

## Model 451 Operation Guide

### Installation

- **Mounting:** Mounting holes are through the cylinder, and the use of 3/8-16 by 3" long socket head cap screws is required. The SLIDE-A-MARK™ marker requires a sturdy, level platform for mounting.
- **Air Requirements:** Compressed air is required on all SLIDE-A-MARK™ markers. CMT recommends a 1/2" shop airline. Maximum operating pressure of 100 psi, minimum operating pressure of 25 psi. Please note that the airline length between the valve and marker should not exceed 3'. The marker has 3/8" NPT advance and 1/8" retracting air ports.
- **Adjustments:** Increased pressure marks deeper. Decreased pressure marks lighter. To regulate marking pressure, adjust regulator on the FRL (Filter/Regulator/Lubricator unit). Sold separately.
- **Rod Orientation:** All air (and electrical) power should be disconnected before adjusting the rod orientation, as well as any maintenance. The SLIDE-A-MARK™ rod is keyed to maintain orientation. This radial orientation can be easily adjusted by loosening the front collar clamp screw (451-13). Then rotate the rod to the desired orientation and re-tighten clamp collar. Do not over tighten, or the actuated marker will not fire.

### 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 451-XX-XX-X-NL

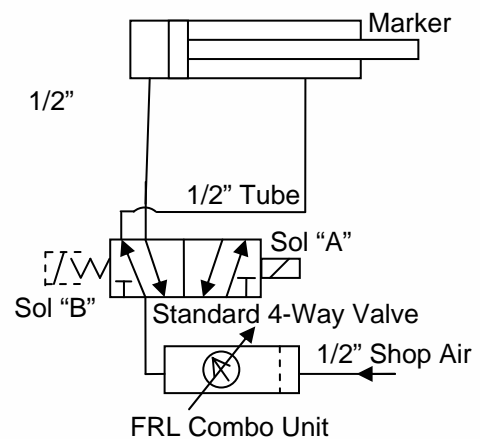
is a non-lube system and does not require any lubrication.

- **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.

### Suggested Pneumatic Control Diagram



## Model 451 Parts List

