INSTRUCTION MANUAL for



MARKMATE

MODEL MM-24 MARKING MACHINE



SERIAL NUMBER: <u>16269 / 16270</u> DATE SHIPPED: <u>JANUARY 2016</u> SOLD TO: <u>LAMONS</u>

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SAFETY AND INSTALLATION INSTRUCTIONS

IT IS VERY IMPORTANT TO READ AND UNDERSTAND THIS ENTIRE MANUAL BEFORE INSTALLING, STARTING OR OPERATING YOUR MARKING MACHINE!!!

CAUTION – IT IS THE EMPLOYER'S RESPONSIBILITY TO ENSURE THAT ALL POTENTIAL OPERATORS AND MAINTENANCE PERSONNEL READ AND UNDERSTAND THIS MANUAL AND ARE ADEQUATELY TRAINED TO ENSURE SAFE INTERACTION WITH THIS EQUIPMENT.

WARNING – IT IS THE EMPLOYER'S RESPONSIBILITY TO PROVIDE ENERGY ISOLATION DEVICES FOR HIS EQUIPMENTAND INSURE THAT ALL POTENTIAL SERVICE AND MAINTENANCE PERSONNEL FOLLOW LOCKOUT/TAGOUT PROCEDURES DEVELOPED BY THE EMPLOYER IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS CONTROL OF HAZARDOUS ENERGY STANDARD 29 CFR 1910.147.

RESIDUAL ENERGIES – WHEN DISCONNECTED FROM THE SOURCE OF AIR PRESSURE THERE IS THE POSSIBILITY OF RESIDUAL PRESSURE IN THE SYSTEM. BE SURE ALL PRESSURE IS RELIEVED BEFORE SERVICING MACHINE.

INSTALLATION – Install the marking machine so that it is level with the floor and does not rock. Adjust the leveling bolts on each leg and lock the jam nut in place to accomplish this.

COMPRESSED AIR – Connect a compressed air line capable of delivering 3 CFM at 90 PSI to the incoming Filter/ Regulator/ Lubricator unit. Refer to Pneumatics Section and Figure 1 on next page.

PNEUMATICS

COMPRESSED AIR – Connect a compressed air line capable of delivering 3 CFM of air at 90 PSI to the incoming Filter/Regulator/Lubricator Unit (18 & 19). Set the pressure regulator (18) to 75 PSI.

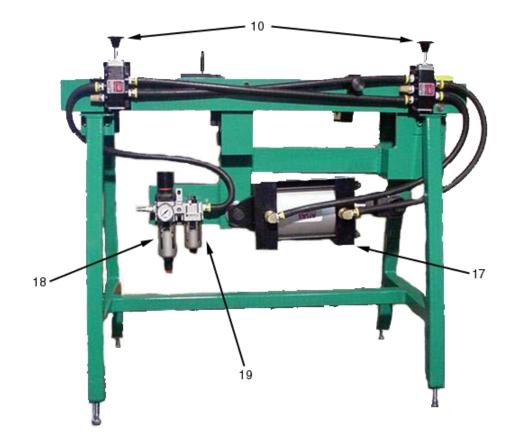


Figure 1: Diagram for pneumatic components.

PNEUMATIC COMPONENTS

PART#	DESCRIPTION
10	Palm Valve (2)
17	Cylinder
18	Filter/ Regulator
19	Lubricator

MACHINE OPERATION

BASIC OPERATION OF MACHINE

The model MM-24 Marking Machine is designed to mark the ends of bolts and studs. The part to be stamped is inserted into the V-blocks (11) until it rests against the backstop (3) and sits level. The operator then depresses both palm valves (10) to initiate the stamping. When the palm valves are released, the marking head will move away from the part completing a cycle. Once the head has come to rest, it is safe to remove the part and replace it with another to repeat the cycle.



Figure 2: Diagram for basic operation of machine.

STANDARD MACHINE SETUP FOR MARKING

WARNING! – PINCH POINTS EXIST BEHIND MACHINE COVERS! REMOVE ALL AIR POWER SOURCES PER YOUR EMPLOYER'S O.S.H.A. LOCKOUT/TAGOUT PROCEDURES BEFORE MAKING ADJUSTMENTS.

MACHINE SETUP

Refer to Figure 3 on page 7.

- 1. In the stamp plunger (4), install the correct marking insert for the material to be marked. Secure the stamp into place with the set screw (6) on top of the plunger. If the machine is equipped with a type holder in the backstop, install the correct type or stamp.
- 2. Adjust the V-blocks (11) on the front support and the backstop (3) for the diameter of bolt or stud to be marked. This is done by loosening the socket cap screw (22) and sliding the V-block up or down so the stud is centered with the stamp and level when placed into the machine.
- 3. Adjust the backstop (3) for the length of the part by placing it in the teeth of the rack gear (21) so there is less than 3/8" gap between the end of the part to be marked and the stamp. The stamp plunger has about 5/8" travel, and the backstop will move forward or backward 3/8" for each tooth of the rack gear. Again, check that the part is laying level in the V-blocks.
- 4. Cycle marking machine by pressing both of the palm valves (10) simultaneously until the plunger has advanced and marked the part. Release both valves to allow plunger to return. Check mark for clarity and concentricity and adjust air pressure if needed to increase or decrease the depth of stamp. Different materials and stamp sizes will require different pressures.
- 5. When changing length of parts it is only necessary to move the backstop if the diameter is the same.
- 6. CAUTION When marking long length, smaller diameter parts, use lower pressures initially to prevent bending the parts. Increase air pressure gradually until proper marking of the part is accomplished.

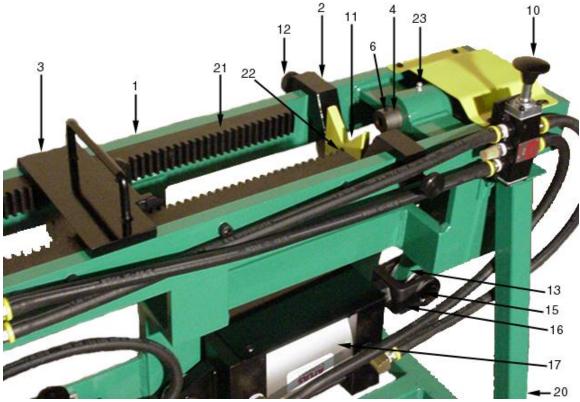


Figure 3: Parts diagram for standard machine setup.

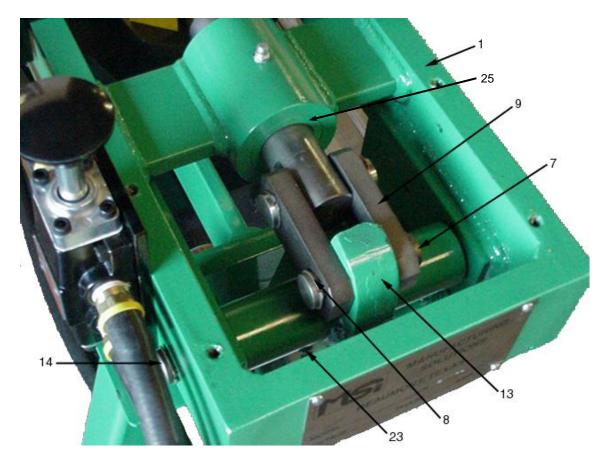


Figure 4: Parts under yellow guard.

COMPLETE PARTS LIST FOR MODEL MM-24 MARKING MACHINE

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Part No.	Description
1	Main Frame
2	Front Part Support
3	Movable Back Stop
4	Plunger
5	Stamp
6	Set Screw
7	Pin (2)
8	C-Clip (4)
9	Side Plates (2)
10	Palm Valve (2)
11	V-block (2)
12	Knurled Screw (2)
13	Pivot Arm
14	Pivot Pin
15	Clevis Pin
16	Clevis
17	Cylinder
18	Filter/ Regulator
19	Lubricator
20	Leg (2)
21	Rack Gear (2)
22	Socket Screw and Washer
23	Grease Zerks (2)
25	Bushing (Plunger)

MAINTENANCE

Very little maintenance is required on the marking machine.

DAILY – Check level of oil in the lubricator (19) on the Filter/ Regulator/ Lubricator unit. Fill with 10 wt Hydraulic oil as needed. Adjust the oiler to provide one drop of oil approximately every 20 cycles.

MONTHLY – Grease, with a grease gun: 1. the plunger through the zerk (23) on top of the machine, and 2. the pivot arm through the zerk on the cross shaft under the bottom of the shaft (Figure 4).

No other normal maintenance is required.