



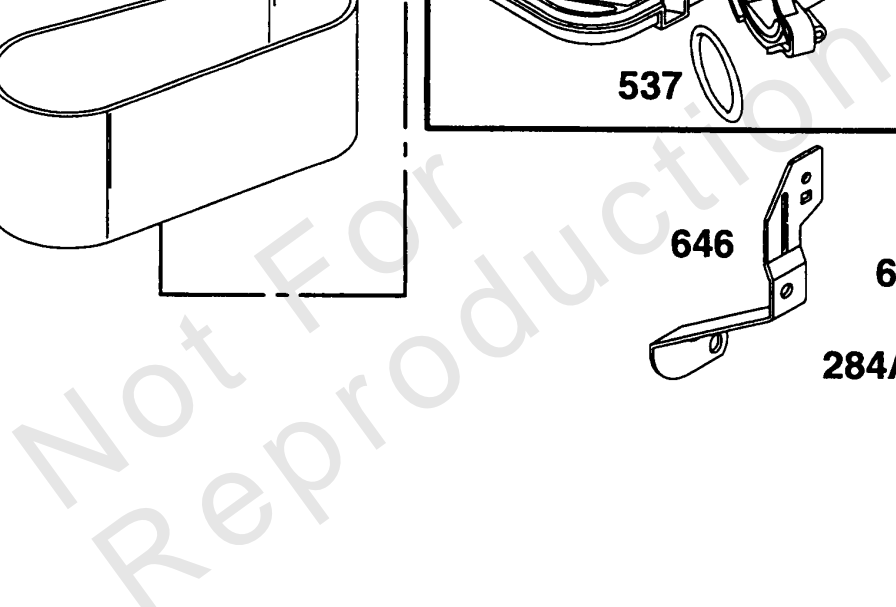
# Parts Manual

Mfg. No: 28A707-0113-01



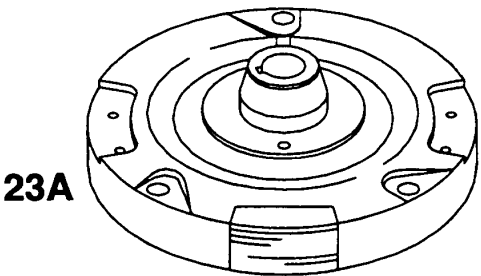
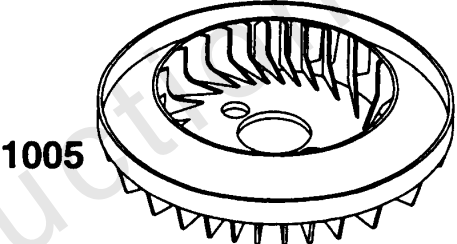
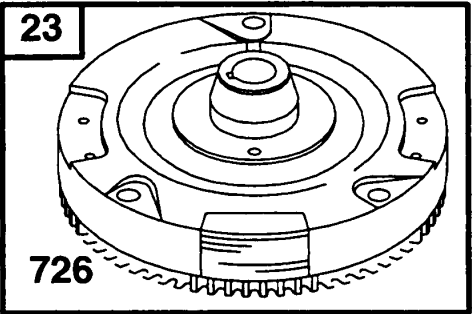
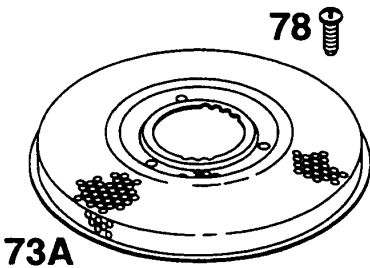
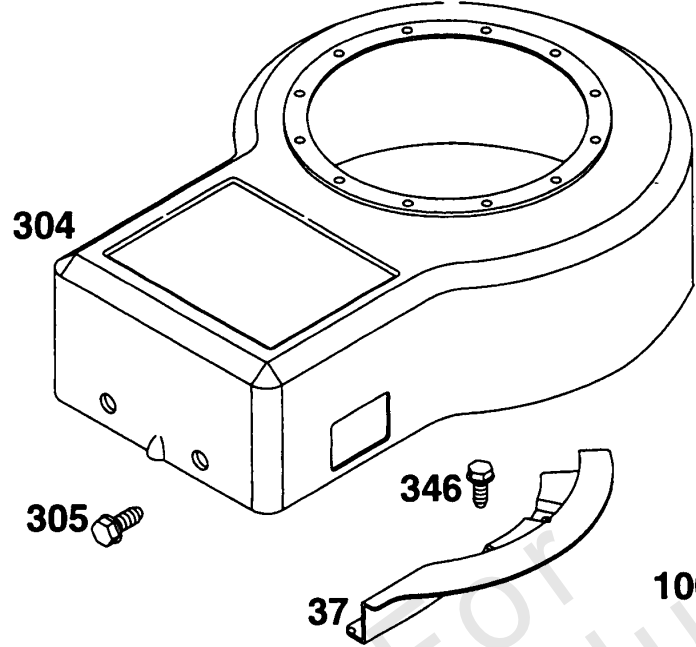
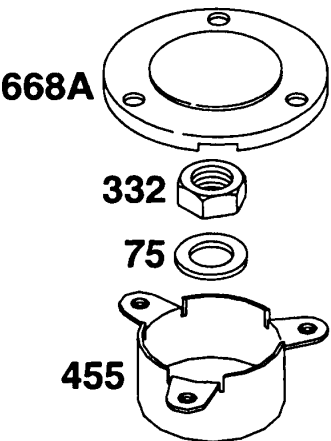
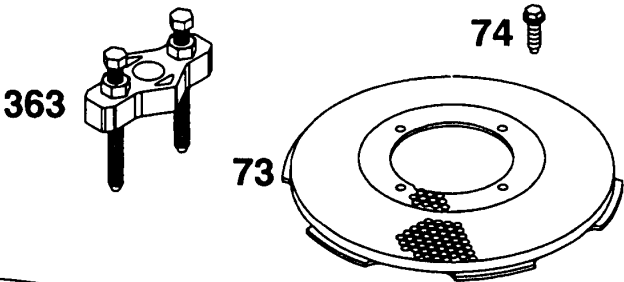
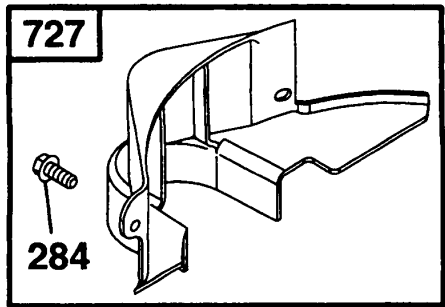
<b>Model Components</b>	<b>Page</b>
Air Cleaner Grp, Muffler Grp. ....	4
Blower Hsg, Flywheels, Screens. ....	6
Carburetor Assy. ....	8
Controls, Elect. ....	12
Controls, Elect, Oil Fill. ....	14
Cylinder, Head. ....	16
Electric Starter. ....	20
Fuel Tank Grp. ....	22
Gasket Sets. ....	24
Piston Grp, Crankshaft. ....	28
Replacement Engine. ....	30
Rewind Assy. ....	31
Sump Base, Cam. ....	33

Not For  
Reproduction



## *Air Cleaner Grp, Muffler Grp*

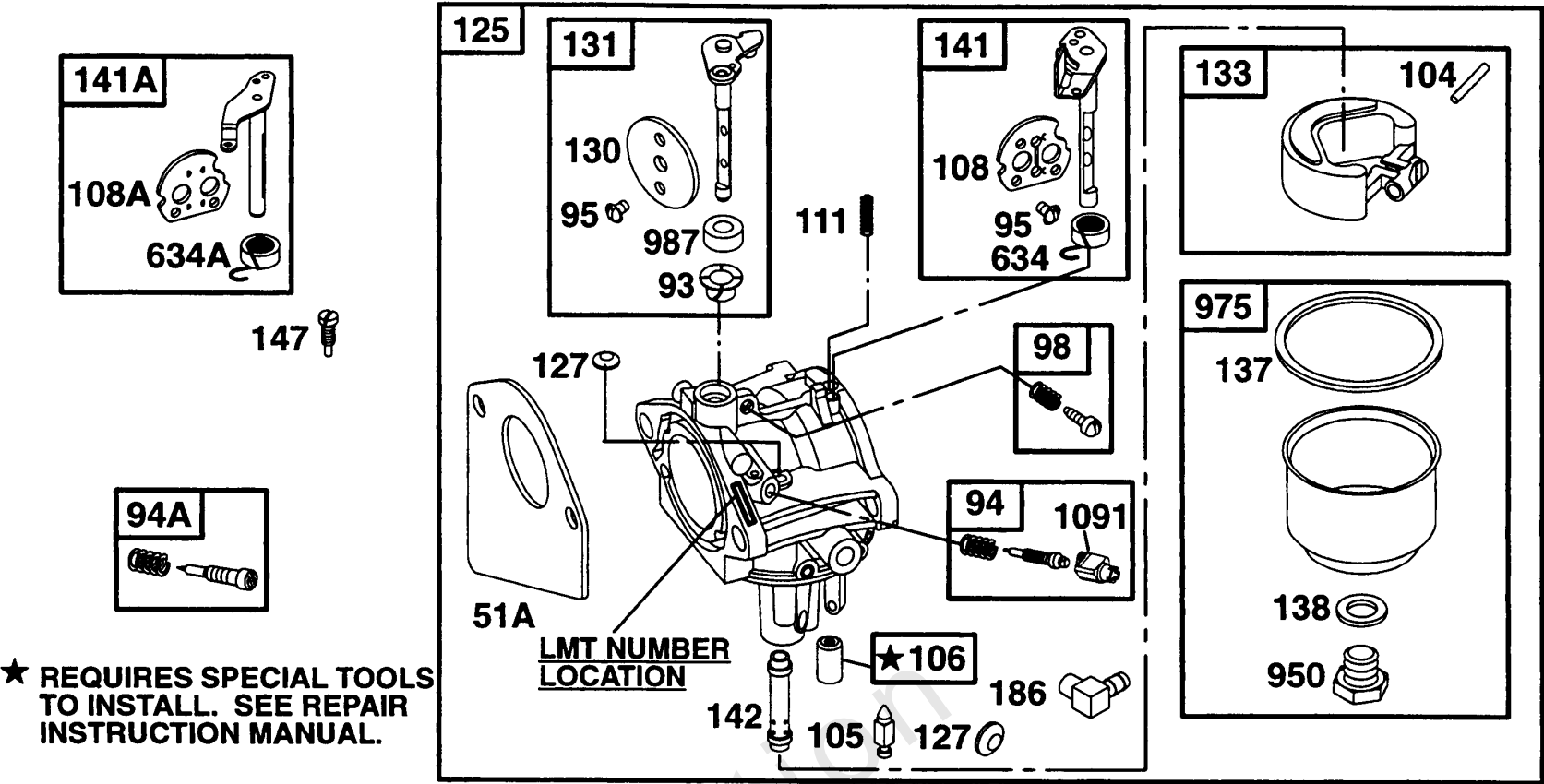
REF NO	PART NO	QTY	DESCRIPTION
161	496368		Base-Air Cleaner
171	281051		Nut.
224	94729		Screw-Torx Hex.
284A	94704		Screw-Hex. Head
300	491413		Muffler Grp (Square Lo Tone)
346	93705		Screw, Tapping Hex (8-32 X 3/8)
445	493910		Filter-Air
467	493903		Knob-Air Cleaner
535	272477		Filter-Pre Cleaner (Foam)
537	281106		Seal-O -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
613	93927		Screw-Shoulder
646	224546		Bracket-Support
663	94620		Screw, Tapping Hex
676	396903		DEFLECTOR, Muffler
725A	223023		Shield-Muffler
836	94513		Screw, Machine Hex
872	281105		Cover-Air Cleaner
883	272293		Gasket-Exhaust Pipe -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
994	392390		Arrester-Spark



1036 LABEL KIT-EMISSION

## ***Blower Hsg,Flywheels,Screens***

REF NO	PART NO	QTY	DESCRIPTION
23A	492135		Flywheel Assy (For Rewind Starter Engines)
23	492326		Flywheel And Ring Gear Assy.-Magneto
37	224502		Guard-Flywheel
73A	224517		Screen-Rotating
73	224518		Screen-Rotating
74	93758		Screw, Hex Wash Hd
75	224061		Washer, Flat (5/8" Hole)
78	94626		Screw-Phillips
188	94480		Screw, Sem Hex Head (Used On Electric Start Engines)
188	94627		Screw, Sem Hex Head
284	94073		Screw, Hex Washer H
304	496319		Blo Hsg/Nut Assy (P (Black)
305	94786		Screw, Machine Hex (1/2" Long)
332	92284		Nut, Jam (Flywheel)
346	93705		Screw, Tapping Hex (8-32 X 3/8)
363	19203		PULLER, Flywheel
455	222561		Cup-Screen Mtg.
668A	280848		Spacer
726	392134		Gear, Ring Kit
727	490324		Cover-Str Drive (Includes Mtg. Screws)
1005	280687		Fan-Flywheel
1006	224413		Retainer-Fan

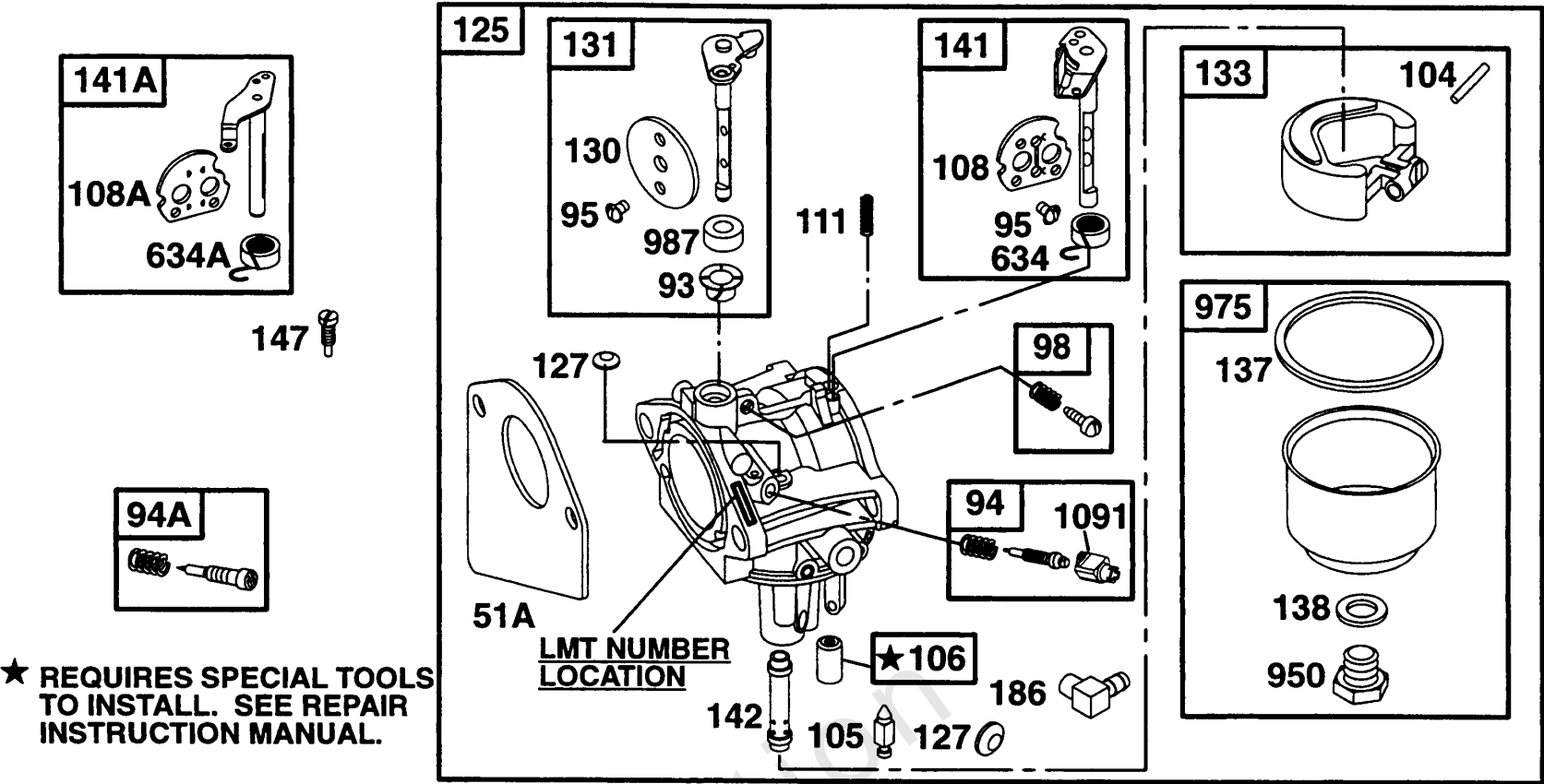


THIS CARBURETOR SERVICES BOTH CHOKE-A-MATIC AND MANUAL CHOKE SYSTEMS



## Carburetor Assy

REF NO	PART NO	QTY	DESCRIPTION
51A	272465		Gasket, Carburetor -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
93	281346		Bushing-Throttle Shaft -Included in Carburetor Kit-See Ref. 121
94A	496589		Kit-Idle Mixture (Lmt 149,150,172,175)
94	498030		Kit-Idle Mixture (Lmt 153154,155,156)
95	94098		Screw, Round Washer -Included in Carburetor Kit-See Ref. 121
98	495800		Screw-Idle Speed (Lmt 54, 55, 91)
104	231789		Pin-Float Hinge -Included in Carburetor Kit-See Ref. 121
105	231855		Valve, Inlet (Lmt 54 55, 91) -Included in Carburetor Kit-See Ref. 121
106	231854		Seat, Inlet (Gravity Feed) -Included in Carburetor Kit-See Ref. 121
108A	224666		Valve, Choke (Choke A Matic)
108	224667		Valve-Choke (Manual Choke)
111	262820		Spring-Lever
125	499161		Carburetor (Lmt 162,165,166)
127	-----		No Nomenclature -Included in Carburetor Kit-See Ref. 121
130	224668		Valve-Throttle
131	494885		Throttle Shaft Kit
133	494381		Float-Carburetor
137	281165		Gasket-Float Bowl -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
138	281164		Washer-Seal -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
141A	495931		Choke Shaft Kit (Choke-A-Matic)
141	495097		Choke Shaft Kit (Manual Choke, Lmt 28,31,55,91,155,156)
142	496519		Nozzle-Carburetor (Std-Lmt 63,65,66,100,136) -Included in Carburetor Kit-See Ref. 121
142	497568		Nozzle-Carburetor (Std, Lmt 97,98,99,100) -Included in Carburetor Kit-See Ref. 121
142	497860		Nozzle-Carburetor (Std Lmt 108,111,133,134,135,136) -Included in Carburetor Kit-See Ref. 121
142	497970		Nozzle-Carburetor (High Alt/Lmt 97,98,100)
142	498258		Nozzle-Carburetor -(High Alt/LMT 63, 65, 66, 100, 108, 111, 133, 135, 136)
142	498545		Nozzle-Carburetor (Standard Lmt 108, 111) -Included in Carburetor Kit-See Ref. 121
142	499037		Nozzle-Carburetor (Std Lmt 162, 165, 169) -Included in Carburetor Kit-See Ref. 121
142	499038		Nozzle/Jet Assy (High Alt/Lmt 162, 165, 169)
142	499039		Nozzle-Carburetor (Std, Lmt 166,167,168) -Included in Carburetor Kit-See Ref. 121
142	499040		Nozzle-Carburetor (High Altitude-Lmt 96,165,166,167,168)
147	231983		Jet-Pilot -(LMT 108,111,133,134,136,139,140)
147	497472		Jet-Pilot -Included in Carburetor Kit-See Ref. 121 (LMT 1,2,3,4,5,7,33,34,37,38,39,40,41,63, 65, 66,77,78,79,80,81,89,97,98,100,101,102,103,113,114,115,116,117,119)
186	493496		Connector-Hose
634A	494455		Spring & Seal Assem (Choke-A-Matic) -Included in Carburetor Kit-See Ref. 121

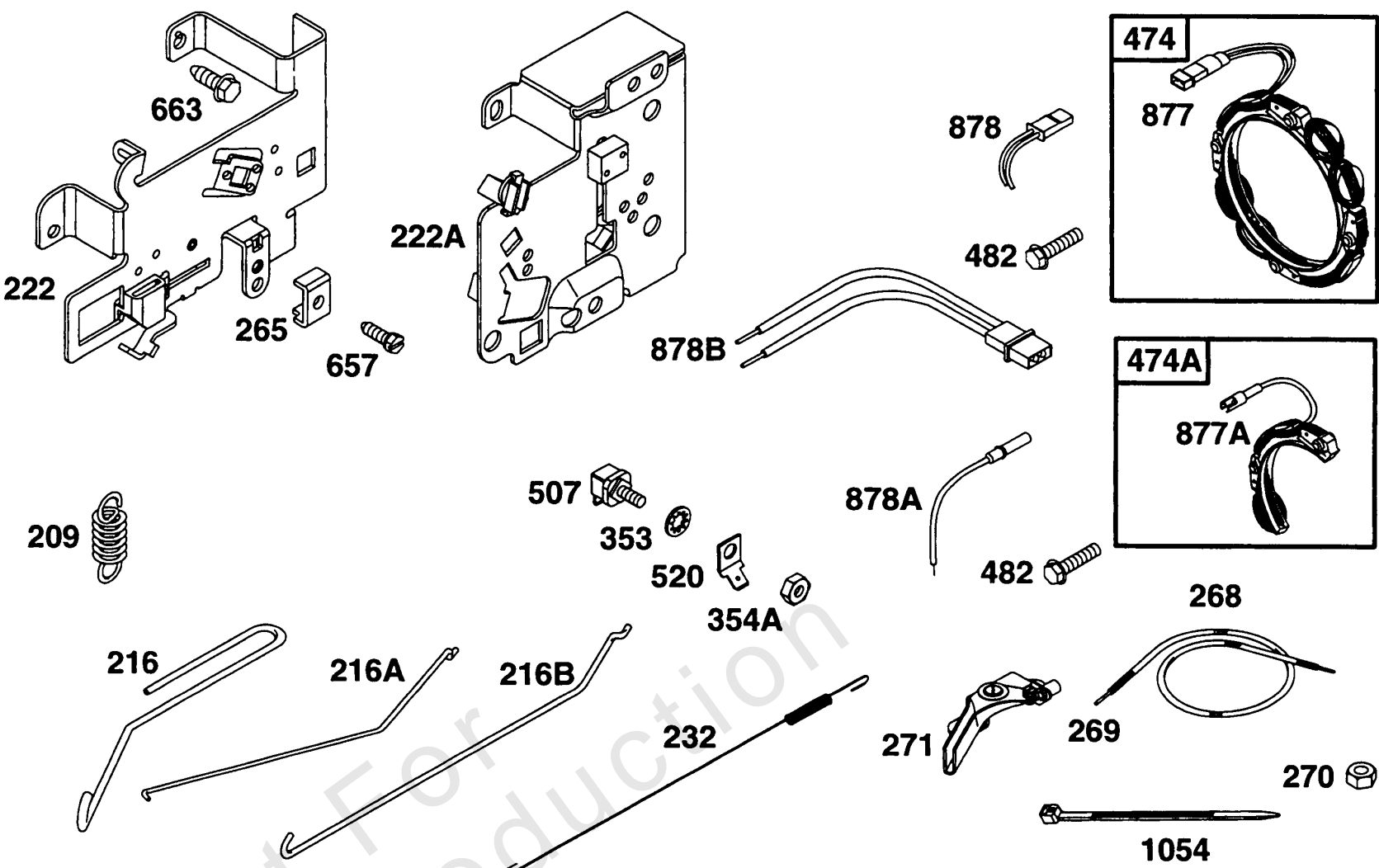


THIS CARBURETOR SERVICES BOTH CHOKE-A-MATIC AND MANUAL CHOKE SYSTEMS

## ***Carburetor Assy***

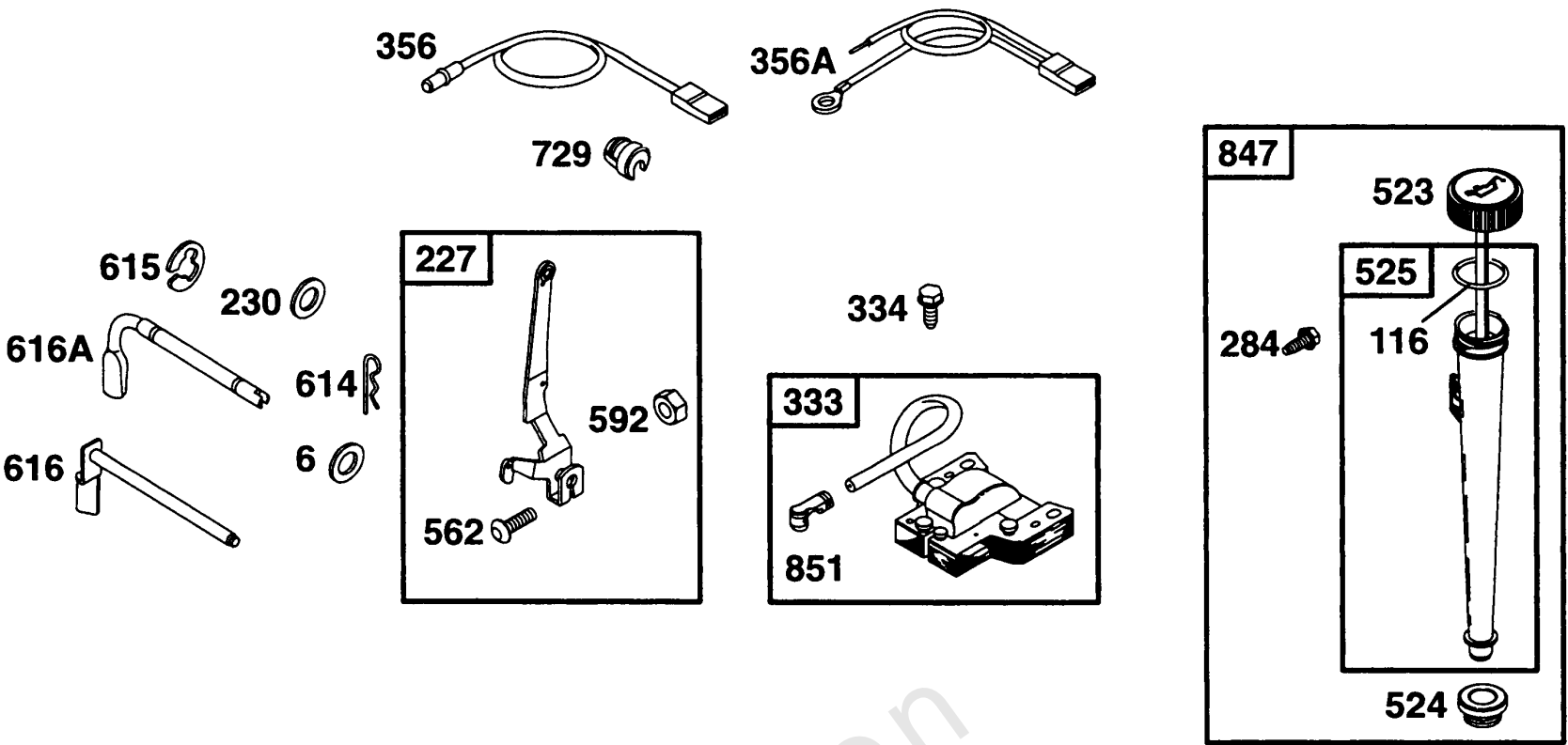
REF NO	PART NO	QTY	DESCRIPTION
634	494453		Spring & Seal Assem (Manual Choke) -Included in Carburetor Kit-See Ref. 121
950	94642		Screw, Hex Head
975	495933		Screw-Bowl Mounting
987	281166		Seal-Throttle Shaft -Included in Carburetor Kit-See Ref. 121
1091	281364		Cap-Limiter

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Reproduction



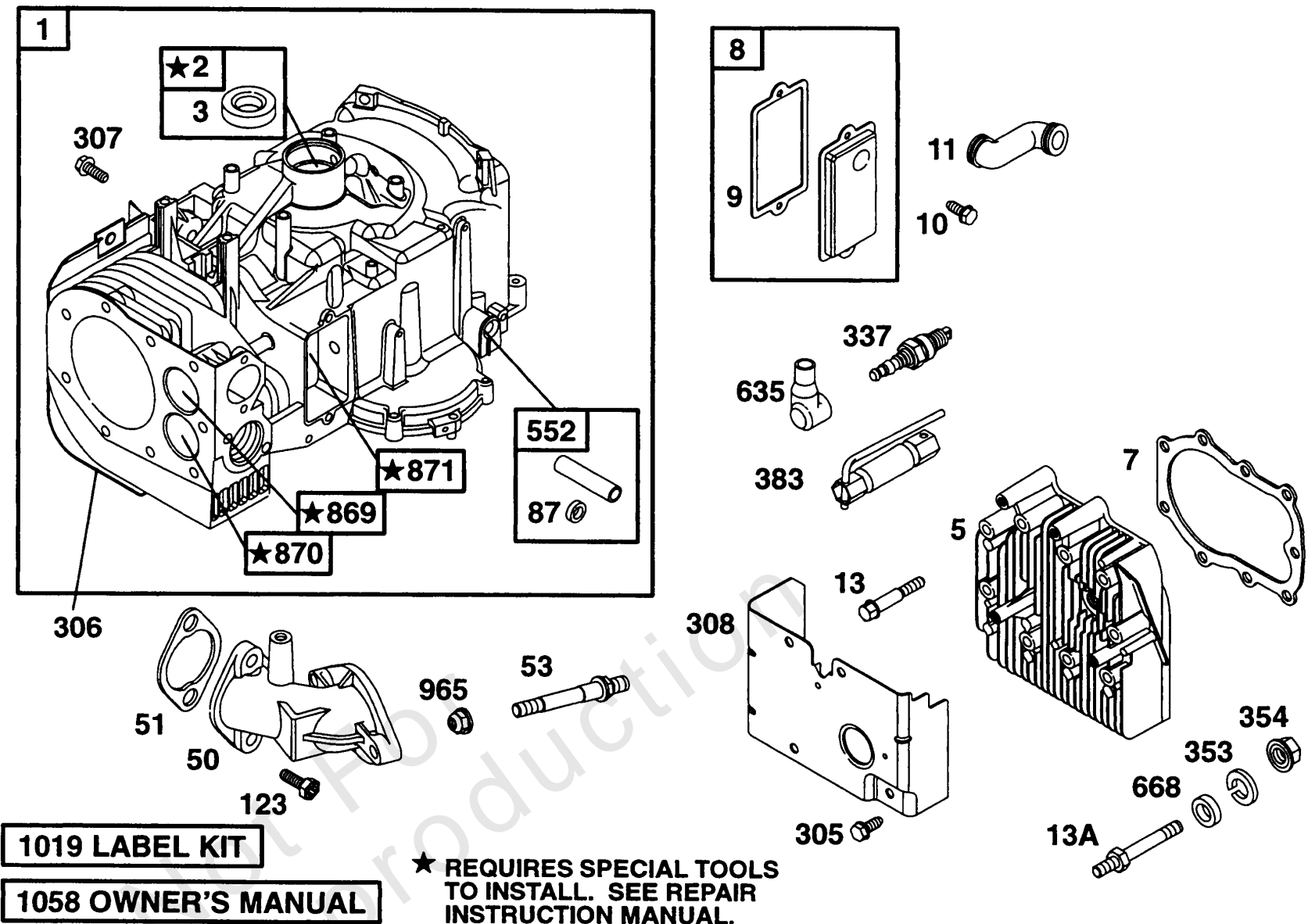
## Controls, Elect

REF NO	PART NO	QTY	DESCRIPTION
209	261306		Spring-Governor
216B	262767		Link-Mechanical Governor
216A	262778		Link, Choke
216	262766		Link-Choke
222	495611		Plate, Control Assy (Choke A Matic)
232	262785		Spring-Link
265	221535		Clamp, Casing (Stamped Steel)
268	65616		Casing, Wire (72", Cut To Required Length)
269	26633		Wire, Control (78" Cut To Required Length)
270	63426		Nut, Hex
271	290568		Lever-Control
353	92791		Lockwasher, Interna
353	94315		Washer-Lock
354A	90576		Nut, Hex (8-32)
474A	391529		Stator, Alternator (Dc Only)
474	393474		Stator, Alternator (Dual-Circuit)
482	93621		Screw, Tapping Hex
507	398525		Terminal-Insulated
520	93722		Terminal, Spade
657	93496		Screw, Sem Hex Head (10-32 X 5/8")
663	94620		Screw, Tapping Hex
877A	393814		Alternator Connecto (Dc Only)
877	393456		WIRE/CONNECTOR, Alternator
878B	399916		Alternator Connecto (Regulated-16 Amp)
878A	393422		Socket/Wire Assy (Dc Only)
878	393362		Harness, Alternator (Dual Circuit)
1054	280275		Tie-Cable



## ***Controls, Elect, Oil Fill***

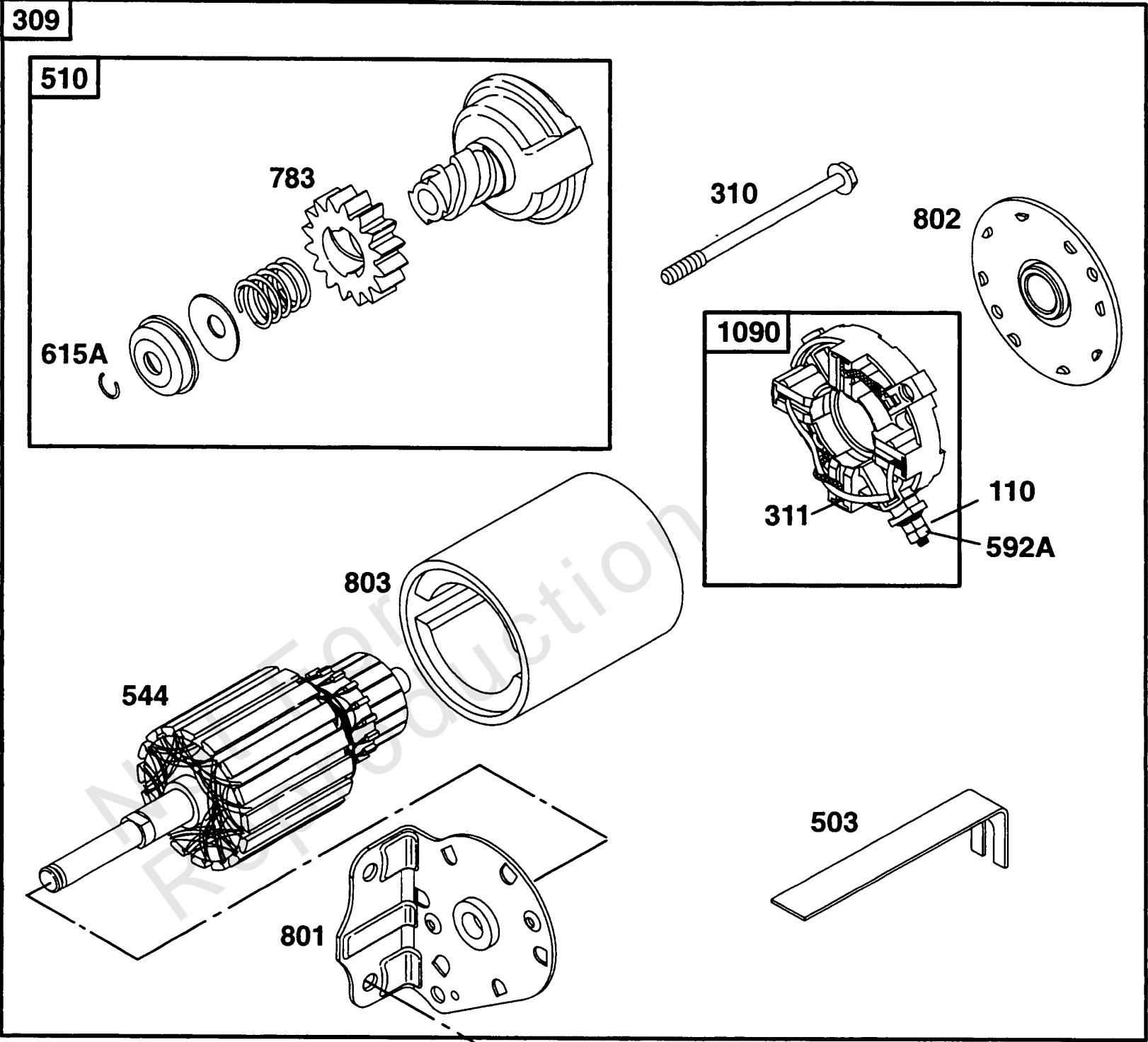
REF NO	PART NO	QTY	DESCRIPTION
6	94927		Washer, Plain
116	270920		Seal, Oil Fill Tube -Included in Gasket Set-Part Number 494241
227	493935		Lever-Governor
284	94073		Screw, Hex Washer H
333	492341		Armature-Magneto
334	94731		Screw, Hex Wash Hea
356A	398808		WIRE, Stop (30" Cut To Required Length)
356	494328		Wire-Stop
523	495229		Dipstick
524	281370		Seal-Tube -Included in Gasket Set-Part Number 494241
525	496068		Tube-Oil Fill
562	94907		Bolt, Round Head Sq
592	231978		Nut-Hex.
614	93306		Pin, Cotter
615	93307		Retainer-E Ring
616A	231058		Crank, Governor (1/4" Dia.)
616	495157		Crank-Governor
729	281159		Clip-Wire
847	496367		Tube Assembly-Oil
851	493880		Terminal-Cable





## Cylinder, Head

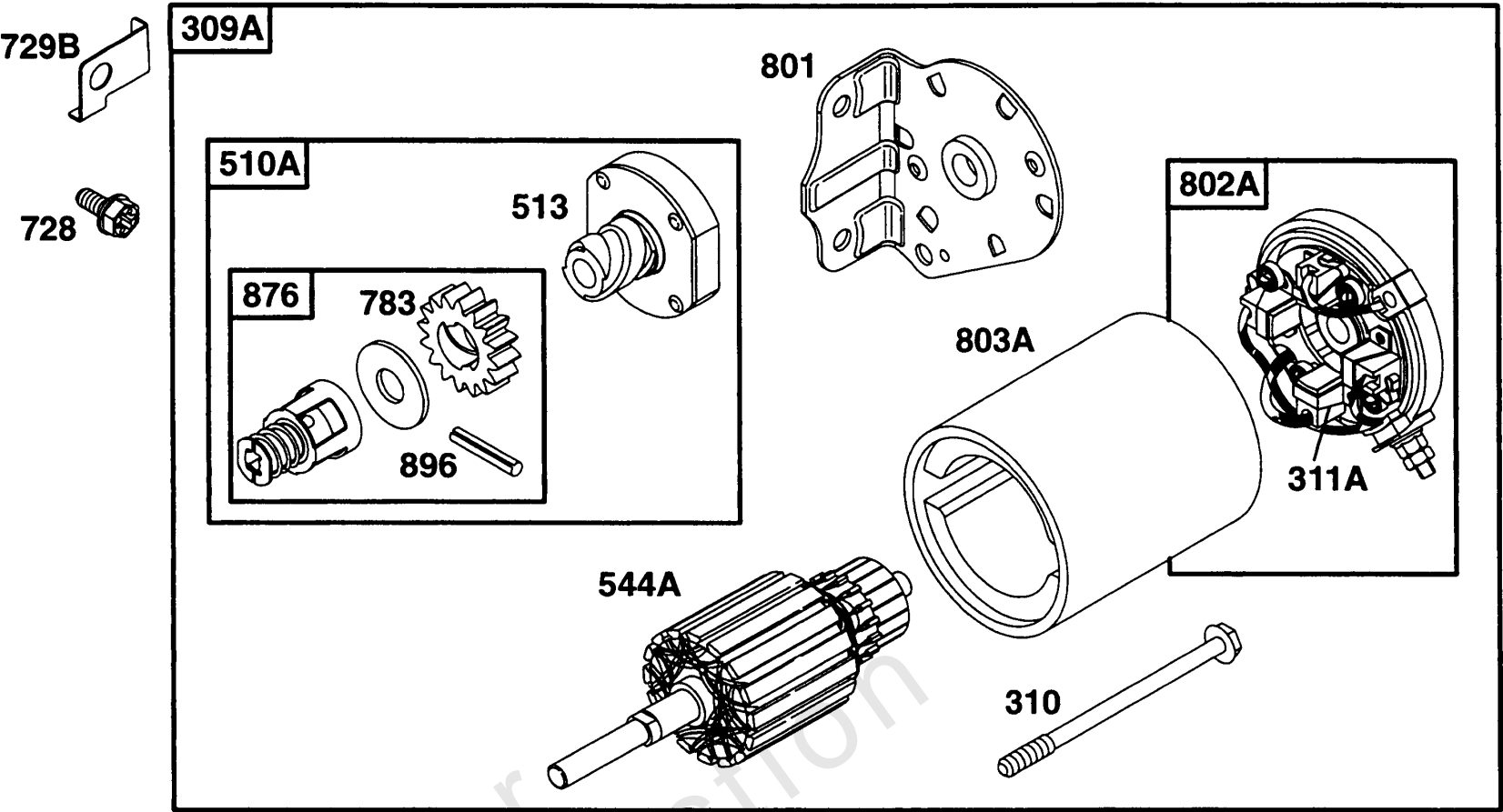
REF NO	PART NO	QTY	DESCRIPTION
1	496414		Cylinder Assembly
2	399265		Bushing/Seal Kit
3	391086		Seal-Oil -Included in Gasket Set-Part Number 494241
5	494240		Head-Cylinder
7	271866		Gasket-Cylinder Head -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
8	495735		Breather Assembly
9	27803		Gasket-Valve Cover -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
10	94621		Screw
11	280100		Tube-Breather
13	94622		Screw, Machine Hex (3" Long)
50	213819		Manifold-Intake
51	272554		Gasket-Intake -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
53	94637		Stud-Hex. Drive
87	491323		Seal, Governor Arm -Included in Gasket Set-Part Number 494241
123	94616		Screw, Hex Head Tor (T/30)
305	94786		Screw, Machine Hex (1/2" Long)
306	224545		Shield-Cylinder
307	94386		Screw-Sem
308	491490		Cover-Cylinder Head
337	802592		Spark Plug,resistor
353	92791		Lockwasher, Interna
353	94315		Washer-Lock
354	94314		Nut-Hex
383	89838		Wrench-Spark Plugs
552	491986		Bushing-Gov Crank (1/4" I.d.)
635	66538		Elbow-Spark Plug
668	231109		Spacer
869	261463		Seat, Intake Valve
870	262924		Seat, Exhaust Valve
871	231218		Bushing-Guide (Brass)
871	261961		Bushing-Guide
965	94010		Nut, Hex
1019	491254		Label Kit
1058	272697		Owner's Manual (Non-Emission)
1058	273131		Owner's Manual (Emission)



## ***Electric Starter***

REF NO	PART NO	QTY	DESCRIPTION
110	225137		Washer, Flat
309	497595		Motor-Starter (3 5/8 Housing/Plastic Ring Gear)
310	94003		Screw, Hex Flange H (For 3-5/8" Housing Length)
311	497608		Brush-Set
503	806000		Strap, Ground (For 4 9/16" Housing Length)
510	497606		Drive-Starter -(Includes 693058 And 693059 Starter Gear)
544	497603		Armature Assy (For 3 5/8" Housing Length)
592A	92278		Nut, Hex (1/4-20)
615A	263080		Ring-Retaining
728	94773		Screw, Hex Head Tor
729A	225170		Clip-Wire
783	280104		Pinion, Starter B&s Or United Tech. 12V
801	394856		Cap-Drive
802	497607		Cap-End
803	497604		Housing Assy (For 3-5/8" Housing Length)
1090	497605		Retainer-Brush

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Reproduction

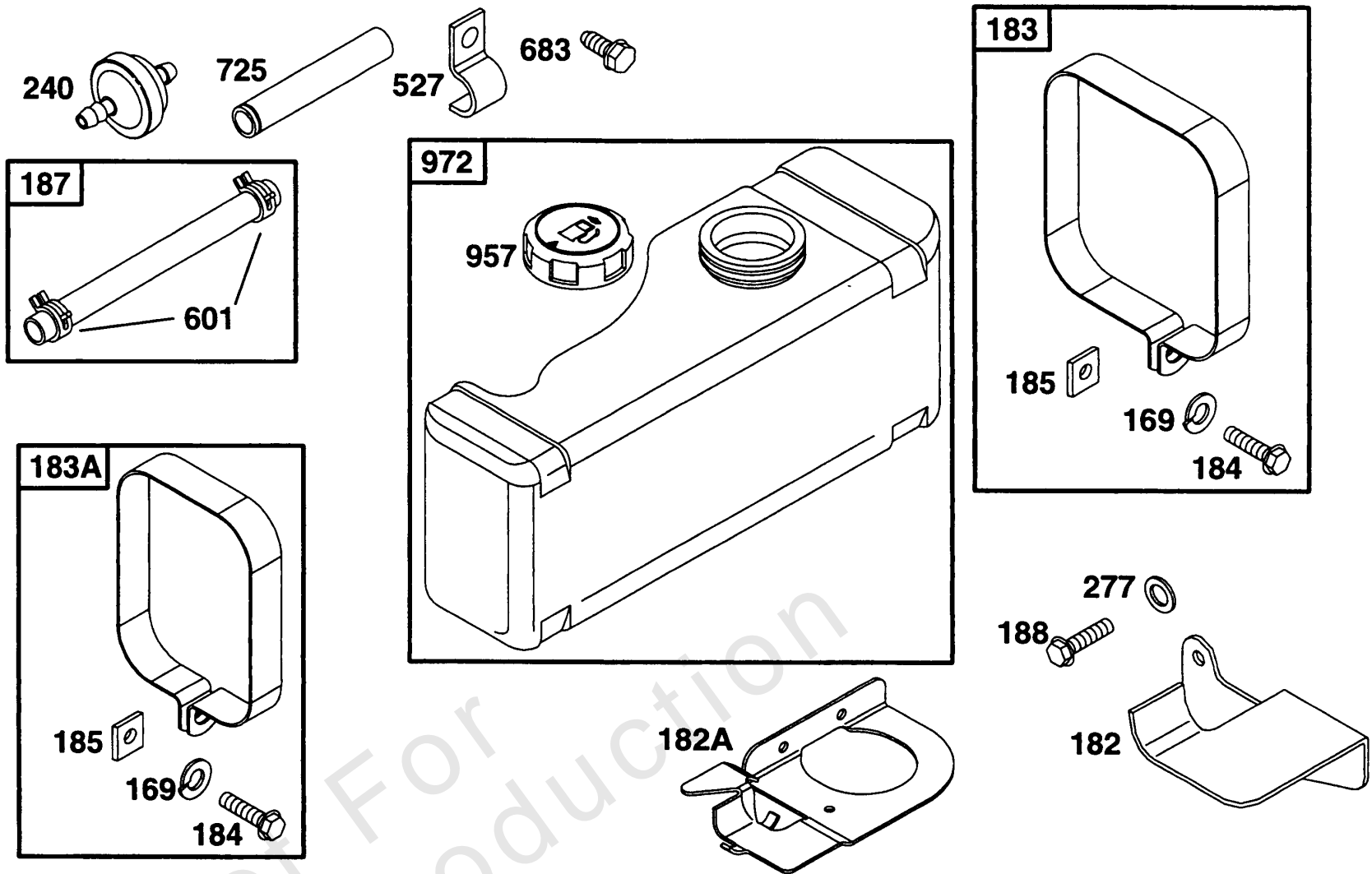


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Reproduction

## ***Electric Starter***

REF NO	PART NO	QTY	DESCRIPTION
309A	394805		Motor/Drive Assy (For 3-1/16" Housing Length)
310	94003		Screw, Hex Flange H (For 3-5/8" Housing Length)
311A	395538		Brush Set -(For 3-5/8" or 4-3/8" Housing Length)
510A	495878		Drive-Starter (For 4-3/8" Housing Length)
513	398003		Clutch, Starter Ass
544A	390837		Armature-Str (For 3-5/8" Housing Length)
728	94773		Screw, Hex Head Tor
729B	224723		Retainer-Wire
783	280104		Pinion, Starter B&s Or United Tech. 12V
801	394856		Cap-Drive
802A	395537		Cap-End (For 3-5/8" Housing Length)
803A	398159		Housing-Starter (For 3-5/8" Housing Length)
876	495877		Kit-Gear (For 4-3/8" Housing)
896	94288		Pin, Spiral (Copper)

Not For  
Reproduction



## ***Fuel Tank Grp***

REF NO	PART NO	QTY	DESCRIPTION
169	90832		Washer-Lock
182A	223866		Bracket-Fuel Tank (L.H.)
182	223925		Bracket, Tank (R.H.)
183A	390405		Strap, Tank Assy (L.H.) -Used Before Code Date 94010100
183A	496852		Strap, Tank Assy (L.H.)
183	390406		Strap, Tank Assy (R.H.)
184	94286		Screw-Hex.
185	90970		Nut, Square (1/4-20)
187	299146		Line-Fuel (28" Cut To Required Length)
188	94480		Screw, Sem Hex Head (Used On Electric Start Engines)
188	94627		Screw, Sem Hex Head
240	298090		Filter, Fuel
277	22776		Washer, Steel
277	22963		Washer, Flat
527	221428		Breather Tube Clamp
601	93053		Clamp, Hose (Green)
683	94602		Screw, Hex Wash Hd
725	222175		Deflector, Heat
957	493988		Cap, Tank (Plastic)
972	390225		Tank-Fuel (3 Quart, Plastic)

121 CARBURETOR KIT

127

106

987

95

104

137

138

634

51A

105

147

142

634A

93

977 CARBURETOR GASKET SET

51A

137

138

1095 VALVE OVERHAUL GASKET SET

7

51

537

883

9

358 GASKET SET

3

116

524

20

883

537

87

12

7

9

51



## Gasket Sets

REF NO	PART NO	QTY	DESCRIPTION
3	391086		Seal-Oil -Included in Gasket Set-Part Number 494241
7	271866		Gasket-Cylinder Head -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
9	27803		Gasket-Valve Cover -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
12	271916		Gasket, Crankcase (.015") -Included in Gasket Set-Part Number 494241
12	271996		Gasket, Crankcase (.009" Thick) -Included in Gasket Set-Part Number 494241
12	271997		Gasket, Crankcase (.005" Thick) -Included in Gasket Set-Part Number 494241
20	291675		Seal, Oil (Used In Crankcase Covers) -Included in Gasket Set-Part Number 494241
51A	272465		Gasket, Carburetor -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
51	272554		Gasket-Intake -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set-Part Number 494241
87	491323		Seal, Governor Arm -Included in Gasket Set-Part Number 494241
93	281346		Bushing-Throttle Shaft -Included in Carburetor Kit-See Ref. 121
95	94098		Screw, Round Washer -Included in Carburetor Kit-See Ref. 121
104	231789		Pin-Float Hinge -Included in Carburetor Kit-See Ref. 121
105	231855		Valve, Inlet (Lmt 54 55, 91) -Included in Carburetor Kit-See Ref. 121
106	231854		Seat, Inlet (Gravity Feed) -Included in Carburetor Kit-See Ref. 121
116	270920		Seal, Oil Fill Tube -Included in Gasket Set-Part Number 494241
121	497481		Carburetor Kit (Lmt 63, 65, 66) -Used Before Code Date 96072600
121	499220		Carburetor Kit -(LMT 92, 93, 94, 95, 96,108,111,162,165,169)
121	499231		Carburetor Kit -(LMT 97,99,133,135,136,157, 158, 159,160,166,167, 168)
127	-----		No Nomenclature -Included in Carburetor Kit-See Ref. 121
137	281165		Gasket-Float Bowl -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
138	281164		Washer-Seal -Included in Carburetor Kit-See Ref. 121. Included in Carburetor Gasket Set-Part No. 494385
142	496519		Nozzle-Carburetor (Std-lmt 63,65,66,100,136) -Included in Carburetor Kit-See Ref. 121
142	497568		Nozzle-Carburetor (Std, Lmt 97,98,99,100) -Included in Carburetor Kit-See Ref. 121
142	497860		Nozzle-Carburetor (Std Lmt 108,111,133,134,135,136) -Included in Carburetor Kit-See Ref. 121
142	497970		Nozzle-Carburetor (High Alt/Lmt 97,98,100)
142	498258		Nozzle-Carburetor -(High Alt/LMT 63, 65, 66, 100, 108, 111, 133, 135, 136)
142	498545		Nozzle-Carburetor (Standard Lmt 108, 111) -Included in Carburetor Kit-See Ref. 121

121 CARBURETOR KIT

127

106

987

95

104

137

138

634

51A

105

147

142

634A

93

977 CARBURETOR GASKET SET

51A

137

138

1095 VALVE OVERHAUL GASKET SET

7

51

537

883

9

358 GASKET SET

3

116

524

20

883

537

87

12

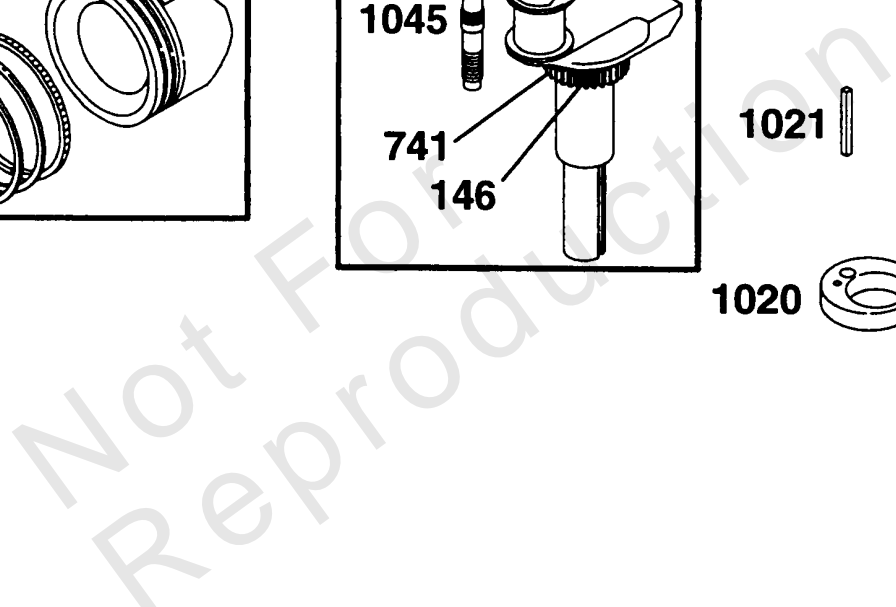
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## Gasket Sets

REF NO	PART NO	QTY	DESCRIPTION
142	499037		Nozzle-Carburetor (Std Lmt 162, 165, 169) -Included in Carburetor Kit-See Ref. 121
142	499038		Nozzle/Jet Assy (High Alt/Lmt 162, 165, 169)
142	499039		Nozzle-Carburetor (Std, Lmt 166,167,168) -Included in Carburetor Kit-See Ref. 121
142	499040		Nozzle-Carburetor (High Altitude-Lmt 96,165,166,167,168)
147	231983		Jet-Pilot -(LMT 108,111,133,134,136,139,140)
147	497472		Jet-Pilot -Included in Carburetor Kit-See Ref. 121 (LMT 1,2,3,4,5,7,33,34,37,38,39,40,41,63, 65, 66,77,78,79,80,81,89,97,98,100,101,102,103,113,114,115,116,117,119)
358	494241		Gasket-Set
524	281370		Seal-Tube -Included in Gasket Set-Part Number 494241
537	281106		Seal-O -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set- Part Number 494241
634A	494455		Spring & Seal Assem (Choke-A-Matic) -Included in Carburetor Kit-See Ref. 121
634	494453		Spring & Seal Assem (Manual Choke) -Included in Carburetor Kit-See Ref. 121
883	272293		Gasket-Exhaust Pipe -Included in Valve Overhaul Gasket Set-Part No. 498539. Included in Gasket Set- Part Number 494241
977	494385		Gasket Set-Carburetor
987	281166		Seal-Throttle Shaft -Included in Carburetor Kit-See Ref. 121
1095	498539		Gasket Set-Valve Overhaul



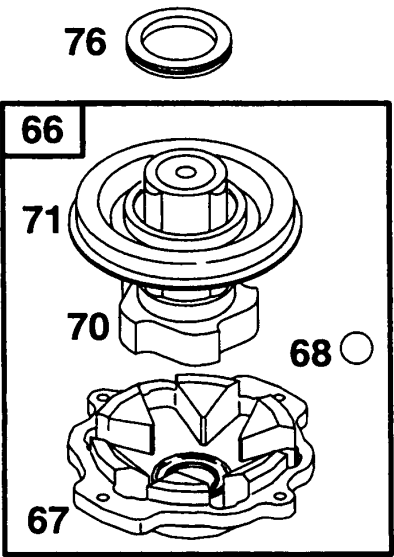
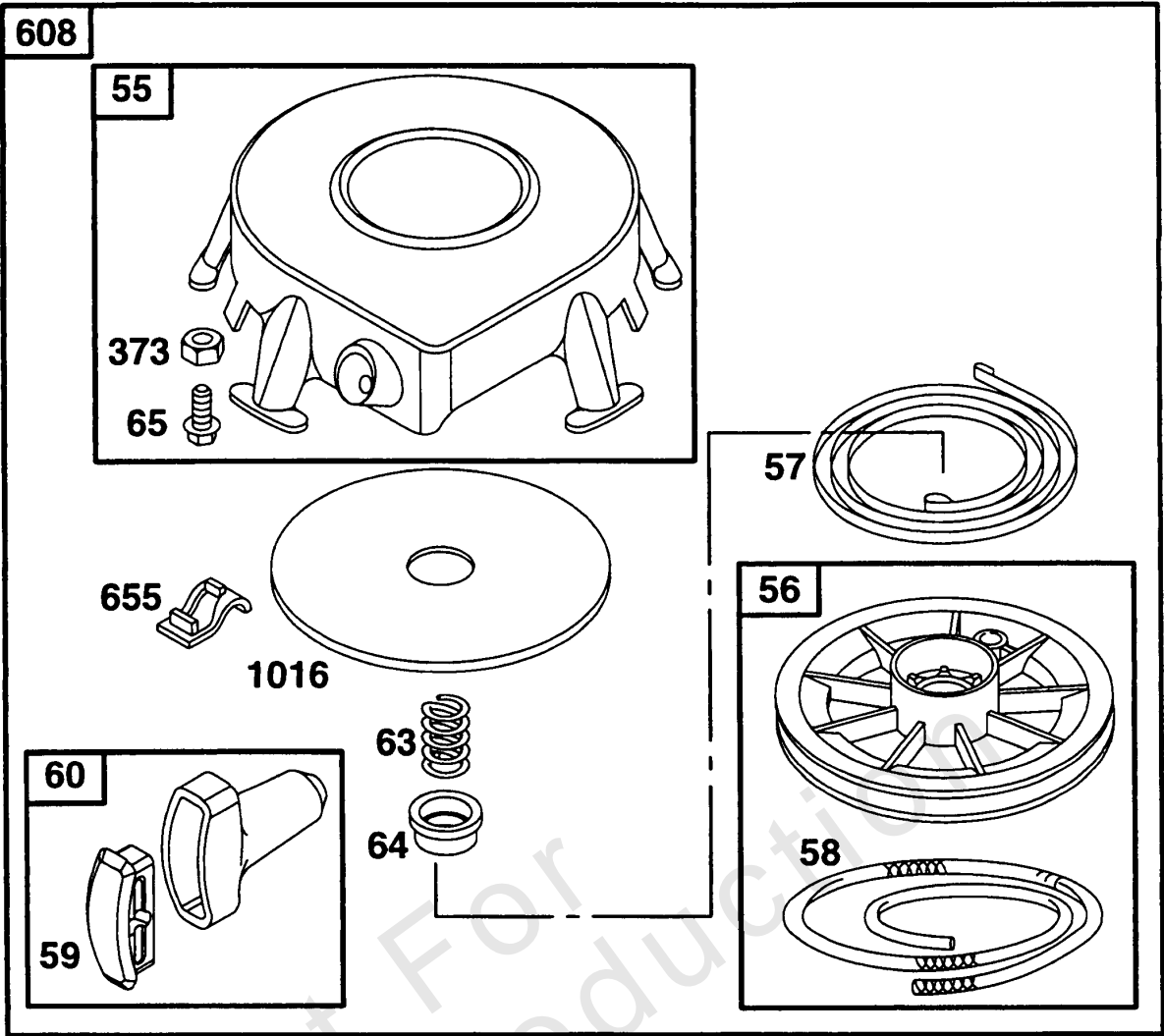
## *Piston Grp, Crankshaft*

REF NO	PART NO	QTY	DESCRIPTION
16	495162		Crankshaft
24	222698		Key, Flywheel
25	391285		Piston/Ring Kit (Std.)
25	391287		Piston/Ring Kit (.010" O.S.)
25	391288		Piston/Ring Kit (.020" O.S.)
25	391289		Piston/Ring Kit (.030" O.S.)
26	391780		Ring, Piston Kit (Std.)
26	391781		Ring, Piston Kit (.010" O.S.)
26	391782		Ring, Piston Kit (.020" O.S.)
26	391783		Ring, Piston Kit (.030" O.S.)
26	392331		Ring Set-Std Chr
27	260924		Lock-Piston Pin
28	299691		Pin-Piston Std (Std.)
28	391286		Pin-Piston 005 (.005 O.S.)
29	490348		Rod-Connecting (Standard)
29	490469		Rod-Connecting (.020" Undersize)
31	222299		Lock-Screw
32	94671		Screw-Hex.
33	262246		Valve-Exhaust
34	262247		Valve-Intake
35	65906		Spring, Valve
36	26828		Spring, Valve (Exhaust)
40	221596		Retainer, Spring (Used With Valves With Groove In Stem)
41	292260		Rotocoil Assy (Exhaust Valve)
42	494553		Keeper-Valve
45	262248		Tappet-Valve
146	94196		Key-Woodruff
741	262932		Gear-Timing
757	213998		Link-Counterweight
758	399891		Counterweight Assy.
759	230787		Pin-Piston Counterweight
761	94593		Screw-Hex.
1020	262243		Eccentric
1021	94160		Pin-Groove
1044	94673		Screw-Shoulder
1045	231828		Extension-Crankshaft

Replacement Engine

REF NO	PART NO	QTY	DESCRIPTION
	2179073025	1	Replacement Engine
	-----		Top No-Load Speed: 3400 -Trim: ALL
	-----		Service Note: If the replacement engine supersedes to or is a Model 210000 series engine, refer to the illustrations located after the conversion data for this model series. The overall dimensions which differ, are shown in the illustrations.
	-----		Service Note: If after making a visual inspection and it is determined the Model 210000 series engine cannot be used because of equipment interference, the original engine should be repaired with a short block and/or individual parts.

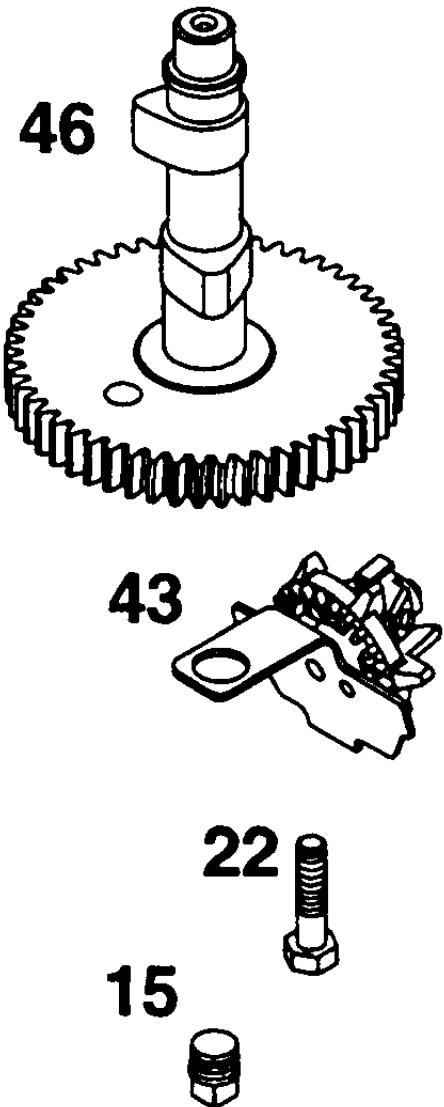
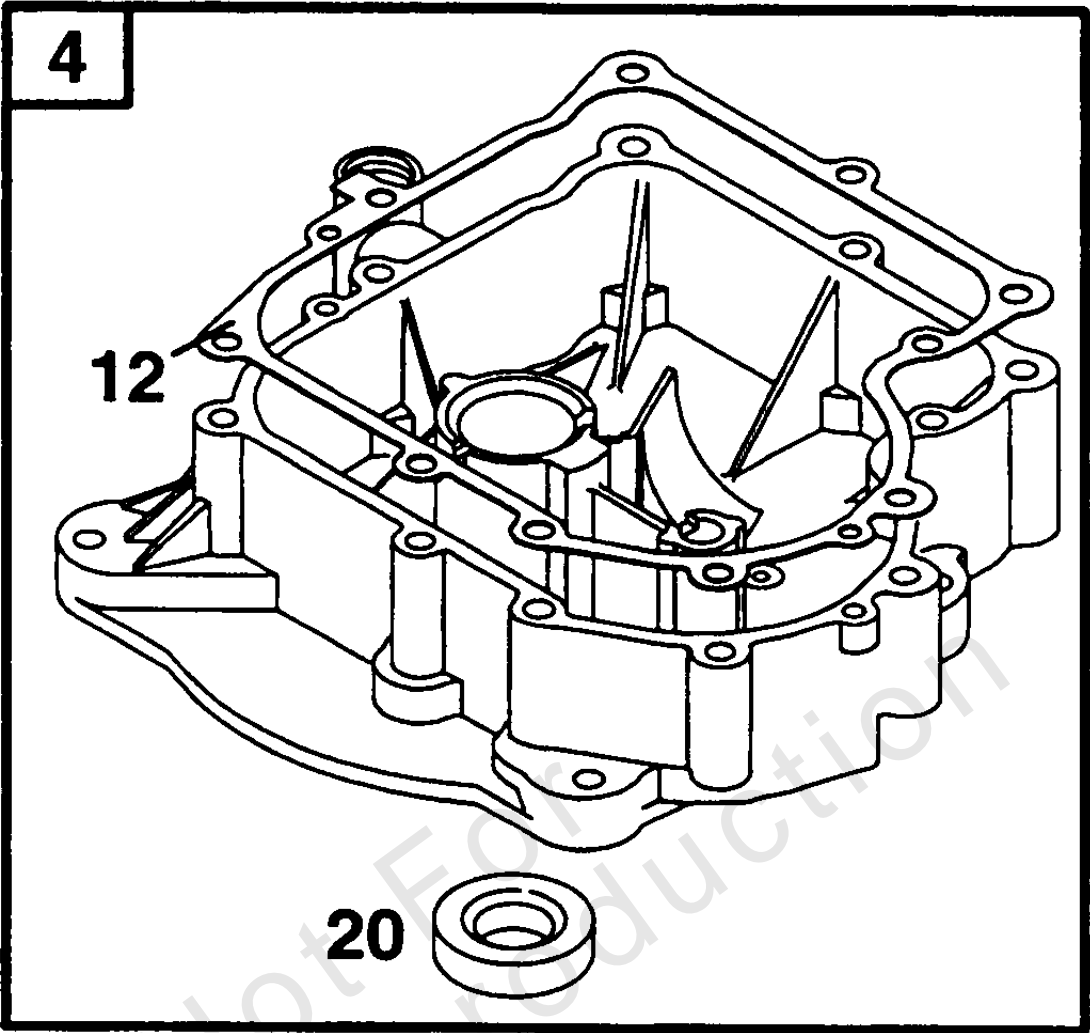
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## Rewind Assy

REF NO	PART NO	QTY	DESCRIPTION
55	393576		Housing-Rew Str
56	295871		Pulley-Starter (Includes 63" Rope)
57	490179		Spring-Rewind Starter
58	66884		Rope, Starter (63" Cut To Required Length)
59	490653		Insert-Starter Rope
60	490652		HANDLE, Starter Rope
63	260414		Spring-Ratchet
64	281204		Adapter-Spring
65	94128		Screw-Stamped Steel Housing Mtg. Sem
66	495970		Clutch-Starter
67	394897		Housing-Starter Clutch
68	63770		Ball-Clutch
70	298799		Ratchet Assy -(For engine W/Ring Gear on FW equipped for Elec Start)
71	394506		Seal/Retainer Assy (Rubber Coated)
76	68238		Seal-Ratchet
373	92987		Nut, Hex Mach
608	390391		Starter-Rewind
655	222598		Insert, Spring -(For Stamped Rewind Housing)
1016	490817		Spacer=rewind





## ***Sump Base, Cam***

REF NO	PART NO	QTY	DESCRIPTION
4	494238		Sump-Engine
12	271916		Gasket, Crankcase (.015") -Included in Gasket Set-Part Number 494241
12	271996		Gasket, Crankcase (.009" Thick) -Included in Gasket Set-Part Number 494241
12	271997		Gasket, Crankcase (.005" Thick) -Included in Gasket Set-Part Number 494241
15	94239		Plug, Pipe (Standar (Square Head)
20	291675		Seal, Oil (Used In Crankcase Covers) -Included in Gasket Set-Part Number 494241
22	94624		Screw-Hex.
43	490815		Slinger-Oil
46	212897		Gear-Cam

Not For  
Reproduction

