

# Onan

## Parts Manual

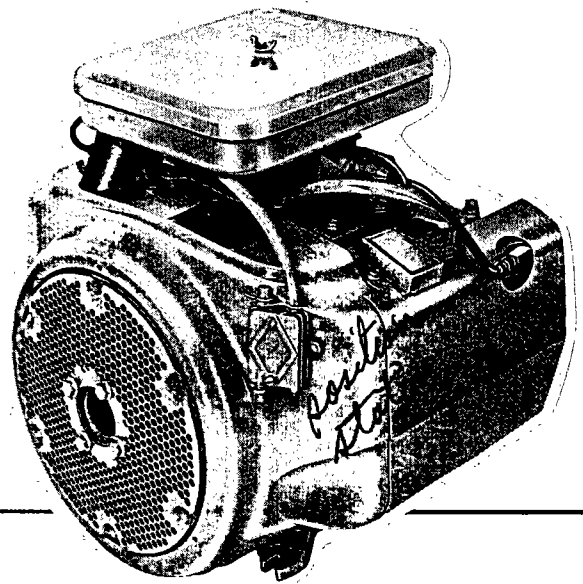
B43E-GA016/4313B

B43E-GA016/4313C

B43E-GA016/4369B

B43E-GA016/4418D

### Engine



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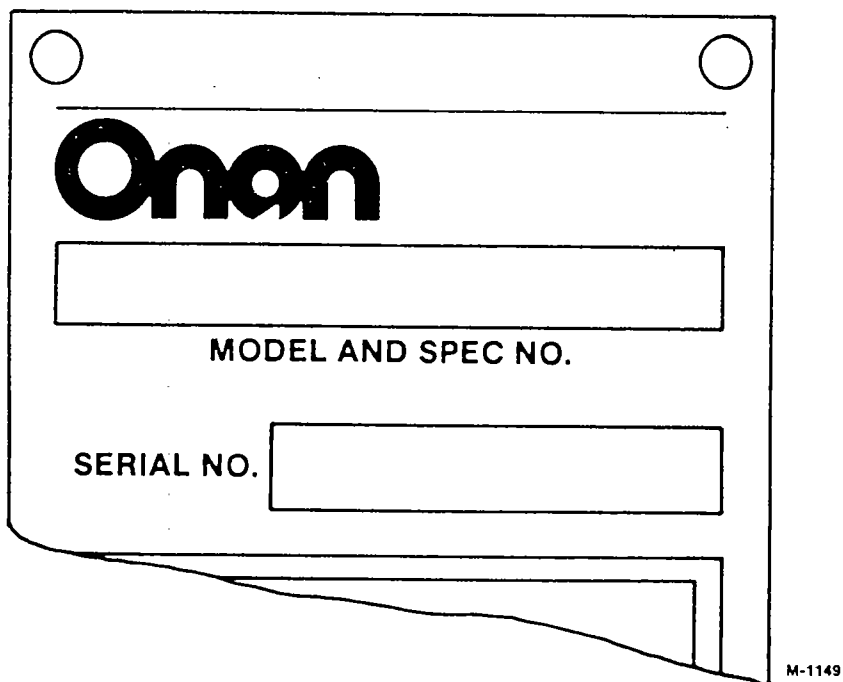
965-0259  
10-88 (SPEC B-D)  
Replaces 1-86 (SPEC B)  
Printed in U.S.A.

**LINCOLN**  
ELECTRIC®

## 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.



A diagram of an Onan nameplate. It is a rectangular plate with two circular mounting holes at the top. The word "Onan" is printed in a large, bold, stylized font at the top. Below the logo is a large rectangular box labeled "MODEL AND SPEC NO.". Below that is a smaller rectangular box labeled "SERIAL NO.". The bottom right corner of the plate is cut off at an angle. The number "M-1149" is printed in the bottom right corner of the diagram.

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

### **▲WARNING**

TAKE ALL NECESSARY PRECAUTIONS WHEN CHECKING OR CHANGING ENGINE OIL. NOT TO INGEST, BREATHE THE FUMES OR CONTACT THE OIL. USED ENGINE OILS HAVE BEEN IDENTIFIED BY FEDERAL AND SOME STATE AGENCIES AS CAUSING CANCER.

### **▲WARNING**

TAKE ALL NECESSARY PRECAUTIONS WHEN HANDLING ENGINE GASKETS. DO NOT INGEST, BREATHE, OR CONTACT DUST FROM GASKETS. USE ADEQUATE VENTILATION AND WEAR PROTECTIVE GLOVES, MASK AND CLOTHING. ASBESTOS HAS BEEN IDENTIFIED BY FEDERAL AND SOME STATE AGENCIES AS CAUSING CANCER.

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## Introduction

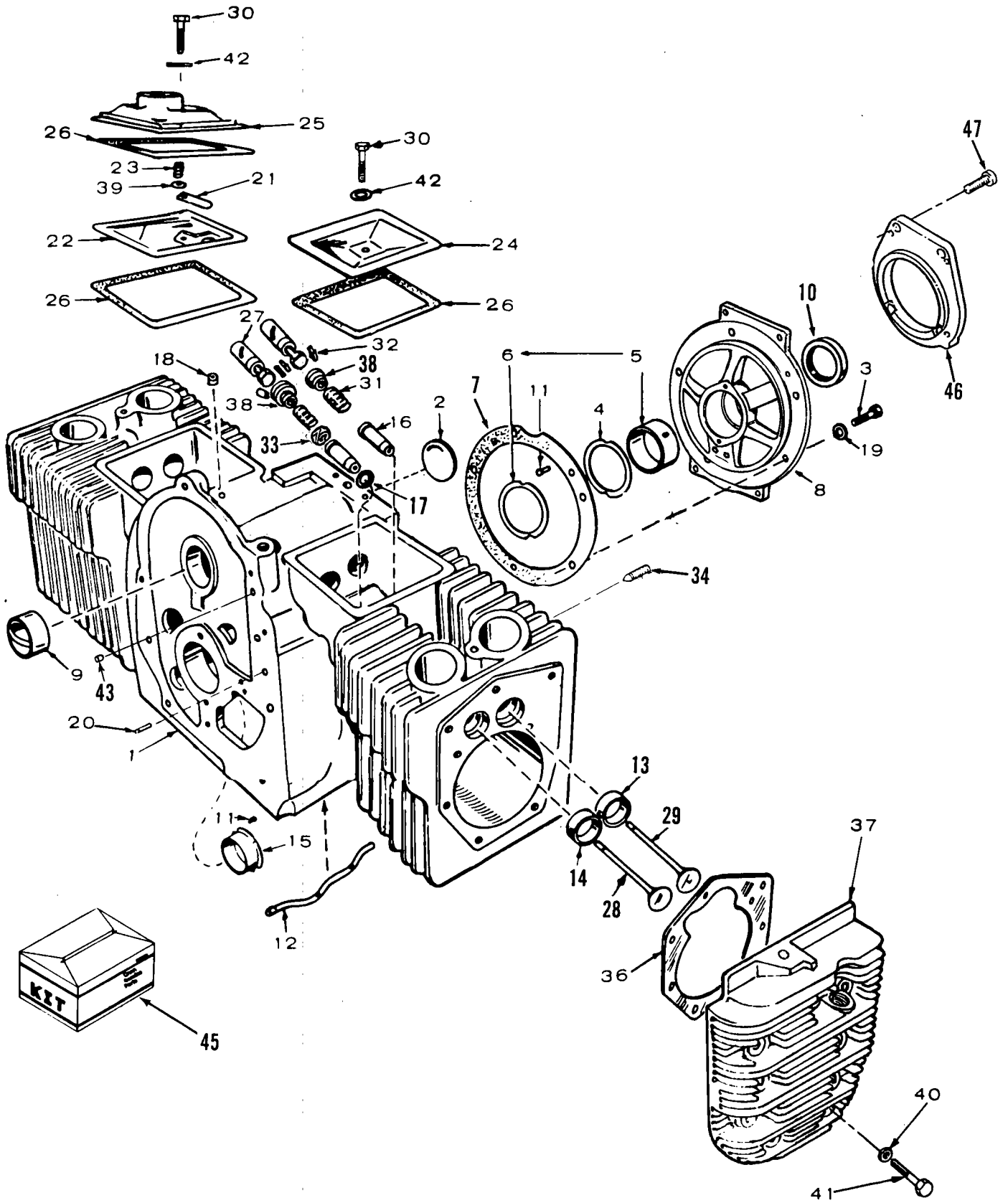
This catalog applies to the B43E-GA016/Engine listed below. Parts are arranged in groups of related items. Each illustrated part is identified by a reference number corresponding to the same reference number in the parts list for that group. Parts illustrations are typical. Using the Model and Spec No. 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 blower end (front) of the engine.

## Data Table

Model and Spec Number	Feature	Key
B43E-GA016/4313B B43E-GA016/4313C	Fixed Speed Governor, Manual Choke, Electric Start, Gasoline Fuel, 3600 RPM, Battery Ignition, Without Oil Filter	1
B43E-GA016/4369B B43E-GA016/4418D	Fixed Speed Governor, Manual Choke, Electric Start, Gasoline Fuel, 3600 RPM, Battery Ignition, With Oil Filter	2



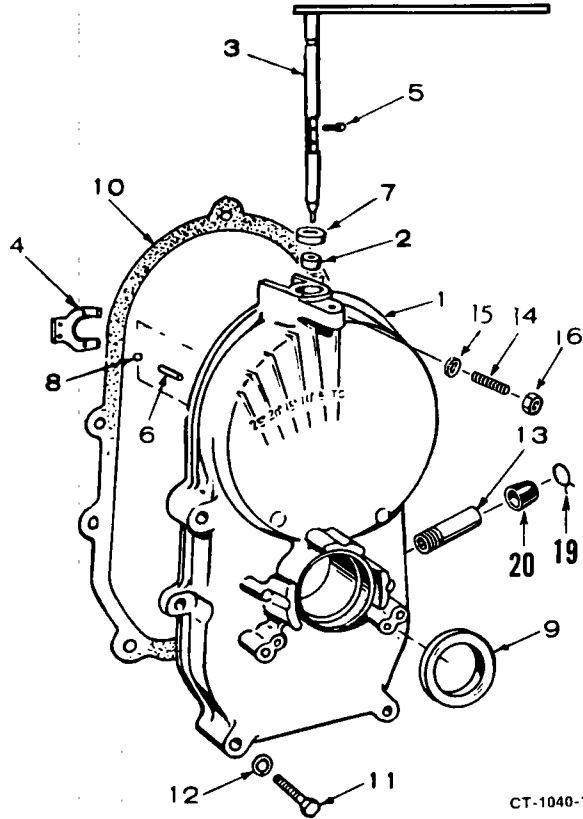
# Cylinder Block



## Cylinder Block

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			For Replacement Use 110-3419-08	17	110-0068	2	Gasket, Intake Valve Guide
			Short Block. This is the	18	517-0120	1	Plug, Breather Hole
			same Short Block used on	19	850-0050	5	Washer, Lock - Spring (3/8")
			Performer Models.	20	516-0141	2	Pin, Gear Cover Alignment
2	517-0048	1	Plug, Welch (1-5/8")	21	123-1175	1	Reed, Breather Valve
			Camshaft Opening	22	123-1173	1	Baffle, Breather Valve
3			Screw, Cap	23	123-1174	1	Spring, Breather Valve
	800-0051	5	Hex Head (3/8-16 x 1-1/4")	24	110-1879	1	Cover, Valve - RH
			Specs B, C	25	110-2274	1	Cover, Valve - LH
	800-0575	5	Flange Head (3/8-16 x 1-1/8")	26	110-1921	3	Gasket, Valve Cover
			Begin Spec D	27			Tappet, Valve
4	104-0776	As Req.	Shim, Crankshaft End Play		115-0006	4	Standard
			(.005")		115-0006-02	4	.002" Oversize
5			Bearing, Crankshaft - Rear		115-0006-05	4	.005" Oversize
			(Includes Thrust Washer)	28	110-2368	2	Valve, Intake
	101-0450	1	Standard	29	110-1955	2	Valve, Exhaust
	101-0450-02	1	.002" Undersize	30	800-0010	2	Screw, Cap - Hex Head
	101-0450-10	1	.010" Undersize				(1/4-20 x 1-3/4")
	101-0450-20	1	.020" Undersize	31	110-0539	4	Spring, Valve
	101-0450-30	1	.030" Undersize	32	110-0639	8	Lock, Valve - Spring
6	104-0575	1	Washer, Thrust	33	509-0168	2	Seal, Valve - Intake
7	101-0415	1	Gasket, Bearing Plate	34	803-0071	2	Screw, Set - Socket Head
8			Plate, Bearing - Rear				(3/8-16 x 5/8")
	101-0750	1	Spec B - Keys 1, 2	36	110-0892	2	Gasket, Cylinder Head
			Spec C - Key 1	37			Head, Cylinder
	101-0439	1	Spec B - Key 2		110-3214	1	Right Side
9	101-0405	2	Bearing, Camshaft		110-3213	1	Left Side
10	509-0041	1	Seal, Oil - Crankshaft Rear	38	110-0904	4	Roto Cap - Valve
11	516-0072	2	Pin, Drive - Bearing Stop	39	526-0018	1	Washer, Flat (17/64" ID x
12	120-0735	1	Tube, Oil - Cylinder Block				5/8" OD x 1/16" Thk)
13			Insert, Valve Seat - Exhaust	40	526-0122	18	Washer, Flat (11/32" ID x
	110-1824	2	Standard				23/32" OD x 10 Ga. Thk)
	110-1824-02	2	.002" Oversize	41			Screw, Cap - Hex Head (Special)
	110-1824-05	2	.005" Oversize		800-0540	8	5/16-18 x 1-5/8"
	110-1824-10	2	.010" Oversize		800-0571	10	2" Long
	110-1824-25	2	.025" Oversize	42	526-0063	2	Washer, Flat - Copper
14			Insert, Valve Seat - Intake				(17/64" ID x 7/16" OD x
	110-0197	2	Standard				1/32" Thk)
	110-0197-02	2	.002" Oversize	43	517-0067	1	Plug, Core Hole
	110-0197-05	2	.005" Oversize	45			Kit, Gasket
	110-0197-10	2	.010" Oversize		168-0140	1	Gasket Kit, Valve Grind/
	110-0197-25	2	.025" Oversize				Carbon Removal
15			Bearing, Crankshaft - Front		168-0153	1	Gasket Kit, Complete
			(Flanged)	46	101-0761	1	Adapter, Bearing Plate
	101-0432	1	Standard				Spec D + Key 2
	101-0432-02	1	.002" Undersize	47	815-0682	4	Screw, Socket Head (Special)
	101-0432-10	1	.010" Undersize				
	101-0432-20	1	.020" Undersize				
	101-0432-30	1	.030" Undersize				
16			Guide, Valve				
			Engines With Intake Valve				
			Seals				
	110-1935	2	Exhaust				
	110-3161	2	Intake				

# Gearcase



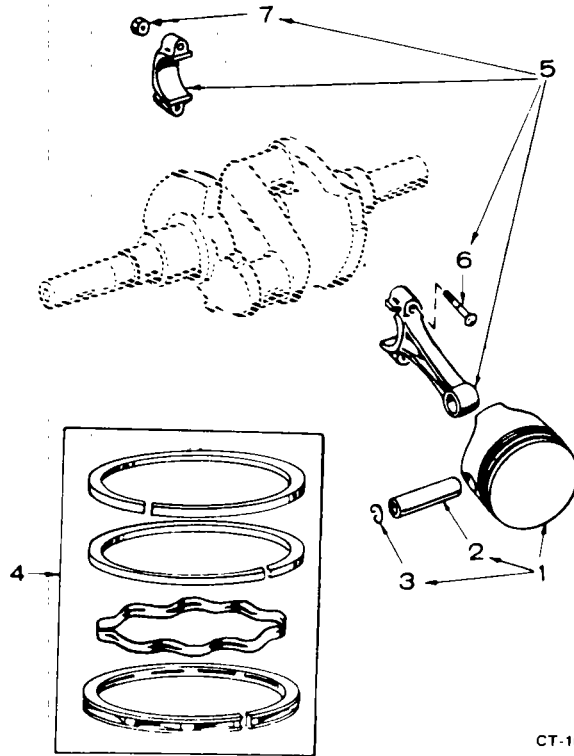
CT-1040-1

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Gearcase Assembly (Kit) (Includes Parts Marked *)	9	509-0040	1	*Seal, Oil - Crankshaft
	103-0738	1	Specs B, C	10	103-0408	1	Gasket, Gearcase Mounting
	103-0791	1	Begin Spec D	11		4	Screw, Cap - Hex Head 5/16-18 x 1-3/4"
2	510-0105	1	*Bearing, Governor Shaft		800-0032	1	5/16-18 x 2-3/4" (Special)
3			*Shaft and Arm, Governor	12	526-0065	5	Washer, Flat - Copper (21/64" ID x 9/16" OD x 1/16" Thk)
	150-1470	1	Begin Spec D	13	149-1299	1	*Tube, Vacuum Port
	150-1470-01	1	Specs B, C	14	525-0933	1	Stud, Gear Cover
4	150-1187	1	*Yoke, Governor Shaft	15	526-0065	1	Washer, Flat - Gear Cover (21/64 ID x 9/16 OD x 1/16" Thk)
5	815-0046	2	*Screw, Machine - Pan Head (#8-32 x 3/8")	16	862-0015	1	Nut, Hex (5/16-18)
6	516-0130	1	*Pin, Dowel - Governor Cup Stop	19	503-0301	1	*Clamp, Vacuum Port Cap
7	509-0008	1	*Seal, Oil - Governor Shaft	20	149-1321	1	*Cap, Vacuum Port
8	510-0014	1	*Ball, Bearing - Governor Shaft				

\* - Parts Included in Gearcase Assembly.



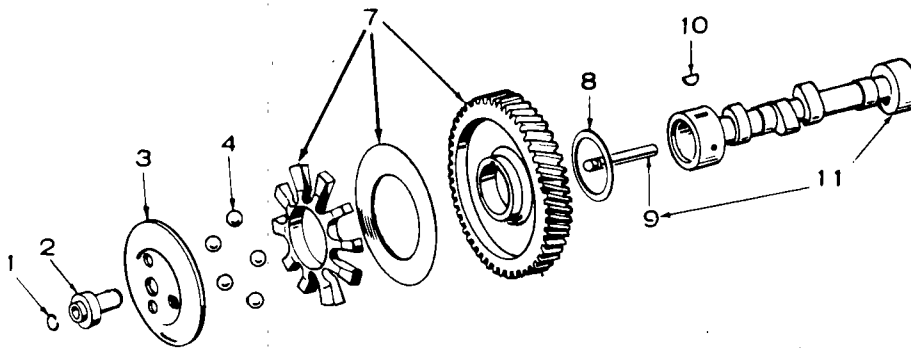
# Piston and Rod



CT-1055

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston and Pin (Includes Retaining Rings)	5			Rod, Connecting (Includes Bolt and Nut)
	112-0186	2	Standard		114-0300	2	Standard
	112-0186-05	2	.005" Oversize		114-0300-10	2	.010" Undersize
	112-0186-10	2	.010" Oversize		114-0300-20	2	.020" Undersize
	112-0186-20	2	.020" Oversize		114-0300-30	2	.030" Undersize
	112-0186-30	2	.030" Oversize	6	114-0240	4	Bolt, Connecting Rod (Special)
	112-0186-40	2	.040" Oversize	7	870-0302	4	Nut, Hex - Crown Lock (5/16-24)
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				

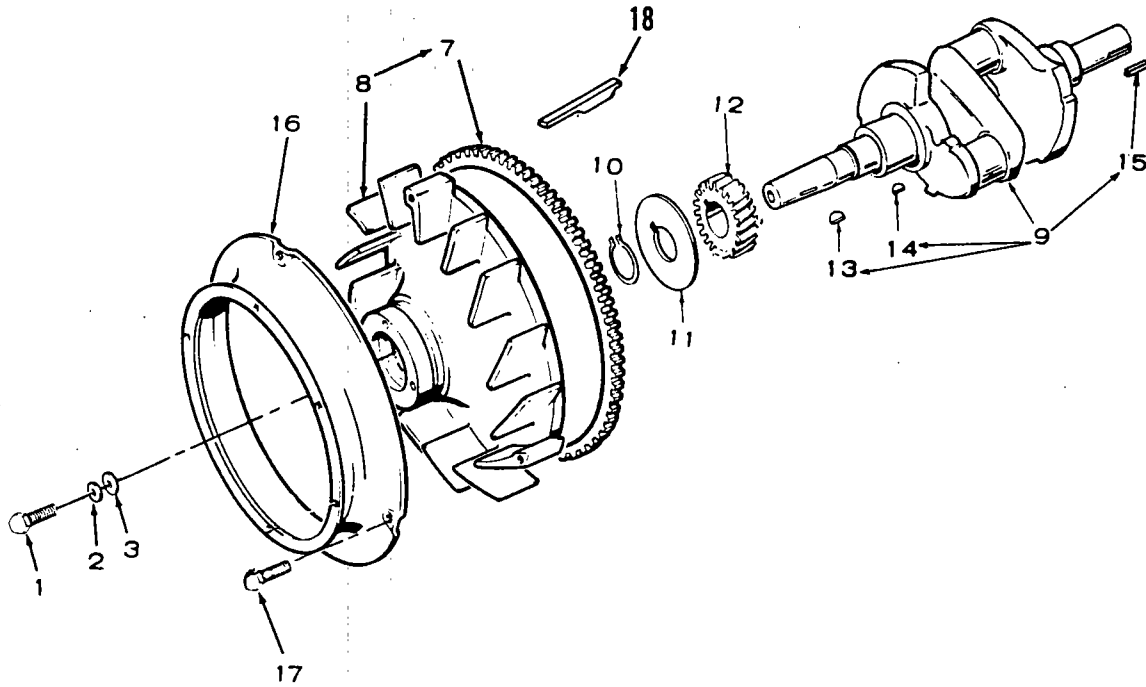
## Camshaft



C-1084

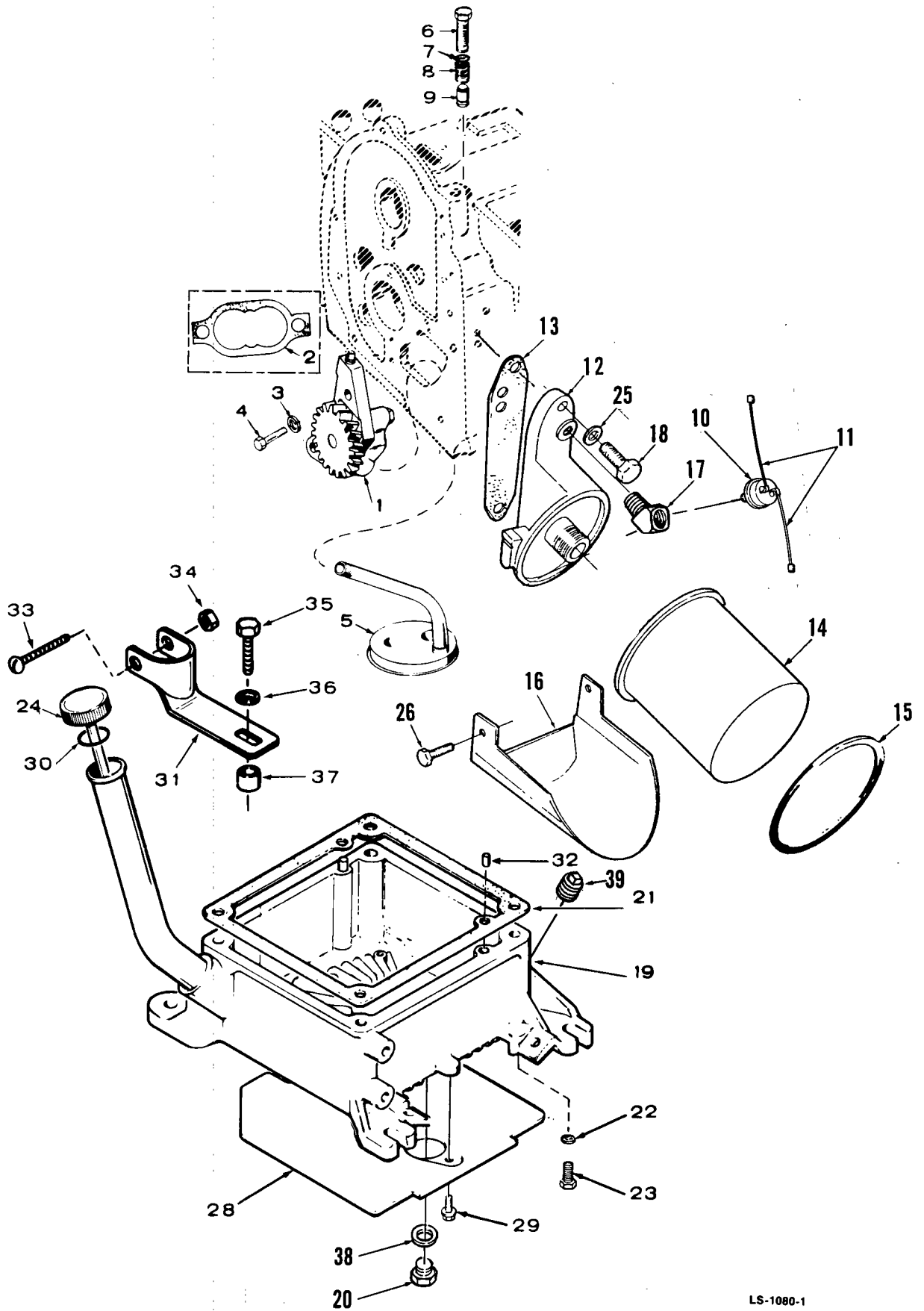
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-0078	1	Ring, Retaining	8	105-0541	1	Washer, Thrust - Special
2	150-1519	1	Hub, Governor Cup	9	150-0075	1	Pin, Center
3	150-1520	1	Cup, Governor	10	515-0001	1	Key, Woodruff - Camshaft Gear
4	510-0015	5	Ball, Governor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

## 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	10	518-0014	1	Ring, Retaining
2	850-0055	1	Lock (7/16") Specs B, C	11	104-0043	1	Washer, Gear Retaining - Special
	526-0356	1	Flat (7/16" Screw) - Begin Spec D	12	104-0032	1	Gear, Crankshaft
3	526-0017	1	Washer, Flat (15/32" ID x 1-1/4" OD x 1/4" Thk)	13	515-0263	1	Key, Flywheel
7	104-0779	1	Gear, Ring	14	515-0001	1	Key, Crankshaft Gear
8	134-4641	1	Flywheel (Includes Ring Gear)	15	515-0103	1	Key, Crankshaft Stub
9	104-1621	1	Crankshaft	16	134-3847	1	Venturi, Blower Wheel
				17	821-0010	5	Screw, Cap - Hex Washer Head (1/4-20 x 1/2")
				18	515-0284	1	Key, Flywheel

# Oil System

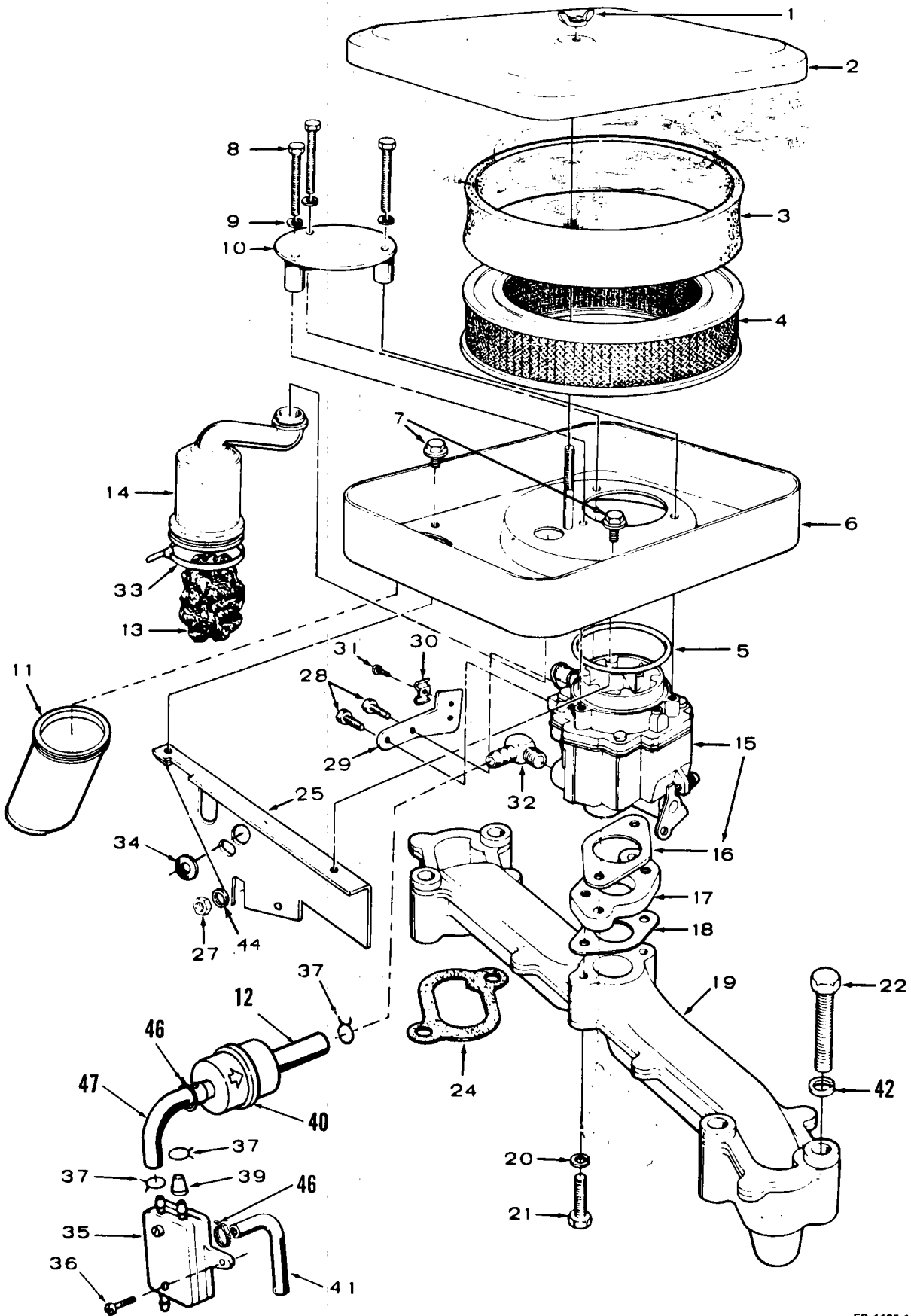


## Oil System

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)	22			Washer
2	120-0161	1	Gasket Kit, Oil Pump	850-0050		4	Lock (3/8") Specs B, C
3	740-1004	2	Washer, Flat (M6)	526-0251		4	Flat (3/8" Screw) Begin Spec D
4	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")	23	800-0061	4	Screw, Cap - Hex Head (3/8-16 x 3-3/4")
5	120-0713	1	Cup, Intake - Oil Pump	24	123-1637	1	Cap and Indicator, Oil Fill (Includes O-Ring)
6	801-0049	1	Screw, Cap - Hex Head (3/8-24 x 7/8")	25	526-0065	2	Washer, Flat - Copper - Key 2 (21/64" ID x 9/16" OD x 1/16")
7	526-0066	1	Washer, Flat - Copper (25/64" ID x 9/16" OD x 1/16" Thk)	26	815-0194	2	Screw, Tapping - Hex Head - Key 2 (#10-32 x 3/8")
8	120-0140	1	Spring, Bypass Valve	28	134-3864	1	Baffle, Oil Base Air
9	120-0398	1	Plunger, Bypass Valve	29	815-0340	2	Screw, Tapping - Hex Washer Head (#10-32 x 3/8")
10	309-0105	1	Switch, Lopko - 2 Terminal	30	509-0142	1	O-Ring, Oil Fill Cap
11	226-3293	2	Lead, Lopko Switch	31	123-1612	1	Bracket, Fill Tube
12	122-0320	1	Adapter, Oil Filter - Key 2	32	516-0212	2	+Pin, Dowel
13	122-0375	1	Gasket, Oil Filter Adapter - Key 2	33	815-0576	1	Screw, Round Head (#10 x 1-1/4")
14	122-0645	1	Filter, Oil - Spin-on - Key 2	34	870-0120	1	Nut, Speed
15	122-0347	1	Seal, Air - Oil Filter - Key 2	35	800-0034	1	Screw, Hex Head - Cap (5/16-18 x 2-1/4")
16	122-0360	1	Drain, Oil Filter - Key 2	36	850-0045	1	Washer, Lock (5/16")
17	502-0053	1	Elbow, Street - 45° - Key 2	37	123-1611	1	Spacer, Fill Tube Bracket
18	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1") - Key 2	38	102-0743	1	+Gasket, Oil Drain
19	102-1271	1	Base, Oil (Includes Parts Marked +)	39	505-0110	1	+Plug, Square Head (3/8")
20	102-0938	1	+Plug, Oil Drain (1/2")				
21			Gasket, Oil Base				
	102-1200	1	Specs B, C				
	102-1358	1	Begin Spec D				

+ - Parts Included in 102-1271 Oil Base.

# Fuel System



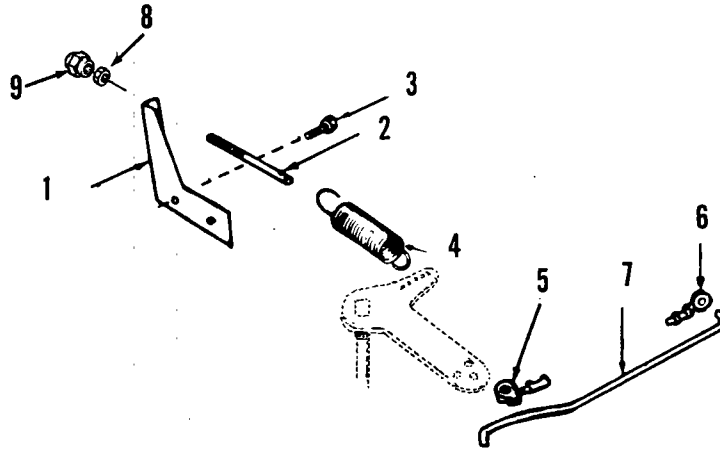
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## Fuel System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	865-0020	1	Nut, Wing (1/4-20)	25	140-1961	1	†Support, Air Cleaner
2	140-1663	1	Cover, Air Cleaner	27	870-0399	1	†Nut, Hex Washer Head (5/16-18)
3	140-1496	1	Wrapper, Air Cleaner Element	28	821-0004	2	Screw, Cap - Hex Washer Head (#10-32 x 5/16")
4	140-1228	1	Element, Air Cleaner (Paper)	29	153-0515	1	Bracket, Choke Cable
5	509-0145	1	Seal, O-Ring	30	153-0514	2	Clip, Choke Cable
6	140-1885	1	†Housing, Air Cleaner	31	815-0359	1	Screw, Tapping - Slotted Hex Washer Head (#10-32 x 7/8")
7	815-0575	2	†Screw, Tapping - Hex Washer Head (1/4-20 x 3/8")	32	502-0313	1	Elbow, Hose
8	815-0470	3	Screw, Machine - Hex Head (#10-32 x 1-1/2")	33	503-1138	1	Tie, Breather Tube
9	526-0234	3	Washer, Flat (7/32 ID x 17/32 OD x .105" Thk)		332-1567	1	Begin Spec D
10	145-0521	1	Plate, Air Deflector		508-0021	1	Spec B, C
11	140-1661	1	Tube, Air Intake	34	508-0021	1	Grommet, Rubber (3/4" Hole)
12	503-1443	1	Hose - 15" Long	35	149-2187-01	1	Pump, Fuel - Mounted on Blower Housing
13	123-1417	1	Filter, Breather Tube	36	815-0555	2	Screw, Tapping - Pan Head (#10-24 x 5/8")
14	123-1429	1	Tube, Crankcase Breather	37	503-0301	3	Clamp, Hose (7/16")
15			Carburetor, Complete (See Separate Page for Components) (Includes Mounting Gasket)	38	503-1199	1	Hose, Fuel (13")
	146-0389	1	Without Semi-Automatic Choke	39	149-1321	1	Cap, Fuel Outlet
	146-0478	1	With Semi-Automatic Choke	40	149-2206-01	1	Filter, Fuel
16	154-0733	1	Gasket, Carburetor to Adapter	41	503-0663	1	Hose, Fuel Pump Vacuum
17	154-1977	1	Adapter, Carburetor	42	850-0045	4	Washer, Lock (5/16")
18	145-0438	1	Gasket, Adapter to Manifold	44	526-0041	1	†Washer, Flat - Air Cleaner Support (21/64 ID x 1 OD x 1/16" Thk)
19	154-2719	1	Manifold, Intake	46	503-0731	4	Clamp, Hose (1/2")
20	740-1006	2	Washer, Flat (8mm)	47	503-1442	1	Hose - 1-1/2" Long
21	800-0032	2	Screw, Cap - Hex Head (5/16-18 x 1-3/4")		140-1942	1	Kit, Housing - Air Cleaner (Includes Parts Marked †)
22	800-0033	4	Screw, Cap - Hex Head (5/16-18 x 2")				
24	154-2745	2	Gasket, Manifold to Block				

† - Parts Included in 140-1942 Housing Kit.

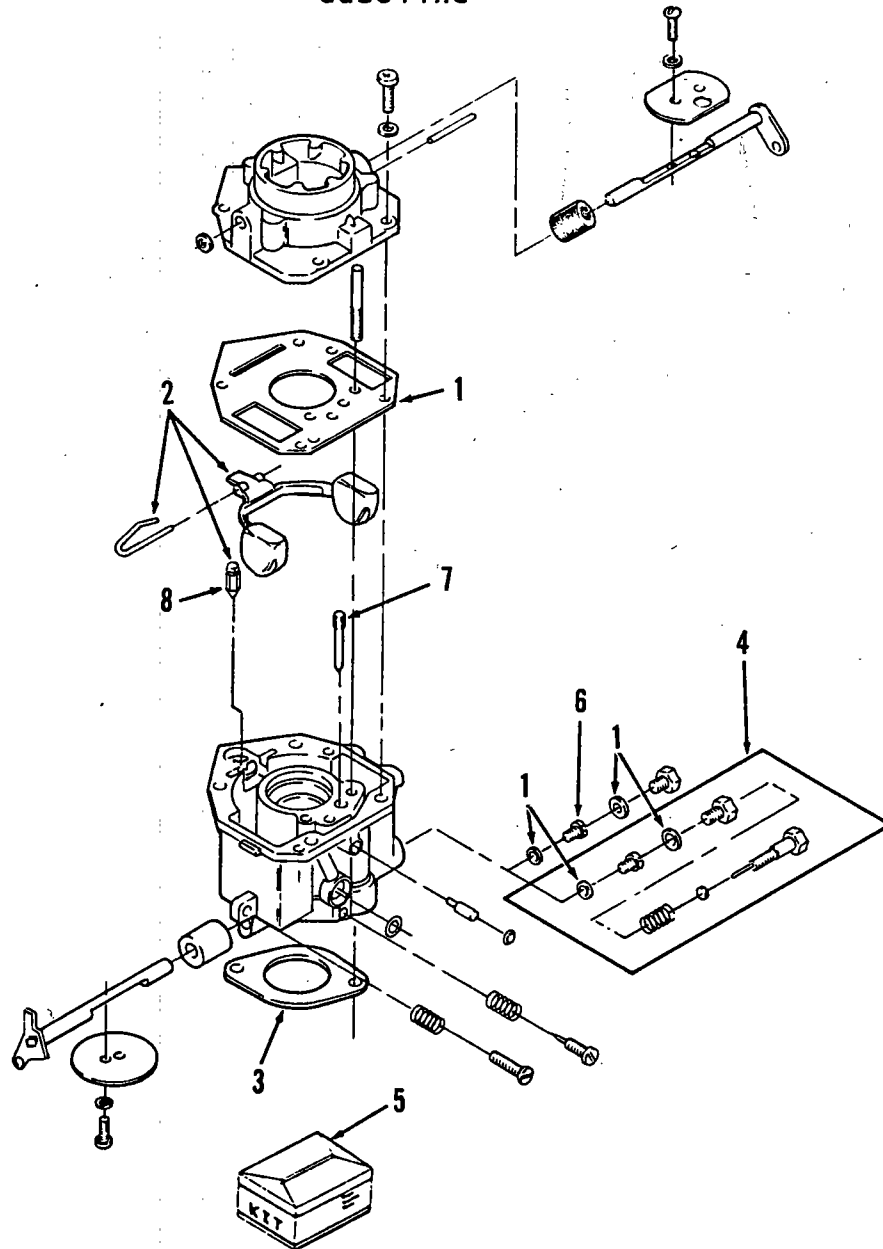
# Governor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-1433	1	Bracket, Governor Control	6	518-0004	1	Clip, Retaining - Control Rod
2	150-0694	1	Stud, Adjusting	7	150-1924	1	Rod, Control
3	821-0010	2	Screw, Cap - Hex Head Locking (1/4-20 x 1/2")	8	870-0131	1	Nut, Hex - Governor Adjusting (WET 10-32)
4	150-1214	1	Spring, Governor	9	150-0621	1	Nut, Acorn - Key 2 - Spec D
5	518-0406	1	Clip, Retaining - Control Rod				



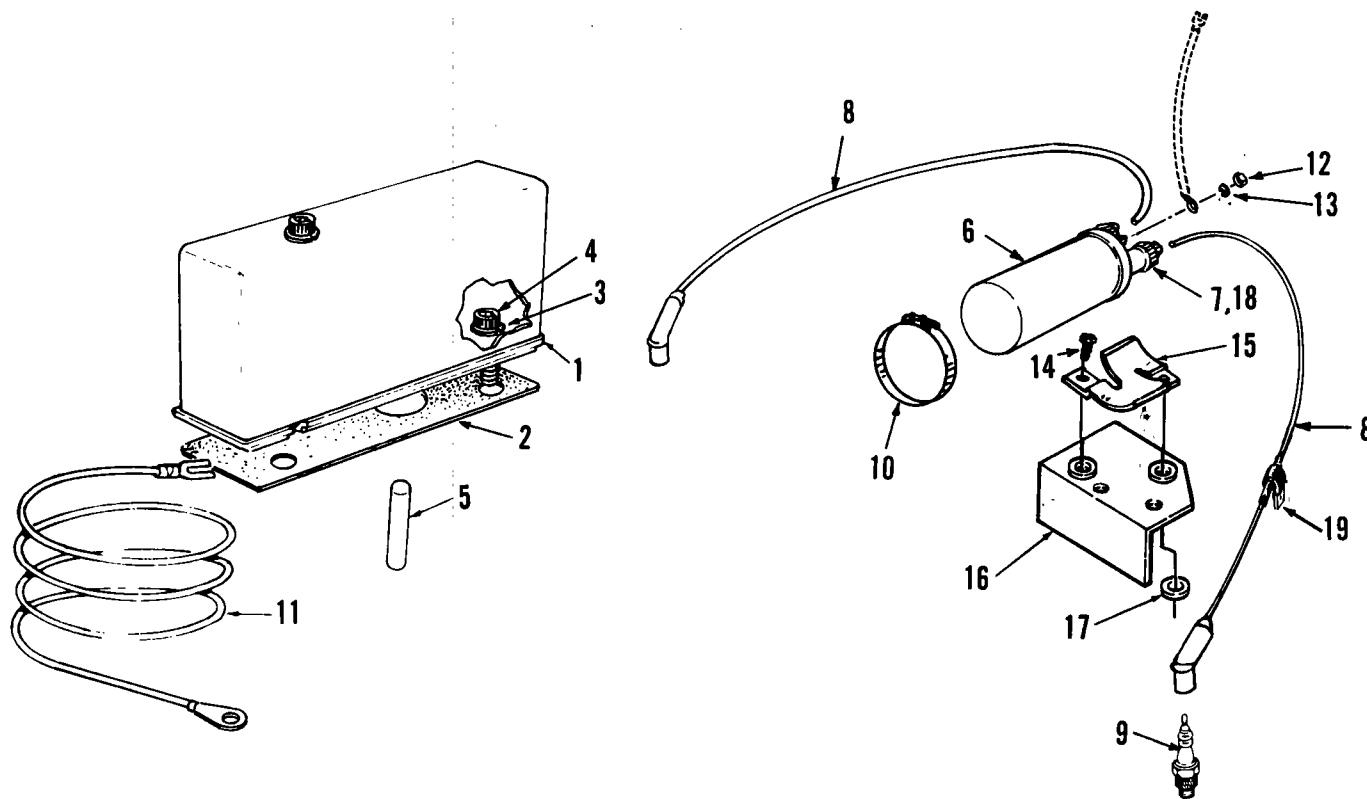
## Carburetor Components Gasoline



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Carburetor, Complete (Includes Mounting Gasket) With Semi-Automatic Choke	3	154-0733	2	***Gasket, Carburetor Mounting
	146-0478	1	Without Semi-Automatic Choke	4	146-0327	1	Variable Jet Kit - Optional (High Altitude Application)
	146-0389	1	- Key 1	5	146-0356	1	Kit, Repair Carburetors Without Semi-Automatic Choke (Includes Parts Marked *)
1			Gasket Package		146-0432	1	Carburetors With Semi-Automatic Choke (Includes Parts Marked +)
	146-0326	1	*Carburetors Without Semi-Automatic Choke	6	146-0396	1	Jet, Power - Carburetor
	146-0438	1	+Carburetors With Semi-Automatic Choke	7	146-0425	1	Jet, Idle
2			Float Package		146-0370	1	With Semi-Automatic Choke
	146-0325	1	Carburetors Without Semi-Automatic Choke		146-0423	1	Without Semi-Automatic Choke
	146-0437	1	Carburetors With Semi-Automatic Choke				Valve, Float

\* - Parts Included in 146-0356 Repair Kit.  
+ - Parts Included in 146-0432 Repair Kit.

## Ignition System

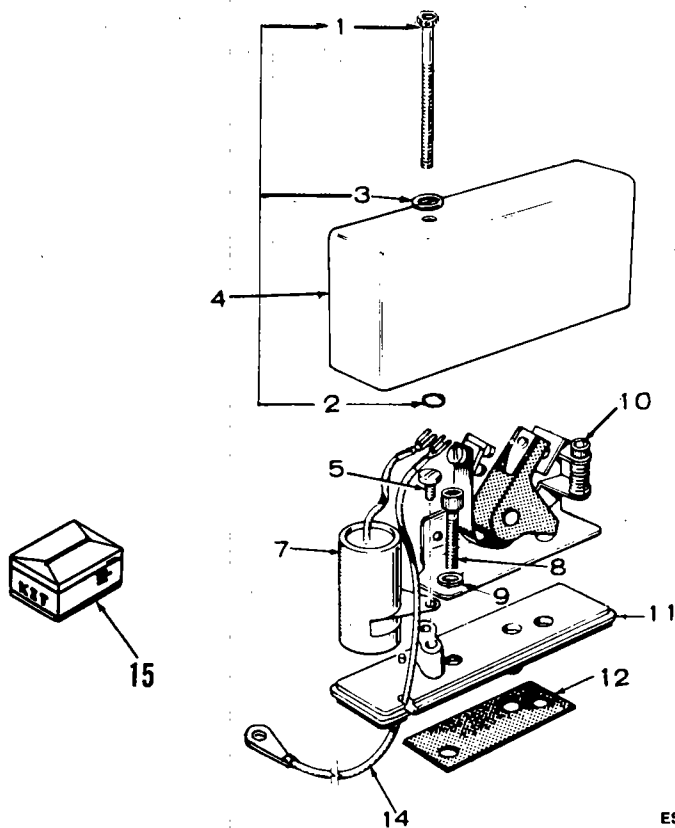


ES-1180

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 - Mounts on Intake Manifold
7	166-0604	2	Cap, Coil Terminal (Part of Coil)
8			Cable, Spark Plug
	167-1615-01	1	9" Long
	167-1615-06	1	26" Long
9	167-0263	2	Plug, Spark
10	503-0311	1	Clamp, Coil
11	226-3275	1	Lead, Breaker Box to Coil

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	166-0554	2	Nut, Hex (Special) - Positive Terminal
13	850-2005	2	Washer, Lock - Spring (Metric) Positive Terminal
14	815-0389	2	Screw, Tapping - Hex Washer Head (1/4-20 x 1/2")
15	166-0741	1	Bracket, Ignition Coil
16	166-0764	1	Bracket, Ignition Coil Mounting
17	526-0122	2	Spacer, Bracket Mounting
	821-0009	2	Screw, Lock Head - Bracket Mounting (Not Shown) (1/4-20 x 3/8")
18	166-0614	2	Bushing, Rubber (Inside Cap 166-0604)
19	518-0350	1	Clamp, Spark Plug Wire - Spec B - Key 2

## Breaker Box

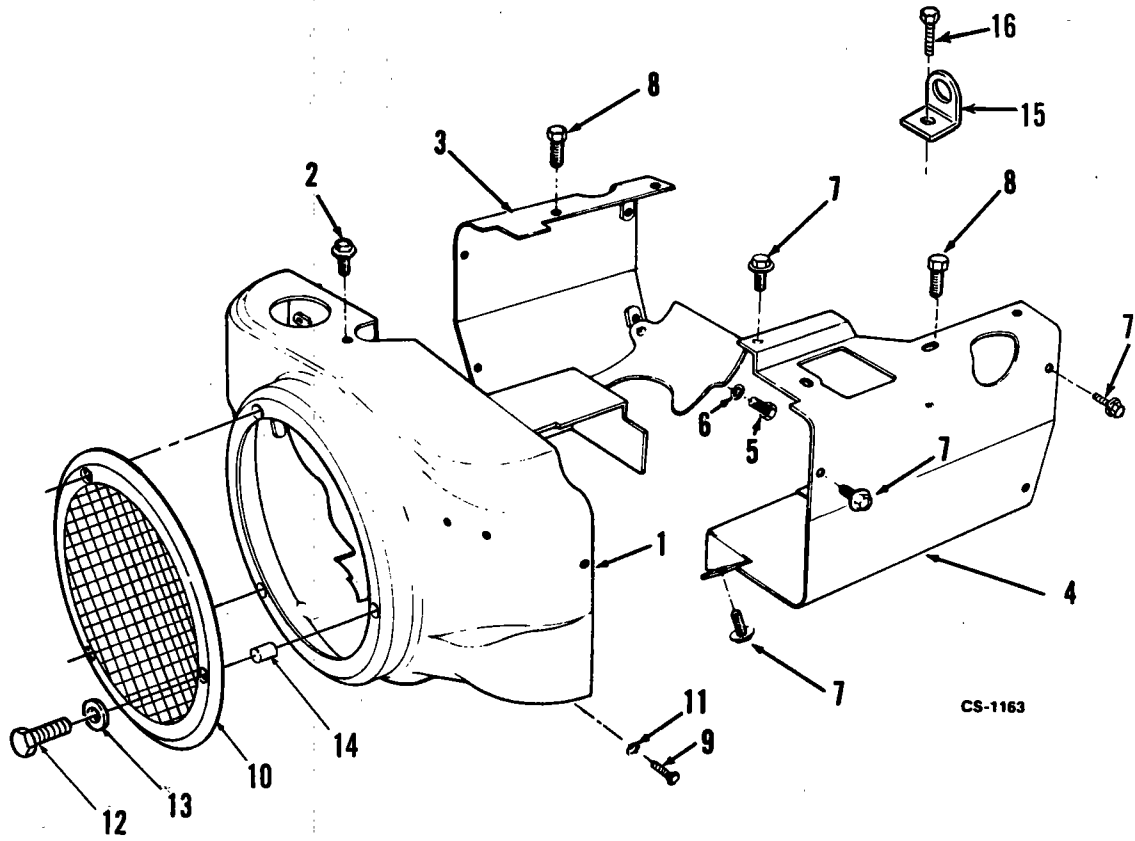


ES-1217

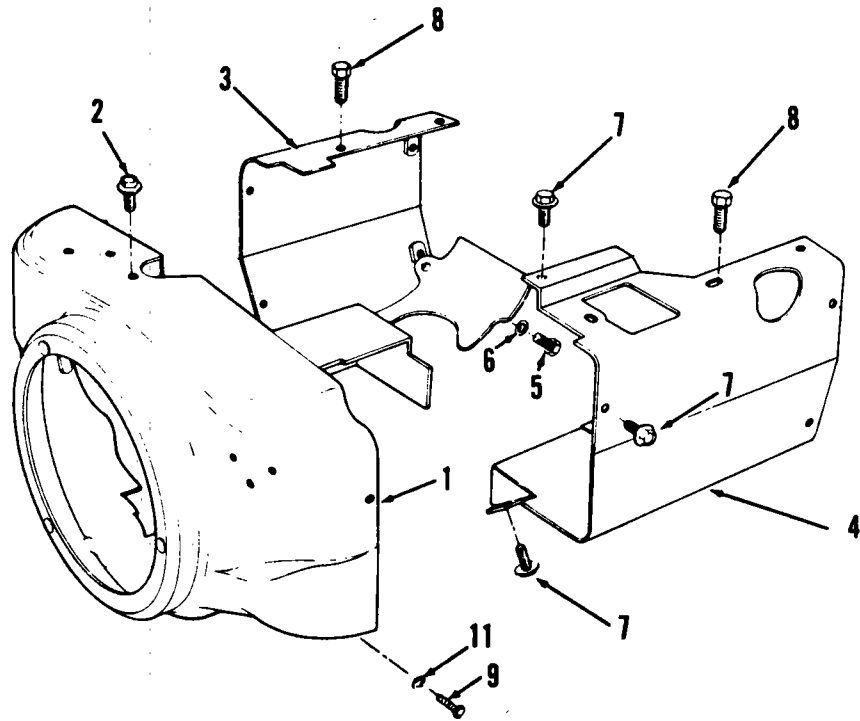
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1303	1	Breaker Box (Includes Parts Marked *)	7	312-0246	1	*Condenser
1	802-0022	1	*Screw, Cap - Hex Socket (#10-24 x 1-1/2")	8	802-0034	2	*Screw, Cap - Socket Head (1/4-20 x 3/4")
2	509-0065	1	*Retainer ("O" Ring)	9	850-0040	2	*Washer, Lock (1/4")
3	526-0008	1	*Washer, Flat (13/64 ID x 7/16 OD x 1/32" Thk)	10	160-1183	1	*Point Set, Breaker
4	160-1285	1	*Cover, Breaker Box	11	160-1219	1	*Base, Breaker
5	815-0358	1	*Screw, Cap - Slotted (#8-32 x 5/16")	12	160-1150	1	*Gasket, Breaker Box
				14	226-3275	1	Lead, Breaker Box to Coil
				15	160-1328	1	Tune Up Kit (Includes Points and Condenser)

\* - Parts Included in 160-1303 Breaker Box.

# Air Housing



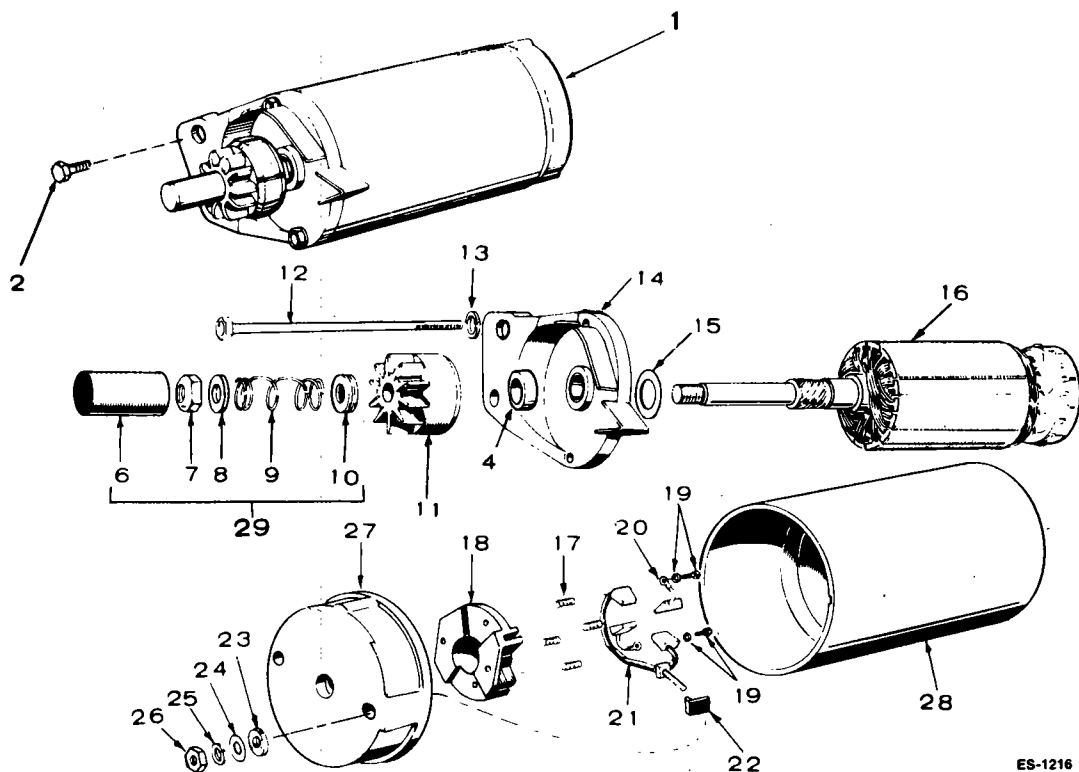
CS-1163



## Air Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-4288	1	Housing, Blower	8	821-0016	2	Screw, Cap - Hex Washer Head (5/16-18 x 3/4")
	134-4257	1	Key 2	9	815-0290	2	Screw, Tapping - Hex Washer Head (1/4-20 x 5/8")
2	815-0261	1	Key 1	10	134-3875	1	Screen, Air Inlet
			Screw, Tapping - Hex Washer Head (1/4-20 x 7/16")	11	526-0018	2	Washer, Flat (17/64" ID x 5/8" OD x 1/16" Thk)
3	134-4265	1	Housing, Cylinder Air - Left Side	12	815-0359	3	Screw, Hex Washer Head - Thread Form (10-32 x 7/8")
4			Housing, Cylinder Air - Right Side	13	526-0009	3	Washer, Flat (7/32" ID x 1/2" OD x 1/16" Thk)
	134-4276	1	Key 2 (With Filter Cutout)	14	134-3868	3	Spacer, Fan
	134-4476	1	Key 1	15	403-1523	2	Bracket, Lifting
5	815-0290	2	Screw, Tapping - Hex Washer Head (1/4-20 x 5/8")	16	800-0034	2	Screw, Hex Head Cap (5/16-18 x 2-1/4")
6	526-0021	2	Washer, Flat (17/64" ID x 3/4" OD x 1/16" Thk)				
7	821-0008	4	Screw, Cap - Hex Washer Head (1/4-20 x 1/4")				

## Starter Components



ES-1216

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1567	1	Motor, Starter (Complete)	20	§	2	†*Brush, Ground
2	815-0570	2	Screw, Cap - Hex Washer Head (5/16"-18 x 1")	21	§	1	†*Stud and Brush Assembly, Input
4	191-1534	1	Cap, Dust - Drive End	22	§	1	†Bushing, Insulation - Input Stud
6	§	1	#Cover, Dust	23	§	1	†Washer, Insulation - Input Stud
7	§	1	#Nut, Stop	24	§	1	†Washer, Flat - Input Stud
8	§	1	#Washer, Stop Nut	25	§	1	†Washer, Lock - Input Stud
9	§	1	#Spring, Anti-drift	26	§	1	†Nut, Securing - Input Stud
10	§	1	#Spacer, Dust Cover	27	191-1532	1	Cap Assembly, Commutator (Includes Parts Marked †)
11	191-1036	1	Drive Assembly	28	§	1	Housing, Starter Motor
12	191-1048	2	Screw, Hex Cap - Special	29	191-1359	1	Dust Cover Assembly (Includes Parts Marked #)
13	850-0040	2	Washer, Lock (1/4")				
14	191-1597	1	Cap Assembly, Drive End				
15	191-1038	1	Washer, Armature Thrust				
16	191-1039	1	Armature				
17	§	4	†*Spring, Brush		191-1533	1	Repair Kit, Brush, Spring and Stud (Includes Parts Marked *)
18	§	1	†Brush Holder				
19	§	2	†Screw and Lockwasher				

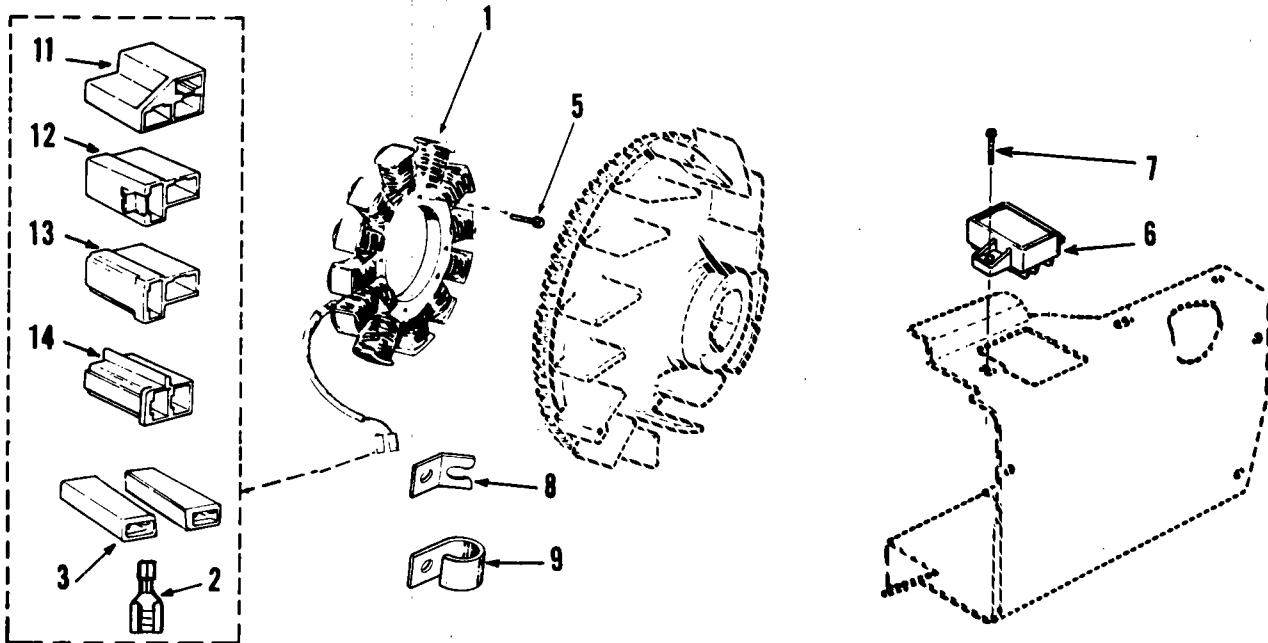
† - Included in the 191-1532 Cap Assembly.

\* - Included in the 191-1533 Brush, Spring and Stud Kit.

# - Included in the 191-1359 Dust Cover Assembly.

§ - Not Sold Separately.

# Flywheel Alternator - 15 Ampere (Phelon)

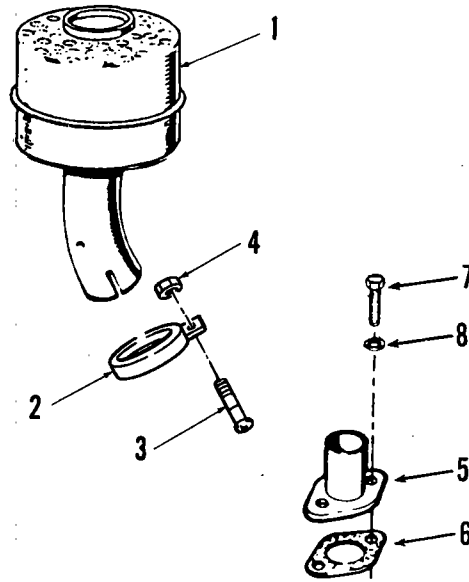


ES-1354

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1256	1	Stator (Includes Terminals and Connector Bodies)	7	821-0007	1	Screw, Cap - Hex Washer Head (1/4-20 x 1/4")
2	332-2423	3	*Terminal, Stator Leads	8	167-0188	1	Clip, Cable
3	323-1257	2	Body & Terminal Kit, Connector (Includes Parts Marked *)	9	332-2319	1	Clamp, Wire - Alternator Leads
5	815-0593	3	Screw, Machine - Hex Head - Self-Lock (#10-32 x 1-3/8")	11	323-0853	1	Body, Terminal Connector
6	191-1748	1	Regulator, Voltage	12	323-1085	1	Body, Terminal Connector
				13	323-0892	1	Body, Terminal Connector
				14	323-0890	1	Body, Terminal Connector

\* - Parts Included in 323-1257 Alternator Connector Body Kit.

## Exhaust



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-1570	2	Muffler, Exhaust
2	155-2140	2	Clamp, Muffler
3	805-0019	2	Screw, Hex Head Cap (3/8-16 x 1-7/16")
4	862-0003	2	Nut, Hex (3/8-16)
5	154-1958	2	Adapter, Exhaust - Flange Type

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	154-1725	2	Gasket, Exhaust Adapter
7	800-0026	4	Screw, Cap - Hex Head (5/16-18 x 3/4")
8	740-1006	4	Washer, Flat (M8)



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