

Important Notice

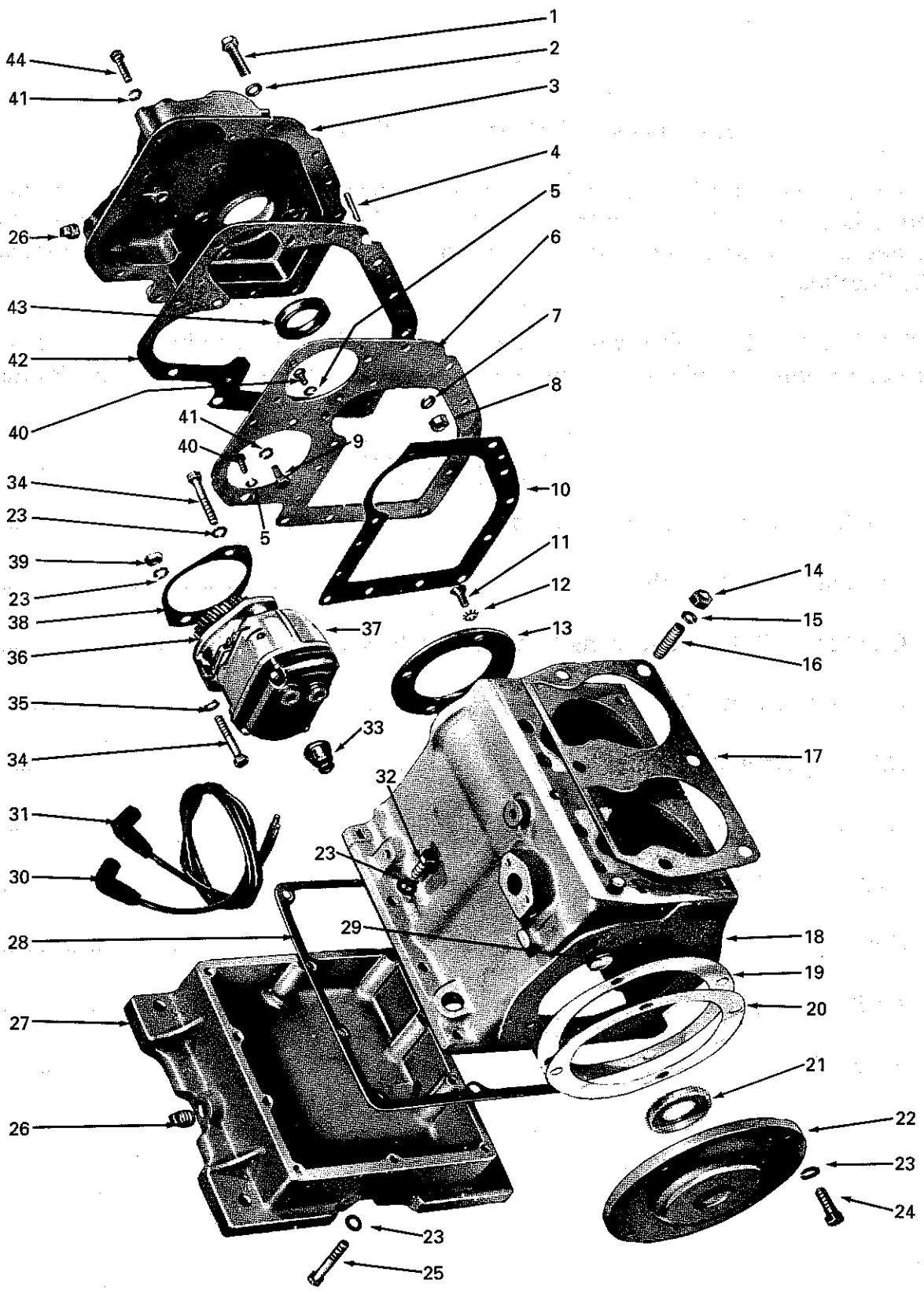
The manuals contained in this computer file are reproductions from the “Wisconsin Engine” counter catalog, part number “S236”. This manual was last produced in the mid 1980’s.

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.

All service parts are sold through our Distributor Network. Visit our website (www.wisconsinmotors.com) to locate a distributor near you.

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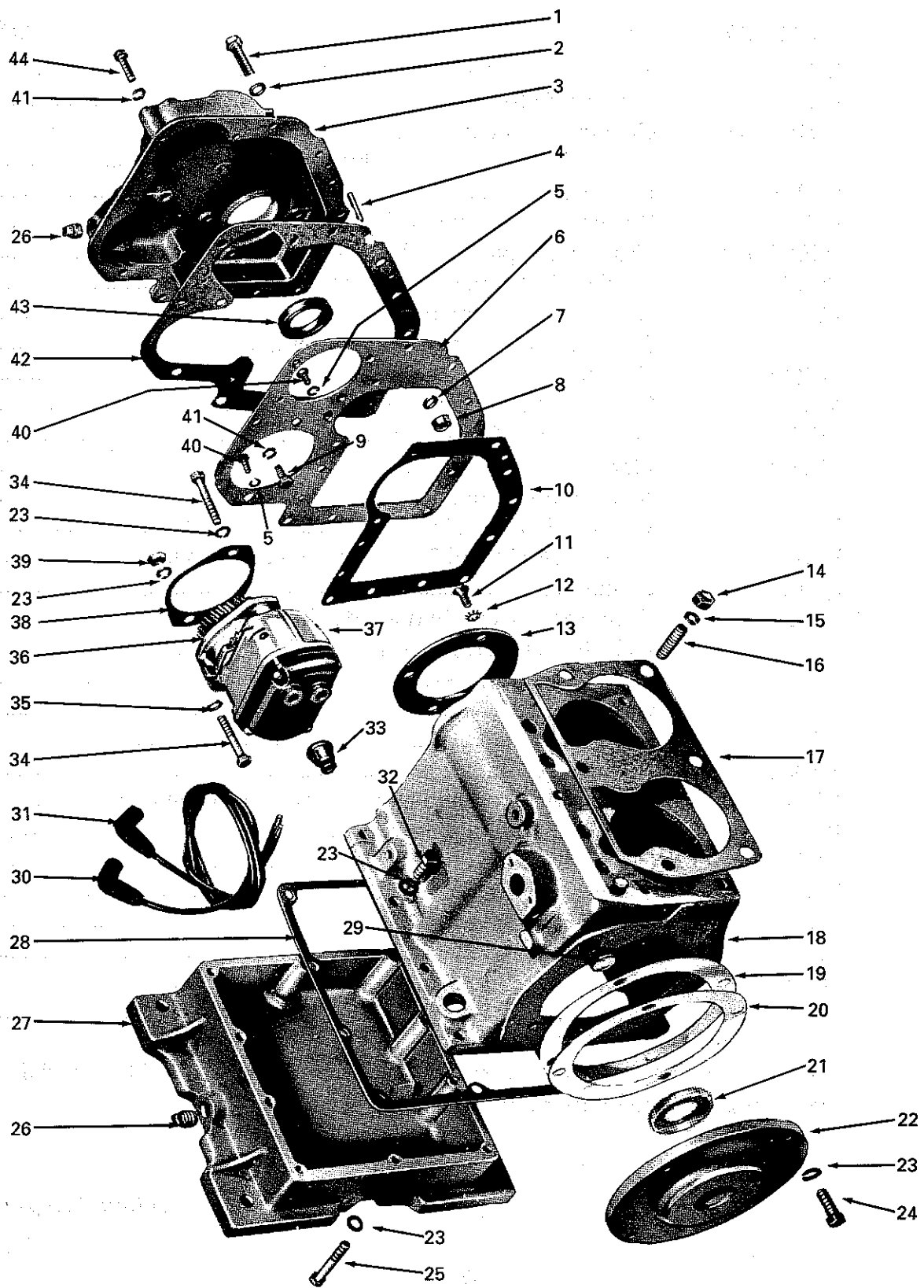


Crankcase, Gear Cover, Base and Magneto

ITEM	PART NO.	DESCRIPTION	QTY
1	XD23	Screw, 5/16"-18 thread x 2" long	1
2	PH14	Washer, 5/16" plain	1
3	BD103G3S1	Gear cover (includes item 26; also seal, plug, shaft, and button)	1
4	PA291	Dowel pin	2
5	PE3	Washer, 1/4" spring lock	4
6	WE293-1S1	Gear cover spacer (includes clinch nut)	1
7	PH209B	Washer, 5/16" plain, 3/32" thick	1
8	PD78	Nut, 5/16"-18 thread	1
9	XD14	Screw, 5/16"-18 thread x 5/8" long	1
10	QD661A	Gasket	1
11	XC68	Screw, 5/16"-18 thread x 3/4" long	4
12	PE49	Lock washer, 5/16" countersunk	4
13	BG209	Plate	1
14	PD12	Nut, 7/16"-20 thread	6
15	PE6	Washer, 7/16" spring lock	6
16	PC615	Stud, 7/16"-14 and 20 thread x 1-11/16" long	6
17	QD617	Gasket	1
18	* BA62	Crankcase assembly (includes items 5, 8, 16, 29; includes washer, plugs, gasket, fitting, nozzle, tube, cover, screws)	1
19	QD844	Gasket	4
20	QD845	Gasket	2
21	PH364	Oil seal	1
22	BG349-2S2	Bearing plate (includes item 21; also bearing cup)	1
23	PE5	Washer, 3/8" spring lock	12
24	XD27A	Screw, 3/8"-16 thread x 1"	4
25	XD113	Screw, 3/8"-16 thread x 2-3/4"	2
26	XK3	Pipe plug, 3/8" square head	1
27	BB126H	Base	1
28	QD662B	Gasket	1
29	SA10	Plug, 7/8" expansion	1

* BA62 is standard machining number. A dash number is added for special machining (located on marking pad).

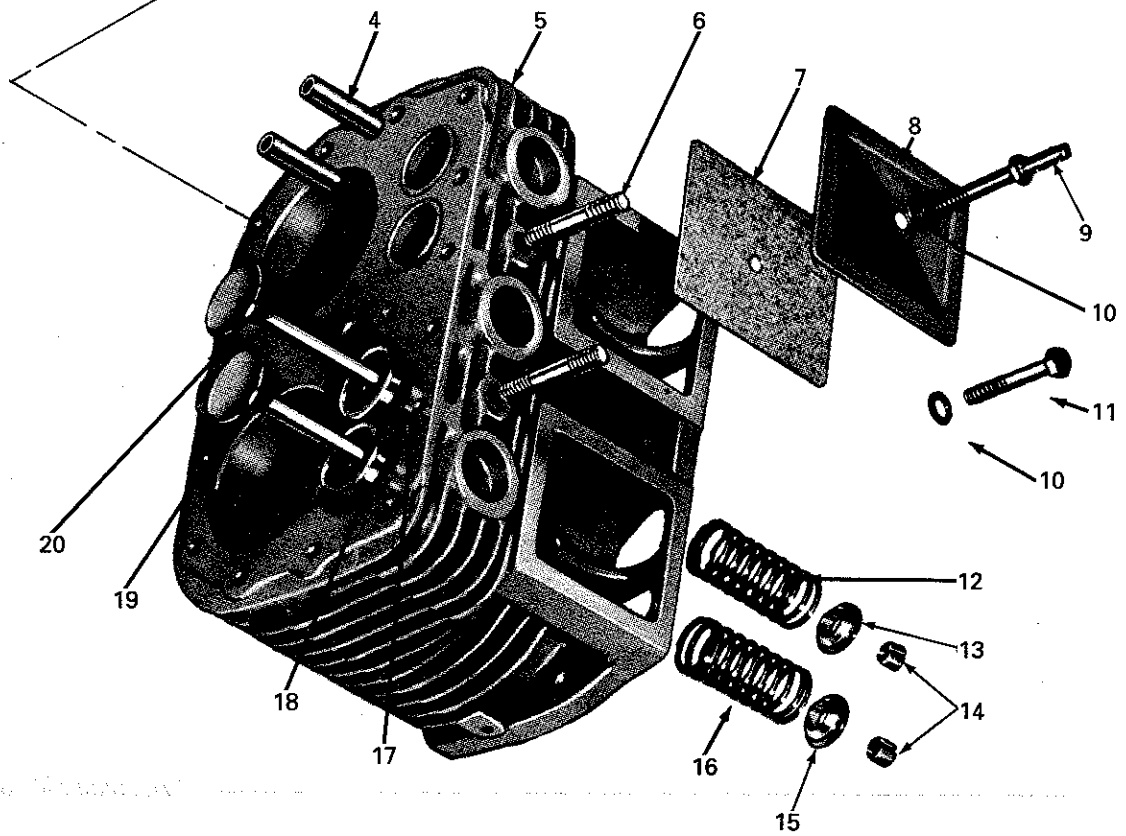
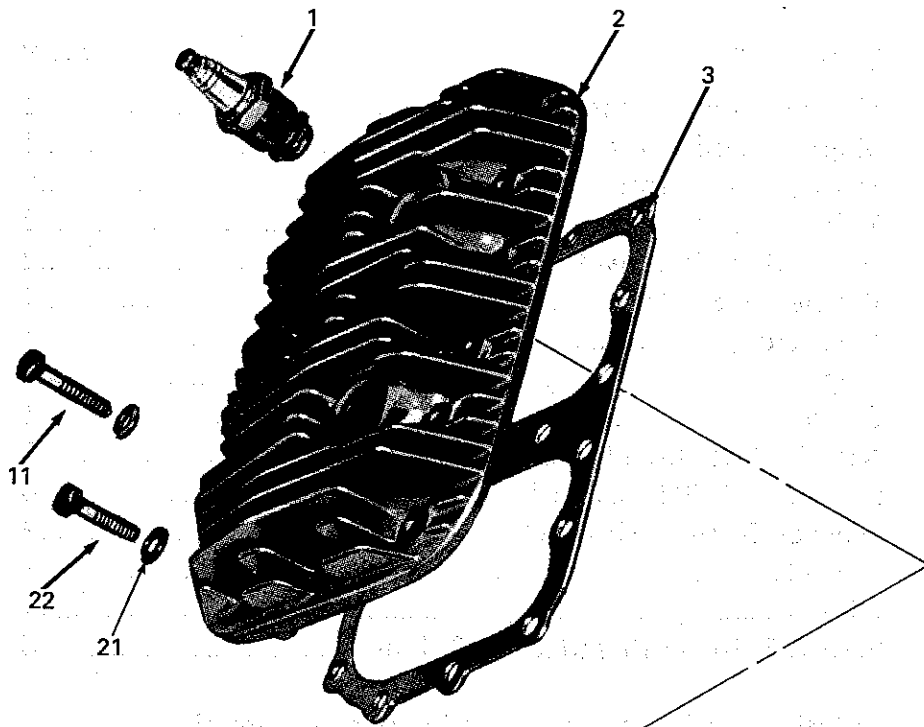
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Crankcase, Gear Cover, Base and Magneto (cont.)

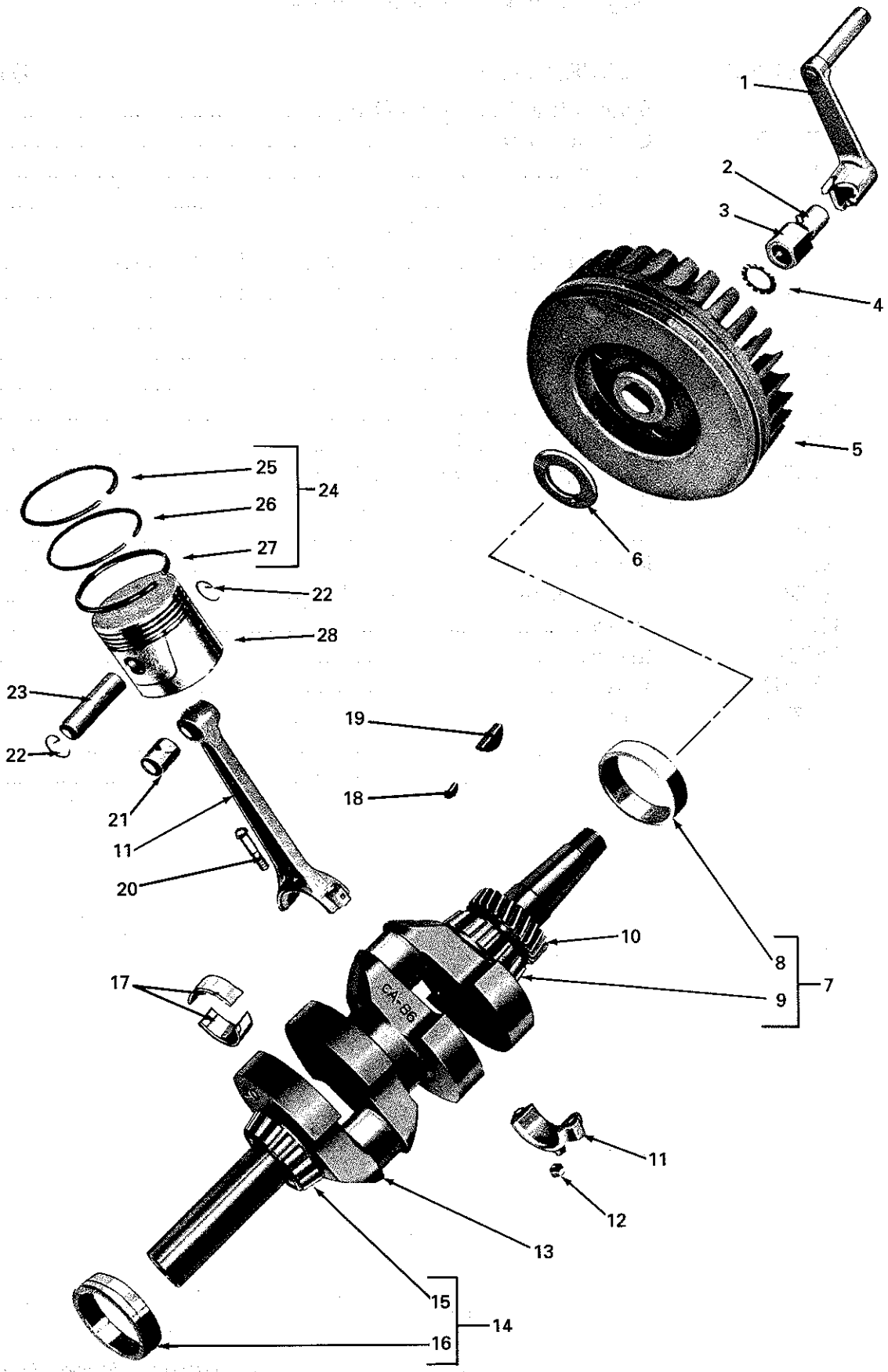
ITEM	PART NO.	DESCRIPTION	QTY
30	YL339-22	Magneto ignition cable	1
31	YL339-26	Magneto ignition cable	1
32	XD29B	Screw, 3/8"-16 thread x 1-1/4" long	8
33	YD20	Rubber nipple	2
34	XD33	Screw, 3/8"-16 thread x 2-1/4" long	2
35	PH22A	Washer, 3/8" plain	1
36	GD93C3	Magneto gear	1
37	* Y79BS1	Magneto	1
38	QD616	Gasket	1
39	PD79	Nut, 3/8"-16 thread	1
40	XD4	Screw, 1/4"-20 thread x 1/2" long	4
41	PE4	Washer, 5/16" spring lock	9
42	QD660	Gasket	1
43	PH299	Oil seal	1
44	XD19	Screw, 5/16"-18 thread x 1-1/2" long	8

* See "Magnetos" in Options and Accessories section of this manual for service parts.



Cylinder Block Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1	YD6	Spark plug, Champion D 16J	2
2	AB100B	Cylinder head	1
3	QD613C	Gasket.....	1
4	AD47	Guide	4
5	AA86AS30	Cylinder block assembly (includes items 4, 6, 12 - 20; includes block, studs)	1
6	PC110	Stud, 3/8"-16 and 24 thread x 2-1/8" long.....	2
7	QD612A	Gasket.....	2
8	SA68	Cover	2
9	TC530S1	Pin	1
10	PH14	Plain washer, 5/16"	2
11	XD21	Screw, 5/16"-18 thread x 1-1/2" long	2
12	AF49A	Valve spring, 2-5/16" free length	2
13	AG26	Seat.....	2
14	AH9	Retainer spring.....	8
15	AG31	Rotator	2
16	AF54	Valve spring, 1-13/16" free length	2
17	HG201	Insert.....	2
18	HG273D	Insert.....	2
19	AE75D	Valve.....	2
20	AE75B	Valve.....	2
21	PH77A	Washer, 5/16" plain steel	17
22	XD19	Screw, 5/16"-18 thread x 1-1/4"	15



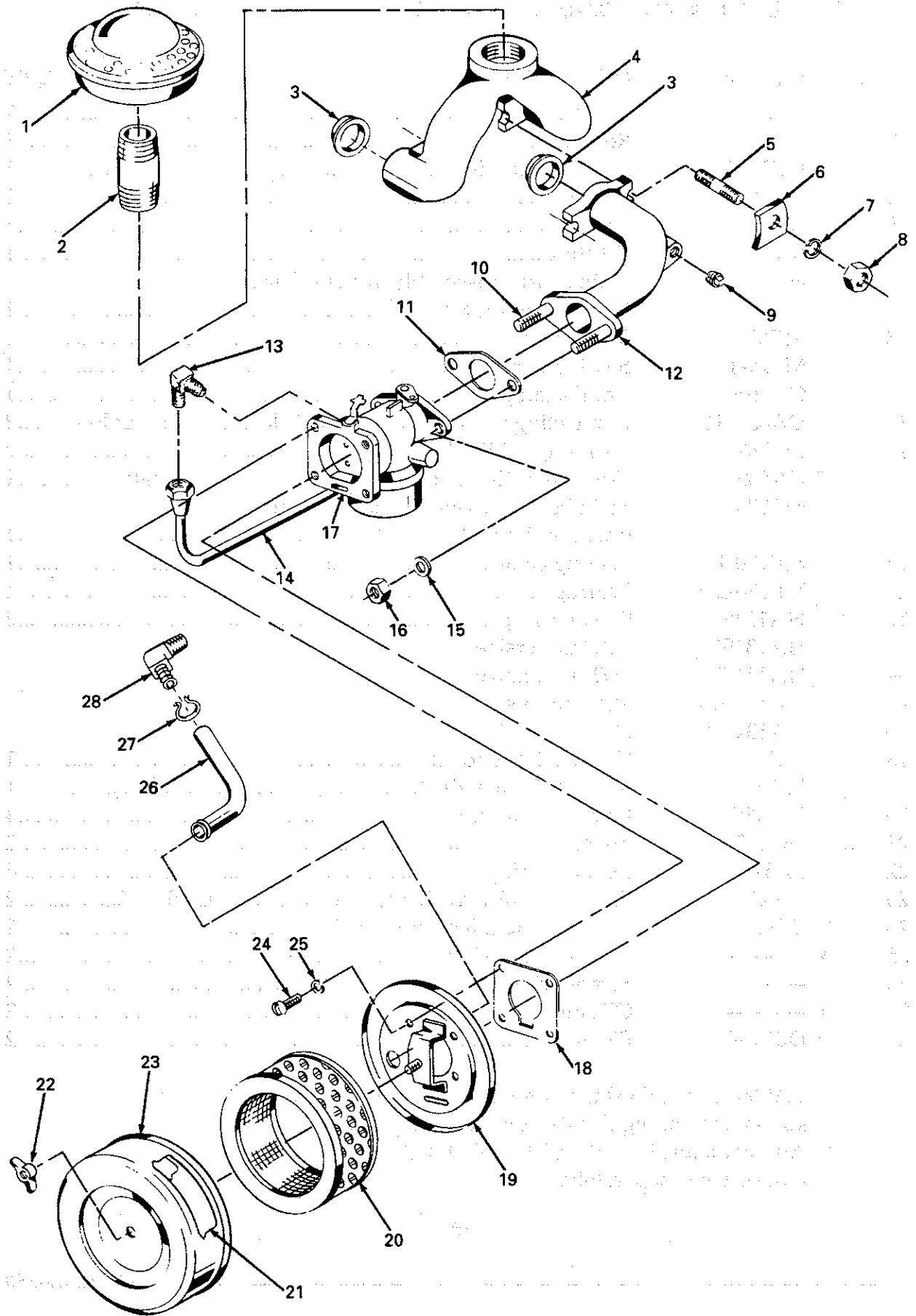
Crankshaft, Piston, Connecting Rod and Flywheel

ITEM	PART NO.	DESCRIPTION	QTY
1	U212	Crank.....	1
2	PA333	Roll pin.....	1
3	UC75S1	Nut (includes item 2).....	1
4	PE59	Washer.....	1
5	N102A	Flywheel.....	1
6	RK170	Oil sling.....	1
7	ME71	Main bearing assembly, flywheel end (includes items 8 and 9).....	1
8	ME69-1	Bearing cup.....	1
9	ME71-1	Bearing cone.....	1
10	GA36A	Crankshaft gear.....	1
11	DA68AS1	Connecting rod (includes item 21, locknuts, and bolts).....	2
12	PD246	Locknut, 5/16"-24 thread.....	2
13	* CA86S1	Crankshaft (includes item 10; includes crankshaft).....	1
14	ME130	Main bearing assembly, take-off end (includes items 15 and 16).....	1
15	ME130-1	Bearing cone.....	1
16	ME130-2	Bearing cup.....	1
17	HA134S	Shell bearing.....	2
—	HA134S1	.001" undersize	
—	HA134S2	.002" undersize	
—	HA134S10	.010" undersize	
—	HA134S20	.020" undersize	
18	PL53	Key, no. 8 Woodruff.....	1
19	PL83	Key, no. 23 Woodruff.....	1
20	PB148S1	Bolt (includes item 12).....	4
21	HG157A	Bushing.....	2
22	PK52	Retaining ring.....	4
23	DE65	Piston pin; also available in .005" & .010" O/S.....	2
24	** DR63	Ring set (includes items 25 - 27).....	1
25	• — — —	Compression ring.....	2
26	• — — —	Scraper ring.....	2
27	• — — —	Oil ring.....	2
28	** DB190B1	Piston.....	2

* CA86S1 is standard machining number. A dash number is added for any special machining (located on marking pad).

** Also available in .010", .020" & .030" O/S.

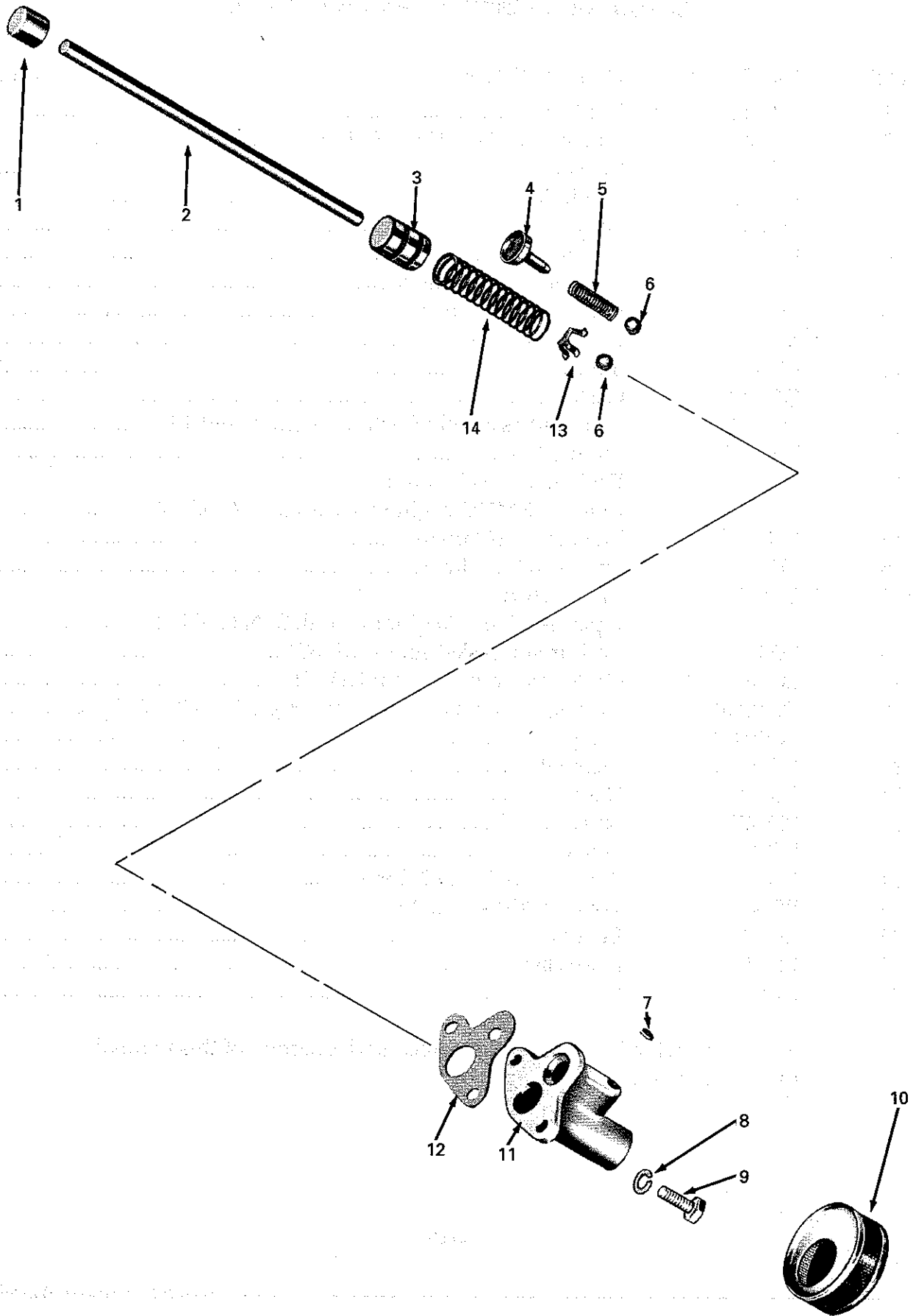
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Carburetor, Manifold and Air Cleaner

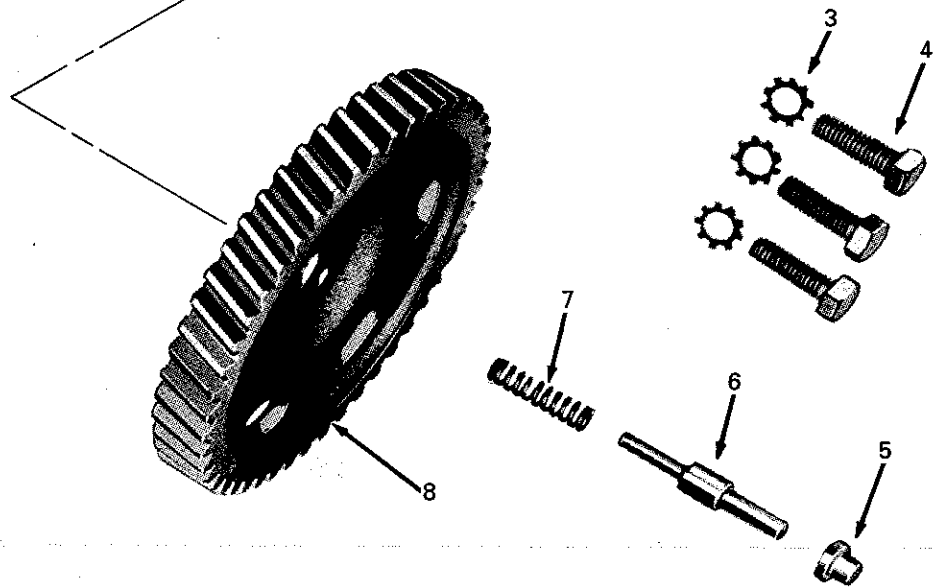
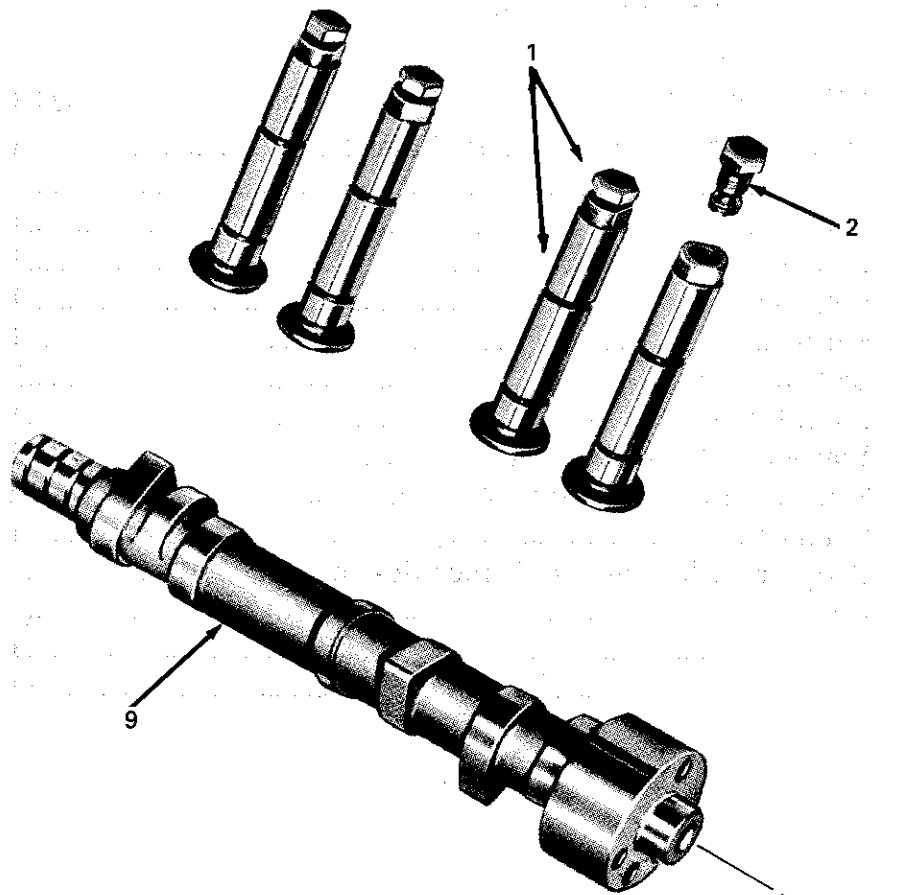
ITEM	PART NO.	DESCRIPTION	QTY
1	WD98S5	Muffler	1
2	LJ192	Pipe nipple, 1-1/4" x 4-1/2" long	1
3	QB75	Gasket	3
4	LD242	Manifold	1
5	PC110	Stud	2
6	PH356	Washer	2
7	PE5	Washer, 3/8" spring lock	2
8	PD206	Nut, 3/8"-24 thread	2
9	XK1	Plug, 1/8" pipe	1
10	PC549	Stud	2
11	QC12A	Gasket	1
12	LC285S1	Manifold assembly (includes items 9 and 10)	1
13	RF1225	Elbow, 1/4"	1
14	RM392-1	Fuel line, 12-1/2" long; replaces RM197 beginning with S/N 6257172	1
15	PH14D	Washer, 5/16" plain	2
16	PD10	Nut, 5/16"-18 thread	2
17	* L131S1	Carburetor; replaces L116S1 beginning with S/N 6257172	1
—	Q50	Carburetor gasket set for L116S1	1
—	LQ56	Carburetor repair kit for L116S1	1
18	QD860B	Gasket; replaces QD860 beginning with S/N 6257172	1
19	LO194H	Adapter	1
20	LO194A	Element	1
21	SD308	Decal	1
22	PD147	Nut	1
23	LO194F	Housing	1
24	XA8	Screw, #10-32 x 1/2" long	4
25	PE14	Washer, #10 spring lock	4
26	LL208	Breather line	1
27	LK34	Hose clamp	1
28	RF1519	Elbow	1

* See "Carburetors" in Options and Accessories section of this manual for service parts.



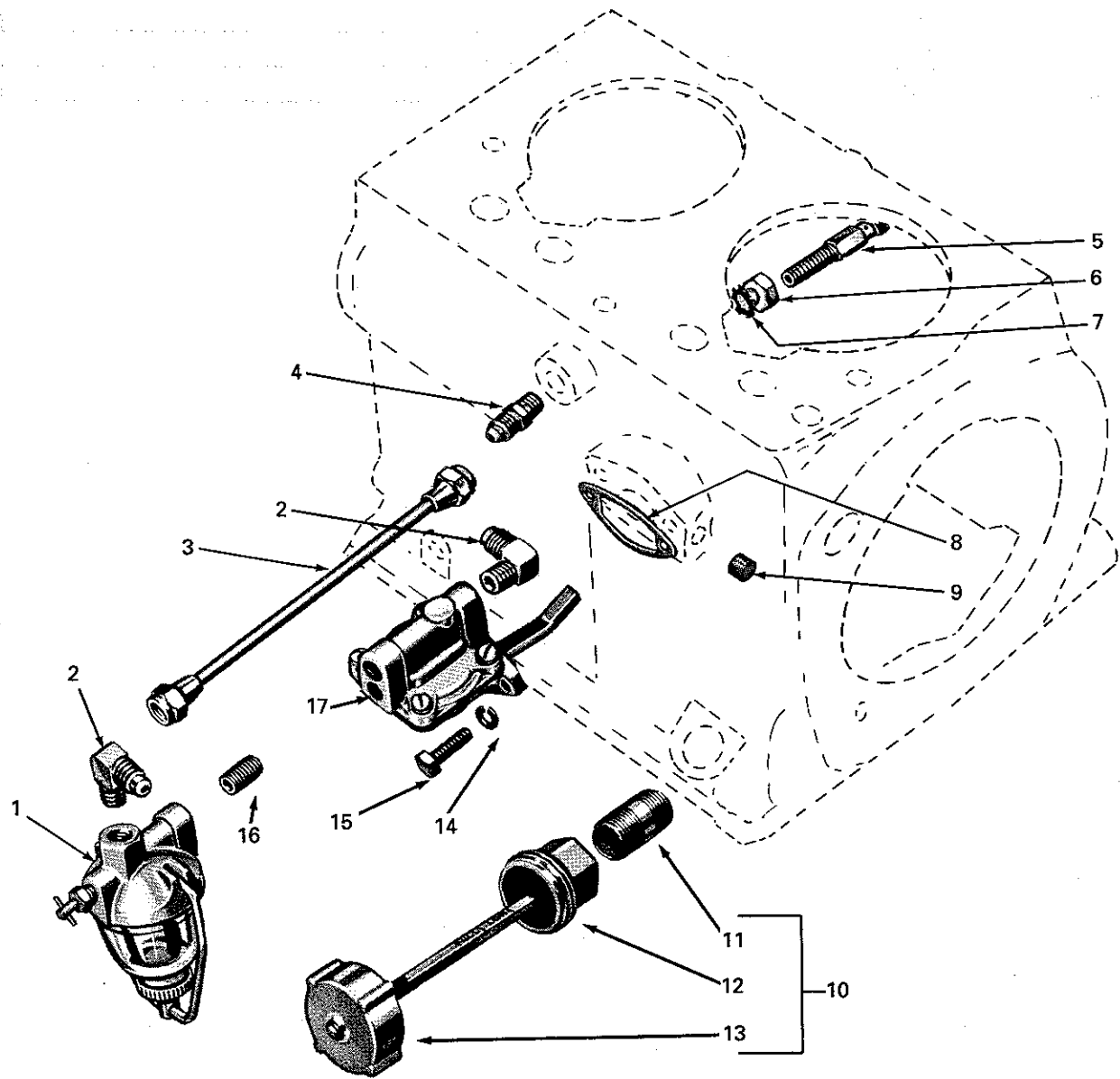
Oil Pump Assembly

ITEM	PART NO.	DESCRIPTION	QTY
—	KAA103	Oil Pump Assembly (includes items 1-14).....	1
1	KF55	Cap.....	1
2	KF24	Rod.....	1
3	KF23-1	Plunger.....	1
4	KF28	Retainer.....	1
5	PM165-1	Spring.....	1
6	ME38A	Ball, 5/16" dia.....	2
7	PF18A	Plug, 1/8" slotted.....	1
8	PE4	Washer, 5/16" spring lock.....	2
9	XD16	Screw, 5/16"-18 thread x 7/8" long.....	2
10	RD107A	Strainer.....	1
11	KA63DS1	Body (includes items 4 - 7; includes body).....	1
12	QD846	Gasket.....	1
13	PK50A	Retainer.....	1
14	PM58E	Spring.....	1



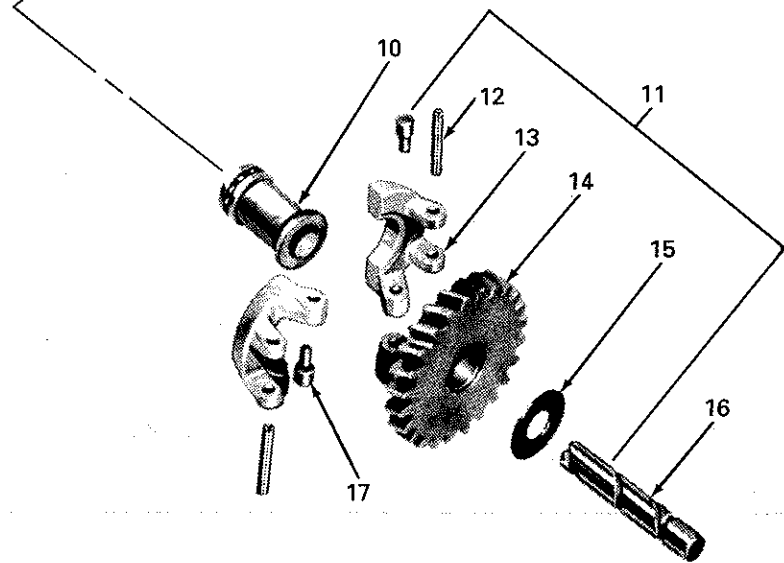
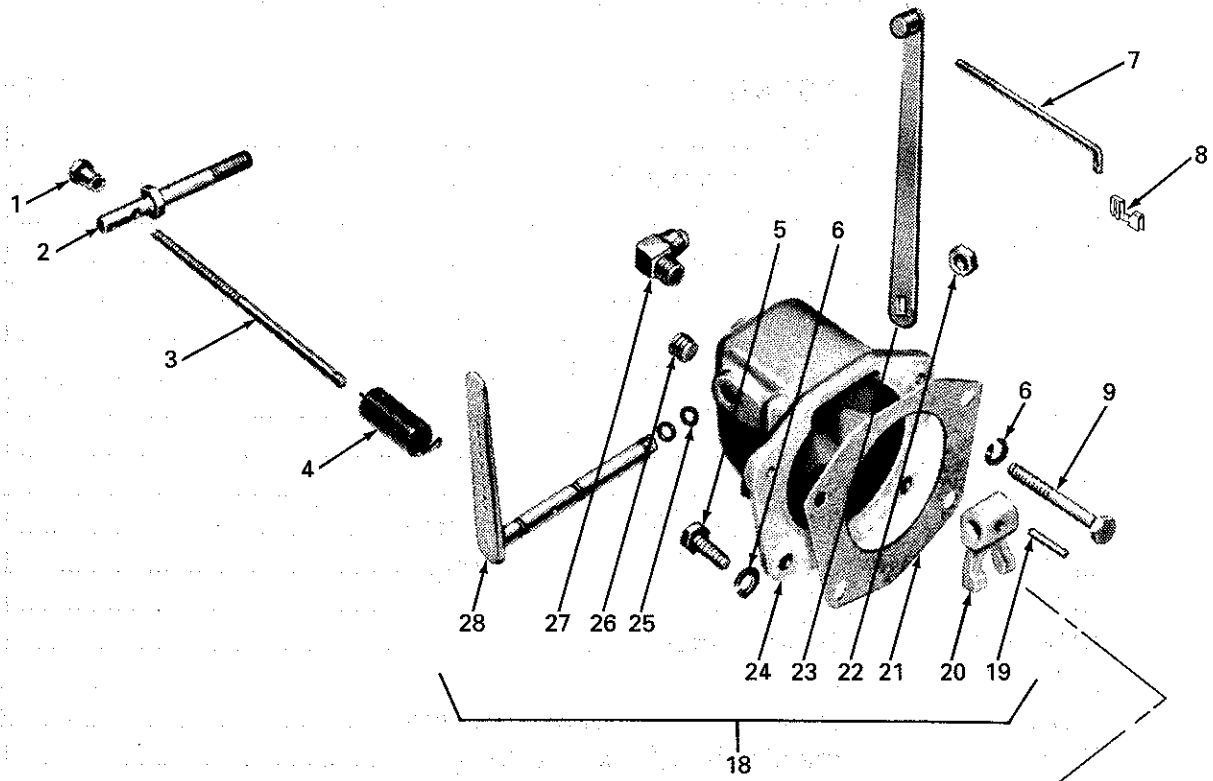
Camshaft and Valve Tappet

ITEM	PART NO.	DESCRIPTION	QTY
1	F61	Tappet	4
2	PB169A	Adjusting screw, tappet.....	4
3	PE46	Lock washer, 5/16" external	3
4	XD19	Screw, 5/16"-18 thread x 1-1/4" long	3
5	PF52	Button	1
6	PF101	Plunger	1
7	PM108	Spring	1
8	GB45A2	Gear (replaces GB45A).....	1
9	EA133B	Camshaft	1



Fuel Pump, Dip Stick and Oil Spray Nozzle

ITEM	PART NO.	DESCRIPTION	QTY
1	LP43	Fuel filter	1
—	LQ31	Fuel filter repair kit	1
2	RF1225	Elbow, 1/4"	2
3	RM849	Oil line, 6" long	1
4	RF269	Fitting, 1/4"	1
5	RF1196	Nozzle	1
6	PD78	Nut, 5/16"-18 thread	1
7	PE46	Lock washer, 5/16" external	1
8	QD670	Gasket	1
9	PF131	Cup plug	1
10	R123	Oil dip stick/filler (includes items 11 - 13)	1
11	LJ310	Pipe nipple, 1/2" x 1-1/2" long	1
12	RB86	Body	1
13	RJ168BS1	Dip stick/cap	1
14	PE3	Washer, 1/4" spring lock	2
15	XB75	Screw, 1/4"-20 thread x 3/4" long	2
16	RF794	Pipe nipple, 1/8" x 3/4" long	1
17	LP62AS1	Fuel pump	1
—	LQ51	Fuel pump repair kit	1

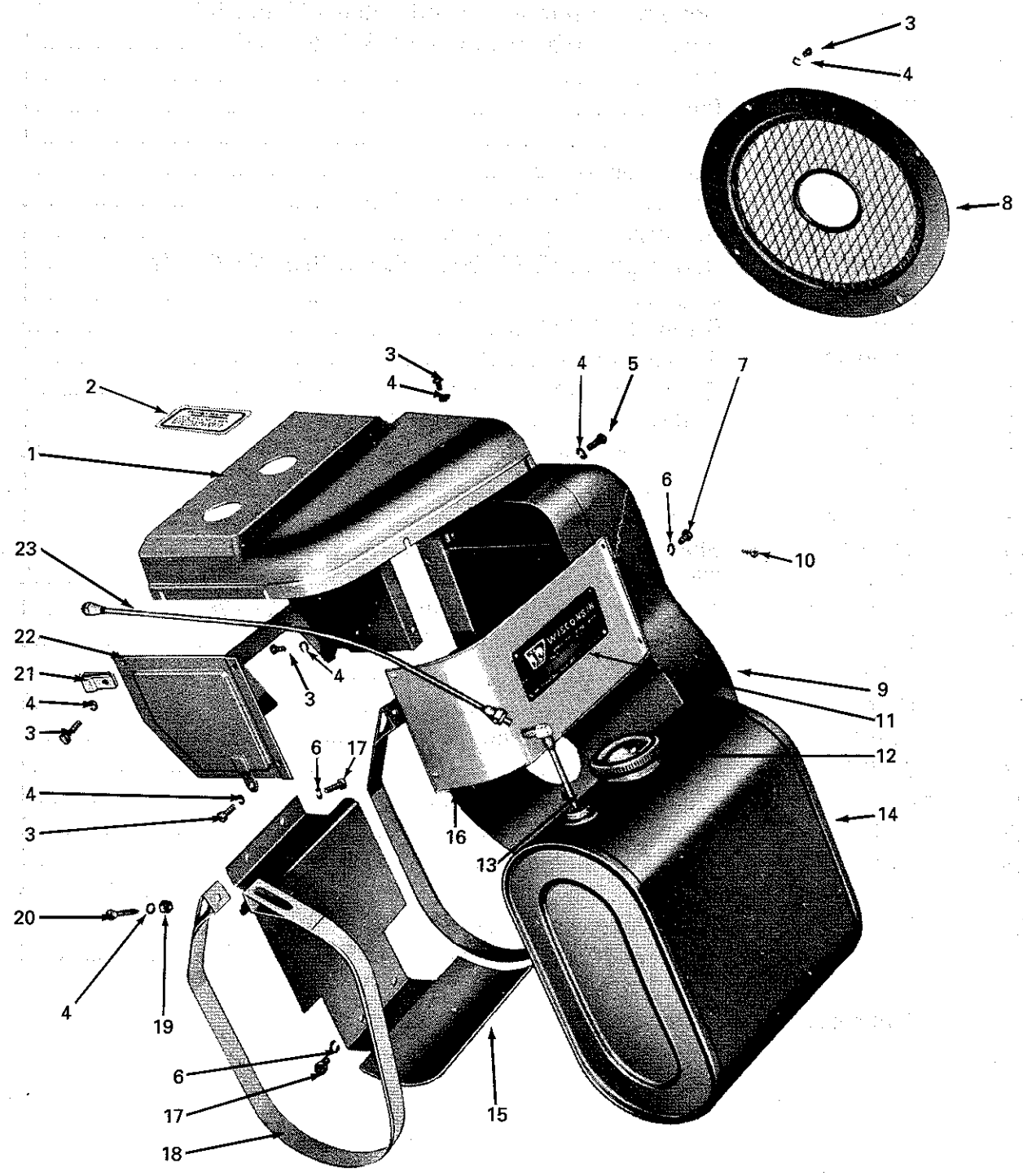


Governor Assembly

ITEM	PART NO.	DESCRIPTION	QTY
—	T137	Governor assembly (includes items 11 and 18); replaces T130 beginning with S/N 6257172	1
1	PD173A	Nut	1
2	TC530S1	Pin	1
3	PI115K	Screw	1
4	PM75	Governor spring	1
5	XD6	Screw, 1/4"-20 thread x 3/4" long	2
6	PE3	Washer, 1/4" spring lock	4
7	VE878	Rod; replaces VE871 beginning with S/N 6257172	1
8	PK178	Clip	1
9	XD11	Screw, 1/4"-20 thread x 2" long	2
10	TC391D	Sleeve/bearing	1
11	TC405N	Gear/flyweight assembly (includes 12 - 15, 17)	1
12	PA340	Roll pin, 3/16" dia. x 1-1/8" long	2
13	TC322DS1	Flyweight assembly (includes 12, 15, 17)	2
14	* — — —	Gear	1
15	PH313A	Shim	1
16	TC388-2	Shaft	1
17	TC328D	Thrust pin	2
18	TC422BS7	Governor housing assembly (includes 19 - 28)	1
19	PA367	Roll pin, 1/8" dia. x 3/4" long	1
20	VB166	Yoke	1
21	QD638A	Gasket	1
22	PD10	Nut, 5/16"-24 thread	1
23	TC521A	Lever	1
24	* — — —	Housing	1
25	JK52	O-ring seal	2
26	PF18	Plug, 1/8" slotted	1
27	RF270-4	Elbow	1
28	TC522A	Shaft/lever (includes item 25); replaces TC522 beginning with S/N 6257172	1

* Not serviced separately.

Fig. 1



Air Shrouding and Fuel Tank

ITEM	PART NO.	DESCRIPTION	QTY
1	SE137D	Cover	1
2	SD314	Warning decal	1
3	XA33	Screw, 1/4"-20 thread x 3/8" long	13
4	PE3	Washer, 1/4" spring lock	16
5	XA38	Screw, 1/4"-20 thread x 1" long	1
6	PE4	Washer, 5/16" spring lock	7
7	XD13A	Screw, 5/16"-18 thread x 1/2" long	3
8	SE3	Screen	1
9	SE135	Flywheel shroud	1
—	SE135J	Shroud with pap for starting motor	1
—	SE135AT	Shroud for starter / flywheel alternator	1
10	XA67	Screw, no. 4 x 1/4" long	4
11	SD312A	Name plate	1
12	RC112	Fuel tank cap	1
13	RM1206	Suction tube	1
14	WE412S1	Fuel tank assembly (includes items 12 and 13)	1
15	BK79A	Bracket	1
16	SE136D	Cylinder shroud	1
17	XD13	Screw, 5/16"-18 thread x 1/2" long	4
—	XD15	Screw, 3/4" long	3
18	PG488	Strap	2
19	PD77	Nut, 1/4"-20 thread	2
20	XA52	Screw, 1/4"-20 thread x 1-1/2" long	2
21	PG314	Clip	1
22	SE138D	Heat deflector	1
23	RM477	Fuel line, 18" long	1



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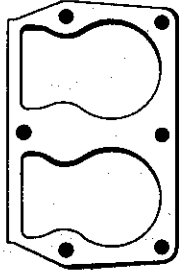
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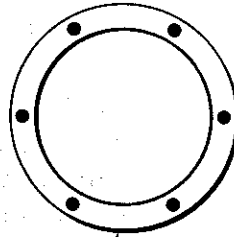
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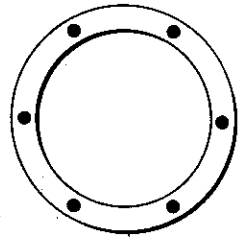
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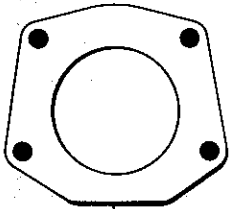
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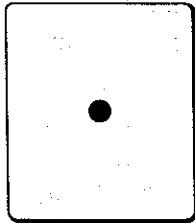
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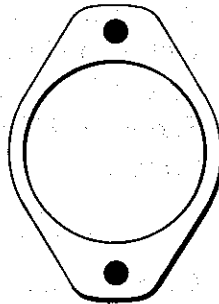
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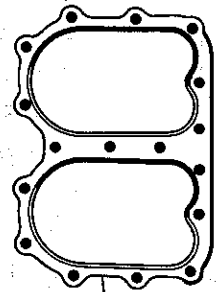
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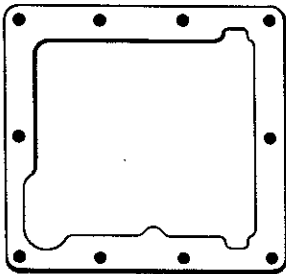
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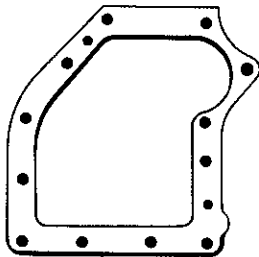
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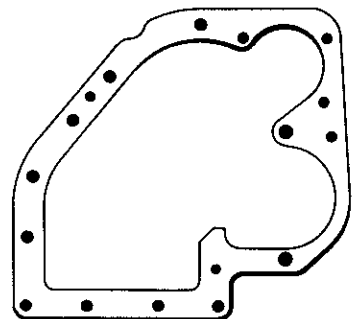
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14



15

Engine Gasket Set

ITEM	PART NO.	DESCRIPTION	QTY
—	Q52	Overhaul gasket set	1
—	Q30	Valve grinding gasket set	1
1	QB75	Gasket, exhaust manifold	3
2	QD860B	Gasket, air cleaner flange	1
3	QD670	Gasket, fuel pump flange	1
4	QC12A	Gasket, carburetor flange	1
5	QD846	Gasket, oil pump body	1
6	QD617	Gasket, cylinder block	1
7	QD844	Gasket, bearing plate, .006" thick	4
8	QD845	Gasket, bearing plate, .003" thick	2
9	QD638A	Gasket, governor housing	1
10	QD612A	Gasket, valve inspection cover	2
11	QD616	Gasket, magneto or distributor housing flange	1
12	QD613C	Gasket, cylinder head	1
13	QD662B	Gasket, engine base	1
14	QD661A	Gasket, spacer to crankcase	1
15	QD660	Gasket, gear cover to spacer	1