

This is a detailed exploded view diagram of a 1966-1967 Ford Mustang 289 cubic inch V8 engine and transmission assembly. The diagram illustrates the relationship between various components, including the engine block, cylinder head, intake manifold, carburetor, distributor, timing belt, and transmission. Numerous parts are labeled with numbers, and a 'GASKET SET' is shown separately at the top left. A callout box at the bottom left shows a detail of a bolt and nut assembly.

Key components and their associated part numbers include:

- Engine Block and Cylinder Head:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200.
- Intake Manifold and Carburetor:** 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200.
- Distributor and Timing Belt:** 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200.
- Transmission:** 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200.

Ref #	Part Number	Qty	Description
1	32769B		Cylinder (Incl. 2, 3 & 4) (2-3/4" Bore)
2	27652		Pin, Dowel
3	27642		Plug, Oil drain
4	32630		Seal, Oil
5	32783		Intake Valve (Std.) (Incl. 9)
5	32784		Intake Valve (1/32" OS) (Incl. 9)
6	27878A		Exhaust Valve (Std.) (Incl. 9)
6	27880A		Exhaust Valve (1/32" OS) (Incl. 9)
7	27882		Cap, Upper valve spring
8	27881		Spring, Valve
9	32581		Cap, Lower valve spring
10	34242		Dipper, Oil
11	35224		Crankshaft
12	29783		Crankshaft Gear Pin (Used on early prod.)
13	27884		Gear, Crankshaft (Used on early production)
14A	32770B		Piston & Pin Ass'y. (Std.)(2-3/4")(Incl. 16)
14A	32771B		Piston & Pin Ass'y. (.010" OS) (Incl. 16)
14A	32772B		Piston & Pin Ass'y. (.020" OS) (Incl. 16)
14	34528		Piston, Pin & Ring Set (Std.) (2-3/4" Bore)
14	34529		Piston, Pin & Ring Set (.010" OS)
14	34530		Piston, Pin & Ring Set (.020" OS)
15	32595		Ring Set (Std.) (2-3/4" Bore)
15	32596		Ring Set (.010" OS)
15	32597		Ring Set (.020" OS)
16	27888		Ring, Piston pin retaining
17	32591C		Rod Assy., Connecting (Incl. 10 & 18)
18	650662C		Bolt, Connecting rod (2 each)
21	32115		Camshaft (MCR)
22	34034		Lifter, Valve
23	31451A		Cylinder Cover (Incl. 24, 106, 178, 179 & 180)
24	28460		Seal, Oil
25	31297		Dipstick (Incl. 30)
27	30684		* Gasket, Cylinder cover
28	650451		Screw, 1/4-20 x 1"
30	29673		* Gasket, Oil fill
32	32631A		* Gasket, Cylinder head
33	30938A		Head, Cylinder
34	27793		Clip, Conduit (Use as required)
35	28942		Screw, 10-32 x 3/8" (Use as required)
36	650697A		Screw, 5/16-18 x 2-1/2" (Use as required)
36	650695A		Screw, 5/16-18 x 2-1/4" (Use as required)
36	650694A		Screw, 5/16-18 x 2" (Use as required)
37	33636		Resistor Spark Plug (RJ-8C)
38	27896A		* Gasket, Breather
39	28423		Body, Breather
40	28424		Element, Breather
41	28425		Cover, Valve spring
42A	650690		Washer, Belleville (Use as required)
42	650691		Washer, Flat (Use as required)
43	650128		Screw, 10-24 x 1/2"
45	27915A		* Gasket, Intake
46	34712		Flange, Carburetor
47	30196		Screw, 5/16-18 x 3/4"
48	29716		Screw, 1/4-28 x 7/16"
50	650548		Screw, 8-32 x 5/16"

Ref #	Part Number	Qty	Description
52	33454		Lever Assy., Governor
56	34662		Link, Throttle
57	730130		Exhaust Adaptor Kit (Incl.58,125) (As req.)
58	30196		Screw, 5/16-18 x 3/4" (Use as require d)
59	29216		Locknut, 10-32
61	29826		Screw, 10-32 x 3/4"
62	29642		Ring, Retaining
63	30699C		Rod, Governor (Incl. 64 & 65)
64	30700		Yoke, Governor
65	650494		Screw, 6-40 x 5/16"
66	29918		Washer, Lock #8 E.T.
67A	32447		Tube, Breather
68	32446		Grommet, Breather tube
69	29747B		Screw, 5/16-24 x 21/32"
70	32158E		Blower Housing (For elec.strt.)(Incl. 134,135)
71	650815		Washer, Belleville
72	8116		Nut, Hex
73	29536		Blower Housing Baffle (Without electric starter knock-out) (Use as required)
73	35256A		Blower Housing Baffle (With electric starter knock-out) (Use as required)
73	35326		Baffle, Blower housing
74	650561		Screw, 1/4-20 x 5/8"
75	31688A		* Gasket, Carburetor
76	34443A		Solid State Assy. (Incl. 146)
77	650872		Stud, Solid state mounting
78	611085		Flywheel (w/ring gear)
81	650517		Screw, 1/4-20 x 27/32"
82	730561		Air Cleaner Kit (Incl. 38, 67A, 68, 83, 84A,85, 87, 88, 89, 156 & 190A) (Use only on engines with an externally vented fully adjustable carburetor)
83	27272A		* Gasket, Air cleaner
84	34780		Elbow, Air cleaner
84A	34819		Elbow Assy., Air cleaner (Incl. 84, 90, 91, 92 & 92A)(Use in 730561 assy. only)
85	650163		Screw, 10-32 x 7/8"
86	30675		Fitting, Breather
87	34782		Filter, Air cleaner (Incl. 93)
88	34783		Filter, Pre-air
89	34781		Cover, Air cleaner
90	34699		Bracket, Air cleaner
91	34698A		Gasket
92A			Pop Rivet (1/8" dia.) (Can be bought locally)
92	650826		Stud, 1/4-20 x 6.20 threaded
93	650825		Nut & Lockwasher, 1/4-20
98	31342		Spring, Compression
99	650549		Screw, 5-40 x 7/16"
100	29538		Base, Engine mounting
101	650542		Screw, 5/16-18 x 3/4"
103	32401		Muffler
103A	391026		Muffler (Incl. 183, 184 & 185) (Thisspark arrester muffler can be used on any model)
105	34246		Clip, Ground wire (Use as required)

Ref #	Part Number	Qty	Description
106	31845		Shaft, Mechanical governor
107	30591		Gear Assy., Governor
108	30588A		Spool, Governor
109	35479		Washer, Flat
110	29193		Ring, Retaining
111	34158		Bracket, Fuel tank mounting
112	34159		Plate, Fuel tank mounting
113	650561		Screw, 1/4-20 x 5/8"
114	34186A		Fuel Tank (Incl. 115 & 168) NOTE: These tanks were built with different size fuel inlet openings. Tanks with the 1-3/16" I.D. opening use fuel cap 33032 or 34210. Tanks with the 1-1/2" I.D. opening use fuel cap 35355.
115	410144B		Fuel Cap (White Plastic) (Std)(Use as req.)
115	33032		Fuel Cap (Red Plastic) (Spurt Resistant, Low Profile) (Use as required)
115	34210		Fuel Cap (Red Plastic) (Spurt Resistant, High Profile) (Use as required)
115	35355		Fuel Cap (Red Plastic) (Use as required)
118	29774		Fuel Line (Braided 8-1/4")(21 cm)(As req.)
118	30962		Fuel Line (Braided 3/2")(81 cm)(Use as req.)
120	650128		Screw, 10-24 x 1/2"
121	30622A		Extension, Blower housing
125	27930A		* Gasket, Exhaust
126	30196		Screw, 5/16-18 x 3/4"
127	26073		Washer, Flat
128	650694A		Screw, 5/16-18 x 2"
129	32589		Key, Flywheel
130	31843A		Bracket, Governor gear
131	650836		Screw, 10-24 x 1/2"
133	650599		Screw, 1/4-20 x 1-1/2"
134	33013		Cover, Starter bubble
135	650760		Screw, 8-32 x 3/8"
138	30747		Clip, Spark plug shorting
139	650890		Lockwasher, 5/16
140	650665		Screw, 1/4-15 x 7/8"
141	30322		Locknut, 8-32
142	29916		Clamp, Governor lever
143	650821		Screw, 10-32 x 1/2"
144	34663		Spring, Speed control
145	34661		Link, Governor
146	610118		Cover, Spark plug (Use as required)
147	30939A		Cover Assy., Cylinder
156	650513		Nut, Wing
157	32125		Cup, Starter
158	35009		Screen, Starter
168	26460		Clamp, Fuel line (Use as required)
169	31461		Bushing, Crankshaft
171	34664		Control Bracket (Incl. 98, 99, 144 & 172)
172	610973		Terminal Assy. (Use as required)
177	31793		Bearing, Ball
178	31855		Retainer, Bearing
179	650778		Washer, E.T. w/sealing compound
180	650580		Locknut

Ref #	Part Number	Qty	Description
181	31792		Washer, Thrust
182	650625		Washer, Thrust
183	33323		Screen, Muffler (Use as required)
184	650578		Screw, 8-18 x 3/8" (Use as required)
185	33700		Cover & Tube, Muffler (Use as required)
188A	32203		Air Cleaner, Starter Can be used on H70 with stamped steel starter
188B	32204		Bracket, Starter air cleaner Can be used on H70 with stamped steel starter
188C	34870		Decal, Instruction Can be used on H70 with stamped steel starter
188	730571		Starter Muff Kit (Incl. 188A, 188B & 188C) Can be used on H70 with stamped steel starter
190	35532		Decal, Name
190A	34704		Decal, Air cleaner
190D	34346		Decal, Instruction
191	631021		Inlet Needle, Seat & Clip Assy.
195	632201		Carburetor (Incl. 75) (Refer to Division 5, Section A, page 176 for breakdown)
197	590420A		Rewind Starter (Refer to Division 5, Section C, page 25 for breakdown)
199	611042		Flywheel (Ring gear flywheel required on engines using 110-120 volt starter kits listed above) (For use with Std. point ignition)
199	611085		Flywheel (Ring gear flywheel required on engines using 110-120 volt starter kits listed above) (For use with solid state ignition)
200	33239A		Gasket Set (Incl. items marked*)