Hi-Performance MARINER OUTBOARDS

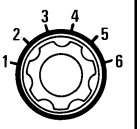
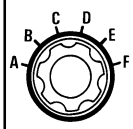
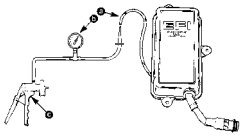
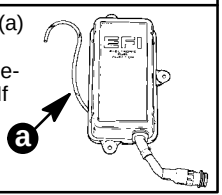
MERCURY PERFORMANCE OUTBOARDS

service bulletin

No. 93-7

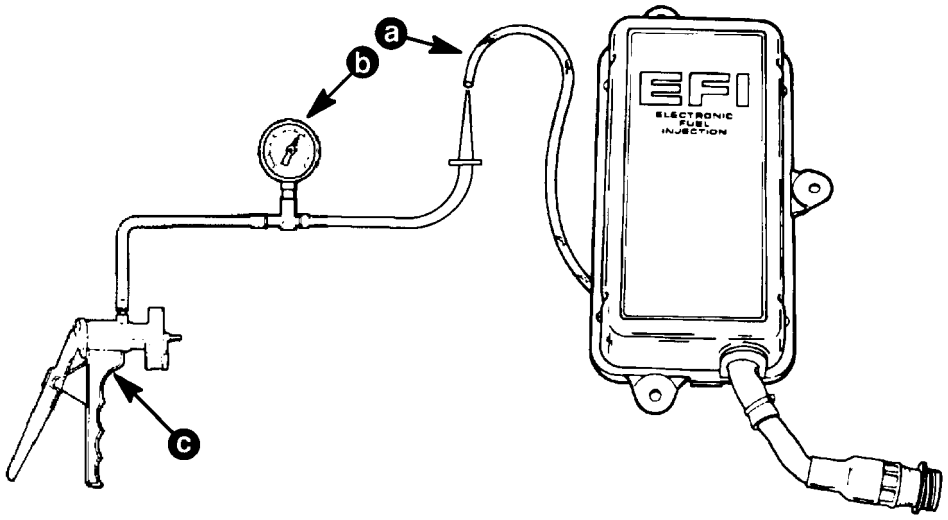
MHP 2.5 LITRE ECU TEST P/N 11350A37

NOTE: **Refer to EFI manual 90-13833-3 for tester set-up**

		SWITCH POSITION  ECU PARAMETERS	**SWITCH POSITION**  SYSTEM PARAMETERS	**NORMALIZING** the EFI system  ECU NORMALIZE	1. Set ECU Parameters switch to position 1. 2. Set System Parameters switch to position B. 3. Rotate ECU Normalize knob to to obtain reading of 1.50 on meter. ECU is now normalized. **DO NOT** move ECU Normalize knob once reading is obtained. 4. If 1.50 is not attained, ECU is faulty.
	Test Steps	**ECU Parameters Switch Positions**	**System Parameters Switch Position**	**Specified Reading**	**CORRECTIVE ACTION if readings do not match**
ECU TEST	1	2	B	1.17 ± .05	Faulty ECU
	2	3	B	.86 ± .05	Faulty ECU
	3	4	B	.86 ± .05	Faulty ECU
	4	5	B	.55 ± .10	Faulty ECU
	5	6	B	.28 ± .10	Faulty ECU
(ELECTRONIC) THROTTLE SENSOR TEST	1	4	B	1. Attach vacuum gauge to ECU tube. 2. Apply 10 in. Hg (70 kPa) 3. Reading should drop from **.86 to .38 volts±.05 volts**  **(Note: See Illus. on Next Page**	
AIR TEMPERATURE SENSOR TEST	1	1	C	Low 1.37 High 1.62	If meter reading is above 1.62, there is a faulty air temperature sensor or open sensor lead. If meter reading is below 1.37, there is a faulty air temperature sensor or shorted sensor lead.
COLD START ENRICHMENT TEST	1	6	A	Press cold start enrichment button. Meter reading should advance a minimum of three times the initial reading. Example: .28 x 3 = .84 	
IGNITION KILL TEST	1	1	A	Press Ignition Kill button. Meter reading should decrease 3 to 4 times, then fall to 0.01. Example: 1.50 0.48 0.35 0.01 	
PRESSURE TRANSDUCER TEST	1	1	A	Disconnect ECU transducer tube (a) from fitting on outboard. Draw air from tube. Meter reading should decrease as air is drawn from tube. If no number change, the ECU is faulty. 	

Electronic (Internal) Throttle Position Sensor Testing

1. Disconnect vacuum tube from ECU
2. Attach hand held vacuum pump to ECU vacuum tube.
3. Apply 10 in. Hg (70 kPa) of vacuum.
4. Reading should drop from .**86 volts to .38 volts±.05 volts.**



a - Vacuum Tubing (to internal TPS)
b - Gauge
c - Hand Pump