

RAPTOR II RACING ENGINES

Illustrated Parts List Motorsports Model Series



135230

TYPE NUMBER
7014.



WARNING:



- MODEL 135230-7014-01 IS A RACING ENGINE
- SPECIAL SKILLS AND KNOWLEDGE ARE REQUIRED TO PREPARE THE ENGINES FOR COMPETITIVE USE. IF YOU ARE NOT FAMILIAR WITH THE PROPER TECHNIQUES AND PROCEDURES, HAVE QUALIFIED INDIVIDUALS DO THE WORK FOR YOU
- THE ENGINES DO NOT HAVE GOVERNORS. ANY THROTTLE MECHANISM MUST HAVE A RETURN-TO-IDLE SPRING SO THE ENGINE WILL RETURN TO IDLE SPEED WHEN THE THROTTLE PEDAL IS RELEASED

**FAILURE TO FOLLOW THESE WARNINGS COULD
RESULT IN SERIOUS PERSONAL INJURY OR DEATH**

TO FIND THE CORRECT NUMBER OF THE PART YOU NEED: FOLLOW THE INSTRUCTIONS ON THE REVERSE SIDE

- Refer to Engine Model, Type and Code Number that is stamped on the blower housing of engine. Engine type numbers such as 0123 01 are listed only as 0123 in most instances. The two digits (01 or 02, etc.) to the right of the space may be required for more accurate parts identification in some instances. Select the Illustrated Parts List covering the correct Model Series and Type Number.
- Refer to the Illustrations and compare the original part with Illustration. The number next to the illustration is the Reference Number. Assemblies include all parts shown in frames. All parts shown in assembly frames having individual reference numbers can be purchased separately.
- After the Reference Number has been identified, refer to the Numerical text, where Reference and Primary Part Number are listed. **THE PRIMARY PART IS USED ON ALL TYPE NUMBERS EXCEPT THOSE TYPE NUMBERS UNDER "NOTE."**
- If a "Note" appears below the Primary Part Number, it means that this part differs from the Primary Part for certain types. If your Type number is listed under "Note," order the part referred to at the "Note."
- If your Engine Type Number does not appear after any part number listed under "Note," use the Primary Part Number.
- For Engine Type Numbers not covered by this book, check other Parts Lists having the same engine model or contact your source of supply.

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In the Interest of Safety

 This safety alert symbol indicates that this message involves personal safety. Words danger, warning and caution indicate degree of hazard. Death, personal injury and/or property damage may occur unless instructions are followed carefully.



You are not ready to operate this engine if you have not read and understood the following safety items.

The Briggs & Stratton engine you bought is made of the finest material in a state-of-the-art manufacturing facility. Please understand that Briggs & Stratton sells engines to original equipment manufacturers. It also sells to others in the distribution chain who may sell to the ultimate consumer, an equipment manufacturer, another distributor or a dealer. As a result, Briggs & Stratton does not necessarily know the application on which the engine will be placed. For that reason, you should carefully read and understand the operating instructions of the equipment on which your engine is placed before you operate it.

You should also understand that there are equipment applications for which Briggs & Stratton does not approve the use of its engines. Briggs & Stratton engines are not to be used on vehicles with less than 4 wheels. They include motor bikes, aircraft products and All Terrain Vehicles. **FOR THAT REASON, BRIGGS & STRATTON ENGINES ARE NOT AUTHORIZED FOR ANY OF THESE APPLICATIONS.** Failure to follow this warning could result in death, serious injury (including paralysis) or property damage.



WARNING

DO NOT run engine in an enclosed area. (Exhaust gases contain carbon monoxide, an odorless and deadly poison.)

- DO NOT place hands or feet near moving or rotating parts.
- DO NOT store, spill, or use gasoline near an open flame, nor near an appliance like a stove, furnace, or water heater that uses a pilot light or can create a spark.
- DO NOT refuel indoors or in an unventilated area.
- DO NOT remove fuel tank cap nor fill fuel tank while engine is hot or running. (Allow engine to cool 2 minutes before refueling.)
- DO NOT operate or tip engine/equipment at such a severe angle that causes gasoline spillage.
- DO NOT operate engine if gasoline is spilled or when smell of gasoline is present or other explosive conditions exist. (Move equipment away from spill and avoid any ignition until gasoline has evaporated.)
- DO NOT transport engine with fuel in tank or with fuel shut-off valve open.
- DO NOT choke carburetor to stop engine, especially in an enclosed vehicle. (Whenever possible, gradually reduce engine speed before stopping.)

- DO NOT check for spark with spark plug removed. (Use an approved tester.)
- DO NOT crank engine with spark plug removed. (If engine is flooded, place throttle in FAST and crank until engine starts.)
- DO NOT strike flywheel with a hammer or hard object as this may cause flywheel to shatter in operation. (Use correct tools to service engine.)
- DO NOT operate engine without a muffler. (Inspect periodically and replace if worn or leaking. If engine is equipped with muffler deflector, inspect periodically and, if necessary, replace with correct deflector.)
- DO NOT operate engine with an accumulation of grass, leaves or other combustible material in muffler area.
- DO NOT use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on muffler. Spark arrester must be maintained in effective working order by owner and/or operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.
- DO NOT touch hot muffler, cylinder, or fins which can cause burns.
- DO NOT start engine with air cleaner or air cleaner cover removed (or cover over carburetor air intake, if SnoGard engine).



WARNING

PREVENT ACCIDENTAL STARTING by removing spark plug wire when servicing engine or equipment. Disconnect negative wire from battery terminal if equipped with electric starting system.

- KEEP cylinder fins and governor parts free of dirt, grass and other debris which can affect engine speed.
- PULL starter cord **slowly** until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.
- USE fresh gasoline. Stale fuel can gum carburetor and cause leakage.

CHECK fuel lines and fittings frequently for cracks or leaks. Replace if required.
4 Use only Genuine Briggs & Stratton Parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the engine.

WARNING:

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

International Symbols



Safety Alert



Read Owner's Manual



On Off



Stop



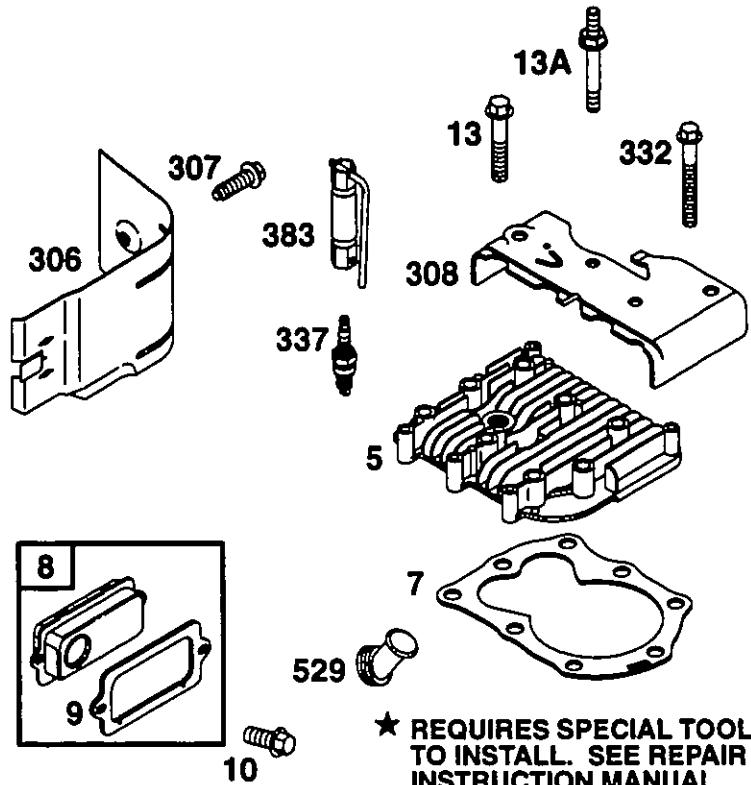
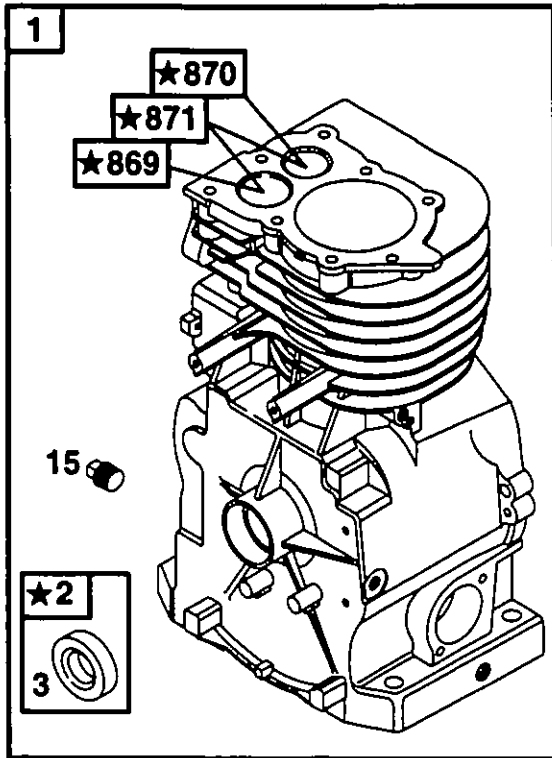
Fuel Shutoff



Fuel



Choke

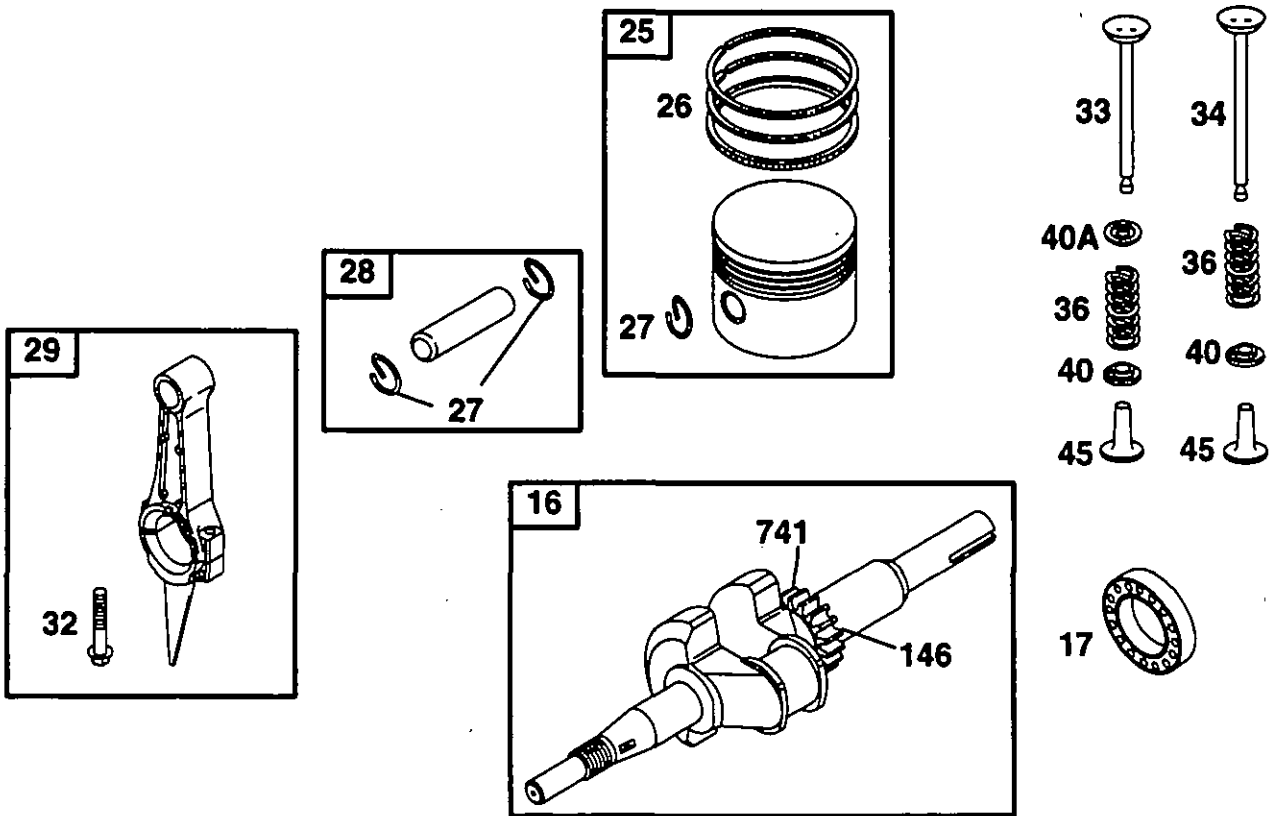


★ REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	555206	Cylinder Assembly	307	555046	Screw-Hex.	871	555214	Bushing-Guide Exhaust Valve) (Sintered Bronze) OR
2	555140	Bushing	308	555056	Cover-Cylinder Head		555158	Bushing-Guide Exhaust Valve) (Sintered Iron)
3	★555071	Seal-Oil	332	555045	Screw (Cylinder Head) (2 1/4" Long)	<p>————— Note —————</p>		
5	555199	Head-Cylinder	337	555132	Plug-Spark		555139	Bushing-Guide (Intake Valve)
7	★555187	Gasket-Cylinder Head	383	89838	Wrench-Spark Plug			
8	555073	Breather Assembly	529	555074	Grommet			
9	★555036	Gasket-Breather	869	555136	Seat-Intake Valve			
10	555043	Screw-Hex.	870	555137	Seat-Exhaust Valve			
13	555041	Screw-Cylinder Head (2 1/8" Long)						
13A	555082	Stud-Cylinder Head						
15	555079	Plug-Oil Drain						
306	555057	Shield-Cylinder						

★ Included in Gasket Set-Part No. 555210.

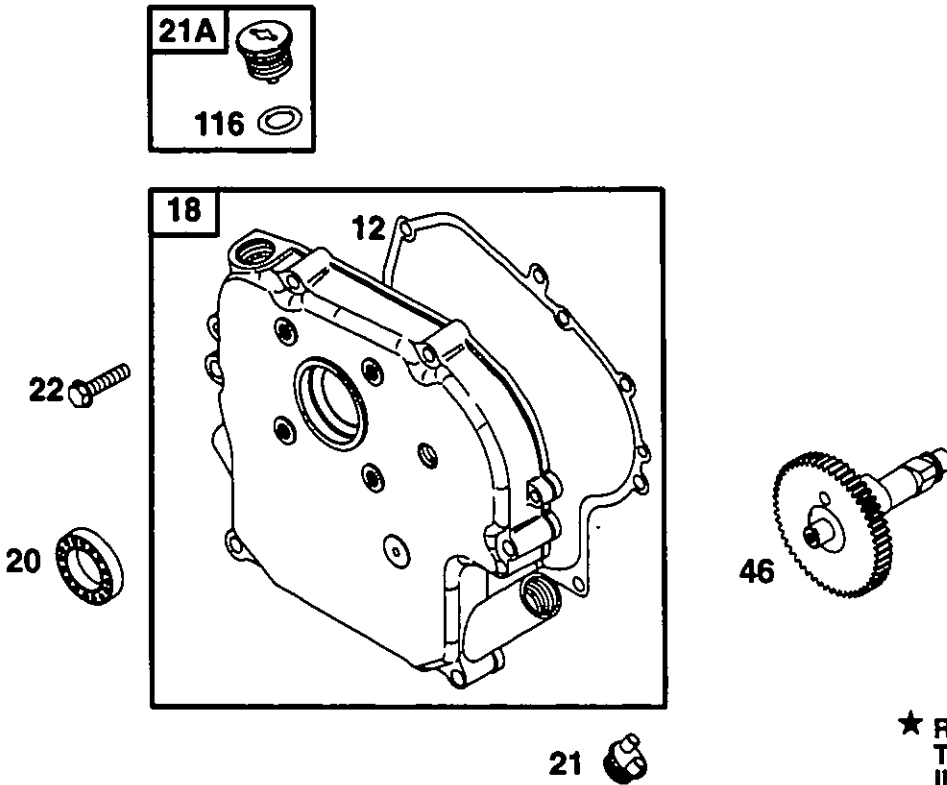
● Included in Carburetor Kit-Part No. 555130.



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
16	555204	Crankshaft	27	555035	Lock-Piston Pin	45	555061	Tappet-Valve
17	555050	Bearing-Ball	28	555058	Pin-Piston (Standard)	146	555049	Key-Woodruff
25	555092	Piston Assembly			Note	741	555019	Gear-Timing (Tempered)
		Note			555059 Pin-Piston (.005" O.S.)			
		555093 Piston Assy. (.010" O.S.)	29	555207	Rod-Connecting (Standard)			
		555094 Piston Assy. (.020" O.S.)			Note			
		555095 Piston Assy. (.030" O.S.)			555208 Rod-Connecting (.020" Undersize)			
26	555088	Ring Set (Standard)	32	555070	Screw-Connecting Rod			
		Note	33	555077	Valve-Exhaust			
		555089 Ring Set (.010" O.S.)	34	555062	Valve-Intake			
		555090 Ring Set (.020" O.S.)	36	555076	Spring-Valve			
		555091 Ring Set (.030" O.S.)	40	555039	Retainer-Valve			
			40A	555147	Retainer-Valve			

★ Included in Gasket Set-Part No. 555210.

● Included in Carburetor Kit-Part No. 555130.

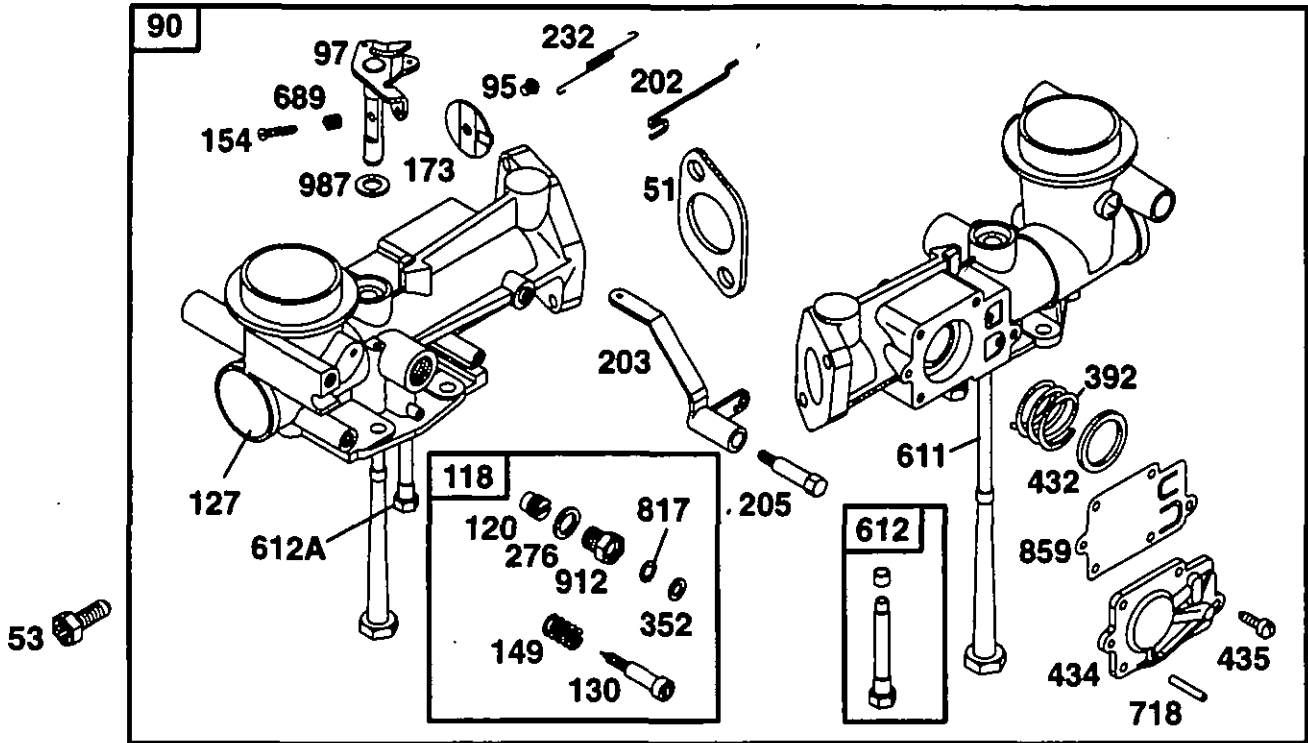


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REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
12	★555191	Gasket-Crankcase (.015" Thick, Std.)	18	555209	Cover-Crankcase	46	555052	Gear-Cam (Machined Lobes)
		<u>Note</u>	20	★555087	Seal-Oil			<u>Note</u>
	★555064	Gasket-Crankcase (.005" Thick)	21	555037	Plug-Oil Fill			555000 Gear-Cam (Unmachined Lobes)
	★555065	Gasket-Crankcase (.009" Thick)	21A	555138	Plug-Oil Fill	116	★555135	Ring-Oil Retainer
			22	555047	Screw-Hex.			

★ Included in Gasket Set-Part No. 555210.

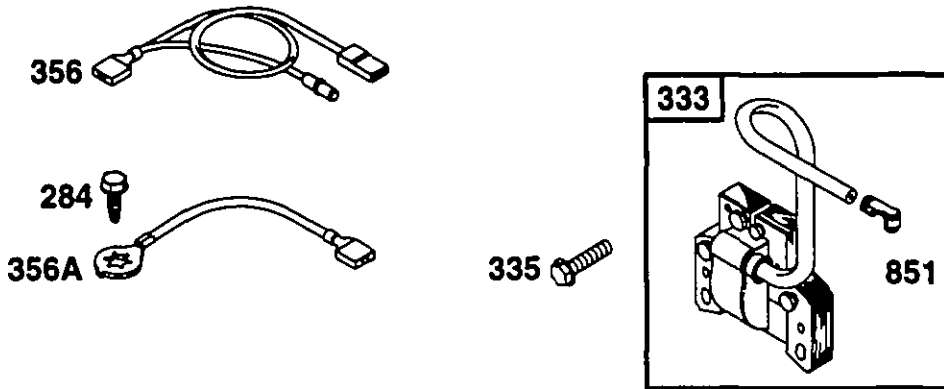
● Included in Carburetor Kit-Part No. 555130.



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
51	★555078	Gasket-Intake Elbow	154	555102	Screw-Round Head	435	555107	Screw-Hex.
53	555193	Screw-Socket	173	555111	Valve-Throttle	611	555103	Tube-Pick-up
90	555129	Carburetor	202	555116	Link-Mech. Gov.	612	555128	Tube-Pick-up
95	555232	Screw-Hex.	203	555104	Crank-Bell	612A	555120	Tube-Pick-up
97	555100	Shaft-Throttle	205	555110	Screw-Shoulder	689	555101	Spring-Friction
118	●555127	Valve-High Speed	232	555117	Spring-Link	718	555108	Pin-Locating
120	●555114	Seat-Needle Valve	276	●555106	Washer-Seal	817	●555122	O-Ring Seal
127	555105	Plug-Welch	392	555115	Spring-Diaphragm	859	●555119	Diaphragm-Pump
130	●555124	Valve-Throttle	432	555113	Cap-Spring	912	●555126	Nut-Needle Valve
352	●555125	Washer-Needle Valve	434	555112	Cover-Diaphragm	987	555118	Washer-Shaft
149	●555123	Spring-Needle Valve						

★ Included in Gasket Set-Part No. 555210.

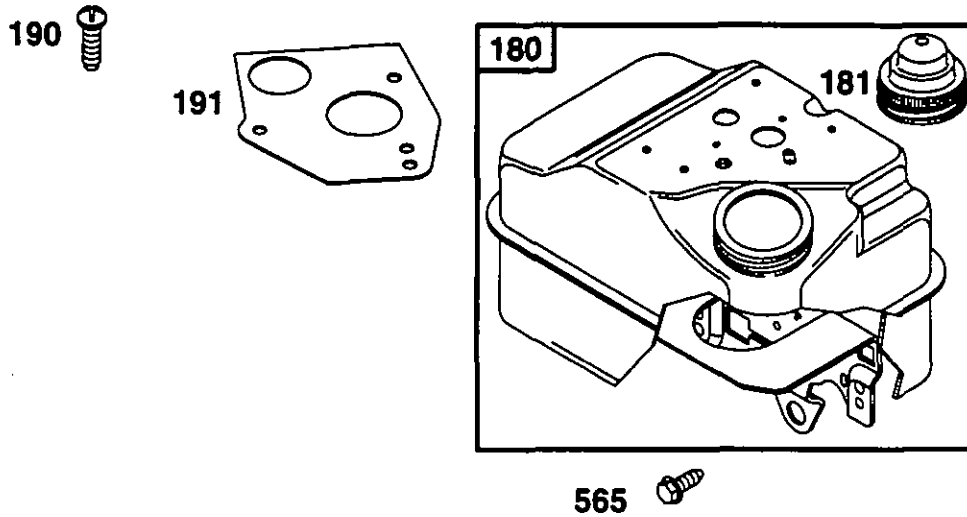
● Included in Carburetor Kit-Part No. 555130.



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
284	555080	Screw—Self Tap	356	555086	Wire—Stop (Armature to Switch)	356A	555099	Wire—Stop (Stop Switch to Ground)
333	555075	Armature—Magneto				851	555072	Terminal—Cable
335	555040	Screw—Hex.						

★ Included in Gasket Set—Part No. 555210.

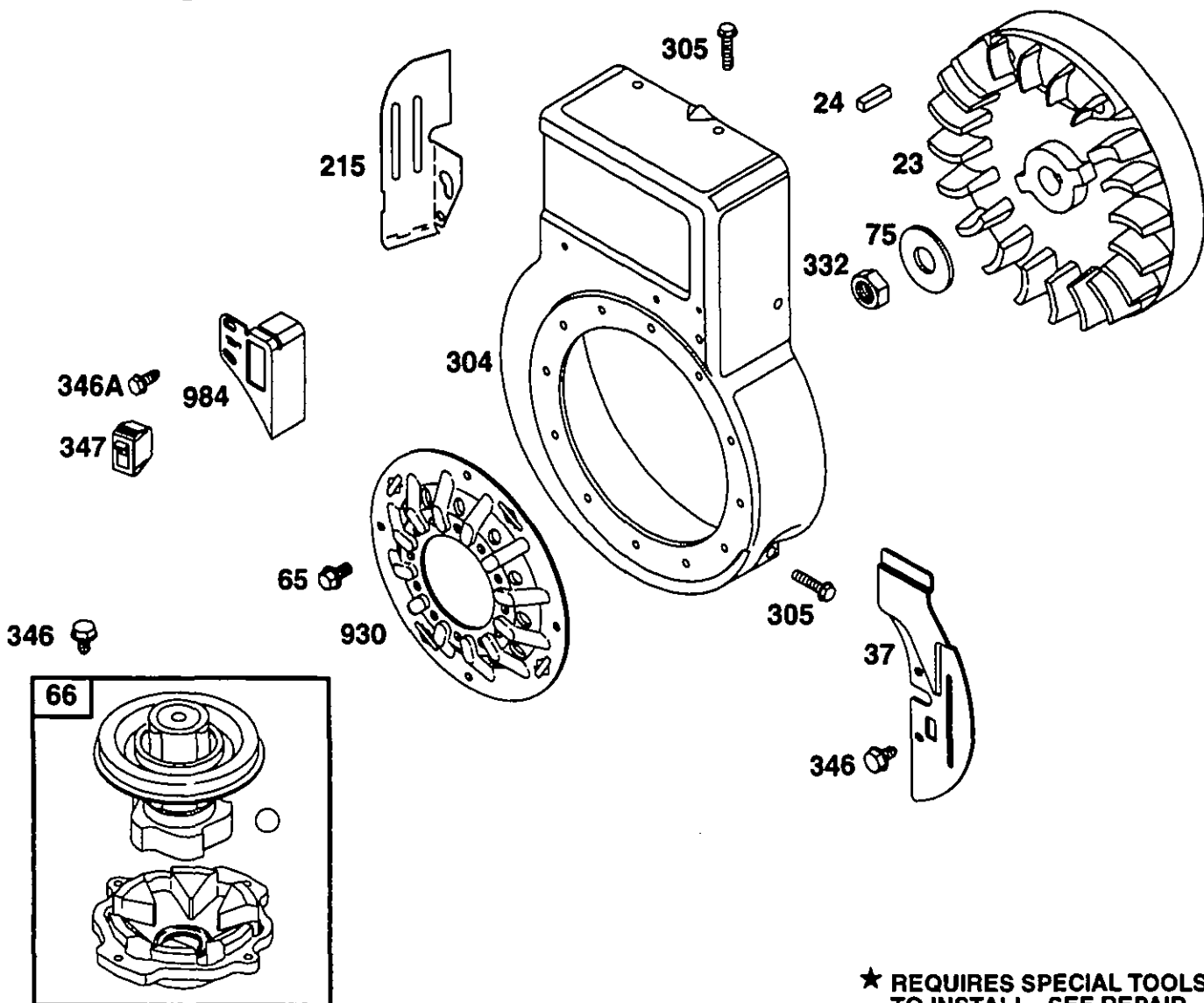
● Included in Carburetor Kit—Part No. 555130.



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
180	555192	Tank-Fuel	190	555048	Screw-Torx®	565	555044	Screw-Hex.
181	555085	Cap-Fuel Tank	191	★555084	Gasket-Tank Mtg.			

★ Included in Gasket Set-Part No. 555210.

● Included in Carburetor Kit-Part No. 555130.

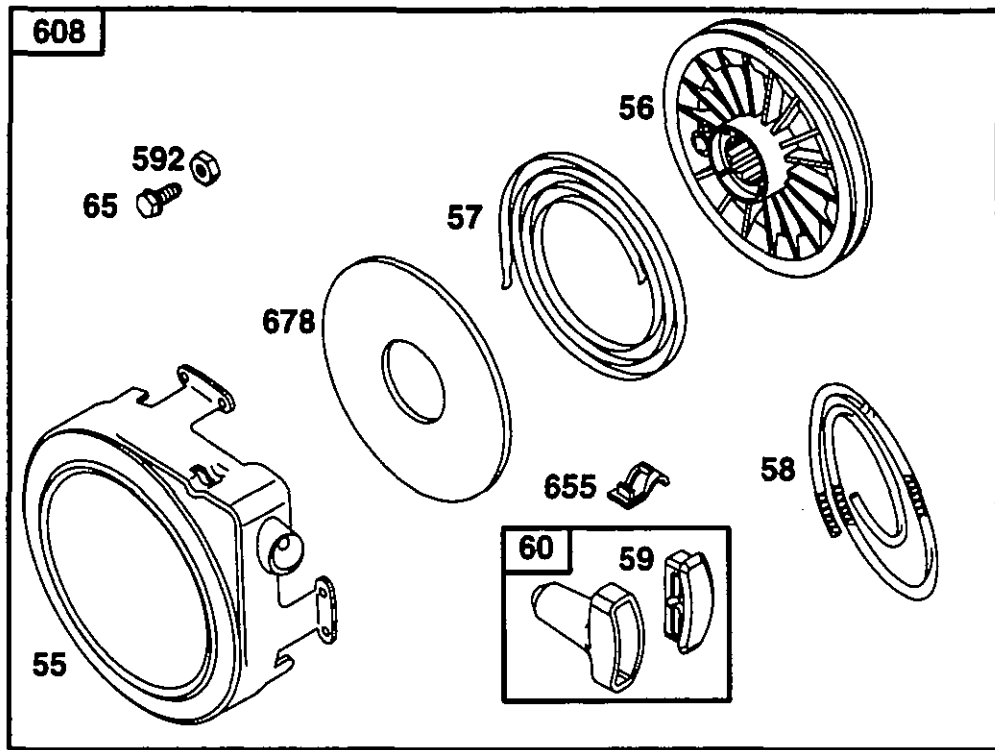


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REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
23	555067	Flywheel	215	555055	Guide-Air	346A	555081	Screw-Hex.
24	555054	Key-Flywheel	304	555190	Housing-Blower	347	555098	Switch-Stop
37	555053	Guard-Flywheel	305	555051	Screw-Hex.	930	555032	Guard-Finger
65	555211	Screw-Torx®	332	555038	Nut-Hex.	984	555097	Bracket-Indicator Light
66	555171	Clutch-Starter	346	555046	Screw-Hex.			
75	555083	Washer-Flywheel						

★ Included in Gasket Set-Part No. 555210.

● Included in Carburetor Kit-Part No. 555130.

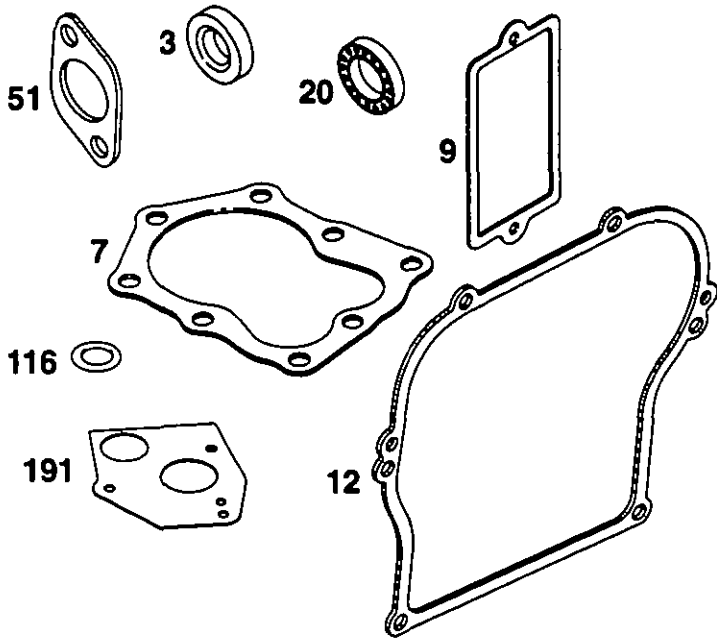


REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
55	555222	Housing-Rewind Starter	58	555221	Rope-Starter (63" Long)	592	555230	Nut-Hex.
56	555224	Pulley-Starter	59	555227	Insert-Grip	608	555165	Starter-Rewind
57	555226	Spring-Rewind Starter	60	555228	Grip-Starter Rope	655	555223	Anchor-Spring
			65	555229	Screw-Hex.	678	555225	Spacer-Rewind

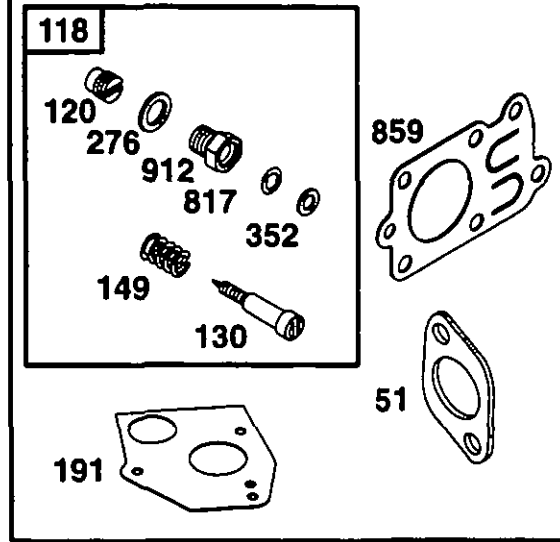
★ Included in Gasket Set-Part No. 555210.

● Included in Carburetor Kit-Part No. 555130.

358 GASKET SET



121 CARBURETOR KIT



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	★555071	Seal—Oil	20	★555087	Seal—Oil	191	★555084	Gasket—Tank Mtg.
7	★555187	Gasket—Cylinder Head	51	★555078	Gasket—Intake Elbow	276	●555106	Washer—Seal
9	★555036	Gasket—Breather	116	★555135	Ring—Oil Retainer	352	●555125	Washer—Needle Valve
12	★555191	Gasket—Crankcase (.015" Thick, Std.)	118	●555127	Valve—Needle Kit	358	555210	Gasket Set
		<u> Note </u>	121	555130	Carburetor Kit	817	●555122	O—Ring Seal
		★555064 Gasket—Crankcase (.005" Thick)	120	●555114	Seat—Needle Valve	859	●555119	Diaphragm— Pump
		★555065 Gasket—Crankcase (.009" Thick)	130	●555124	Valve—Idle Adjustment	912	●555126	Nut—Needle Valve
			149	●555123	Spring—Needle Valve			

★ Included in Gasket Set—Part No. 555210.

● Included in Carburetor Kit—Part No. 555130.

