

4.6L Crown Victoria/Grand Marquis

Typical Diagnostic Reference Values

Sensors/Inputs	PCM Pin/PID only	Measured/PID Values				Units Measured/PID
		KOEO	Hot Idle	30 MPH	55 MPH	
FLI V/FLI	9	1.7/50	1.7/50	1.7/50	1.7/50	DCV/%
FEPS	13	.5-.6	.5-.6	.5-.6	.5-.6	DCV
CKP (+)	21	0	440-490	660-780	900-960	Hz
TCS	29	.1/OFF	VBAT/ON (G)	.1/OFF	.1/OFF	DCV/OFF-ON
TR 1	34	0	0	11.5	11.5	DCV
O2S12	35	0.1	(D)	(D)	(D)	DCV
TFT	37	.5-2/210-110	.5-2/210-110	.5-2/210-110	.5-2/210-110	DCV/DEG
IAT	39	1.7-3.5/120-50 (K)	1.7-3.5/120-50 (K)	1.7-3.5/120-50 (K)	1.7-3.5/120-50 (K)	DCV/DEG
FPM	40	.1/OFF	VBAT/ON	VBAT/ON	VBAT/ON	DCV/OFF-ON
ACCS	41	.1/OFF	VBAT/ON (A)	.1/OFF	.1/OFF	DCV/OFF-ON
TR 2	49	0	0	11.5	11.5	DCV
TR 4	50	0	0	11.5	11.5	DCV
VSS (+)	58	0	0	65/30	125/55	Hz/MPH
O2S11	60	0	switching (C)	switching (C)	switching (C)	DCV
O2S22	61	0	(D)	(D)	(D)	DCV
FTP V/FTP	62	2.6/0	2.6/0	2.6/0	2.6/0	DCV/IN-H2O
TR V/TR	64	0/PARK	0/PARK	1.7/OD	1.7/OD	DCV/MODE
DPFEGR	65	.2-1.3	.2-1.3	.2-4.5	.2-4.5	DCV
CHT V/CHT	66	.67 or 3.7/194	.67 or 3.7/194	.67 or 3.7/194	.67 or 3.7/194	DCV/DEG
OSS	84	0	0	126-136/ 1260-1330	225-243/ 2265-2400	Hz/RPM
CID	85	0	6-7	10-11	13-14	Hz
ACP	86	VBAT/OPEN	VBAT/OPEN	VBAT/OPEN	VBAT/OPEN	DCV/OPEN-CLOSED
O2S21	87	0	switching (C)	switching (C)	switching (C)	DCV
MAF V	88	0	.6-.9	.9-1.5	1.4-2.1	DCV
TP V	89	.53-1.27	.53-1.27	1-1.2	1-1.3	DCV
BPP	92	.1/OFF	VBAT/ON (E)	.1/OFF	.1/OFF	DCV/OFF-ON
CPP/PNP	PID	ON	ON	OFF	OFF	OFF-ON
GEAR	PID	1	1	3	4	GEAR
LOAD	PID	(L)	15-19	20-26	23-28	%
MISF	PID	OFF	OFF	OFF	OFF	OFF-ON
OCTADJ	PID	CLOSED	CLOSED	CLOSED	CLOSED	OPEN-CLOSED
RPM	PID	0	790-815	1250-1400	1540-1620	RPM

Actuators/ Outputs	PCM Pin/PID only	Measured/PID Values				Units Measured/PID
		KOEO	Hot Idle	30 MPH	55 MPH	
CD5	1	VBAT	VBAT	VBAT	VBAT	DCV
MIL	2	.1/OFF	VBAT/OFF	VBAT/OFF	VBAT/OFF	DCV/OFF-ON
SS1	6	.1/ON	.1/ON	VBAT/OFF	.1/ON	DCV/OFF-ON
SS2	11	VBAT/OFF	VBAT/OFF	.1/ON	.1/ON	DCV/OFF-ON
TCIL	12	5/OFF	5/OFF	5/OFF	5/OFF	DCV/OFF-ON
CD1	26	VBAT	VBAT	VBAT	VBAT	DCV
CD6	27	VBAT	VBAT	VBAT	VBAT	DCV
LFC	28	VBAT/OFF	.1/ON (B)	VBAT/OFF	VBAT/OFF	DCV/OFF-ON
CHTIL	45	4.7/OFF	4.7/OFF	4.7/OFF	4.7/OFF	DCV/OFF-ON
HFC	46	VBAT/OFF	.1/ON (B)	VBAT/OFF	VBAT/OFF	DCV/OFF-ON
EGRVR	47	VBAT/0	VBAT/0	10.5-VBAT/ 0-40	8-11.3/ 39-50	DCV/%
CD2	52	VBAT	VBAT	VBAT	VBAT	DCV
CD7	53	VBAT	VBAT	VBAT	VBAT	DCV
TCC	54	.2/100	VBAT/0	9.9-10.1/42-44	.3/90-100	DCV/%
EVAPPDC	56	0	0-10/0-100	0-10/0-100	0-10/0-100	Hz/%
EVAPCV	67	0	0-10/0-100	0-10/0-100	0-10/0-100	Hz/%
WAC	69	VBAT/OFF	.1 /ON (A)	VBAT/OFF	VBAT/OFF	DCV/OFF-ON
INJ7	72	0	3.4-3.7	3.7-6	5.5-9	mS
INJ5	73	0	3.4-3.7	3.7-6	5.5-9	mS
INJ3	74	0	3.4-3.7	3.7-6	5.5-9	mS
INJ1	75	0	3.4-3.7	3.7-6	5.5-9	mS
CD3	78	VBAT	VBAT	VBAT	VBAT	DCV
CD8	79	VBAT	VBAT	VBAT	VBAT	DCV
FP	80	VBAT/0	.1/100	.1/100	.1/100	DCV/%
EPC	81	7.9/20	9.5/20	9.3/22	9.5/22	DCV/PSI
IAC	83	VBAT/0	9.2-10.3/32-36	8.3-10.7/30-55	5.7-8/40-70	DCV/%
HTR11	93	.1/ON (P)	.1/ON	.1/ON	.1/ON	DCV/OFF-ON

HTR21	94	.1/ON (P)	.1/ON	.1/ON	.1/ON	DCV/OFF-ON
HTR12	95	.2/ON (P)	.2/ON	.2/ON	.2/ON	DCV/OFF-ON
HTR22	96	.2/ON (P)	.2/ON	.2/ON	.2/ON	DCV/OFF-ON
INJ8	98	0	3.4-3.7	3.7-6	5.5-9	mS
INJ6	99	0	3.4-3.7	3.7-6	5.5-9	mS
INJ4	100	0	3.4-3.7	3.7-6	5.5-9	mS
INJ2	101	0	3.4-3.7	3.7-6	5.5-9	mS
CD4	104	VBAT	VBAT	VBAT	VBAT	DCV
FUELPW1	PID	(L)	3.4-3.7	3.7-6	5.5-9	mS
FUELPW2	PID	(L)	3.4-3.7	3.7-6	5.5-9	mS
LONGFT1	PID	(-)20-(+)20	(-)20-(+)20	(-)20-(+)20	(-)20-(+)20	%
LONGFT2	PID	(-)20-(+)20	(-)20-(+)20	(-)20-(+)20	(-)20-(+)20	%
SHRTFT1	PID	(L)	(-)10-(+)10	(-)10-(+)10	(-)10-(+)10	%
SHRTFT2	PID	(L)	(-)10-(+)10	(-)10-(+)10	(-)10-(+)10	%
SPARKADV	PID	0	15-18	20-30	32-38	DEG
OTHER						Units
VPWR	71	VBAT	VBAT	VBAT	VBAT	DCV
VREF	90	5	5	5	5	DCV

NOTE: All generic OBD II readings under no load (PARK or NEUTRAL).

GENERIC OBD II PID VALUES

PID	Hot Idle	2500 RPM	Units
LONGFT1	(-)20-(+)20	(-)20-(+)20	%
LONGFT2	(-)20-(+)20	(-)20-(+)20	%
LOAD	19-24	19-24	%
MAF	4.7-6	13-16	G/S
SHRTFT1	(-)10-(+)10	(-)10-(+)10	%
SHRTFT2	(-)10-(+)10	(-)10-(+)10	%
SHRTFT11	(-)10-(+)10	(-)10-(+)10	%
SHRTFT12	95-100	95-100	%
SHRTFT21	(-)10-(+)10	(-)10-(+)10	%
SHRTFT22	95-100	95-100	%