Columbia Marking Tools

AIR IMPACT MARKER

Model 78 Operation Guide

Installation

- **Mounting:** For rear mounting the model 78 has (4) tapped holes, and for foot mounting the 78 has (4) through holes both of which require (4) 10-32 screws to mount marker into position. The model 78 markers require a sturdy, level platform for mounting. For optimum power, the marker should be mounted so that the stamp face is .8 to .9 inches away from the part to be marked.
- **Air Requirements:** Model 78 is air powered for both forward and return stroke. CMT recommends 3/8" 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 1/4" NPT advance and 1/8" NPT retracting air ports.
- **Adjustments:** Increased air pressure marks deeper, and decreased air pressure marks lighter. *To regulate marking pressure adjust regulator on FRL (Filter/Regulator/Lubricator combo unit). Sold separately.*

Maintenance

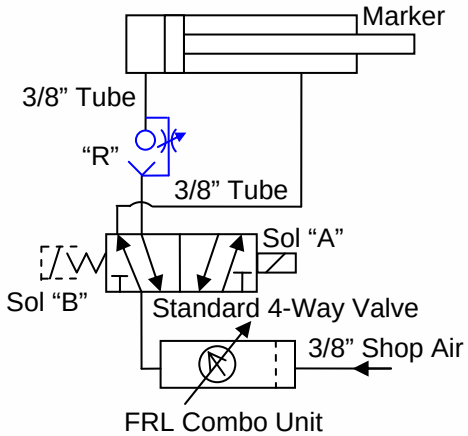
Shut off all air and electrical power prior to performing any and all maintenance.

- **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 78XX-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



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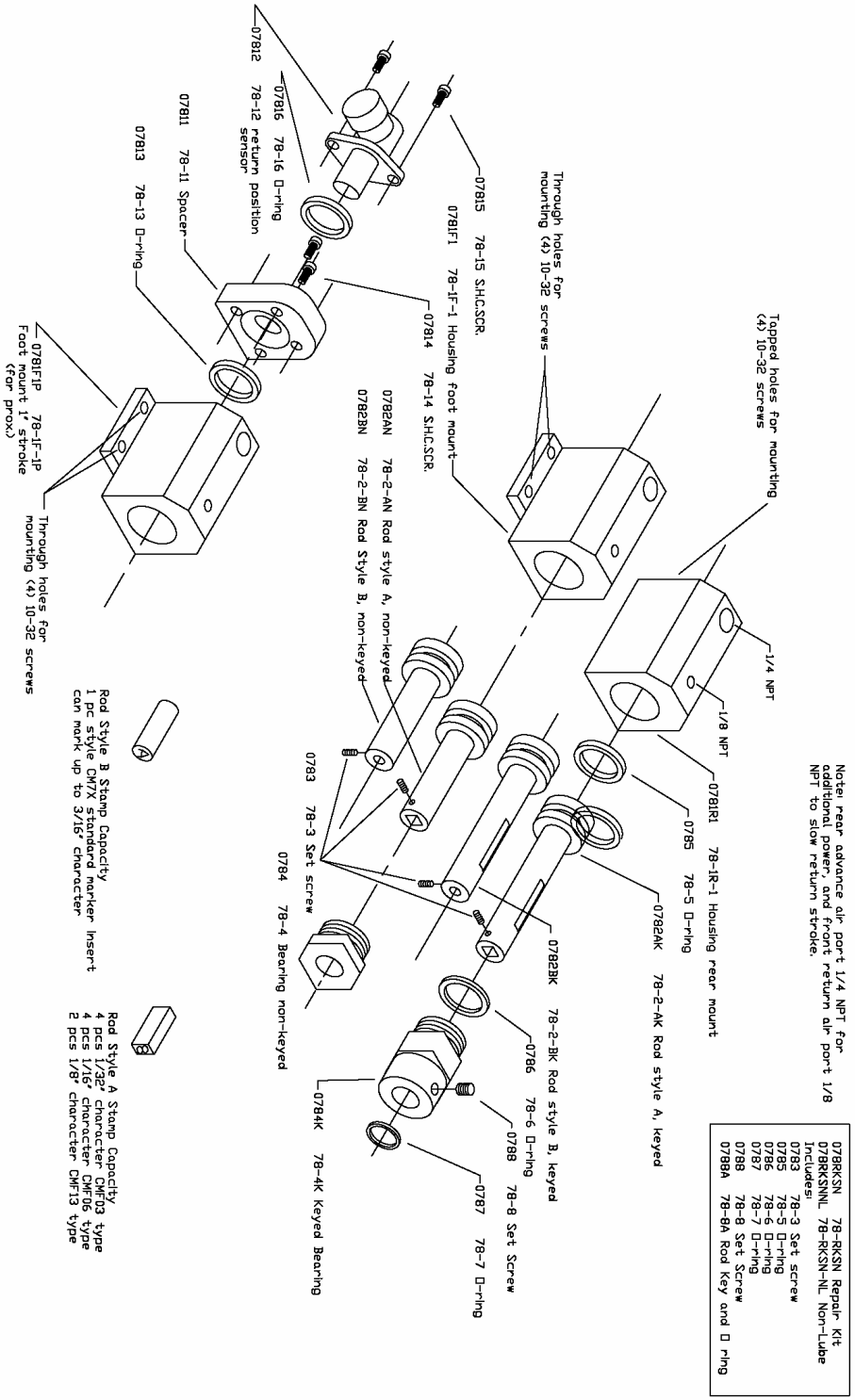
Model 78 with 1" Stroke Parts List



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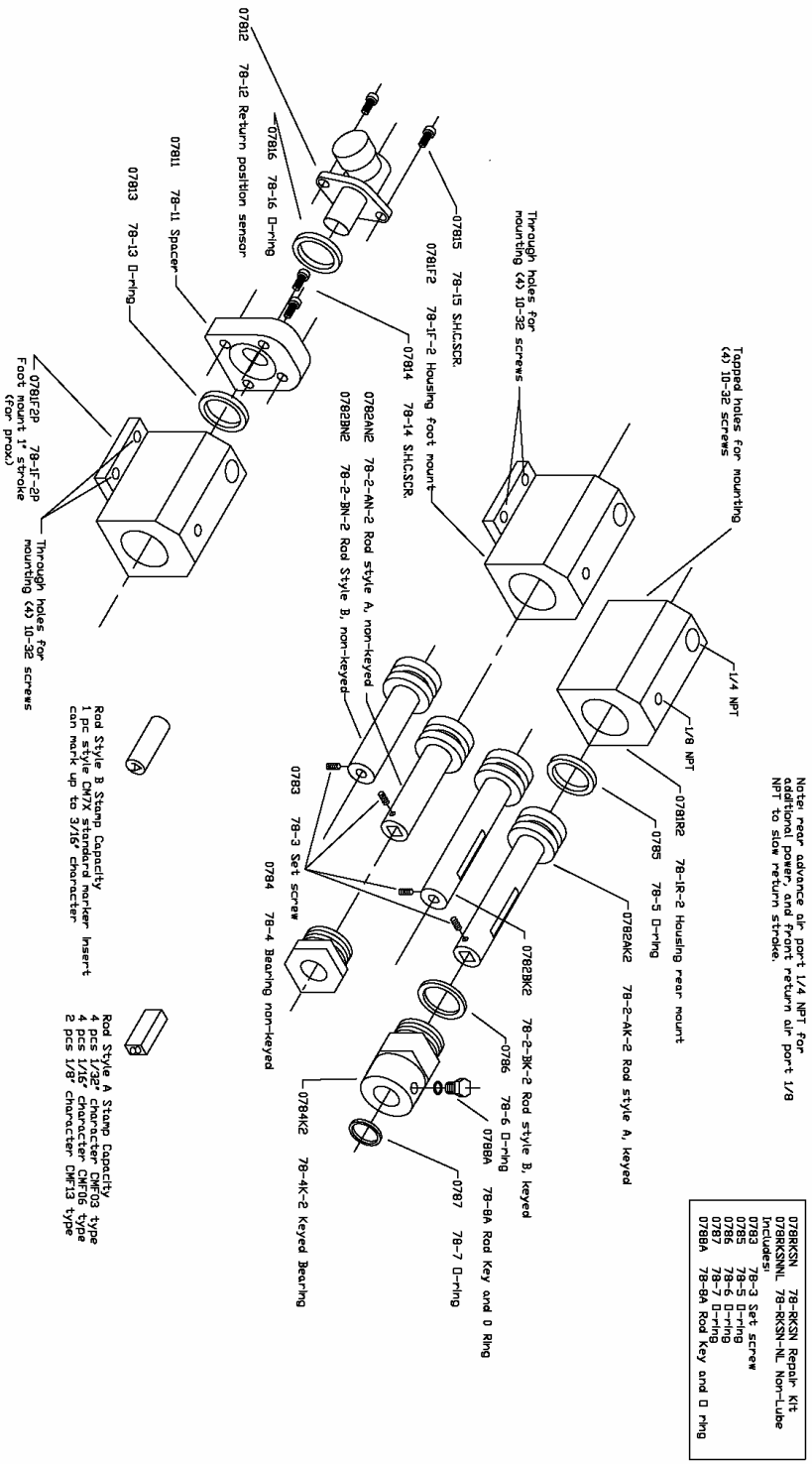
Model 78 with 2” Stroke Parts List



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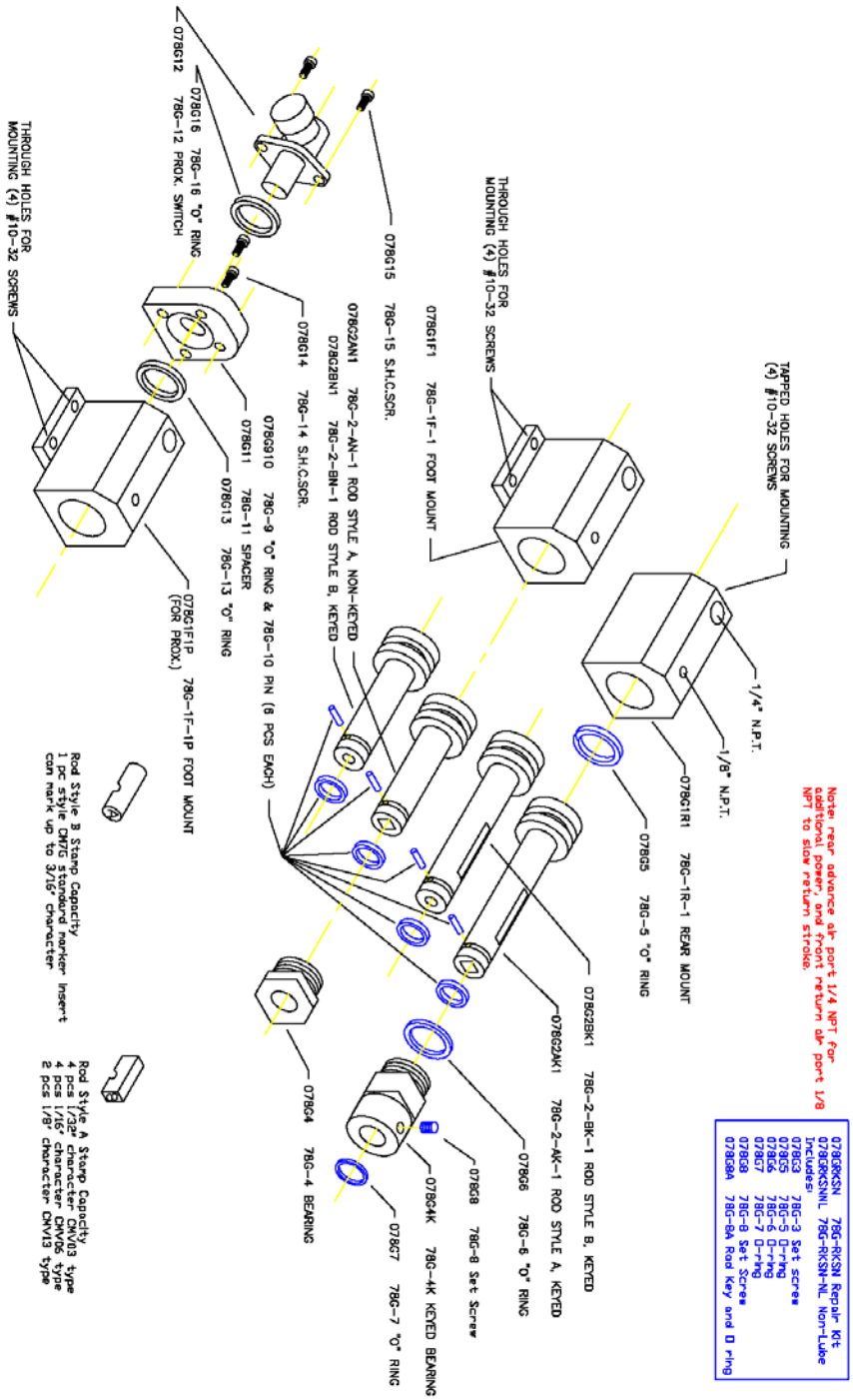
Model 78G with 1" Stroke Parts List



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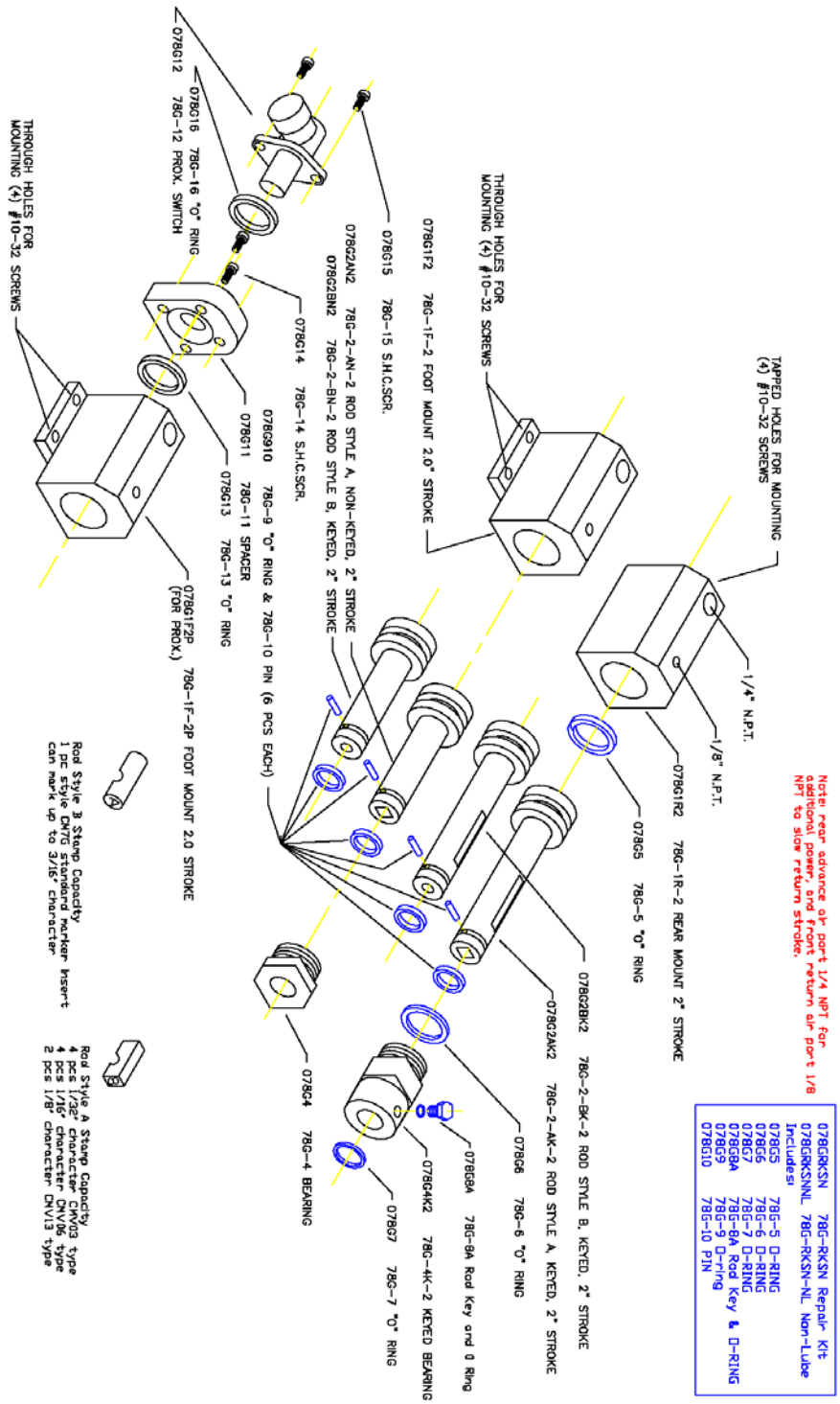
Model 78G with 2" Stroke Parts List



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