

# S10D-S12D-S14D ENGINES

## Important Notice

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As with any printed data, the information contained in these manuals may not be the most up-to-date available. It is provided as a convenience to our customers and all information should be verified before making repairs to an engine or component.

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Order parts from the **WISCONSIN MOTORS, L.L.C.** Distributor or Service Center in your locality. Refer to the Yellow Pages of the Telephone Directory under **ENGINES**, or visit our website, [www.wisconsinmotors.com](http://www.wisconsinmotors.com) to locate a distributor in your area. You can also call Wisconsin Motors toll free, 800-932-2858.

The **MODEL**, **SPECIFICATION** and **SERIAL NUMBER** of your engine must be given when ordering parts. The **MODEL**, **SPECIFICATION** and **SERIAL NUMBER** are on the engine nameplate.



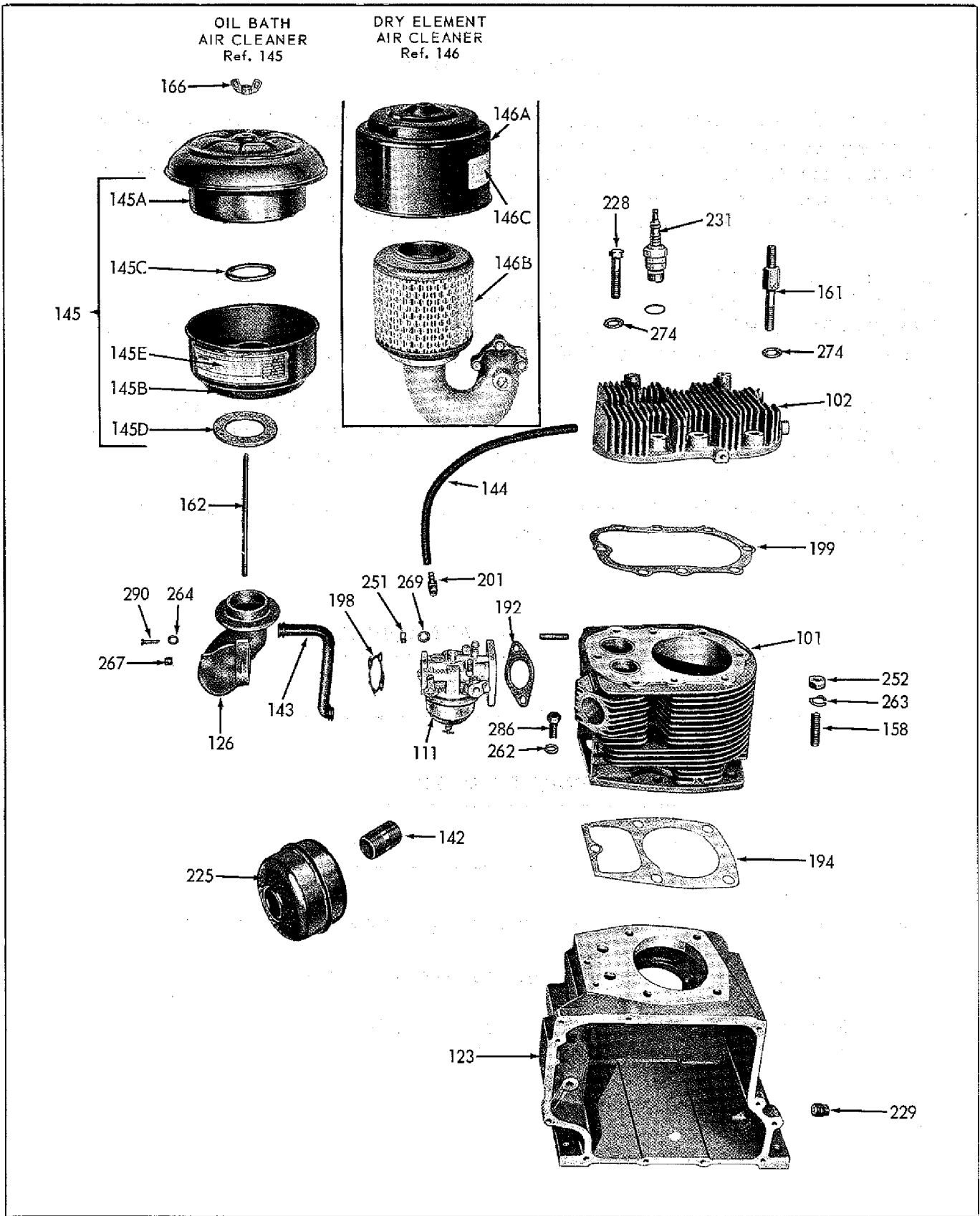
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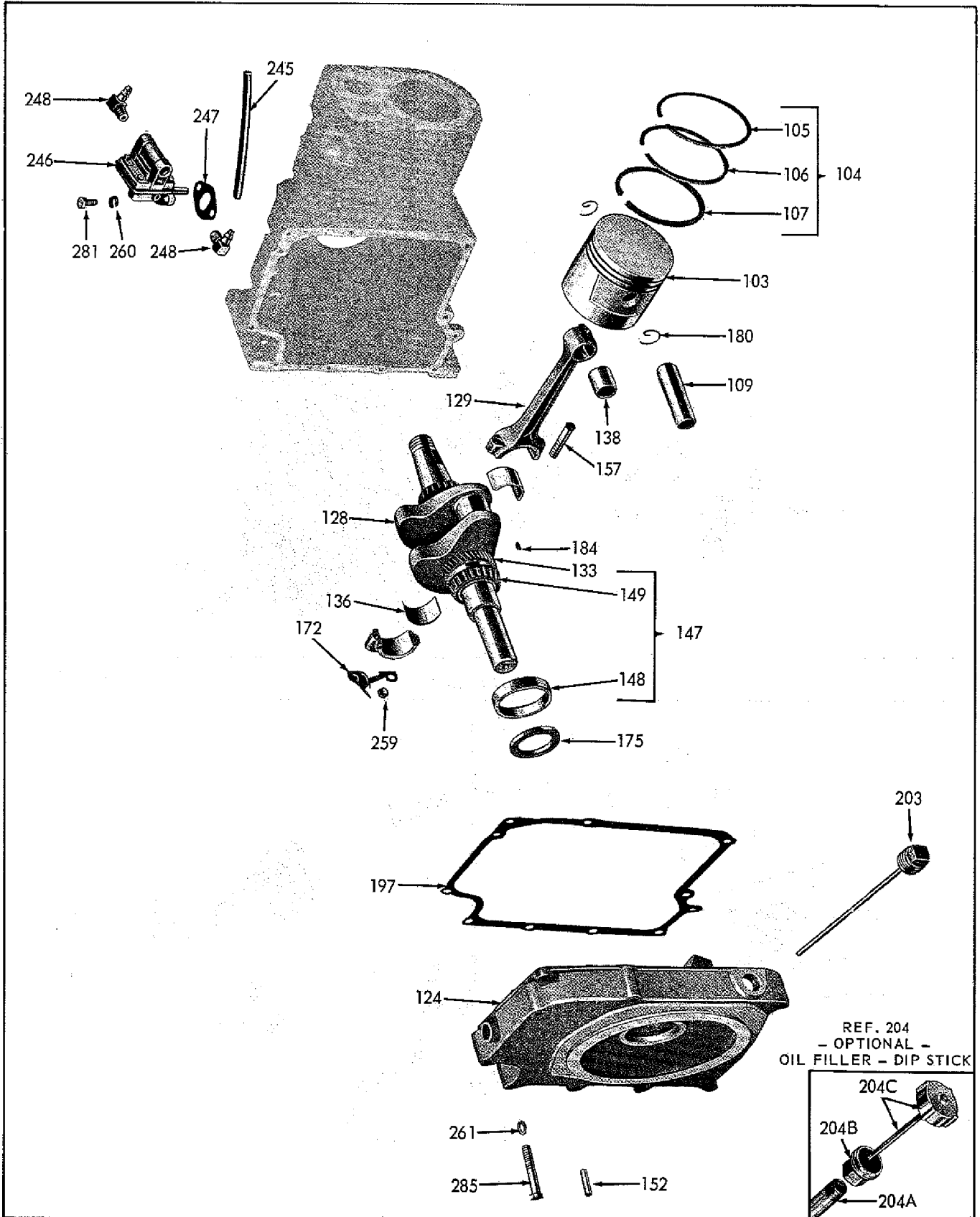


**CRANKCASE, CYLINDER HEAD, BLOCK, CARBURETOR and AIR CLEANER GROUP**

297769C-1

Parts are identified by reference number. See parts list for correct part number.

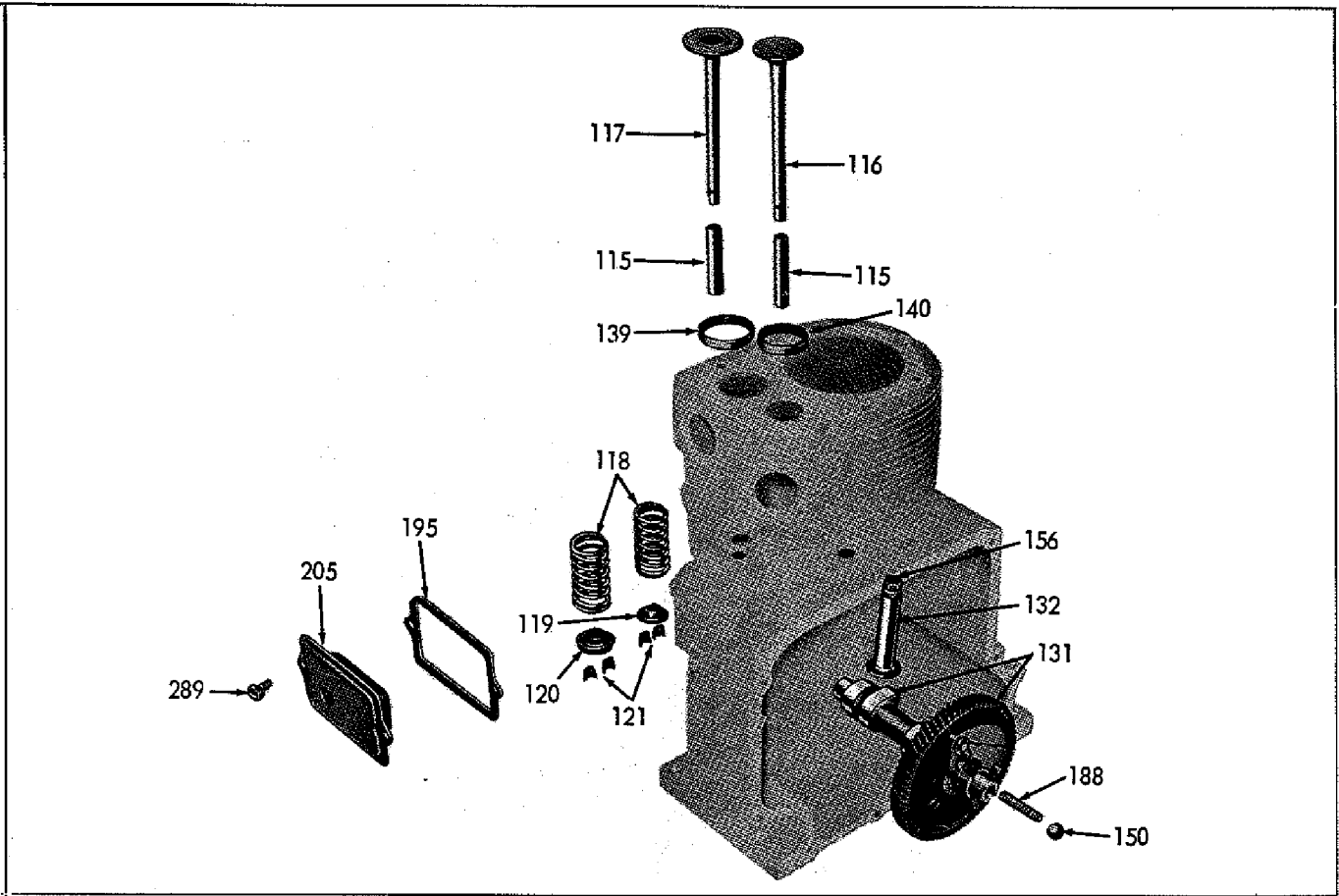
PARTS FOR ENGINE MODELS S-10D AND S-12D



**GEAR COVER, CRANKSHAFT, PISTON, CONNECTING ROD and FUEL PUMP GROUP**

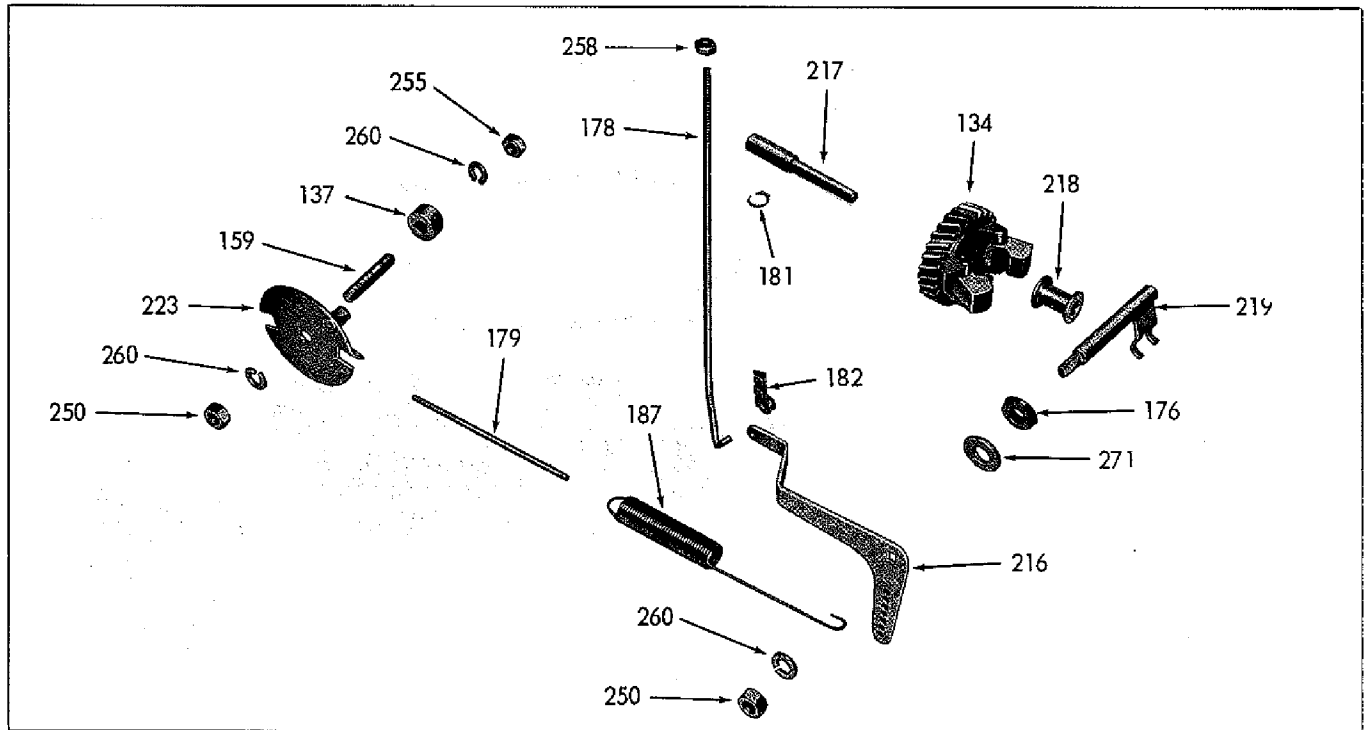
Parts are identified by reference number. See parts list for correct part number.

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**VALVES and CAMSHAFT GROUP**

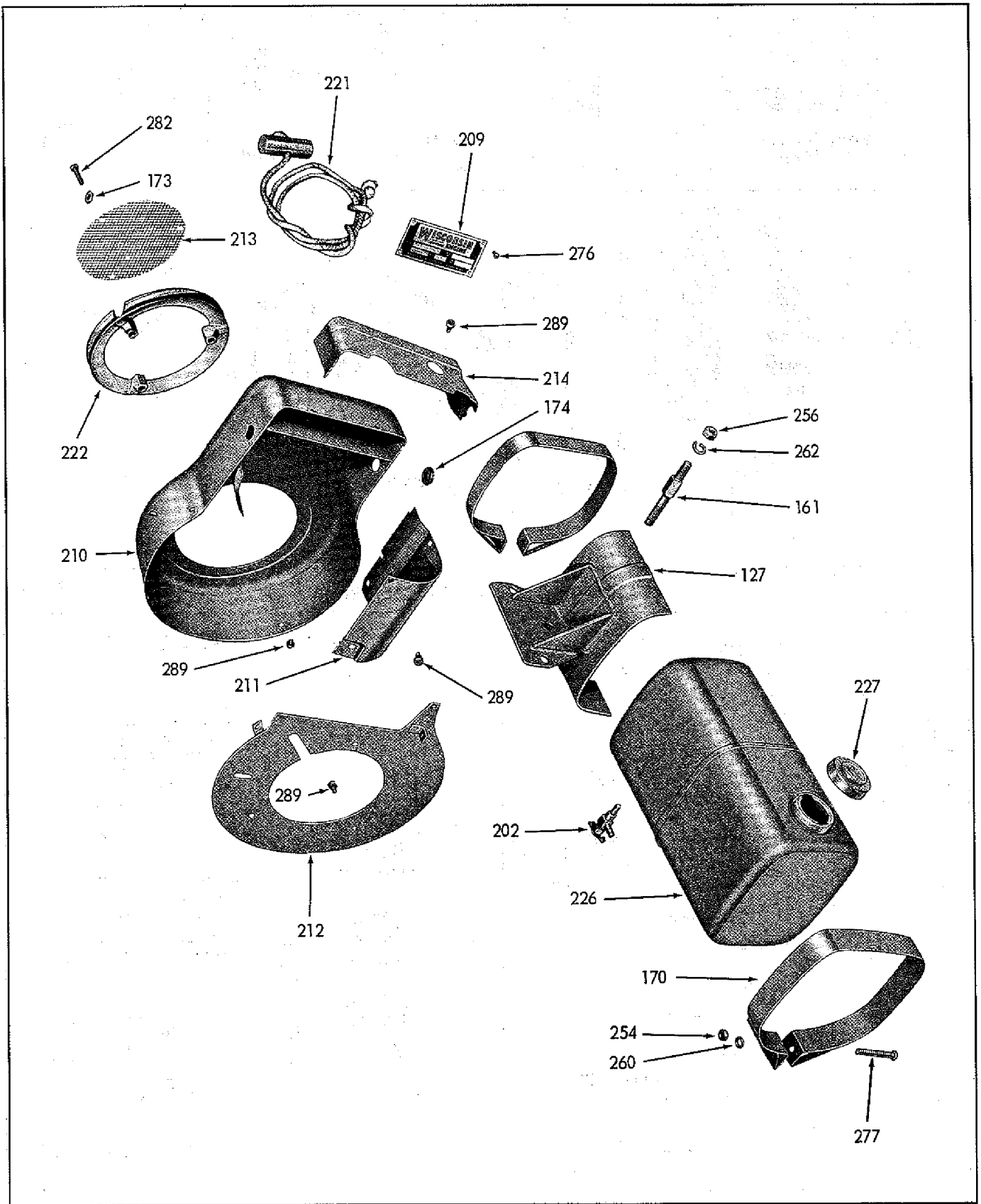
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**GOVERNOR ASSEMBLY**

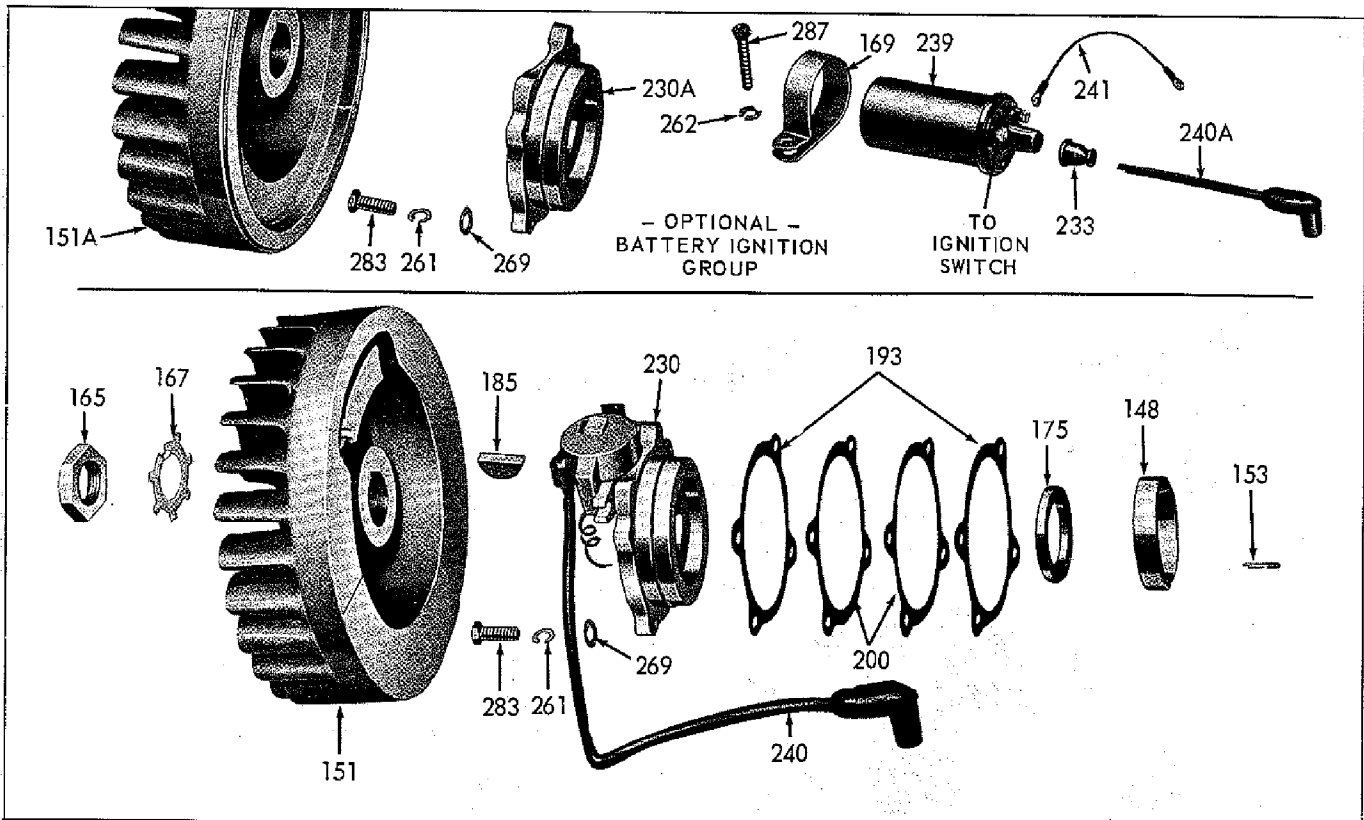
297766C

Parts are identified by reference number. See parts list for correct part number.



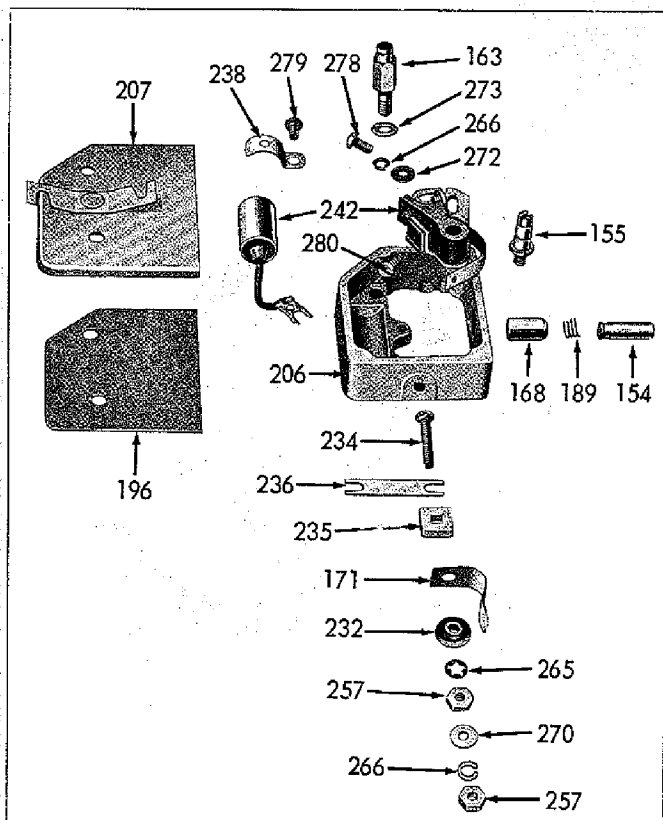
**AIR SHROUDING and FUEL TANK GROUP**

Parts are identified by reference number. See parts list for correct part number.



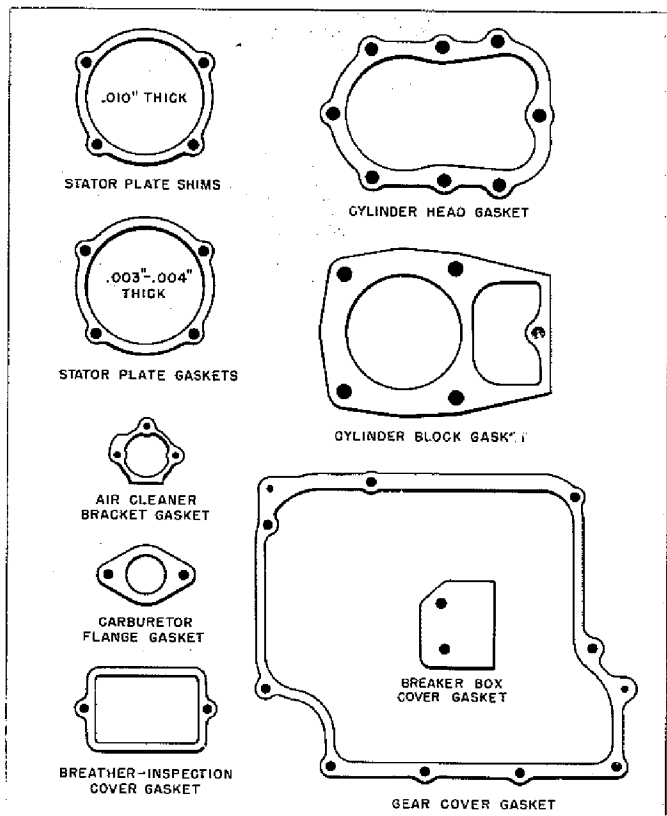
**STATOR PLATE and FLYWHEEL GROUP**

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**Ref. No. 237, BREAKER ASSEMBLY**

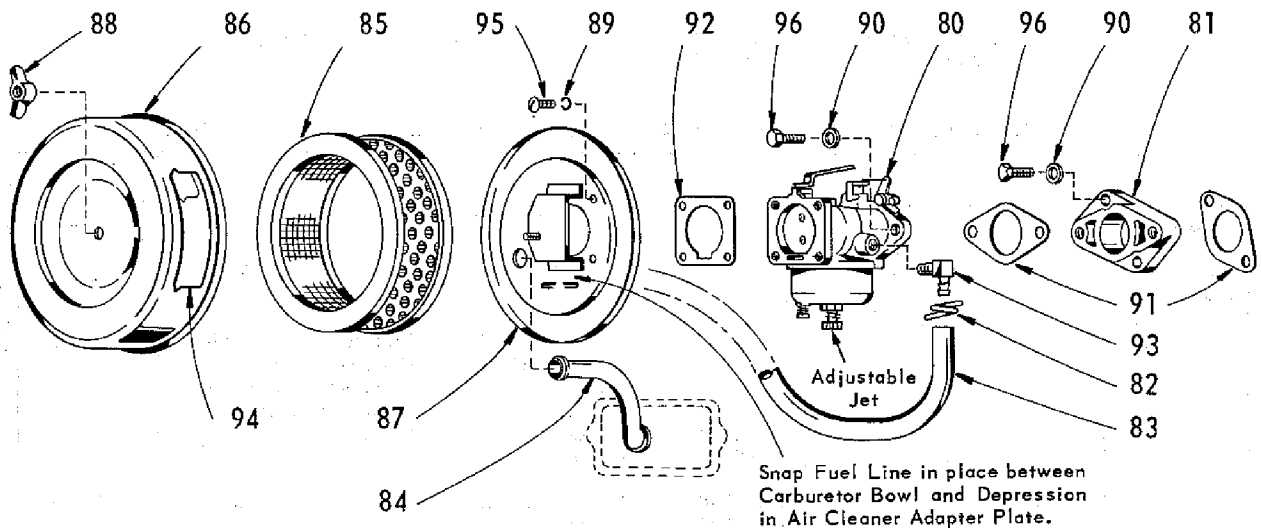
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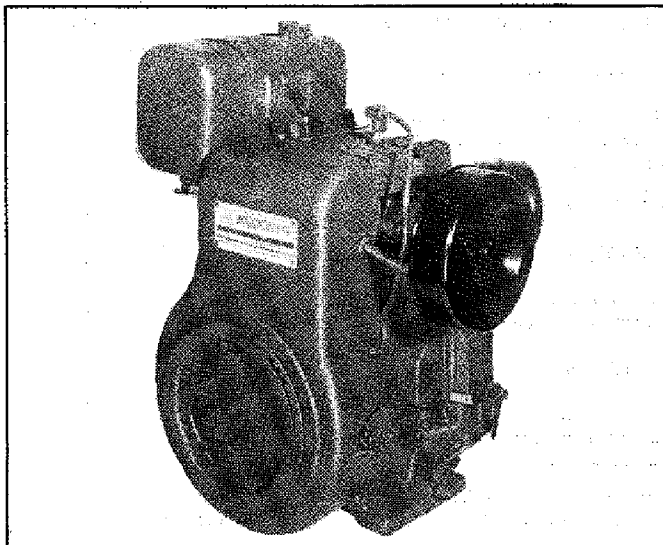
**Ref. No. 191, GASKET SET**

Parts are identified by reference number. See parts list for correct part number.

**LFA 100 Walbro Carburetor Assembly and LAA 138 Air Cleaner Assembly**  
For Models S12D and S14D Beginning with engine serial number 5,675,598.



**SERVICE LIST** of parts related to this change.



Ref. No.	Part Number	Description	No. Net Wt.		
			Req.	Lb	Oz
81	LF 146	ADAPTER, carburetor .....	1		2
82	LK 30	HOSE CLAMP, fuel line .....	2		1
83	LL 178-19	FUEL LINE .....	1		3
84	LL 201	BREATHER TUBE .....	1		3
85	LO 194 A	ELEMENT, air cleaner .....	1		6
86	LO 194 F	HOUSING, air cleaner .....	1		12
87	LO 194 H	ADAPTER PLATE, air cleaner .....	1		6
88	PD 147	WING NUT, air cleaner mounting .....	1		1
89	PE 14	LOCKWASHER, No. 10 spring lock For air cleaner adapter plate .....	4		1
90	PH 14 D	WASHER, 5/16" plain steel For carburetor and adapter mounting ...	4		1
91	QC 12 A	GASKET, carburetor and adapter mtg. ...	2		1
92	QD 860	GASKET, air cleaner adapter plate ...	1		1
93	RF 1439	ELBOW, in carburetor for fuel line .....	1		1
94	SD 308	DECAL, air cleaner instruction .....	1		1
95	XA 7	SCREW, 10-32 x 3/8 long, round head For air cleaner mounting .....	4		1
96	XD 16 B	SCREW, 5/16-18 x 7/8 hex hd., grade 5 For carburetor and adapter mounting ...	4		1

**NOTE:** Two other parts affected by this change are in the basic engine **Parts List**.  
Ref. No. 178 **THROTTLE ROD** (PI 228)  
Ref. No. 210 **FLYWHEEL AIR SHROUD** (SE 337, SE 337 A)

Ref. No.	Part Number	Description	No. Net Wt.		
			Req.	Lb	Oz
	LAA 138	<b>AIR CLEANER ASSEMBLY</b> Consisting of: Ref. No's. 84, 85, 86, 87, 88, 89, 92, 94, 95			
	LFA 100	<b>CARBURETOR ASSEMBLY</b> Consisting of: Ref. No's. 80, 81, 90, 91, 93, 96			
80	L 106 A S1	<b>CARBURETOR</b> , adjustable jet type ..... WALBRO No. LMH 18 L 106 S1 (LMH 16) fixed jet carburetor replaced by L 106 A S1, interchangeable.  LQ 54 A Repair Kit for L 106 A S1, L 106 S1 LQ 54 Repair Kit, replaced by LQ 54 A.  Q 46 Gasket Set for L 106 A S1, L 106 S1	1	1	
		Refer to Walbro Carburetor Bulletin in back section of manual for Service Instructions - Parts List.			
		<b>NOTE:</b> For S12D, S14D engines previous to Serial #5,675,598 use LTA 100 Carburetor and Air Cleaner-Conversion Kit for replacement of L 86 C, L 86 D, L 95, L 95 A Zenith carburetors.			

Order parts from nearest Wisconsin Distributor or Service Center.

# PARTS LIST

FOR STANDARD MAGNETO IGNITION ENGINES,  
AND BATTERY IGNITION

## Models S-10D, S-12D and S-14D

THE FOLLOWING ARE NON-INTERCHANGEABLE PARTS BETWEEN THE ABOVE ENGINE MODELS

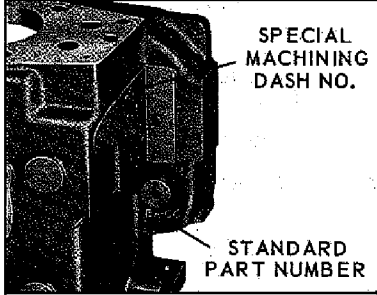
REF. NO.	PART NUMBER			DESCRIPTION	NO. REQ.	NET WEIGHT	
	MODEL S-10D	MODEL S-12D	MODEL S-14D			LBS.	OZ.
101	AA-109-S1 3-1/4" Bore	AA-108-S1 3-1/2" Bore	AA-112-S1 3-3/4" Bore	<b>CYLINDER BLOCK ASSEMBLY</b> complete ..... Consisting of: 1 Cylinder block 1AG-31 Seat and rotator, exh. 2AD-43 Valve stem guides 2AH-9 Retainer locks 1 Inlet valve 1HG-150-A Valve seat insert, inlet 1 Exhaust valve 1 Valve seat insert, exh. 2AF-49D Valve springs 2PC-549 Carburetor studs 1AG-26 Spring seat, inlet	1	21 19 17	(S-10D) (S-12D) (S-14D)
102	AB-114	AB-113	AB-117-A	<b>CYLINDER HEAD</b> ..... AB-117 (S-14D), replaced by AB-117-A.	1	3	8
103	DB-210-2	DB-231	DB-233	<b>PISTON</b> , standard size (cam ground) ..... Pistons are also furnished .010" and .030" oversize.	1	(S-10D) (S-12D) (S-14D)	10 11-3/4 12
104	DR-56	DR-58	DR-61	<b>PISTON RING SET</b> , standard size ..... Consisting of:	1		6
105	DC-310	DC-340	DC-353	<b>COMPRESSION RING</b> , top groove .....	1		
106	DC-311	DC-339	DC-355	<b>SCRAPER RING</b> , 2nd groove .....	1		
107	DC-324	DC-338	DC-356 DC-357	<b>OIL RING</b> , 3rd groove ..... <b>EXPANDER</b> for oil ring ..... <b>TRI-CROME RE-RING SET</b> , standard size .....	1 1 1		6
		DR-59					
				<b>NOTE:</b> All ring sets are available .010", .020" and .030" oversize.			
109	DE-65	DE-79	DE-81	<b>PISTON PIN</b> , standard size ..... Piston pins are also furnished .005" and .010" oversize.	1		3
111	L-86-B-S1 (13027)	L-86-D-S1 (13064)	L-95-S1 (13385)	<b>CARBURETOR</b> , standard (gravity feed) ..... Zenith Model 1408. LQ-45 Repair kit .....	1	1	
	L-86-A-S1 (13022)	L-86-C-S1 (13040)	L-95-A-S1 (13417)	<b>CARBURETOR</b> , for engines with fuel pump ..... LQ-44 Repair kit .....			
				<b>NOTE:</b> The above 'ZENITH' carburetors for Models S12D and S14D can be replaced by 'WALBRO' carburetor (page 32A) - Conversion Kit LTA 100, compl. with air cleaner Refer to stamped part number on carburetor for replacement carburetor or parts. See carburetor bulletins in back of manual for service replacement parts list.			
116	AE-97-D	AE-97-D	AE-102-D	<b>EXHAUST VALVE</b> .....	1		4
117	AE-98	AE-98	AE-103	<b>INLET VALVE</b> .....	1		4
119	AG-26	AG-26		<b>VALVE SPRING SEAT</b> , inlet .....	1		1
120	AG-31	AG-31	AG-31	<b>ROTO-CAP and SEAT</b> , exhaust valve ..... <b>ROTO-CAP and SEAT</b> , inlet and exhaust valve .....	1 2		1 1
140	HG-201-D	HG-201-D	HG-150-D	<b>VALVE SEAT INSERT</b> , exhaust .....	1		1
142	LJ-380 (1" x 2)	LJ-380 (1" x 2)	LJ-280 (1 1/4" x 2 1/4)	<b>PIPE NIPPLE</b> for exhaust muffler .....	1		6
191	Q-38B	Q-38B	Q-38C	<b>ENGINE GASKET SET</b> (replaces Q-38, Q38A) .....	1		8
199	QD-829A	QD-829A	QD-847	<b>GASKET</b> for cylinder head .....	1		1
225	WD-66-A	WD-66-A	WD-66	<b>EXHAUST MUFFLER</b> (order pipe nipple separately) .....	1	1	

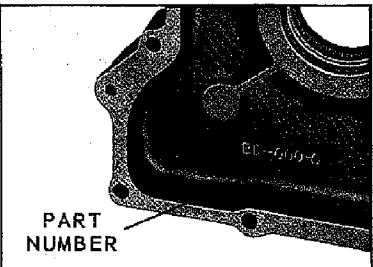
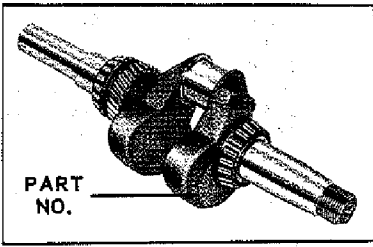
**IMPORTANT:** Always give Model, Specification and Serial Numbers as shown on name plate.



# PARTS INTERCHANGEABLE ON MODELS S-10D, S-12D AND S-14D

REFER TO PAGE 33 FOR NON-INTERCHANGEABLE PARTS.

Ref. No.	Part Number	Description	No.			Net Wt.		
			Req.	Lb.	Oz.	Req.	Lb.	Oz.
115	AD-43	VALVE STEM GUIDE, inlet and exhaust	2		1			
118	AF-49-D	VALVE SPRING, inlet and exhaust ..... AF-60, replaced by AF-49-D.	2		2			
121	AH-9	LOCK for valve spring seat .....	4		1			
123	BA-59-C-S1	<b>CRANKCASE ASSEMBLY</b> (cast iron) .. Consisting of: 1 Crankcase 1 PA-437 Timing pin 4 PC-337 Cylinder studs 1 PF-160 Breaker pin bushing 1 SA-13 Plug for fuel pump hole 1 TC-487 Governor shaft 2 XK-3 Pipe plugs	1		28			
<p><b>NOTE:</b> Beginning with engine serial No. 4080373, BA-59-C crankcase replaces BA-59-A, BA-59A-1 and all subsequent dash numbers. For Service Replacement: Use BA-59-C-S1 crankcase assembly. This crankcase is machined to provide for a fuel pump, optional oil drains and various motor-generator mountings, that previously required separate crankcase part numbers.</p> <p>If a special crankcase was furnished, this would be indicated by a dash (-) number stamped at the location shown in Fig. A. Add this number to the standard crankcase part number when ordering. Remachine special cases from available standard BA-59-C-S1 service crankcase, whenever possible.</p>								
			<p>Fig. A      299524C</p>					
124	See Fig. B	<b>GEAR COVER ASSEMBLY</b> ..... Consisting of: 1 BD- Gear cover 1 PH-557A Oil seal 1 ME-212-1 Brg. cap 1 PH-571 Oil seal	1		13			
<p><b>NOTE:</b> The standard gear cover part number for these models of engines is BD-113-C (replaces ED-113). Any special machining is indicated by a dash (-) number stamped behind the basic ED-113-C cast part number, at the location shown in Fig. B. Order by this complete part number and by giving model, specification and serial numbers of engine.</p>								

Ref. No.	Part Number	Description	No.			Net Wt.		
			Req.	Lb.	Oz.	Req.	Lb.	Oz.
			<p>Fig. B      297762C</p>					
126	BI-374-A	<b>AIR CLEANER BRACKET</b> ..... Includes RD-142 drip plug	1		12			
	BI-383-A	For 'ZENITH' carburetor						
127	BK-112-A	<b>FUEL TANK BRACKET, standard</b> ..... For gravity feed engines.	1		2		12	
<p><b>NOTE:</b> If bracket is other than standard, order by giving spec and serial numbers — because of various tank mountings with fuel pump and motor-generator.</p>								
128	See Fig. C	<b>CRANKSHAFT ASSEMBLY</b> ..... Consisting of: 1 Crankshaft 1 GA-46 Gear 2 ME-212 Bearings 1 PL-21 Key	1		12		4	
<p><b>NOTE:</b> The standard and basic engine crankshaft part number (raised letters on side of counter-weight), is CA-80. Dash numbers are added to the basic part number to identify special machining at the take-off end. The dash (-) number will be found stamped on the cheek facing the flywheel end of the shaft, as illustrated in Fig. C. Order by complete part number, (dash number added to basic number) and by giving the model, specification and serial numbers of the engine.</p>								
			<p>Fig. C      290652C</p>					
129	DA-74-B-S1	<b>CONNECTING ROD ASSEMBLY</b> for engines beginning with serial No. 4599775 Includes: 1 HC-133A Bushing 2 PD-246 Nuts 2 PE-186 Bolts 1 PG-1143C Dipper DA-74A-S1 for engines previous to serial No. 4599775. Replaced by DA-74B-S1 but if original piston is used, machine inside of piston to 1-3/8" between pin bosses.	1		1		2	
<p><b>NOTE:</b> The connecting rod is furnished LESS the shell bearings. Refer to reference number 136 for part number of the standard size and the undersize shell bearings available.</p>								

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**PARTS INTERCHANGEABLE ON MODELS S-10D, S-12D AND S-14D**

REFER TO PAGE 33 FOR NON-INTERCHANGEABLE PARTS.

Ref. No.	Part Number	Description	No. Req.	Net Wt.		Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz					Lb	Oz
131	EA-134-A	CAMSHAFT and GEAR ASSEMBLY with striker plate and compression release .... PM-232 Torsion Spring for compression release flyweight ..... EA-128A, replaced by EA-134-A. EA-127-A camshaft assembly (less compression release) for engines previous to Serial No. 4225490. For replacement use EA-134-A.	1	2	12	150	ME-216	STEEL BALL for camshaft, 1/2" dia. ..	1		1
			1		1	151	N-105-B	FLYWHEEL ASSEMBLY, includes magnet. For magneto ignition and beginning with engine serial No. 4329320. NC-208D-S1, replaced by N-105-B.  NC-208B-S1, for serial No. 4153189 to 4329319, replaced by N-105-B.	1		20
132	F-70	VALVE TAPPET with lockscrew .....	2		2			NC-208-S1 for engines to and including serial No. 4153188 - replaced by N-105B-S1 flywheel and sheave assembly.	19		8
133	GA-46	CRANKSHAFT GEAR .....	1		5			N-105B-1 for Bendix starter includes: GH-48 Ring Gear.	21		
134	GD-139B-S1	GOVERNOR GEAR and FLYWEIGHT ASSEMBLY ..... Consisting of: 1 GD-139-B Gear 1 PK-118 Snap ring 2 PA-332 Flyweight pins 2 TC-488 Flyweights	1		8	151A	NC-210-6	FLYWHEEL for battery ignition engines with motor-generator.	1		20
							N-105-C	FLYWHEEL with GH-48 ring gear ..... For battery ignition and Bendix starter.	21		
							N-105-2	FLYWHEEL with ring gear and rotor for flywheel alternator.			
136	HA-129-S	SHELL BEARING (2 halves) ..... For connecting rod, standard size. NOTE: The following undersize shell bearings are also available. HA-129-S1 ..... (.001" undersize) HA-129-S2 ..... (.002" undersize) HA-129-S10 ..... (.010" undersize) HA-129-S20 ..... (.020" undersize)	1		4		N-105-3	FLYWHEEL with ring gear and rotor for solid state ignition.			
							N-105-4	FLYWHEEL with rotor (less ring gear) for solid state ignition.			
137	HF-52	SPACER for governor control disc .....	1		1	152	PA-425	DOWEL PIN for gear cover .....	2		1
138	HG-133-A	PISTON PIN BUSHING .....	1		1	153	PA-437	POINTER for timing .....	1		1
139	HG-150-A	VALVE SEAT INSERT, inlet .....	1		1	154	PA-438-S1	PUSH PIN for breaker points .....	1		1
143	LL-168	BREATHER TUBE, standard .....	1		2			Includes: PM-22 3 Spring			
	LL-168-B	For horizontal mounted air cleaner .....			2	155	PA-439	FULCRUM PIN for breaker arm .....	1		1
144	LL-178-12	HOSE for fuel line .....	1		2			(Included in YQ-16 Kit.)			
145	LO-24	AIR CLEANER - Oil Bath Type .....	1	1	12	156	PB-169-A	ADJUSTING SCREW for valve tappet ....	2		1
		Service parts:				157	PB-186	CONNECTING ROD BOLT .....	2		2
145A		81-179B1 Cap and filter assembly ....	1	1		158	PC-337	STUD for cylinder block .....	4		2
145B		81-176B1 K01 Oil cup .....	1		10	159	PC-377	STUD for governor control disc .....	1		1
145C		81-615A1 Filter gasket .....	1		1	160	PC-549	STUD for carburetor mounting .....	2		1
145D		QD-540 Base gasket (Wis. part No.) .....	1		1	161	PC-588	STUD for cylinder head and fuel tank bracket .....	3		3
145E		SD-165 Instruction decal .....	1		1	162	PC-593	STUD for oil bath air cleaner, 7-3/8" long	1		2
146	LO-175	AIR CLEANER - Dry Element Type .....	1	1			PC-591	STUD for dry element cleaner, 7-7/16" lg.			2
		Consisting of:				163	PC-601	STUD for breaker box mounting .....	2		1
146A		LO-175-A Cover .....	1		8	165	PD-123	NUT for flywheel mounting .....	1		2
146B		LO-175-B Element .....	1		8	166	PD-147	WING NUT for air cleaner stud .....	1		1
146C		SD-295 Instruction decal .....	1		1	167	PE-66	LOCKWASHER for flywheel mounting ..	1		1
	LO-175-C	AIR CLEANER - horizontal mounted ....	1	4		168	PF-160	BREAKER BUSHING .....	1		3
		Consisting of:						Ream I. D. to .2785 - .2790 inches after pressing in place.			
		LO-175-B Element .....	1		8	169	PG-556-2	STRAP for ignition coil .....	1		4
		LO-175-D Body .....	1		8						
		SD-295 Decal .....	1		1						
	SA-137	CAP (not illustrated) .....	1		1						
	SA-144	COVER (not illustrated) .....	1		2						
		NOTE: See Page 32A for new air cleaner assembly									
147	ME-212	MAIN BEARING ASSEMBLY .....	2		8						
		Consisting of:									
148		1 ME-212-1 * Bearing cup .....			3						
149		1 ME-212-2 * Bearing cone .....			5						
		* Not sold separately.									

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**PARTS INTERCHANGEABLE ON MODELS S-10D, S-12D AND S-14D**

REFER TO PAGE 33 FOR NON-INTERCHANGEABLE PARTS.

Ref. No.	Part Number	Description	No.			Ref. No.	Part Number	Description	No.		
			Req	Lb	Oz				Req	Lb	Oz
170	PG-1196 PG-864	STRAP, for standard, 1.5 gal. tank ..... STRAP, for 2.4 gal. fuel tank .....	2 2		4 6	202	RG-41	SHUT-OFF VALVE and STRAINER .....	1		1
		<b>NOTE:</b> Steel Binder Strapping and Seal for mounting fuel tank, on engines sent out from the factory, are not serviceable in the field. Order 2 each of straps, XA-69 screws and PD-239 nuts.				203	RJ-165 RJ-171-C (Optional)	DIP STICK (screw in) standard ..... DIP STICK (saber type) .....	1 1		2 4
171	PG-1132	GROUNDING CLIP .....	1		1	204	R-123-74	OIL FILLER - DIP STICK Assembly .. Consisting of: L.H. side of gear cover	1		12
172	PG-1143-C	OIL DIPPER for DA-74B-S1 conn. rod .. PG-1143-B for engines previous to serial No. 4599775 and DA-74A-S1 conn. rod.	1		3	204A	LJ-442	1/2" Pipe Nipple, 3-3/8" long	1		5
173	PH-196 PE-3	WASHER, 1/4" plain steel ..... WASHER, 1/4" spring lock..... For starter sheave mounting. (Replaces PH-442 rubber faced washer)	3 3		1 1	204B	RB-86	Body .....	1		3
174	PH-515	GROMMET for fuel line .....	2		1	204C	RJ-168E-S1	Dip Stick and Cap with QD-715 Gasket .....	1		4
175	PH-557-A	OIL SEAL for crankshaft ..... 1-in gear cover. 1-in stator plate.	2		2	205	SA-128-B	BREATHER - INSPECTION COVER .. SA-128-A, replaced by SA-128-B.	1		4
176	PH-571	OIL SEAL for governor lever shaft .....	1		1	206	SA-138	BREAKER BOX (order YD-334 complete box, pin and point assembly.)	1		
178	PI-228 PI-218	ROD, throttle (10-1/16) WALBRO carb... ROD, (9-3/8" long) ZENITH carburetor..	1		1	207	SA-139	BREAKER BOX COVER .....	1		2
179	PI-219 or PI-219-A	ADJUSTING SCREW for governor spring 3-5/8" long, for 2600 to 3600 R.P.M. .... 4-1/4" long, to and including 2500 R.P.M. load.	1		1	209	SD-312	NAME PLATE .....	1		1
180	PK-52	PISTON PIN RETAINING RING .....	2		1		210	SE-337 SE-337A	FLYWHEEL AIR SHROUD, standard..... For engines with Bendix starter..... SE-289, SE-289A repl. by SE-337, SE-337A	1 1	2 8
181	PK-118	SNAP RING for governor gear .....	1		1	211	SE-291	CYLINDER SIDE SHROUD .....	1		6
182	PK-178	CLIP for throttle rod mounting..... PK-160, PK-177, replaced by PK-178	1		1	212	SE-301 SE-301-B	BACK PLATE for flywheel shroud, std. For engine with Bendix starter. ....	1 1	1 2	4 2
184	PL-21	WOODRUFF KEY, No. 3 .....	1		1	213	SE-303	SCREEN for rope sheave .....	1		2
185	PL-48	WOODRUFF KEY, letter E.....	1		1	214	SE-309	CYLINDER HEAD COVER .....	1		4
187	PM-213	GOVERNOR SPRING .....	1		1	216	TC-486	GOVERNOR LEVER .....	1		2
188	PM-216	SPRING for camshaft thrust plunger .....	1		1	217	TC-487	GOVERNOR SHAFT .....	1		3
189	PM-223	SPRING for breaker pin .....	1		1	218	TC-490	GOVERNOR THRUST SLEEVE .....	1		1
192	QC-12-A	GASKET for carburetor flange .....	1		1	219	TC-491-A	CROSS SHAFT and YOKE ASSEMBLY	1		2
193	QD-816-A	GASKET for stator plate (paper) ..... .003"-.004" thick. * Use as required to give .002" to .005" crankshaft end play (2 to 4 used, along with 3 QF-116 shims).	*		1	221	U-268 (Obsolete)	STARTING ROPE ASSEMBLY .....	1		6
194	QD-818-B	GASKET for cylinder block .....	1		1	222	UC-202 (Obsolete)	STARTING SHEAVE (Sheet metal). Beginning with engine serial No. 5368079. (Sheave is furnished less screen) UC-189B (aluminum) serial No. 4153188 to serial No. 5368078, not available. Use UC-202 and enlarge hole in flywheel shroud to 7-1/4" dia. UC-189 for engines to serial No. 4153187. For replacement use UC-202 with 3 HF-631 spacers, and enlarge shroud hole to 7-1/4".	1		
195	QD-823	GASKET for breather - insp. cover .....	1		1			<b>NOTE:</b> Rewind (recoil) starter is now standard equipment. See section following parts list.			
196	QD-838	GASKET for breaker box cover .....	1		1	223	VC-43-A	DISC ASSEMBLY for gov. control rod ..	1		3
197	QD-824	GASKET for gear cover .....	1		1	226	WE-415-S1	FUEL TANK (1.5 gal. capacity) std. with RC-122 filler cap. WE-402 tank with RC-87 cap, replaced by WE-415-S1.	1	2	6
198	QD-828	GASKET, air cleaner brkt. ZENITH carb.	1		1		WE-417-S1	2.4 gal. tank with RC-122 cap (requires special bracket) .....			3
200	QF-116-A	SHIM for stator plate, .010" thick steel QF-116, replaced by QF-116-A.	3		1			WE-344 with RC-77 cap, replaced by WE-417-S1.			
201	RF-1439	ELBOW in carburetor, for fuel line .....	1		1						

**IMPORTANT:** Always give Model, Specification and Serial Numbers as shown on name plate.

## PARTS INTERCHANGEABLE ON MODELS S-10D, S-12D AND S-14D

REFER TO PAGE 33 FOR NON-INTERCHANGEABLE PARTS.

Ref. No.	Part Number	Description	No.			Ref. No.	Part Number	Description	No.		
			Req	Lb	Oz				Req	Lb	Oz
		<b>NOTE:</b> Fuel tanks are mounted to the tank bracket with steel binder strapping, which is not serviceable in the field. When replacing fuel tank, order service replacement straps (Ref. 170).						<b>FUEL PUMP MOUNTING</b> (Not part of standard engine)			
227	RC-122 RC-123-A	CAP (screw type) for WE-415 tank ..... CAP with gauge, available for WE-415 fuel tank .....	1		2	245	LL-178-6	FUEL LINE, pump to carburetor .....	1		1
		RC-87 cap for obsolete WE-402 bayonet neck type fuel tank .....			4	246	LP-62F-S1	FUEL PUMP for engines beginning with serial No. 5307640 .....	1		10
228	XD-31	SCREW (Special hardness) 3/8"-16 thread x 1-3/4" long ..... For mounting cylinder head.	5		2			LQ-51 Repair Kit for LP-62F-S1 .....	1		4
229	XK-3	PIPE PLUG, 3/8" square head ..... For oil drain.	2		2			LP-42M-S1, replaced by LP-62F-S1.			
230	Y-132-S1	STATOR PLATE ASSEMBLY, mag. ign. Includes: 1 ME-212-1 Bearing cup 1 PH-557-A Oil seal 1 YL339B20 Lead wire 1 YM 23 Coil assembly 1 YM 24 Coil clip	1	1	8			LQ-28 Repair Kit for LP-42M-S1 pump ..	1		4
230A	BG-350A-S1	BEARING PLATE ASSEMBLY, fan end For battery ignition, flywheel alternator or solid state ignition engines. Includes: 1 ME-212-1 Bearing cup 1 PH-557-A Oil seal Y-132A-S1, replaced by BG-350A-S1	1	1	4	247	QD-670	FLANGE GASKET .....	1		1
231	YD-6-51 (Optional) YD-6-52	SPARK PLUG, 18mm, Champion #D-16J SPARK PLUG, AC #88 Commercial .....	1		3	248	RF-1439	ELBOW in pump outlet and inlet .....	2		1
232	YD-316	INSULATING WASHER (outer) for ground stud .....	1		1			<b>STANDARD HARDWARE</b>			
233	YD-20-A	RUBBER NIPPLE for coil terminal .....	1		1	250	PD-9	NUT, 1/4"-28 thread, hexagon steel .... 1-for governor control lever. 1-for governor control disc.	2		1
234	YD-321	TERMINAL STUD for ground clip .....	1		1	251	PD-10	NUT, 5/16"-24 thread, hexagon steel .. For carburetor mounting.	2		1
235	YD-324	INSULATING WASHER (inner) for ground stud .....	1		1	252	PD-12	NUT, 7/16"-20 thread, hexagon steel .. For cylinder block mounting.	4		1
236	YD-326	TERMINAL STRIP for breaker arm .....	1		1	254	PD-239	NUT, 1/4"-20 thread, square steel .....	2		1
237	YD-334-S1	BREAKER BOX and PIN ASSEMBLY .... Complete - with points and condenser.	1		8	255	PD-77-1	NUT, 1/4"-20 thread, hexagon jam .....	1		1
238	YD-339	CONDENSER CLAMP .....	1		1	256	PD-79	NUT, 3/8"-16 thread, hexagon steel .... For fuel tank bracket studs.	3		1
239	YF-5-B YF-37	COIL (12 volt) for battery ignition .....	1	1	6	257	PD-153-2	NUT, No. 8-32, hexagon steel .....	2		1
240	YL-339B-20	HIGH TENSION LEAD for magneto coil	1		3	258	PD-155	NUT, No. 5-40 thread, hexagon steel .... For governor control rod lock.	1		1
240A	YL-339-20 YL-339-6	HIGH TENSION LEAD for battery ign. ... LEAD for solid state ignition .....	1		3	259	PD-246	NUT (special) 5/16"-24 thread .....	2		1
241	YL-352-19	IGNITION WIRE, breaker box to battery ignition coil .....	1		1	260	PE-3	LOCKWASHER, 1/4" spring lock .....	11		1
242	YQ-16	POINTS and CONDENSER KIT .....	1		4			1-for governor lever. 2-for governor control disc. 2-for fuel tank straps. 2-for fuel pump mounting. 4-for air shroud to back plate.			
		Consisting of: 1 YD-315-A Condenser 1 YD-326 Terminal strip 1 YD-339 Condenser clip 1 YD-340 Breaker assembly Includes: 1 PA-439 Fulcrum pin 1 XA-121 Breaker arm screw				261	PE-4	LOCKWASHER, 5/16" spring lock .....	13		1
						262	PE-5	LOCKWASHER, 3/8" spring lock .....	5		1
						263	PE-6	LOCKWASHER, 7/16" spring lock .....	4		1
						264	PE-45	LOCKWASHER, No. 10 external tooth .. For air cleaner bracket mt'g. (Replaces PH-312 plain washer).	3		1
						265	PE-72	LOCKWASHER, No. 8 internal .....	1		1
								For ground clip.			

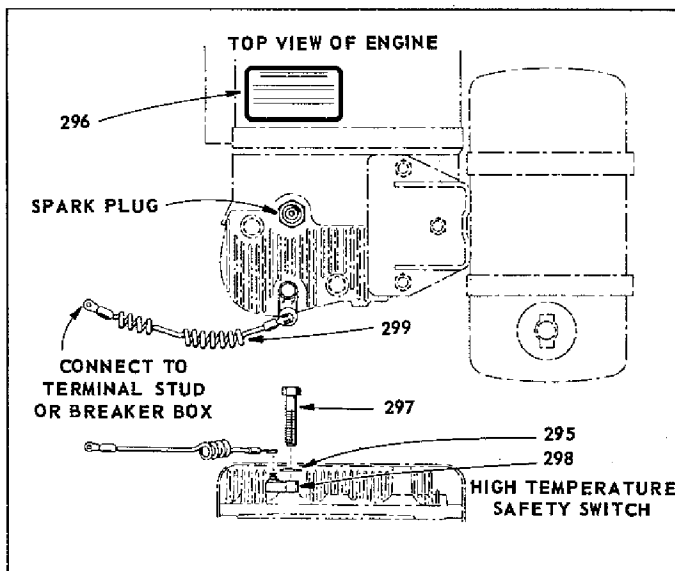
**IMPORTANT:** Always give Model, Specification and Serial Numbers as shown on name plate.

**PARTS INTERCHANGEABLE ON MODELS S-10D, S-12D AND S-14D**

REFER TO PAGE 33 FOR NON-INTERCHANGEABLE PARTS.

Ref. No.	Part Number	Description	No. Req.	Net Wt.		Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz					Lb	Oz
266	PE-89	<b>LOCKWASHER</b> , No. 8 Positive ..... 1-for ground terminal. 1-for breaker point bracket.	2		1	280	XA-121	<b>SCREW</b> , No. 6-20 x 3/8" long, round head, self tapping ..... For breaker arm terminal. (In YQ-16 Kit)	1		1
267	PF-18	<b>PLUG</b> , 1/8" pipe, slotted, steel ..... For air cleaner bracket.	1		1	281	XD-6	<b>SCREW</b> , 1/4"-20 x 3/4" long, hex. head For fuel pump mounting.	2		1
269	PH-14-D	<b>WASHER</b> , 5/16" I.D. x 19/32" O.D. x 1/16" thick, steel ..... 2-for carburetor mounting. 4-for coil-stator plate mounting.	6		1	282	XD-6	<b>SCREW</b> , 1/4"-20 x 3/4" long, hex. head For UC-202 sheetmetal starting sheave. (1-1/2" long) for obsolete UC-189B ..... Aluminum starting sheave. (1-3/4" long) for obsolete UC-189 sheave	3		1
270	PH-86-B	<b>PLAIN WASHER</b> , 11/64" I.D. x 3/8" O.D. For ground terminal stud.	1		1	XD-9			3		1
271	PH-209-B	<b>PLAIN WASHER</b> , 5/16" steel ..... For governor lever mounting.	1		1	XD-10			3		1
272	PH-583	<b>PLAIN WASHER</b> , 11/64" I.D. x 13/32" O.D. For breaker point bracket. (Replaces PH-236)	1		1	283	XD-17	<b>SCREW</b> , 5/16"-18 x 1" long, hex. head.. For coil-stator plate mounting.	4		1
273	PH-312	<b>PLAIN WASHER</b> , 3/16" steel ..... For breaker box stud.	2		1	285	XD-22	<b>SCREW</b> , 5/16"-18 thread x 1-3/4" long, hexagon head ..... For gear cover mounting.	9		2
274	PH-513	<b>WASHER</b> , 13/32" I.D. x 13/16" O.D. x 1/8" thick, steel, hardened ..... For cylinder head mounting.	9		1	286	XD-28	<b>SCREW</b> , 3/8"-16 thread x 1-1/8" long, hexagon head ..... For cylinder block in valve chamber.	1		1
276	XA-67	<b>SCREW</b> , No. 4 x 1/4" long, self-tapping, sheet metal ..... For name plate to shroud.	4		1	287	XD-25	<b>SCREW</b> , 3/8"-16 x 3/4" long, hex. head For mounting ignition coil.	1		1
277	XA-69	<b>SCREW</b> , 1/4"-20 x 2" long round head .. For fuel tank straps.	2		1	289	XD-157	<b>SCREW</b> , 1/4"-20 thread x 1/2" long, hexagon head, with external lockwasher 2-for air shroud to cylinder head. 2-for breather-inspection cover. 3-for back plate to crankcase. 4-for cylinder side cover.	11		1
278	XA-126	<b>SCREW</b> , No. 8-32 thread x 1/2" long, steel finished pan head ..... For breaker point bracket. XA-118, 5/16" long, repl'd. by XA-126.	1		1	XD-4		<b>SCREW</b> less lockwasher ..... For air shroud to back plate.	4		1
279	XA-119	<b>SCREW</b> , No. 8 x 1/4" long, round head, self tapping ..... For condenser mounting.	1		1	290	XD-166	<b>SCREW</b> , No. 10-32 thread x 3/4" long, indented hexagon head ..... For air cleaner bracket to carburetor.	3		1

**YC-66-D-S1 HIGH TEMPERATURE SAFETY SWITCH KIT**



Ref. No.	Part Number	Description	No. Req.	Net Wt.	
				Lb	Oz
	YC-66-D-S1	<b>HIGH TEMPERATURE SAFETY SWITCH KIT</b> - Complete ..... Consisting of:			8
295	PH-22	<b>WASHER</b> , 3/8" I.D., plain steel ..... For switch to cylinder head mounting.	1		1
296	SD-233	<b>INSTRUCTION DECAL</b> .....	1		1
297	XD-32	<b>CAPSCREW</b> , 3/8"-16 thread x 2" long, hexagon head ..... For switch to cylinder head mounting.	1		1
298	YC-66-D	<b>HIGH TEMPERATURE SAFETY SWITCH</b> ..... For replacement, order YC-66-D-S1 Kit.	1		3
299	YL-357-42	<b>WIRE ASSEMBLY</b> , 42" long, with terminals. (Wire coiled to suit all models.)			
	PG-57	<b>CLIP</b> for supporting wire to cylinder side shroud ..... Not illustrated nor included in Kit.	1		1

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