

The part numbers in this manual are OEM Onan numbers. Case and other manufacturers assigned their own unique numbers. John Deere simply added the prefix “HE” to the Onan number.

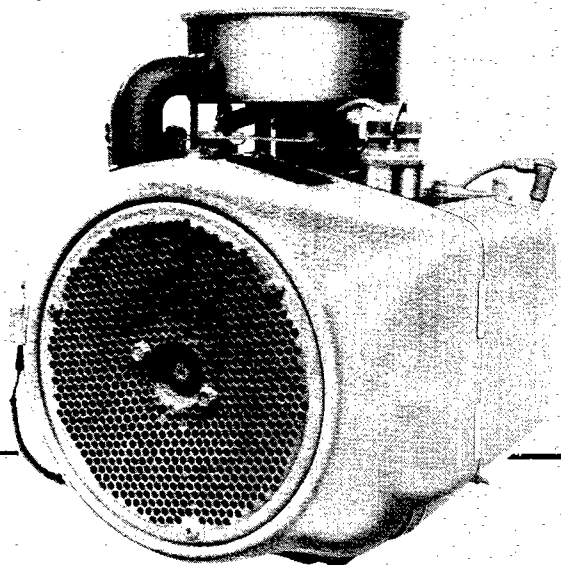
Obsolete

Onan

Parts Manual

B43M-GA016 Industrial Engines

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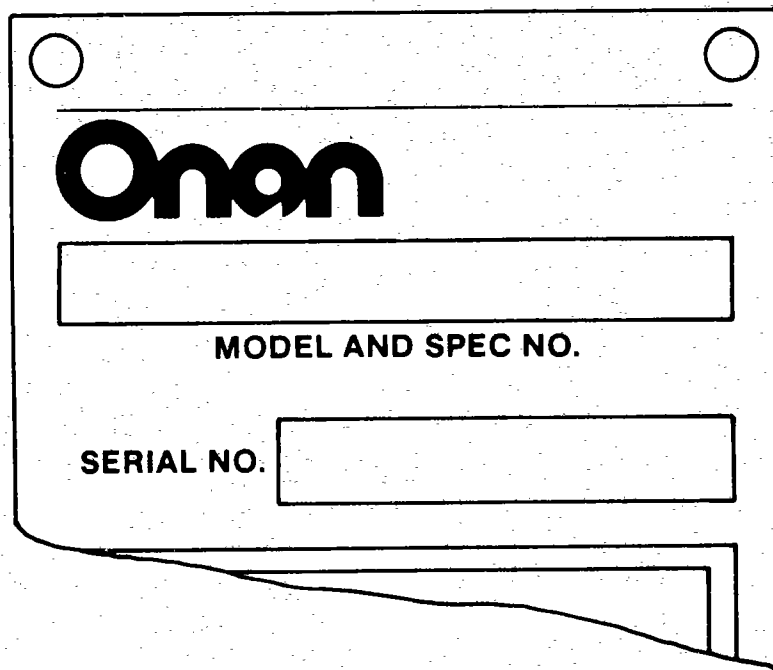


965-0254
11-88 (Spec A-C)
Replaces 5-85 (Spec A-C)
Printed in U.S.A.

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 rectangular nameplate template with two circular mounting holes at the top. The word "Onan" is printed in a large, bold, stylized font. Below it is a horizontal rectangular box. Underneath that box is the text "MODEL AND SPEC NO.". Below that is another horizontal rectangular box. To the left of this box is the text "SERIAL NO.". The bottom right corner of the nameplate is folded over, showing a second layer.

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

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

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Introduction

This catalog applies to the Standard B43M-GA016 Engines. 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.

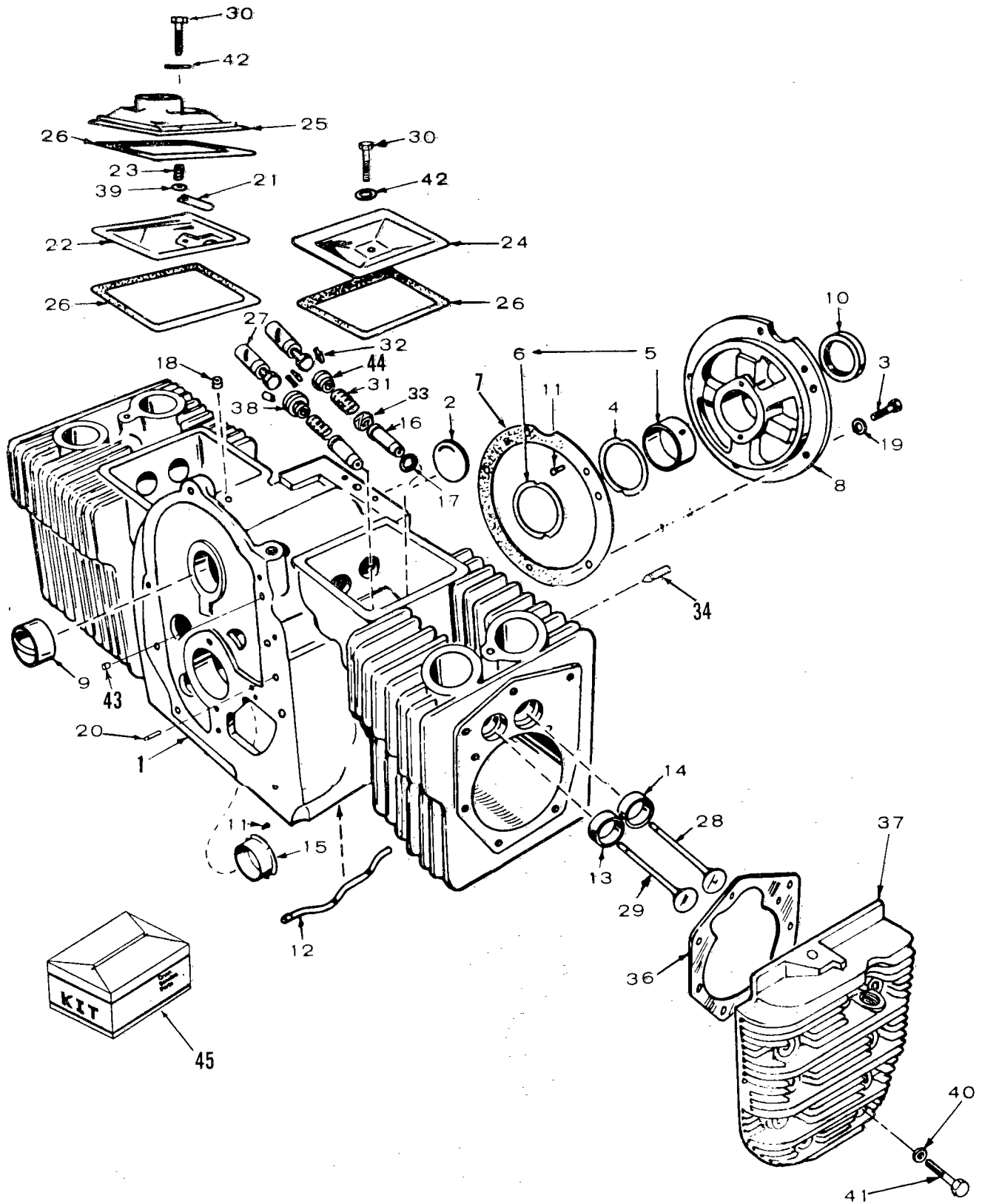
WARNING

This engine is not designed or intended for use in any type of aircraft. Use of this engine in aircraft may result in engine failure and cause serious bodily injury, death and/or property damage.

NOTICE !

Items referenced as optional indicate part is factory installed and may not be applicable to all models. For field conversions additional parts are usually required.

Cylinder Block

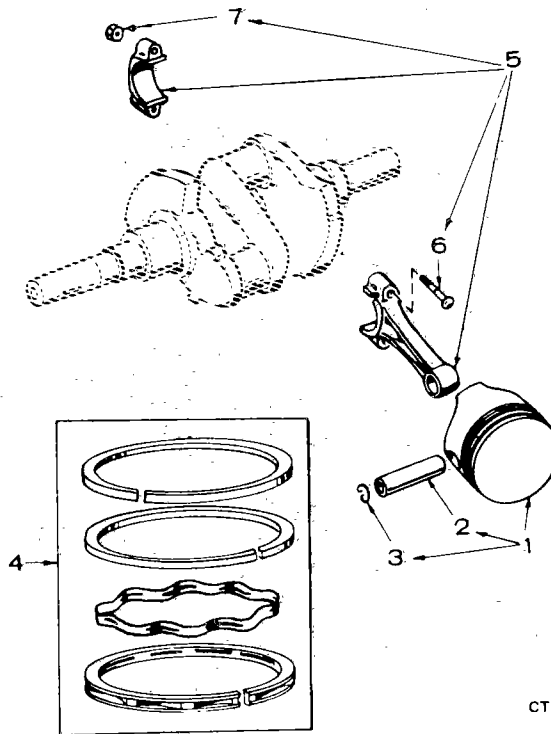


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Cylinder Block

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Block Assembly, Cylinder (All Replacement Cylinder Block Assemblies Use Intake Valve Seals and Include Parts Marked *)	17	110-0068	2	*Gasket Intake Valve Guide Vacuum Port
	110-3148	1	Engines with Standard Rear Bearing Plate	18	149-1299	1	Tube - Early Models
	110-3151	1	Engines with 4 Boss Bearing Plate		517-0120	1	Plug, Breather Hole - Later Models
	110-3154	1	Engines with SAE A or SAE B Rear Bearing Plate (Does Not Include Rear Bearing Plate)	19	850-0050	5	*Washer, Lock - Spring (3/8")
2	517-0048	1	*Plug, Welch (1-5/8") Camshaft Opening	20	516-0141	2	*Pin, Gear Cover Alignment
3	800-0051	5	*Screw, Cap - Hex Head (3/8-16 x 1-1/4")	21	123-1175	1	Reed, Breather Valve
4	104-0776	AR	*Shim, Crankshaft End Play (.005")	22	123-1173	1	Baffle, Breather Valve
5			Bearing, Crankshaft - Rear (Includes Thrust Washer)	23	123-1174	1	Spring, Breather Valve
	101-0450	1	*Standard	24	110-1879	1	Cover, Valve - RH
	101-0450-02	1	.002" Undersize	25	110-2274	1	Cover, Valve - LH
	101-0450-10	1	.010" Undersize	26	110-1921	3	Gasket, Valve Cover
	101-0450-20	1	.020" Undersize	27			Tappet, Valve
	101-0450-30	1	.030" Undersize		115-0006	4	Standard
6	104-0575	2	*Washer, Thrust		115-0006-02	4	.002" Oversize
7	101-0415	1	*Gasket, Bearing Plate		115-0006-05	4	.005" Oversize
8			Plate, Bearing - Rear	28	110-2368	2	Valve, Intake
	101-0439	1	*Standard	29	110-1955	2	Valve, Exhaust
	101-0551	1	Optional - 4 Boss	30	800-0010	2	Screw, Cap - Hex Head (1/4-20 x 1-3/4")
	101-0430	1	Optional - SAE B	31	110-0539	4	Spring, Valve
	101-0437	1	Optional - SAE A	32	110-0639	8	Lock, Valve Spring
9	101-0405	2	*Bearing, Camshaft	33	509-0168	2	Seal, Valve - Intake (Optional)
10	509-0041	1	Seal, Oil - Crankshaft Rear	34	803-0071	2	Screw, Socket - Set (3/8-16 x 5/8")
11	516-0072	4	*Pin, Drive - Bearing Stop	36			Gasket, Cylinder Head
12	120-0735	1	*Tube, Oil - Cylinder Block		110-2287	2	Standard
13			Insert, Valve Seat - Exhaust		110-3181	2	Optional (Graphoil)
	110-1824	2	*Standard	37			Head, Cylinder
	110-1824-02	2	.002" Oversize		110-2564	1	Right Side - Spec A
	110-1824-05	2	.005" Oversize		110-2563	1	Left Side - Spec A
	110-1824-10	2	.010" Oversize		110-2561	1	Left Side - Begin Spec B
	110-1824-25	2	.025" Oversize		110-2562	1	Right Side - Begin Spec B
14			Insert, Valve Seat - Intake	38	110-0904	4	Roto Cap - Valve
	110-0197	2	*Standard	39	526-0018	1	Washer, Flat (1/4" Screw)
	110-0197-02	2	.002" Oversize	40	526-0122	18	Washer, Flat (5/16" Screw)
	110-0197-05	2	.005" Oversize	41			Screw, Cap - Hex Head (Special)
	110-0197-10	2	.010" Oversize		800-0540	12	5/16-18 x 1-5/8"
	110-0197-25	2	.025" Oversize		800-0571	6	2" Long
15			Bearing, Crankshaft - Front Flanged	42	526-0063	2	Washer, Flat - Copper (1/4" Screw)
	101-0432	1	*Standard	43	517-0067	1	Plug, Core Hole
	101-0432-02	1	.002" Undersize	44	110-0893	2	Washer, Intake Valve Spring Retainer (Optional)
	101-0432-10	1	.010" Undersize	45			Kit, Gasket
	101-0432-20	1	.020" Undersize		168-0140	1	Valve Grind/Carbon Removal (Standard Head Gaskets)
	101-0432-30	1	.030" Undersize		168-0183	1	Valve Grind/Carbon Removal (Graphoil Head Gaskets)
16			Guide, Valve		168-0153	1	Gasket Kit, Complete (Standard Head Gaskets)
			Engines w/o Intake Valve Seals		168-0182	1	Gasket Kit, Complete (Graphoil Head Gaskets)
	110-1807	2	Intake	* - Parts Included in the Cylinder Block Assembly.			
	110-1807	2	Exhaust				
			Engines with Intake Valve Seals				
	110-1807	2	*Exhaust				
	110-3161	2	*Intake				

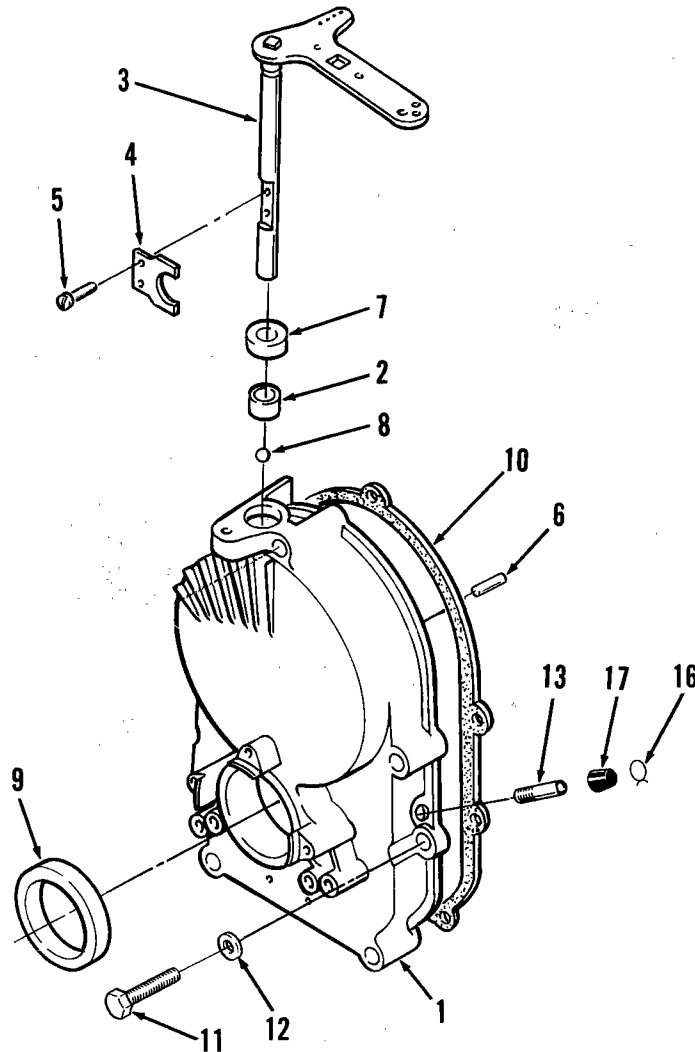
Piston and Rod



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				

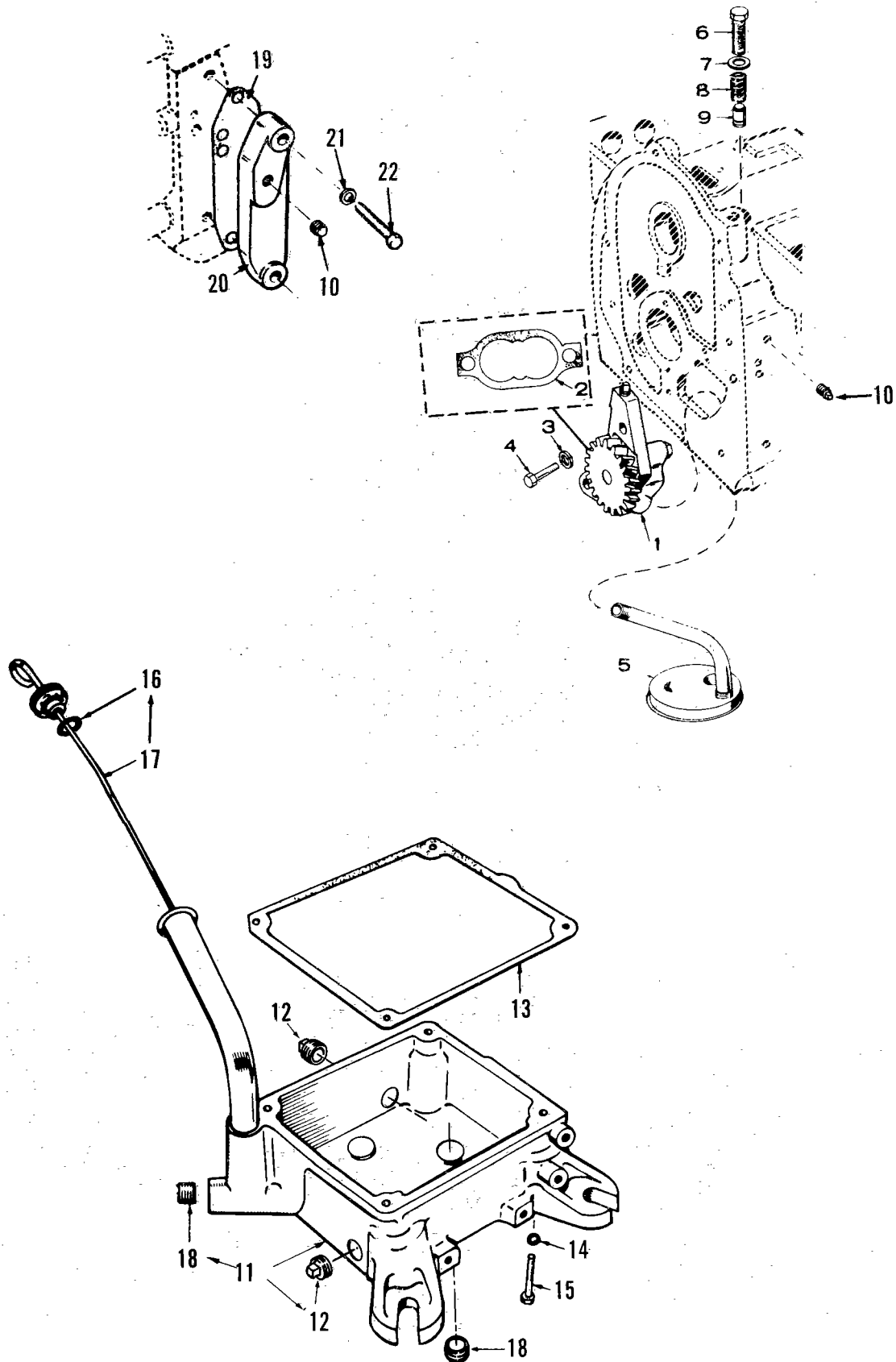
Gearcase



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	103-0738	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	150-1470	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	5	5/16-18 x 2-3/4" (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	16	503-0301	1	*Tube, Vacuum Port
8	510-0014	1	*Ball, Bearing - Governor Shaft	17	149-1321	1	*Clamp, Vacuum Port Cap
						1	*Cap, Vacuum Port

* - Parts Included in 103-0738 Gearcase Assembly.

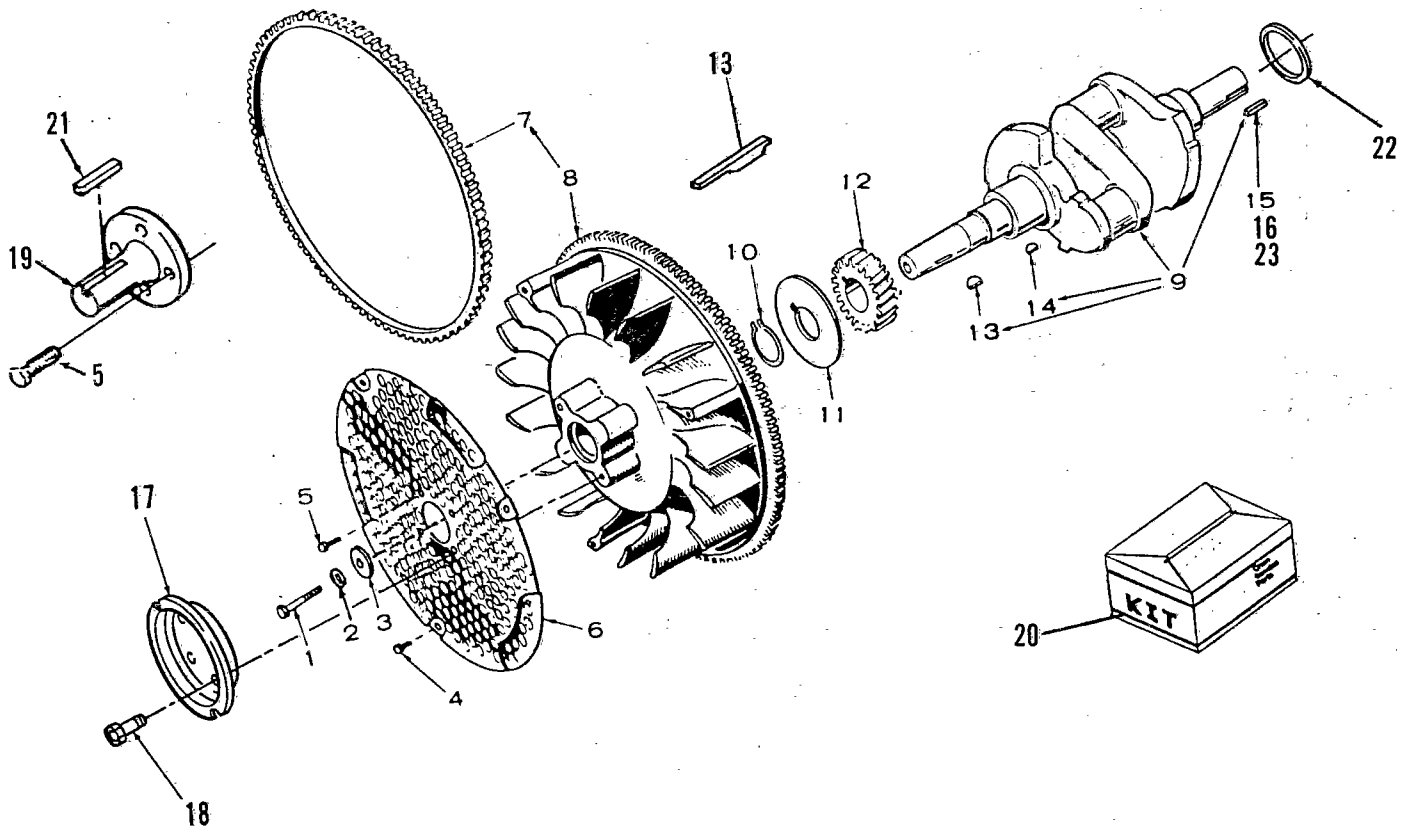
Oil System



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	102-1200	1	Gasket, Oil Base
2	120-0161	1	Gasket Kit, Oil Pump	14	850-0050	4	Washer, Lock - Spring (3/8")
3	850-0040	2	Washer, Lock Spring (1/4")	15	800-0056	4	Screw, Cap - Hex Head (3/8-16 x 2-1/2")
4	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")	16	123-1292	1	Cap and Indicator, Oil Fill
5	120-0713	1	Cup, Intake - Oil Pump	17	509-0142	1	Gasket, Oil Fill Cap ("O" Ring)
6	801-0050	1	Screw, Cap - Hex Head (3/8-24 x 1")	18	505-0937	2	Plug, Pressure - Socket Head (3/8")
7	526-0066	1	Washer, Flat - Copper (3/8" Screw)	19	122-0375	1	Gasket, Oil Filter Adapter
8	120-0140	1	Spring, Bypass Valve	20	122-0438	1	Cover, Oil Filter Pad - Optional
9	120-0398	1	Plunger, Bypass Valve	21	526-0065	2	Washer, Flat - Copper (5/16" Screw)
10	505-0057	1	Plug, Pipe	22	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")
11	102-0850	1	Base, Oil				
12	505-0056	2	Plug, Pipe - Oil Drain (1/2")				

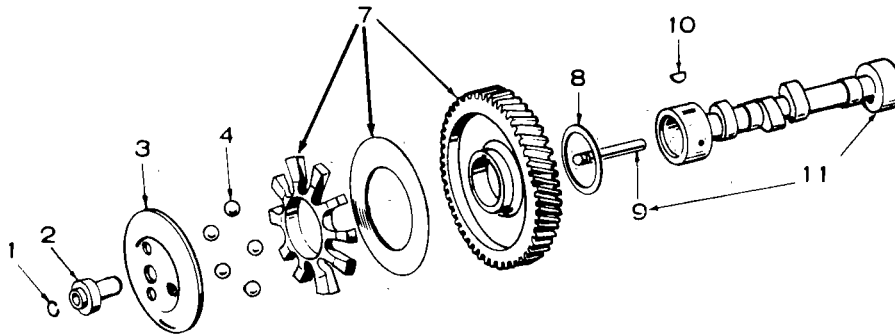
Crankshaft and Flywheel



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	Washer, Lock - Spring (7/16")	11	104-0043	1	Washer, Gear Retaining (Special)
3	526-0017	1	Washer, Flat (7/16" Screw)	12	104-0032	1	Gear, Crankshaft
4	815-0400	3	Screw, Machine - Truss Head (1/4-20 x 1/2")	13	515-0263	1	Key, Flywheel
5	821-0014	4	Screw, Cap - Hex Head Locking (5/16-18 x 1/2")		515-0284	1	**Kit, Woodruff
6	134-3920	1	Guard, Flywheel	14	515-0001	1	+*Key, Crankshaft Gear
7	104-0779	1	Gear, Ring	15	515-0103	1	*Key, Crankshaft Stub
8	134-3871	1	Flywheel (Includes Ring Gear) Without Imbalance Weight	16	515-0198	1	+Key, Crankshaft Stub
	134-4734	1	With Imbalance Weight - Hi Flo (Identify by 1/2" Drilled Holes on Backside of Flywheel)	17	192-0398	1	Sheave, Rope - Engines with Magneto Ignition
	160-1301	1	Engines with Magneto Ignition - Electric Start - Hi Flo	18	821-0016	4	Screw, Cap - Hex Washer Head (5/16-18" x 3/4")
	160-1307	1	Engines with Magneto Ignition - Recoil Start - Hi Flo	19	190-0546	1	PTO Shaft (2" Pilot) 1-7/16" Diameter
9	104-1328	1	Crankshaft 1-1/8" Dia. Stub x 2.54" Lg. (Includes Parts Marked *)		190-0687	1	1" Diameter
	104-1699	1	1-7/32" Dia. Stub x 3.058" Lg. (Includes Parts Marked +)	20	190-0577	1	Kit, Shaft
	104-1432	1	Taper Stub (Includes Parts Marked *)		541-0222	1	Front PTO, 1-7/16" Diameter
	104-1330	1	1.125" Dia. Stub x 3.776" Lg.	21	515-0007	1	PTO, 1" Diameter
				22	104-1694	1	Key, Machine (1/4 x 2")
				23	515-0146	1	+Spacer, Crankshaft
							+Key, Woodruff - #18 (1/4 x 1-1/8")

* - Parts Included in 104-1432 Crankshaft Kit.
 + - Parts Included in 104-1350 Crankshaft Kit.
 * - Parts Included in 104-1328 Crankshaft Kit.

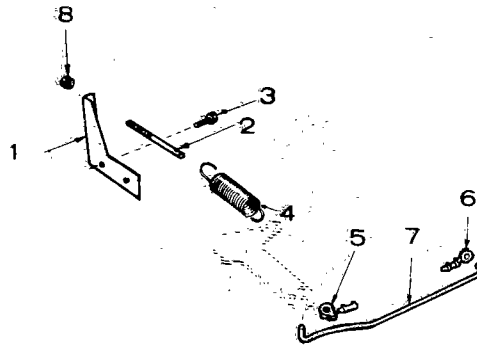
Camshaft



C-1084

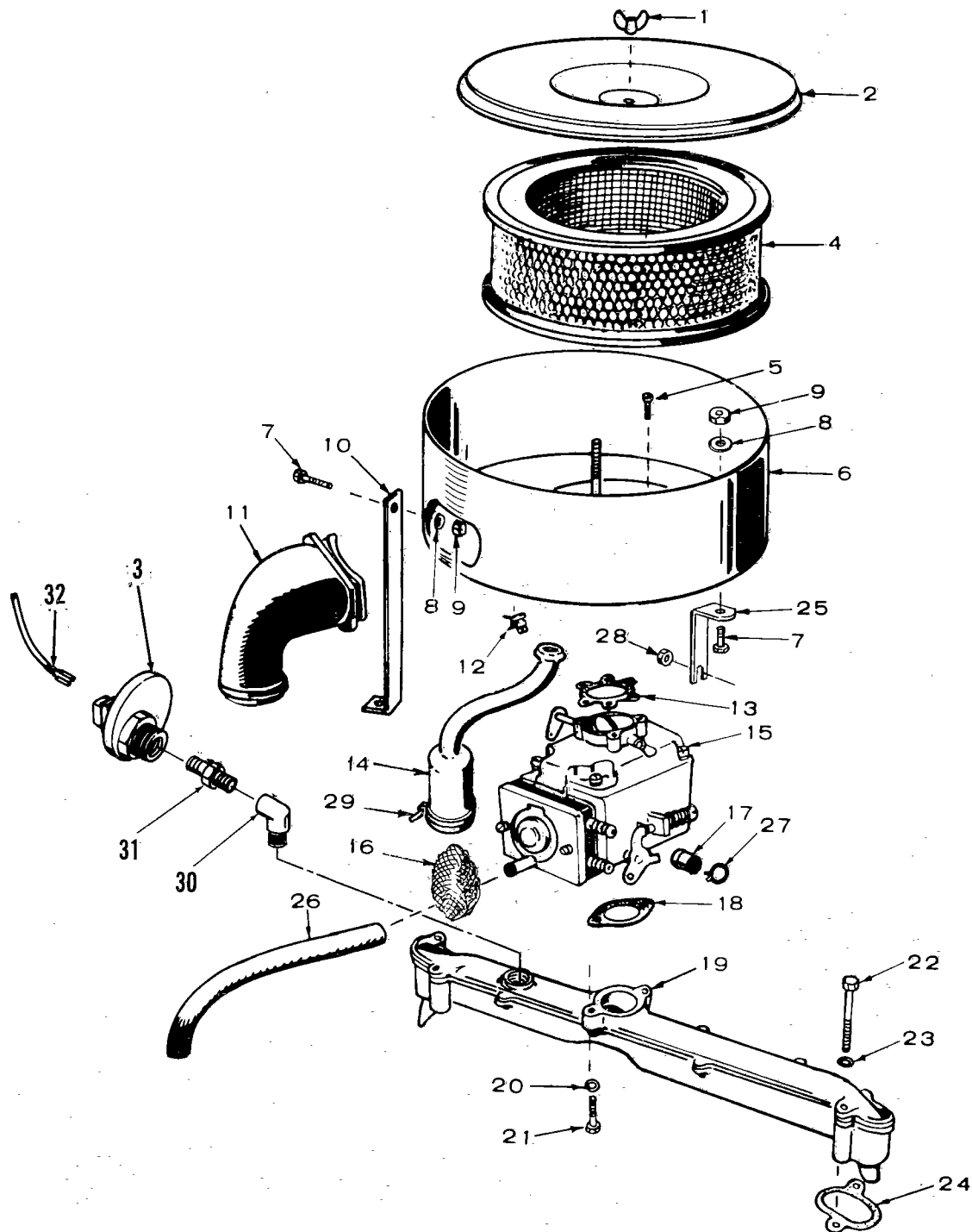
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-0078	1	Ring, Retaining	7	105-0332	1	Gear Assembly, Camshaft (Includes Plate and Spacer)
2	150-1519	1	Hub, Governor Cup	8	105-0541	1	Washer, Thrust (Special)
3	150-1520	1	Cup, Governor	9	150-0075	1	Pin, Center
4			Ball, Governor	10	515-0001	1	Key, Woodruff - Camshaft Gear
	510-0015	5	5 Ball Governor	11	105-0402	1	Camshaft (Includes Center Pin)
	510-0015	10	10 Ball Governor				

Governor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-1433	1	Bracket, Governor Control	5	870-0278	1	Clip, Retaining - Control Rod
2	150-0694	1	Stud, Adjusting	6	518-0004	1	Clip, Retaining - Control Rod
3	821-0010	2	Screw, Cap - Hex Head Locking (1/4-20 x 1/2")	7	150-1350	1	Rod, Control
4	150-1214	1	Spring, Governor	8	870-0131	1	Nut, Governor Adjusting

Fuel System

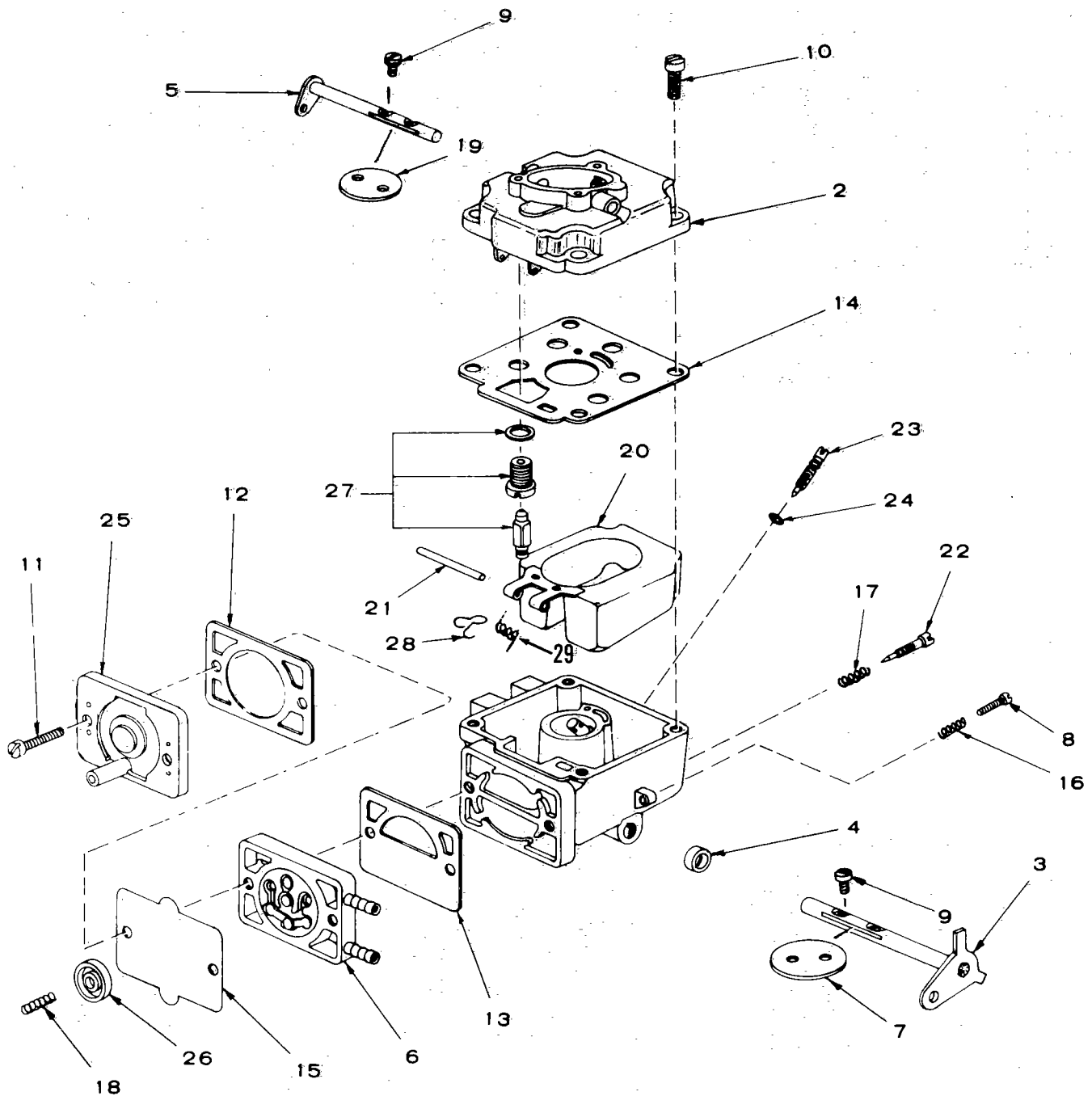


Fuel System

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)	19		1	Manifold, Intake
2	140-1168	1	Cover, Air Cleaner		154-2206	1	Models Without Vacuum Switch
3	148-0367	1	Switch, Vacuum (Optional)		154-2339	1	Models With Vacuum Switch
4	140-1216	1	Filter, Air (Paper)	20	850-0040	2	Washer, Lock - Spring (1/4")
5	815-0463	3	Screw, Machine - Slotted Head (#10-32 x 3/8")	21	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")
6	140-1213	1	Housing, Air Cleaner	22	800-0033	4	Screw, Cap - Hex Head (5/16-18 x 2")
7	800-0003	2	Screw, Cap - Hex Head (1/4-20 x 1/2")	23	850-0045	4	Washer, Lock - Spring (5/16")
8	853-0013	3	Washer, Lock - ET (1/4")	24	154-1744	2	Gasket, Manifold to Block
9	862-0001	2	Nut, Hex (1/4-20)	25	140-1313	1	Support, Air Cleaner - Front (2.37" Lg)
10	140-1198	1	Support, Air Cleaner (4.4" Lg)	26	503-0707	1	Hose, Vacuum Port Tube (1/4" ID)
11	140-1549	1	Tube, Air Intake	27	503-0731	1	*Clamp, Loop
12	518-0328	2	Clip, Cable	28	870-0257	1	Nut, Hex - Selflock (5/16-18)
13	140-1215	1	*Gasket, Air Cleaner to Carburetor	29	332-0941	1	Tie, Breather Tube
14	123-1277	1	Tube, Crankcase Breather	30	502-0020	1	Elbow, Street
15	142-0660	1	Carburetor Assembly (See Separate Page for Components) (Includes Mounting Gasket) (Includes Parts Marked *)	31	502-0815	1	Nipple, Hex - Restricted
16	123-1417	1	Filter, Breather Tube	32	336-8464	1	Lead, Vacuum Switch to Oil Pressure Switch (18")
17	149-1321	1	*Cap, Fuel Outlet				
18	145-0438	1	*Gasket, Carburetor Mounting				

* - Parts Included in 142-0660 Carburetor Kit Assembly.

Carburetor (With Integral Fuel Pump) Components (142-0660)



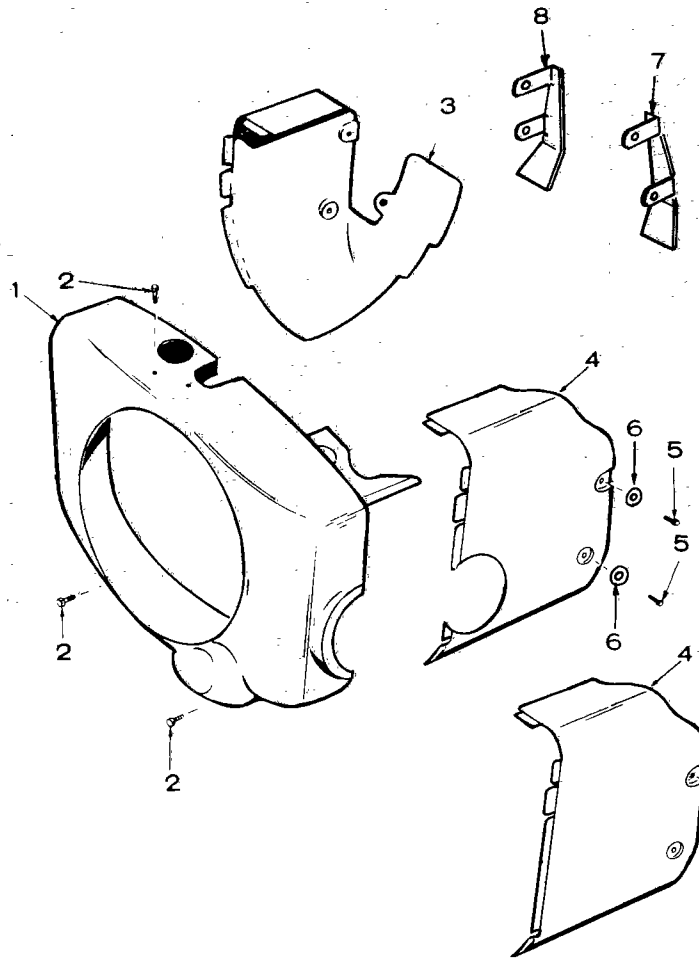
**Carburetor (With Integral Fuel Pump) Components
(142-0660)**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	142-0660	1	Carburetor, Complete (With Integral Fuel Pump)	11	142-0540	2	Screw, Pump Cover to Body
	142-0571	1	*Gasket Set (Includes Parts Marked †)	12	142-0541	1	†Gasket, Pump Cover
	142-0570	1	Repair Kit (Includes Parts Marked *)	13	142-0542	1	†Gasket, Inlet Plate
		1	Body, Lower - Not Sold Separately	14	142-0572	1	†Gasket, Carburetor Body
2		1	Body, Upper - Not Sold Separately	15	142-0555	1	†Diaphragm, Fuel Pump
3	142-0534	1	*Shaft, Throttle	16	142-0544	1	Spring, Throttle Stop
4	142-0535	1	†"O" Ring, Throttle Shaft Seal	17	142-0282	1	*Spring, Idle Needle
5	142-0536	1	Shaft, Choke	18	142-0545	1	*Spring, Fuel Pump
6	142-0537	1	*Valve Assembly, Reed Fuel Pump	19	142-0546	1	Fly, Choke
7	142-0538	1	Fly, Throttle	20	146-0380	1	Float Assembly
8	142-0064	1	Screw, Throttle Stop	21	142-0548	1	*Shaft, Float
9	142-0334	4	*Screw, Fly to Shaft	22	142-0016	1	*Needle, Idle
10	142-0539	4	*Screw, Upper to Lower Body	23	142-0549	1	Needle, Power
				24	142-0550	1	†"O" Ring, Seal - Power Needle
				25	142-0551	1	Cover, Pump
				26	142-0552	1	*Plate, Drive - Fuel Pump
				27	142-0553	1	*Valve, Assembly, Float
				28	142-0554	1	Clip, Retaining - Float Valve
				29	146-0379	1	Spring, Float Assist

† - Parts Included in 142-0571 Gasket Set.

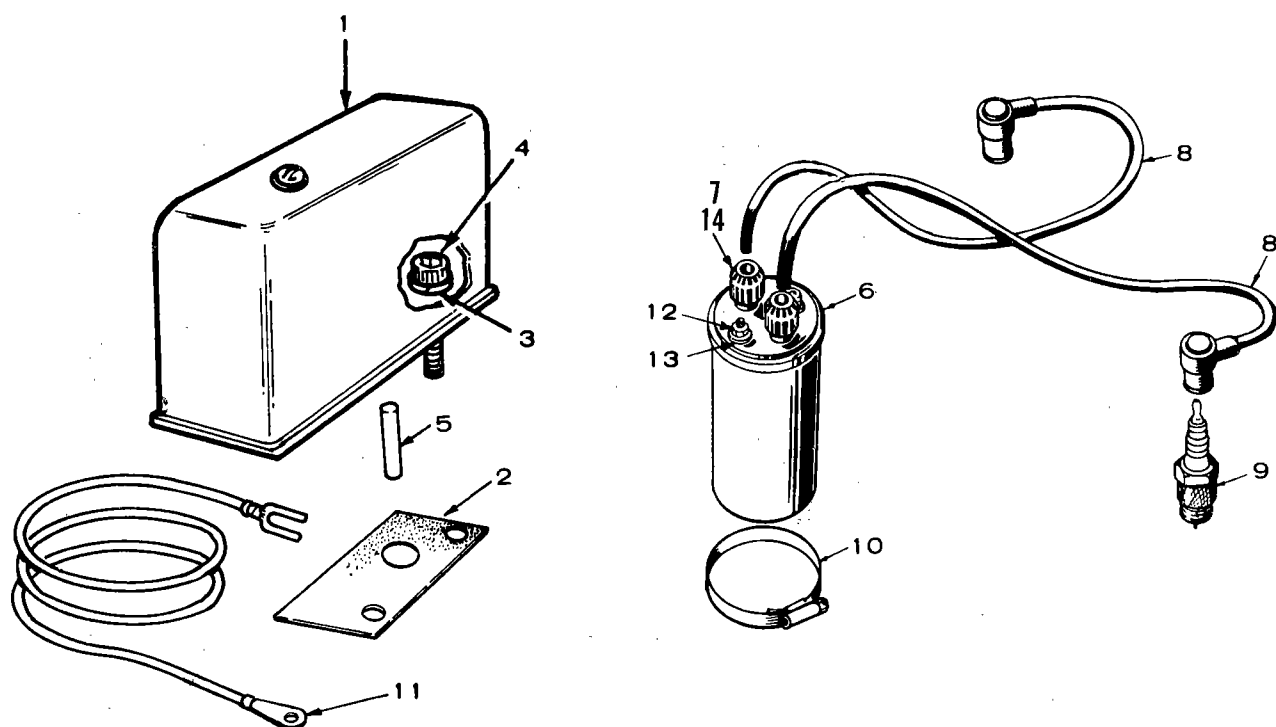
* - Parts Included in 142-0570 Repair Kit.

Air Housing



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-4430	1	Housing, Blower	5	815-0290	4	Screw, Cap - Hex Head (1/4-20 x 5/8")
	134-4400	1	Sets Without Oil Filter	6	526-0021	4	Washer, Flat (1/4" Screw)
2	815-0261	3	Screw, Cap - Hex Head (1/4-20 x 7/16")	7	134-3582	1	Baffle, Cylinder Head - Right Side
3	134-4371	1	Housing, Cylinder Air - Left Side	8	134-3583	1	Baffle, Cylinder Head - Left Side
4			Housing, Cylinder Air (Right Side)				
	134-3400	1	Use Sets without Oil Filter - Free Flo				
	134-3518	1	Use Sets with Oil Filter - Free Flo				

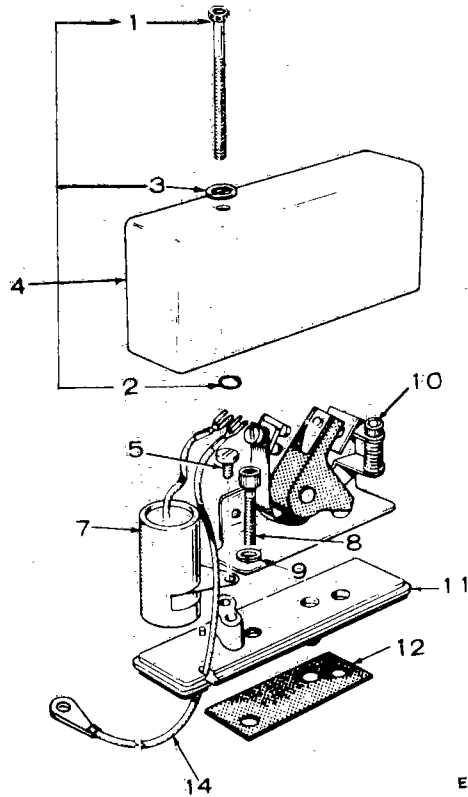
Ignition



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
7	166-0604	2	Cap, Coil Terminal (Part of Coil)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	167-1602	2	Cable, Spark Plug
9	167-0298	2	Plug, Spark
10	503-0311	1	Clamp, Coil
11	336-2378	1	Lead, Breaker Box to Coil
12	166-0554	2	Nut, Hex (Special)
13	850-2005	2	Washer, Lock - Spring (Metric)
14	166-0614	2	Bushing, Rubber (Inside of Cap 166-0604)

Breaker Box

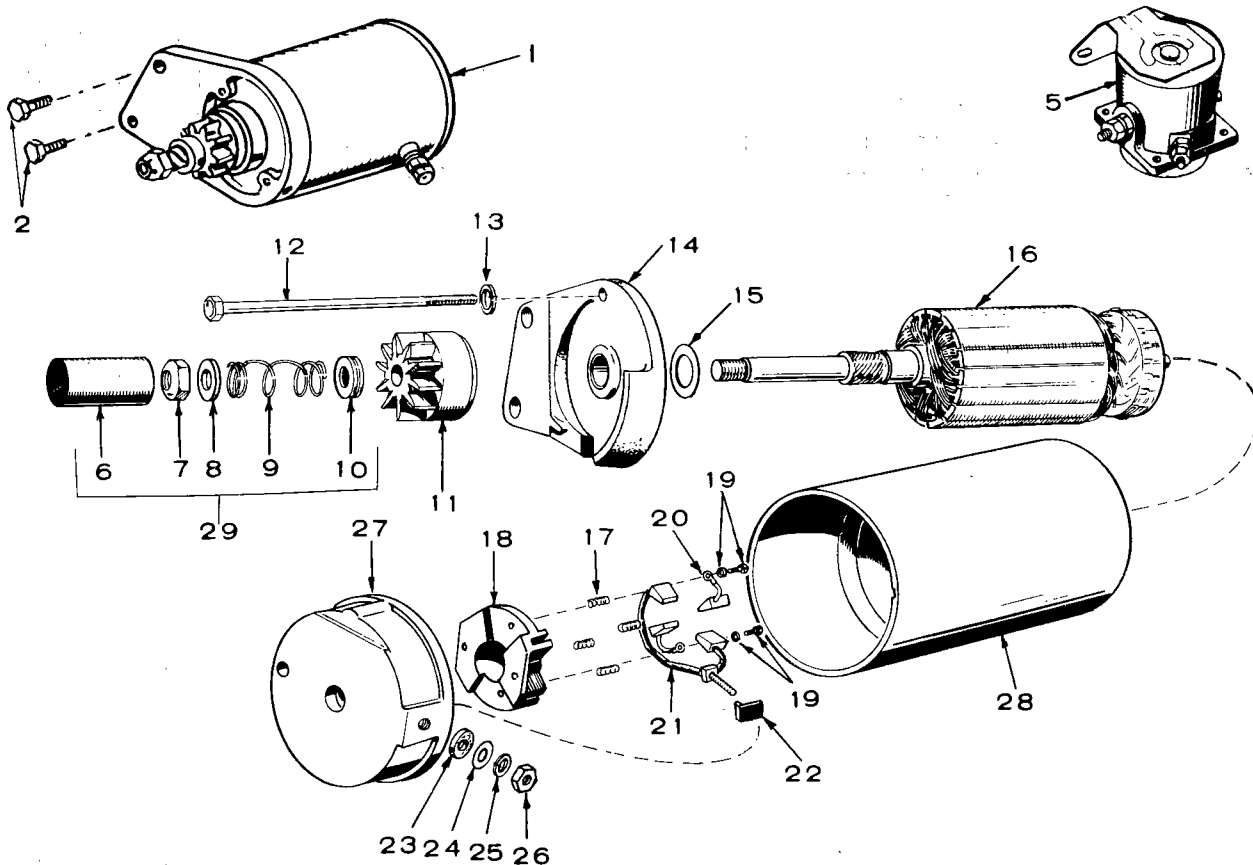


ES-1217

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1303	1	Breaker Box (Includes Parts Marked *)	8	802-0034	2	*Screw, Cap - Socket Head (1/4-20 x 3/4")
1	802-0022	1	*Screw, Cap - Hex Socket (#10-24 x 1-1/2")	9	850-0040	2	*Washer, Lock (1/4")
2	509-0065	1	*Retainer ("O" Ring)	10	160-1183	1	*Point Set, Breaker
3	526-0008	1	*Washer, Flat (#10 Screw)	11	160-1219	1	*Base, Breaker
4	160-1285	1	*Cover, Breaker Box	12	160-1150	1	*Gasket, Breaker Box
5	815-0358	1	*Screw, Cap - Slotted (#8-32 x 5/16")	14	336-2378	1	Lead, Breaker Box to Coil
7	312-0246	1	*Condenser		160-1311	1	Tune Up Kit (Includes Points and Condenser)

* - Parts Included in 160-1303 Breaker Box.

Starter Motor



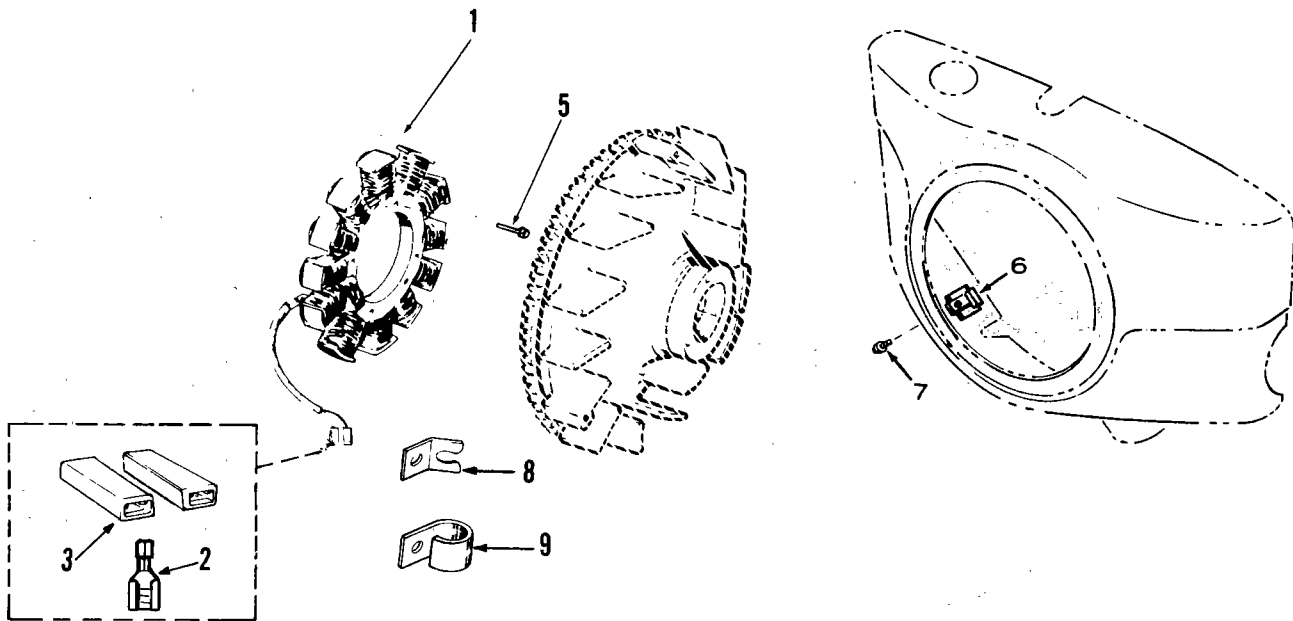
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1171	1	Starting Motor, Complete	18	#	1	+Brush Holder
2	815-0570	2	Screw, Cap - Hex Washer Head (5/16-18 x 1")	19	#	1	+Screw and Lock Washer
5	307-1031	1	Solenoid, Start - Relay	20	#	2	*+Brush, Ground
6	#	1	xCover, Dust	21	#	1	*+Stud and Brush Assembly, Input
7	#	1	xNut, Stop	22	#	1	+Bushing, Insulation
8	#	1	xWasher, Flat	23	#	1	Washer, Insulation
9	#	1	xSpring, Anti-Drift	24	#	1	+Washer, Flat
10	#	1	xSpacer, Dust Cover	25	#	1	+Washer, Lock
11	191-1156	1	Drive Assembly	26	#	1	+Nut
12	191-1220	2	Screw, Cap - Hex Head	27	191-1040	1	Cap Assembly, Commutator (Includes Parts Marked +)
13	850-0040	2	Washer, Lock - Spring (1/4")	28	#	1	Housing
14	191-1219	1	Cap Assembly, Drive End		191-1222	1	Repair Package (Includes Parts Marked *)
15	191-1038	1	Washer, Armature Thrust	29	191-1359	1	Dust Cover Assembly (Includes Parts Marked x)
16	191-1221	1	Armature				
17	#	4	*+Spring				

+ - Parts Included in 191-1040 Cap Assembly.
 * - Parts Included in 191-1222 Repair Package.
 # - Not Sold Separately.
 x - Parts Included in 191-1359 Dust Cover Assembly.

OPTIONAL EQUIPMENT SECTION

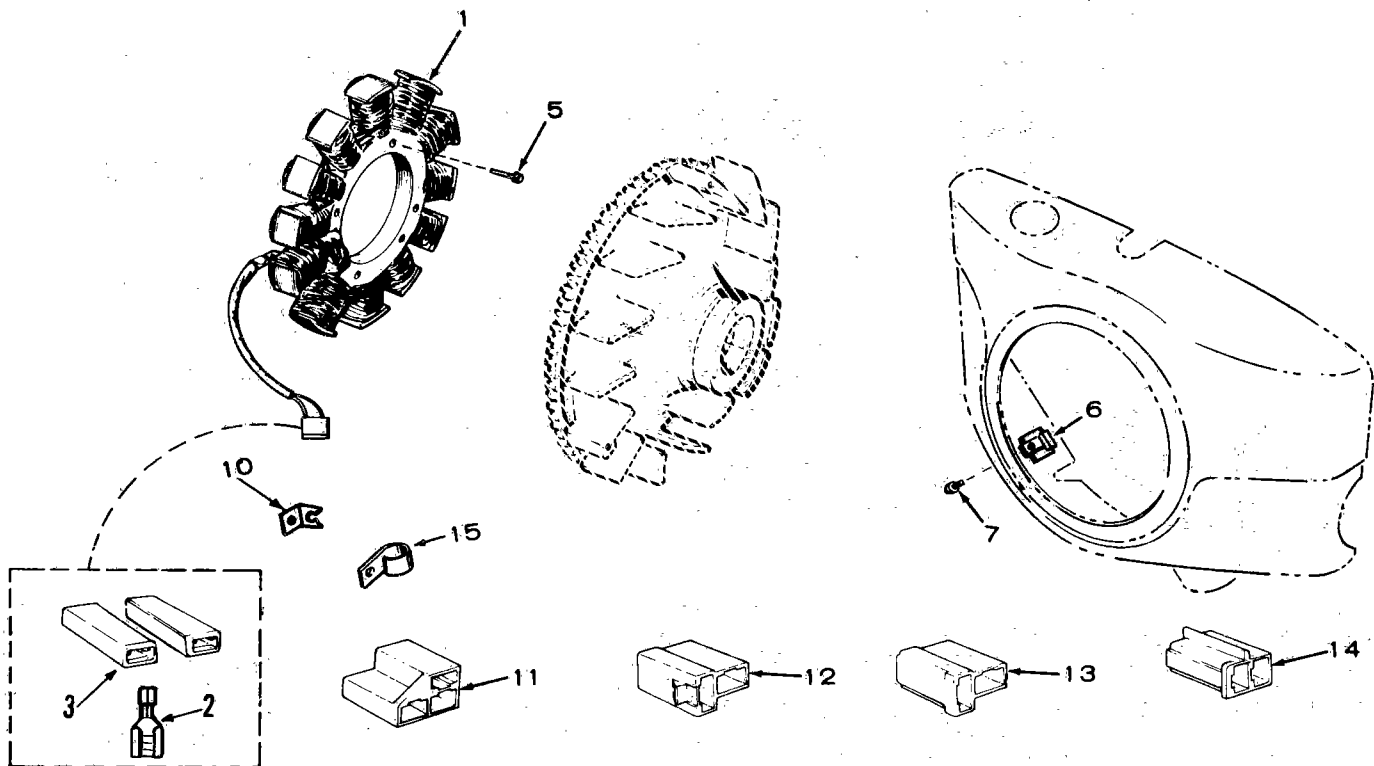
This section contains illustrated parts listing of factory installed options for these industrial engines. Options may not be applicable to all models; for field conversions additional parts are usually required. Optional parts listed in this section are in addition or in place of those shown in the standard engine parts section.

Option 1
Flywheel Alternator - 20 Ampere (Phelon)



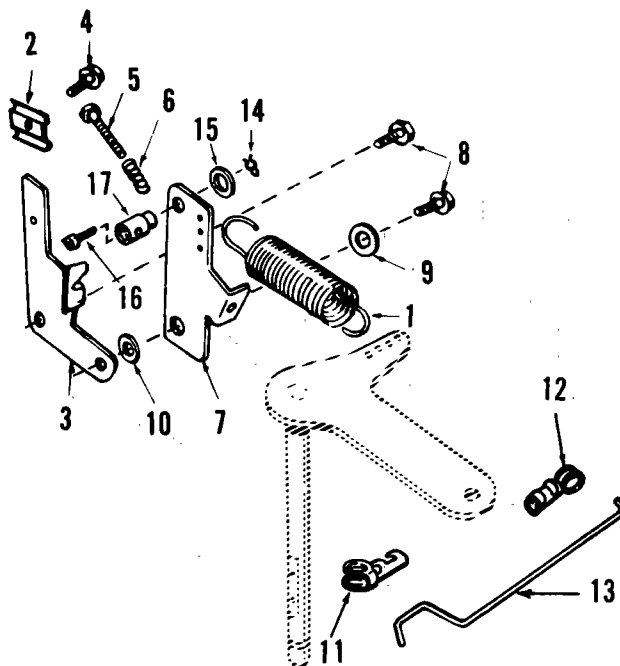
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1276	1	Stator (Includes Terminals and Connector Bodies)	6	191-1748	1	Regulator, Voltage
2	332-2423	2	Terminal, Stator Leads	7	821-0007	1	Screw, Cap - Hex Washer Head (1/4-20 x 1/4")
3	323-1257	2	Kit, Body Terminal Connector	8	167-0188	1	Clip, Cable
5	815-0470	3	Screw, Machine - Hex Head - Self Lock (#10-32 x 1-1/2")	9	332-2319	1	Clamp, Wire - Alternator Leads

Option 2
Flywheel Alternator - 15 Ampere (Phelon)



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)	10	167-0188	1	Clip, Cable
2	332-2423	3	Terminal Stator Leads	11	323-0853	1	Body, Terminal Connector
3	323-1257	2	Kit, Body Terminal Connector	12	323-1085	1	Body, Terminal Connector
5	815-0593	3	Screw, Machine - Hex Head - Self-Lock (#10-32 x 1-3/8")	13	323-0892	1	Body, Terminal Connector
6	191-1206	1	Regulator, Voltage	14	323-0890	1	Body, Terminal Connector
7	821-0007	1	Screw, Cap - Hex Washer Head (1/4-20 x 1/4")	15	332-2319	1	Clamp, Wire - Alternator Leads

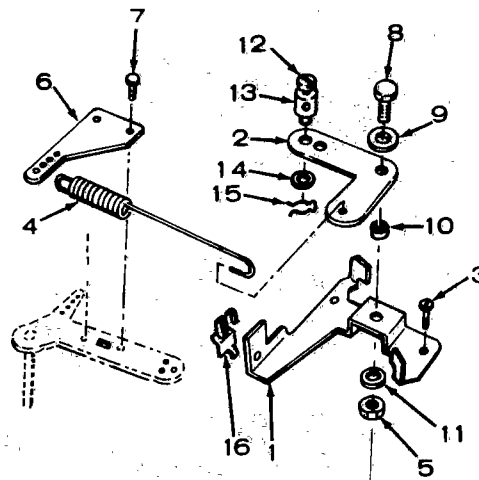
Option 3
Governor Control - Variable Speed
(Side Pull)



FS-1274

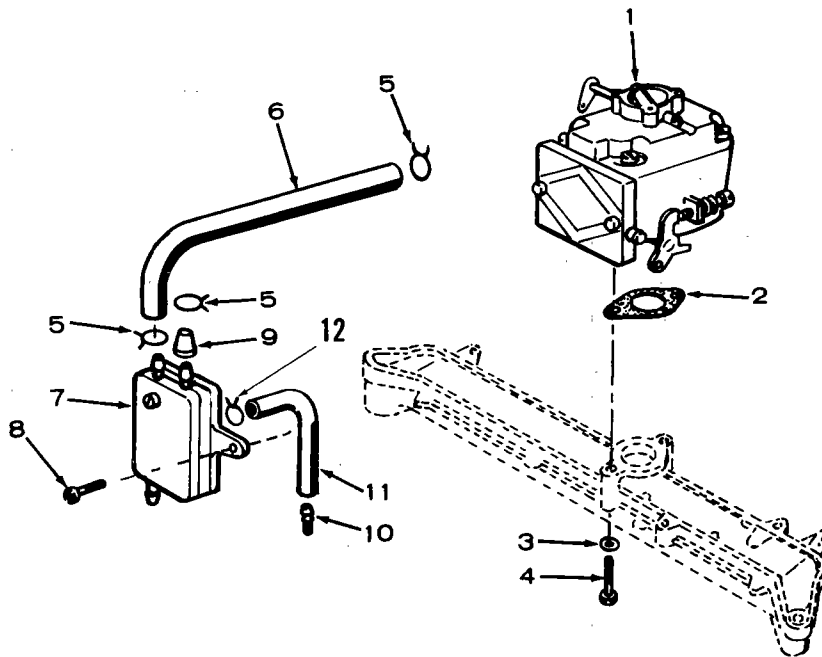
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-1214	1	Spring, Governor	9	526-0021	2	Washer, Flat (17/64" ID x 3/4" OD x 1/16")
2	153-0514	1	Clamp, Cable	10	150-1269	1	Bushing, Control Arm
3	150-1725	1	Bracket, Cable	11	518-0406	1	Clip, Retaining - Control Rod to Governor Shaft
4	815-0359	1	Screw, Tapping - Hex Head (#10-32 x 7/8")	12	518-0004	1	Clip, Retaining - Control Rod to Carburetor
5	815-0510	1	Screw, Tapping - Hex Head (#6-32 x 5/8")	13	150-1924	1	Rod, Governor Control
6	150-1398	1	Spring, Idle Setting	14	516-0059	1	Pin, Cotter
7	150-1345	1	Use With Swivel	15	526-0006	1	Washer, Flat (#12 Screw)
	150-1576	1	Use Without Swivel	16	815-0104	1	Screw, Machine - Fillister Head (#8-32 x 5/16")
8	815-0436	2	Screw, Cap - Hex Washer Head (1/4-20 x 1/2")	17	152-0155	1	Swivel, Cable Holding

Option 4
Governor Control - Variable Speed
(Front Pull)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-1810	1	Bracket, Governor Control	9	526-0021	1	Washer, Flat (1/4" Screw)
2	150-1366	1	Link, Governor Control	10	150-1269	1	Bushing, Governor Control
3	815-0439	3	Screw, Cap - Hex Head Locking (#8 x 1/2")	11	850-0040	1	Washer, Lock - Spring (1/4")
4	150-1369	1	Spring, Governor	12	815-0104	1	Screw, Machine - Fillister Head (#8-32 x 5/16")
5	862-0001	1	Nut, Hex (1/4-20)	13	152-0155	1	Swivel, Cable - Throttle
6	150-1367	1	Adapter, Governor Arm	14	526-0006	1	Washer, Flat (#12 Screw)
7	815-0181	2	Screw, Cap - Hex Head W/ET (#10-32 x 1/2")	15	516-0059	1	Pin, Cotter
8	800-0004	1	Screw, Cap - Hex Head (1/4-20 x 5/8")	16	518-0176	1	Clip, Cable - Throttle

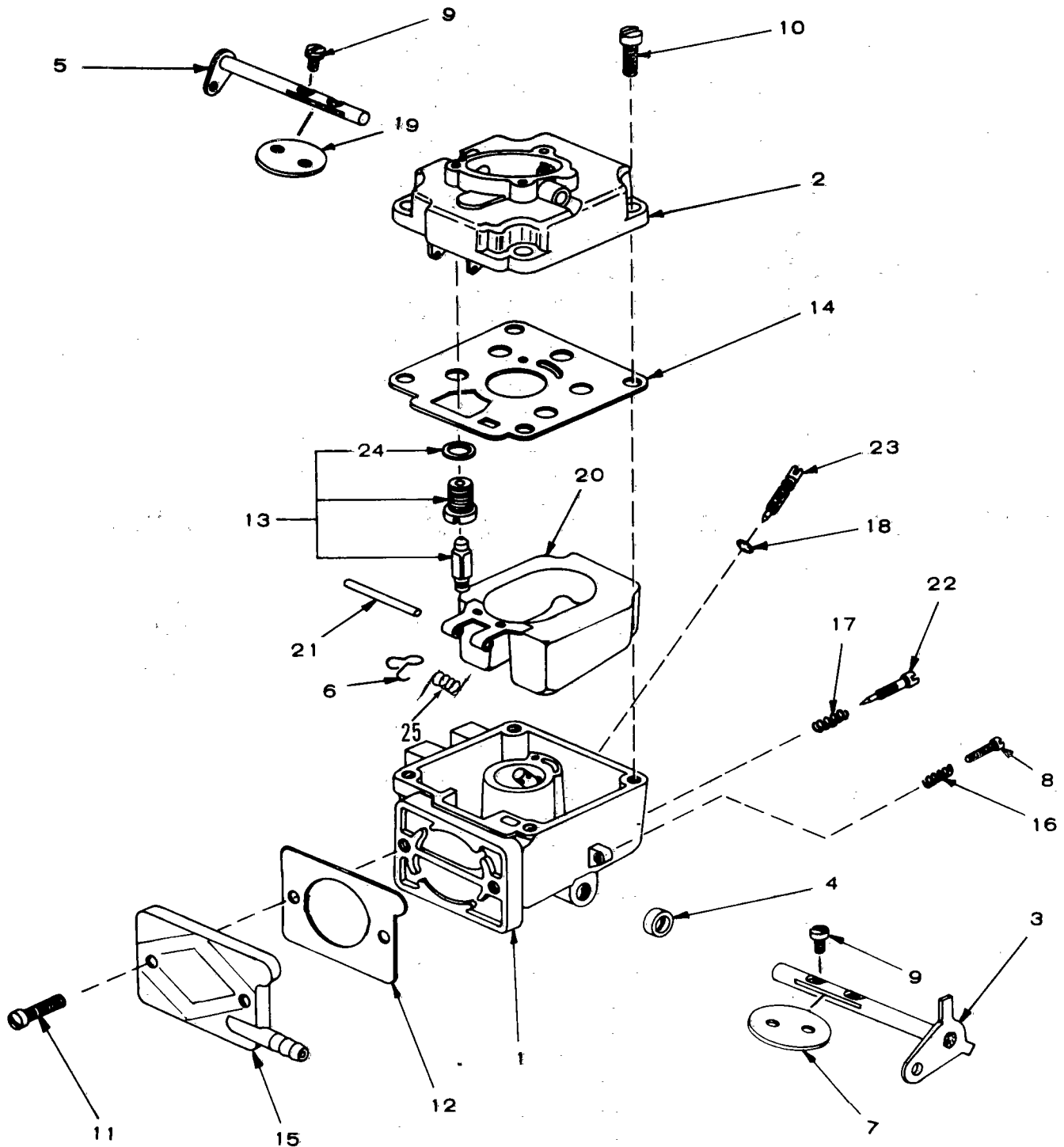
Option 5 Fuel System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	142-0661	1	Carburetor Assembly - Gasoline (See Separate Page for Components) (Includes Mounting Gasket) (Includes Parts Marked +)	6	503-0664	1	Hose, Fuel (1/4" ID x 11" Lg)
2	145-0438	1	Gasket, Carburetor Mounting	7	149-2187-01	1	Pump, Fuel (Includes Parts Marked *)
3	850-0040	2	Washer, Lock - Spring (1/4")	8	815-0555	2	Screw, Tapping - Pan Head (10-24 x 5/8")
4	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")	9	149-1321	1	+Cap, Fuel Outlet
5	503-0731	3	+Clamp, Hose (7/16")	10	149-1299	1	Tube, Vacuum Port
				11	503-0663	1	Line, Impulse
				12	503-0731	1	Clamp, Wire (1/2")

+ - Parts Included in 142-0661 Carburetor Assembly Kit.

Option 6
Carburetor Components
(Without Integral Fuel Pump)

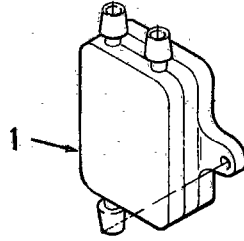


**Option 6
Carburetor Components
(Without Integral Fuel Pump)**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	142-0661	1	Carburetor, Gasoline (Includes Mounting Gasket)	10	142-0539	4	Screw, Upper to Lower Body
	142-0592	1	Repair Kit (Includes Parts Marked †)	11	142-0539	2	Screw, Inlet Plate
	142-0591	1	Gasket Kit (Includes Parts Marked *)	12	142-0559	1	*Gasket, Inlet Plate
1		1	Body, Lower (Not Sold Separately)	13	142-0553	1	†Valve Assembly, Float
2		1	Body, Upper (Not Sold Separately)	14	142-0572	1	*Gasket, Carburetor Body
3	142-0534	1	†Shaft, Throttle	15	149-1983	1	Plate, Inlet (Includes Cap and Clamp)
4	142-0535	1	*O-Ring, Packing - Throttle Shaft	16	142-0544	1	Spring, Throttle Stop
5	142-0536	1	Shaft, Choke	17	142-0282	1	†Spring, Idle Needle
6	142-0554	1	Clip, Retaining - Float Valve	18	142-0550	1	*O-Ring, Packing - Power Needle
7	142-0538	1	Fly, Throttle	19	142-0546	1	Fly, Choke
8	142-0064	1	Screw, Throttle Stop	20	146-0380	1	Float Assembly
9	142-0334	4	†Screw, Fly to Shaft	21	142-0548	1	†Shaft, Float
				22	142-0016	1	†Needle, Idle
				23	142-0549	1	Needle Assembly, Power
				24	142-0523	1	*Gasket, Float Valve Seat
				25	146-0379	1	Spring, Float Assist

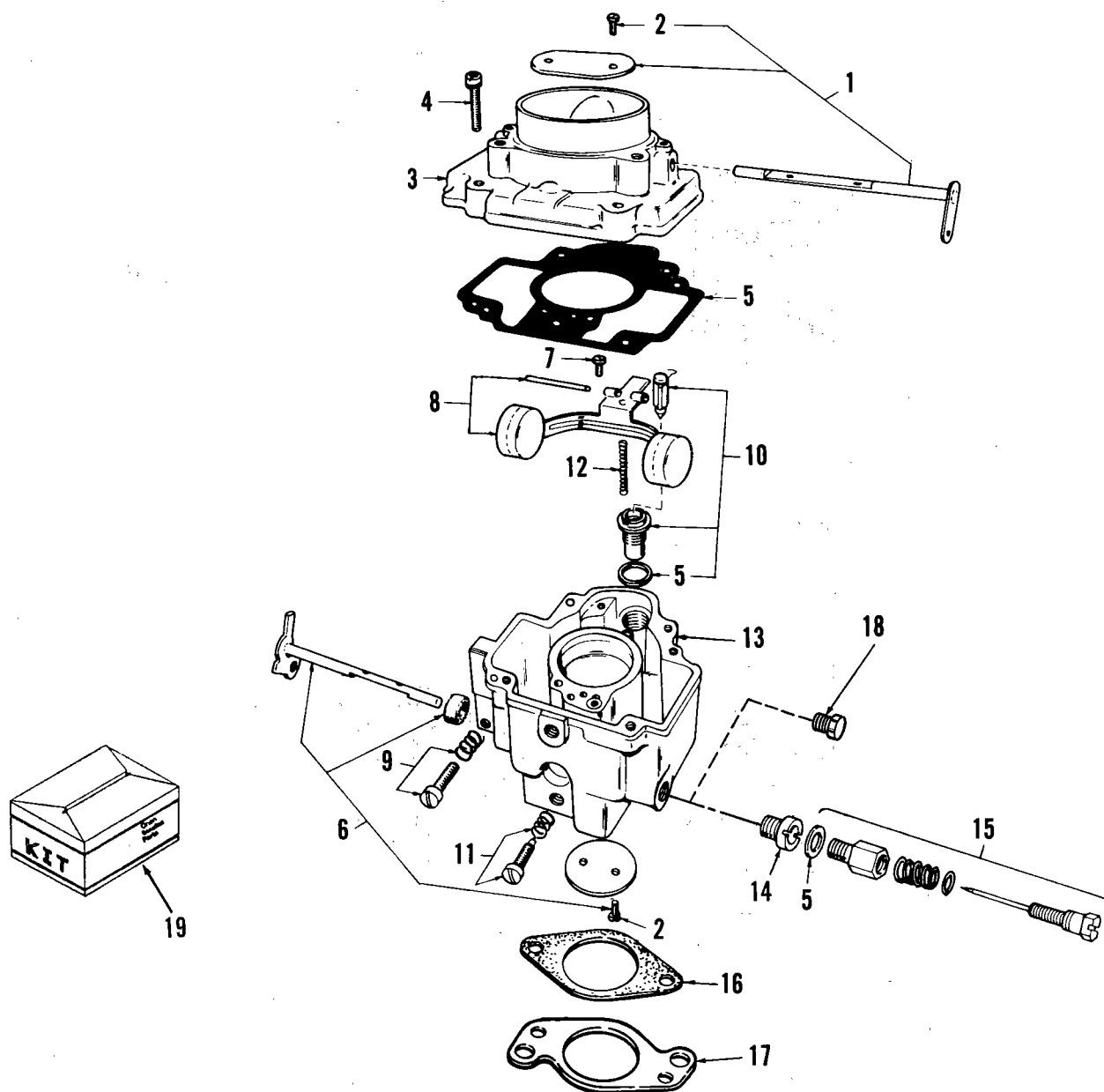
† - Parts Included in 142-0592 Repair Kit.
* - Parts Included in 142-0591 Gasket Kit.

Option 7
Fuel Pump



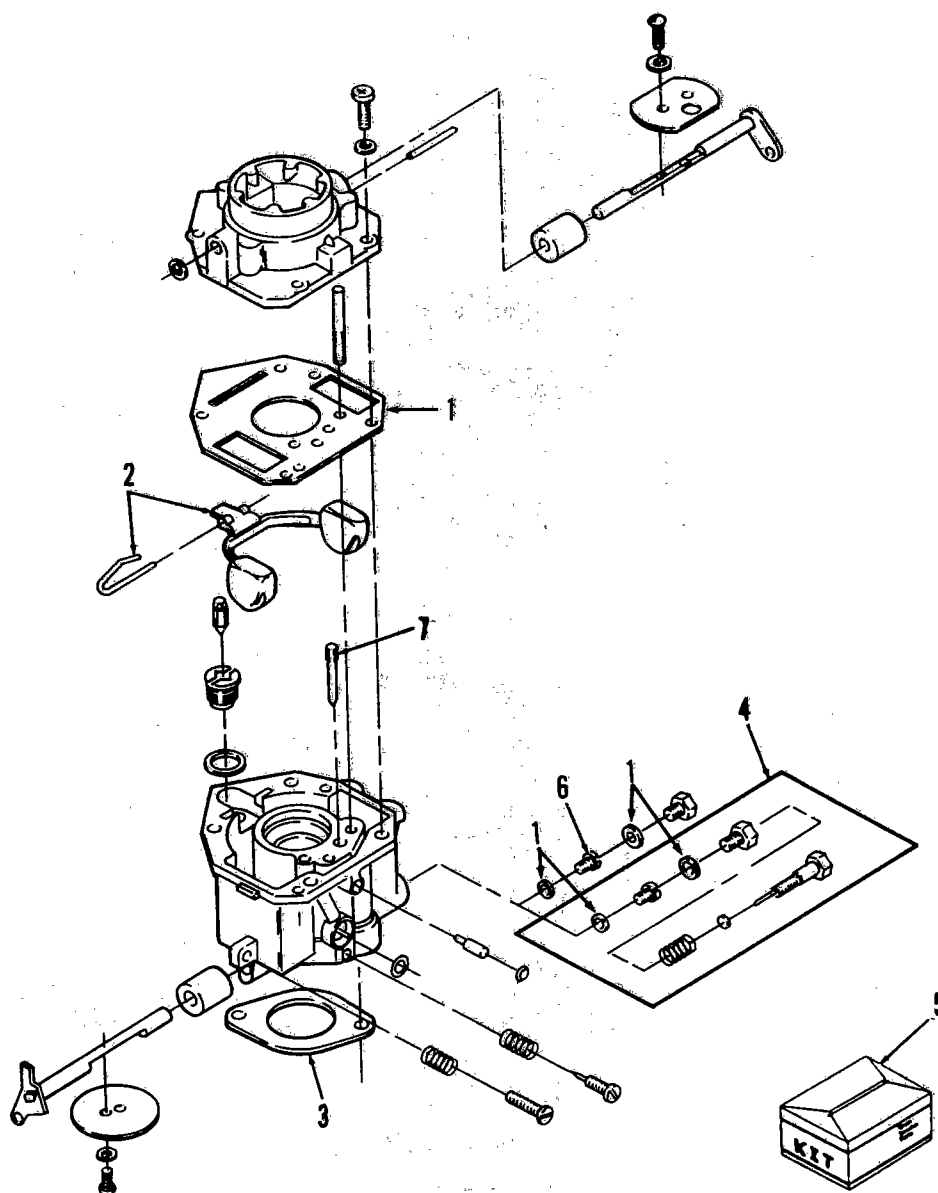
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	149-2187-01	1	Pump, Fuel - Vacuum, Pulse				

Option 8
Carburetor Components
(Adjustable Main Jet) (Fixed Main Jet)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Carburetor, Complete (Includes Mounting Gasket)	10	146-0289	1	Valve and Seat Package
	146-0309	1	Adjustable Main Jet	11	146-0209	1	Idle Needle Package
	146-0344	1	Fixed Main Jet	12	146-0208	1	Spring Buoyancy
1	146-0260	1	Choke Shaft Package	13		1	Body (Not Sold Separately)
2	146-0142	4	Screw, Valve Mounting	14	146-0238	1	Jet, Power
3		1	Intake, Air (Not Sold Separately)		146-0316	1	Adjustable (Use on Carburetor 146-0309)
4	146-0247	4	Screw, Body to Intake				Fixed (Use on Carburetor 146-0344)
5	146-0220	1	Gasket Kit	15	146-0214	1	Power Needle Package
6			Shaft, Throttle (Package)	16	154-0733	1	Gasket, Carburetor Mounting
	146-0267	1	Use on Carburetor 146-0309	17	154-1977	1	Adapter, Carburetor - Use on Carburetor 146-0344
	146-0259	1	Use on Carburetor 146-0344	18	146-0278	1	Screw, Plug - Fixed Main Jet
7	146-0222	1	Screw, Lever Pin	19	146-0228	1	Kit, Repair
8	146-0262	1	Float Package				
9	146-0261	1	Idle Speed Adjusting Screw Package				

**Option 8A
Carburetor Components (Nikki)
Fixed Main Jet**

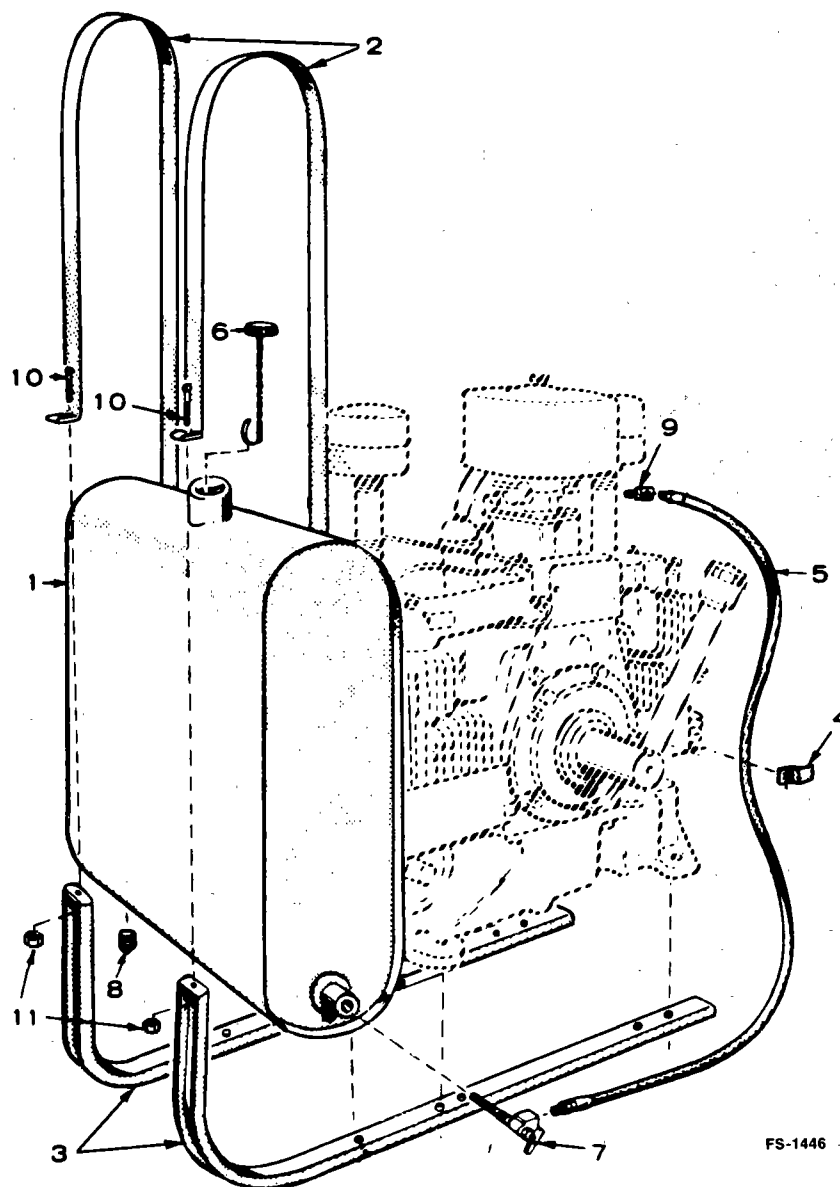


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	146-0428	1	Carburetor, Complete (Includes Mounting Gasket) With Semi-Automatic Choke
1	146-0438	1	+Kit, Gasket
2	146-0437	1	Kit, Float
3	154-0733	2	+Gasket, Carburetor Mounting

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
4	146-0327	1	Kit, Variable Jet - Optional (High Altitude Application)
5	146-0432	1	Kit, Repair (Includes Parts Marked +)
6	146-0396	1	Jet, Power
7	146-0425	1	Jet, Idle

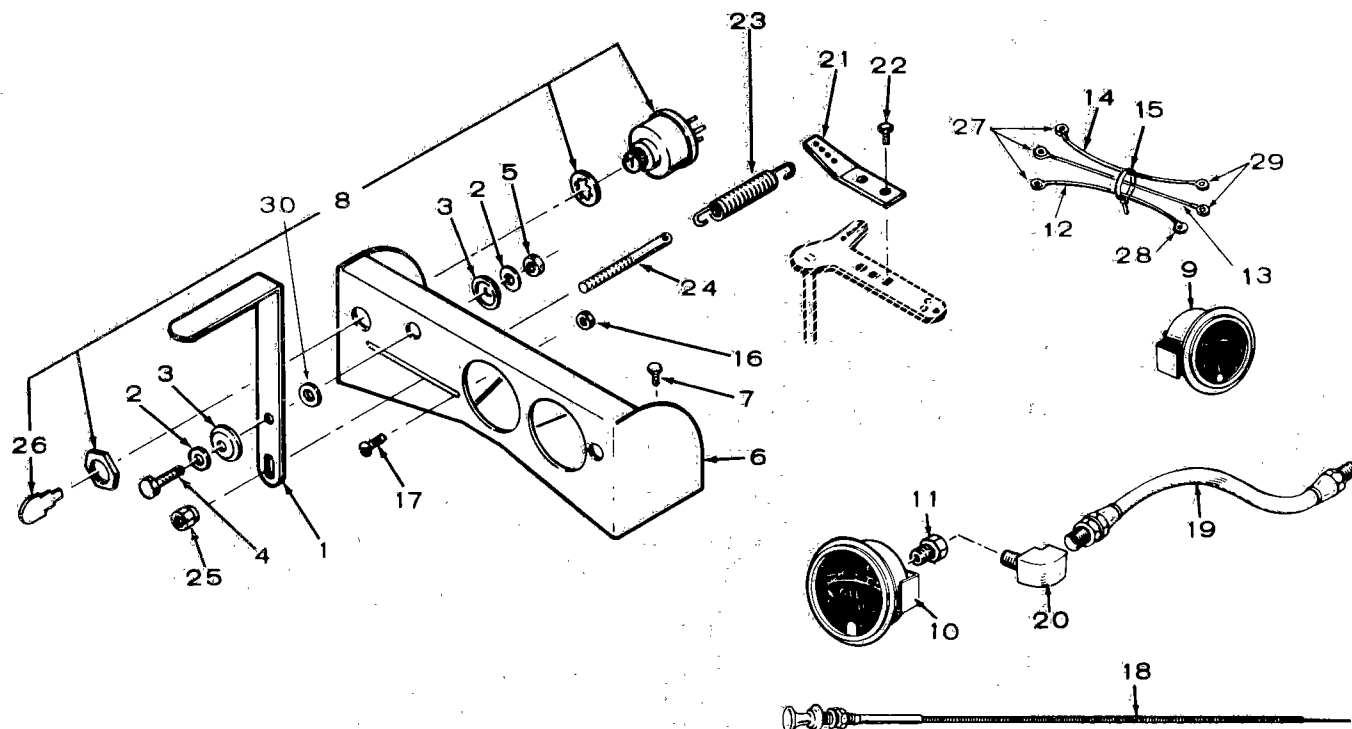
+ - Parts Included in 146-0432 Repair Kit.

Option 9
Fuel Tank (Side Mounted)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	159-0597	1	Kit, Fuel Tank - Complete	7	504-0013	1	Valve, Shut-off
1	159-0981	1	Tank, Fuel (Less Cap)	8	505-0057	1	Plug, Tank Drain
2	159-0596	2	Strap, Fuel Tank	9	502-0020	1	Elbow, Carburetor Inlet
3	159-0595	2	Bracket, Fuel Tank	10	813-0108	2	Screw, Machine - Round Head (#10-32 x 1-1/2")
4	134-0599	1	Clip, Fuel Line	11	870-0053	2	Nut, Hex (#10-32)
5	501-0008	1	Line, Fuel				
6	159-0020	1	Cap, Fuel Tank				

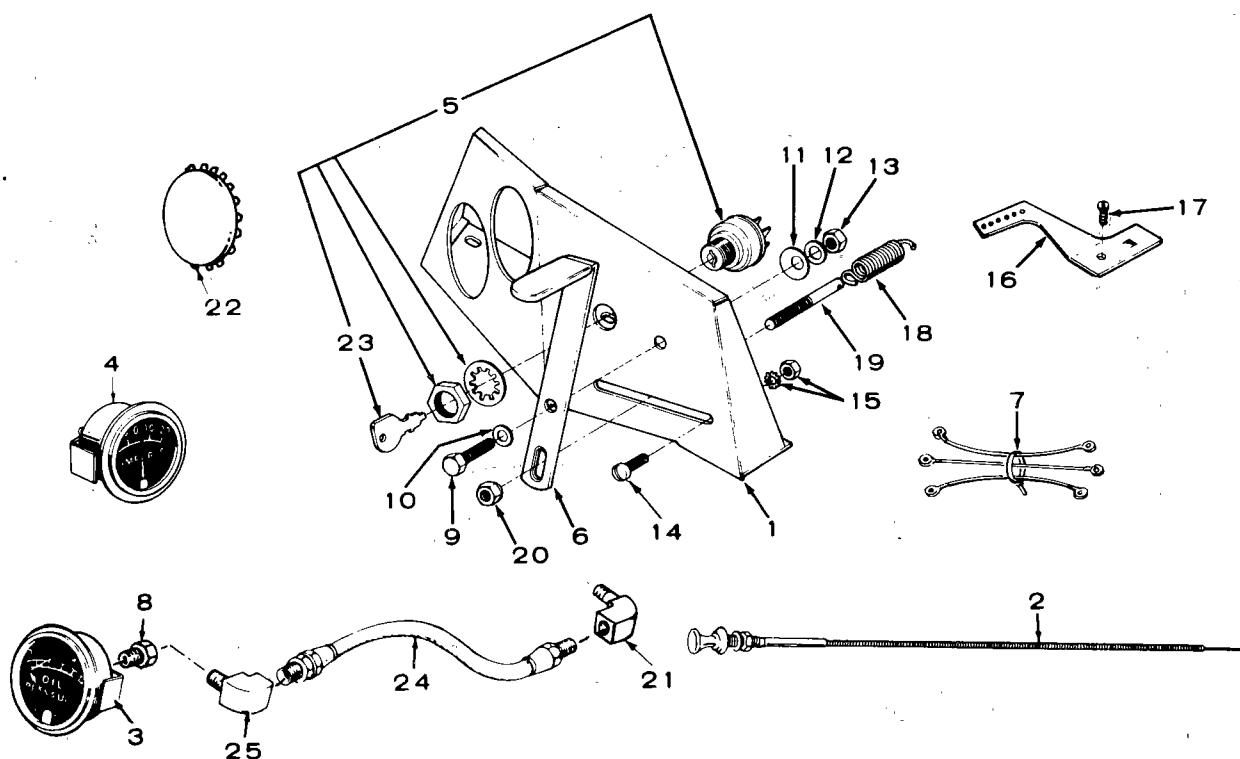
Option 10 Control (Engine)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	152-0198	1	Lever, Throttle Control
2	526-0015	2	Washer, Flat (1/4" Screw)
3	152-0041	2	Washer, Tension - Cup
4	800-0005	1	Screw, Cap - Hex Head (1/4-20 x 3/4")
5	870-0065	1	Nut, Lock - Hex (1/4-20)
6	301-4041	1	Panel, Control
7	821-0009	2	Screw, Lock - Hex (1/4-20 x 5/16")
8	308-0385	1	Switch and Key, Ignition
9	302-0060	1	Ammeter, DC (20-0-20)
10	193-0005	1	Gauge, Oil Pressure
11	502-0017	1	Connector, Inverted Female
12		1	Lead, Electrical - #16 Wire, 26" Lg.
13		1	Lead, Electrical - Switch to Coil - #16 Wire, 13" Lg.
14		1	Lead, Electrical - Switch to Ammeter - #16 Wire, 7" Lg.

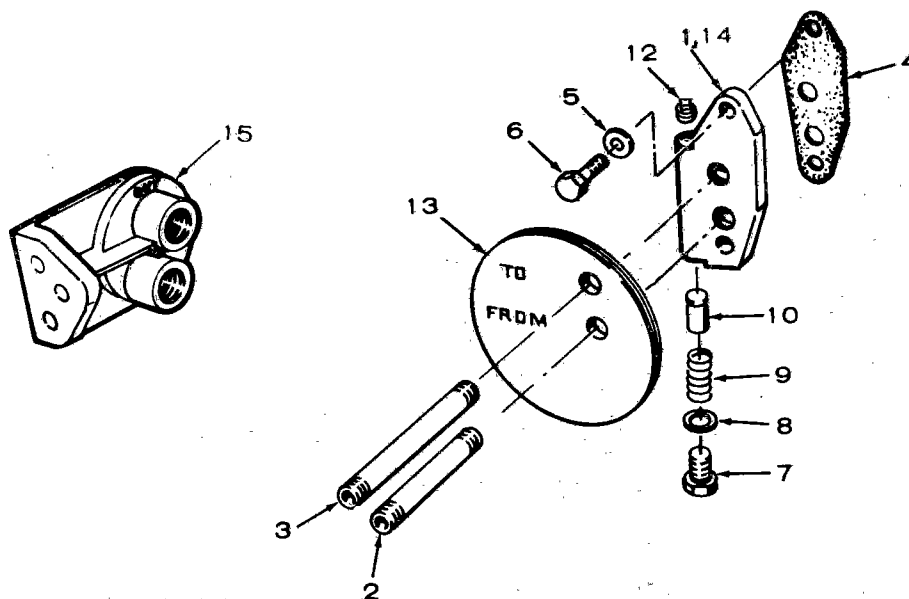
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
15	332-0942	1	Tie, Cable
16	870-0131	2	Nut, Hex (10-32)
17	815-0199	2	Screw, Machine - Fillister Head (10-32 x 5/16")
18	153-0097	1	Cable, Choke
19	501-0004	1	Line, Oil - Flexible
20	502-0020	1	Elbow, Street (90°)
21	150-1544	1	Adapter, Governor Arm
22	815-0194	2	Screw, Tapping (10-32 x 3/8")
23	150-0098	1	Spring, Governor
24	150-0096	1	Stud, Speed Adjusting
25	150-0621	1	Nut, Special - Speed Adjusting Stud
26	308-0490	1	Key, Ignition Switch
27	332-0325	1	Terminal, Ring
28	332-1408	1	Terminal, Faston
29	332-1993	1	Terminal, Receptacle
30	526-0016	1	Washer, Flat (1/4" Screw)

Option 10A Control (Engine)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	301-5065	1	Panel, Control	14	815-0199	2	Screw, Machine - Fillister Head (#10-32 x 5/16")
2	153-0097	1	Cable, Choke	15	870-0131	2	Nut, Hex with ET (#10-32)
3	193-0005	1	Gauge, Oil Pressure	16	150-1749	1	Extension, Governor Arm
4	302-0060	1	Ammeter (20-0-20)	17	815-0181	1	Screw, Tapping - Hex Head with ET (#10-32 x 1/2")
5	308-0385	1	Switch, Ignition	18	150-1214	1	Spring, Governor
6	152-0224	1	Lever, Throttle Control	19	152-0177	1	Stud, Speed Adjusting
7	338-1219	1	Harness, Wiring	20	150-0621	1	Nut, Speed Adjusting Stud
8	502-0051	1	Coupling, Female	21	502-0005	1	Elbow, Inverted - Female (90°)
9	800-0005	1	Screw, Cap - Hex Head (1/4-20 x 3/4")	22	517-0009	AR	Plug, Dot Button
10	526-0016	1	Washer, Flat (1/4" Screw)	23	308-0490	1	Key, Ignition Switch
11	152-0041	1	Washer, Tension - Cup	24	501-0009	1	Line, Oil - Flexible (36" Lg)
12	526-0015	2	Washer, Flat (1/4" Screw)	25	502-0065	1	Elbow, Inverted - Male (45°)
13	870-0065	1	Nut, Hex - Self Locking (1/4-20)				

Option 11 Oil Filter (Remote)



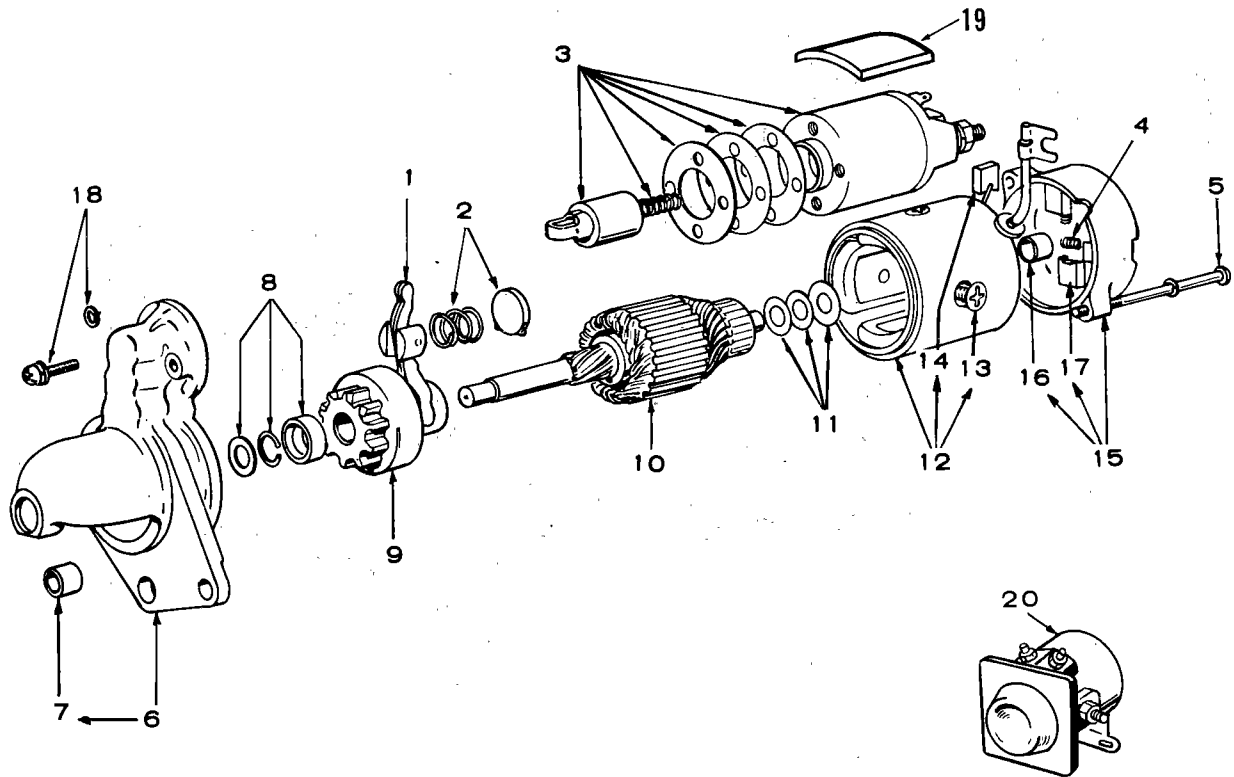
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	122-0369	1	+Adapter, Remote Oil Filter
2	505-0791	1	Nipple, Pipe (1/4 x 7")
3	505-0776	1	Nipple, Pipe (1/4 x 6")
4	122-0375	1	Gasket, Adapter
5	526-0065	2	Washer, Flat - Copper (5/16" Screw)
6			Screw, Cap - Hex Head
	800-0031	2	Prior to 6/86 (5/16-18 x 1-1/2")
	800-0030	2	Begin 6/86 (5/16-18 x 1-1/4")
7	801-0047	1	+Screw, Cap - Hex Head (3/8-24 x 5/8")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	526-0066	1	+Washer, Flat - Copper (3/8" Screw)
9	120-0140	1	+Spring, By-Pass Valve
10	120-0398	1	+Valve, By-Pass
12	505-0057	1	+Plug, Pipe - Square Head
13	508-0184	1	Grommet, Air Seal
14	122-0473	1	Adapter Assembly, Remote Oil Filter (Includes Parts Marked +)
15	122-0476	1	Base Assembly, Remote Oil Filter

+ - Parts Included in 122-0473 Adapter Assembly.

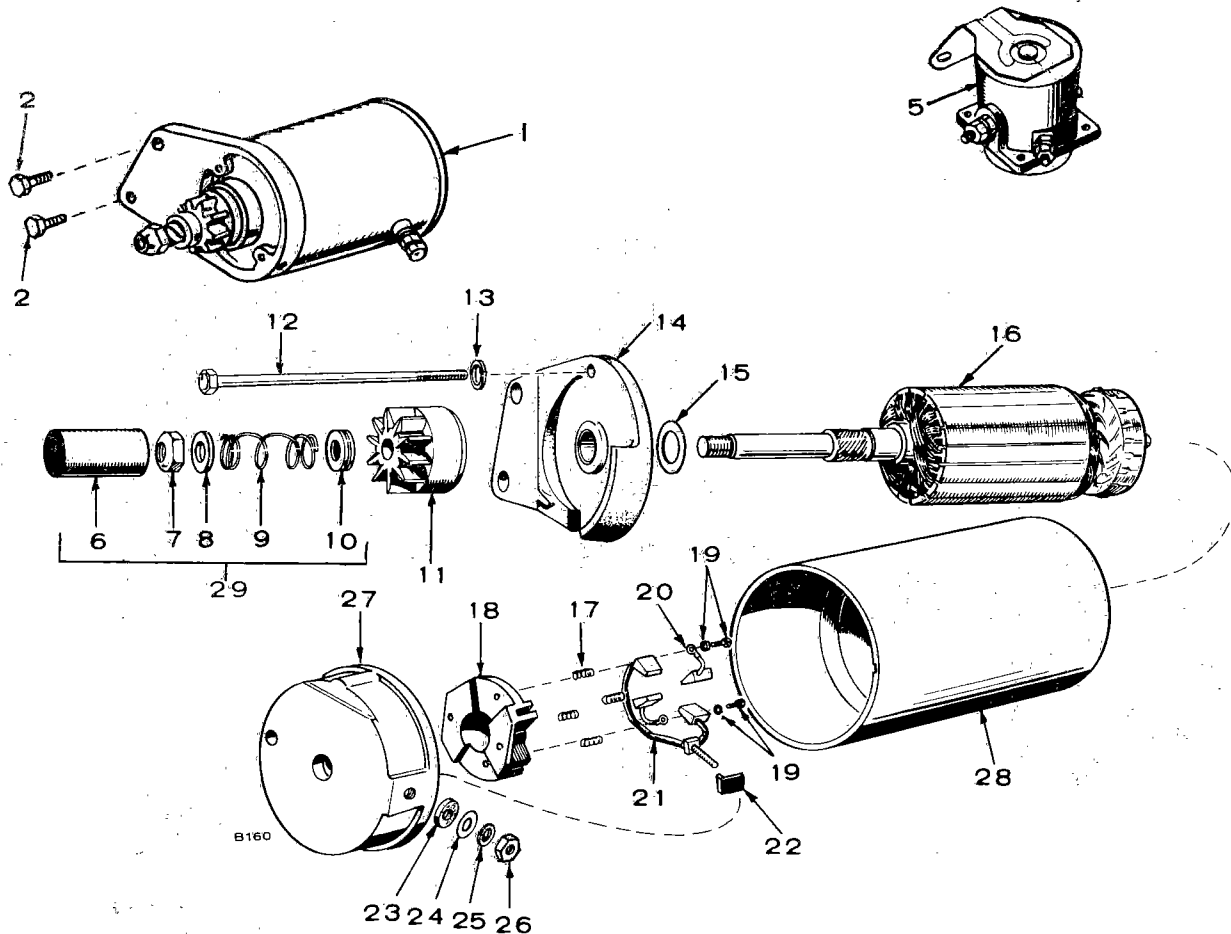
NOTE: Hoses vary with each installation.
Purchase locally, hoses with a minimum pressure rating of 150 PSI (1035 kPa).

Option 12
Starter Motor Components - Solenoid Shift



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	191-0915	1	Motor, Starting	11	191-0975	1	Washer Set
1	191-0965	1	Lever Assembly	12	191-0976	1	Yoke Assembly (Includes Brush and Screws)
2	191-0966	1	Spring Set	13	191-0977	4	Screw, Flat Head Machine
3	191-0967	1	Switch Assembly	14	191-0978	1	Brush (+)
4	191-0968	2	Spring, Bush	15	191-0979	1	Rear Bracket Assembly (Includes Bearing and Brush)
5	191-0969	2	Bolt, Through	16	191-0980	1	Bearing, Rear
6	191-0970	1	Bracket Assembly, Front (Includes Bearing)	17	191-0981	1	Brush (-)
7	191-0971	1	Bearing Front	18	191-0982	1	Screw Set
8	191-0972	1	Stopper Set, Pinion	19	191-1076	1	Seal, Starter Air
9	191-0973	1	Clutch Assembly	20	307-0845	1	Relay, Start Solenoid
10	191-0974	1	Armature				

Option 12A Start Motor Components (Heavy Duty)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-0933	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
5	307-1031	1	Relay, Start Solenoid	22	§	1	†Brushing, Insulation - Input Stud
6	§	1	xCover, Dust	23	§	1	†Washer, Insulation - Input Stud
7	§	1	xNut, Stop	24	§	1	†Washer, Flat - Input Stud
8	§	1	xWasher, Stop Nut	25	§	1	†Washer, Lock - Input Stud
9	§	1	xSpring, Anti-drift	26	§	1	†Nut, Securing - Input Stud
10	§	1	xSpacer, Dust Cover	27	191-1040	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	191-1041	1	1	Repair Kit, Brush, Spring and Stud (Includes Parts Marked *)
13	850-0040	2	Washer, Lock (1/4")	29	191-1359	1	Dust Cover Assembly (Includes Parts Marked x)
14	191-1037	1	Cap Assembly, Drive End				
15	191-1038	1	Washer, Armature Thrust - Special				
16	191-1039	1	Armature				
17	§	4	†*Spring, Brush				
18	§	1	†Brush Holder				
19	§	2	†Screw and Lockwasher				

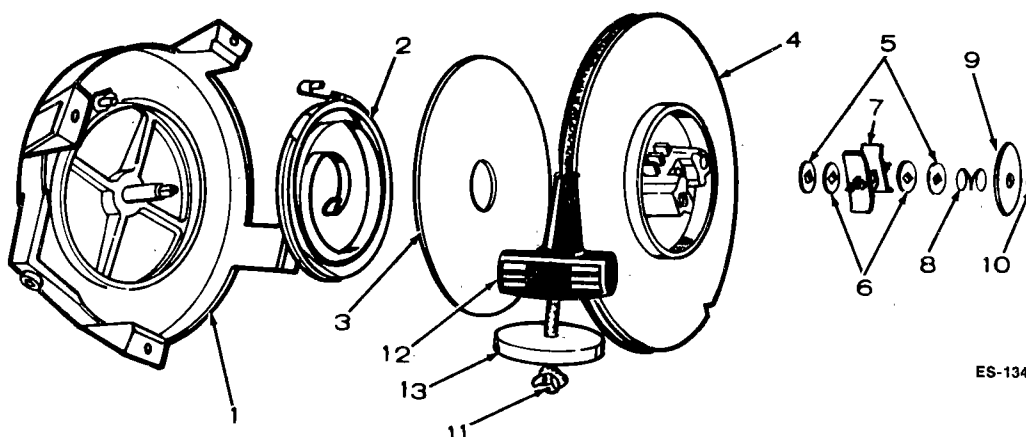
† - Included in the 191-1040 Cap Assembly.

* - Included in the 191-1041 Brush, Spring and Stud Kit.

§ - Not Sold Separately.

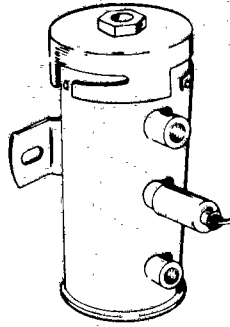
x - Included in 191-1359 Dust Cover Assembly.

Option 13
Recoil Starter Components



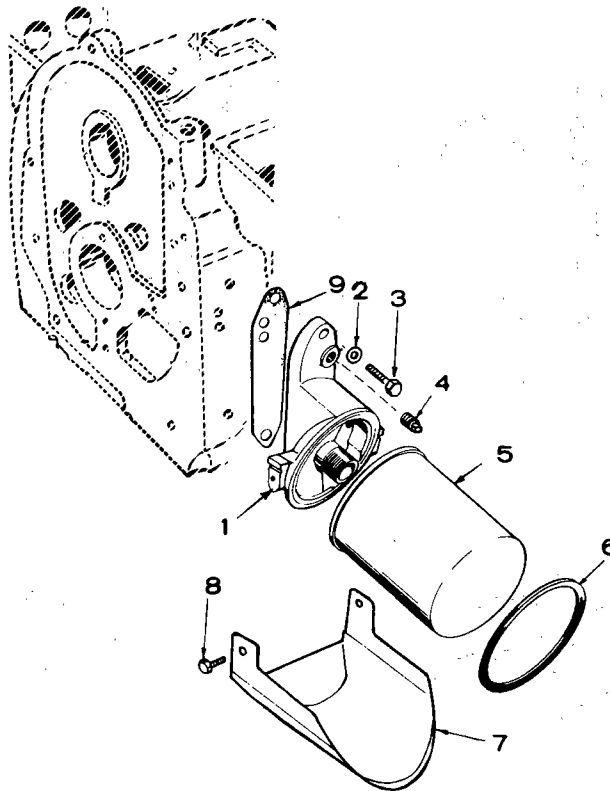
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	192-0392	1	Starter, Recoil - Complete	7	192-0416	1	Shoe Assembly, Friction
1	192-0422	1	Cover, Starter	8	192-0415	1	Spring, Brake
2	192-0421	1	Spring, Rewind	9	526-0142	1	Washer, Flat
3	192-0420	1	Shield Spring	10	518-0205	1	Ring, Snap
4	192-0419	1	Rotor	11	192-0412	1	Cord, Pull
5	192-0418	2	Washer, Steel	12	192-0411	1	Handle, Pull
6	192-0417	2	Washer, Fibre	13	192-0410	1	Insert, Handle

Option 14
Fuel Pump (Electric)



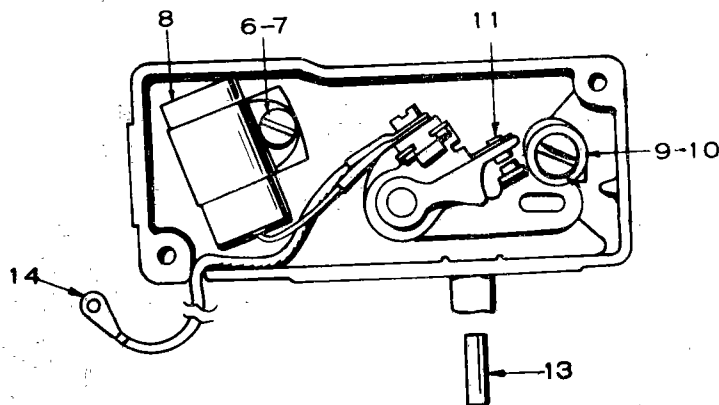
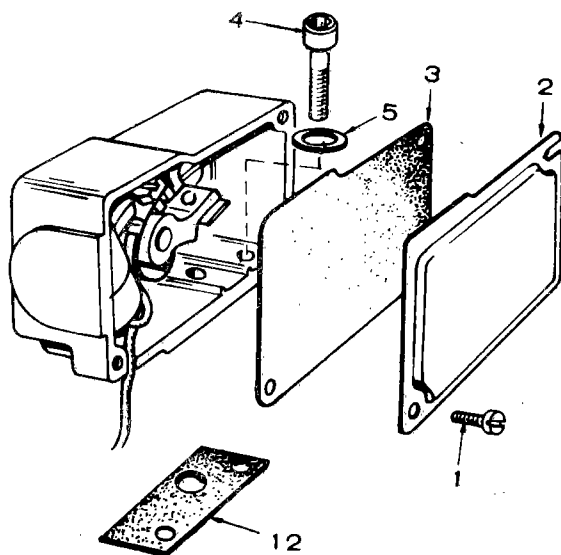
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	149-1828	1	Pump, Fuel

Option 15
Oil Filter (Spin-On)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	122-0320	1	Adapter, Oil Filter	5	122-0645	1	Filter, Oil
2	526-0065	2	Washer, Flat - Copper (5/16" Screw)	6	122-0347	1	Seal, Air - Filter to Housing
3	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")	7	122-0360	1	Drain, Oil Filter
4	505-0057	1	Plug, Pipe (1/8")	8	815-0194	2	Screw, Cap - Hex Head w/ET (#10-32 x 3/8")
				9	122-0321	1	Gasket, Oil Filter Adapter

Option 16
Ignition Breaker Box (Side Adjustable)

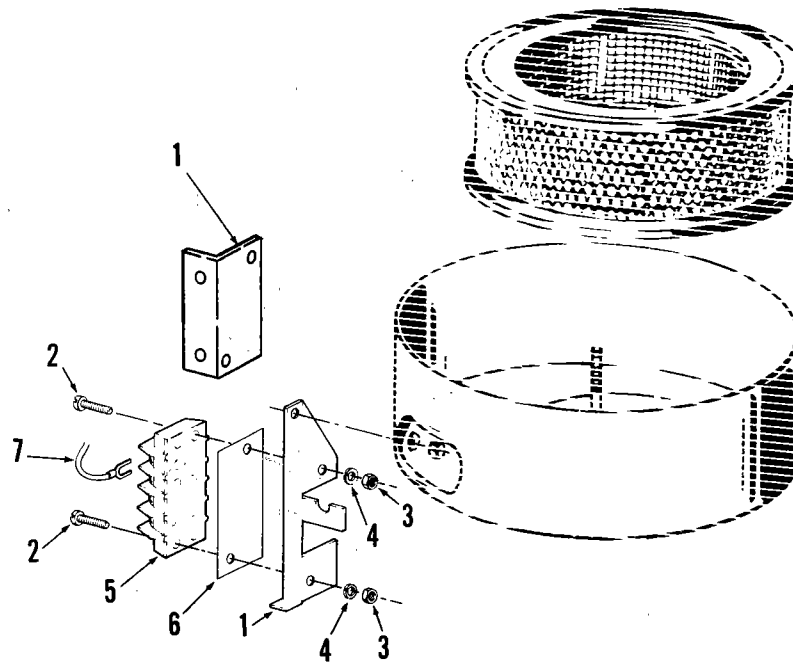


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1158	1	Box Assembly, Breaker (Includes Parts Marked *)
1	815-0358	2	*Screw, Tapping - Hex Head, Slotted (#8-32 x 5/16")
2	160-1149	1	*Cover, Breaker Box
3	160-1148	1	*Gasket, Cover
4	802-0034	2	*Screw, Cap - Socket Head (1/4-20 x 3/4")
5	850-0038	2	*Washer, Lock - Spring (1/4")
6	815-0403	1	*Screw, Tapping - Pan Head (#8-32 x 5/16")
7	850-0025	1	*Washer, Lock - Spring (#8)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	312-0069	1	*Condenser, Ignition
9	870-0221	1	*Nut, Hex with External Tooth Lockwasher (#8-32)
10	815-0405	1	*Screw, Machine - Pan Head, Cross-Recessed (#8-32 x 1/2")
11	160-1154	1	*Point Set, Breaker
12	160-1150	1	*Gasket
13	160-1151	1	Plunger, Breaker Points
14	336-2378	1	Lead, Breaker Box to Coil
	160-1161	1	Tune-Up Kit (Includes Points and Condenser)

* - Parts Included in 160-1158 Breaker Box Assembly.

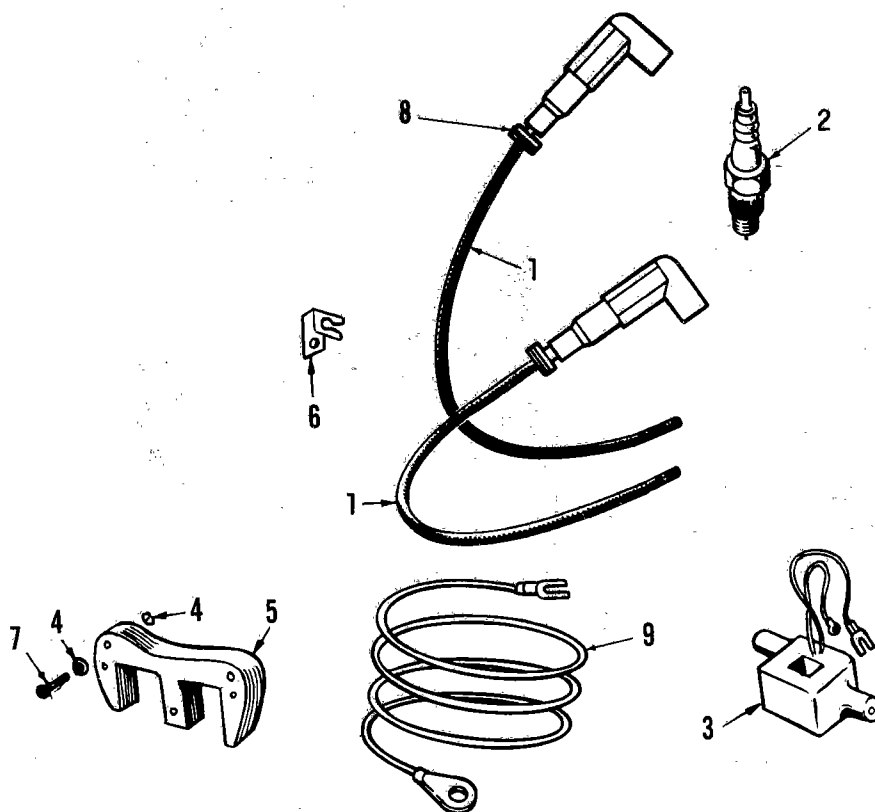
Option 17 Support and Terminal Block Assembly



ES-1481

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	140-1644	1	Support, Air Cleaner Units with Air Cleaner Housing	4	853-0005	2	Washer, Lock - ET (#8)
	301-5936	1	Units without Air Cleaner Housing	5	332-0537	1	Block Terminal (4 Place)
2	812-0081	2	Screw, Machine - Round Head (#8-32 x 5/8")	6	332-2208	1	Strip, Marker
3	860-0008	2	Nut, Hex (#8-32)	7	336-4385	1	Lead Assembly Alternator (Use Bulk #16 Wire)
					334-0028	1	Ignition

Option 18 Ignition (Magneto)

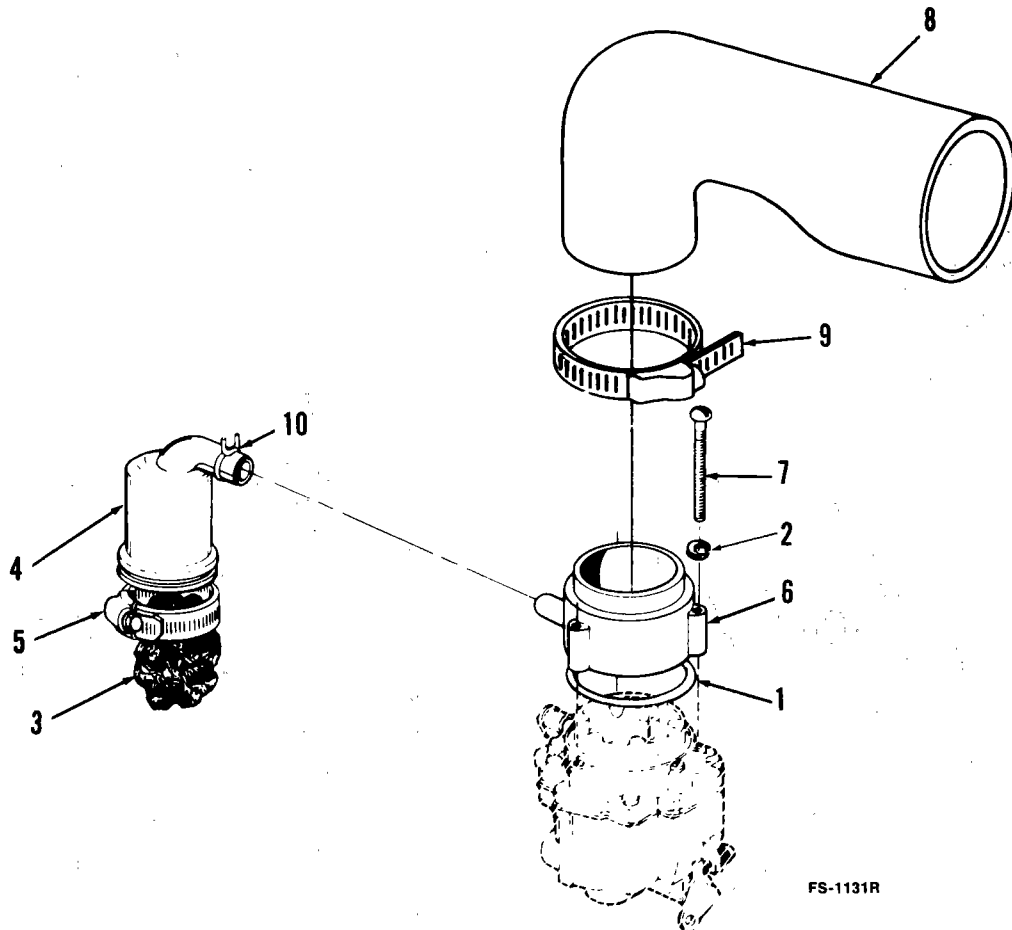


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1306	1	Stator Assembly (Includes Parts Marked *)
1	167-1595	2	Cable, Spark Plug R.H.
2	167-0298	2	Spark Plug
3	160-1305	1	*Coil, Magneto Stator
4	526-0015	2	Washer, Flat - Stator
	526-0184	2	1/4" Screw
			17/64 ID x 5/8 OD x .1345" Thk)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	160-0749	1	*Pole Shoe, Stator - Magneto
6	167-0188	4	Clip, Spark Plug Cable
7	815-0259	2	Screw, Hex Cap
8	508-0095	2	Grommet, Rubber
9	336-8466	1	Lead, Magneto to Ignition Breaker

* - Parts Included in the 160-1306 Stator Assembly.

Option 19 Remote Air Cleaner Adapter

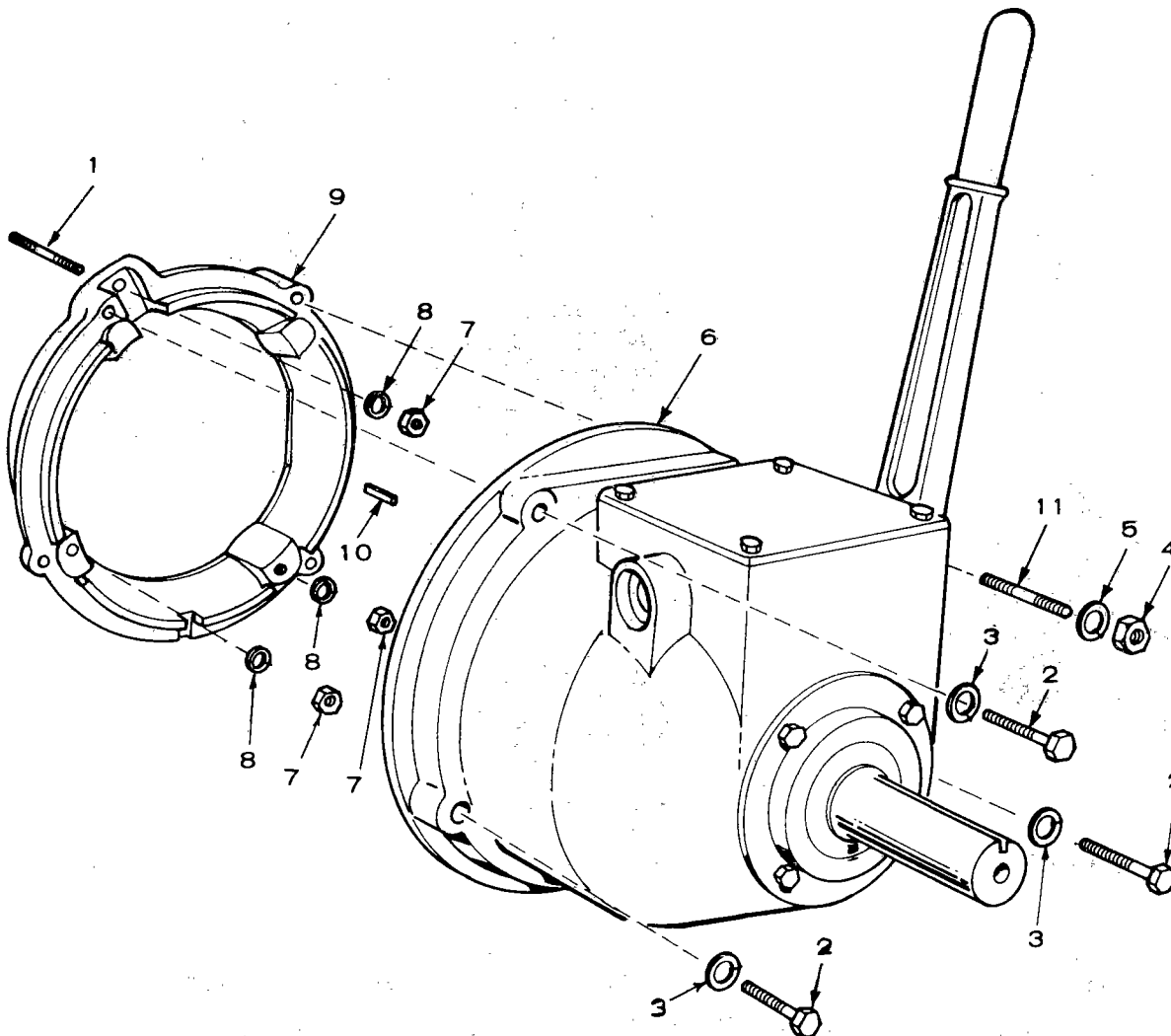


FS-1131R

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	140-1915	1	Kit, Remote Air Cleaner Adapter (Includes Parts Marked *)	6	140-1714	1	*Adapter, Carburetor Air Intake
1	509-0145	1	Seal, O-Ring	7	813-0106	3	*Screw, Machine - Round Head (#10-32 x 1-1/8")
2	850-0030	3	*Washer, Lock - Spring (#10)	8	140-1428	1	*Elbow, Air Intake
3	123-1417	1	*Filter, Breather Tube	9	503-0274	1	*Clamp, Hose - Air Intake
4	123-1539	1	*Tube, Crankcase Breather	10	503-0171	1	*Clamp, Hose
5	503-0107	1	Clamp, Breather Tube	11	517-0151	1	*Plug, Dot Button - Blower Housing Air Hole

* - Parts Included in 140-1915 Remote Air Cleaner Adapter Kit.

Option 20 Clutch

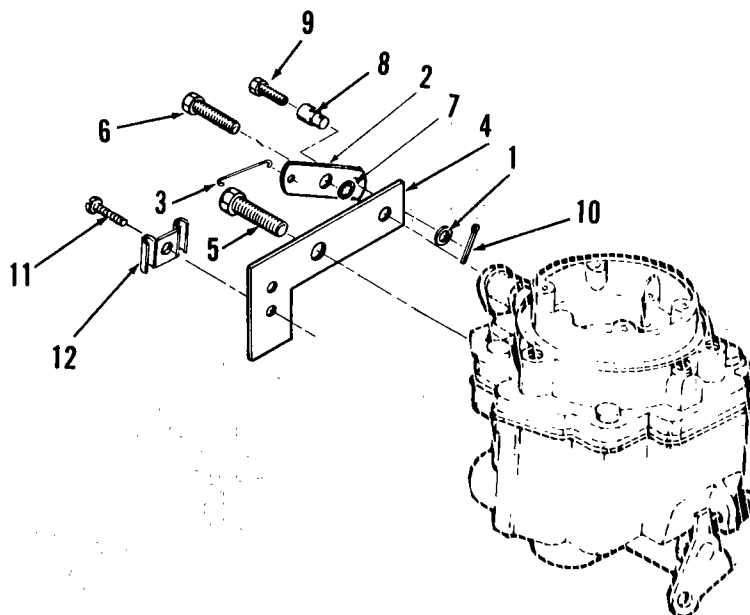


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	190-0289	1	Kit, Clutch Assembly (Includes All Parts Except Crankshaft)
1	520-0739	3	Stud (3/8-24 x 3/8-16 x 3")
2	800-0075	3	Screw, Cap - Hex Head (7/16-14 x 2")
3	850-0055	3	Washer, Lock - Spring (7/16")
4	104-0091	1	Nut, Hex - Special

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	850-0050	1	Washer, Lock - Spring (3/8")
6	190-0288	1	*Clutch Assembly
7	104-0091	3	Nut, Hex - Special
8	850-0050	3	Washer, Lock - Spring (3/8")
9	190-0171	1	Adapter, Clutch
10	515-0041	1	Key, Drive - Special
11	520-0738	1	Stud (3/8-24 x 3/8-16 x 4")

* - For Components, check nameplate and contact nearest Rockford Clutch Dealer.

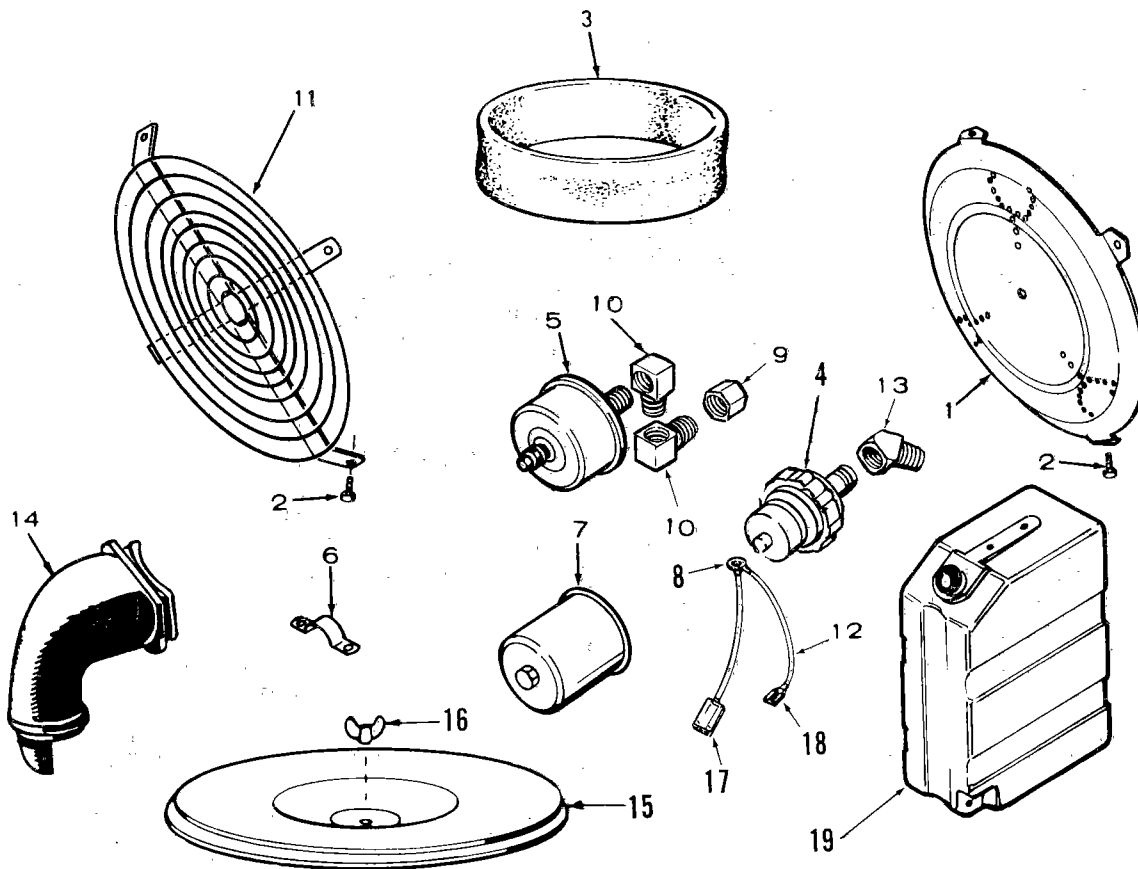
Option 21
Choke Control (Front Pull)



FS-1131R

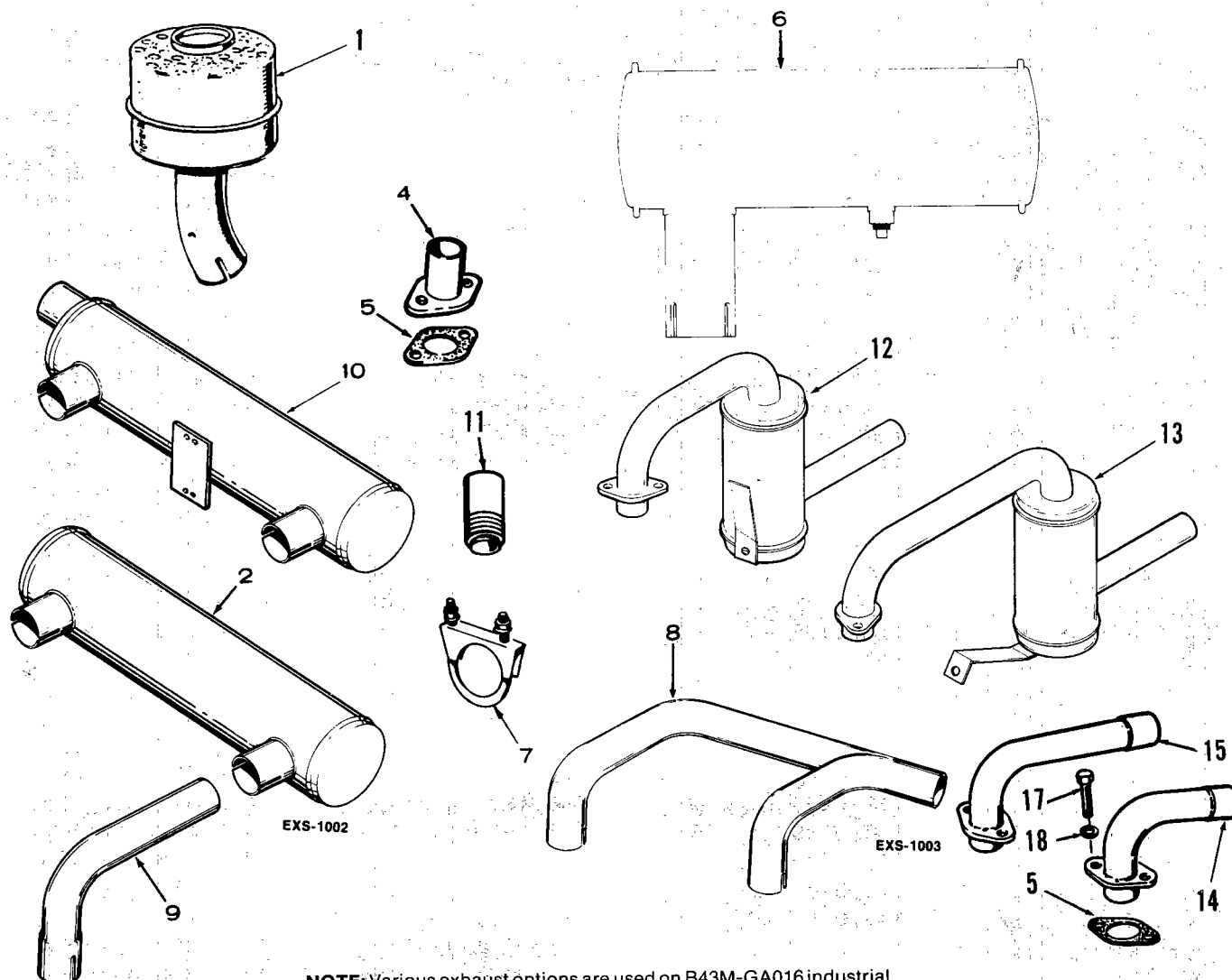
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	526-0140	1	Washer, Flat (#10 Screw)	8	152-0155	1	Swivel, Choke Lever
2	153-0523	1	Lever, Choke	9	815-0693	1	Screw, Machine - Hex Head (#8-32 x .31")
3	153-0500	1	Link, Choke	10	516-0059	1	Pin, Cotter
4	153-0524	1	Bracket, Choke Cable	11	815-0359	1	Screw, Tapping - Slotted Hex Washer Head (#10-32 x 7/8")
5	821-0002	1	Screw, Cap - Hex Washer Head (#10-32 x 1/4")	12	153-0514	1	Clip, Choke Cable
6	815-0480	1	Screw, Shoulder (#10-32 x .34")				
7	854-0010	1	Washer, Lock - IT (#10)				

Miscellaneous Options



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-3213	1	Guard, Flywheel - Stationary	11			Guard, Flywheel - Stationary (Wire Type)
2	815-0378	4	Screw, Tapping - Hex Head (#14 x 1/2")		134-3527	1	Use without PTO
3	140-1218	1	Wrapper, Filter Element - Dry Type		134-4134	1	Use with PTO
4			Switch, Low Oil Pressure	12		1	Lead Assembly, Low Oil Pressure Switch - #16 Wire, 12" Lg (2)
	309-0237	1	Close at 8-10 PSI at Lowering Pressure	13	502-0053	1	Elbow, Street - 45°
	309-0510	1	Open at 4.5-7.5 PSI on Increasing Pressure	14	140-1169	1	Tube, Air Intake with Debris Lip
5	193-0108	1	Sender, Electric Oil Pressure Gauge	15	140-1747	1	Cover, Air Cleaner - Moisture Proof
6	403-1021	2	Bracket, Lifting	16	140-1750	1	Knob, Air Cleaner - Moisture Proof
7	122-0406	1	Filter, Oil (With Hex Nut)	17	332-1408	1	Terminal, Receptacle
8	332-0152	1	Terminal, Ring	18	332-1279	1	Terminal, Spade
9	502-0175	1	Adapter, Pipe	19	159-1150	1	Tank, Fuel - Plastic (3.5 Gallon Capacity)
10	502-0020	2	Elbow, Street - 90°				

Miscellaneous Exhaust Options



NOTE: Various exhaust options are used on B43M-GA016 industrial engines. Select according to illustration.

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-1570	2	Muffler, Exhaust	9		1	Pipe, Exhaust (90°)
2	155-1692	1	Muffler, Exhaust		155-1703	1	Left
4	154-1958	2	Adapter, Exhaust (Flange Type)		155-1704	1	Right
5	154-1725	2	Gasket, Exhaust Adapter	10	155-1848	1	Muffler, Crossover
6			Muffler, Exhaust - Raygun	11		1	Nipple, Half - Exhaust
	155-1697	2	With Spark Arrestor		505-0775	2	1" x 1-13/16"
	155-1693	2	Without Spark Arrestor		505-0755	2	1" x 3"
7			Clamp, Muffler	12	155-1722	1	Muffler - RH
	155-1256	2	1-1/4"	13	155-1723	1	Muffler - LH
	155-1257	2	1-3/8"	14	154-2128	1	Adapter, Exhaust - Right (1-1/4" OD Outlet)
8			Manifold, Exhaust - Crossover	15	154-2129	1	Adapter, Exhaust - Left (1-1/4" OD Outlet)
	154-1986	1	Left Rear Outlet	17	800-0026	4	Screw, Cap - Hex Head (5/16-18" x 3/4")
	154-1669	1	Left Front Outlet	18	850-0045	4	Washer, Lock - Spring (5/16")
	154-1986	1	Right Front Outlet				
	154-1669	1	Right Rear Outlet				

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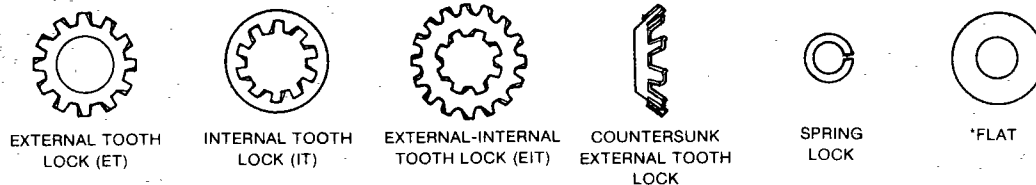
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HARDWARE IDENTIFICATION

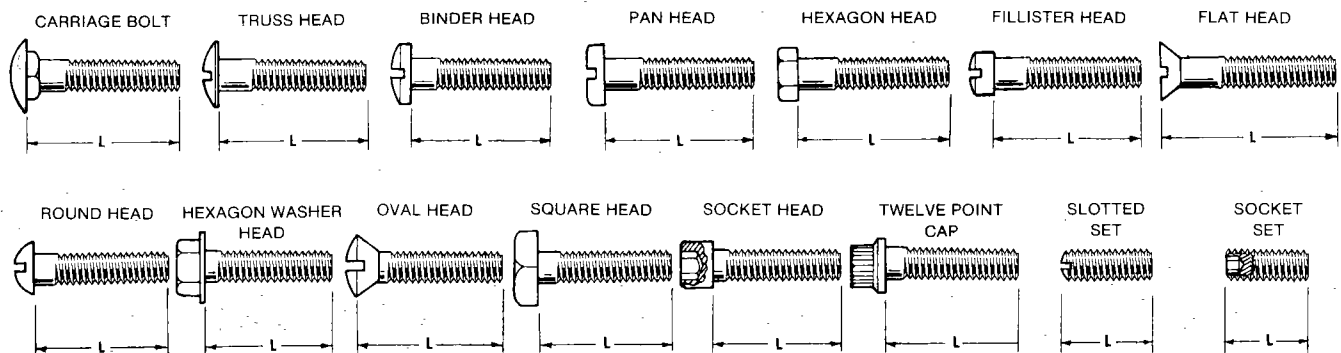
Illustrated hardware items are only for identification purposes. All hardware items listed throughout this parts catalog are steel SAE grade five (5) or lower (zinc plated with clear chromate dip) unless parts description indicates differently. All dimensions are in inches.

WASHER TYPES



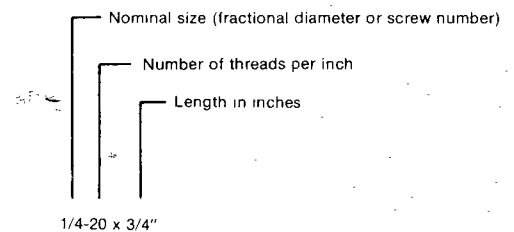
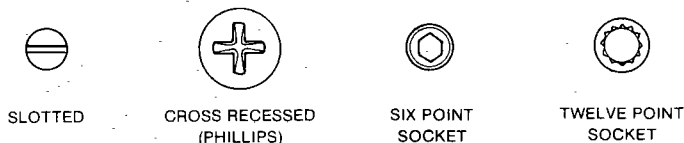
* - Flat washer dimensions given are: Inside Diameter (ID), Outside Diameter (OD) and Thickness (Thk).

BOLT AND SCREW TYPES



L - Measure length between these points.

INTERNAL DRIVE TYPES



NUT TYPES





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Telex: 275477
Cable ONAN

casecoltingersoll.com