Pilot's Guide Supplement

Engine Data Management

EDM-740 Experimental Model

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EDM-740 Pilots Guide Supplemental Information

This section describes the added capabilities and operation of the EDM-740 model. The added capabilities are:

Fuel Pressure: Monitors fuel pressure ranges for either carbureted or injected engines. Fuel pressure is displayed in the '*Scanner*' area and optionally as a linear gauge via 'Display Customization'. Sensor type and low and high fuel pressure alarm limits are programmable in the Factory Limits setup area.

Amps: Monitors positive or negative amperage flow at the location of your choice - typically either a bus 'loadmeter' or battery 'charge/discharge' configuration. Amps is displayed in the '*Scanner*' area and optionally as a linear gauge via 'Display Customization'. Low and high amps limits are programmable in the Factory Limits setup area.

Fuel Level: Monitors fuel tank levels (maximum of two). Fuel level is displayed in the '*Scanner*' area and optionally as a linear gauge via 'Display Customization'. Calibration is performed in the aircraft and saved inside the instrument. The most popular resistive, voltage or frequency output level sensors are compatible (not supplied). The calibration data entry and low fuel level alarm values are programmable in the Factory Limits setup area. See 'Factory Limit Program Mode additions' section below. Detailed calibration instructions can be found in the Installation Instructions Addendum for the EDM-740.

HOBBS: The hobbs function displays total engine running time. This is visible for several seconds when the instrument is first turned on, after the engine is stopped or via the Pilot Program Mode.

Clock: The clock function is displayed in the Scanner area in 24 hour format (00:00:00 to 23:59:59). This is initially set via the Pilot Program Mode.

Timer: The timer function is displayed in the Scanner area and provides Hours:Minute:Seconds resolution. While displayed, the timer count can be started and stopped, by tapping the LF button. Holding LF resets the timer.

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EDM-740 Program Mode additional choices

Pilot Program Mode additions

HOBBS: 1234.9	Displays engine total running hours.

Factory Limit Program Mode additions

LO AMPS=0	Tap/hold LF to change value. Tap STEP to save. Hold both STEP and LF buttons for a few seconds to access AMP calibration choice below.
AMPS ADJ +0	Hold both STEP and LF buttons to enable adjustment. Tap/hold LF to change value. Hold both STEP and LF buttons again to save.
HI AMPS=50	Tap/hold LF to change value. Tap STEP to save.
FUEL PRESSURE	Hold STEP and LF for a few seconds to access sensor selection.
FP=30 PSI 2W *FP=30 PSI 4W* *FP=100 PSI 4W* *FP=150 PSI 2W* *FP=NONE*	Tap/hold LF to change selection. Tap STEP to save.
LO F-P=1.0	Tap/hold LF to change value. Tap STEP to save.
HI F-P=25.0	Tap/hold LF to change value. Tap STEP to save.
EDIT FUEL LEVELS?	Hold STEP and LF for a few seconds to access Fuel Level Calibration (see section on fuel level calibration).
LO L-TANK=0	Tap/hold STEP to adjust left tank low alarm. Tap STEP to save.
LO R-TANK=0	Tap/hold STEP to adjust right tank low alarm. Tap STEP to save.

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EDM-740 Expansion Module pin to sensor assignments

J7 Amps		
Pin / color	**Shunt Sensor/color**	**Hall Effect Sensor/color**
1 (wht)	+amps	'WHT' (wht)
2 (grn)	-amps	(N.U.)
3 (blk)	(N.U.)	'BLK' (blk)
4 (red)	(N.U.)	'RED' (red)

(N.U.) means no connection

J8 Fuel Pressure		
Pin / color	**2W resistive Sensor/color**	**4W bridge Sensor/color**
1 (blk)	(N.U.)	Gnd (blk)
2 (wht)	Term A (wht)	Sig- (wht)
3 (grn)	Term B (grn)	Sig+ (grn)
4 (red)	(N.U.)	Pwr (red)

J9 & J10 Fuel Level 1 & 2			
Pin / color	**resistive Sensor**	**0 - 5dc voltage Sensor**	**VMS Freq Sensor**
1 (grn)	Term A	Sig	Sig (wht)
2 (blk)	Ground	Gnd	Gnd (blk)
3 (red)	(N.U.)	Pwr	Pwr (red)