

## MUSTANG ENGINE SPECIFICATIONS

### '64-1/2 Through '73 In-Line Six Cylinder

*Compression ratio...combustion chamber size...point gap... We'll tell you everything you wanted to know about your early Mustang powerplant – and some things you didn't.*

article by Mark Houlahan

Eventually, there comes a time when you wish you could get your hands on all pertinent Mustang engine specifications, like fast idle adjustment or plug gap, without digging through a five-hundred page manual. Well, no one has ever, to our knowledge, compiled this essential data into an easy to read, easy to access format until we sat down with that five-hundred page book (actually a bunch of Shop Manuals) from Ford and pulled out all the information you need to keep your Mustang's engine up to standard. Along the way we threw in several specifications you might need if you are planning a rebuild.

Our Vintage Engine Specs series begins this month with a look at the in-line six-cylinder '64-1/2 through '73 Mustang engines. In the coming months we will tackle the small-block V8 family, as well as the big-block V8s Ford stuffed between the first-generation

Mustang's fenders. While this information is available to anyone with the time and money to acquire the necessary publications, we understand that it is often difficult for most individuals to accumulate. If you would like to see more technical factory data like this, just let us know. Write *Mustang Monthly*, Technical Data, P.O. Box 7157, Lakeland, FL 33807-7157.



1962 1/2

#### 1964 1/2

engine size:	170 cubic inches
data plate code:	U
horsepower:	105 @ 4400 rpm
torque:	158 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.50x2.94
compression ratio:	9.1:1
combustion chamber:	48.3-50.3cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	500-525 rpm
fast idle rpm:	1,300 rpm (manual) 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	150-190 w/ 20 psi tolerance between cylinders
initial ignition timing:	6° for manual, 12° for automatic
point gap:	.024-.026
dwell @ idle rpm:	35°-38°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	50°F and below-HI above 50°F-LO
anti-stall dashpot setting:	3 1/4-3 3/4 turns after contact of adjusting screw
choke plate to airhorn:	1/4"
choke housing setting:	index
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-55 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## 1965

engine size:	200 cubic inches
data plate code:	T
horsepower:	120 @ 4400 rpm
torque:	190 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.126
compression ratio:	9.2:1
combustion chamber:	48.3-50.3cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	575-600 rpm for manual 500-525 rpm for automatic
fast idle rpm:	1,300 rpm (manual), 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	155-195 w/ 20 psi tolerance between cylinders
initial ignition timing:	.6° for manual 12° for automatic
point gap:	.024-.026
dwll @ idle rpm:	35°-38°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	50°F and below-HI above 50°F-LO
anti-stall dashpot setting:	3 1/4-3 3/4 turns after contact of adjusting screw
choke plate to airhorn:	1/4"
choke housing setting:	index
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-55 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement



1965 (above) and 1966 (below)



## 1966

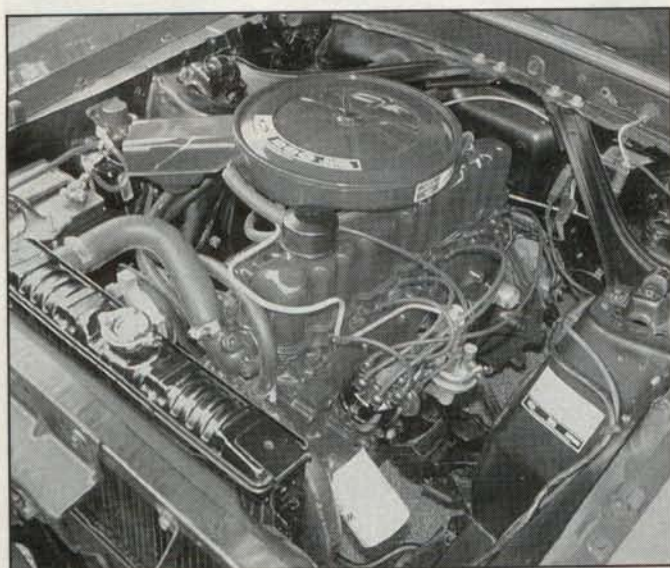
engine size:	200 cubic inches
data plate code:	T
horsepower:	120 @ 4400 rpm
torque:	190 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.126
compression ratio:	9.2:1
combustion chamber:	48.5-50.5cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	575-600 rpm for manual 500-525 rpm for automatic
fast idle rpm:	1,300 rpm (manual), 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	155-195 w/ 20 psi tolerance between cylinders
initial ignition timing:	.6° for manual 12° for automatic
point gap:	.024-.026
dwll @ idle rpm:	35°-38°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	50°F and below-HI above 50°F-LO
anti-stall dashpot setting:	3 1/4-3 3/4 turns after contact of adjusting screw
choke plate to airhorn:	1/4"
choke housing setting:	index
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-55 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## 1967

engine size:	200 cubic inches
data plate code:	T
horsepower:	120 @ 4400 rpm
torque:	190 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.13
compression ratio:	9.2:1
combustion chamber:	48.5-50.5cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	575 rpm for manual (700 w/emissions), 550 rpm for automatic
fast idle rpm:	1,300 rpm (manual) 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	155-195 w/ 20 psi tolerance between cylinders
initial ignition timing:	.6° for manual 12° for automatic
point gap:	.024-.026
dwll @ idle rpm:	35°-38°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	50°F and below-HI above 50°F-LO
anti-stall dashpot setting:	3 1/4-3 3/4 turns after contact of adjusting screw
choke plate to airhorn:	1/4"
choke housing setting:	index
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-55 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## MUSTANG ENGINE SPECIFICATIONS

### '64-1/2 Through '73 In-Line Six Cylinder



1969

engine size:	250 cubic inches
data plate code:	L
horsepower:	155 @ 4000 rpm
torque:	240 @ 1600 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.91
compression ratio:	9.0:1
combustion chamber:	59.4-62.4cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	700 rpm w/ solenoid energized, 550 rpm w/ solenoid off for manual, 550 rpm w/solenoid energized, 450 rpm w/solenoid off for automatic
fast idle rpm:	1,400 rpm (manual) 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.025
dwell @ idle rpm:	37°-42°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	.190, lever set to HI
anti-stall dashpot setting:	pneumatic, .080
choke plate to airhorn:	.234
choke housing setting:	1-lean
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-42 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

1969

engine size:	200 cubic inches
data plate code:	T
horsepower:	120 @ 4400 rpm
torque:	190 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.13
compression ratio:	9.2:1
combustion chamber:	51.5-54cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	700 rpm for manual 550 rpm for automatic
fast idle rpm:	1,400 rpm (manual) 1,500 rpm (automatic)
idle manifold vacuum:	17 in/hg
compression pressure:	150-200 w/ 20 psi tolerance between cylinders
initial ignition timing:	6° for manual and automatic
point gap:	.027
dwell @ idle rpm:	35°-40°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	HI
anti-stall dashpot setting:	2 turns after contact of adjusting screw
choke plate to airhorn:	.234
choke housing setting:	1-lean (Imco) 2-lean (thermactor)
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

1968

engine size:	200 cubic inches
data plate code:	T
horsepower:	120 @ 4400 rpm
torque:	190 @ 2400 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.13
compression ratio:	8.1:1
combustion chamber:	51.5-54cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	750 rpm (600 w/ a/c) for manual, 550 rpm (600 w/a/c) for automatic
fast idle rpm:	.031 (manual), .036 (automatic) throttle plate clearance
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.027
dwell @ idle rpm:	35°-40°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	.150 (manual) .190 (automatic), lever set to HI
anti-stall dashpot setting:	.7/64"
choke plate to airhorn:	.234
choke housing setting:	index
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

1970

## 1970

engine size:	250 cubic inches
data plate code:	L
horsepower:	155 @ 4400 rpm
torque:	240 @ 1600 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.91
compression ratio:	9.1:1
combustion chamber:	59.4-62.4cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	750 rpm (500 w/ solenoid off) for manual, 600 rpm (500 w/ solenoid off) for automatic
fast idle rpm:	.040 (manual), .046 (automatic) throttle plate clearance
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.025
dwell @ idle rpm:	37°-42°
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	400
anti-stall dashpot setting:	solenoid equipped (manual), 7/32" (automatic)
choke plate to airhorn:	234
choke housing setting:	index (manual), 1-rich (automatic)
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BF-82 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## 1971

engine size:	250 cubic inches
data plate code:	L
horsepower:	145 @ 4400 rpm
torque:	232 @ 1600 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.91
compression ratio:	9.0:1
combustion chamber:	59.19-62.19cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.657
exhaust valve size:	1.381-1.396
idle rpm:	750 rpm (500 w/solenoid off) for manual, 600 rpm (500 w/ solenoid off) for automatic
fast idle rpm:	1,600 rpm
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.027 (.025 for single diaphragm distributor)
dwell @ idle rpm:	33°-38° (34°-37.5° for single diaphragm distributor)
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	400
anti-stall dashpot setting:	solenoid equipped (manual), 100 (automatic)
choke plate to airhorn:	234
choke housing setting:	index (manual), 1-rich (automatic)
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BRF-82 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## 1972

engine size:	250 cubic inches
data plate code:	L
horsepower:	145 @ 4400 rpm
torque:	232 @ 1600 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.91
compression ratio:	8.0:1
combustion chamber:	59.19-62.19cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.660
exhaust valve size:	1.381-1.399
idle rpm:	750 rpm (500 w/solenoid off) for manual, 600 rpm (500 w/ solenoid off) for automatic
fast idle rpm:	1,600 rpm
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.027 (.025 for single diaphragm distributor)
dwell @ idle rpm:	33°-38° (34°-37.5° for single diaphragm distributor)
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	400
anti-stall dashpot setting:	solenoid equipped (manual), 100 (automatic)
choke plate to airhorn:	234
choke housing setting:	index (manual), 1-rich (automatic)
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BRF-82 @ .032-.036"
oil pressure:	35-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

## 1973

engine size:	250 cubic inches
data plate code:	L
horsepower:	145 @ 4400 rpm
torque:	232 @ 1600 rpm
firing order:	1-5-3-6-2-4
bore & stroke:	3.68x3.91
compression ratio:	N/A
combustion chamber:	59.4-62.4cc
rocker arm ratio:	1.50:1
intake valve size:	1.642-1.660
exhaust valve size:	1.381-1.399
idle rpm:	750 rpm (500 w/ solenoid off) for manual, 600 rpm (500 w/ solenoid off) for automatic
fast idle rpm:	1,600 rpm
idle manifold vacuum:	17 in/hg
compression pressure:	lowest reading must be within 75% of highest reading
initial ignition timing:	6° for manual and for automatic
point gap:	.027 (.025 for single diaphragm distributor)
dwell @ idle rpm:	33°-38° (34°-37.5° for single diaphragm distributor)
number of venturis:	1
spark control valve closes:	5.5-6.5" HG
float setting:	1 3/32" from bottom of flat to surface of body (inverted)
accelerator pump setting:	400
anti-stall dashpot setting:	solenoid equipped (manual), 100 (automatic)
choke plate to airhorn:	234
choke housing setting:	index (manual), 1-rich (automatic)
fuel pump static pressure:	3.5-5.5 PSI at 500 rpm
spark plug type and gap:	BRF-82 @ .032-.036"
oil pressure:	40-60 PSI at 2,000 rpm-hot
oil pan capacity:	4.5 quarts w/ filter replacement

