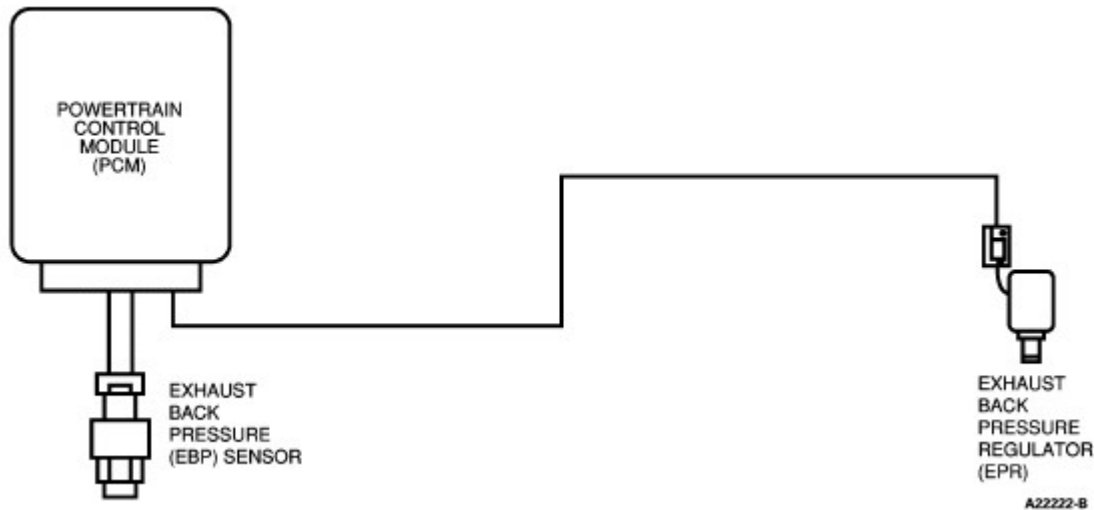


H: Exhaust Back Pressure (EBP) Sensor Introduction

[H: Pinpoint Tests](#) ➔



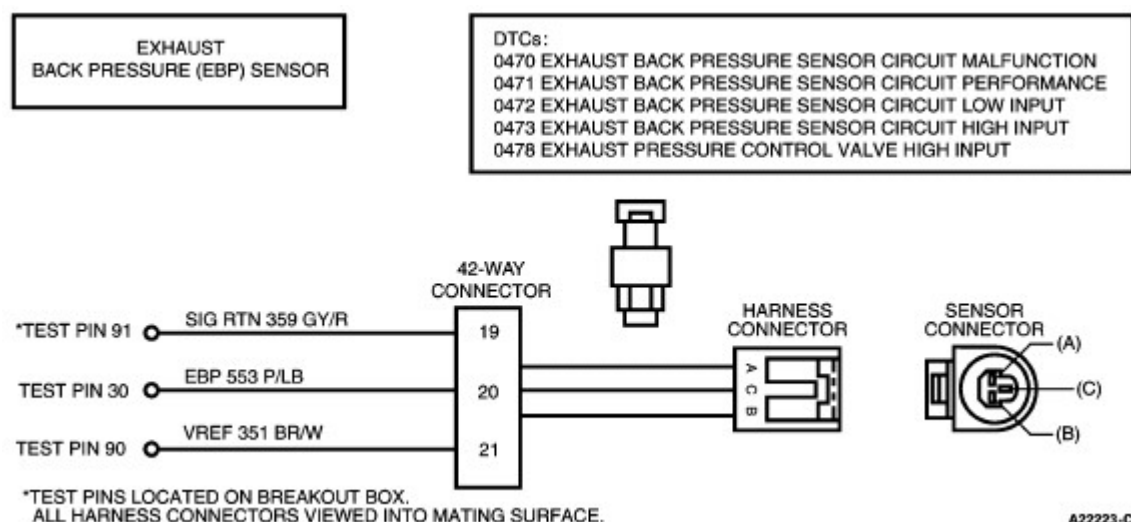
Signal Functions

The exhaust back pressure (EBP) sensor is a variable capacitance sensor which, when supplied with a 5-volt reference signal from the powertrain control module (PCM), produces a linear analog voltage signal that indicates pressure.

The EBP sensor's primary function is to measure exhaust back pressure so that the PCM can control the exhaust back pressure regulator (EPR) when needed.

Detection/Management

An EBP signal that is detected out of range (high or low) by the PCM will cause the engine to ignore the EBP signal and disable exhaust back pressure operation.



Note

After removing connectors always check for damaged pins, corrosion, loose terminals, etc.

CONNECTOR CHECKS TO GROUND (B-) (CHECK WITH SENSOR CONNECTOR DISCONNECTED AND IGNITION KEY OFF, ALL ACCESSORIES OFF)

Test Points	Spec.	Comments
A to Grd	<5 ohms	Resistance to ground check with key off. If greater than 5 ohms the harness is open.
B to Grd	>5 ohms	Resistance less than 5 ohms indicates a short to ground.
C to Grd	>5 ohms	Resistance less than 5 ohms indicates a short to ground.

CONNECTOR VOLTAGE CHECKS (CHECK WITH SENSOR CONNECTOR DISCONNECTED AND IGNITION KEY ON)

Test Points	Spec.	Comments
A to Grd	0-.25 volts	If greater than .25 volts signal wire is shorted to VREF or battery.
B to Grd	5 volts	VREF check with key ON.
C to Grd	.12-.25 volts	Signal. If greater than .25 volts signal wire is shorted to VREF or battery.

HARNESS RESISTANCE CHECKS (CHECK WITH BREAKOUT BOX INSTALLED ON ENGINE HARNESS ONLY)

Test Points	Spec.	Comments
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No. 91 to A	<5 ohms	Resistance from sensor connector to 104 pin connector.
No. 30 to C	<5 ohms	Resistance from sensor connector to 104 pin connector.
No. 90 to B	<5 ohms	Resistance from sensor connector to 104 pin connector.

DTC Descriptions

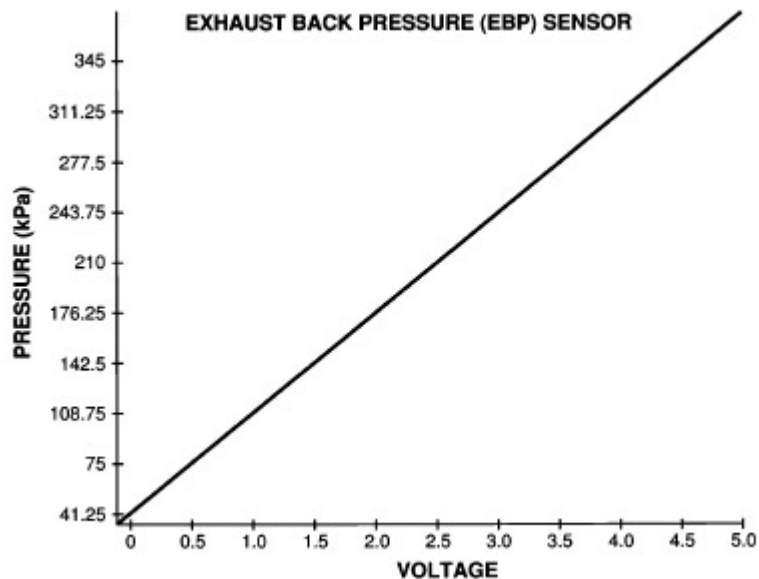
0470 = EBP sensor circuit malfunction.

0471 = EBP sensor circuit performance.

0472 = EBP sensor circuit low input.

0473 = EBP sensor circuit high input.

0478 = Exhaust pressure control valve high input.



A22224-A

kPa	EBP (Volts)
0	0
55.16	0.25
137.9	1.45
344.75	4.45
365.44	4.75
413.7	5.00

In Hg	PSI
0	0
16.38	8
40.94	20
102.36	50
108.50	53
122.83	60

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