

# OPERATION MANUAL

92-1793 Rev. 210723  
Model 572AC SEVERMASTER™

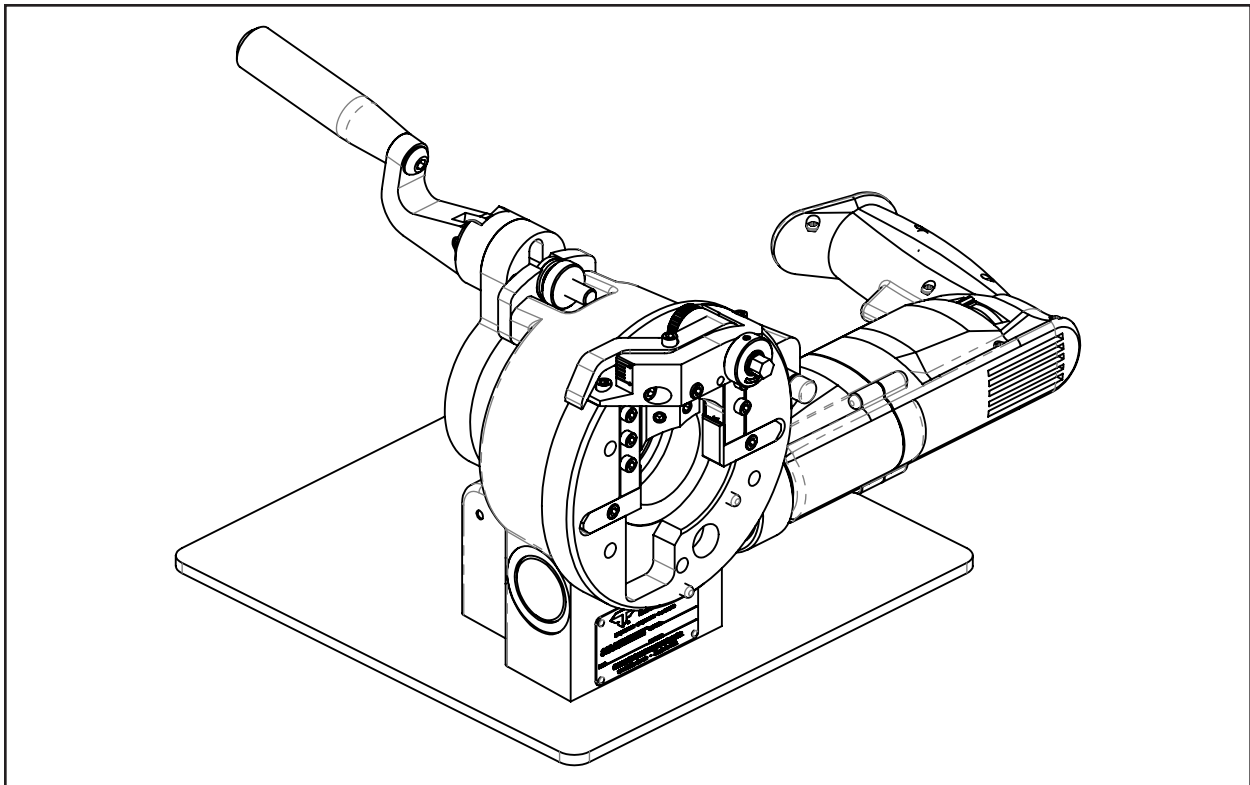


## ABOUT TRI TOOL TECHNOLOGIES

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At Tri Tool, we are committed to your success through relentless innovation and powerful partnership. We insist on developing tools and equipment that exceed your expectations of performance, precision, safety, and durability. As a full-service engineering firm, we are here to support you every step of the way.

For more information on engineered solutions, products, and trainings, visit [tritool.com](http://tritool.com) or contact our engineers at +1(916) 288-6100.



92-1793 Rev. 210723  
**Model 572AC SEVERMASTER™**

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## **TRI TOOL INC. Warranty**

LIMITED WARRANTY: All products manufactured by Seller are warranted to be free from defects in materials and workmanship under normal use. The period of this warranty shall be three years from the date of shipment for all products, except for welding and Non-Standard Products which shall be one year from the date of shipment. The Buyer shall bear all shipping, packing and insurance costs and all other costs to and from a designated repair service center. All return goods must be authorized in advance and communicated upon issuance of a Return Material Authorization (RMA) by Seller. The product will be returned to the Seller accompanied by a RMA number and associated paperwork, freight prepaid and billed to the Buyer. This warranty is not transferable and will not apply to tool bits or other consumables, or to any Goods to have been (i) mishandled, misused, abused or damaged by Buyer or any third party; (ii) altered without the express permission in writing by Seller, (iii) repaired by a party other than Seller without Seller's prior written approval; or (iv) improperly stored, installed, operated, or maintained in a manner inconsistent with Seller's instructions. This warranty does not apply to defects attributed to (i) normal wear and tear or (ii) failure to comply with Seller's safety warnings.

No warranty for any parts or other supplies provided to seller by buyer, whether or not they are incorporated into goods. Goods supplied by seller which are designed or manufactured by a third party are subject strictly to the third party's warranty for those goods. Seller makes no warranty and disclaims all statutory or implied warranties for these goods, including the implied warranties of merchantability, freedom from patent infringement and fitness for a particular purpose.

Neither this warranty nor any other warranty, expressed or implied, including implied warranties of mechanical ability, fitness for a particular use, or merchantability, shall extend beyond the warranty period. No responsibility is assumed for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitations incidental or consequential damages, so the above limitation of exclusion does not apply to all Buyers. This warranty gives the Buyer specific legal rights. Other rights vary from state to state.

## **Warranty Claims and Remedies**

Buyer must promptly notify Seller in writing during the applicable warranty period, of any defective Goods covered by Seller's warranties under the Limited Warranty section herein, and no later than fifteen (15) calendar days after discovery of the defect. Seller has no obligation to honor any warranty claim made after the expiration of the warranty period. However, despite the expiration of the warranty period, Seller, at its reasonable discretion, may accept warranty claims submitted up to fifteen (15) calendar days after the expiration of the warranty period provided that Buyer provides Seller with credible and persuasive documentary evidence that the defect was discovered during the warranty period. No warranty claims submitted after this fifteen (15) day calendar period will be considered by Seller.

Buyer's notice of a defective Goods must identify the specific Goods affected, and the nature of the defect. It is required when returning the defective Goods, that it is suitably packed, fully insured, and transportation and insurance prepaid in accordance with instructions issued by Seller. Seller, at its sole option, will either repair or replace any Goods authorized for return to Seller. Such repair, replacement, or credit shall be Buyer's sole remedy for defective Goods. Buyer must promptly provide Seller with all information requested regarding the identified defect.

If the defect claimed by Buyer cannot be reproduced or otherwise verified by Seller, the Goods will be returned to Buyer unmodified at Buyer's expense.

The warranty period for repaired or replaced Goods shall be (i) ninety (90) days or (ii) the unexpired portion of the original warranty period. Under no circumstances is Seller liable for recall, retrieval, removal, dismantling, re-installation, redeployment, or re-commissioning of any defective Goods or any costs associated therewith.

## Tool Bit Resharpener Policy

Buyer is required to check all tool bits prior to returning and ensure they are packaged well for shipment. The price structure is available from the Seller's sales coordinator. Seller cannot sharpen badly gouged, chipped, or broken tool bits. Seller will return tool bits that are not suitable for sharpening with the tool bits that were sharpened upon Buyer's request. Buyer is responsible for all shipping charges to and from Seller.



# 1. ABOUT THE MANUAL

## Copyright

©Copyright Tri Tool Inc. Proprietary property of Tri Tool Inc. No reproduction, use, or duplication of the information shown hereon is permitted without the express written consent of Tri Tool Inc.

## Disclaimer

The instructions and descriptions in this manual were accurate when the manual was written. However, the information in the manual is subject to change without notice. Check for updated information before you start any job. The Tri Tool Inc. web site has the most current information.

Do not operate or work on this equipment unless you have read and understood the instructions in this Manual. Failure to follow the instructions or follow the safety instructions could result in serious injury or death. This manual describes conditions and hazards that are common and anticipated during equipment operation. No manual can address all conditions which may occur.

## Safety Symbols

The manual may contain one or more safety symbols. These symbols and the associated text warn you of potentially hazardous conditions. Examples of the safety symbols and the associated text follow:



**DANGER**

**DANGER:** Indicates a hazardous situation that, if not avoided, will result in serious injury or death.



**WARNING**

**WARNING:** Indicates a hazardous situation that, if not avoided, could result in serious injury or death.



**CAUTION**

**CAUTION:** Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury, or cause property damage.



GLASSES

**SAFETY GLASSES:** Indicates a hazardous situation that requires the use of safety glasses.



HOT SURFACE

**HOT SURFACE:** Indicates a hazardous situation that hot surfaces may be present.



GLOVES

**GLOVES:** Indicates a hazardous situation that requires gloves.



SHOCK HAZARD

**ARC FLASH & SHOCK HAZARD:** High voltage. Entry by authorized personnel only. Appropriate PPE and tools required when working on this equipment.

## 2. SAFETY PRECAUTIONS

### In General

Use standard safety equipment such as: hard hats, safety shoes, safety harnesses, protective clothes, and other safety devices when appropriate.

Operate this tool only in accordance with specific operating instructions.



**WARNING:** Do not override the dead-man switch on the power unit. Locking down, obstructing, or in any way defeating the dead-man switch on the power drive unit may result in serious injury.

### Personal Protective Equipment

Use standard safety equipment such as: hard hats, safety shoes, safety harnesses, protective clothes, and other safety devices when appropriate.

Wear safety glasses.

Do not wear loose clothing or jewelry.

Wear nonskid footwear.

Put long hair in a cap or a net to make sure hair does not get tangled in equipment.

### Personnel

Only personnel who are trained or are being trained may operate the equipment.

Keep the operation manual available where the equipment is used.

The operator must read the operation manual before using the equipment.

The equipment must be operated in accordance with the manual information.

The operator must follow the safety precautions in this manual and good engineering practices to reduce the risk of injury.

Before using the equipment, the operator must ensure that all safety messages on the equipment are legible.

### Work Area

Keep the work area clean.

Keep the area well lit.

Keep items such as electrical cords, cables, rags, and rigging straps away from rotating equipment.



Do not use power-cutting tools in the presence of flammable liquids and gases.

Do not let visitors or untrained personnel near tools that are in use.

Ensure all observers wear eye protection.

Keep proper footing at all times.

## **Area Equipment**

Secure the pipe with clamps, vises, chains or straps.

Ensure that both sides of the pipe at the cut site is fully supported so that the pipe will not move after the cut is completed. Long lengths of pipe may be under load and the separation of the pipe can release pressure. This pressure can cause both sides of the pipe to move.

## **Tool Care**

Keep tools in good operating condition. Sharp tool bits perform better and are safer than dull tool bits.

Do not use damaged tools. Always check your tools for damage especially if a tool has malfunctioned, been dropped or hit, check it for damage.

Before you start operating the equipment, do no-load tests and feed function checks.

## **Tool Use**

Use the right tool and tool bit for the job. Contact Tri Tool to help with your application.

Keep the tool bits fully engaged in the tool bit holders. Loose bits are sharp and can cause cuts or punctures.

Disconnect power supply during setup and maintenance. Use all 'Stop' or Shut off' features available when changing or adjusting tool bits, maintaining the tool, or when the tool is not in use.

Remove adjusting keys and wrenches before applying power to the equipment. Check the tool before turning it on to make sure that all keys and wrenches have been removed.

Do not force tools. Tools and tool bits function better and safer when used at the recommended speeds.

Do not reach into rotating equipment.

Do not reach into the rotating head stock to remove chips, to make adjustments, or to check the surface finish.

Handle chips with care. Chips have very sharp edges and are hot. Do not try to pull chips apart with bare hands.

Store tools properly. Disconnect tools from the power source, remove the tool bits, and store in a safe place.

### 3. GENERAL DESCRIPTION

The Model 572AC SEVERMASTER™ severs 1/4" to 2" (6.35 mm to 50.80 mm) diameter tubes and thin wall pipes within the size range.

The Model 572AC accepts its own torque through the Collet clamping system.

The Collet provides accurate centering and full diameter support for minimum distortion of thin wall tubing.

This machine enhances productivity by incorporation of an Auto-Cycle Tool Module and a Quick Lock Collet Closure. The Quick Lock Collet Closure mechanism actuates the Collet with a single lever stroke and provides for simple Collet changes.

The Auto-Cycle Tool Module incorporates a cam cycle tool bit feed mechanism. It automatically returns the tool bit to the home position ready to start the next cut.

The tool module also allows setting the start and finish cut position to minimize the cycle time.

The feed increment per revolution is adjustable to match the cutting relative to the material.

A variable speed motor provides cutting speed control for tool bit life and ID burr condition.

Gear driven powerhead rotates on a precision cross roller bearing.

Gears are enclosed for operator safety.

Tool bit options are available to minimize the burr on either of the mounting side or the drop-off side of the sever line and in different edge widths to match the tube wall thicknesses.

The Model 572AC also incorporates mounting features that allow the use of an SQM-1AC Tube Squaring Module for optimum burr free ends.

Model 572AC SEVERMASTER™ System, consists of the mainframe with the Quick Lock Collet Closure, Auto-Cycle Tool Module with adjustable depth of feed from .001" to .005" (.02 mm to .13 mm) per revolution, drive motor, wrench kit, operation manual and carrying case.

## 4. SPECIFICATIONS

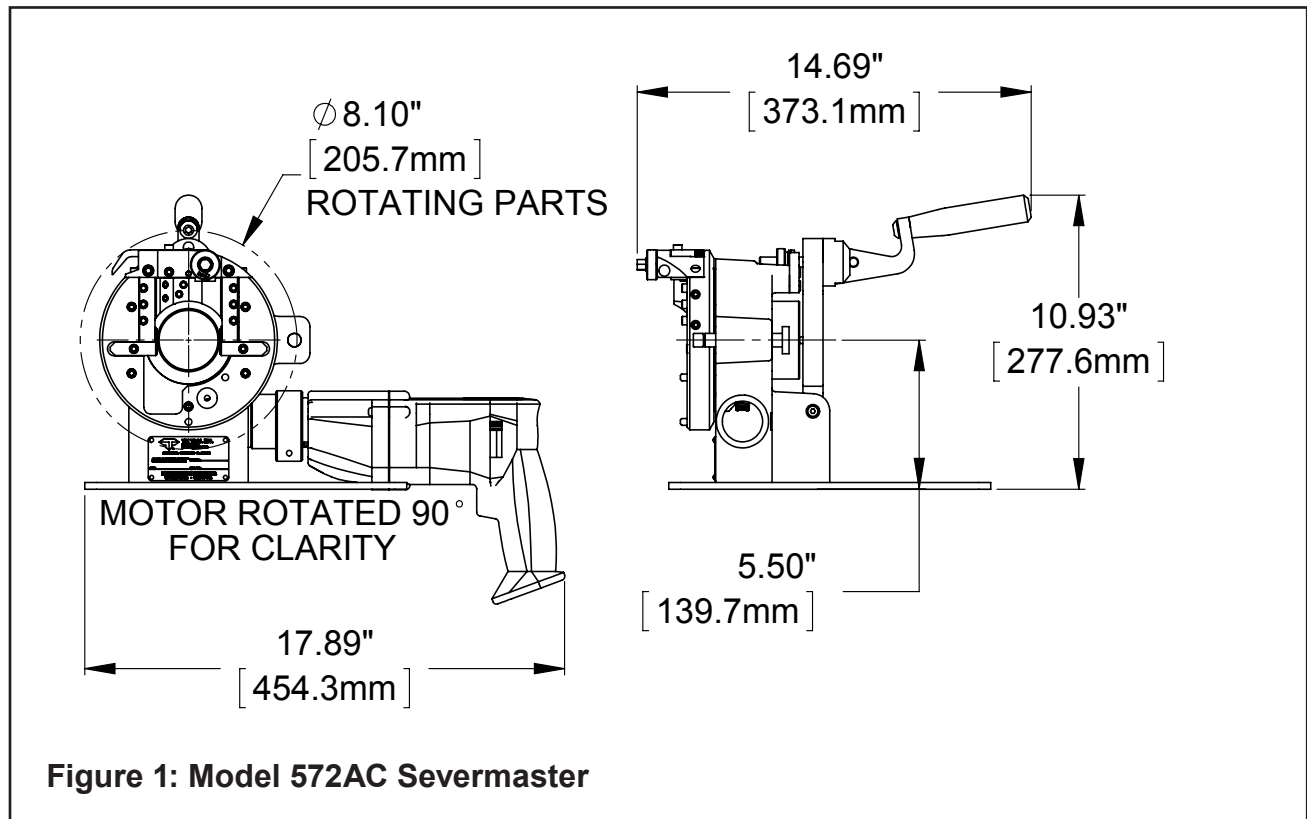


Figure 1: Model 572AC Severmaster

### Weight

29.0 lbs. (13.1 kg)

### Power Requirements

115 vac, 28 to 60 hz, 5.25 amp

230 vac, 50/60 hz

### Cutting Capacities

#### Basic Pipe Sizes

1/8" through 3/8" All Schedules

1/2" and 3/4" Schedules 5 through 40

1.00" through 1-1/2" Schedules 5 & 10

#### Basic Tube Sizes

.25" (6.4mm) through 2.00" (50.8mm) with wall thickness up to .125" (3.2 mm)

### **Material Cutting Capacities**

Mild steels, chrome steels (Rc 35 maximum), stainless steel, copper-nickel and aluminum without limitations except size and wall thickness as specified.

Inconel and some other high temperature alloys may require special procedures as a function of wall thickness and type of end preparation.

Contact the Tri Tool Inc. engineering department for details.

### **Mounting**

Manually actuated draw rod expands the mandrel ramps and the jaw blocks 162 rpm.

### **Drive System**

Electric - Standard

Pneumatic - Available on request

### **Speed**

Cutting Head Maximum (Electric)

Low - 60 RPM

High - 120 RPM

### **Feed**

Autofeed system adjustment from .001" (.02 mm) to .005" (.13 mm).

## 5. INSTALLATION



**WARNING**

**WARNING:** Make sure that the Model 572AC is disconnected from its power source before you install a tool bit.

### Install a Collet into the Model 572AC

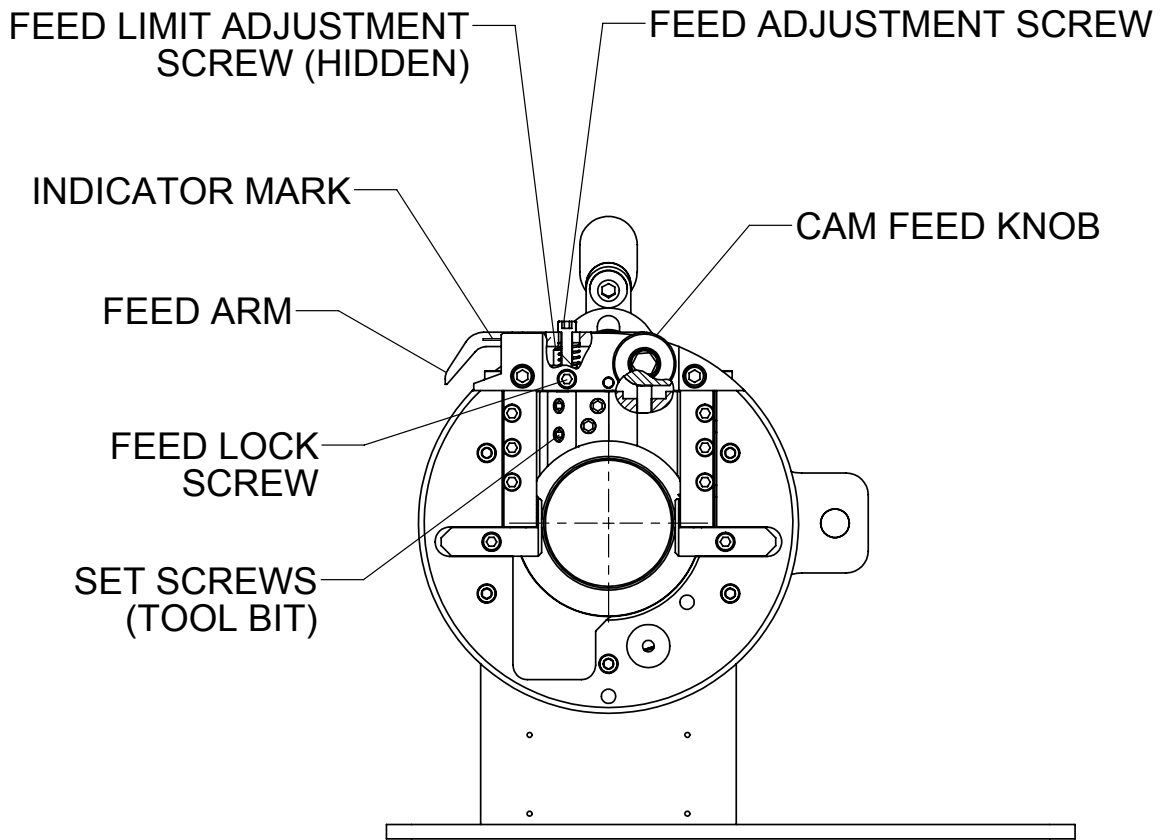
1. Install a Collet into the Model 572AC. Refer to Fig. 2.
2. Insert a tube into the Collet and bring it flush to the front of the Collet and clamp the tube in place.
3. Rotate the cam feed knob counter-clockwise with a 3/8" wrench, so that the scribe mark points to the bottom (this will place the tool holder to the end of the feed). The cam can only rotate in the direction noted on the knob with an arrow.
4. Slide a tool bit into the tool slot until the end of the cutting edge of the tool bit passes the ID of the tube by approximately .020" (.51 mm).



**CAUTION**

**CAUTION:** Make sure that the tool bit is not installed backwards. If it is backwards it will not cut and may damage the tool bit.

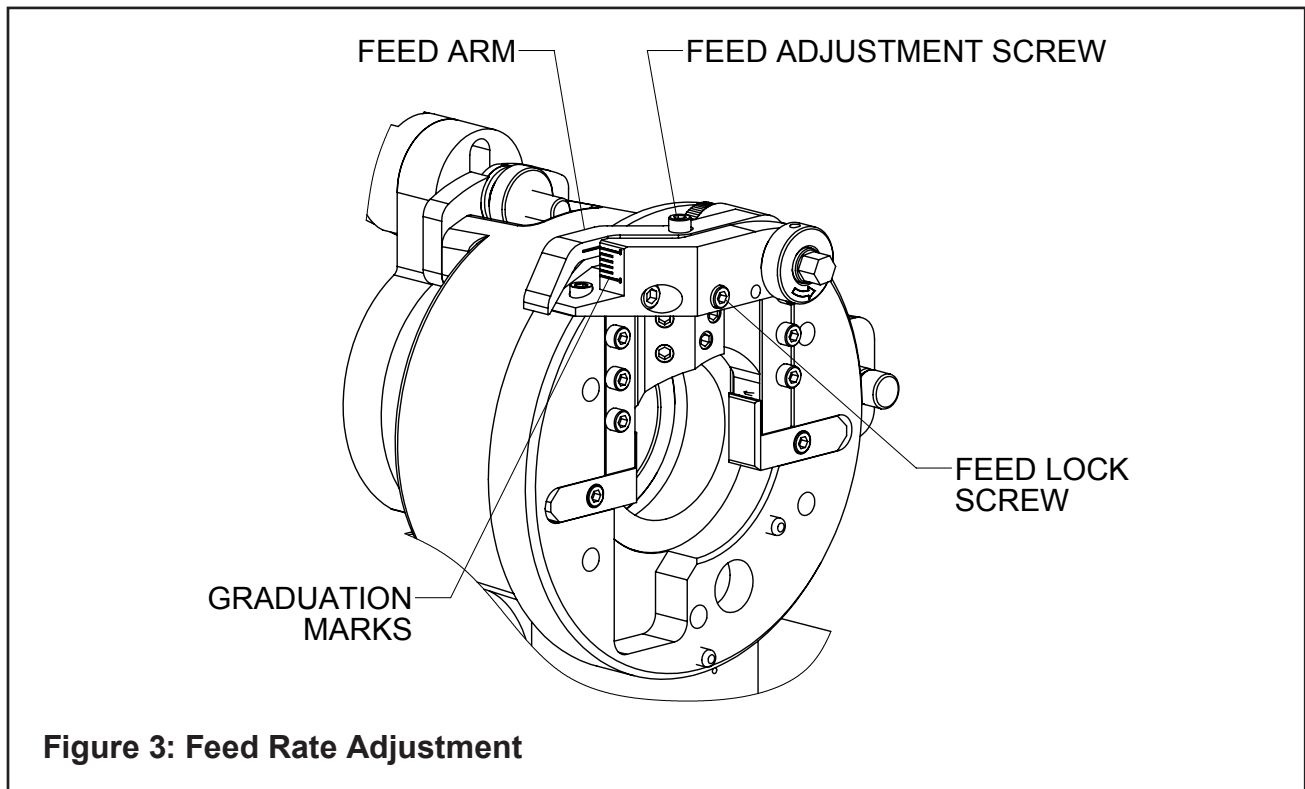
5. Secure the tool bit in place by tightening the four set screws in the tool holder.
6. Rotate the cam feed knob until the tool holder returns to top of its travel.
7. Screw in the feed limit adjustment screw until the end of the cutting edge of the tool bit just clears the OD of the tube.
8. Rotate the cam feed knob counter-clockwise to pick up the feed slack.
9. Loosen the Collet and re-position the tube to sever.



**Figure 2: Features of the Model 572AC**

## Adjust the Feed Rate

1. Loosen the feed lock screw. Refer to Fig. 3.
2. Rotate the feed adjustment screw and read the feed rate graduations to find the desired feed rate. Try several feed rates to maximize the efficiency and tool bit life.
3. A feed rate of .002" (.05 mm) to .003" (.08 mm) will accommodate most tube materials.
4. When the desired feed rate is set, tighten the feed lock screw. (Do not over tighten.)



## 6. OPERATION

### Insert the Collet

1. Select the Collet, for the pipe or tube to be worked on, Refer to Section 9, Collets.
2. Raise the handle to release pressure on the check nut.
3. Rotate the check nut until the eyebolt can be raised out of the slot, and then rotate the hinge bracket back and down.
4. Remove the pusher sleeve from the main housing.
5. Remove the Collet, if there is one, from the main housing.
6. Wipe the internal contact surface clean before inserting another Collet into the main housing.
7. Insert the desired Collet into the main housing and then slide the pusher sleeve back into the main housing and into contact with the Collet.
8. Rotate the hinge bracket back up and let the eyebolt drop back into the slot.
9. Rotate the check nut on the eyebolt to secure in the slot.

### Machining Operation

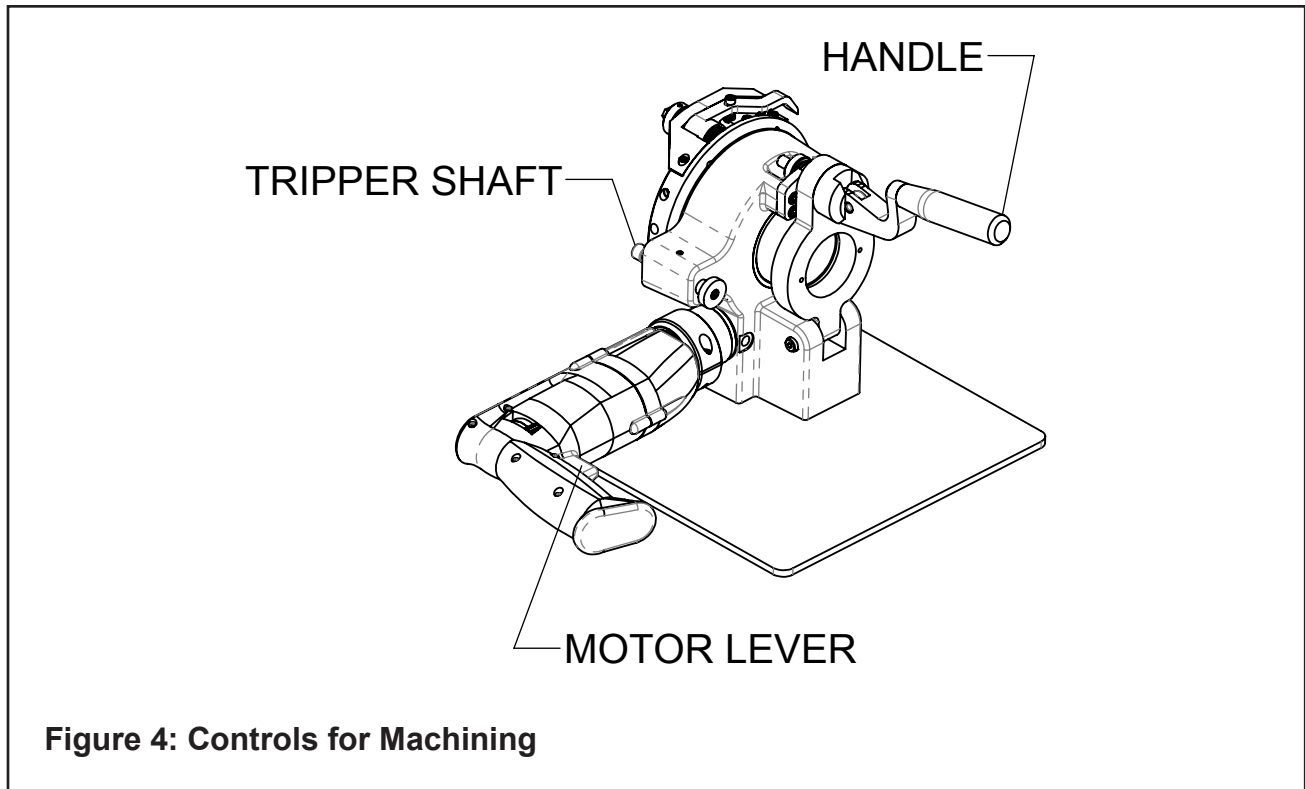
#### Turn the motor on

Press the lever to turn the motor on to full speed. See Fig. 4.

- Use the low speed setting for 1.00" (25.4 mm) to 2.00" (50.8 mm) DIA tubes.
- Use the high speed setting for .25" (6.4 mm) to 1.00" (25.4 mm) DIA tubes.

Push the tripper shaft in to engage the feed. The machine operation is finished when the tool holder returns home.





### Post Machining Procedure

1. Release the lever to turn the motor off.
2. Loosen the Collet by rotating the handle up.
3. Remove the pipe or tubing from the Model 572AC.
4. The tool holder will retract automatically in five to ten revolutions. There is an audible 'snap' when the tool holder returns to the home position.
5. Observe the relationship between the pipe or tube and the tool bit.
6. The tool holder may be reset quickly by hand by rotating the cam feed knob to pick up the feed slack.
7. It is not necessary to disengage the tripper shaft after each cutting operation.
8. Remove debris from the cutting head to maintain tool life.

## 7. CUTTING SPEEDS AND FEEDS

### Approximate Cutting Speeds

Use the table to find the cutting speed for a specific tube.

Tube Size		RPM for 200 in/min (5080 mm/min)	RPM for 250 in/min (6350 mm/min)	RPM for 300 in/min (7620 mm/min)
.25"	6.4 mm	255	318	382
.38"	9.5 mm	169	209	251
.50"	12.7 mm	127	159	191
.75"	19.1 mm	85	106	127
1.00"	25.4 mm	64	80	95
1.50"	38.1 mm	42	53	64
2.00"	50.8 mm	32	40	48

Use 200 surface inches per minute (5080 surface millimeters per minute) for:

- Stainless steels in general when no coolant is allowed, all heavy-wall tube and some chrome/molybdenum steels.

Use 250 surface inches per minute (6350 surface millimeters per minute) for:

- Mild steels and some thin-wall stainless steels when coolants are permitted and applied.

Use 300 surface inches per minute (7620 surface millimeters per minute) for:

- Aluminum and some thin-wall mild steel and tube with coolants.

### Feed Recommendations

Use very light feed for initial facing or until a continuous cut is established. This is important for long tool bit life.

Use a feed rate of .002" (.05 mm) to .003" (.08 mm) per revolution after a continuous cut is established.

Use a feed rate of at least .003" (.08 mm) to .005" (.13 mm) per revolution for work hardened surfaces.

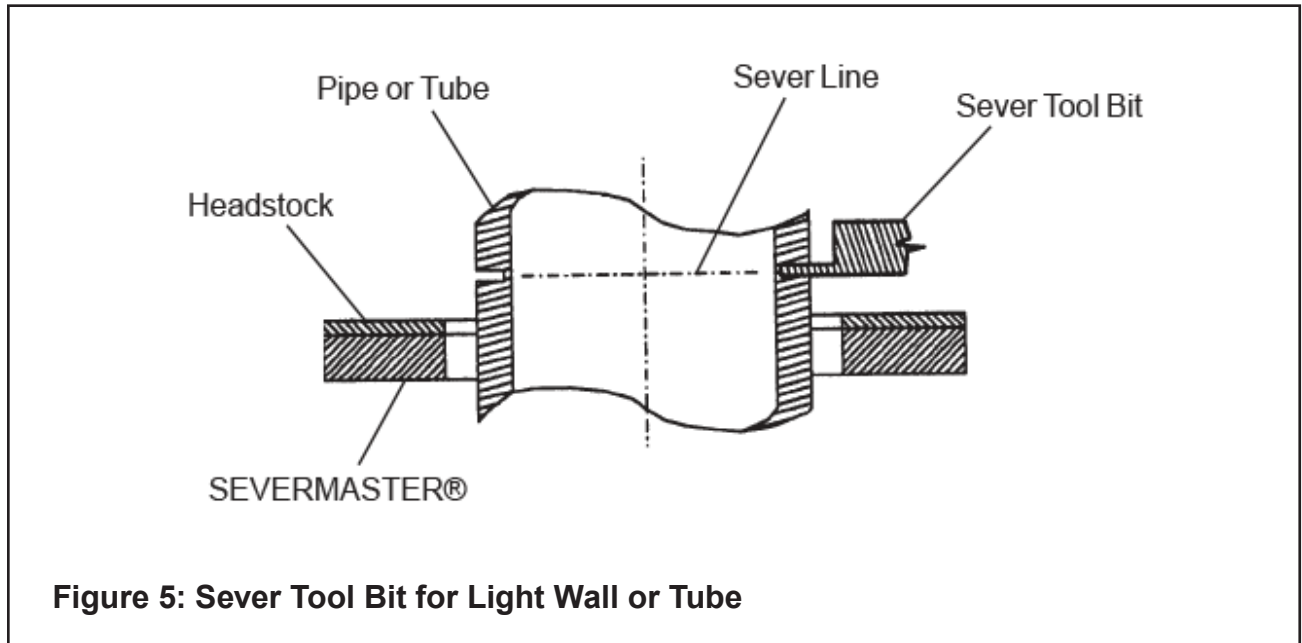
If the feed is too light, only light stringer chips will be removed. If the feed is too heavy, the drive will start to overload and the chip will start to have a rough or torn appearance.

Stainless steel, which work hardens, must be worked with a heavy enough feed to stay under the work hardened surface

Never allow the tool bit to burnish the surface.

Reduced feeds and speeds usually minimizes chatter problems.

## 8. TOOL BITS



Range	Max. Wall Thickness	Pipe or Tube Material	Sever Tool Bit P/N
1/8" thru 3/8" pipe	Sch All	CS, SS	99-2959
1/2" and 3/4" pipe	Sch 5 thru 40		
1" thru 1-1/2" pipe	Sch 5 & 10		
1/4" dia thru 2" dia tube	.125"		
6.4 mm dia thru 50.8 mm dia	3.2 mm		
Note: A burr will be left on the side opposite from the headstock.			
1/8" thru 3/8" pipe	Sch All	CS, SS	99-3036
1/2" and 3/4" pipe	Sch 5 thru 40		
1" thru 1-1/2" pipe	Sch 5 & 10		
1/4" dia thru 2" dia tube	.125"		
6.4 mm dia thru 50.8 mm dia	3.2 mm		
Note: A burr will be left on the same side as the headstock.			

## 9. COLLETS

Use the outside diameter of the tube or pipe to determine the Collet size.

<b>Decimal Inches</b>	<b>mm Equiv.</b>	<b>Part No.</b>	<b>Decimal Inches</b>	<b>mm Equiv.</b>	<b>Part No.</b>
0.250	6.35	30-2394	0.563	14.30	30-2419
0.276	7.00	30-2395	0.591	15.00	30-2420
0.281	7.14	30-2396	0.594	15.08	30-2421
0.313	7.95	30-2397	0.602	15.29	30-2422
0.315	8.00	30-2398	0.625	15.88	30-2423
0.344	8.74	30-2399	0.630	16.00	30-2424
0.354	9.00	30-2400	0.641	16.27	30-2425
0.359	9.13	30-2401	0.656	16.66	30-2426
0.375	9.53	30-2402	0.669	17.00	30-2427
0.394	10.00	30-2403	0.675	17.15	30-2428
0.400	10.16	30-2404	0.677	17.20	30-2429
0.406	10.31	30-2405	0.681	17.30	30-2430
0.413	10.50	30-2406	0.688	17.48	30-2431
0.422	10.72	30-2407	0.709	18.00	30-2432
0.433	11.00	30-2408	0.718	18.24	30-2433
0.438	11.13	30-2409	0.750	19.05	30-2434
0.469	11.91	30-2410	0.781	19.84	30-2435
0.472	12.00	30-2411	0.787	20.00	30-2436
0.500	12.70	30-2412	0.813	20.65	30-2437
0.512	13.00	30-2413	0.840	21.34	30-2438
0.531	13.50	30-2414	0.844	21.44	30-2439
0.540	13.72	30-2415	0.854	21.70	30-2440
0.543	13.80	30-2416	0.859	21.83	30-2441
0.547	13.89	30-2417	0.866	22.00	30-2442
0.551	14.00	30-2418	0.875	22.23	30-2443
0.906	23.00	30-2444	1.375	34.93	30-2464
0.938	23.83	30-2445	1.378	35.00	30-2465

<b>Decimal Inches</b>	<b>mm Equiv.</b>	<b>Part No.</b>	<b>Decimal Inches</b>	<b>mm Equiv.</b>	<b>Part No.</b>
0.969	24.61	30-2446	1.438	36.53	30-2466
0.984	25.00	30-2447	1.500	38.10	30-2467
1.000	25.40	30-2448	1.563	39.70	30-2468
1.024	26.00	30-2449	1.575	40.00	30-2469
1.050	26.67	30-2450	1.625	41.28	30-2470
1.063	27.00	30-2451	1.660	42.16	30-2471
1.071	27.20	30-2452	1.681	42.70	30-2472
1.102	28.00	30-2453	1.688	42.88	30-2473
1.125	28.58	30-2454	1.750	44.45	30-2474
1.142	29.00	30-2455	1.752	44.50	30-2475
1.181	30.00	30-2456	1.813	46.05	30-2476
1.188	30.18	30-2457	1.875	47.63	30-2477
1.250	31.75	30-2458	1.900	48.26	30-2478
1.260	32.00	30-2459	1.913	48.60	30-2479
1.313	33.35	30-2460	1.938	49.23	30-2480
1.315	33.40	30-2461	1.969	50.00	30-2481
1.327	33.70	30-2462	2.000	50.80	30-2482
1.339	34.00	30-2463			

## 10. MAINTENANCE

### Routine Maintenance

#### Daily

- Wipe the unit down and spray with a rust preventative under severe humid conditions.
- Coat all components with a light film of oil before and after use. Use a clean, non-detergent oil, preferably SAE 10 (90SSU) or lighter.
- Inspect the SEVERMASTER for loose or missing screws, damage or other problems before and after use.
- Remove remove the chips and other debris after each cut. The tool life may be severely shortened, if chips and/or other debris are not removed.

#### After 20 Hours of Operation

- Lubricate the male and female tool holder slides.

#### Storage

- If the Model 572AC is to be stored or out of service for 30 days or more—thoroughly clean it, lubricate it and spray it with a with a rust preventative.

### Tool Holder Maintenance

- Clean the slide rails, the tool holder, and the feed components.
- Inspect these parts for damage and replace as required.
- Lubricate and reassemble the slide rails.
- Adjust the adjustable slide rail to provide a firm, but not excessive pressure on the tool holder.
- The slide rails must be over tightened to squeeze the oil into a thin film against the male and female surfaces of the slide rails.
- Reset for operation.

## **Tripper Bracket Lubrication and Adjustment**

- Back off the half-dog set screw until it disengages from the tripper shaft.
- Remove the tripper shaft assembly from the bracket and clean off all of the old lubrication.
- Apply fresh lubrication to the tripper shaft assembly and reinstall it in the bracket.
- Screw in the half-dog set screw until it locates itself in the slot on the tripper shaft.
- Try turning the tripper shaft assembly to ensure that the set screw is in the slot of the tripper shaft assembly and is preventing it from rotating.

## **Lubrication Recommendations**

- The drive gears require a heavy duty grease such as Chevron Ultra Duty Grease, ER, NLGI2.
- The slide rails and tool holder require a light oil such as SAE 10 light machine oil.
- The tripper bracket assembly also requires a SAE 10 light machine oil for normal conditions and under dusty conditions a silicone, graphite or molybdenum disulfide 'dry' lubricant.
- A light film of all-purpose grease may be used, but it must be used, but check it for grit contamination frequently.

## 11. SPARE PARTS

Parts List, Recommended Spare Parts for the Model 572AC

<b>Item No</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
1.	28-0260	O-RING, SMALL	1
2.	28-0261	O-RING, LARGE	1
3.	40-0236	SPRING, COMPRESSION, .25" DIA	3
4.	32-0497	PIN, STOP	1
5.	33-0514	SCREW, SET, 5/16-18 X 3/8", CUP PT	2
6.	33-1986	SCREW, SET, 5/16-18 X 1/2", CONE PT	2



## 12. TROUBLESHOOTING

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**Problem: Tool Bit Chatters**

- The tool bit is loose or overextended.
  - The tool bit is damaged.
  - The tool holder is too loose in the slides.
  - The cutting speed is too fast.
  - The clamping pads are loose on the pipe or tube.
  - Cutting fluid is required.
  - The main bearing pre-load is loose.
- 

**Problem: Excessive Tool Bit Wear**

- The pipe or tube material is too hard or abrasive.
  - The cutting speed is too fast.
  - Cutting fluid is required.
  - A dull Tool Bit is causing surface hardening conditions (Stainless pipe or tubing).
  - There is scale or other foreign matter on the pipe or tube, which is dulling the tool bit at the start of the cut.
  - The tool bit is incorrect for the material being cut.
- 

**Problem: Rough Surface Finish**

- The tool bit is dull, chipped, etc.
  - Metal build-up on the cutting edge of the tool bit is creating a false cutting edge.
  - Cutting fluid is required.
  - The cutting speed is incorrect.
- 

**Problem: Tool Holder is not Feeding**

- The feed pin is broken or out of position.
  - The feed sprocket shear pin is broken.
  - The feed screw is stripped.
  - The feed nut is stripped.
  - The slide rails are too tight.
- 

**Problem: Tool Bit does not Reach the Work**

- Incorrect tool blocks are installed for the size of the pipe or tube being worked on.
- Incorrect tool bit is installed.

**Problem: Loss of Air Power**

The air supply pressure is too low.

The air filter is plugged.

The air line size is insufficient.

The air line is too long.

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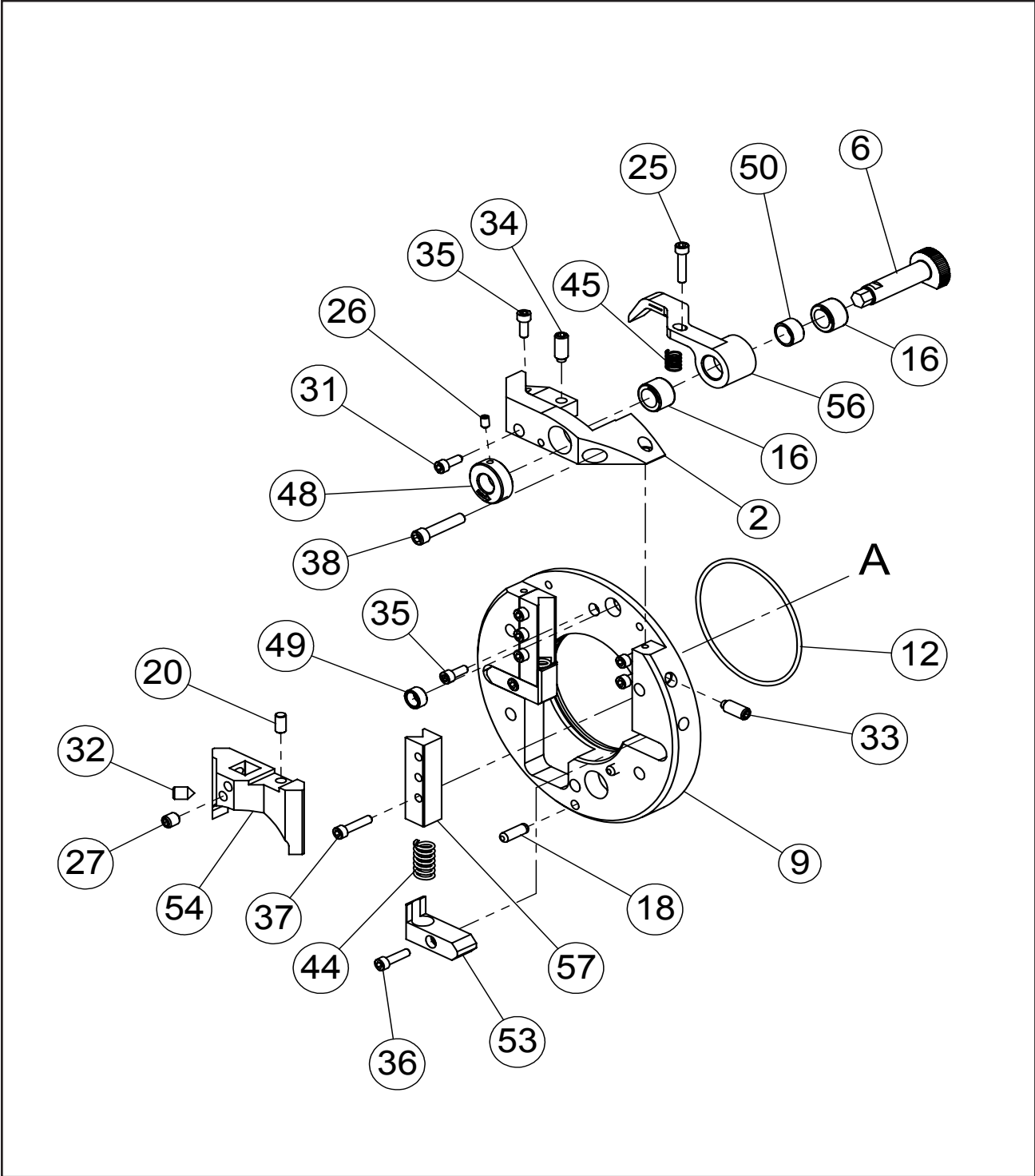
**Problem: Tool Bit does not Reach the Work**

Incorrect tool blocks are installed for the size of the pipe or tube

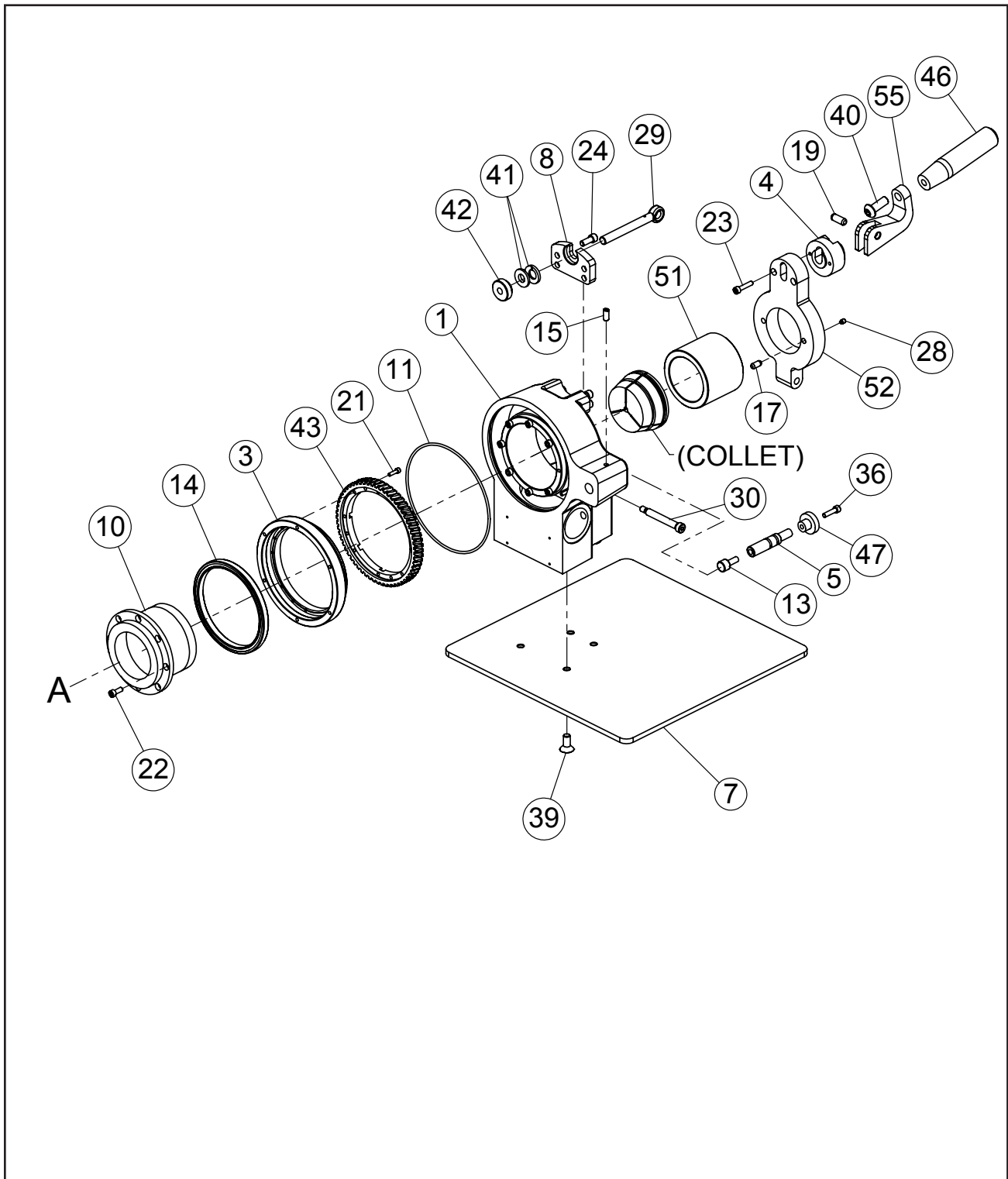
Incorrect tool bit is installed.

### 13. ILLUSTRATED PARTS BREAKDOWN

MODEL 572AC SEVERMASTER SUB-ASSEMBLY 1 of 2 (P/N 02-3019)



**MODEL 572AC SEVERMASTER SUB-ASSEMBLY 2 of 2 (P/N 02-3019)**



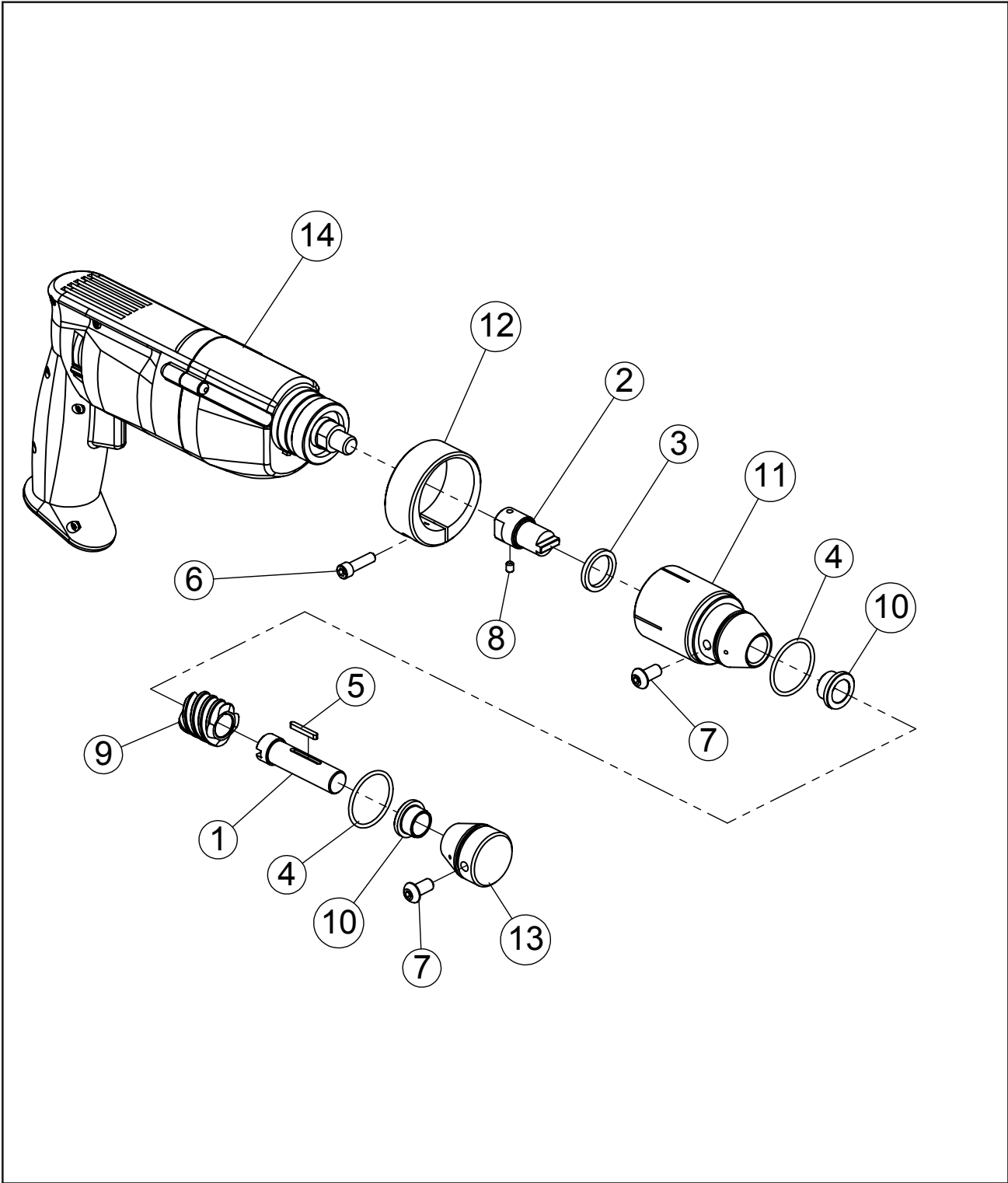
## Parts List, Model 572AC SEVERMASTER Sub-Assembly (P/N 02-3019)

Item No	Part No.	Description	Qty
1.	19-0759	HOUSING, MAIN	1
2.	19-0761	HOUSING, FEED	1
3.	20-0632	SHAFT, MAIN	1
4.	20-0633	SHAFT, CLAMP	1
5.	20-0637	SHAFT, TRIPPER	1
6.	20-0902	SHAFT, CAM,572AC (.208")	1
7.	24-1479	PLATE, STAND	1
8.	24-1481	PLATE, CLAMP	1
9.	24-1482	PLATE, MAIN	1
10.	27-0556	ADAPTER, COLLET	1
11.	28-0256	O-RING,5.237"ID X .103"W	1
12.	28-0257	O-RING,3.237"ID X .103"W	1
13.	29-0031	CAM FOLLOWER, 1/2"OD X 3/8"	1
14.	29-0348	BEARING,RLLR,10MM X 116MM X 8	1
15.	30-0125	PLUNGER, BALL, 1/4-20 X 17/32	1
16.	30-2490	CLUTCH, ROLLER, 1/2"ID	2
17.	32-0116	PIN, DOWEL, 1/4" DIA X 1/2"	2
18.	32-0140	PIN, DOWEL, 1/4" DIA X 3/4"	2
19.	32-0495	PIN, DOWEL, 5/16" DIA X 3/4"	1
20.	32-0497	PIN, STOP	1
21.	33-0013	SCREW, CAP, #6-32 X 1/2"	8
22.	33-0028	SCREW, CAP, #10-24 X 1/2"	8
23.	33-0031	SCREW, CAP, #10-24 X 7/8"	2
24.	33-0039	SCREW, CAP, 1/4-20 X 5/8"	4
25.	33-0203	SCREW, CAP, #10-32 X 7/8"	1
26.	33-0489	SCREW, SET, #10-24 X 5/16", CUP PT	1
27.	33-0514	SCREW, SET, 5/16-18 X 3/8", CUP PT	2
28.	33-0954	SCREW, SET, #10-24 X 1/4", HDOG	2
29.	33-1391	EYEBOLT, 3/8-16 X 3"	1
30.	33-1979	SCREW, SHLDR, 5/16" X 2"	1
31.	33-1985	SCREW, CAP, 10-32 X 1/2" BRASS TIP	1
32.	33-1986	SCREW, SET, 5/16-18 X 1/2", CONE PT	2
33.	33-1987	SCREW, SET, 5/16-18 X 3/4", HDOG	2

Parts List, Model 572AC SEVERMASTER Sub-Assembly (P/N 02-3019)

Item No	Part No.	Description	Qty
34.	33-1998	SCREW, SET, 5/16-18 X 3/4", HD, LOCK	1
35.	33-2000	SCREW, CAP, SS, #10-24 X 1/2"	8
36.	33-2001	SCREW, CAP, SS, #10-24 X 3/4"	3
37.	33-2002	SCREW, CAP, SS, #10-24 X 7/8"	6
38.	33-2003	SCREW, CAP, SS, 1/4-20 X 1 1/4"	2
39.	33-2005	SCREW, FLAT HEAD, SS, 5/16-18 X 3/4"	4
40.	33-2006	SCREW, BUTTON HEAD, SS, 3/8-16 X 1"	1
41.	34-0134	WASHER SET, SELF ALIGN, 3/8"	1
42.	35-0139	NUT, CHECK	1
43.	39-0805	GEAR, WORM, 60T	1
44.	40-0233	SPRING, COMP, HD, 1/2" OD X 1" LG	2
45.	40-0246	SPRING, COMP, 3/8" OD X 1/2"	1
46.	41-0125	HANDLE	1
47.	42-0023	KNOB	1
48.	42-0171	KNOB, FEED SHAFT	1
49.	45-0260	BUSHING, BRONZE, 3/8" X 1/2" X 1/4" L	1
50.	45-0261	BUSHING, BRONZE, 1/2" ID X 5/8" OD X 3/8" L	1
51.	46-0439	SLEEVE, PUSHER	1
52.	47-1099	BRACKET, HINGE	1
53.	48-1017	BLOCK, SPRING	2
54.	48-1018	BLOCK, MODULE, TOOL	1
55.	62-0106	CAM, CLAMP	1
56.	63-0137	ARM, FEED	1
57.	66-0159	RAIL, SLIDE	2

**ELECTRIC MOTOR ASSEMBLY (P/N 58-0276)**



Parts List, Electric Motor Assembly 110VAC (P/N 58-0276)

Item No	Part No.	Description	Qty
1.	20-0617	SHAFT, DRIVE	1
2.	20-1468	SHAFT, DRIVE	1
3.	28-0245	SEAL, GREASE	1
4.	28-0233	O-RING	2
5.	31-0115	KEY	1
6.	33-0041	SCREW, CAP, 1/4-20 X 7/8"	1
7.	33-0292	SCREW, BUTTON HEAD, 5/16-18 X 5/8"	2
8.	33-0619	SCREW, SET, #10-32 X 1/4", CUP PT	2
9.	39-0005	WORM	1
10.	45-0258	BUSHING, FLANGE	2
11.	46-0411	SLEEVE, MOTOR	1
12.	47-1111	BRACKET, CLAMP	1
13.	54-0347	PLUG	1
14.	58-0275	MOTOR, ELECTRIC, 110 VAC	1

Parts List, Electric Motor Assembly 220VAC (P/N 58-0080)

Item No	Part No.	Description	Qty
1.	20-0617	SHAFT, DRIVE	1
2.	20-0619	SHAFT, DRIVE	1
3.	28-0245	SEAL, GREASE	1
4.	28-0233	O-RING	2
5.	31-0115	KEY	1
6.	33-0041	SCREW, CAP, 1/4-20 X 7/8"	1
7.	33-0292	SCREW, BUTTON HEAD, 5/16-18 X 5/8"	2
8.	33-0619	SCREW, SET, #10-32 X 1/4", CUP PT	2
9.	39-0005	WORM	1
10.	45-0258	BUSHING, FLANGE	2
11.	46-0411	SLEEVE, MOTOR	1
12.	47-1111	BRACKET, CLAMP	1
13.	54-0347	PLUG	1
14.	58-0324	MOTOR, MOD., ELECTRIC, 220 VAC	1



## Parts List, Wrench Kit 572AC/576AC (P/N 05-1319)

<b>Item No</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
1.	36-0007	WRENCH, L, 5/23 HEX	1
2.	36-0008	WRENCH, L, 3/16 HEX	1
3.	36-0020	WRENCH, T, 5/23 HEX	1
4.	36-0052	WRENCH, COMBINATION, 3/8	1

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# WARNING



Read the manual and be familiar with all safety precautions before operating equipment. The following are general warnings for industrial equipment with moving parts. Refer to the manual for specific warnings applicable to your equipment.



**EYE HAZARD** - Always wear appropriate eye protection while operating the equipment.



**PINCH HAZARD** - Keep your hands and clothing away from moving parts.



**CRUSH HAZARD** - The machinery, pipe, or work piece can shift, separate, lurch, or fall.



**CHIP HAZARD** - Metal chips may be hot and sharp. Be careful when you clear the tooling path or clean up chips.



**TIE DOWN HAZARD** - Deliberate overriding of safety triggers can result in serious injury. Never lock or tie down any safety triggers.



**SHOCK HAZARD** - Ensure that the equipment is properly installed and grounded. Ensure that the equipment is not damaged and that the power cord is intact.

## OTHER HAZARDS

- Tool bits are sharp and can cause serious injury.
- Do not defeat or modify safety features.
- Disconnect power sources before servicing or moving the equipment.
- Remove all loose articles of clothing and jewelry before operating the equipment.

***Be Safety Conscious!***



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