



**CLINTON**

S	E	R	I	E	S
<b>4100-1000</b>					
G E M					

**BASIC  
TYPE**

SEC. II, DIV. 4100-1000  
PARTS CATALOG  
Revised Nov., 1959  
Supersedes Dec., 1958

There are three Basic Types of the 4100-1000 Engine covered by this Basic Parts List. Parts not used on all types are noted. These types are shown as follows: Serial Number Suffix "A"—referred to as Type A; Serial Number Suffix "B"—referred to as Type B; Serial Number Suffix "C"—referred to as Type C.

**NOTE:** See page "a" on "How to Identify Your Clinton Engine."

### BASIC PARTS LIST

Ref. No.	PART DESCRIPTION	Part No.	Quantity
1	<b>AXLE ASSEMBLY</b> — Camshaft (Includes Pin)	21310-A	1
2	<b>BEARING</b> — Sleeve (Plate Assembly)	21016	1
3	<b>BEARING</b> — Main Sleeve (Cylinder Block)	90278	1
4	<b>BLOCK ASSEMBLY</b> — Cylinder (Used on Type A) (Includes Ref. Nos. 3 and 95)	31201-A	1
	<b>BLOCK ASSEMBLY</b> — Cylinder (Used on Types B and C) (Includes Ref. Nos. 3 and 95)	31218-A	1
5	<b>BREAKER POINTS ASSEMBLY</b> — (Used on Type A) (Includes Ref. Nos. 30, 80 and 90)	P5543	1
	<b>BREAKER POINTS ASSEMBLY</b> — (Used on Types B and C) (Includes Ref. Nos. 30, 55, 94 and 116)	P5735	1
6	<b>BREATHER ASSEMBLY</b>	6354	1
7	<b>BUSHING</b> — Air Vane (Used on Types A and B)	7239	2
8	<b>CAM</b> — Magneto Breaker (Used on Type A)	5707	1
	<b>CAM</b> — Magneto Breaker (Used on Types B and C)	5751	1
9	<b>CAMSHAFT</b>	31010	1
10	<b>CAP &amp; GASKET ASSEMBLY</b> — Fuel	4517-A	1
11	<b>CAP &amp; GASKET ASSEMBLY</b> — Oil Filler	21074-A	1
12	<b>CARBURETOR ASSEMBLY</b> — Clinton For complete identification of carburetors, refer to Section III, Div. A, Page 2.	14362	1
13	<b>CLEANER ASSEMBLY</b> — Air	4546-A	1
14	<b>CLIP</b> — Ignition Shorting	3499	1
15	<b>COIL ASSEMBLY</b> — Magneto (With Laminations) (Used on Type A)	P5593-B	1
16	<b>COIL</b> — Magneto (Without Laminations) (Used on Type A)	P5593-A	1
	<b>COIL</b> — Magneto (Without Laminations) (Used on Types B and C)	P5733-A	1
17	<b>CONDENSER</b> — Magneto (Used on Type A)	P5599-A	1
	<b>CONDENSER</b> — Magneto (Used on Types B and C)	P5589-A	1
18	<b>CONNECTOR</b> — Flexible Fuel Line (Carburetor)	5053	1
19	<b>CONNECTOR</b> — Hose Connecting	5054	1
20	<b>CORE &amp; BREAKER BOX COVER</b> — (Used on Types B and C)	P5732	1
21	<b>COVER</b> — Dust (Magneto Breaker Points) (Used on Type A)	10382	1
	<b>COVER</b> — Dust (Magneto Breaker Points) (Used on Types B and C)	P5743	1
22	<b>COVER</b> — Valve Chamber	10324	1
23	<b>CRANKSHAFT</b>	31314-1	1
24	<b>DECAL</b> — Air Cleaner	4561	1
25	<b>DECAL</b> — Arrowhead	90559	2
26	<b>DECAL</b> — Horsepower	90494	1
27	<b>DEFLECTOR ASSEMBLY</b> — Air Cylinder	90504	1
28	<b>DISTRIBUTOR</b> — Oil	31017-1	1
29	<b>ELBOW</b> — Breather	90610	1
30	<b>FELT</b> — Lubrication (Cam Follower) (Used on Type A)	P5504	1
	<b>FELT</b> — Lubrication (Cam Follower) (Used on Types B and C)	P5742	1
31	<b>FLYWHEEL ASSEMBLY</b> — With Magnets	5752-A	1
32	<b>GASKET</b> — Air Horn to Air Cleaner	10259	1
33	<b>GASKET</b> — Air Horn to Carburetor	3990	1
34	<b>GASKET</b> — Cylinder Head	10253	1
35	<b>GASKET</b> — Bearing Plate, .015 Standard Available in .010 size	10254	1
		10254-1	1
36	<b>GASKET</b> — Asbestos (Carburetor to Block)	6002	1
37	<b>GASKET</b> — Cover, Dust (Breaker Points) (Used on Type A)	10250	1
	<b>GASKET</b> — Cover, Dust (Breaker Points) (Used on Types B and C)	P5744	1
38	<b>GASKET</b> — Oil Filler Cap	3297	1
39	<b>GASKET</b> — Spark Plug	3115	1

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**BASIC PARTS LIST (Continued)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
40	<b>GASKET</b> — Valve Chamber Cover	10251	1
	<b>GASKET KIT</b> — Engine Overhaul	91560	1
41	<b>GROMMET</b> — Magneto (Breaker Lead Wire) (Used on Type A)	10367	1
42	<b>HEAD</b> — Cylinder	31011	1
43	<b>HORN</b> — Air	21350	1
44	<b>HOUSING ASSEMBLY</b> — Blower	21007-D	1
45	<b>KEY</b> — Flywheel	10339	1
46	<b>LEAD</b> — Hi-Tension, Magneto (Used on Type A)	P2055	1
	<b>LEAD</b> — Hi-Tension, Magneto (Used on Types B and C)	P5555	1
47	<b>LEVER</b> — Speed Adjusting (Used on Types A and B)	4441	1
	<b>LEVER</b> — Speed Adjusting (Used on Type C)	90584	1
48	<b>LEVER ASSEMBLY</b> — Speed Regulating (Used on Type C)	90585-A	1
49	<b>LINE</b> — Fuel, Flexible	6316	1
50	<b>LINK</b> — Carburetor to Air Vane (Used on Type A)	21020	1
	<b>LINK</b> — Carburetor to Air Vane (Used on Types B and C)	31402	1
51	<b>LOCK</b> — Connecting Rod Screw	31432	2
52	<b>MUFFLER</b> — 45° Inlet	4500	1
53	<b>NUT</b> — Starter Pulley	5877	1
54	<b>NUT</b> — Lock, Muffler	4425	1
55	<b>NUT</b> — Terminal Condenser Lead (Used on Types B and C)	5740	1
56	<b>NUT</b> — Wing (Air Cleaner)	7044	1
57	<b>NUT &amp; L'WASHER ASS'Y</b> — 1/4-28 Hex. (Carburetor Mounting)	3255-A	2
58	<b>PIN</b> — Camshaft Axle	10392	1
59	<b>PIN</b> — Pivot, Air Vane Governor (Used on Types A and B)	7238	1
	<b>PIN</b> — Pivot, Air Vane Governor (Used on Type C)	10015	1
60	<b>PIN</b> — Wrist	6024	1
61	<b>PISTON</b> — Standard	31001	1
	<b>PISTON ASSEMBLY</b> — Standard	31001-A	1
	<b>NOTE:</b> Piston Assemblies are available in the following oversizes: .005, .010, .020, .030 and .040. Order by Part Number and specify oversize.		
	<b>NOTE:</b> Piston Assembly includes Ref. Nos. 60, 61, 69, 70, 71 and 72.		
62	<b>PLATE</b> — Name	6530	1
63	<b>PLATE ASSEMBLY</b> — Bearing (Includes Ref. Nos. 2 and 96)	10047-A	1
64	<b>PLATE</b> — Valve Spring Retainer	10013	1
65	<b>PLUG</b> — 1/4 N.P.T. (Oil Drain)	3289	2
66	<b>PULLEY</b> — Assembly (Starting)	12397	1
67	<b>RETAINER</b> — Air Vane (Used on Types A and B)	4430	1
68	<b>RETAINER</b> — Valve Spring	3028	2
69	<b>RING</b> — Compression, Standard	6026	1
70	<b>RING</b> — Oil, Standard	6006	1
71	<b>RING</b> — Retainer, Wrist Pin	6034	2
72	<b>RING</b> — Scraper, Standard	6027	1
	<b>RING SET</b> — Standard	10023	1
	<b>NOTE:</b> Ring Sets are also available in the following oversizes: .005, .010, .020, .030 and .040. Order by Part Number and specify oversize.		
	<b>NOTE:</b> Ring Set includes Ref. Nos. 69, 70 and 72.		
73	<b>RIVET</b> — Tubular (Name Plate)	5469	4
74	<b>ROD ASSEMBLY</b> — Connecting	31002-A	1
75	<b>ROPE ASSEMBLY</b> — Starter	4266	1
76	<b>SCREEN</b> — Rotating	90092	1
77	<b>SCREW</b> — R.H.S.T., 8-32 x 4/5 (Condenser to Plate, Used on Types B and C)	5741	1
78	<b>SCREW</b> — H.H.C., 1/4-20 x 1 1/4 (Connecting Rod Cap)	3235	2
79	<b>SCREW</b> — P.H.S.T., #6-32 x 1/4 (Coil to Laminations, Used on Type A)	5641	1
80	<b>SCREW</b> — R.H.M., #6-32 x 1/4 (Breaker Points Terminal, Used on Type A)	5664	1
81	<b>SCREW</b> — H.H. Slotted S.T., #8-32 x 3/8 (2—Deflector to Block) (2—Breaker Points Cover, Used on Type A)	5644	4

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**PARTS CATALOG**  
 Revised Nov., 1959  
 Supersedes Dec., 1958
**BASIC PARTS LIST (Continued)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
82	SCREW — R.H.M., #10-24 x ¼ (Blower Housing to Fuel Tank)	5643	2
83	SCREW — R.H.M., #10-24 x 6¼ (Air Cleaner to Air Horn)	5636	1
84	SCREW — H.W.H., 5/16-18 x 1⅞ (Cylinder Head to Block)	5654	8
85	SCREW — Knurled #8-32 x ⅞ (Speed Regulating, Used on Type C)	5863	1
86	SCREW — Shoulder, 10-32 x ⅝" (Lever, Speed Adjusting)	4440	1
87	SCREW & L'WASHER ASS'Y — H.H.C., ¼-20 x ½ (Blower Housing to Block)	3205-G	2
88	SCREW & L'WASHER ASS'Y — H.H.C., ¼-20 x 1¼ (Bearing Plate to Block)	5613-G	7
89	SCREW & L'WASHER ASS'Y — H.H.C., #10-24 x 1 (Laminations to Block)	5682-A	2
90	SCREW & L'WASHER ASS'Y — R.H.M., #6-32 x 5/16 (Breaker Points to Block, Used on Type A)	5444-F	1
91	SCREW & L'WASHER ASS'Y — R.H.M., #8-32 x 11/16 (Air Horn to Carburetor)	5677-A	2
92	SCREW & L'WASHER ASS'Y — H.H.C., #10-24 x ½ (Valve Chamber Cover)	5645-A	2
93	SCREW & L'WASHER ASS'Y — H.H.S.T., #10-32 x ⅞ (Speed Regulator, Used on Type C)	5838-A	1
94	SCREW & L'WASHER ASS'Y — R.H.M., 8-32 x ⅞ (Breaker Points to Breaker Box, Used on Types B and C)	5737	1
95	SEAL — Oil (Block)	10012	1
96	SEAL — Bearing Plate Assembly	3026	1
97	SHIELD — Flywheel	90502	1
98	SPARK PLUG & GASKET ASSEMBLY	K90531-A	1
99	SPRING — Breaker Box Cover	P5745	1
100	SPRING — Compression (Knurled Screw, Used on Type C)	90586	1
101	SPRING — Compression (Air Vane) (Used on Type A)	10005	1
102	SPRING — Air Governor (Used on Type A)	10336	1
	SPRING — Air Governor (Used on Types B and C)	90842	1
103	SPRING — Valve	3068	2
104	STUD — Carburetor Mounting	5659	2
105	TANK ASSEMBLY — Fuel (Includes Ref. No. 10)	21380-A	1
106	TAPPET — Valve	10009	2
107	TERMINAL — Jamtite Breaker Points (Used on Types B and C)	P5738	1
108	VALVE — Exhaust	10301	1
	VALVE — Exhaust, .010 Oversize	10321	1
109	VALVE — Intake	10302	1
	VALVE — Intake, .010 Oversize	10322	1
110	VANE — Air Governor (Used on Types A & B)	10393	1
	VANE — Air Governor (Used on Type C)	10014	1
111	WASHER — Muffler	7444	1
112	WASHER — "C" Valve Keeper	3291	2
113	WASHER — Starter Pulley	5880	1
114	WASHER — Rubber (Screw to Air Cleaner)	5906	1
115	WASHER — Speed Adjusting (Used on Type C)	3279	1
116	WASHER — Terminal Condenser Lead (Used on Types B and C)	5739	1
117	WASHER — Lock (Blower Housing to Fuel Tank)	5900	2
118	WASHER — Lock, Spring Tension (Speed Regulating) (Used on Types A and B)	21305	1

**MODEL VARIATIONS OF 4100-1000 SERIES**

The adaptation of Clinton Engines to a wide variety of uses results in what is known as "Model Variations." Following is the complete list of all Models produced up to issue date (shown above). Opposite each Engine Model listed are the Part Numbers and/or Assembly Numbers for the Series used IN ADDITION TO or IN PLACE OF the parts illustrated and shown on the Basic Parts List preceding this Model Variations List. Refer to other sections of this Manual when Assembly Numbers are given to find the Parts List for these assemblies.

See page (a) on "How to Identify Your Clinton Engine." Use the preceding Basic Parts List except as shown below.

ENGINE MODEL—See page (a), "How to Identify Your Clinton Engine."	FOOTNOTES (Check bottom of page).	BASE—ENGINE (Part Numbers Shown). Refer to Sec. IV, Div. A for further information.	BLOCK ASSEMBLY — CYLINDER (Part Number Shown). Refer to Illustrated Basic Parts List for corresponding part.	CRANKSHAFT (Part Numbers Shown). Refer to Sec. IV, Div. B for details and further information.	BEARING—MAIN (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.	CONTROL GROUP (Control Group Illustration Numbers Shown). Refer to Sec. III, Div. D for Parts List.	CONTROL CABLE LENGTH — Replace-ment cable is furnished in 72" length ONLY, cut to length shown.	PLATE ASSEMBLY — BEARING (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.	MUFFLER OR MANIFOLD (Part Num-bers Shown). Refer to Illustrated Basic Parts List for corresponding part.	STARTER — RECOIL. Refer to Sec. III, Div. H for Parts List.	HOUSING ASSEMBLY — BLOWER (Part Numbers Shown). Refer to Basic Parts List for corresponding part.	REDUCTION GEAR (Assy. Nos. Shown). Refer to Sec. III, Div. C for Parts List.	MOUNTING POSITION — "Clock" posi-tion shows mounting of reduction unit in relation to Crankshaft.
4100-1000		NO VARIATION—USE BASIC PARTS LIST											
4100-1101	Notes 1 & 2					SK-560				P90996	21013-F		
4100-1102										P90996	21013-F		
4100-1103	Note 1				21016	SK-560		10048-A		P90996	21013-F		
4100-1104	Note 4									P90996	21013-F		
4100-1105	Notes 4 & 5									P90996	21013-F		
4100-1106	Note 3								6343	P90996	21013-F		
4100-1107	Notes 1 & 4			31300-1						P90996	21013-F		
4160-1000	Note 7			31306-1				10048-A				3800	
4190-1000	Note 6			31310-1	3670			10049-A					
4190-1101	Note 6			31312	3670			10049-A					
4190-1103	Note 6			31306-1	3670					P90996	21013-F		
4190-1104	Note 6			31310-1	3670								
4190-1105	Note 6			31318	3670								

- NOTE 1—Use 21351 Horn (Air), 5052 Elbow, 4533 Tube (Breather).
- NOTE 2—This is a Basic 100 Series engine. For standard parts, refer to 100 Basic Parts List.
- NOTE 3—Use 14363 Carburetor, 10417 Bracket (Slide Mounting), 5644-A Screw & L'Washer, 10432 Shroud (Carburetor), 10431-A Slide Assembly, 31462 Clamp, 10373 Spring, 5825 Rivet, 5415 Screw (Carb. Shroud to Slide Mounting Bracket) (2), 31493 Spring, 14290 Nut (Insulation), 10364 Clip (Shorting), 31486 Grommet, 12409-A Wire Assembly (Shorting), 5522 Nut (Hex.), 5405 Screw, 5051 Valve (Fuel Shut-Off), 10320 Knob, 5444-A Screw & L'Washer, 5481 L'Washer.
- NOTE 4—Use 21376-A Bracket Assembly (Remote Control), 5909 L'Washer, 4448 Stop Throttle Lever, 21375-A Lever Assembly, 5681 Screw.
- NOTE 5—Use 12409-A Wire Assembly (Shorting), 5566 Grommet, 5644 Screw, 5522 Nut.
- NOTE 6—Use 21328 Ring (Retaining), 21329 Ring (Retaining), 6189 Spacer, 3764 Seal (Oil).
- NOTE 7—Use 3136 Seal.