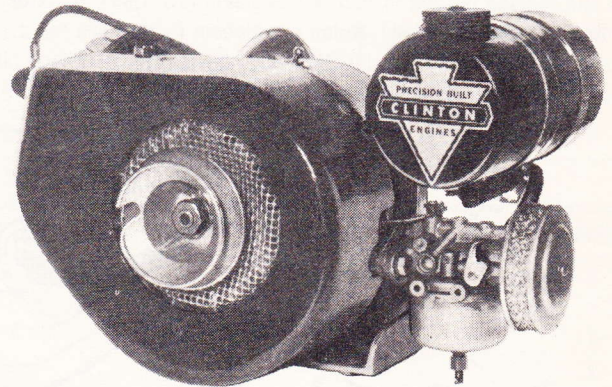
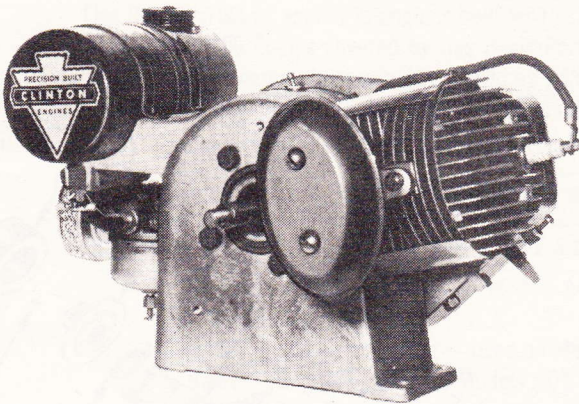


S E R I E S

290-490

2 - C Y C L E



A Wide Range of Models are Made By **CLINTON** For Farm, Home and Industrial Use.

H.P.	R.P.M.	
1.0.....	2000	<b>290</b>
1.35.....	2800	
1.6.....	3600	

	H.P.	R.P.M.
<b>490</b>	1.3.....	2000
	1.9.....	2800
	2.5.....	3600

## GENERAL SPECIFICATIONS

Models	Type	Description	Starter	Weight
290-490	2-Cycle Air Cooled	Horizontal Shaft	Rope	17

**TYPE:** 2-cycle, single cylinder, air cooled.

**AIR COOLED:** Powerful flywheel blower forces strong air blast through deep cooling fins on cylinder and cylinder head to maintain correct operating temperature.

**BORE:** 1 7/8" or 2 1/8"

**STROKE:** 1 5/8"

**PISTON DISPLACEMENT:** 4.5 cubic inches or 5.76.

**IGNITION:** Patented high tension, built-in flywheel magneto, moisture and dust proof, covered points.

**SPARK PLUG:** 14 mm.

**LUBRICATION:** Lubricating oil carried in fuel to all moving parts.

**CARBURETION:** Float-feed carburetor with dial speed adjustment and gasoline strainer with shut-off.

**GOVERNOR:** Adjustable, air-velocity type completely enclosed and statically balanced.

**MAIN BEARINGS:** Ball bearing on power-take-off side designed to withstand extra stress. Needle bearing on flywheel side.

**CRANKSHAFT:** Arma steel, induction heat treated, has counter-weights integral with shaft. Bearing surface superfinished. Extra large diameter crankshaft extension.

**CONNECTING ROD:** I-beam aluminum alloy, with bronze insert crank pin and wrist pin.

**PISTON:** Aluminum alloy Clinton-engineered for efficient combustion.

**PISTON RINGS:** Two compression rings, pinned to prevent rotation.

**CYLINDER AND CRANKCASE:** One-piece die cast cylinder block and crankcase with large amount of cooling area for cool operation. A close-grained cast iron liner is die cast in block.

**CYLINDER HEAD:** Integral with cylinder casting.

**AIR CLEANER:** Metallic mesh type.

**FUEL TANK:** One quart capacity.

**DIRECTION OF ROTATION:** (viewed from power-take-off side) Counter-clockwise.

**FINISH:** Dark green or red heat-resisting enamel. Other colors upon special order.

### STANDARD EQUIPMENT

Standard equipment includes: Air cleaner, specially designed dust and moisture-proof high-tension flywheel magneto, fuel tank, muffler, blower housing screen.

### SPECIAL EQUIPMENT

Special equipment available includes: Recoil starter, remote governor controls, remote stop control and any color finish.

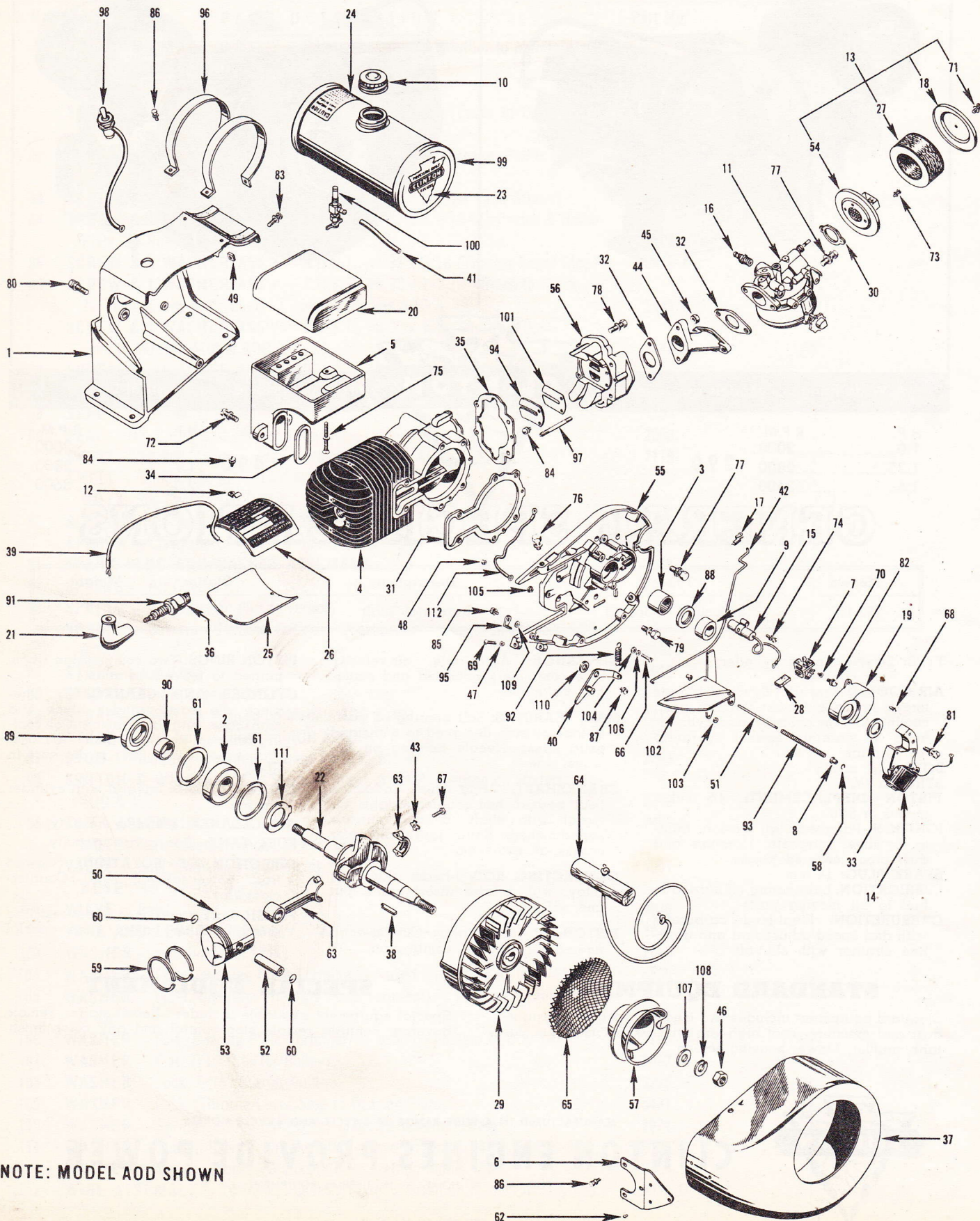


MANUFACTURED IN A WIDE RANGE OF 2-CYCLE AND 4-CYCLE MODELS

# CLINTON ENGINES PROVIDE POWER

FOR FARM • HOME • INDUSTRIAL EQUIPMENT

PRINTED IN U.S.A.



# CLINTON

# SERIES 290-490 2-CYCLE

## BASIC MODELS

SEC. II, DIV. 290 & 490  
PARTS CATALOG  
Revised June, 1955  
Supersedes June, 1954

This Basic Parts List applies to engines built for the Henderson Mfg. Co. There are three Basic Models of the 290 Engines and one Model of the 490 Engine covered by this Basic Parts List. Parts not used on all models are noted. These four Model Numbers stamped on the name plates are referred to as follows: MODEL 290 AOB is referred to as "MODEL AOB". MODEL 290 AOC is referred to as "MODEL AOC". MODEL 290 AOD is referred to as "MODEL AOD". MODEL 490 AOB is referred to as "MODEL 490".

**NOTE:** See page no. (a) on "How to Identify Your Clinton Engine".

### BASIC PARTS LIST — ALL MODELS

Ref. No.	PART DESCRIPTION	Part No.	Quantity
	<b>BAFFLE</b> — Muffler — used on Models AOB & AOC.....	2120	1
	<b>NOTE:</b> See Section III, Div. J.		
1	<b>BASE</b> — Engine Mounting — used on Models AOD & 490.....	2217	1
	<b>BASE</b> — Engine — used on Models AOB & AOC.....	2116	1
2	<b>BEARING</b> — Main, Ball (Block Assembly).....	3670	1
3	<b>BEARING</b> — Needle (Bearing Plate).....	2502	1
4	<b>BLOCK ASSEMBLY</b> — Cylinder — used on Models AOB, AOC & AOD.....	2521-B	1
	<b>BLOCK ASSEMBLY</b> — Cylinder — used on Model 490.....	2421-A	1
5	<b>BODY</b> — Muffler — used on Models AOD & 490.....	2215	1
6	<b>BRACE</b> — Blower Housing to Block — used on Models AOD & 490.....	2127	1
	<b>BRACKET</b> — Fuel Tank — used on Models AOB & AOC.....	2117	1
7	<b>BREAKER POINTS ASSEMBLY</b> — Magneto.....	P5532	1
	<b>NOTE:</b> Breaker Points Assembly includes Ref. No. 70.		
8	<b>BUSHING</b> — Air Vane.....	7239	2
9	<b>CAM</b> — Breaker Points.....	5105	1
10	<b>CAP AND GASKET ASSEMBLY</b> — Fuel.....	4517-A	1
11	<b>CARBURETOR ASSEMBLY</b> — (Carter) — used on Models AOD & 490.....	C2478-1	1
	<b>CARBURETOR ASSEMBLY</b> — (Carter) — used on Models AOB & AOC.....	C2078-1	1
	<b>NOTE:</b> See Section III, Div. A for component parts.		
12	<b>CLAMP</b> — High Tension Lead (Deflector Name Plate).....	C3410	1
13	<b>CLEANER ASSEMBLY</b> — Air.....	2000-A	1
	<b>NOTE:</b> Cleaner Ass'y includes Ref. Nos. 18, 27, 54 and 71.		
	<b>NOTE:</b> See Section III, Div. F.		
14	<b>COIL ASSEMBLY</b> — Magneto (With Laminations).....	P5531	1
	<b>COIL</b> — Magneto (Without Laminations).....	P5539	1
15	<b>CONDENSER</b> — Magneto.....	P2053	1
16	<b>CONNECTOR</b> — Flexible Fuel Line (Carburetor).....	5053	1
	<b>NOTE:</b> See Section III, Div. G.		
17	<b>CONNECTOR</b> — Governor Link (Link to Air Vane) — used on Models AOD & 490.....	2226	1
18	<b>COVER</b> — Air Cleaner.....	2003	1
	<b>NOTE:</b> See Section III, Div. F.		
19	<b>COVER</b> — Breaker Points.....	2060	1
20	<b>COVER</b> — Muffler — used on Models AOD & 490.....	2216	1
21	<b>COVER</b> — Spark Plug — used on Models AOD & 490.....	4181	1
22	<b>CRANKSHAFT</b> — used on Models AOC, AOD & 490.....	2142	1
	<b>CRANKSHAFT</b> — used on Model AOB.....	2504	1
23	<b>DECAL</b> — Arrowhead.....	3579	2
24	<b>DECAL</b> — Instruction, Fuel Mixture.....	2098	1
25	<b>DEFLECTOR</b> — Air.....	2037	1
26	<b>DEFLECTOR</b> — Air and Name Plate Assembly, Cylinder.....	2106	1
	<b>DEVICE</b> — Ignition Shorting Clip — used on Models AOB & AOC.....	2054	1
27	<b>ELEMENT</b> — Air Cleaner.....	2132	1
	<b>NOTE:</b> See Section III, Div. F.		
	<b>ENGINE REPAIR KIT</b> .....	6310	1
	<b>NOTE:</b> See Section VIII, Div. A, Bulletin 57.		
28	<b>FELT</b> — Lubrication, Cam Follower.....	P5504	1
29	<b>FLYWHEEL ASSEMBLY</b> — With Magnets (Zinc).....	2070-1A	1
	<b>NOTE:</b> Sold as an Assembly only.		

**BASIC PARTS LIST — ALL MODELS (CONTINUED)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
30	<b>GASKET</b> — Air Cleaner	2075	1
31	<b>GASKET</b> — Bearing Plate (Standard .030 thick)	2039	1
	<b>NOTE:</b> Gaskets are available in the following thicknesses: .025, .030 and .035. Order by Part No. and specify thickness.		
32	<b>GASKET</b> — Carburetor (Carburetor to Manifold and Manifold to Reed Plate)	2096	2
33	<b>GASKET</b> — Crankshaft (Dust Cover to Flywheel)	7139	1
34	<b>GASKET</b> — Muffler (Block)	2069	1
	<b>GASKET</b> — Muffler (Manifold to Muffler) — used on Models AOB & AOC	2126	1
	<b>NOTE:</b> See Section III, Div. J.		
35	<b>GASKET</b> — Reed Plate to Block	2125	1
36	<b>GASKET</b> — Spark Plug	3115	1
	<b>GASKET KIT</b> — Engine Overhaul	2203	1
	<b>NOTE:</b> Kit contains all necessary Gaskets and Oil Seals. <b>NOTE:</b> See Section VIII, Div. A, Bulletin 48.		
37	<b>HOUSING</b> — Blower	2115	1
38	<b>KEY</b> — Flywheel	7244	1
39	<b>LEAD</b> — High Tension, Magneto	P2055	1
	<b>LEVER</b> — Throttle, Governor — used on Models AOB & AOC	2050	1
40	<b>LEVER AND SCREW ASSEMBLY</b> — Throttle Control	2043-B	1
41	<b>LINE</b> — Fuel, Flexible	6316	1
	<b>NOTE:</b> See Section III, Div. G.		
42	<b>LINK</b> — Air Governor	2114	1
43	<b>LOCK</b> — Connecting Rod Screw — used on Models AOC, AOD & 490	2027	2
44	<b>MANIFOLD</b> — Carburetor	2123	1
	<b>MANIFOLD</b> — Exhaust — used on Models AOB & AOC	2118	1
	<b>MUFFLER ASSEMBLY</b> — Exhaust — used on Models AOD and 490	2215-A	1
	<b>NOTE:</b> Muffler Ass'y includes Ref. Nos. 5, 20 and 75.		
	<b>MUFFLER ASSEMBLY</b> — Exhaust — used on Models AOB and AOC	6318	1
	<b>NOTE:</b> See Section III, Div. J.		
45	<b>NUT &amp; L'WASHER ASSEMBLY</b> — Hexagon, 1/4-28 (Manifold to Reed Plate)	3255-A	2
46	<b>NUT</b> — Hexagon, 7/16-20 (Starter Pulley)	3250	1
47	<b>NUT</b> — Hexagon, #8-32 (Speed Control Adjusting)	5522	1
48	<b>NUT</b> — Hexagon, Gripco, #8-32 (Bearing Plate Terminal) — used on Models AOD & 490	5524	1
49	<b>NUT</b> — Square, #10-24 (Fuel Tank Straps)	3253	2
50	<b>PIN</b> — Drive (Ring Retainer)	2099	2
51	<b>PIN</b> — Pivot, Air Vane	2047	1
52	<b>PIN</b> — Wrist — used on Models AOB, AOC & AOD	2028	1
	<b>PIN</b> — Wrist — used on Model 490	2428	1
53	<b>PISTON</b> — Standard — used on Models AOB, AOC & AOD	2030	1
	<b>PISTON</b> — Standard — used on Model 490	2430	1
	<b>PISTON ASSEMBLY</b> — Standard — used on Models AOB, AOC & AOD	2030-D	1
	<b>PISTON ASSEMBLY</b> — Standard — used on Model 490	2430-A	1
	<b>NOTE:</b> Piston Assemblies are also available in the following oversizes: .005, .010 and .020. Order by Part No. and specify oversize.		
	<b>NOTE:</b> Piston Ass'y includes Ref. Nos. 50, 52, 53, 59 and 60.		
54	<b>PLATE</b> — Air Cleaner Mounting	2000	1
55	<b>PLATE</b> — Bearing — used on Models AOD & 490	2017-A	1
	<b>PLATE</b> — Bearing — used on Models AOB & AOC	2015-A	1
	<b>NOTE:</b> Bearing Plate includes Ref. Nos. 3 and 38.		
	<b>PLATE ASSEMBLY</b> — Bearing & Magneto — used on Models AOD & 490	C2017-B	1
	<b>PLATE ASSEMBLY</b> — Bearing & Magneto — used on Models AOB & AOC	C2015-B	1
	<b>NOTE:</b> Plate Ass'y includes Ref. No. 7, 14, 15, 28, 39, 40, 47, 48, 55, 66, 69, 74, 81, 82, 87, 104, 105, 106, 110 and 112.		

**CLINTON**

S E R I E S
<b>290-490</b>
2 - C Y C L E

**BASIC  
MODELS**
**SEC. II, DIV. 290 & 490  
PARTS CATALOG**  
 Revised June, 1955  
 Supersedes June, 1954
**BASIC PARTS LIST — ALL MODELS (CONTINUED)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
56	<b>PLATE ASSEMBLY</b> — Reed Valve..... <b>NOTE:</b> Reed Valve Plate Ass'y includes Ref. Nos. 84, 94 and 101.	2033-A	1
57	<b>PULLEY</b> — Starter.....	2040	1
58	<b>RETAINER</b> — Air Vane.....	4430	1
59	<b>RING</b> — Piston, Standard — used on Models AOB, AOC & AOD.....	2056	2
	<b>RING</b> — Piston, Standard — used on Model 490.....	2408	2
	<b>RING SET</b> — Piston, Standard — used on Models AOB, AOC & AOD.....	2200	1
	<b>RING SET</b> — Piston, Standard — used on Model 490..... <b>NOTE:</b> Rings are also available in the following oversizes: .005, .010 and .020. Order by Part No. and specify oversize.	2486	1
60	<b>RING</b> — Retainer, Wrist Pin — used on Models AOB, AOC & AOD.....	2029	2
	<b>RING</b> — Retainer, Wrist Pin — used on Model 490.....	3030	2
61	<b>RING</b> — Retaining, Main Bearing.....	2503	2
62	<b>RIVET</b> — Tubular (Brace to Blower Housing) — used on Models AOD & 490.....	6050	3
63	<b>ROD ASSEMBLY</b> — Connecting — used on Models AOC & AOD.....	2022-D	1
	<b>ROD ASSEMBLY</b> — Connecting — used on Model 490.....	2422-A	1
	<b>NOTE:</b> Rod Assembly includes Ref. Nos. 43 and 67.		
	<b>ROD ASSEMBLY</b> — Connecting — used on Model AOB.....	2593-A	1
	<b>NOTE:</b> Rod Assembly includes (2) Screws and Rollers.		
	<b>ROLLER</b> — Bearing Pin (Connecting Rod) — used on Model AOB.....	2501	25
64	<b>ROPE ASSEMBLY</b> — Starter.....	4266	1
65	<b>SCREEN</b> — Revolving.....	2071	1
	<b>SCREW</b> — A.H.M., #10-24 x 3/4 (Connecting Rod Cap) — used on Model AOB	5442	2
66	<b>SCREW</b> — F.H.M., #8-32 x 5/8 (Bearing Plate Terminal) — used on Models AOD & 490.....	3239	1
67	<b>SCREW</b> — H.H.S., #10-24 x 3/4 (Connecting Rod Cap) — used on Models AOC, AOD & 490.....	5429	2
68	<b>SCREW</b> — O.H.S.T., #6-32 x 3/8 (Breaker Cover to Bearing Plate).....	5416	2
69	<b>SCREW</b> — R.H.M., #8-32 x 7/8 (Speed Control Adjusting).....	3240	1
70	<b>SCREW</b> — R.H.S.T., #6-32 x 3/8 (Breaker Points Terminal).....	5405	1
71	<b>SCREW &amp; L'WASHER ASS'Y</b> — B.H.M., #8-32 x 3/8 (Air Cleaner Cover to Mounting Plate).....	5457-A	1
72	<b>SCREW &amp; L'WASHER ASS'Y</b> — F.H.M., 1/4-20 x 3/4 (used on Models AOB AOC—Manifold to Block) (used on Models AOD & 490—Muffler to Block).... <b>NOTE:</b> See Section III, Div. J.	5439-G	2
73	<b>SCREW &amp; L'WASHER ASS'Y</b> — F.H.M., #8-32 x 7/16 (Air Cleaner Mount- ing Plate to Carburetor).....	5456-A	2
74	<b>SCREW &amp; L'WASHER ASS'Y</b> — F.H.M., #8-32 x 5/8 (Condenser to Bearing Plate).....	3239-F	1
75	<b>SCREW &amp; L'WASHER ASS'Y</b> — Flat H.M., #10-24 x 1-3/4 (Cover to Muffler Body) — used on Models AOD & 490.....	5612-A	2
	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 1/4-20 x 1/2 (Tank Bracket to Base) — used on Models AOB & AOC.....	3205-G	2
76	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 1/4-20 x 5/8 (Blower Housing to Bearing Plate).....	3632-G	4
77	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 1/4-20 x 3/4 (6—Bearing Plate to Block, 2—Carburetor to Manifold).....	5446-F	8
78	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 1/4-20 x 7/8 (Reed Plate to Block).....	3294-G	2
79	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 1/4-20 x 1-1/4 (Bearing Plate to Base) — used on Models AOD & 490.....	5613-G	1
80	<b>SCREW &amp; L'WASHER ASS'Y</b> — H.H.C., 5/16-18 x 7/8 (Base to Block).....	3217-G	4
81	<b>SCREW &amp; L'WASHER ASS'Y</b> — P.H.S.T., #10-24 x 1 (Laminations to Bear- ing Plate).....	5430-A	2

**BASIC PARTS LIST — ALL MODELS (CONTINUED)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.M., 1/4-20 x 2 (Muffler to Manifold) — used on Models AOB & AOC.....	5441-G	2
	<b>NOTE:</b> See Section III, Div. J.		
	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.M., #6-32 x 1/4 (Lever to Carburetor) — used on Models AOB & AOC.....	7143-A	1
82	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.M., #8-32 x 3/8 (Breaker Points to Bearing Plate).....	5444-F	1
83	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.M., #10-24 x 1 (Fuel Tank Straps).....	5421-A	2
84	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.S.T., #8-32 x 3/8 (4—Deflector & Name Plate, 2—Reed Ass'y to Reed Plate).....	5409-A	6
85	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.S.T., #8-32 x 5/16 (Throttle Lever Stop).....	5438-A	1
86	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.S.T., #8-32 x 1/2 (3—Brace to Block, 2—Tank Straps to Bracket) — used on Models AOD & 490.....	5443-A	5
	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.S.T., #8-32 x 1/2 (Shorting Clip) — used on Models AOB & AOC.....	5443-A	1
87	<b>SCREW &amp; L'WASHER ASS'Y</b> — R.H.S.T., #8-32 x 3/8 (Speed Control Lever to Bearing Plate).....	5409-D	1
88	<b>SEAL</b> — Oil (Bearing Plate).....	7254	1
89	<b>SEAL</b> — Oil, Crankshaft (Power Take-Off).....	2508	1
	<b>SHELL</b> — Muffler, Inner — used on Models AOB & AOC.....	2119	1
	<b>SHELL</b> — Muffler, Outer — used on Models AOB & AOC.....	2122	1
	<b>NOTE:</b> See Section III, Div. J.		
90	<b>SLEEVE</b> — Oil Seal, Crankshaft (Power Take-Off).....	2113	1
	<b>SPACER</b> — Crankshaft — used on Model AOB.....	2505	1
91	<b>SPARK PLUG AND GASKET ASSEMBLY</b> .....	2168-A	1
92	<b>SPRING</b> — Air Governor.....	2448	1
93	<b>SPRING</b> — Compression (Air Governor).....	2400	1
	<b>SPRING</b> — Governor Throttle Backlash (Carburetor) — used on Models AOB & AOC.....	2111	1
94	<b>STOP</b> — Reed Valve.....	2036	1
95	<b>STOP</b> — Throttle Lever.....	4448	1
96	<b>STRAP</b> — Fuel Tank — used on Models AOD & 490.....	2218	2
	<b>STRAP</b> — Fuel Tank — used on AOB & AOC.....	2124	2
97	<b>STUD</b> — Mounting (Manifold & Reed Plate to Block).....	2063	2
98	<b>SWITCH &amp; WIRE ASS'Y</b> — Shorting (Tank Bracket) — used on Models AOD & 490.....	2219	1
99	<b>TANK ASSEMBLY</b> — Fuel.....	7461-A	1
	<b>NOTE:</b> Tank Assembly includes Ref. No. 10.		
100	<b>VALVE</b> — Fuel, Shut-off, Flexible Line.....	5051	1
	<b>NOTE:</b> See Sec. III, Div. G.		
101	<b>VALVE</b> — Reed.....	2035	1
102	<b>VANE AND LEVER ASSEMBLY</b> — Air Governor.....	2045-A	1
103	<b>WASHER</b> — (Air Governor Link).....	2049	1
104	<b>WASHER</b> — Fiber (Bearing Plate Terminal) — used on Models AOD & 490.....	5528	1
105	<b>WASHER</b> — Fiber, Shoulder (Bearing Plate Terminal) — used on Models AOD & 490.....	5527	1
106	<b>WASHER</b> — Flat (Bearing Plate Terminal) — used on Models AOD & 490.....	3288	1
107	<b>WASHER</b> — Flat, 7/16 (Starter Pulley).....	5482	1
108	<b>WASHER</b> — Lock, 7/16 (Starter Pulley).....	3275	1
109	<b>WASHER</b> — Lock (Throttle Lever Stop to Bearing Plate).....	5481	1
110	<b>WASHER</b> — Spring Tension (5/8 O.D.) (Throttle Control Lever).....	2077	1
111	<b>WASHER</b> — Thrust, Bronze (Crankshaft) — used on Models AOB, AOC & AOD.....	2064	1
	<b>WASHER</b> — Thrust, Bronze (Crankshaft) — used on Model 490.....	2464	1
112	<b>WIRE ASSEMBLY</b> — Terminal (Bearing Plate) — used on Models AOD & 490.....	5526-D	1