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SAFETY PRECAUTIONS

IN GENERAL

When using rotating head cutting equipment, basic safety precautions should always be followed to reduce the risk of personal injury.

Operate this tool only in accordance with specific operating instructions.

WARNING:

Do not override the deadman switch on the power unit. Locking down, obstructing, or in any way defeating the deadman switch on the power drive unit may result in serious injury.

DRESS CONSIDERATIONS

Use standard safety equipment. Hard hats, safety shoes, safety harnesses, protective clothes, and other safety devices should always be used when appropriate.

Use safety glasses. Do not operate cutting tools without eye protection.

Dress properly. Do not wear loose clothing or jewelry. They can be caught in rotating and moving parts. Avoid slippery floors or wear nonskid footwear. If you have long hair, wear protective hair covering to contain it.

WORK AREA

Keep the work area clean. Cluttered work areas and benches invite injuries.

Consider the work area environment. Keep the area well lit. Keep electrical cords, cables, rags, rigging straps, and etc. clear of rotating equipment. Do not use power-cutting tools in the presence of flammable liquids and gasses.

Keep visitors away. Do not let visitors or untrained personnel at or near operating tools. Enforce eye protection requirements for all observers.

Do not over reach. Keep proper footing at all times.

Stay alert. Watch what you are doing. Use common sense. Do not operate tools when you are tired.

TOOL CARE

Maintain tools with care. Keep tools in good operating condition. Sharp tool bits perform better and safer than dull tool bits. Well maintained tools function properly when needed.

Check for damaged parts. If a tool has malfunctioned, been dropped or hit, it must be checked for damage. Run no-load tests and feed function checks. Do a complete visual inspection.

Electric motors. Use only with proper AC voltage power sources and observe all normal electric shock hazard procedures.

Do not abuse power and control cords. Pulling or running over cords and cables can result in electrical shock hazards and malfunctions. Keep control and power cords out of all cutting fluids and water.

Hydraulic drives. Observe proper procedures for electrically driven power sources. Avoid damage to hydraulic lines. Keep quick-disconnects clean. Grit contamination causes malfunctions.

Air tools. Check the exhaust muffler. Broken or damaged mufflers can restrict air flow or cause excessive noise. Use air motors only with a filtered, lubricated and regulated air supply. Dirty air, low-pressure air or over pressure air will cause malfunctions, including delayed starting.

AREA EQUIPMENT

Secure work. Whenever possible use clamps, vises, chains and straps to secure pipe.

Make sure the tool is secured; it is safer to have both hands free to operate the tool.

TOOL USE

Use the right tool and tool bit for the job. Do not use a tool, which is incorrect for the job you are doing.

Keep the tool bits fully engaged in the tool bit holders. Loose bits are a safety hazard.

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. Develop a habit of checking 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 feed and speed rate for which they were designed.

Do not reach into rotating equipment. Do not reach into the rotating head stock to clear chips, to make adjustments, or to check surface finish. A machine designed to cut steel will not stop for a hand or an arm.

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

Avoid unintentional starts. Do not carry or handle tools with your hand on the operating switches or levers. Do not lay the tool down in a manner that will start the drive. Do not allow the tool to flip around or move when adjusting or changing tool bits.

Store idle tools properly. Disconnect tools from the power source and store in a safe place. Remove tool bits for safe handling of the tool.

GENERAL DESCRIPTION

The Model 206B is a Pipe Beveler designed for facing, beveling and/or counterboring the ends of pipe and/or tubing in preparation for welding.

These machining operations may be performed either simultaneously or separately.

Pipe weld end preparations that meet all existing conventional codes including the more stringent nuclear codes may be machined using the Model 206B.

The various interchangeable jaw blocks and ramps will secure the Model 206B Pipe Beveler to pipe and tubing having an inside diameter ranging from 1.63" (41.4 mm) through 6.49" (164.8 mm).

The expanding mandrel provides fast, accurate self-centering and alignment to the pipe or tubing to be machined.

The Model 206B accepts the reaction torque generated by the machining operations through the mandrel.

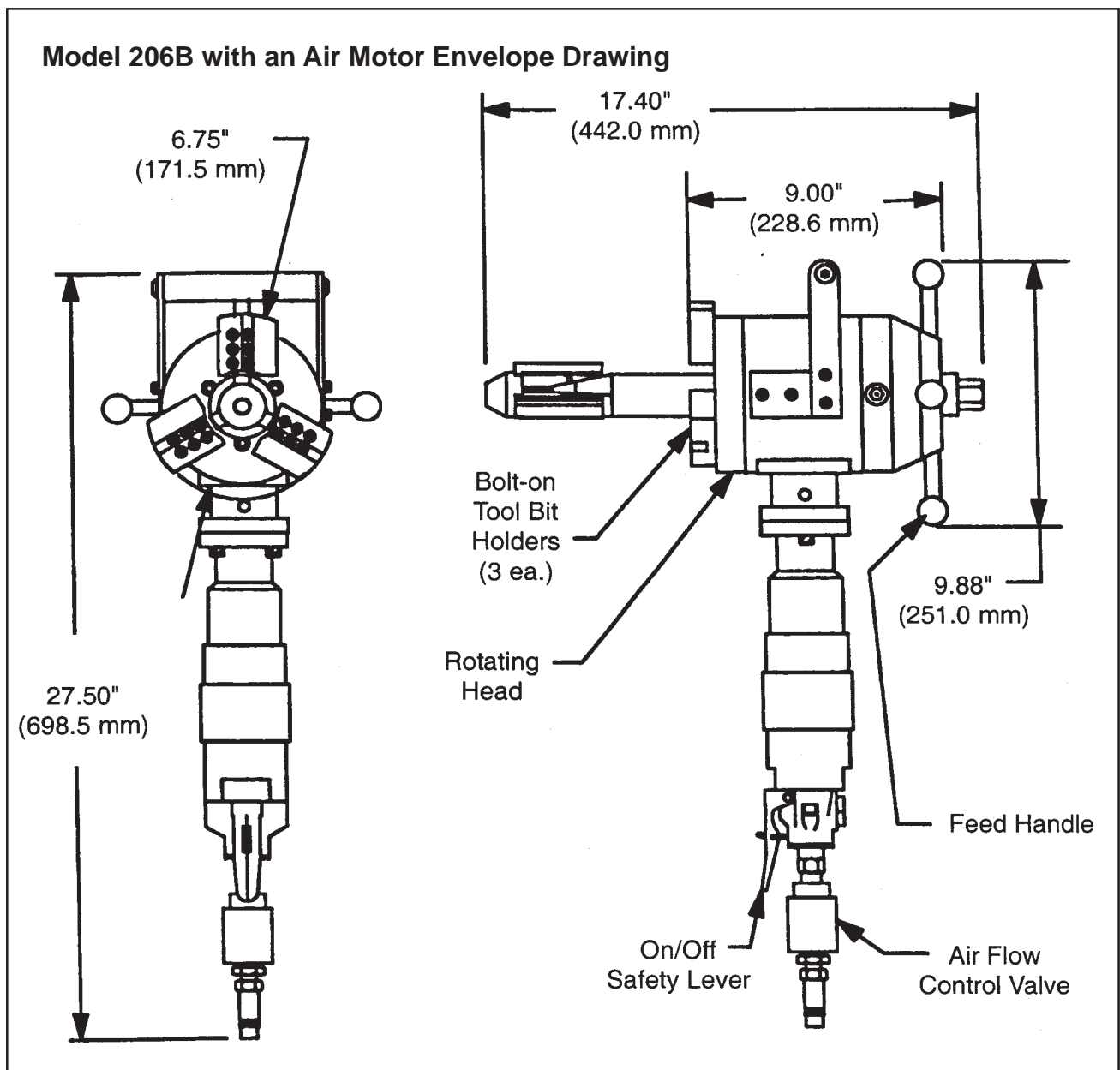
No additional restraining devices are required.

SPECIFICATIONS

MODEL 206B WITH AIR MOTOR

Weight (Less the Mandrel) 34 lbs (16 kg)

Power Requirements 85 cfm @ 90 psi (35 L/s @ 621 kPa)



PIPE CUTTING CAPACITIES

Basic Pipe Sizes

1 1/2" Pipe Schedules 5 and 10

2" and 2 1/2" Pipe Schedules 5 through 160

3" through 6" Pipe All Schedules

Basic Tube Sizes

Up to .875" (22.2 mm) wall tubing with a maximum OD of 6.63" (168.4 mm) and a minimum ID of 1.63" (41.4 mm) may be beveled with standard procedures.

Wall Thickness Capacity

Wall thickness of all standard pipe schedules, .864" (21.9 mm) maximum, in the range listed.

Tubing with greater wall thickness may be handled provided the ID is greater than 1.63" (41.4 mm) and the OD is less than 6.63" (168.4 mm).

Contact TRI TOOL INC. for heavier wall procedures.

Counterboring Operation

The machine will counterbore pipe and tubing with an ID range of 2.00" (50.8 mm) to 6.41" (162.8 mm).

Material Cutting Capability

Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel and aluminum without limitations except size and wall thickness as specified under 'Wall Thickness Capacity'.

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.

Headstock Speeds

Maximum Headstock Speed 78 rpm

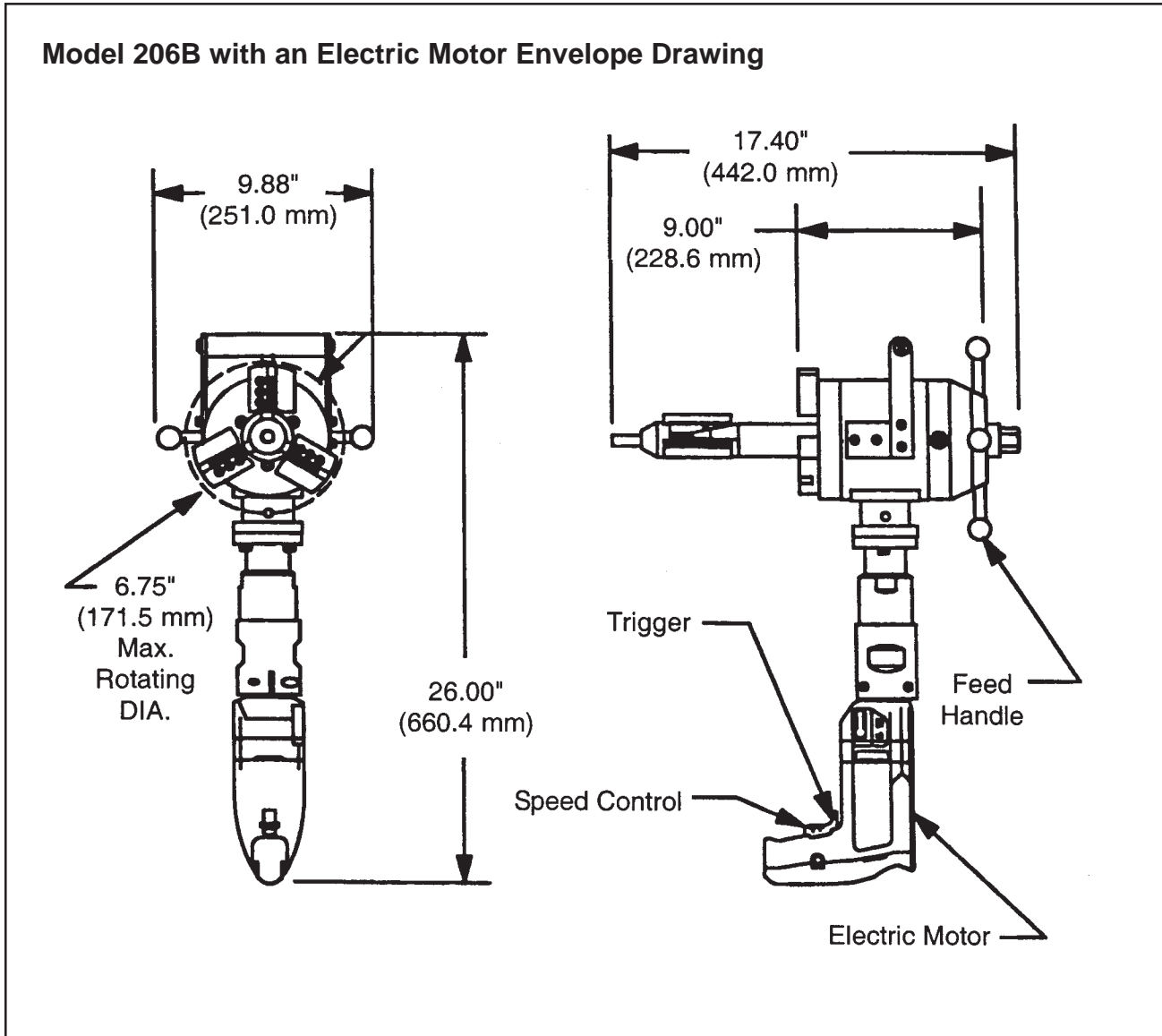
Headstock Speed at maximum H.P. 39 rpm

Functional Speed Range 10 to 60 rpm

MODEL 206B WITH ELECTRIC MOTOR (110V AC AND 220V AC)

Weight (Less the Mandrel)

34 lbs (16 kg)



Power Requirements

110V AC, 60Hz or 220V AC, 50 Hz

PIPE CUTTING CAPACITIES

Basic Pipe Sizes

1 1/2" Pipe Schedules 5 and 10

2" and 2 1/2" Pipe Schedule 5 through 80

3" through 6" Pipe Schedule 5 through 40

Basic Tube Sizes

Up to .280" (7.1 mm) wall tubing with a maximum OD of 6.63" (168.4 mm) and a minimum ID of 1.63" (41.4 mm) may be beveled with standard procedures.

Wall Thickness Capacity

Wall thickness of all standard pipe schedules, .280" (7.1 mm) max., in the ranges listed.

Contact TRI TOOL Inc. for heavier wall procedures.

Counterboring Operation

The machine will counterbore pipe and tubing with an ID range of 2.00" (50.8 mm) to 6.41" (162.8 mm).

Material Cutting Capability

Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel and aluminum without limitations except size and wall thickness as specified under 'Wall Thickness Capacity'.

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.

Headstock Speeds

TRI TOOL INC.

Maximum Cutting Head Speed 38 rmp

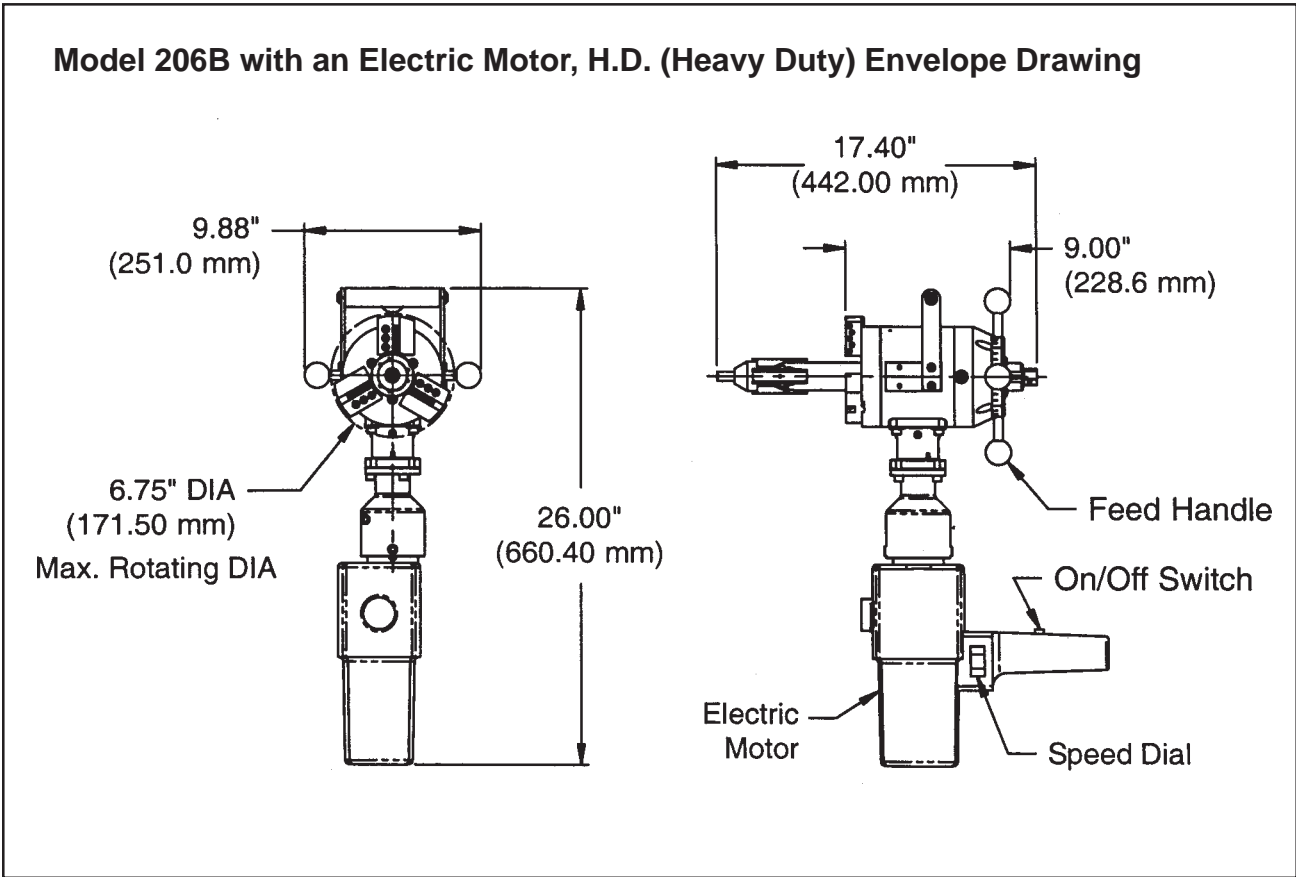
Functional Speed Range 9 to 34 rpm

MODEL 206B WITH ELECTRIC MOTOR, H.D. (HEAVY DUTY)

Weight

NOTE: less than 60 lbs (27.22 kg)

Power Supply Options



115 VAC, 40 – 60 Hz, 2300 Watt rated Supply

All 115V motors require a minimum of a 20-amp circuit.

230 VAC, 40 – 60 Hz, 2300 Watt Rated Supply

PIPE CUTTING CAPACITIES

Basic Pipe Sizes

1 1/2" Pipe Schedules 5 and 10

2" and 2 1/2" Pipe Schedules 5 through 160

3" through 6" Pipe All Schedules

Basic Tube Sizes

Up to .875 (22.2 mm) wall tubing with a maximum OD of 6.63" (168.4 mm) and a minimum ID of 1.63 (41.4 mm) may be beveled with standard mandrel.

Wall Thickness Capacity

Wall thickness of all standard pipe schedules, .875 (22.2 mm) maximum, in the range listed. Tubing with greater wall thickness may be handled provided the ID is greater than 1.63" (41.4 mm) and the OD is less than 6.63" (168.4 mm). Contact TRI TOOL Inc. for heavier wall procedures.

Counterboring Operations

The tool will counterbore pipe and tubing with an ID range of 2.00" (50.8 mm) to 6.41" (162.8 mm).

Material Cutting Capabilities

Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel and aluminum with out limitations except size and wall thickness as specified in the previous information.

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

Contact TRI TOOL Inc. Engineering Department for details.

Cutting Head Speeds

Maximum Cutting Head Speed 40 rpm

Functional Speed Range 16 - 37 rpm

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 or oil as specified for the air motor.

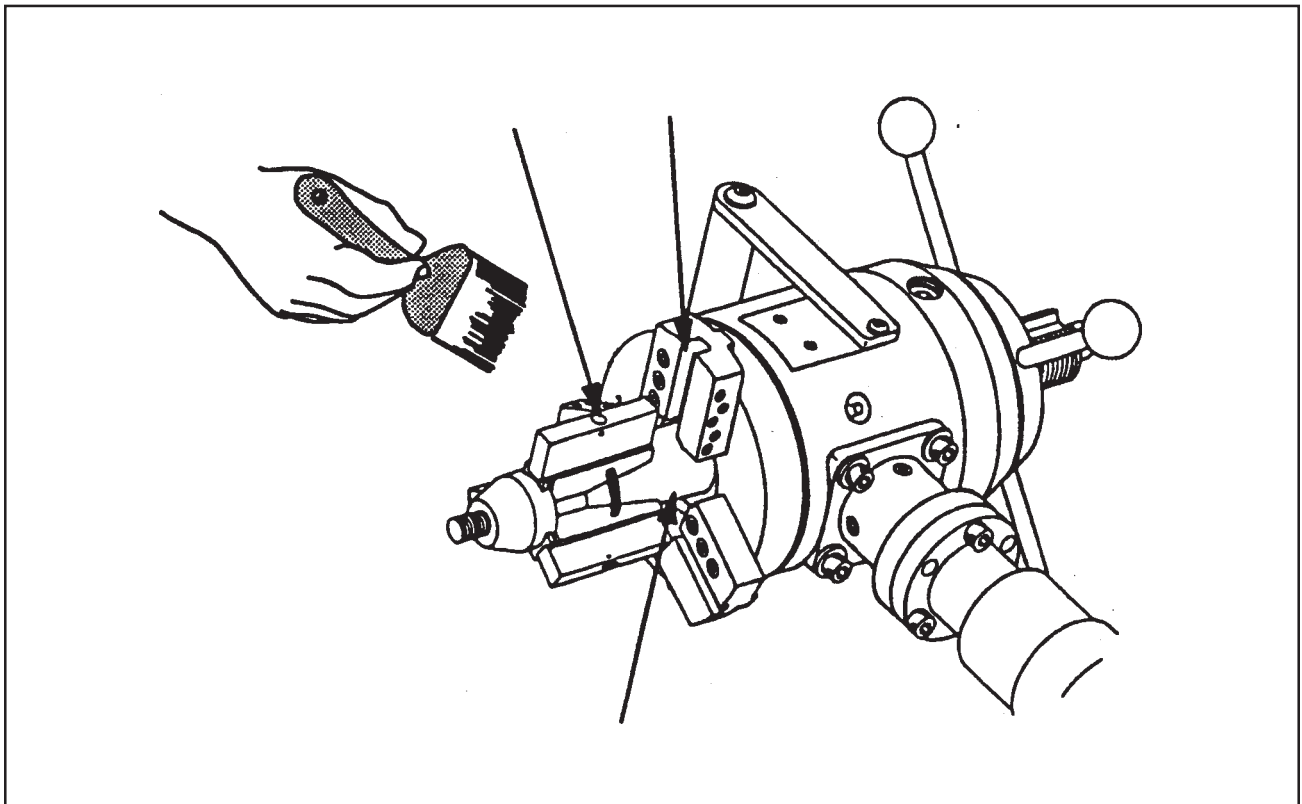
AIR SUPPLY

Air Supply for the Model 206B with an air motor requires an adequate filter/regulator/lubricator (FRL) to be used in the air supply line.

NOTE:

The motor warranty is void if damage occurs from contaminated air or lack of lubrication.

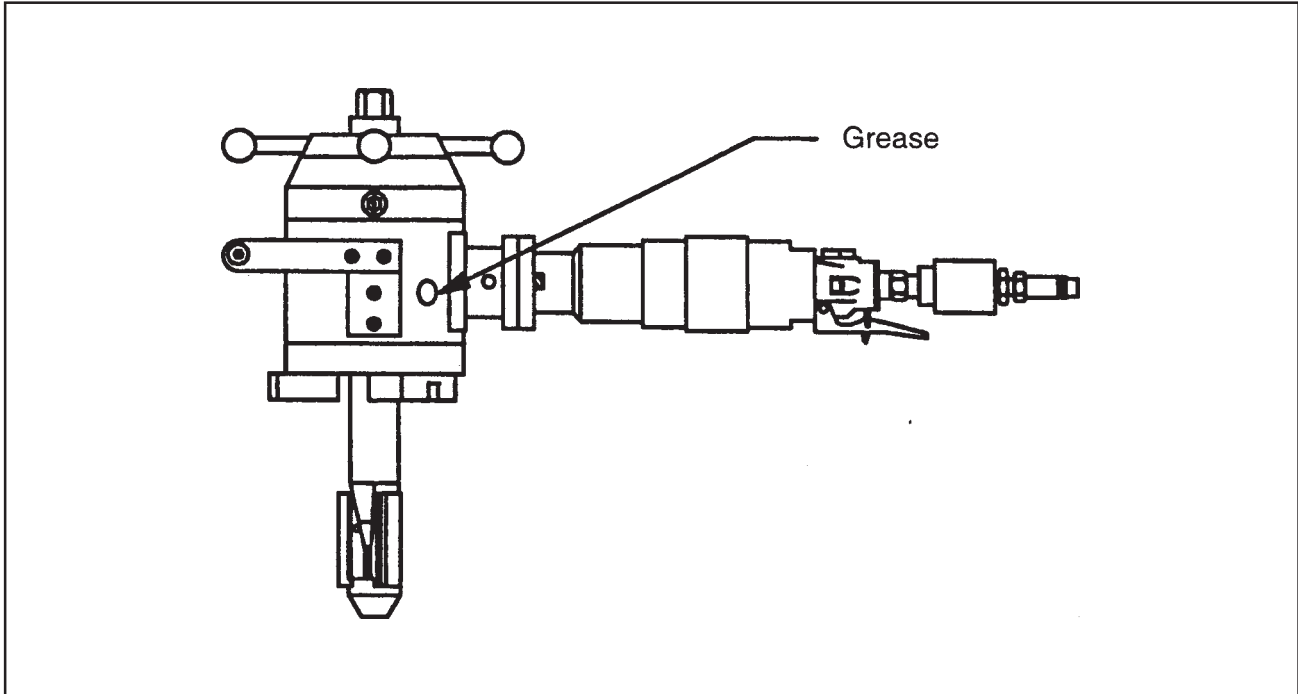
When the Model 206B is operated in the vertical position, cutting head up, it should be turned upside down and the chips and/or other debris removed after each bevel has been completed.



NOTE:

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.

Verify that there is adequate grease in the gear box. Bearing and gears are to be lubricated using a high string utility grease (P/N 68-0024).



NOTE:

Disassembly of a power unit voids the warranty, except when performed by a TRI TOOL INC. designated repair technician. (A letter of designation is required.)

AIR MOTOR LUBRICATION

No direct maintenance is normally required on the air motor.

However, the air supply must flow through a filter/regulator/lubricator (FRL) unit or separate units before arriving at the air motor.

The FRL unit must be maintained as required (frequency dependent on the basic air supply) to keep the water trap drained, filter cleaned and the lubricator oil reservoir filled so that a drop of oil every 2 to 5 seconds is flowing.

When the Model 206B BEVELMASTER™ is to be left idle for 24 hours or more after being run on 'wet' air, it is advisable to squirt oil directly into the air motor inlet and run the motor for two (2) to three (3) seconds.

This will prevent rusting and freezing of the rotor.

LUBRICANT RECOMMENDATIONS

The drive gears require a high string lubrication grease such as 'Chevron Ultra-Duty Grease EP NCG12' (P/N 68-0024).

The air motor requires a Class 2 lubricant, viscosity of 100 to 200 SSU at 100° F (38° C) minimum aniline point of 200° F (93° C).

TRI TOOL INC. Air Tool Lubricant (P/N 68-0022)

- AMOCO – American Industrial Oil No. 32
- Atlantic Richfield – Duro Oil S-150
- Chevron – A.W. Machine Oil 32
- Exxon – Nuto H32
- Shell – Tellus Oil 32

The bearings in the air or electric motor are sealed and do not require any lubrication.

OPERATION

Read the operating instructions carefully before attempting to operate the Model 206B.

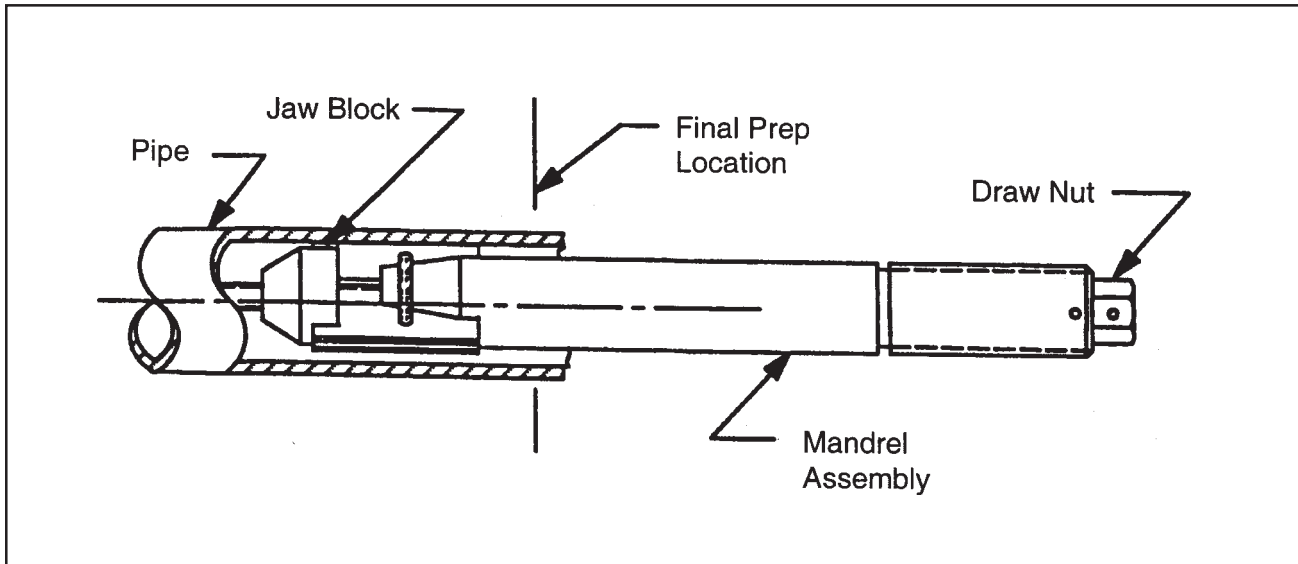
Use eye protection at all times when operating the Model 206B.

Select the recommended jaw blocks and/or ramp set for the pipe size to be machined. (Refer to the jaw block selection chart.)

Install the mandrel assembly into the pipe.

NOTE:

In order to avoid cutting the jaw blocks during the machining operation, the mandrel must be installed beyond the final end preparation location.



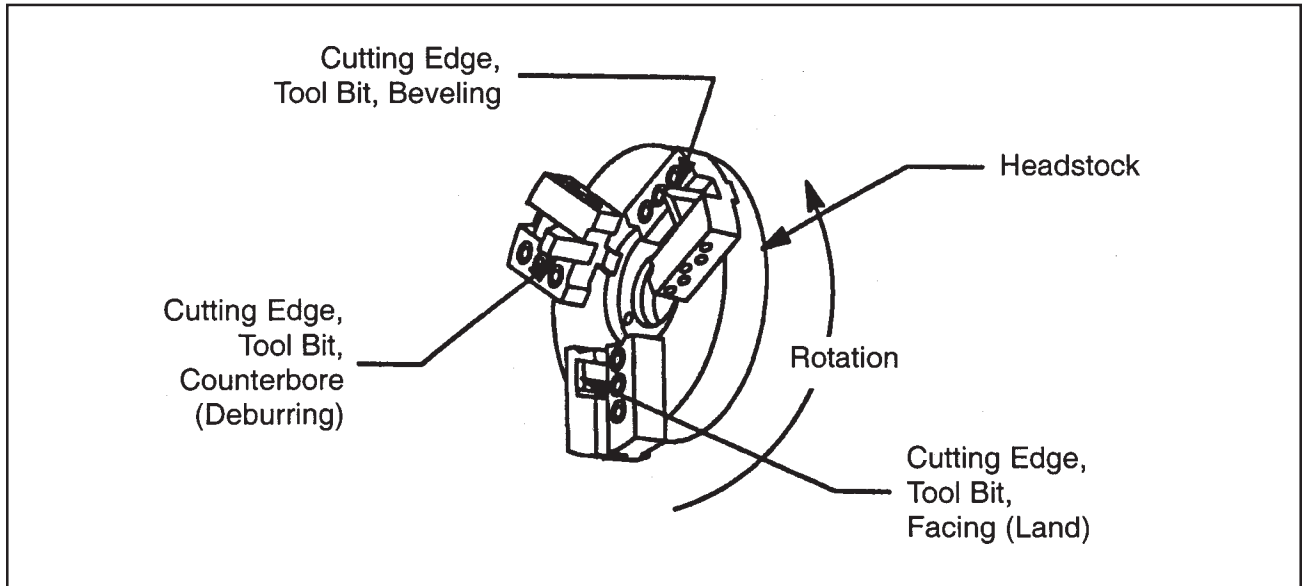
Tighten the draw nut to force the jaw blocks out to the inside diameter of the pipe or tube.

Select the tool bit(s) required to machine the pipe to the configuration desired.

WARNING:

Use of dull or improperly designed tool bits or tool bits not manufactured by TRI TOOL INC. may result in poor performance and may constitute abuse of this machine and therefore voids the TRI TOOL INC. factory warranty.

When performing any multiple machining operation such as facing, beveling, and/or counterboring, the counterbore tool bit should be installed to 'lead' the bevel tool bit.

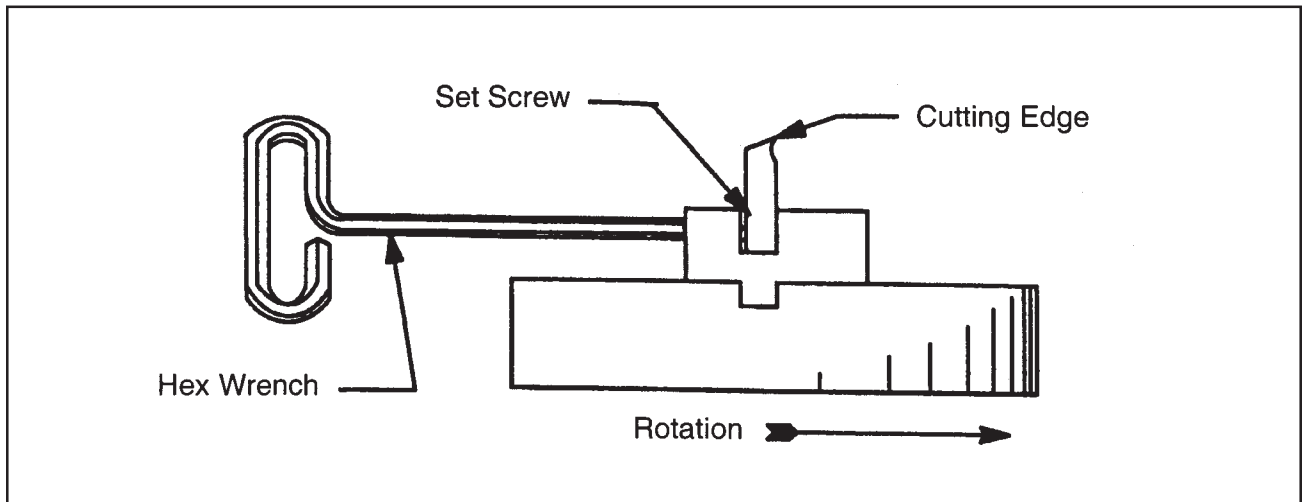


Attach the tool holders in the appropriate position for the size of pipe being machined.

Use the four (4) outer holes for the larger diameters of pipe.

Use the four (4) inner holes for the smaller diameters of pipe.

Insert the tool bit(s) into the slot(s) in the tool holder(s).



CAUTION: The cutting edge of the tool bit(s) must be located on the radial centerline.

CAUTION: Insure that no tool bit is installed backwards.

Tighten the set screws to secure the tool bit(s) to the tool holder(s).

Adjust the counterbore tool bit radially to control counterbore diameter.

Adjust the bevel tool bit radially to control the counterbore depth to the bevel relationship.

Slide the Model 206B gently onto the mandrel assembly until it comes to a solid stop against the torque acceptance keys.

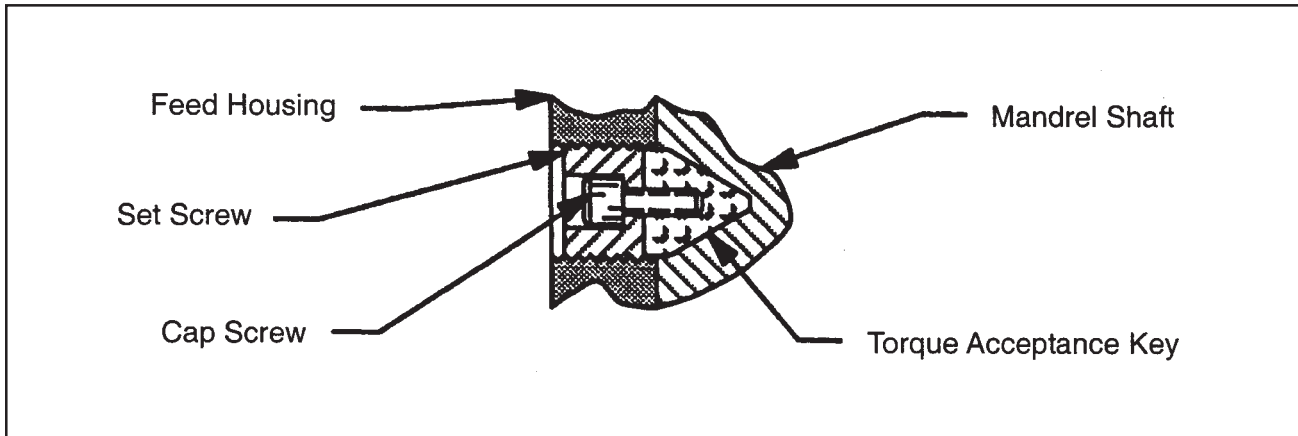
The Model 206B with the mandrel assembly installed maybe mounted to the pipe as one unit.

Rotate the Model 206B as required to engage the torque acceptance keys with the slots in the mandrel shaft.

NOTE:

Since the mandrel shaft will contact the torque acceptance keys before the feed nut engages the mandrel shaft threads, caution should be taken not to force (or allow) the machine to impact the lead threads of the feed nut with the lead threads of the Mandrel.

ADJUSTMENT OF THE TORQUE ACCEPTANCE KEYS



Adjustment of the torque acceptance keys will be required if the BEVELMASTER™ is loose radially on the mandrel shaft.

This may appear as chatter in the tool bit.

Loosen the cap screws in both torque acceptance keys.

Rotate the set screw as required until the torque acceptance keys are riding snugly in the slots in the mandrel shaft.

Run the Feed in and out to insure that the torque acceptance keys are not so tight that the feed is impaired.

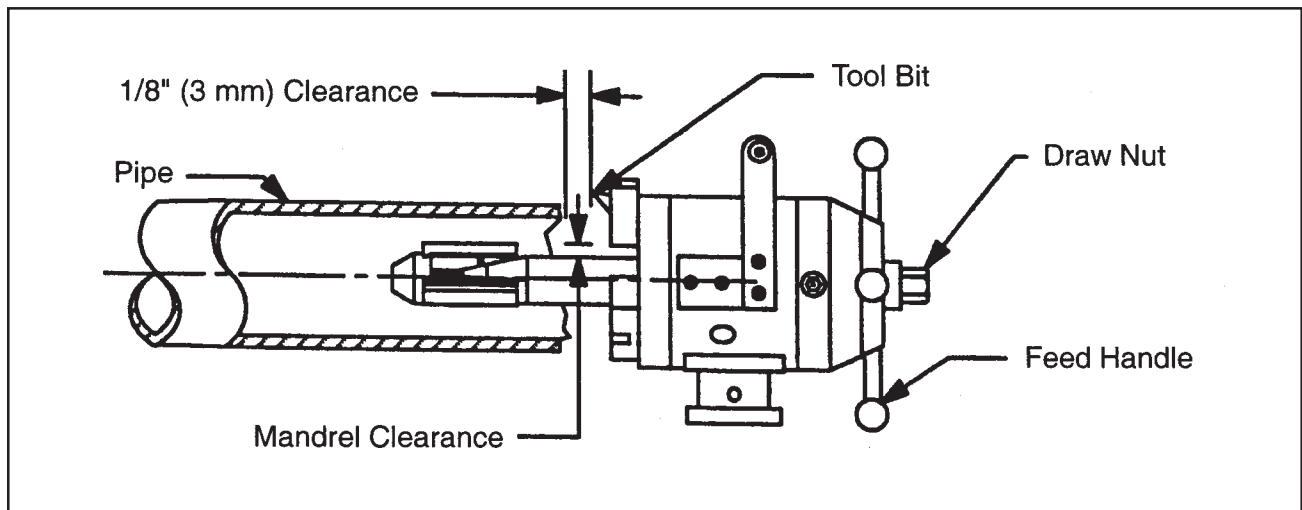
Re-tighten the cap screws to retain the new settings.

Rotate the feed handle clockwise to engage the feed nut with the thread on the mandrel shaft.

WARNING: A minimum of ten (10) threads must be engaged to prevent thread stripping during the machining operation.

Verify a clearance of 1/8" (3 mm) minimum between the tool bit and the pipe face.

Make sure that there is a clearance between the tool bit(s) and the mandrel.



Air Motor: Attach the proper air supply line to the Model 206B.

Electric Motor: Plug the power cord into the proper outlet.

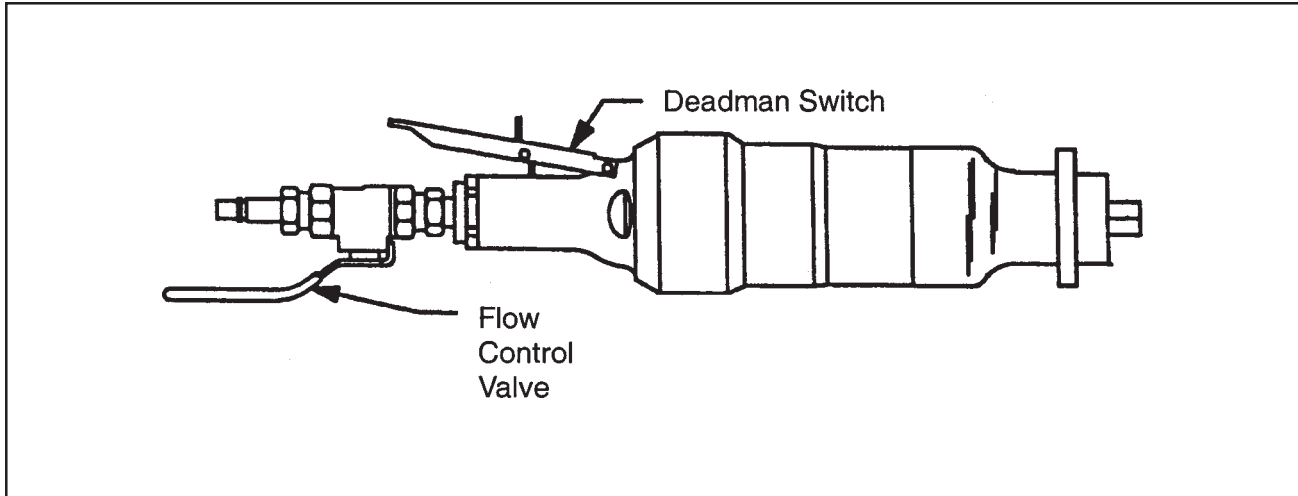
NOTE: Check that the filter/regulator/lubricator (FRL) is installed and set properly.

MACHINING OPERATION

WARNING: Do Not Override the Deadman Switch on the Unit. Locking down, obstructing, or in any way defeating the deadman switch on this unit may result in serious injury.

Air Motor

Depress the air motor trigger.



Adjust the cutting speed by rotating the flow valve at the air connection.

Electric Motor

Depress the trigger.

Adjust the cutting speed by rotating the speed control dial on the trigger and/or using the high/low switch.

CAUTION: Do not change the high/low switch while the motor is running. Damage to the gears may occur.

Rotate the feed handle clockwise to bring the tool bit(s) and pipe closer together.

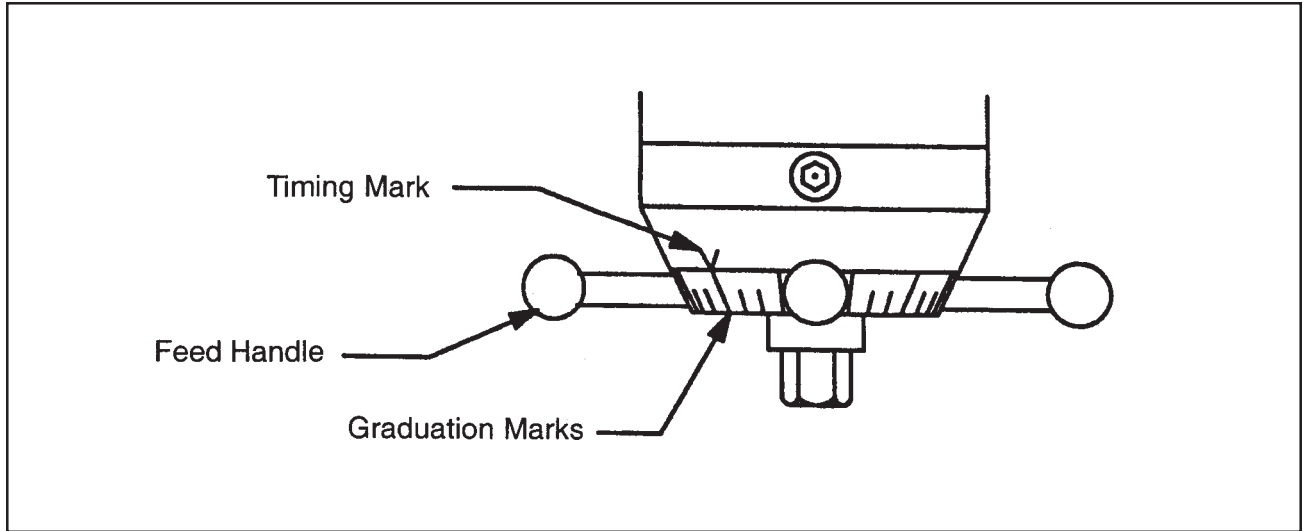
WARNING: The actual machining operation will begin when the first tool bit contacts the pipe.

When the pipe end is not square to the pipe axis, the tool bit will contact only a small segment of the pipe during each revolution.

To avoid tool bit damage, the feed rate should be very slow until the tool bit(s) is in contact with the pipe continually during at least one full revolution.

Continue rotating the feed handle clockwise until the end of the pipe is completely machined.

The axial feed rate of the tool bit is .0023" (.06 mm) for each graduation or .083" (2.11 mm) for each complete revolution of the feed handle.



Discontinue feed and allow the head to rotate one (1) to three (3) revolutions to improve the finish of the prep surface.

Release the trigger to stop the head rotation.

Rotate the Feed Handle counterclockwise to separate the Tool Bit(s) from the pipe.

Rotate the feed handle counterclockwise until the tool bit is 1/8" (3 mm) minimum from the end of the pipe or tube.

Loosen the draw nut on the mandrel to release the mandrel from the pipe.

The mandrel assembly may be left in the Model 206B and installed as a complete assembly.

CUTTING SPEEDS AND FEEDS

Nominal Cutting DIA	RPM for 200 in/min (5080 mm/min)	RPM for 250 in/min (6350 mm/min)	RPM for 300 in/min (7620 mm/min)
1.50" (38.1 mm)	42	53	64
2.00" (50.8 mm)	32	40	48
2.50" (63.5 mm)	25	32	34
3.00" (76.2 mm)	21	27	32
3.50" (88.9 mm)	18	23	27
4.00" (101.6 mm)	16	20	24
4.50" (114.3 mm)	14	18	21
5.00" (127.0 mm)	13	16	19
5.50" (139.7 mm)	12	15	17
6.00" (152.4 mm)	11	13	16
6.50" (165.1 mm)	10	12	15
Cutting Speed (Approximately)			

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.

BASIC FEED RECOMMENDATION

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

This is very important for longer tool bit life when cutting through flame cut or out of square pipe ends.

Use adequate feed, .003" (.08 mm) to .006" (.15 mm) per revolution thereafter, to establish a continuous chip cut.

If the feed is too light, only light stringer chips will be removed.

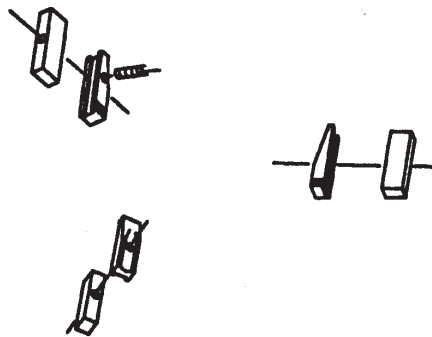
If the feed is too heavy the drive will start to overload and the chip will start to have a rough or torn appearance.

Stainless steel, which work hardens, must be worked with heavy enough feed to stay under the work hardened surface, .003" (.08 mm) to .006" (.15 mm) feed.

Never allow the Tool Bit to burnish the surface.

Reduced feeds and speeds will normally minimize chatter problems.

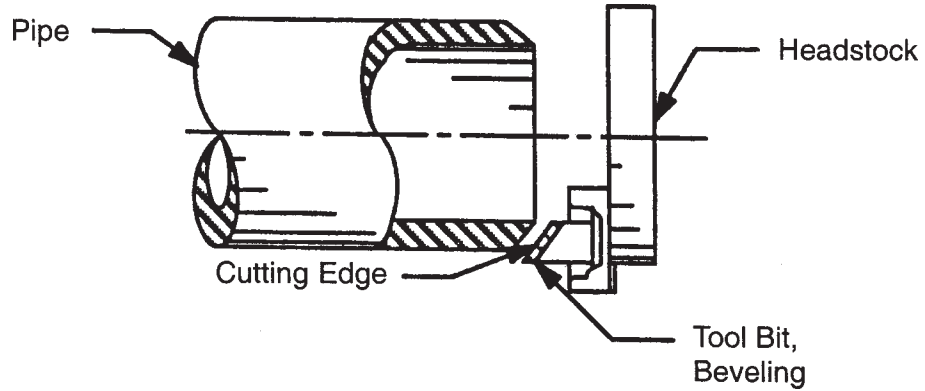
JAW BLOCKS AND RAMPS



ID RAMP SET	BLOCK P/N	MOUNTING RANGE
Standard	Not Required	1.63" to 2.18" ID (41.4 mm to 55.4 mm ID)
Standard	08-0162	2.08" to 2.65" ID (52.8 mm to 67.3 mm ID)
Standard	08-0163	2.55" to 3.12" ID (64.8 mm to 79.2 mm ID)
Standard	08-0164	3.02" to 3.60" ID (76.7 mm to 91.4 mm ID)
Standard	08-0165	3.50" to 4.08" ID (88.9 mm to 103.6 mm ID)
Extended	Not Required	3.98" to 4.55" ID (101.1 mm to 115.6 mm ID)
Extended	08-0162	4.47" to 5.05" ID (113.5 mm to 128.3 mm ID)
Extended	08-0163	4.95" to 5.53" ID (125.7 mm to 140.5 mm ID)
Extended	08-0164	5.43" to 6.01" ID (137.9 mm to 152.7 mm ID)
Extended	08-0165	5.91" to 6.49" ID (151.1 mm to 164.8 mm ID)

TOOL BITS

TOOL BIT, BEVELING

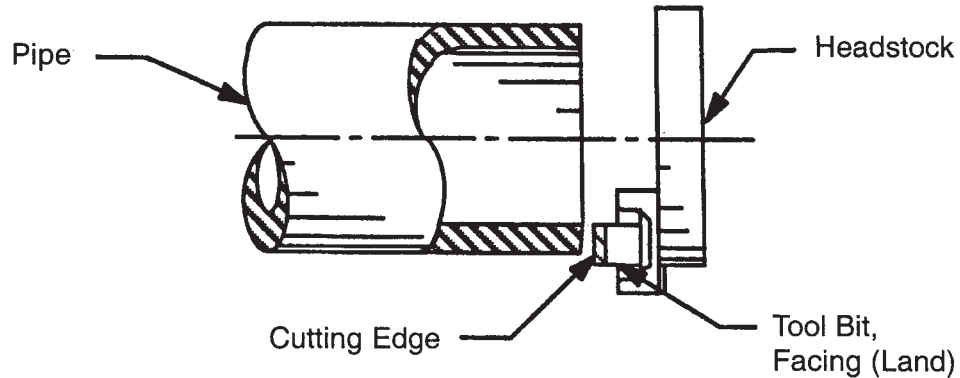


ID Range	Pipe or Tube Material	37.5° Beveling Tool Bit P/N	Facing Tool Bit P/N
2.223" thru 5.500" (56.5 mm thru 139.7 mm)	CS	99-2905	99-2904
2.203" thru 5.500" (56.0 mm thru 139.7 mm)	SS	99-2918	99-2917
2.750" thru 6.400" (69.9 mm thru 162.6 mm)	CS	99-2906	99-2904
2.937" thru 6.400" (74.6 mm thru 162.6 mm)	SS	99-2919	99-2917

TOOL BIT, BEVELING

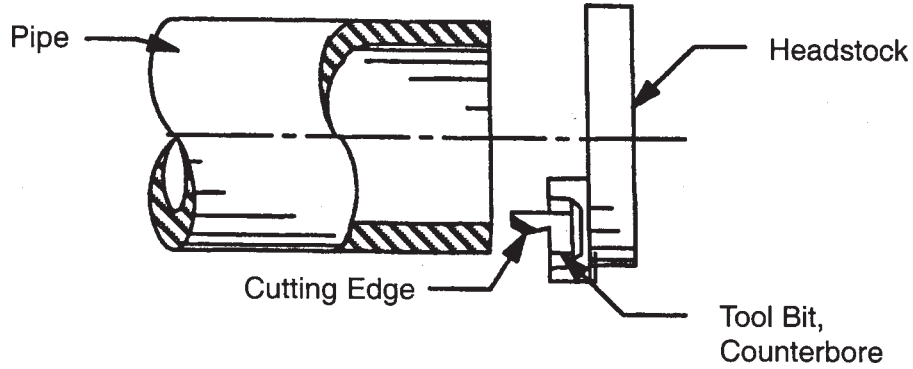
ID Range	Pipe or Tube Material	45° Beveling Tool Bit P/N	FACING Tool Bit P/N
2.046" thru 5.312" (52.0 mm thru 134.9 mm)	CS	99-2913	99-2904
2.046" thru 5.312" (52.0 mm thru 134.9 mm)	SS	99-2926	99-2917
3.078" thru 6.344" (78.2 mm thru 161.1 mm)	CS	99-2914	99-2904
3.078" thru 6.344" (78.2 mm thru 161.1 mm)	SS	99-2927	99-2917

TOOL BIT, FACING (LAND)



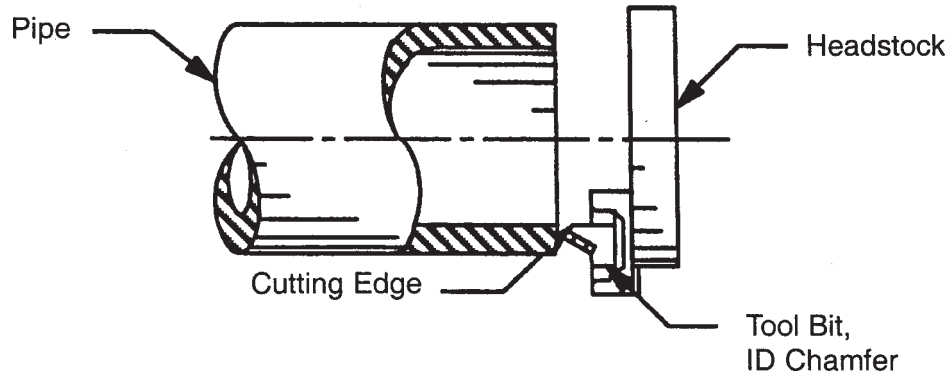
OD Range	Pipe or Tube Material	Facing (Land) Tool Bit P/N
1.625" thru 6.750" (41.3 mm thru 171.5 mm)	CS SS	99-0135
1.625" thru 6.750" (41.3 mm thru 171.5 mm)	CS SS	99-2904
1.625" thru 6.750" (41.3 mm thru 171.5 mm)	SS	99-2917
1.625" thru 6.750" (41.3 mm thru 171.5 mm)	SS	99-2979*
1.625" thru 6.750" (41.3 mm thru 171.5 mm)	COPPER	99-4537
* Cobalt High Heat Tool Bits are available.		

TOOL BIT, COUNTERBORING



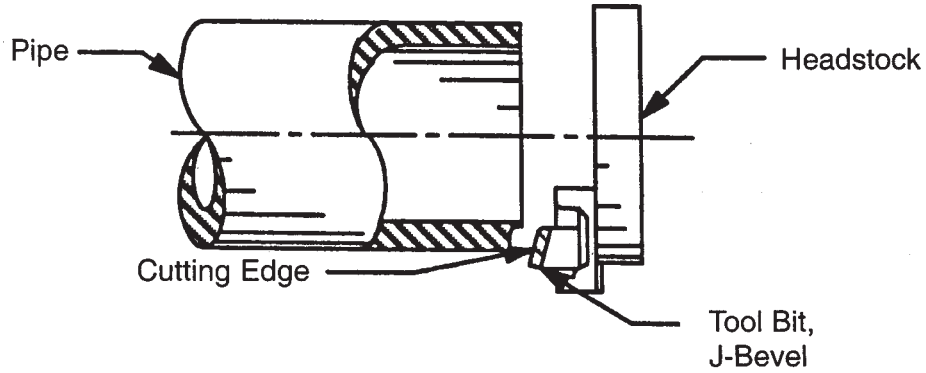
ID Range	Pipe or Tube Material	14.5° (4:1) C'Bore (1/2" [12.7 mm]) Deep Tool Bit P/N	Facing Tool Bit P/N
2.141" thru 5.562" (54.4 mm thru 141.3 mm)	CS	99-2907	99-29-04
2.141" thru 5.562" (54.4 mm thru 141.3 mm)	SS	99-2920	99-2917
2.546" thru 5.968" (64.7 mm thru 151.6 mm)	CS	99-2908	99-2904
2.546" thru 5.968" (64.7 mm thru 151.6 mm)	SS	99-2921	99-2917
3.562" thru 6.500" (90.5 mm thru 165.1 mm)	CS	99-2909	99-2904
3.562" thru 6.500" (90.5 mm thru 165.1 mm)	SS	99-2922	99-2917

TOOL BIT, ID CHAMFER



ID Range	Pipe or Tube Material	10° ID Chamfer Tool Bit P/N	Facing Tool Bit P/N
2.000" thru 5.375" (50.8 mm thru 136.5 mm)	CS	99-2910	99-2904
2.000" thru 5.375" (50.8 mm thru 136.5 mm)	SS	99-2923	99-2917
2.812" thru 6.125" (71.4 mm thru 155.6 mm)	CS	99-2911	99-2904
2.812" thru 6.125" (71.4 mm thru 155.6 mm)	SS	99-2924	99-2917
3.546" thru 6.500" (90.1 mm thru 165.1 mm)	CS	99-2912	99-2904
3.546" thru 6.500" (90.1 mm thru 165.1 mm)	SS	99-2925	99-2917

TOOL BIT, J-BEVEL



ID Range	Pipe or Tube Material	25° J-Bevel Tool Bit P/N	Facing Tool Bit P/N
1.625" thru 4.750" (41.3 mm thru 120.7 mm)	CS	99-2915	99-2904
1.625" thru 4.750" (41.3 mm thru 120.7 mm)	SS	99-2928	99-2917
2.750" thru 6.000" (69.9 mm thru 152.4 mm)	CS	99-2916	99-2904
2.750" thru 6.000" (69.9 mm thru 152.4 mm)	SS	99-2929	99-2917
3.750" thru 6.625" (95.3 mm thru 168.3 mm)	CS	99-3349	99-2904
3.750" thru 6.625" (95.3 mm thru 168.3 mm)	SS	99-3350	99-2917

TROUBLE SHOOTING

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: 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: There's a Loss of Hydraulic Power

The hydraulic supply pressure is too low.
The hydraulic filter is plugged.
The hydraulic line size is insufficient.
The hydraulic 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 Hydraulic Motor Will Not Start

The hydraulic power supply is shut off.
The hydraulic motor is damaged and will not run free.

ACCESSORIES

The following accessories are recommended for use with the Model 206B and are available from TRI TOOL INC.

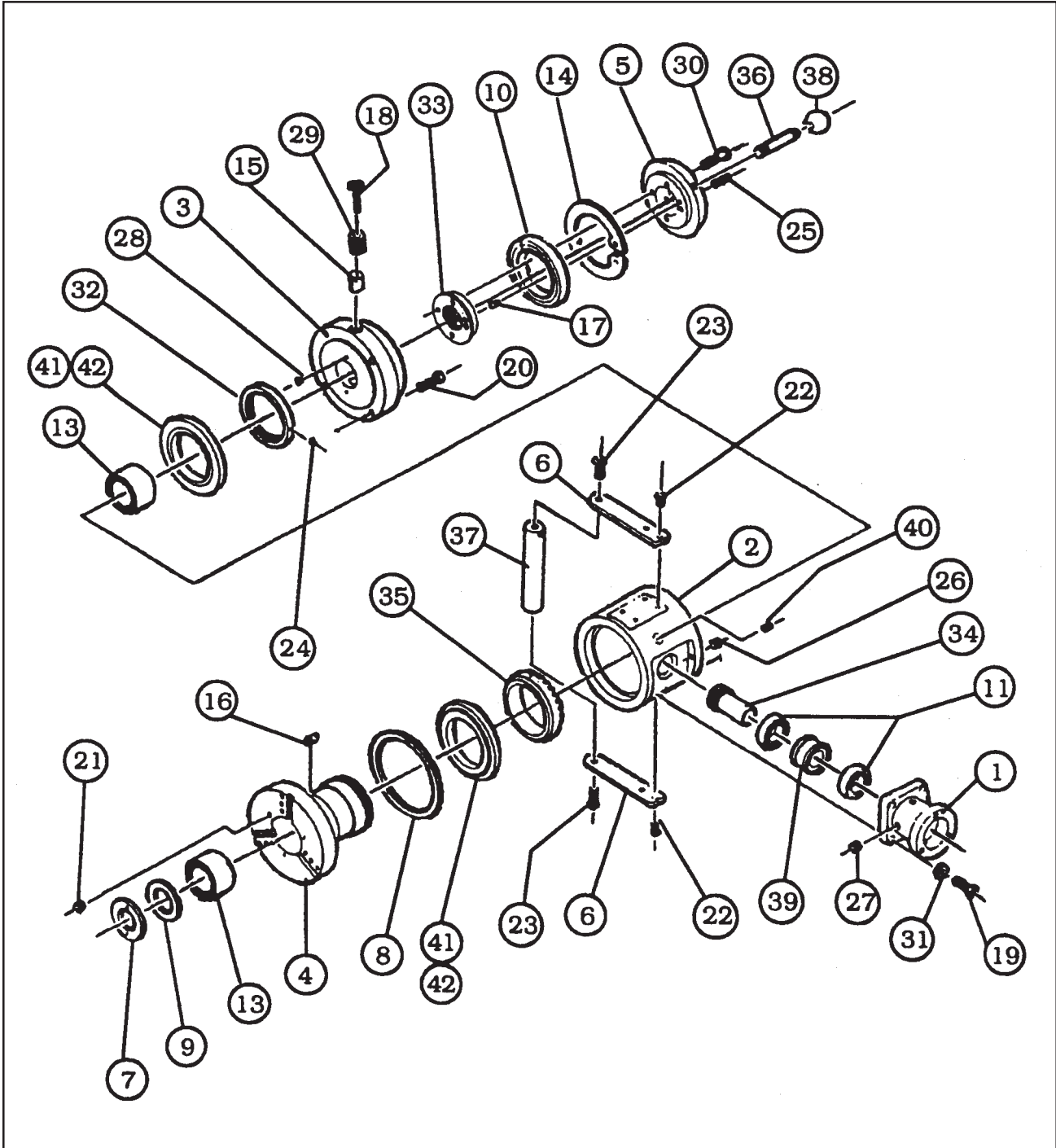
1. Portable Air Caddy (P/N 75-0115)
2. Elbow Mandrel Kit (P/N 05-1257)
2.51" ID to 6.12" ID
(63.8 mm ID to 155.4 mm ID)
3. Elbow Mandrel Assembly (P/N 06-0296)
1.63" ID to 2.56" ID
(41.4 mm ID to 65.0 mm ID)
4. Pointer kit, Elbow Mandrel (P/N 05-0153)
5. Sleeve Mandrel Kit (P/N 05-1286)
2" – 6" pipe
6. Flange Facer Kit (P/N 05-0131)
1.75" DIA to 14.00" DIA
(44.5 mm DIA to 355.6 mm DIA)
7. Miter Mandrel Kit (P/N 05-0177)
8. Dial Indicator Kit (P/N 05-0180)
9. ID Tracking Module Kit (P/N 05-0183)

NOTE:

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

ILLUSTRATED PARTS BREAKDOWN

MODEL 206B BEVELMASTER™



Parts List, Model 206B BEVELMASTER™

Item No.	Part No.	Description	Qty
1.	19-0409	HOUSING, DRIVE	1
2.	19-0410	HOUSING, MAIN	1
3.	19-0411	HOUSING, FEED	1
4.	20-0358	SHAFT, MAIN	1
5.	24-0726	PLATE, FEED	1
6.	24-0727	PLATE, HANDLE	2
7.	24-0831	PLATE, SEAL	1
8.	28-0057	SEAL, FELT	17" (44 cm)
9.	28-0172	SEAL, SHAFT	1
10.	29-0002	BEARING, BALL	1
11.	29-0065	BEARING, BALL	2
12.	—		
13.	29-0218	BEARING, ROLLER	2

TRI TOOL INC.

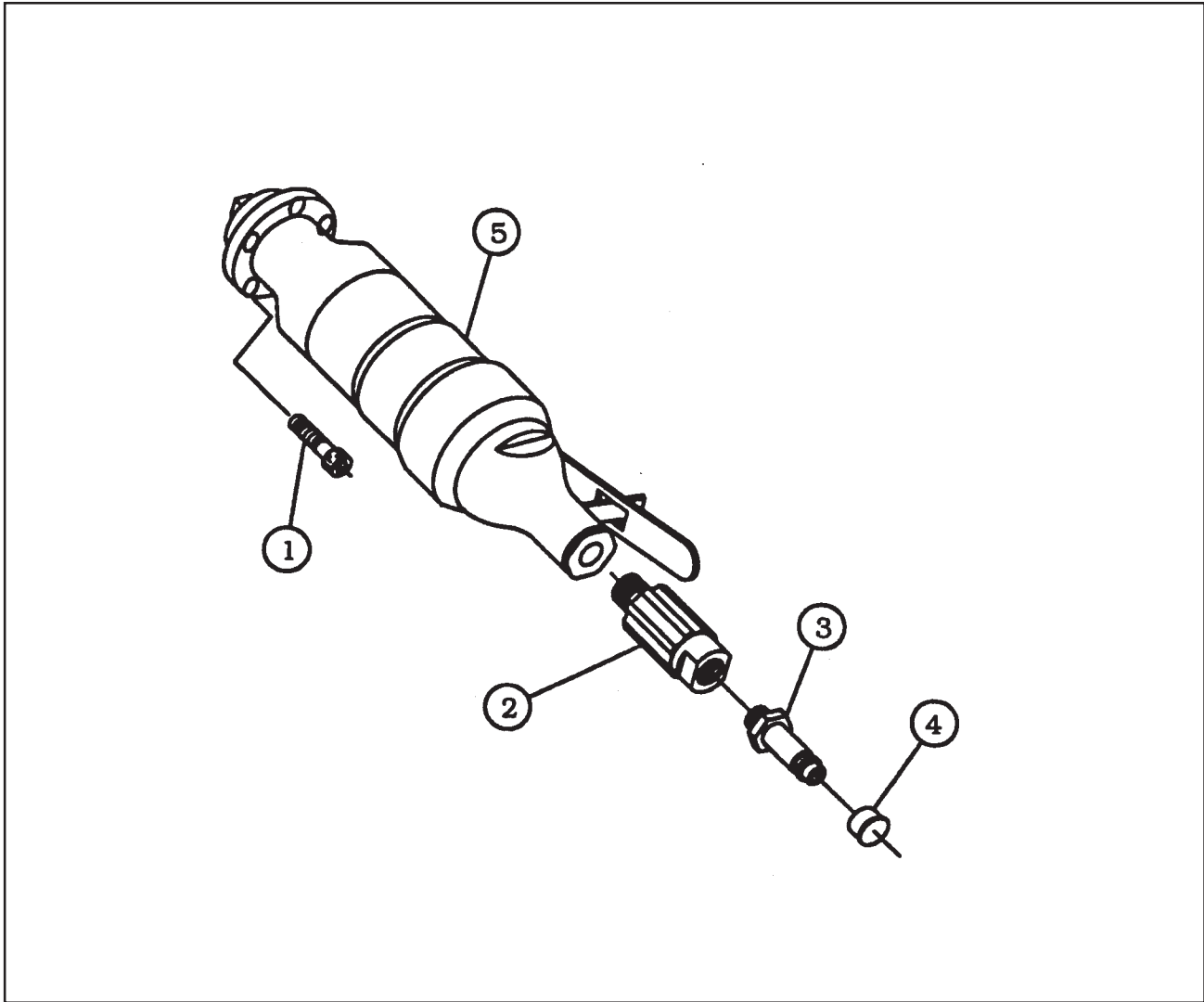
Parts List, Model 206B BEVELMASTER™ Continued

Item No.	Part No.	Description	Qty
14.	30-0300	RING, RETAINING, INTERNAL	1
15.	31-0086	KEY, BRONZE, 45°	2
16.	31-0087	KEY	1
17.	32-0304	PIN, LOCK	1
18.	33-0031	SCREW, CAP, #10-24 X 7/8"	2
19.	33-0056	SCREW, CAP, 5/16-18 X 1"	4
20.	33-0058	SCREW, CAP, 5/16-18 X 1 1/2"	4
21.	33-0284	SCREW, BUTTON HEAD, 1/4-20 X 3/8"	3
22.	33-0285	SCREW, BUTTON HEAD, 1/4-20 X 1/2"	4
23.	33-0300	SCREW, BUTTON HEAD, 3/8-16 X 1"	2
24.	33-0488	SCREW, SET, #10-24 X 1/4", CUP PT	2
25.	33-0507	SCREW, SET, 1/4-20 X 1", CUP PT	1
26.	33-0515	SCREW, SET, 5/16-18 X 7/16", CUP PT	1
27.	33-0526	SCREW, SET, 3/8-16 X 5/16, CUP PT	4
28.	33-0954	SCREW, SET, #10-24, 1/4", HDOG	2
29.	33-1524	SCREW, SET, ADJUST	2
30.	33-1526	SCREW, BUTTON HEAD, 5/16-18 X 1 1/2"	4
31.	34-0027	WASHER, FLAT	4
32.	35-0267	NUT, LOCK	1
33.	35-0269	NUT, FEED	1
34.	39-0331	GEAR, PINION	1
35.	39-0468	GEAR, BEVEL	1
36.	41-0076	HANDLE, FEED	4
37.	41-0077	HANDLE	1
38.	42-0017	KNOB	4
39.	46-0134	SLEEVE	1
40.	54-0375	FITTING, GREASE	1
41.	29-0216	BEARING, TAPER, CONE	2
42.	29-0215	BEARING, TAPER, CUP	2
NOT SHOWN			
	05-1256	SHIPPING KIT	1
	36-0005	WRENCH, L, 1/8" HEX	1
	36-0007	WRENCH, L, 5/32" HEX	1

Parts List, Model 206B BEVELMASTER™ Continued

Item No.	Part No.	Description	Qty
NOT SHOWN Continued			
	36-0008	WRENCH, L, 3/16" HEX	1
	36-0010	WRENCH, L, 1/4" HEX	1
	36-0012	WRENCH, L, 3/8" HEX	1
	36-0020	WRENCH, T, 5/32" HEX	1
	36-0146	WRENCH, COMBINATION, 13/16"	1
	86-0089	CARRYING CASE, 206B	1

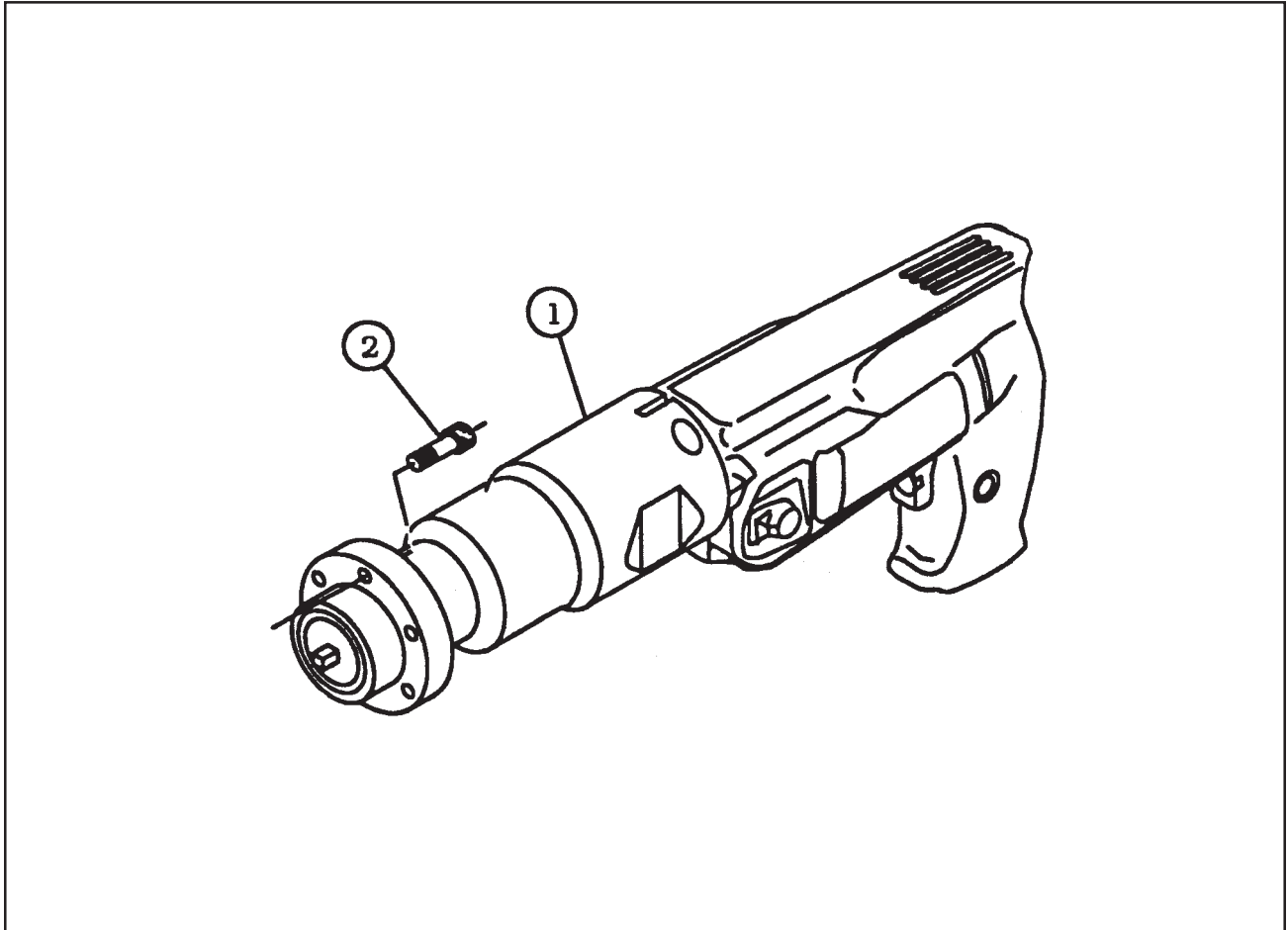
MOTOR ASSEMBLY, AIR (P/N 57-0168)



Parts List, Motor Assembly, Air (P/N 57-0168)

Item No.	Part No.	Description	Qty
1.	33-0056	SCREW, CAP, 5/16-18 X 1"	3
2.	53-0046	VALVE, FLOW CONTROL	1
3.	54-0126	COUPLING, QD	1
4.	54-0201	CAP, PLASTIC	1
5.	57-0161	MOTOR, AIR	1

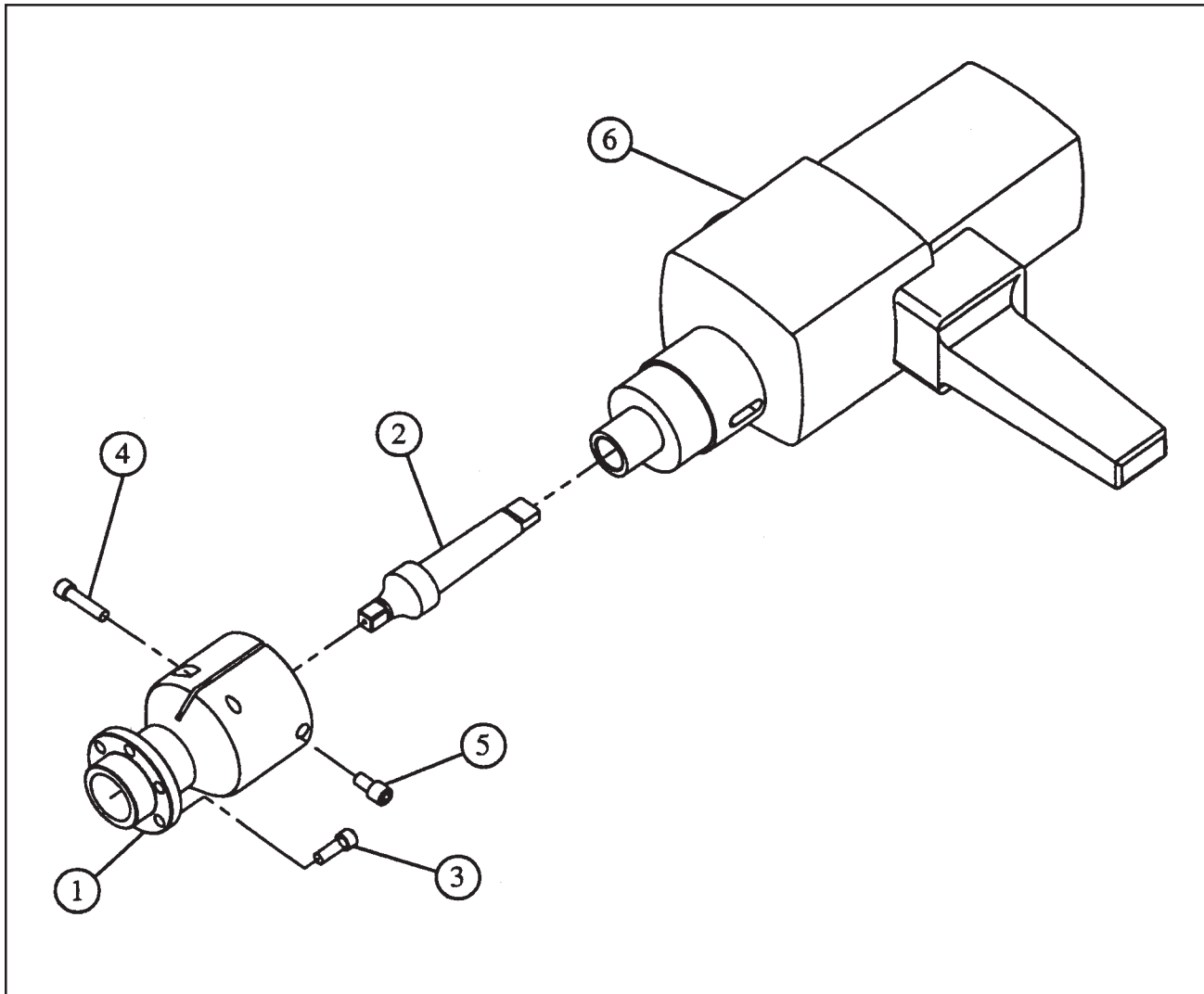
MOTOR ASSEMBLY, ELECTRIC



Parts List, Motor Assembly, Electric

Item No.	Part No.	Description	Qty
		110V AC, 60 Hz	
1.	58-0045	MOTOR ASSEMBLY, ELECTRIC	1
2.	33-0056	SCREW, CAP, 5/16-18 X 1"	3
		220V AC, 50 Hz	
1.	58-0047	MOTOR ASSEMBLY, ELECTRIC	1
2.	33-0056	SCREW, CAP, 5/16-18 X 1"	3

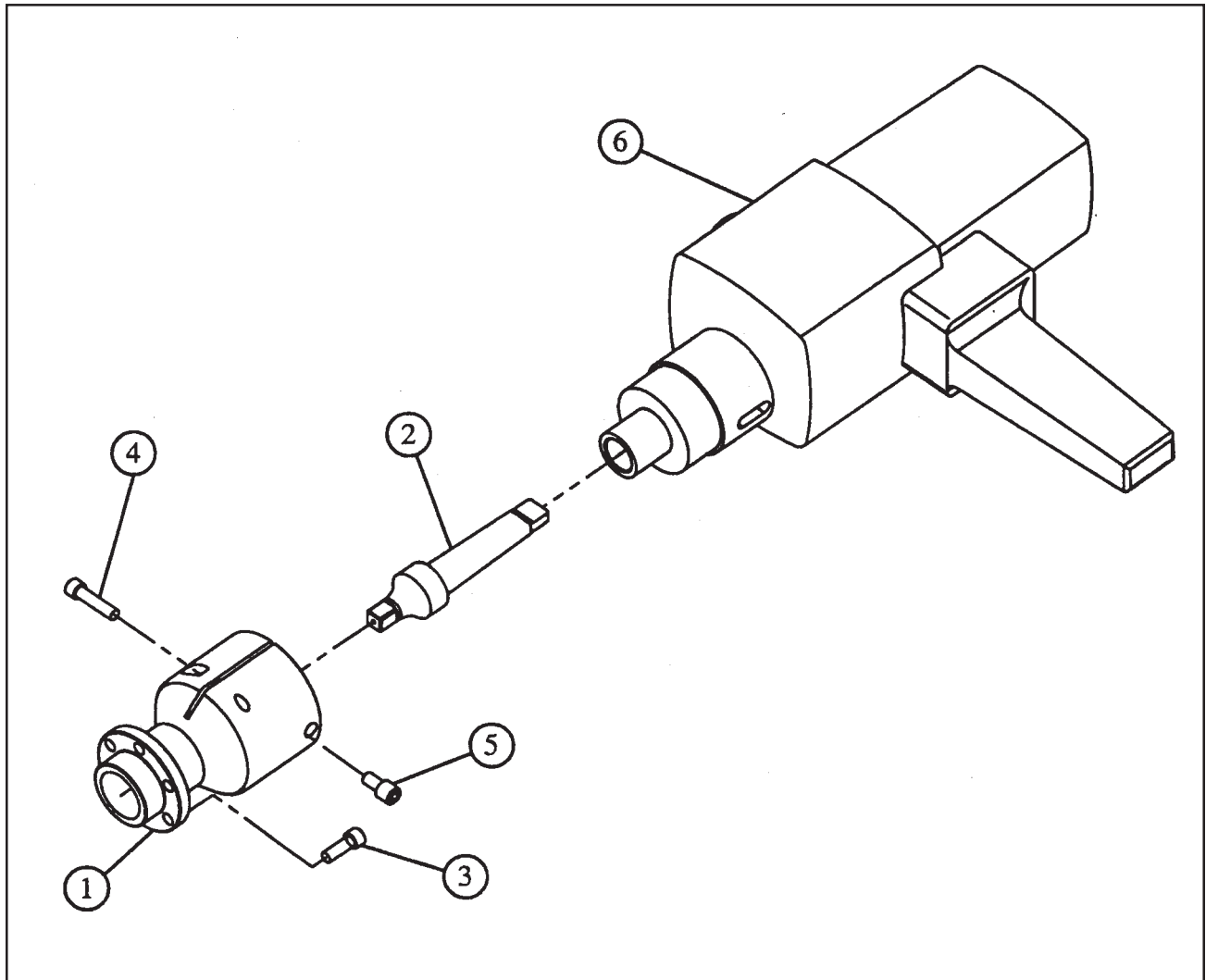
MOTOR ASSEMBLY, ELECTRIC DRIVE, 115V HD (P/N 58-0167)



Parts List, Motor Assembly, Electric Drive, 115V HD (P/N 58-0167)

Item No.	Part No.	Description	Qty
1.	27-0826	ADAPTER, DRIVE	1
2.	30-3143	1/2" SQUARE DRIVE	1
3.	33-0055	SCREW, CAP, 5/16-18 X 7/8" LG.	3
4.	33-0057	SCREW, CAP, 5/16-18 X 1 1/4" LG.	1
5.	33-1874	SCREW, ANTI-ROTATION	2
6.	58-0192	MOTOR, ELECTRIC, 115V, MODIFIED	1

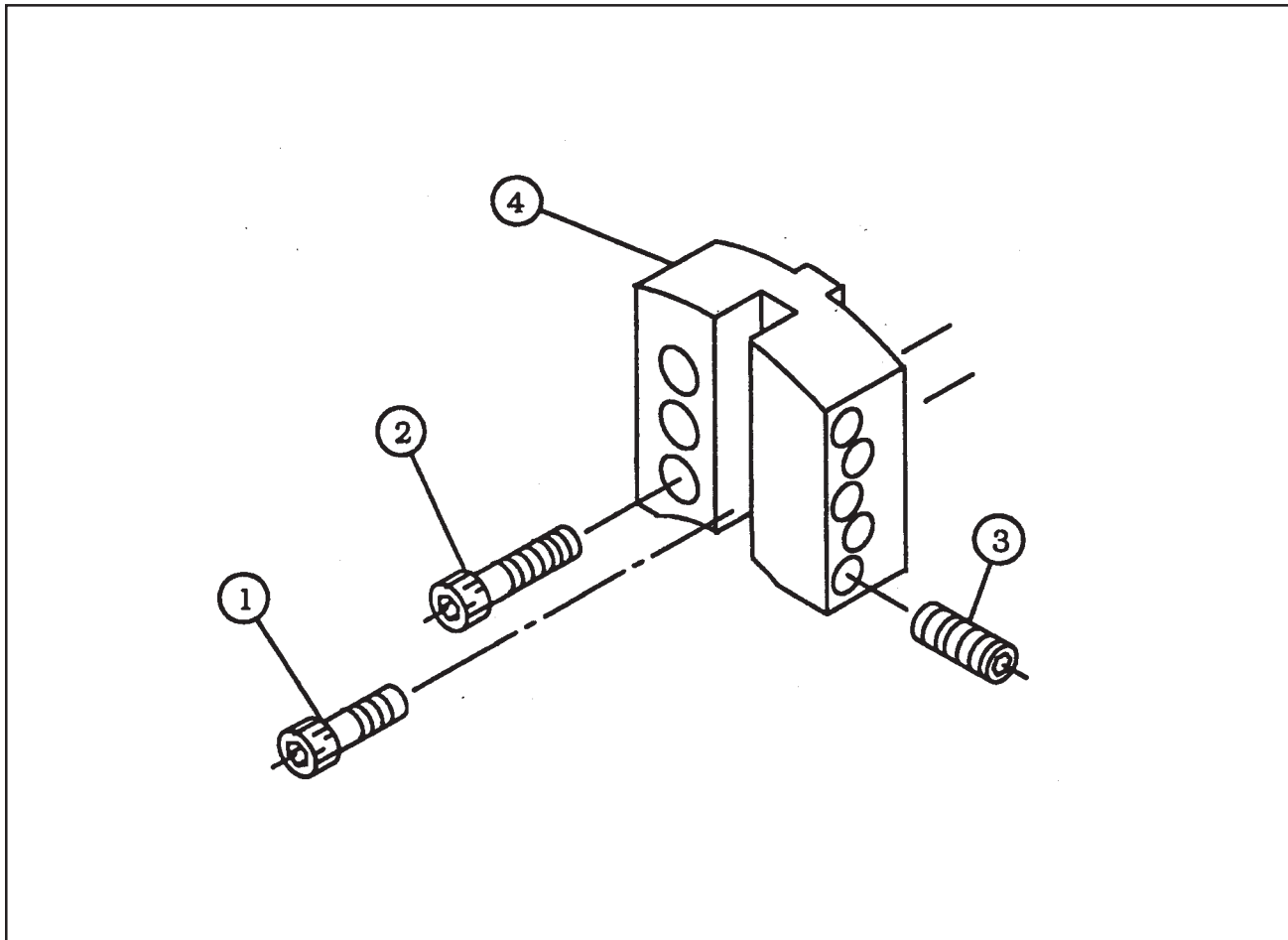
MOTOR ASSEMBLY, ELECTRIC DRIVE, 230V HD (P/N 58-0174)



Parts List, Motor Assembly, Electric Drive, 230V HD (P/N 58-0174)

Item No.	Part No.	Description	Qty
1.	27-0826	ADAPTER, DRIVE	1
2.	30-3143	1/2" SQUARE DRIVE	1
3.	33-0055	SCREW, CAP, 5/16-18 7/8" LG.	3
4.	33-0057	SCREW, CAP, 5/16-18 X 1 1/4" LG.	1
5.	33-1874	SCREW, ANTI-ROTATION	2
6.	58-0173	MOTOR, ELECTRIC, 230V, MODIFIED	1

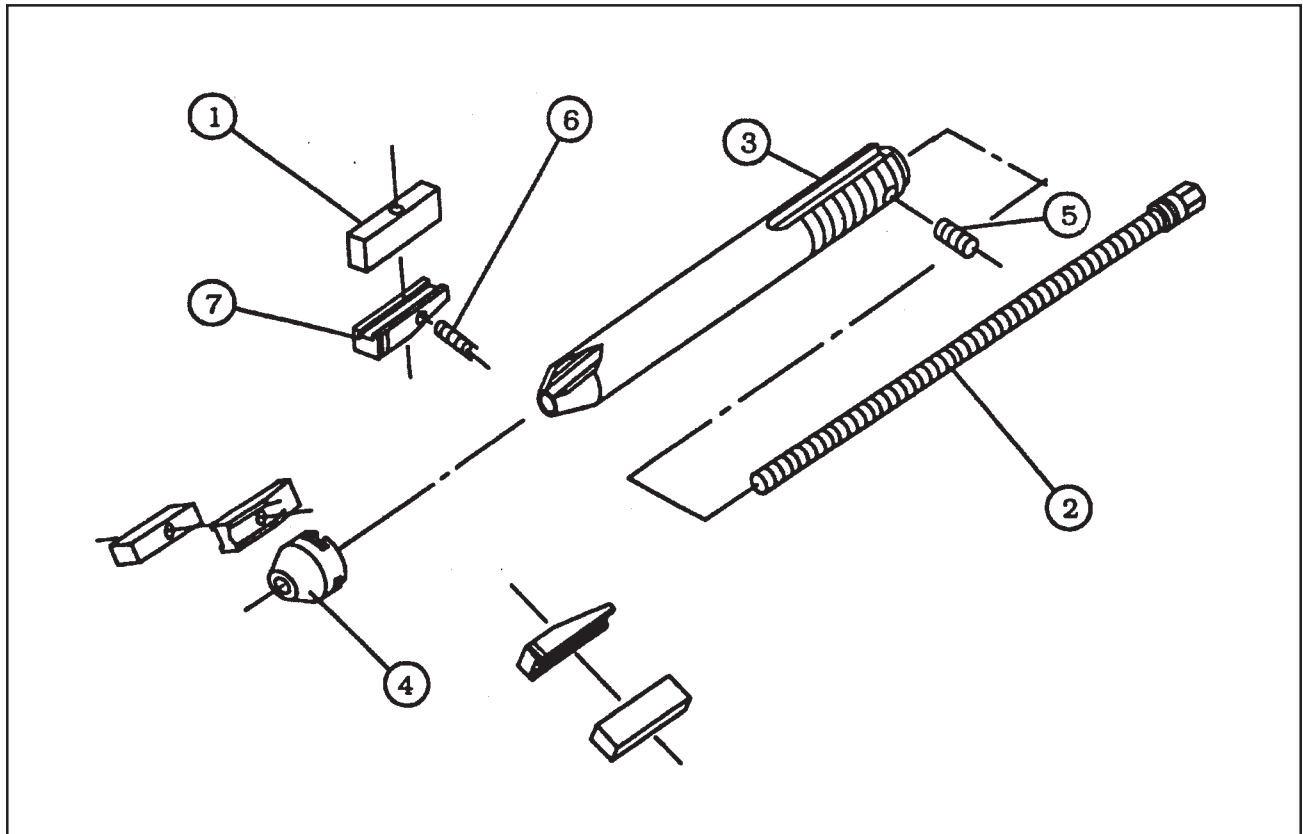
TOOL HOLDER (P/N 49-0089)



Parts List, Tool Holder (P/N 49-0089)

Item No.	Part No.	Description	Qty
1.	33-0039	SCREW, CAP, 1/4-20 X 5/8"	3
2.	33-0042	SCREW, CAP, 1/4-20 X 1"	3
3.	33-0518	SCREW, SET, 5/16-18 X 3/4", CUP PT	5
4.	49-0087	HOLDER, TOOL	1

MANDREL ASSEMBLY (P/N 06-0292)



Parts List, Mandrel Assembly (P/N 06-0292)

Item No.	Part No.	Description	Qty
1.	08-0162	BLOCK ASSEMBLY, JAW, .340"	3
	08-0163	BLOCK ASSEMBLY, JAW, .580"	3
	08-0164	BLOCK ASSEMBLY, JAW, .820"	3
	08-0165	BLOCK ASSEMBLY, JAW, 1.060"	3
2.	11-0057	ROD ASSEMBLY, DRAW	1
3.	13-0301	MANDREL	1
4.	24-0722	PLATE, BUTT, SMALL	1
	24-0723	PLATE, BUTT, LARGE	1
5.	33-1527	SCREW, SET, 1/4-20 X 1/4", H DOG	2
6.	40-0001	SPRING, EXTENSION	1
	40-0037	SPRING, EXTENSION	1
7.	48-0474	BLOCK, RAMP, STANDARD	3
	48-0475	BLOCK, RAMP, EXTENDED	3