- **NEVER** operate this equipment under the influence of *drugs* or *alcohol*.



- **ALWAYS** wear proper respiratory (mask), hearing and eye protection equipment when operating the rebar bender. 
- **ALWAYS** replace any worn or damaged warning decals.
- Manufacturer does not assume responsibility for any accident due to equipment modifications.
- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

- **NEVER** operate the rebar bender in an explosive atmosphere or near combustible materials. The possibility exists of the rebar bender emitting a spark during operation. A explosion or fire could result causing severe ***bodily harm or even death*** if the sparks make contact with combustible or explosive materials. 

- Maintain this equipment in a safe operating condition at all times.
- Keep bystanders, children and visitors away while operating the rebar bender. Distractions can cause you to lose control.
- **DO NOT** wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.
- **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- **ALWAYS** be sure the operator is familiar with proper safety precautions and operation techniques before using rebar bender.
- **ALWAYS** keep work area clean and free of foreign matter and debris. Also keep work area well lit.
- **NEVER** leave the rebar bender unattended. When not in use always unplug the rebar bender from power source.
- Keep all ***inexperienced*** and ***unauthorized*** people away from the equipment at all times.
- Become familiar with the components of the rebar bender before operating.
- Use this rebar bender only for its intended purpose. **DO NOT** use this rebar bender for applications not recommended.
- Inspect the rebar bender after each use. Replace any damaged or worn parts immediately. **DO NOT** use a defective rebar bender.
- If a malfunction occurs, immediately unplug the rebar bender from the power source and correct the problem. If the problem can not be corrected, contact your nearest MQ service center.
- All **WARNING** statements must be carefully observed to help prevent personal injury.

JIMMY SERIES HYDRAULIC REBAR BENDERS — RULES FOR SAFE OPERATION

UNIT SAFETY INSTRUCTIONS

- All hose connections must be tightened with the proper tools before operating hydraulic power unit. **DO NOT** over tighten. Connections should only be tightened securely and leak-free. Over tightening can cause premature thread failure or high-pressure fittings to split at pressures lower than their rated capacities.
- Should a hydraulic hose ever rupture, burst, or need to be disconnected, immediately shut off the pump and release all pressure. **NEVER** attempt to grasp a leaking pressurized hose with your hands. The force of escaping hydraulic fluid could cause serious injury.
- **NEVER** subject the hose to potential hazard such as fire, sharp surfaces, extreme heat or cold, or heavy impact. **DO NOT** allow the hose to kink, twist curl, crush, cut, or bend so tightly that the fluid flow within the hose is blocked or reduced. Periodically inspect the hose for wear, because any of these conditions can damage the hose and possibly result in personal injury.
- **NEVER** use the hose to move attached equipment. Stress can damage the hose and possibly cause personal injury.
- Hose material and coupler seals must be compatible with the hydraulic fluid used. Hoses also must not come in contact with corrosive materials such as creosote-impregnated objects and some paints. Hose deterioration due to corrosive materials can result in personal injury. Consult the manufacturer before painting a hose. **NEVER** paint a coupler.
- Use only approved accessories and approved hydraulic fluid. Hoses, seals and all components used in a system must be compatible with the hydraulic fluid used.
- **DO NOT** exceed the rated capacities of the cylinders. Excess pressure can result in personal injury.
- Inspect each cylinder and coupler before each shift or usage to prevent unsafe conditions from developing.
- **DO NOT** use cylinders if they are damaged, altered or in poor condition.
- **DO NOT** use cylinders with bent or damaged couplers or damaged port threads.

- **NEVER** use extreme heat to disassemble a hydraulic cylinder or ram. Metal fatigue and/or seal damage will result and can lead to unsafe operating conditions.



DANGER - High Pressure Hazard

When extending a cylinder or ram under load, always insure that the couplers or port threads have not been damaged or do not come in contact with any rigid obstruction. If this condition does occur, the coupler's attaching threads may become stripped or pulled from the cylinder or ram resulting in the instantaneous release of high pressure hydraulic fluid, flying objects, and loss of the load. All of these possible results could cause serious injury or even death.



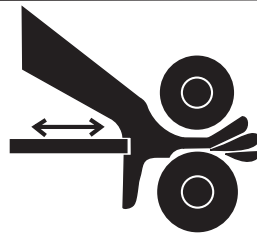
CAUTION - System Evaluation

Cylinder hoses, couplings and hydraulic pump must all be rated for the same operating pressure, correctly connected and compatible with the hydraulic fluid used. An improperly matched system could cause the system to fail and possibly cause serious injury. Always maintain the correct operating for optimal performance. If you have any questions, please contact your nearest MQ service center.

- Avoid pinch points or crush points that can be created by the load or parts of the cylinder. Do not wear loose jewelry when operating the rebar bender.



WARNING



Moving parts can crush and cut.

ALWAYS keep hands clear of rollers while rebar bender is operating.

JIMMY SERIES HYDRAULIC REBAR BENDERS — RULES FOR SAFE OPERATION

ELECTRICAL SAFETY

- **ALWAYS** test the **ON/OFF** switch on the hydraulic power unit before operating. The purpose of this switch is to shut down the rebar bender.
- **NEVER** use an extension cord that is frayed or damaged where the insulation has been cut.
- **NEVER** carry the hydraulic power unit by its power cord or disconnect it by yanking the cord from the power outlet.
- **ALWAYS** make certain that the proper extension cord has been selected for the job. See Table 5.
- **NEVER** allow power cord to **lay in water**.
- **NEVER stand in water** while operating the rebar bender.
- When connecting the hydraulic power unit to a power receptacle, make sure the receptacle circuit is connected to either a GFCI receptacle or a receptacle protected by a 20 amp circuit breaker.
- When plugging the hydraulic power unit into a power receptacle, check the nameplate for the correct operating voltage. Operating the rebar bender at the wrong voltage will damage the electrical components. **ALWAYS** read the nameplate before applying power.
- This hydraulic power unit is equipped with a 3-prong male power plug. **DO NOT** use a 2-prong adapter when plugging into a wall outlet. This will defeat the purpose of the ground circuit. If the plug does not fit into the receptacle, contact a qualified electrician to install a 3-conductor wall receptacle (outlet).
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electrical shock if your body is grounded.
- **DO NOT** expose the hydraulic power unit to rain or wet conditions. Water entering the power unit will increase the risk of electrical shock.
- When operating the hydraulic power unit outside, be sure to use the appropriate outdoor extension cord. This type of extension cord reduces the risk of electrical shock.
- **ALWAYS** remove the AC power cord from the power source before performing any service or maintenance on the rebar bender. This preventative safety measure reduces the possibility of accidental starting.

POWER UNIT TRANSPORTING (Electric-Hydraulic Pump)

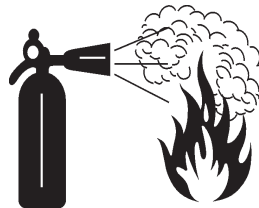
- When transporting of the power unit (pump) is required, **ALWAYS** carry unit by its handle.
- **ALWAYS** wrap power and remote cable cords neatly to avoid tripping and damage when transporting.

MAINTENANCE

- **NEVER** lubricate components or attempt service on a operational rebar bender.
- **ALWAYS** maintain rebar bender in correct operating condition.
- **ALWAYS** fix damage to the rebar bender immediately and always replace broken parts. Replace with only MQ recommended parts.

EMERGENCIES

- **ALWAYS** know the location of the nearest **fire extinguisher** and **first aid kit**.

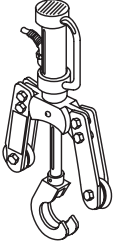
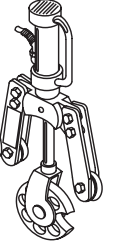
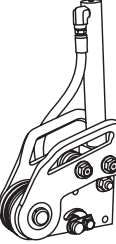

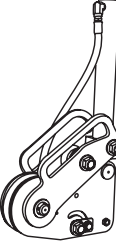




- In emergencies **always** know the location of the nearest phone or **keep a phone on the job site**. Also know the phone numbers of the nearest **ambulance**, **doctor** and **fire department**. This information will be invaluable in the case of an emergency.



JIMMY SERIES HYDRAULIC REBAR BENDERS — SPECIFICATIONS (REBAR UNIT)

Table 1. Rebar Bender Specifications

							
Model	JB5135	JB7135	JB5090	JB7090	JB8090	JB9180	JB11090
Bending Angle	135°	135°	90°	90°	90°	180°	90°
Rebar Capacity (Bar Size)	#4, #5	#6, #7	#4, #5, #6	#6, #7, #8	#6, #7, #8, #9	#7, #8, #9, #10	#8, #9, #10, #11
Minimum Bend in. (cm) *	5 (12.7)	5 (12.7)	5 (12.7)	8 (20.3)	8 (20.3)	11 (27.9)	14 (35.6)
Minimum Bar Spacing inches on center	2	2	3	3	3	3.5	3.5
ACI-Approved Bar Number; Bend Radius**	#5; 135°	#7; 135°	#5; 90°	#7; 90°	#8; 90°	#9; 180°	#11; 90°
Weight lb. (kg)	22 (10)	26 (12)	26 (12)	58 (26)	62 (29)	100 (45)	110 (50)
Shipping Weight lb. (kg)	34 (15)	47 (21)	39 (18)	74 (33)	89 (40)	119 (54)	136 (62)
Overall Dimensions in. (cm)	23 x 11 x 3.5 (58.4x27.9x8.9)	19 x 9 x 3 (48.3x22.9x7.6)	17 x 9 x 4.5 (43.2x22.9x11.4)	21.5 x 12.5 x 5.5 (54.6x31.8x14)	27 x 14 x 5.5 (68.6x35.6x14)	19 x 17 x 6 (48.3x43.2x15.2)	27 x 19 x 6 (68.6x48.3x15.2)
Shipping Dimensions in. (cm)	30 x 13 x 24 (76x33x61)	30 x 13 x 24 (76x33x61)	30 x 13 x 24 (76x33x61)	24 x 13 x 15 (61x33x38)	24 x 13 x 15 (61x33x38)	24 x 13 x 15 (61x33x38)	24 x 13 x 15 (61x33x38)

Applications

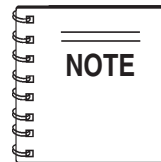
90° Standard Bend	✓	✓	✓	✓	✓	✓	✓
180° Cane Hook						✓	
Offset Bends	✓	✓	✓	✓	✓	✓	✓
Straightening	✓	✓	✓	✓	✓	✓	✓
Seismic Stirrup and Tie Hook	✓	✓					

* Minimum bend measured from bottom of machine to top of angle.

** American Concrete Institute (ACI) has approved the wheel used in this device as the proper radius for bending the bar size indicated; Concrete Reinforcing Steel Institute(CRSI) requirements are met for the bar size indicated.

Table 2. Rebar Size Chart

Model	JB5135	JB7135	JB5090	JB7090	JB8090	JB9180	JB11090
Bending Radius	135°	135°	90°	90°	90°	180°	180°
#4 (10M/#13)	★★		★★				
#5 (15M/#16)	★★★		★★★			★★	
#6 (20M/#19)		★★	★	★★	★★	★★	★★
#7 (NA/#22)		★★★	★	★★★	★★	★★	★★
#8 (25M/#25)				★	★★★	★★★	★★
#9 (30M/#29)				★	★	★	★★
#10 (NA/#32)							★★
#11 (35M/#36)							★★★



Rebar Size:
Standard 1/8 inch increments
(Metric Hard/Soft
Conversion)

Example:
#8 Rebar ÷ 8 = 1-inch
#4 Rebar ÷ 8 = 4/8 = 1/2-inch

- ★★★ ACI/CRSI Approved for this size
- ★★ Acceptable bend radius for ACI/CRSI requirements
- ★ Capable of bending rebar but does not meet ACI/CRSI requirements
- Not capable of bending this size rebar

Table 3. Electric Hydraulic Pump Specifications

	Model	JPU1
Pump	Motor Specification	PEW1501T
	Type	Electric Pump
	Motor	1.5 HP (1.11 kw)
	Speed	1725 RPM
	Input Voltage	115 @ 60 Hz
	Current	16.2 Amps
	Sound Level	80 dBA
	Oil Capacity	1 gal (3.78 liters)
	Pressure Rating	10,000 psi (68,951 kPa)
	First Stage Pressure	700 psi (4,826 kPa)
	Flow Rate @ No Load	415 in ³ /min (6,800 cm ³ /min)
	Flow Rate @ 10,000 psi	61 in ³ /min (1,000 cm ³ /min)
	Remote Control Cable	15 ft. (4.57 meters)
	Control Valve	Manual 3-Way 3-Position
	Net Weight	79.2 lbs. (32.7 kg.)
Gross Weight	104 lbs. (47.1 kg.)	
Carton Dimension (L x W x H)	16-5/8 x 11-1/8 x 21-1/8 in. (42.22 x 28.25 x 53.65 cm.)	
Crate Dimension (L x W x H)	17-1/2 x 11-5/8 x 22-7/8 in. (44.45 x 29.52 x 58.10 cm.)	

JIMMY SERIES HYDRAULIC REBAR BENDERS — GENERAL INFORMATION

GENERAL INFORMATION

The **MQ Jimmy Series Hydraulic Rebar Benders** are designed to be used as **portable** on-site rebar benders, capable of bending in-place rebar to approved American Concrete Institute (ACI) radius. Labor time and injuries are greatly reduced from manually bending rebar. Bends of 90°, 135° or 180° can now be completed in seconds at the correct elevation after forms are stripped away.

With seven models to choose from, the Jimmy Series rebar benders can accommodate a wide variety of rebar angles and sizes. Please reference Tables 1 and 2 in this manual for the rebar bender that best fits your application.

REBAR BENDING APPLICATIONS (Figures 1 thru 4)

- Pilings
- Caissons
- Bridge and Decking
- Retrofits
- Columns
- Straightening
- Walls

Rebar Columns

- 90° rebar (Figure 1) at top of column can be bent after forms have been removed
- Bending after concrete is poured allows you to stock bottom beam bars, eliminating the need to thread bottom beam bars.
- Rebar at top of column can be bent at exactly the correct elevation allowing top beam bars to be placed on top of 90° bend.

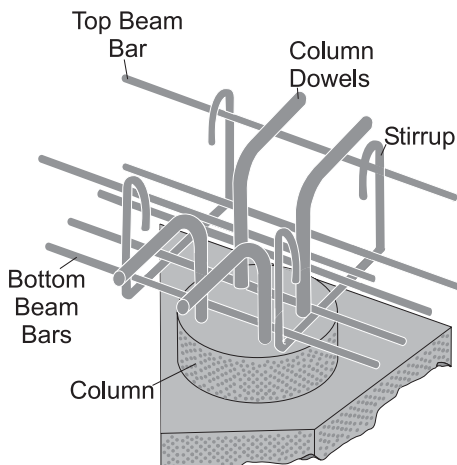


Figure 1. Columns

Rebar Straightening

- Rebar can be straightened using JB5090, JB7090, JB8090, JB9180 and JB11090.
- **NEVER** straighten rebar that is bent greater than 30°. Check with building codes before straightening rebar

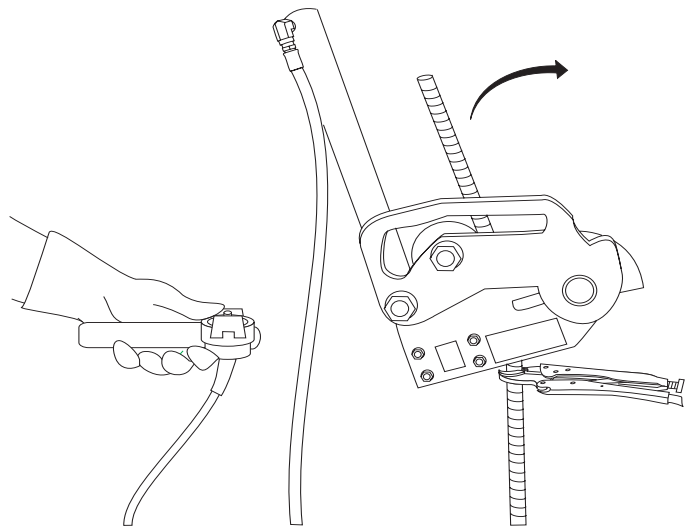


Figure 2. Rebar Straightening

- Before the rebar can be straightened by the JB5090, JB7090 or JB8090, it will be necessary to replace the main roller with the straightening roller. The straightening roller is included with each of the above models from the factory. To accomplish this task remove the main shaft as outlined in Figure 14.

CAUTION

Some agencies may not permit the straightening of rebar for existing bends of more than 30°. **DO NOT** attempt to straighten rebar bends greater than 30°.

JIMMY SERIES HYDRAULIC REBAR BENDERS — GENERAL INFORMATION

Rebar Spirals and Cages

- Can bend rebar up to 135° (Figure 3) and fits between spirals as close as 2 in. (5 cm.) on center.
- No welding required.

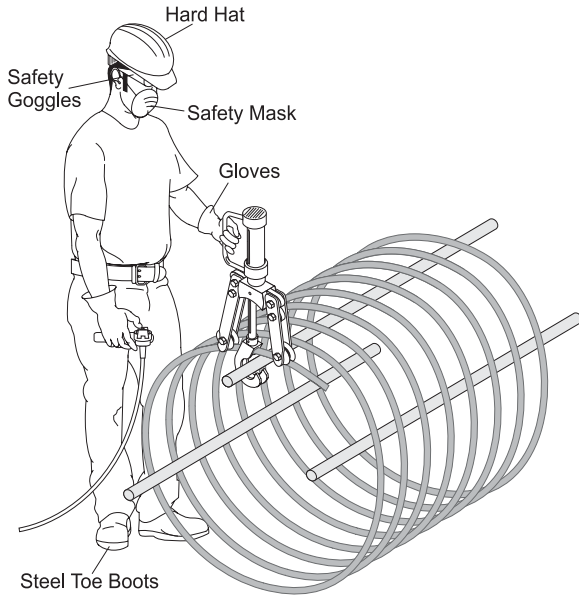


Figure 3. Rebar Spirals and Cages

Rebar Walls

- No welding required
- Bends hooks in rebar after forms have been removed.
- Bends graduated bars to precise elevations.
- Reduces size and number of holes and splices required in forms.

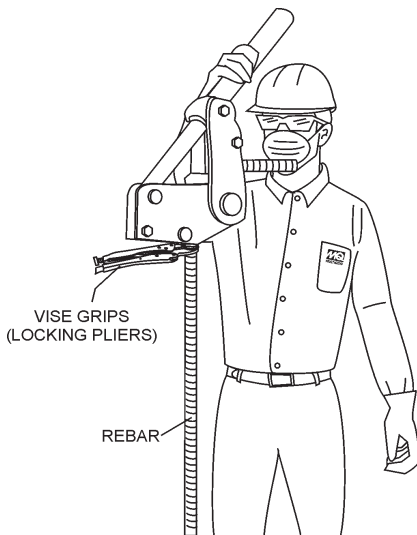


Figure 4. Rebar Walls

Electric-Hydraulic Pump

All Jimmy Series Hydraulic Rebar Benders require an electric-powered hydraulic pump to supply the necessary pressure to actuate the hydraulic cylinder. This hydraulic pump consists of a drive cylinder, oil reservoir and electronics for either remote or manual operation.

The electric motor for this pump is a 1.5 HP motor. Each electric motor requires 115 VAC, 60 Hz input for normal operation. Amperage draw for the electric motor at 10,000 psi (68,951 kpa) is approximately 13 amps. Reference Figure 5 for oil volume versus pressure.

The hydraulic pump is equipped with a 3-way, 3-position manual operated valve. This valve allows the operator to remotely control the **advance**, **hold** and **return** functions of the rebar bender. A 15 ft. (4.57 meters) remote control cable allows the operator to control the pump remotely.

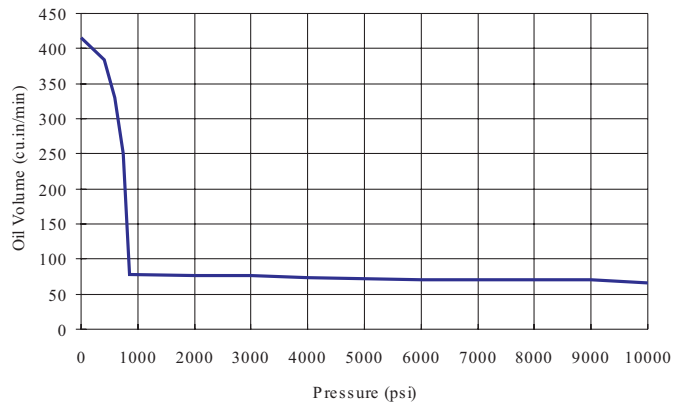


Figure 5. Oil Volume vs Pressure
Model PEW1501T Electric/Hydraulic Pump

JIMMY SERIES HYDRAULIC REBAR BENDERS — COMPONENTS

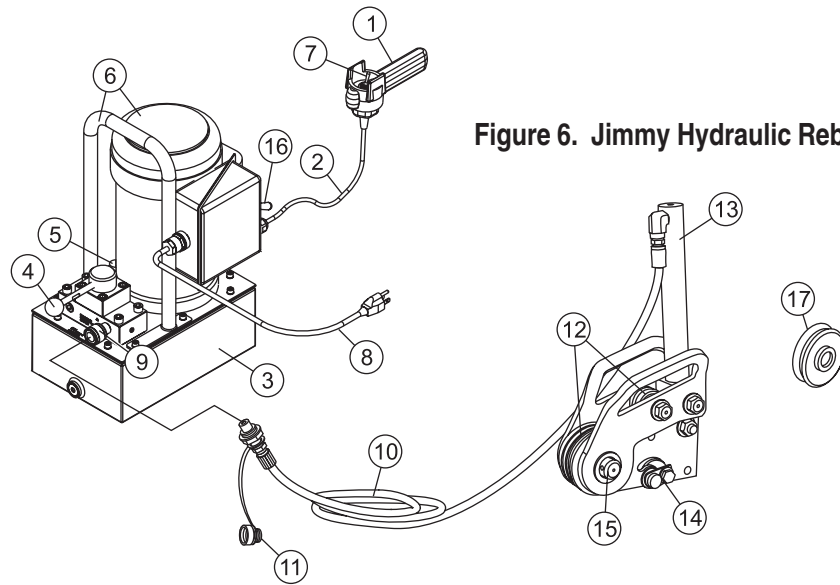


Figure 6. Jimmy Hydraulic Rebar Bender Components


1. **Remote Control Unit** – Allows the hydraulic cylinder on the rebar unit to be *advanced* or *held*.
2. **Remote Control Cable** – Allows the Electric-Hydraulic Pump to be operated remotely.
3. **Hydraulic Reservoir**– Holds 1.00 gallon (3.78 liters) of hydraulic oil. Fill only with recommended type hydraulic oil.
4. **Pump Control Lever** – Move this lever to actuate the hydraulic cylinder on the rebar bender. The lever allows the cylinder to be *advanced*, *held* or *returned*.
5. **Hydraulic Oil Fill Cap** – Remove this cap to add hydraulic fluid to the reservoir. Fill with commercial hydraulic oil.
6. **Electric-Hydraulic Pump/Carrying Handle** – When transporting of the pump is required, always use the carrying handle or lifting bale to lift the unit.
7. **Electric-Hydraulic Pump ON/OFF Switch** – Move the toggle switch to the forward position to activate the electric motor. The electric motor will stay on as long as the switch is held. Release the switch to turn off the electric motor.
8. **AC Power Cord** – Plug this 10 ft. (3.0 meters) power cord into a 115 VAC grounded type receptacle. **NEVER** remove the ground pin from the plug. This will defeat the ground circuit and greatly increase the possibility of electrical shock.
9. **Female Quick Disconnect Fitting** – Connects to the hydraulic hose and allows for easy removal.
10. **Hydraulic Hose (Rebar Bender)** – Connect one end of this hose to the female quick disconnect fitting on the electric-hydraulic pump, connect the other end (90° fitting) to the hydraulic input port on the rebar bender cylinder.
11. **Hose Cap** – When the rebar bender is not in use, **ALWAYS** cover the hose's male fitting with this cap. This will prevent dirt and foreign matter from entering the cylinder cavity.
12. **Main and Upper Arm Rollers** – Always keep large and small rollers clean and lubricated to insure smooth rolling. Remove any dirt or debris that may have accumulated on the rollers during operation.
13. **Hydraulic Cylinder** – When actuated can apply a force between 2~10 tons (2,032 ~10,160 kg.)
14. **Rebar Adjustment Bolt** – There is an adjustment bolt on the side plate of the rebar bender. Adjust these bolts to accommodate different size rebar.
15. **Main Roller Shaft** – To remove the large roller (main) or stuck rebar from the unit, push the roller shaft inward to release. Some units have a pin-clip mechanism for the removal of the main roller. See Figure 14.
16. **Electric Motor On/Off Switch** – When placed in the ON position, supplies 115VAC, 60Hz power to the electric motor.
17. **Straightening Roller** – Accessory roller for straightening rebar. For use with JB5090, JB7090, JB8090 only.

JIMMY SERIES HYDRAULIC REBAR BENDERS — INSPECTION

BEFORE STARTING

CAUTION - Read Manual


Before attempting to operate this rebar bender, and to avoid serious injury to personnel, always read and understand operation manual. Failure to read and understand operation manual could result in serious harm or even death!



WARNING
To avoid injury, you **MUST** read and understand operator's manual before using this machine.
This machine to be operated by qualified personnel only. Ask for training as needed.

DANGER - Flammable/Combustible Materials

NEVER operate the rebar bender or hydraulic pump in or around flammable materials. The possibility exists of the rebar bender emitting a spark during operation. If contact is made between the sparks and the flammable material, the result could be fire or explosion causing damage to the equipment and severe bodily harm even death!



INSPECTION

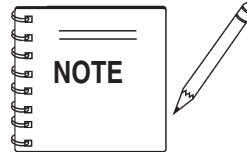
Before each use, visually inspect the items listed below. Regular maintenance and visual checks of the rebar bender and power unit prior to operation will minimize repairs and help ensure normal operation of the bender and electric-hydraulic pump.

- Check for wear and damage to rollers, pin, nuts and bolts, clip, side plates and hydraulic arm. Clean, lubricate and replace as required.
- Rebar bender can **ONLY** be used with a standard hydraulic pump rated at 10,000 PSI. Refer to the pump's manual for operation and maintenance instructions.
- Check the hydraulic pump fluid level.
- Check that all hydraulic connections are clean.
- Check all hydraulic hoses for cuts, holes, or excessive wear.
- Inspect all fittings and couplers, make sure they are clean and fitted with dust caps.
- Check that couplings to pump and bender are tightened securely.
- Check for a cracked or damaged cylinder or rebar bender
- Check for excessive wear, bending, damage, or insufficient thread engagement.
- Check for leaking hydraulic fluid
- Check for a scored or damaged piston rod.
- Improperly functioning or damaged components
- Check for loose bolts.
- Check for damaged or improperly assembled accessory equipment.
- Check for modified, welded, or altered equipment.
- Check for bent or damaged couplers or port threads.

JIMMY SERIES HYDRAULIC REBAR BENDERS — APPLYING POWER

CONNECTING THE POWER

1. The electric-hydraulic pump requires 115 VAC, 60 Hz power. Applying power to the pump that is not specified will cause severe damage to the pump's electric motor. Always read the **electrical data plate** before applying power to the pump.
2. The power plug on the pump is a 3-prong grounded type plug. **ALWAYS** connect this plug to a 3-prong grounded receptacle. **NEVER** plug this device into a 2-prong type receptacle. This will defeat the ground circuit. The use of a 3-prong to 2-prong adapter is strictly prohibited.
3. Connect the pump's AC power cord to a 115 VAC wall receptacle or portable generator (Figure 7) that is protected by a 20 amp circuit breaker. For best results connect the power cord to a GFCI receptacle.



Since **distance** can affect **voltage drop** when using an extension cord, **ALWAYS** make certain that the proper extension cord has been selected for the job. See Table 4.

4. Connect the hand-held remote control cable to the power input receptacle on the power unit
5. To apply power to the electric-hydraulic pump, place the ON/OFF toggle switch (Figure 7) to the ON position (up).

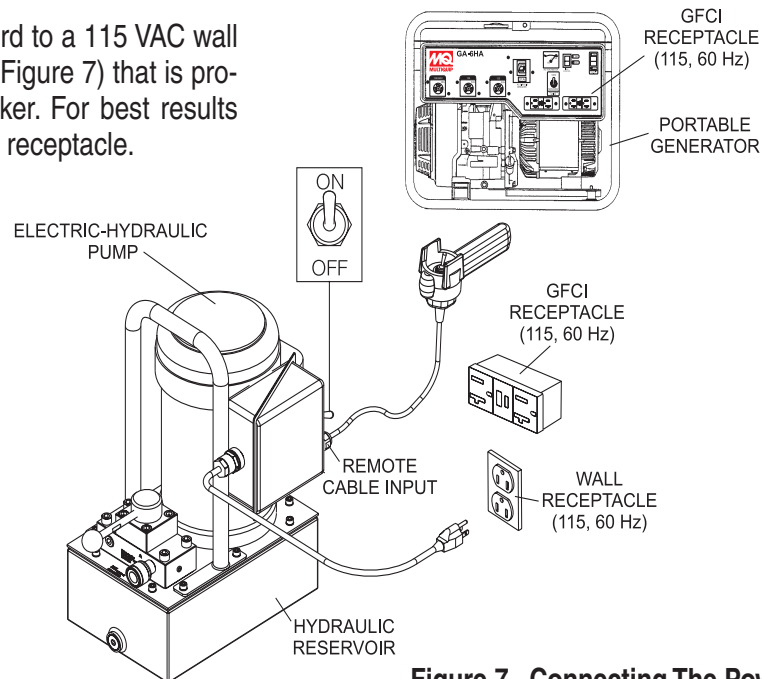


Figure 7. Connecting The Power

! DANGER - ELECTROCUTION HAZARDS

During operation of this rebar bender, there exists the possibility of **electrocution, electrical shock or burn**, which can cause **severe bodily harm** or even **DEATH!**

To avoid these hazards:

NEVER use damaged or worn cables when plugging the rebar bender into an AC power receptacle.

NEVER grab or touch a live power cord with wet hands.

NEVER stand in water and touch a live power cord.

Table 4. Cable Selection (60 Hz, Single Phase Operation)					
Current in Amperes	Load In Watts At 120 Volts	Maximum Allowable Cable Length			
		#10 Wire	#12 Wire	#14 Wire	#16 Wire
2.5	300	1000 ft.	600 ft.	375 ft.	250 ft.
5	600	500 ft.	300 ft.	200 ft.	125 ft.
7.5	900	350 ft.	200 ft.	125 ft.	100 ft.
10	1200	250 ft.	150 ft.	100 ft.	
15	1800	150 ft.	100 ft.	65 ft.	
20	2400	125 ft.	75 ft.	50 ft.	

CAUTION: Equipment damage can result from low voltage.

JIMMY SERIES HYDRAULIC REBAR BENDERS — OPERATION

OPERATION

Control Valve Lever

1. This hydraulic pump has a 3-way, 3-position valve that is activated by a control valve lever (Figure 8). In the **neutral** position, “**PORT A**” is **CLOSED**, meaning there is no flow of pressurized fluid.

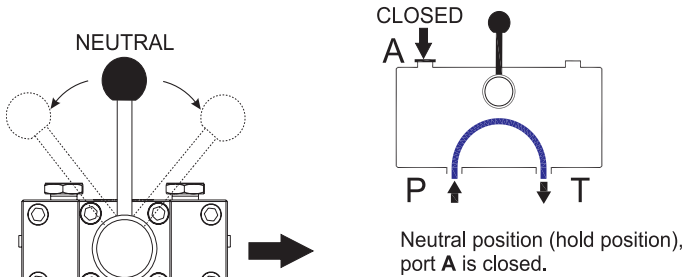


Figure 8. Control Valve Lever (Neutral Position)

2. In the **forward (extend)** position, “**PORT A**” is **OPEN**, meaning the flow of pressurized fluid is allowed (Figure 9) and the hydraulic cylinder will extend once the remote control toggle switch is pressed.

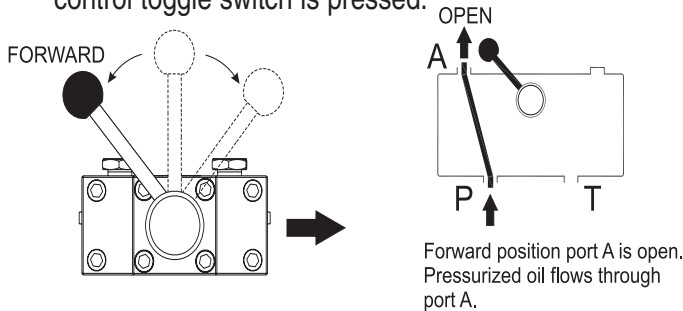


Figure 9. Control Valve Lever (Forward Position)

3. In the **reverse (retract)** position, “**PORT A**” returns hydraulic fluid back into tank (Figure 10) and the hydraulic cylinder retracts.

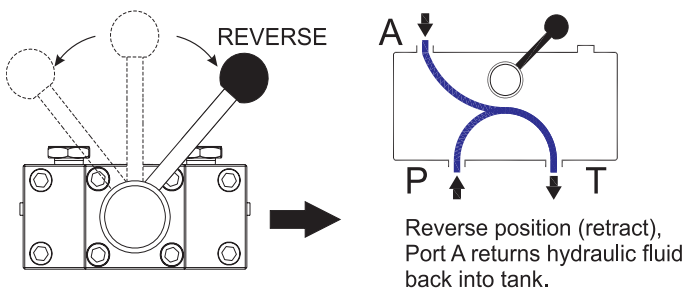


Figure 10. Control Valve Lever (Reverse Position)

NOTE The cylinder on the JB5135 and JB7135 models retract when the control valve lever is in the forward position and extend when the lever is in the reverse position. See Figure 15.

Remote Control Unit

1. On the remote control unit there is a toggle switch. When pressed, this toggle switch (Figure 11) will activate (extend) the hydraulic cylinder. Releasing the toggle switch will hold the cylinder in place.

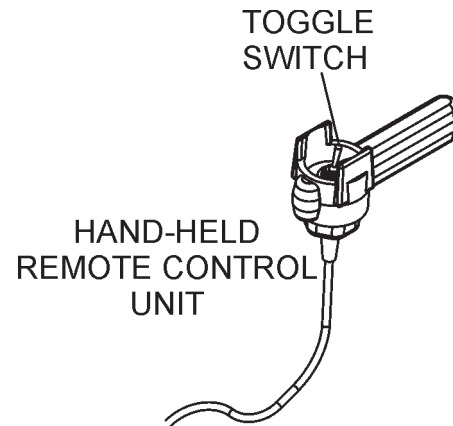


Figure 11. Remote Control Unit

NOTE The Remote Control Unit does not retract the hydraulic cylinder. The retraction of the cylinder must be done manually (Power Unit).

Positioning the Rebar Bender (Method 1)

For Models JB5090, JB7090, JB8090, JB9180, JB11090

1. Place the pump control valve lever (Figure 8) in the **neutral** position.
2. Place the rebar bender over the rebar between the main roller and upper roller arm at the desired elevation of the bend as shown in Figure 12. Use vise-grips to hold the rebar bender base in place.
3. Rotate the rebar bender until the hydraulic cylinder is in the opposite direction of the desired bend.

CAUTION

Make certain the area is clear of bystanders before starting the bending process.

JIMMY SERIES HYDRAULIC REBAR BENDERS — OPERATION

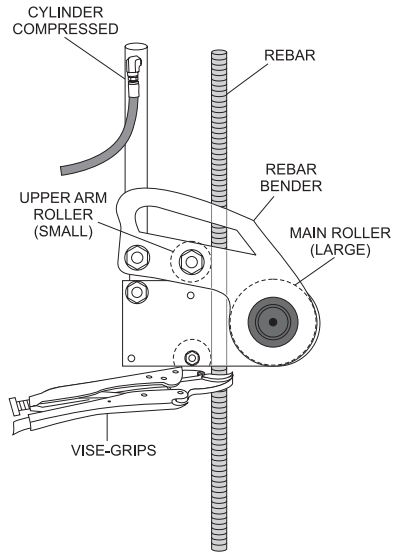


Figure 12. Rebar Placement

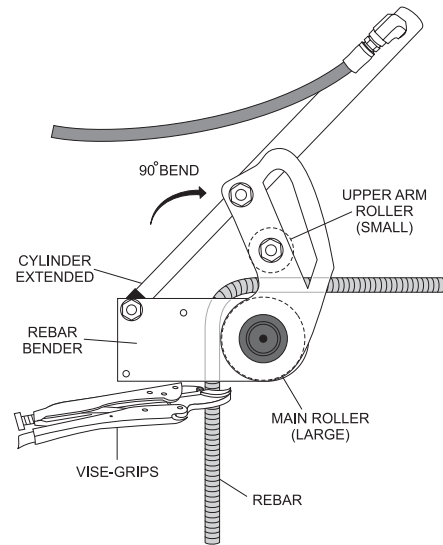


Figure 13. 90° Rebar Bend

4. Place the pump control valve lever in the **forward** position (Figure 9).
5. Place and hold the toggle switch on the remote control unit in the **ON** position. The rebar bending process should begin.
6. When the desired rebar bend angle (Figure 13) has been achieved, release the toggle switch on the remote control unit. This will stop the forward motion of the cylinder.
7. To retract the cylinder, place the pump control valve lever in the **reverse/retract** position. The cylinder will retract with or without the pump running.
8. To remove the rebar bender, place the pump control valve lever in the **neutral position** and either lift the bender over the end of the rebar or remove the main roller and shaft (Figure 14) and slide the rebar bender off the rebar.

Positioning the Rebar Bender (Method 2)

For Models JB5090, JB7090, JB8090, JB9180, JB11090

1. Place the pump control valve lever (Figure 8) in the **neutral** position.
2. Remove the **Main Roller Shaft** as shown in Figure 14. Apply a suitable amount of pressure to the shaft to either insert or remove it. It is held in place by a detent ball plunger

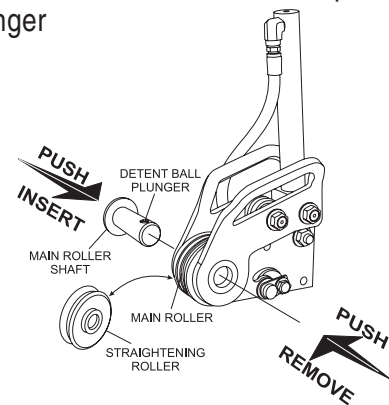
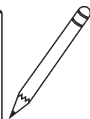
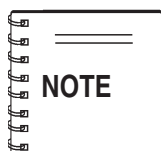


Figure 14. Removing the Main Roller Shaft



The JB5090, JB7090 and JB8090 bender may require adjustment in order to obtain a 90° bend. See Rebar Adjustment Bolt section.

3. Next, remove the **main roller** and place the rebar bender over the rebar. Use vise-grips to hold the rebar bender base in place.
- 3a. When bending rebar with models JB5090, JB7090, JB8090 only: exchange the main roller for the straightening roller supplied from the factory.
4. Reinsert the main roller, making sure the rebar is positioned between the main roller and the upper roller arm.
5. Operate rebar bender as outlined in Method 1, steps 3 thru 8.

! WARNING

Use **ONLY** graded rebar. Ungraded rebar may break and cause serious injury!

JIMMY SERIES HYDRAULIC REBAR BENDERS — OPERATION

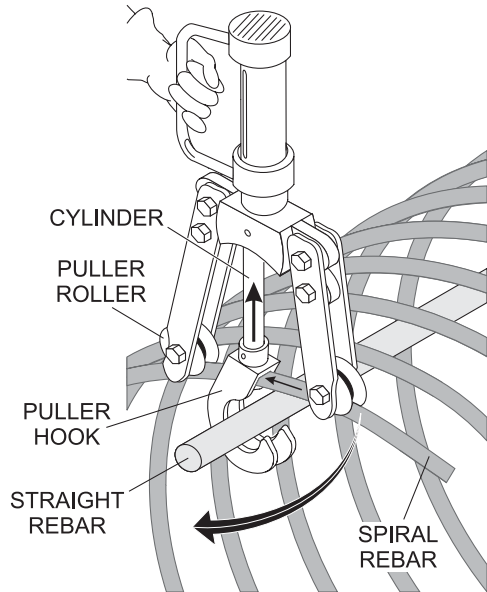


Figure 15. JB5135 Rebar Placement — Rebar Bending

Positioning the Rebar Bender (Method 3)

For Model JB5135

1. Place the pump control valve lever (Figure 8) in the **neutral** position.
2. Send the end of the spiral rebar through the gap in the puller hook. Secure the puller hook around the straight rebar and align the puller rollers on the spiral rebar (Figure 15).
3. Place the pump control valve lever in the **forward** position.
4. Place and hold the toggle switch on the remote control unit (**ON** position). The rebar bending process should begin.
5. Activating the rebar bender will then cause the puller hook and cylinder to retract and curl the end of the spiral rebar up to 135° around the straight rebar.
6. When the desired angle has been achieved, release the toggle switch on the remote control unit. This will stop the retraction of the puller hook and cylinder.
7. To extend the puller hook and cylinder, place the pump control valve lever in the **reverse/retract** position.
8. To remove the rebar bender, place the pump control valve lever in the **neutral** position and lift the bender over the end of the rebar.

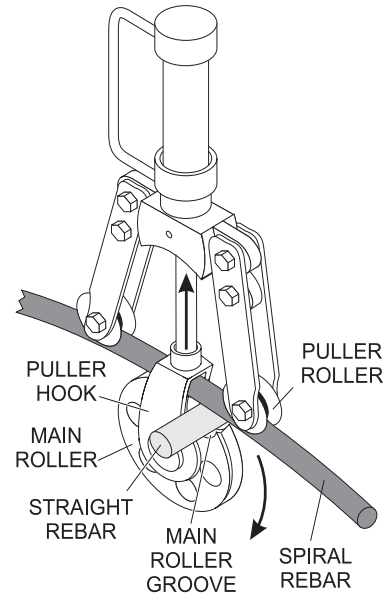


Figure 16. JB7135 Rebar Placement — Rebar Bending

Positioning the Rebar Bender (Method 4)

For Model JB7135

1. Place the pump control valve lever (Figure 8) in the **neutral** position.
2. Send the end of the spiral rebar through the gap between the puller hook and main roller. Rotate the main roller so that the main roller groove is in the 1 o'clock position. Secure the straight rebar in the main roller groove. Align the puller rollers on the spiral rebar (Figure 16).
3. Operate rebar bender as outlined in Method 3, steps 3 thru 8.

JIMMY SERIES HYDRAULIC REBAR BENDERS — OPERATION/SHUT-DOWN

Rebar Adjustment Bolt

For Model JB5090, JB7090, JB8090

The rebar bender may require adjustment in order to obtain a 90° bend. Adjustment is necessary due to inconsistencies in the rebar produced by steel mills and because each bender is capable of handling multiple diameters of rebar.

1. Use a 19 MM socket to loosen the bolt and a 24 MM socket to loosen the locknut (Figure 17) until the adjustable block can be slid easily in the crescent groove on the side of the rebar. Note: there is no need to remove the hardware.
2. Insert a piece of the rebar to be used into the machine to assist in positioning the adjustable stop.
3. Slide the adjustable stop towards the rebar (away from the hydraulic ram) until it makes contact with the rod.
4. Back the adjustable stop off the rebar slightly so the rod can pass easily through the machine without binding.
5. Tighten the hardware securely, connect the bender to the pump and make a test bend. You should now be able to attain the desired bending angle. If the desired bend is not attained, repeat the process until the desired result is achieved.

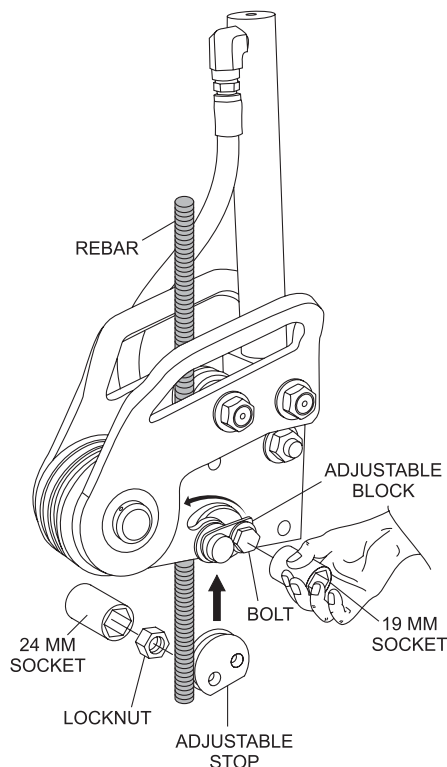


Figure 17. Rebar Adjustment Bolt

Shutting Down the Rebar Bender and Power Unit

1. Remove Rebar Bender from the rebar.
2. Place ON/OFF toggle switch in the OFF position.
3. Unplug AC Power cord from receptacle.
4. Disconnect hydraulic hose from Power Unit.
5. Place protective hose cap on the male coupler end of the hose.
6. Roll up hydraulic hose. Store Rebar Bender in a safe place.
7. On the Power Unit, wrap the power and remote cords neatly. Store Power Unit in safe place.

JIMMY SERIES HYDRAULIC REBAR BENDERS — MAINTENANCE

PREVENTIVE MAINTENANCE

Preventive maintenance should be performed on a daily or weekly basis depending on the amount and working use. A higher than normal operating pressure could indicate a need for immediate maintenance.

A clean well lubricated rebar bender will operate faster and smoother and will allow for more accurate readings from pump pressure gauges.

PUMP MAINTENANCE (Cleaning and Lubrication)

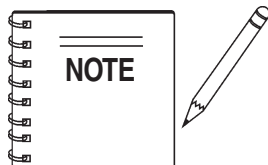
1. Remove the side plates on the rebar bender to expose moving parts. Clean all moving parts with a clean rag and solvent.
2. Check the cylinder on all models for leaks.
3. Lubricate all moving parts with **high pressure grease**.
4. For rebar bender models with cables (Models JB11090 and JB9180), lubricate the five grease fittings daily or after approximately 50 rebar bend operations. Check hydraulic cables daily for fraying.
4. For rebar models JB135 and JB7135, visually check for dents or cracks in the side plates. Replace plates immediately if damaged. Clean and lubricate both rollers to insure smooth rotation.
5. Check hydraulic oil every 40 hours of operation. Add hydraulic oil if necessary. Oil can be added by removing the vent cap. Use a funnel.

ADDING HYDRAULIC OIL

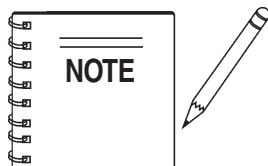
1. Make sure electric motor is OFF.
2. Depressurize system by placing pump control lever in the **neutral** position. Disconnect hydraulic hose from port A of system.
3. Remove **vent cap** on top plate of reservoir. Visually inspect to see if oil level is low. Oil level should be about 2 inches (50 mm) from top of reservoir plate.
4. Using a funnel, add oil to about 2 inches (50 mm) from top of reservoir plate.

CHANGING HYDRAULIC OIL

1. Change hydraulic oil **once a year**.
2. Remove drain plug, tilt the pump, then pour used fluid into a sealable container.
3. Dispose the hydraulic fluid in accordance with local regulations.
4. Install drain cap.
5. Remove vent cap and fill with recommended type hydraulic oil.



Completely change hydraulic oil every **300 hours** of operation. Change the oil more frequently when pump is used in an extremely dusty environment or when the oil has been overheated.



Use only good quality hydraulic oil. Multiquip recommends Mobil DTE 15M or equivalent. NEVER use brake fluid, transmission fluid, turbine oil, motor oil alcohol glycerin etc. Use of other than the recommended hydraulic oil will void warranty and damage the pump and hydraulic hose used in the rebar bending application.

STORAGE

When the rebar bender and electric hydraulic pump are not used, please store in a clean dry location out of the reach of children and away from unauthorized personnel.

Be sure that all dust caps are attached to their respective hoses and the hand-held remote control cable and pump power cord are neatly wrapped.

JIMMY SERIES HYD. REBAR BENDERS — EXPLANATION OF CODE IN REMARKS

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

Sample Parts List:

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	12345	BOLT	1	INCLUDES ITEMS W/*
2*		WASHER, 1/4 IN.		NOT SOLD SEPARATELY
2*	12347	WASHER, 3/8 IN. ...	1	MQ-45T ONLY
3	12348	HOSE	A/R	MAKE LOCALLY
4	12349	BEARING	1	S/N 2345B AND ABOVE

NO. Column

Unique Symbols - All items with same unique symbol (*, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

Duplicate Item Numbers - Duplicate numbers indicate multiple part numbers are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.



When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

PART NO. Column

Numbers Used - Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

QTY. Column

Numbers Used - Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

Assembly/Kit - All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:
“INCLUDES ITEMS W/(unique symbol)”

Serial Number Break - Used to list an effective serial number range where a particular part is used.

Indicated by:
“S/N XXXXX AND BELOW”
“S/N XXXX AND ABOVE”
“S/N XXXX TO S/N XXXX”

Specific Model Number Use - Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:
“XXXXX ONLY”
“NOT USED ON XXXX”

“Make/Obtain Locally” - Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

“Not Sold Separately” - Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

JIMMY SERIES HYD. REBAR BENDERS — SUGGESTED SPARE PARTS

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB5135)

Qty.	P/N	Description
1	RB252698	PULLER HOOK
1	RB252818	CAP SCREW, 5/8-18 X 2-1/2 LG
1	RB252703	ROLLER PIN
1	RB252828	BALL PLUNGER, 3/8-16
1	RB252701	WHEEL PULLER HOUSING
1	RB252699	PULLER ROLLER
2	RB252852	SET SCREW, 5/16 X 24 X 1/4
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB7135)

Qty.	P/N	Description
1	RB252710	ROLLER PIN
1	RB252828	BALL PLUNGER, 3/8-16
1	RB252707	MAIN ROLLER
1	RB252706	PULLER HOOK
1	RB10621	90 DEGREE FITTING, 3/8 NPTF
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB5090)

Qty.	P/N	Description
1	RB252671	MAIN ROLLER SHAFT
1	RB252828	BALL PLUNGER, 3/8-16
1	RB252665	MAIN ROLLER
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RB HOSECAP	HOSE CAP
1	RB001WHL	STRAIGHTENING WHEEL
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB7090)

Qty.	P/N	Description
1	RB252685	MAIN ROLLER SHAFT
1	RB252829	BALL PLUNGER, 1/2-13
1	RB252679	MAIN ROLLER
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	RB001WHL	STRAIGHTENING WHEEL
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB8090)

Qty.	P/N	Description
1	RB252685	MAIN ROLLER SHAFT
1	RB252829	BALL PLUNGER, 1/2-13
1	RB252694	MAIN ROLLER
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	RB001WHL	STRAIGHTENING WHEEL
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB9180)

Qty.	P/N	Description
1	RB252720	MAIN WHEEL PIN
1	RB252829	BALL PLUNGER, 1/2-13
1	RB252717	FRONT PULLEY
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF
2	RB252731	CABLE, 44-1/2" LG.

JIMMY SERIES HYDRAULIC REBAR BENDER 1 to 3 Units (JB11090)

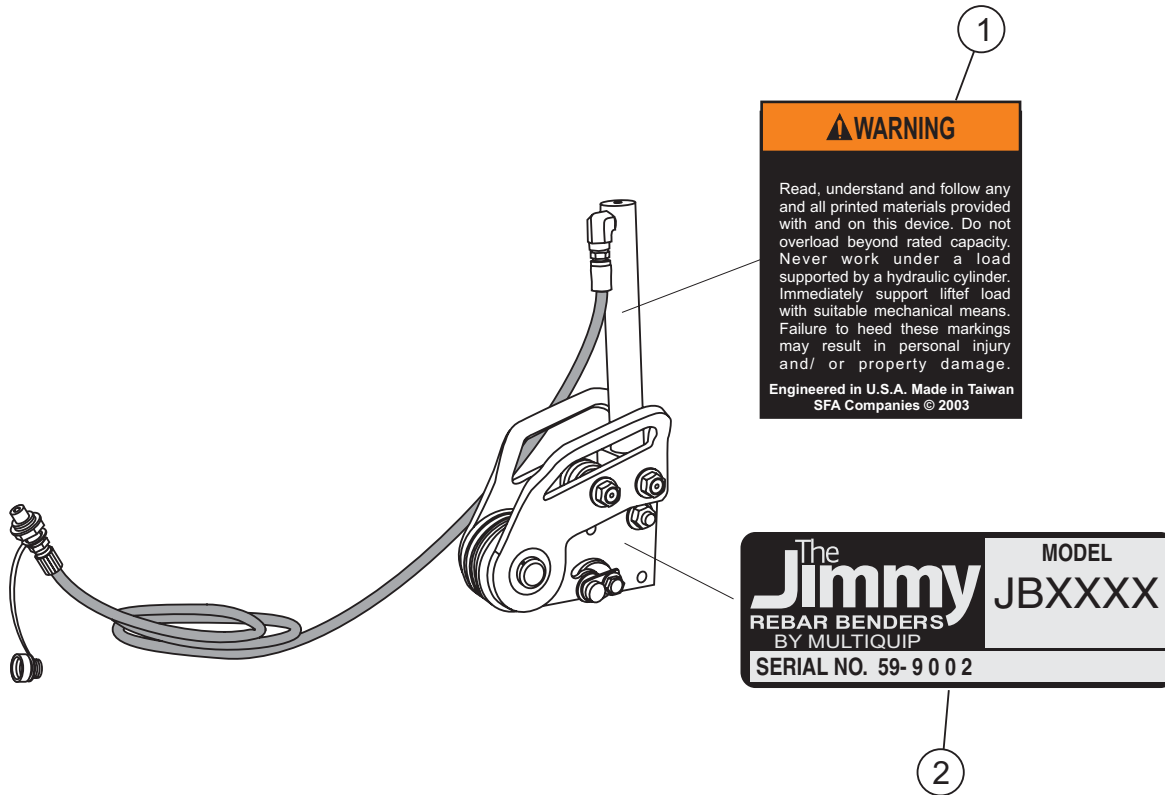
Qty.	P/N	Description
1	RB252720	MAIN WHEEL PIN
1	RB252829	BALL PLUNGER, 1/2-13
1	RB252717	FRONT PULLEY
1	RB9681	STREET ELBOW FITTING
1	CH38F	QUICK DISCONNECT COUPLER
1	RB9777	RUBBER HOSE, 10 FT
1	RBHOSECAP	HOSE CAP
1	CH38M	MALE HALF COUPLER, 3/8-18NPTF
1	RB252738	CABLE, 45-1/2" LG.

ELECTRIC-HYDRAULIC PUMP 1 to 3 Units (JPU1)

Qty.	P/N	Description
1	PEW01	PENDANT SWITCH
1	E0539940101	REPAIR KIT FOR PISTON BLOCK
1	E0539980105	REPAIR KIT FOR MANIFOLD
1	E0539960109	REPAIR KIT FOR GEAR PUMP
1	64110100104	SOCKET HEAD SCREW, M10X1.5X10
1	E0561009101	HANDLE, D10 X 98.5
1	E0561008109	KNOB, D30MM
1	E0539910104	BOLT KIT
1	E0539911106	REPAIR KIT

JIMMY SERIES HYDRAULIC REBAR BENDERS — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS



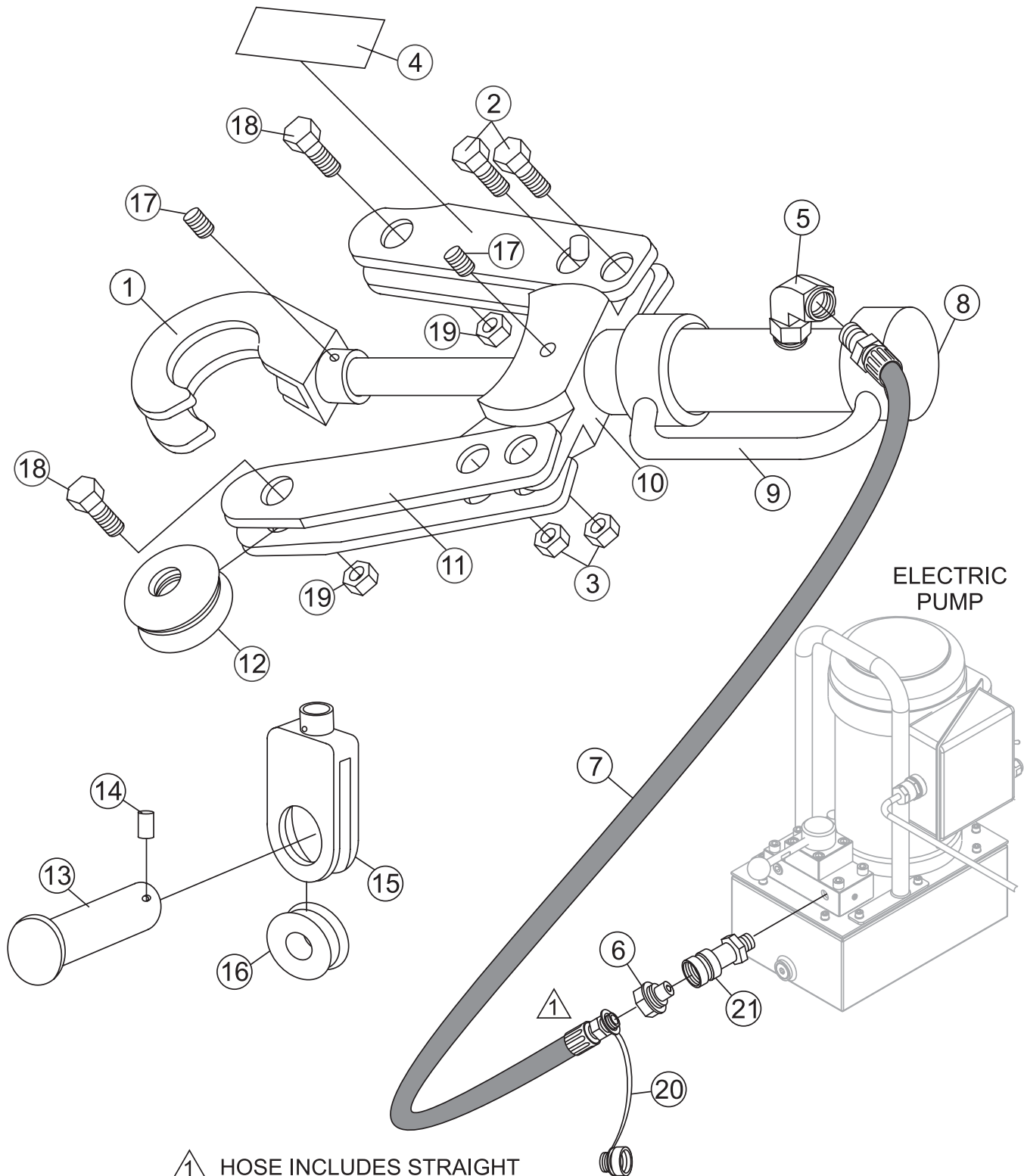
JIMMY SERIES HYDRAULIC REBAR BENDERS — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARK</u>
1	TBD	WARNING, READ MANUAL DECAL	1	
2		NAMEPLATE, JB5135	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB7135	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB5090	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB7090	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB8090	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB9180	1	CONTACT MQ PARTS DEPT.
2		NAMEPLATE, JB11090	1	CONTACT MQ PARTS DEPT.

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB5135 ASSY.

JB5135 ASSY.



1 HOSE INCLUDES STRAIGHT MALE FITTING AT BOTH ENDS.

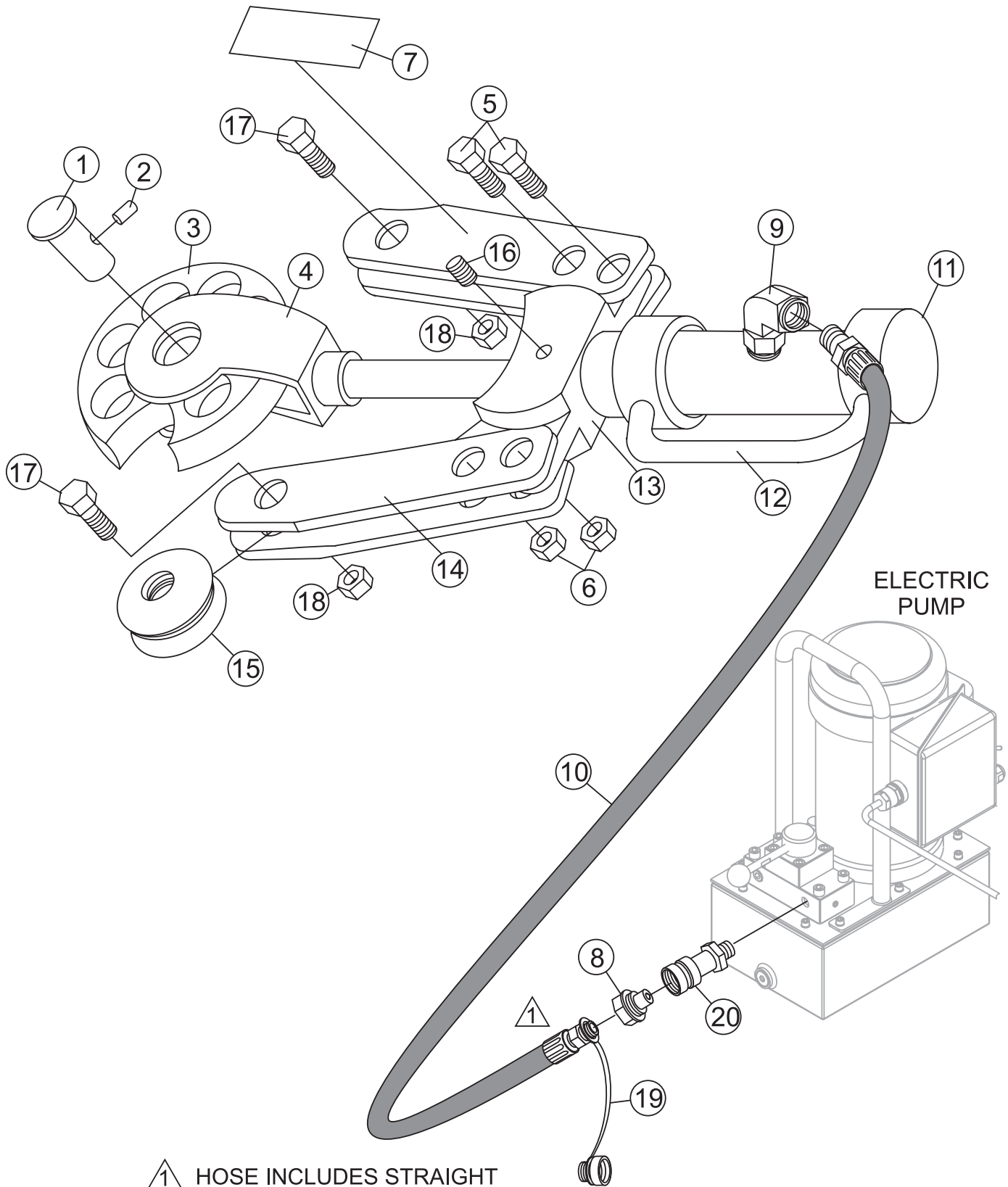
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB5135 ASSY.

JB5135 ASSY.

NO	PART NO	PART NAME	QTY.	REMARK
1	RB252698	PULLER HOOK	1	
2	RB252818	CAP SCREW(5/8- 18 X 2- 1/2LG.)	4	
3	RB252839	LOCK NUT(5/8- 18)	4	
4	RB252745	DECAL	1	
5	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
6	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
7	RB9777	RUBBER HOSE (10FT.)	1	
8	HP0205PB	CYLINDER (2 TON; 5IN. STROKE, ADAPTER INCLUDED)	1	REPLACES RP25PAC
9	RB252702	HANDLE ASSY.	1	
10	RB252696	CYLINDER MOUNT	1	
11	RB252697	PULLER ARM (LEFT & RIGHT)	1	
12	RB252700	PULLER ROLLER	2	
13	RB252703	ROLLER PIN	1	
14	RB252828	BALL PLUNGER (3/8-16)	1	
15	RB252701	WHEEL PULLER HOUSING	1	
16	RB252699	PULLER ROLLER	1	
17	RB252852	SET SCREW (5/16- 24 X 1/4 LG. NYLON LOCKING TIP INCLUDED)	2	
18	RB253081	CAP SCREW (3/4- 16 X 2- 1/2 LG.: LONG SHANK)	2	
19	RB252835	JAM NUT (3/4- 16)	2	
20	RBHOSECAP	HOSE CAP	1	
21	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB7135 ASSY.

JB7135 ASSY.



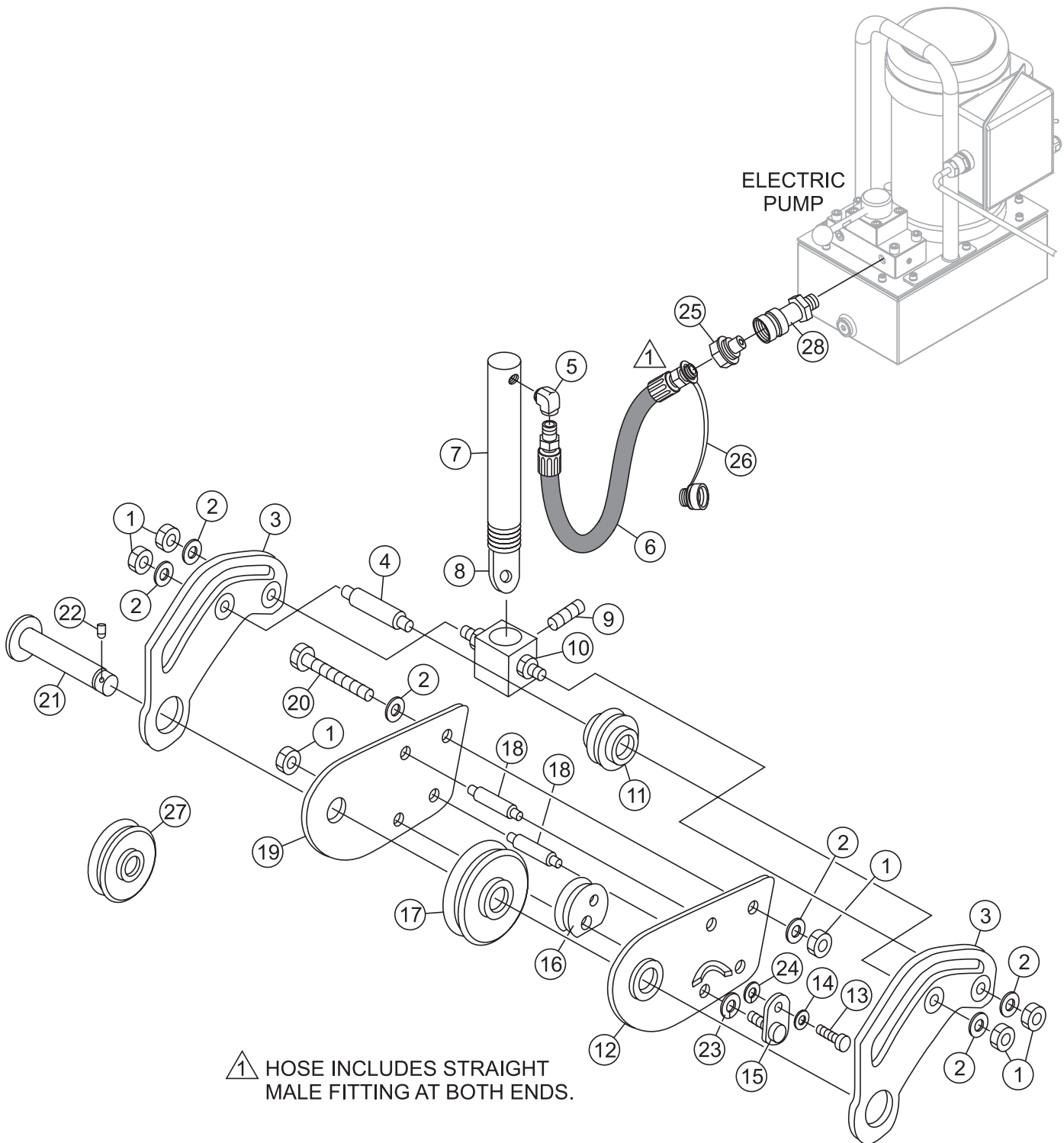
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB7135 ASSY.

JB7135 ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARK</u>
1	RB252710	ROLLER PIN	1	
2	RB252828	BALL PLUNGER	1	
3	RB252707	MAIN ROLLER	1	
4	RB252706	PULLER HOOK	1	
5	RB252841	LOCK NUT	4	
6	RB252820	CAP SCREW (3/4-16X 2-12)	4	
7	RB252746	DECAL	1	
8	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
9	RB10621	90° ELBOW FITTING (3/8 NPTF)	1	
10	RB9777	RUBBER HOSE (10FT)	1	
11	HP0505PB	CYLINDER(5 TON; 5-1/2 IN. STROKE)	1 REPLACES RP55PAC
12	RB252709	HANDLE ASSEMBLY	1	
13	RB252704	CYLINDER MOUNT	1	
14	RB252705	PULLER ARM (LEFT & RIGHT)	4	
15	RB252708	PULLER ARM ROLLER	1	
16	RB252852	SET SCREW (5/16- 24 X 1/4 LG. NYLON LOCKING TIP INCLUDED)	1	
17	RB253081	CAP SCREW (3/4- 16 X 2- 1/2 LG.: LONG SHANK)	2	
18	RB252835	JAM NUT (3/4- 16)	2	
19	RBHOSECAP	HOSE CAP	1	
20	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB5090 ASSY.

JB5090 ASSY.



JIMMY SERIES HYDRAULIC REBAR BENDERS — JB5090 ASSY.

JB5090 ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	RB252839	LOCKNUT (5/8-18)	6	
2	RB252844	WASHER (5/8)	6	
3	RB252662	OUTSIDE PLATE (LEFT AND RIGHT)	1	
4	RB252672	CENTRAL SHAFT	1	
5	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
6	RB9777	RUBBER HOSE (10')	1	
7	H0509PB	CYLINDER (5 TON; 9-1/8" STROKE)	1	REPLACES C59C-PAC
8	RB252675	PLUNGER CLEVIS	1	
9	RB252852	SET SCREW (5/16-24 X 1/4 LG.)	1	
10	RB252669	CYLINDER TRUNION	1	
11	RB252667	UPPER ARM ROLLER	1	
12	RB252663	INSIDE SIDE PLATE RIGHT HAND	1	
13	RB252815	CAP SCREW (1/2-20 X 1-1/4 LG.)	1	
14	RB252843	WASHER (1/2")	1	
15	RB252674	STOP BOLT ASSEMBLY	1	
16	RB252668	ADJUSTABLE STOP	1	
17	RB252665	MAIN ROLLER	1	
18	RB252673	INSIDE PLATE SPACER	2	
19	RB252664	INSIDE SIDE PLATE LEFT HAND	1	
20	RB252817	CAP SCREW (8-5/8-18 X 2-1/2 LG.)	1	
21	RB252671	MAIN ROLLER SHAFT	1	
22	RB252828	BALL PLUNGER (3/8-16)	1	
23	RB252831	EXTERNAL LOCKWASHER (5/8")	1	
24	RB252830	EXTERNAL LOCKWASHER (1/2")	1	
25	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
26	RBHOSECAP	HOSE CAP	1	
27	RB001WHL	STRAIGHTENING WHEEL	1	
28	CH38F	QUICK DISCONNECT COUPLER	1	

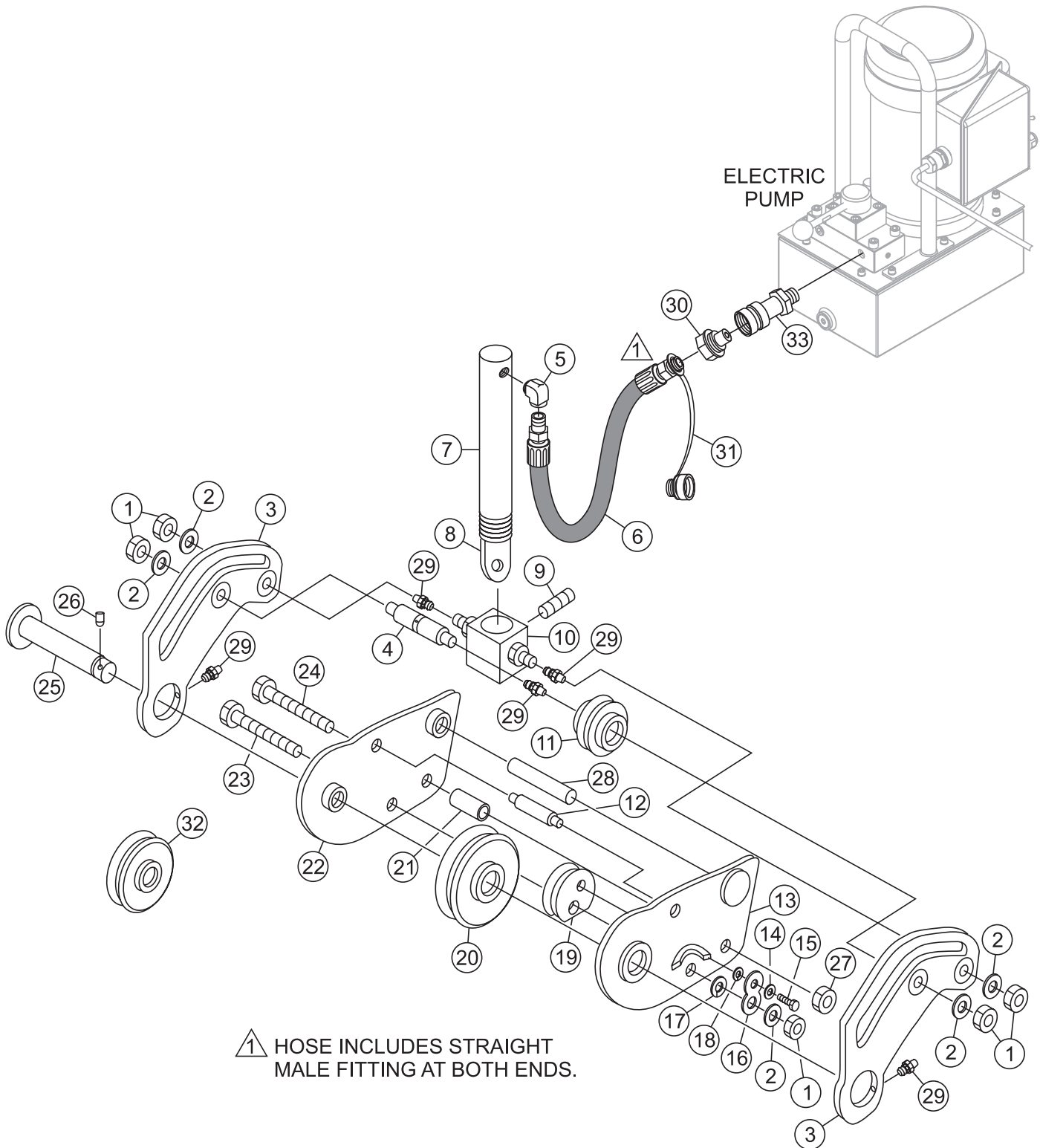
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB7090 ASSY.

JB7090 ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	RB252840	LOCKNUT (7/8-14)	5	
2	RB252845	WASHER (7/8)	5	
3	RB252676	OUTSIDE PLATE (LEFT AND RIGHT)	1	
4	RB252686	CENTRAL SHAFT	1	
5	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
6	RB9777	RUBBER HOSE (10')	1	
7	H1012PB	CYLINDER (10 TON; 12" STROKE)	1	REPLACES C1012C-PAC
8	RB252689	PLUNGER CLEVIS	1	
9	RB252852	SET SCREW (5/16-24 X 1/4 LG.)	1	
10	RB252683	CYLINDER TRUNION	1	
11	RB252681	UPPER ARM ROLLER	1	
12	RB252684	SPACER	1	
13	RB252678	INSIDE SIDE PLATE LEFT HAND	1	
14	RB252843	WASHER (1/2")	1	
15	RB252815	HEX CAP SCREW (1/2-20 X 1-1/4 LG.)	1	
16	RB252688	STOP BOLT WASHER	1	
17	RBRB253046	EXTERNAL LOCKWASHER (7/8")	1	
18	RB252830	EXTERNAL LOCKWASHER (1/2")	1	
19	RBRB252682	ADJUSTABLE STOP	1	
20	RB252679	MAIN ROLLER	1	
21	RB252687	INSIDE PLATE SPACER	1	
22	RB252677	INSIDE SIDE PLATE RIGHT HAND	1	
23	RB252821	HEX CAP SCREW (7/8-14 X 3-1/4 LG.)	1	
24	RB252816	HEX CAP SCREW (1/2-20 X 2-3/4 LG.)	1	
25	RB252685	MAIN ROLLER SHAFT	1	
26	RB252829	BALL PLUNGER (1/2-13)	1	
27	RB252838	LOCKNUT (1/2-20)	1	
28	RB252690	DOWEL PIN (7/8" DIA X 2")	1	
29	RB252854	GREASE FITTING (1/4-20)	5	
30	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
31	RBHOSECAP	HOSE CAP	1	
32	RB001WHL	STRAIGHTENING WHEEL	1	
33	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB8090 ASSY.

JB8090 ASSY.



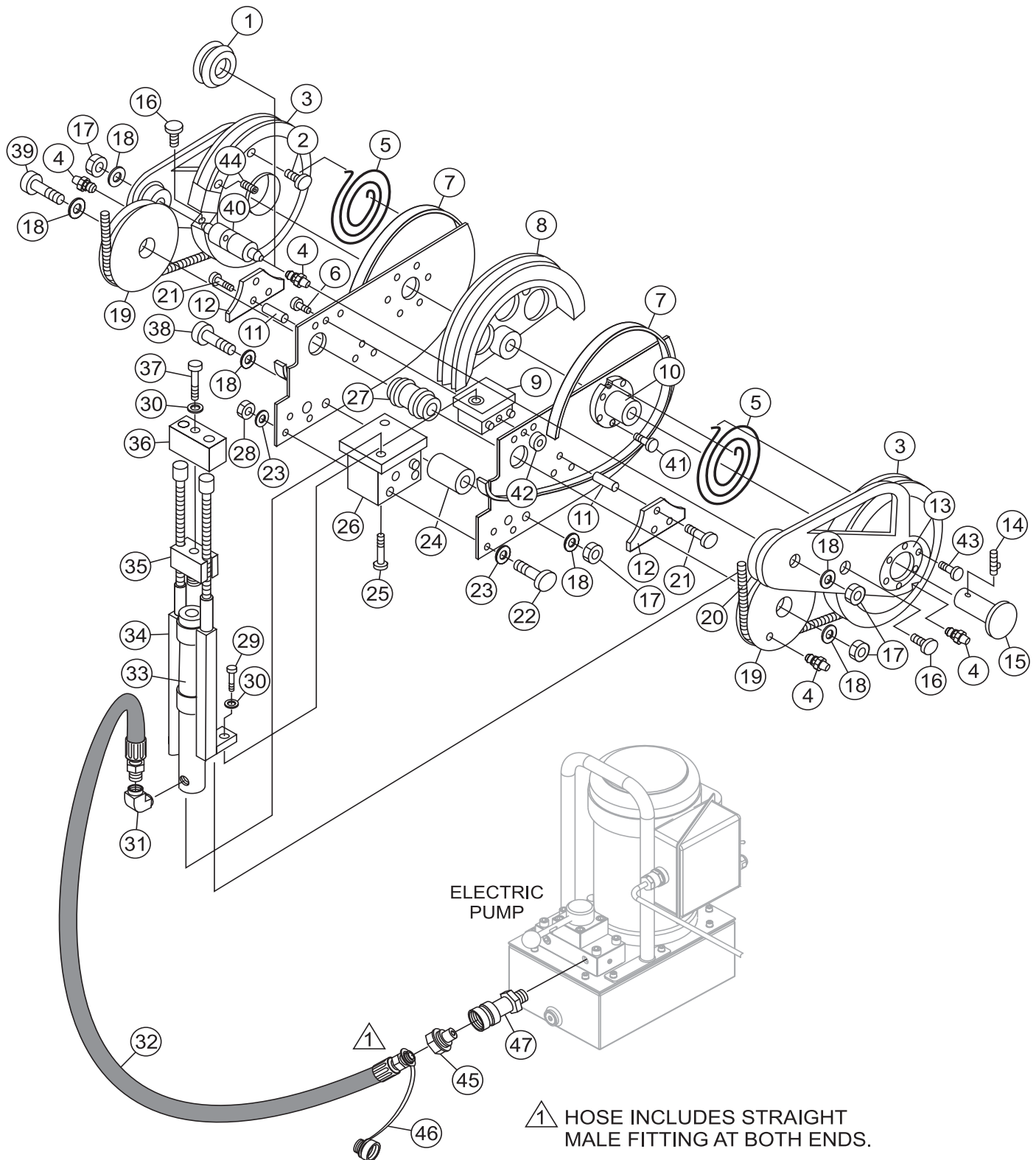
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB8090 ASSY.

JB8090 ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	RB252840	LOCKNUT (7/8-14)	5	
2	RB252845	WASHER (7/8)	5	
3	RB252691	OUTSIDE PLATE (LEFT AND RIGHT)	1	
4	RB252686	CENTRAL SHAFT	1	
5	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
6	RB9777	RUBBER HOSE (10')	1	
7	H1014PB	CYLINDER (10 TON; 14" STROKE)	1	REPLACES C1014C-PAC
8	RB252689	PLUNGER CLEVIS	1	
9	RB252852	SET SCREW (5/16-24 X 1/4 LG.)	1	
10	RB252683	CYLINDER TRUNION	1	
11	RB252681	UPPER ARM ROLLER	1	
12	RB252684	SPACER	1	
13	RB252693	INSIDE SIDE PLATE LEFT HAND	1	
14	RB252843	WASHER (1/2")	1	
15	RB252815	HEX CAP SCREW (1/2-20 X 1-1/4 LG.)	1	
16	RB252688	STOP BOLT WASHER	1	
17	RB253046	EXTERNAL LOCKWASHER (7/8")	1	
18	RB252830	EXTERNAL LOCKWASHER (1/2")	1	
19	RB252682	ADJUSTABLE STOP	1	
20	RB252694	MAIN ROLLER	1	
21	RB252687	INSIDE PLATE SPACER	1	
22	RB252692	INSIDE SIDE PLATE RIGHT HAND	1	
23	RB252821	HEX CAP SCREW (7/8-14 X 3-1/4 LG.)	1	
24	RB252816	HEX CAP SCREW (1/2-20 X 2-3/4 LG.)	1	
25	RB252685	MAIN ROLLER SHAFT	1	
26	RB252829	BALL PLUNGER (1/2-13)	1	
27	RB252838	LOCKNUT (1/2-20)	1	
28	RB252690	DOWEL PIN (7/8" DIA X 2")	1	
29	RB252047	GREASE FITTING (1/4-20)	5	
30	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
31	RBHOSECAP	HOSE CAP	1	
32	RB001WHL	STRAIGHTENING WHEEL	1	
33	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB9180 ASSY.

JB9180 ASSY.



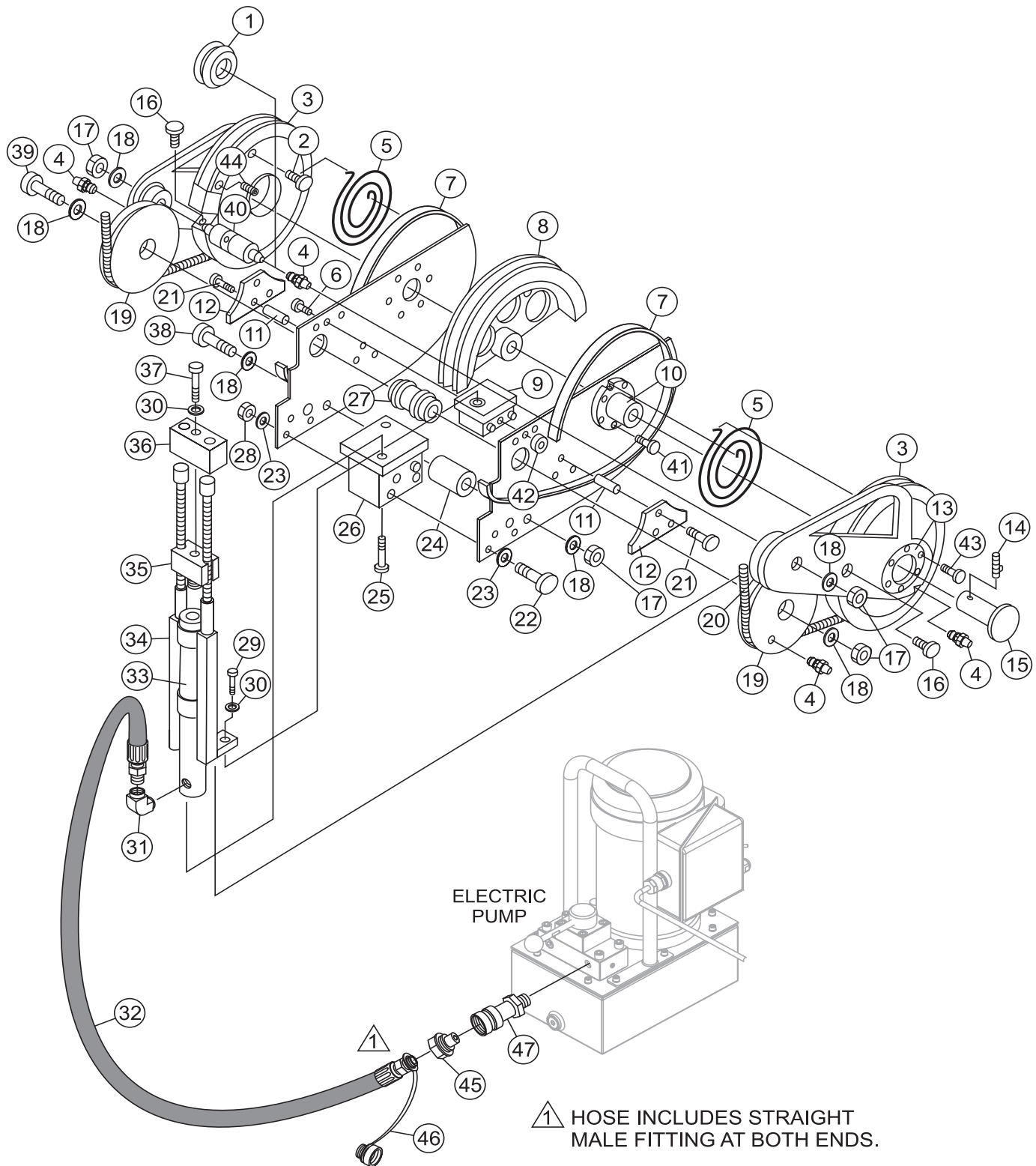
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB9180 ASSY.

JB9180 ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	RB252716	TOP ROLLER	1	
2	RB252807	HEX CAP SCREW (1/4-20 X 1" LG.)	2	
3	RB252711	OUTSIDE SIDE PLATES (RIGHT AND LEFT)	2	
4	RB252854	GREASE FITTING (1/4-20)	5	
5	RB252741	COIL SPRING	2	
6	RB252811	HEX CAP SCREW (3/8-24 X 2-1/2" LG.)	1	
7	RB252713	INSIDE SIDE GUIDE PLATE (RIGHT AND LEFT)	2	
8	RB252715	HALF MAIN WHEEL (DOWEL PINS INCLUDED)	1	
9	RB252719	RAM SUPPORT AND CENTER SPACER (DOWEL PINS INCLUDED)	1	
10	RB252723	INSIDE MAIN PLATE PULLEY BUSHING (RIGHT AND LEFT)	2	
11	RB252742	SPACER	6	
12	RB252712	SIDE GUARD (RIGHT AND LEFT)	2	
13	RB252725	MAIN PULLEY BUSHING (RIGHT AND LEFT)	2	
14	RB252829	BALL PLUNGER (1/2-13)	1	
15	RB252720	MAIN WHEEL PIN	1	
16	RB253074	HEX CAP SCREW (5/16-24 X 1" LG.)	2	
17	RB252840	LOCKNUT (7/8-14)	4	
18	RB252845	WASHER (7/8")	6	
19	RB252717	FRONT PULLEY	2	
20	RB252731	CABLE (44-1/2" LG.)	2	
21	RB253067	HEX CAP SCREW (1/4-20 X 1-1/4 LG.)	6	
22	RB252813	HEX CAP SCREW (3/8-24 X 2-3/4 LG.)	3	
23	RB252842	WASHER (3/8")	6	
24	RB252726	BAR STOP BUSHING	1	
25	RB252824	SOC. HD. CAP SCREW (5/16-18 X 3-1/2 LG.)	2	
26	RB252718	RAM PAD AND CENTER SUPPORT (DOWEL PIN INCLUDED)	1	
27	RB252721	FRONT PULLEY SHAFT	1	
28	RB252837	LOCKNUT (3/8-24)	3	
29	RB252814	HEX CAP SCREW (1/2-20 X 1" LG.)	1	
30	RB252843	WASHER (1/2")	2	
31	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
32	RB9777	RUBBER HOSE (10')	1	
33	H1014PB	CYLINDER (10 TON; 14" STROKE)	1 REPLACES C1014C-PAC
34	RB252714	RAM TOWER	1	
35	RB252727	CABLE GUIDE BLOCK	1	
36	RB252728	CABLE STOP BLOCK	1	
37	RB252816	HEX CAP SCREW (1/2-20 X 2-3/4 LG.)	1	
38	RB252821	HEX CAP SCREW (7/8-14 X 3-1/4 LG.)	1	
39	RB252823	HEX CAP SCREW (7/8-14 X 5" LG.)	1	
40	RB252722	TOP ROLLER PIN	1	
41	RB252826	FLAT HD. SOC. SCREW (1/4-28 X 3/4 LG.)	12	
42	RB252833	JAM NUT (3/8-24)	1	
43	RB252827	FLAT HD. SOC. SCREW (1/4-20 X 3/4 LG.)	12	
44	RB25200A	SET SCREW (5/16-24 X 3/4 LG.)	1	
45	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
46	RBHOSECAP	HOSE CAP	1	
47	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — JB11090 ASSY.

JB11090 ASSY.



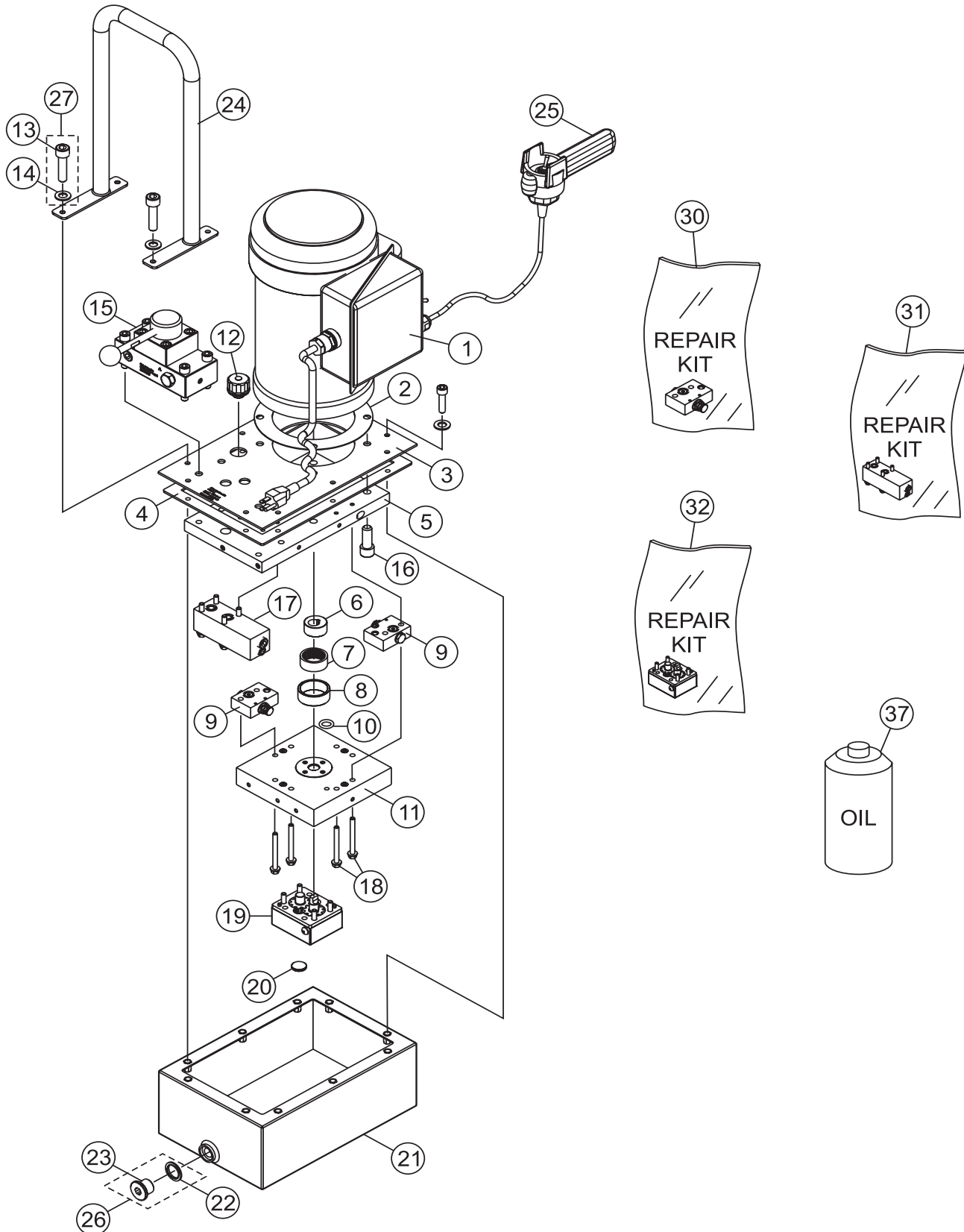
JIMMY SERIES HYDRAULIC REBAR BENDERS — JB11090 ASSY.

JB11090 ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	RB252737	TOP ROLLER	1	
2	RB252807	HEX CAP SCREW (1/4-20 X 1" LG.)	2	
3	RB252732	OUTSIDE SIDE PLATES (RIGHT AND LEFT)	2	
4	RB252854	GREASE FITTING (1/4-20)	5	
5	RB252741	COIL SPRING	2	
6	RB252811	HEX CAP SCREW (3/8-24 X 2-1/2" LG.)	1	
7	RB252734	INSIDE SIDE GUIDE PLATE (RIGHT AND LEFT)	2	
8	RB252736	HALF MAIN WHEEL (DOWEL PINS INCLUDED)	1	
9	RB252719	RAM SUPPORT AND CENTER SPACER (DOWEL PINS INCLUDED)	1	
10	RB252723	INSIDE MAIN PLATE PULLEY BUSHING (RIGHT AND LEFT)	2	
11	RB252742	SPACER	6	
12	RB252729	SIDE GUARD (RIGHT AND LEFT)	2	
13	RB252725	MAIN PULLEY BUSHING (RIGHT AND LEFT)	2	
14	RB252829	BALL PLUNGER (1/2-13)	1	
15	RB252720	MAIN WHEEL PIN	1	
16	RB253074	HEX CAP SCREW (5/16-24 X 1" LG.)	2	
17	RB252840	LOCKNUT (7/8-14)	4	
18	RB252845	WASHER (7/8")	6	
19	RB252717	FRONT PULLEY	2	
20	RB252738	CABLE (45-1/2" LG.)	2	
21	RB253067	HEX CAP SCREW (1/4-20 X 1-1/4 LG.)	6	
22	RB252813	HEX CAP SCREW (3/8-24 X 2-3/4 LG.)	3	
23	RB252842	WASHER (3/8")	6	
24	RB252726	BAR STOP BUSHING	1	
25	RB252824	SOC. HD. CAP SCREW (5/16-18 X 3-1/2 LG.)	2	
26	RB252718	RAM PAD AND CENTER SUPPORT (DOWEL PIN INCLUDED)	1	
27	RB252721	FRONT PULLEY SHAFT	1	
28	RB252837	LOCKNUT (3/8-24)	3	
29	RB252814	HEX CAP SCREW (1/2-20 X 1" LG.)	1	
30	RB252843	WASHER (1/2")	2	
31	RB9681	STREET ELBOW FITTING (3/8 NPTF)	1	
32	RB9777	RUBBER HOSE (10')	1	
33	H1010PB	CYLINDER (10 TON; 10" STROKE)	1 REPLACES C1010C-PAC
34	RB252730	RAM TOWER	1	
35	RB252727	CABLE GUIDE BLOCK	1	
36	RB252728	CABLE STOP BLOCK	1	
37	RB252816	HEX CAP SCREW (1/2-20 X 2-3/4 LG.)	1	
38	RB252821	HEX CAP SCREW (7/8-14 X 3-1/4 LG.)	1	
39	RB252823	HEX CAP SCREW (7/8-14 X 5" LG.)	1	
40	RB252722	TOP ROLLER PIN	1	
41	RB252826	FLAT HD. SOC. SCREW (1/4-28 X 3/4 LG.)	12	
42	RB252833	JAM NUT (3/8-24)	1	
43	RB252827	FLAT HD. SOC. SCREW (1/4-20 X 3/4 LG.)	12	
44	RB25200A	SET SCREW (5/16-24 X 3/4 LG.)	1	
45	CH38M	MALE HALF COUPLER (3/8-18NPTF)	1	
46	RBHOSECAP	HOSE CAP	1	
47	CH38F	QUICK DISCONNECT COUPLER	1	

JIMMY SERIES HYDRAULIC REBAR BENDERS — ELECTRIC PUMP ASSY.

PUMP ASSY.

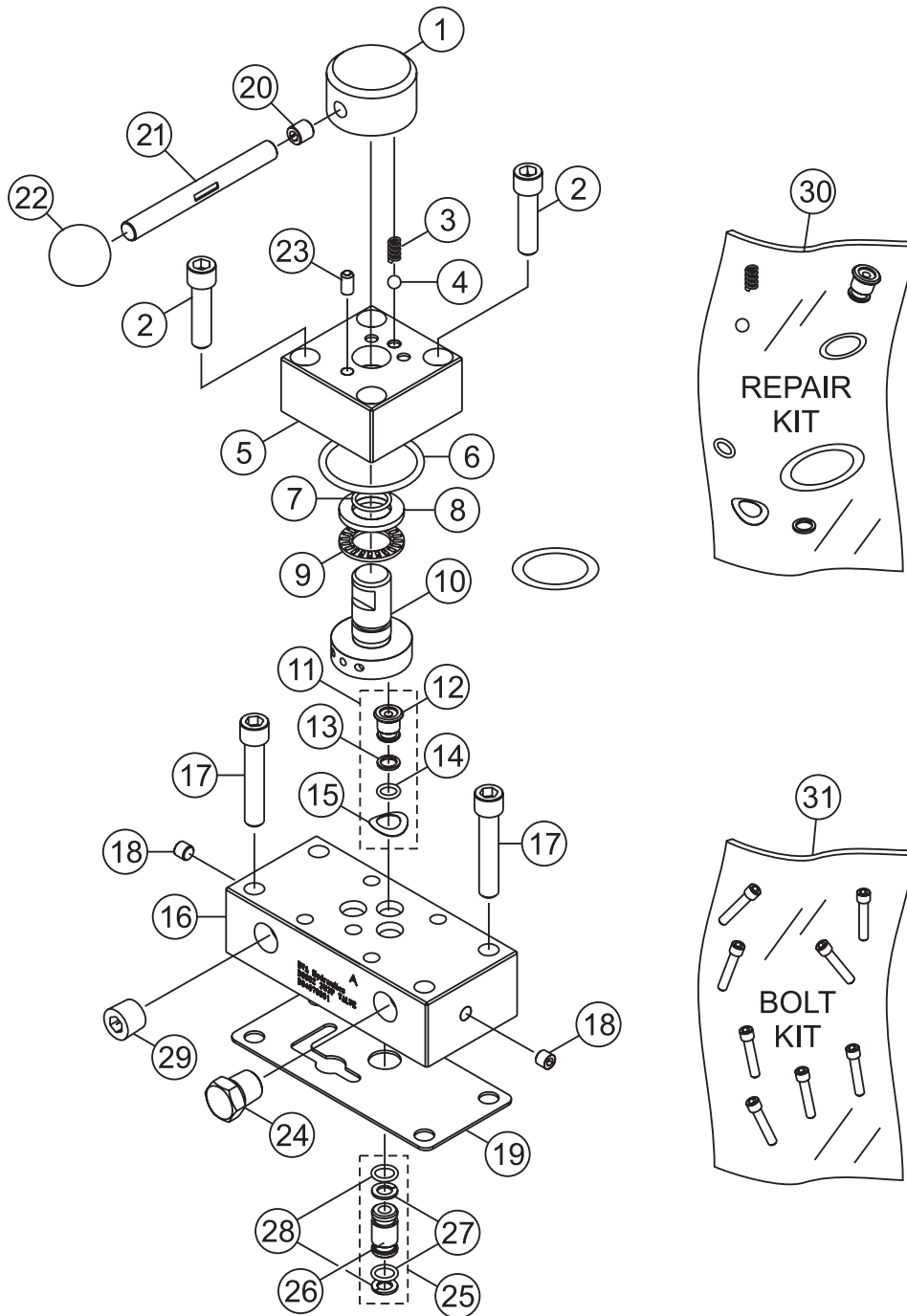


JIMMY SERIES HYDRAULIC REBAR BENDERS — ELECTRIC PUMP ASSY.

PUMP ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	E1649001108	MOTOR, 1.5 HP	1	
2	E0569002107	GASKET, MOTOR	1	
3	E0569003109	RESERVOIR COVER PLATE	1	
4	E0569004101	RESERVOIR GASKET	1	
5	E1643000106	UPPER PLATE ASSEMBLY	1	
6	E0569006105	ECCENTRIC 5/8" SHAFT	1	
7	62260318100	BEARING	1	
8	E0569007107	SLEEVE ECCENTRIC BEARING	1	
9	E1544000104	PISTON BLOCK	4	
10	51170064109	O-RING D6.4 X 1.8	2	
11	E1645002100	LOWER PLATE ASSEMBLY	1	
12	E0542000106	OIL FILLER (VENT) CAP	1	
13	64910060407	BOLT M6X1X25	10	
14	60130064106	WASHER	10	
15	D0901002100	CONTROL VALVE, 3 WAY-3 POSITION	1	
16	64910095204	SOCKET HEAD SCREW (3/8"-16UNC)	4	
17	E0548000106	MANIFOLD, SAFETY VALVE	1	
18	65810064305	HEX. HEAD BOLT (1/4"-20UNC)	8	
19	E0546003102	GEAR PUMP ASSY.	1	
20	H2361000102	MAGNET	1	
21	E0539005105	RESERVOIR	1	
22	53230160104	SPECIAL WASHER	1	
23	E0568008104	DRAIN PLUG	1	
24	E0537000105	CARRY HANDLE	1	
25	PEW01	PENDANT SWITCH	1	
26	E0539901103	DRAIN PLUG ASSEMBLY	1	
27	E0539902105	BOLT KIT FOR RESERVOIR	1	
30	E0539940101	REPAIR KIT FOR PISTON BLOCK (ITEM #9)	1	USE FOR ITEM 9
31	E0539980105	REPAIR KIT FOR MANIFOLD (ITEM #17)	1	USE FOR ITEM 17
32	E0539960109	REPAIR KIT FOR GEAR PUMP (ITEM #19)	1	USE FOR ITEM 19
37		HYDRAULIC OIL, 1 GAL	1	OPTION, MOBIL DTE 15M

JIMMY SERIES HYDRAULIC REBAR BENDERS — CONTROL VALVE ASSY.



JIMMY SERIES HYDRAULIC REBAR BENDERS — CONTROL VALVE ASSY.

CONTROL VALVE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	E0561002107	CAP VALVE	1	
2#		SOCKET HEAD SCREW (3/8-16UNC X 1-1/2")	4	
3+		SPRING DETENT	1	
4+		STEEL BALL, 1/4"	1	
5	E0561003109	VALVE BONNET	1	
6+		O-RING, 3.5 X 44.45	1	
7+		O-RING, 1.8 X 15.8	1	
8	61130190109	THRUST-WASHER	1	
9	62260190102	THRUST-BEARING	1	
10	E0531005105	ROTOR ASSEMBLY	1	
11	E0541001103	SHEAR SEAL ASSEMBLY	2	INCLUDES ITEMS W/*
12*	E0561001105	SHEAR SEAL	1	
13*+		BACK-UP RING, 8.1 X 11.15	1	
14*+		O-RING, 8 X 1.8	1	
15*+		SPRING WASHER	3	
16	D0961009100	VALVE BLOCK	1	
17#		SOCKET HEAD SCREW (3/8-16UNC X 2")	4	
18	60910075105	HEX SOCKET PLUG, 1/16NPT	2	
19+		GASKET, VALVE	1	
20	64110100104	SOCKET HEAD SCREW (M10 X 1.5 X 10)	1	
21	E0561009101	HANDLE, D10 X 98.5	1	
22	E0561008109	KNOB, D30MM	1	
23	60140060101	ROLL PIN, D6 X 12	1	
24	D0561001106	HEX SOCKET PLUG, H19 X 23	1	
25	E0541004105	ADAPTER ASSEMBLY	1	INCLUDES ITEMS W/%
26%	E0561004101	ADAPTER	1	
27%+		BACK-UP RING, D9.7 X 1.45	2	
28%+		O-RING, D1.8 X 9.5	2	
29	H1868104106	HEX SOCKET PLUG	1	
30	E0539910104	BOLT KIT	1	INCLUDES ITEMS W/#
31	E0539911106	REPAIR KIT	1	INCLUDES ITEMS W/+

PAYMENT TERMS

Terms of payment for parts are net 30 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable hereunder for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

OPERATION AND PARTS MANUAL

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER *ON-HAND* WHEN CALLING

UNITED STATES

Multiquip Corporate Office

18910 Wilmington Ave. Tel. (800) 421-1244
Carson, CA 90746 Fax (800) 537-3927
Contact: mq@multiquip.com

Mayco Parts

800-306-2926 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Service Department

800-421-1244 Fax: 310-537-4259
310-537-3700

MQ Parts Department

800-427-1244 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Warranty Department

800-421-1244, Ext. 279 Fax: 310-537-1173
310-537-3700, Ext. 279

Technical Assistance

800-478-1244 Fax: 310-631-5032

MEXICO

MQ Cipsa

Carr. Fed. Mexico-Puebla KM 126.5 Tel: (52) 222-225-9900
Momoxpan, Cholula, Puebla 72760 Mexico Fax: (52) 222-285-0420
Contact: pmastretta@cipsa.com.mx

CANADA

Multiquip

4110 Industriel Boul. Tel: (450) 625-2244
Laval, Quebec, Canada H7L 6V3 Fax: (450) 625-8664
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Multiquip

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Barra de Tijuca - Rio de Janeiro Fax: 011-55-21-3433-9055
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This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

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