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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 are 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 Sleeve Mandrels have been designed to expand the versatility of the Model 212B BEVELMASTER™.

These Mandrels, when used in conjunction with the Model 212B, allow machining of thin wall pipe and tube.

## MAINTENANCE

All components except the nylon sleeve should be cleaned and coated with a light film of oil prior to storage.

If the Mandrel is operated in such a way that the Mandrel collects chips or debris near the head, the Head should be cleaned after each cutting operation.

### DAILY MAINTENANCE

Wipe the unit down and spray with a rest preventative under severe humidity conditions.

Visually inspect for loose screws, missing bolts, or damage due to impact.

Contact TRI TOOL Inc. if major repair is required.

Tighten or replace screws or other parts as required.

**SLEEVE MANDREL KIT RANGE**

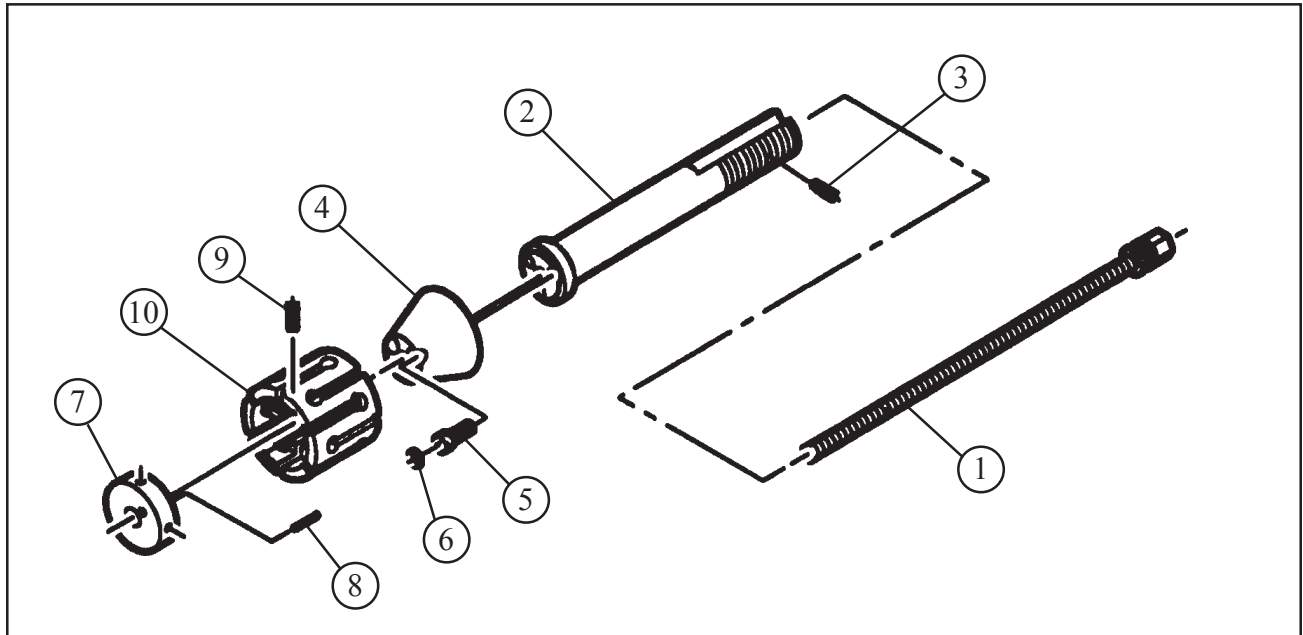
<b>ID MOUNTING RANGE</b>			
<b>Head Assy P/N</b>	<b>Sleeve Assy P/N</b>	<b>ID Range</b>	
		<b>Min</b>	<b>Max</b>
21-0307	46-0250	4.20" (106.7 mm)	4.41" (112.0 mm)
21-0308	46-0251	5.24" (133.1 mm)	5.44" (138.2 mm)
21-0309	46-0252	6.30" (160.0 mm)	6.50" (165.4 mm)
21-0310	46-0253	8.27" (210.1 mm)	8.48" (215.4 mm)
21-0311	46-0254	10.36" (263.1 mm)	10.57" (268.5 mm)
21-0312	46-0255	12.33" (313.2 mm)	12.54" (318.5 mm)

Sleeve Mandrel set-up will use the same instructions as are required for the standard Mandrel.

Refer to the Operator's Manual for the operation of the standard Mandrel for the Model 212B BEVELMASTER™.

## ILLUSTRATED PARTS BREAKDOWN

### SLEEVE MANDRELS



Parts List, Mandrel Assy, #1 Sleeve (P/N 06-0350)

Item No.	Part No.	Description	Qty
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0307	HEAD ASSY, #1	1
4	21-0313	HEAD, #1	1
5	33-0070	SCREW, CAP, 3/8-16 X 7/8	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0250	SLEEVE ASSY, #1	1
7	24-0964	PLATE, BUTT, #1	1
8	32-0054	PIN, ROLL, 1/4 DIA X 1 1/4	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0247	SLEEVE, MANDREL, #5	1

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## Parts List, Mandrel Assy, #2 Sleeve (P/N 06-0351)

<b>Item No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0308	HEAD ASSY, #2	1
4	21-0314	HEAD, #2	1
5	33-0073	SCREW, CAP, 3/8-16 X 1 1/2	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0251	SLEEVE ASSY, #2	1
7	24-0965	PLATE, BUTT, #2	1
8	32-0054	PIN, ROLL, 1/4 DIA X 1 1/4	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0248	SLEEVE, MANDREL, #6	1

## Parts List, Mandrel Assy, #3 Sleeve (P/N 06-0352)

<b>Item No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0309	HEAD ASSY, #3	1
4	21-0315	HEAD, #3	1
5	33-0073	SCREW, CAP, 3/8-16 X 1 1/2	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0252	SLEEVE ASSY, #3	1
7	24-0966	PLATE, BUTT, #3	1
8	32-0054	PIN, ROLL, 1/4 DIA X 1 1/4	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0249	SLEEVE, MANDREL, #7	1

Parts List, Mandrel Assy, #4 Sleeve (P/N 06-0353)

Item No.	Part No.	Description	Qty
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0310	HEAD ASSY, #4	1
4	21-0316	HEAD, #4	1
5	33-0075	SCREW, CAP, 3/8-16 X 2	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0253	SLEEVE ASSY, #4	1
7	24-0967	PLATE, BUTT, #4	1
8	32-0069	PIN, ROLL, 3/8 X 1 1/2	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0256	SLEEVE, MANDREL, #4	1

Parts List, Mandrel Assy, #5 Sleeve (P/N 06-0354)

Item No.	Part No.	Description	Qty
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0311	HEAD ASSY, #5	1
4	21-0317	HEAD, #5	1
5	33-0075	SCREW, CAP, 3/8-16 X 2	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0254	SLEEVE ASSY, #5	1
7	24-0968	PLATE, BUTT, #5	1
8	32-0069	PIN, ROLL, 3/8 X 1 1/2	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0257	SLEEVE, MANDREL, #5	1

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Parts List, Mandrel Assy, #6 Sleeve (P/N 06-0355)

<b>Item No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	12-0114	MANDREL, SUB-ASSY	1
1	11-0067	ROD ASSY, DRAW	1
2	13-0330	MANDREL	1
3	33-0928	SCREW, SET, 1/4-20 X 3/8, HDOG	2
	21-0312	HEAD ASSY, #6	1
4	21-0318	HEAD, #6	1
5	33-0075	SCREW, CAP, 3/8-16 X 2	3
6	34-0233	WASHER, NYLON, 5/8" OD X 3/8" ID	3
	46-0255	SLEEVE ASSY, #6	1
7	24-0969	PLATE, BUTT, #6	1
8	32-0069	PIN, ROLL, 3/8 X 1 1/2	1
9	33-0505	SCREW, SET, 1/4-20 X 3/4, CUP PT	4
10	46-0258	SLEEVE, MANDREL, #6	1

<b>Item No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
<b>NOT SHOWN:</b>			
	36-0024	WRENCH, T, 5/16" HEX	1
	36-0042	WRENCH, COMBINATION, 7/8"	1
	86-0142	CASE, CARRYING	1