

## Model 298 Operation Guide

### Installation

- **Mounting:** Mounting holes are located in the mounting bracket, and the use of 1/4-20 socket head cap screws with lock washers is required. The Model 298 markers require a sturdy, level platform for mounting. For optimum power, the marker should be mounted so that the stamp face is 2 1/8" to 2 3/8" away from the part to be marked for a 2 1/2" stroke model. (2.125" to 3.875 for a 4" stroke model, ect).
- **Air Requirements:** Model 298 is air powered for both the forward and reverse stroke. CMT recommends a 1/2" minimum shop airline. Maximum operating pressure of 100 psi, minimum operating pressure of 20 psi. Please note that the airline length between the valve and marker should not exceed 3'. The marker has 1/2" NPT air port for advance and a 3/8" NPT air port for retract.. Air will naturally escape when the marker is in the forward position.
- **Adjustments:** Increase air pressure to mark deeper. Decrease air pressure to mark lighter. *To regulate marking pressure, adjust FRL (Filter/Regulator/Lubricator unit). Sold separately.*

### Maintenance

*Shut off all air and electrical power prior to performing any and all maintenance.*

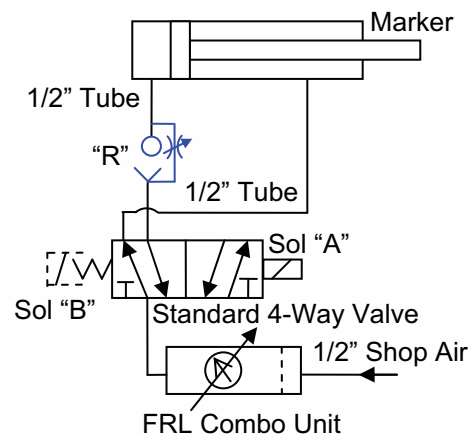
- **Lubrication:** Add 10W "light" industrial hydraulic oil to lubricator bowl and adjust oil flow to approximately 1 drop for every 30-50 cycles. The Model 298XX-XX-XX-X-NL is a non-lube system and does not require any lubrication.
- **Air Filter:** Check and clean/change as required. The frequency of cleaning/changing is dependent on

environment and plant air system. Do not allow excess water to fill filter bowl.

### Pneumatic Controls

- **Electrical Sequence for Double Solenoid Valve:** To advance marker, energize solenoid "A". To return marker and reset, de-energize solenoid "A" and energize solenoid "B".
- **Electrical Sequence for Spring Return Valve:** To advance marker, energize solenoid "A". To return marker and reset, de-energize solenoid "A" after part is marked.
- **Speed Control Adjustment:** Adjust speed control "R" to control speed of retract motion. **DO NOT install speed control on forward (rod port of marker).**
- **Note:** For most efficient operation, electrical signal energizing solenoid "A" should be very short, approximately .06 to .10 seconds.

### Suggested Pneumatic Control Diagram



**Removal of front cap voids warranty.**

