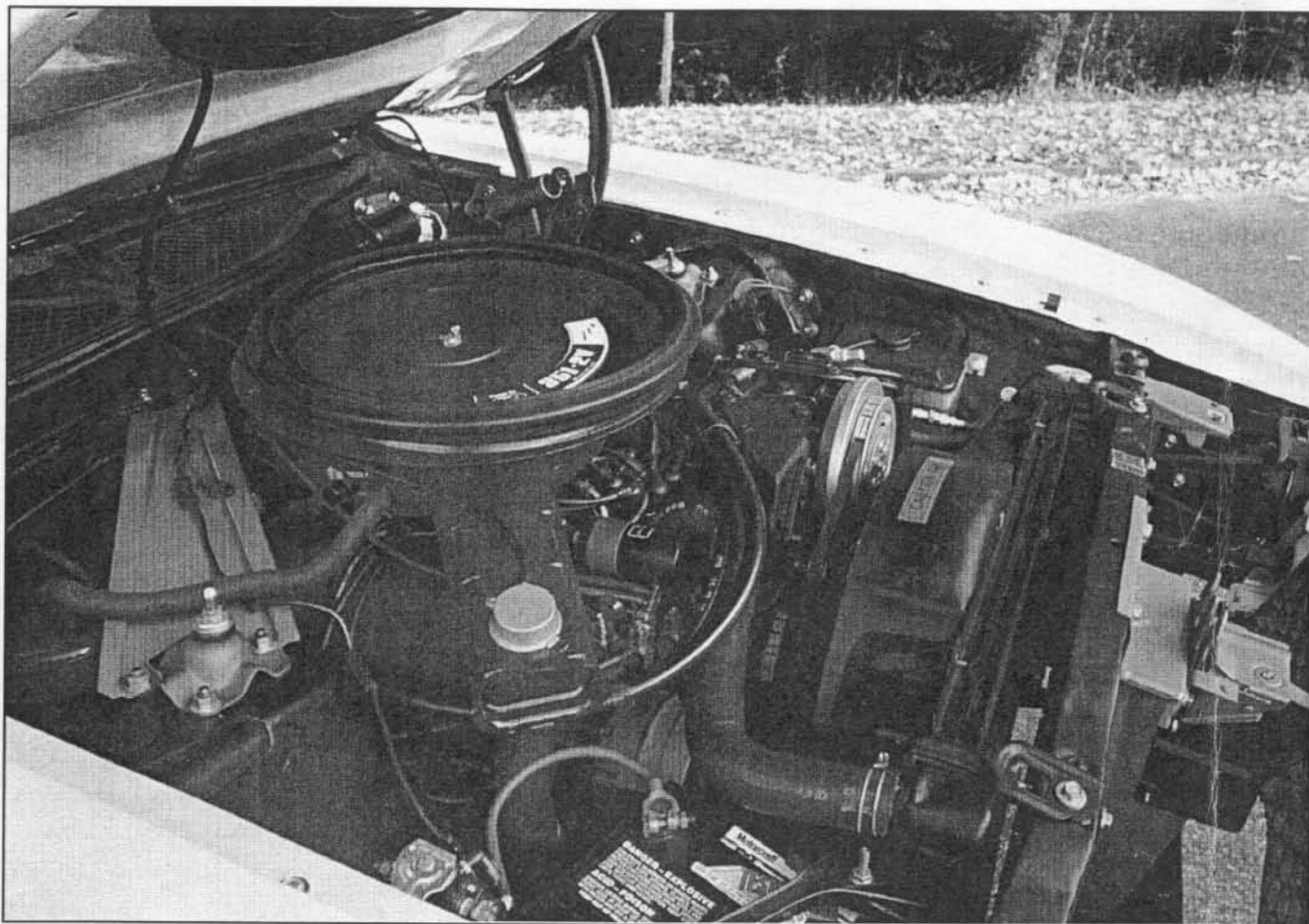


Mustang Engine Specifications: 1971-1973 Small-Block V8s

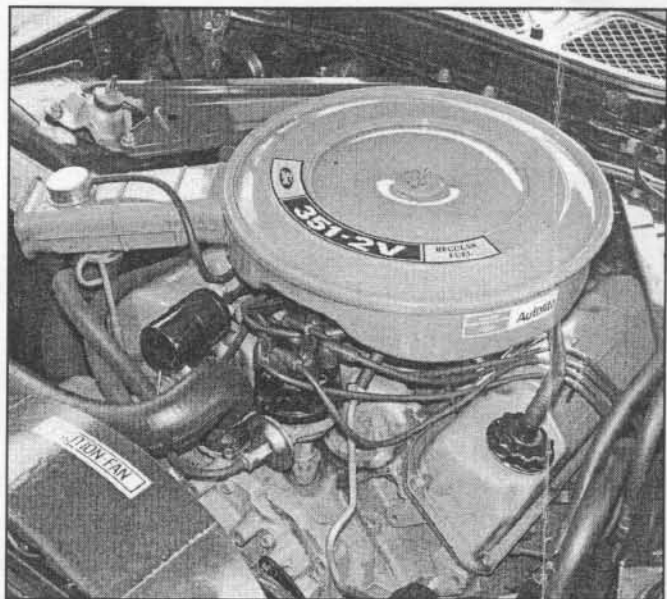


We conclude our first-generation small-block engine specifications review with a look at the 1971-'73 302 and 351 cid V8s.

article by Mark Houlihan
photographs from the Mustang Monthly archives

Little did we know how daunting a task it would be to list the maintenance and tune-up specifications of the small-block V8 for 1964-1/2 to 1973 Mustangs. Sure, we knew there were a lot more V8s than the six-cylinder engine specifications we covered in the May 1995 issue, but our list grew like that monster in your garage that you've been trying to restore for the past five years. Unfortunately, due to page limitations we had to split the list in two, completing our small-block specifications roundup this month.

Next month we will close the book on our specifications guides with the big-block specs from the 1967-1971 Mustangs. This is only five years of Mustang big-block production, so we should be able to get it done in one issue. Then I can finally get these huge books off my desk and find my car keys. Maybe even take a vacation...in a soft rubber cell.



1971

Engine size:	302 cid
Data plate code:	F
Horsepower:	210 @ 4600 rpm
Torque:	296 @ 2600 rpm
Firing order:	1-5-4-2-6-3-7-8
Bore & stroke:	4.00" X 3.00"
Compression ratio:	9.0:1
Combustion chamber:	56.7-59.7 cc
Rocker arm ratio:	1.60:1
Intake valve size:	1.773"-1.783"
Exhaust valve size:	1.442"-1.457"
Idle rpm:	for solenoid throttle positioner 800 on/500 off for manual, 600 on/500 off for automatic, without positioner 575 for automatic
Fast idle rpm:	1400 for manual, 1500 for automatic
Idle manifold vacuum:	16 in/hg
Compression pressure:	lowest reading must be within 75 percent of highest reading
Initial ignition timing:	6°
Point gap:	.017" for single diaphragm, .021" for dual diaphragm
Dwell @ idle rpm:	26°-31° for single diaphragm, 24°-29° for dual diaphragm
Number of venturis:	two
Float setting:	7/16"
Accelerator pump setting:	pump link inboard and lever in #3 hole for manual and #2 hole for automatic
Anti-stall dashpot setting:	1/8"
Choke plate to airhorn:	.060"
Choke housing setting:	one rich
Fuel pump static pressure:	4-6 psi
Spark plug type and gap:	BRF-42 @ .035"
Oil pressure:	35-60 psi
Oil pan capacity:	five quarts

Engine size:	351 cid
Data plate code:	M
Horsepower:	285 @ 5400 rpm
Torque:	370 @ 3400 rpm
Firing order:	1-3-7-2-6-5-4-8
Bore & stroke:	4.00" X 3.50"
Compression ratio:	10.7:1
Combustion chamber:	64.6-67.6 cc
Rocker arm ratio:	1.73:1
Intake valve size:	2.183"-2.198"
Exhaust valve size:	1.705"-1.715"
Idle rpm:	for solenoid throttle positioner 800 on/500 off for manual, 600 on/500 off for automatic, without positioner 600 for automatic
Fast idle rpm:	1250 for manual, 1400 for automatic
Idle manifold vacuum:	13 in/hg
Compression pressure:	lowest reading must be within 75 percent of highest reading
Initial ignition timing:	6°
Point gap:	.017" for single diaphragm, .021" for dual diaphragm
Dwell @ idle rpm:	26°-31° for single diaphragm, 24°-29° for dual diaphragm
Number of venturis:	four
Float setting:	13/16"
Accelerator pump setting:	pump link stem height .425"
Anti-stall dashpot setting:	1/16"
Choke plate to airhorn:	.078"
Choke housing setting:	Index
Fuel pump static pressure:	5-7 psi
Spark plug type and gap:	ARF-42 @ .032"-.036"
Oil pressure:	50-70 psi
Oil pan capacity:	five quarts

351 4V-Ram Air and Boss 351 engines for the '71 model year were not listed in original Ford shop manuals of the era. Speculation is that there were separate manuals for these late engines, and they couldn't be located for this article.

1971

Engine size:	351 cid
Data plate code:	H
Horsepower:	240 @ 4600 rpm
Torque:	350 @ 2600 rpm
Firing order:	1-3-7-2-6-5-4-8
Bore & stroke:	4.00" X 3.50"
Compression ratio:	9.0:1
Combustion chamber:	76.76-79.76 cc
Rocker arm ratio:	1.73:1
Intake valve size:	2.032"-2.050"
Exhaust valve size:	1.650"-1.660"
Idle rpm:	for solenoid throttle positioner 700 on/500 off for manual, 600 on/500 off for automatic, without positioner 600 for automatic
Fast idle rpm:	1500 for manual, 1500 for automatic
Idle manifold vacuum:	14.5 in/hg
Compression pressure:	lowest reading must be within 75 percent of highest reading
Initial ignition timing:	6°
Point gap:	.017" for single diaphragm, .021" for dual diaphragm
Dwell @ idle rpm:	26°-31° for single diaphragm, 24°-29° for dual diaphragm
Number of venturis:	two
Float setting:	7/16"
Accelerator pump setting:	pump link inboard and throttle lever in #3 hole
Anti-stall dashpot setting:	solenoid equipped
Choke plate to airhorn:	.060"
Choke housing setting:	Index for manual, one rich for automatic
Fuel pump static pressure:	5-7 psi
Spark plug type and gap:	ARF-42 @ .032"-.036"
Oil pressure:	50-70 psi
Oil pan capacity:	five quarts

1972

Engine size:	302 cid
Data plate code:	F
Horsepower:	information unavailable
Torque:	information unavailable
Firing order:	1-5-4-2-6-3-7-8
Bore & stroke:	4.00" X 3.00"
Compression ratio:	8.5:1
Combustion chamber:	56.7-59.7 cc
Rocker arm ratio:	1.60:1
Intake valve size:	1.773"-1.791"
Exhaust valve size:	1.442"-1.460"
Idle rpm:	for solenoid throttle positioner 800 on/500 off for manual, 600 on/500 off for automatic, without positioner 575 for automatic
Fast idle rpm:	1400 for manual, 1500 for automatic
Idle manifold vacuum:	16 in/hg
Compression pressure:	lowest reading must be within 75 percent of highest reading
Initial ignition timing:	6°
Point gap:	.017" for single diaphragm, .021" for dual diaphragm
Dwell @ idle rpm:	26°-31° for single diaphragm, 24°-29° for dual diaphragm
Number of venturis:	two
Float setting:	information unavailable
Accelerator pump setting:	information unavailable
Anti-stall dashpot setting:	information unavailable
Choke plate to airhorn:	information unavailable
Choke housing setting:	information unavailable
Fuel pump static pressure:	5-7 psi
Spark plug type and gap:	BRF-42 @ .035"
Oil pressure:	35-60 psi
Oil pan capacity:	five quarts

ENGINE SPECIFICATIONS: 1971-1973 SMALL-BLOCK V8S

1972

Engine size:.....351 cid
 Data plate code:.....H
 Horsepower:.....information unavailable
 Torque:.....information unavailable
 Firing order:.....1-3-7-2-6-5-4-8
 Bore & stroke:.....4.00" X 3.50"
 Compression ratio:.....8.6:1
 Combustion chamber:.....76.9-79.9 cc
 Rocker arm ratio:.....1.73:1
 Intake valve size:.....2.032"-2.050"
 Exhaust valve size:.....1.650"-1.660"
 Idle rpm:.....for solenoid throttle positioner 700 on/500 off for manual, 600 on/500 off for automatic, without positioner 600 for automatic
 Fast idle rpm:.....1500 for manual, 1500 for automatic
 Idle manifold vacuum:.....14.5 in/hg
 Compression pressure:.....lowest reading must be within 75 percent of highest reading
 Initial ignition timing:.....6°
 Point gap:......017" for single diaphragm, .021" for dual diaphragm
 Dwell @ idle rpm:.....26°-31° for single diaphragm, 24°-29° for dual diaphragm
 Number of venturis:.....two
 Float setting:.....information unavailable
 Accelerator pump setting:.....information unavailable
 Anti-stall dashpot setting:.....information unavailable
 Choke plate to airhorn:.....information unavailable
 Choke housing setting:.....information unavailable
 Fuel pump static pressure:.....5-7 psi
 Spark plug type and gap:.....ARF-42 @ .032"-.036"
 Oil pressure:.....35-85 psi
 Oil pan capacity:.....five quarts

Engine size:.....351 cid
 Data plate code:.....Q
 Horsepower:.....information unavailable
 Torque:.....information unavailable
 Firing order:.....1-3-7-2-6-5-4-8
 Bore & stroke:.....4.00" X 3.50"
 Compression ratio:.....8.6:1
 Combustion chamber:.....64.6-67.6 cc
 Rocker arm ratio:.....1.73:1
 Intake valve size:.....2.183"-2.198"
 Exhaust valve size:.....1.705"-1.715"
 Idle rpm:.....for solenoid throttle positioner 700 on/500 off for manual, 600 on/500 off for automatic, without positioner 600 for automatic
 Fast idle rpm:.....1500 for manual, 1500 for automatic
 Idle manifold vacuum:.....14.5 in/hg
 Compression pressure:.....lowest reading must be within 75 percent of highest reading
 Initial ignition timing:.....6°
 Point gap:......017" for single diaphragm, .021" for dual diaphragm
 Dwell @ idle rpm:.....26°-31° for single diaphragm, 24°-29° for dual diaphragm
 Number of venturis:.....four
 Float setting:.....information unavailable
 Accelerator pump setting:.....information unavailable
 Anti-stall dashpot setting:.....information unavailable
 Choke plate to airhorn:.....information unavailable
 Choke housing setting:.....information unavailable
 Fuel pump static pressure:.....5-7 psi
 Spark plug type and gap:.....ARF-42 @ .032"-.036"
 Oil pressure:.....35-85 psi
 Oil pan capacity:.....five quarts

1972

Engine size:.....351 cid
 Data plate code:.....R
 Horsepower:.....information unavailable
 Torque:.....information unavailable
 Firing order:.....1-3-7-2-6-5-4-8
 Bore & stroke:.....4.00" X 3.50"
 Compression ratio:.....8.8:1
 Combustion chamber:.....73.9-76.9 cc
 Rocker arm ratio:.....1.73:1
 Intake valve size:.....2.183"-2.198"
 Exhaust valve size:.....1.705"-1.715"
 Idle rpm:.....for solenoid throttle positioner 700 on/500 off for manual, 600 on/500 off for automatic, without positioner 600 for automatic
 Fast idle rpm:.....1500 for manual, 1500 for automatic
 Idle manifold vacuum:.....14.5 in/hg
 Compression pressure:.....lowest reading must be within 75 percent of highest reading
 Initial ignition timing:.....6°
 Point gap:......017" for single diaphragm, .021" for dual diaphragm
 Dwell @ idle rpm:.....26°-31° for single diaphragm, 24°-29° for dual diaphragm
 Number of venturis:.....four
 Float setting:.....information unavailable
 Accelerator pump setting:.....information unavailable
 Anti-stall dashpot setting:.....information unavailable
 Choke plate to airhorn:.....information unavailable
 Choke housing setting:.....information unavailable
 Fuel pump static pressure:.....5-7 psi
 Spark plug type and gap:.....ARF-42 @ .032"-.036"
 Oil pressure:.....50-70 psi
 Oil pan capacity:.....six quarts

1973

Engine size:.....302 cid
 Data plate code:.....F
 Horsepower:.....information unavailable
 Torque:.....information unavailable
 Firing order:.....1-5-4-2-6-3-7-8
 Bore & stroke:.....4.00" X 3.00"
 Compression ratio:.....N/A
 Combustion chamber:.....56.7-59.7 cc
 Rocker arm ratio:.....1.61:1
 Intake valve size:.....1.773"-1.791"
 Exhaust valve size:.....1.442"-1.460"
 Idle rpm:.....for solenoid throttle positioner 800 on/500 off for manual, 600 on/500 off for automatic, without positioner 575 for automatic
 Fast idle rpm:.....1400 for manual, 1500 for automatic
 Idle manifold vacuum:.....16 in/hg
 Compression pressure:.....lowest reading must be within 75 percent of highest reading
 Initial ignition timing:.....6°
 Point gap:......017" for single diaphragm, .021" for dual diaphragm
 Dwell @ idle rpm:.....26°-31° for single diaphragm, 24°-29° for dual diaphragm
 Number of venturis:.....two
 Float setting:.....information unavailable
 Accelerator pump setting:.....information unavailable
 Anti-stall dashpot setting:.....information unavailable
 Choke plate to airhorn:.....information unavailable
 Choke housing setting:.....information unavailable
 Fuel pump static pressure:.....5-7 psi
 Spark plug type and gap:.....BRF-42 @ .035"
 Oil pressure:.....40-60 psi
 Oil pan capacity:.....five quarts

1973

Engine size:351 cid
 Data plate code:H
 Horsepower:information unavailable
 Torque:information unavailable
 Firing order:1-3-7-2-6-5-4-8
 Bore & stroke:4.00" X 3.50"
 Compression ratio:8.0:1
 Combustion chamber:76.9-79.9 cc
 Rocker arm ratio:1.73:1
 Intake valve size:2.032"-2.050"
 Exhaust valve size:1.650"-1.660"
 Idle rpm:for solenoid throttle positioner 700 on/500 off for
 manual, 600 on/500 off for automatic,
 without positioner 600 for automatic
 Fast idle rpm:1500 for manual, 1500 for automatic
 Idle manifold vacuum:14.5 in/hg
 compression pressure:lowest reading must be
 within 75 percent of highest reading
 Initial ignition timing:6°
 Point gap:0.017" for single diaphragm,
 0.021" for dual diaphragm
 Dwell @ idle rpm:26°-31° for single diaphragm,
 24°-29° for dual diaphragm
 Number of venturis:two
 Float setting:information unavailable
 Accelerator pump setting:information unavailable
 Anti-stall dashpot setting:information unavailable
 Choke plate to airhorn:information unavailable
 Choke housing setting:information unavailable
 Fuel pump static pressure:5-7 psi
 Spark plug type and gap:ARF-42 @ .032-.036"
 Oil pressure:45-75 psi
 Oil pan capacity:five quarts

Engine size:351 cid
 Data plate code:Q
 Horsepower:information unavailable
 Torque:information unavailable
 Firing order:1-3-7-2-6-5-4-8
 Bore & stroke:4.00" X 3.50"
 Compression ratio:8.0:1
 Combustion chamber:76.9-79.9 cc
 Rocker arm ratio:1.73:1
 Intake valve size:2.032"-2.050"
 Exhaust valve size:1.650"-1.660"
 Idle rpm:for solenoid throttle positioner 700 on/500 off for
 manual, 600 on/500 off for automatic,
 without positioner 600 for automatic
 Fast idle rpm:1500 for manual, 1500 for automatic
 Idle manifold vacuum:14.5 in/hg
 Compression pressure:lowest reading must be
 within 75 percent of highest reading
 Initial ignition timing:6°
 Point gap:0.017" for single diaphragm,
 0.021" for dual diaphragm
 Dwell @ idle rpm:26°-31° for single diaphragm,
 24°-29° for dual diaphragm
 Number of venturis:four
 Float setting:information unavailable
 Accelerator pump setting:information unavailable
 Anti-stall dashpot setting:information unavailable
 Choke plate to airhorn:information unavailable
 Choke housing setting:information unavailable
 Fuel pump static pressure:5-7 psi
 Spark plug type and gap:ARF-42 @ .032-.036"
 Oil pressure:45-75 psi
 Oil pan capacity:five quarts

