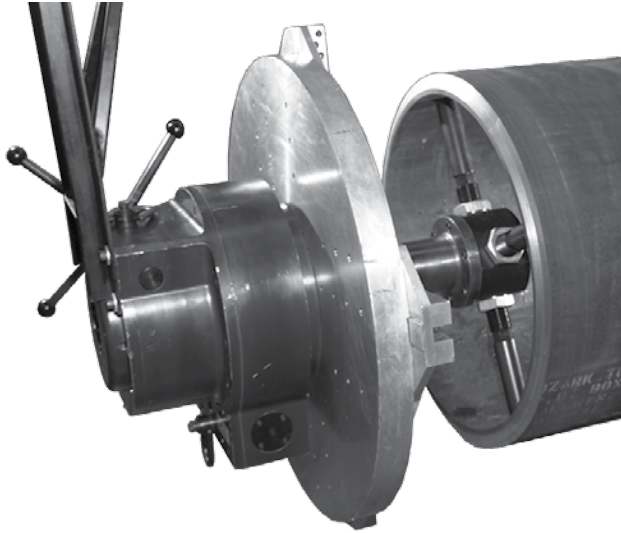
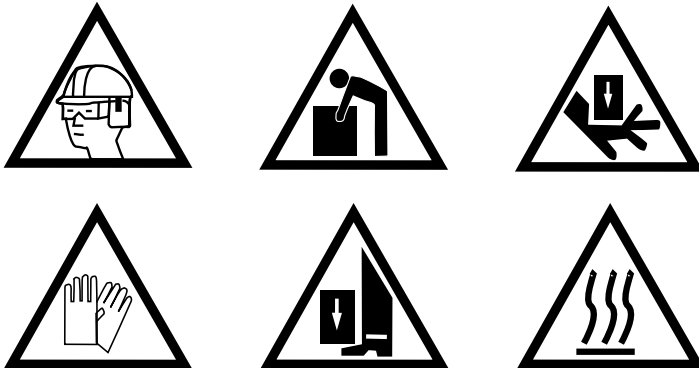


## Setup Recommendations for Model MFT-HD Miter Mandrel

**READ AND UNDERSTAND THESE RECOMMENDATIONS BEFORE ATTEMPTING TO OPERATE THIS MACHINE!**



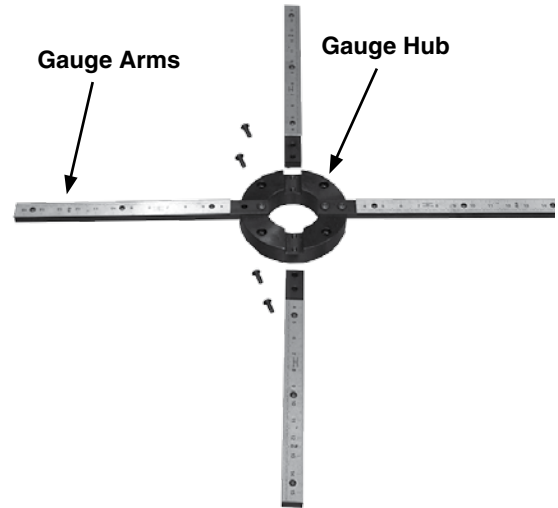
The Miter Mandrel for the MFT-HD has been engineered to center and lock the tool in a minimum of pipe depth. It is especially useful for, but not limited to, elbows.



**Caution** The operation of this machine and the Miter Mandrel requires heavy lifts, creates many serious pinch points and produces metal chips that are hot and very sharp. All approved safety equipment must be used for lifting and personal protection. Pay attention to your surroundings and anticipate where potentially dangerous, harmful situations are present.

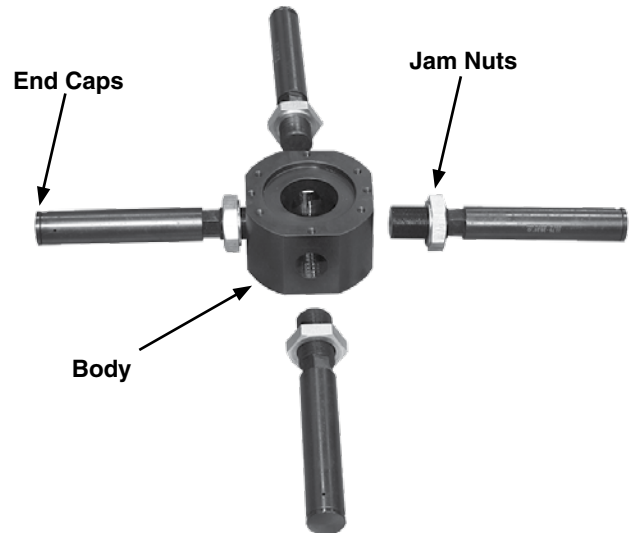
### 1. Remove Wedge Cone

Remove the six mounting bolts from the wedge cone and put the cone in the tool box.



### 2. Assemble The Miter Mandrel Gauge

Your Miter Mandrel should have been shipped with the measuring scales already installed on the gauge arms. Assemble the Gauge Arms to the Gauge Hub.



### 3. Assemble the Miter Mandrel Body

Measure the I.D. of the pipe to be machined. Select the appropriate Extension Legs (size range is shown on the legs). Assemble the Extension Legs by Installing End Caps onto the legs and threading on the Jam Nuts (Jam Nuts have a machined flat surface which must be on the Body side.) Thread the legs in far enough to fit inside of the pipe.



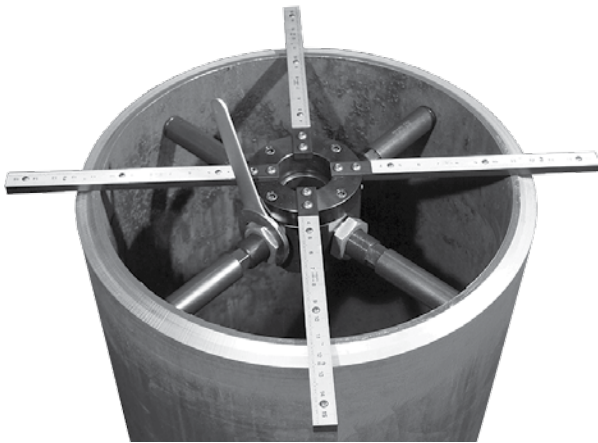
#### 4. Assemble the Miter Mandrel

Install the Gauge assembly to the Body assembly, using four mounting bolts from the wedge cone. The Gauge assembly must be placed as shown to permit adjusting and locking the Extension Legs inside the pipe.



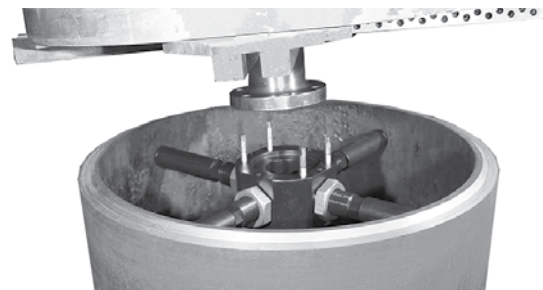
#### 6. Install Alignment Studs

Remove the Gauge assembly and install the alignment studs provided. These assist in aligning the tool onto the Mandrel.



#### 5. Insert the Assembled Mandrel into the Pipe

Insert the Miter Mandrel into the pipe with the Gauge Arms resting on the pipe edge. Using the Gauge Scales to center the assembly, turn the Extension Legs counter clockwise to tighten them against the wall. Use the 1-1/8" wrench, provided, on the hex machined into the Extension Legs and tighten them as tightly as possible. Confirm that the Mandrel is still centered and use the 2-1/4" wrench to tighten the Jam Nuts to the Body, solidly locking the Extension Legs in place. We suggest using a soft hammer on the wrenches on both the Extension Legs and Jam Nuts to assure that they are completely secured.

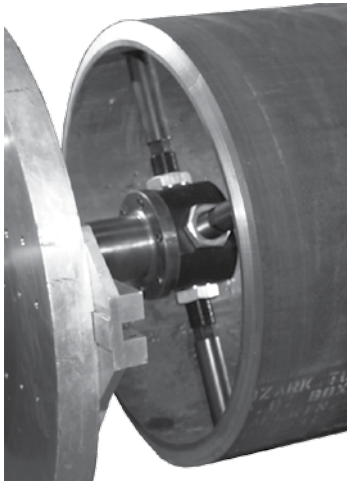


#### 7. Installing the Tool —Vertical

When installing this on a vertical pipe (shown), the tool is lowered carefully until the center shaft flange contacts the Mandrel. Once the shaft flange is securely located on the Mandrel, thread two mounting bolts, used for the wedge cone, into the Mandrel and gently tighten them. Remove the Alignment Studs, install the balance of the mounting bolts and tighten them all securely. The tool is ready to use.

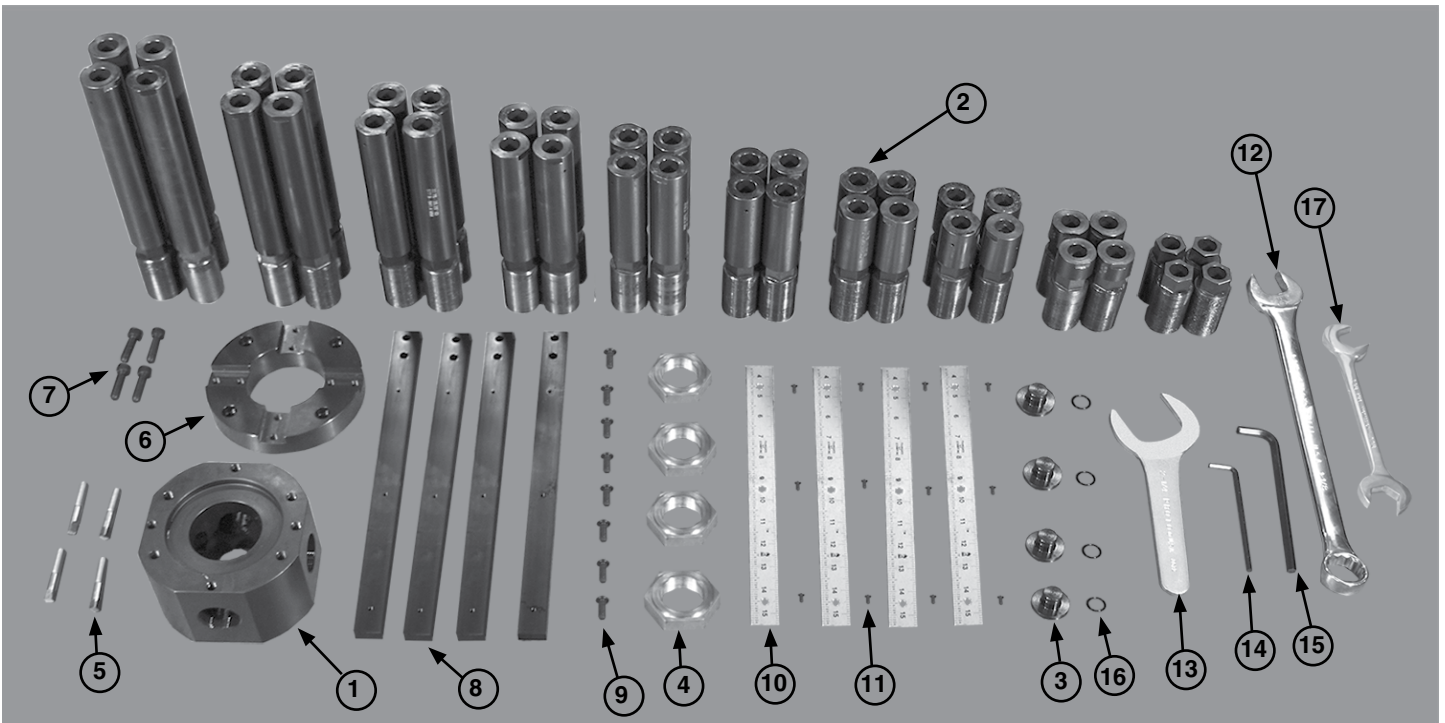


Final assembly of the tool on the Miter Mandrel will require that the operators place their arms in the space between the tool and the edge of the pipe. If the Mandrel is not tightened fully, there is a possibility that the Mandrel will slip and cause significant injury.



### 8. Installing the Tool — Horizontal

Mount the Miter Mandrel on to the center shaft using two mounting bolts from the wedge cone. Suspend the tool with the lifting frame and slide the Mandrel into the pipe to approximately the depth that the Gauge Assembly will position it. **[IMPORTANT—Mark the location of the extension legs in the pipe. These legs must be in this position to assure alignment of the bolt holes when the tool is finish-mounted on the Mandrel.]** Tighten the extension legs inside the pipe sufficiently to hold the Mandrel in place. Remove the two mounting bolts from the center shaft flange and swing the tool out of the way. Loosen the Extension Legs just enough to allow adjustment of the Mandrel in the pipe. Follow instructions #4, #5, #6 and #7 to complete the installation. An offset 1-1/8" wrench has been provided to assist in tightening the Extension Legs against the pipe wall.



**MFT-HD Miter Mandrel  
Assembly Part No. HD 360-800**

Item No.	Part No.	Description	Quantity	Item No.	Part No.	Description	Quantity
1	HD 360-801	Body	1	9	900-0001	5/16"-18 x 1" Button Head Cap Screw	8
2	See Chart	Extension Legs		10	HD 360-817	Gauge Scale	4
3	HD 360-812	Leg Cap	4	11	900-0002	10-24 x 3/8" Button Head Cap Screw	12
4	HD 360-813	1-1/2"-12 Jam Nut	4	12	RPWEOFF118	1-1/8" Combination Wrench	1
5	HD 360-814	Aligning Stud	4	13	RPWSV214	2-1/4" Service Wrench	1
6	HD 360-815	Gauge Hub	1	14	05471107	5/32" Hex Key, Long Arm	1
7	902-0002	3/8"-16 x 1-1/4" Socket	4	15	RPHD360711	3/16" Hex Key, Long Arm	1
8	HD 360-816	Head Cap Screw	4	16	ORING	O-Ring, Leg Cap	4
		Gauge Arm	4	17	85242626	1-1/8" Offset Wrench	1

**Item #2**

**Extension Legs**

Part No.	Pipe I.D. Range	Quantity
HD 360-802	8.75" - 11/25" (222.3 - 285.8 mm)	4
HD 360-803	10.75" - 13.25" (273.1 - 336.6 mm)	4
HD 360-804	12.75" - 15.25" (323.9 - 387.4 mm)	4
HD 360-805	14.75" - 17.25" (374.7 - 438.2 mm)	4
HD 360-806	16.75" - 19.25" (425.5 - 489.0 mm)	4
HD 360-807	18.75" - 21.25" (476.2 - 539.8 mm)	4
HD 360-808	20.75" - 23.25" (527.1 - 590.6 mm)	4
HD 360-809	22.75" - 25.25" (577.9 - 641.4 mm)	4
HD 360-810	24.75" - 27.25" (628.7 - 692.2 mm)	4
HD 360-811	26.75" - 29.25" (679.5 - 743.0 mm)	4