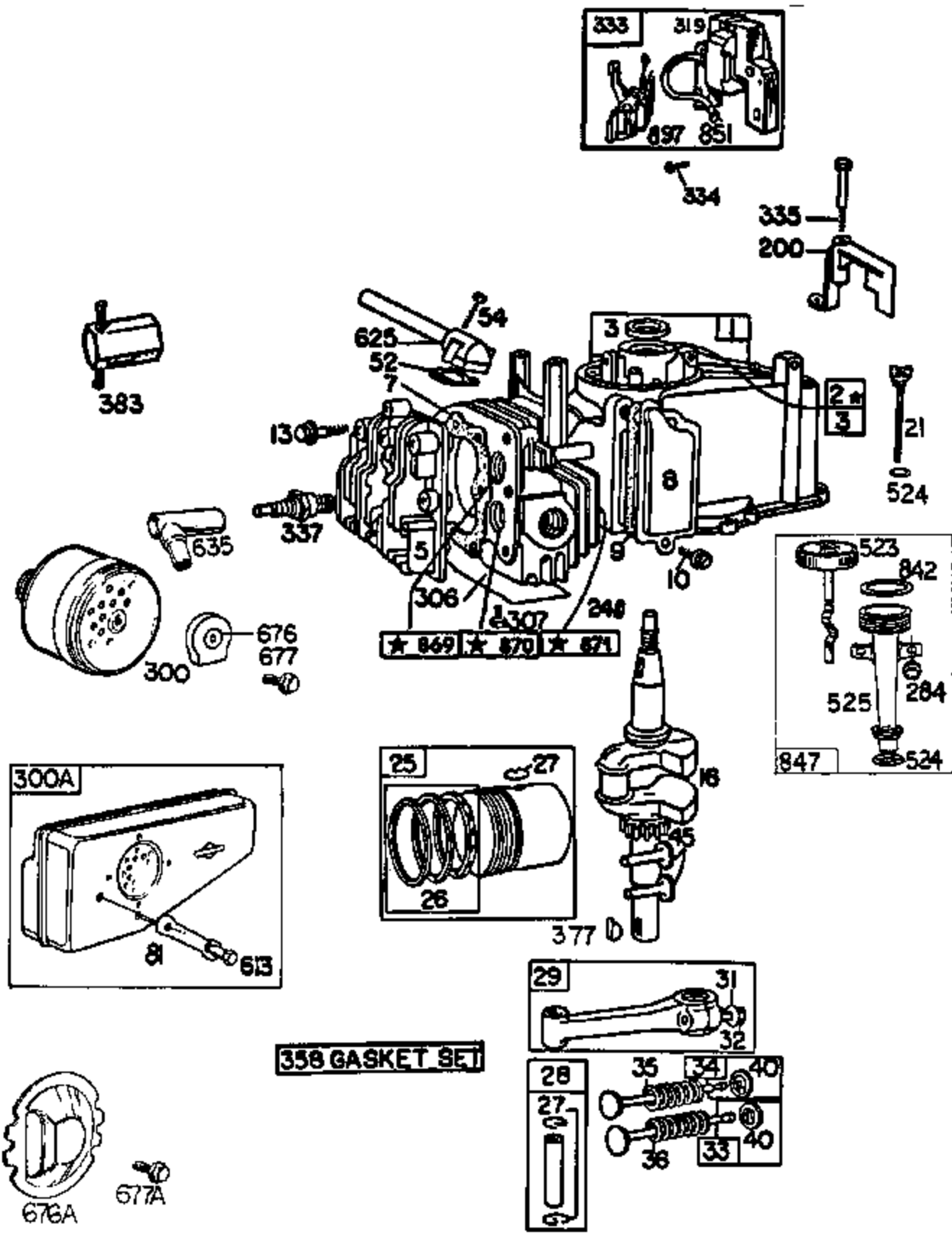
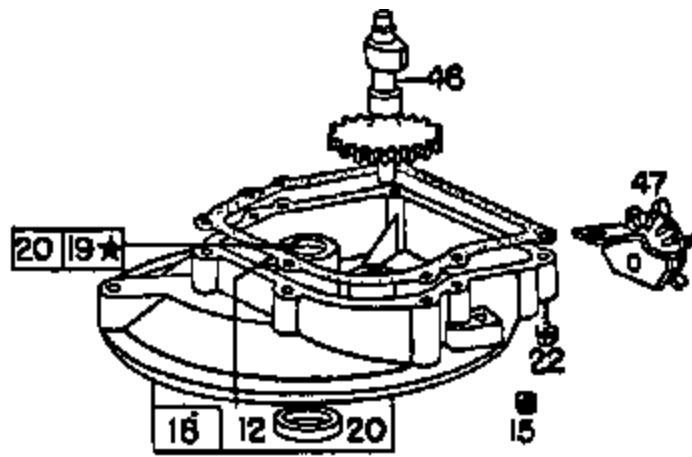


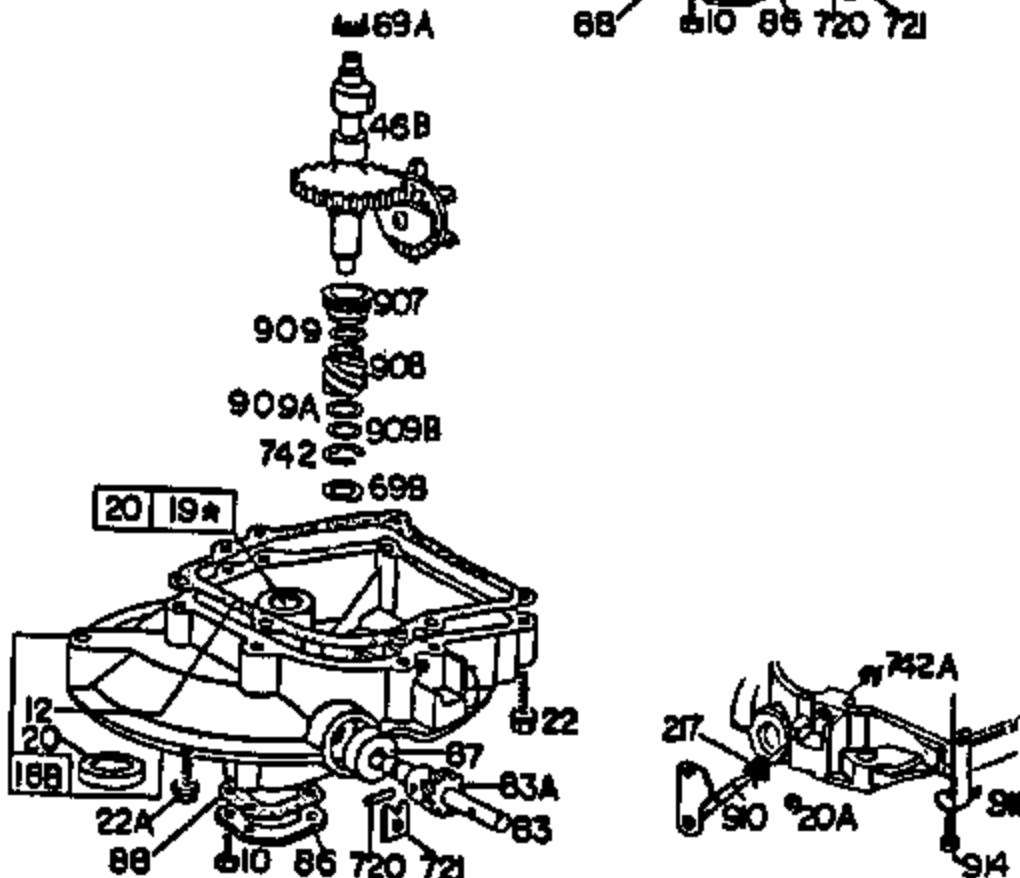
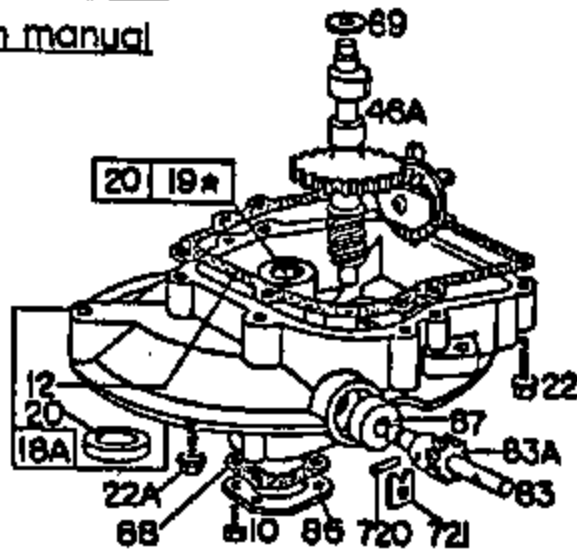
FORM MS- 8039
11/83
Illustrated Parts List
Model Series
93500 to 93599
COMPLIANCE/NON- COMPLIANCE
TYPE NUMBERS
5107 through 5119
5130 through 5220



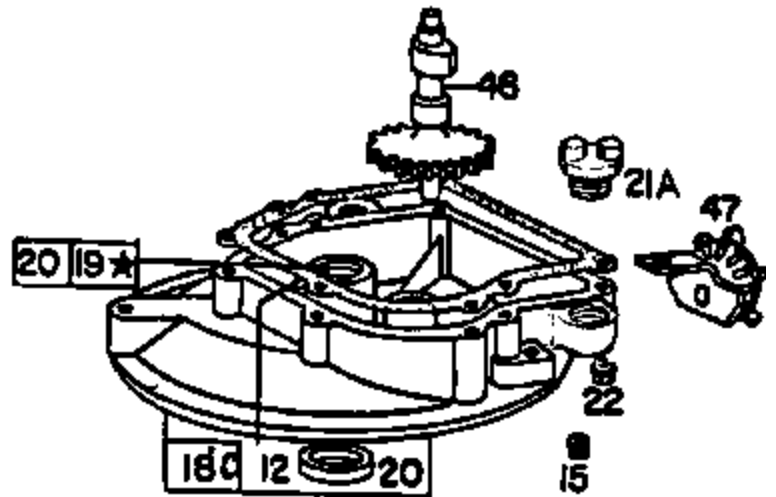
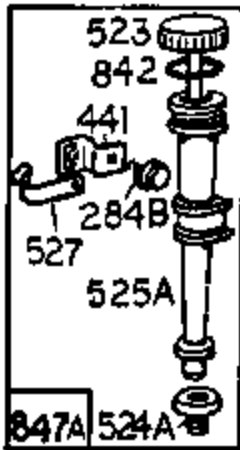
**★NOTE-SPECIAL TOOLS REQUIRED FOR INSTALLING
SEE REPAIR INSTRUCTION MANUAL**



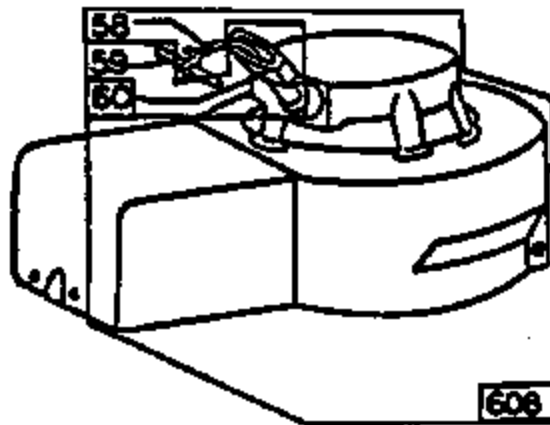
★ Special tools required to install.
See repair instruction manual



Sump assembly illustrated on this page includes an oil filler opening.



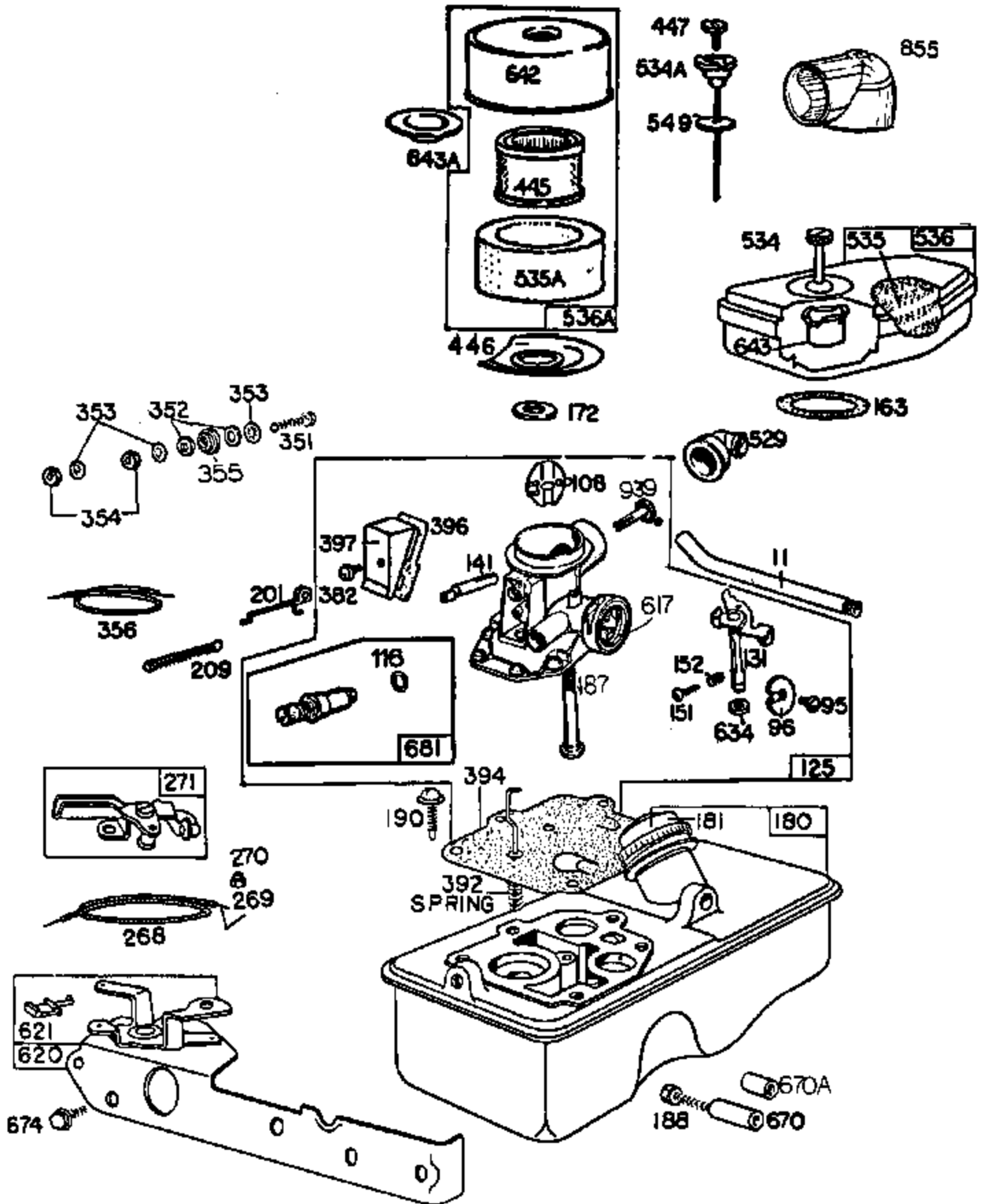
★ **NOTE-SPECIAL TOOLS REQUIRED FOR INSTALLING**
SEE REPAIR INSTRUCTION MANUAL

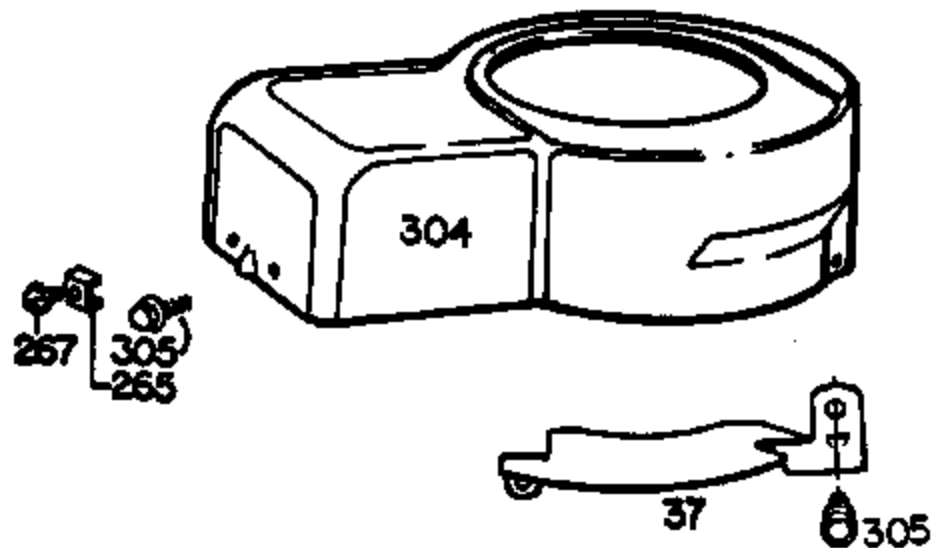
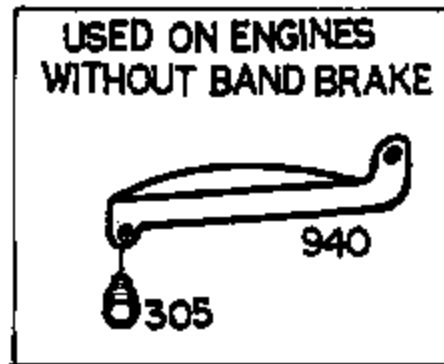
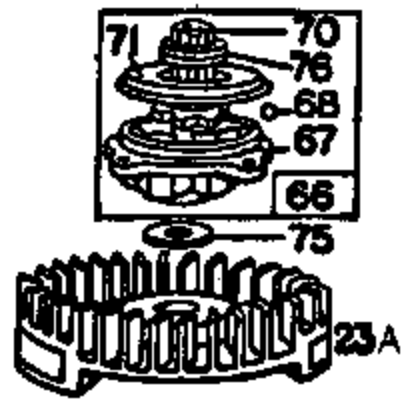
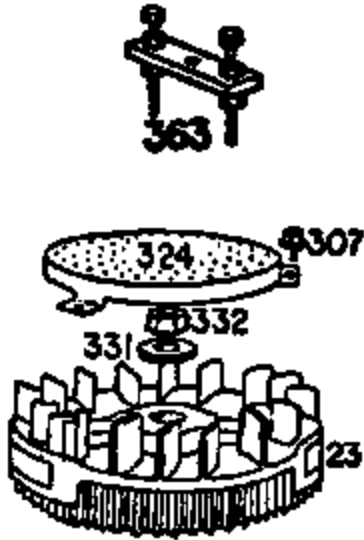
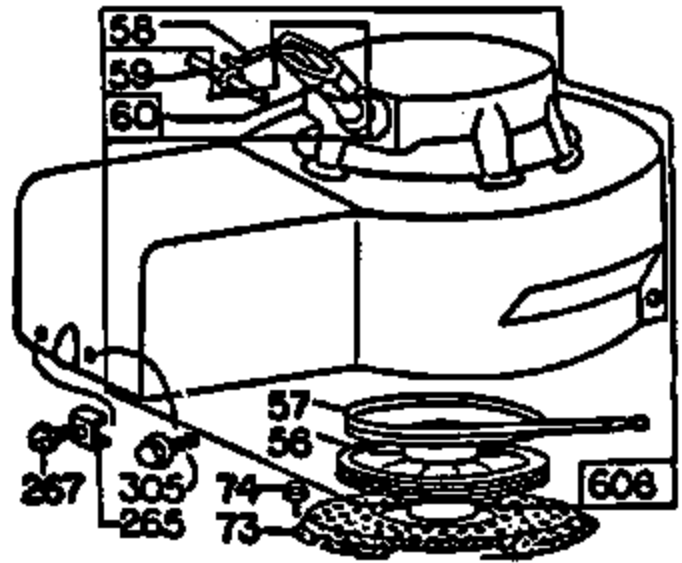
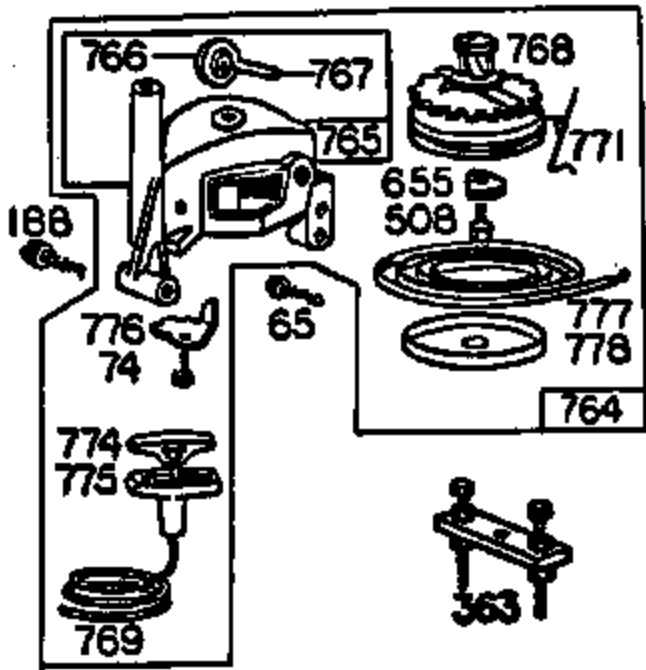


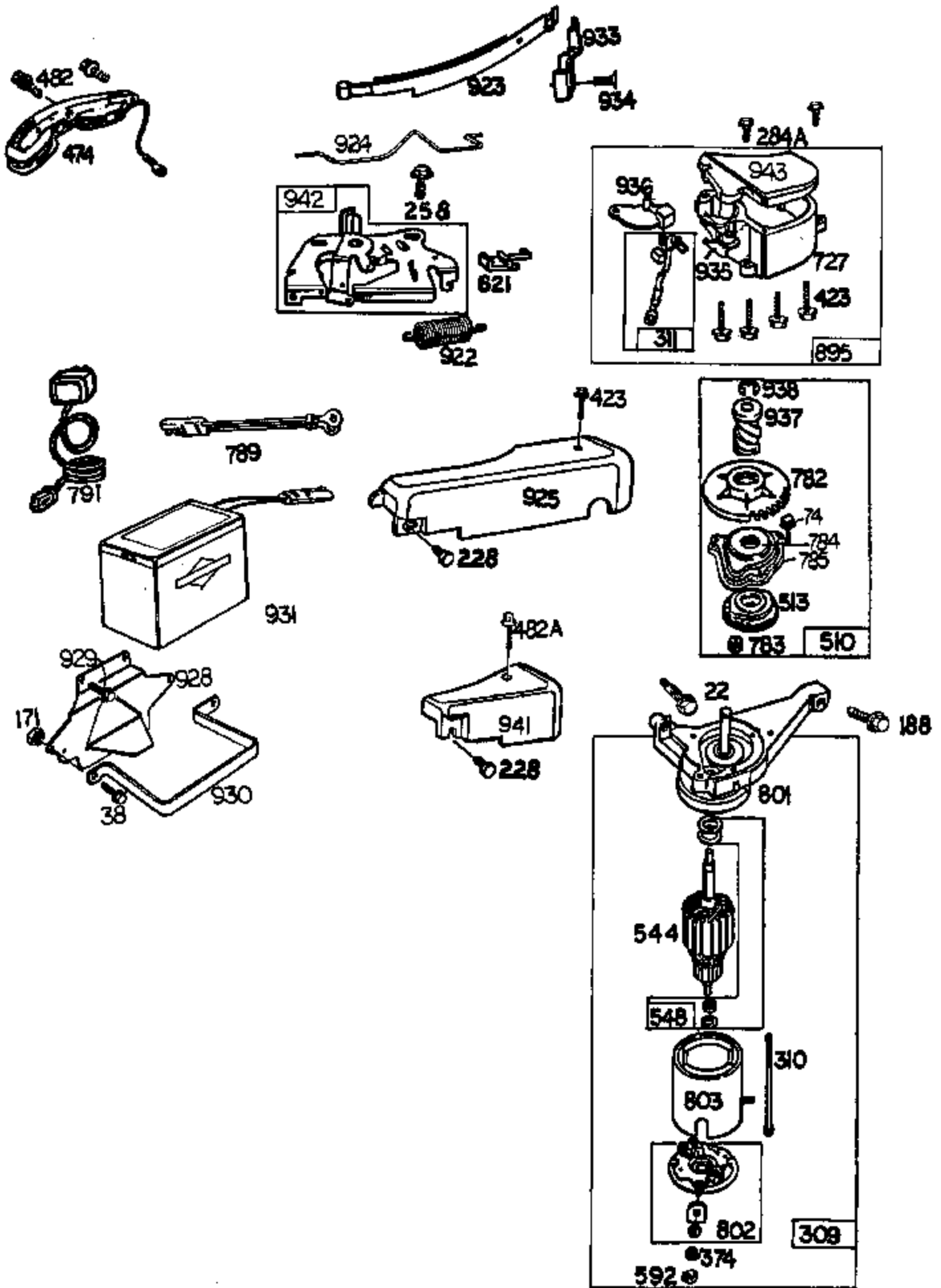
This Chart Applies to Engines That Were Originally Equipped With Rewind Starters.

o'clock position	REWIND STARTER WITH BAND BRAKE	REWIND STARTER WITHOUT BAND BRAKE	ELECTRIC STARTER WITH BAND BRAKE	ELECTRIC STARTER WITHOUT BAND BRAKE
1:30	—	395240 (48)	395311	—
6	—	—	395231	—
9	394928	—	—	—
12	395576	—	—	—

(48) Designates Rope Length of 48-5/8"







- 1 395373 Cylinder Assembly
- 2 293708 Bushing--Cylinder
- Note: Requires special tools
for installation
- 3 299819 Seal--Oil
- 5 211479 Head--Cylinder
- 7 *270341 Gasket--Cylinder
Head
- 8 298383 Breather--Valve
Chamber
- 9 *270239 Gasket--Valve Cover
- 10 93394 Screw--Breather and
P. T. O. Gear Sump
Cover Mtg. Sem
(Ref. No. 86)
- 11 231272 Tube--Breather
- 12 *270833 Gasket--Crankcase-
.015" thick (Standard)
- *270895 Gasket--Crankcase--
.005" thick
- *270896 Gasket--Crankcase--
.009" thick
- 13 93111 Screw--Cylinder
Head
(1-15/16" long)
- 15 93418 Plug--Oil Drain
(Socket Head)
- 16 260124 Crankshaft
- Note: 260096 Crankshaft
Used on Type Nos.
5112, 5130, 5133,
5137, 5138, 5139,
5140, 5144, 5145,
5147, 5155, 5158,
5170, 5171, 5172,
5173, 5184, 5185,
5193, 5197, 5199,
5200, 5207.
260097 Crankshaft
Used on Type Nos.
5113, 5189.
260098 Crankshaft
Used on Type Nos.
5114, 5131, 5135,
5136, 5146, 5164,
5192, 5216.
260370 Crankshaft
Used on Type Nos.
5167, 5168.
260319 Crankshaft
Used on Type Nos.
5150, 5151.
260911 Crankshaft
Used on Type Nos.
5108, 5110, 5115,
5116, 5117, 5118,
5119, 5141, 5153,
5154, 5157, 5160,
5163, 5169, 5174,
5175, 5176, 5177,

5179, 5195, 5204,
5205, 5209, 5214,
5219, 5220.
260912 Crankshaft
Used on Type Nos.
5149, 5181, 5201,
5206.
261293 Crankshaft
Used on Type No.
5142.
261417 Crankshaft
Used on Type No.
5213.
The Following
Engine Bases
Do Not Have An

- 18 395384 Oil Filler Boss
Sump--Oil
Note: 395385 Sump--Oil
Used on Type Nos.
5130, 5131, 5138,
5140, 5150, 5151,
5170, 5173.
- 18A 395390 Sump--Oil
Used on Model 93580
to 93589 Series.
Note: 395391 Sump--Oil
Used on Type Nos.
5174, 5177.
- 18B 395392 Sump--Oil
(For Clutch)
The Following
Engine Base
Has An Oil
Filler Boss
- 18C 394157 Sump--Oil
- 19 293709 Bushing--Oil Sump
Note: Requires Special Tool
for Installation
- 20 391483 Seal--Oil
- 20A 280266 Seal--Oil
- 21 280381 Gage--Oil Plug
- 21A 66768 Plug--Oil Filler
(Used with Engine
Bases Which Have
An Oil Fill Boss)
- 22 93032 Screw--Sem
- 22A 93415 Screw--Sump Mtg.
Sem
(One used in Auxiliary
Drive Gear Sump) on
Model 93580 to 93599
Series.
Note: Use 93032 Screw in
the other (5) Sump
Mounting Holes.
Use (4) 93032 Screws
with (1) Ref. 914
Screw
on Clutch Type.
- 23 395578 Flywheel--Magneto
Note: 394848 Flywheel--
Magneto
Used on Type No.
5109.
394032 Flywheel--
Magneto
(Vert. Pull Only)
Used on Type Nos.
5136, 5144.
394066 Flywheel--
Magneto
(Heavy)
Used on Type Nos.
5130, 5131, 5137,
5138, 5140, 5150,
5151, 5170, 5171,
5172, 5173, 5174,
5175, 5176, 5177.
- 23A 395653 Flywheel--Magneto
- 24 222698 Key--Flywheel
- 25 298904 Piston
Assy.--Standard
- 298905 Piston Assy.--
.010" O. S.
- 298906 Piston Assy.--
.020" O. S.
- 298907 Piston Assy.--
.030" O. S.

PISTON RING SETS:

Note: For Chrome Piston
Ring Set--Standard

		Size-- Order Part No. 299742.
26	298982	Ring Set-- Standard Piston
	298983	Ring Set-- . 010" O. S. Piston
	298984	Ring Set-- . 020" O. S. Piston
	298985	Ring Set-- . 030" O. S. Piston
27	26026	Lock-- Piston Pin
28	298909	Pin Assembly-- Piston-- Standard
	298908	Pin Assembly-- Piston-- . 005" O. S.
29	294201	Rod Assy. -- Connecting
	Note:	For Connecting Rod with .020" Undersize Crankpin Bore-- Order No. 296079.
31	222282	Washer-- Conn. Rod (One for Each Screw)
32	92296	Screw-- Connecting Rod
33	296676	Valve-- Exhaust
	Note:	260442 Valve-- Exhaust Used on Type No. 5180. 260443 Valve-- Exhaust Used on Type No. 5156.
34	296677	Valve-- Intake
35	260552	Spring-- Intake Valve
36	26478	Spring-- Exhaust Valve
	Note:	26826 Spring-- Exhaust Valve Used on Type Nos. 5156, 5180.
37	223150	Guard-- Flywheel
38	93777	Screw-- Battery Bracket
40	93312	Retainer-- Valve Spring
	Note:	292259 Rotocap-- Exhaust Valve 230126 Pin-- Exhaust Valve Rotocap Retainer 230127 Retainer-- Exhaust Valve Rotocap Used on Type Nos. 5156, 5180.
45	230173	Tappet-- Valve
46	394800	Gear-- Cam
46A	396197	Cam Gear, Worm and Oil Slinger Assembly
	Note:	395317 Cam Gear Worm and Oil Slinger Assy. (Counterclockwise) Used on Type Nos. 5110, 5116, 5141, 5154, 5157, 5160, 5169, 5174, 5175, 5176, 5177, 5179, 5195, 5201, 5204, 5205, 5206, 5220.
46B	395334	Cam Gear and Oil Slinger Assembly (For Clutch)

47	294652	Oil Slinger Gear and Bracket
52	*270345	Gasket-- Intake Elbow
54	93485	Screw-- Intake Elbow Mounting
56	280117	Pulley-- Rewind Starter
57	294303	Spring-- Rewind Starter
58	280406	Rope-- Rewind Starter-- 81" long

Note: If longer rope is
needed, Order No.
280399 (99") and cut
to
required length.
Order 66734 for
48-5/8" rope.

59	230228	Pin-- Starter Rope
60	393152	Grip-- Starter Rope
65	93587	Screw-- Vertical Pull Starter Mounting
66	394558	Clutch Assy.-- Rewind Starter
67	394897	Housing-- Starter Clutch
68	63770	Ball-- Clutch
69	66718	Washer-- Thrust

Note: 68938 Washer-- Thrust
(13/16" O. D. x
17/32" I. D.)
Used on counterclock-
wise rotation
Auxiliary
Drive P. T. O. Camshaft
and is located next to
the Worm Gear.

69A	223225	Washer-- Clip
69B	223228	Washer-- Thrust
70	298436	Ratchet-- Rewind and Wind-up Starter
71	221653	Washer-- Clutch Retainer
73	221661	Screen-- Starter Pulley
74	†93490	Screw-- Sem

75	223047	Washer-- Spring
Note:	220865	Washer-- Spring Used with Heavy Flywheel

76	68238	Washer-- Ratchet Sealing
81	223256	Lock-- Muffler Screw
83	230831	Shaft-- Drive

Note: 230921 Shaft-- Drive
Used on Type No.
5154.
230948 Shaft-- Drive
Used on Type Nos.
5169, 5181, 5206.
230952 Shaft-- Drive
Used on Type Nos.
5141, 5160, 5204,
5209.
231213 Shaft-- Drive
Used on Type Nos.
5163, 5214.

83A	231278	Gear-- Drive
Note:	231279	Gear-- Drive Used on Type Nos. 5110, 5116, 5117, 5119, 5141, 5149, 5154, 5157, 5160, 5169, 5174, 5175,

5176, 5177, 5179,
5195, 5201, 5204,
5205, 5206, 5209,
5220.

86 221780 Cover-- Sump
87 391484 Seal-- Oil
88 *270328 Gasket-- Sump Cover
95 93499 Screw-- Throttle
Valve
Mounting Sem
96 211203 Valve-- Throttle
108 280370 Valve-- Choke
116 280203 Seal-- O- Ring
125 395375 Carburetor Assembly
131 394588 Shaft and Lever
Throttle
141 68908 Shaft-- Choke
151 93524 Screw-- Machine, Rd.
Hd. -- 5- 40 x 1/2"
152 260746 Spring-- Throttle
Adj.

163 271139 Gasket-- Air Cleaner
Mounting
171 93203 Nut-- 5/16- 18
172 271077 Gasket-- Air Cleaner
180 393113 Tank Asembly-- Fuel
181 298425 Cap-- Fuel Tank
187 393001 Pipe-- Fuel
188 93585 Screw-- Fuel Tank
and
Starter Mounting
190 93440 Screw-- Fuel Tank
Mounting Sem
200 68388 Blade-- Governor
201 261027 Link-- Governor
209 260875 Spring-- Governor
For 3400 to 3600 RPM
Top Speed Set-
No Load

Note: 260876 Spring--
Governor
(For 3900 to 4100
RPM Top Speed

Set-No Load)
Used on Type No.
5200.
260877 Spring--
Governor
(For 3200 to 3400
RPM Top SpeedSet
No Load)
Used on Type Nos.
5156, 5180, 5185,
5190, 5212.
261034 Spring--
Governor
For 2900 to 3100
RPM Top Speed Set
No Load
Used on Type Nos.
5130, 5131, 5134,
5135, 5136, 5137,
5138, 5154, 5157,
5158, 5159, 5160,
5162, 5163, 5166,
5170, 5171, 5172,
5173, 5174, 5175,
5176, 5177, 5192,
5209, 5214, 5215,
5216.
261060 Spring--
Governor

For 3100 to 3300 RPM
 Top Speed Set -
 No Load
 Used on Type Nos.
 5143, 5144, 5150,
 5151, 5155, 5167,
 5193, 5196, 5201,
 5202, 5207, 5211.
 261105 Spring--
 Governor

For 3000 to 3200 RPM
 Used on Type Nos.
 5132, 5133, 5145,
 5146, 5149, 5152,
 5153, 5179, 5181,
 5182, 5184, 5194,
 5205, 5206, 5217,
 5218, 5219, 5220.
 261106 Spring--
 Governor

For 2800 to 3000 RPM
 Used on Type Nos.
 5139, 5140, 5141,
 5165, 5169, 5204.
 261419 Spring--
 Governor

For 2500 to 2700 RPM
 Used on Type Nos.
 5142, 5213.

217 261520
 228 93490
 258 94018
 265 22372
 267 93469
 268 66986

Spring-- Return
 (Clutch Lever)
 Screw-- Hex. Hd.
 Screw-- Sem
 Clamp-- Casing
 Screw-- Clamp Mtg.
 Casing-- Control
 Wire-- 48" long

Note: If longer casing is
 needed, specify length
 in inches; if a
 shorter
 casing is needed,

Order No. 66986 and
 cut to required length.

269 26099

Wire-- Control, 54"
 long

Note: If longer wire is
 needed, specify length
 in inches; if shorter
 wire is needed, Order
 No. 26099 and cut
 to required length.

270 63426
 271 290568
 284 93984
 284A 93892
 284B 93572
 300 298830

Locknut-- Control
 Wire Casing
 Lever Assy.-- Control
 Screw-- Clamp Mtg.
 Screw-- Cover
 To Starter Motor
 Screw-- Clamp Mtg.
 Muffler-- Exhaust

Note: 394569 Muffler--
 Exhaust
 Used on Type Nos.
 5130, 5131, 5142,
 5143, 5144, 5156,
 5162, 5163, 5167,
 5168, 5180, 5188,
 5200, 5211, 5212,
 5213, 5214.

300A 394644

Muffler-- Exhaust

Note: 393400 Muffler--
 Exhaust
 Used on Type No.
 5185.

304

Housing-- Blower
 For Blower Housing

With
Rewind Starter, See
Ref. No. 608.

Note: 223132 Housing- - Blower
Used on Model 93507,
and 93587 Series,
and Type No.
5109.

223188 Housing- - Blower
Used on Type Nos.
5130, 5131, 5136,
5137, 5138, 5150,
5172, 5173, 5176,
5177.

394249 Housing- - Blower
Used on Type No.
5144.

305 93559 Screw- - Blower
Housing

306 221805 Mounting Sem

307 93490 Shield- - Cylinder

Screw- - Cylinder
Shield

and Rotating Screen

Mounting Sem

309 395852 Motor- - Starter

(6 Volt)

Note: 396384 Motor- - Starter
(6 Volt)
Used before Code No.
82040100.

310 94051 Bolt- - Starter Motor

311 395728 Brush Kit- - Starter

Motor

319 395488 Armature Assy.

(Less Trigger Coil)

324 223006 Screen- - Rotating

331 223047 Washer- - Flywheel

Note: 220865 Washer- -
Flywheel
Used with Heavy
Flywheel.

332 92284 Nut- - Flywheel

333 395489 Armature- - Magneto

334 93381 Screw- - Armature

Mounting Sem

335 93435 Screw- - Armature and

Governor Blade

Mounting Sem

337 298809 Plug- - Spark

1- 1/2" High- -

(37- 42 MM)

Note: 293918 Plug- - Spark
1- 1/2" High- -
(37 MM)

(Resistor Type)

351 93735 Screw- - Terminal

352 66068 Washer- - Insulating

353 92791 Washer- - Lock- -

Shakeproof (3)

354 90576 Nut- - Hex. - - 8- 32

(2)

355 66554 Collar- - Insulating

356 395558 Wire- - Ground

Note: 298581 Wire- - Ground
Used on Type No.
5144.

394826 Wire- - Ground

Used on Type No.
5166.

358 298989 Gasket Set

363 19069 Puller- - Flywheel

(Optional Accessory)

374 92813 Washer- - Lock-

Shakeproof

377 93065 Key- - Woodruff No. 6

382	93864	Screw--Choke Link Cover
383	89838	Wrench-- Spark Plug
392	261016	Spring-- Diaphragm
394	299637	Diaphragm-- Carburetor
396	270571	Gasket-- Choke Link Cover
397	211678	Cover-- Choke Link
423	94026	Screw-- Hex. Hd.
441	222530	Bracket-- Oil Fill Tube
445	392308	Cartridge-- Air Cleaner
446	222844	Base-- Air Cleaner
447	93817	Screw-- Cover Mtg.
474	394529	Stator-- Alternator
482	94016	Screw-- Hex. Hd.
482A	93621	Screw-- Hex. Hd.
508	93158	Screw-- Sem
510	395727	Drive Kit-- Starter
513	+394815	Clutch Assembly-- Electric Starter
523	396372	Cap with Dipstick-- Oil Filler
524	271485	Seal-- Filler Tube
524A	68838	Seal-- Filler Tube
525	280382	Tube-- Oil Filler
525A	280131	Tube-- Oil Filler
527	222548	Clamp-- Oil Filler Tube
529	280368	Grommet-- Breather
534	93865	Screw-- Air Cleaner
Note:	93374	Screw-- Air Cleaner Used on Type No. 5197.
534A	94005	Screw-- Air Cleaner (Internal)
535	270579	Element-- Air Cleaner
535A	271466	Element-- Air Cleaner
536	390055	Cleaner Assembly-- Air
536A	392368	Cleaner Assy. -- Air
544	396058	Armature-- Starter
548	396067	Washer Set-- Starter Motor
549	270978	Washer (Below Internal Screw Head)
592	231082	Nut-- Hex. -- 10- 24
608		Starter Assy. -- Rewind See Chart
613	93935	Screw-- Muffler Mtg.
617	270344	Seal-- Intake Tube
620	299974	Plate-- Carburetor Control
621	297472	Switch-- Stop
625	298775	Tube-- Fuel Intake
634	270167	Washer-- Throttle Shaft (Felt)
635	66538	Elbow-- Spark Plug
642	222626	Cover-- Air Cleaner
643	280374	Cup-- Air Cleaner
643A	222594	Cup-- Air Cleaner
655	222057	Anchor-- Spring
670	94038	Spacer-- Fuel Tank (23/32" Long) (Used with Band Brake)
670A	94047	Spacer-- Fuel Tank (13/16" Long)
674	93158	Screw-- Tank to Bracket

676	393755	Deflector-- Muffler (Side Outlet)
	Note: 393760	Deflector-- Exhaust Uses: 93705 Screw-- Muffler Used on Type Nos. 5142, 5143, 5144, 5156, 5168, 5200, 5202, 5211, 5212.
676A	393756	Deflector-- Exhaust (Side Outlet)
677	93606	Screw-- Muffler Deflector
677A	93705	Screw-- Muffler Deflector
681	395508	Needle Valve Kit
720	93474	Pin--Gear to Shaft
721	221779	Stop--Drive Shaft
727	280336	Base--Electric Starter Cover
742	93525	Ring--Retaining
742A	93925	Ring--Retaining (Clutch Lever)
764	395853	Starter Assembly-- Side Pull Used on Type No. 5109.
	Note: 396082	Starter Assy.-- Vertical Pull Used on Type Nos. 5130, 5131, 5136, 5137, 5138, 5150, 5172, 5173, 5176, 5177.
765	395729	Housing--Side Pull Starter Used on Type No. 5109.
	Note: 299947	Housing-- Vertical Pull Starter Used on Type Nos. 5130, 5131, 5136, 5137, 5138, 5150, 5172, 5173, 5176, 5177.
766	280022	Pulley--Rope (Small)
767	231048	Pin--Small Rope Pulley
768	395870	Pulley and Gear Assy. Used on Type No. 5109.
	Note: 299948	Pulley and Gear Assembly Used on Type Nos. 5130, 5131, 5136, 5137, 5138, 5150, 5172, 5173, 5176, 5177.
769	66904	Rope--Vertical Pull Starter (79" long)
	Note:	If longer rope is required, Order No. 280399 (99") and cut to required length. Order 66734 for 48-5/8", rope.
771	299961	Clip--Vertical Pull Starter
774	280121	Insert--Starter Handle
775	280036	Grip--Starter Rope

776	222049	Guide--Rope
777	390066	Spring--Vertical Pull Starter
778	280021	Cover--Vertical Pull Starter Cover
782	+280038	Gear--Electric Starter Spur
783	+261606	Gear--Electric Starter Pinion
784	+223132	Cover--Electric Starter Clutch Gear
785	+271457	Gasket--Electric Starter Clutch Gear Cover
789	395624	Harness Assembly-- Wiring (4-1/2" Long)
Note:	395602	Harness Assy.-- Wiring (14" Long) (for Remote Mount Battery)
791	395569	Charger--Battery (120 volt)
Note:	395585	Charger-- Battery (240 volt)
801	395851	Motor Output End Cover and Mounting Bracket
Note:	396387	Motor Output End Cover and Mounting Bracket Used before Code No. 82040100.
802	396061	Cap Assembly--End
803	396059	Housing--Starter
842	270920	Seal--Oil Filler Cap
847	395869	Fill Group--Oil
847A	392055	Fill Group--Oil
851	221798	Terminal--Ignition Cable
855	211982	Elbow--Air Cleaner Adaptor
869	210879	Seat--Intake Valve (Standard)
870	211291	Seat--Exhaust Valve (Standard)
871	63709	Guide--Exhaust Valve
895	394767	Switch and Cover Assembly--Starter
897	394970	Trigger Coil
907	394871	Sleeve Assy.--Clutch
908	231220	Gear--Worm
Note:	231219	Gear--Worm Used on Type Nos. 5117, 5119, 5149, 5209.
909	271417	Washer--Thrust
909A	271418	Washer--Thrust
909B	271312	Washer--Thrust
910	394051	Lever Assy.--Clutch
911	223009	Control Bracket--Clutch
914	93970	Screw--Bracket Mtg. Screw
922	261647	Spring--Band Brake
923	394867	Brake Assembly-- Band
924	261881	Link--Starter Switch
925	280363	Cover--Linkage

928	223162	Bracket-- Battery
929	93980	Screw-- Sem
930	223161	Bracket Support-- Battery
931	395559	Battery-- 6 Volt
933	223187	Pivot-- Band Brake
934	94037	Screw-- Band Brake Pivot
935	223128	Terminal-- Switch
936	280338	Actuator-- Switch
937	†280366	Spline-- Starter
938	†93941	Ring-- Retaining
939	394929	Shaft Assembly-- Choke
940	222403	Guard-- Flywheel
941	280395	Cover-- Linkage
942	395393	Plate-- Band Brake Control
943	280322	Top-- Electric Starter Cover

*Included in Gasket Set--
Part No. 298989.

†Included in Starter Drive Kit--
Part No. 395727.