



BASIC ENGINE DIMENSIONS (INCHES) Gasoline Engines

DISPLACEMENT	YEARS	BORE	STROKE	BORE SPACING	MAIN JOURNAL DIA.	ROD JOURNAL DIA.	CON ROD LENGTH (MEAN)	DECK HEIGHT	PISTON COMP HT
1.6L Kent	1971-73	3.188	3.056	3.780	2.1253	1.9372	4.928	8.2272	—
1.6L CVH	1981-85	3.150	3.130	3.614	2.383	1.886	5.195	8.212	1.451
1.9L CVH	1985-87	3.230	3.465	3.614	2.383	1.886	5.195	8.378	1.451
1.9L CVH	1988-96	3.230	3.465	3.614	2.383	1.728	5.195	8.378	1.451
1.8L ZETEC® DOHC	1991-96	3.270	3.350	3.583	1.966	1.771	5.230	8.130	1.108
2.0L I-4 Duratec®	2005-TBD	3.445	3.272	3.780	2.047	1.850	5.758	8.540	1.122
2.0L CVH	1997-98	3.339	3.465	3.614	2.383	1.728	5.195	8.378	1.451
2.0L OHC ①	1971-74	3.575	3.029	4.016	2.244	2.047	4.982	8.146	1.595 ⑤
2.0L OHC ②	1983-87	3.520	3.126	4.173	2.399	2.047	5.205	8.368	1.583
2.0L ZETEC®	1995-04	3.339	3.465	3.614	2.283	1.847	5.3618 ⑦	8.378	1.3012 ⑧
2.0L V6	2001-04	3.215	2.631	4.016	2.479	1.967	5.686	8.189	1.181
2.2L Probe	1988-92	3.390	3.700	3.810	2.360	2.006	6.200	9.500	1.450
2.3L I-4 Duratec®	2001-07	3.445	3.701	3.780	2.047	1.968	6.094	9.094	1.122
2.3L OHC	1974-97	3.780	3.126	4.173	2.399	2.047	5.205	8.368	1.583
2.5L OHC	1998	3.780	3.401	4.173	2.399	2.047	5.457	8.368	1.211
2.3L HSC	1984-94	3.680	3.300	4.080	2.249	2.124	5.457	8.700	1.520
2.5L HSC	1986-91	3.680	3.583	4.080	2.249	2.124	5.990	9.400	1.579
2.5L V6 Duratec®	1995-99	3.245	3.130	4.016	2.480	1.968	5.437	8.189	1.181
2.5L V6 Duratec®	1999-07	3.215	3.130	4.016	2.480	1.968	5.437	8.189	1.181
2.6L V6	1972-73	3.545	2.630	4.760	2.244	2.127	—	8.084	1.546
2.8L V6	1974-80	3.650	2.700	4.760	2.244	2.127	5.140	8.084	1.539
2.9L V6	1986-92	3.661	2.835	4.760	2.244	2.126	5.140	8.858	1.461
3.0L V6	1986-07	3.504	3.150	4.330	2.519	2.126	5.532	8.661	1.535
3.0L V6 Duratec®	1997-07	3.504	3.130	4.016	2.480	1.968	5.437	8.189	1.181
3.5L V6 Duratec®	2006-07	3.642	3.413	4.173	2.658	2.205	6.011	8.970	1.240
3.0L V6 SHO	1989-95	3.500	3.150	4.330	2.516	2.047	5.780	8.660	1.307
3.2L V6 SHO	1993-95	3.620	3.150	4.330	2.516	2.047	5.780	8.660	1.307
3.4L V8 SHO	1996	3.245	3.130	4.016	2.480	1.968	5.437	8.189	1.181
3.8L V6	1982-95	3.810	3.390	4.193	2.5194 ④	2.311	5.914	9.232	1.602
3.8L V6	1997-03	3.810	3.390	4.193	2.519	2.311	6.091	9.232	1.450
3.9L V6	2004-07	3.810	3.465	4.193	2.519	2.311	6.091	9.232	1.411
3.9L V8 ⑥	2000-02	3.386	3.346	3.858	2.441	2.205	6.115	8.880	1.211
3.9L V8 ⑥	2002-07	3.386	3.346	3.858	2.441	2.087	6.115	8.880	1.211
4.0L V6	1990-00	3.950	3.320	4.760	2.244	2.126	5.748	8.858	1.442
4.0L V6	1997-07	3.950	3.320	4.760	2.244	2.126	5.748	8.858	1.440
4.2L V6	1997-07	3.810	3.740	4.193	2.519	2.311	6.091	9.232	1.273
4.5L Ford Racing ③		4.080	3.500	4.469	2.749	2.100	6.088	9.232	③
4.6L V8	1991-07	3.552	3.543	3.937	2.657	2.086	5.933	8.937	1.221
5.0L V8	⑧	3.700	3.543	3.937	2.657	2.086	5.933	8.937	1.221
5.0L V8	2011-12	3.629	3.647	3.937	2.652	2.082	5.933	8.937	1.220
5.4L V8	1997-07	3.552	4.165	3.937	2.657	2.086	6.658	10.079	1.167
5.8L V8	2013	3.681	4.230	3.937	2.6567-2.6577	2.0867-2.0859	6.6575	10.0673	1.2185-1.2224
6.8L V10	1997-07	3.552	4.165	3.937	2.657	2.086	6.657	10.079	1.221
6.0L V12	1999-07	3.504	3.130	4.016	2.657	1.968	5.437	8.189	1.181
200 I-6	1963-83	3.680	3.126	4.080	2.249	2.124	4.715	7.808	1.511
250 I-6	1969-80	3.680	3.910	4.080	2.399	2.124	5.880	7.808	—
240 I-6	1965-72	4.000	3.180	4.480	2.399	2.123	6.795	10.000	1.605
300 I-6	1965-96	4.000	3.980	4.480	2.399	2.123	6.210	10.000	1.757
221 V8	1962-63	3.500	2.870	4.380	2.249	2.123	5.155	8.206	1.595
255 V8	1979-82	3.680	3.000	4.380	2.249	2.123	5.155	8.206	1.600
260 V8	1962-64	3.800	2.870	4.380	2.249	2.123	5.155	8.206	1.600
289	1963-68	4.000	2.870	4.380	2.249	2.123	5.155	8.206	1.605
302	1968-96	4.000	3.000	4.380	2.249	2.123	5.090	8.206	1.605
302 BOSS	1969-70	4.000	3.000	4.380	2.249	2.123	5.150	8.201-8.210	1.530
302 Ford Racing ③		4.000	3.000	4.380	2.249	2.123	5.150	8.201-8.210	③
351W	1969-70	4.000	3.500	4.380	3.000	2.311	5.956	9.480	1.769
351W	1971-96	4.000	3.500	4.380	3.000	2.311	5.956	9.503	1.769
351 Ford Racing ③		4.000	3.500	4.380	2.749	2.311	5.956	9.503	③
351 Ford Racing ③		4.000	3.500	4.380	2.249	2.311	5.780	9.206	③
351C * BOSS	1970-74	4.000	3.500	4.380	2.749	2.311	5.780	9.206	1.647
351M	1975-85	4.000	3.500	4.380	3.000	2.311	6.580	10.297	1.947

- ① Car (EAO)
- ② Ranger/Bronco II
- ③ Non-production blocks. Dimensions for reference
- ④ 3.8L SC #1-2-3 – 2.5190", #4 – 2.5096"
- ⑤ Sport 2000 – 1.6395"
- ⑥ 1997 – 5.482"
- ⑦ 1997 – 1.181"
- ⑧ 3.9L V8 used in the Thunderbird and Lincoln LS is based on the Jaguar® V8 design
- ⑨ Aftermarket from Ford Racing

NOTES:

- All 4-cylinder (except 1.6L Kent) and all V6 engines are metric. Dimensions shown in inches.
- 3.9L V8 used in the Thunderbird and Lincoln LS is based on the Jaguar® V8 design.
- 6.0L V8, 6.4L V8 and 7.3L V8 – ITEC® Powerstroke.

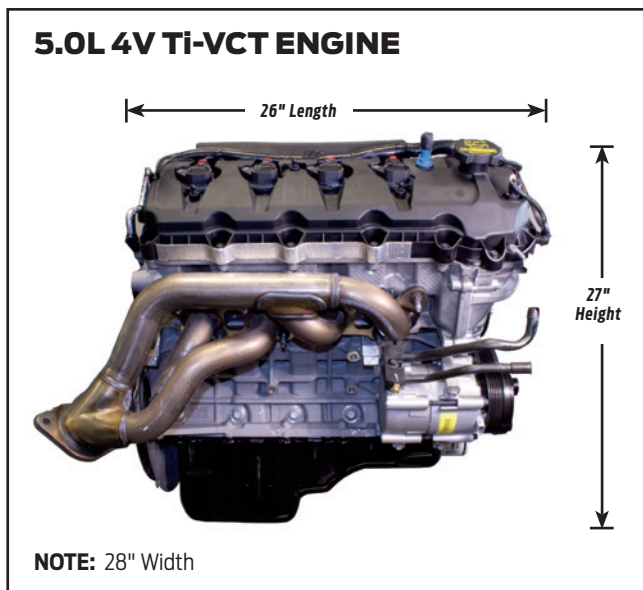


BASIC ENGINE DIMENSIONS (INCHES) CONTINUED

Gasoline Engines

DISPLACEMENT	YEARS	BORE	STROKE	BORE SPACING	MAIN JOURNAL DIA.	ROD JOURNAL DIA.	CON ROD LENGTH (MEAN)	DECK HEIGHT	PISTON COMP HT
400	1971-81	4.000	4.000	4.380	3.000	2.311	6.580	10.292-10.302	1.647
352	1960-66	4.000	3.500	4.630	2.749	2.438	6.540	10.170	1.825
390	1961-71	4.050	3.780	4.630	2.749	2.438	6.489	10.170	1.775
406	1962-63	4.130	3.780	4.630	2.749	2.438	6.489	10.170	1.745
410	1966-67	4.050	3.980	4.630	2.749	2.438	6.489	10.170	1.674
427	1963-68	4.230	3.780	4.630	2.749	2.438	6.489	10.170	1.752
428	1966-70	4.130	3.980	4.630	2.749	2.438	6.489	10.170	1.674
429 STD	1968-73	4.360	3.590	4.900	3.000	2.500	6.605	10.300 (1968-70)	1.890
429 STD	1968-73	4.360	3.590	4.900	3.000	2.500	6.605	10.310 (1970 1/2-71)	1.890
429 CJ/SCJ	1969-70	4.360	3.590	4.900	3.000	2.500	6.605	10.322 (1972-73)	1.890
429 BOSS (S)	1969	4.360	3.590	4.900	3.000	2.500	6.549	10.300	1.926
429 BOSS (T)	1969-70	4.360	3.590	4.900	3.000	2.500	6.605	10.300	1.870
460/460 Ford Racing	1969-96	4.360	3.850	4.900	3.000	2.500	6.605	10.322 (1972-96)	1.756

Engine Swap Size Chart



4.6L Modular Engine

28" Length

SOHC
26" Height

DOHC
29 7/8" Height

NOTE: SOHC – 25 5/8" Width / DOHC – 30" Width.

302/351W/460 Engine

302/351W 27 1/2" Length ① 32" Length ①

460 32" Length ①

302
20 3/4" Height

351W
23 3/4" Height

460
26" Height

NOTE: 302 – 18 3/4" Width / 351W – 21" Width / 460 – 26" Width
NOTE: ① With Short Serpentine Water Pump M-8501-A50.