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# Weld Coupon Station

## User's Manual



E.H. Wachs Part No. 08-089-MAN  
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## Chapter 1

# About the Weld Coupon Station

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### PURPOSE OF THIS MANUAL

This manual explains how to operate and maintain the weld coupon station. It includes instructions for set-up, operation, and maintenance. It also contains parts lists, diagrams, and service information to help you order replacement parts and perform user-serviceable repairs.

Before operating the weld coupon station, you should read through this manual and become familiar with all instructions.

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### HOW TO USE THE MANUAL

This manual is organized to help you quickly find the information you need. Each chapter describes a specific topic on using or maintaining your equipment.

Each page is designed with two columns. This large column on the inside of the page contains instructions and illustrations. Use these instructions to operate and maintain the equipment.

The narrower column on the outside contains additional information such as warnings, special notes, and definitions. Refer to it for safety notes and other information.

### In This Chapter

PURPOSE OF THIS MANUAL

HOW TO USE THE MANUAL

SYMBOLS AND WARNINGS

MANUAL UPDATES AND  
REVISION TRACKING

EQUIPMENT DESCRIPTION

Throughout this manual, refer to this column for warnings, cautions, and notices with supplementary information.

## SYMBOLS AND WARNINGS

The following symbols are used throughout this manual to indicate special notes and warnings. They appear in the outside column of the page, next to the section they refer to. Make sure you understand what each symbol means, and follow all instructions for cautions and warnings.



### WARNING

A WARNING alert with the safety alert symbol indicates a potentially hazardous situation that **could** result in **serious injury or death**.



This is the **safety alert symbol**. It is used to alert you to **potential personal injury hazards**. Obey all safety messages that follow this symbol to avoid possible injury or death.



### CAUTION

A CAUTION alert with the safety alert symbol indicates a potentially hazardous situation that **could** result in **minor or moderate injury**.



### CAUTION

A CAUTION alert with the damage alert symbol indicates a situation that **will** result in **damage to the equipment**.



This is the **equipment damage alert symbol**. It is used to alert you to **potential equipment damage situations**. Obey all messages that follow this symbol to avoid damaging the equipment or workpiece on which it is operating.



### IMPORTANT

An IMPORTANT alert with the damage alert symbol indicates a situation that **may** result in **damage to the equipment**.

## NOTE

This symbol indicates a user note. **Notes** provide additional information to supplement the instructions, or tips for easier operation.



## NOTE

A NOTE provides supplementary information or operating tips.

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## MANUAL UPDATES AND REVISION TRACKING

Occasionally, we will update manuals with improved operation or maintenance procedures, or with corrections if necessary. When a manual is revised, we will update the revision history on the title page.

You may have factory service or upgrades performed on the equipment. If this service changes any technical data or operation and maintenance procedures, we will include a revised manual when we return the equipment to you.

Current versions of E.H. Wachs Company manuals are also available in PDF format. You can request an electronic copy of this manual by emailing customer service at [sales@ehwachs.com](mailto:sales@ehwachs.com).

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## EQUIPMENT DESCRIPTION

The Wachs weld coupon station is designed to quickly and easily machine weld preps on pre-cut pipe sections, creating weld-ready coupons. The system will machine virtually any prep, including bevels, compound bevels, and J-preps, on carbon steel, stainless steel, alloy steel, and aluminum pipe and tubing.

An I.D.-mount mandrel provides a perfectly centered setup in seconds. Different-sized clamping legs can be swapped out for various pipe sizes. An optional mandrel will let you perform counterbores and prep pipes up to 6.63" (168 mm) I.D.

The coupon station is based on the Wachs SDB 206, a heavy duty, portable end prep tool. It includes an enclosure, electric drive motor, integrated control panel, and coolant system with pump and adjustable nozzle. The system's components are illustrated in Figure 1-1.

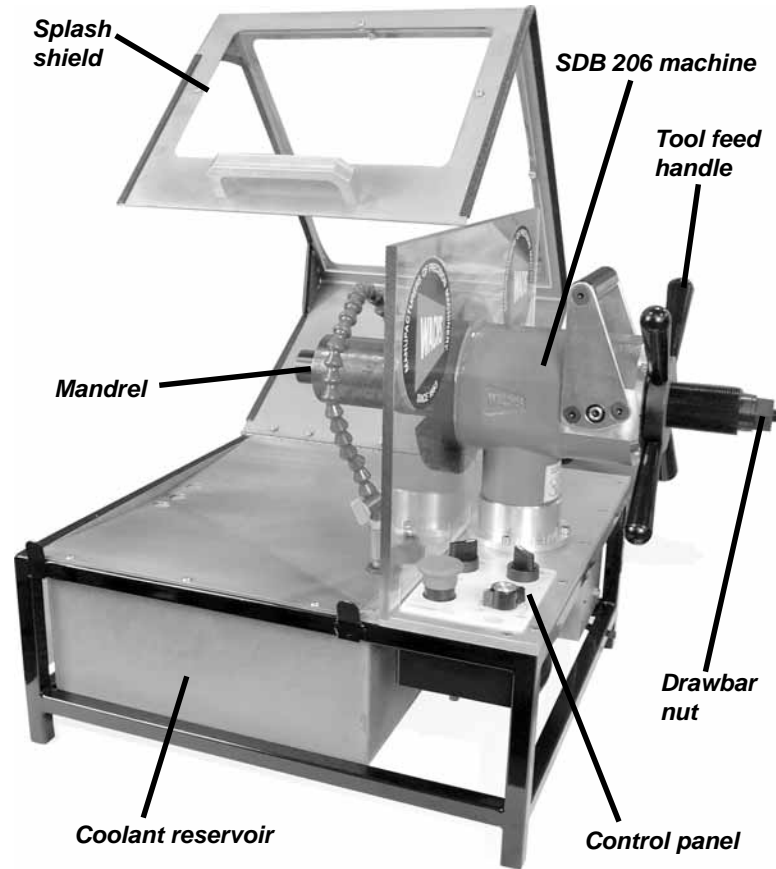


Figure 1-1. The photo illustrates the components of the weld coupon station.

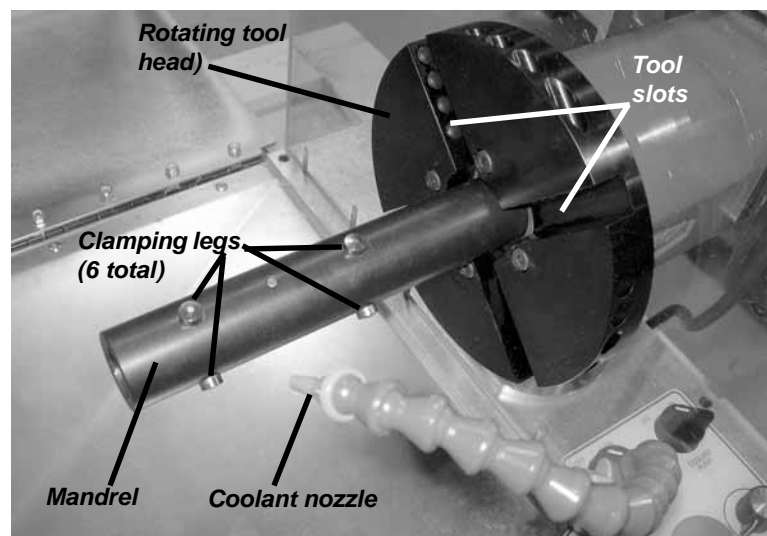


Figure 1-2. The photo shows the cutting head and mandrel of the SDB 206 machine. The pipe sample fits over the mandrel and is held in place by the clamping legs.



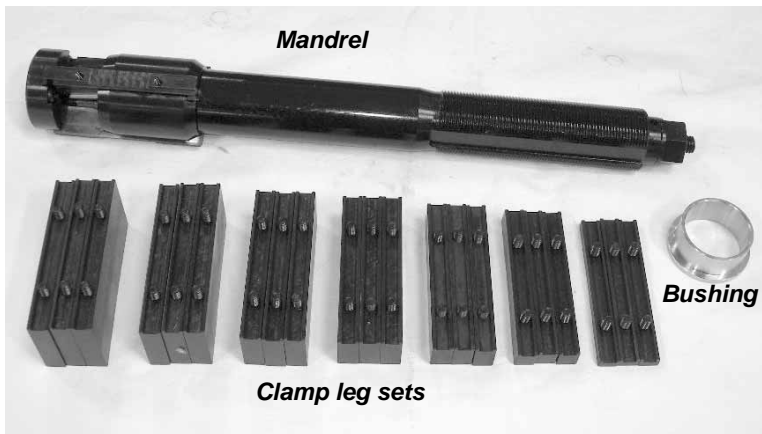


*Figure 1-3. A set of hand tools is provided. The hex cluster is for maintenance, the 3/16" t-handle hex wrench is to install tooling in the rotating head, and the 1-1/8" combination wrench turns the drawbar nut.*

### Optional Large I.D. Mandrel

An optional mandrel kit (part number 56-430-00) is available to allow machining of weld coupons from 2.27" to 6.77" I.D. The kit includes seven sets of clamp legs to cover the full range of I.D.s. See the leg size table in Chapter 3.

In order to use the large I.D. mandrel with the coupon station, you will also need to order a special bushing, part number SPG-616-028.



*Figure 1-4. The photo shows the optional mandrel kit, including mandrel and seven sets of clamp legs (part number 56-430-00). To use the mandrel with the weld coupon station, you must also order the special bushing (part number SPG-616-028).*

## Specifications

Machining Capacity	Common coupon sizes up to “Super coupons” with 2.75” (69.9 mm) O.D. and 5/8” (15.9 mm) wall, using standard mandrel. Optional accessories available for up to 6” Schedule 80 (ND150).
Feed Rate	0.083” (2.1 mm) per turn of the feed handle.
Feed Stroke	2.5” (63.5 mm) usable feed travel with a 0.001” (0.025 mm) feed scale.
Chucking Capacity (I.D.)	2” (50.8 mm) pipe schedule 10, 40, 80, xx, super coupon.
Controls	On/off, manual clamp, manual feed, emergency stop, rotating speed, and coolant on/off.
Drive	Electric 110 V, 60 Hz AC @ 50 A.
Tool Rotation Speed	Variable from 0-40 RPM.
Tooling	Included 37.5° tooling holder kit, Wachs 56-711-01 high-speed steel tooling with 2 precision ground cutting edges.
Dimensions	Length 21” (533 mm); width 18” (457 mm); height 21” (533 mm).
Weight	105 lb (48 kg) without coolant.

## Chapter 2

# Safety

The E.H. Wachs Company takes great pride in designing and manufacturing safe, high-quality products. We make user safety a top priority in the design of all our products.

Read this chapter carefully before operating the weld coupon station. It contains important safety instructions and recommendations.

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### OPERATOR SAFETY

Follow these guidelines for safe operation of the equipment.

- **READ THE OPERATING MANUAL.** Make sure you understand all setup and operating instructions before you begin.
- **INSPECT MACHINE AND ACCESSORIES.** Before starting the machine, look for loose bolts or nuts, leaking lubricant, rusted components, and any other physical conditions that may affect operation. Properly maintaining the machine can greatly decrease the chances for injury.
- **ALWAYS READ PLACARDS AND LABELS.** Make sure all placards, labels, and stickers are clearly legible and in good condition. You can purchase replacement labels from E.H. Wachs Company.
- **KEEP CLEAR OF MOVING PARTS.** Keep hands, arms, and fingers clear of all rotating or moving parts.

### In This Chapter

OPERATOR SAFETY

SAFETY LABELS



Look for this symbol throughout the manual. It indicates a personal injury hazard.

Always turn machine off before doing any adjustments or service.

- **SECURE LOOSE CLOTHING AND JEWELRY.** Secure or remove loose-fitting clothing and jewelry, and securely bind long hair, to prevent them from getting caught in moving parts of the machine.
- **KEEP WORK AREA CLEAR.** Keep all clutter and nonessential materials out of the work area. Only people directly involved with the work being performed should have access to the area.

### Safety Symbols



This icon is displayed with any safety alert that indicates a personal injury hazard.

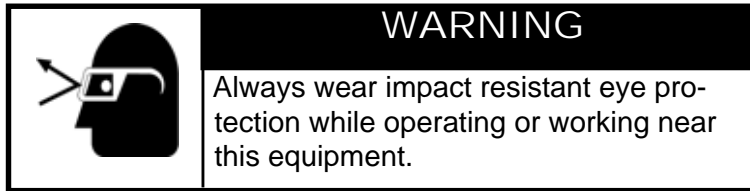
### WARNING

This safety alert indicates a potentially hazardous situation that, if not avoided, **could** result in **death or serious injury**.

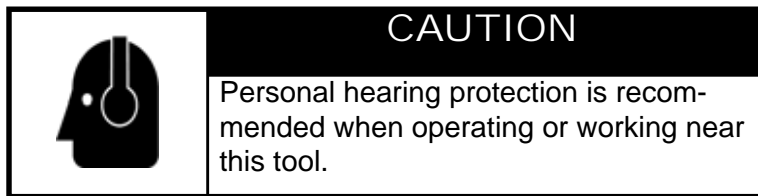
### CAUTION

This safety alert, with the personal injury hazard symbol, indicates a potentially hazardous situation that, if not avoided, **could** result in **minor or moderate injury**.

## Protective Equipment Requirements



For additional information on eye and face protection, refer to Federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.133., Eye and Face Protection and American National Standards Institute, ANSI Z87.1, Occupational and Educational Eye and Face Protection. Z87.1 is available from the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.



Hearing protectors are required in high noise areas, 85 dBA or greater. The operation of other tools and equipment in the area, reflective surfaces, process noises, and resonant structures can increase the noise level in the area. For additional information on hearing protection, refer to Federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.95, Occupational Noise Exposure and ANSI S12.6 Hearing Protectors.

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## SAFETY LABELS

The safety label shown in Figure 2-1 is attached to the SDB 206 machine body. Keep your hands away from the SDB rotating head while the machine is operating.



*Figure 2-1. The Warning label is on the SDB 206 machine body.*

# Chapter 3

## Operating Instructions

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### SETTING UP THE WELD COUPON STATION

The weld coupon station can be set up easily in minutes. All that is required to operate it is 110 V AC power. Use the following guidelines for setup and operation:

- Make sure that the frame is standing on a solid, level surface such as a workbench or work table.
- Make sure that the power cord is plugged into a grounded power outlet.
- Make sure the coolant reservoir is at least half full when operating the machine. See “Filling the Coolant Reservoir” in Chapter 4 for instructions on checking the reservoir level.
- Make sure that cutting chips are cleared from the drain screen, so that coolant can return to the reservoir.

### Installing the Tooling

You can install a single form tool, or multiple tools for various end preps. For instance, you can put on both a facing tool to square the pipe end or generate a land, and a bevel tool to apply a bevel. Chapter 5 includes a table of available tooling.

1. Using the provided 3/16” hex wrench, loosen the set screws in the tool slot you are using. You can use any of the 4 tool slots in the rotating head.

### In This Chapter

SETTING UP THE WELD COUPON STATION

MOUNTING THE COUPON

OPERATING THE WELD COUPON STATION

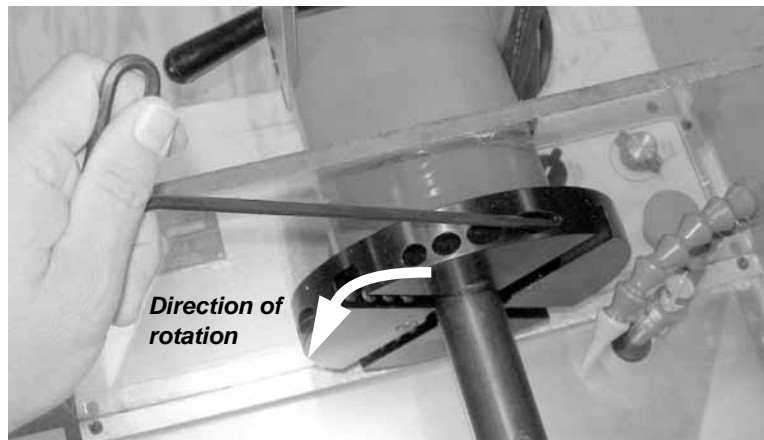


Figure 3-1. Loosen the set screws to install the tool in the rotating head.

2. Install the desired tool in the slot, with the cutting edge toward the direction of rotation. See Figure 3-1.
3. Snug the set screws to hold the tool in place while you mount the coupon on the mandrel (see next section).



#### NOTE

The feed drive has about 2-1/2" (64 mm) of travel. Mount the coupon end close enough to the rotating head so that the tool can perform the desired end prep. (The surface of the rotating head can get within about 7/8" [22 mm] of the closest clamping legs.)

## MOUNTING THE COUPON

When you mount the pipe sample on the mandrel, you must position it so that all 6 clamping legs are inside the pipe. Otherwise, the pipe will not clamp squarely to the machine. The two sets of clamping legs are 3" (76 mm) apart, so the pipe sample must be over 3" long to be mounted properly.

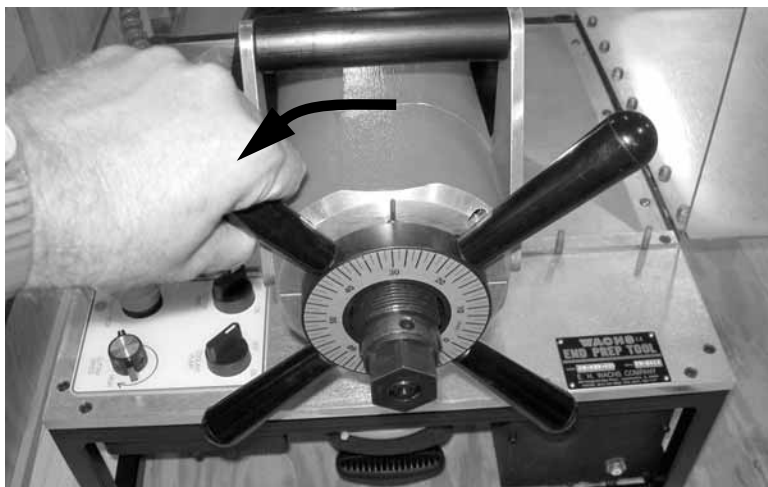
The mandrel design automatically centers and squares the pipe sample when you tighten the drawbar. No separate centering or squaring procedures are required.

If you are using the optional large I.D. mandrel, the mounting procedure is the same. Install the mandrel according to the instructions in Chapter 4, and see "Using the Optional Large I.D. Mandrel" in the next section for information on using the correct clamp leg set.

1. Make sure you have the correct set of clamping legs installed for the pipe size you are mounting. See "Changing the Clamp Legs" below for instructions on selecting and installing the clamping legs.

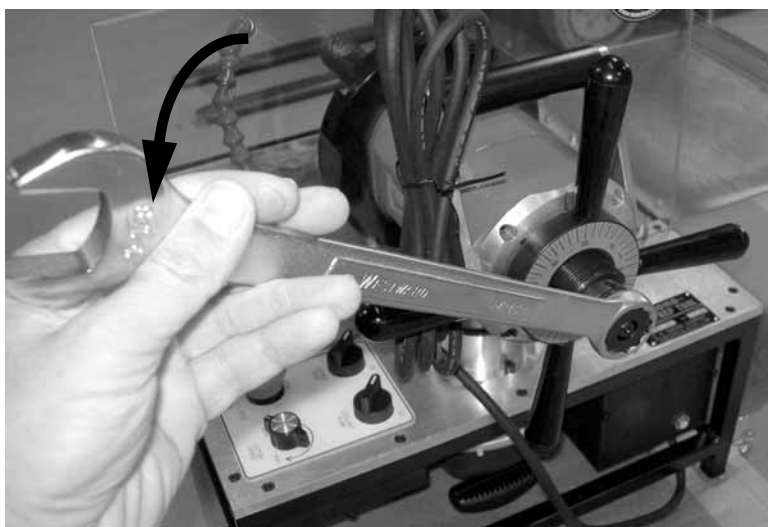


2. Turn the feed handle counter-clockwise to fully extend the mandrel through the rotating head.



*Figure 3-2. Turn the feed handle counter-clockwise to extend the mandrel all the way out.*

3. Using the 1-1/8" combination wrench, turn the drawbar nut counter-clockwise to fully retract the clamping legs.



*Figure 3-3. Turn the drawbar nut counter-clockwise to retract the clamping legs into the mandrel.*



**NOTE**

The clamping legs are not captivated in the mandrel, so you may have to push them in flush when you turn the drawbar nut.



**NOTE**

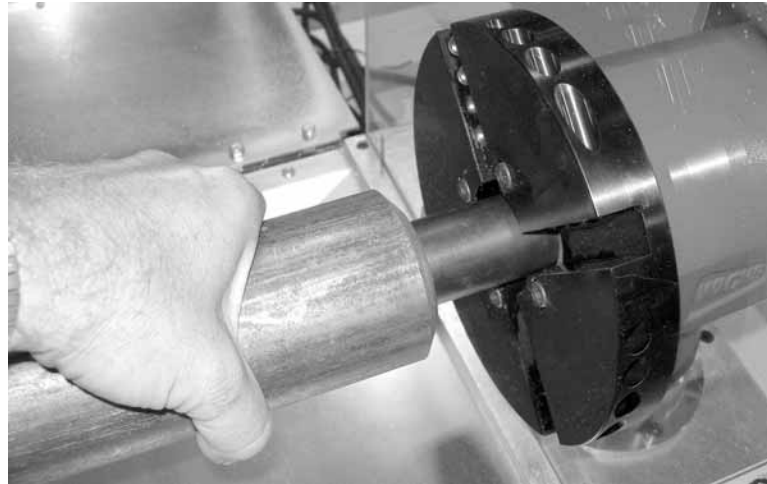
You can mount a long pipe sample with the end extending beyond the enclosure. If necessary, support the pipe end when mounting and machining the pipe.



**NOTE**

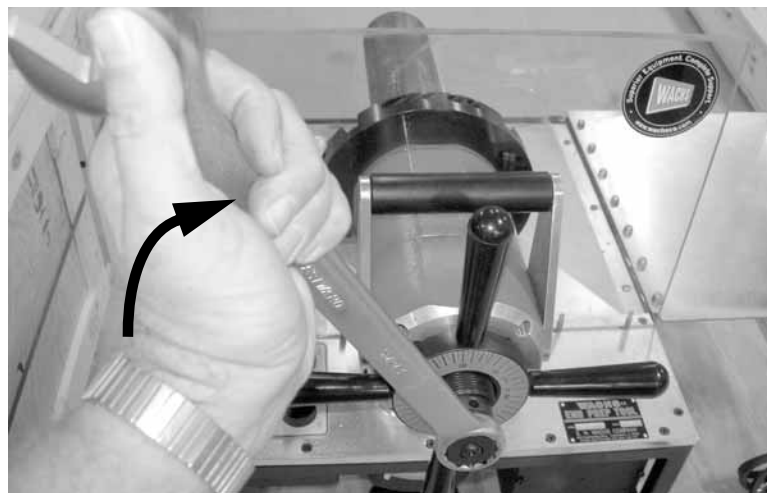
If you turn the drawbar nut all the way and the pipe sample is still loose, you will need to install longer clamping legs. Retract the legs and remove the pipe, then install a set of longer legs.

4. Put the pipe sample over the end of the mandrel, and position it so all 6 clamping legs are inside the pipe. Leave enough room between the pipe and rotating head to adjust the tooling.



*Figure 3-4. Put the pipe over the mandrel far enough so that all 6 clamping legs are inside the pipe.*

5. Using the 1-1/8" combination wrench, turn the drawbar nut clockwise until the clamping legs are tight inside the pipe sample. Make sure the pipe sample is rigidly held in place.



*Figure 3-5. Turn the drawbar nut clockwise to clamp the pipe onto the mandrel.*

6. Turn the feed handle clockwise to retract the mandrel and pull the pipe end toward the rotating head.

7. Check the alignment of the tool(s) with the end of the pipe. If necessary, loosen the tool set screws and move the tool along the tool slot to the required position.
8. Securely tighten the tool set screws that are in contact with the tool.

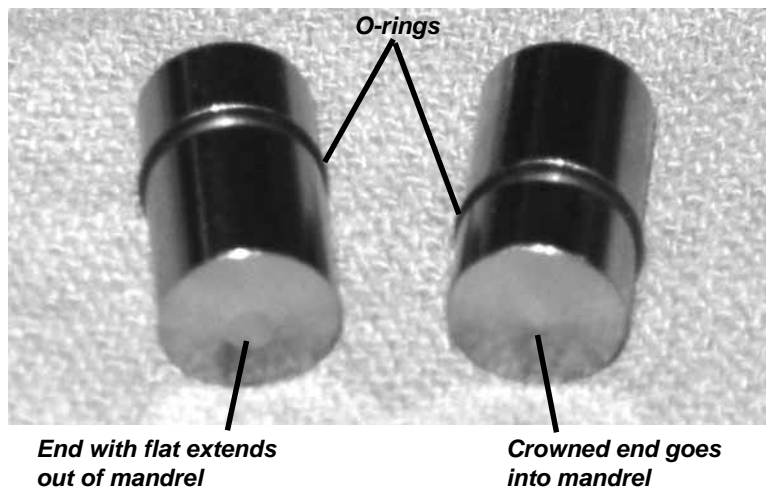
### Changing the Clamp Legs

Three sets of clamp legs (6 legs per set) are provided with the weld coupon station. The legs are different lengths to hold different sized pipe samples:

- 1.38"-1.68" (35.1-42.7 mm) I.D.
- 1.82"-2.11" (46.2-53.6 mm) I.D.
- 2.06"-2.35" (52.3-60.0 mm) I.D.

Select the correct leg set for the coupon samples you are prepping. Make sure you install the same size legs in all six locations in the mandrel.

**IMPORTANT:** Install the clamp legs so that the ends with the flats on them are out. See Figure 3-6.



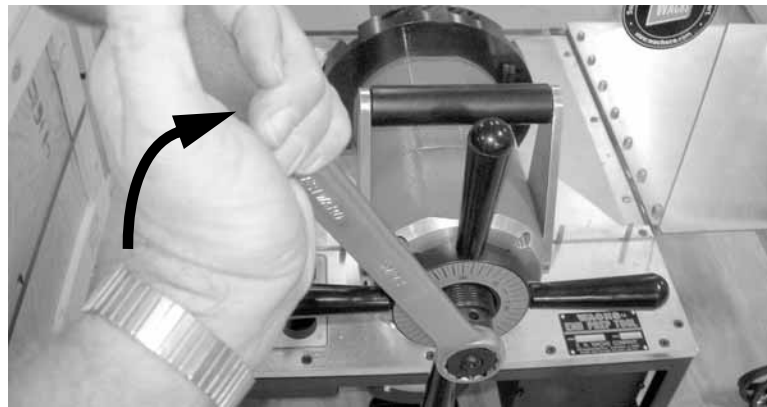
*Figure 3-6. Put the legs into the mandrel with the crowned (pointed) ends in, and the flat ends out.*



### CAUTION

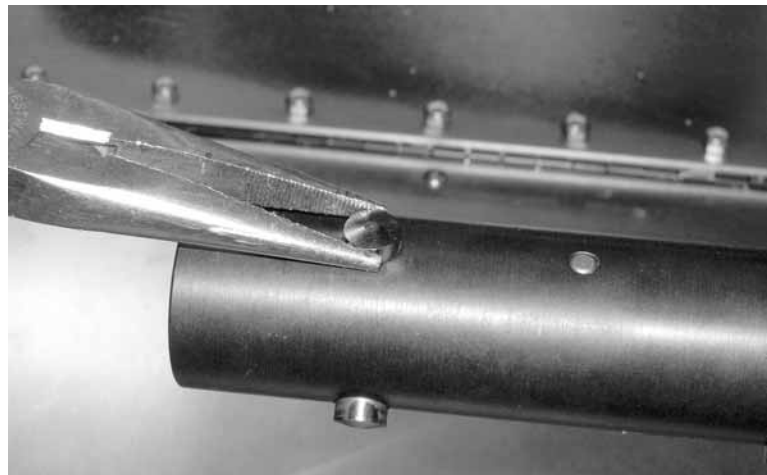
Unplug the power cord before changing the clamp legs. Injury could result if the machine starts while you are servicing it.

1. Turn the drawbar nut clockwise to extend the clamping legs all the way out of the mandrel.



*Figure 3-7. Turn the drawbar nut clockwise to extend the clamping legs.*

2. Using a pliers, carefully pull the clamping legs out of the mandrel. Keep each set of legs together in a separate container or ziplock bag.



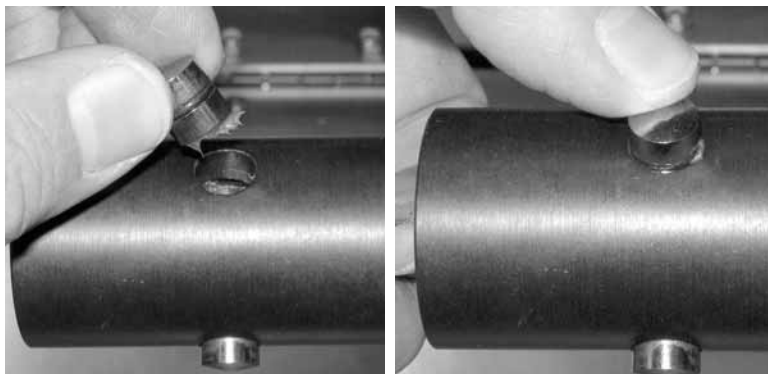
*Figure 3-8. Use a pliers to pull the clamping legs out of the mandrel.*



### NOTE

Each time you remove or install clamping legs, inspect the o-rings. Replace any worn or damaged o-rings. See Figure 3-6.

3. Press the new legs into the mandrel, with the crowned end in. See Figure 3-6.



*Figure 3-9. Put the clamp leg in the mandrel, then press it in securely.*

4. The legs are held in place by the o-rings. They are not mechanically captivated, so you may need to press them in with your thumb when you retract the drawbar nut.

#### Using the Optional Large I.D. Mandrel

The optional large I.D. mandrel has standard chuck legs built in that allow an I.D. clamping range of 2.27" to 2.92". Seven sets of leg extensions are provided to extend the pipe I.D. capacity up to 6.77". There are three identical legs in each set.

**Table 1: Large I.D. Extension Leg Sets**

Part No.	Pipe I.D. Range
56-085-01	2.75"-3.37"
56-085-02	3.31"-3.94"
56-085-03	3.87"-4.50"
56-085-04	4.44"-5.07"
56-085-05	5.01"-5.63"
56-085-06	5.55"-6.19"
56-085-07	6.14"-6.77"

See the instructions in Chapter 4 for installing the large I.D. mandrel. Install the correct set of clamp legs as follows.

1. Measure the I.D. of the pipe you will be machining.
2. Refer to Table 1 for the required set of clamp legs. Select all three legs of the set. The legs have their I.D. range stamped on the side.



*Figure 3-10. The clamp legs for the large I.D. mandrel are stamped with their pipe I.D. size range.*

3. Using a 3/16" hex wrench, attach the legs to the mandrel chuck legs using the captivated screws in the legs. Tighten the screws securely.



*Figure 3-11. Attach the clamp legs to the mandrel. You can do this before or after installing the mandrel in the machine.*

## OPERATING THE WELD COUPON STATION

### Using the Control Panel

Figure 3-12 shows the controls on the weld coupon station control panel.

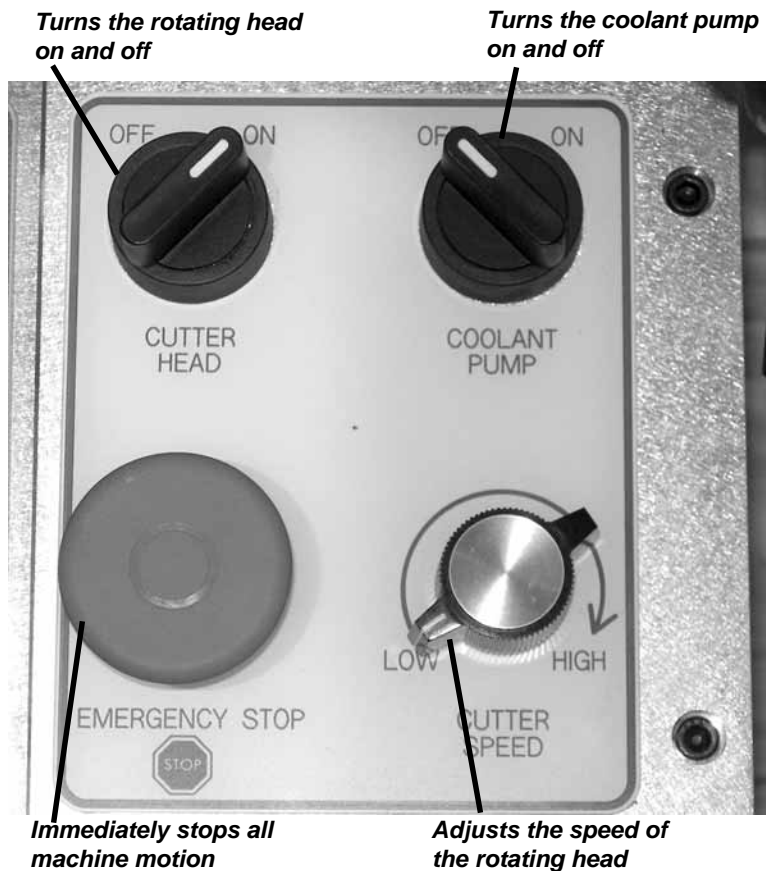


Figure 3-12. The photo shows the controls on the control panel.

1. Make sure the CUTTER HEAD and COOLANT PUMP knobs are set to OFF.
2. Set the CUTTER SPEED knob to the LOW setting.
3. Plug in the power cord.
4. Make sure the tool is not in contact with the pipe end.

5. Close the weld coupon station cover. Make sure the side of the cover fits inside the lip on the base of the frame.



*Figure 3-13. Make sure the cover rests inside the lip of the base.*

6. Turn the CUTTER HEAD knob to ON.
7. Set the CUTTER SPEED knob to the desired rotation speed. You may need to adjust the speed as you begin cutting.
8. Turn the feed handle clockwise to retract the mandrel and pipe sample into the rotating head.
9. When the tool contacts the pipe end, turn the COOLANT PUMP knob to ON.
10. If you need to adjust the coolant flow, turn the CUTTER HEAD knob to OFF and retract the feed handle. Lift the cover and adjust the coolant flow knob on the nozzle until you get the desired coolant flow.



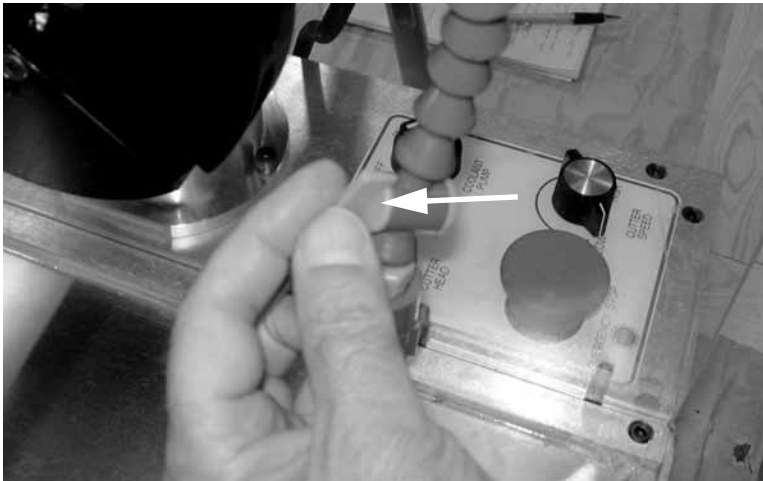


Figure 3-14. Turn the coolant flow knob to adjust the flow.

11. Turn the feed handle clockwise to continue cutting until you have the desired end prep.
12. Turn the feed handle counter-clockwise to retract the pipe end from the tool.
13. Set the CUTTING HEAD and COOLANT PUMP knobs to OFF.
14. Using the 1-1/8" combination wrench, turn the draw-bar nut counter-clockwise to release the clamping legs.
15. Lift the cover and remove the pipe sample from the mandrel.

### Troubleshooting

If the machine will not operate—

- Make sure the power cord is plugged in.
- Make sure the EMERGENCY STOP button is pulled out.
- Make sure the power supply circuit breaker is not tripped. Turn all knobs to OFF, then press the circuit breaker button to reset it.



### CAUTION

Use gloves to handle the pipe sample. It may be hot and may have sharp edges.



*Figure 3-15. If the circuit breaker has tripped, press the button on the power supply to reset it.*

If there is no coolant flow—

- Check that the flow control valve on the coolant nozzle is open.
- Check to make sure there is adequate coolant in the reservoir. See “Filling the Coolant Reservoir” in Chapter 4.

If the machine is chattering or cutting roughly—

- Adjust the CUTTER SPEED knob to see if you can eliminate the problem.
- Experiment with turning the feed handle faster or slower.
- Make sure the pipe sample is securely clamped on the mandrel.
- Make sure the tool is installed so that the cutting edge is in the direction of rotation.
- Check the tool for sharpness. Replace the tool if necessary.

# Chapter 4

## Maintenance

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### MAINTENANCE CHECKLIST

- Check the tool sharpness before every end prep.
- Check the o-rings on the clamping legs every time you remove or install them, and replace any worn or damaged o-rings.
- Every time you use the weld coupon station, clean chips and debris out of the coolant drain screens.
- Use a non-abrasive cleaner such as an acrylic polish to clean the splash guard.
- Every 500 coupons, drain and clean the coolant reservoir, and fill it with new coolant.
- If installing the optional mandrel assembly for 6-inch pipes, consult the factory for guidance. See Ordering Information in Chapter 5.

### In This Chapter

MAINTENANCE CHECKLIST

FILLING THE COOLANT  
RESERVOIR

REMOVING AND RE-  
INSTALLING THE MANDREL

ELECTRICAL SERVICE AND  
SCHEMATIC



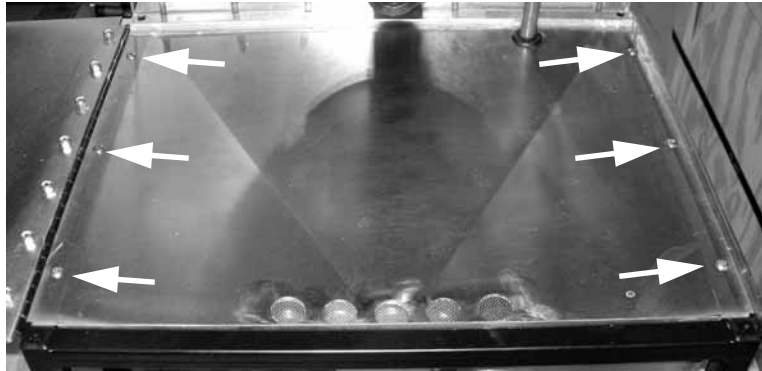
## NOTE

When the coolant level drops due to evaporation, the concentration of the lubricant in the coolant gets stronger. Add water to the coolant to restore the original mix ratio. If coolant has spilled or leaked, add the appropriate coolant mix.

## FILLING THE COOLANT RESERVOIR

The coolant reservoir should be at least one-half full. You can fill it by pouring new coolant into the drain holes.

To check the coolant level or clean out the reservoir, remove the base plate of the enclosure.



*Figure 4-1. To remove the base plate, take out the 6 button head cap screws (indicated by arrows) along the sides, then lift the base plate to access the coolant reservoir. Detach the coolant nozzle if necessary.*

## REMOVING AND RE-INSTALLING THE MANDREL

Use the following procedure if you need to remove the mandrel to replace it or perform other service on the machine.

The mandrel must be taken out through the front (tool head) side of the machine, with the tool head removed. Do not attempt to remove the mandrel through the back (feed handle) side of the machine.

Remove the clamping legs from the mandrel before removing it from the machine.

See the instructions later in this section to install the large I.D. mandrel for machining coupons up to 6.77" I.D.

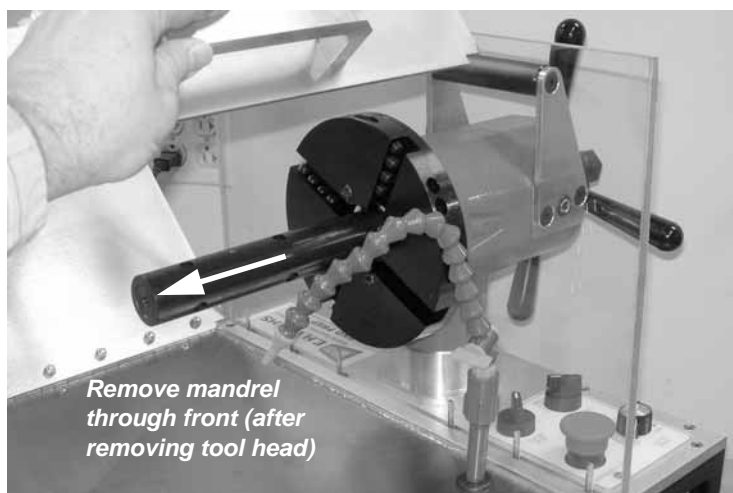


Figure 4-2. Remove the mandrel through the front of the machine, using the procedure in this section.

1. Open the cover of the coupon station. Position the coolant nozzle out of the way.

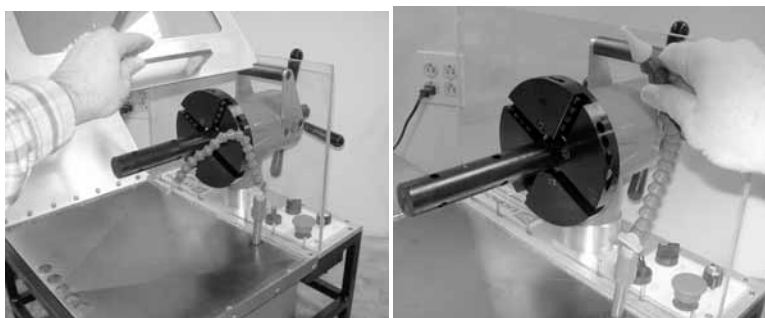


Figure 4-3. Open the coupon station cover (left), and move the coolant nozzle out of the way (right).

2. Using a 5/32" hex wrench, loosen the 4 screws holding the tool head to the main shaft. Remove the screws.



**CAUTION**

Unplug the power cord before servicing the coupon station. Injury could result if the machine starts while you are working on it.



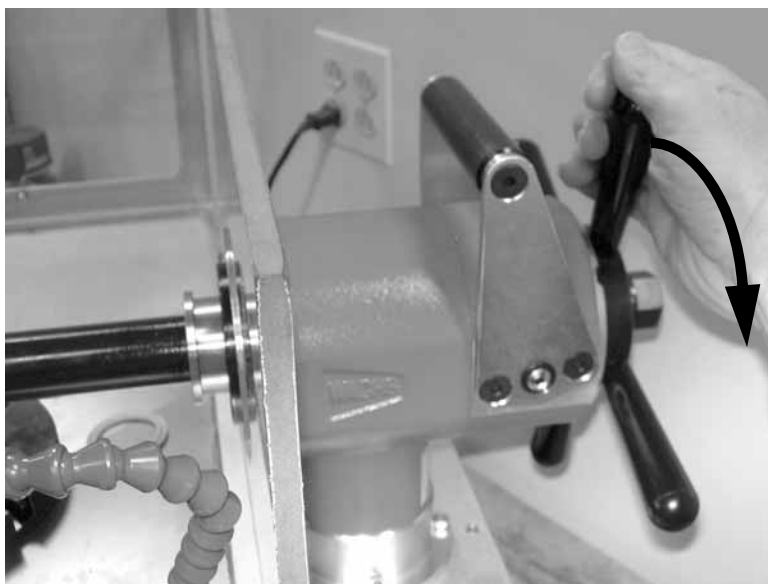
*Figure 4-4. Loosen the 4 screws holding the tool head to the main shaft.*

3. Remove the tool head from the mandrel.



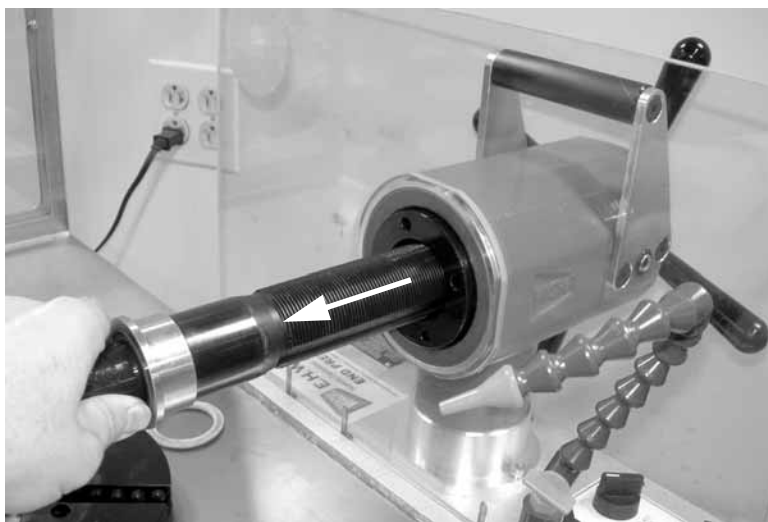
*Figure 4-5. Remove the tool head from the mandrel.*

4. Turn the feed handle **counter-clockwise** (viewed from the back of the machine) to thread the mandrel out of the machine.



*Figure 4-6. Turn the feed handle counter-clockwise (viewed from the back of the machine) to remove the mandrel.*

5. When the mandrel threads are fully disengaged from the feed nut, you can pull the mandrel out.



*Figure 4-7. Pull the mandrel out of the machine.*

6. Inspect the mandrel bushing on the mandrel for wear or damage. The bushing should fit snugly on the mandrel, without slipping or spinning. Replace the bushing if it is worn.

7. Inspect the threads on the mandrel for wear or damage. Replace the mandrel if necessary.

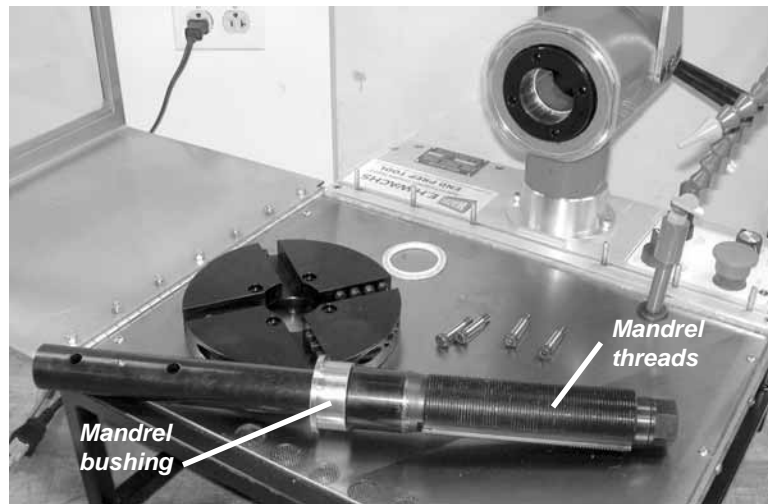


Figure 4-8. Inspect the mandrel bushing and the mandrel threads. Replace the mandrel if damaged.



**CAUTION**

Insert the mandrel carefully into the machine body, to avoid damaging the threads.

8. Replace the mandrel by inserting the threaded end into the front of the machine body.



Figure 4-9. Re-insert the mandrel into the front of the machine.

9. Push the mandrel in as far as it will go, and turn the feed handle **clockwise** to engage the threads in the feed nut.





*Figure 4-10. Turn the feed handle clockwise (viewed from the back of the machine) to thread the mandrel back into the feed nut. Push the mandrel in while you start the threads.*

10. As you thread the mandrel into the machine, make sure the mandrel bushing engages into the main shaft.



*Figure 4-11. Make sure the mandrel bushing goes into the main shaft.*

11. Turn the feed handle until the mandrel bushing is flush against the end of the main shaft.



*Figure 4-12. Make sure the mandrel bushing is flush with the main shaft.*

12. Install the tool head over the end of the mandrel and position it against the front of the machine body.



*Figure 4-13. Put the tool head back onto the mandrel and line up the holes with the holes in the main shaft.*

13. Insert the screws through the tool head and screw them into the main shaft. Turn the tool head if necessary to line the screw up with the hole.



*Figure 4-14. Insert the screws through the tool head into the main shaft.*

14. Using the 5/32" hex wrench, snug each of the screws. Once all 4 screws are snugged, tighten them securely.

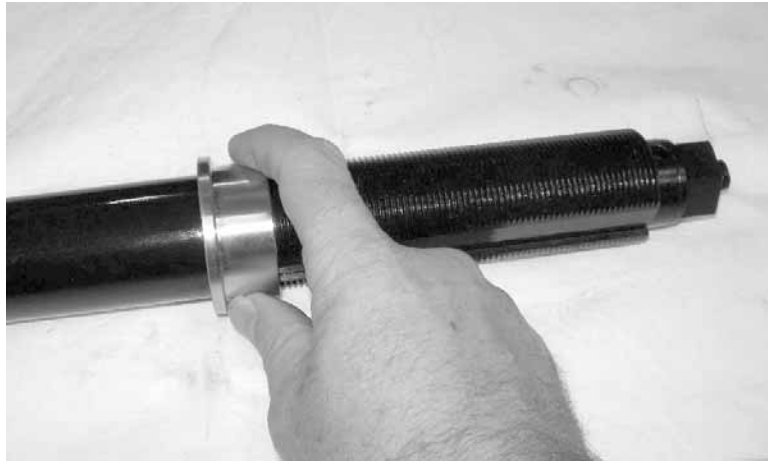


*Figure 4-15. Snug all 4 screws, then tighten them securely.*

## Installing the Large I.D. Mandrel

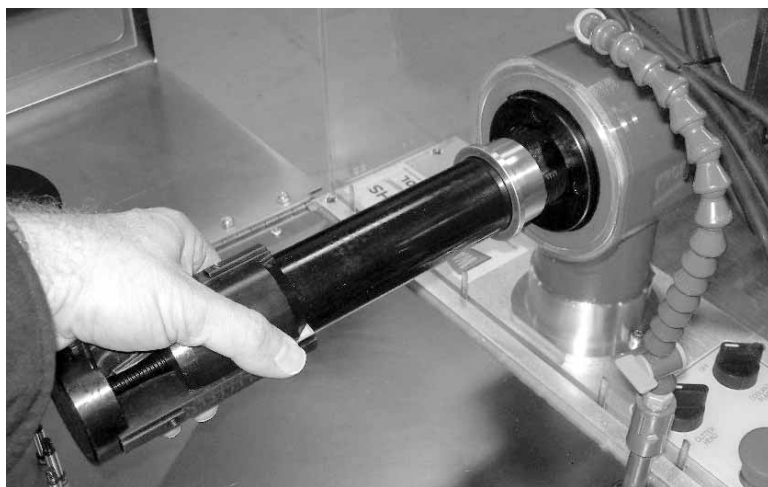
Before installing the large I.D. mandrel, remove the standard mandrel as described in the previous section. Make sure the standard bushing (SPG-616-022) is removed from the machine.

1. Put the special bushing (part number SPG-616-028) onto the large I.D. mandrel from the threaded end. The thin end of the bushing should be toward the threads.



*Figure 4-16. Install the special bushing on the large I.D. mandrel as shown.*

2. Insert the threaded end of the mandrel into the front of the machine until it stops, when the threads reach the feed nut.



*Figure 4-17. Insert the mandrel into the machine.*

3. Push the bushing up flush against the main shaft. You may have to “wiggle” the mandrel to align the bushing with the bore of the shaft.



*Figure 4-18. Push the bushing flush against the front surface of the main shaft.*

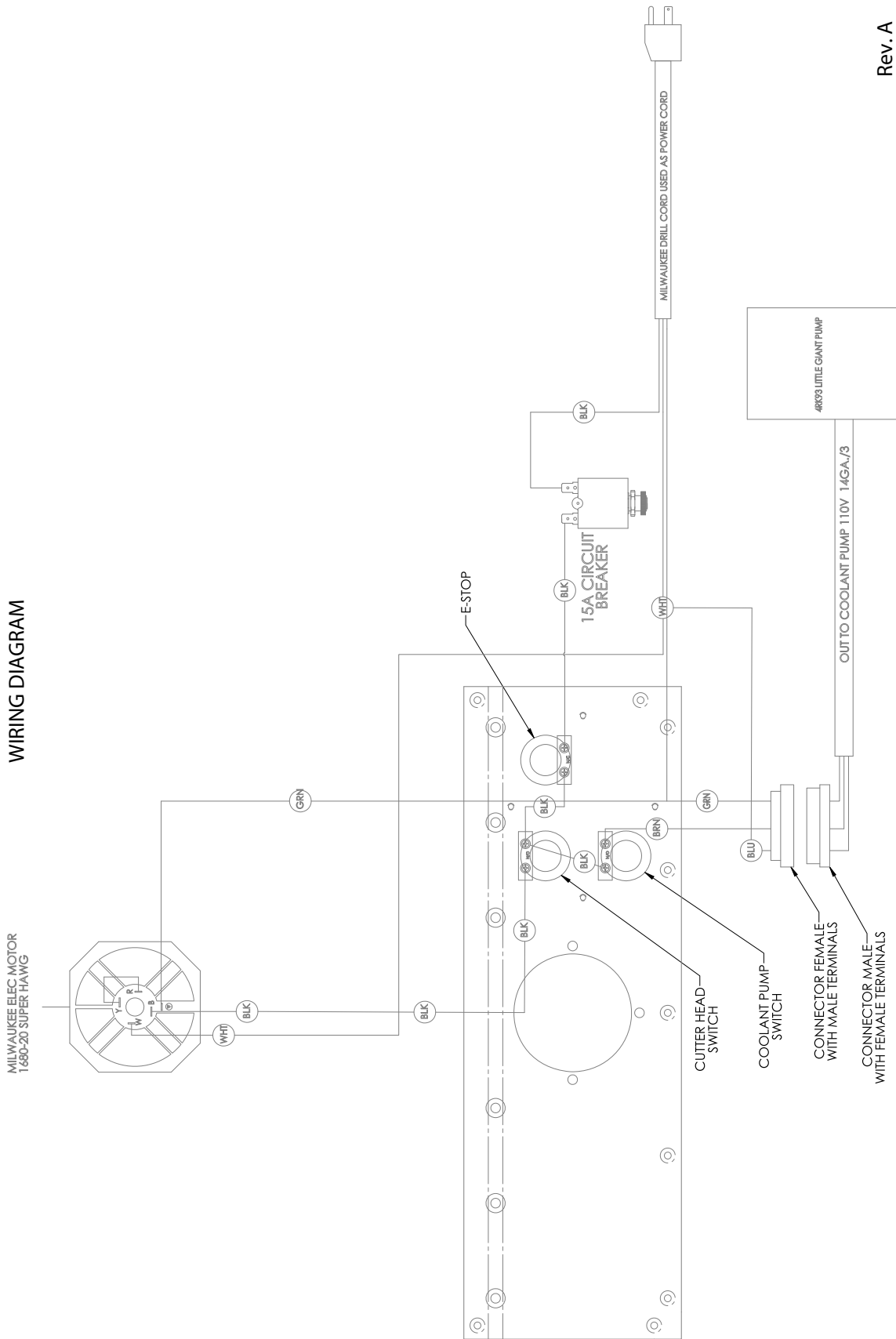
4. Thread the mandrel into the feed nut by pushing in on it while turning the feed handle **clockwise** (as viewed from behind the machine).
5. Replace the tool head as described in the previous section.

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## **ELECTRICAL SERVICE AND SCHEMATIC**

To service the electrical system, refer to the schematic on the following page.

WIRING DIAGRAM



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## Chapter 5

# Parts List and Ordering Information

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### ORDERING INFORMATION

To place an order, request service, or get more detailed information on any E.H. Wachs products, call us at one of the following numbers:

U.S. 800-323-8185

International: 847-537-8800

You can also visit our Web site at:

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

### Ordering Replacement Parts

When ordering parts, refer to the parts lists in this chapter. Please provide the part description and part number for all parts you are ordering.

### Repair Information

Please call us for an authorization number before returning any equipment for repair or factory service. We will advise you of shipping and handling. When you send the equipment, please include the following information:

- Your name/company name
- Your address
- Your phone number

### In This Chapter

ORDERING INFORMATION

DRAWINGS AND PARTS LISTS

- A description of the problem or the work to be done.

Before we perform any repair, we will estimate the work and inform you of the cost and the time to complete it.

### Warranty Information

Enclosed with the manual is a warranty card. Please fill out the registration card and return to E.H. Wachs. Retain the owner's registration record and warranty card for your information.

### Return Goods Address

Return equipment for repair to the following address.

E.H. Wachs  
600 Knightsbridge Parkway  
Lincolnshire, Illinois 60069 USA

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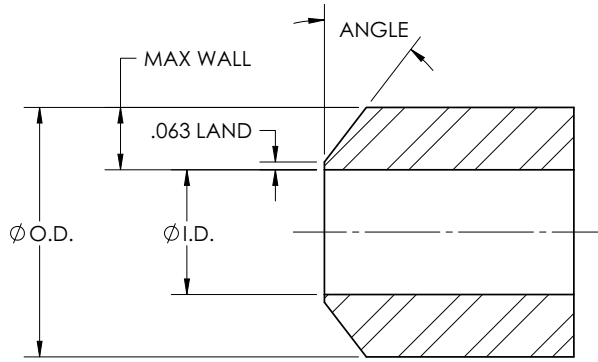
## **DRAWINGS AND PARTS LISTS**

The following 2 pages list tooling available for the weld coupon station. Standard SDB 206 tooling is used.

The rest of this chapter contains drawings and parts lists for the coupon station and its main assemblies. Refer to these drawings to identify and order parts.



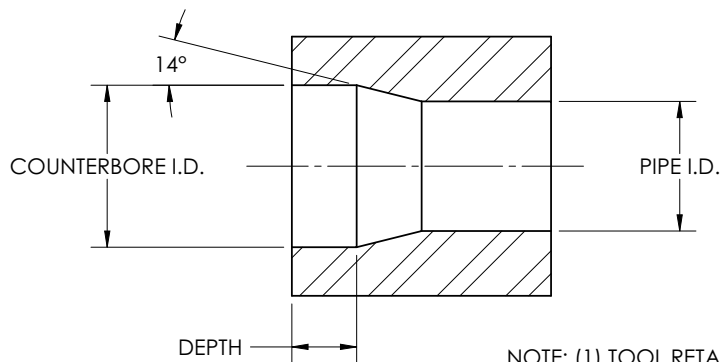
### Beveling Tool Chart



NOTE: (1) TOOL RETAINED WITH AT LEAST 2 SCREWS ON STANDARD ROTATING HEAD.

BEVEL TOOL	FACING TOOL	ANGLE	MAX WALL W/ 1/16" LAND	MIN I.D. W/ 1/16" LAND	MAX I.D. (1) W/1/16" LAND	MAX O.D. (1)
56-709-03	56-708-01	37-1/2°	1.38" (35.1mm)	2.26" (57.4mm)	4.88" (124.0mm)	7.60" (193.0mm)
56-709-03	56-708-02	37-1/2°	0.73" (18.5mm)	3.03" (77.0mm)	6.18" (157.0mm)	7.60" (193.0mm)
56-709-02	56-708-01	30°	1.50" (38.1mm)	2.26" (57.4mm)	4.88" (124.0mm)	7.84" (199.1mm)
56-709-02	56-708-02	30°	0.53" (13.5mm)	3.48" (88.4mm)	6.60" (167.6mm)	7.84" (199.1mm)

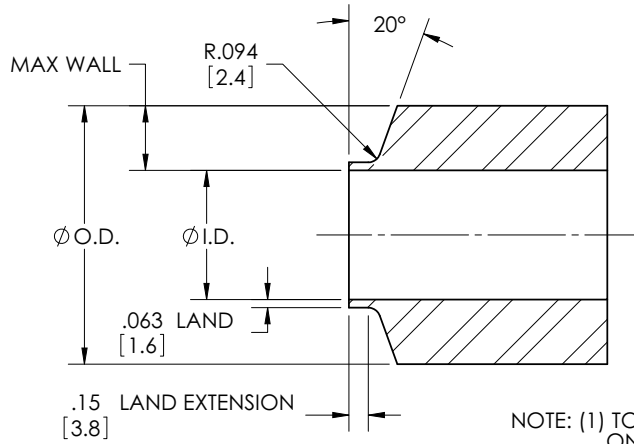
### Counterbore Tool Chart



NOTE: (1) TOOL RETAINED WITH AT LEAST 2 SCREWS ON STANDARD ROTATING HEAD

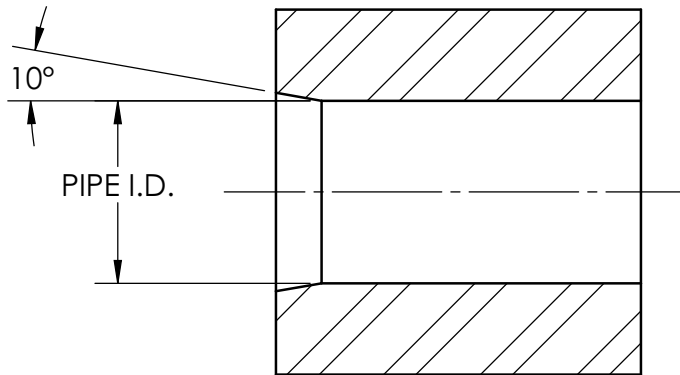
C'BORE TOOL	MIN PIPE I.D.	MIN C'BORE I.D.	MAX C'BORE I.D.(1)	MAX DEPTH	MAX DEPTH W/56-708-01 FACING TOOL
56-705-01	2.38" (60.5mm)	2.62" (66.5mm)	5.88" (149.4mm)	0.63" (16.0mm)	0.48" (12.2mm)
56-705-02	3.50" (88.9mm)	3.75" (95.3mm)	7.00" (177.8mm)	0.63" (16.0mm)	0.48" (12.2mm)
56-705-03	4.50" (114.3mm)	4.75" (120.7mm)	8.00" (203.2mm)	0.63" (16.0mm)	0.48" (12.2mm)

### J-Prep Tool Chart



BEVEL TOOL	FACING TOOL	MAX WALL W/ 1/16" LAND	MIN I.D. W/ 1/16" LAND	MAX I.D. (1) W/ 1/16" LAND	MAX O.D. (1)
56-709-01	56-708-01	1.68" (42.7mm)	2.38" (60.5mm)	5.00" (127.0mm)	8.09" (205.5mm)
56-709-05	56-708-01	1.68" (42.7mm)	2.38" (60.5mm)	6.28" (159.5mm)	9.61" (244.1mm)

### Deburring Tool Chart



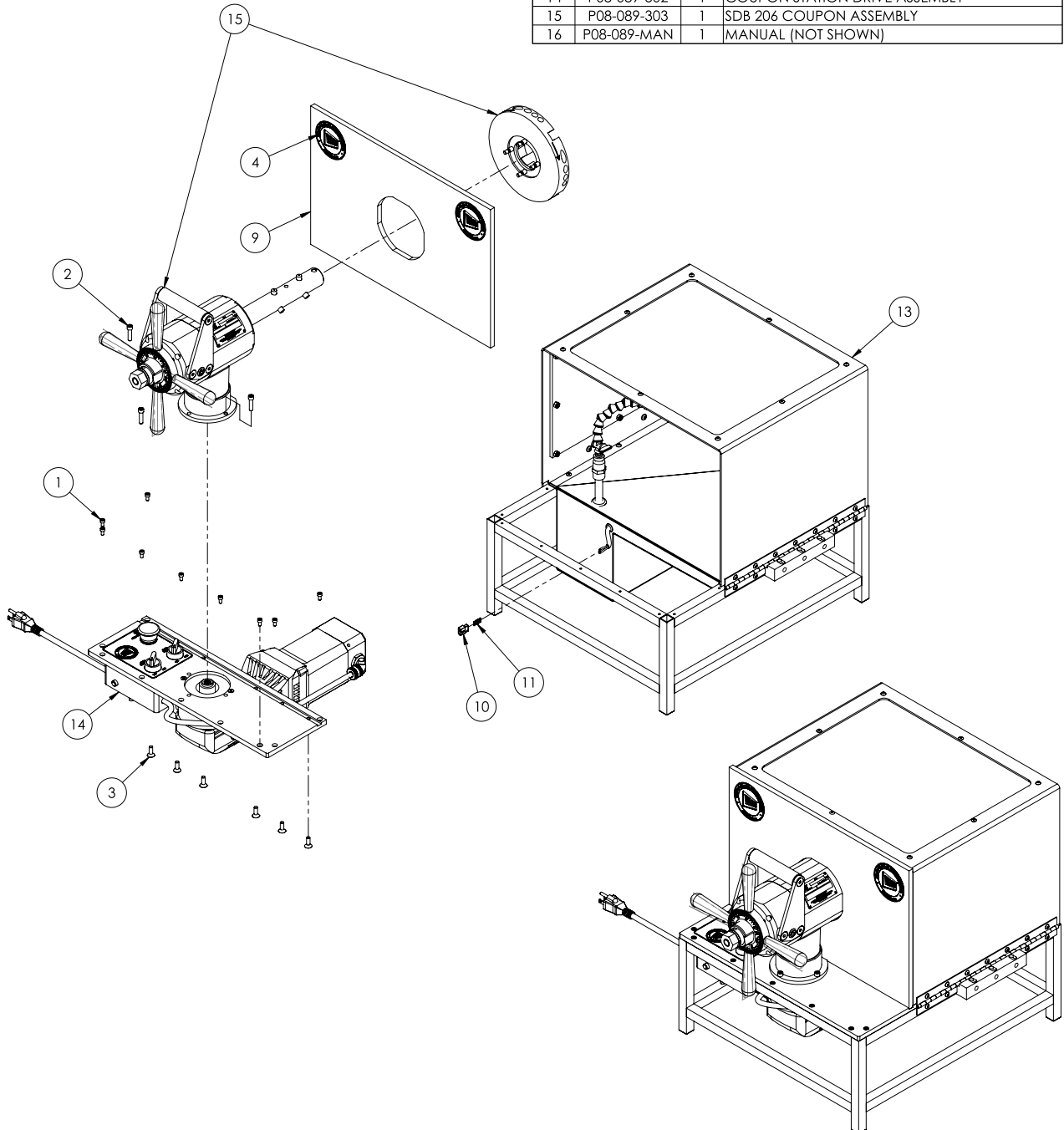
NOTE: (1) STANDARD ROTATING HEAD

DEBURRING TOOL	MIN PIPE I.D.	MAX PIPE I.D. (1)
56-702-01	2.26" (57.4mm)	5.28" (134.1mm)
56-702-02	2.64" (67.1mm)	5.88" (149.4mm)
56-702-03	3.26" (82.8mm)	6.50" (165.1mm)

Coupon Station Assembly, P08-089-401

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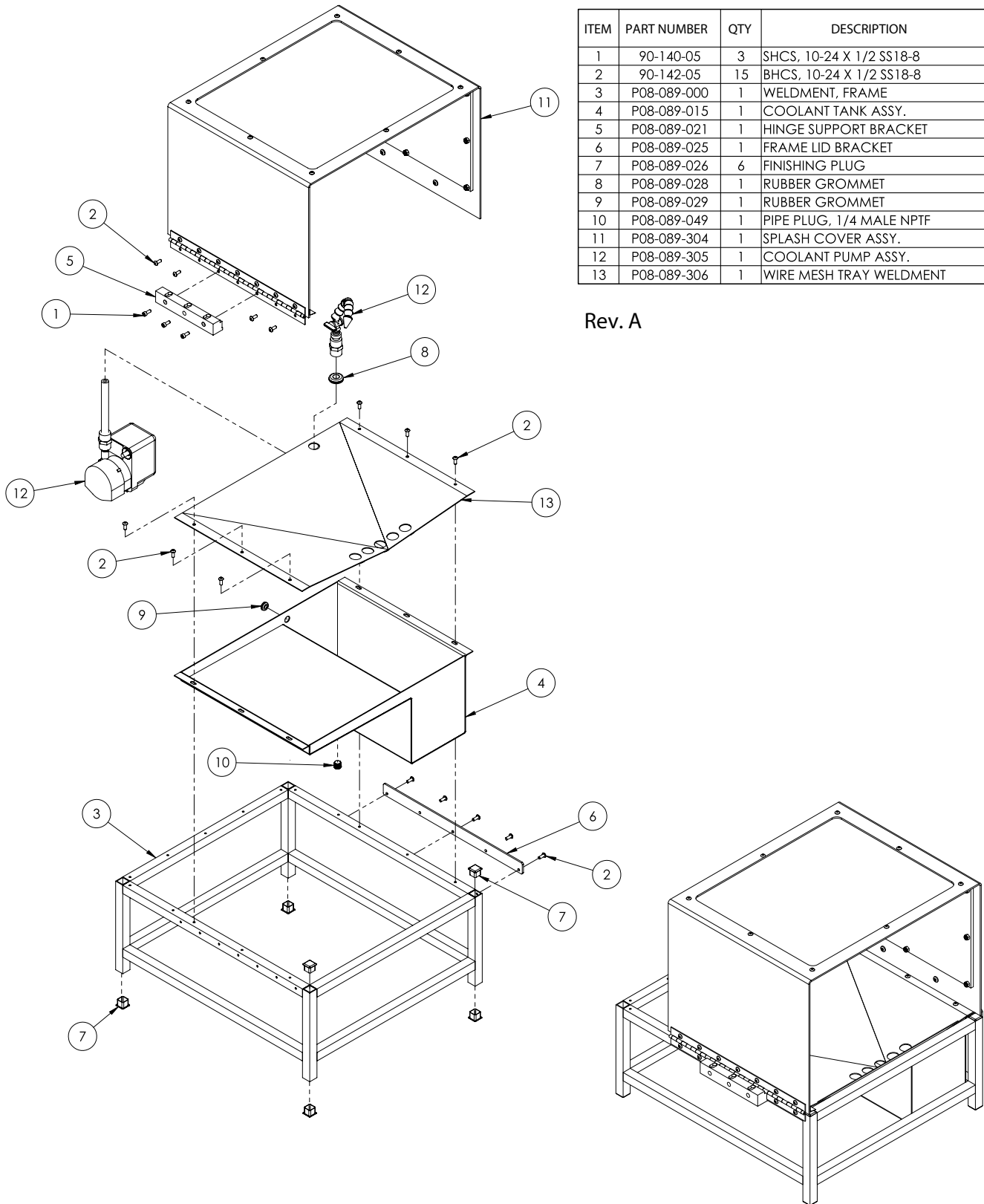
ITEM	PART NUMBER	QTY	DESCRIPTION
1	90-040-03	9	SHCS, 10-24 X 3/8
2	90-050-10	3	SHCS, 1/4-20 x 1
3	90-053-07	6	FHCS, 1/4-20 X 3/4
4	90-400-02	2	LABEL, WACHS CIRCLE LOGO 3.00
5	90-800-06	1	WRENCH, 5/64 - 1/4 HEX SET (NOT SHOWN)
6	90-800-29	1	WRENCH, 1-1/8 COMBINATION (NOT SHOWN)
7	90-800-40	1	WRENCH, 3/16 - 3/8 HEX SET (NOT SHOWN)
8	90-800-62	1	WRENCH, 3/16 HEX 9" TEE HANDLE (NOT SHOWN)
9	P08-089-012	1	SPLASH SHIELD
10	P08-089-073	1	CONNECTOR, SOCKET
11	P08-089-074	3	CRIMP TERMINAL-MALE
12	P08-089-078	1	CRATE, COUPON STATION (NOT SHOWN)
13	P08-089-301	1	FRAME AND COVER ASSEMBLY
14	P08-089-302	1	COUPON STATION DRIVE ASSEMBLY
15	P08-089-303	1	SDB 206 COUPON ASSEMBLY
16	P08-089-MAN	1	MANUAL (NOT SHOWN)



Frame and Cover Assembly, P08-089-301

ITEM	PART NUMBER	QTY	DESCRIPTION
1	90-140-05	3	SHCS, 10-24 X 1/2 SS18-8
2	90-142-05	15	BHCS, 10-24 X 1/2 SS18-8
3	P08-089-000	1	WELDMENT, FRAME
4	P08-089-015	1	COOLANT TANK ASSY.
5	P08-089-021	1	HINGE SUPPORT BRACKET
6	P08-089-025	1	FRAME LID BRACKET
7	P08-089-026	6	FINISHING PLUG
8	P08-089-028	1	RUBBER GROMMET
9	P08-089-029	1	RUBBER GROMMET
10	P08-089-049	1	PIPE PLUG, 1/4 MALE NPTF
11	P08-089-304	1	SPLASH COVER ASSY.
12	P08-089-305	1	COOLANT PUMP ASSY.
13	P08-089-306	1	WIRE MESH TRAY WELDMENT

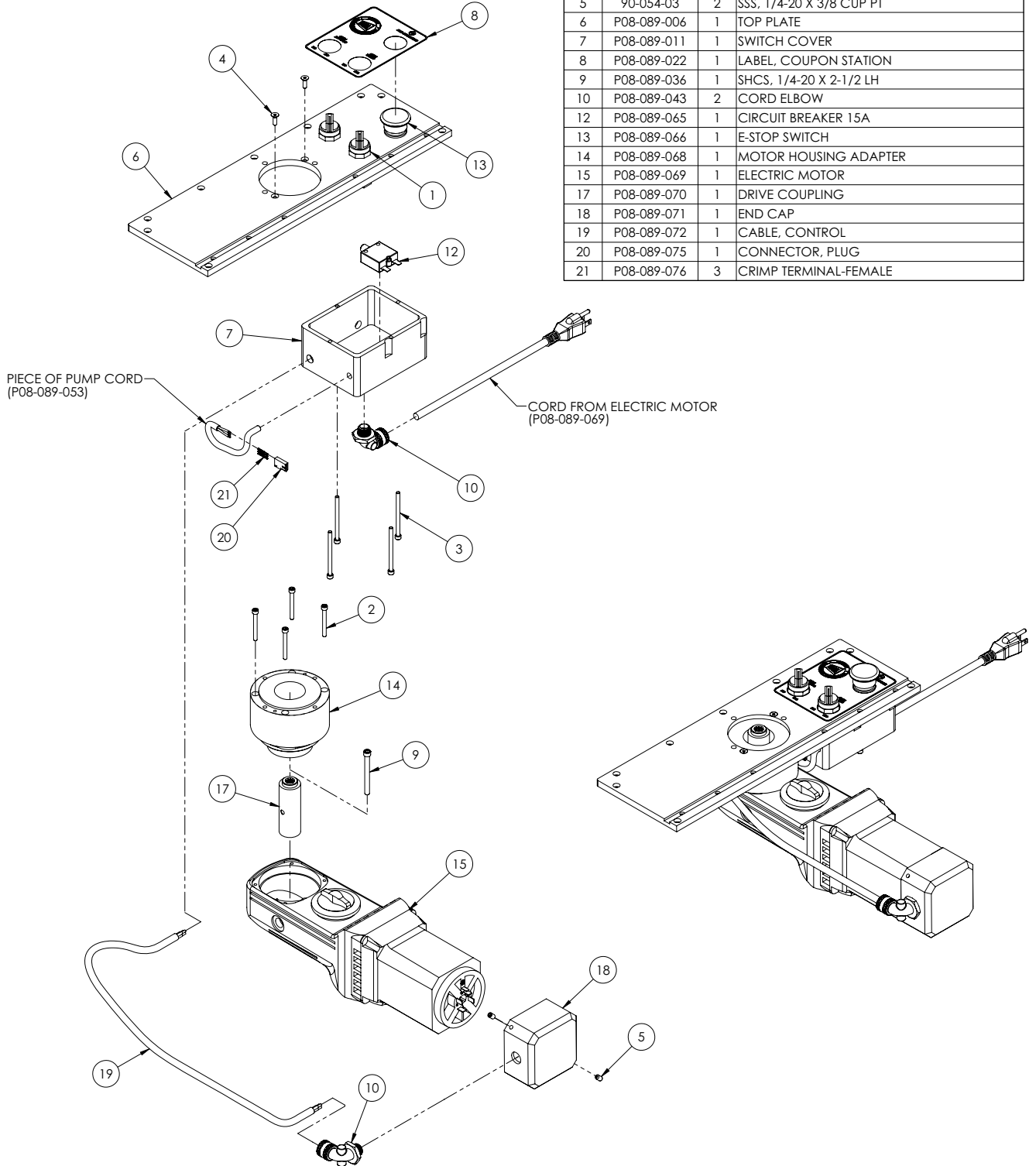
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Drive Assembly, P08-089-302

Rev. A

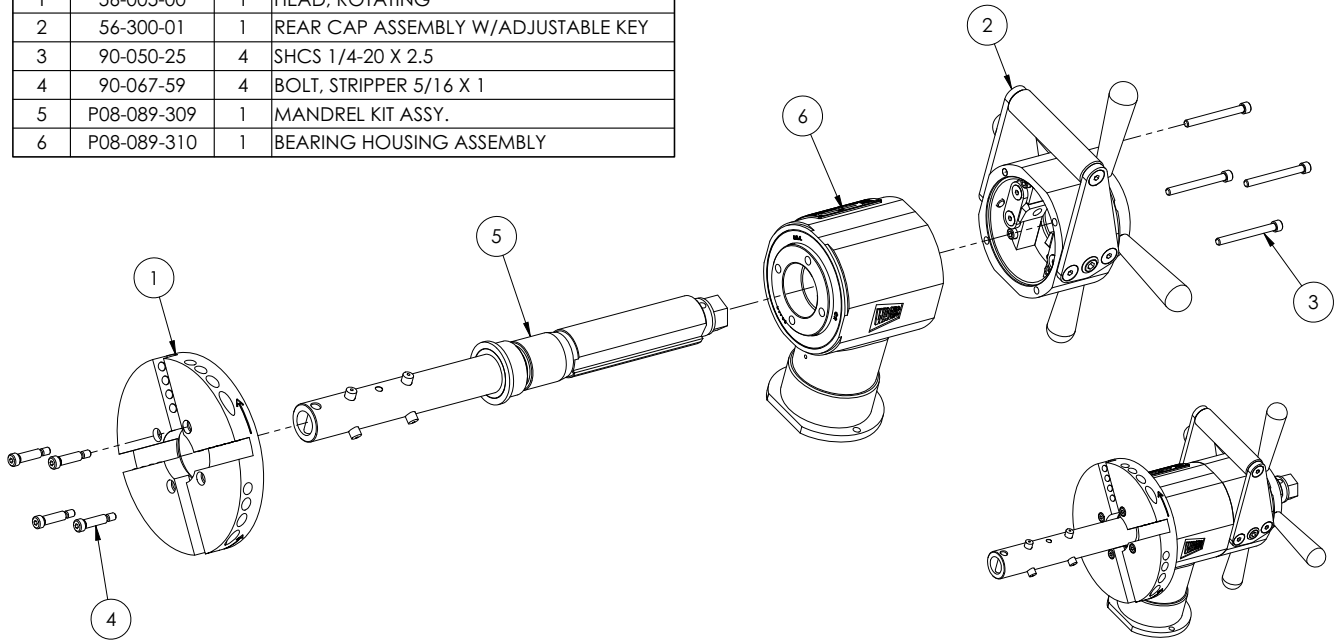
ITEM	PART NUMBER	QTY	DESCRIPTION
1	68-179-06	2	SELECTOR SWITCH, 2-POS MAINTAINED, 1-NO
2	90-040-17	4	SHCS, 10-24 X 1-3/4
3	90-040-27	4	SHCS 10-24 X 2-3/4
4	90-043-06	2	FHCS, 10-24 x 5/8
5	90-054-03	2	SSS, 1/4-20 X 3/8 CUP PT
6	P08-089-006	1	TOP PLATE
7	P08-089-011	1	SWITCH COVER
8	P08-089-022	1	LABEL, COUPON STATION
9	P08-089-036	1	SHCS, 1/4-20 X 2-1/2 LH
10	P08-089-043	2	CORD ELBOW
12	P08-089-065	1	CIRCUIT BREAKER 15A
13	P08-089-066	1	E-STOP SWITCH
14	P08-089-068	1	MOTOR HOUSING ADAPTER
15	P08-089-069	1	ELECTRIC MOTOR
17	P08-089-070	1	DRIVE COUPLING
18	P08-089-071	1	END CAP
19	P08-089-072	1	CABLE, CONTROL
20	P08-089-075	1	CONNECTOR, PLUG
21	P08-089-076	3	CRIMP TERMINAL-FEMALE



SDB 206 Assembly, P08-089-303

ITEM	PART NUMBER	QTY	DESCRIPTION
1	56-005-00	1	HEAD, ROTATING
2	56-300-01	1	REAR CAP ASSEMBLY W/ADJUSTABLE KEY
3	90-050-25	4	SHCS 1/4-20 X 2.5
4	90-067-59	4	BOLT, STRIPPER 5/16 X 1
5	P08-089-309	1	MANDREL KIT ASSY.
6	P08-089-310	1	BEARING HOUSING ASSEMBLY

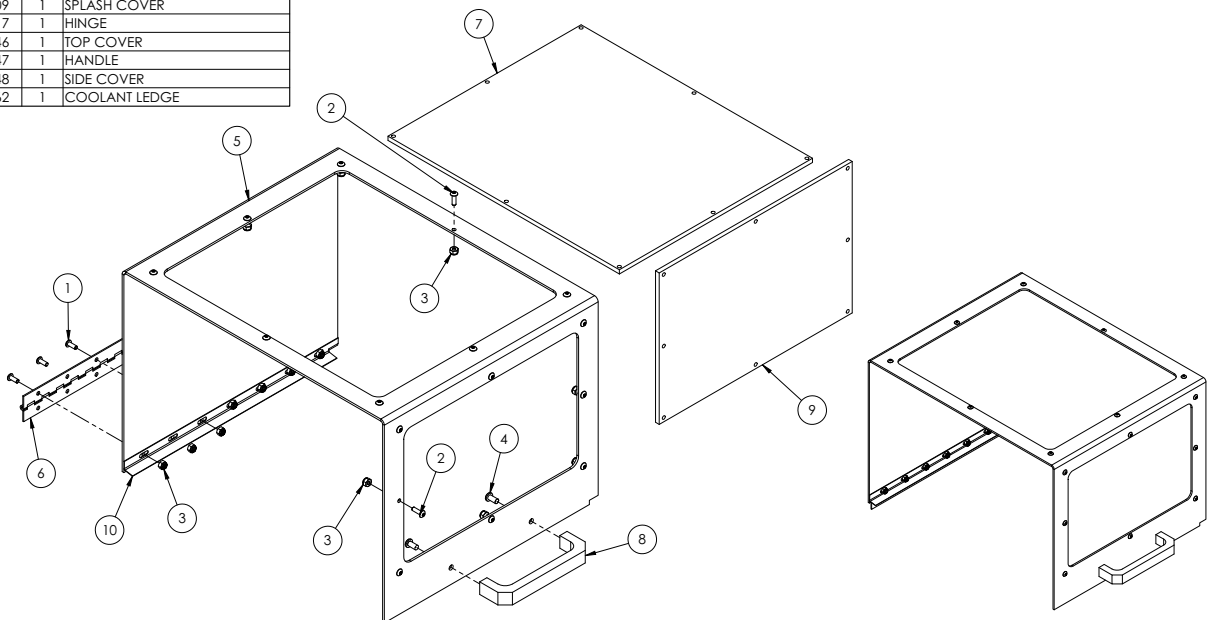
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Splash Cover Assembly, P08-089-304

ITEM	PART NUMBER	QTY	DESCRIPTION
1	90-142-05	7	BHCS, 10-24 X 1/2 SS18-8
2	90-142-08	16	BHCS, 10-24 X 5/8 SS18-8
3	90-145-04	23	NUT, 10-24 NYLOCK SS18-8
4	90-152-05	2	BHCS 1/4-20 X 1/2 SS18-8
5	P08-089-009	1	SPLASH COVER
6	P08-089-017	1	HINGE
7	P08-089-046	1	TOP COVER
8	P08-089-047	1	HANDLE
9	P08-089-048	1	SIDE COVER
10	P08-089-062	1	COOLANT LEDGE

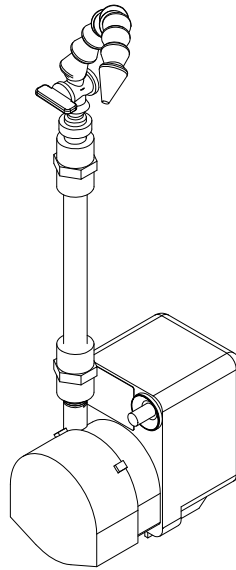
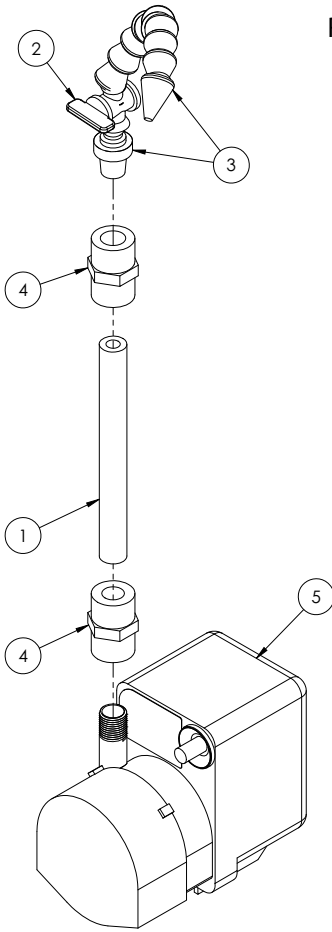
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# Coolant Pump Assembly, P08-089-305

Rev. A

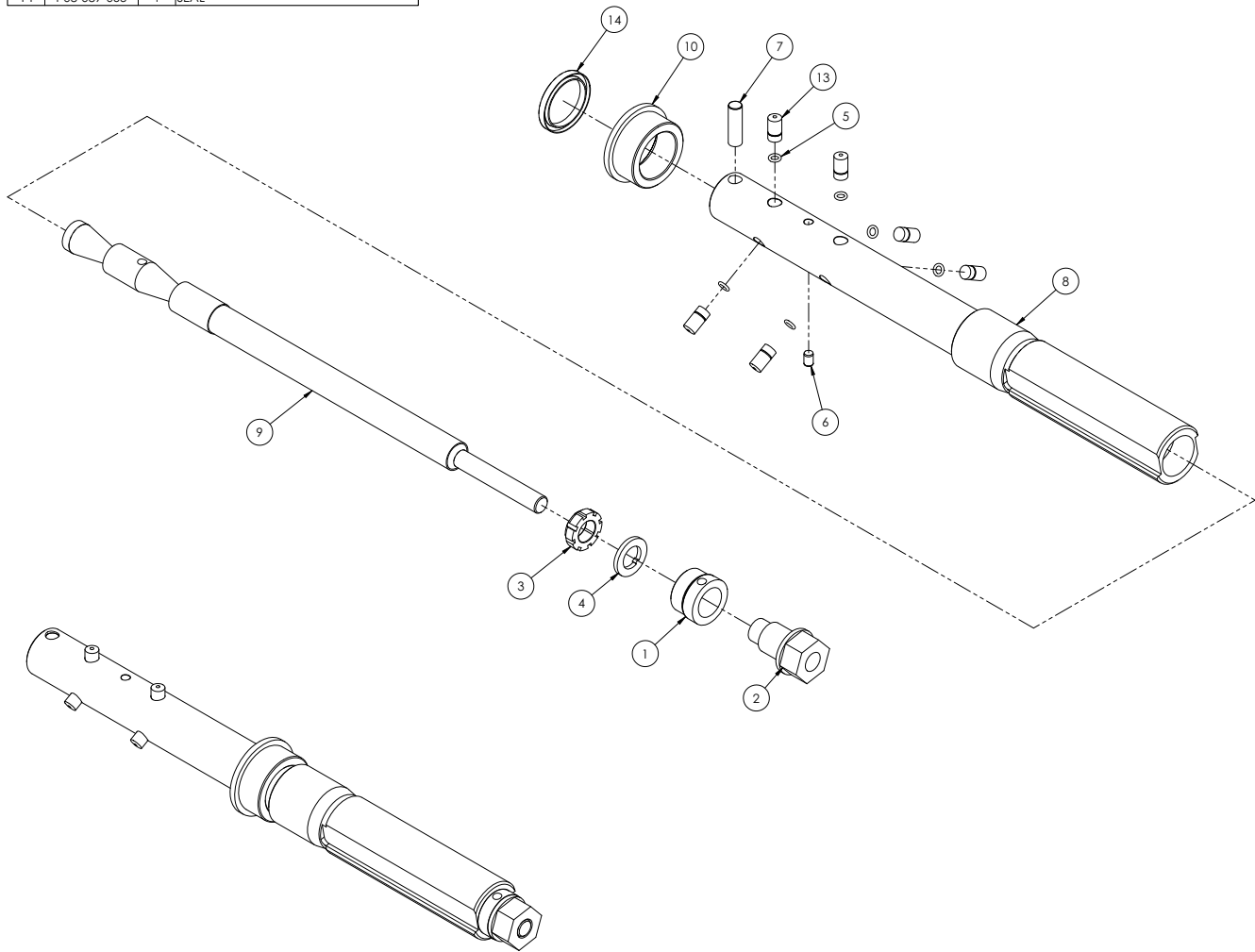
ITEM	PART NUMBER	QTY	DESCRIPTION
1	P08-089-039	1	THREADED PIPE NIPPLE, 1/4 NPT
2	P08-089-050	1	COOLANT IN-LINE VALVE
3	P08-089-051	1	COOLANT NOZZLE
4	P08-089-052	2	PIPE COUPLER
5	P08-089-053	1	COOLANT PUMP



Mandrel Kit Assembly, P08-089-309

ITEM	PART NUMBER	QTY	DESCRIPTION
1	56-024-02	1	COLLAR, DRAWBAR NUT
2	56-025-00	1	NUT, DRAWBAR
3	56-035-00	1	LOCKNUT, BEARING
4	56-036-00	1	WASHER, TONGUED
5	69-8015-00	18	O-RING, (-009) BUNA-N
6	90-056-03	1	PIN, 1/4 X 3/8 DOWEL
7	90-076-12	1	PIN, 3/8 X 1-1/4 DOWEL
8	P08-089-054	1	MANDREL
9	P08-089-055	1	DRAW BAR
10	P08-089-056	1	MANDREL BUSHING, SMALL
11	P08-089-057	6	LEG 1.38-1.68 ID RANGE (NOT SHOWN)
12	P08-089-058	6	LEG 1.82-2.11 ID RANGE (NOT SHOWN)
13	P08-089-059	6	LEG 2.06-2.35 ID RANGE
14	P08-089-063	1	SEAL

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# Bearing Housing Assembly, P08-089-310

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ITEM	PART NUMBER	QTY	DESCRIPTION
1	11-103-00	1	GEARBOX, PLANETARY OUTPUT
2	16-076-00	1	RING, RETAINING
3	16-077-00	1	RING, RETAINING
4	26-046-00	1	BLANK, ADHESIVE TAPE
5	26-047-00	1	NAME PLATE
6	56-001-00	1	BODY, MAIN
7	56-008-00	1	GEAR, RING
8	56-009-00	1	GEAR, PINION
9	56-029-00	1	BEARING CONE
10	56-030-00	1	BEARING CUP
11	56-031-00	1	BEARING CONE
12	56-032-00	1	BEARING CUP
13	56-033-00	1	LOCKNUT
14	56-034-00	1	LOCKWASHER
15	56-039-00	1	RING, SNAP
16	56-040-00	1	BEARING
17	56-041-00	1	SEAL, SHAFT
18	66-144-00	1	COUPLER, DRIVE
19	66-148-00	1	BEARING
20	90-020-10	7	SHCS #8-32 x 1.00
21	90-057-10	1	KEY, 1/4 SQ. X 1
22	90-060-10	3	SHCS, 5/16-18 X 1.0
23	P08-089-064	1	MOTOR ADAPTER
24	P08-089-307	1	MAIN SHAFT ASSEMBLY

