

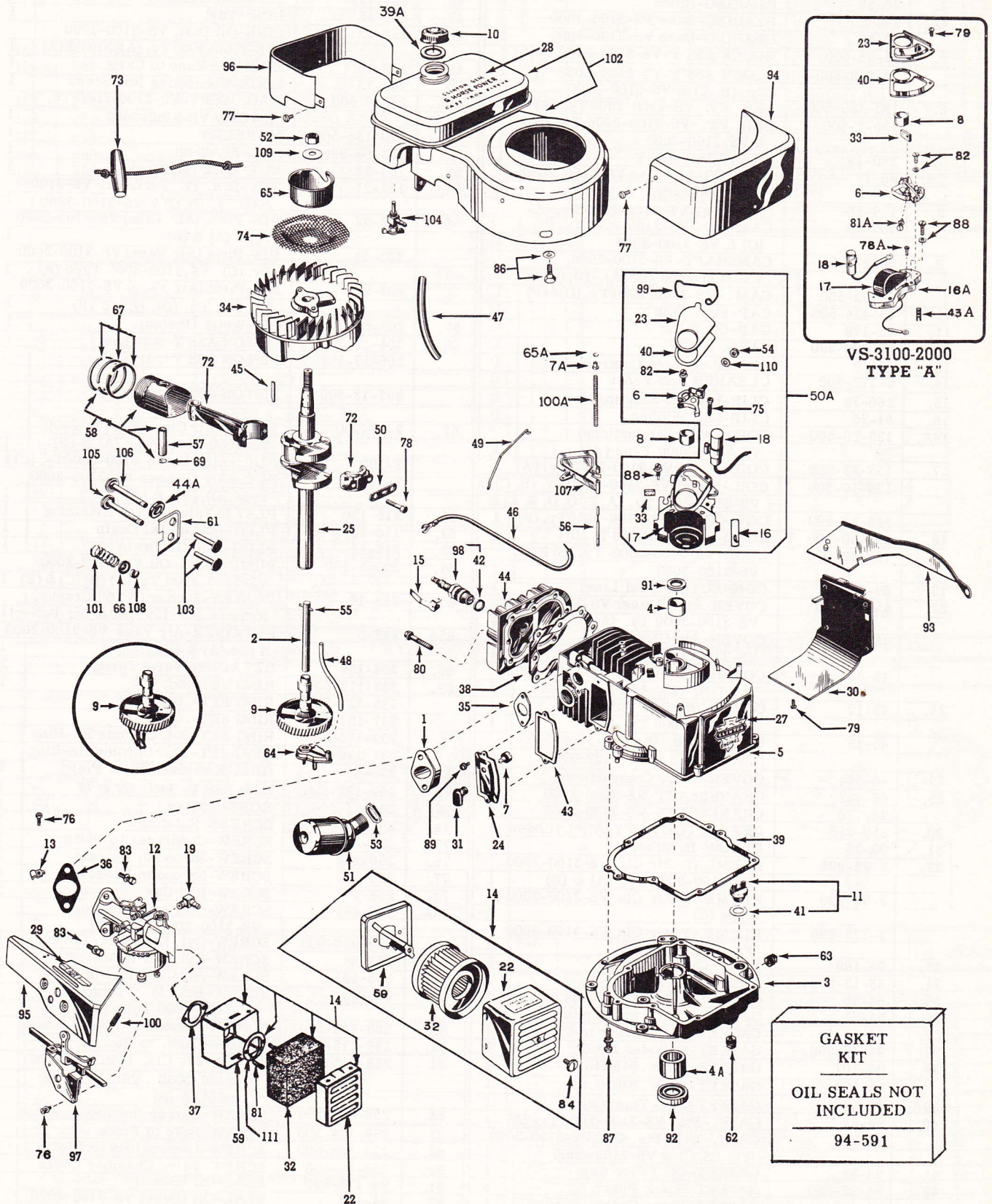


# BASIC PARTS LIST

## VS-3100-2000

## VS-3100-3000

SEC. II, DIVISION  
VS-3100-2000  
VS-3100-3000  
ISSUED DEC., 1958  
REVISED JULY, 1966





BASIC PARTS LIST  
**VS-3100-2000 & VS-3100-3000**

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
1.	1-65	ADAPTOR-Carburetor	1	44.	122-19	HEAD-Cylinder	1
2.	6-3-500	AXLE-Camshaft	1	44A.	136-22-990	INSERT VALVE SEAT-Ser. Pt.	2
3.	18-17-500	BASE ENGINE-VS-3100-2000	1		136-108-990	INSERT VALVE SEAT-Stellite	2
	18-45-500	BASE ENGINE-VS-3100-3000	1	45.	148-4	KEY-Flywheel	1
4.	20-58	BEARING-Block	1	46.	307-190	LEAD-Hi-Tension	1
4A.	20-52	BEARING-Base VS-3100-2000	1	47.	158-25	LINE-Fuel	1
	20-50	BEARING-Base VS-3100-3000	1	48.	158-53	LINE-Oil Dist. VS-3100-2000	
5.	22-36-500	BLOCK ASS'Y-VS-3100-2000 Ty.(A)	1			VS-3100-3000 Ty. (A)(B)(C)&(E)	1
	22-718-500	BLOCK ASS'Y-VS-3100-2000 Ty. (B, C) & VS-3100-3000	1	49.	159-18	LINK-Air Vane to Carb.	1
6.	135-130-500	BKR. PT. -VS-3100-2000 Ty. (A)	1	50.	148-13	LOCK-Connecting Rod Screw	1
	135-7-500	BKR. PT. -VS-3100-2000 Ty. (B, C) & VS-3100-3000	1	50A.	268-6-500	MAG. ASS'Y-VS-3100-2000 Ty. (B, C) & VS-3100-3000	1
7.	260-13	BREATHER ASS'Y	1	51.	170-136-500	MUFFLER	1
7A.	28-1	BUSHING-Air Vane VS-3100-2000 Type (A) & (B)	2	52.	183-68-990	NUT-Flywheel	1
8.	157-26	CAM-Brk. VS-3100-2000 Ty. (A)		53.	183-37	NUT-Lock (Muffler)	1
	157-29	CAM-Bkr. VS-3100-2000 Ty. (B) (C) & VS-3100-3000	1	54.	183-21	NUT-Brk. Pt. Terminal VS-3100-2000 Ty. (B, C) & VS-3100-3000	1
9.	6-22-500	CAMSHAFT-VS-3100-2000, VS-3100-3000 Ty. (A), (B), (C)&(E)	1	56.	203-32	PIN-Pivot (Air Vane) VS-3100-2000 Type (A) & (B)	1
	6-423-500	CAM. -VS-3100-3000 Ty. (D)&(F)	1		203-33	PIN-Pivot (Air Vane) VS-3100-2000 Ty. (C) VS-3100-3000 Type (A)	1
10.	45-424-500	CAP-Fuel Tank	1		203-91	PIN-Pivot (Air Vane) VS-3100-3000 Ty. (B), (C), (D), (E), & (F)	1
11.	45-179	CAP-Oil Filler	1	57.	203-65	PIN-Wrist (Piston)	1
12.	39-190-990	CARB. ASS'Y	1	58.	204-13-500	PISTON ASS'Y-Standard	1
13.	81-13	CLAMP-Remote Control	1		206-13-500	PISTON ASS'Y-.010 O. S.	
14.	2-177-500	CLEANER ASS'Y-Air	1		207-13-500	PISTON ASS'Y-.020 O. S.	
15.	266-28	CLIP-Ignition-Shorting	1	59.	2-17-500	PLATE-Air Cln. VS-3100-2000 VS-3100-3000 Type (A) & (B)	1
16.	81-20	CLIP-Coil Holding	1		2-100	PLT. -Air Cln. VS-3100-3000 Ty. (C)	1
16A.	135-20-500	COIL-(With Laminations) VS-3100-2000 Type (A)	1		2-139	PLT. -Air Cleaner VS-3100-3000 Type (D), (E), & (F)	1
17.	135-23-500	COIL-(Only)VS-3100-2000 Ty. (A)	1	61.	215-136	PLATE-Valve Spring Retaining	1
	135-10-500	COIL-(Only) VS-3100-2000 Ty. (B, C) & VS-3100-3000 Ty. (A, B, C, D, & E)	1	62.	216-22	PLUG-Bottom Oil Drain	1
	135-13-990	COIL-(Only) VS-3100-3000 Ty. (F)	1	63.	216-24	PLUG-Side Oil Drain	1
18.	135-30-500	COND-VS-3100-2000 Ty. (A)	1	64.	220-5-500	PUMP ASS'Y-Oil VS-3100-2000 VS-3100-3000 Ty. (A) (B) (C) & (E)	1
	135-29-990	COND-VS-3100-2000 Ty. (B) & (C) VS-3100-3000	1	65.	219-17	PULLEY-Starter (7/16" Cranks. Require 304-135 Spacer for Pulley)	1
19.	69-24	CONNECTOR-Fuel Line	1	65A.	232-5	RETAINER-Air Vane VS-3100-2000 Type (A) & (B)	1
22.	45-10-500	COVER-Air Cleaner VS-3100-2000& VS-3100-3000 Ty. (A) & (B)	1	66.	304-135	RETAINER-Valve Spring	2
	45-175	COVER-Air Cleaner VS-3100-3000 Ty. (C)	1	67.	233-112-500	RING SET-Std.	1
	45-337	COVER-Air Cleaner VS-3100-3000 Ty. (D), (E), & (F)	1		235-121-500	RING SET-.010 O. S.	
23.	45-17	COVER-Breaker Points VS-3100-2000 Ty. (A)	1		237-121-500	RING SET-.020 O. S.	
	45-15	COVER-Brk. Pts. VS-3100-2000 Ty. (B) (C) & VS-3100-3000	1		233-136-500	RING SET-Std. Chrome Re-Ring	
24.	45-304	COVER-Valve Compartment	1		237-136-500	RING SET-.020 Chrome Re-Ring	
25.	46-422	CRANKSHAFT-VS-3100-2000	1	69.	232-41	RING-Retainer (Wrist Pin)	2
	46-776	CRANKSHAFT-VS-3100-3000	1	72.	245-102-500	ROD ASS'Y- Incl. 50 & 78	1
30.	259-358	DEFLECTOR ASS'Y-Air Cylinder	1	73.	246-13-500	ROPE-Starter	1
31.	69-23	ELBOW-Breather	1	74.	257-25	SCREEN-Rotating	1
32.	2-28-990	ELEMENT-Air Cln. VS-3100-2000 VS-3100-3000 Ty. (A) & (B)	1	75.	258-299	SCREW-Condenser to Plate	1
	2-99-990	ELEMENT-Air Cln. VS-3100-3000 Type (C)	1	76.	258-159	SCREW-Shroud to Bracket	3
	2-175-990	ELEMENT-Air Cln. VS-3100-3000 Ty. (D), (E), & (F)	1	77.	258-160	SCREW-Shroud to Housing	6
33.	94-189	FELT-Cam. Follower	1	78.	258-9	SCREW-Rod Cap	2
34.	83-12-500	FLYWHEEL ASS'Y	1	78A.	258-483	SCREW-Coil to Laminations VS-3100-2000 Type (A)	1
35.	94-68	GASKET-Adaptor to Block	1	79.	258-936-500	SCREW-Cyl. Defl. & Pt. Cover	6
36.	94-32	GASKET-Carb. to Adaptor	1	80.	258-88	SCREW-Cylinder Head	8
37.	94-13	GASKET-Air Cleaner to Carb.	1	81.	258-131	SCREW-Air Cln. Pt. to Carb.	2
38.	94-48-990	GASKET-Cylinder Head	1	81A.	258-95	SCREW-Brk. Pt. Terminal VS-3100-2000 Type (A)	1
39.	94-107	GASKET-Base .015 Std.	1	82.	258-248-500	SCREW-Breaker Pt. Hold Down	1
	93-107	GASKET-Base .010 U. S.	1	83.	258-275-500	SCREW-Carb. to Block	2
39A.	94-620	GASKET-Fuel Tank Cap	1	84.	258-6-500	SCREW-Air Cln. Brk. to Carb. VS-3100-2000 VS-3100-3000 Type (A) & (B)	2
40.	94-29	GASK. -Pts. VS-3100-2000 Ty. (A)	1	86.	258-280-500	SCREW-Blower Housing to Block	2
	94-241	GASK. -Brk. Pts. Cov. VS-3100-2000 Ty. (B, C) & VS-3100-3000	1	87.	258-254-500	SCREW-Base to Block	7
41.	94-82	GASKET-Oil Filler Cap.	1	88.	258-108-500	SCREW-Laminations to Block	2
42.	94-92-990	GASKET-Spark Plug	1	89.	258-82-500	SCREW-Valve Chamber Cover	2
43.	94-103	GASKET-Valve Compartment	1	91.	94-178-990	SEAL-Oil (Block)	1
43A.	70-12	GROMMET -Mag. VS-3100-2000 Type (A)	1	92.	94-172	SEAL-Oil (Base) VS-3100-2000	1
					94-176	SEAL-Oil (Base) VS-3100-3000	1
				94.	259-231	SHROUD-Blower Housing	1



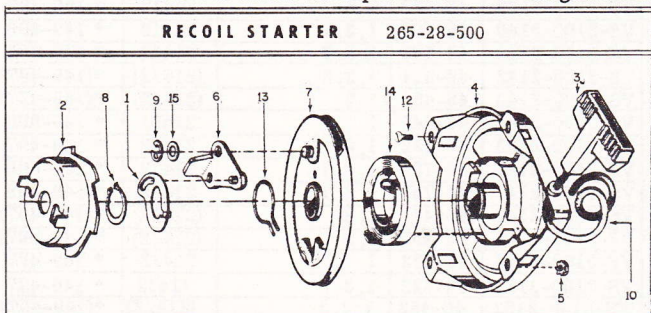
**VS-3100-2000 & VS-3100-3000**  
**BASIC PARTS LIST (Continued)**

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
95.	259-784	SHROUD-Carburetor	1		292-20-990	VALVE-Exhaust .010 O. S. Ser. Pt.	
96.	259-256	SHROUD-Fuel Tank	1	106.	291-9-990	VALVE-Intake Standard	1
97.	26-657-500	SLIDE-Speed Regulating	1		292-7-990	VALVE-Intake .010 O. S. Ser. Pt.	
98.	267-28-500	SPARK PLUG	1	107.	107-12	VANE-Air VS-3100-2000Ty. (A)&(B)1	
99.	263-10	SPRING-Breaker Box Cover			107-11	VANE-Air VS-3100-2000 Type (C)	
		VS-3100-2000 Type (B, C) &				VS-3100-3000 Type (A)	1
		VS-3100-3000	1		107-34	VANE-Air VS-3100-3000 Type	
100.	263-69	SPRING-Speed Regulating	1			(B), (C), (D), (E), & (F)	1
100A	263-28	SPRING-Air Vane Post VS-3100-		108.	304-90	WASHER-"C" Valve Keeper	2
		2000 Type (A) & (B)	1	109.	304-132	WASHER-Starter Pulley	1
101.	263-92	SPRING-Valve	2	110.	304-290	WASHER-Terminal Points	
102.	259-129-500	TANK & HOUSING ASS'Y	1			VS-3100-2000 Type (B, C) &	
103.	278-5	TAPPET-Valve	2			VS-3100-3000	1
104.	293-37	VALVE-Fuel Shut-Off	1	111.	304-562	WASHER-Air Cleaner VS-3100-3000	
105.	291-8-990	VALVE-Exhaust Standard	1			Type (D), (E), & (F)	1

**CARBURETOR — 39-132-500 (LMG 59) 39-190-990 (LMV) 39-874-500 (LMG 176)**

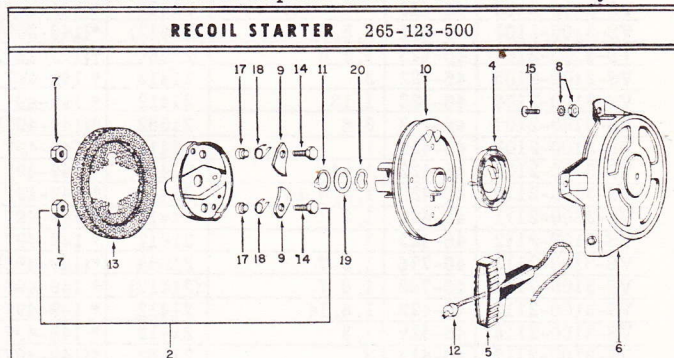
Ref. No.	Part Number	Description	39-190-990		
			39-132-500	39-874-500	
1.	25-16-500	BOWL & DRAIN ASS'Y	1	1	1
2.	39-909	DRAIN ASS'Y	1	1	1
3.	82-2-500	FLOAT & LEVER ASS'Y	1	1	1
4.	*39-928	GASKET KIT	1	1	1
5.	*181-2	NEEDLE-Idle Adj.	1	1	1
6.	*181-5-500	NEEDLE-Power Adj.	1	1	1
7.	*293-30-500	NEEDLE & SEAT INLET	1	1	1
8.	**182-37	NOZZLE	1	1	1
9.	39-910	REPAIR KIT	1	1	1
10.	39-938	PLUG KIT	1	1	1
11.	263-82	SPRING-Idle Needle & Throttle Stop Screw	2	2	2
12.	6-446	CHOKE SHAFT KIT	1	1	1
13.	6-452	THROTTLE SHAFT KIT		1	1
	6-456	THROTTLE SHAFT KIT	1		
14.	258-60	SCREW-Throttle	1	1	1
15.	*6-195	SHAFT-Float Hinge	1	1	1
16.	263-165	SPRING-Choke Return	1	1	1

\* Indicates Parts In Repair Kit \*\* If Original Main Nozzle Was Removed Replace With Service Nozzle Only



Ref. No.	Part Number	Description	265-28-500
1.	157-2	ACTUATOR	1
2.	*265-10	CUP-Starter	1
3.	121-6	HANDLE	1
4.	124-6-500	HOUSING-Includes Recoil Spring	1
5.	*183-25-500	NUT & L'WASHER ASSEMBLY	4
6.	157-129-500	PAWL & PIN ASSEMBLY	1
7.	219-28-500	PULLEY ASSEMBLY	1
8.	232-147	RING-Retaining	1
9.	232-35	RING-Retaining	1
10.	246-7	ROPE	1
11.	*257-30	SCREEN (Not Illustrated)	1
12.	*258-191	SCREW-Pan Head	4
13.	263-133	SPRING-Actuator	1
14.	263-79	SPRING-Recoil	1
15.	304-320	WASHER	1

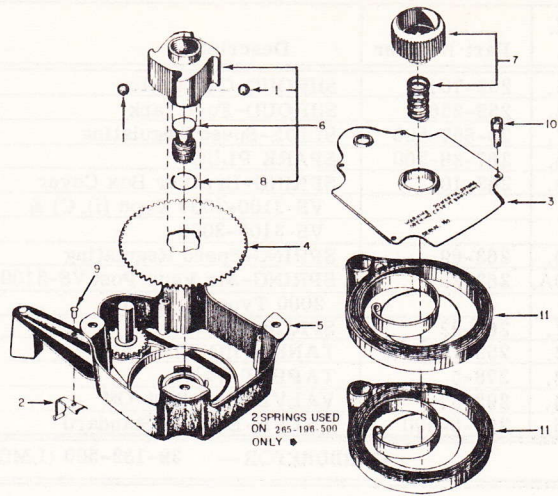
\* Indicates Parts Not Included with Recoil Assembly.



Ref. No.	Part Number	Description	265-123-500
2.	265-12-500	CUP ASSEMBLY-Starter	1
4.	265-11-500	CUP ASSEMBLY-Includes Recoil Spring	1
5.	121-6	HANDLE	1
6.	124-29-500	HOUSING ASSEMBLY	1
7.	183-56	NUT-Lock	2
8.	183-25-500	NUT & LOCK WASHER ASS'Y	4
9.	157-239	PAWL	2
10.	219-70-500	PULLEY ASSEMBLY-Starter Sheave	1
11.	232-147	RING-Retaining	1
12.	246-7	ROPE-58" Standard Length	1
13.	257-26	SCREEN-Rotating	1
14.	258-180	SCREW-Hex. Hd. Cap	2
15.	258-191	SCREW-Projection Weld	4
17.	304-82	SPACER-Pawl	2
18.	263-164	SPRING-Pawl	2
19.	304-547	WASHER-Retaining	1
20.	304-170	WASHER-Wave	1



Ref. No.	Part Number	Description	265-196-500		265-206-500	
1.	20-208	BALL-Bearing	2	2		
2.	*81-167	CLIP-Handle	1	1		
3.	45-384-500	COVER ASS'Y-Bottom	1	1		
4.	106-259	GEAR	1	1		
5.	124-162-500	HOUSING ASSEMBLY				
	124-164-500	HOUSING ASSEMBLY			1	
6.	<del>265-216-500</del>	PLUNGER ASSEMBLY			1	
	265-217-500	PLUNGER ASSEMBLY	1			
7.	265-240	RATCHET & SPRING KIT			1	
	265-241	RATCHET & SPRING KIT	1			
8.	232-157	RING-Retaining Ball	1	1		
9.	*244-47	RIVET-Clip to Handle	1	1		
10.	258-918-500	SCREW & L'W ASS'Y-Cover	4	4		
11.	263-336-500	SPRING ASS'Y-Power	1			
	263-337-500	SPRING ASS'Y-Power			2	



\* Not used on all Impulse Starters; Handle will show evidence of installation if factory applied.



## MODEL VARIATIONS

### VS-3100-2000 & VS-3100-3000

SEC. II, DIVISION  
VS-3100-2000  
VS-3100-3000  
ISSUED DEC., 1958  
REVISED JULY, 1966

The adaptation of Clinton Engines to a wide variety of uses, results in what is known as Model Variations. Following is a list of Models produced to date. Opposite each Engine Model listed are the Part Numbers required in addition to or in place of standard applications. Refer to Basic Parts List for parts not listed in the Model Variations. For replacement engine to fit special applications, external part changes may be required.

\* Short Block not adaptable to Type A engines.

UNITS MARKED WITH A ( ) INDICATES CRANKSHAFT TO BE CUT OR CHANGED.

See Page C of this Manual on "How to Identify your Clinton Engine".

MODEL	CRANKSHAFT	NOTES	REPL. ENGINE	SHORT BLOCK	MODELS	CRANKSHAFT	NOTES	REPL. ENGINE	SHORT BLOCK
VS-3100-2000	46-422		21412	* 149-497	VS-3100-2136	46-432	1, 6, 16	Nt. 30	None
VS-3100-2100	46-411		(21412)	*(149-497)	VS-3100-2137	46-422	1, 3	21412	* 149-497
VS-3100-2101	46-412		(21412)	*(149-497)	VS-3100-2138	46-422	1, 3	21412	* 149-497
VS-3100-2102	46-413		21582	*(149-497)	VS-3100-2139	46-422	1, 5	21412	* 149-497
VS-3100-2103	46-411	1, 5, 6	(21412)	*(149-497)	VS-3100-2140	46-788	1, 3, 7	21412	* 149-496
VS-3100-2104	46-413	1, 5, 6	21582	*(149-497)	VS-3100-2141	46-788	1, 3, 7	21412	* 149-496
VS-3100-2105	46-422	3	21412	* 149-497	VS-3100-2142	46-411	1, 2, 3	(21412)	*(149-497)
VS-3100-2106	46-422	1, 13	21412	* 149-497	VS-3100-2143	46-450	1, 3	(21412)	*(149-497)
VS-3100-2107	46-413	3, 6	21582	*(149-497)	VS-3100-2144	46-449	1	21581	* 149-500
VS-3100-2108	46-422	1	21412	* 149-497	VS-3100-2145	46-422	1, 3, 11	21412	* 149-497
VS-3100-2109	46-422	1, 14	21412	* 149-497	VS-3100-2146	46-788	1, 3, 7	21412	* 149-496
VS-3100-2110	46-422	1, 2, 6, 14	21412	* 149-497	VS-3100-2147	46-788	1, 3, 7	21412	* 149-496
VS-3100-2111	46-422	1, 3	21412	* 149-497	VS-3100-2148	46-411	1, 3	(21412)	*(149-497)
VS-3100-2112	46-422	1	21412	* 149-497	VS-3100-2149	46-450	1, 3	(21412)	*(149-497)
VS-3100-2113	46-776	1, 3, 7	21544	*(149-498)	VS-3100-2150	46-422	1	21412	* 149-497
VS-3100-2114	46-788	1, 6, 7	(21412)	* 149-496	VS-3100-2151	46-422	1, 3	21412	* 149-497
VS-3100-2115	46-422	1, 6, 14	21412	* 149-497	VS-3100-2152	46-452	1, 2, 3	(21412)	*(149-497)
VS-3100-2116	46-422	1, 3	21412	* 149-497	VS-3100-2153	46-422	1, 5, 8	21412	* 149-497
VS-3100-2117	46-413	3	21582	*(149-497)	VS-3100-2154	46-788	1, 3, 7	21412	* 149-496
VS-3100-2118	46-413	1, 3, 6, 11, 14	21582	*(149-497)	VS-3100-2155	46-788	1, 3, 7	21412	* 149-496
VS-3100-2119	46-788	1, 6, 7	(21412)	* 149-496	VS-3100-2156	46-411	1, 3	(21412)	*(149-497)
VS-3100-2120	46-788	1, 3, 6, 7	(21412)	* 149-496	VS-3100-2157	46-788	1, 3, 7	21412	* 149-496
VS-3100-2121	46-411	1, 3	(21412)	*(149-497)	VS-3100-2158	46-422	1, 3, 4	21412	* 149-497
VS-3100-2122	46-776	1, 3, 7	21544	*(149-498)	VS-3100-2159	46-462	1, 3, 7	(21412)	*(149-498)
VS-3100-2123	46-422	14	21412	* 149-497	VS-3100-2160	46-488	1, 7	21412	* 149-496
VS-3100-2124	46-422	1, 3	21412	* 149-497	VS-3100-2161	46-825	1, 3, 7	(21412)	*(149-499)
VS-3100-2125	46-422	1, 3	21412	* 149-497	VS-3100-2162	46-788	1, 7	21412	* 149-496
VS-3100-2126	46-422	1, 3, 14	21412	* 149-497	VS-3100-2163	46-788	1, 7, 14	21412	* 149-496
VS-3100-2127	46-422	6	21412	* 149-497					
VS-3100-2128	46-788	1, 3, 4, 6, 7, 9, 10, 15	(21412)	* 149-496	VS-3100-2164	46-776	1, 3, 7	21544	*(149-498)
					VS-3100-2165	46-411	1	(21412)	*(149-497)
VS-3100-2129	46-422	1, 3, 5	21412	* 149-497	VS-3100-2166	46-825	1, 2, 3, 7	(21412)	*(149-499)
VS-3100-2130	46-422	1	21412	* 149-497	VS-3100-2167	46-825	1, 3, 7	(21412)	*(149-499)
VS-3100-2131	46-788	1, 3, 7	21412	* 149-496	VS-3100-2168	46-825	1, 3, 7	(21412)	*(149-499)
VS-3100-2132	46-422	1, 3	21412	* 149-497	VS-3100-2169	46-825	1, 2, 3, 7	(21412)	*(149-499)
VS-3100-2133	46-788	1, 3, 7	21412	* 149-496	VS-3100-2170	46-788	1, 3, 5, 7	21412	* 149-496
VS-3100-2134	46-788	1, 3, 6, 7, 11, 15	(21412)	* 149-496	VS-3100-2171	46-501	1, 2, 3, 7	21581	*(149-501)
VS-3100-2135	46-825	1, 7	(21412)	*(149-499)	VS-3100-2172	46-422	1, 2, 3	21412	* 149-497

(Continued)



\* Short Block not adaptable to Type A engines.  
 UNITS MARKED WITH A ( ) INDICATES CRANKSHAFT TO BE CUT OR CHANGED.  
 See Page C of this Manual on "How to Identify your Clinton Engine".

MODEL	CRANKSHAFT	NOTES	REPL. ENGINE	SHORT BLOCK	MODELS	CRANKSHAFT	NOTES	REPL. ENGINE	SHORT BLOCK
VS-3100-2173	46-411	1, 3	(21412)	*(149-497)	VS-3100-3137	46-494	21, 28	(21582)	(149-499)
VS-3100-2174	46-433	1, 3, 6, 12	(21412)	*(149-497)	VS-3100-3138	46-776	3, 27	21544	(149-498)
VS-3100-2175	46-411	5	(21412)	*(149-497)	VS-3100-3139	46-825	3, 27	(21412)	(149-499)
VS-3100-2176	46-422	1, 2, 14	21412	* 149-497	VS-3100-3140	46-825	3, 28	(21412)	(149-499)
VS-3100-2177	46-422	1, 3, 11	21412	* 149-497	VS-3100-3141	46-788	5, 8, 27	21412	149-496
VS-3100-2178	46-422	1, 2, 6, 8	21412	* 149-497	VS-3100-3142	46-776	3, 5, 27	21544	(149-498)
VS-3100-2179	46-788	1, 3, 7	21412	* 149-496	VS-3100-3143	46-497	27	21412	149-499
VS-3100-2180	46-411	1	(21412)	*(149-497)	VS-3100-3144	46-497	28	21412	149-499
VS-3100-2181	46-422	1, 5	21412	*(149-497)	VS-3100-3145	46-788	14, 21, 28	21412	149-496
VS-3100-3000	46-776		21544	(149-498)	VS-3100-3146	46-497	3, 5, 27	21412	149-499
VS-3100-3100	46-462		(21412)	(149-498)	VS-3100-3147	46-743	3, 27, 29	Nt.30	None
VS-3100-3101	46-464		(21412)	(149-498)	VS-3100-3148	46-776	25	21544	(149-498)
VS-3100-3102	46-466		(21412)	(149-498)	VS-3100-3149		Never Built		
VS-3100-3103	46-825	5, 27	(21412)	(149-499)	VS-3100-3150	46-497	3, 27	21412	149-499
VS-3100-3104	46-832	5, 27	21582	(149-499)	VS-3100-3151	46-497	3, 27	21412	149-499
VS-3100-3105	46-825	5, 28	(21412)	(149-499)	VS-3100-3152	46-788	3, 27	(21412)	149-496
VS-3100-3106	46-788	27	21412	149-496	VS-3100-3153	46-497	3, 28	21412	149-499
VS-3100-3107	46-788	3, 27	21412	149-496	VS-3100-3154	46-832	3, 5, 27	21582	(149-499)
VS-3100-3108	46-497	5, 3, 28	21412	149-499	VS-3100-3155	46-832	3, 5, 28	21582	(149-499)
VS-3100-3109	46-788	3, 17	21412	149-496	VS-3100-3156	46-788	Short Block		149-496
VS-3100-3110	46-788	3, 27	(21412)	149-496	VS-3100-3157	46-422	Short Block		149-497
VS-3100-3111	46-788	3, 15, 27	(21412)	149-496	VS-3100-3158	46-784	Short Block		149-498
VS-3100-3112	46-788	3, 15, 27	(21412)	149-496	VS-3100-3159	46-497	Short Block		149-499
VS-3100-3113	46-776	3, 14, 28	21544	149-498	VS-3100-3160	46-787	Short Block		149-500
VS-3100-3114	46-497	3, 5, 27	21412	149-499	VS-3100-3161	46-776	3, 14, 17, 21	21544	(149-498)
VS-3100-3115	46-788	14, 27	21412	149-496	VS-3100-3162	46-788	3, 15, 21, 27	(21412)	149-496
VS-3100-3116	46-497	27	21412	149-499	VS-3100-3163	46-788	3, 5, 21, 24, 28	(21412)	149-496
VS-3100-3117	46-499	3, 12, 13, 27	(21412)	(149-496)	VS-3100-3164	46-788	3, 17	(21412)	149-496
VS-3100-3118	46-466	3, 15, 18, 19, 27	(21412)	(149-498)	VS-3100-3165	46-788	22, 23, 28	(21412)	149-496
VS-3100-3119	46-776	14, 27	21544	(149-498)	VS-3100-3166	46-466	3, 14, 17, 21	(21412)	(149-498)
VS-3100-3120	46-776	14	21544	(149-498)	VS-3100-3167	46-776	14, 27	21544	(149-498)
VS-3100-3121	46-788	3, 18, 19, 28	(21412)	149-496	VS-3100-3168	46-776	28	21544	(149-498)
VS-3100-3122	46-497	28	21412	149-499	VS-3100-3169	46-788	22, 23, 28	(21412)	149-496
VS-3100-3123	46-452	3, 15, 20, 27	(21412)	(149-497)	VS-3100-3170	46-776	3, 21, 27	21544	(149-498)
VS-3100-3124	46-788	3, 28	21412	149-496	VS-3100-3171	46-788	3, 17, 21	21412	149-496
VS-3100-3125	46-788	3, 15, 19, 21, 28	(21412)	149-496	VS-3100-3172	46-788	21	21412	149-496
VS-3100-3126	46-788	3, 15, 21, 27	(21412)	149-496	VS-3100-3173	46-776	3, 12, 14, 27	21544	(149-498)
VS-3100-3127	46-788	3, 21, 28	21412	149-496	VS-3100-3174	46-776	3, 21, 27	21544	(149-498)
VS-3100-3128	46-788	3, 21, 27	21412	149-496	VS-3100-3175	46-776	2, 3, 5, 14, 26, 27	21544	(149-498)
VS-3100-3129	46-788	14, 21, 27	21412	149-496	VS-3100-3176	46-497	3, 5	21412	149-499
VS-3100-3130	46-776	3, 27	21544	(149-498)	VS-3100-3177	46-776	27	21544	(149-498)
VS-3100-3131	46-788	3, 28	21412	149-496	VS-3100-3178	46-788	3, 17	21412	149-496
VS-3100-3132	46-788	3, 27	21412	149-496	VS-3100-3179	46-832	3, 5, 17	21582	(149-499)
VS-3100-3133	46-422	2, 20, 27	21412	149-497	VS-3100-3180	46-831	3, 26, 28	21581	149-501
VS-3100-3134	46-825	3, 28	(21412)	(149-499)	VS-3100-3181	46-484	27	(21412)	(149-498)
VS-3100-3135	46-784	27	21544	149-498	VS-3100-3182	46-776	3, 14, 27	21544	(149-498)
VS-3100-3136	46-494	3, 27	(21582)	(149-499)	VS-3100-3182	46-776	3, 14, 28	21544	(149-498)

VS-3100-2000 & VS-3100-3000 SERIES NOTES

- Note 1 Use 265-123-500 Recoil Starter and 259-129-500 Housing Blower.
- Note 2 Use 170-141 Muffler Assembly.
- Note 3 Use 307-120-500 Shorting Wire, 70-7 Nut Insulation, 258-936-500 Screw, 183-26 Nut, 266-26 Clip Shorting, 70-10 Grommet.
- Note 4 This unit is a basic VS-4100-1000 engine. For parts other than listed in notes; use basic VS-4100-1000 parts list.
- Note 5 Use 122-17 Cylinder Head and 83-10-500 Cast Iron Flywheel.
- Note 6 Use 216-24 Side Plug Base and 216-25 Bottom Plug Base.
- Note 7 Use 18-45-500 Base and 94-176 Oil Seal Base.
- Note 8 Use 2-31 Pre-Cleaner for Air Filter.
- Note 9 Use 69-6 Connector-Hose (Fuel Tank).
- Note 10 Use 94-68 Gasket, 169-6 Manifold, (2) 258-284-500 Screws, 24-13 Stud, 258-190 Screw, 159-14 Governor Link, 39-132-500 Carburetor, (2) 183-29-500 Nut, 81-41 Shorting Clip, 26-656-500 Slide Assembly, (2) 258-936-500 Screws, 263-50 Governor Spring, 259-239 Shroud-Carburetor, 69-50 Air Horn, (2) 258-102 Screws, 94-11 Gasket (Air Cleaner to Air Horn), 2-9-500 Air Cleaner, 304-136 Washer-Air Cleaner Screw, 258-72 Screw-Air Cleaner, 183-66 Wing Nut-Air Cleaner and 81-3 Cable Clamp.
- Note 11 Use 2-195 Air Cleaner Assembly.
- Note 12 Use 69-18 Elbow-Muffler (90°).
- Note 13 Use 121-10 Knob Control Arm and 258-41-500 Screw.



- Note 14 Use 307-31-500 Remote Control Cable.
- Note 15 Use 170-18-500 Muffler (45°).
- Note 16 Use 18-49-500 Base Assembly.
- Note 17 Use 265-196-500 Impulse Starter, 265-106-500 Cup, 257-30 Screw Rotating, (4) 183-25-500 Nut, 259-361-500 Housing.
- Note 18 Use 2-103-500 Air Cleaner, 2-33 Element Air Cleaner.
- Note 19 Use 26-95 Bracket-(Carburetor Shroud).
- Note 20 Use 18-17-500 Base Assembly and 94-172 Oil Seal.
- Note 21 Use 45-190-500 Oil Level Gauge.
- Note 22 Use 45-68-500 Cover-Spark Plug.
- Note 23 Use 83-10-500 Cast Iron Flywheel.
- Note 24 Use 45-344-500 Cap and Fuel Gauge.
- Note 25 Use 45-304 Cover (Valve Compartment), 1-53-500 Adaptor (Carb.), (2) 258-284-500 Screw (Adaptor to Block), 39-874-500 Carburetor 94-69 Gasket (Carb. to Adaptor), 69-123 Fitting (Fuel Line), 258-190 Screw (Carb. to Adaptor), 183-29-500 Nut (Carb. to Adaptor), 259-375 Shroud Carb., 900-340 Spacer (Air Cleaner), (2) 94-13 Gasket (Spacer to Air Cleaner), 2-144 Body (Air Cleaner), (2) 258-902 Screw (Air Cleaner to Carb.), 159-73 Link Governor, 259-379-500 Housing (Blower), 277-388-500 Tank (Fuel), (2) 26-351-500 Strap (Fuel Tank), (2) 183-53 Nut, (2) 258-185-500 Screw, 259-738-500 Shroud (Decorative), (2) 258-160 Screw (Shroud to Bracket), 258-280-500 Screw (Bracket to Block), 45-181 Cap-Fuel (Plastic), 45-424-500 Cap-Fuel (Metal).
- Note 26 Use 216-22 Plug (Oil).
- Note 27 Use 259-129-500 Housing (Blower), 265-123-500 Recoil Starter on engines below serial number 9111396 or 265-28-500 Recoil Starter on engines above serial number 9111396.
- Note 28 Use 259-361-500 Housing (Blower), 265-196-500 Impulse Starter on engines below serial number 8535574 and 265-206-500 Impulse Starter on engines above serial number 8535574, 265-106-500 Cup (Starting), 257-30 Screen (Rotating) and (4) 258-25-500 Nut.
- Note 29 Use 18-116 Base and 94-172 Oil Seal.
- Note 30 Special engine order by complete model number.

**SERVICE INFORMATION VS-3100-2000 & VS-3100-3000 SERIES**

Type of Carburetion -----	Float	Oil Capacity -----	1 1/4 Pint
Bore -----	2 3/8"	Bearing-Flywheel End -----	Bronze
Stroke -----	1 7/8"	Bearing-PTO End -----	Bronze
Cubic Inch Displacement -----	8.3	Valve Lash Setting -----	.009 to .011
Spark Plug Gap -----	.025 to .028	RPM-Horsepower Rating -----	3 @ 3600
Point Setting -----	.018 to .021	Block Construction -----	Die-Cast Aluminum with Cast Iron Sleeve