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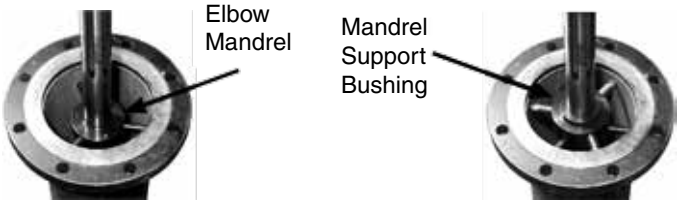
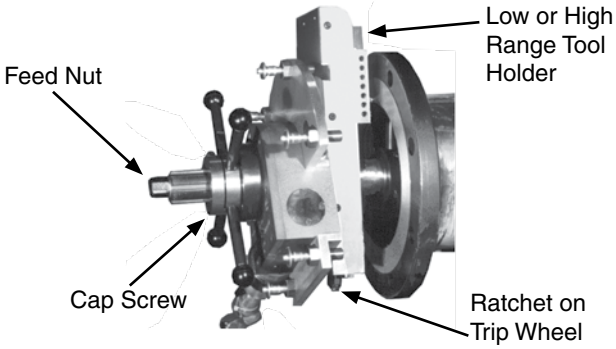
OPERATING RECOMMENDATIONS for MODEL MFT Flange Facer

READ THOROUGHLY AND UNDERSTAND THIS PUBLICATION BEFORE ATTEMPTING TO OPERATE THE EQUIPMENT.

DANGER! The application of this product requires an exposed rotating tool holder and cutting blade. It can produce HOT, SHARP metal fragments requiring that eye, ear, and hand protection and other protective clothing be worn at all times. Do not wear loose fitting clothing that may become entangled with the rotating objects.

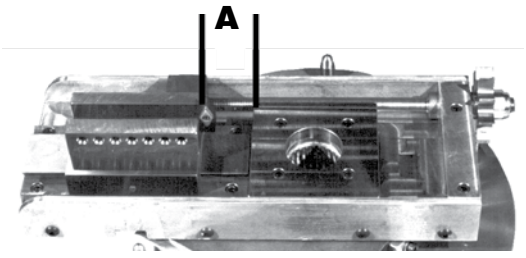


1. Install the appropriate elbow mandrel in the pipe I.D. in accordance with the instructions provided with the mandrel. For accuracy, the elbow mandrel is highly recommended over the wedge sets. The mandrel support bushing should also be installed to increase rigidity and reduce the occurrence of chatter.



2. Mount the power unit/flange facer assembly onto the centershaft by aligning the splines and engaging the feed nut.

3. Install the low or high range tool holder (depending upon the flange size) in the tool block.



NOTE: Make sure that the distance (A) between the female slide block and the body is greater that the width of the flange surface to be machined. Reposition as necessary. All trip pins must be disengaged.

4. Assure that the area around the machine is clear. Begin rotating the flange facer and advance the feed nut until the insert makes contact with the surface. Stop the machine and note the position of the handles on the feed nut. Turn the feed nut counter clockwise 1/2 turn to disengage the insert from the face.

5. Position the insert outside of the flange surface to be machined by rotating the trip wheel with the ratchet and socket.

6. Return the insert to the contact depth by turning the feed nut 1/2 turn clockwise. See specifications below for approximate adjustment dimensions. Lock the feed nut in position by tightening the cap screw.

7. Clear the backlash by rotating the trip wheel clockwise when looking at the nut by hand. Once you feel resistance, position the next tip of the star wheel so it points directly at the trip ring (model MFT) or bracket (model MT). Failure to perform this procedure will result in damage to the trip pins.

8. Proper adjustment of the gib is necessary for an even cut and proper timing. The gib is properly adjusted when there is resistance to turning the trip wheel by hand. Adjustments are made by turning the gib screw clockwise to loosen.

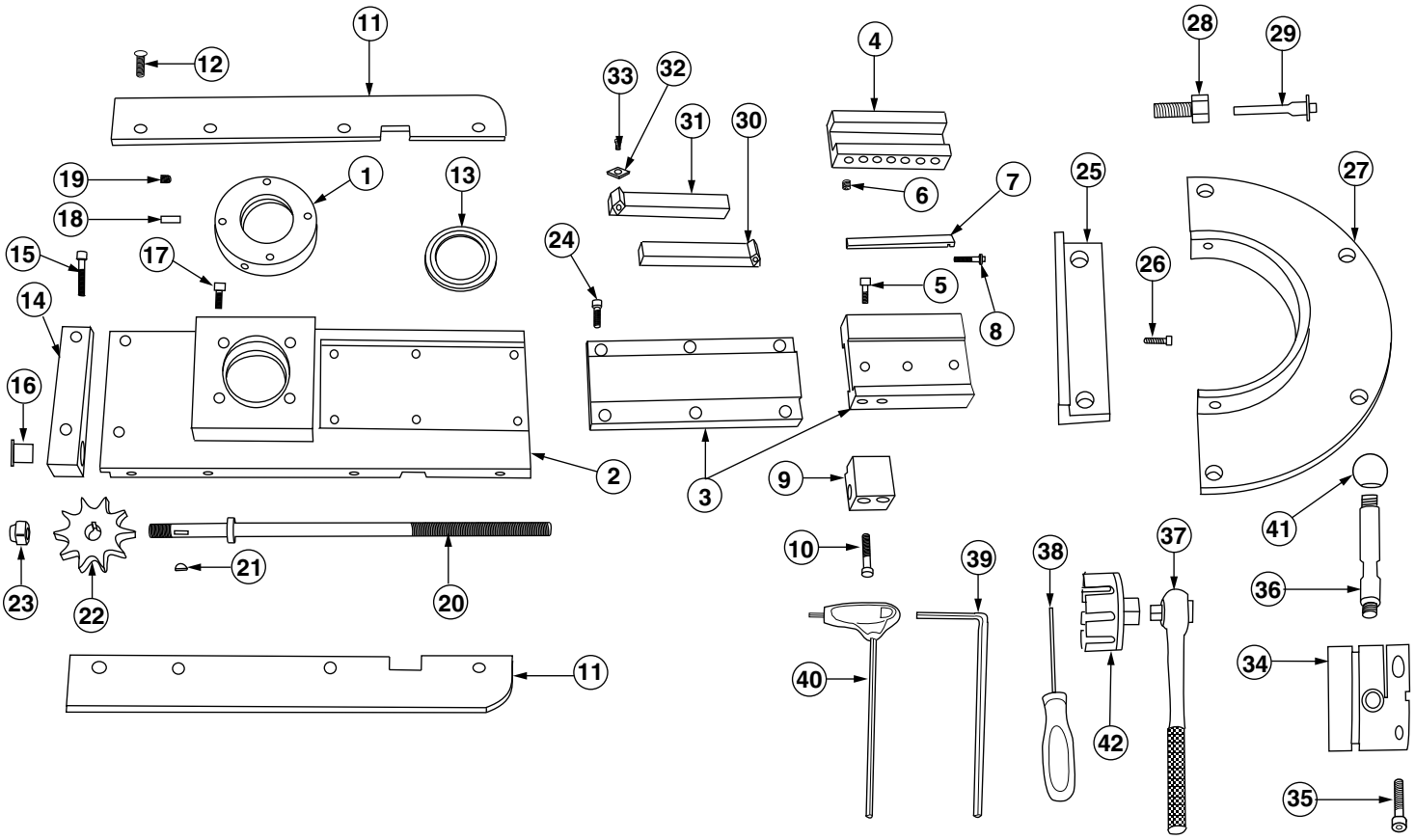
9. Engage the desired number of trip pins for the surface finish required (See specifications below).

10. Allow the machine to run until the flange has been completely resurfaced.

Specifications

Working
Range: 4.25" I.D. (108.0 mm) to 16.25" (610.0 mm) O.D.
Radial Tool Clearance: 11.0" (279.0 mm)
Radial Feed Rate - .005" (0.13 mm) per pin: All 6 pins .030" (0.76 mm) Per Revolution Note: Pins must be engaged at opposing positions for even resurfacing.
Approximate surface finishes are:
1 pin — 63 RMS 3 pins — 125 RMS 6 pins — 500 RMS
Axial Feed Rate: .083" (1.6 mm) Per Full Feed Nut Turn
Approximate Feed Depth Adjustments are:
1/4 turn — .021" (0.38 mm) 1/2 turn — .042" (0.79 mm)
3/4 turn — .063" (1.2 mm)

PARTS LIST
Model MT
Flange Facer
Part No. 260-809

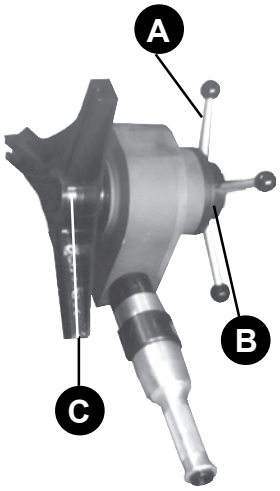


Reference No.	Part No.	Description
1	MTFF-260-810	Drive Adapter
2	MTFF-260-811	Flange Facer Body
3	DV-330	Dovetail Slide Assembly
4	MTFF-260-814	Toolblock
5	MTFF-260-815	(3) Toolblock Screws
6	MTFF-260-816	(7) Toolblock Set Screws
7	MTFF-260-817	Gib
8	MTFF-260-818	Gib Screw
9	MTFF-260-819	Slide Nut
10	MTFF-260-820	(2) Slide Nut Screws
11	MTFF-260-822	(2) Side Guards
12	MTFF-260-823	(8) Side Guard Cap Screws
13	MT-260-529	Seal
14	MTFF-260-825	Bearing Block
15	MTFF-260-826	(2) Bearing Block Cap Screws
16	MTFF-260-827	(2) Bearing
17	MTFF-260-828	(4) Flange Facer Body Cap Screws
18	MTFF-260-829	(2) Keystock
19	MTFF-260-830	(2) Drive Adpater Set Screws

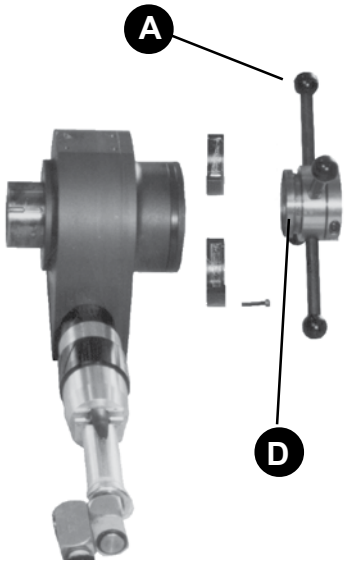
Reference No.	Part No.	Description
20	MTFF-260-831	Slide Screw
21	MTFF-260-832	Woodruff Key
22	MTFF-260-833	Trip Wheel
23	MTFF-260-834	Lock Nut
24	MTFF-260-835	(6) Male Slide Cap Screws
25	MTFF-260-836	Trip Bracket
26	MTFF-260-837	(5) Trip Bracket Cap Screws
27	MTFF-260-838	Trip Ring
28	MTFF-260-839	(6) Trip Receptacles
29	MTFF-260-840	(6) Trip Pins
30	MTFF-260-841	Low Range Holder
31	MTFF-260-842	High Range Holder
32	MTFF-260-843	Insert
33	MTFF-260-844	Insert Screw
34	MT-260-544	Feednut
35	MTFF-260-846	Feednut Cap Screw
36	MTFF-260-847	(4) Feed Handle
37	400-1012	3/8" Ratchet
38	T15	Torx Driver
39	MFTFF-160-345	1/4" Hex Key
40	400-1019	5/32" T-Handle Hex Key
41	MTFF-260-852	(4) Feed Handle Knob
42	MTFF-260-853	Trip Wheel Socket

MODEL MFT
FLANGE FACING CONVERSION

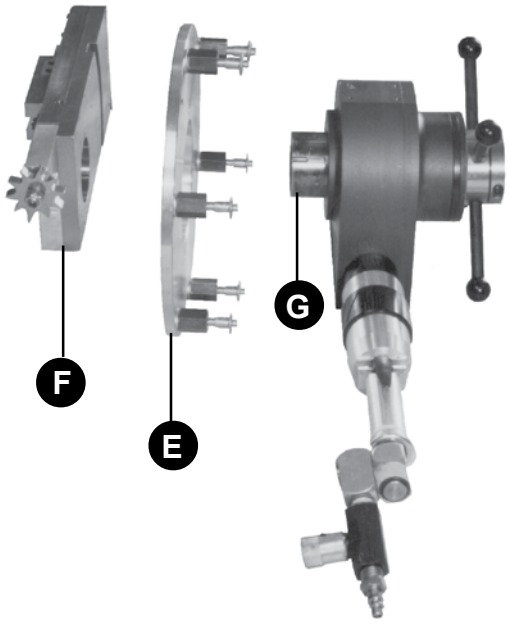
Confirm the date of manufacturing for your model MFT. Tools built before March of 2003 will require that holes be drilled and tapped in the housing to accept the trip ring. Typically, these tools are returned to the factory for this process. Should you elect to perform this operation, contact the factory for exact location and sizes. Once you have confirmed that your tool has the appropriate mounting holes, proceed with the following instructions.



Step 1: Remove the feed nut handles (A) by unscrewing them from the feed nut.
Step 2: Remove the cap screws (B) that lock the retainer ring onto the feed nut. Remove both halves of the Retainer Ring and slide the feed nut off of the tool.
Step 3: Remove the Tool Holder by loosening the three set screws (C).



Step 4: Install the feed nut handles (A) into the Flange Facer feed nut.
Step 5: Install the Flange Facer Feed Nut (D) and replace the Retainer Rings.

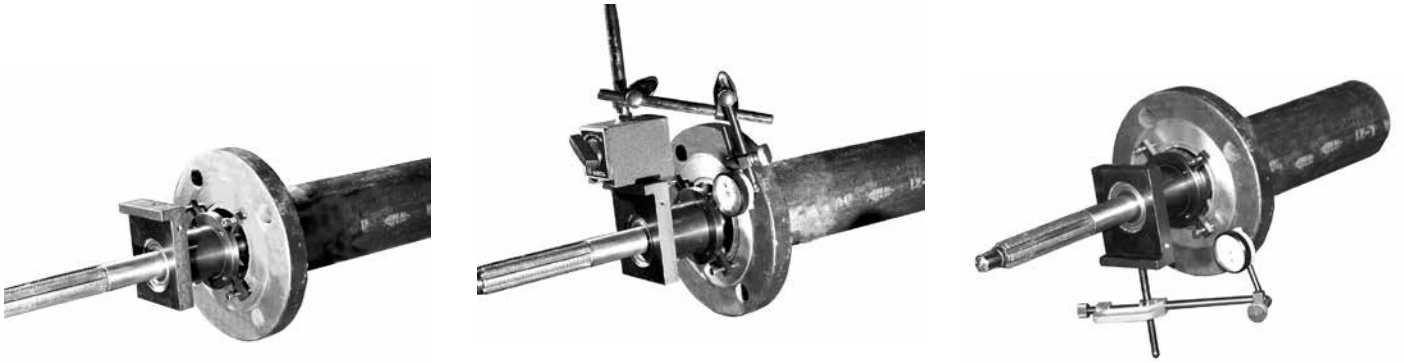


Step 6: Secure the Trip Ring (E) to the housing with the cap screws provided.

Step 7: Mount the Flange Facer Head Assembly (F) onto the Drive Hub (G) with the two (2) keys from the tool holder and two (2) set screws provided.

With the conversion complete, refer to setup and operating instructions for tool and cutter positioning instructions.

Flange Fine Adjustment Alignment Kit

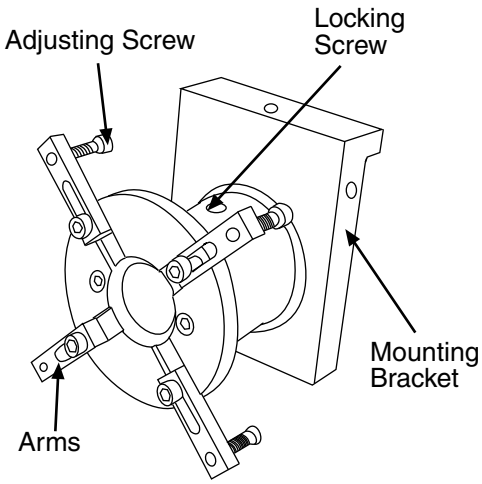


H&S offers this fine adjustment flange facing alignment kit to provide the most accurate setup possible.
Insert the center shaft/locking mechanism into the pipe. Tighten the draw rod just enough to stabilize the position. The alignment fixture slides onto the shaft until the four adjusting screws contact the flange surface. The fixture is locked in place with the locking set screw.

There is a choice of dial indicator mounts. The magnetic base mounts by setting the unit on the bracket and turning the switch to "on". The arms are adjusted to a position where the dial indicator can be swung a full 360 degrees without interference.

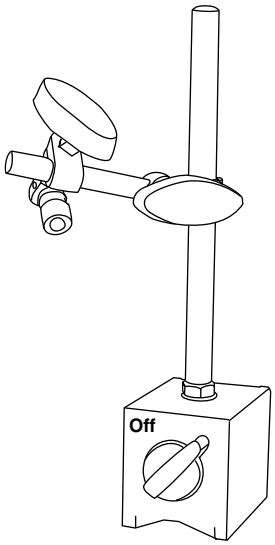
The kit also includes threaded extension rods and clamps for mounting the dial indicator. Tapped holes are provided on the flat and side of the mounting bracket into which a rod can be located. The C-clamp can be locked on that rod and another rod affixed to the clamp to hold the indicator. There are various combinations to give you a setup that will clear surrounding obstructions.

Once the dial indicator is secured in position with the indicator sensor in contact with the flange face, the fixture is rotated to swing the indicator around the surface. The adjusting screws are then used to square the centershaft with the flange. The mandrel is then locked in place, the fixture/dial indicator is removed and the flange facer is

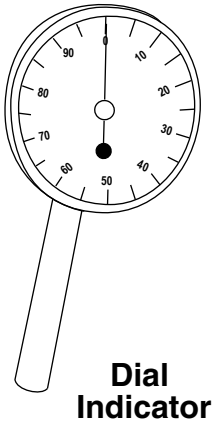


Fine Adjustment Alignment Fixture

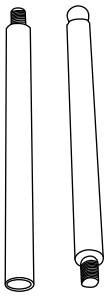
Needle Extension



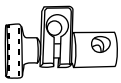
Magnetic Base



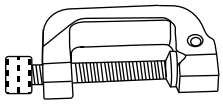
Dial Indicator



Extension Rods



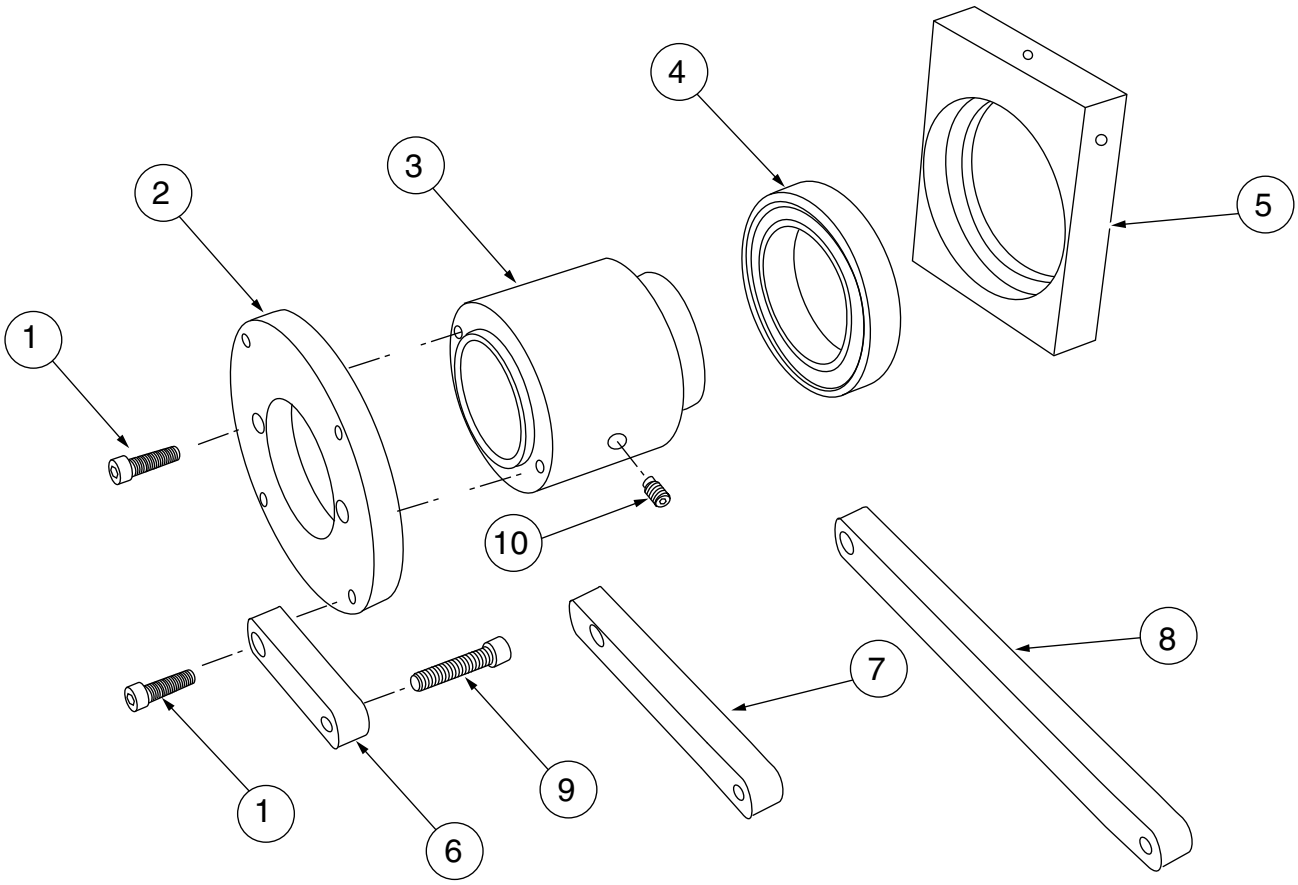
Swivel Clamp



C-Clamp

Tool Post Holder

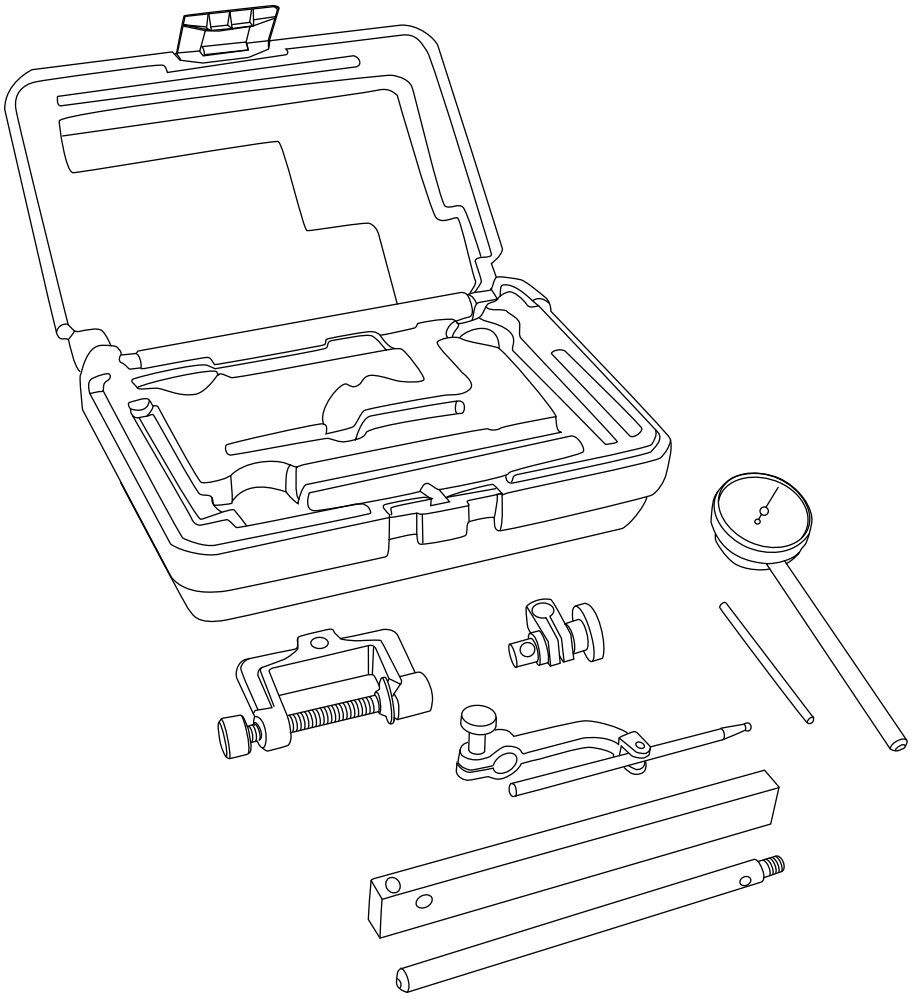
PARTS LIST
Fine Adjustment
MT Assembly No. MTA 126008
MFT Assembly No. MFTA 126009



Reference No.	Part No.	Description
1	MTA 126010	1/4-20 x 3/4 Socket Head Cap Screw (6)
2	MTA 126011	Adjustment Plate
3	MTA 126012	MT Hub
	MTA 126013	MFT Hub
4	MTA 126014	Bearing
5	MTA 126015	Indicator Bracket
6	MTA 126016	2-3/4" (69/9 mm) Extension Arms (4) - MT and MFT
7	MTA 126017	5" (127.0 mm) Extension Arms (4) - MT and MFT
8	MTA 126018	8-1/4" (209.6 mm) Extension Arms (4) - MFT Only
9	MTA 126019	1/4"-20 x 1-1/4" Socket Head Cap Screw (4)
10	MTA 126020	5/16"-18 x 1/2" Brass Tipped Socket Head Set Screw

PARTS LIST
Dial Indicator Kit
Dial Indicator Kit Part No. FA 004580
Magnetic Base/Arms Part No. FA 004581

Dial Indicator Kit



Magnetic Base/Arms