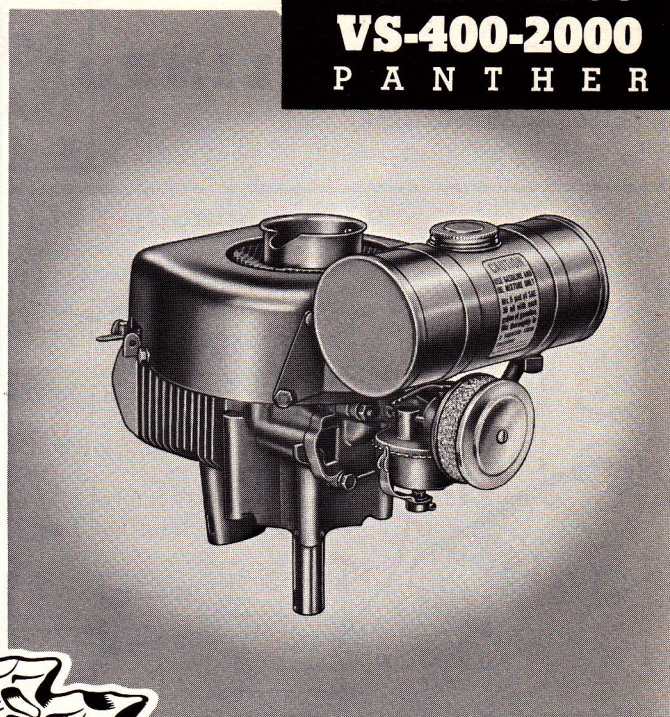
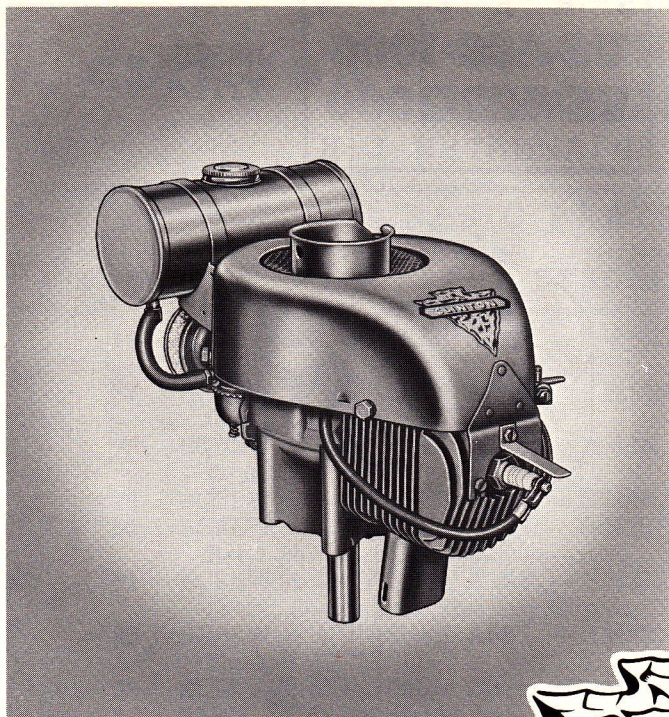
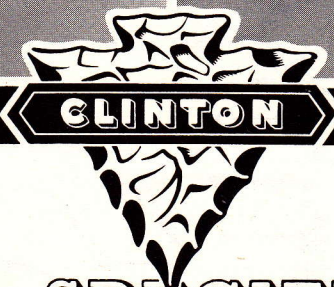


S E R I E S
VS-400-1000
VS-400-2000
 P A N T H E R



A Wide Range of Models are Made By



For Farm, Home and Industrial Use.

	H.P.	R.P.M.
VS-400-1000	1.3	2000
VS-400-2000	1.8	2800
	2.5	3800

GENERAL SPECIFICATIONS

Model	Type	Description	Starter	Weight
VS-400-1000, VS-400-2000	Air Cooled	Vertical Shaft	Rope or Recoil	15 $\frac{3}{4}$

TYPE: Single cylinder, vertical shaft, 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: 2 $\frac{1}{8}$ ".

STROKE: 1 $\frac{5}{8}$ ".

PISTON DISPLACEMENT: 5.76 cubic inches.

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 manual speed adjustment. Fuel strainer in tank.

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

MAIN BEARINGS: Aluminum.

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.

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: Two quart capacity.

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

FINISH: 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, above deck muffler, mounting plate converter to 8" bolt circle.



WORLD'S LARGEST MANUFACTURER OF A COMPLETE LINE OF AIR COOLED GASOLINE ENGINES

CLINTON ENGINES PROVIDE POWER

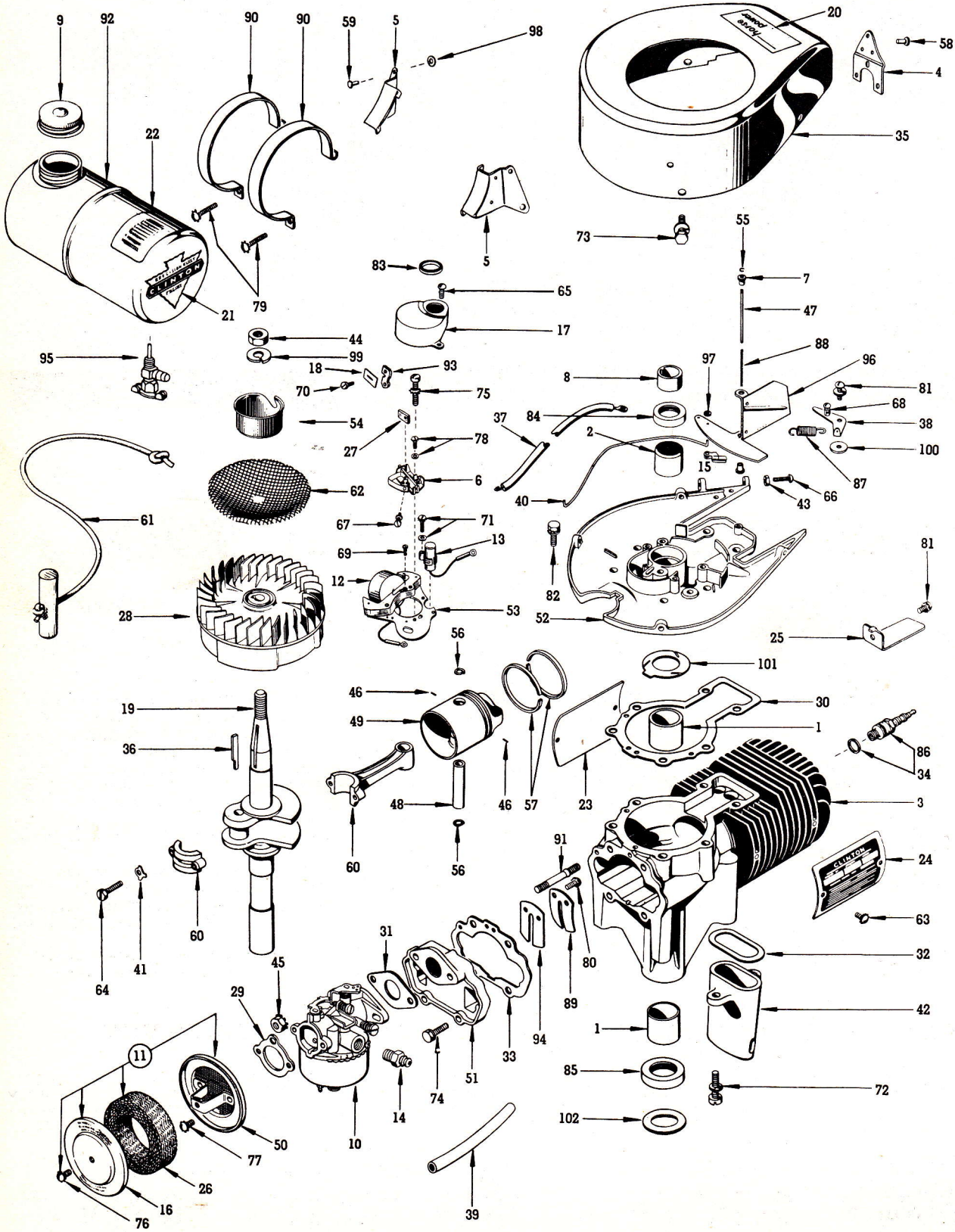
FOR FARM • HOME • INDUSTRIAL EQUIPMENT

PRINTED IN U.S.A.

CLINTON

S E R I E S VS-400-1000 VS-400-2000 P A N T H E R

BASIC
TYPE



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S E R I E S
VS-400-1000
VS-400-2000
P A N T H E R

BASIC
TYPE

SEC. II, DIV. VS-400-1000
SEC. II, DIV. VS-400-2000
PARTS CATALOG
Revised February, 1957
Supersedes March, 1956

There are six Basic Types of the VS-400-1000 and one Basic Type of the VS-400-2000 Engines covered by this Basic Parts List. Parts not used on all types are noted. The VS-400-1000 series 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"; Serial Number Suffix "D"—referred to as "Type D"; Serial Number Suffix "E"—referred to as "Type E." The VS-400-2000 is referred to as 2000 Series.

BASIC PARTS LIST

Ref. No.	PART DESCRIPTION	Part No.	Quantity
1	BEARING — Main Sleeve (Block Assembly, Cylinder)—Used on 1000 Series (All Types)-----	2058	2
	BEARING — Main Sleeve (Block Assembly)—Used on 2000 Series-----	9016	1
2	BEARING — Sleeve (Bearing Plate)-----	2059	1
3	BLOCK ASSEMBLY — Cylinder (includes Ref. No. 1)—Used on 1000 Series (All Types)-----	2420	1
	BLOCK ASSEMBLY — Cylinder (includes Ref. No. 1)—Used on 2000 Series-----	2476	1
4	BRACE — Blower Housing-----	2127	1
5	BRACKET — Fuel Tank (Left Hand)-----	2133	1
	BRACKET — Fuel Tank (Right Hand)-----	2134	1
6	BREAKER POINTS ASSEMBLY (includes Ref. No. 67)-----	P5543	1
7	BUSHING — Air Vane-----	7239	2
8	CAM — Breaker Points-----	5594	1
9	CAP AND GASKET ASSEMBLY — Fuel-----	4517-A	1
10	CARBURETOR ASSEMBLY (Clinton)—Used on Type B, C and 2000-----	14001	1
	CARBURETOR ASSEMBLY — Used on Type A and D-----	C2478-1	1
	CARBURETOR ASSEMBLY — Used on Type E-----	C14089	1
	For complete identification of carburetors, refer to Section III, Div. A, page 2.		
11	CLEANER ASSEMBLY — Air-----	2000-A	1
12	COIL — Magneto (without laminations)-----	P5593-A	1
13	CONDENSER — Magneto-----	P5589-A	1
14	CONNECTOR — Fuel Line (Flexible)-----	5053	1
15	CONNECTOR — Governor Link to Air Vane-----	2226	1
16	COVER — Air Cleaner-----	2003	1
17	COVER — Breaker Points (with gasket)-----	5595-A	1
18	COVER — Breaker Points Terminal (Fish Paper)—Used on 2000 Series-----	5714	1
19	CRANKSHAFT — Used on 1000 Series (All Types)-----	2041	1
	CRANKSHAFT — Used on 2000 Series-----	2370	1
20	DECAL — Horsepower—Used on 1000 Series (All Types)-----	21010	1
21	DECAL — Arrowhead—Used on 1000 Series (All Types)-----	3579	1
	DECAL — Arrowhead—Used on 2000 Series-----	4565	1
22	DECAL — Instruction, Fuel Mixture-----	2098	1
23	DEFLECTOR — Air Cylinder—Used on 1000 Series (All Types)-----	2037	1
24	DEFLECTOR AND NAMEPLATE ASSEMBLY-----	2106	1
25	DEVICE — Ignition Shorting Clip-----	2054	1
26	ELEMENT — Air Cleaner-----	2132	1
27	FELT — Lubrication, Cam Follower-----	P5504	1
28	FLYWHEEL ASSEMBLY-----	5597-A	1
29	GASKET — Air Cleaner-----	2075	1
30	GASKET — Bearing Plate (Standard, .030 thick)-----	2039	1
	NOTE: Gaskets are also available in the following thicknesses: .025 and .035. Order by Part Number and specify thickness.		
31	GASKET — Carburetor to Reed Plate-----	2096	1
32	GASKET — Muffler to Block-----	2069	1
33	GASKET — Reed Plate to Block-----	2344	1
34	GASKET — Spark Plug-----	3115	1
	GASKET KIT — Engine Overhaul-----	2203	1
	NOTE: Kit contains all necessary Gaskets and Oil Seals.		

CLINTON

S E R I E S
VS-400-1000
VS-400-2000
P A N T H E R

**BASIC
 TYPE**

BASIC PARTS LIST (Continued)

Ref. No.	PART DESCRIPTION	Part No.	Quantity
35	HOUSING — Blower and Bracket Assembly NOTE: Housing Assembly includes Ref. Nos. 4 and 58.	2139-A	1
36	KEY — Flywheel	10339	1
37	LEAD — High Tension Magneto	P2055	1
38	LEVER AND SCREW ASSEMBLY — Throttle Control	2043-B	1
39	LINE — Fuel (Flexible)	6316	1
40	LINK — Air Governor	2335	1
41	LOCK — Connecting Rod Cap	2027	2
42	MUFFLER	2082	1
43	NUT — Hexagon, 8-32 (Speed Control Adjusting)	5522	1
44	NUT — Hexagon, 7/16-20 (Starter Pulley)	3250	1
45	NUT & LOCKWASHER ASSEMBLY — Hexagon, 1/4-28 (Carburetor to Reed Plate)	3255-A	2
46	PIN — Drive (Ring Retainer)	2099	2
47	PIN — Pivot, Air Vane—Used on Types A and B	2047	1
	PIN — Pivot, Air Vane—Used on Types C, D, E and 2000 Series	7238	1
48	PIN — Wrist	2428	1
49	PISTON — Standard	2430	1
	PISTON ASSEMBLY — Standard	2430-A	1
	NOTE: Piston and Piston Assemblies are available in the following oversizes: .005, .010 and .020. Order by Part Number and specify oversize.		
	NOTE: Piston Assembly includes Ref. Nos. 48, 49, 56 and 57.		
50	PLATE — Air Cleaner Mounting	2001-B	1
51	PLATE — Reed Valve Assembly	2033-A	1
52	PLATE — Bearing NOTE: Bearing Plate includes Ref. Nos. 2 and 84.	2312-A	1
53	PLATE ASSEMBLY — Magneto with Coil and Lamination	P5590-B	1
54	PULLEY — Starter	3299	1
55	RETAINER — Air Vane	4430	1
56	RETAINER — Wrist Pin	3030	1
57	RING — Piston, Standard	2408	2
	RING SET — Piston, Standard	2486	1
	NOTE: Ring Sets are also available in the following oversizes: .005, .010, .020. Order by Part Number and specify oversize.		
58	RIVET — Tubular (Brace to Housing)	5460	3
59	RIVET — Tubular (Bracket to Blower Housing)	3619	2
60	ROD ASSEMBLY — Connecting	2022-D	1
61	ROPE ASSEMBLY — Starting	4266	1
62	SCREEN — Revolving	7187	1
63	SCREW — 8-32 x 3/8 (Deflector to Block)	5644	4
64	SCREW — H.H. Slotted, 10-24 x 1/4 (Connecting Rod Cap)	5429	2
65	SCREW — O.H.S.T., 6-32 x 3/8 (Breaker Cover to Bearing Plate)	5405	2
66	SCREW — R.H.M., 8-32 x 7/8 (Speed Control Adjusting)	3240	1
67	SCREW — R.H.S.T., 6-32 x 1/2 (Breaker Points Terminal)	5664	1
68	SCREW — R.H.M., 8-32 x 1/4 (Throttle Lever)	5404	1
69	SCREW — P.H.S.T., 4-40 x 1/4 (Coil to Laminations)	5641	1
70	SCREW — Breaker Points (Wires to Breaker P.T.)—Used on 2000 Series	7143	1
71	SCREW & L'WASHER ASSY. — F.H.M., 8-32 x 3/8 (Condenser to Bearing Plate)	5674-F	1
72	SCREW & L'WASHER ASSY. — F.H.M., 1/4-20 x 3/4 (Muffler to Block)	5679-G	2
73	SCREW & L'WASHER ASSY. — H.H.C., 1/4-20 x 1/2 (Blower Housing to Plate)	3632-G	4
74	SCREW & L'WASHER ASSY. — H.H.C., 1/4-20 x 7/8 (Reed Plate to Block)	3294-G	2
75	SCREW & L'WASHER ASSY. — P.H.S.T., 10-24 x 1 (Magneto Plate to Bearing Plate)	5430-A	2

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VS-400-1000						
VS-400-2000						
P	A	N	T	H	E	R

**BASIC
TYPE**

SEC. II, DIV. VS-400-1000
 SEC. II, DIV. VS-400-2000
 PARTS CATALOG
 Revised February, 1957
 Supersedes March, 1956

BASIC PARTS LIST (Continued)

Ref. No.	PART DESCRIPTION	Part No.	Quantity
76	SCREW & L'WASHER ASSY. — P.H.S.T., 8-32 x 3/8 (Air Cleaner Cover to Mounting Plate)	5457-A	1
77	SCREW & L'WASHER ASSY. — F.H.M., 8-32 x 7/16 (Mounting Plate to Carburetor)	5673-A	2
78	SCREW & L'WASHER ASSY. — R.H.M., 8-32 x 5/16 (Breaker Points to Bearing Plate)	5409-F	1
79	SCREW & L'WASHER ASSY. — R.H.M., 10-24 x 1 (Fuel Tank Straps)	5421-A	2
80	SCREW & L'WASHER ASSY. — R.H.S.T., 8-32 x 3/8 (Reed Assembly to Reed Plate)	5644-A	2
81	SCREW & L'WASHER ASSY. — H.H.C., 8-32 x 1/2 (1—Speed Control Lever, 3—Ignition Shorting Clip)	5443-A	4
82	SCREW & L'WASHER ASSY. — H.H.C., 1/4-20 x 3/4 (Bearing Plate to Block)	5446-F	6
83	SEAL — Breaker Points Cover—Used on 2000 Series	5596	1
84	SEAL — Oil (Bearing Plate)	7254	1
85	SEAL — Oil (Power Take-Off)	4429	1
86	SPARK PLUG & GASKET ASSEMBLY	2168-A	1
87	SPRING — Air Governor	2448	1
88	SPRING — Compression (Air Vane)—Used on Types A and B	2400	1
	SPRING — Compression (Air Vane)—Used on Types C, D, E and 2000 Series	10005	1
89	STOP — Reed Valve	2036	1
90	STRAP — Fuel Tank	2435	2
91	STUD — Carburetor Mounting	2063	2
92	TANK ASSEMBLY — Fuel	3481-A	1
93	TERMINAL — Breaker Points—Used on 2000 Series	5713	1
94	VALVE — Reed	2035	1
95	VALVE — Fuel Shut-Off—Used on Types A and B	5051	1
	CONNECTOR — Fuel Line—Used on Types C, D and E	5054	1
96	VANE & LEVER ASSY. — Air Governor—Used on Types A and B	2045-A	1
	VANE & LEVER ASSY. — Used on Types C, D, E and 2000 Series	2323	1
97	WASHER — Air Governor Link	2049	1
98	WASHER — Flat (Bracket to Housing)	3279	2
99	WASHER — Spring Tension (Starter Pulley)	4119	1
100	WASHER — Spring Tension (Throttle Control)	2077	1
101	WASHER — Thrust, Bronze (Crankshaft)—Used on 1000 Series (All Types)	2064	1
	WASHER — Thrust (Crankshaft)—Used on 2000 Series	2026	1
102	WASHER — Oil Seal Protector	4558	1

AVAILABLE OVERHAUL KITS

Engine Model	Description	Kit No.
All Types	Gasket Overhaul Kit	2203
All Types	Engine Overhaul Kit	6310
Types B and C	Carburetor Repair Kit (Clinton)	14237
Types A, D, E	Carburetor Repair Kit	C6315

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S	E	R	I	E	S	
VS-400-1000						
VS-400-2000						
P	A	N	T	H	E	R

MODEL VARIATIONS

SEC. II, DIV. VS-400-1000
VS-400-2000
PARTS CATALOG
Revised January, 1959
Supersedes May, 1957

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.

MODEL VARIATIONS OF VS-400-1000—VS-400-2000 SERIES

ENGINE MODEL—See Page (a), "How to Identify Your Clinton Engine."	FOOTNOTES (Check bottom of page).	CRANKSHAFT (Part Numbers Shown). Refer to Sec. IV, Div. B for details and further information.	CONTROL GROUP (Control Group Illustration Numbers Shown). Refer to Sec. III, Div. D for Parts List.	CONTROL CABLE LENGTH, replacement 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.	STARTER—RECOIL. Refer to Sec. III, Div. H for Parts List.	HOUSING ASSEMBLY — BLOWER (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.	MUFFLER OR MANIFOLD (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.
VS-400-1101	No Variation, use Basic Parts List							
VS-400-1102						Yes	2140-A	
VS-400-1104	Note 1							
VS-400-1105	Note 1					Yes	2140-A	
VS-400-1106				72"				
VS-400-1110	Note 2							
VS-400-1112	Note 1			72"				
VS-400-1113	No Variation—Use Basic Parts List							
VS-400-1122	Note 1							
VS-400-1123	Note 1						2140-A	
VS-400-1135						Yes	2140-A	2136
VS-400-1138	Note 3	2293			2314-A	Yes	2140-A	2324-D
VS-400-1140	Note 1					Yes	2140-A	
VS-400-1141	Note 3	2293			2013-A	Yes	2140-A	2324-D
VS-400-1142	No Variation—Use Basic Parts List							
VS-400-1143	Notes 1 & 2					Yes	2140-A	
VS-400-1144	Note 1					Yes	2140-A	
VS-400-1145				72"		Yes	2140-A	
VS-400-1146						Yes	2140-A	
VS-400-1147	Note 1					Yes	2140-A	
VS-400-1148						Yes	2140-A	
VS-400-1150	No Variation—Use Basic Parts List							
VS-400-1151						Yes	2140-A	
VS-400-1152						Yes	2140-A	
VS-400-1153						Yes	2140-A	
VS-400-1154		2293						
VS-400-1155	Note 1					Yes	2140-A	
VS-400-1156	Note 1					Yes	2140-A	
VS-400-1157	Note 1						2140-A	2324-D
VS-400-1158				72"		Yes	2140-A	
VS-400-1159	Note 3	2293				Yes	2140-A	2324-D
VS-400-1160	Note 3	2293				Yes	2140-A	2324-D
VS-400-1161						Yes	2140-A	

CLINTON

S E R I E S
VS-400-1000
VS-400-2000
P A N T H E R

**MODEL
 VARIATIONS**

MODEL VARIATIONS OF VS-400-1000—VS-400-2000 SERIES (Cont.)

ENGINE MODEL	FOOTNOTES	CRANKSHAFT	CONTROL GROUP	CONTROL CABLE LENGTH	PLATE ASSEMBLY—BEARING	STARTER—RECOIL	HOUSING ASSEMBLY—BLOWER	MUFFLER OR MANIFOLD
VS-400-1162	Notes 3 & 6					Yes	2140-A	
VS-400-2104	Note 4							
VS-400-2112	Note 4			72"				
VS-400-2115		2374						
VS-400-2122	Note 4							
VS-400-2123	Note 4			72"			2140-A	
VS-400-2124						Yes	2140-A	
VS-400-2141	Note 5	2373			2314-A	Yes	2140-A	2324-D
VS-400-2144	Note 1					Yes	2140-A	
VS-400-2145				72"		Yes	2140-A	
VS-400-2146						Yes	2140-A	
VS-400-2150	No Variation—Use Basic Parts List							
VS-400-2161						Yes	2140-A	
VS-400-2162	Notes 5 & 6					Yes	2140-A	
VS-400-2163						Yes	2140-A	
VS-400-2164	Note 4			72"		Yes	2140-A	
VS-400-2165	Note 4							
VS-400-2166	Note 4					Yes	2140-A	
VS-400-2167	Note 4							
VS-400-2168						Yes	2140-A	2350-D
VS-400-2169	Note 4	2375				Yes	2140-A	2324-D
VS-400-2170	No Variation—Use Basic Parts List							
VS-400-2171							2139-J	
VS-400-2172	Note 4					Yes	2140-A	2324-D

NOTE 1—Use 2131 Base, Engine; four (4) 3217-G Screw & L'Washer Ass'y. See Sec. IV, Div. A.

NOTE 2—This Assembly consists of the following additional parts: 2220 Muffler Body; 2222 Baffle; (2) 2223 Spacer; 2221 Cover; 2225 Gasket; 2224 Plate, Inspection; (2) 5612-A Screw & L'Washer Ass'y; (2) 5409-A Screw & L'Washer Ass'y.

NOTE 3—5526-D Terminal Wire Assembly, 5566 Grommet, C-3475 Terminal, 2228 Terminal, 5644 Screw used in lieu of 2054 Clip—Ignition Shorting. (2) 5659 Stud, (2) 3255-A Nut & L'Washer Assembly, and (2) 5498 Washer (Flat) used as additional parts.

NOTE 4—Use 2431 Adapter Flange and 3217-G Screw & L'Washer Ass'y.

NOTE 5—Use 5708 Shorting Wire, 3478 Terminal, 5541 Sleeve, 5644 Screw and 2228 Terminal.

NOTE 6—Use 4181 Spark Plug Cover.

