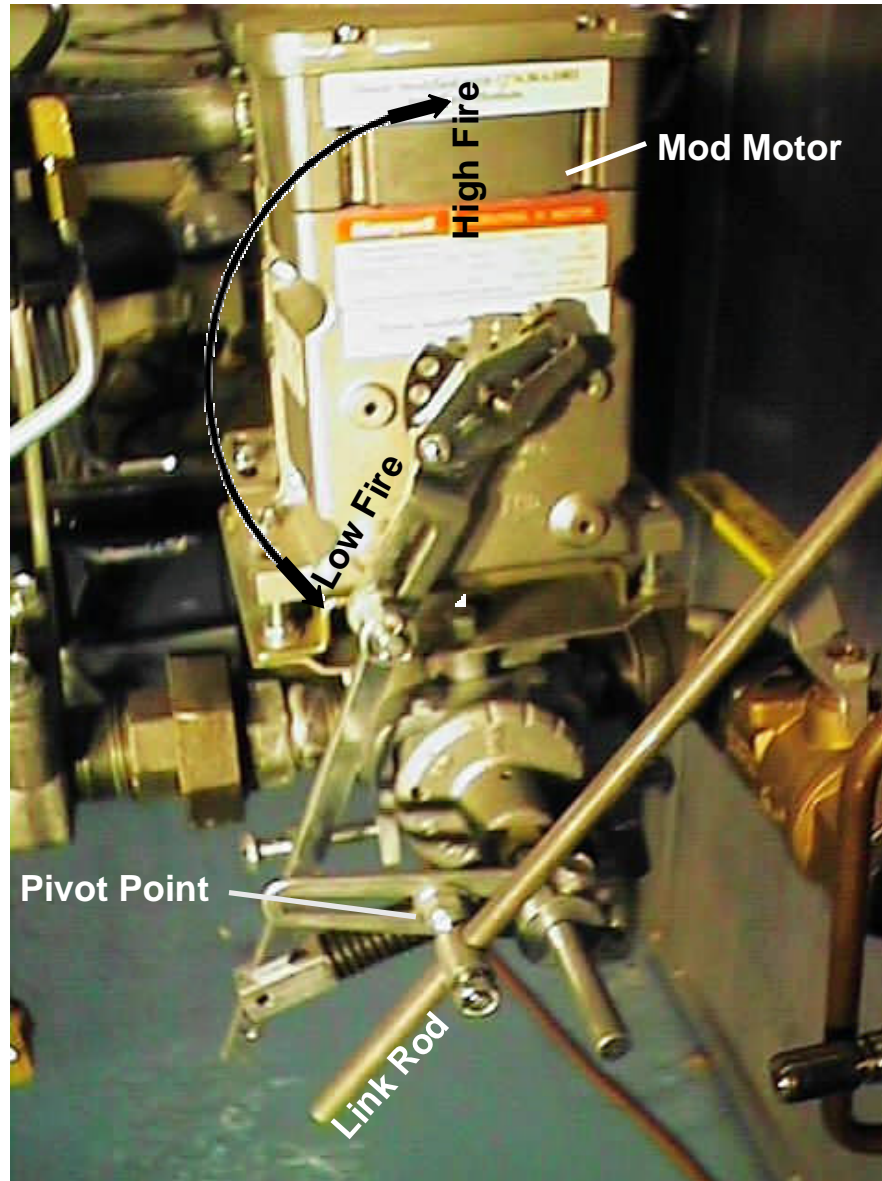


Modutrol Motor Adjustments



To adjust the combustion air shutter:

Note: Mod Motor is pictured in low fire position.
At high fire the linkage arm will be at about the 12:00 position.

Start the oven and set the temperature so the burner is at high fire

- ◆ Loosen the Link Rod set screw and pull the Link Rod so the shutter is fully open.
- ◆ Tighten the Link Rod set screw.
- ◆ Make a mark on the link rod for reference.
- ◆ Set the oven temperature low enough for the burner to go to low fire.
- ◆ Loosen the Link Rod set screw and see if the link rod has pushed the shutter fully closed.
- ◆ If the Link Rod is holding the burner valve from going fully closed, the stroke of the link rod is too long. If the link rod is not pushing the shutter all the way closed, the link rod stroke is too short.
- ◆ To shorten the stroke, move the pivot point toward the axle of the pivot arm.
- ◆ To lengthen the stroke, move the pivot point farther out on the pivot arm.

The idea is to set the pivot point to ensure the shutter opens and closes fully without limiting the travel of the gas valve. The picture shows the approximate distance to set the pivot point on the pivot arm.

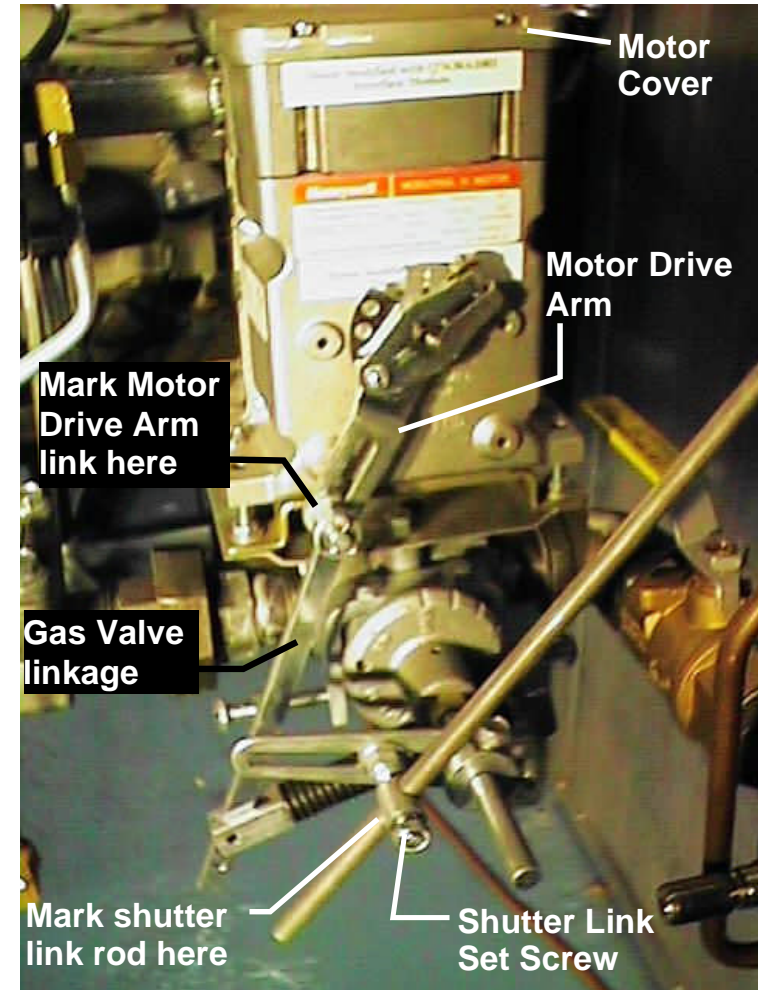
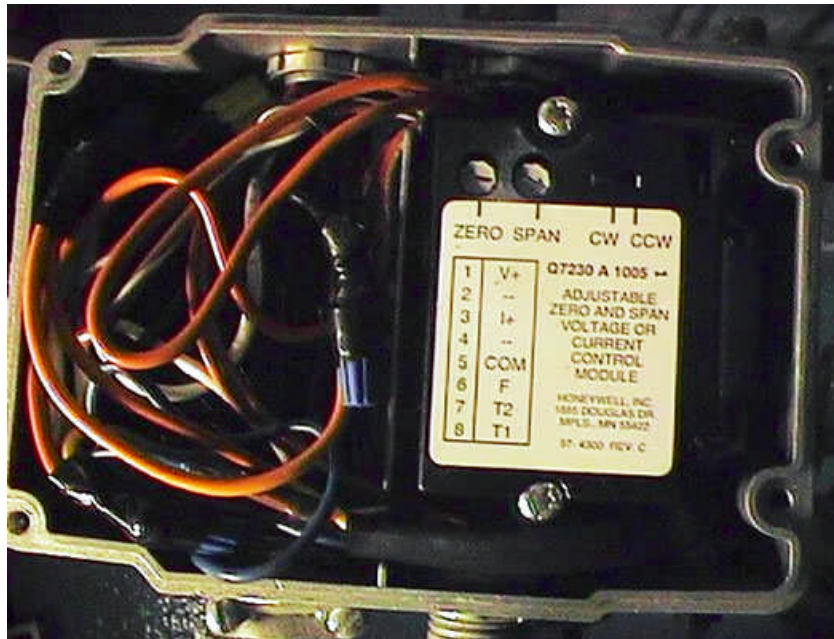
Modutrol Motor Adjustments

Adjusting the travel of the Mod Motor

Note: The “Zero” and “Span” potentiometers in the Mod Motor are very sensitive, adjust them a little at a time.

- 1 Remove the cast cover from the top of the Mod Motor.
- 2 Mark the shutter link rod at the shutter link set screw
- 3 Loosen the shutter link set screw to ensure the shutter linkage does not limit the travel of the gas valve.
- 4 Set the “Zero” potentiometer in the Mod Motor so that the motor arm drives the gas valve closed.
- 5 Run the oven so the burner goes to high fire.
- 6 Set the “Span” potentiometer so the gas valve opens all the way at high fire.
- 7 Check the low fire and high fire settings several times, you may have to change the “Zero” and “Span” settings several times to find the right combination.

When adjusted correctly, the Mod motor should open and close the gas valve fully without too much excess travel. Excess travel slows down the response



Alternate Method for Step #3 Above

Alt #3 Remove the bolt connecting the motor drive arm from the gas valve linkage. Be sure to mark it's location first. This disconnects the gas valve so you can drive the mod motor to high and low without worrying about what the oven is doing. Then adjust the zero and span setting as above. Be patient it can take a while to get it right.