## Speed Control Plates Installation \& Operation Manual

Max Air's CF2 and CF3 speed control plates are a Namur mounted air flow control accessory designed to provide a method for field adjustment of valve operating speed. This is accomplished via internal needle valves which regulate the flow of air from the air supply into the actuator. The CF2 is designed for use with double acting actuators and the CF3 is designed for use with spring return actuators.

## Installation: The CF2 and CF3 plates can be installed in one of two ways.



With Namur Mount Solenoid Valve:
When a Namur mounted solenoid valve is used in conjunction with the speed control plate, the speed control plate is mounted first, sandwiched between the solenoid valve and actuator. Extra-long mounting screws are provided with the plate to accomplish this. The CF3 should be mounted with the direct through hole over the port that communicates with the actuator's spring chamber which is the right port when facing the port side of a Max-Air actuator*.


## With Nipple Mount Solenoid Valve:

If a nipple mounted solenoid valve is being used, the CF2 or CF3 must be installed with an NPT adapter plate. These adapter plates add a female threaded connection into which a pipe nipple or other male threaded accessory can be installed.

Note*: Take care when mounting these items that all of the face seal o-rings are in place before tightening the mounting screws.

## Operation:

Once installed, the speed control plates can be adjusted by turning the adjustment screws on the sides of the plate to adjust the airflow. Clockwise rotation restricts the airflow, thus slowing down the operating speed, counter clockwise rotation opens up the flow path, thus increasing the operating speed.


When installed on Max Air actuators, the CF2 will normally work as follows:

- Adjustment of the left adjusting screw (when facing the actuator) will control the opening speed
- Adjustment of the right adjusting screw (when facing the actuator) will control the closing speed.


When installed on Max Air actuators, the CF3 will have two adjusting screws on the left hand side of the block (when facing the actuator) and will normally work as follows:

- The upper screw controls the air flow into the actuator's operating chamber and thus controls opening speed on actuators built in the most common fail closed configuration
- The lower screw controls the air flow out of this same chamber and thus controls the closing speed for fail closed actuators.

For actuators which are not set up in a fail closed configuration or for non-Max Air actuators where the left port is not the primary operating port, call Max Air for instructions.

