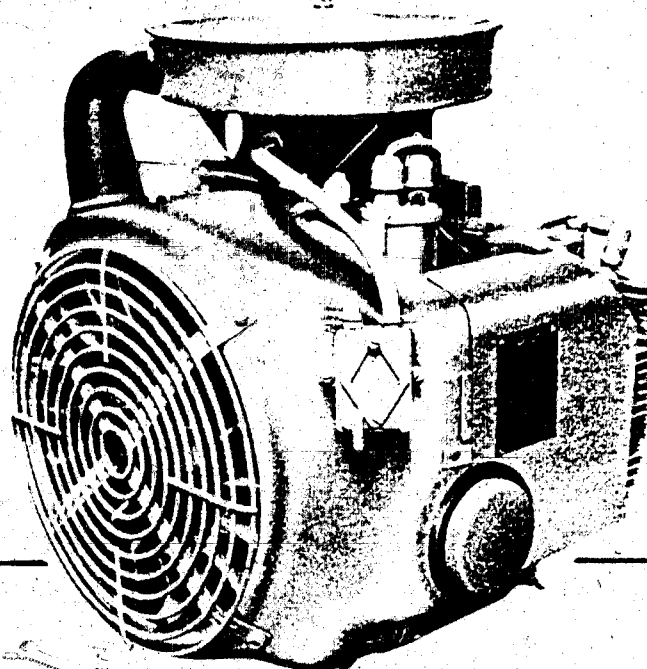


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numbers, or doesn't
have any numbers.
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order that Acrobat
assigns it.

Onan

Parts Manual

B48M-GA018
Engine



965-0261
12-88 (Spec A)
Replaces 6-84 (Spec A)
Printed in U.S.A.

MILLER ELECTRIC MFG. CO.

General Information

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO. and SERIAL NO. from the Onan nameplate.

The image shows a rectangular nameplate template for Onan equipment. It features the Onan logo at the top. Below the logo is a large rectangular box labeled "MODEL AND SPEC NO.". Below that is another rectangular box labeled "SERIAL NO.". The nameplate has two circular mounting holes at the top corners and a tab at the bottom right corner.

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

For handy reference, insert "YOUR" nameplate information in the spaces above.

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Gearcase	A11	Tube, Vacuum Port	A11
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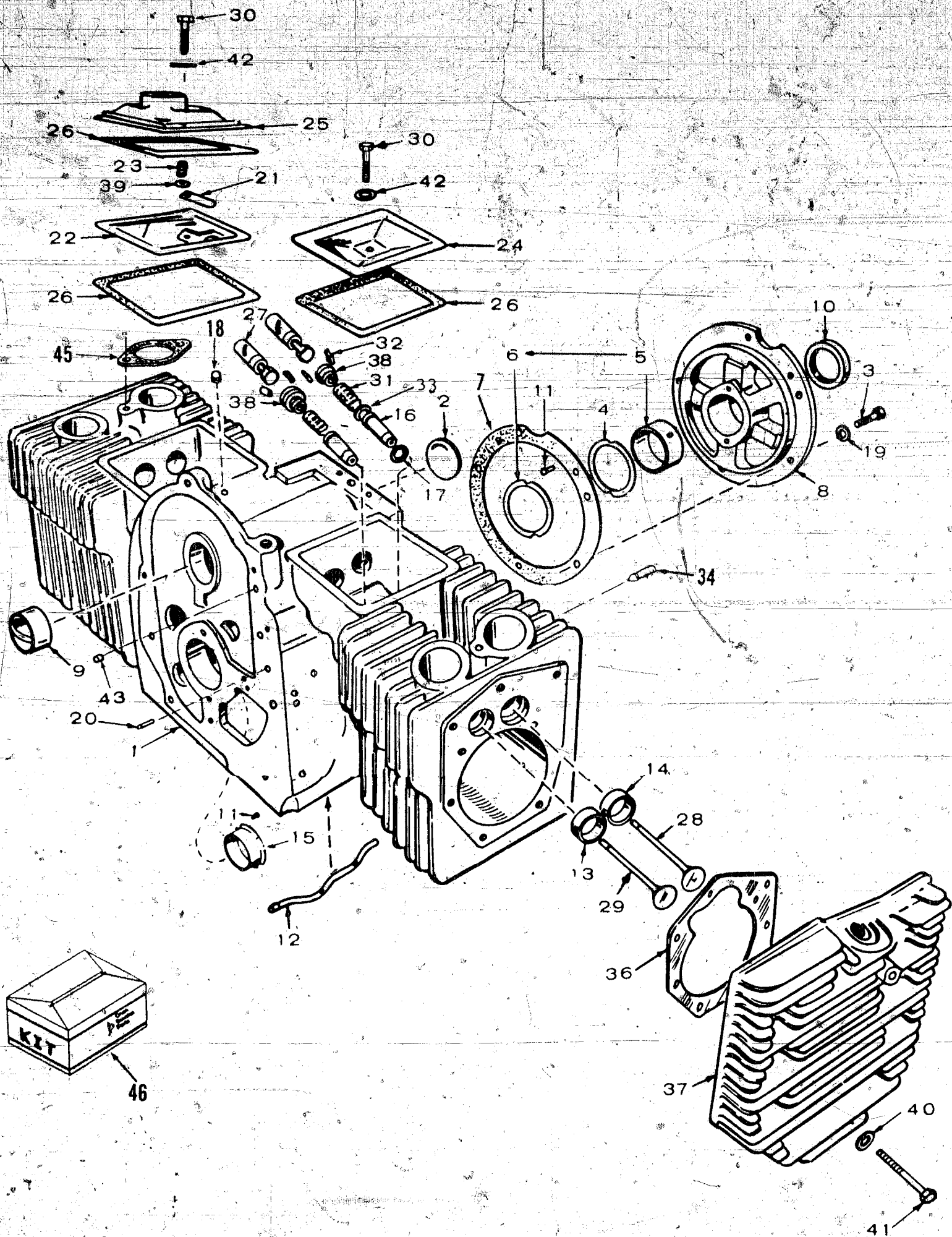
Introduction

This catalog applies to the B48M-GA018 Engines listed below. Parts are arranged in groups of related items. Each illustrated part is identified by a reference number corresponding to the same reference number in the parts list for that group. Parts illustrations are typical. Using the MODEL and SPEC NO. from the nameplate, select the parts that apply to your engine. Unless otherwise mentioned in the description, parts are interchangeable between models. Right and left sides are determined by facing the lower end (front) of the engine.

Data Table

Model and Spec Number	Features	Key
B48M-GA018/4107A	2-Speed Governor, Manual Choke, Electric Start, Gasoline Fuel, 3,000 RPM, Battery Ignition	1
B48M-GA018/4108A	2-Speed Governor, Manual Choke, Manual Start, Gasoline Fuel, 3,000 RPM, Magneto Ignition	2
B48M-GA018/4109A	2-Speed Governor, Manual Choke, Electric Start, Gasoline Fuel, 3,600 RPM, Battery Ignition	3
B48M-GA018/4381A	2-Speed Governor, Manual Choke, Electric Start, Gasoline Fuel, 3,000 RPM, Battery Ignition	4

Cylinder Block

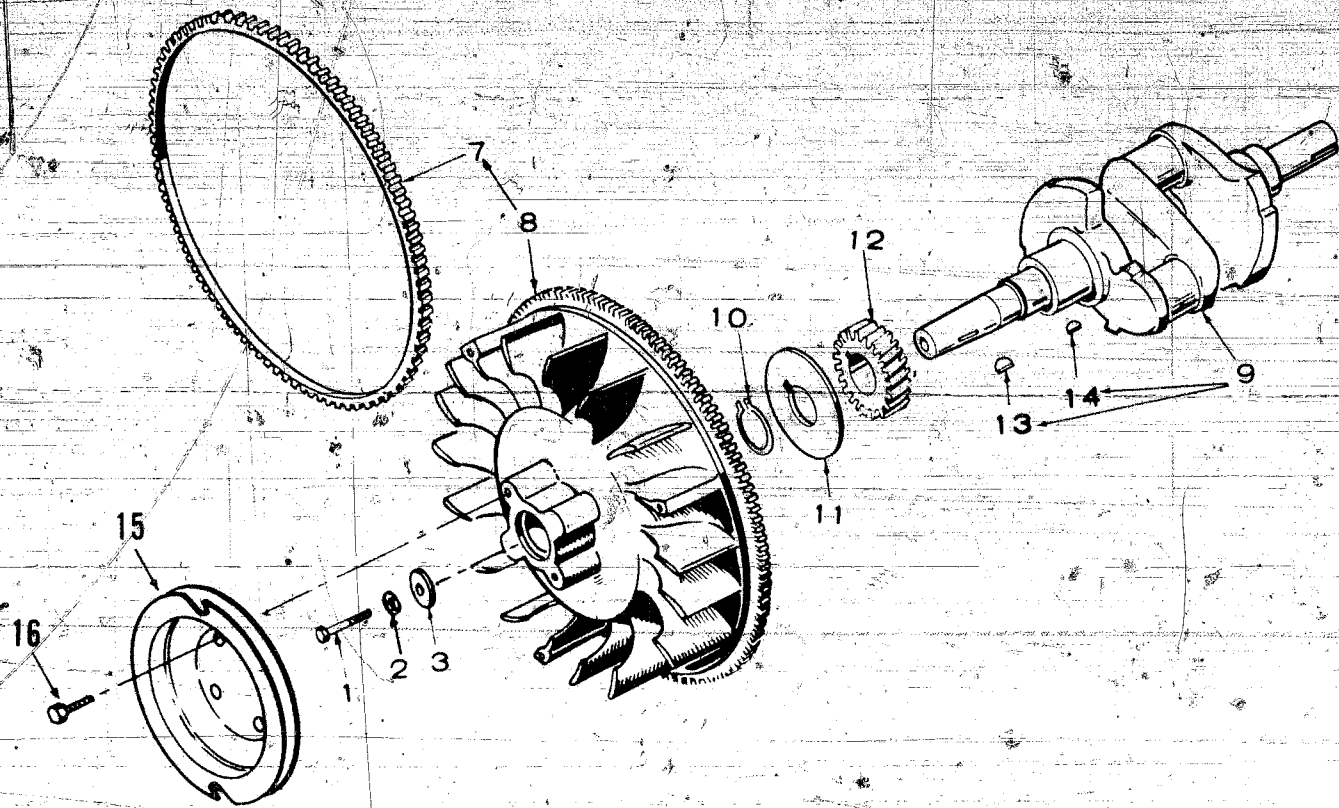


Cylinder Block

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	110-3148		Block Assembly, Cylinder (All Replacement Cylinder Block Assemblies Use Intake Valve Seals and Include Parts Marked *) (Engines with Standard Bearing Plate)	16	110-1807	2	*Guide, Valve Exhaust
2	517-0048	1	*Plug, Welch (1-5/8") Camshaft Opening		110-3161	2	*Intake
3	800-0051	5	*Screw, Cap - Hex Head (3/8-16 x 1-1/4")	17	110-0068	2	*Gasket, Intake Valve Guide
4	104-0776	As Req.	*Shim, Crankshaft End Play (.005")	18	517-0120	4	*Plug, Breather Hole
5			Bearing, Crankshaft - Rear (Includes Thrust Washer)	19	850-0050	5	*Washer, Lock - Spring (3/8")
	101-0450	1	*Standard	20	516-0141	2	*Pin, Gear Cover Alignment
	101-0450-02	1	.002" Undersize	21	123-1175	1	Reed, Breather Valve
	101-0450-10	1	.010" Undersize	22	123-1173	1	Baffle, Breather Valve
	101-0450-20	1	.020" Undersize	23	123-1174	1	Spring, Breather Valve
	101-0450-30	1	.030" Undersize	24	110-1879	1	Cover, Valve Box - RH
6	104-0575	2	*Washer, Thrust - Special	25	110-2274	1	Cover, Valve Box - LH
7	101-0415	1	*Gasket, Bearing Plate	26	110-1921	3	Gasket, Valve Cover
8	101-0439	2	*Plate, Bearing - Rear	27			Tappet, Valve
9	101-0405	2	*Bearing, Camshaft		115-0006	4	Standard
10	509-0041	1	Seal, Oil - Crankshaft Rear		115-0006-02	4	.002" Oversize
11	516-0072	4	*Pin, Drive - Bearing Stop		115-0006-05	4	.005" Oversize
12	120-0735	1	*Tube, Oil - Cylinder Block	28	110-2368	2	Valve, Intake
13			Insert, Valve Seat - Exhaust	29	110-1955	2	Valve, Exhaust
	110-1824	2	*Standard	30	800-0010	2	Screw, Cap - Hex Head (1/4-20 x 1-3/4")
	110-1824-02	2	.002" Oversize	31	110-0539	4	Spring, Valve
	110-1824-05	2	.005" Oversize	32	110-0639	8	Lock, Valve Spring
	110-1824-10	2	.010" Oversize	33	509-0168	2	Seal, Valve - Intake
	110-1824-25	2	.025" Oversize	34	803-0071	2	Screw, Socket - Set (3/8-16 x 5/8")
14			Insert, Valve Seat - Intake	36	110-0892	2	Gasket, Cylinder Head
	110-0197	2	*Standard	37			Head, Cylinder
	110-0197-02	2	.002" Oversize		110-2564	1	Right Side
	110-0197-05	2	.005" Oversize		110-2563	1	Left Side
	110-0197-10	2	.010" Oversize	38	110-0904	4	Roto Cap - Valve
	110-0197-25	2	.025" Oversize	39	526-0018	1	Washer, Flat (1/4" Screw)
15			Bearing, Crankshaft - Front (Elongated)	40	526-0122	18	Washer, Flat (5/16" Screw)
	101-0432	1	*Standard	41			Screw, Cap - Hex Head (Special 1-5/8" Long
	101-0432-02	1	.002" Undersize		800-0540	12	2" Long
	101-0432-10	1	.010" Undersize	42	800-0571	6	Washer, Flat - Copper (1/4" Screw)
	101-0432-20	1	.020" Undersize		526-0063	2	Plug, Core Hole
	101-0432-30	1	.030" Undersize	43	517-0067	1	Gasket, Exhaust - Key 1,4
				45	154-1725	2	Kit, Gasket
				46			Valve Grind/Carbon Removal Engine
					168-0140	1	
					168-0153	1	

* - Parts Included in 110-3148 Cylinder Block Assembl

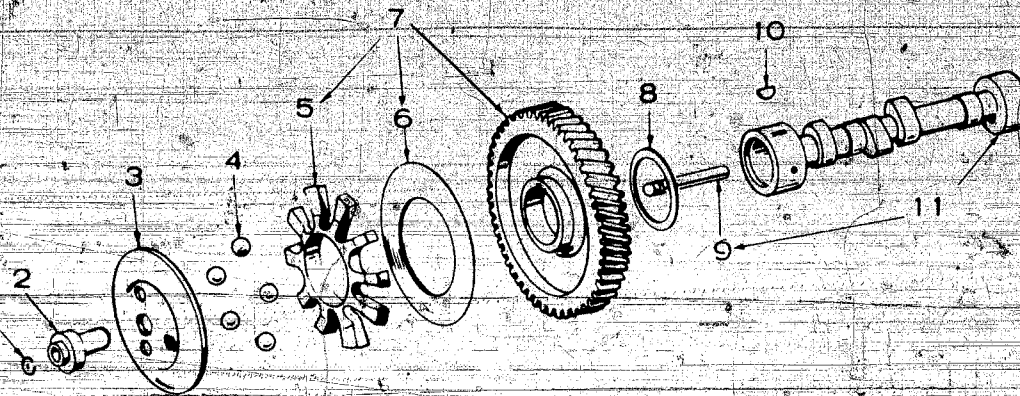
Crankshaft and Flywheel



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	104-0170	1	Screw, Cap - Hex Head - Special	11	104-0043	1	Washer, Gear Retaining - Special
2	850-0055	1	Washer, Lock - Spring (7/16")	12	104-0032	1	Gear, Crankshaft
3	526-0017	1	Washer, Flat (7/16" Screw)	13	515-0263	1	*Key, Flywheel
7	104-0779	1	Gear, Ring	14	515-0001	1	*Key, Crankshaft Gear
8	134-4734	1	Flywheel (Includes Ring Gear) Electric Start Engines - Keys 1, 3, 4	15	192-0398	1	Sheave, Rope - Manual Start Engines - Key 2
160-1307		1	Manual Start Engines - Key 2	16	821-0016	4	Screw, Hex Washer Head - Self-Lock (5/16-18 x 3/4") Manual Start Engines
9	104-1502	1	Crankshaft (Kit) (Includes Parts Marked *)				
10	518-0014	1	Ring, Retaining				

* - Parts Included in 104-1502 Crankshaft Kit.

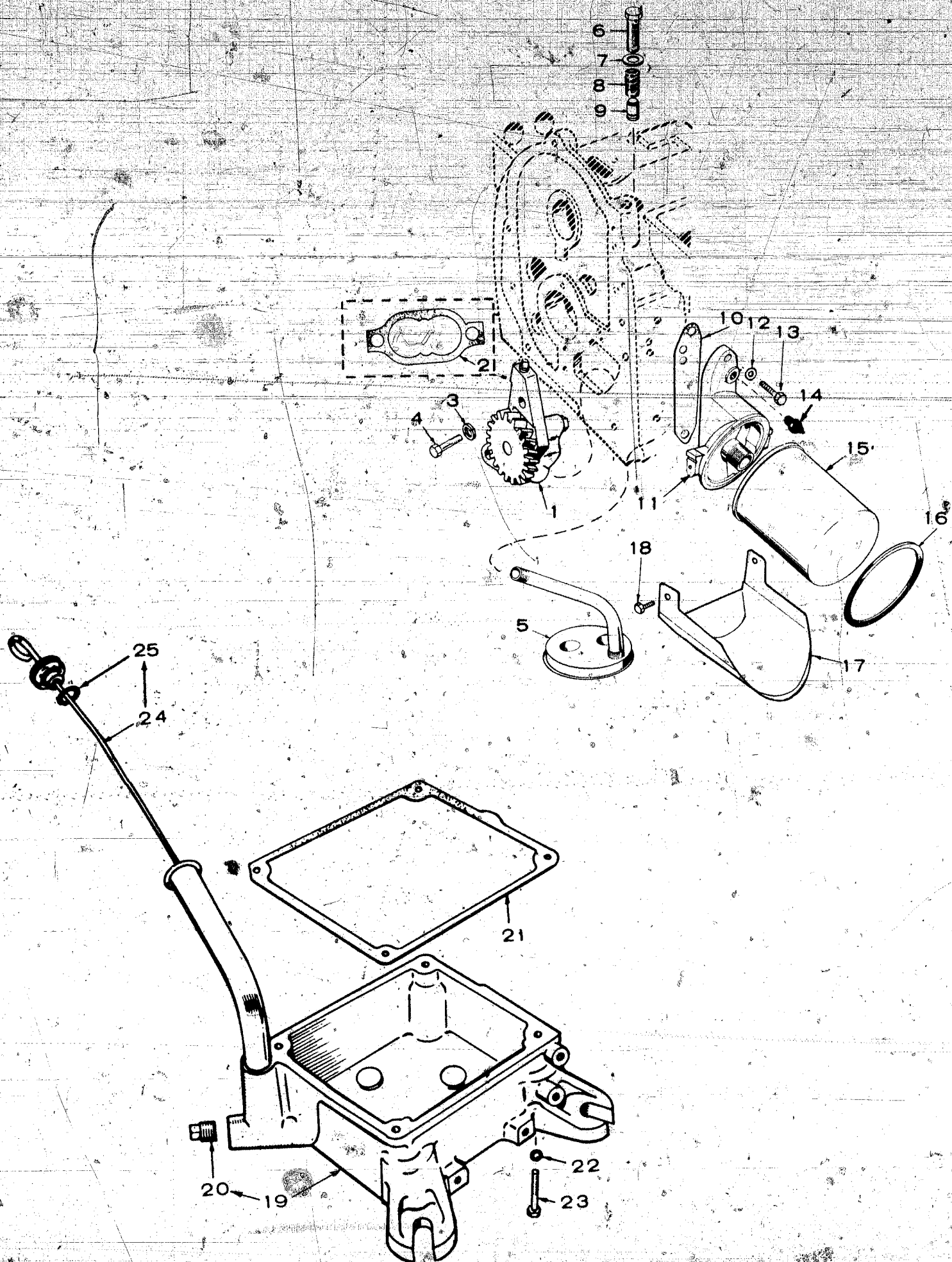
Camshaft



C-1084

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-0078	1	Ring, Retaining	8	105-0541	1	Washer, Thrust - Special
2	150-1519	1	Hub, Governor Cup	9	150-0075	1	Pin, Center
3	150-1520	1	Cup, Governor	10	515-0001	1	Key, Woodruff - Camshaft Ge
4			Ball, Governor	11			Camshaft (Includes Center P
	510-0015	10	3000 RPM Engines		105-0639	1	Key 3
	510-0015	5	3600 RPM Engines - Key 3		105-0637	1	Key 1, 2, 4
7	105-0332	1	Gear Assembly, Camshaft (Includes Spacer & Plate)				

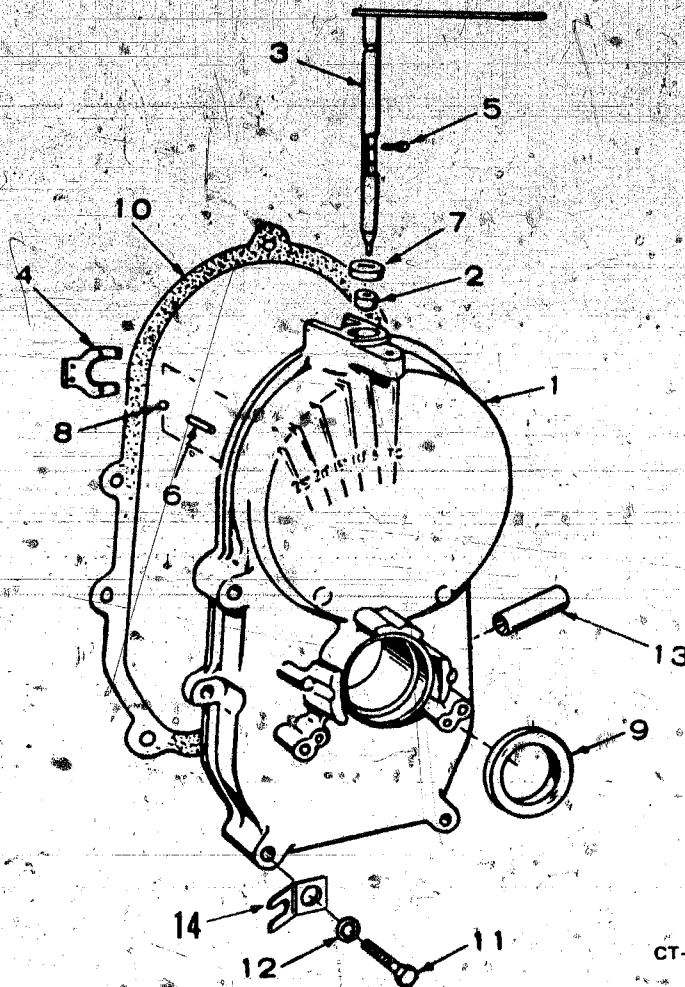
Oil System



Oil System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	120-0491	1	Pump, Oil (Components Not Sold Separately)	13	800-0028	2	Screw, Cap - Hex Head (5/16" x 1")
2	120-0161	1	Gasket Kit, Oil Pump	14	505-0057	1	Plug, Pipe
3	850-0040	2	Washer, Lock Spring (1/4")	15	122-0645	1	Filter, Oil
4	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")	16	122-0347	1	Seal, Air - Filter to House
5	120-0751	1	Cup, Intake - Oil Pump	17	122-0360	1	Drain, Oil Filter
6	801-0050	1	Screw, Cap - Hex Head (3/8-24 x 1")	18	816-0194	2	Screw, Cap - Hex Head w/ET (#10-32 x 3/8")
7	526-0066	1	Washer, Flat - Copper (3/8" Screw)	19	102-0802	1	Base, Oil
8	120-0140	1	Spring, Bypass Valve	20	505-0056	1	Plug, Pipe - Oil Drain
9	120-0398	1	Plunger, Bypass Valve	21	102-1200	1	Gasket, Oil Base
10	122-0375	1	Gasket, Oil Filter Adapter	22	850-0050	4	Washer, Lock - Spring (3/8")
11	122-0320	1	Adapter, Oil Filter	23	800-0056	4	Screw, Cap - Hex Head (3/8-16 x 2-1/2")
12	526-0065	2	Washer, Flat - Copper (5/16" Screw)	24	123-1660	1	Cap and Indicator, Oil Fill
				25	509-0142	1	Gasket, Oil Fill Cap ("O" Ring)

Gearcase

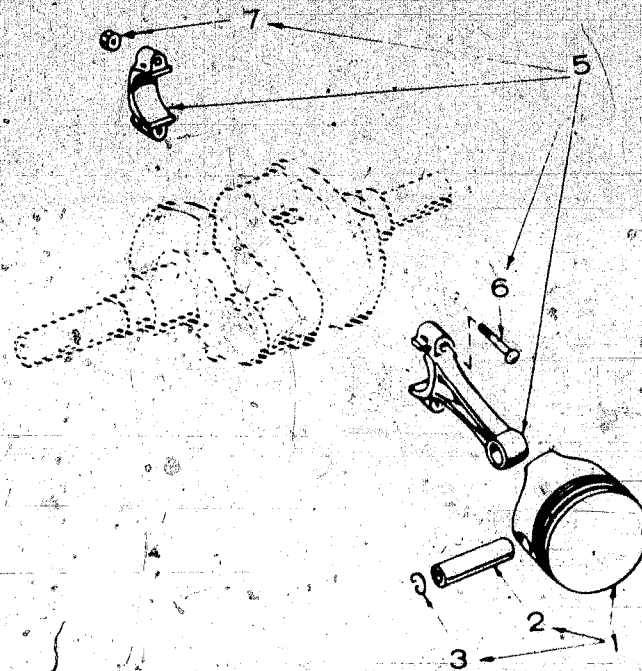
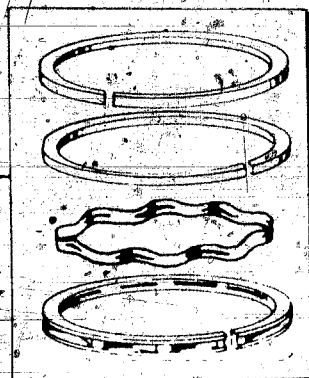


CT-1041

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	103-0737	1	Gearcase Assembly (Includes Parts Marked *)	9	509-0040	1	*Seal, Oil - Crankshaft
2	510-0105	1	*Bearing, Governor Shaft	10	103-0408	1	Gasket, Gearcase Mounting
3	150-1542	1	*Shaft and Arm, Governor	11	800-0032	4	Screw, Cap - Hex Head
4	150-1187	1	*Yoke, Governor Shaft		800-0545	1	5/16-18 x 1-3/4"
5	815-0046	2	*Screw, Machine - Pan Head (#8-32 x 3/8")	12	526-0065	1	2-3/4" Long (Special)
6	516-0130	1	*Pin, Dowel - Governor Cup Stop	13	149-1299	1	Washer, Flat - Copper (5/16" Screw)
7	509-0008	1	*Seal, Oil - Governor Shaft	14	167-0188	4	*Tube, Vacuum Port
8	510-0014	1	*Ball Bearing - Governor Shaft				Clip, Cable - Manual Start Engines - Key 2

* - Parts Included in 103-0737 Gearcase Assembly.

Piston and Rod

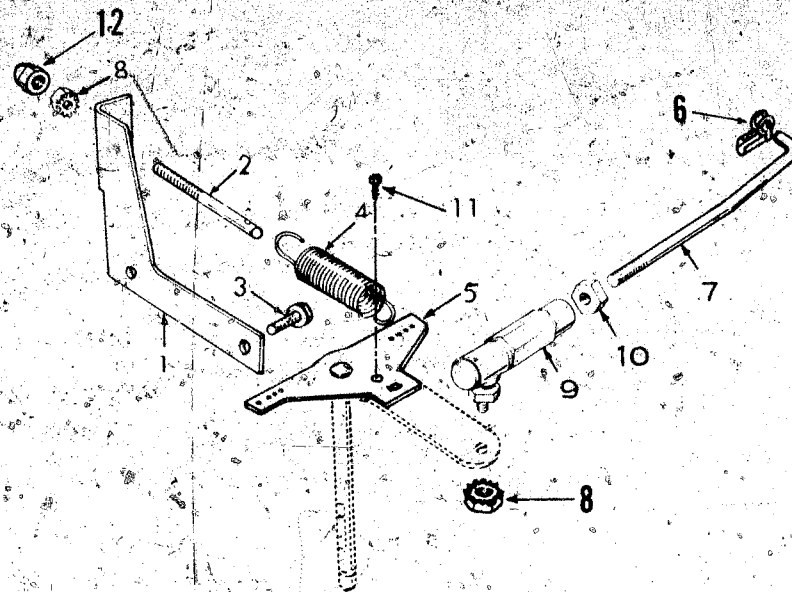


CT-1055

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston and Pin (Includes Retaining Rings)
	112-0186	2	Standard
	112-0186-05	2	.005" Oversize
	112-0186-10	2	.010" Oversize
	112-0186-20	2	.020" Oversize
	112-0186-30	2	.030" Oversize
	112-0186-40	2	.040" Oversize
2	112-0229	2	Pin, Piston
3	518-0311	4	Ring, Retaining
4			Ring Set, Piston
	113-0189	2	Standard
	113-0189-05	2	.005" Oversize
	113-0189-10	2	.010" Oversize
	113-0189-20	2	.020" Oversize
	113-0189-30	2	.030" Oversize
	113-0189-40	2	.040" Oversize

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5			Rod, Connecting (Includes Bolt and Nut)
	114-0257	2	Standard
	114-0257-10	2	.010" Undersize
	114-0257-20	2	.020" Undersize
	114-0257-30	2	.030" Undersize
6	114-0240	4	Bolt, Special - Connecting Ro
7	870-0302	4	Nut, Hex - Crown Lock (5/16-24)

Governor

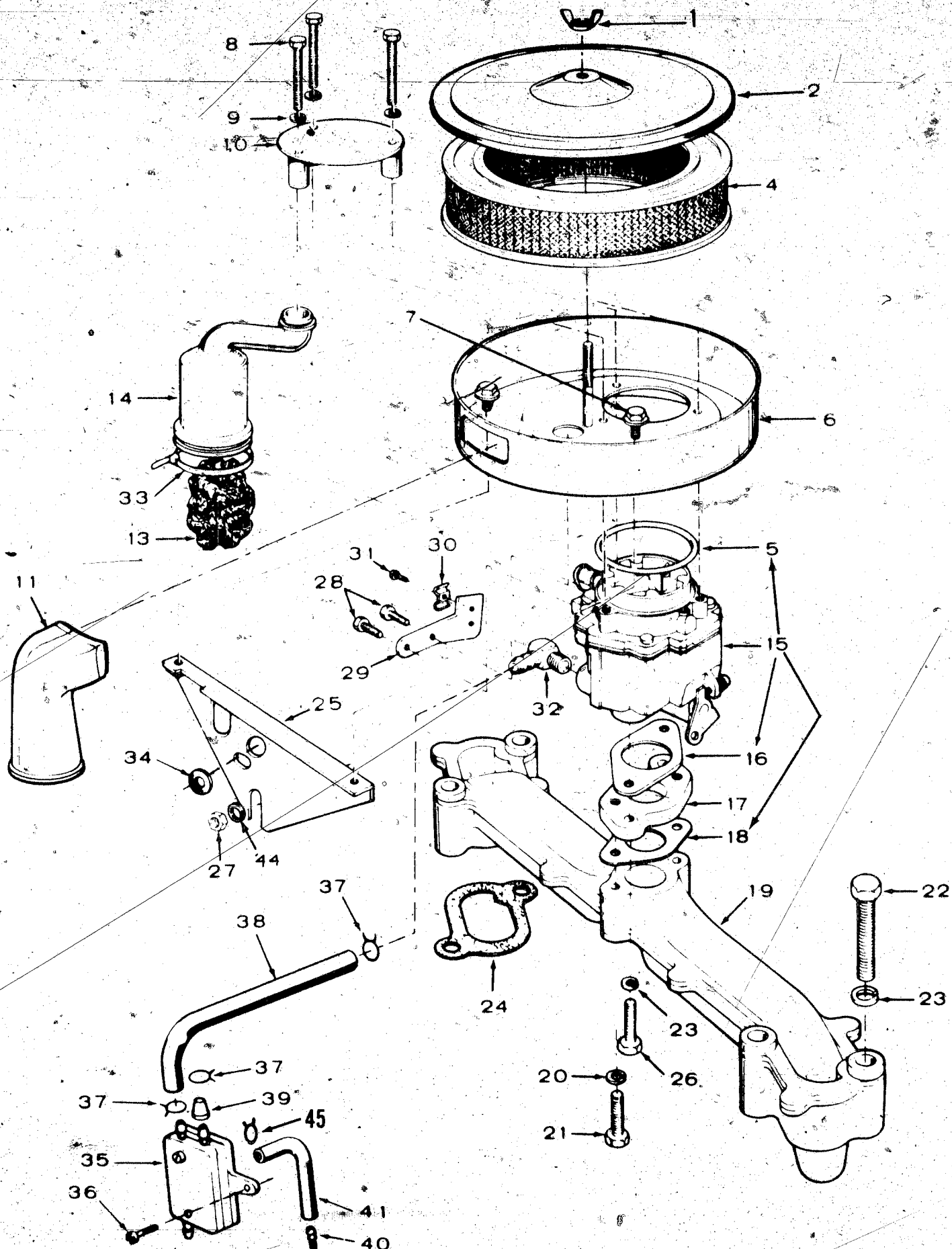


FS-1468

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-1433	1	Bracket, Governor Control	8	870-0131	2	*Nut, Hex - w/ET Governor Adjusting (10-32)
2	150-0694	1	Stud, Adjusting	9	150-0639	1	*Joint, Ball
3	821-0010	2	Screw, Cap - Hex Head Locking (1/4-20 x 1/2")	10	870-0053	1	*Nut, Hex (3/8")
4			Spring, Governor	11	815-0181	1	Screw, Tapping - Hex Head w/ET (#10-32 x 1/2")
	150-1214	1	3600 RPM Engines - Key 3	12	150-0621	1	Nut, Acorn - Governor
	150-1740	1	3000 RPM Engines - Key 1,2,4	13	150-0630	1	Linkage, Governor (Includes Parts Marked *)
5	150-1734	1	Arm, Governor				
6	518-0004	1	Clip, Retaining - Control Rod				
7	150-0629	1	*Rod, Control				

* - Parts Included in 150-0630 Governor Linkage.

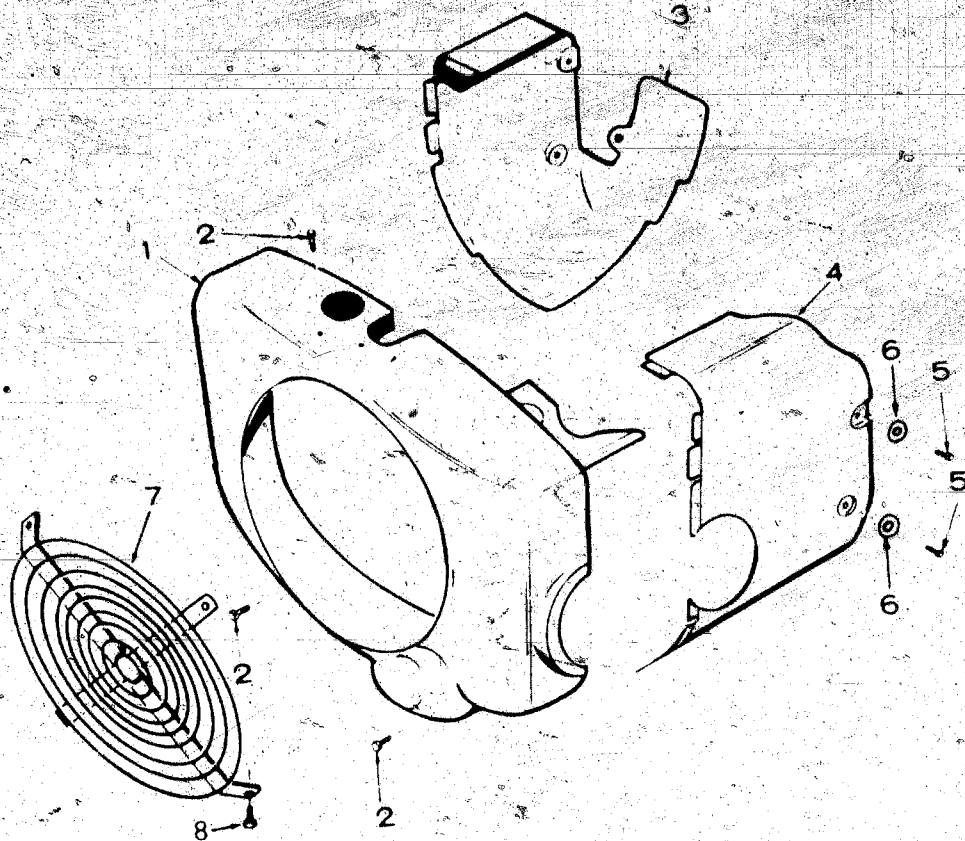
Fuel System



Fuel System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	865-0006	1	Nut, Wing (1/4-20)	25	140-1720	1	Support, Air Cleaner
2	140-1652	1	Cover, Air Cleaner	26	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")
4	140-1228	1	Element, Air Cleaner (Paper)	27	870-0048	1	Nut, Hex Washer Head (5/16-18")
5	509-0145	1	Seal, O-Ring	28	821-0004	2	Screw, Cap - Hex Washer Head (#10-32 x 5/16")
6	140-1721	1	Housing, Air Cleaner	29	153-0515	1	Bracket, Choke Cable
7	815-0389	2	Screw, Tapping - Hex Washer Head (1/4-20 x 3/8")	30	153-0514	1	Clip, Choke Cable
8	815-0470	3	Screw, Machine - Hex Head (#10-32 x 1-1/2")	31	815-0359	1	Screw, Tapping - Slotted Washer Head (#10-32 x 7/8)
9	526-0234	3	Washer, Flat (#10 Screw)	32	502-0313	1	Elbow, Hose
10	145-0521	1	Plate, Air Deflector	33			Tie, Breather Tube
11	140-1495	1	Tube, Air Intake		503-1138	1	Keys 1, 4
13	123-1417	1	Filter, Breather Tube		332-1567	1	Keys 2, 3
14	123-1429	1	Tube, Crankcase Breather	34	508-0021	1	Grommet, Rubber (3/4" Hole)
15			Carburetor, Gasoline (See Separate Page for Parts) (Includes Mounting Gasket)	35			Pump, Fuel
	146-0381	1	Fixed Main Jet - Keys 1, 2, 3		149-2187-01	1	Keys 1, 4
	146-0430	1	Semi-Automatic Choke - Key 4		149-1982	1	Keys 2, 3 (Includes Fuel Cap and Hose Clamp)
16	154-0733	1	Gasket, Carburetor to Adapter	36	815-0555	2	Screw, Tapping - Pan Head Special
17	154-1977	1	Adapter, Carburetor	37	503-0301	3	Clamp, Hose (7/16")
18	145-0438	1	Gasket, Adapter to Manifold	38	503-1279	1	Hose, Fuel
19	154-2720	1	Manifold, Intake	39	149-1321	1	Cap, Fuel Outlet
20	850-0040	2	Washer, Lock - Spring (1/4")	40	149-1299	1	Tube, Vacuum Port
21	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")	41	503-0707	1	Hose, Fuel Pump Vacuum
22	800-0033	4	Screw, Cap - Hex Head (5/16-18 x 2")	44	526-0041	1	Washer, Flat (5/16" Screw)
23	850-0045	6	Washer, Lock - Spring (5/16")	45	503-0731	1	Clamp, Wire (1/2")
24	154-1744	2	Gasket, Manifold to Block				

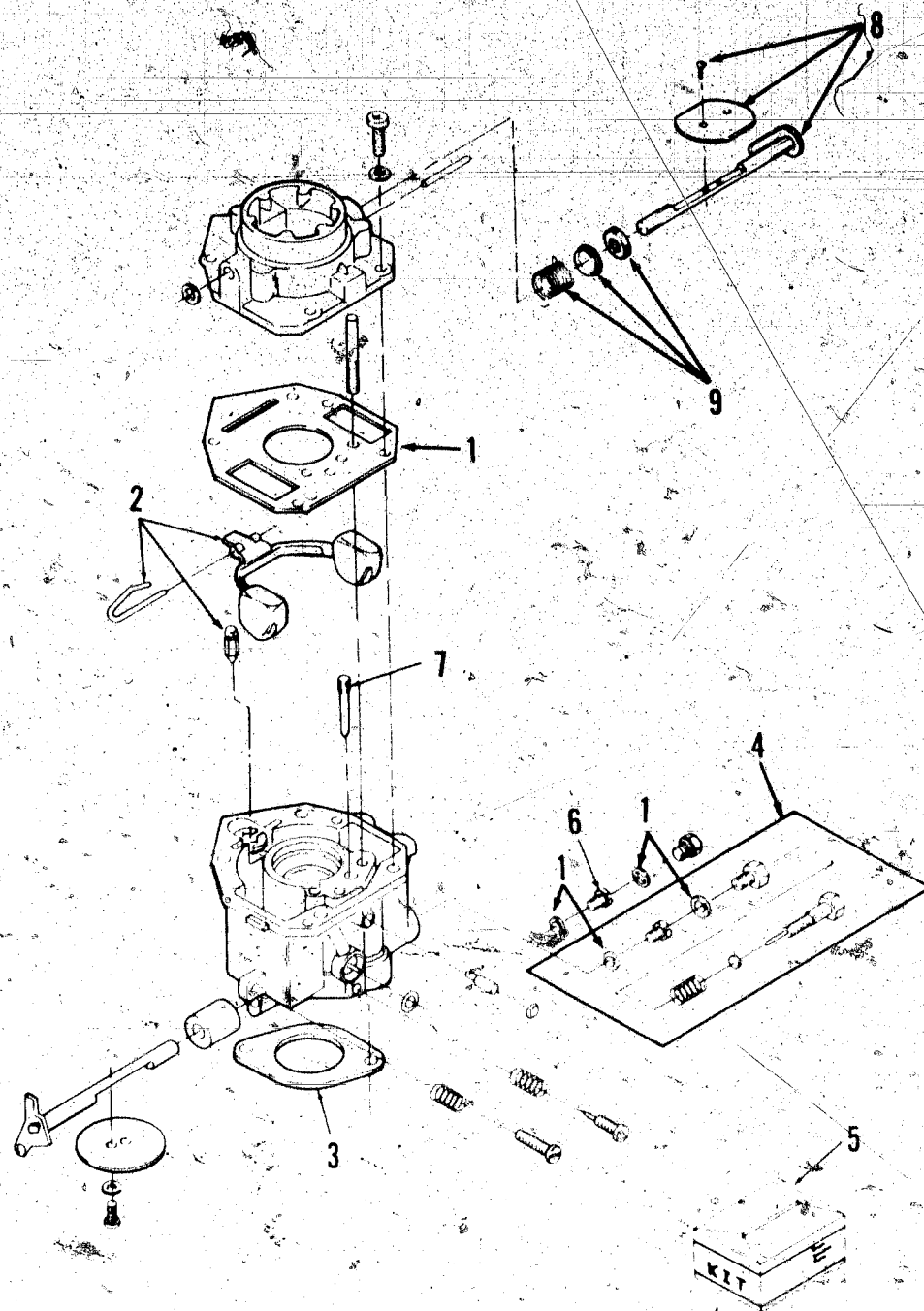
Air Housing



M-1463

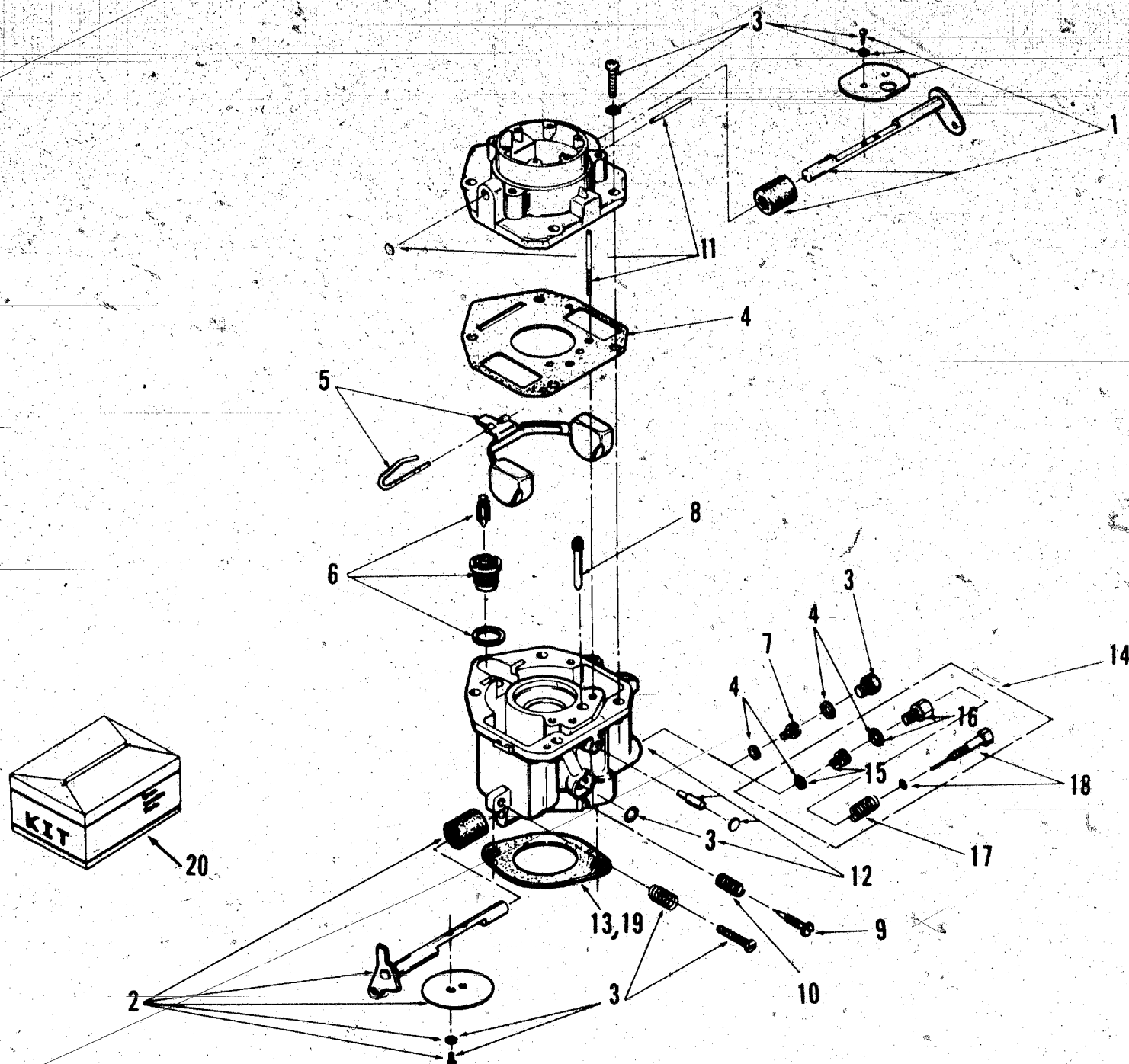
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-4398	1	Housing, Blower - Electric Start Engines - Keys 1, 4	5	815-0290	4	Screw, Cap - Hex Head (1/4-20 x 5/8")
	134-4397	1	Manual Start Engines - Keys 2, 3	6	526-0021	4	Washer, Flat (1/4" Screw)
2	815-0261	3	Screw, Cap - Hex Head (1/4-20 x 7/16")	7	134-3527	1	Guard, Flywheel - Electric Start Engines - Keys 1, 4
3	134-4371	1	Housing, Cylinder Air - Left Side		134-4134	1	Manual Start Engines - Keys 2, 3
4			Housing, Cylinder Air - Right Side	8	815-0378	4	Screw, Tapping - Hex Head (#14 x 1/2")
	134-3523	1	w/o Baffle - Electric Start Engines - Keys 1, 3, 4				
	134-4325	1	w/Baffle - Manual Start Engines - Key 2				

Carburetor Components With Semi-Automatic Choke



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	146-0430	1	Carburetor, Complete (Includes Mounting Gasket)	5	146-0432	1	Kit, Repair (Includes Screw and Plug Package, Gasket Package, Float Valve, Idle Adjust, Needle and Spring, Mounting Gaskets, Idle Lim Cap)
1	146-0438	1	Gasket Package	6	146-0391	1	Jet, Power
2	146-0437	1	Float Package (Includes Float, Pin and Valve)	7	146-0425	1	Jet, Idle
3	154-0733	2	Gasket, Carburetor Mounting	8	146-0433	1	Choke Shaft Kit
4	146-0327	1	Variable Jet Kit - Optional (High Altitude Application) (Includes Power Jet and Gasket, Retainer, Power Needle Spring, Power Needle and Power Plug Gasket)	9	146-0435	1	Choke Lever Kit

Carburetor Components Fixed Main Jet

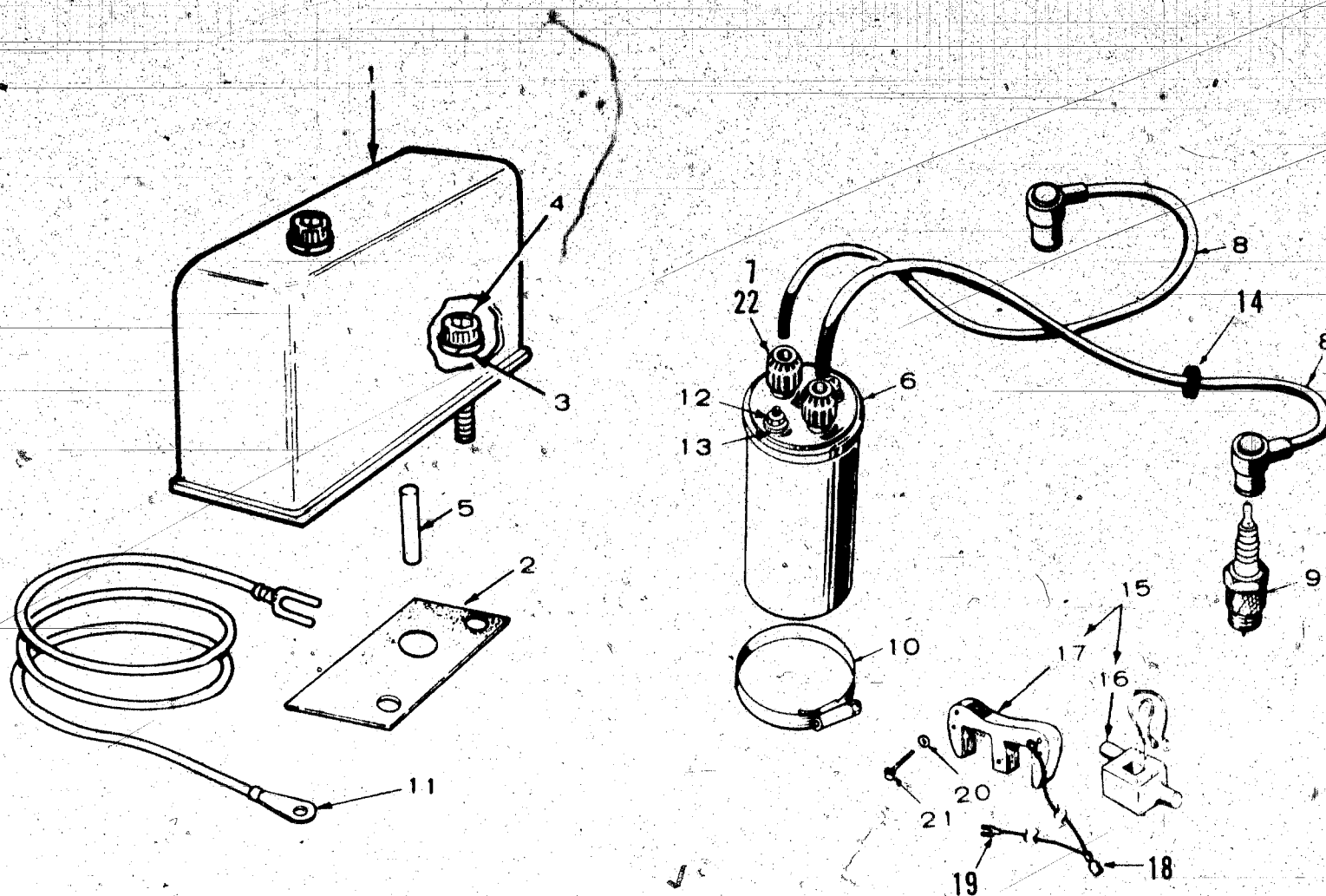


FS-1440

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	146-0381	1	Carburetor, Complete (Includes Mounting Gasket)	14	146-0327	1	*Variable Jet Kit - Optional (High Altitude Application) (Includes Parts Marked +)
1	146-0377	1	Choke Shaft Kit	15	146-0343	1	+Power Jet, Variable (Includes Gasket)
2	146-0324	1	Throttle Shaft Kit	16	146-0340	1	+Retainer, Power Needle (Includes Gasket)
3	146-0322	1	*Screw and Plug Kit	17	146-0341	1	+Spring, Power Needle
4	146-0326	1	*Gasket Kit	18	146-0342	1	+Needle Complete, Power
5	146-0325	1	Float Kit	19	145-0438	1	*Gasket, Carburetor Mounting
6	146-0329	1	*Valve and Seat Kit	20	146-0356	1	Kit, Repair (Includes Parts Marked *)
7	146-0347	1	Jet, Power				
8	146-0337	1	Jet, Idle				
9	146-0335	1	*Needle, Idle Adjusting				
10	146-0331	1	*Spring, Idle Adjusting Needle				
11		1	Intake, Air (Not Sold Separately)				
12		1	Body (Not Sold Separately)				
13	154-0733	1	*Gasket, Carburetor Mounting				

* - Parts Included in 146-0356 Repair Kit
+ - Parts Included in 146-0327 Variable Jet Kit

Ignition System

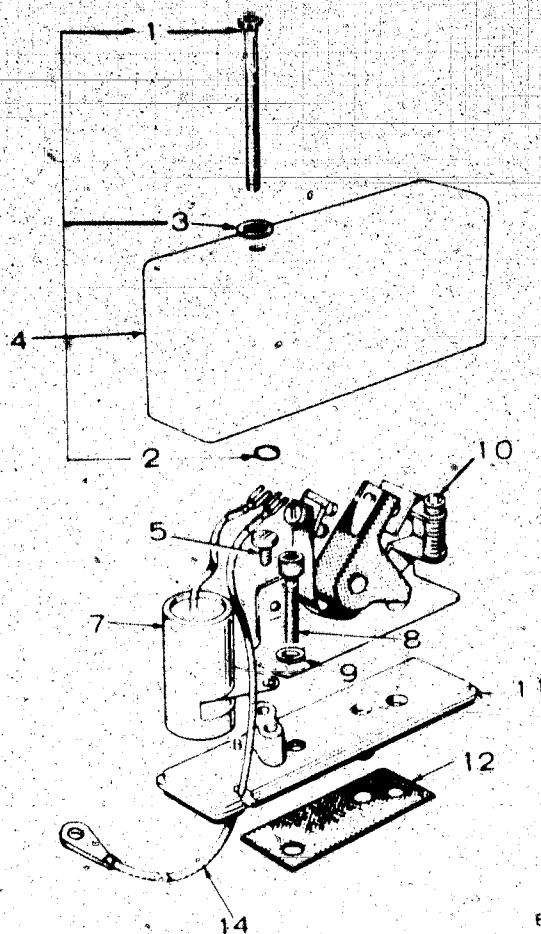
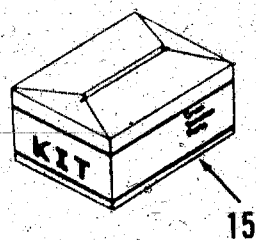


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	160-1303	1	Box Assembly, Breaker (See Separate Page for Components) (Includes Mounting Gasket)
2	160-1150	1	Gasket, Breaker Box Mounting
3	850-0038	2	Washer, Lock - Spring (1/4")
4	802-0034	2	Screw, Socket Head (1/4-20 x 3/4")
5	160-1151	1	Plunger, Breaker Points
6	166-0772	1	Coil, Ignition - Keys 1, 3, 4
7	166-0604	2	Cap, Coil Terminal (Part of Coil)
8			Cable, Spark Plug
	167-1602	2	Magneto Ignition - Key 2
	167-1615-02	1	Coil Ignition, 12" Long - Keys 1, 3, 4
	167-1615-03	1	Coil Ignition - 15" Long - Keys 1, 3, 4
9	167-0298	2	Plug, Spark
10	503-0311	1	Clamp, Coil - Keys 1, 3, 4
11	336-2378	1	Lead, Breaker Box to Coil
12	166-0554	2	Nut, Hex (Special)
13	850-2005	2	Washer, Lock - Spring (Special)
14	508-0095	2	Grommet, Rubber - Magneto Ignition Engines - Key 2

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
15	160-0752	1	Magneto Stator Assembly - Key 2 (Includes Parts Marked *)
16	160-0750	1	*Coil, Magneto Stator - Key 2
17	160-0749	1	*Shoe, Pole - Magneto Stator - Key 2
18	332-1993	1	Terminal, Receptacle - Magneto Ignition Engines
19	332-0266	1	Terminal, Spade (#6) - Magneto Ignition Engines
20			Washer, Flat (Magneto Stator Assembly Mounting)
	526-0015	2	1/4" Screw
	526-0184	2	17/64" ID x 5/8" OD x 10 Gauge Thk
21	815-0259	2	Screw, Cap - Hex Head - Tapping (1/4-20 x 1-1/4) - Magneto Ignition Engines
22	166-0614	2	Bushing, Rubber (Inside of Cap 166-0604)

* - Included in 160-0752 Magneto Stator Assembly

Breaker Box



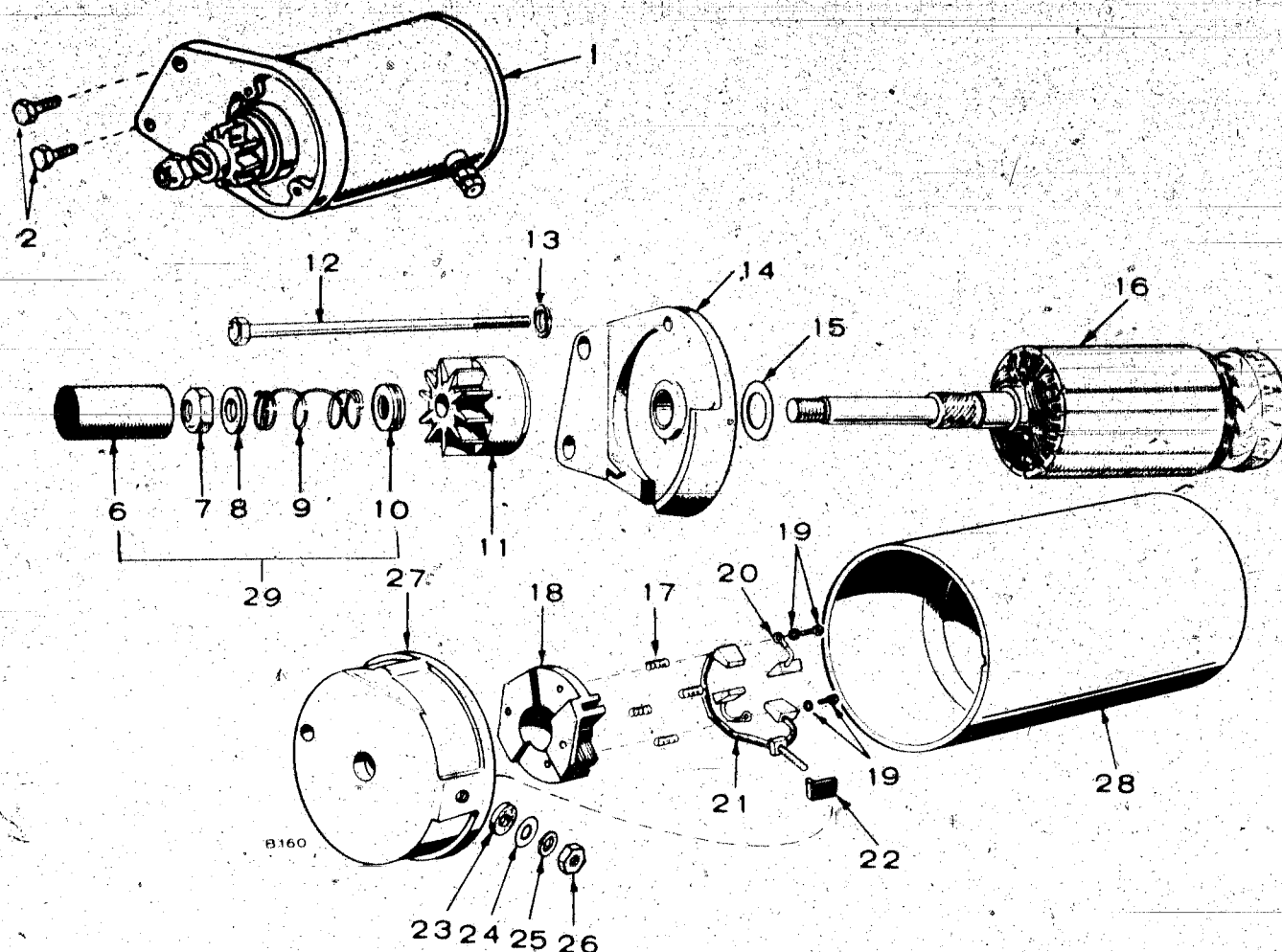
ES-1217

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1303	1	Breaker Box (Includes Parts Marked *)
1	802-0022	1	*Screw, Cap - Hex Socket (#10-24 x 1-1/2")
2	509-0065	1	*Retainer ("O" Ring)
3	526-0008	1	*Flat Washer (13/64" ID x 7/16" OD x 1/32" Thk)
4	160-1285	1	*Cover, Breaker Box
5	815-0358	1	*Cap Screw (#8-32 x 5/16") Slotted
7	312-0246	1	*Condenser

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	802-0034	2	*Cap Screw (1/4-20 x 3/4) Socket Head
9	850-0040	2	*Lock Washer (1/4")
10	160-1183	1	*Point Set, Breaker
11	160-1219	1	*Base, Breaker
12	160-1150	1	*Gasket, Breaker Box
14	336-2378	1	Lead, Breaker Box to Coil
15	160-1311	1	Tune Up Kit (Includes Points and Condenser)

* - Parts Included in 160-1303 Breaker Box

Starter Components Keys 1, 3, 4.

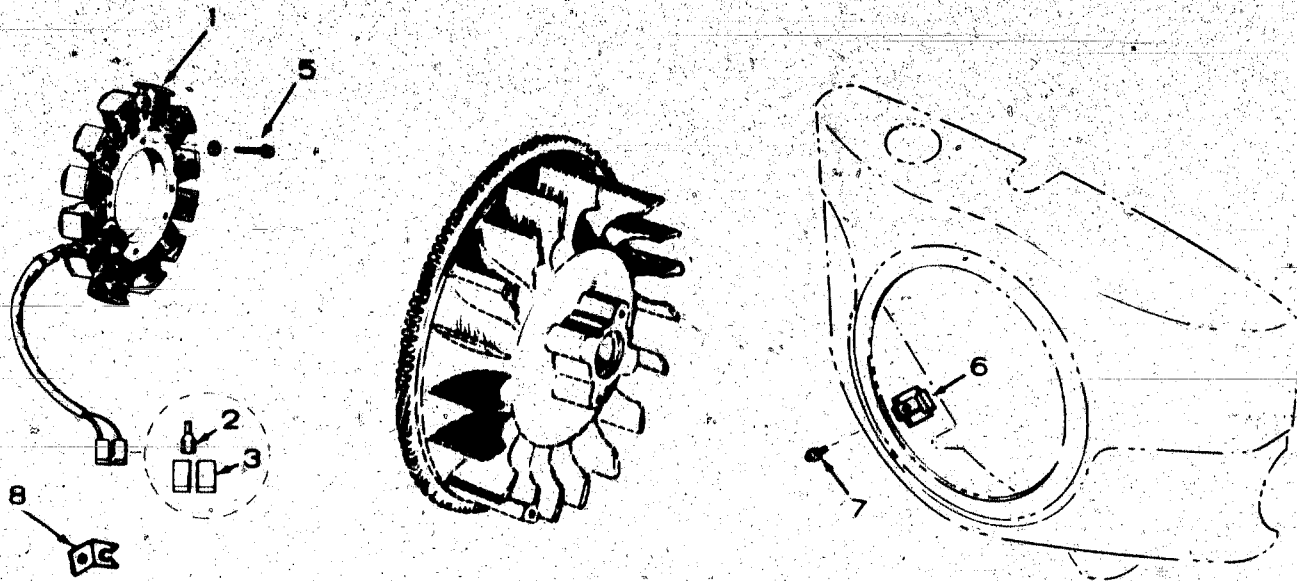


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-0933	1	Motor, Starter (Complete)
2	815-0570	2	Screw, Cap - Hex Washer Head - Special
6	§	1	#Cover, Dust
7	§	1	#Nut, Stop
8	§	1	#Washer, Stop Nut
9	§	1	#Spring, Anti-drift
10	§	1	#Spacer, Dust Cover
11	191-1036	1	Drive Assembly
12	191-1048	2	Screw, Hex Cap - Special
13	850-0040	2	Washer, Lock (1/4")
14	191-1037	1	Cap Assembly, Drive End
15	191-1038	1	Washer, Armature Thrust
16	191-1039	1	Armature
17	§	4	†*Spring, Brush
18	§	1	†Brush Holder
19	§	2	†Screw and Lockwasher
20	§	2	†*Brush, Ground
21	§	1	†*Stud and Brush Assembly, Input

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
22	§	2	†Bushing, Insulation - Input Stud
23	§	1	†Washer, Insulation - Input Stud
24	§	1	†Washer, Flat - Input Stud
25	§	1	†Washer, Lock - Input Stud
26	§	1	†Nut, Securing - Input Stud
27	191-1040	1	Cap Assembly, Commutator (Includes Parts Marked †)
28	§	1	Housing, Starter Motor
	191-1041	1	Repair Kit, Brush, Spring and Stud (Includes Parts Marked †)
29	191-1359	1	Dust Cover Assembly (Includes Parts Marked #)

† - Included in the 191-1040 Cap Assembly.
 * - Included in the 191-1041 Brush, Spring and Stud Kit.
 § - Not Sold Separately.
 # - Included in the 191-1359 Dust Cover Assembly.

Flywheel Alternator - 15 Ampere (Phelon)
Electric Start Engines
Keys 1, 3, 4



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1256	1	Stator (Includes Terminals and Connector Bodies)
2	332-2423	3	+Terminal Stator Leads
3	323-1257	2	Body Kit, Terminal Connector (Includes Parts Marked +)
5	815-0593	3	Screw, Machine - Hex Head - Self-Lock (#10-32 x 1-3/8")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	191-1748	1	Regulator, Voltage
7	821-0010	1	Screw, Cap - Hex Head Locking (1/4-20 x 1/2")
8	167-0188	1	Clip, Cable

+ - Parts Included in 323-1257 Alternator Terminal Connector Body Kit

Labels, Paint and Thread Sealant

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
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518-0452	1	Sealant, Thread (50 cc Bottle)
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REF NO.	PART NO.	QTY USED	PART DESCRIPTION
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