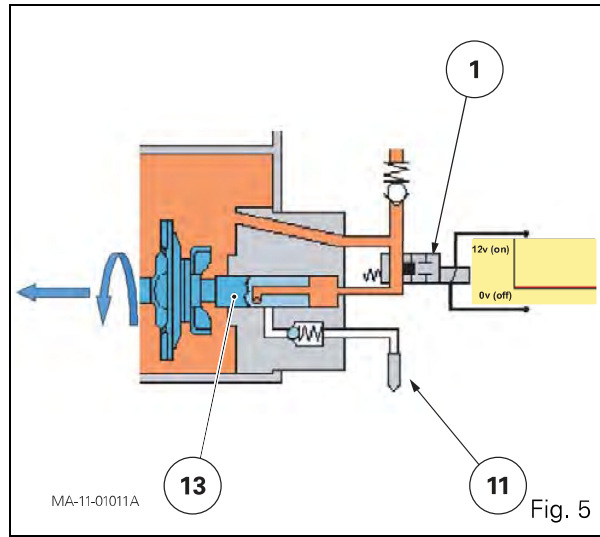


# EEM CAT - Description

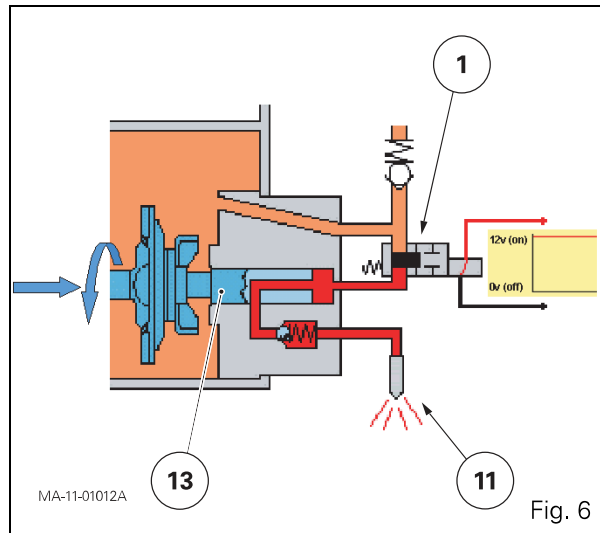
## Pump Chamber Fill (Fig. 5)

As the pumping plunger (13) moves backwards, the Fuel Quantity Solenoid (1) de-energizes. With the solenoid de-energized the valve is open which allows fuel to flow in to the pump chamber and fill it with diesel.



## Pump Injecting (Fig. 6)

As the pumping plunger (13) starts to move forwards, the Fuel Quantity Solenoid (1) energizes which closes the valve. The fuel now has nowhere to go inside the pumping chamber, and so the pressure increases. This pressure then forces the fuel out to the injector (11) which in turn squirts fuel into the cylinder. When the ECM has calculated enough fuel has been delivered the solenoid (1) is de-energized. The pressure inside the pumping chamber is lost and injection stops.



## Advance Timing (Fig. 7)

To advance the timing the PWM signal is decreased, thus reducing the gap in the valve (7) and hence, the flow of pressurized fuel through it. This creates more pressure in the timing advance box (8) which pushes against the spring and moves the mechanism to an advanced position.

