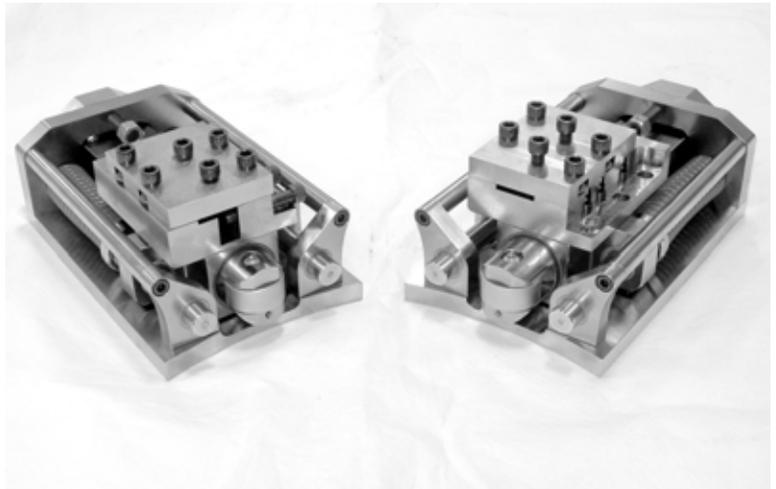




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# Small LCSF O.D. Tracking Slide User's Manual



E.H. Wachs Part No. 60-MAN-06  
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## Chapter 1

# About the Small LCSF O.D. Tracking Slides

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### PURPOSE OF THIS MANUAL

This manual explains how to operate and maintain the O.D. tracking slides for 4"-20" low clearance split frames. It includes instructions for set-up, operation, and maintenance. It also contains parts lists and diagrams, and troubleshooting instructions to help you order replacement parts and perform user-serviceable repairs.

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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 the 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  
TOOLING  
OPERATING ENVELOPE

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

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## 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.



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.



### NOTE

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

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@wachsco.com](mailto:sales@wachsco.com).

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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. Revised accessory manuals will be available for customers. When a manual is revised, we will update the revision history on the title page and at the bottom of the pages.

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.

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## EQUIPMENT DESCRIPTION

The components of the O.D. tracking slide are shown in Figure 1-1. The slide set includes a parting slide and a parting/beveling slide.

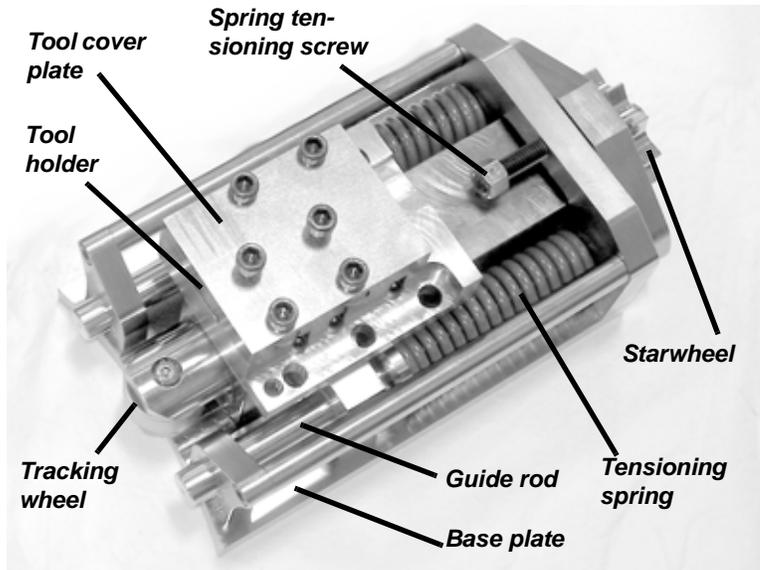


Figure 1-1. The photo shows the components of the O.D. tracking slide.

Note that special tapped holes are required in the LCSF to mount the O.D. tracking slides and the tracking slide trip. See Figure 1-2 and Figure 1-3. Recently manufactured machines have these holes; if your LCSF does not, contact the factory at 847-537-8800 to arrange to have your LCSF modified.

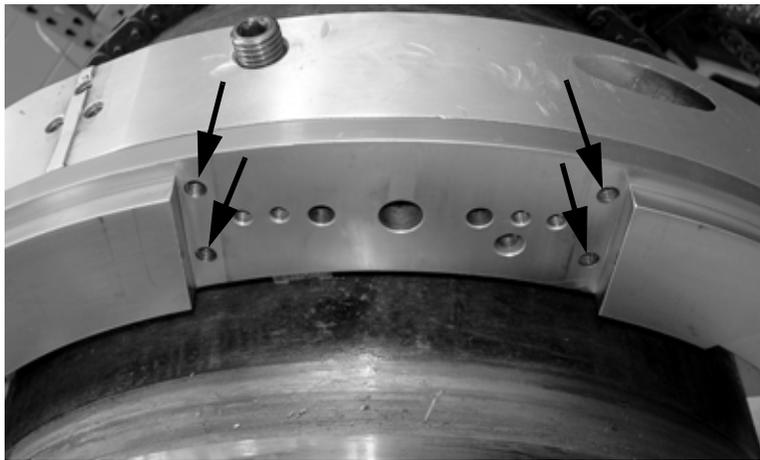
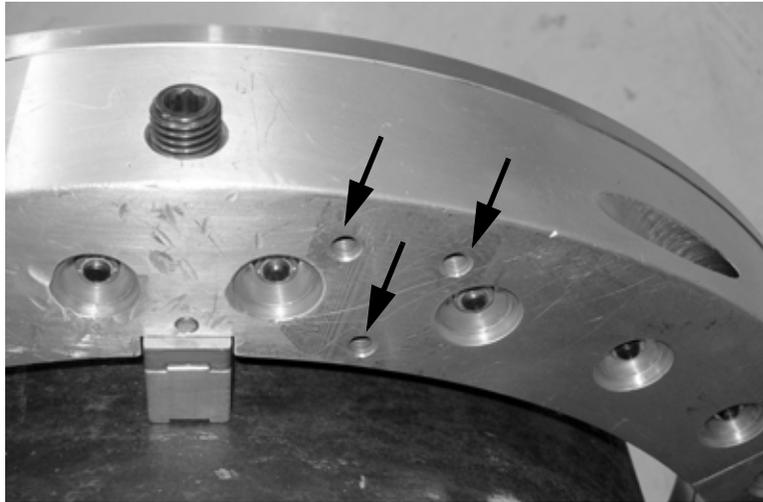
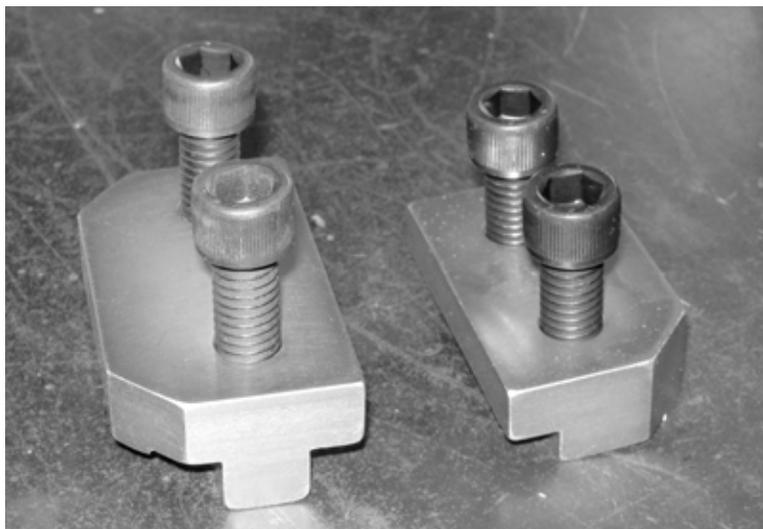


Figure 1-2. There are special holes for the O.D. tracking slides in the LCSF rotating ring at the slide mounting locations.



*Figure 1-3. There are special holes in the back of the stationary ring for the O.D. tracking slide trip.*

The O.D. tracking slides are mounted to the LCSF using special mounting clamps. The clamps are bolted to the LCSF rotating ring, and tightened down to hold the slides. There are two sets of clamps for each slide: one for 10"-14" LCSFs (models 610 through 814), and one for 16" and 20" LCSFs (models 1016 and 1420). These are shown in Figure 1-4.



*Figure 1-4. Two sizes of mounting clamps are available. The larger clamp on the left is for models 1016 and 1420. The smaller clamp is for models 610 through 814. Two clamps are required for each slide.*

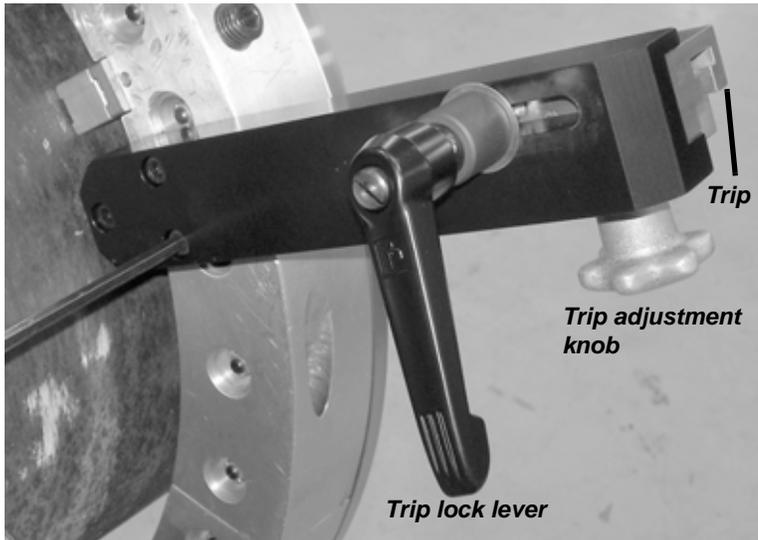


Figure 1-5. The photo shows the tracking slide trip installed on the LCSF. Use the trip lock lever to engage and disengage the trip. Use the trip adjustment knob to set the operating location of the trip.

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## TOOLING

The O.D. tracking slides use standard LCSF parting and beveling tools. See the tool charts in the *Low Clearance Split Frame User's Manual* for tool selection and ordering.

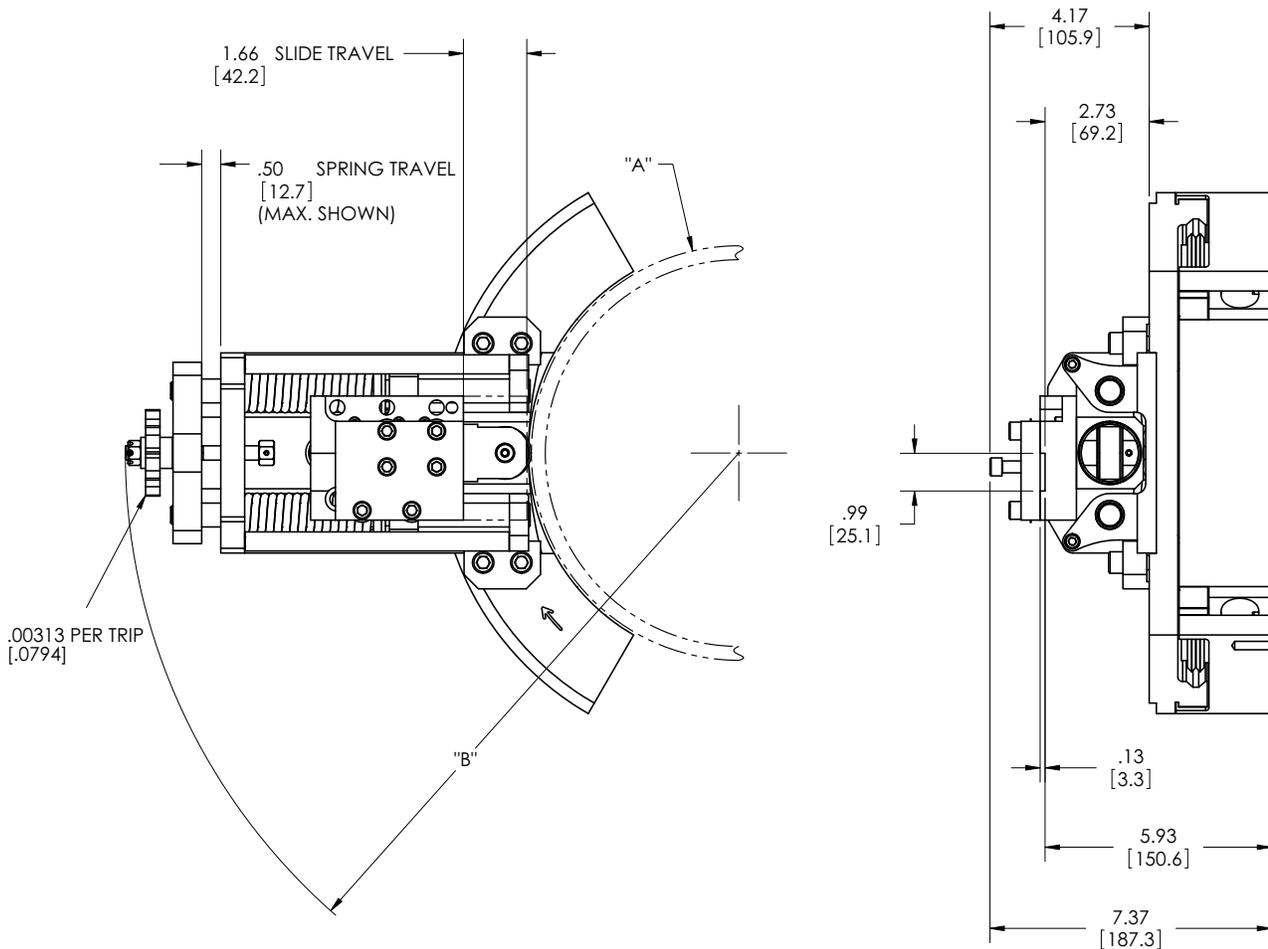
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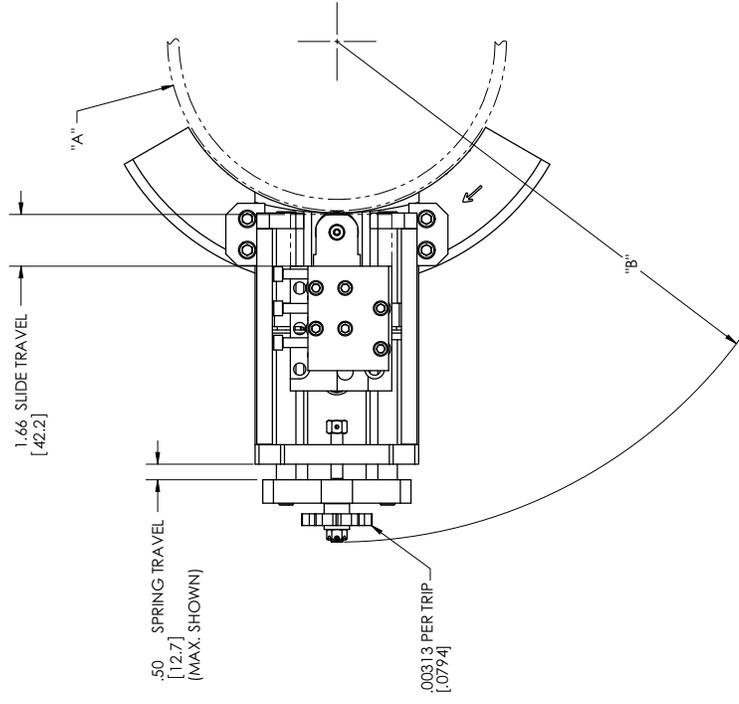
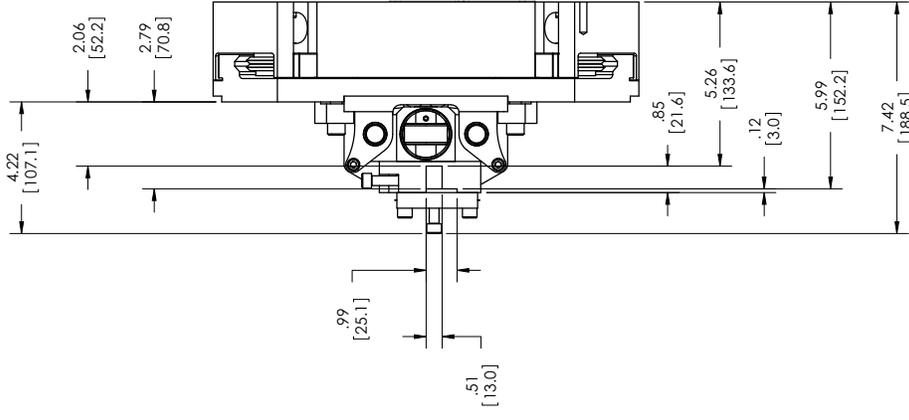
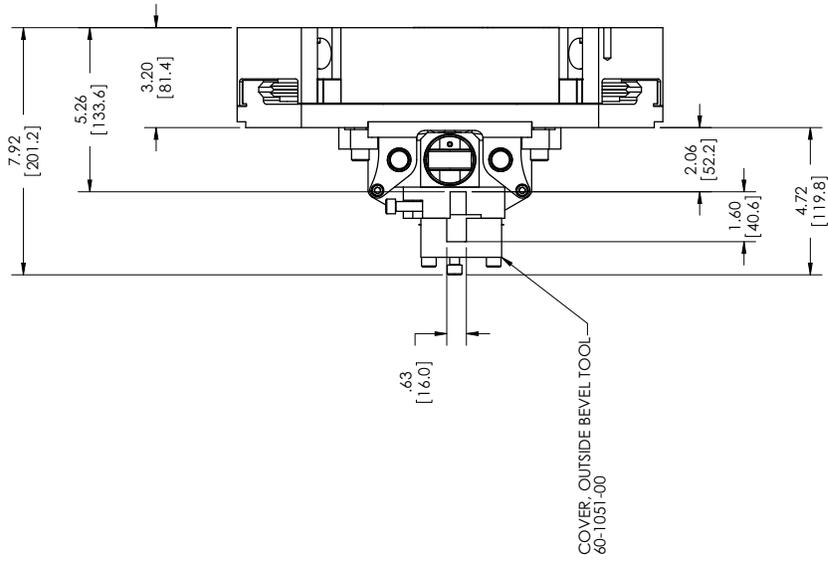
## OPERATING ENVELOPE

The following drawings shows the operating envelope and parting line dimension for the small O.D. tracking slides, and the operating envelope for the tracking slide trip assembly.

O.D. Tracking Parting Slide  
 60-451-01  
 Dimensions and Operating Envelope

-TABLE-			
MODEL	POSITION	DIM. "A" PIPE DIAMETER	DIM. "B" RADIAL CLEARANCE
LCSF 610/3	MIN.	6.63 [168.4]	13.94 [354.0]
	MAX.	10.75 [273.1]	16.00 [406.3]
LCSF 612/3	MIN.	6.63 [168.4]	13.94 [354.0]
	MAX.	12.75 [323.9]	17.00 [431.7]
LCSF 814/3	MIN.	8.63 [219.1]	14.94 [379.4]
	MAX.	14.00 [355.6]	17.62 [447.6]
LCSF 1016/3	MIN.	10.75 [273.1]	16.00 [406.3]
	MAX.	16.00 [406.4]	18.62 [473.0]
LCSF 1420/3	MIN.	14.00 [355.6]	17.62 [447.6]
	MAX.	20.00 [508.0]	20.62 [523.8]





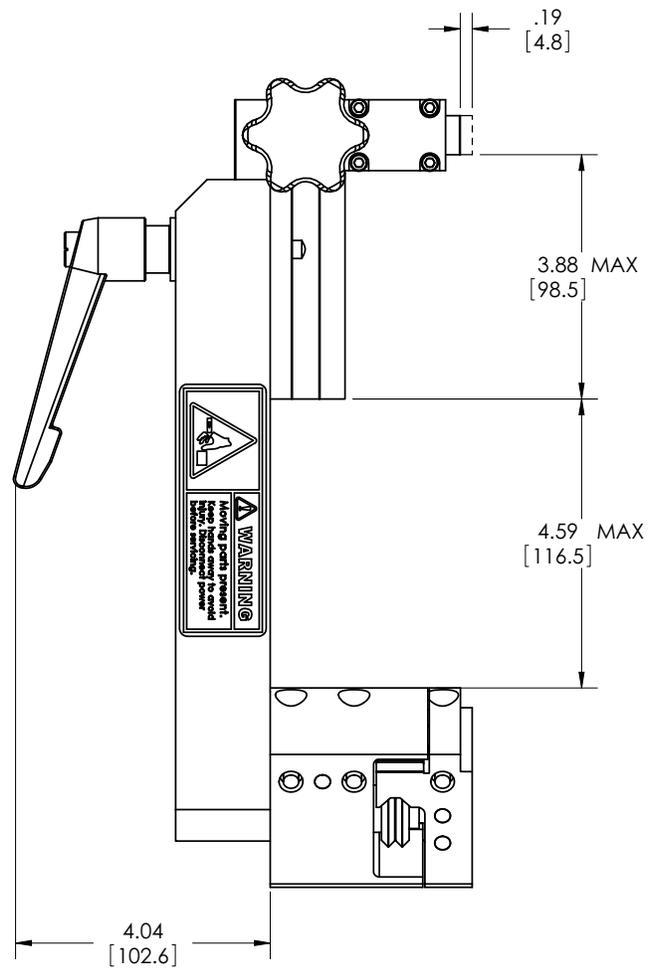
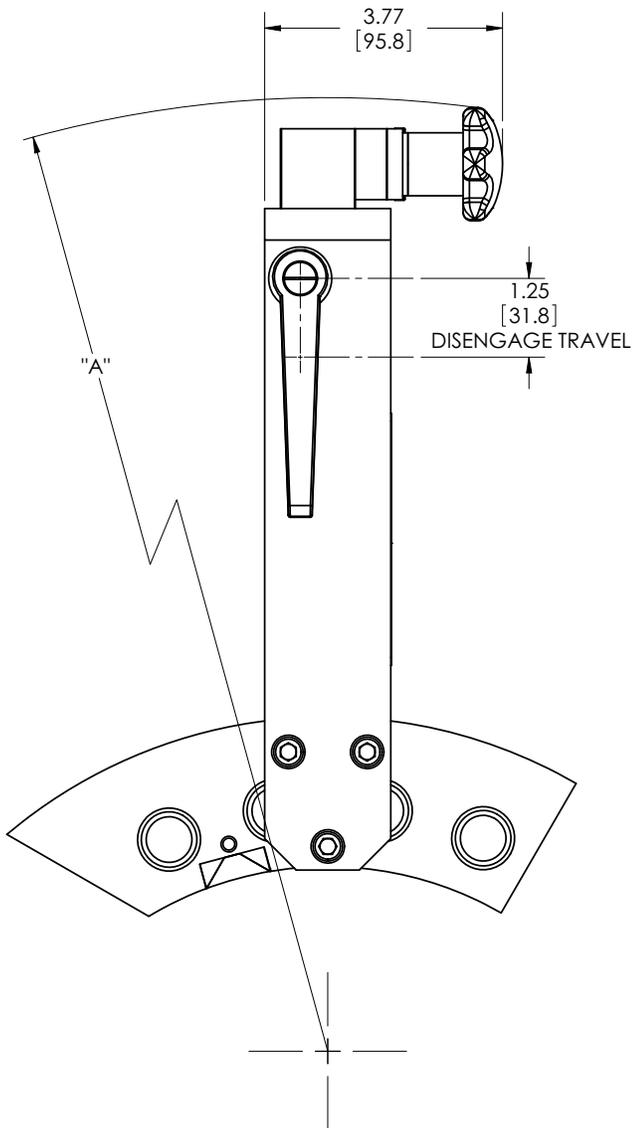
O.D. Tracking Beveling Slide  
60-451-02  
Dimensions and Operating Envelope

-TABLE-

MODEL	POSITION	DIM. "A" PIPE DIAMETER	DIM. "B" RADIAL PIPE CLEARANCE
LCSF 610/3	MIN.	6.63 [168.4]	13.94 [354.0]
	MAX.	10.75 [273.1]	16.00 [406.3]
LCSF 612/3	MIN.	6.63 [168.4]	13.94 [354.0]
	MAX.	12.75 [323.9]	17.00 [431.7]
LCSF 814/3	MIN.	8.63 [219.1]	14.94 [379.4]
	MAX.	14.00 [355.6]	17.62 [447.6]
LCSF 1016/3	MIN.	10.75 [273.1]	16.00 [406.3]
	MAX.	16.00 [406.4]	18.62 [473.0]
LCSF 1420/3	MIN.	14.00 [355.6]	17.62 [447.6]
	MAX.	20.00 [508.0]	20.62 [523.8]

O.D. Tracking Slide Trip  
 60-451-03  
 Dimensions and Operating Envelope

-TABLE-		
MODEL	POSITION	DIM. "A" RADIAL CLEARANCE
LCSF 610/3	MIN.	16.55 [420.4]
	MAX.	17.80 [452.2]
LCSF 612/3	MIN.	17.60 [447.1]
	MAX.	18.85 [478.9]
LCSF 814/3	MIN.	18.22 [462.7]
	MAX.	19.47 [494.5]
LCSF 1016/3	MIN.	19.34 [491.2]
	MAX.	20.59 [523.0]
LCSF 1420/3	MIN.	21.20 [538.5]
	MAX.	22.45 [570.2]



DIMENSIONS IN BRACKETS ARE MILLIMETERS

## Chapter 2

# Safety

.....

E.H. Wachs 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 LCSF with the O.D. tracking slides. It contains important safety instructions and recommendations.

**FULL SAFETY INSTRUCTIONS AND GUIDELINES ARE IN THE MANUAL FOR YOUR LOW CLEARANCE SPLIT FRAME MACHINE.** Make sure you read and understand all safety information in the LCSF manual.

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### SAFE OPERATING GUIDELINES

Follow these guidelines for safe operation of all E.H. Wachs equipment.

- **READ THE OPERATING MANUAL.** Make sure you understand all setup and operating instructions before you begin. Keep this manual with the machine.
- **INSPECT MACHINE AND ACCESSORIES BEFORE USE.** 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 STICKERS AND LABELS.** Make sure all labels and stickers are in place, clearly legible, and in good

### In This Chapter

SAFE OPERATING GUIDELINES

SAFE OPERATION OF THE O.D. TRACKING SLIDES

SAFETY LABELS



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

condition. Refer to “Safety Labels” later in this chapter for label locations on the machine. Replace any damaged or missing safety labels; see the ordering information at the end of this manual.

- **KEEP CLEAR OF MOVING PARTS.** Keep hands, arms, and fingers clear of all rotating or moving parts. Always turn the machine off and disconnect the power source 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.
- **FOLLOW SAFE PROCEDURES FOR HANDLING LUBRICANTS.** Refer to the manufacturer’s instructions and the Material Safety Data Sheets.

### Safe Operating Environment

- Do not use this equipment in a potentially explosive atmosphere. Fire or explosion could result, with the risk of serious injury or death.
- Provide adequate lighting to use the equipment, in accordance with worksite or local regulations.
- **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.

### Operating and Maintenance Safety

- This equipment is to be operated and maintained only by qualified, trained personnel.
- Make sure the equipment is stable when attached to the workpiece for the operation. Ensuring stability of the installed tool is the responsibility of the operator.
- Make sure the workpiece is supported adequately for installation of the equipment. This includes supporting any workpiece “fall-off” section when severing the workpiece. Ensuring support of the workpiece is the responsibility of the operator.
- Tooling on any cutting equipment—including lathe tools, saw blades, milling tools, etc.—may get very hot. Do not touch tooling until you have made sure it is cool enough to handle.

- Wear gloves when removing or cleaning up chips and cutting debris. Chips can be very sharp and cause cuts.
- Before performing any service on the equipment, disconnect the power source. Follow all lock-out/tag-out procedures required at the worksite.

### Safety Alerts in This Manual

The following alerts are used throughout this manual to indicate operator safety hazards. In all cases, these alerts include a notice describing the hazard and the means to avoid or reduce risk. Carefully read all safety alerts.



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

### WARNING

This safety alert, with the personal injury hazard symbol, 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

### **Protective Clothing**

**Wear safety shoes** when operating or servicing the equipment. Serious injury could result from dropping the machine or its components.



## NOTE

Gloves should be worn when cleaning up chips and other cutting debris. Chips can be very sharp and can cause serious cuts. **Do not wear gloves when the machine is operating.**

**Do not wear gloves** while operating the machine. Gloves can become entangled in moving parts, resulting in serious injury. Gloves may be worn when setting up the machine or cleaning up after the operation, but take them off when operating the machine.

### Eye Protection

Always wear impact-resistant eye protection while operating or working near this equipment.

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.

### Hearing Protection

This equipment can produce noise levels above 80 dB. Hearing protection is required when operating the equipment. 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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## SAFE OPERATION OF THE O.D. TRACKING SLIDES

Refer to “Safe Operation of the LCSF” in Chapter 2 of the *Low Clearance Split Frame User’s Manual* for full safety guidelines and instructions.

### Intended Uses

The low clearance split frame O.D. tracking slides are designed to provide uniform cutting and beveling on pipes that are out of round, or in situations where the split frame is not centered on the pipe. The spring-tensioned tracking mechanism allows radial motion (perpendicular to the side

of the pipe) of up to 1/2 inch, keeping the cutting tool on the pipe at all times and compensating for a maximum 1 inch out-of-roundness.

**Make sure to follow all safety guidelines and procedures required for machining operations at the work site, including personal protective equipment (PPE). Do not use the LCSF in a manner that violates these guidelines.**

### Proper Use of the O.D. Tracking Slides

- The LCSF and O.D. tracking slides should only be used by trained, qualified operators.
- The workpiece must be within the operating capacity of the O.D. tracking slides and LCSF model you are using. See operating envelope information and drawings in Chapter 1.
- Make sure the operating environment allows you to mount the machine securely and squarely on the workpiece.
- Make sure there is adequate clearance around workpiece and the LCSF/O.D. tracking slide combination to operate the machine controls as described in the operating instructions.

### **Misuse**

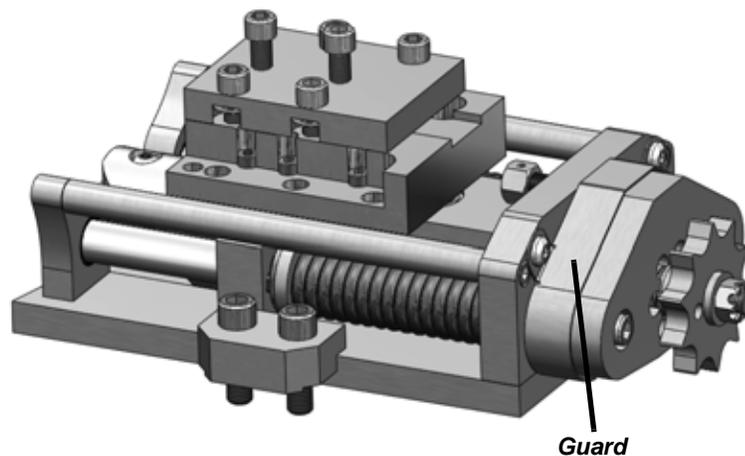
- Do not attempt to mount or operate the LCSF and O.D. tracking slides on non-cylindrical workpieces.
- Do not attempt to mount or operate the LCSF and O.D. tracking slides on any workpiece to which the equipment cannot be securely mounted.
- Do not attempt to mount or operate the LCSF and O.D. tracking slides on any workpiece that is not stable enough to hold the equipment.
- Do not disable any safety feature of the O.D. tracking slides or LCSF, or remove any safety labeling. Replace worn or damaged safety labels immediately. (See “Safety Labels” later in this chapter.)

## Potential Hazards

See the “Potential Hazards” section in Chapter 2 of the user’s manual for your low clearance split frame machine. Follow all guidelines for avoiding hazards associated with operating the machine.

## O.D. Tracking Slide Safety Features

The small O.D. tracking slides include a guard to cover the pinch point between the support plate and the tracking bar end plate. Do not operate the slides without this guard installed. If you need to remove the guard for service, make sure the springs are released, and make sure to re-install the guard before operation.



*Figure 2-1. The O.D. tracking slides have a guard to keep fingers out of the pinch point at the end of the slide.*

## Safe Lifting and Handling

- The small O.D. tracking slides weigh less than 40 lb each. (Machines or assemblies over 40 lb [18 kg] must be lifted by two people or a lifting device.)
- It is the responsibility of the end user to determine whether a machine or assembly can be lifted by two or more people. A lifting device is recommended for machines or assemblies that cannot be handled easily by two people.

- It is **not** recommended that you lift the LCSF with the O.D. tracking slides attached. The assembled combination may not be balanced to enable safe lifting.

---

## SAFETY LABELS

The Moving Parts label is attached to the O.D. tracking slide trip. Do not remove the label. If the label is lost or damaged, order a replacement label from E.H. Wachs; see ordering instructions in Chapter 5.



*Figure 2-2. The Moving Parts warning label is on the trip assembly (part no. 03-113-04).*



## Chapter 3

# Operating Instructions

Before using the LCSF O.D. tracking slides, you should be familiar with all LCSF operating and safety procedures. Refer to the *Low Clearance Split Frame User's Manual*.

### PREPARING THE LCSF AND SLIDES

The cut line for the O.D. tracking slides is 2.73" (69.3 mm) above the slide mounting surface on the rotating ring. See the Operating Envelope drawings in Chapter 1.

1. Mount and center the LCSF according to the instructions in the *Low Clearance Split Frame User's Manual*.
2. Remove any trips, slides, or other accessories from the LCSF.
3. Set the O.D. tracking slides on a workbench or other stable work surface. Using a 9/16" wrench or socket, turn the castle nut on the starwheel clockwise to fully retract the slide.

### In This Chapter

PREPARING THE LCSF AND SLIDES

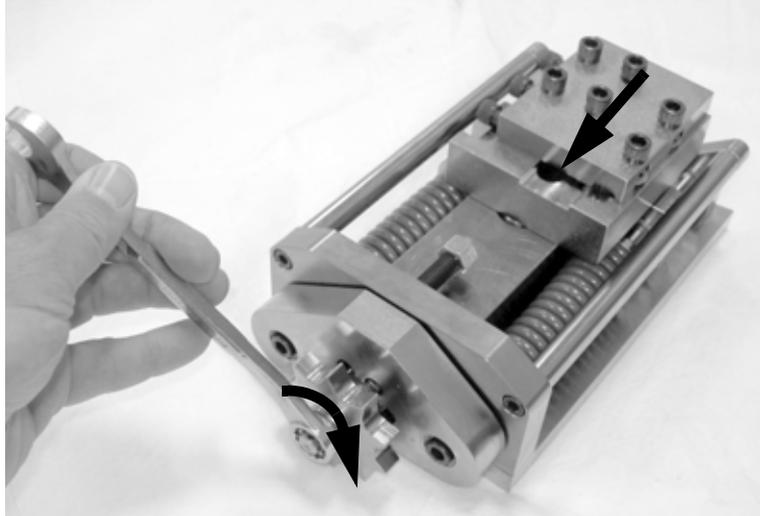
MOUNTING THE SLIDES AND TRIP

PERFORMING THE CUT



### CAUTION

Do not leave other accessories, such as standard trip assemblies, mounted on the LCSF when using the O.D. tracking slide. These accessories may collide with the tracking slides, causing damage to the equipment.



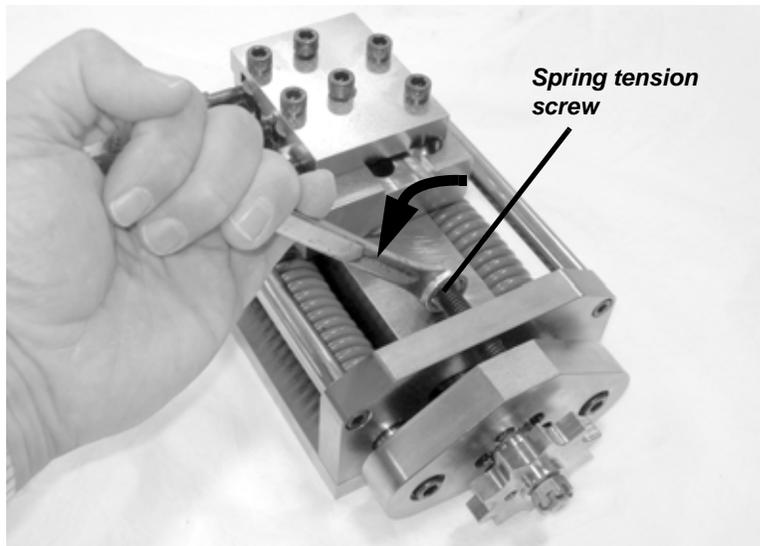
*Figure 3-1. Turn the starwheel clockwise to retract the slide.*



**NOTE**

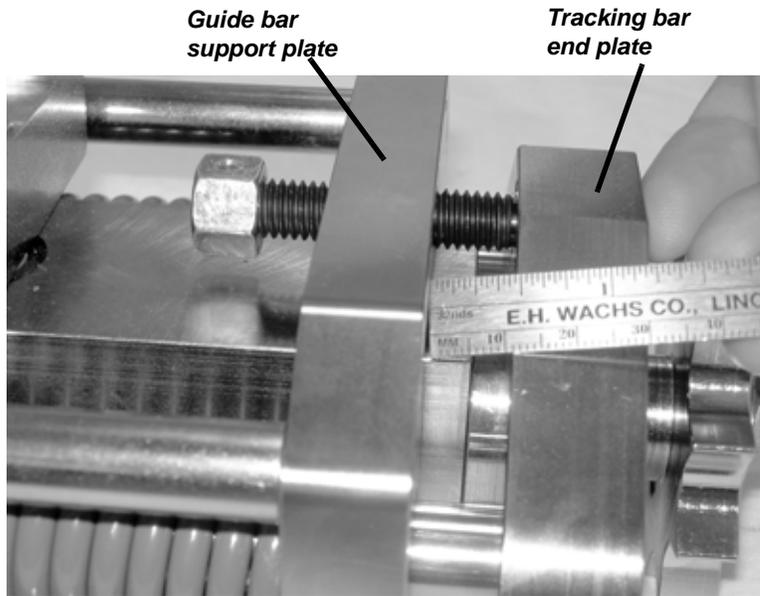
The springs should be fully compressed, so that the coils are pressed together.

4. Using the 9/16" wrench or socket, screw in (counter-clockwise as viewed from the starwheel end) the spring tension screw to compress the springs. Turn the screw as far as it will go.



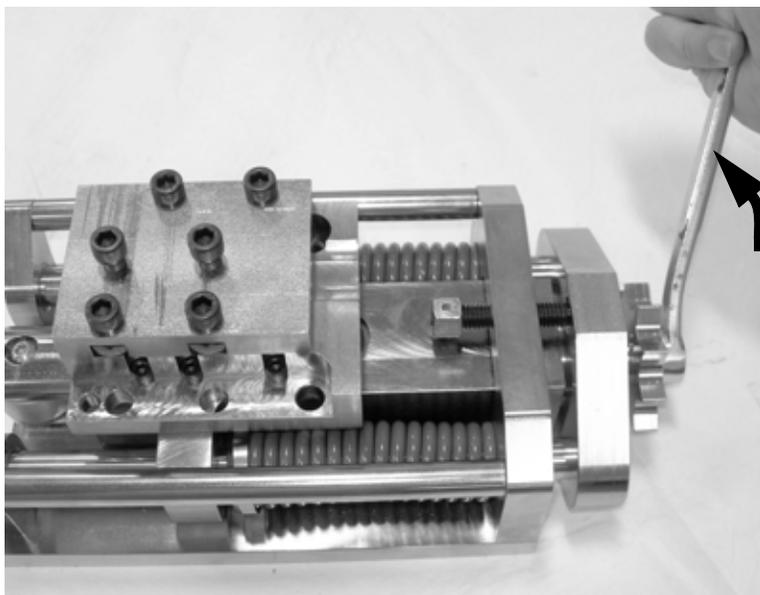
*Figure 3-2. Tighten the spring tension screw all the way.*

5. When you have compressed the springs, there should be at least 1/2" (13 mm) clearance between the tracking bar end plate and the guide bar support plate.



*Figure 3-3. Make sure there is at least 1/2" clearance between the support plate and end plate.*

6. After compressing the springs, turn the castle nut on the starwheel clockwise to make sure the slide is fully retracted. Back the screw off 1/2 turn.



*Figure 3-4. Turn the starwheel all the way clockwise to fully retract it, then back it off 1/2 turn counter-clockwise.*

7. Repeat steps 3 through 6 for the other slide.

## MOUNTING THE SLIDES AND TRIP

To minimize the risk of equipment damage or personal injury, it is recommended that you install the slides without tooling in the tool holders.

1. Select the appropriate mounting clamps for the LCSF model you are using. You will need 4 clamps total—2 for each slide.
  - The small clamps are for 10-14 inch LCSFs.
  - The large clamps are for 16-20 inch LCSFs.
2. Install 2 mounting clamps at each slide location. Leave the mounting screws loose so that you can install the slides.



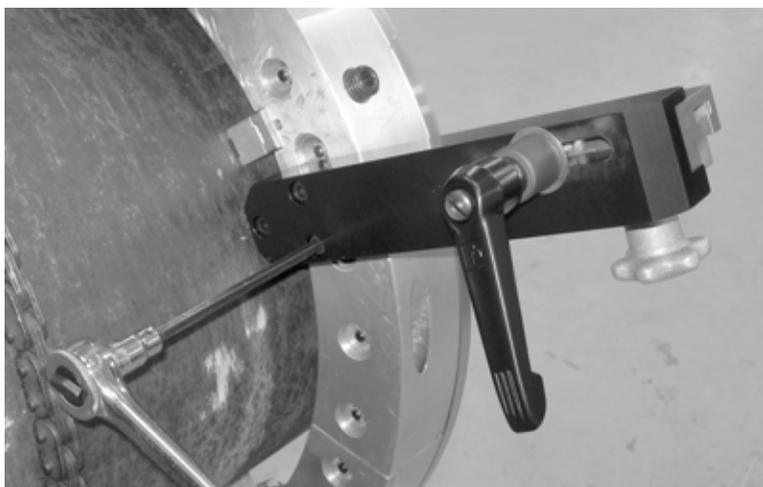
### NOTE

If you have the LCSF on a horizontal pipe, it is recommended that you position the rotating ring with the slide mounting positions at the sides (roughly 3 o'clock and 9 o'clock positions). If you have the mounting positions at the top and bottom, the slide on the bottom may fall out while you are mounting and adjusting it.



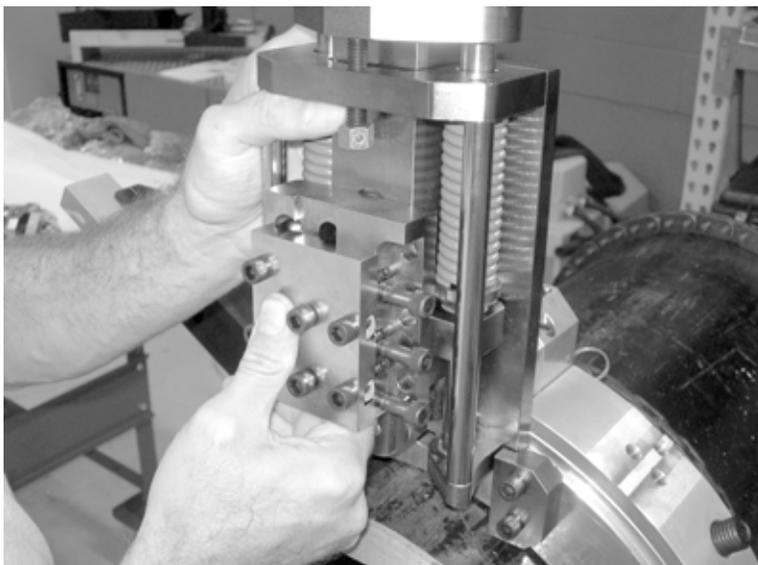
*Figure 3-5. Install the mounting clamps on the rotating ring of the LCSF at the slide mounting locations.*

3. Mount the trip at its location on the back of the stationary ring.



*Figure 3-6. Mount the trip on the LCSF with the 3 screws provided.*

4. Insert the base plates of the slides under the mounting clamps, and move the slides forward until the tracking wheels contact the pipe.



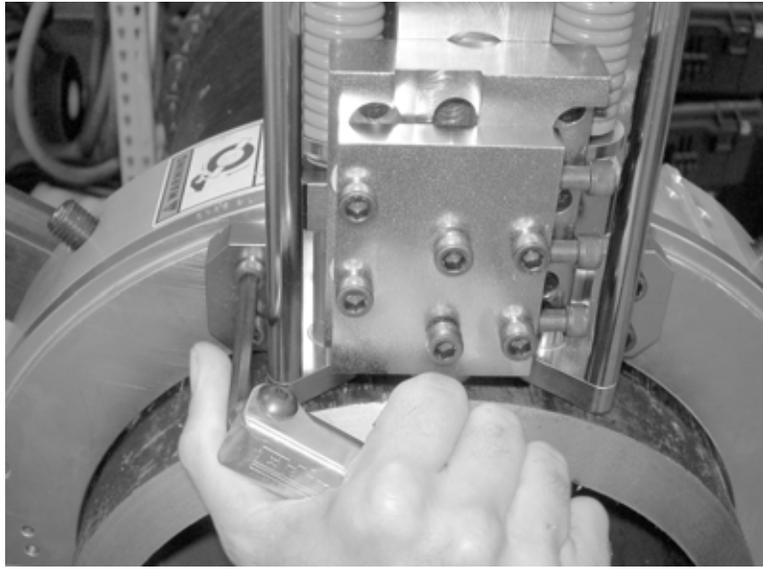
*Figure 3-7. Slide the base plate of the slide under the edges of the mounting clamps. Push the slide in all the way until the tracking wheel is against the pipe.*

5. Snug the mounting clamp screws just tight enough to hold the slides in place.



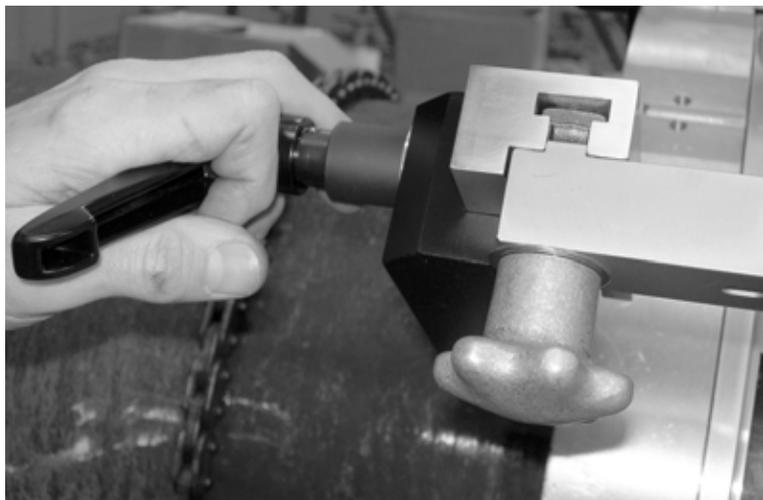
**NOTE**

You can install either slide at each slide mounting position.



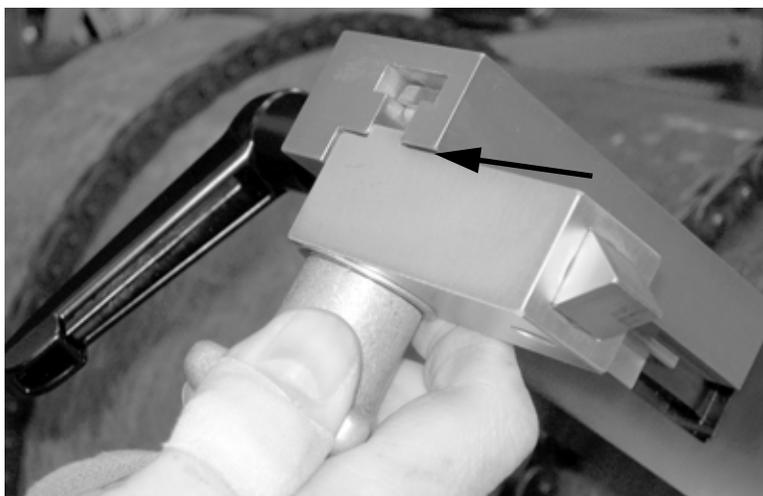
*Figure 3-8. Snug the mounting clamp screws just tight enough to hold the slide in place.*

6. Disengage the trip by turning the trip lock lever counter-clockwise (as viewed from behind the machine) and allowing the spring-loaded trip bar to extend fully. Re-tighten the trip lock lever.



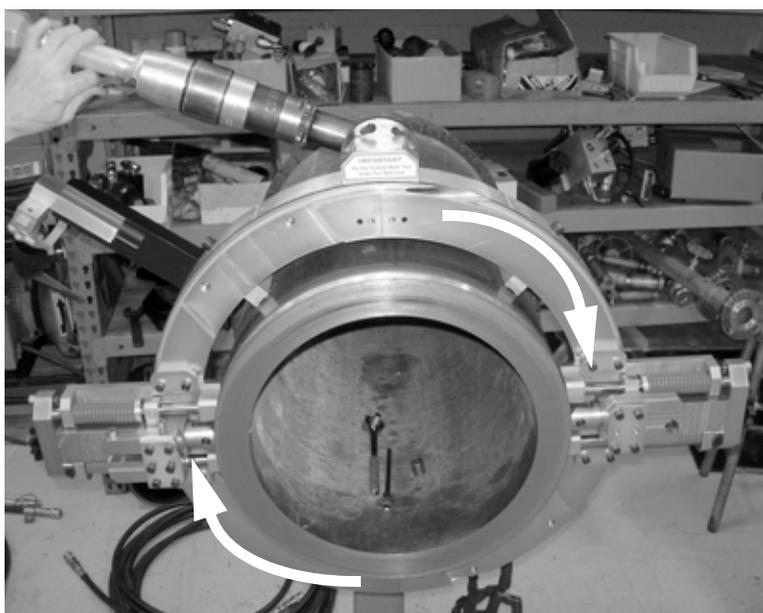
*Figure 3-9. Loosen the trip lock lever to release the trip to its disengaged position. The spring will push the trip bar out away from the LCSF.*

7. Loosen the trip adjustment knob and move the trip out until the trip is flush with the end of the trip bar. Re-tighten the trip adjustment knob.



*Figure 3-10. Loosen the trip adjustment knob and set the trip block flush with the end of the trip bar.*

8. Attach the drive motor to the LCSF and turn on power to the motor.
9. To set the starting location of the slides, engage the drive motor and slowly rotate the LCSF through one complete rotation. The contact of the tracking wheel on the pipe will move the slides out to the “high point” of the pipe O.D.



*Figure 3-11. Slowly operate the LCSF through one complete rotation to set the slide positions.*



### IMPORTANT

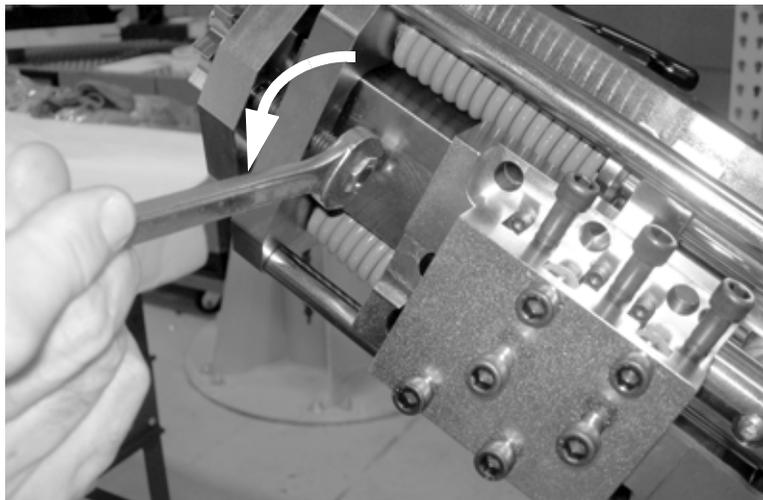
When you set the slide positions, it is critical that the mounting clamp screws are snug enough to keep the slide from falling, but not too tight. The slide base plates need to be able to move as the tracking wheel follows the O.D. of the pipe.

10. Tighten the screws on all 4 mounting clamps securely.



*Figure 3-12. Once the slide positions are set, securely tighten the mounting clamp screws.*

11. Using a 9/16" wrench or socket, fully retract the spring tensioning screws on both slides. This will spring-load the slides to track the pipe surface.



*Figure 3-13. Retract the spring tension screws all the way to spring-load the slides.*

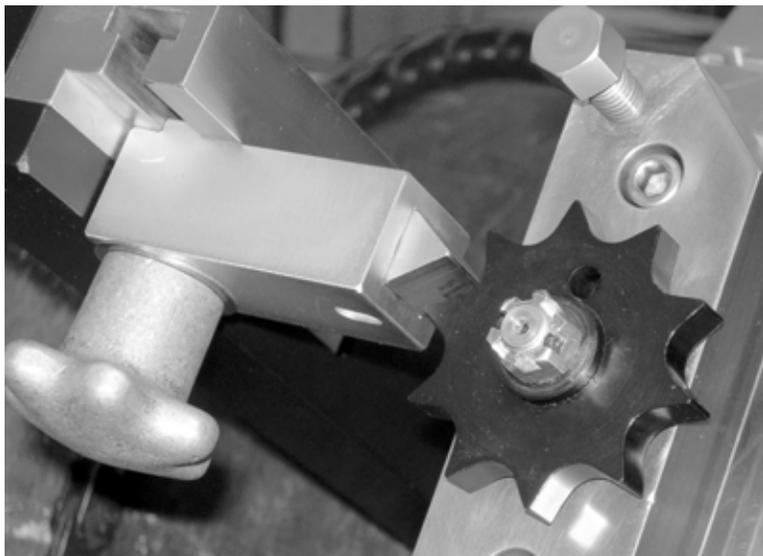
12. Engage the drive motor to rotate the machine until one of the starwheels is near the trip.

13. Loosen the trip lock lever. Push the trip bar in toward the machine as far as it will go, and hold it in that position while you re-tighten the trip lock lever.



*Figure 3-14. Engage the trip by loosening the trip lock lever and pushing the trip bar in toward the LCSF.*

14. Loosen the trip adjustment knob and move the trip so that the starwheel is aligned at the center of the trip surface. Re-tighten the trip adjustment knob.



*Figure 3-15. Align the trip so that the starwheel will strike the center of it.*

15. Time the starwheels by turning them so that one of the points is perpendicular to the trip.

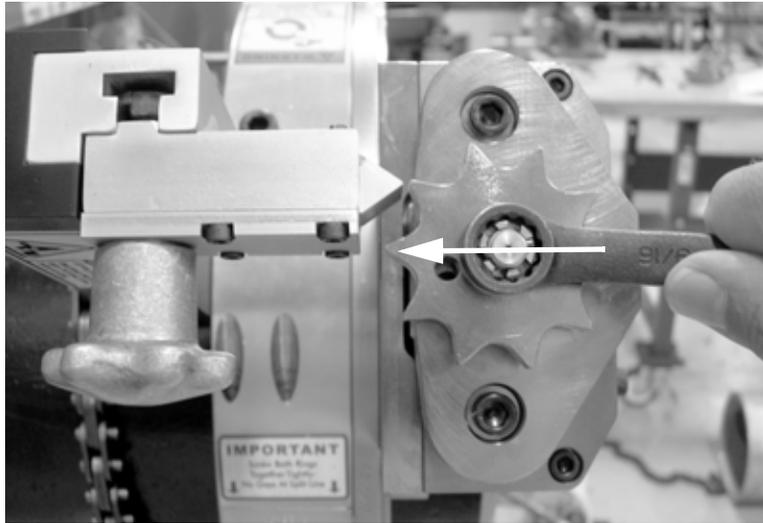


Figure 3-16. Set both starwheels so that one point is perpendicular to the trip.

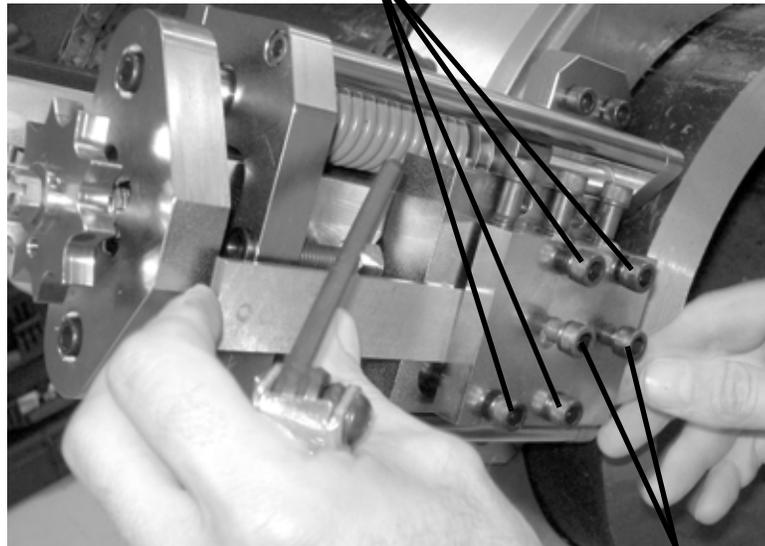
16. Loosen the 4 cover screws and the 2 tool set screws in the parting slide.
17. Insert a parting tool in the parting slide and set the cutting surface about 1/16" from the surface of the pipe.



**NOTE**

Use standard LCSF parting tools with the O.D. tracking slides.

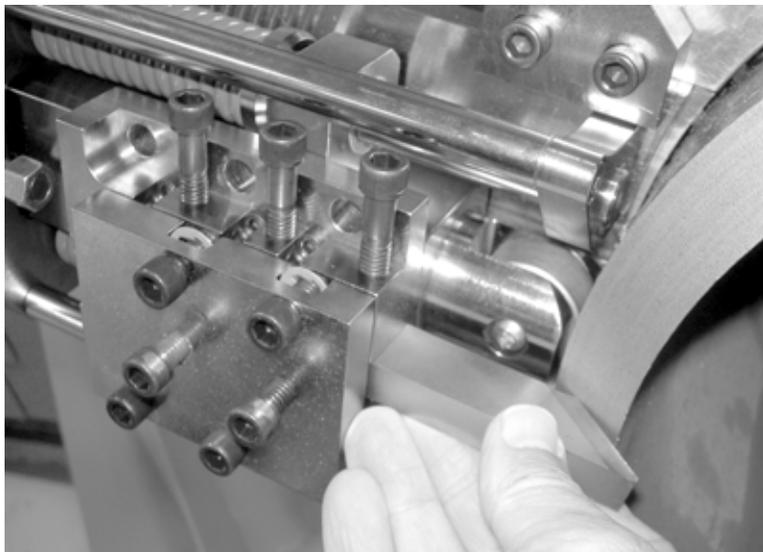
**Tool cover screws**



**Tool set screws**

Figure 3-17. Insert the parting tool with the cutting edge in the direction shown.

18. Snug the 4 cover screws in the tool cover, making sure the cover is square against the top of the parting tool.
19. Tighten the 2 tool set screws, then securely tighten the tool cover screws.
20. You can install either a parting tool or beveling tool in the beveling slide. Set the tool about 1/16" from the surface of the pipe.



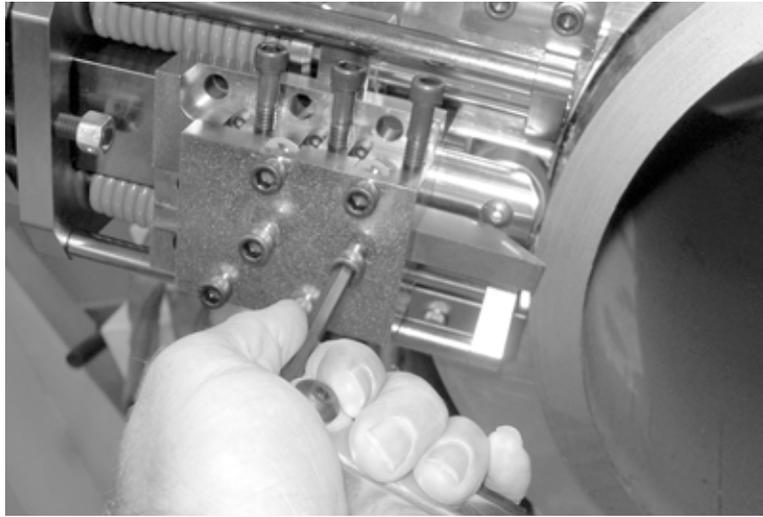
*Figure 3-18. Insert the beveling tool into the tool holder as shown.*

21. If you are installing a parting tool, use the same procedure described above for the parting slide.
22. If you are installing a beveling tool, first snug the 2 tool set screws on the top of the tool holder.



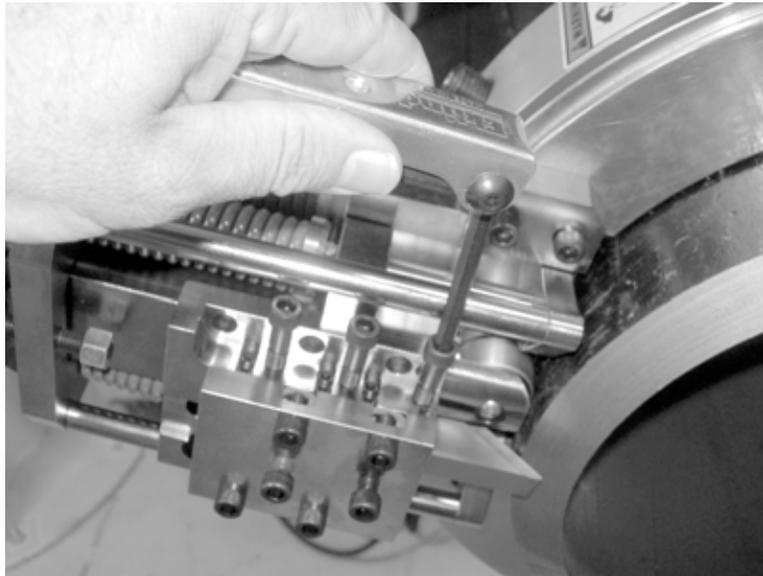
**NOTE**

Use standard LCSF beveling tools with the O.D. tracking slides.



*Figure 3-19. Snug the top set screws to hold the bevel tool in place.*

23. Tighten the 3 bevel tool set screws on the side of the tool holder.



*Figure 3-20. Tighten the side screws holding the beveling tool.*

24. Tighten the 2 tool cover screws and the 2 tool set screws on the top of the tool holder.

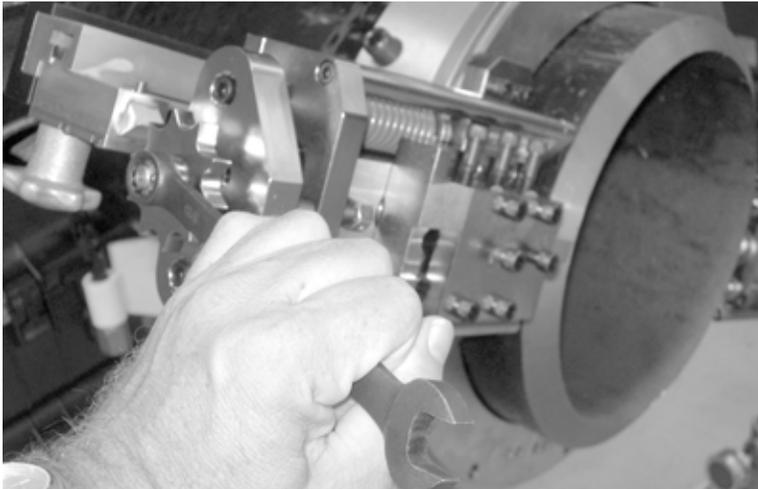
## PERFORMING THE CUT

Once the O.D. tracking slides are set up, you will operate the LCSF in the standard way. The slides will feed automatically as the machine rotates.

- Use of coolant is recommended during cutting for better performance and to increase tool life.
- Make sure the starwheels are engaging the trip and the slides are feeding.
- Periodically check the alignment of the starwheels and trip. If the starwheel alignment is changing, the mounting clamps may not be tight enough on the slide. Stop the machine and tighten the clamp screws.
- To disengage the trip, loosen the trip lock lever. The trip will “spring out” to its disengaged position.

When you are finished making the cut, stop the machine and turn off power to the drive motor. Remove the slides using the following procedure.

1. Turn the castle nuts on the starwheels clockwise to fully retract the slides.



*Figure 3-21. Turn the starwheel clockwise to fully retract the slide.*

2. Remove the tooling from both slides.



### CAUTION

Watch the progress of the cut and stop the LCSF as soon as the cut is complete. It is possible to advance the slides until the tool holder strikes the workpiece. Damage to the equipment will result.



### NOTE

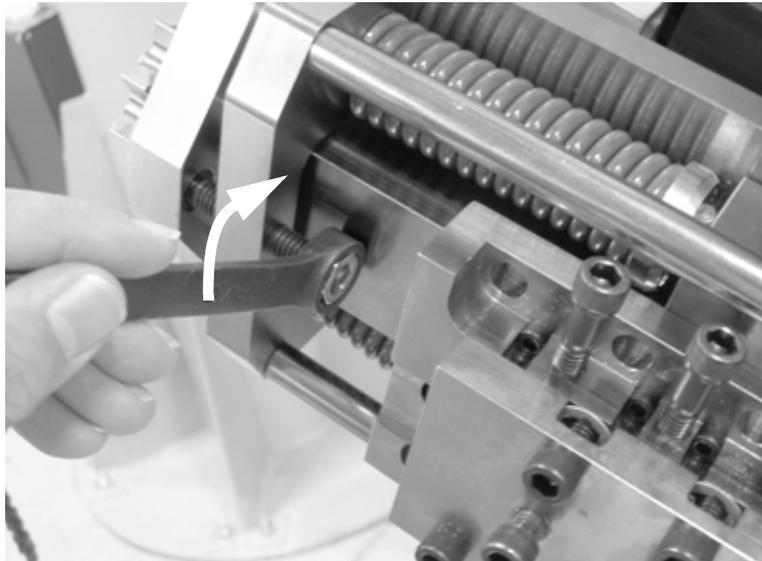
If you have the LCSF on a horizontal pipe, it is recommended that you position the rotating ring with the slide mounting positions at the sides (roughly 3 o'clock and 9 o'clock positions).



**WARNING**

You **must** tighten the spring tension screw before loosening the mounting clamps. If you don't, the tension on the springs can eject the slide when you loosen the clamps, causing personal injury or equipment damage.

3. Tighten the spring tension screw fully on both slides to take the tension off the springs.



*Figure 3-22. Tighten the spring tensioning screw against the end plate.*

4. Loosen the screws in the mounting clamps and pull the slide out from under the clamps.



*Figure 3-23. Loosen the mounting clamp screws to remove the slides.*

5. If you are finished using the O.D. tracking slides, remove the mounting clamps from the LCSF.

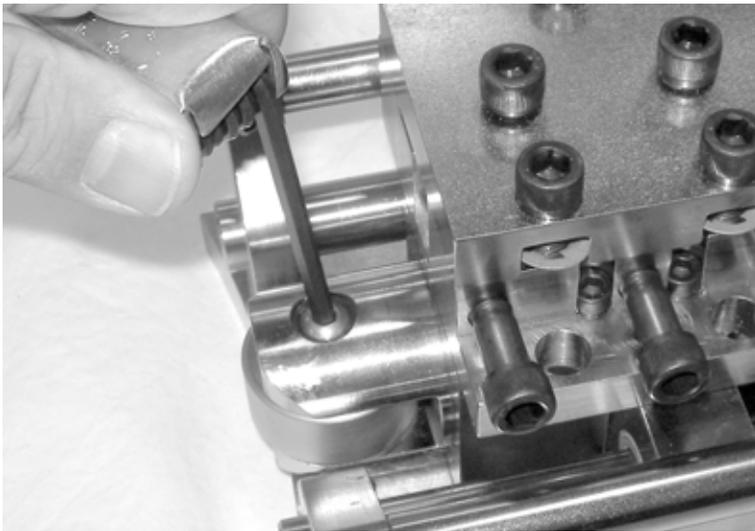
## Chapter 4

# Maintenance

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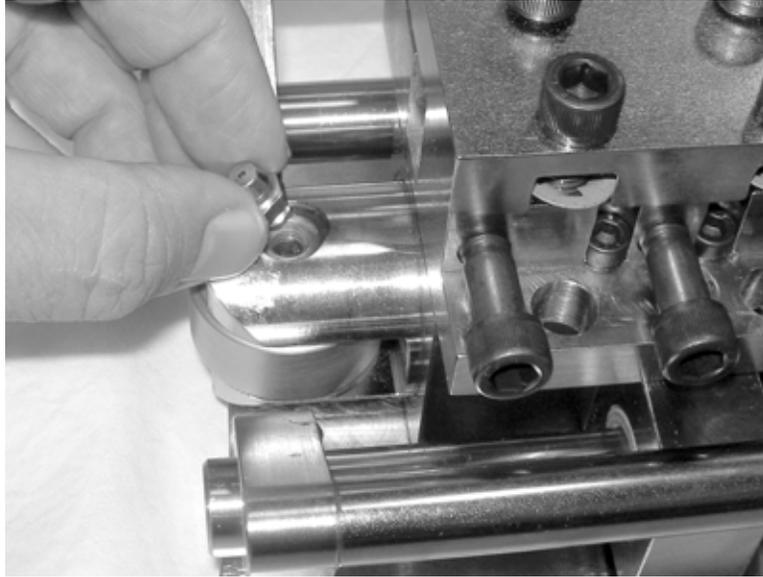
The O.D. tracking slides require little maintenance. However, it is important to grease the tracking wheel bearing. If you are using coolant when you cut, you should grease these bearings between every cut. Otherwise, grease them every 5 hours of operation.

1. Remove the button head cap screw on top of the tracking wheel.



*Figure 4-1. Remove the button head cap screw to access the tracking wheel bearing.*

2. Install the provided grease fitting and snug it in place. Finger-tightness is sufficient.



*Figure 4-2. Install the grease fitting and snug it into the bearing.*

3. Apply grease to the fitting until it penetrates around the tracking wheel.
4. Remove the grease fitting.
5. Replace the button head cap screw and tighten it securely.



**CAUTION**

Make sure to remove the grease fitting before using the slide. The fitting will collide with other components, causing equipment damage.

## 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

### Ordering Replacement Parts

When ordering parts, refer to the parts lists earlier in this chapter. Please provide the part description and part number for all parts you are ordering. Always note your machine model number when 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
- A brief description of the problem or the work to be done.

### In This Chapter

ORDERING INFORMATION

DRAWINGS AND PARTS LISTS

Before we perform any repair, we will estimate the work and inform you of the cost and the time required 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

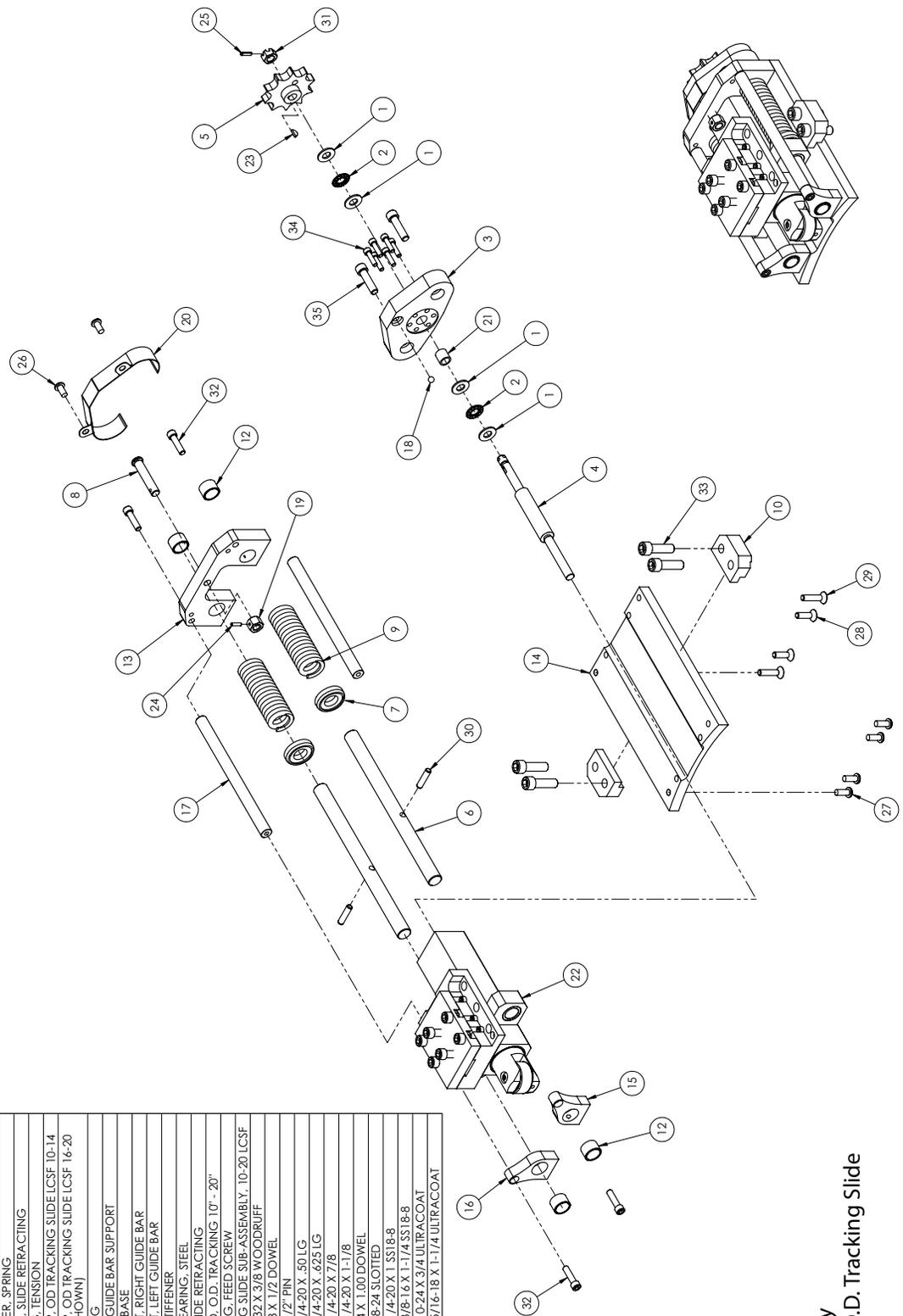
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## **DRAWINGS AND PARTS LISTS**

The drawings on the following pages illustrate the components of the trip and the O.D. tracking slides. Each drawing includes a bill of materials.

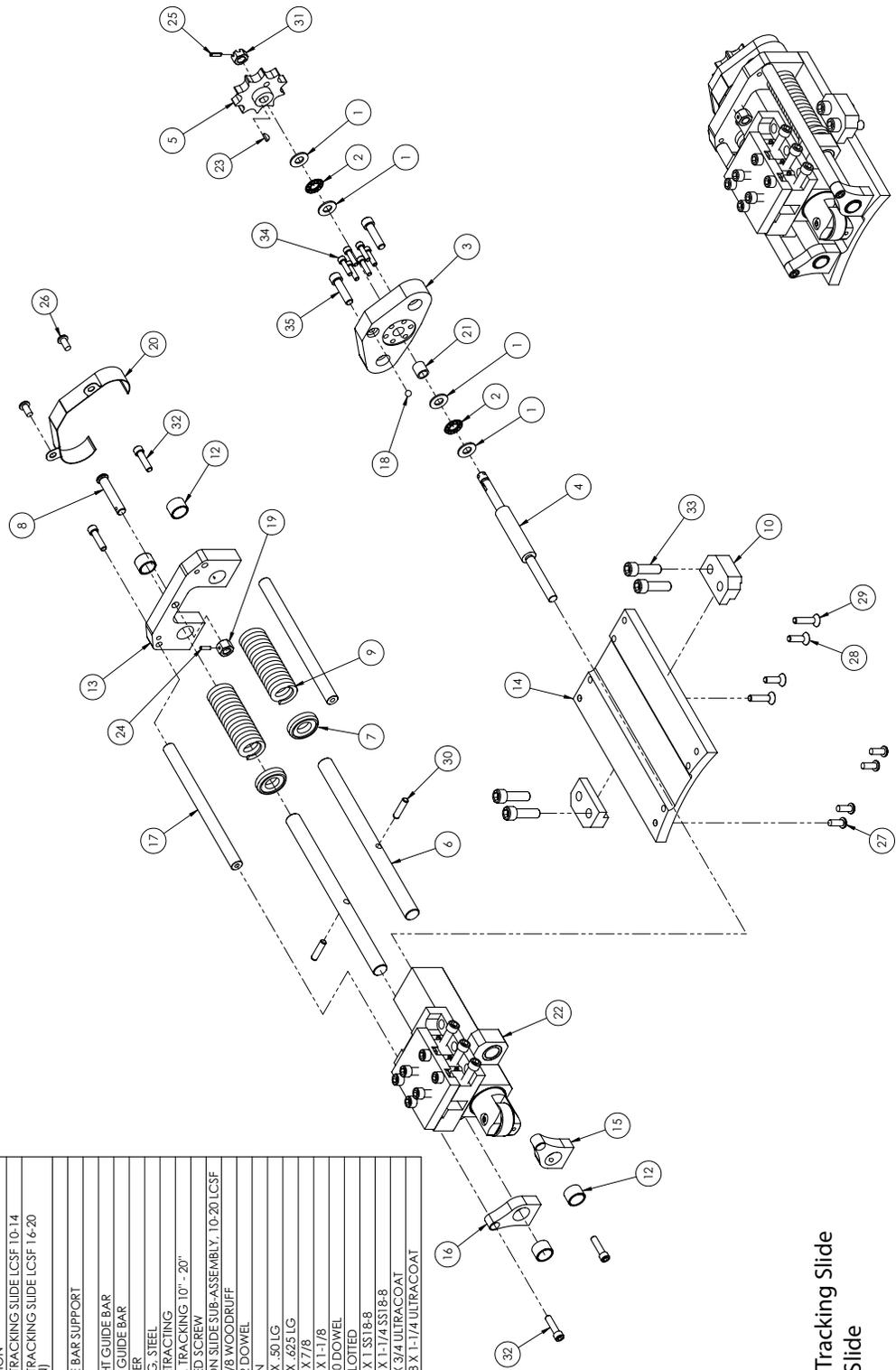
Both the parting slide and beveling slide are shown fully illustrated. They are identical except for the tool holder assembly.

ITEM	PART NUMBER	QTY.	DESCRIPTION
1	43-043-00	4	THRUST WASHER
2	43-044-00	2	BEARING, THRUST
3	60-1203-01	1	PLATE, TRACKING BAR END
4	60-1204-01	1	SCREW, FEED
5	60-1206-01	1	STARWHEEL
6	60-1208-00	2	SHAFT, GUIDE
7	60-1209-00	2	RETAINER, SPRING
8	60-1210-01	1	SCREW, SLIDE RETRACTING
9	60-1213-00	2	SPRING, TENSION
10	60-1218-00	2	CLAMP, OD TRACKING SLIDE LCSF 10-14
11	60-1219-00	2	CLAMP, OD TRACKING SLIDE LCSF 16-20 (NOT SHOWN)
12	60-1255-00	4	BUSHING
13	60-1264-00	1	PLATE, GUIDE BAR SUPPORT
14	60-1265-00	1	PLATE, BASE
15	60-1266-00	1	MOUNT, RIGHT GUIDE BAR
16	60-1267-00	1	MOUNT, LEFT GUIDE BAR
17	60-1268-00	2	ROD, STIFFENER
18	60-1269-00	1	BALL BEARING, STEEL
19	60-1270-00	1	NUT, SLIDE RETRACTING
20	60-1278-00	1	GUARD, O.D. TRACKING 10" - 20"
21	60-339-00	1	BUSHING, FEED SCREW
22	60-371-00	1	PARTING SLIDE SUB-ASSEMBLY, 10-20 LCSF
23	90-019-43	1	KEY, 3/32 X 3/8 WOODRUFF
24	90-024-05	1	PIN, 1/8 X 1/2 DOWEL
25	90-026-55	1	1/8" X 1/2" PIN
26	90-052-05	2	BHCS 1/4-20 X .50 LG
27	90-052-06	4	BHCS 1/4-20 X .625 LG
28	90-052-08	2	FHCS, 1/4-20 X 7/8
29	90-053-11	2	FHCS, 1/4-20 X 1-1/8
30	90-056-10	2	PIN, 1/4 X 1.00 DOWEL
31	90-075-07	1	NUT, 3/8-24 SLOTTED
32	90-170-12	4	SHCS, 3/8-16 X 1-1/4 SS18-8
33	90-170-12	4	SHCS, 3/8-16 X 1-1/4 SS18-8
34	90-248-07	6	SHCS, 10-24 X 3/4 ULTRACOAT
35	90-249-12	2	SHCS, 5/16-18 X 1-1/4 ULTRACOAT



Parts and Assembly  
60-451-01, Small O.D. Tracking Slide  
Parting Slide

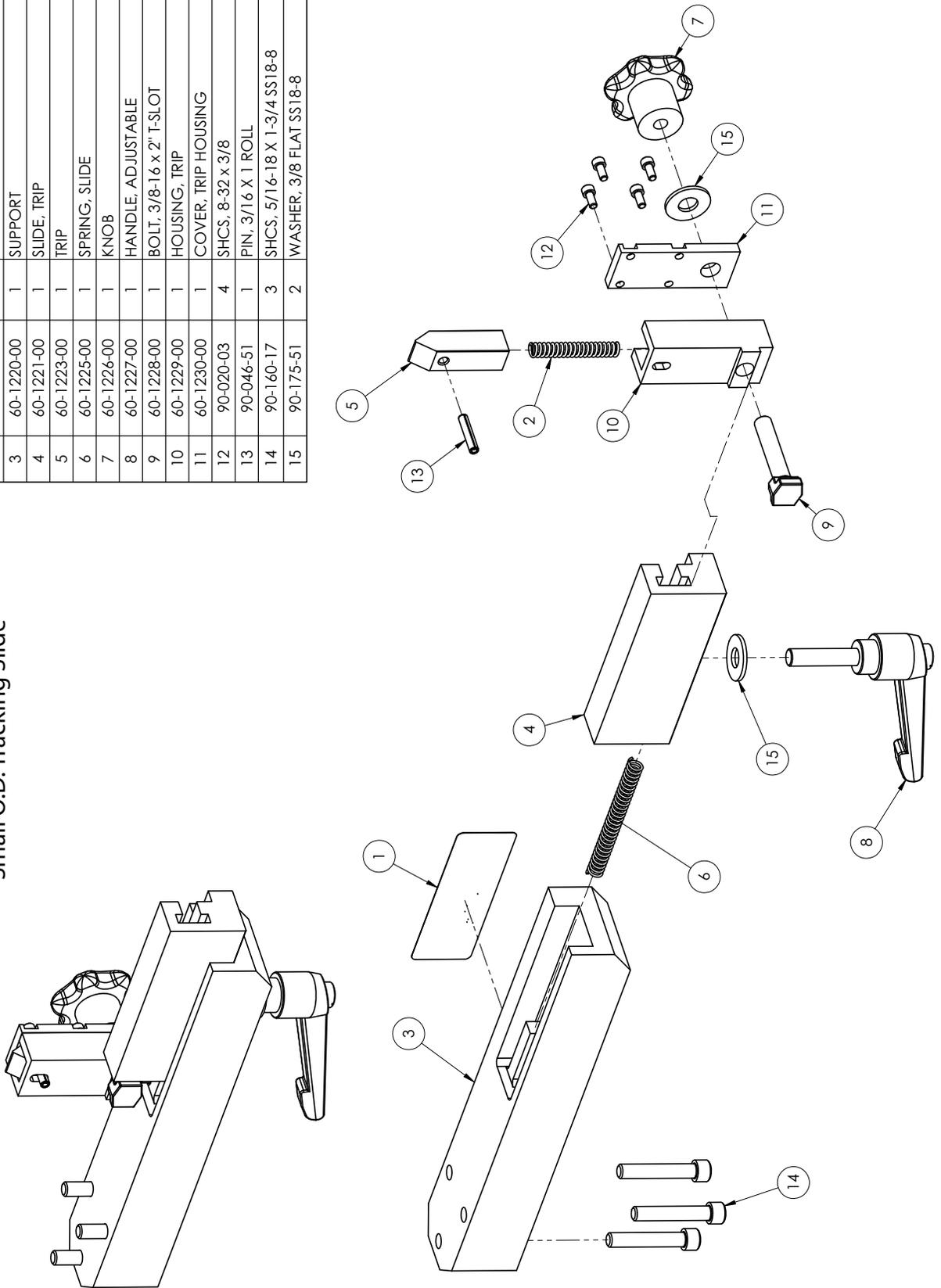
ITEM	PART NUMBER	QTY.	DESCRIPTION
1	43-043-00	4	THRUST WASHER
2	43-044-00	2	BEARING, THRUST
3	60-1203-01	1	PLATE, TRACKING BAR END
4	60-1204-01	1	SCREW, FEED
5	60-1204-01	1	STARWHEEL
6	60-1208-00	2	SHAFT, GUIDE
7	60-1209-00	2	RETAINER, SPRING
8	60-1210-01	1	SCREW, SLIDE RETRACTING
9	60-1213-00	2	SPRING, TENSION
10	60-1218-00	2	CLAMP, OD TRACKING SLIDE LCSF 10-14
11	60-1219-00	2	CLAMP, OD TRACKING SLIDE LCSF 14-20 (NOT SHOWN)
12	60-1255-00	4	BUSHING
13	60-1264-00	1	PLATE, GUIDE BAR SUPPORT
14	60-1265-00	1	PLATE, BASE
15	60-1266-00	1	MOUNT, RIGHT GUIDE BAR
16	60-1267-00	1	MOUNT, LEFT GUIDE BAR
17	60-1268-00	2	ROD, STIFFENER
18	60-1269-00	1	BALL BEARING, STEEL
19	60-1270-00	1	NUT, SLIDE RETRACTING
20	60-1278-00	1	GUARD, OD, TRACKING 10"-20"
21	60-339-00	1	BUSHING, FEED SCREW
22	60-372-00	1	COMBINATION SLIDE SUB-ASSEMBLY, 10-20 LCSF
23	90-019-43	1	KEY, 3/32 X 3/8 WOODRUFF
24	90-026-05	1	PIN, 1/8 X 1/2 DOWEL
25	90-026-55	1	1/8" X 1/2" PIN
26	90-052-05	2	BHCS 1/4-20 X .50 LG
27	90-052-06	4	BHCS 1/4-20 X .625 LG
28	90-053-08	2	FHCS, 1/4-20 X 7/8
29	90-053-11	2	FHCS, 1/4-20 X 1-1/8
30	90-056-10	2	PIN, 1/4 X 1.00 DOWEL
31	90-075-07	1	NUT, 3/8-24 SLOTTED
32	90-150-10	4	SHCS, 1/4-20 X 1.5318-8
33	90-170-12	4	SHCS, 3/8-16 X 1.1/4 SS18-8
34	90-240-07	6	SHCS, 10-24 X 3/4 ULTRACOAT
35	90-260-12	2	SHCS, 5/16-18 X 1-1/4 ULTRACOAT



Parts and Assembly  
60-451-02, Small O.D. Tracking Slide  
Parting and Beveling Slide

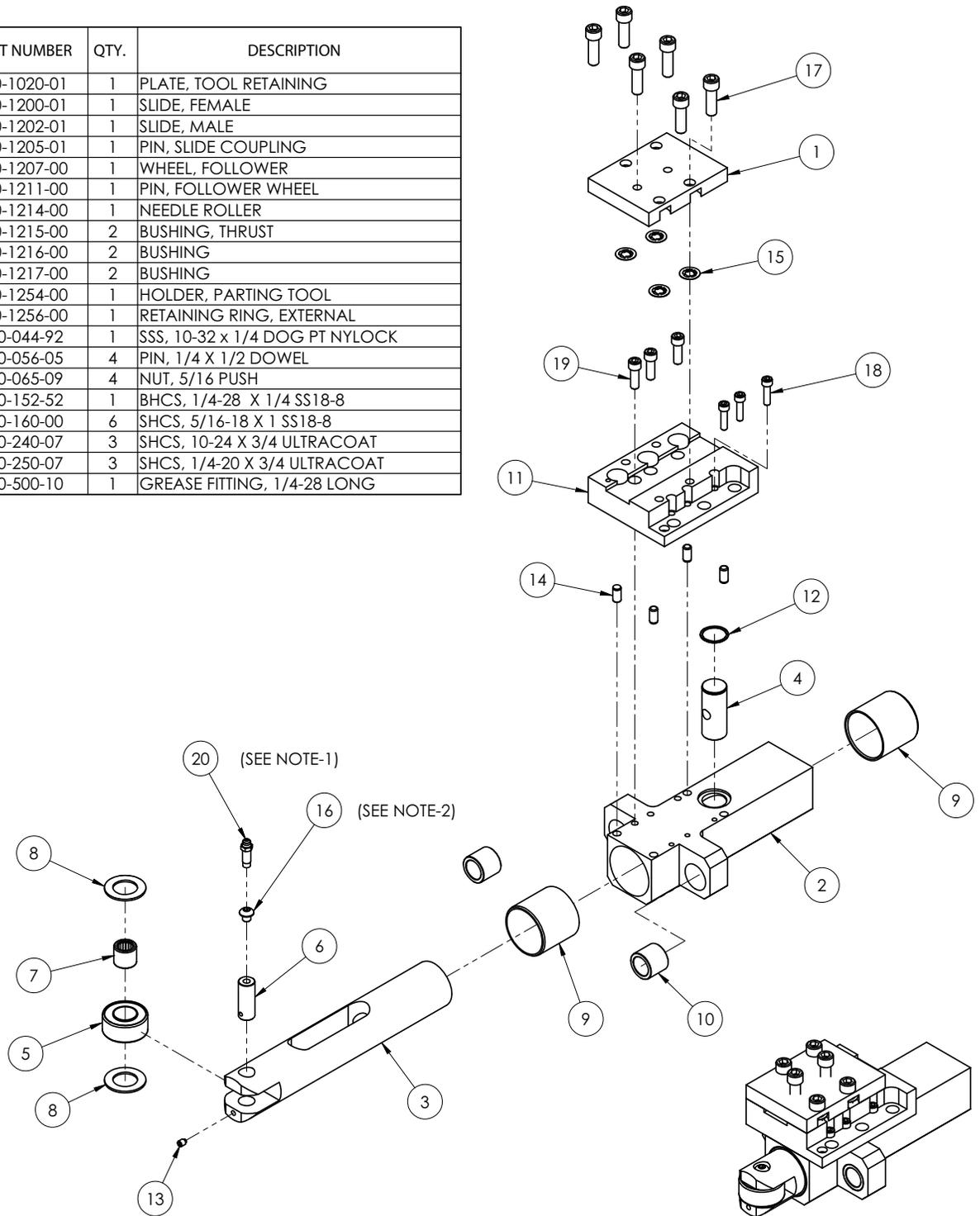
Parts and Assembly  
60-451-03, Trip Assembly for  
Small O.D. Tracking Slide

ITEM	PART NUMBER	QTY.	DESCRIPTION
1	03-113-04	1	LABEL, WARNING-MOVING PARTS
2	60-1044	1	SPRING, .329 X .211 X 2.0 LG.
3	60-1220-00	1	SUPPORT
4	60-1221-00	1	SLIDE, TRIP
5	60-1223-00	1	TRIP
6	60-1225-00	1	SPRING, SLIDE
7	60-1226-00	1	KNOB
8	60-1227-00	1	HANDLE, ADJUSTABLE
9	60-1228-00	1	BOLT, 3/8-16 X 2" T-SLOT
10	60-1229-00	1	HOUSING, TRIP
11	60-1230-00	1	COVER, TRIP HOUSING
12	90-020-03	4	SHCS, 8-32 X 3/8
13	90-046-51	1	PIN, 3/16 X 1 ROLL
14	90-160-17	3	SHCS, 5/16-18 X 1-3/4 SS18-8
15	90-175-51	2	WASHER, 3/8 FLAT SS18-8



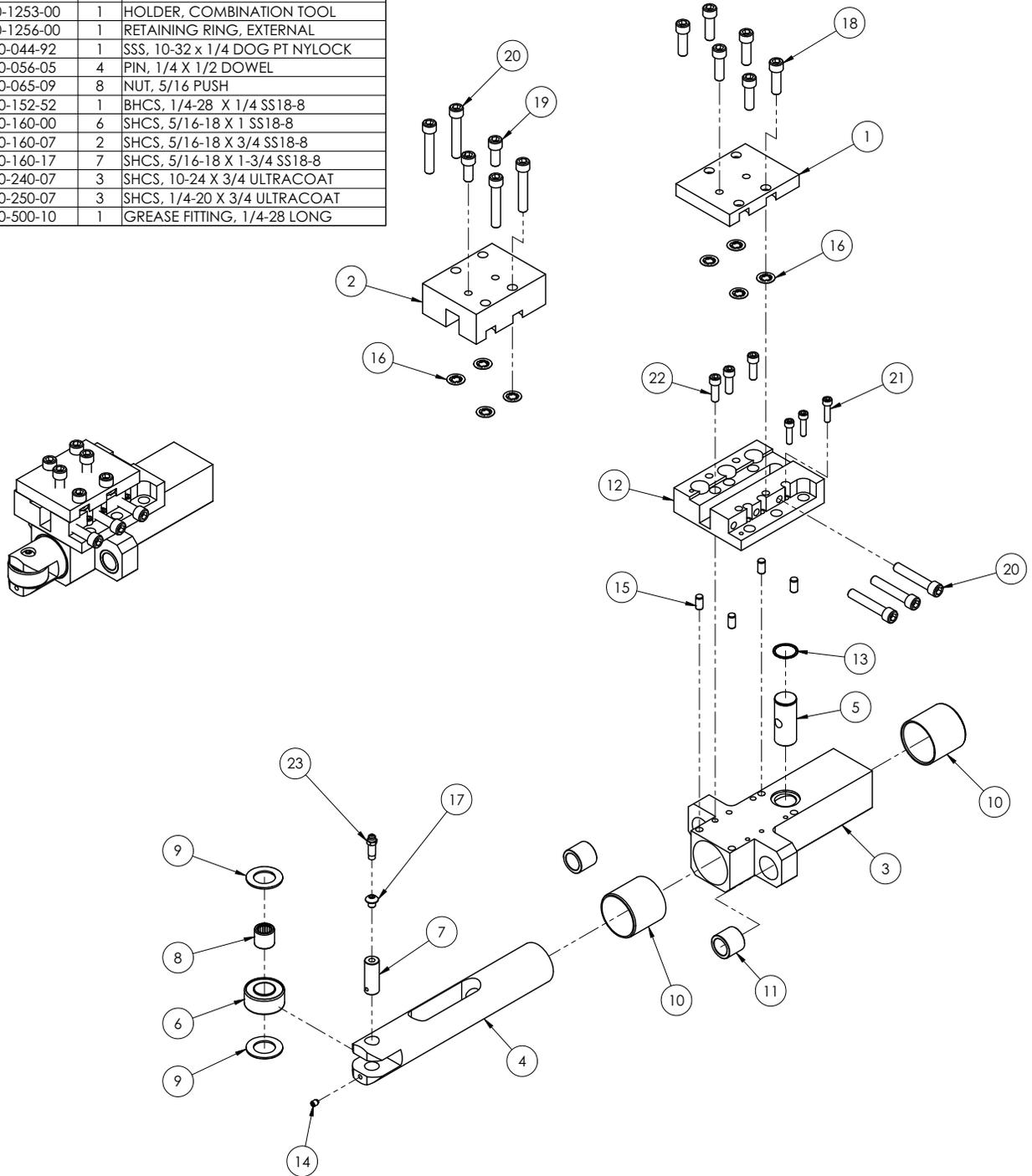
## Parts and Assembly 60-371-00, Parting Slide Subassembly

ITEM	PART NUMBER	QTY.	DESCRIPTION
1	60-1020-01	1	PLATE, TOOL RETAINING
2	60-1200-01	1	SLIDE, FEMALE
3	60-1202-01	1	SLIDE, MALE
4	60-1205-01	1	PIN, SLIDE COUPLING
5	60-1207-00	1	WHEEL, FOLLOWER
6	60-1211-00	1	PIN, FOLLOWER WHEEL
7	60-1214-00	1	NEEDLE ROLLER
8	60-1215-00	2	BUSHING, THRUST
9	60-1216-00	2	BUSHING
10	60-1217-00	2	BUSHING
11	60-1254-00	1	HOLDER, PARTING TOOL
12	60-1256-00	1	RETAINING RING, EXTERNAL
13	90-044-92	1	SSS, 10-32 x 1/4 DOG PT NYLOCK
14	90-056-05	4	PIN, 1/4 X 1/2 DOWEL
15	90-065-09	4	NUT, 5/16 PUSH
16	90-152-52	1	BHCS, 1/4-28 X 1/4 SS18-8
17	90-160-00	6	SHCS, 5/16-18 X 1 SS18-8
18	90-240-07	3	SHCS, 10-24 X 3/4 ULTRACOAT
19	90-250-07	3	SHCS, 1/4-20 X 3/4 ULTRACOAT
20	90-500-10	1	GREASE FITTING, 1/4-28 LONG



ITEM	PART NUMBER	QTY.	DESCRIPTION
1	60-1020-01	1	PLATE, TOOL RETAINING
2	60-1051-00	1	COVER, OUTSIDE BEVEL TOOL
3	60-1200-01	1	SLIDE, FEMALE
4	60-1202-01	1	SLIDE, MALE
5	60-1205-01	1	PIN, SLIDE COUPLING
6	60-1207-00	1	WHEEL, FOLLOWER
7	60-1211-00	1	PIN, FOLLOWER WHEEL
8	60-1214-00	1	NEEDLE ROLLER
9	60-1215-00	2	BUSHING, THRUST
10	60-1216-00	2	BUSHING
11	60-1217-00	2	BUSHING
12	60-1253-00	1	HOLDER, COMBINATION TOOL
13	60-1256-00	1	RETAINING RING, EXTERNAL
14	90-044-92	1	SSS, 10-32 x 1/4 DOG PT NYLOCK
15	90-056-05	4	PIN, 1/4 X 1/2 DOWEL
16	90-065-09	8	NUT, 5/16 PUSH
17	90-152-52	1	BHCS, 1/4-28 X 1/4 SS18-8
18	90-160-00	6	SHCS, 5/16-18 X 1 SS18-8
19	90-160-07	2	SHCS, 5/16-18 X 3/4 SS18-8
20	90-160-17	7	SHCS, 5/16-18 X 1-3/4 SS18-8
21	90-240-07	3	SHCS, 10-24 X 3/4 ULTRACOAT
22	90-250-07	3	SHCS, 1/4-20 X 3/4 ULTRACOAT
23	90-500-10	1	GREASE FITTING, 1/4-28 LONG

### Parts and Assembly 60-371-00, Parting Slide Subassembly





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