

Operator's Manual



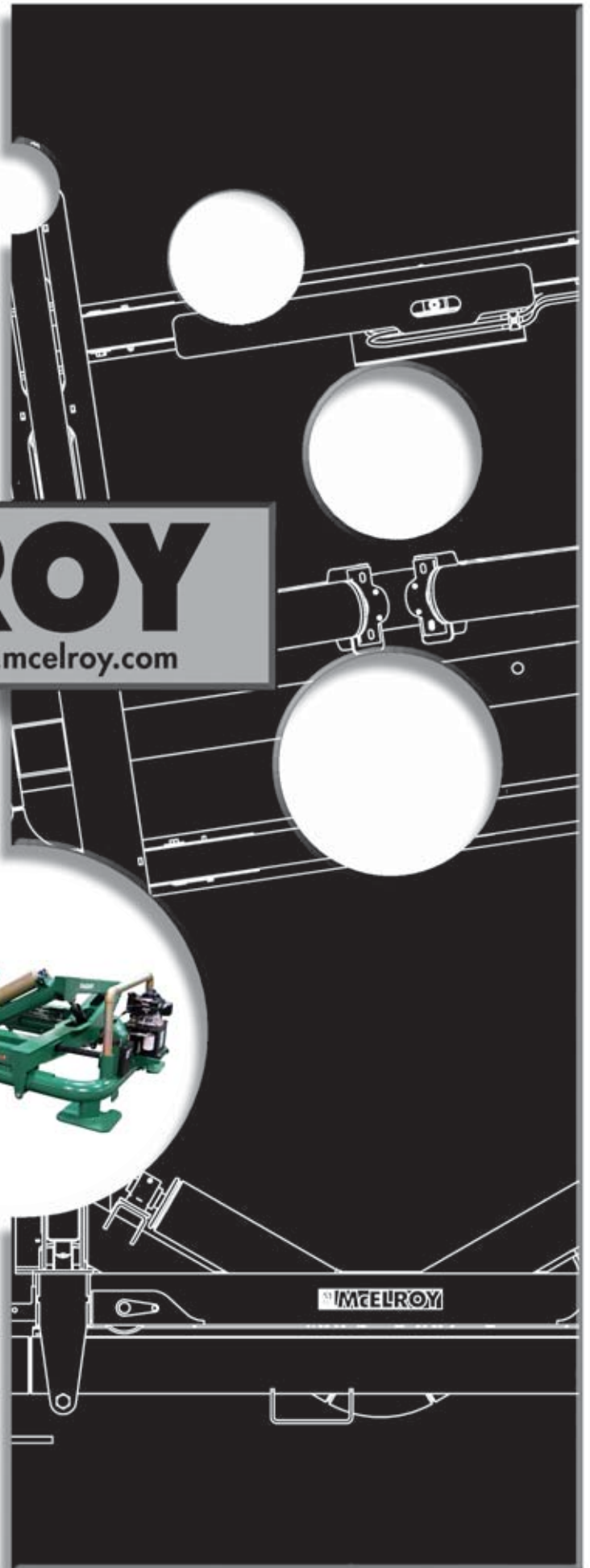
McELROY

www.mcelroy.com



MegaMc[®] Hydraulic Pipe Stand

Manual: 6513401 Revision: A 12/18
Original Language: English





WARNING

Cancer and Reproductive Harm -
www.P65warnings.ca.gov

8165361

This product and other products
could be protected by patents or
have patents pending. All the latest
patent information is available at
patent.mcelroy.com

Introduction

Thank you for purchasing this McElroy product.

The McElroy® MegaMc® Pipe Stand allows efficient alignment of pipe in the fusion machine jaws. Using the pipe stand's 34" vertical and 24" lateral adjustments, the pipe is efficiently aligned with the fusion machine jaws. Aligning the pipe quickly reduces the overall cycle time for the joint, increasing productivity. Good alignment in the jaws means less stress on the fusion machine, easier to close jaws and less hi-low mismatch.

With reasonable care and maintenance, this machine will give years of satisfactory service.

Before operating this machine, please read this manual thoroughly, and keep a copy with the machine for future reference. This manual is to be considered part of your machine.



TX03084-3-2-10

McElroy University

For more than 30 years, McElroy has been the only pipe fusion machine manufacturer to continuously offer advanced training. Course offerings are meant to enhance your efficiency, productivity and safety in the proper use of McElroy machines. McElroy University classes are structured so that the skills learned and the machines used in each class closely match the machines found on pipelining jobsites. We offer training at our facility or yours. Our uniquely qualified McElroy University course instructors offer years of industry experience.

Tuition for each course includes lunches, course materials and a certificate of completion. Online registration, as well as up-to-date course offerings and dates, is available at www.mcelroy.com/university

This manual is intended as a guide only and does not take the place of proper training by qualified instructors. The information in this manual is not all inclusive and can not encompass all possible situations that can be encountered during various operations.



MU203-13-14

TX04659-03-24-14

Warranty

LIMITED WARRANTY

McElroy Manufacturing, Inc. (McElroy) warrants all products manufactured, sold and repaired by it to be free from defects in materials and workmanship, its obligation under this warranty being limited to repairing or replacing at its factory and new products, within **5 years** after shipment, with the exception of purchased items (such as electronic devices, pumps, switches, etc.), in which case that manufacturer's warranty applies. Warranty applies when returned freight is prepaid and which, upon examination, shall disclose to have been defective. This warranty does not apply to any product or component which has been repaired or altered by anyone other than McElroy or has become damaged due to misuse, negligence or casualty, or has not been operated or maintained according to McElroy's printed instructions and warnings. This warranty is expressly in lieu of all other warranties expressed or implied. The remedies of the Buyer are the exclusive and sole remedies available and Buyer shall not be entitled to receive any incidental or consequential damages. Buyer waives the benefit of any rule that disclaimer of warranty shall be construed against McElroy and agrees that such disclaimers herein shall be construed liberally in favor of McElroy.

RETURN OF GOODS

Buyer agrees not to return goods for any reason except upon the written consent of McElroy obtained in advance of such return, which consent, if given, shall specify the terms and conditions and charges upon which any such return may be made. Materials returned to McElroy, for warranty work, repair, etc., **must have a Return Material Authorization (RMA) number**, and be so noted on the package at time of shipment. For assistance, inquiry shall be directed to:

McElroy Manufacturing, Inc.
P.O. Box 580550
833 North Fulton Street Tulsa, Oklahoma 74158-0550
PHONE: (918) 836-8611, FAX: (918) 831-9285.
EMAIL: fusion@McElroy.com

Note: Certain repairs, warranty work, and inquiries may be directed, at McElroy's discretion, to an authorized service center or distributor.

DISCLAIMER OF LIABILITY

McElroy accepts no responsibility of liability for fusion joints. Operation and maintenance of the product is the responsibility of others. We recommend qualified joining procedures be followed when using McElroy fusion equipment.

McElroy makes no other warranty of any kind whatever, express or implied; and all implied warranties of merchantability and fitness for a particular purpose which exceed the aforestated obligation are hereby disclaimed by McElroy.

PRODUCT IMPROVEMENT

McElroy reserves the right to make any changes in or improvements on its products without incurring any liability or obligation to update or change previously sold machines and/or the accessories thereto.

INFORMATION DISCLOSED

No information of knowledge heretofore or hereafter disclosed to McElroy in the performance of or in connection with the terms hereof, shall be deemed to be confidential or proprietary, unless otherwise expressly agreed to in writing by McElroy and any such information or knowledge shall be free from restrictions, other than a claim for patent infringement, is part of the consideration hereof.

PROPRIETARY RIGHTS

All proprietary rights pertaining to the equipment or the components of the equipment to be delivered by McElroy hereunder, and all patent rights therein, arising prior to, or in the course of, or as a result of the design or fabrication of the said product, are exclusively the property of McElroy.

LAW APPLICABLE

All sales shall be governed by the Uniform Commercial Code of Oklahoma, U.S.A.

Register your product online to activate your warranty:
www.McElroy.com/fusion

(Copy information listed on the machine nameplate here for your records).

Model No. _____

Serial No. _____

Date Received _____

Distributor _____

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Tulsa, Oklahoma, USA

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Equipment Safety

Safety Alerts



This hazard alert sign appears in this manual. When you see this sign, carefully read what it says. YOUR SAFETY IS AT STAKE.

You will see the hazard alert sign with these words: DANGER, WARNING, and CAUTION.



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

In this manual you should look for two other words: **NOTICE** and **IMPORTANT**.

NOTICE: can keep you from doing something that might damage the machine or someone's property. It may also be used to alert against unsafe practices.

IMPORTANT: can help you do a better job or make your job easier in some way.



WR00051:11:30-92

TX00030-12-1-92

Read and Understand

Do not operate this equipment until you have carefully read, and understand all the sections of this manual, and all other equipment manuals that will be used with it.

Your safety and the safety of others depends upon care and judgment in the operation of this equipment.

Follow all applicable federal, state, local, and industry specific regulations.

McElroy Manufacturing, Inc. cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the machine are therefore not all inclusive. You must satisfy yourself that a procedure, tool, work method, or operating technique is safe for you and others. You should also ensure that the machine will not be damaged or made unsafe by the method of operation or maintenance you choose.



WR00052:12:1-92

TX02946-4-15-09

Equipment Safety

General Safety

Safety is important. Report anything unusual that you notice during set up or operation.

LISTEN for thumps, bumps, rattles, squeals, air leaks, or unusual sounds.

SMELL odors like burning insulation, hot metal, burning rubber, hot oil, or natural gas.

FEEL any changes in the way the equipment operates.

SEE problems with wiring and cables, hydraulic connections, or other equipment.

REPORT anything you see, feel, smell, or hear that is different from what you expect, or that you think may be unsafe.



SAFE1ST-122292

TX00114-4-22-93

Wear Safety Equipment

Wear a hard hat, safety shoes, safety glasses, and other applicable personal protective equipment.

Remove jewelry and rings, do not wear loose-fitting clothing, and tie back long hair that could catch on controls or moving machinery.



WR00053-122-92

TX00032-04-18-16

Gas Powered Units



Gasoline engines will cause explosions when operated in a hazardous environment. Do not operate gas powered machines in a hazardous environment.

Do not place flammable substances near the engine while it is operating.

A spark arrester is available as an optional part for this engine. It is illegal in some areas to operate an engine without a spark arrester. Check local laws and regulations before operating.



WR00080-4-12-93

TX00955-5-14-96

Equipment Safety

Fuel Handling

⚠ DANGER Gasoline and diesel fuel are extremely flammable and their vapors will explode if ignited.

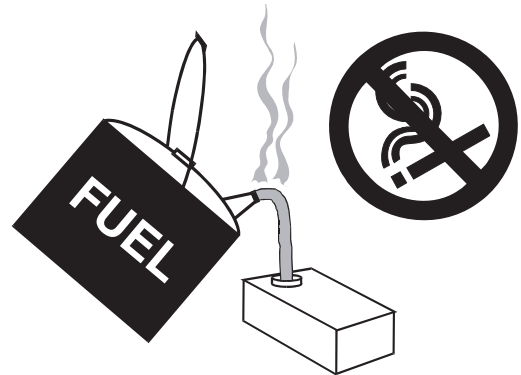
Do not fill the fuel tank while the engine is hot or running, as spilled fuel could ignite.

Refuel in a well ventilated area. Do not smoke or allow flames or sparks in the area where the engine is refueled, or where gasoline is stored.

Do not start the engine near spilled fuel. Wipe up spills immediately.

Make sure the fuel tank cap is closed and properly secured.

Avoid repeated or prolonged contact with skin or breathing of vapor.



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TX00953-2-19-97

Carbon Monoxide

⚠ DANGER Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide can cause severe nausea, fainting and death. Avoid inhaling exhaust fumes, and never run the engine in a closed or confined area.



WR00093-5-14-96

TX00954-04-18-16

Crush Points

⚠ WARNING Hydraulically operated equipment operates under high pressure and generates extremely high forces. Anything inadvertently caught in the machine will be crushed. Keep fingers, feet, arms, legs, and head out of the machine while operated. Always ensure machine power is off before entering the machine for any reason.



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Equipment Safety

Pipe Handling Safety

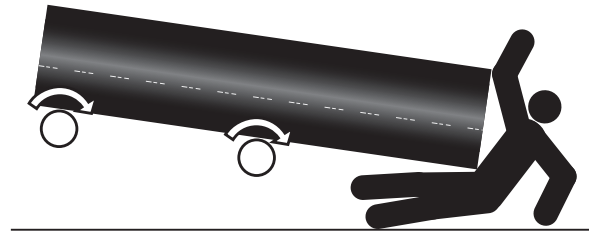
⚠ WARNING

Do not position yourself under supported or raised pipe or near the end of the pipe. Pipe could travel uncontrolled on the rollers in either direction and cause serious injury or death.

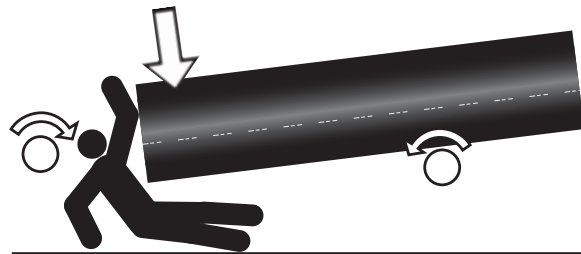
In order to minimize the potential for the pipe to travel uncontrolled, keep the pipe level when it is placed on the rollers of the fusion machine and on the rollers of the pipe stand(s). Hold pipe securely by either clamping in the fusion machine jaws or by other means.

NOTICE: Do not leave stand unattended while HPU is running. When not operating the pipe stand, turn off the HPU to prevent accidental or unintentional movement of the stand.

IMPORTANT: Engine does not need to be running to hold load. However, do not leave raised pipe unattended as the hydraulic pressure may bleed off over time and lower the load.



CD00785-1-13-10



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TX03057-3-2-10

Units With Hydraulics

It is important to remember that a sudden hydraulic oil leak can cause serious injury, or even be fatal if the pressure or oil temperature is high enough.

⚠ WARNING

Escaping fluid under pressure can penetrate the skin causing serious injury. Keep hands and body away from pinholes which eject fluid under pressure. Use a piece of cardboard or paper to search for leaks. If any fluid is injected into the skin, it must be immediately removed by a doctor familiar with this type of injury.

⚠ WARNING

Unwanted movement of the machine could result in serious injury or damage to machine. Unwanted movement of the machine may take place if switches do not match machine state when the machine power is turned on.

NOTICE: Wear safety glasses, and keep face clear of area when bleeding air from hydraulic system to avoid spraying oil into eyes.



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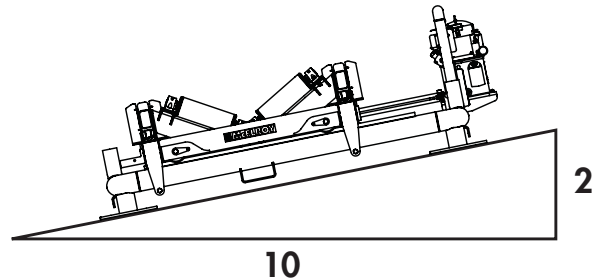
Equipment Safety

Operating On A Grade

⚠ WARNING Never operate the pipe stand on a grade steeper than 20 % (A 2 foot elevation change in 10 feet). Pipe could fall off the rollers or pipe stand could tip causing serious injury or death.

Place pipe stand on as level ground as possible.

If it is necessary to operate machine on unlevel grade, make sure that the ground is stable. Some unstable conditions include ice, snow, mud and loose gravel.



CD000795-223-10

TX03083-3-2-10

Lifting Safety

Follow all applicable federal, state, local, and industry specific regulations when lifting.

⚠ WARNING

Safety warnings:

1. Do not exceed rated load or lift loads other than the McElroy MegaMc Hydraulic Pipe Stand with the lifting sling.
2. Do not operate a damaged or malfunctioning lifting sling or one missing parts.
3. Do not lift persons.
4. Do not lift a suspended load over persons.
5. Do not leave a suspended load unattended.
6. Do not remove or obscure warning labels.
7. Read and understand the operator's manual before using the device.
8. Stay clear of the suspended load.
9. Lift loads only as high as necessary.
10. Do not alter or modify the lifting sling.
11. Employ generally accepted safe lifting practices.
12. Do not shock or impact load the lifting sling.



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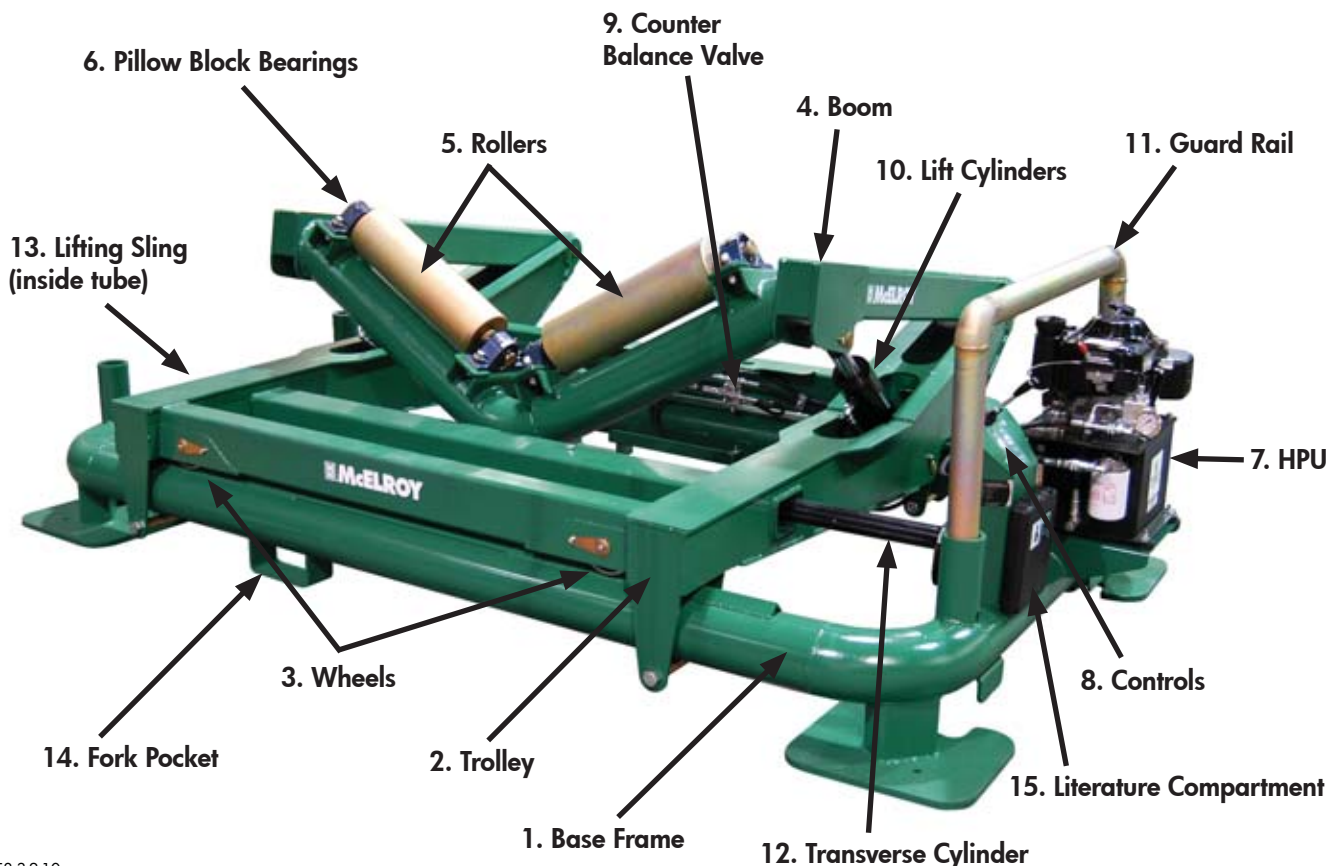
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Overview

MegaMc Pipe Stand

Parts of the Pipe Stand

1. **Base Frame** – supports the machine and rests on the ground.
2. **Trolley** – moves transversely and supports the boom.
3. **Wheels** – support trolley and allows transverse movement.
4. **Boom** – moves vertically and supports the rollers.
5. **Rollers** – support pipe and allow axial movement.
6. **Pillow Block Bearings** – supports rollers and allows them to roll.
7. **HPU** – Hydraulic Power Unit.
8. **Controls** – two levers to control movement.
9. **Counter Balance Valve** - hydraulically holds and regulates lowering of load.
10. **Lift Cylinders** - cylinders that raise or lower the boom
11. **Guard Rail** - guards the HPU and controls, and is used when stacking two pipe stands.
12. **Transverse Cylinder** - cylinder that moves the trolley toward or away from the operator.
13. **Lifting Sling** - used for lifting of the pipe stand. The lifting sling has a storage area inside the trolley tube.
14. **Fork Pocket** - used when lifting the pipe stand with a fork truck.
15. **Literature Compartment** - stores manuals.



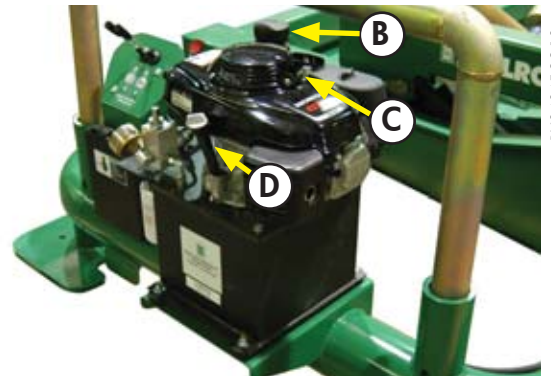
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Overview

Hydraulic Power Unit

- (A) Hydraulic fluid fill
- (B) Gasoline fill
- (C) Starter grip
- (D) Engine oil check and fill
- (E) System pressure gauge
- (F) Pressure relief valve

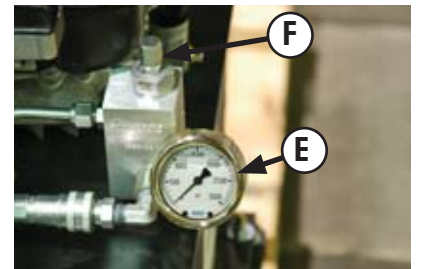
The hydraulics are an open center flow system. The gauge will show close to 0 psi until the controls are operated. The pressure relief valve is set at 2500 psi.



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PH0404222:10



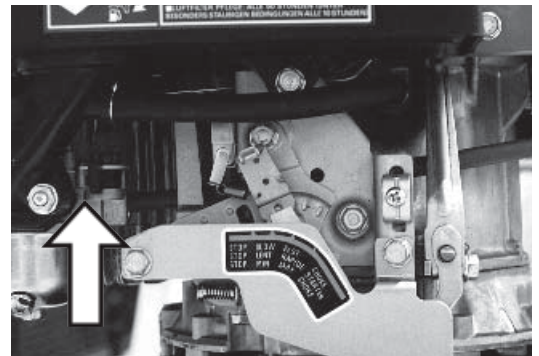
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Fuel Valve

The fuel valve should be turned off when transporting the equipment, or when not being used.

Turn the valve control in to turn off. Turn the control out to turn on.



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TX00958-5-14-96

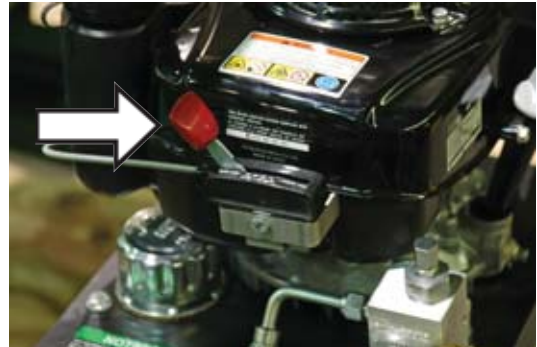
Overview

Engine Control Lever

All the way back to the left, shuts the engine off. All the way forward to the right, is the choke position. Between these two positions, the desired engine speed can be set.

IMPORTANT: Do not use the choke if the engine is warm or the ambient temperature is high.

TX00959-5-14-96



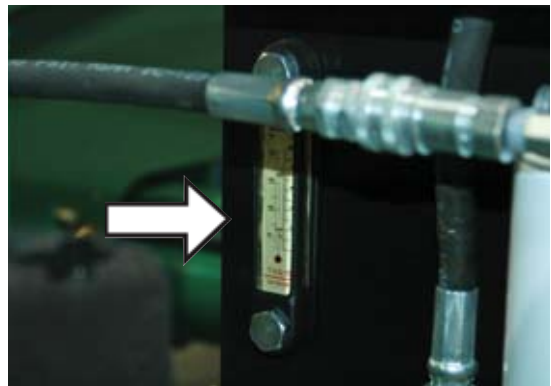
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Hydraulic Fluid

Proper fluid level is indicated on the sight gauge located on the hydraulic tank.

Refer to the "Check Hydraulic Fluids" section of this manual for instructions on checking hydraulic fluid.

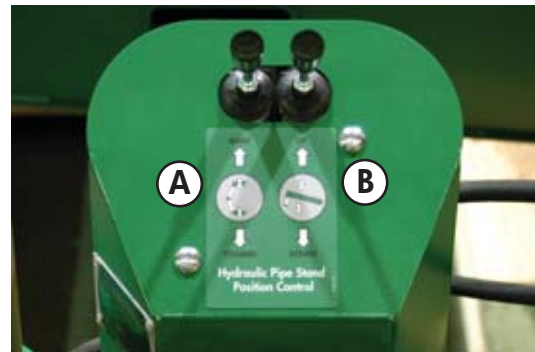
TX03078-2-22-10



PH04046-22-10

Hydraulic Controls

- (A) Move trolley towards or away from operator.
- (B) Raise or lower the pipe roller boom.



TX03086-2-23-10

PH04043-22-10

Operation

Read and Understand

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Your safety and the safety of others depends upon care and judgment in the operation of this equipment.

Follow all applicable federal, state, local, and industry specific regulations.

McElroy Manufacturing, Inc. cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the machine are therefore not all inclusive. You must satisfy yourself that a procedure, tool, work method, or operating technique is safe for you and others. You should also ensure that the machine will not be damaged or made unsafe by the method of operation or maintenance you choose.



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STOP-122292

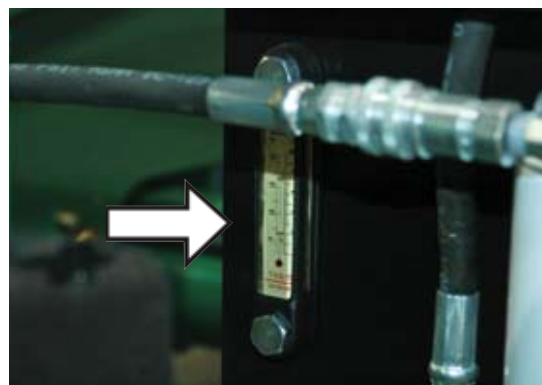
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Check Hydraulic Fluid

Periodically check the hydraulic fluid level in reservoir. All hydraulic cylinders must be retracted (boom down and trolley toward HPU) before checking fluid to get an accurate level. Maintain fluid at HIGH Level.

Never allow dirt or foreign matter to enter the open tank.

Refer to the "Hydraulic Fluids" section of this manual for hydraulic fluid recommendations.



PH04046-2-2-10

TX03079-2-22-10

Check Engine Oil

Check the engine oil level with the engine stopped and in a level position.

Remove the oil filler cap/dipstick and wipe it clean.

Insert the oil filler cap/dipstick into the oil filler neck, but do not screw it in, then remove it to check the oil level.

If the oil level is near or below the lower limit mark on the dipstick, fill with the recommended oil to the upper limit mark.

Do not overfill.

Screw in the filler cap/dipstick securely.



PH04055-2-2-10

TX03080-3-2-10

Operation

Starting the HPU

Check that the fuel tank is full of clean unleaded gasoline. Check that the air cleaner element is clean.

Make sure the fuel cut off valve under the air cleaner is open (A). It is open when the black lever is in line with the fuel line. Set the red throttle lever on the engine to start.

Pull the starter grip lightly until you feel resistance then pull briskly a full stroke. Return the starter grip gently (do not allow it to snap back against the engine).

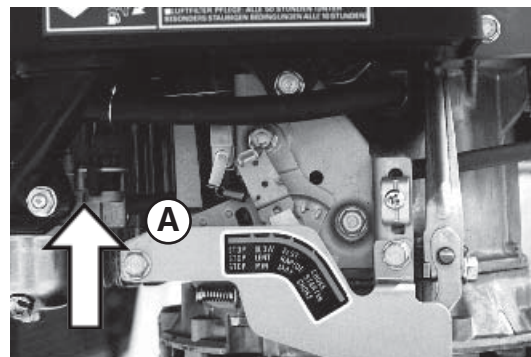
After the engine starts, gradually move the throttle to fast (F) position as the engine warms up. To restart a warm engine put the throttle lever at fast (F).

To stop the engine, move the red throttle lever to the stop position. The engine should be started each time the Pipe Stand is to be adjusted and then stopped.

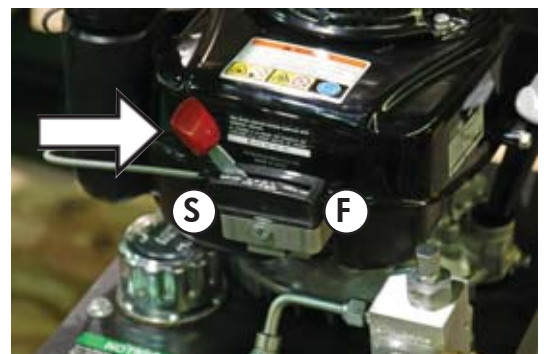
To stop the engine at the end of the work day, put the lever at the slow position (S). Turn the black fuel valve lever to the off position (perpendicular to the fuel line).



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PH00823-4-26-96



PH04044-22-10

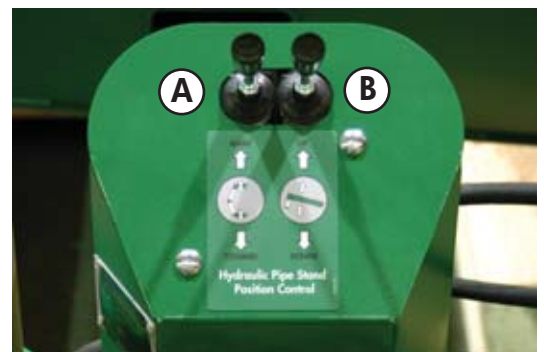
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Machine Controls

The machine is hydraulically actuated and the controls are on a podium next to the HPU. Ensure that all personnel and equipment are clear of the unit before actuating it.

The left lever (A) controls the transverse movement. Pushing the left control lever up makes the trolley move away from the control podium. Pulling the left control lever down makes the trolley move toward the podium.

The right lever (B) controls the boom vertical movement. Pushing the right control lever up raises the boom. Pulling the right control lever down lowers the boom.



PH04043-22-10

TX03062-3-2-10

Operation

Stand Placement

Placement For Use On Movable Jaw Side Of Fusion Machine

Place the pipe stand to the right of the fusion machine so that the free stick of pipe (clamped in movable jaws) will be supported by the stand. Place the pipe stand controls on the same side as the fusion machine's controls so that the operator does not have to cross the pipe. Place the pipe stand at least half the length of a stick of pipe away from the fusion machine. This is so the pipe won't teeter and lift off of the fusion machine jaws. This also allows lifting equipment carrying a piece of pipe at its center to go between the fusion machine and Pipe Stand to load the pipe. Center the base of the stand (not the trolley rollers) on the fusion machine jaws centerline. This allows the 24" of lateral adjustment to be used 12" on either side of center.

Using proper lifting equipment, place the stick of pipe on the movable jaws and pipe stand rollers so that the end of the pipe extends from the inner jaw the amount required for a proper face off.

WARNING Do not position yourself under supported or raised pipe or near the end of the pipe. Pipe could travel uncontrolled on the rollers in either direction and cause serious injury or death.

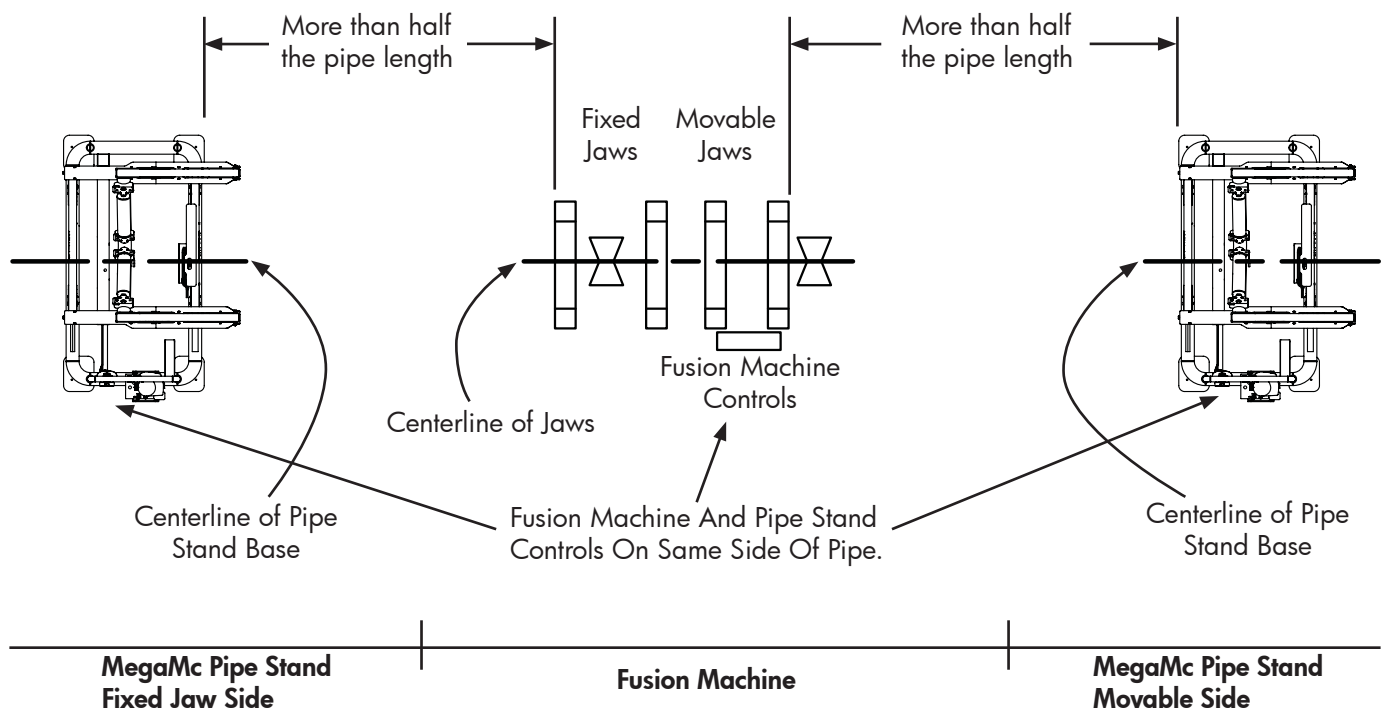
NOTICE: Take care not to impact the fusion machine or pipe stand with the pipe. The pipe is heavy and can do damage to the machines, especially raised jaws, facer and heater.

Placement On Fixed Jaw Side Of Fusion Machine

Place the second pipe stand to the left of the fusion machine so that the fused stick of pipe coming out of the machine rests on it. Place the pipe stand controls on the same side as the fusion machine's controls so that the operator does not have to cross the pipe.

Additional pipe stands or rollers may be required to adequately support the length of fused pipe exiting the fixed jaw side of the fusion machine.

Placement of MegaMc Pipe Stands (Overhead View)



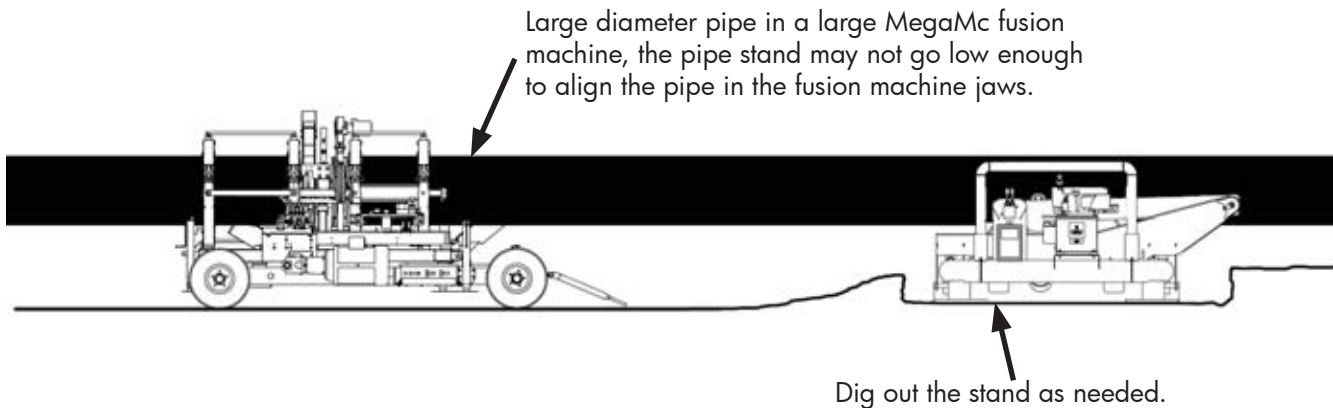
Operation

Align Pipe with Fusion Machine

To align the pipe in the fusion machine, adjust the pipe stand so that the pipe fits inline with the jaws or inserts. Once the adjustment is complete, stop the HPU engine.

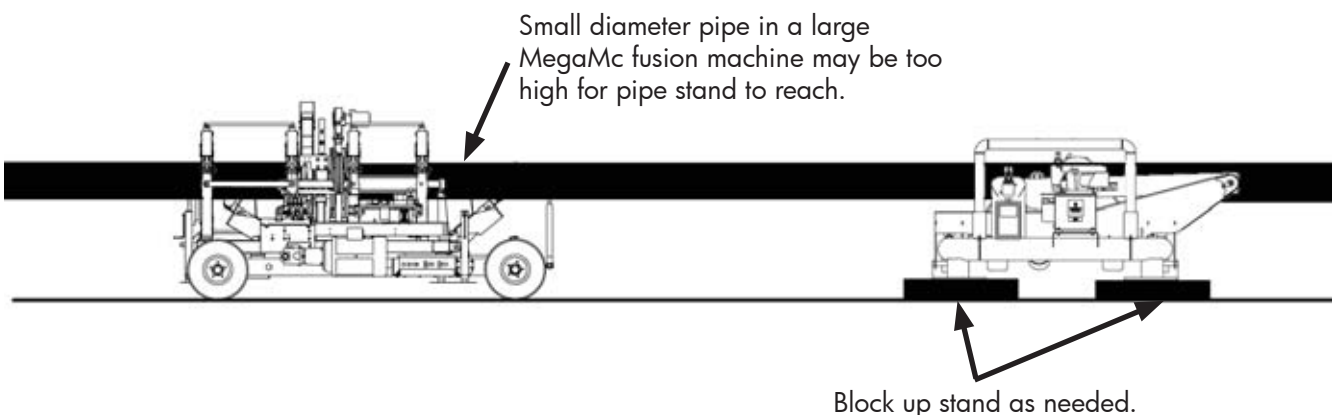
On very uneven terrain or with bent pipe, the pipe stand may not go low enough to align the pipe in the fusion machine jaws. Possible options for correcting alignment:

- Rotate the pipe so it bows sideways or up rather than down.
- Lower the pipe stand by digging out underneath it.
- Raise the fusion machine up with stable blocking.



On very uneven terrain or when using small pipe in a larger fusion machine, the pipe stand may not go high enough to align the pipe in the fusion machine jaws. Possible options for correcting alignment:

- Raise the pipe stand with stable blocking.
- Dig out where the fusion machine is to lower it in relation to the pipe stand.



Operation

Pipe Stand Selection Chart

Fusion Machine

Pipe Size	824	T630	1236	T900	1648	2065 1600
8						
10	8-36 Pipe Stand					
12						
14						
16						
18						
20						
22						
24						
26			8-36 or 36-65 Pipe Stand			
28						
30						
32						
34						
36						
42						
48						
52						
54						
63						
65						

Blocked up
8-36 or 36-65
Pipe Stand

36-65 Pipe Stand

How to use this chart:

The MegaMc Hydraulic Pipe Stands are intended for use with the MegaMc fusion machines. The 8-36 pipe stand is best matched to the 824, T630, 1236 and T900 fusion machines. The 36-65 pipe stand is best matched to the 1236, T900, 1648, 2065 and 1600 fusion machines. There is some capability overlap so this chart details all the combinations of pipe size and MegaMc fusion machines that can be used with the 8-36 and 36-65 MegaMc Hydraulic Pipe Stands.

To determine which pipe stand to use, locate the pipe size at left of chart and fusion machine at top of chart. Where the two intersect will fall within the operating envelope of either the 8-36 or 36-65 pipe stand or both. The chart is based on the fusion machine and pipe stand being on level ground. Uneven ground will shift the effective operating envelopes. For heavy wall pipe, ensure that the weight of a stick of pipe does not exceed the pipe lift capacity of 9,000 lbs. for 8-36 and 16,000 lbs. for 36-65.

To reach some small pipe sizes in a 65 fusion machine, the pipe stand must be blocked up.

TX03063-3-5-10

Lifting and Storage

Lifting Safety

Follow all applicable federal, state, local, and industry specific regulations when lifting.

WARNING

Safety warnings:

1. Do not exceed rated load or lift loads other than the McElroy MegaMc Hydraulic Pipe Stand with the lifting sling.
2. Do not operate a damaged or malfunctioning lifting sling or one missing parts.
3. Do not lift persons.
4. Do not lift a suspended load over persons.
5. Do not leave a suspended load unattended.
6. Do not remove or obscure warning labels.
7. Read and understand the operator's manual before using the device.
8. Stay clear of the suspended load.
9. Lift loads only as high as necessary.
10. Do not alter or modify the lifting sling.
11. Employ generally accepted safe lifting practices.
12. Do not shock or impact load the lifting sling.



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WR00014-3-8-93

TX03087-3-2-10

Lifting and Storage

Lifting the Pipe Stand

Lifting

A four cable lifting sling is provided for hook lifting the unit.

The lifting sling must only be used by a person trained and qualified in its use.

Before each lift of the machine, inspect the lifting sling for damage. Do not use a damaged lifting sling. The sling is to lift one stand only. For the lift all four lifting sling hooks must be attached to the four lifting lugs. Before lifting the machine, lower the boom fully.

The HPU on one end makes the pipe stand off balance. To improve the balance, move the trolley off center away from the HPU (so the trolley's weight balances that of the HPU). The 8-36 pipe stand has a plate on the trolley that covers one of the four lifting lugs until the trolley has been moved sufficiently away from the HPU for good balance.



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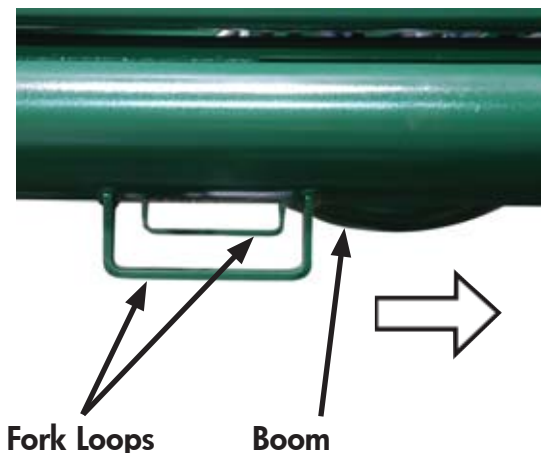
Forking

The pipe stand has fork loops for lifting with a fork truck. The forks must be at least 6 ft long. Fork extensions can be added to shorter forks, but the lifting and tipping capacity of the fork truck must not be exceeded.

Move the trolley so that the bottom of the Boom is not in line with the fork loops. The left fork will go through the loops but the right fork will just go under the frame. Ensure that the right fork contacts the pipe frame and not the trolley lugs; adjust the trolley location as needed.

Strap the Base Frame to the fork truck frame so the stand won't slide off of the forks when braking or going down a hill. If the machine slips out on the forks, it could come off the far frame tube and topple off of the forks.

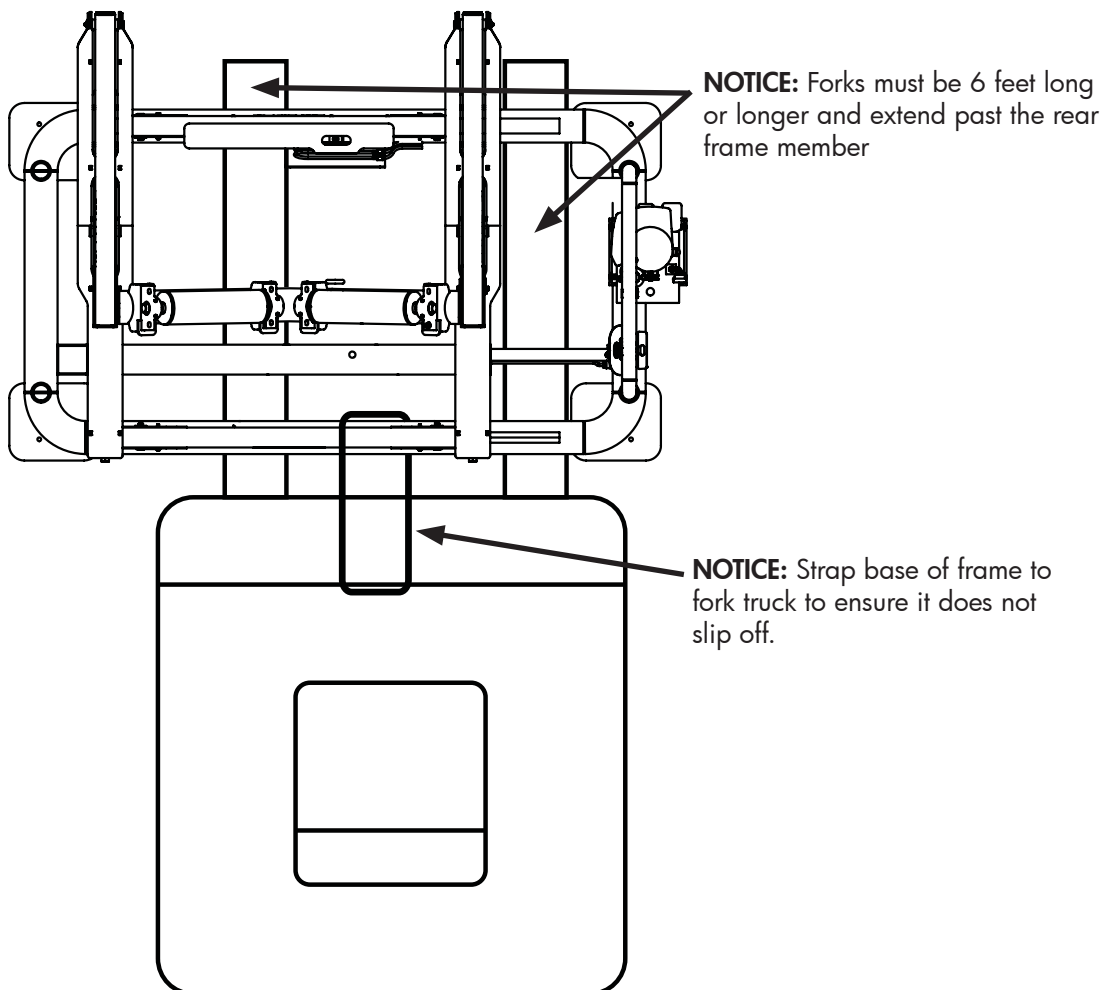
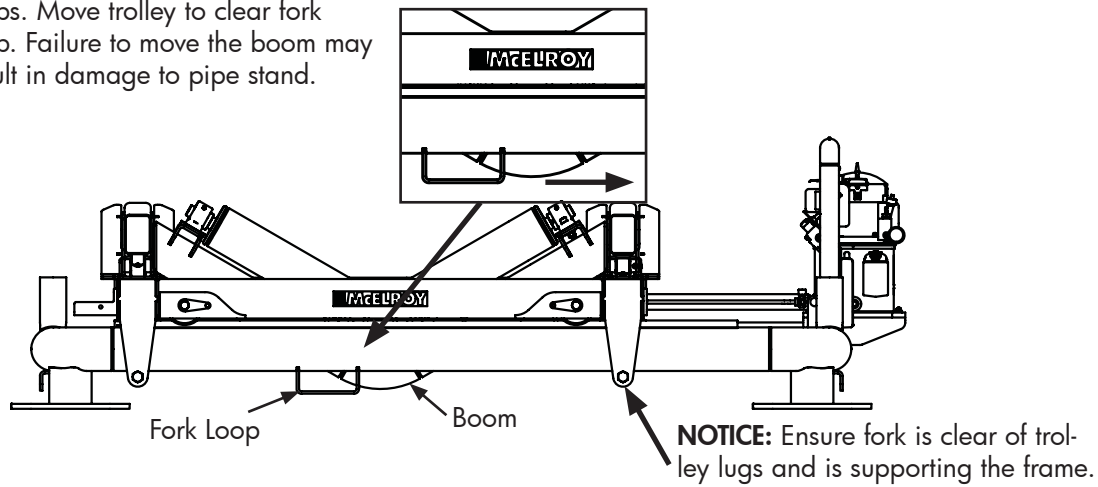
Two stacked pipe stands that are securely strapped or banded together may be lifted with a fork truck by forking the bottom pipe stand. Do not exceed the lifting capacity or tipping capacity of the fork truck.



PH0404322:10

Lifting and Storage

NOTICE: Boom must be clear of fork loops. Move trolley to clear fork loop. Failure to move the boom may result in damage to pipe stand.



Lifting and Storage

Stacking Stands

Pipe stands of the same size can be stacked a maximum two high to reduce the floor space needed for storage or shipping.

First lower the boom fully on both units and move the trolley away from the HPU to make the unit more balanced.

Remove the guard rail from the unit that will stack on top by lifting up on the rail and pulling it out of its sockets on the base frame. Place the guard rail in the unit that will be on the bottom in the sockets on the end of the frame opposite the HPU. The bottom pipe stand will have two guard rails and the top pipe stand will have none.

Attach the lifting sling to or fork, the top pipe stand. Place it on top of the bottom unit so that both guard rails engage the notches in the feet and the U brackets on the bottom of the frame. For shipping, the top unit must be securely held down by straps so it won't slip off in transit.

Two stacked pipe stands that are securely strapped or banded together may be lifted with a fork truck by forking the bottom pipe stand. Do not exceed the lifting capacity or tipping capacity of the fork truck. The sling is for lifting one stand only.



TX03065-3-2-10

PH04049-2-2-10



PH04050-2-2-10

Lifting Sling Storage

The lifting sling is stored inside the trolley cross tube.

The 36-65 stand cross tube is long enough for the sling to be inserted straight. The 8-36 stand cross tube is shorter so flex (do not kink) the cables in the middle to double them over and slide the cables into the tube. The tube end has small holes which can be used to lock (not included) the sling to the tube to deter theft of the sling and/or machine.

Do not use a damaged lifting sling. The sling is for lifting one stand only.



TX03066-3-2-10

PH04052-2-2-10



PH04051-2-2-10

Lifting and Storage

Extended Period Storage

If storing the pipe stand for an extended period of time, refer to the engine operator's manual for long term storage procedures.

Grease all pins, wheels and bearings. Refer to the Maintenance section of this manual for lubrication procedures.



TX03067-2-23-10

Maintenance

Preventative Maintenance

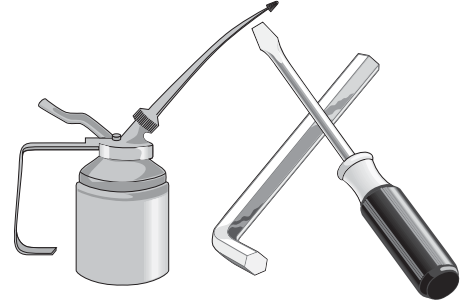
To insure optimum performance, the machine must be kept clean and well maintained.

With reasonable care, this machine will give years of service. Therefore, it is important that a regular schedule of preventive maintenance be kept.

Store machine inside, out of the weather, whenever possible.

Service intervals are approximate for average service and may need to be done more frequently in severe service conditions or can be done less frequently if used minimally.

TX03068-1-25-10



CD00142:11-2-94

Washing the Machine

An important factor in the service life of this machine is cleanliness. The machine should be cleaned with soap and water as needed.

When exposed to dust and mud in a field location, the machine should be washed at the end of each days work.

TX00601-8-10-95



CD00178-9:15-95

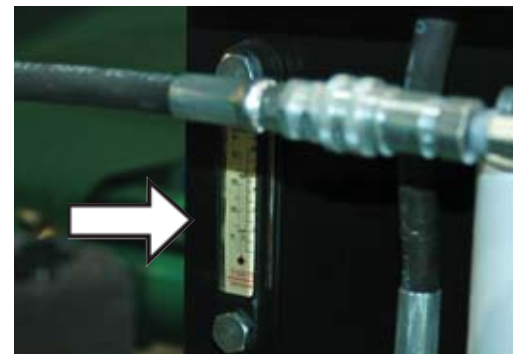
Check Hydraulic Fluid

Periodically check the hydraulic fluid level in reservoir. All hydraulic cylinders must be retracted (Boom down and trolley toward HPU) before checking fluid to get an accurate level. Maintain fluid at HIGH Level.

Never allow dirt or foreign matter to enter the open tank.

Fill the reservoir from a clean container.

Refer to the "Hydraulic Fluids" section of this manual for hydraulic fluid recommendations.



PH04046-22:10



PH04042:22:10

TX03081-2-23-10

Maintenance

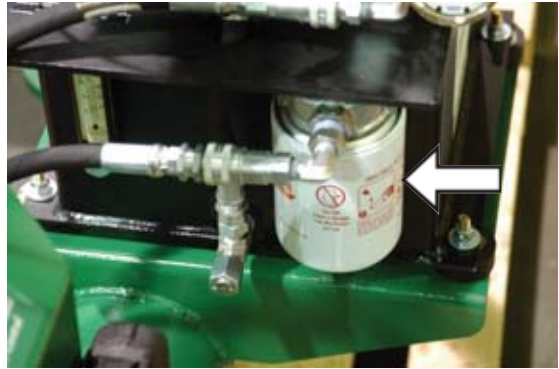
Change Hydraulic Filter and Fluid

The hydraulic filter should be replaced every year.

The hydraulic fluid should be replaced every two years.

Fill the reservoir from a clean container.

Refer to the "Hydraulic Fluids" section of this manual for hydraulic fluid recommendations.



PH0404222:10



PH0404222:10

TX03075-2-4-10

Pipe Stand Lubrication

- Use a grease gun to grease the following parts:

- a) Cylinder Pins (6 points)
- b) Boom Pins (2 points)
- c) Roller Bearings (4 points)
- d) Wheels (4 points)

- Check that the pillow block bearings (Rollers) rotate freely.
- Check that the trolley wheels rotate freely.



PH040633-3-10

TX03069-3-2-10

Maintenance

Lifting Slings

Before each lift of the machine, inspect the lifting sling for damage. Do not use a damaged sling. In addition, a thorough yearly inspection should be done by a qualified person per ASME Standard B30.9. In severe service it should be inspected more frequently than yearly.

TX03072-3-2-10



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Fasteners Must Be Tight

Check all nuts, bolts, and snap rings to make certain they are secure and in place.

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PH04054-3-2-10

HPU Engine

The HPU engine should be maintained per the maintenance schedule in the engine operator's manual.

TX03073-1-25-10



PH0404522-10

Maintenance

Troubleshooting

Problem	Action
Load Lowers	<p>a) May need to replace lift cylinder seals.</p> <p>b) May need to replace counterbalance valve.</p> <ul style="list-style-type: none"> If counterbalance valve requires replacement: <ol style="list-style-type: none"> Lower pipe stand completely. Remove pipe from pipe stand. Turn valve adjustment fully clockwise. Slowly and carefully remove valve cartridge from valve body. <p>c) May need to increase the counterbalance valve setting. Proper counterbalance valve setting is 1-1/4 turns clockwise from fully counter clockwise position.</p>
Engine Will Not Start	See the engine operator's manual for engine troubleshooting
Load Will Not Raise	<p>a) Check fluid level in hydraulic reservoir.</p> <p>b) May need to replace counterbalance valve.</p> <p>c) May need to increase relief valve setting on HPU.</p> <p>To adjust relief valve:</p> <p>Turn relief valve adjustment clockwise to increase setting. Proper setting, 2500 psi can only be achieved when actuating either control valve lever, and the corresponding cylinder is bottomed-out.</p>

Hydraulic Fluids

Hydraulic Fluids

The use of proper hydraulic fluid is mandatory to achieve maximum performance and machine life. Use a clean, high quality, anti-wear hydraulic fluid with a viscosity index (VI) of 135 minimum. It should have a maximum viscosity of 500 cSt (2000 SSU) at startup (ambient temperature) and a minimum viscosity of 13 cSt (65 SSU) at the maximum fluid temperature (generally 80°F above ambient). Using hydraulic fluids that do not meet these criteria may cause poor operation and/or damage to the hydraulic components.

The following table specifies the fluid temperature at various viscosities. Temperature rise of the hydraulic fluid can vary from 30° F to about 80° F over the ambient temperature depending on the pressure setting, age of the pump, wind, etc. Mobil Univis N46 hydraulic fluid is installed at our factory. The advantage of this fluid is a wider temperature range, however, this fluid should not be used for continuous operation below 24°F.

TX03082-04-18-16

Hydraulic Fluids Characteristics																	
Manufacturer	Fluid Name	cSt 100F	cSt 210F	V.I.	-20F	-10F	0F	10F	30F	50F	70F	90F	110F	130F	150F	Range °F	Range °C
Mobil	DTE 10 Excel 15	15.8	4.1	168		*	*	*	*	*	*	*	*	*	*	-16 - 113	-27 - 45
	DTE 10 Excel 32	32.7	6.6	164					*	*	*	*	*	*	*	12 - 154	-11 - 68
	DTE 10 Excel 46	45.6	8.5	164					*	*	*	*	*	*	*	23-173	-5 - 78
	DTE 10 Excel 68	68.4	11.2	156						*	*	*	*	*	*	37-196	3 - 91
	Univis N-32	34.9	6.9	164					*	*	*	*	*	*	*	12-150	-11 - 66
	Univis N-46	46	8.5	163					*	*	*	*	*	*	*	24-166	-4 - 74
	Univis N-68	73.8	12.1	160						*	*	*	*	*	*	39-193	4 - 89

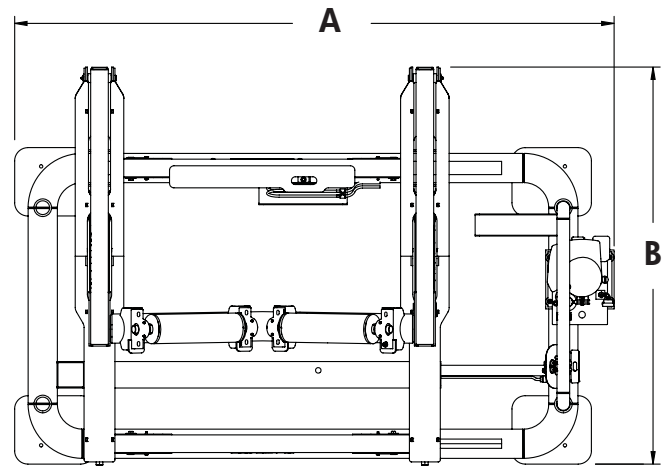
NOTE: This chart is based on pump manufacturer recommendations of 13 to 500 cSt.

NOTE: Temperatures shown are fluid temperatures. – NOT ambient temperatures.

Specifications

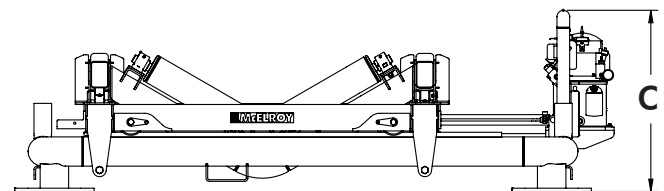
MegaMc® Hydraulic Pipe Stand

	8 - 36	36 - 65
Dimensions:		
Length: (A)	114 in	136 in
Width: (B)	90 in	90 in
Height: (C)	40 in	41 in
Weight:		
Lifting Capacity:	9,000 lbs	16,000 lbs
Capacity:		
Pipe Size Range:	8 - 36 IPS	36 - 65 IPS
Minimum Pipe Size:	8 IPS	16 IPS
Vertical Lift Range:	34 in	34 in
Transverse Movement:	24 in	24 in



Hydraulic Power Unit

Power (hp) (self contained):	5.5 hp
Relief Pressure (psi):	2,500 PSI
Reservoir Capacity:	5 gal
Flow (GPM @ 2000 PSI):	2 gpm
Starting System:	Pull Start
Fuel Type:	Unleaded Gasoline
Fuel Tank Capacity:	1.16 qt
Engine Oil Type:	Refer to Engine Manual
Engine Oil Capacity:	0.69 qt
Hydraulic Fluid:	Refer to Hydraulic Fluids Section



About this manual . . .

McElroy Manufacturing continually strives to give customers the best quality products available. This manual is printed with materials made for durable applications and harsh environments.

This manual is waterproof, tear resistant, grease resistant, abrasion resistant and the bonding quality of the printing ensures a readable, durable product.

The material does not contain any cellulose based materials and does not contribute to the harvesting of our forests, or ozone-depleting constituents. This manual can be safely disposed of in a landfill and will not leach into ground water.

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