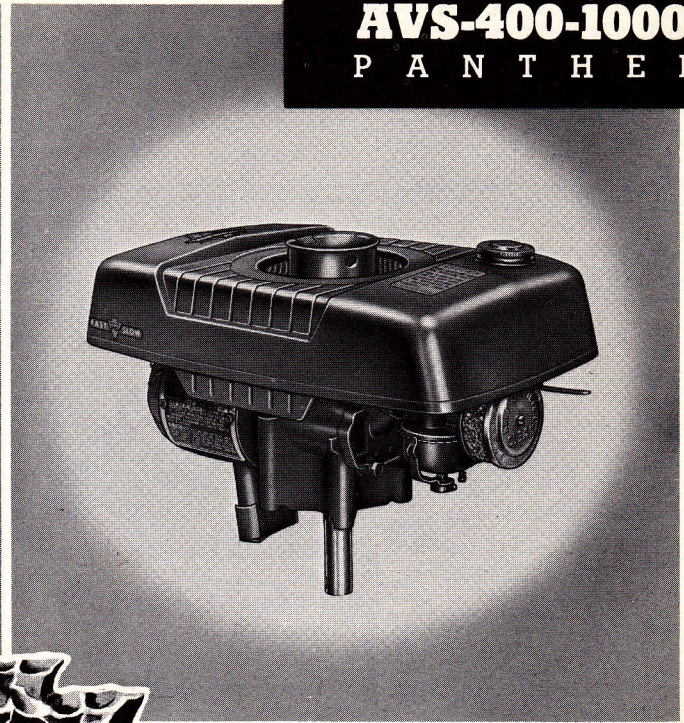
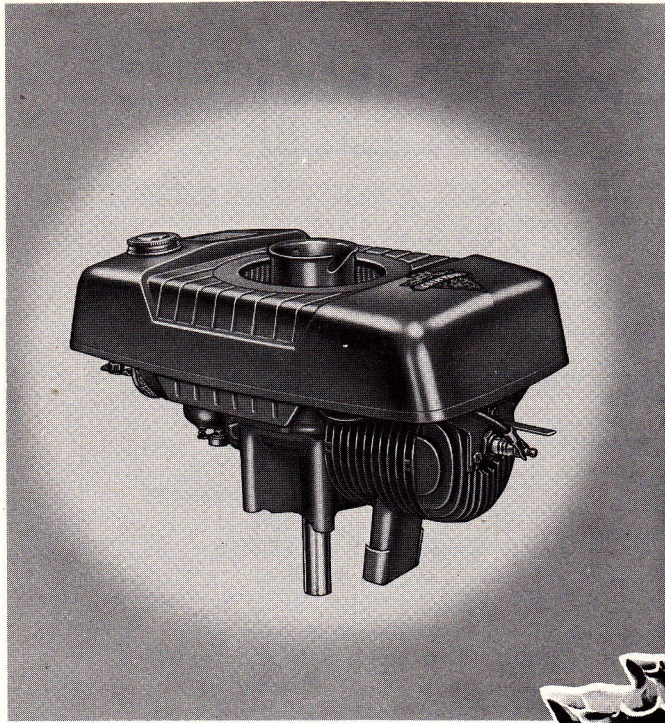


S E R I E S
AVS-400
AVS-400-1000
P A N T H E R



A Wide Range of Models are Made By

CLINTON

For Farm, Home and Industrial Use.

ENGINES

AVS-400
AVS-400-1000

H.P.	R.P.M.
1.5-----	2200
1.9-----	2800
2.5-----	3800

GENERAL SPECIFICATIONS

Model	Type	Description	Starter	Weight
AVS-400, AVS-400-1000	Air Cooled	Vertical Shaft	Rope or Recoil	15¼ lb.

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: 2½"

STROKE: 1⅝"

PISTON DISPLACEMENT: 5.76 cu. 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 and gasoline strainer with shut-off.

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

MAIN BEARINGS: Bronze. Extra large bearing on power take-off 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: Two-quart capacity.

DIRECTION OF ROTATION: Counter-clockwise, viewed from power take-off shaft side.

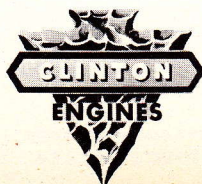
FINISH: Red heat-resisting enamel. Other colors upon special order.

STANDARD EQUIPMENT

Standard equipment includes: Cast iron cylinder liner, replaceable bearing, air cleaner, specially designed dust and moisture-proof high voltage flywheel magneto, fuel tank, splash-proof gas tank cap, muffler, blower housing screen, rope starter. Safety stop device.

SPECIAL EQUIPMENT

Special equipment includes: Touch N' Go controls, remote throttle cable and controls, recoil starter, shorting terminal for remote stop hookup, 8-inch circle mounting adapter plate, electric starter, deluxe muffler, special paint finishes, resistor spark plug, special crankshaft extensions.



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

CLINTON ENGINES PROVIDE POWER

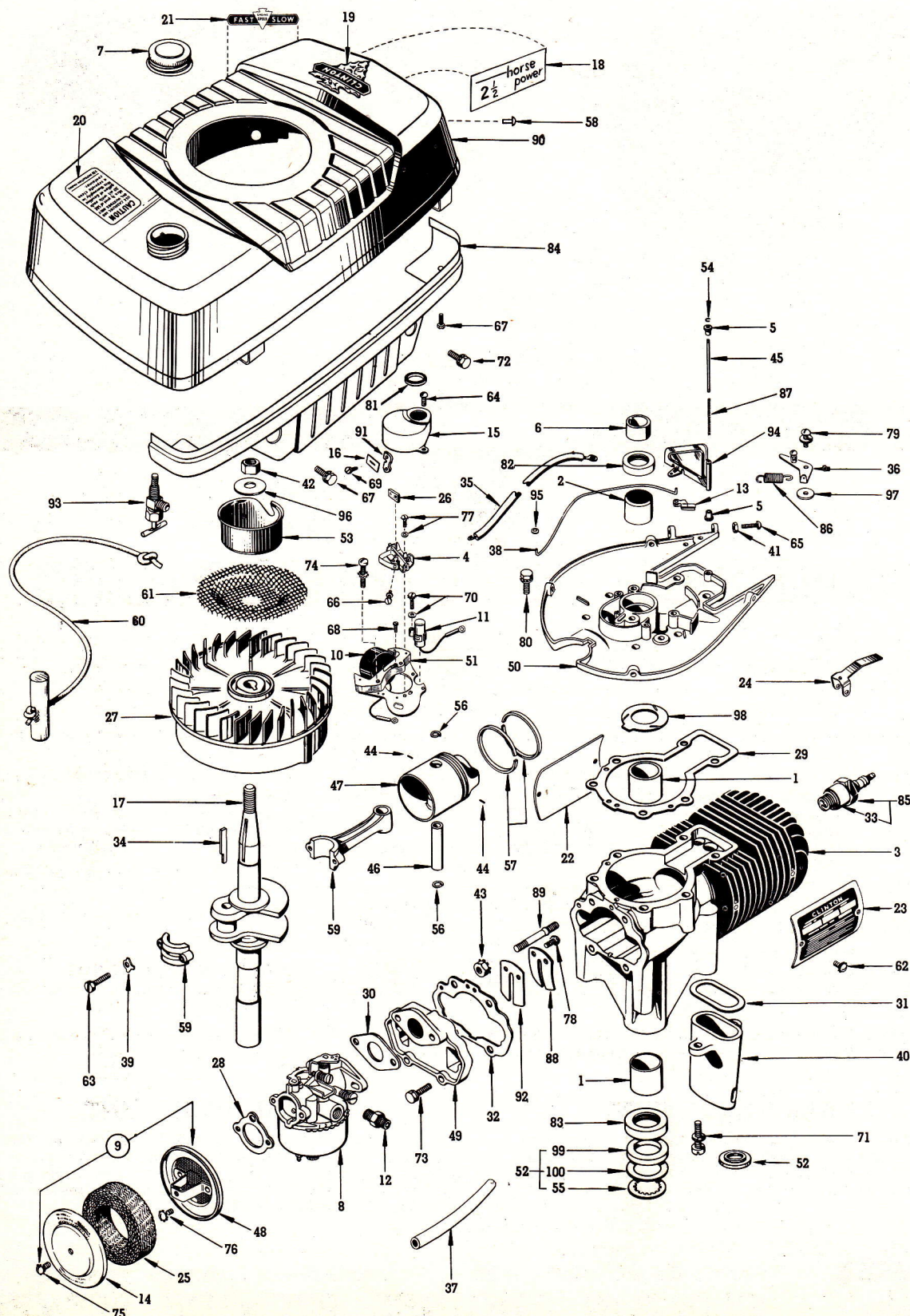
FOR FARM • HOME • INDUSTRIAL EQUIPMENT

PRINTED IN U.S.A.

CLINTON

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

BASIC
TYPE



CLINTON

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

**BASIC
TYPE**

SEC. II, DIV. AVS-400
AVS-400-1000
PARTS CATALOG
 Revised April, 1958
 Supersedes January, 1957

There is one Basic Type of the AVS-400 Engine and two Basic Types of the AVS-400-1000 Engine covered by this Basic Parts List. The AVS-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.

MODEL VARIATIONS follow this Basic Parts List.

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

BASIC PARTS LIST

Ref. No.	PART DESCRIPTION	Part No.	Quantity
1	BEARING — Main Sleeve (Block Assy., Cylinder)—Used on AVS-400—	2058	2
	BEARING — Main Sleeve (Block Assy., Cylinder)—Used on AVS-400-1000 (Types A and B)-----	9016	1
2	BEARING — Sleeve (Bearing Plate)-----	2059	1
3	BLOCK ASSEMBLY — Cylinder (includes Ref. No. 1)—Used on AVS-400 Series-----	2420-A	1
	BLOCK ASSEMBLY — Cylinder (includes Ref. No. 1)—Used on AVS-400-1000 (Type A)-----	2476	1
	BLOCK ASSEMBLY — Cylinder (includes Ref. No. 1)—Used on AVS-400-1000B-----	2472	1
4	BREAKER POINTS ASSEMBLY (includes Ref. Nos. 26, 66 and 77)-----	P5543	1
5	BUSHING — Air Vane-----	7239	2
6	CAM — Breaker Points-----	P5594	1
7	CAP AND GASKET ASSEMBLY — Fuel-----	4517-A	1
8	CARBURETOR ASSEMBLY — Clinton—Used on AVS-400 and AVS-400-1000-----	14013	1
	CARBURETOR ASSEMBLY — Clinton—Used on AVS-400-1000 (Types A and B)-----	14029	1
9	CLEANER ASSEMBLY — Air-----	2000-A	1
10	COIL — Magneto (without Laminations)-----	P5593-A	1
11	CONDENSER — Magneto-----	P5589-A	1
12	CONNECTOR — Fuel Line (Flexible)—Used on AVS-400-----	5052	1
	CONNECTOR — Fuel Line—Used on AVS-400-1000 (Types A and B)-----	5053	1
13	CONNECTOR — Governor Link to Air Vane-----	2226	1
14	COVER — Air Cleaner-----	2003	1
15	COVER — Breaker Points (with Seal)-----	P5595-A	1
16	COVER — Breaker Points Terminal—Used on AVS-400-1000 (Types A and B)-----	5714	1
17	CRANKSHAFT — Used on AVS-400 Series-----	2041	1
	CRANKSHAFT — Used on AVS-400-1000 Series (Types A and B)-----	2370	1
18	DECAL — Horsepower-----	10010	1
19	DECAL — Arrowhead-----	3579	1
20	DECAL — Instruction, Fuel Mixture-----	2098	1
21	DECAL — Engine Speed-----	4549	1
22	DEFLECTOR — Air Cylinder—Used on AVS-400-----	2037	1
23	DEFLECTOR AND NAMEPLATE ASSEMBLY — Used on AVS-400 and AVS-400-1000A-----	2106	1
	NAMEPLATE — Used on AVS-400-1000B-----	2363	1
24	DEVICE — Ignition Shorting Clip-----	3499	1
25	ELEMENT — Air Cleaner-----	2132	1
26	FELT — Lubrication, Cam Follower-----	P5504	1
27	FLYWHEEL ASSEMBLY-----	5597-A	1
28	GASKET — Air Cleaner-----	2075	1
29	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.		
30	GASKET — Carburetor to Reed Plate-----	2096	1
31	GASKET — Muffler to Block-----	2069	1
32	GASKET — Reed Plate to Block-----	2344	1
33	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
AVS-400
AVS-400-1000
P A N T H E R

**BASIC
 TYPE**

BASIC PARTS LIST (Continued)

Ref. No.	PART DESCRIPTION	Part No.	Quantity
34	KEY — Flywheel	10339	1
35	LEAD — High Tension Magneto	P2055	1
36	LEVER AND SCREW ASSEMBLY — Throttle Control	2302-B	1
37	LINE — Fuel (Flexible)	6316	1
38	LINK — Air Governor	2335	1
39	LOCK — Connecting Rod Cap	2027	2
40	MUFFLER — Used on AVS-400	2082	1
	MUFFLER — Used on AVS-400-1000, Types A and B	2082-A	1
41	NUT — Hexagon, 8-32 (Speed Control Adjusting)	5522	1
42	NUT — Hexagon, 7/16-20 (Starter Pulley)	3250	1
43	NUT & LOCKWASHER ASSEMBLY — Hexagon, 1/4-28 (Carburetor to Reed Plate)	3255-A	2
44	PIN — Drive (Ring Retainer)	2099	2
45	PIN — Pivot, Air Vane	7238	1
46	PIN — Wrist	2428	1
47	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. 44, 46, 47, 56 and 57.			
48	PLATE — Air Cleaner Mounting	2001-B	1
49	PLATE — Reed Valve Assembly	2033-A	1
50	PLATE — Bearing	2312-A	1
NOTE: Bearing Plate includes Ref. Nos. 2 and 82.			
51	PLATE ASSEMBLY — Magneto with Coil and Lamination	P5590-B	1
NOTE: Magneto Plate Assembly includes Ref. Nos. 10, 51 and 74.			
52	PROTECTOR — Oil Seal—Used on AVS-400-1000 (Types A and B)	4558	1
	PROTECTOR ASSEMBLY — Oil Seal—Used on AVS-400 (includes Ref. Nos. 55, 99 and 100)	7443-A	1
53	PULLEY — Starter	3299	1
54	RETAINER — Air Vane	4430	1
55	RETAINER — Power Take-Off (Self-Locking)—Used on AVS-400	7452	1
56	RETAINER — Wrist Pin	3030	2
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	2
59	ROD ASSEMBLY — Connecting	2422-A	1
60	ROPE ASSEMBLY — Starting	4266	1
61	SCREEN — Revolving	7187	1
62	SCREW — #8-32 x 3/8 (Deflector to Block and Nameplate to Block)	5644	4
63	SCREW — H.H. Slotted, #10-24 x 3/4 (Connecting Rod Cap)	5429	2
64	SCREW — R.H.S.T., #6-32 x 3/8 (Breaker Cover to Bearing Plate)	5405	2
65	SCREW — R.H.M., #8-32 x 7/8 (Speed Control Adjusting)	3240	1
66	SCREW — R.H.S.T., #6-32 x 1/4 (Breaker Points Terminal)	5664	1
67	SCREW — Shroud to Tank Assembly	5457	4
68	SCREW — P.H.S.T., #4-40 x 1/4 (Coil to Laminations)	5641	1
69	SCREW — R.H.M., #6-32 x 1/4 (Wires to Terminal)—Used on AVS-400-1000, Types A and B	7143	1
70	SCREW & L'WASHER ASS'Y — F.H.M., #8-32 x 5/8 (Condenser to Magneto Plate)	5674-F	1
71	SCREW & L'WASHER ASS'Y — F.H.M., 1/4-20 x 7/8 (Muffler to Block)	5679-G	2
72	SCREW & L'WASHER ASS'Y — H.H.C., 1/4-20 x 5/8 (Tank Assembly to Bearing Plate)	3632-G	4
73	SCREW & L'WASHER ASS'Y — H.H.C., 1/4-20 x 7/8 (Reed Plate to Block)	3294-G	2

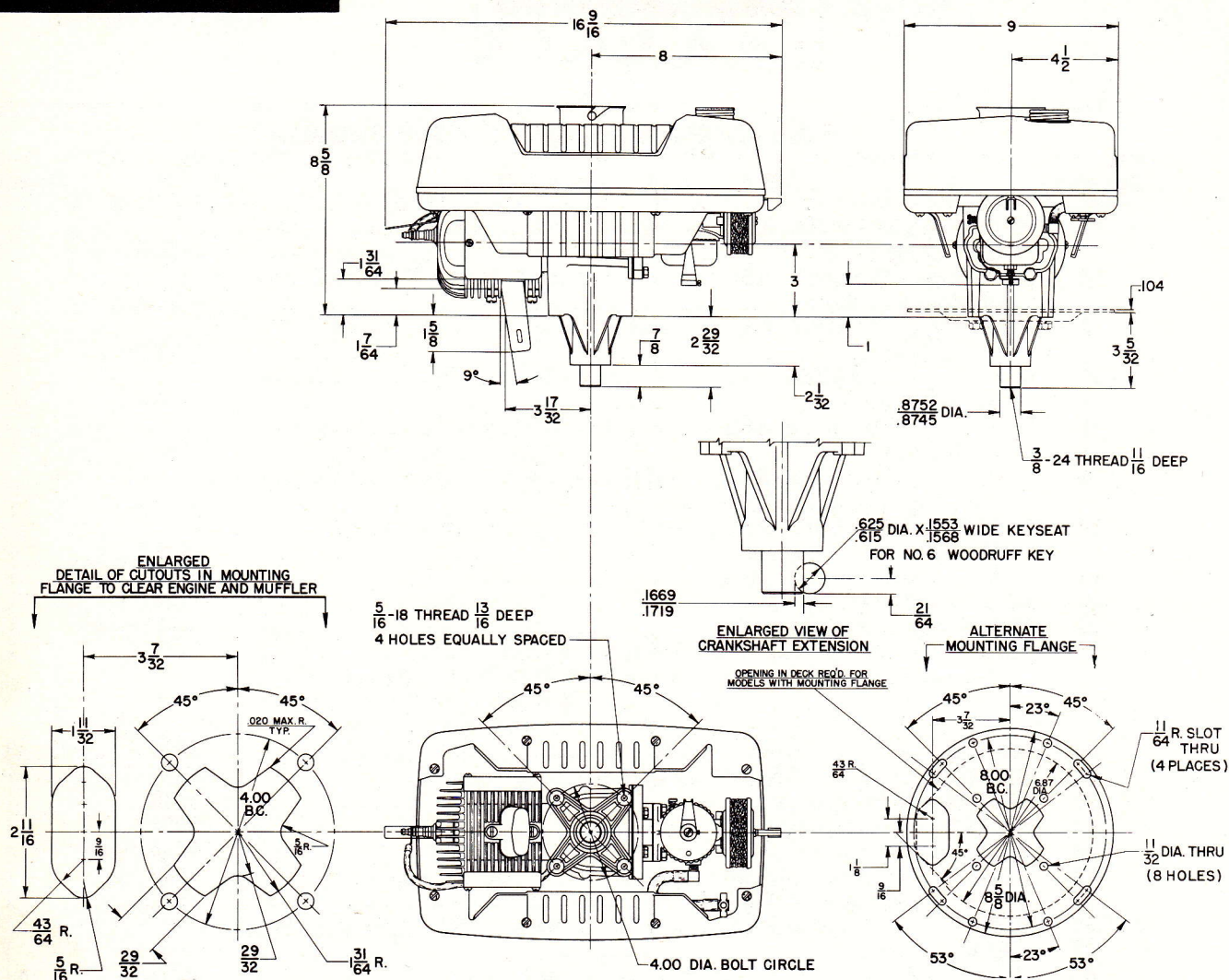
CLINTON**S E R I E S**
AVS-400
AVS-400-1000
P A N T H E R**BASIC**
TYPESEC. II, DIV. AVS-400
AVS-400-1000
PARTS CATALOG
Revised April, 1958
Supersedes January, 1957**BASIC PARTS LIST (Continued)**

Ref. No.	PART DESCRIPTION	Part No.	Quantity
74	SCREW & L'WASHER ASS'Y — P.H.S.T., #10-24 x 1 (Magneto Plate to Bearing Plate) -----	5682-A	2
75	SCREW & L'WASHER ASS'Y — B.H.M., #8-32 x 3/8 (Air Cleaner Cover to Mounting Plate) -----	5457-A	1
76	SCREW & L'WASHER ASS'Y — H.H.C., #8-32 x 7/16 (Mounting Plate to Carburetor) -----	5673-A	2
77	SCREW & L'WASHER ASS'Y — R.H.M., #8-32 x 1/2 (Breaker Points to Bearing Plate) -----	5409-F	1
78	SCREW & L'WASHER ASS'Y — R.H.S.T., #8-32 x 3/8 (Reed Assembly to Reed Plate) -----	5644-A	2
79	SCREW & L'WASHER ASS'Y — H.H.C., #8-32 x 1/2 (1—Speed Control Lever, 3—Brace to Block) -----	5443-D	4
80	SCREW & L'WASHER ASS'Y — H.H.C., 1/4-20 x 3/4 (Bearing Plate to Block) -----	5446-F	6
81	SEAL — Breaker Point Cover -----	5596	1
82	SEAL — Oil (Bearing Plate) -----	7254	1
83	SEAL — Oil (Power Take-Off) -----	4429	1
	SEAL — Oil (Power Take-Off)—Used on AVS-400 Series -----	2121	1
	NOTE: 2121 Seal interchangeable with 4429 Seal, 7443 Felt Washer, 7444 Flat Washer and 7452 Retainer (Excluder Kit No. 7443-A).		
84	SHROUD — Engine (Used on AVS-400) -----	2334	2
85	SPARK PLUG AND GASKET ASSEMBLY -----	K2168-A	1
86	SPRING — Air Governor -----	2448	1
87	SPRING — Compression (Air Vane) -----	10005	1
88	STOP — Reed Valve -----	2036	1
89	STUD — Carburetor Mounting -----	2063	2
90	TANK ASSEMBLY — Fuel -----	2330-D	1
91	TERMINAL — Breaker Points—Used on AVS-400-1000 (Types A & B) --	5713	1
92	VALVE — Reed -----	2035	1
93	VALVE — Fuel Shut-Off—Used on AVS-400 Series -----	5051	1
	VALVE — Connector to Fuel Tank (Flexible Fuel Line)—Used on AVS-400-1000 (Types A and B) -----	5055	1
94	VANE — Air Governor -----	2323	1
95	WASHER — Air Governor Link -----	2049	1
96	WASHER — Spring Tension (Starter Pulley) -----	4119	1
97	WASHER — Spring Tension (Throttle Control) -----	2077	1
98	WASHER — Thrust (Crankshaft)—Used on AVS-400 Series -----	2464	1
	WASHER — Thrust—Used on AVS-400-1000 (Types A & B) -----	2026	1
99	WASHER — Felt (Power Take-Off)—Used on AVS-400-Series -----	7443	1
100	WASHER — Flat, Steel (Power Take-Off)—Used on AVS-400 Series ---	7444	1

AVAILABLE OVERHAUL KITS

Engine Model	Description	Kit No.
All Types	Gasket Overhaul Kit	2203
All Types	Carburetor Repair Kit (Clinton)	14237

DIMENSIONAL SPECIFICATIONS AND POWER DATA



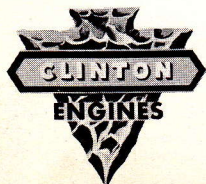
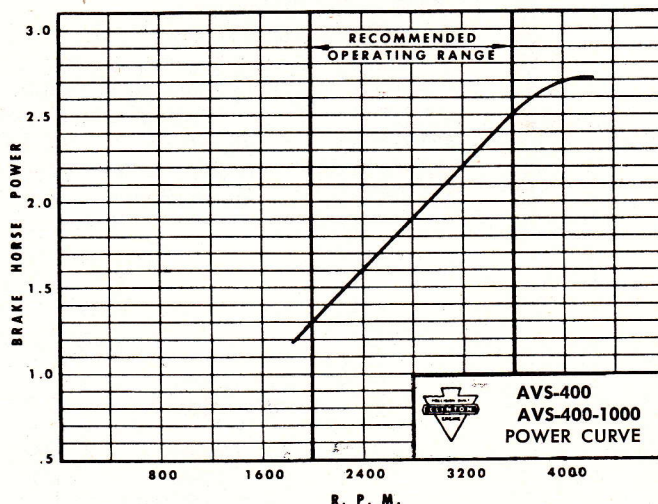
POWER DATA

The performance and power analysis figures for the Clinton Engine series show the rated Brake Horse Power developed from test-run engines. The standard engine equipped with standard air cleaner and muffler was used, in every case, for these tests and the figures have been corrected for barometer at sea level and temperature of 60° F. Production engines when shipped will develop not less than 85% of rated B.H.P.

Production engines, after run-in to reduce friction will develop not less than 95% of the rated B.H.P.

Engine power will decrease 3% for each 1,000 feet above sea level, and 1% for each 10° F. above standard temperature of 60° F.

Unless otherwise specified, governors are set to operate at 3,400 R.P.M. without load. Complete details of installations requiring continuous operation at other than recommended speeds should be referred to the factory for approval.



ENGINE DIVISION OF **CLINTON ENGINES CORPORATION**

MAQUOKETA, IOWA

FORMERLY: CLINTON MACHINE CO.

CABLE ADDRESS: ENGINES U. S. A.

CLINTON

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

**MODEL
VARIATIONS**

SEC. II, DIV. AVS-400
SEC. II, DIV. AVS-400-1000
PARTS CATALOG
Revised January, 1959
Supersedes March, 1958

MODEL VARIATIONS OF AVS-400—AVS-400-1000 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 page 2).	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.	MUFFLER OR MANIFOLD (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.	HOUSING ASSEMBLY — BLOWER (Part Numbers Shown). Refer to Illustrated Basic Parts List for corresponding part.
AVS-400-100	Notes 1 & 2			72"			2350-B	
AVS-400-101	Note 1					Yes		2330-B
AVS-400-102	Notes 1 & 2						2350-B	
AVS-400-103	Note 1							
AVS-400-104	Notes 1 & 2					Yes	2350-B	2330-B
AVS-400-105	No Variation—Use Basic Parts List							
AVS-400-106						Yes		2330-B
AVS-400-107	Note 1					Yes		2330-B
AVS-400-108				72"				
AVS-400-109				72"		Yes		2330-B
AVS-400-110	Note 1							
AVS-400-111		2291						
AVS-400-112						Yes		2330-B
AVS-400-113	Note 3				2315-A			
AVS-400-114	Note 1					Yes		2330-B
AVS-400-115		2291				Yes		2330-B
AVS-400-1107	Note 4					Yes		2330-B
AVS-400-1108				72"				
AVS-400-1109				72"		Yes		2330-B
AVS-400-1112						Yes		2330-B
AVS-400-1116	Notes 2 & 5					Yes	2350-B	2330-B
AVS-400-1117	Notes 6, 7, 8				2318	Yes		2330-B
AVS-400-1118	Note 4					Yes	2350-B	2330-B
AVS-400-1119	Notes 4 & 8					Yes		2330-B
AVS-400-1120	Notes 4 & 8					Yes		2330-B
AVS-400-1121	Notes 4 & 7	2376			2318	Yes		2330-B
AVS-400-1124	Notes 7 & 8					Yes	2220-A	2330-B
AVS-400-1125	Notes 7 & 8					Yes		2330-B
AVS-400-1126	Note 4							
AVS-400-1127	Note 4					Yes		2330-B
AVS-400-1128		2379				Yes		2330-B
AVS-400-1129	Note 1					Yes		2330-B

CLINTON

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

**MODEL
VARIATIONS**

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

ENGINE MODEL	FOOTNOTES	CRANKSHAFT	CONTROL GROUP	CONTROL CABLE LENGTH	PLATE ASSEMBLY— BEARING	STARTER— RECOIL	MUFFLER OR MANIFOLD	HOUSING ASSEMBLY— BLOWER
AVS-400-1130						Yes	2220-A	2330-B
AVS-400-1131	Note 1		3855-56	72"				
AVS-400-1132						Yes	2220-A	2330-B
AVS-400-1500	No Variation—Use Basic Parts List							

NOTE 1—Use #2131 Bracket and (4) #3217-G Screw and L'Washer Assembly.

NOTE 2—Use #C-3410 Clamp.

NOTE 3—Use #2315-A Plate Assembly, #5567-B Wire Assembly, #P-5566 Grommet and #5644 Screw.

NOTE 4—Use #2431 Adapter Flange and #3217-G Screw and L'Washer Assembly.

NOTE 5—Use (2) Each: #5659 Stud, #5498 Flat Washer, and #3255-A Screw and L'Washer Assembly.

NOTE 6—Use #2360 Bracket and #4943 Screw.

NOTE 7—Use #5717-A Shorting Wire Assembly.

NOTE 8—Engine Requires "Touch 'n Go" Controls: #14268 Carburetor, #14283 Knob, #14290 Grommet, #14280 Shorting Clip, #5647 Screw, #2352 Panel and #5698-G Screw and L'Washer Assembly.

