

Introduction

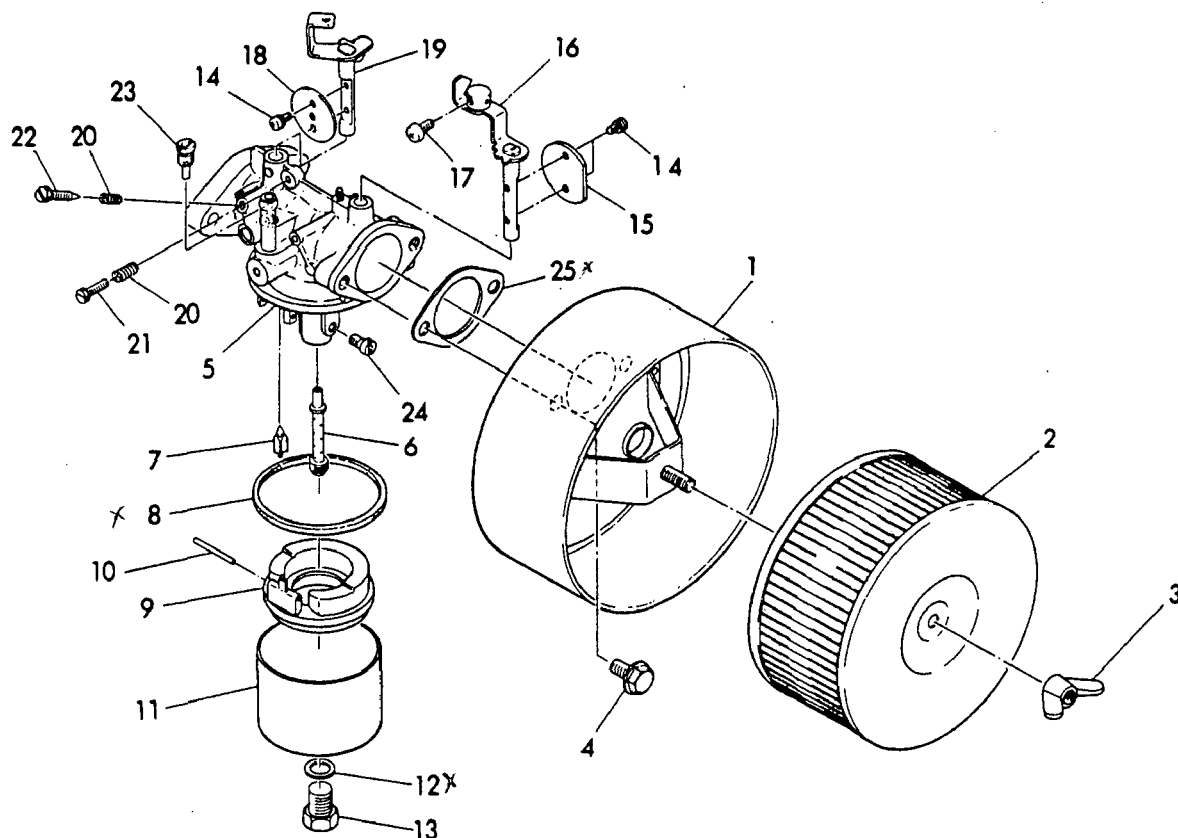
This catalog is designed to identify **Wisconsin Robin** parts.

When ordering parts, it is always advisable to list the engine model, specification number and serial number. With this information, we can check your order for any incorrect part numbers. Use your Service Parts List to ensure proper part number and nomenclature identification.

TELEDYNE TOTAL POWER reserves the right to modify, alter and improve engines and parts. Part numbers and the structure of parts may change from those shown in this catalog.

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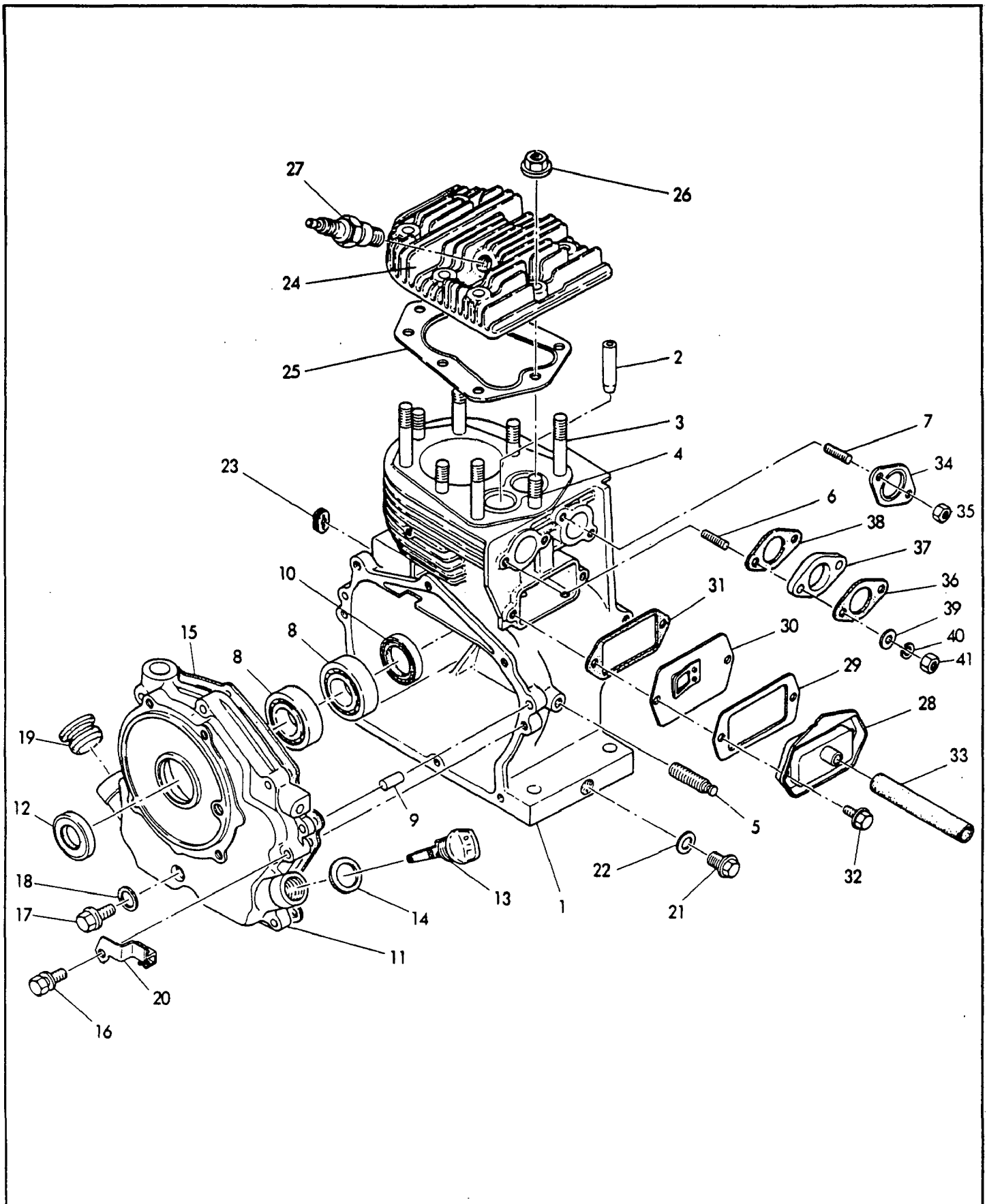
AIR CLEANER and CARBURETOR Group

NOTE: Parts are identical for both models, except where noted.

Items without a part number are not sold separately.

Ref. No.	Part Number	Description	No. Req.	Ref. No.	Part Number	Description	No. Req.
•	EY 2243270100	AIR CLEANER assembly	1	16	EY 2246252008	CHOKE SHAFT	1
1		Consisting of: Ref. 1, 2, 3 BODY with gasket	1	17		SCREW, choke lever swivel	1
2	EY 2243260108	ELEMENT	1	18		THROTTLE VALVE	1
3	EY 2243274008	WING NUT, element mtg; 6 mm thd	1		EY 2246253608	For Model W1-340	
4	EY 0110060020	SCREW, air cleaner mounting	2		EY 2246253508	For Model W1-390	
5		CARBURETOR assembly, Ref. 6 thru 24	1	19	EY 2246253008	THROTTLE SHAFT	1
	EY 2236230300	For Model W1-340		20	EY 2066244608	SPRING, pilot and throttle stop screws	2
	EY 2246230100	For Model W1-390		21	EY 1066235808	SCREW, throttle stop	1
6		MAIN NOZZLE	1		†	PILOT SCREW	1
7	EY 1506230108†	FUEL VALVE assembly	1	22	†	PILOT JET	1
8	† *	GASKET, float chamber	1	23	†	PILOT JET	1
9	EY 2246250508	FLOAT assembly	1	24	†	MAIN JET	1
10	†	FLOAT PIN	1		EY 1106230108	For Model W1-340 (#110)	
11		FLOAT CHAMBER	1		EY 1096240408	For Model W1-390 (#112.5)	
12	† *	GASKET, float chamber screw	1	25	† *	GASKET, air cleaner body	1
13		SCREW, float chamber mtg.	1	•		REPAIR KIT, † Parts included in kit.	
14	†	SCREW, choke and throttle valve	4		EY 2236230107	For Model W1-340	
15		CHOKE VALVE	1		EY 2246230107	For Model W1-390	
	EY 2246252608	For Model W1-340		•	EY 2246230207	GASKET SET, * Parts included in set.	
	EY 2246252508	For Model W1-390			2246234610	Carb - Ditch Witch	
					2246230700	Carb m/g gen. + throttle bushing	
					2246230400	m/g welder/gen Carb.	

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CRANKCASE, GEAR COVER and CYLINDER HEAD Group

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

CRANKCASE, GEAR COVER and CYLINDER HEAD Group

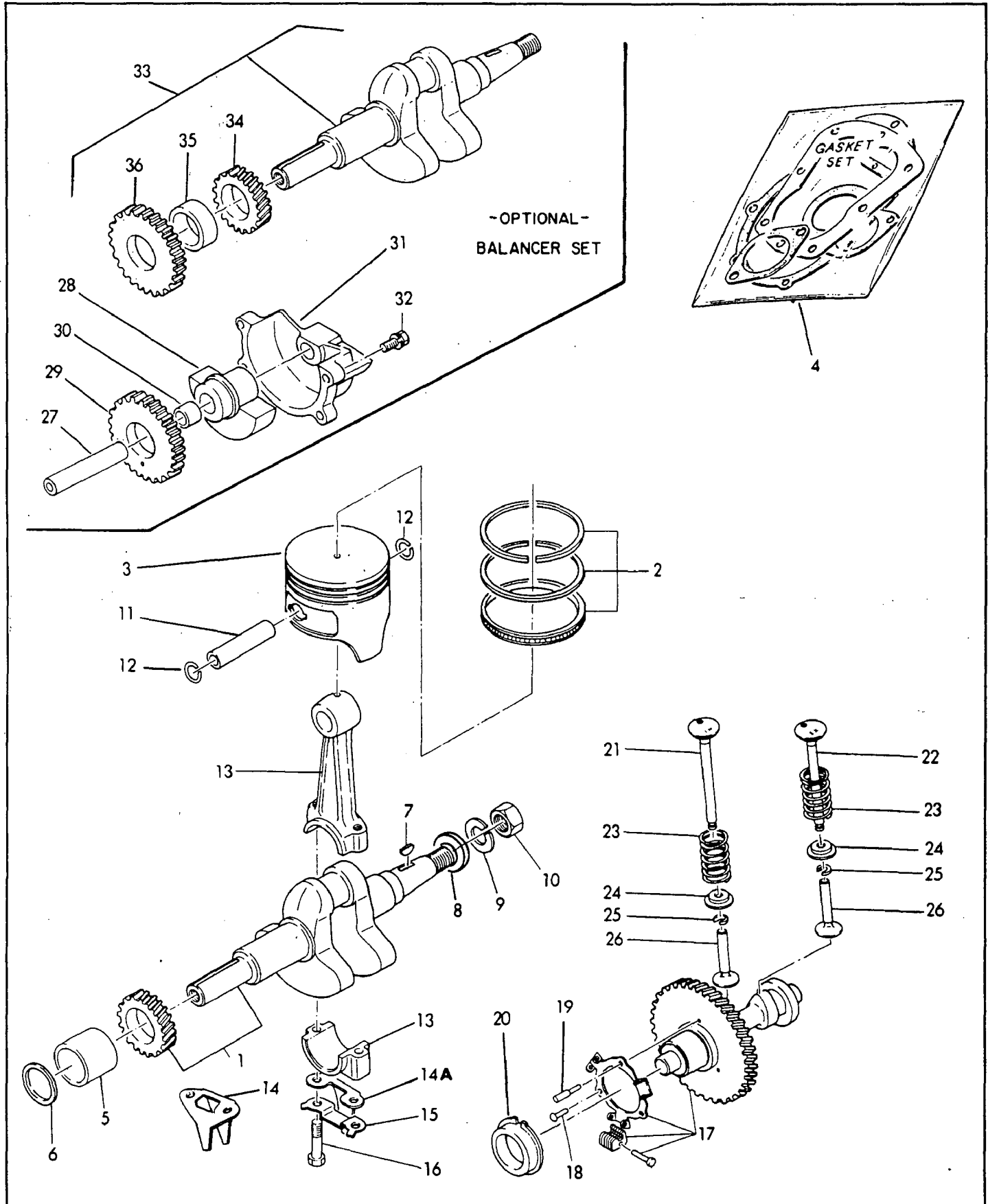
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*Included in Engine Gasket Set, (Ref. 4, Page 5).

Ref. No.	Part Number	Description	No. Req.	Ref. No.	Part Number	Description	No. Req.
1		CYLINDER - CRANKCASE		25	*	GASKET , cylinder head	1
2	EY 2241420203	VALVE GUIDE	2		EY 2231510103	For Model W1-340	
3	EY 0105100280	STUD , cylinder head mounting	4		EY 2241510103	For Model W1-390	
		10 mm x 87 mm long.		26	EY 0023810000	NUT , cylinder head mounting	8
4	EY 0105100270	STUD , cylinder head mounting	4			10 mm, hexagon flange type	
		10 mm x 54 mm long.		27	EY 0650140036	SPARK PLUG with gasket (Standard)	1
5	EY 0105080031	STUD , governor control mounting	1		EY 0650140190	Champion I86, AC 44F, NGK B6HS.	
6	EY 0013106351	STUD , carburetor mounting	2	28	EY 2241430101	SPARK PLUG , for S.S. Ignition, NGK BP-4HS	
		6 mm x 35 mm long.				COVER , tappet inspection	1
7	EY 0013108301	STUD , muffler mounting	2	29	*	GASKET , inspection cover	1
		8 mm x 30 mm long.		30	EY 2241440101	BREATHER PLATE assembly	1
8	EY 0600350010	BEARING , crankshaft main	2	31	*	GASKET , breather plate	1
9	EY 0052608180	DOWEL PIN , gear cover	2	32	EY 0110060030	SCREW , inspection cover	2
10	EY 0440350090	OIL SEAL , crankcase	1			6 mm x 14 mm long, hexagon flange head	
11	EY 2241110101	GEAR COVER assembly		33	EY 0851120010	BREATHER TUBE	1
12		Includes: Bearing (Ref. 8)		34	EY 2243510103*	GASKET , muffler mounting	1
	EY 0440350090	OIL SEAL	1	35	EY 0021908000	NUT , muffler mounting	2
13	EY 2246360107	OIL DIP STICK	1		*	8 mm thread, hexagon steel	
14		Includes:		36	EY 2243520103	GASKET , carburetor flange (paper)	1
	EY 0213200010	GASKET	1	37	EY 2243290103	INSULATOR , carburetor flange	1
15	*	GASKET , gear cover 2241520103	1	38	*	GASKET , insulator to block (composition)	1
16	EY 0011408350	SCREW - WASHER , gear cover mounting	8	39	EY 0031006000	WASHER , carburetor mounting	2
		8 mm x 35 mm long, hexagon head				6.4 mm I.D. x 11.5 O.D., plain steel	
17	EY 0110060010	SCREW , balancer gear assembly	1	40	EY 0032006000	LOCKWASHER , carburetor mounting	2
		6 mm x 8 mm long, hexagon flange head				6 mm spring lock	
18	EY 0037006000	GASKET , balancer gear assemb. screw	1	41	EY 0022706000	NUT , carburetor mounting	2
19	EY 0420220010	PLUG , oil filler	1			6 mm thread, hexagon steel	
20	EY 2244420101	BRACKET , remote speed control	1				
21	EY 0401140030	OIL DRAIN PLUG , (less gasket)	2				
22	EY 0211140020	GASKET , oil drain plug (order sep.)	2				
23	EY 2247550103	GROMMET , ignition wire	1				
24		CYLINDER HEAD	1				
	EY 2231300103	For Model W1-340					
	EY 2241330103	For Model W1-390					

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CRANKSHAFT, CAMSHAFT, PISTON, ROD and VALVE Group



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CRANKSHAFT, CAMSHAFT, PISTON, ROD and VALVE Group

NOTE: Parts are identical for both models, except where noted.

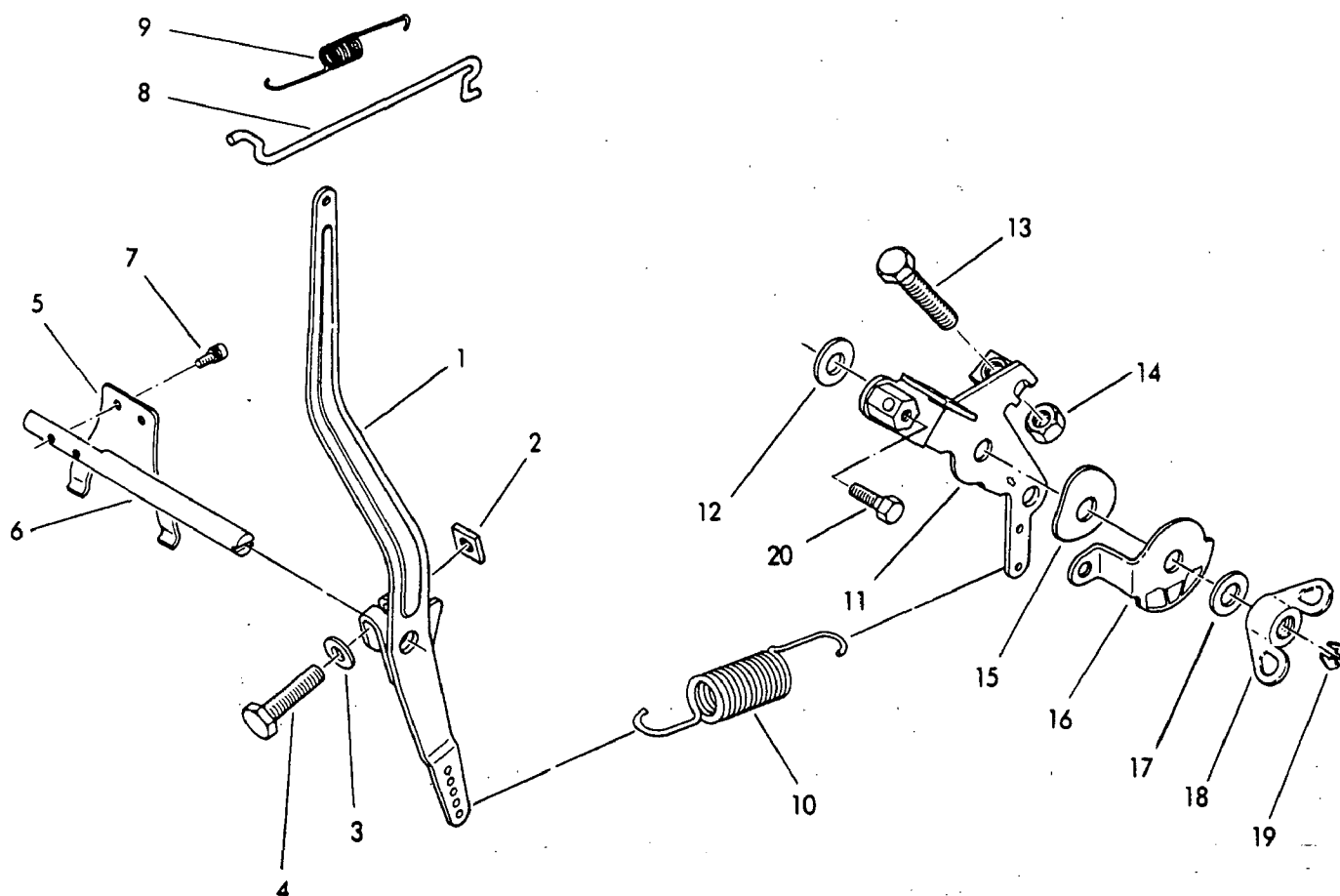
Items without a part number are not sold separately.

Ref. No.	Part Number		Description	No. Req.
	Model W1-340	Model W1-390		
1	NOTE: FOR SERVICE, SEE REFERENCE NO. 33		CRANKSHAFT with gear — standard KEYWAY SHAFT illustrated TAPERED generator crankshaft THREADED pump crankshaft No. 1 THREADED-KEYSLOT pump crankshaft No. 2	1
2	EY 2232350107 EY 2232350207 EY 2232350307	EY 2242350107 EY 2242350207 EY 2242350307	RING SET , piston, standard size010 inch (0.25 mm) oversize Ring Set.020 inch (0.50 mm) oversize Ring Set.	1
3	EY 2232340113 EY 2232340203 EY 2232340303	EY 2242340113 EY 2242340203 EY 2242340303	PISTON , standard size010 inch (0.25 mm) oversize Piston.020 inch (0.50 mm) oversize Piston.	1
4	EY 2239900207	EY 2249900207	ENGINE GASKET SET , Includes gaskets for:..... GEAR COVER INSPECTION COVER CARBURETOR FLANGE CYLINDER HEAD INSULATOR PLATE AIR CLEANER BODY BREATHER PLATE MUFFLER FLANGE	1

Ref. No.	Part Number	Description	No. Req.
5	EY 2242510303	SPACER , crankshaft spacer	1
6	EY 0230350010 EY 0230350060 EY 0230350076	ADJUSTING SHIM , endplay .040 " thick .. .050 inch thick .060 inch thick	1
7	EY 0053204401	KEY , flywheel mounting 4 mm wide x 7.5 mm high, Woodruff.	1
8	EY 0031018000	WASHER , flywheel nut 18 mm I.D., plain steel	1
9	EY 0032018000	LOCKWASHER , flywheel nut 18 mm spring lock.	1
10	EY 0021818000	NUT , flywheel mounting 18 mm thread, hexagon steel	1
11	EY 2232330103 EY 2242330103	PIN , piston, For Model W1-340 PIN, piston, For Model W1-390	1 1
12	EY 0565220011	SNAP RING , piston pin	2
13	EY 2242250110	CONNECTING ROD , assembly (new design), EY 2242250100 previous to serial numbers 132948 (W1-340) and 130146 (W1-390) consists of	1
14		EY 2242310203 OIL SCRAPER (new design)	1
14A		EY2242310103 previous to above S/N	
15		EY 2242320103 LOCK PLATE	1
16		EY 2172300103 ROD BOLT	1
	NOTE: DO NOT MIX OLD & NEW DESIGN PARTS		
—	EY 2242250200	.010 inch undersize connecting rod	—
17	EY 2243170101	CAMSHAFT assembly, includes GOVERNOR PLATE assembly	1 1
18		RIVET , 4 mm x 18 mm long, round head ...	2
19		PIN , governor sleeve	1
20	EY 2244190103	GOVERNOR SLEEVE	1
21	EY 2243340103	INTAKE VALVE	1

Ref. No.	Part Number	Description	No. Req.
22	EY 2243350103	EXHAUST VALVE	1
23	EY 2083360113	VALVE SPRING	2
24	EY 2083370103	RETAINER , valve spring	2
25	EY 2173380103	LOCK , valve spring retainer	2
26	EY 2243330103 Optional	VALVE TAPPET	2
•	EY 2242430107	BALANCER SET (Items 27 thru 32)	1
27		SHAFT, balancer	1
28		BALANCER UNIT	1
29		Includes: GEAR, balancer	1
30		BEARING, needle	2
31		HOLDER, balancer	1
32		SCREW-WASHER, holder mounting 8 mm x 30 mm long hexagon head	4
CRANKSHAFT REQUIREMENTS for use with BALANCER			
33	See below	CRANKSHAFT assembly includes:	1
34		CRANK GEAR	1
35		SPACER	1
36		BALANCER GEAR	1
Model W1-340		Model W1-390	
	EY 2232030201 EY 2232040201 EY 2242050201	EY 2242030201 EY 2242040201 EY 2242050201	KEYWAY SHAFT TAPERED SHAFT PUMP SHAFT, NO. 1

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GOVERNOR and SPEED CONTROL Group

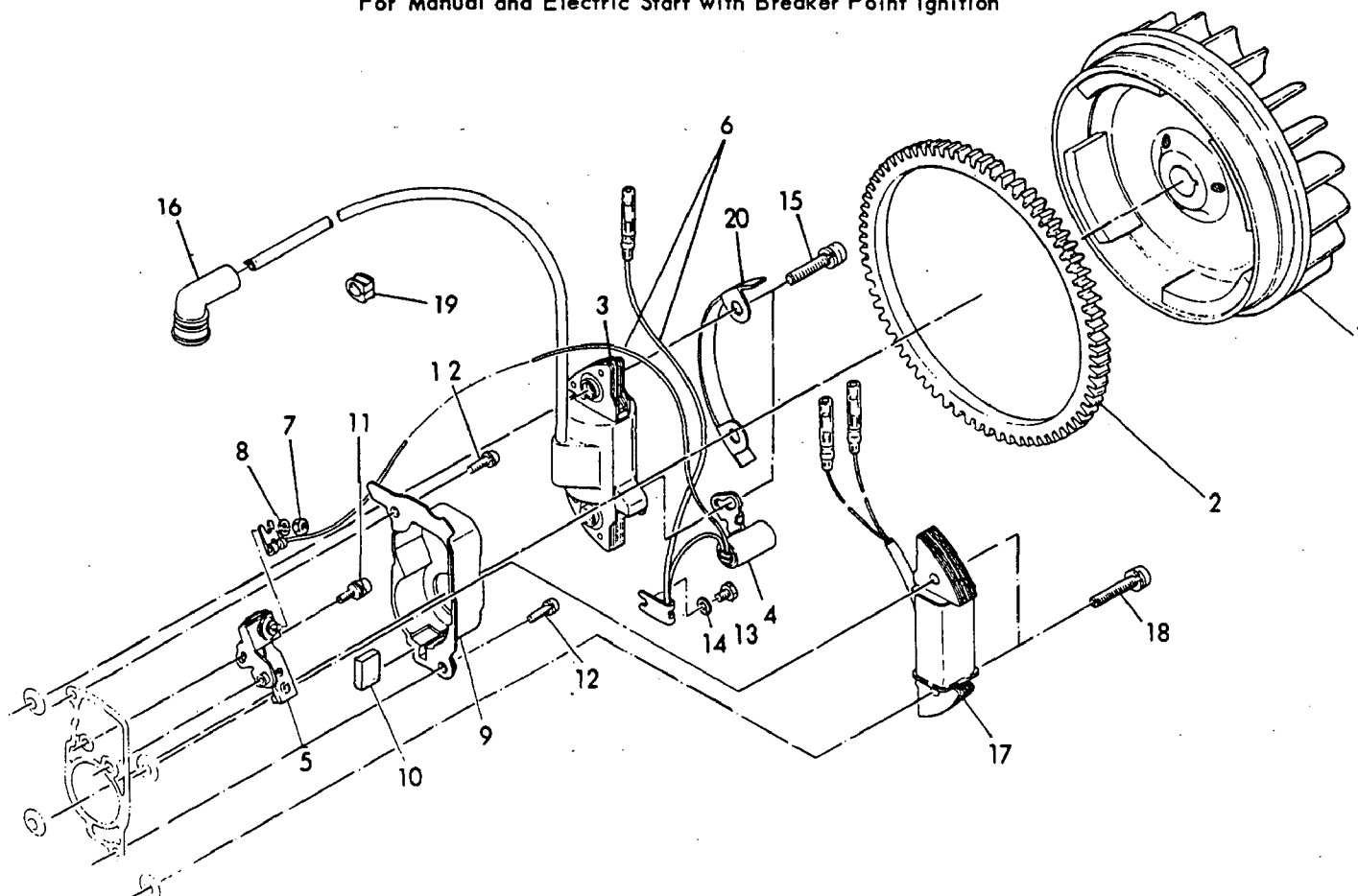
NOTE: Items without a part number are not sold separately.

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
●	EY 2244230107	GOVERNOR LEVER and SHAFT SET	1	●	EY 2244330107	GOVERNOR CONTROL LEVER SET	
		(Includes Items 1 thru 7)				(Includes Items 11 thru 20)	
1		GOVERNOR LEVER	1	11		CONTROL LEVER	1
2		NUT, governor lever	1	12		FRICTION WASHER	1
		6 mm thread, hexagon steel		13		SCREW, control lever stop	1
3		WASHER, governor lever	1			6 mm x 45 mm long, hexagon head	
		6 mm I.D., plain steel		14		NUT, lever stop screw	1
4		SCREW, governor lever clamp	1			6 mm thread, hexagon steel	
		6 mm x 25 mm long, hexagon head		15		WASHER, stop plate	1
5		GOVERNOR YOKE	1	16		STOP PLATE	1
6		GOVERNOR SHAFT	1	17		WASHER, wing nut	1
7		SCREW-WASHER, yoke mounting	2			8 mm I.D., plain steel	
		4 mm x 8 mm long, round head		18		WING NUT, control lever	1
●	EY 2244250107	GOVERNOR SPRING and ROD SET	1			8 mm thread	
		(Includes Items 8, 9, 10)		19		CLIP, control mounting stud	1
8		GOVERNOR ROD	1			4 mm I.D. x 9 mm O.D., U type	
9	EY 2144280101	SPRING, governor rod	1	20		SCREW, control wire lock	1
10		GOVERNOR SPRING	1			4 mm x 14 mm long, hexagon head	

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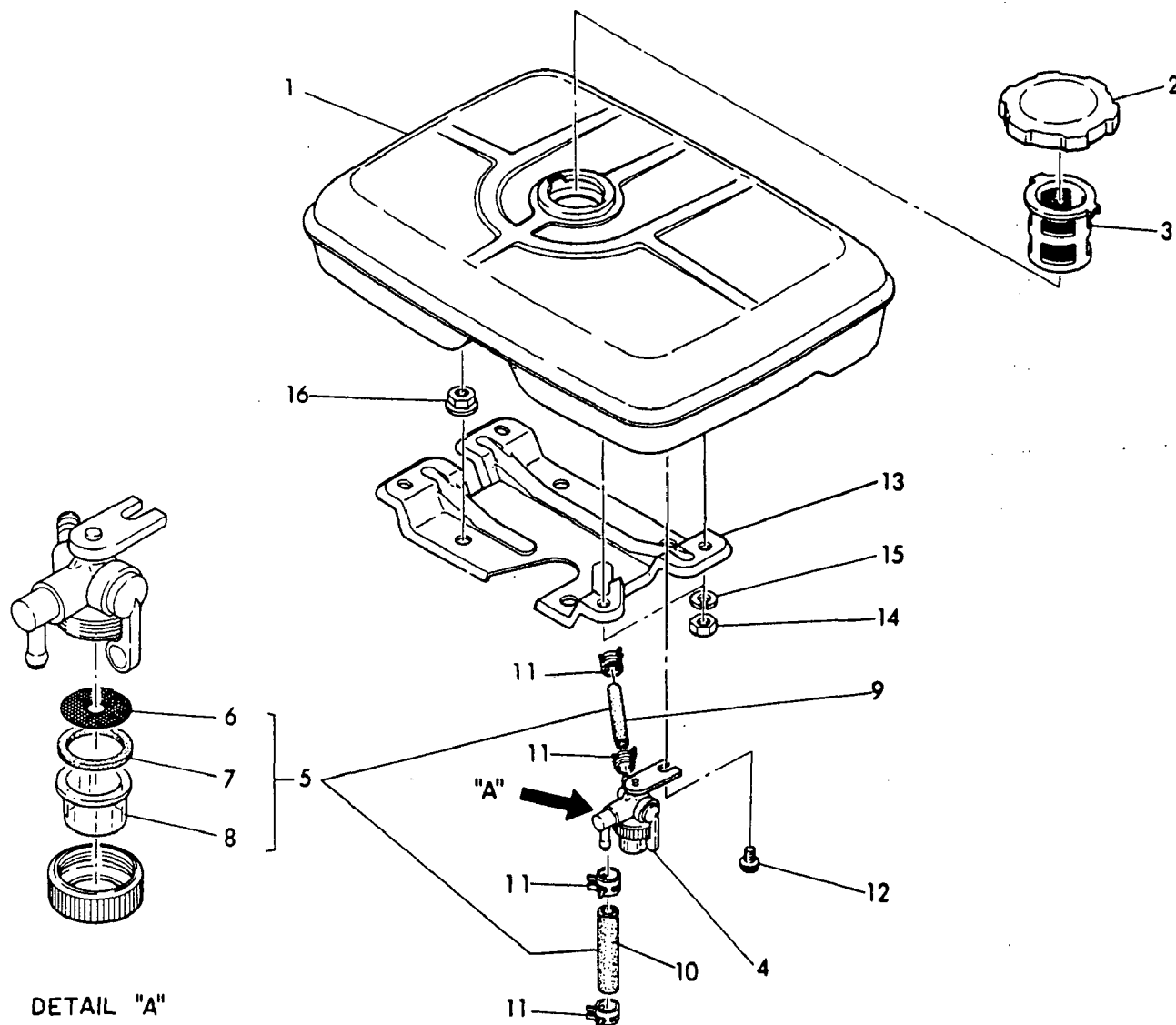
MAGNETO — CHARGING COIL and FLYWHEEL Group

For Manual and Electric Start with Breaker Point Ignition

**NOTE:** Items without a part number are not sold separately.

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
1	EY 2247012108	FLYWHEEL, standard, Manual Start	1	11		SCREW-WASHER, breaker mounting	1
	EY 2247010407	FLYWHEEL assembly, Electric Start	1			4 mm x 8 mm long, pan head	
2		Includes: EY 2247100203 RING GEAR	1	12		SCREW-WASHER, cover mounting	2
3	EY 2247013208	IGNITION COIL, standard, Manual Start and Electric Start	1			4 mm x 12 mm long, pan head	
•	EY 2247010107	POINTS and CONDENSER KIT	1	13		SCREW, condenser mounting	1
4		Consisting of: CONDENSER	1			3 mm x 6 mm long, round head	
5		CONTACT BREAKER	1	14		LOCKWASHER, condenser mounting	1
6		LEAD WIRES	3			3 mm, spring lock	
7		NUT, lead wire	1	15	EY 0043506250	SCREW-WASHER, ignition coil mtg.	2
8		LOCKWASHER, lead wire	1			6 mm x 25 mm long, round head	
•	EY 2247010307	COVER — HARDWARE KIT, for points and ..	1	16	EY 0655000050	CAP, spark plug terminal	1
9		condenser mounting Consisting of: Ref. 9 thru 14	1	17	EY 2147014408	CHARGE COIL with cable	1
10		BREAKER COVER	1			For Electric Start engines	
		OIL FELT, breaker	1	18	EY 0043506300	SCREW-WASHER assembly, charge coil,	2
						6 mm x 30 mm long, pan head	
				19	EY 0241090050	GROMMET, spark plug cable	1
				20	EY 2147017008	LEAKAGE PASS, ignition coil	1
						For electric start engines	

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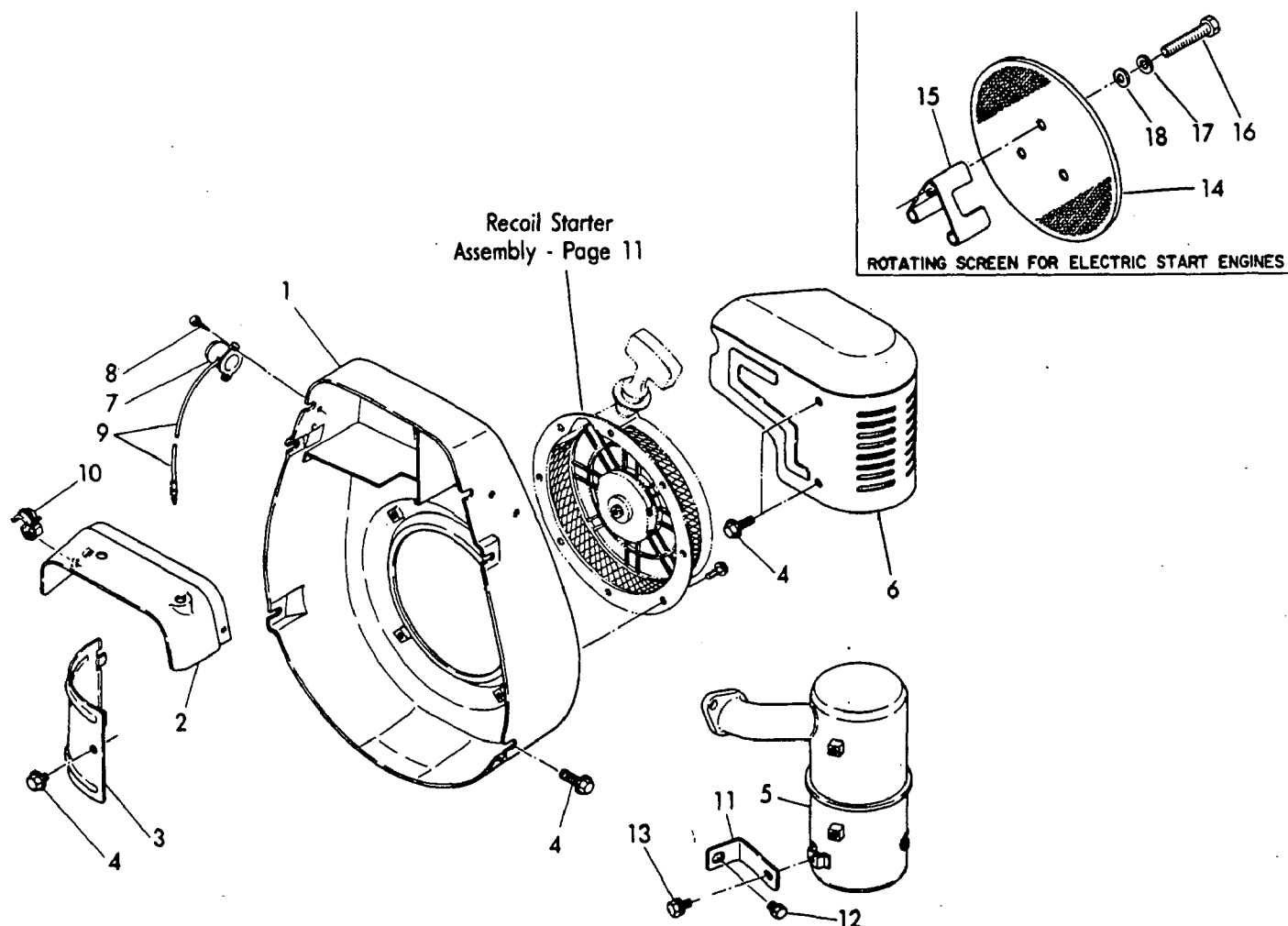
FUEL TANK Group

DETAIL "A"

Ref. No.	Part Number	Description	No. Req.	Ref. No.	Part Number	Description	No. Req.
1	EY 2246010207	FUEL TANK assembly.....	1	9	EY 0851060230	FUEL LINE, strainer to tank	1
2		Includes:		10	EY 0851060680	FUEL LINE, strainer to carburetor	1
3		EY 0430430015 CAP with gasket	1	11	EY 0561110020	CLAMP, fuel line hose	4
4	EY 0642003600	EY 0641360010 FILTER SCREEN	1	12	EY 0110060010	SCREW, fuel strainer mounting	1
5	EY 2246010307	FUEL STRAINER	1			6 mm x 8 mm long, hex flange head	
6		REPAIR KIT, fuel strainer.....	1	13	EY 2246160101	BRACKET, fuel tank	1
7		Consisting of:		14	EY 0022708000	NUT, tank to bracket mounting.....	4
8		SCREEN	1			8 mm thread, hexagon steel	
—		GASKET	1	15	EY 0032008000	WASHER, fuel tank bracket mtg.....	4
—		BOWL	1			8 mm, spring lock	
—		FUEL LINE (Ref. 9).....	1	16	EY 0023810000	NUT, bracket to head mounting	4
—		FUEL LINE (Ref. 10).....	1			10 mm, hexagon, flange	
—		HOSE CLAMP (Ref. 11).....	4				

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SHROUDING, MUFFLER and ROTATING SCREEN Group

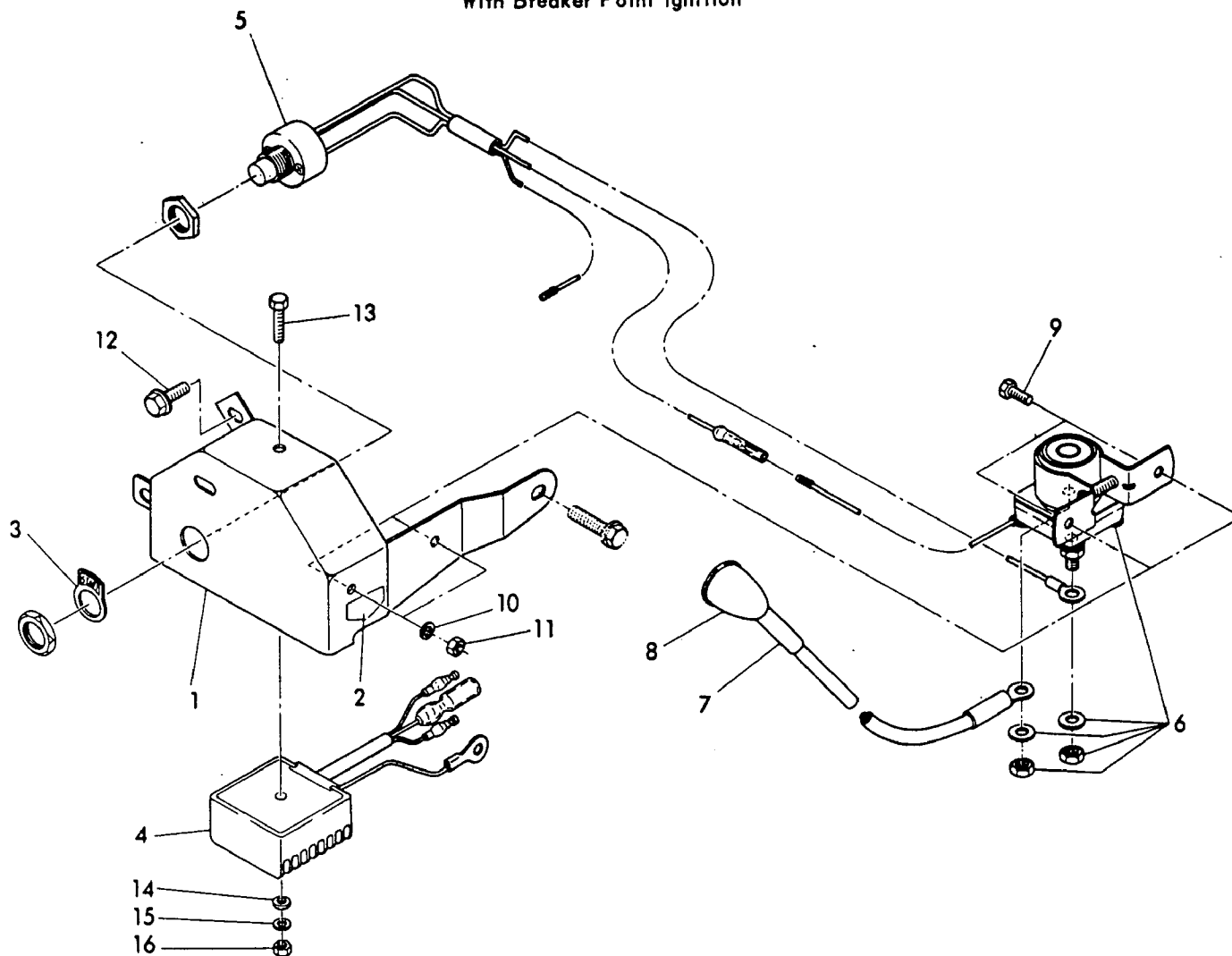


Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
1	EY 2245121007	FLYWHEEL SHROUD	1	10	EY 0566000190	CLAMP, spark plug wire	1
2	EY 2245260101	COVER, cylinder head	1	11	EY 2243500301	BRACKET, muffler support	1
3	EY 2245270103	BAFFLE, cylinder	1	12	EY 0011003160	SCREW-WASHER, muffler bracket	1
4	EY 0110060010	SCREW, 6 mm x 8 mm long, hexagon flange head 1 - For cylinder baffle 6 - For flywheel shroud 4 - For muffler cover	11	13	EY 0011106120	SCREW-WASHER, bracket to muffler	1
5	EY 2243030301	EXHAUST MUFFLER	1	14	EY 2245650101	ROTATING SCREEN for Electric Start engines	1
6	EY 2243420301	COVER, muffler	1	15	EY 2245660101	SPACER, rotating screen mounting	1
7	EY 0662000011	STOP BUTTON assembly	1	16	EY 0016608500	SCREW, rotating screen mounting	3
8	EY 0150040010	SCREW, stop button mounting	2	17	EY 0032008000	LOCKWASHER, rotating screen mounting	3
9	EY 2147320101	IGNITION WIRE, stop button	1	18	EY 0031108000	WASHER, rotating screen mounting 8 mm I.D., plain steel	3

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CONTROL BOX, SWITCHES and REGULATOR Group

With Breaker Point Ignition

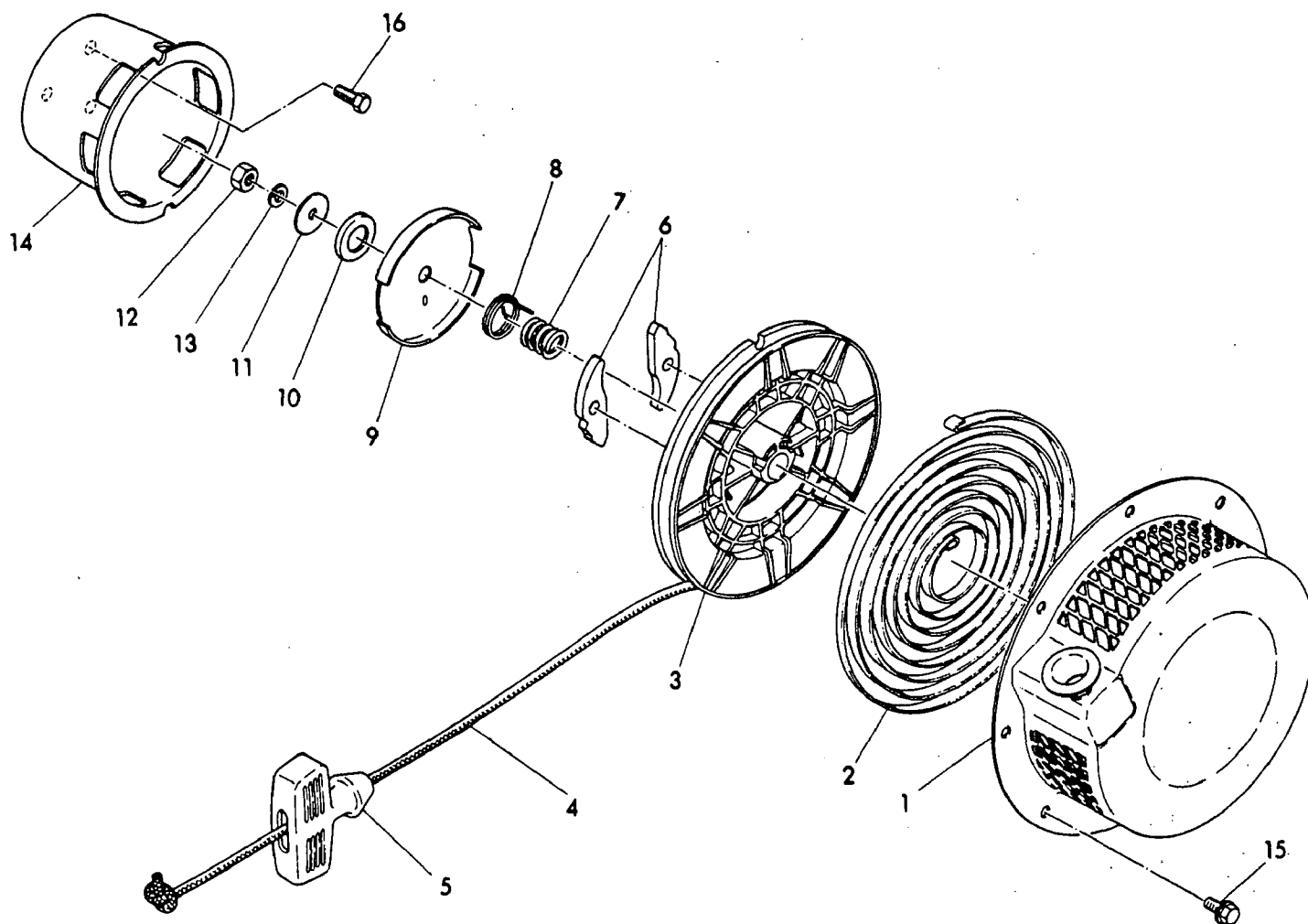


Ref. No.	Part Number	Description	Qty.
1	EY 2247500401	CONTROL BOX assembly Includes Ref. 2	1
2	EY 0732001080	LABEL (BATTERY).....	1
3	EY 0732000410	LABEL (START SWITCH)	1
4	EY 2077190301	REGULATOR, assembly	1
5	EY 2247310411	STARTER SWITCH assembly	1
6	EY 2147700110	MAGNETIC SWITCH assembly	1
7	EY 2147310111	WIRE assembly, magnetic switch to starter	1
8	EY 2147850103	CAP, starter wire terminal	1
9	EY 0016505120	SCREW, magnetic switch mounting 5 mm x 12 mm long, hexagon head	2

Ref. No.	Part Number	Description	Qty.
10	EY 0032005000	LOCKWASHER, magnetic switch mounting 5 mm, spring lock	2
11	EY 0021705000	NUT, magnetic switch mounting	2
12	EY 0110060010	SCREW, control box mounting	1
13	EY 0016506250	SCREW, regulator mounting	1
14	EY 0031006000	WASHER, regulator mounting	1
15	EY 0032006000	LOCKWASHER, regulator mounting	1
16	EY 0021706000	NUT, regulator mounting.....	1

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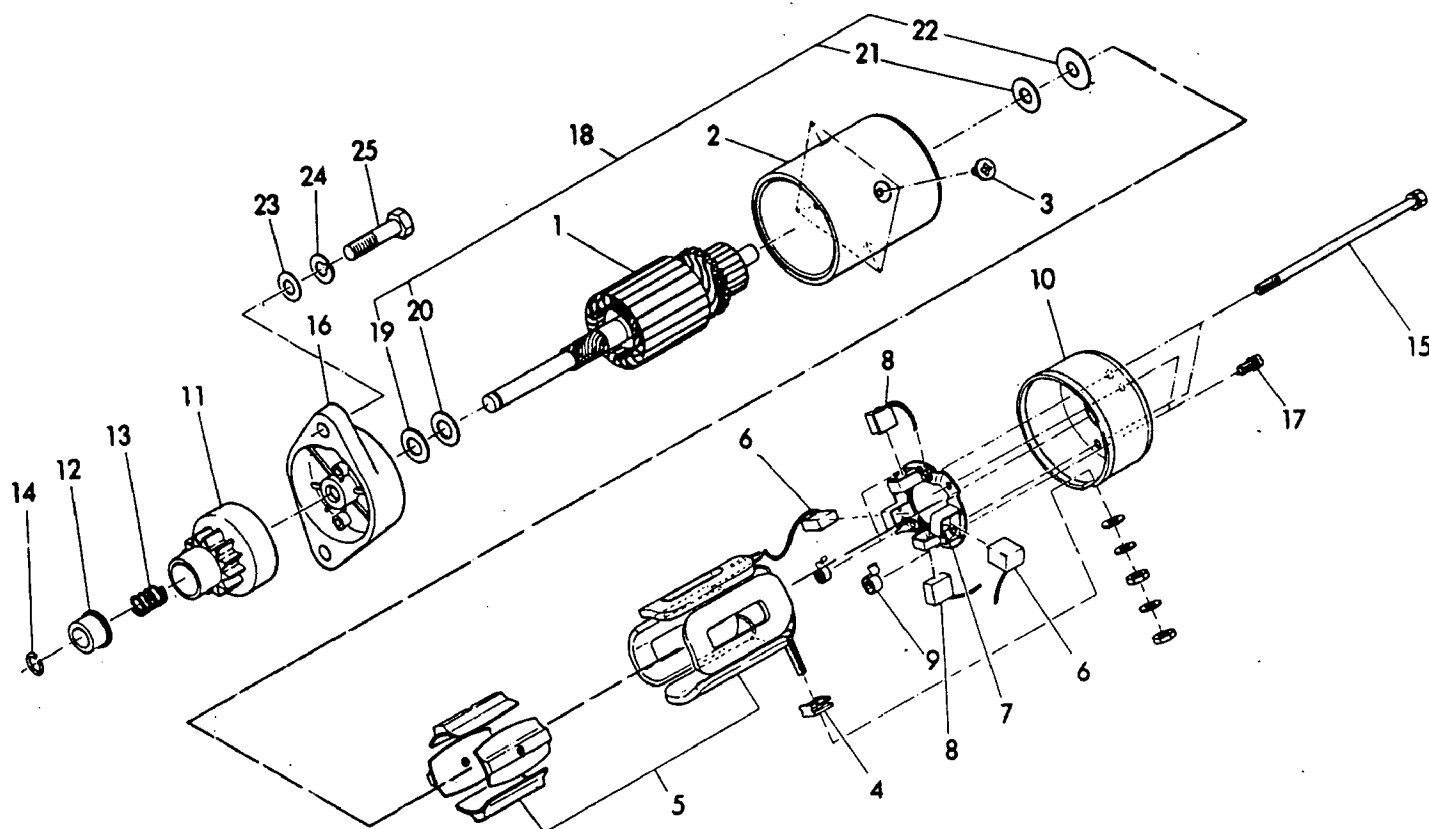
RECOIL STARTER ASSEMBLY



NOTE: Items without a part number are not sold separately.

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
•	EY 2245010200	RECOIL STARTER complete		9		FRICITION PLATE	1
1		(Includes Items 1 thru 14)		10		WASHER, friction plate spacing.....	1
		HOUSING	1	11		THRUST WASHER, friction plate.....	1
2	EY 1135011608	POWER SPRING	1	12		NUT, friction plate mounting	1
3	EY 2245012008	REEL	1			6 mm thread, hexagon steel	
•	EY 2075010508	ROPE ASSEMBLY	1	13		WASHER, friction plate mounting	1
4		Consisting of:				6 mm, spring lock	
		ROPE	1	14	EY 2245014508	STARTING PULLEY.....	1
5		HANDLE	1	15	EY 0110060010	SCREW, housing mounting.....	4
•	EY 2245010307	HARDWARE KIT, recoil starter repair.....				6 mm x 8 mm long, hexagon flange head	
6		(Includes Items 6 thru 13)		16	EY 0016508120	SCREW, starting pulley mounting	3
		RATCHET	2			8 mm x 12 mm long, hexagon head	
7		SPRING, friction					
8		SPRING, return					

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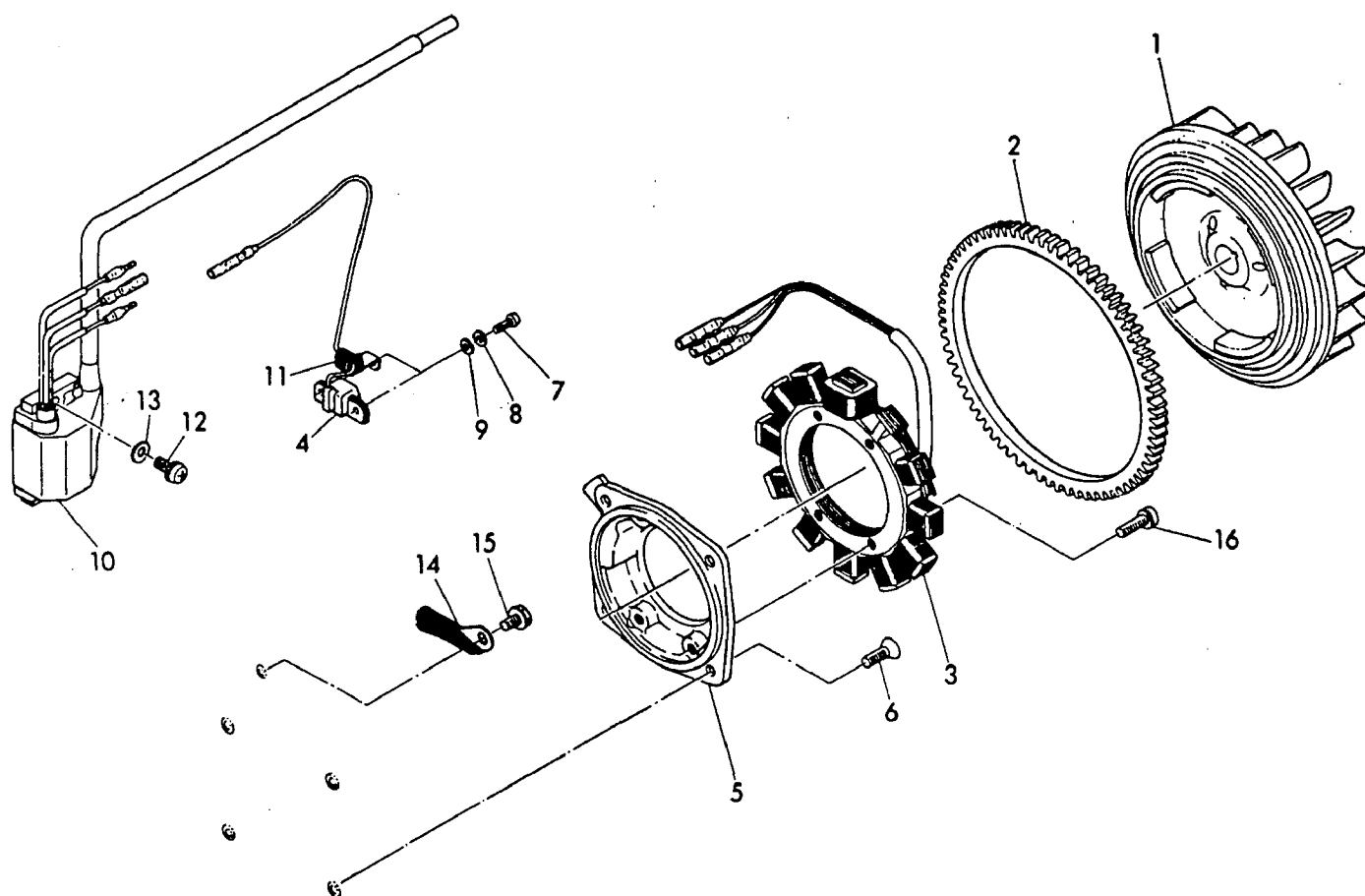
ELECTRIC STARTING MOTOR

NOTE: Items without a part number are not sold separately.

Ref. No.	Part Number	Description	Qty.	Ref. No.	Part Number	Description	Qty.
•	EY 2147050210	STARTING MOTOR complete	1	15	EY 2107052708	THRU BOLT	2
1	EY 2147055708	Consisting of Items 1 thru 22 ARMATURE assembly	1	16	EY 2147050108	FLANGE assembly, front cover	1
2		FRAME assembly	1	17	EY 0043104120	SCREW, brush plate mounting	2
3		SCREW, pole core	4	18	EY 2147055508	WASHER KIT, thrust	1
4		INSULATOR, terminal stud	1			(Includes Items 19, 20, 21, 22)	
5		FIELD COIL and CORE assembly	1	19		THRUST WASHER, drive end	1
6	EY 1137053508	BRUSH (+)	2	20		THRUST WASHER, drive end	1
7	EY 1137053008	BRUSH HOLDER assembly	1	21		THRUST WASHER, brush holder end	1
8	EY 1137054008	(Includes Items 8 and 9) BRUSH (-) (See Ref. 7)	2	22		THRUST WASHER, brush holder end	1
9	EY 1137054508	BRUSH SPRING	2	23	EY 0031008000	WASHER, starting motor mounting	2
10	EY 1137050508	COVER assembly, rear	1			8.4 mm I.D. x 16 mm O.D., plain steel	
11	EY 2147055908	PINION DRIVE assembly	1	24	EY 0032008000	LOCKWASHER, starting motor mtg	2
•	EY 2147056108	STOPPER SET, pinion	1			8 mm spring lock	
12		Consisting of: PINION STOPPER	1	25	EY 2147900101	SCREW, starting motor mounting	2
13		RETURN SPRING	1			8 mm, hexagon head, special	
14		RETAINER CLIP	1				

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

MAGNETO — SOLID STATE IGNITION SYSTEM **With 12 Volt - 12.5 Amp FLYWHEEL ALTERNATOR CIRCUIT**

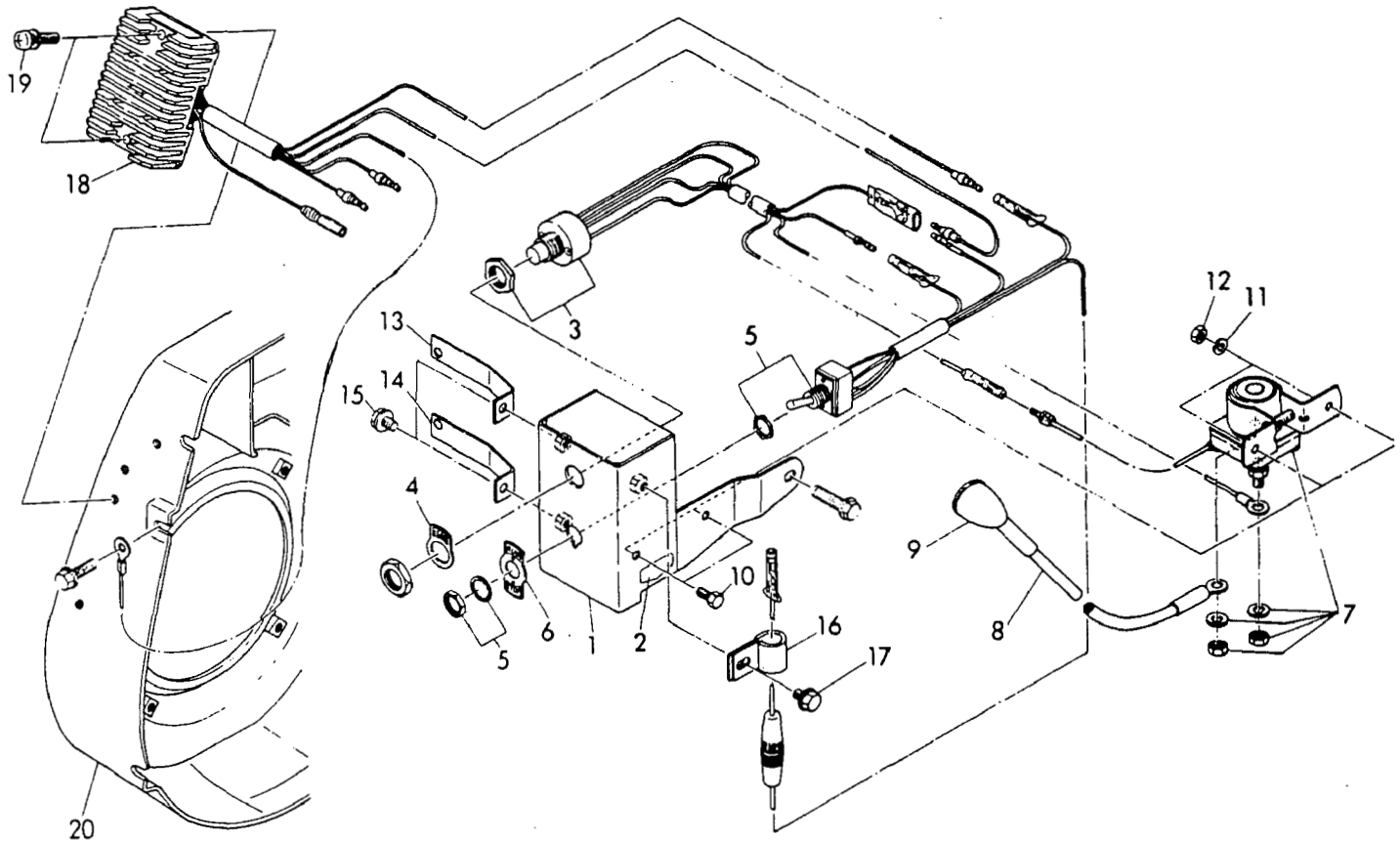


Ref. No.	Part Number	Description	Qty.
1	EY 2247010507	FLYWHEEL assembly	1
2		Includes: EY 2247100203 RING GEAR.....	1
3	EY 2247020108	STATOR assembly	1
4	EY 2247015008	PULSER COIL	1
5	EY 2147520123	ADAPTER, stator	1
6	EY 0041106140	SCREW, stator adapter mounting	4
		6 mm x 14 mm long, flat head	
7	EY 0043104250	SCREW, pulser coil mounting	2
		4 mm x 25 mm long, pan head	
8	EY 0032004000	LOCKWASHER, pulser coil mounting	2
		4 mm spring lock	
9	EY 0031004000	WASHER, pulser coil mounting.....	2
		4 mm I.D., plain steel	

Ref. No.	Part Number	Description	Qty.
10	EY 2247220301	IGNITION UNIT assembly	1
11	EY 2057820101	CLAMP, coil wire	1
12	EY 0043506200	SCREW/WASHER, ignition coil mounting ...	2
		6 mm x 20 mm long, pan head	
13	EY 0031006000	WASHER, ignition coil mounting.....	2
		6 mm I.D., plain steel	
14	EY 2247700201	CLAMP, stator wire harness	1
15	EY 0110060010	SCREW, stator harness clamp.....	1
		6 mm x 8 mm long, hexagon flange head	
16	EY 0043506250	SCREW/WASHER, stator mounting	4
		6 mm x 25 mm long, pan head	

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

CONTROL BOX, SWITCHES and REGULATOR Group
For SOLID STATE IGNITION with 12 Volt - 12.5-Amp FLYWHEEL ALTERNATOR CIRCUIT

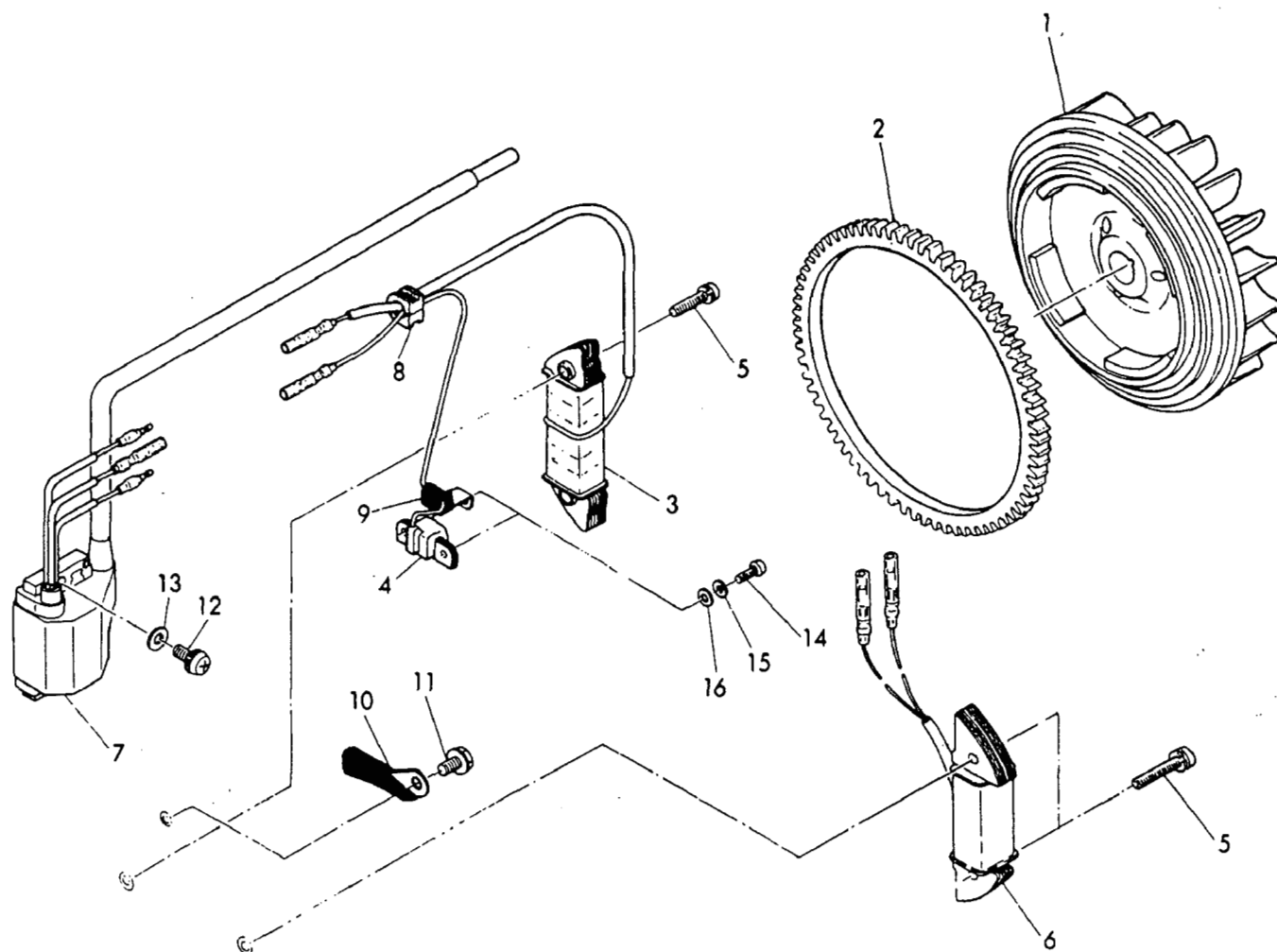


Ref. No.	Part Number	Description	Qty.
1	EY 2247510501	CONTROL BOX assembly (Includes Ref. 2)	1
2	EY 0732001080	LABEL (BATTERY)	1
3	EY 2247310711	STARTER SWITCH assembly	1
4	EY 0732000410	LABEL (START SWITCH)	1
5	EY 2247260101	OFF/ON (CHARGE) SWITCH assembly	1
6	EY 0732000700	LABEL (OFF/ON SWITCH)	1
7	EY 2147700110	MAGNETIC SWITCH assembly	1
8	EY 2147310111	WIRE assembly	1
		Magnetic switch to starting motor	
9	EY 2147850103	CAP, starting motor terminal	1
10	EY 0016505120	SCREW, magnetic switch mounting	2
		5 mm x 12 mm long, hexagon head	
11	EY 0032005000	LOCKWASHER, magnetic switch mounting ..	2
		5 mm, spring lock	

Ref. No.	Part Number	Description	Qty.
12	EY 0021705000	NUT, magnetic switch mounting	2
		5 mm thread, hexagon steel	
13	EY 2247540101	BRACKET, control box (upper)	1
14	EY 2247540201	BRACKET, control box (lower)	1
15	EY 0110060010	SCREW, control box bracket	2
		6 mm x 8 mm long, hexagon flange head	
16	EY 0566120040	CLAMP, fuse support	1
17	EY 0110060010	SCREW, fuse clamp	1
		6 mm x 8 mm long, hex flange head	
18	EY 2247610101	REGULATOR, current/voltage	1
19	EY 0043506300	SCREW/WASHER, regulator mounting	2
		6 mm x 30 mm long, pan head	
20	EY 2245121007	FLYWHEEL SHROUD	1

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

MAGNETO — SOLID STATE IGNITION SYSTEM **With 12 Volt - 3.3 Amp FLYWHEEL ALTERNATOR CIRCUIT**

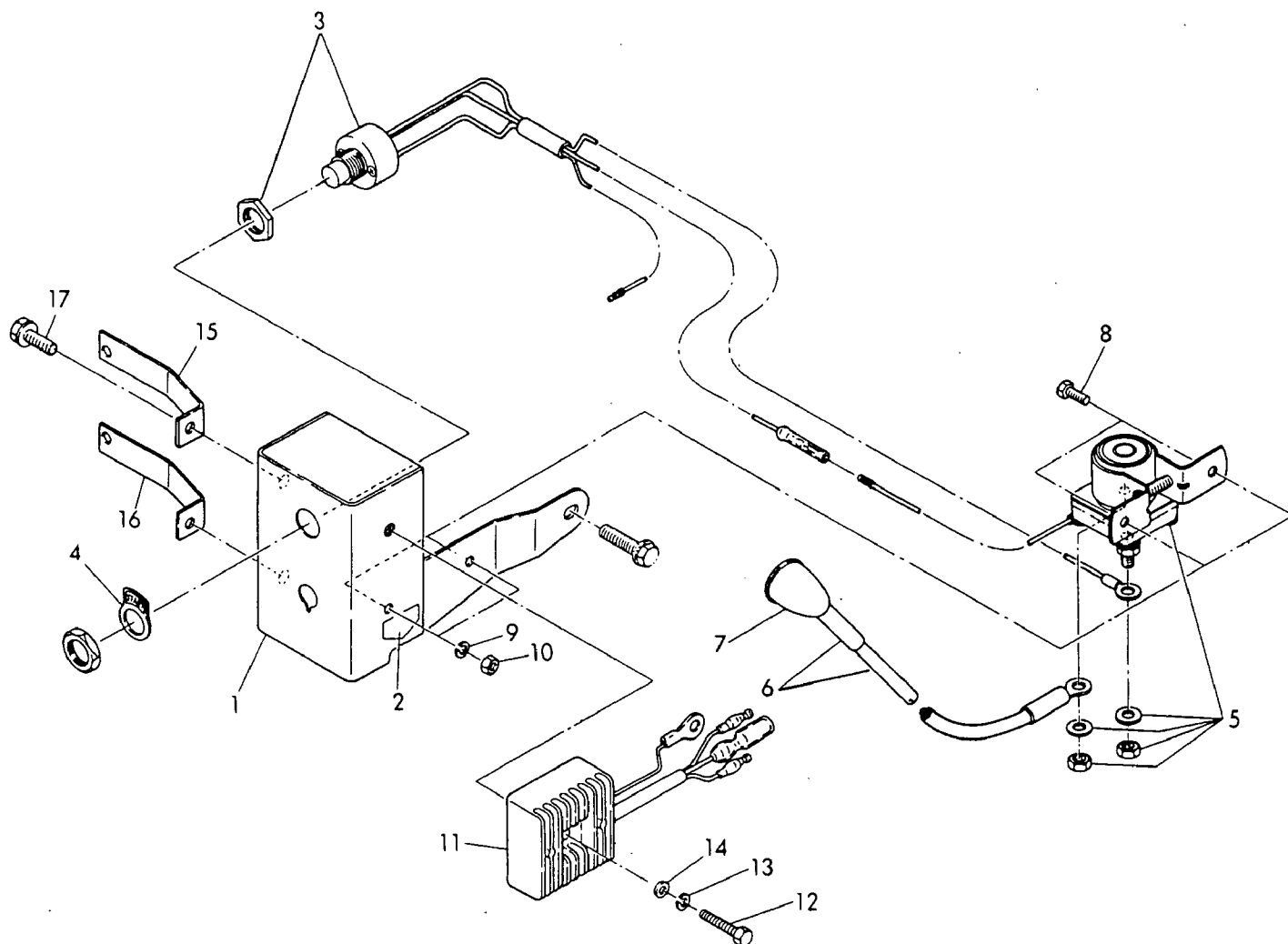


Ref. No.	Part Number	Description	Qty.
1	EY 2247010607	FLYWHEEL, assembly.....	1
2		Includes: EY 2247100203 RING GEAR	
3	EY 2247013708	EXCITER COIL	1
4	EY 2247015008	PULSER COIL	1
5	EY 0043506300	SCREW/WASHER assembly	4
		6 mm x 30 mm long, pan head 2 - For exciter coil 2 - For charge coil	
6	EY 2147014408	CHARGE COIL	1
7	EY 2247220301	IGNITION UNIT assembly	1
8	EY 0241090050	GROMMET, Ignition unit wire.....	1
9	EY 2057820101	CLAMP, Pulser coil wire	1

Ref. No.	Part Number	Description	Qty.
10	EY 2247700201	CLAMP, ignition wire.....	1
11	EY 0110060010	SCREW, ignition wire clamp	1
		6 mm x 8 mm long, hexagon flange head	
12	EY 0043506200	SCREW/WASHER assembly	2
		For ignition unit mounting 6 mm x 20 mm long, fillister head	
13	EY 0031006000	WASHER, ignition unit mounting	2
		6 mm I.D., plain steel	
14	EY 0043104120	SCREW, pulser coil mounting	2
		4 mm x 12 mm long, pan head	
15	EY 0032004000	LOCKWASHER, pulser coil mounting	2
		4 mm I.D., spring lock	
16	EY 0031004000	WASHER, pulser coil mounting.....	2
		4 mm I.D., plain steel	

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

CONTROL BOX, SWITCHES and REGULATOR Group
For SOLID STATE IGNITION with 12 Volt - 3.3 Amp FLYWHEEL ALTERNATOR CIRCUIT

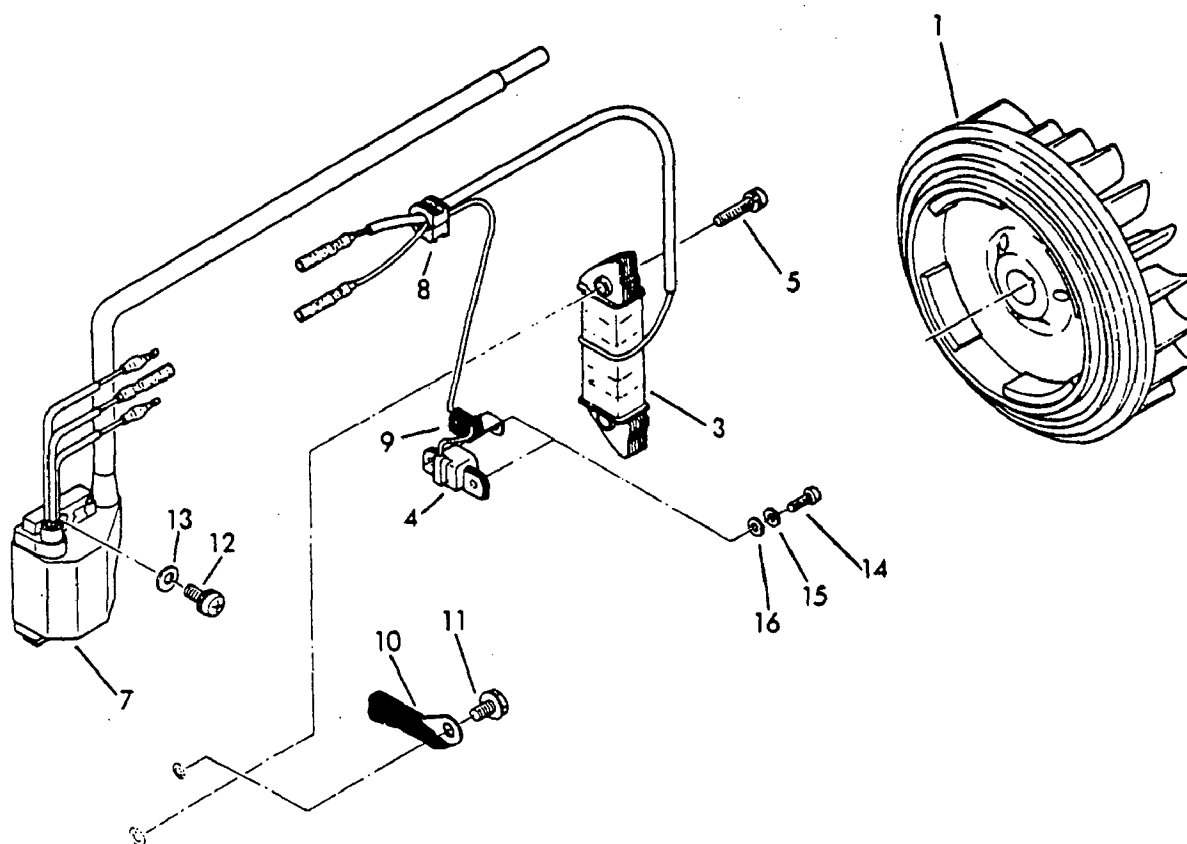


Ref. No.	Part Number	Description	Qty.
1	EY 2247510501	CONTROL BOX assembly (Includes Ref. 2)	1
2	EY 0732001080	LABEL (BATTERY)	1
3	EY 2247310401	STARTER SWITCH assembly	1
4	EY 0732000410	LABEL (START SWITCH)	1
5	EY 2147700110	MAGNETIC SWITCH assembly	1
6	EY 2147310111	WIRE assembly Magnetic switch to starting motor	1
7	EY 2147850103	CAP, starting motor terminal	1
8	EY 0016505120	SCREW, magnetic switch mounting 5 mm x 12 mm long, hexagon head	2
9	EY 0032005000	LOCKWASHER, magnetic switch mounting ... 5 mm spring lock	2

Ref. No.	Part Number	Description	Qty.
10	EY 0021705000	NUT, magnetic switch mounting 5 mm thread, hexagon steel	2
11	EY 2077190301	REGULATOR, current/voltage	1
12	EY 0016506250	SCREW, regulator mounting 6 mm x 25 mm long, hexagon head	1
13	EY 0032006000	LOCKWASHER, regulator mounting 6 mm spring lock	1
14	EY 0031006000	WASHER, regulator mounting 6 mm I.D., plain steel	1
15	EY 2247540101	BRACKET, upper, control box	1
16	EY 2247540201	BRACKET, lower, control box	1
17	EY 0110060010	SCREW, control box mounting 6 mm x 8 mm long, hexagon head	2

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

MAGNETO — SOLID STATE IGNITION SYSTEM (For RECOIL START Engines)



Ref. No.	Part Number	Description	Qty.
1	EY 2247012308	FLYWHEEL, Standard Manual start with Solid State Ignition.	1
3	EY 2247013508	EXCITER COIL	1
4	EY 2247015008	PULSER COIL	1
5	EY 0043506300	SCREW/WASHER assembly For exciter coil mounting. 6 mm x 30 mm long, pan head	2
7	EY 2247220301	IGNITION UNIT assembly	1
8	EY 0241090050	GROMMET, Ignition unit wire.....	1
9	EY 2057820101	CLAMP, Pulser coil wire	1

Ref. No.	Part Number	Description	Qty.
10	EY 2247700201	CLAMP, ignition wire.....	1
11	EY 0110060020	SCREW, ignition wire clamp	1
12	EY 0043506200	SCREW/WASHER assembly For ignition unit mounting 6 mm x 20 mm long, fillister head	2
13	EY 0031006000	WASHER, ignition unit mounting	2
14	EY 0043504120	SCREW, pulser coil mounting	2
15	EY 0032004000	LOCKWASHER, pulser coil mounting	2
16	EY 0031004000	WASHER, pulser coil mounting	2

When ordering parts: Always give Model, Specification and Serial Numbers of engine.

IGNITION and ELECTRICAL SYSTEMS

Engines equipped with an electric starting motor are also provided with a built-in charging circuit (flywheel alternator). There are **no maintenance or adjustment** requirements because there are **no brushes, commutator or belts**. The charging coil and magnetic rotor are mounted within the flywheel. A **Rectifier/Regulator** converts the charge from alternating current to direct current.

There are two charging circuits available; **12 volts - 3.3 amps** for maintaining battery charge and **12 volts - 12.5 amps** for battery charge and external load. Illustrated Wiring diagrams for these Ignition and Charge circuits are as follows:

Fig. A, 3.3 amp, with Breaker Point Ignition.

Fig. B, 3.3 amp, with Solid State Ignition.

Fig. C, 12.5 amp, with Solid State Ignition.

Fig. D, Solid State Ignition with Recoil Start.

Use a **12 volt battery** — minimum capacity of 18 amp-hours. Connect ground strap from **negative** post of battery to a good clean ground surface on the engine.

3.3 AMP FLYWHEEL ALTERNATOR Fig. A or Fig. B

1. **Do not** operate engine **without** a battery in the circuit and the regulator connected. To operate engine **without** a battery, disconnect the two green and white wires from charging coil to the regulator.
2. **Do not** connect regulator harness, red wire, directly to load. Connect load (lights, etc. to battery positive (+) terminal.
3. **Do not** reverse battery connections. This is for a **negative ground** system only.

4. **Do not** polarize the alternator.
5. **Do not** ground any wires which terminate at connectors.
6. Disconnect at least one battery lead if a battery charger is used.
7. Never use a fast battery charger to boost the battery output for starting.

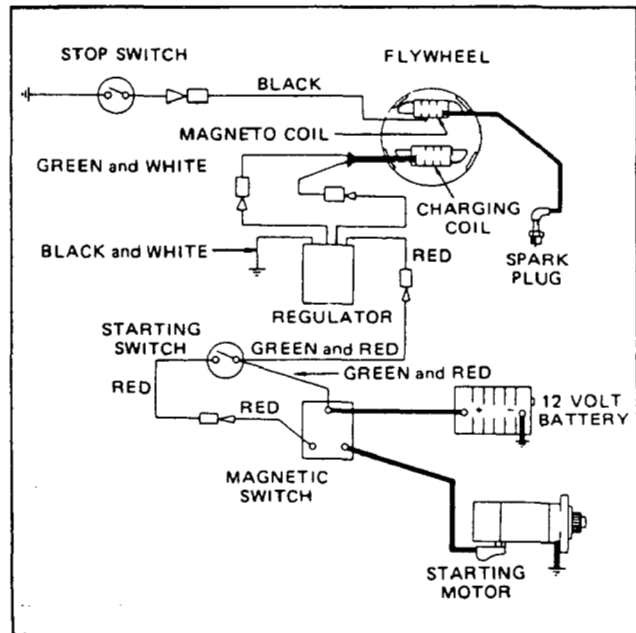


Fig. A, 3.3 AMP FLYWHEEL ALTERNATOR with BREAKER POINT IGNITION

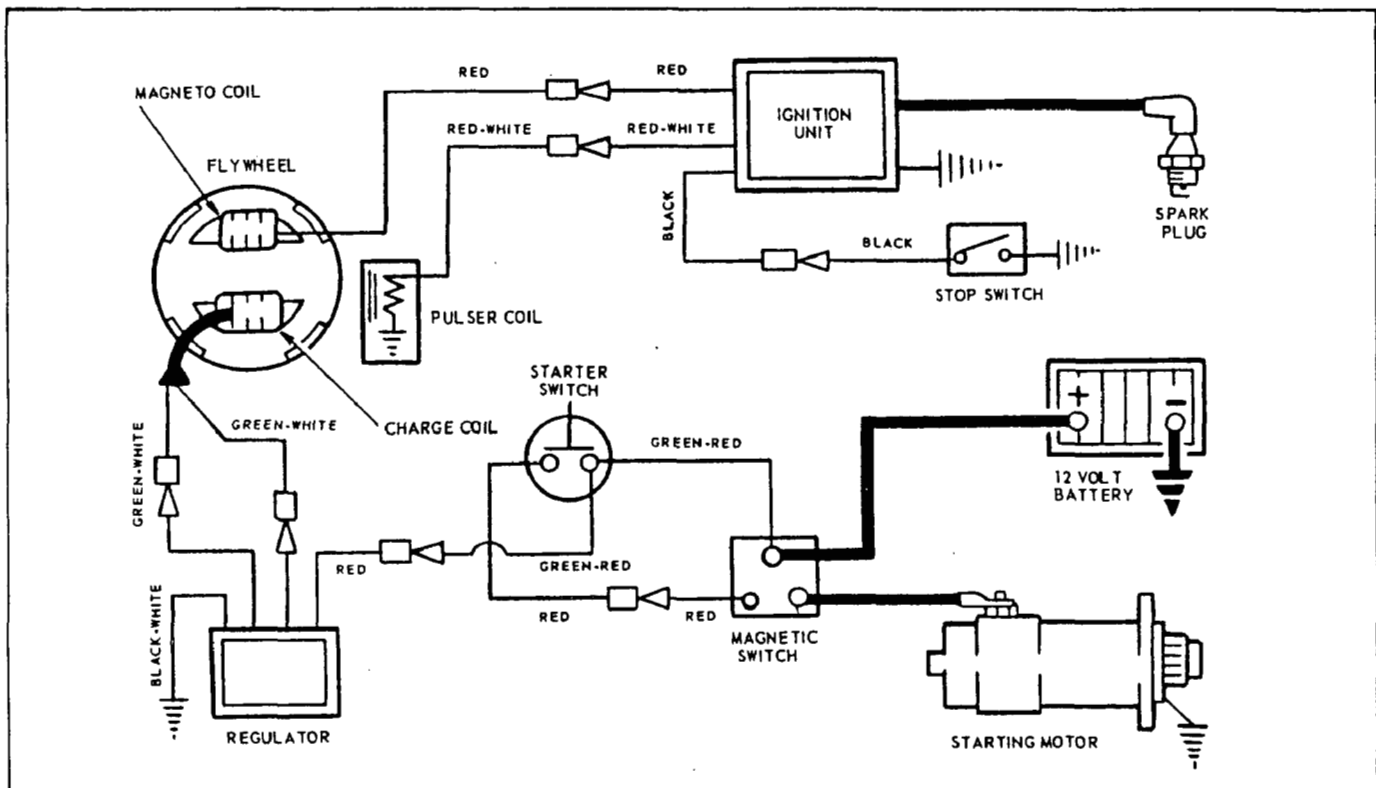


Fig. B, 3.3 AMP FLYWHEEL ALTERNATOR with SOLID STATE IGNITION