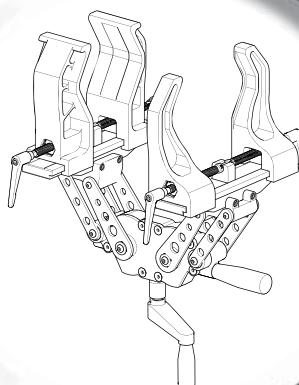


# Operator's Manual



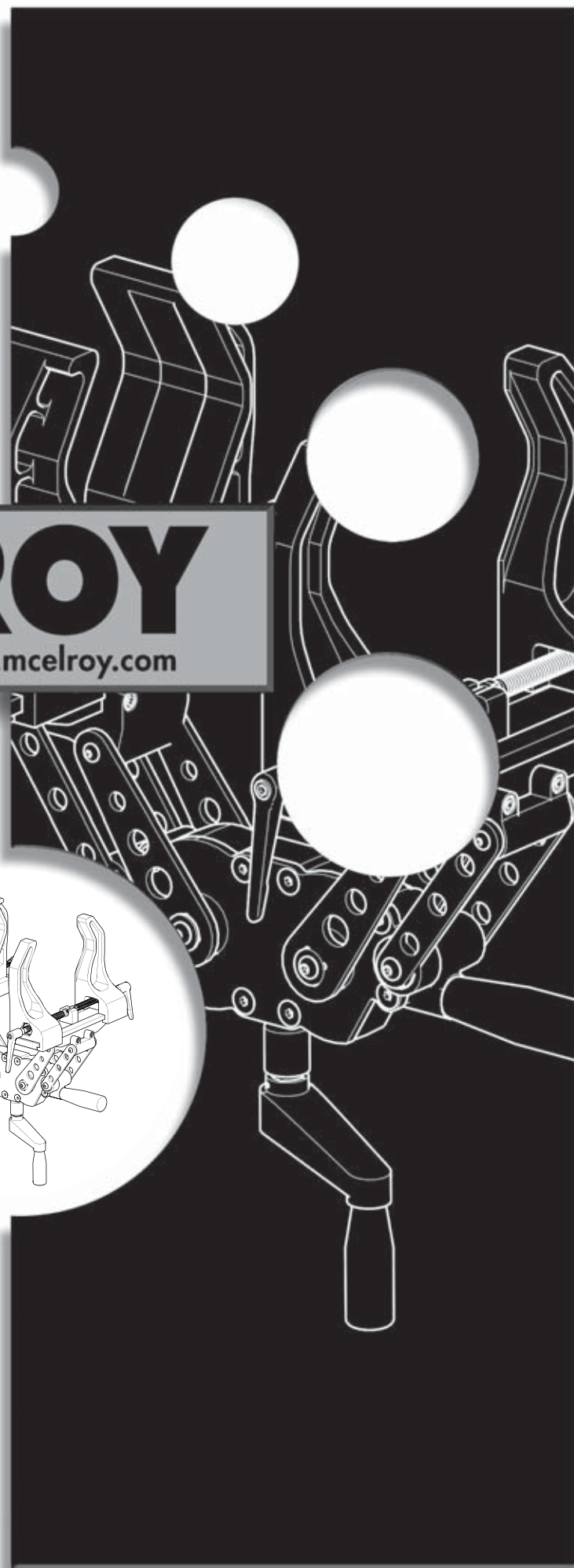
# McELROY

[www.mcelroy.com](http://www.mcelroy.com)



## Socket Fusion Tooling Systems

Original Language: English  
Manual: SW20902 Revision: A 05/17



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](http://patent.mcelroy.com)

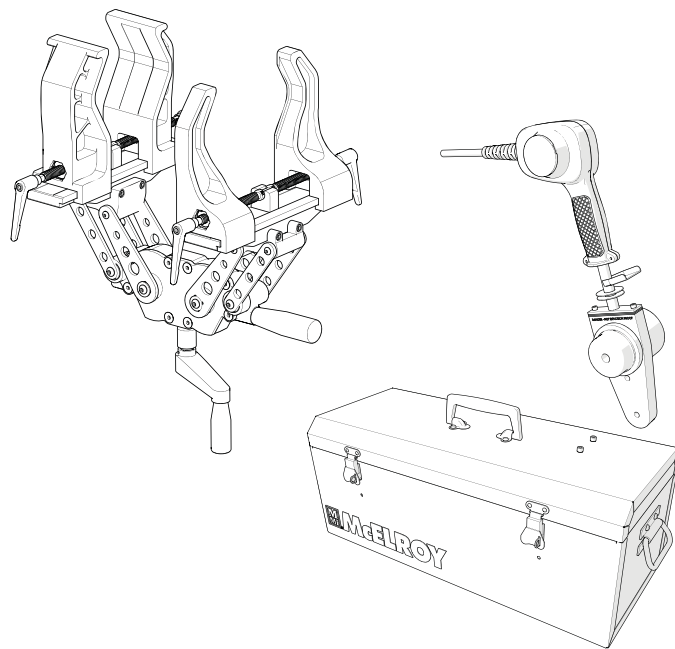
# Introduction

## Thank You for purchasing this McElroy product

The McElroy Socket Fusion Tooling Systems is designed for socket fusion on 16mm to 125mm pipe.

With reasonable care and maintenance, these tools will give years of satisfactory service.

Before operating these tools, please read this manual thoroughly, and keep a copy with the tools for future reference. This manual is to be considered part of your Socket Fusion Tooling System.



TX04697-04-10-14

## 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](http://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.



MU2-03-13-14

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](mailto: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 aforesaid 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](http://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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# Fusion 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.



WR00051-1-30-92

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



# Fusion 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.



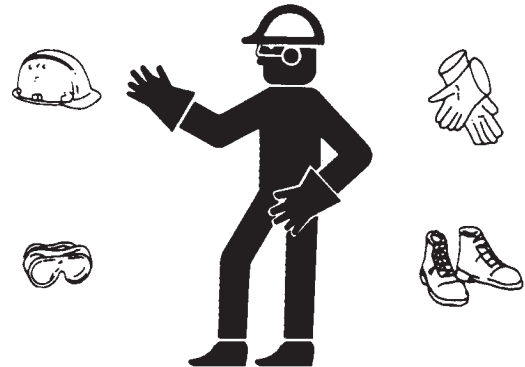
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TX00114-4-22-93

## Wear Safety Equipment

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

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



WR00053-12292

TX00032-4-7-93

## Heater Is Not Explosion Proof



This heater is not explosion proof. Operation of heater in an explosive atmosphere without necessary safety precautions will result in serious injury or death.

When operating in an explosive atmosphere, the heater should be brought up to temperature in a safe environment, then unplugged before entering the explosive atmosphere for fusion.



WR00034-11-30-92

TX04467-03-24-14



# Fusion Equipment Safety

## Electrical Safety



**WARNING** Always ensure power cords are properly grounded. It is important to remember that you are working in a wet environment with electrical devices. Proper ground connections help to minimize the chances of an electric shock.

Frequently inspect electrical cords and unit for damage. Have damaged components replaced and service performed by a qualified electrician.

Do not carry electrical devices by the cord.



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WR00025-11-30-92

TX02947-4-15-09

## Pipe Handling Safety

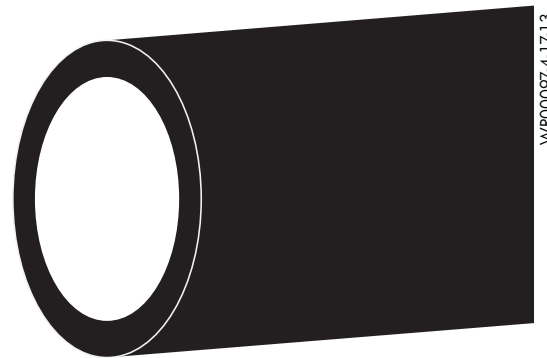


**WARNING** Pipe that is bent can store a great amount of energy. Do not bend and force the pipe into the machine. A bent pipe with stored energy could cause serious injury or death when that energy is released.

It is recommended that the pipe is always be held securely by either being clamped securely in the fusion machine jaws or attached to the lifting device.

Keep persons that are not involved in handling pipe away from handling operations. When the pipe and handling equipment are in motion, all persons involved in handling pipe should be able to see all other persons at all times. If any handling person is not in sight, immediately stop moving equipment and pipe and locate that person. Do not continue until all persons are accounted for and in sight.

Never push, roll, dump or drop pipe lengths, bundles or coils off the truck, off handling equipment or into a trench. Always use appropriate equipment to lift, move and lower the pipe.



WR00097-4-17-13

TX04698-04-14-14

# Fusion Equipment Safety

## Overhead Loads

### **⚠️ WARNING**

The Spider™ 125 is not designed to support overhead or overhung loads. Adequately support the pipe using appropriate support devices. If not supported, overhead loads could fall causing serious injury or death.



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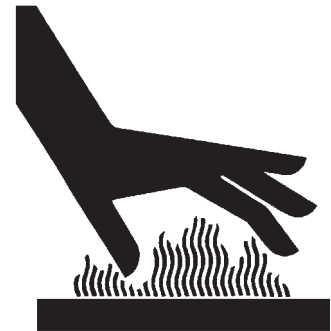
TX04455-2-26-13

## Heater is Hot

### **⚠️ CAUTION**

The heater is hot and will burn clothing and skin. Keep the heater in its insulated heater sling when not in use, and use care when heating the pipe.

**NOTICE:** Use only a clean non-synthetic cloth such as a cotton cloth to clean the heater plates.



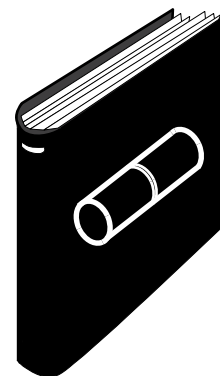
WR00030-2-10-93

TX00104-8-12-94

## Fusion Procedures

Obtain a copy of the pipe manufacturer's procedures or appropriate joining standard for the pipe being fused. Follow the procedure carefully, and adhere to all specified parameters.

**NOTICE:** Failure to follow pipe manufacturer's procedure could result in a bad joint. Always follow pipe manufacturer's procedures.



WR00079-1-24-96

TX02984-5-22-12

# Overview

## Theory of Heat Fusion

The principle of heat fusion is to heat two surfaces to a designated temperature, and then fuse them together by application of force. This pressure causes flow of the melted materials, which causes mixing and thus fusion. When the thermoplastic material is heated, the molecular structure is transformed from a crystalline state into an amorphous condition. When fusion pressure is applied, the molecules from each thermoplastic part mix. As the joint cools, the molecules return to their crystalline form, the original interfaces are gone, and the fitting and pipe have become one homogeneous unit. A strong, fully leak tight connection is the result.



PH05178-04-17-14

The principal operations include:

- Clamping** The pipe and fitting must be held firmly to allow all subsequent operations to take place.
- Cleaning** The area of pipe that the fitting will come in contact with must be cleaned.
- Aligning** The fitting, heater adapters, and pipe must be properly aligned.
- Heating** A melt pattern must be formed that penetrates into the pipe and into the fitting.
- Joining** The pipe and fitting must be joined and the pipe fully seated within the fitting.
- Holding** The molten joint must be held immobile until adequately cooled.
- Inspecting** Visually examine the entire circumference of the joint for compliance with standards established by your company, customer, industry, federal, state, or local regulations.

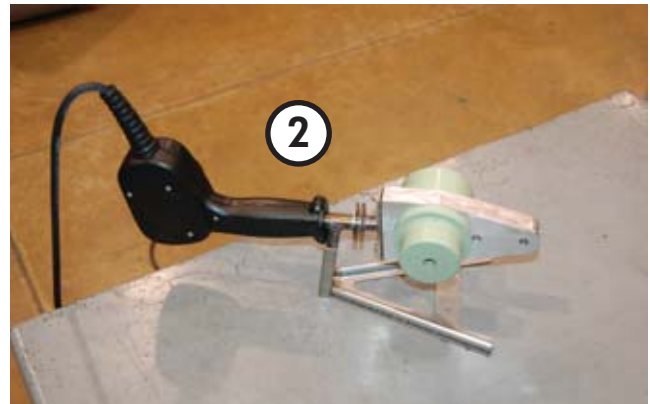
# Operation - 16-63mm

## Nomenclature

- ① **Heater Sling** - Sling used to hold the heater that protects and insulates the heater.
- ② **Heater and Heater Stand** - Used with heater adapters in order to heat the pipe and fitting so that they can be fused.
- ③ **Heater Adapters** - Used with the heater and should be installed to match the fitting and pipe being fused.
- ④ **Pipe Cutter** - Used to cut the pipe to remove any damaged or misshaped material.
- ⑤ **Socket Fusion Toolbox** - Holds the heater, heater adapters, pipe cutters, heater stand, and has a fusion chart attached.



PH042126-14-10



# Operation - 16-63mm

## Prepare Pipe End

Cut off damaged or oval ends of pipe squarely with a pipe cutter. Remove shavings and burrs inside pipe end.

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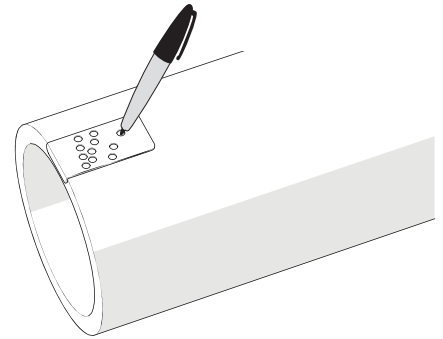


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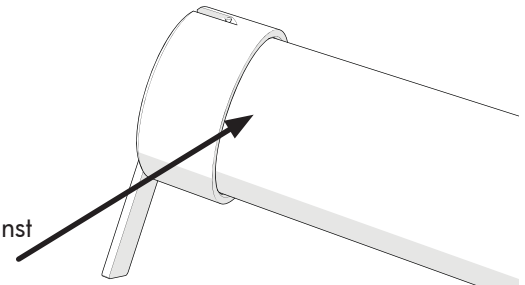
## Mark Insertion Depth

Use a marking instrument and mark the insertion depth according to the appropriate joining standard. The mark can be made using the insertion depth gauge. This mark is the insertion depth used when fusing the pipe and fitting.

The chamfer/depth gauge tool may be used to chamfer the end of the pipe as well as determine the insertion depth. The cold ring tool is used to clamp against the chamfer/depth gauge to mark the insertion depth. The chamfer/depth gauge and cold ring tool are pipe size specific.



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CD01238-04-22-14

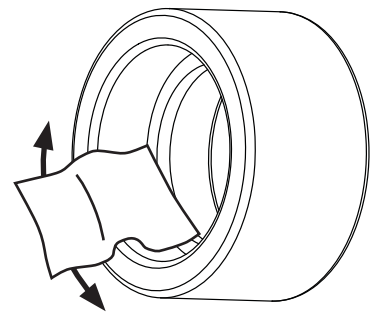
Cold ring tool is attached here against depth gauge.

TX04699-04-22-14

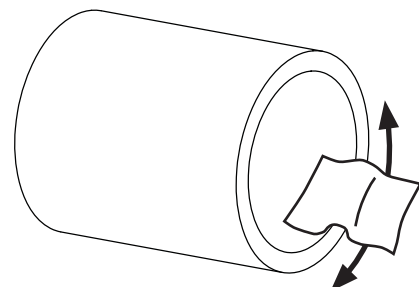
## Clean Fitting and Pipe

Fitting and pipe must be clean and dry. Use a clean cloth to wipe the mating surfaces.

**NOTICE:** Do not touch fusion area with hands.



CD01000-5-22-12



CD00999-5-22-12

TX04462-04-22-14

# Operation - 16-63mm

## Heater Is Not Explosion Proof



This heater is not explosion proof. Operation of heater in an explosive atmosphere without necessary safety precautions will result in serious injury or death.

If operating in an explosive atmosphere, the heater should be brought up to temperature in a safe environment, then unplugged before entering the explosive atmosphere for fusion.

Use a clean nonsynthetic lint free cloth to clean the heater adapter surfaces.

TX04410-04-10-14



PH05180-04-17-14

## Heater Temperature

Set the temperature of the heater per appropriate joining standard.

Use a pyrometer to check the temperature on the socket faces.

If the temperature needs to be adjusted, refer to "Adjusting Heater Temperature" in the Maintenance section of this manual.

TX04700-04-22-14



PH05181-04-22-14

## Heating The Pipe and Fitting

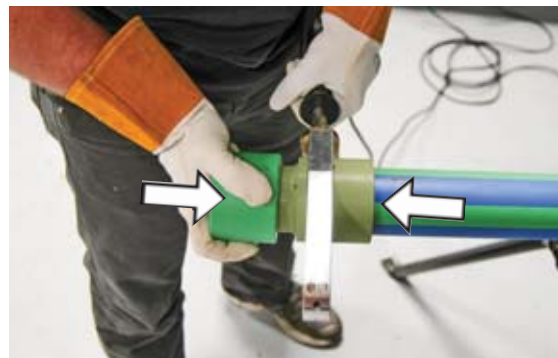
Firmly seat the socket fitting on the male adapter of the heater.

Simultaneously place the female adapter of the heater over the end of the pipe, up to the marked insertion depth.

Heating time starts when the heater is inserted to the proper insertion depth.

Heat fitting and pipe for the time specified by appropriate joining standard.

**NOTICE:** Do not twist fitting, pipe or heater



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TX04701-04-22-14



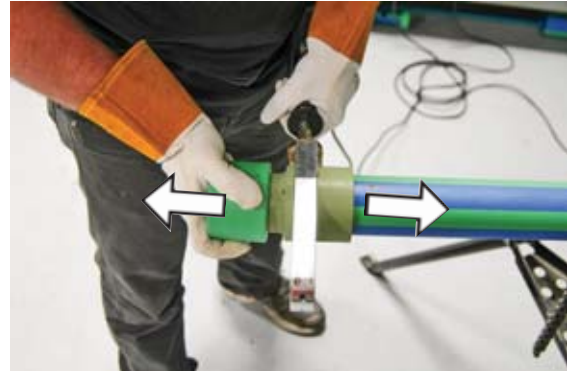
# Operation - 16-63mm

## Remove Heater

Remove the pipe and the fitting from the heater.

**NOTICE:** Do not twist fitting, pipe or heater.

TX04458-9-25-12



PH0518204-17-14

## Inspect Melt

Quickly inspect the heated parts to make sure all surfaces have been melted properly.

If melt is not complete, cut off melted pipe end. Use a new fitting and repeat preparation and heating process.

TX01408-6-20-97

## Fusion and Cooling

After the heater has been removed, firmly push the melted fitting squarely onto the pipe to the marked insertion depth. Be sure not to exceed the maximum time allowed by the manufacturer or joining standard for completion of the fusion joint.

**NOTICE:** Do not twist or rotate the fitting.

Hold the fitting firmly in place for the total cooling time specified by the pipe manufacturer or appropriate joining standard.



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# Operation - 16-63mm

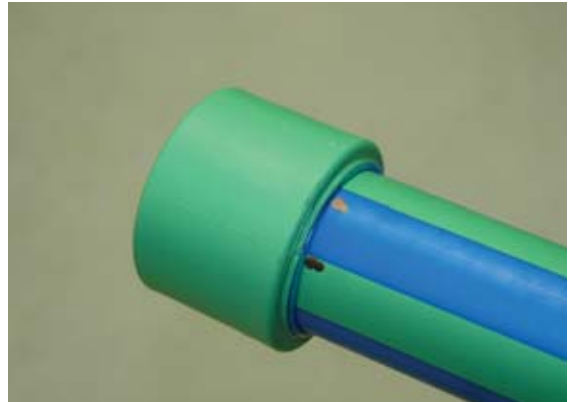
## Inspecting Fusion Joint

After completing the specified cooling time, inspect the joint for compliance with the appropriate joining standard.

There should be no gaps or voids between the fitting and the pipe.

If the joint is not acceptable, cut off the joint and re-fuse the joint.

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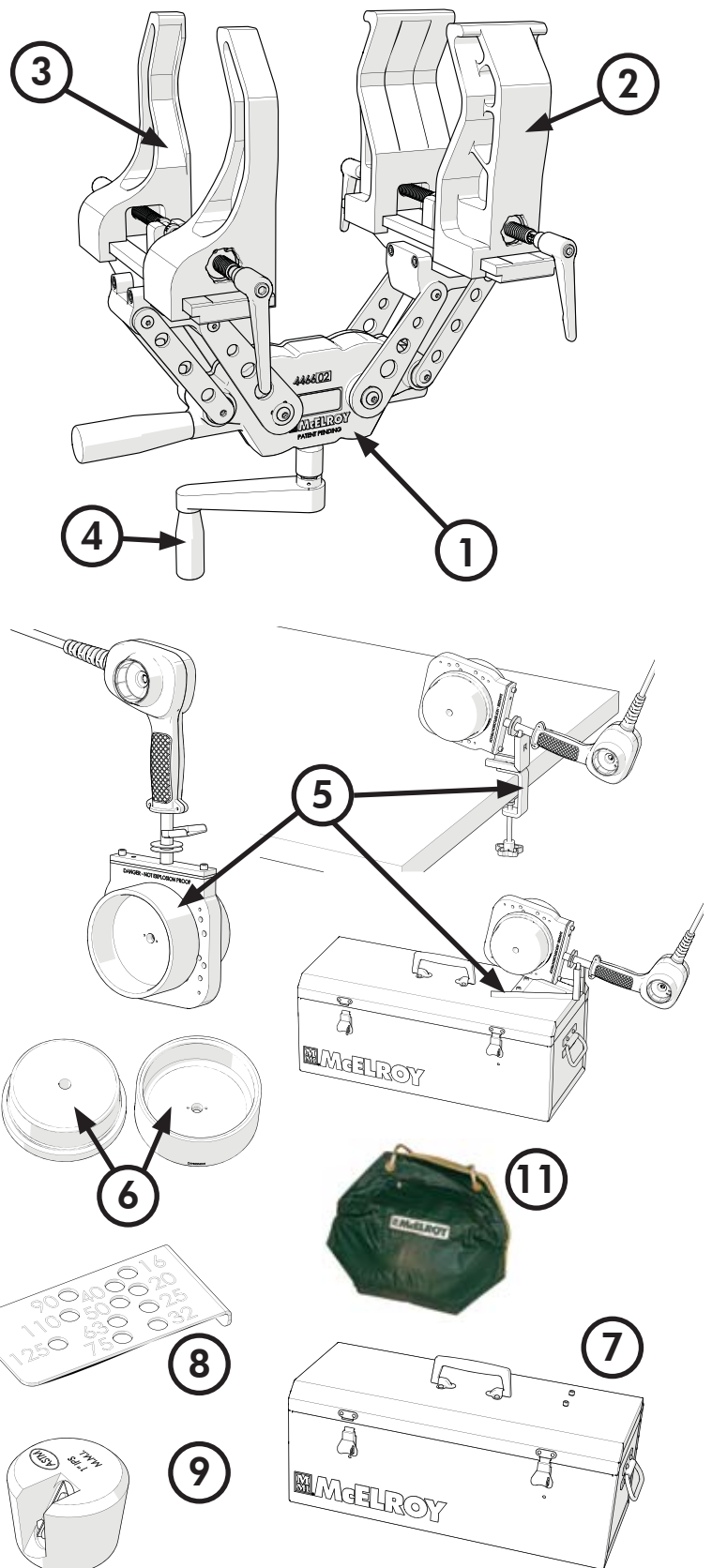


PH05183-04-22-14

# Operation - Spider™ 125 with Universal Clamping 63-125mm

## Nomenclature

- ① **Spider™ 125 with Universal Clamping** - Is an assembly tool that has two self-centering jaws and can move the jaws toward or away from each other using the crank handle. It is compatible with 63 - 125mm pipes and fittings
- ② **Pipe Jaws** - Jaws used to hold the pipe in the assembly tool. Jaws are adjusted by rotating the handles on either side of the jaws.
- ③ **Fitting Jaws** - Jaws used to hold the fitting in the assembly tool. Jaws are adjusted by rotating the handles on either side of the jaws.
- ④ **Crank Handle** - Handle used to move the jaws toward or away from each other.
- ⑤ **Heater and Heater Stand** - Used with heater adapters in order to heat the pipe and fitting so that they can be fused. Heater stands can be used on the Socket Storage Box or mounted on a tabletop.
- ⑥ **Heater Adapters** - The correct size adapters should be installed to match the size pipe and fitting used.
- ⑦ **Socket Storage Box** - Toolbox for storage of socket fusion heater adapters and other socket fusion accessories.
- ⑧ **Insertion Depth Gauge** - Tool used to mark the insertion depth on the pipe for various sizes. Use correct gauge that complies with the standard of the pipe manufacturer.
- ⑨ **Chamfer Tool/Depth Gauge** - Tool used to chamfer the end of the pipe and also measures the insertion depth. These tools are pipe size specific. Use correct gauge that complies with the standard of the pipe manufacturer.
- ⑩ **Spider Storage Box** - Box for the storage of the Spider 125 with Universal Clamping assembly tool.
- ⑪ **Heater Sling** - Used to keep heater insulated when the heater is not being used during fusion.



TX04656-03-22-14

# Operation - Spider™ 125 with Universal Clamping 63-125mm

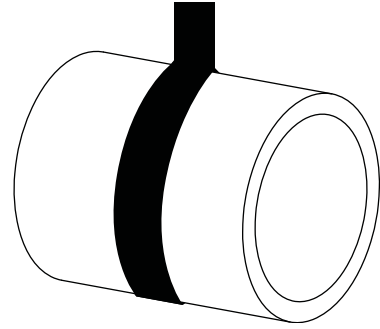
## Support Pipe



The Spider™ 125 is not designed to support overhead or overhung loads. Adequately support the pipe using appropriate support devices. If not supported, overhead loads could fall causing serious injury or death.

Ensure the pipe is properly supported before attaching the assembly tool to the pipe. Ensure there is enough travel in the pipe to complete the fusion.

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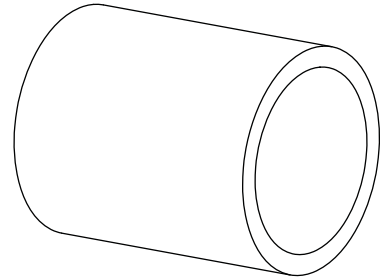


CD01033-8-29-12

## Prepare Pipe End

Cut off damaged or oval ends of pipe squarely with a pipe cutter. Remove shavings and burrs inside pipe end.

TX04408-5-22-12



CD00999-5-22-12

## Heater Adapters

Select the appropriate heater adapters for the size of fitting and pipe being fused together.

The heater body of this assembly is not coated. Coated heater adapters are available for all fusion applications.

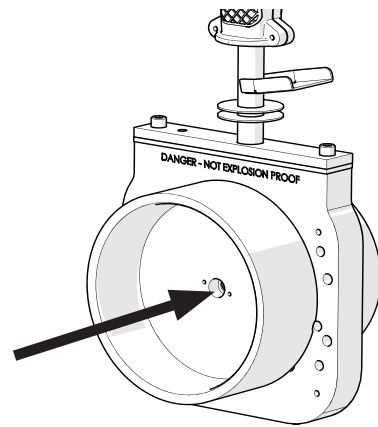
Heater adapters are installed with stainless steel cap screws.

Care should be taken to assure that the heater adapters are seated on the heater body, and that there is no foreign matter trapped between these surfaces.

**IMPORTANT:** Do not over-tighten the bolts.

The surface of the heater adapters are coated with an anti-stick coating.

TX04461-9-25-12



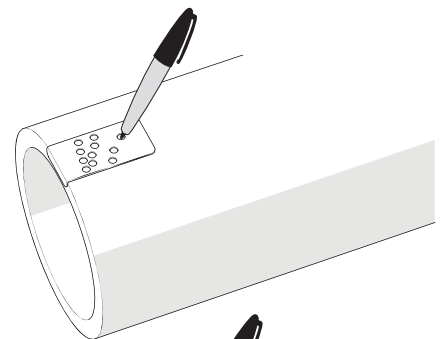
CD01208-03-17-14

## Operation - Spider™ 125 with Universal Clamping 63-125mm

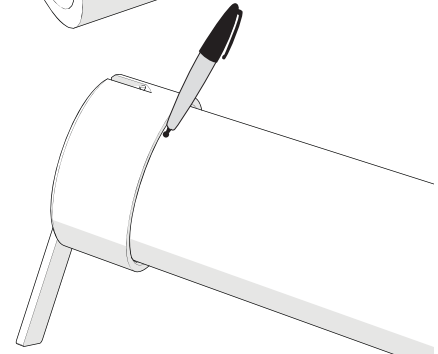
### Mark Insertion Depth

Use a marking instrument and mark the insertion depth according to the appropriate joining standard. The mark can be made using the insertion depth gauge. This mark is the insertion depth used when fusing the pipe and fitting.

The chamfer/depth gauge tool may be used to chamfer the end of the pipe as well as determine the insertion depth. Mark the insertion depth along the edge of the chamfer/depth gauge. The chamfer/depth gauge is pipe size specific.



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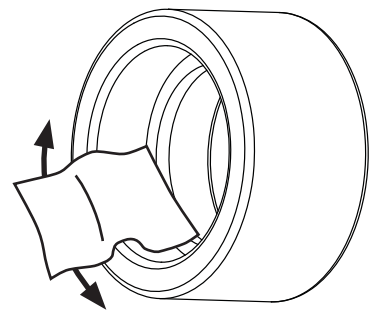
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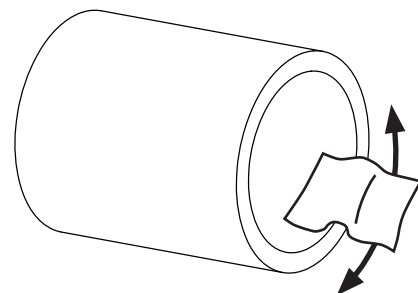
### Clean Fitting and Pipe

Fitting and pipe must be clean and dry. Use a clean lint free cloth to wipe the mating surfaces.

**NOTICE:** Do not touch fusion area with hands.



CD01000-5-22-12



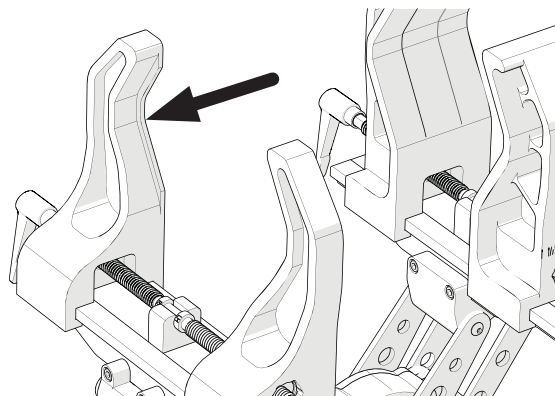
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TX04462-04-22-14

## Operation - Spider™ 125 with Universal Clamping 63-125mm

### Attach Spider 125 to Fitting and Pipe

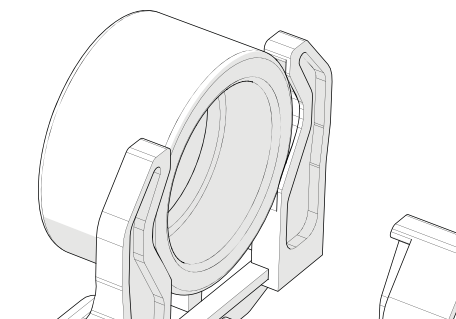
Insert the fitting into the fitting jaws ensuring that it is resting against the stop tabs. Tighten the jaws by rotating the jaw clamp handles. The handles can be pulled out and rotated to change the position of the handle for tightening.



CD01100-226-13

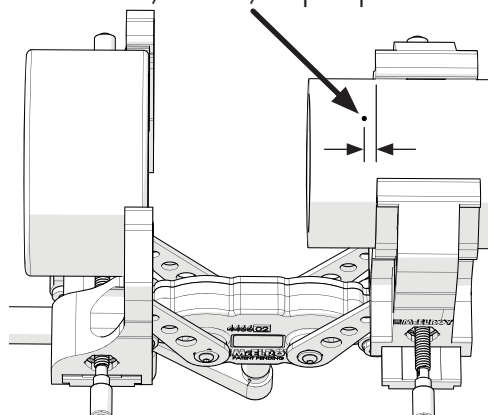
Insert pipe into the pipe jaws, allowing the insertion depth mark to protrude 3/8" to 1/2" past the jaw. Tighten the jaws by rotating the jaw clamp handles. The handles can be pulled out and rotated to change the position of the handle for tightening.

**NOTICE:** Overtightening the jaws could distort the pipe or fitting resulting in a questionable fusion joint.



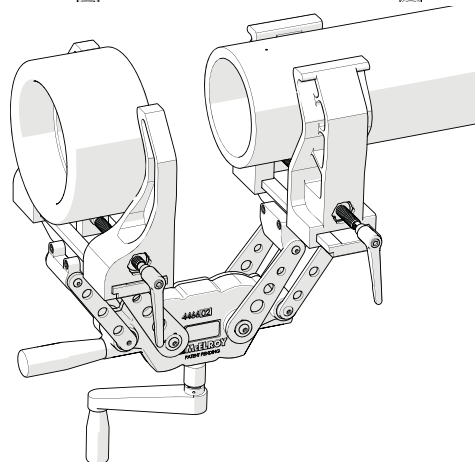
CD0121203-18-14

Allow insertion depth mark to protrude 3/8" to 1/2" past jaw.



CD01211-03-17-14

Open the jaws enough to allow the heater to be inserted.



CD0121303-18-14

# Operation - Spider™ 125 with Universal Clamping 63-125mm

## Heater Is Not Explosion Proof

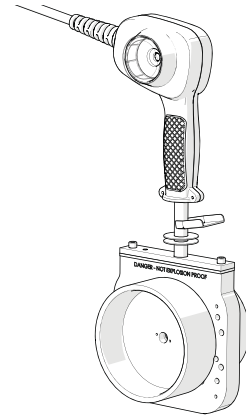


This heater is not explosion proof. Operation of heater in an explosive atmosphere without necessary safety precautions will result in serious injury or death.

If operating in an explosive atmosphere, the heater should be brought up to temperature in a safe environment, then unplugged before entering the explosive atmosphere for fusion.

Use a clean nonsynthetic lint free cloth to clean the heater adapter surfaces.

TX04410-04-10-14



CD01208-03-18-14

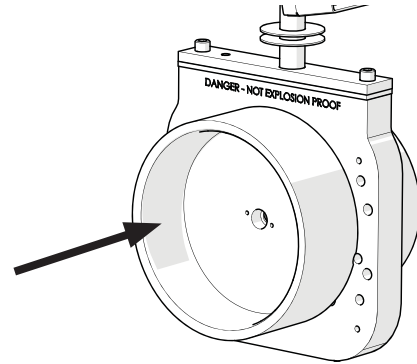
## Heater Temperature

Set the temperature of the heater per appropriate joining standard.

Use a pyrometer to check the temperature on the socket faces.

If the temperature needs to be adjusted, refer to "Adjusting Heater Temperature" in the Maintenance section of this manual.

TX04700-04-22-14



CD01208-03-18-14

## Operation - Spider™ 125 with Universal Clamping 63-125mm

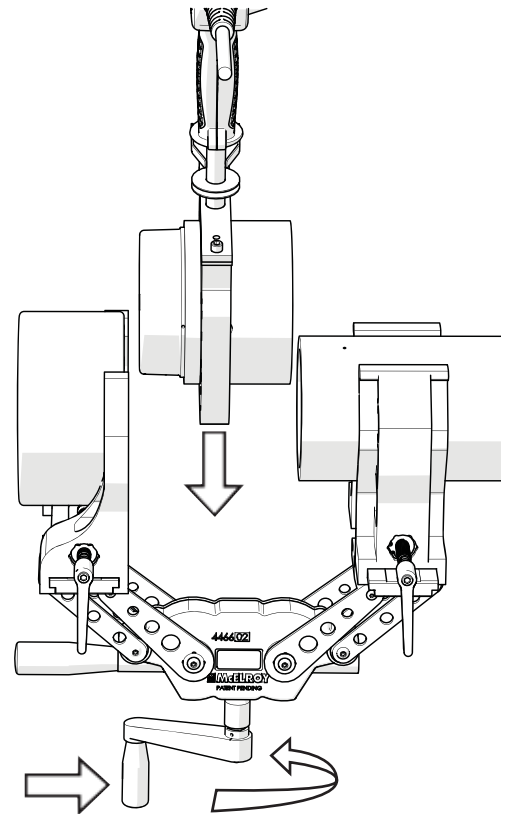
### Heating The Pipe and Fitting

Insert the heater in between the pipe end and fitting. Rotate the crank handle moving the pipe and fitting onto the heater. Move the jaws onto the heater to the proper welding depths.

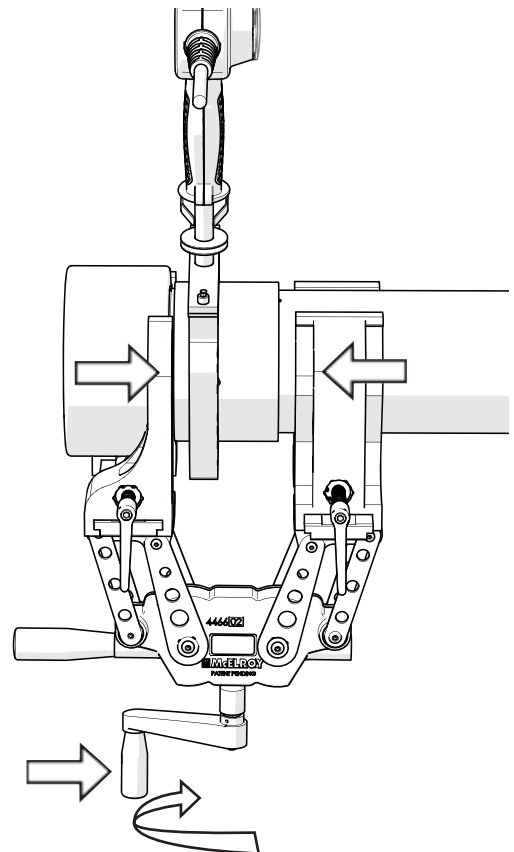
**IMPORTANT:** Do not force the pipe and fitting onto the heater. Allow the pipe and fitting to melt onto the heater. Forcing the pipe and fitting onto the heater will damage the assembly tool or create a questionable melt pattern.

Heating time starts when the pipe and fitting are fully inserted onto the heater adapters.

Heat fitting and pipe for the pipe manufacturer's specified period of time or appropriate joining standard.



CD01214-03-18-14



CD01215-03-18-14



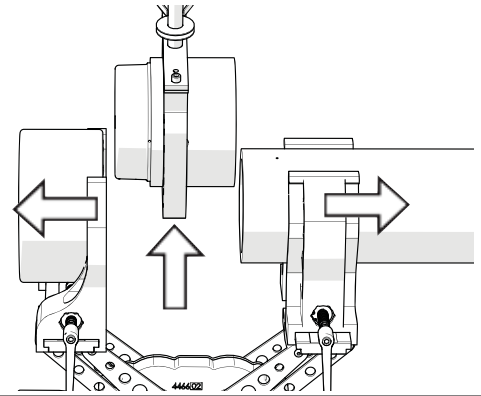
## Operation - Spider™ 125 with Universal Clamping 63-125mm

### Remove Heater

Rotate the crank handle and open the jaws until there is enough room to remove the heater. Quickly remove the heater from the pipe and fitting.

**IMPORTANT:** An optional auxiliary heater handle is available to assist with removing the heater.

TX04417-9-25-12



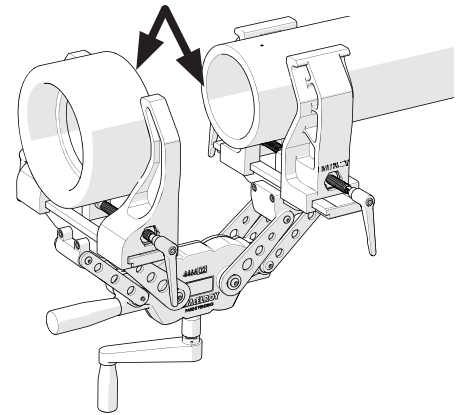
CD01204-03-18-14

### Inspect Melt

Quickly inspect the heated parts to make sure all surfaces have been melted properly.

If melt is not complete, cut off melted pipe end. Use a new fitting and repeat preparation and heating process.

TX01408-6-20-97



CD01216-03-18-14

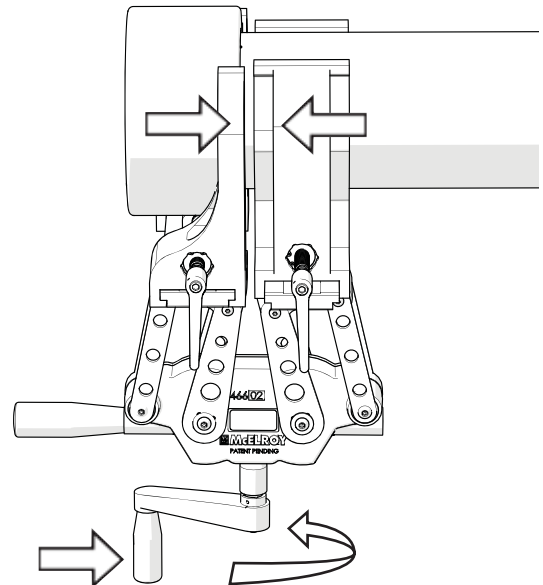
### Fusion and Cooling

Rotate the crank handle and close the jaws completely together.

**NOTICE:** Be sure to complete the joint in the time allowed by the pipe manufacturer or appropriate joining standard.

Allow the jaws to stay in place for the total cooling time specified by the pipe manufacturer or appropriate joining standard.

TX04706-04-22-14



CD01217-03-18-14

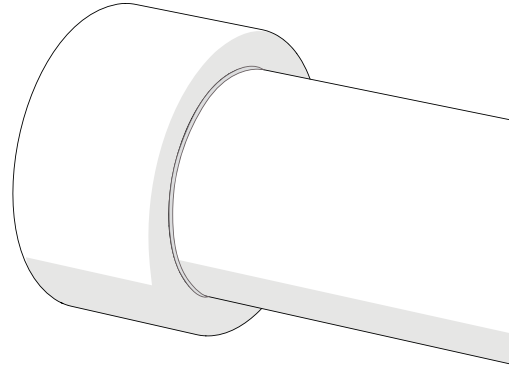
## Operation - Spider™ 125 with Universal Clamping 63-125mm

### Inspecting Fusion Joint

After completing the specified cooling time, inspect the joint for compliance with the appropriate joining standard.

There should be no gaps or voids between the fitting and the pipe.

If the joint is not acceptable, cut off the joint and re-fuse the joint.



CD0121803-18-14

TX04703-04-22-14

# Maintenance

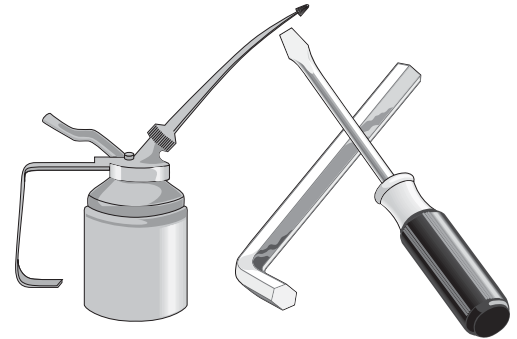
## Preventative Maintenance

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.

TX00428-8-10-95



CD0014211-2-94

## Cleaning the Machine

Clean the machine with a soap and water wash as needed.

Do not pressure wash.

Disconnect heater before cleaning.

**NOTICE:** Do not allow water on electrical components of the heater. Allow to dry completely before use.

TX04707-04-22-14



CD00178-5-3-96

## Lubrication

The assembly tool is sealed and does not require any lubrication.

TX04708-04-22-14

# Maintenance

## Installing Socket Fusion Heater Adapters

The heater body of this assembly is not coated. Coated heater adapters are available for all fusion applications.

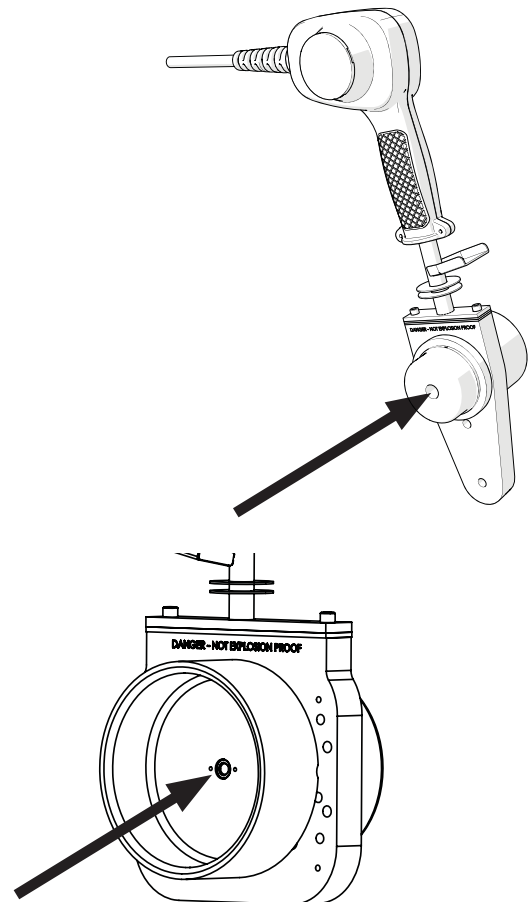
Heater adapters are installed with stainless steel cap screws.

Care should be taken to assure that the heater adapters are seated on the heater body, and that there is no foreign matter trapped between these surfaces.

**IMPORTANT:** Do not over-tighten the bolts.

The surface of the heater adapters are coated with an anti-stick coating.

**NOTICE:** Only install heater adapters when the heater is cool.



TX01413-6-17-10

## Adjusting Heater Temperature

Turn knob to desired temperature. Measure the heater surface temperature with a pyrometer. Any variance must be corrected to the pyrometer reading.

Loosen setscrew in the knob. Turn knob to point to the same temperature as the pyrometer. Tighten setscrew in the knob.

Turn knob to desired temperature. Allow heater to stabilize at the new temperature (5 to 10 minutes) after adjusting.

The thermometer on the heater body indicates internal temperature and should be used as a reference only.

TX02009-3-13-02



# Maintenance

## Heater Indicator Light

The heater has a green indicator light which will flash on and off. This indicates that the controller is operating normally. If the green indicator is not flashing then the controller may not be operating properly. If this occurs, disconnect power and have the heater repaired by an McElroy Authorized Service Center.

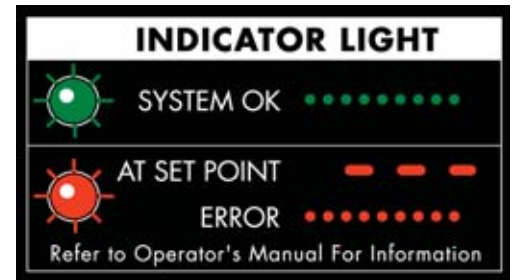
The heater has a red indicator light on the handle at the bottom of the temperature scale. When the heater is plugged in and preheating the red light glows steadily until the set temperature is reached. The red light then goes off and on as the heater maintains temperature.

If the heater is not operating properly, the control will attempt to turn the heater off and the red indicator light will flash rapidly. If this occurs, disconnect the power and take it to a McElroy Authorized Service Center for repair.

TX04036-4-12-10



PH02314-4-24-02



PH02571-09-16-03

# Specifications

## Specifications

The McElroy Socket Fusion Tooling System is designed for socket fusion of 16mm to 125mm pipe.

### Heaters:

16mm - 63mm Socket Heater Power - 100V - 120V, 50/60Hz, 700 Watt, 1Ph

Large Socket Heater Power - 100V - 120V, 50/60Hz, 1600 Watt, 1Ph

### Weight:

16mm - 63mm Socket Heater: 3.5 lbs. (1.6 Kg)

Larger Socket Heater: 5.5 lbs. (2.5 Kg)

### Toolbox Dimensions:

Length: 24" (609.6mm)

Width: 10" (254mm)

Height: 9.5" (241.3mm)

### Spider™ 125 with Universal Clamping

Weight: 16 lbs. (7.3 Kg)

Dimensions:

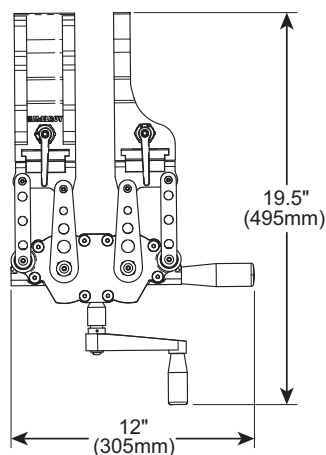
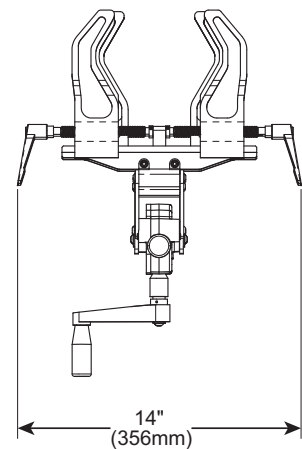
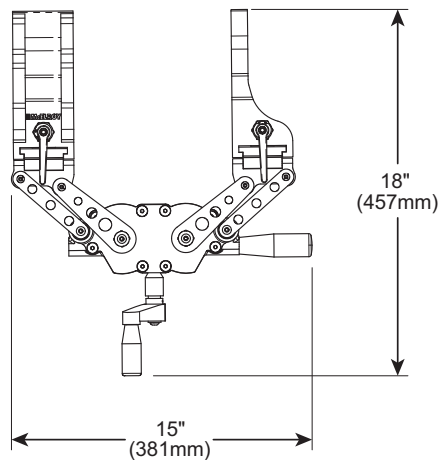
Length: 15" (381mm)

Width: 14" (356mm)

Height: 19.5" (495mm)

Maximum Stroke: 7.6" (193mm)

Mechanical Advantage: 20 to 1



## 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.

TX001660-8-19-99





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