Operation Manual

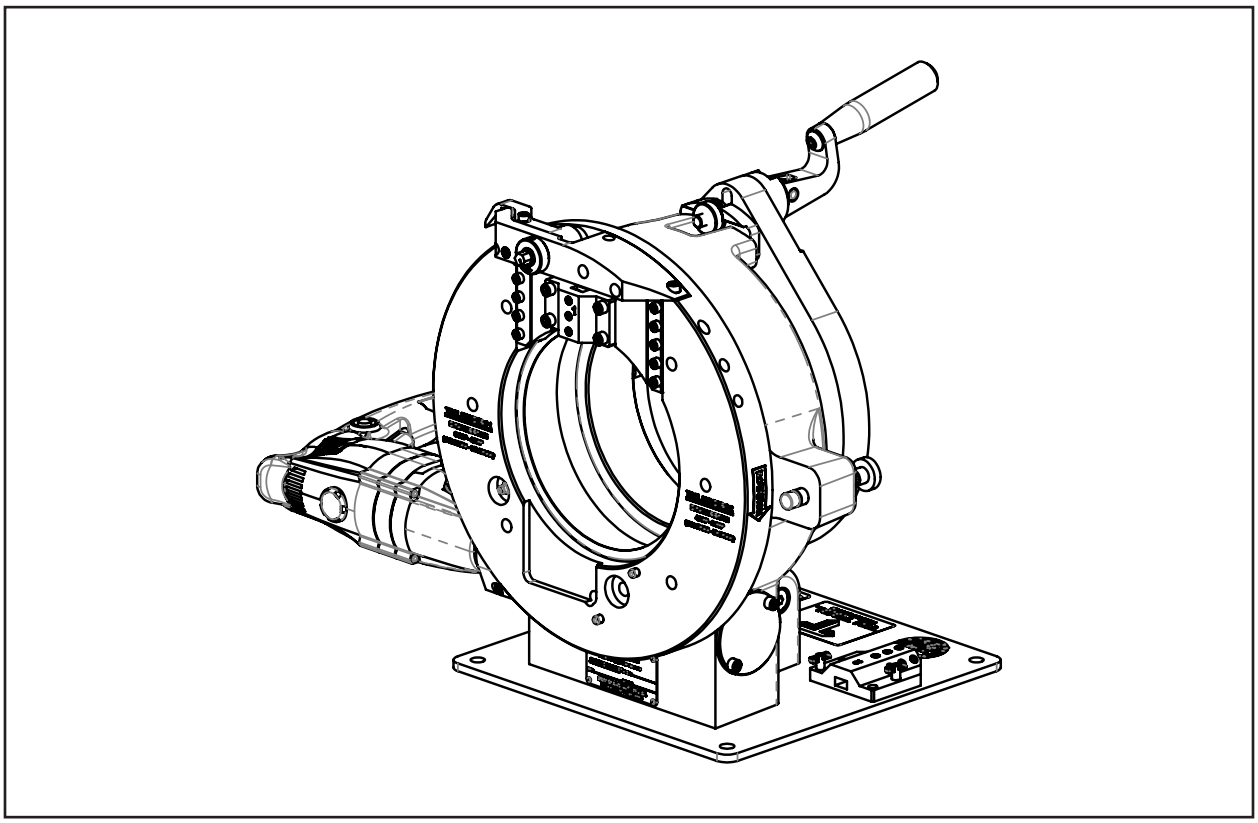
92-1924 Rev. 220714
Model 576AC SEVERMASTER™

TRI TOOL TECHNOLOGIES

ABOUT TRI TOOL TECHNOLOGIES

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 or contact our engineers at +1(916) 288-6100.



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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 Resharpening 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 resharpen badly gouged, chipped, or broken tool bits. Seller will return tool bits that are not suitable for resharpening with the tool bits that were resharpened, unless Seller is instructed otherwise. Buyer is responsible for all shipping charges to and from Seller.

1. ABOUT THE MANUAL

1.1 Copyright

1.2 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.

1.3 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.

2. SAFETY PRECAUTIONS

2.1 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

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.

2.2 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.

2.3 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.

2.4 Work Area

Keep the work area clean.

Keep the area well lit.

Keep items such as electrical cords, cables, rags, 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.

2.5 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.

2.6 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.

2.7 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 576AC SEVERMASTER™severs 2.00” to 6.63” (50.8mm to 168.3mm) diameter tubes and thin wall pipe within the size range.

This machine enhances productivity by incorporation of an Auto-Cycle Tool Module and Quick Lock Collet Closure.

The Auto-Cycle Tool Module incorporates a cam cycle tool bit feed mechanism which 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.

The Quick Lock Collet Closure mechanism actuates the collet with a single lever stroke and provides for simple collet changes.

Tool bit options are available to minimize the burr on either 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 576AC also incorporates mounting features to allow use of an SQM-2AC Tube Squaring Module for optimum burr free ends.

The Model 576AC 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” (.02mm to .13mm) per revolution, drive motor, wrench kit and operator’s manual.

4. SPECIFICATIONS

WEIGHT

90 lbs (40.8 kg)

MOUNTING

Manually actuated collet clamping system.

DRIVE SYSTEMS

Pneumatic	Available on request.
Electric	110 VAC, 50/60 Hz, 9.6 A 220 VAC, 50/60 Hz, 5.7A

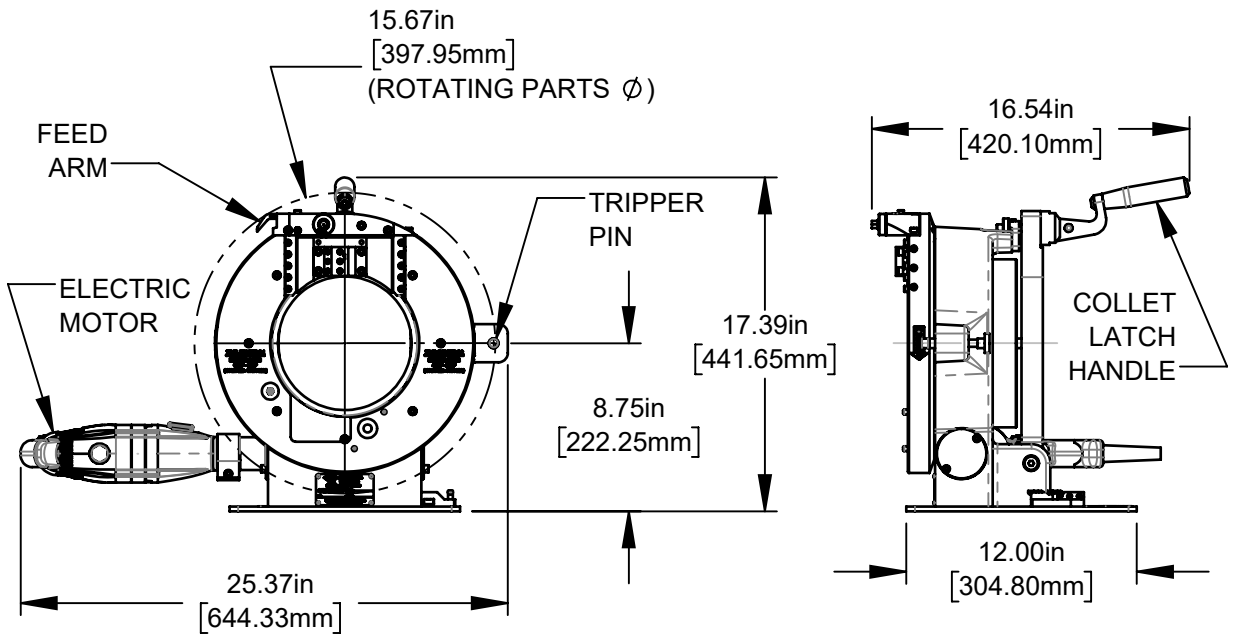


Figure: 1. Envelope Drawing

SPEED

Maximum cutting head free speed: (Electric) 77 RPM

FEED

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

DESIGN AND OPERATING FEATURES

The Model 576AC 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.

Gear driven powerhead rotates on a precision ball bearing system.

Single lever actuation of collet.

Gears are enclosed for operator safety.

The wrenches that are required for operation of the machine are supplied.

CUTTING CAPACITIES

Pipe Sizes

2" pipe - schedules 5 and 40.
2 1/2” through 6” pipe - schedules 5 and 10.

Tube Sizes

2.00" (50.8mm) through 6.63" (168.3mm) DIA. tubing.

Wall Thickness Capacity

Up to .156" (4.0mm) wall.

5. MAINTENANCE

All components should be cleaned and coated with a light film of oil prior to use. Use a clean, non-detergent oil, preferably SAE 10 (90 SSU) or lighter.

The air supply for the Model 576AC (pneumatic drive) should include an adequate filter, regulator and lubricator (FRL).

If the Model 576AC is operated in such a manner that the tool holder collect debris while cutting, the tool holder and the slides should be cleaned after each cutting operation.

Tool life may be severely shortened, unless chips and/or other debris that have been deposited on the cutting head during the machining operation are removed.

RECOMMENDED MAINTENANCE SCHEDULE

Daily

Wipe the unit down and spraying with rust preventative under severe humidity conditions.

Visually inspect for loose screws, missing screws, damage, etc.

Every 20 hours

Lubricate the male and female tool holder slides.

Every 40 hours

Thoroughly clean and lubricate main gear, drive gear, male and female tool slides, and tripper bracket assembly.

STORAGE

When the Model 576AC is to be stored or if it will remain out of service for a significant period of time (30 days or more), it should be thoroughly cleaned, lubricated and sprayed with a rust preventative prior to storage.

TOOL HOLDER

Clean the slide rails, the tool holder, and the feed components.

Inspect these parts for damage and replace as required.

Lubricate and reassemble.

Adjust the adjustable slide rail to provide a firm, but not excessive pressure on the tool holder.

The slide rails must be overtightened to squeeze the oil into a thin film against the male and female surfaces of the slide rails.

Reset for proper operation.

TRIPPER BRACKET ASSEMBLY LUBRICATION AND ADJUSTMENT

Back off the half-dog setscrew 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 setscrew until it locates itself in the slot on the tripper shaft.

Try turning the tripper shaft assembly to insure that the setscrew is in the slot of the tripper shaft assembly and is preventing it from rotating.

LUBRICANT RECOMMENDATIONS

The drive gears require a heavy duty grease such as “Chevron Ultra Duty Grease, EP, 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 checked for grit contamination frequently.

6. OPERATION

Read the operating instructions carefully before attempting to operate the Model 576AC SEVERMASTER™.

INSERTING THE COLLET

Select the desired size collet for the pipe or tube to be worked on.

Raise the handle to release pressure on the adjust nut.

Rotate the adjust nut until the eyebolt can be raised out of the slot and then the hinge bracket may be rotated back and down.

Remove the pusher sleeve from the main housing.

Remove the collet, if there is one, from the inside of the main housing.

Insert the correct collet into the main housing and then slide the pusher sleeve back into the main housing and into contact with the collet.

Rotate the hinge bracket back up and let the eyebolt drop back into the slot.

Rotate the adjust nut on the eyebolt to secure in the slot.

MOUNTING THE TOOL HOLDER

Select the tool holder which will allow the tool bit to reach the work surface.

Place the tool holder in the tool holder slot.

Insert the (4) four cap screws that hold the tool holder in place.

Mount tool holder #1 for tube ranging from 4.50” (114.3mm) to 6.625” (168.3mm).

Mount tool holder #2 for tube ranging from 2.00” (50.8mm) to 4.50” (114.3mm).

MACHINING INSTRUCTIONS

Turn the motor on to full speed by depressing On/Off trigger.

Engage the feed by pushing the tripper shaft in.

Monitor the cutting operation and apply cutting fluid as necessary.

The machine operation is finished when the tool holder returns home, release the trigger in order to turn off the motor.

Loosen the collet by rotating the handle up.

Remove the pipe or tubing from the Model 576AC.

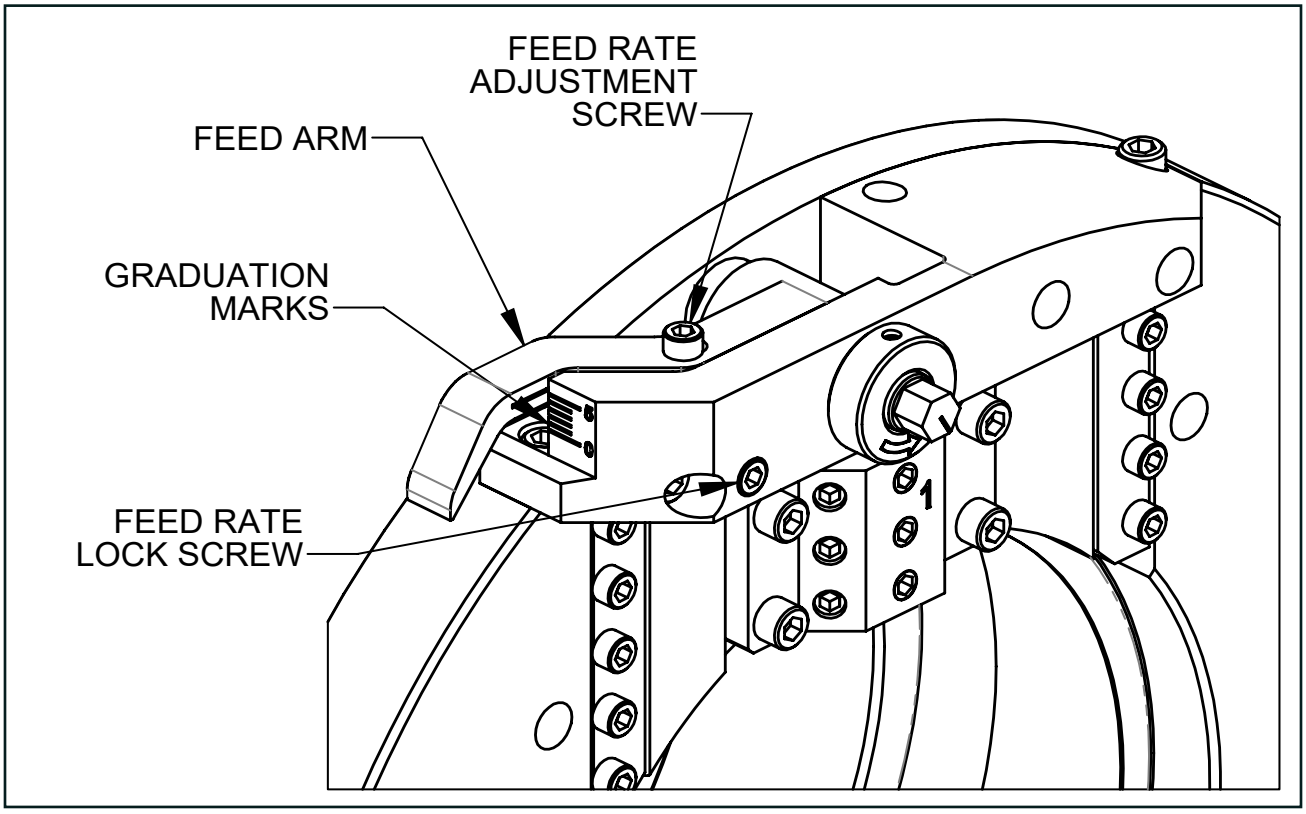
The tool holder will retract automatically in 5 to 10 revolutions.

There is an audible ‘snap’ when the tool holder returns to the home position.

Observe the relationship between the pipe or tube and the tool bit.

NOTE: The tool holder may be reset quickly by hand by rotating the cam feed knob to pick up the feed slack.

NOTE: It is not necessary to disengage the tripper shaft after each cutting operation.



7. CUTTING FEEDS AND SPEEDS

The table below shows RPM required to obtain a specified Tool Bit cutting speed on the surface of a pipe or tube.

Tube Size		Cutting Speeds Approximately		
		RPM for 200 in/mm (5080 mm/min)	RPM for 250 in/mm (6350 mm/min)	RPM for 300 in/mm (7620 mm/min)
2″	50.8 mm	32	40	48
3″	76.2 mm	21	26	32
4″	101.6 mm	16	20	24
5″	127.0 mm	13	16	19
6″	152.4 mm	11	13	16

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 alloys.

Use 250 surface inches per minute (6350 surface millimeters per minute) for mild steel and some thin wall stainless steel when coolant are permitted and used.

Use 300 surface inches per minute (7620 surface millimeters per minute) for aluminum and thin-wall mild steel tube with coolant.

CUTTING FEEDS

Use very light feed for initial severing or until a continuous cut is established.

Use a feed rate .002” (.05mm) to .003” (.08mm) per revolution once a continuous cut is established.

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 take on 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.

Feed at rate of at least .003” (.08mm) to .005” (.13mm) per revolution.

Never allow the bit to burnish the surface.

Reducing cutting feed and speed will normally minimize any chatter problems.

MATERIAL CUTTING CAPABILITIES

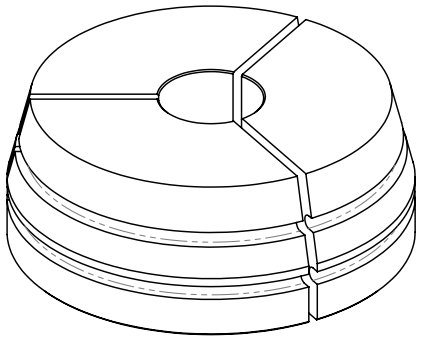
Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel and aluminum without limitations other than size and wall thickness as specified.

Inconel and some other high-temperature alloys may require special procedures as a function of wall thickness. Contact TRI TOOL INC’s Engineering Department for details.

8. COLLETS

NOTE: The size of the collet is determined by the outside diameter of the tube or pipe to be severed or squared.

Decimal Inches	mm Equivalent	Part Number
2.000	50.8	30-2558
2.008	51.0	30-2559
2.063	52.4	30-2560
2.125	54.0	30-2561
2.188	55.6	30-2562
2.240	56.9	30-2563
2.244	57.0	30-2564
2.250	57.2	30-2565
2.313	58.8	30-2566
2.375	60.3	30-2567
2.382	60.5	30-2568
2.438	61.9	30-2569
2.480	63.0	30-2570
2.492	63.3	30-2572
2.500	63.5	30-2573
2.563	65.1	30-2574
2.625	66.7	30-2575
2.688	68.3	30-2576
2.750	69.9	30-2577
2.795	71.0	30-2578
2.813	71.5	30-2579
2.875	73.0	30-2580
2.938	74.6	30-2581
2.992	76.0	30-2582
2.996	76.1	30-2583
3.000	76.2	30-2584



Decimal Inches	mm Equivalent	Part Number
3.004	76.3	30-2585
3.125	79.4	30-2586
3.250	82.6	30-2587
3.375	85.7	30-2588
3.500	88.9	30-2589
3.508	89.1	30-2590
3.625	92.1	30-2591
3.750	95.3	30-2592
3.875	98.4	30-2593
3.988	101.3	30-2594
4.000	101.6	30-2595
4.125	104.8	30-2596
4.250	108.0	30-2597
4.375	111.1	30-2598
4.500	114.3	30-2599
4.750	120.7	30-2600
5.000	127.0	30-2601
5.250	133.4	30-2602
5.500	139.7	30-2603
5.563	141.3	30-2604
5.750	146.1	30-2605
6.000	152.4	30-2606
6.250	158.8	30-2607
6.500	165.1	30-2608
6.625	168.3	30-2609

Spare Parts For The Collets		
Part No.	Description	
40-0238	Spring, Extention	.25″ dia x 12.00″
40-0248	Spring, Compression	.25″ dia x 1.38″
40-0249	Spring, Extention	.25″ dia x 1.88″
40-0250	Spring, Extention	.25″ dia x 6.00″

9. TOOL BITS

The following Tool Bits leave the burr on the piece on which the machine is mounted on:

Max. Wall Thk.	Part No.	Description
.016" thru .040"	99-5482	Tool Bit, Sever, Right Hand, .040" wide
.040" thru .065"	99-5477	Tool Bit, Sever, Right Hand, .060" wide
.065" thru .156"	99-5472	Tool Bit, Sever, Right Hand, .100" wide

The following Tool Bits leave the burr on the piece opposite to which the machine is mounted on:

Max. Wall Thk.	Part No.	Description
.016" thru .040"	99-5481	Tool Bit, Sever, Right Hand, .040" wide
.040" thru .065"	99-5480	Tool Bit, Sever, Right Hand, .060" wide
.065" thru .156"	99-5473	Tool Bit, Sever, Right Hand, .100" wide

10. INSTALLATION

WARNING: Make sure that the Model 576AC is disconnected from its power source before installing a tool bit.

Install a collet into the Model 576AC.

Insert a tube into the collet and bring it flush to the front of the collet and clamp the tube in place.

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).

NOTE: The cam can only rotate in the direction noted on the knob with an arrow.

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" (.51mm).

CAUTION: Do not install the tool bit backwards; it will not cut and may destroy the tool bit.

Secure the tool bit in place by tightening the (6) six set screws in the tool holder.

Rotate the cam feed knob until the tool holder returns to top of its travel.

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.

Rotate the cam feed knob counter-clockwise to pick up the feed slack.

Loosen the collet and re-position the tube to sever.

To adjust the feed rate, loosen feed lock screw, rotate the feed adjustment screw and read the feed rate graduations to find the desired feed rate.

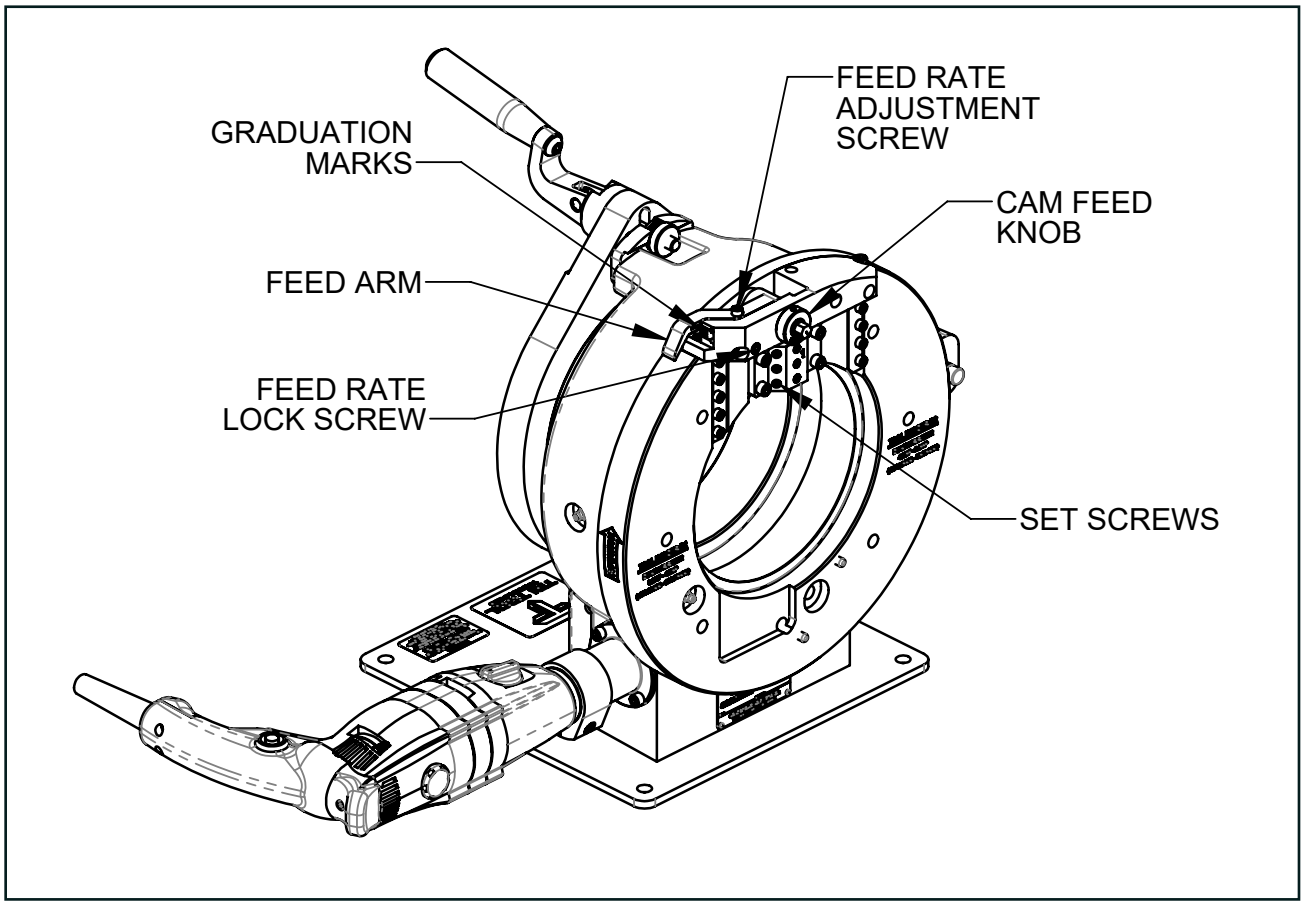
Some experimentation should be made to maximize the efficiency and tool bit life.

A feed rate of .002” to .003” (.05mm to .08mm) will accommodate most tube materials.

WARNING

WARNING: A feed rate of .002” to .003” (.05mm to .08mm) will accommodate most tube materials.

When the desired feed rate is set, tighten the feed lock screw. (DO NOT overtighten.)



11. TROUBLESHOOTING

Problem: The 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: There's 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: The Surface Finish is Rough

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.

Problem: The 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: The Tool Bit is diving and the SEVERMASTER™ is stalling

The tool bit is dull, chipped, etc.
The tool holder adjustment slide is too loose.
The tool bit is over-extended

Problem: The pipe or tube is slipping in the collet

The clamping pressure is not tight enough.
Scale and/or other foreign material is present on the pipe or tube.
Weld seams, swelling, or bumps are preventing full contact of the collet.
Dull tool bits are causing extra force in the axial and/or radial direction.

Problem: There's a 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.

Problem: The Tool Bit Will 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: The Air Motor Will Not Start

The air power supply is shut off.
The air motor is damaged and will not run free.
The air motor needs lubrication.
Add lubrication and do not run the air motor for a few minutes, then try running the motor.
Tap on the side of the air motor casing lightly with a piece of wood or with a soft rubber mallet just in case the vanes may be sticking.
Sand or other foreign material may be in the vanes of the air motor.

12. ACCESSORIES

The following accessories are recommended for use with the Model 576AC SEVERMASTER™ and are available from TRI TOOL INC.

1. Portable Air Filter Caddy (P/N 57-0100)

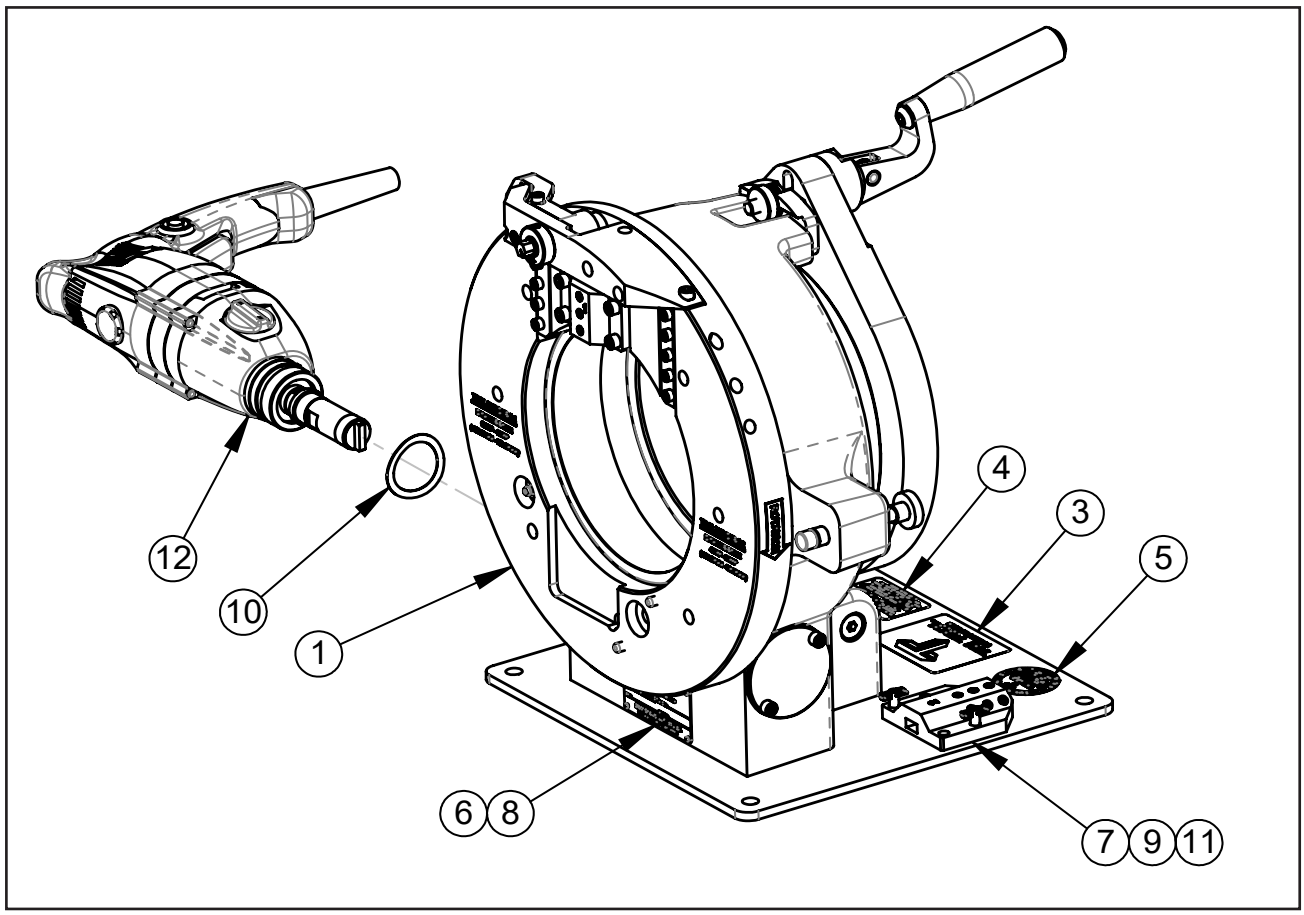
2. SQM-2AC Squaring Module Kit (P/N 05-0320)

3. Extended Tool Holder #3 (P/N 49-0326*)
   *Available by Special Order Only.

A portable Air Caddy (FRL) is required to protect the warranty on all TRI TOOL INC air driven tools.

13. ILLUSTRATED PARTS BREAKDOWN

MODEL 576AC SEVERMASTER™, 110V (P/N 01-2513, 01-2514)



Parts List, Model 576AC SEVERMASTER™, 110V (P/N 01-2513)

Item No.	Part No.	Description	Qty
1.	02-3130	MODEL 576AC SUBASSY.	1
2.	05-1319	KIT, WRENCH	1
3.	30-0483	LABEL, LOGO, SMALL	1
4.	30-0660	LABEL, “WARNING, TOOL BIT”	1
5.	30-2061	LABEL, TRI TOOL	1
6.	30-2488	PLATE, DATA, SEVERMASTER	1
7.	33-0514	SCREW, SET, 5/16 - 18 X 3/8”, CUP PT.	3
8.	33-0995	SCREW, DRIVE, #2 X 3/16”	4
9.	33-1986	SCREW, SET, 5/16 - 18 X 1/2”, CONE PT.	3
10.	40-0271	SPRING, WAVE, DISC, 1.819” O.D.	1
11.	49-0321	HOLDER, TOOL, # 2	1
12.	58-0405	MOTOR ASSY., ELECTRIC, 110V	1

Parts List, Model 576AC SEVERMASTER™, 220V (P/N 01-2514)

Item No.	Part No.	Description	Qty
1.	02-3130	MODEL 576AC SUBASSY.	1
2.	05-1319	KIT, WRENCH	1
3.	30-0483	LABEL, LOGO, SMALL	1
4.	30-0660	LABEL, “WARNING, TOOL BIT”	1
5.	30-2061	LABEL, TRI TOOL	1
6.	30-2488	PLATE, DATA, SEVERMASTER	1
7.	33-0514	SCREW, SET, 5/16 - 18 X 3/8”, CUP PT.	3
8.	33-0995	SCREW, DRIVE, #2 X 3/16”	4
9.	33-1986	SCREW, SET, 5/16 - 18 X 1/2”, CONE PT.	3
10.	40-0271	SPRING, WAVE, DISC, 1.819” O.D.	1
11.	49-0321	HOLDER, TOOL, # 2	1
12.	58-0407	MOTOR ASSY., ELECTRIC, 220V	1

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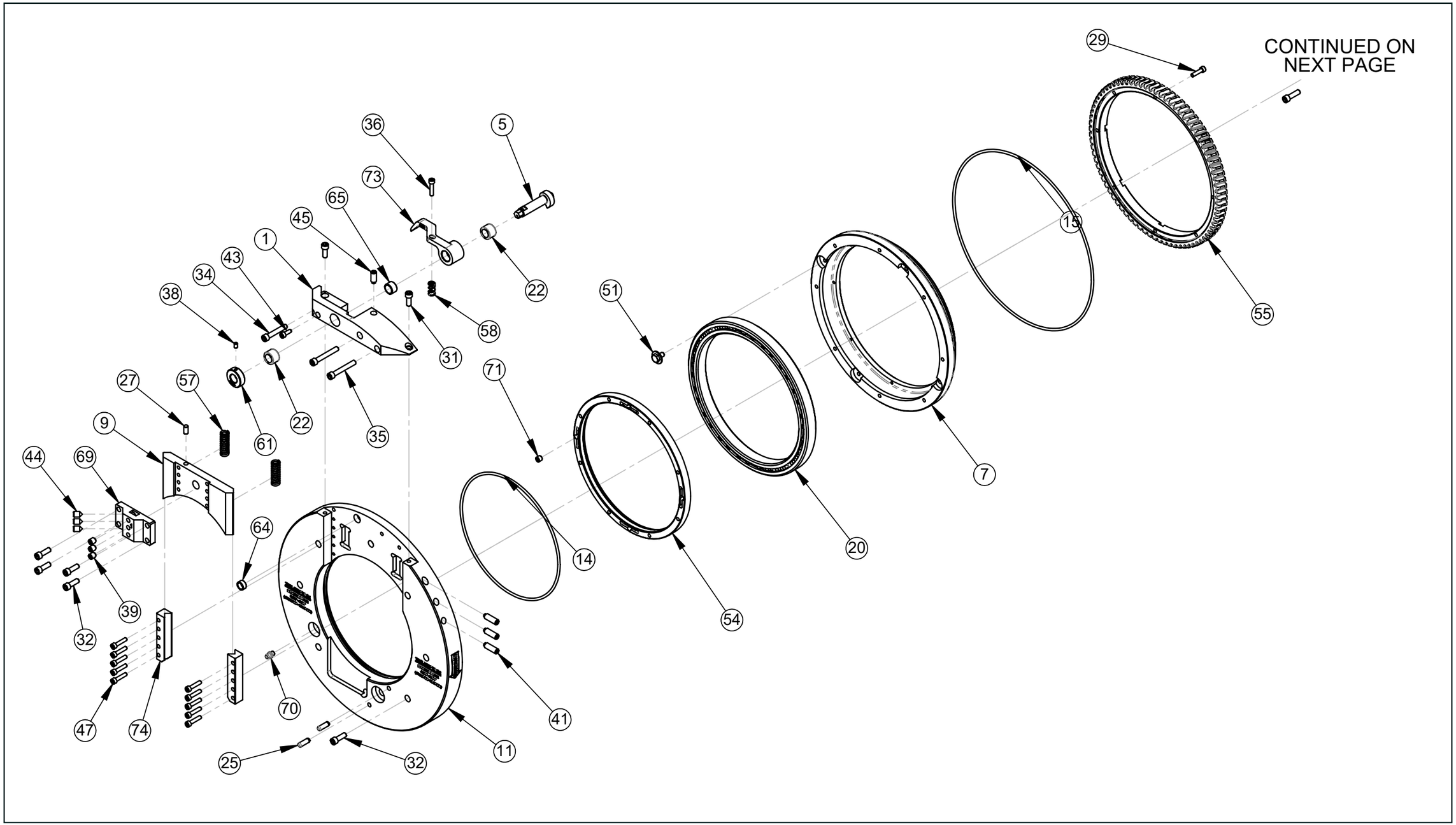
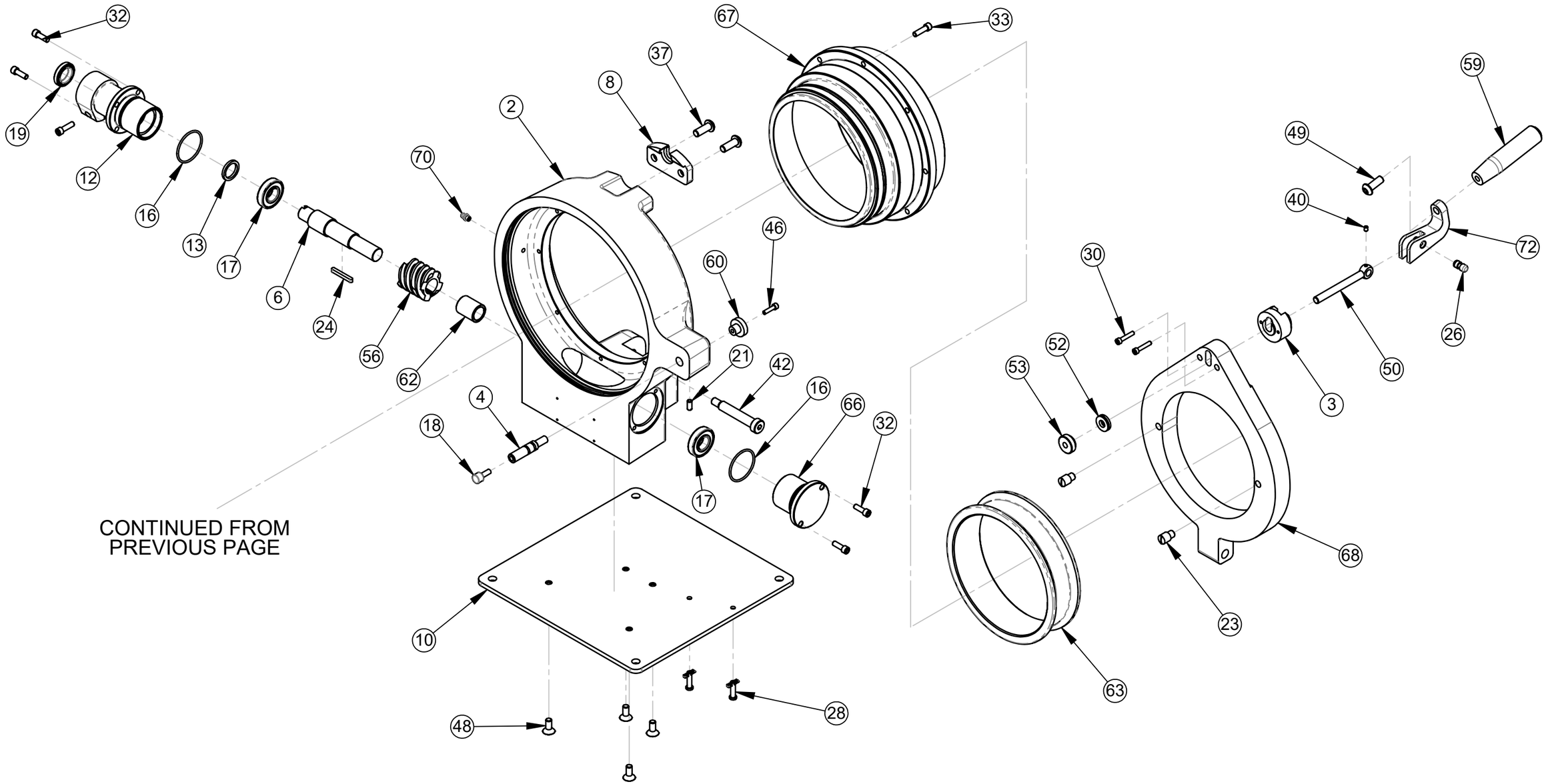
MODEL 576AC SUB-ASSEMBLY (P/N 02-3130) (PAGE 1 OF 2)



MODEL 576AC SUB-ASSEMBLY (P/N 02-3130) (PAGE 2 OF 2)



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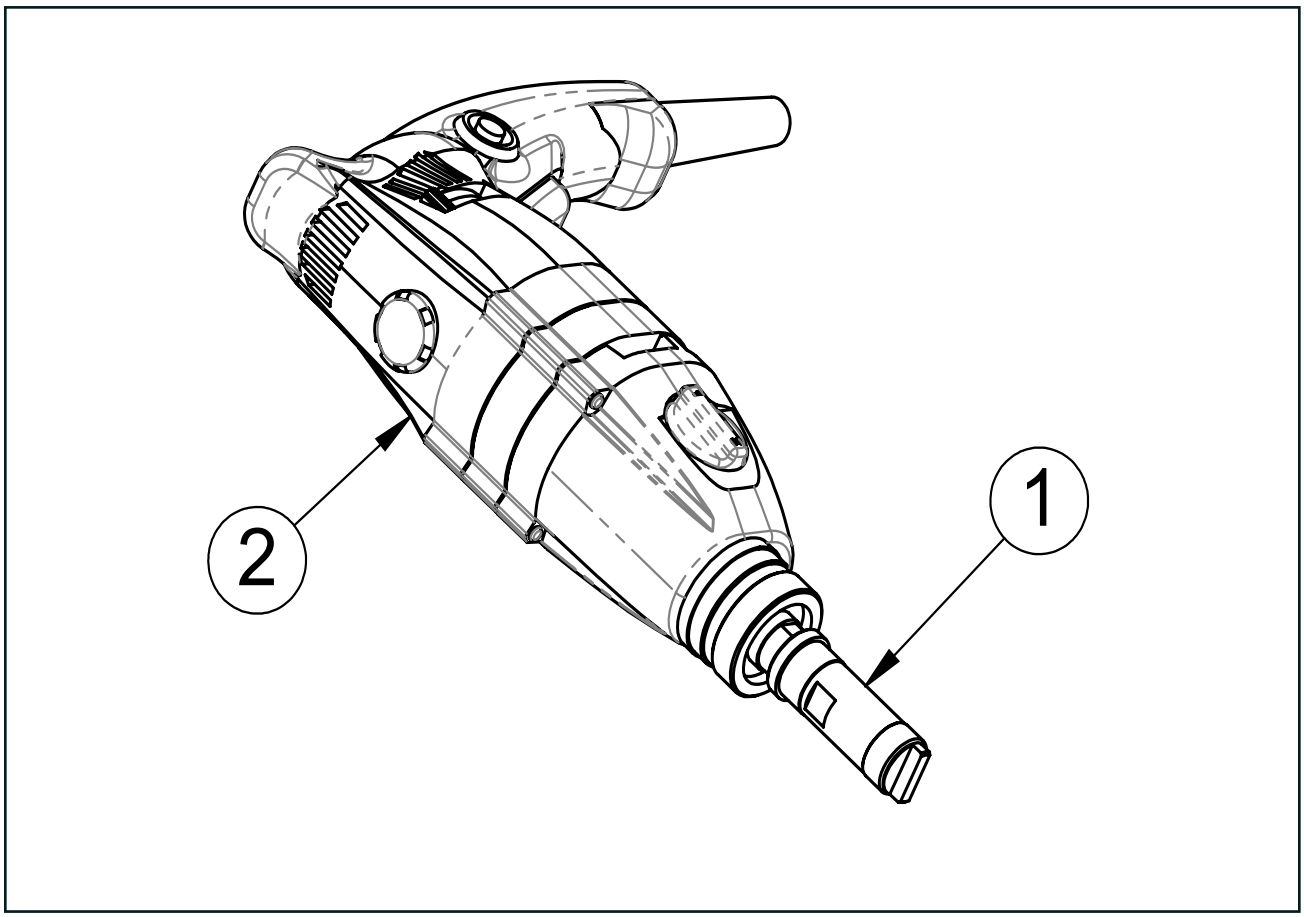
Parts List, Model 576AC Sub-Assembly (P/N 02-3130)

Item No.	Part No.	Description	Qty
1.	19-0778	HOUSING, FEED	1
2.	19-1901	HOUSING, MAIN	1
3.	20-0633	SHAFT, CLAMP	1
4.	20-0637	SHAFT, TRIPPER	1
5.	20-0644	SHAFT, CAM (.230”/5.84MM)	1
6.	20-0651	SHAFT, DRIVE	1
7.	20-1787	SHAFT, MAIN	1
8.	24-1511	PLATE, CLAMP	1
9.	24-1515	PLATE, TOOL	1
10.	24-1525	PLATE, STAND	1
11.	24-5031	PLATE, MAIN	1
12.	27-1685	ADAPTER, MOTOR	1
13.	28-0245	SEAL, GREASE, .875” I.D.	1
14.	28-0262	O-RING, 7.734” I.D. X .139” W.	1
15.	28-0263	O-RING,10.984” I.D. X .139” W.	1
16.	28-0264	O-RING,1.674” I.D. X .103” W.	2
17.	29-0020	BEARING, BALL, 3/4” X 1 5/8” X 7/16”	2
18.	29-0031	CAM FOLLOWER, 1/2” O.D. X 3/8”	1
19.	29-0096	BEARING, BALL, 7/8” X 1 5/16” X 9/32”	1
20.	29-0853	BEARING, 8” I.D, X TYPE	1
21.	30-0125	PLUNGER, BALL, 1/4 - 20 X 17/32”	1
22.	30-2490	CLUTCH, ROLLER, 1/2” I.D.	2
23.	30-2611	BUTTON, SPHERICAL, 1/2” DIA.	2
24.	31-0142	KEY, 3/16” SQ. X 1 1/2” LG, ROUND ENDS	1
25.	32-0140	PIN, DOWEL, 1/4” DIA. X 3/4”	2
26.	32-0260	PIN, MOD	1
27.	32-0497	PIN, STOP	1
28.	32-0509	PIN, CLEVIS,1/4”	2
29.	33-0030	SCREW, CAP, #10 - 24 X 3/4”	8
30.	33-0032	SCREW, CAP, #10 - 24 X 1”	2
31.	33-0039	SCREW, CAP, 1/4 - 20 X 5/8”	2
32.	33-0040	SCREW, CAP, 1/4 - 20 X 3/4”	16
33.	33-0041	SCREW, CAP, 1/4 - 20 X 7/8”	9
34.	33-0044	SCREW, CAP, 1/4 - 20 X 1 1/2”	1
35.	33-0045	SCREW, CAP, 1/4 - 20 X 1 3/4”	2
36.	33-0203	SCREW, CAP, #10 - 32 X 7/8”	1
37.	33-0300	SCREW, BUTTON, 3/8 - 16 X 1”	2
38.	33-0489	SCREW, SET, #10 - 24 X 5/16”, CUP PT.	1
39.	33-0514	SCREW, SET, 5/16 - 18 X 3/8”, CUP PT.	3
40.	33-0619	SCREW, SET, #10 - 32 X 1/4”, CUP PT.	1

Parts List, Model 576AC Sub-Assembly (P/N 02-3130) (Continued)

Item No.	Part No.	Description	Qty
41.	33-1147	SCREW, SET, 5/16 - 18 X 1”, HALF DOG	3
42.	33-1950	SCREW, SHOULDER, 1/2” X 2 1/2”	1
43.	33-1985	SCREW, CAP, #10 - 32 X 1/2”, BRASS TIP	1
44.	33-1986	SCREW, SET, 5/16 - 18 X 1/2”, CONE PT.	3
45.	33-1998	SCREW, SET, 5/16 - 18 X 3/4” H.D., LOCK	1
46.	33-2001	SCREW, CAP, #10 - 24 X 3/4”, S.S.	1
47.	33-2002	SCREW, CAP, #10 - 24 X 7/8”, S.S.	10
48.	33-2005	SCREW, FLAT, 5/16 - 18 X 3/4”, S.S.	4
49.	33-2006	SCREW, BUTTON, 3/8 - 16 X 1”, S.S.	1
50.	33-2075	EYEBOLT, 3/8 - 16 X 3 3/4”	1
51.	33-4911	SCREW, HEX, 1/4 - 20 X 1/2”, W / FLAT WASHER	4
52.	34-0134	SELF ALIGN WASHER SET, 3/8” (2-PC SET)	1
53.	35-0139	NUT, CHECK, 3/8 - 16 X 7/16”	1
54.	35-1173	NUT, BEARING	1
55.	39-0815	GEAR, MAIN, WORM, 80 T.	1
56.	39-0819	WORM, R.H., 8 D.P., 2 T., 1.50” P.D.	1
57.	40-0240	SPRING, COMP., H.D., .50” O.D. X 1.50”	2
58.	40-0255	SPRING, COMP., 3/8” O.D. X 3/4”	1
59.	41-0125	HANDLE	1
60.	42-0023	KNOB, ROUND	1
61.	42-0171	KNOB, FEED SHAFT	1
62.	44-0473	SPACER	1
63.	44-0474	SPACER, COLLET	1
64.	45-0260	BUSHING, BRONZE, 3/8” I.D. X 1/2” O.D. X 1/4” LG.	1
65.	45-0261	BUSHING, BRONZE, 1/2” I.D. X 5/8” O.D. X 3/8” LG.	1
66.	46-0446	SLEEVE, END	1
67.	46-0795	SLEEVE, MAIN	1
68.	47-1163	BRACKET, HINGE	1
69.	49-0320	HOLDER, TOOL, #1	1
70.	54-0375	FITTING, GREASE	2
71.	54-0398	PLUG, PRESSURE, FLUSH, 1/16” NPT	4
72.	62-0110	CAM, CLAMP	1
73.	63-0137	ARM, FEED	1
74.	66-0164	RAIL, SLIDE	2

MOTOR ASSEMBLY, ELECTRIC, 110V (P/N 58-0405)



Parts List, Motor Assembly, Electric, 110V (P/N 58-0405)

Item No.	Part No.	Description	Qty
1.	27-1684	ADAPTER, DRIVE	1
2.	58-0277	MOTOR, ELECTRIC, 110V	1

Parts List, Motor Assembly, Electric, 220V (P/N 58-0407)

Item No.	Part No.	Description	Qty
1.	27-1682	ADAPTER, DRIVE	1
2.	58-0406	MOTOR, ELECTRIC, 220V	1

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

Item No.	Part No.	Description	Qty
1.	36-0007	WRENCH, L, 5/32” HEX	1
2.	36-0008	WRENCH, L, 3/16” HEX	1
3.	36-0020	WRENCH, T, 5/32” HEX X 6”	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 defate 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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