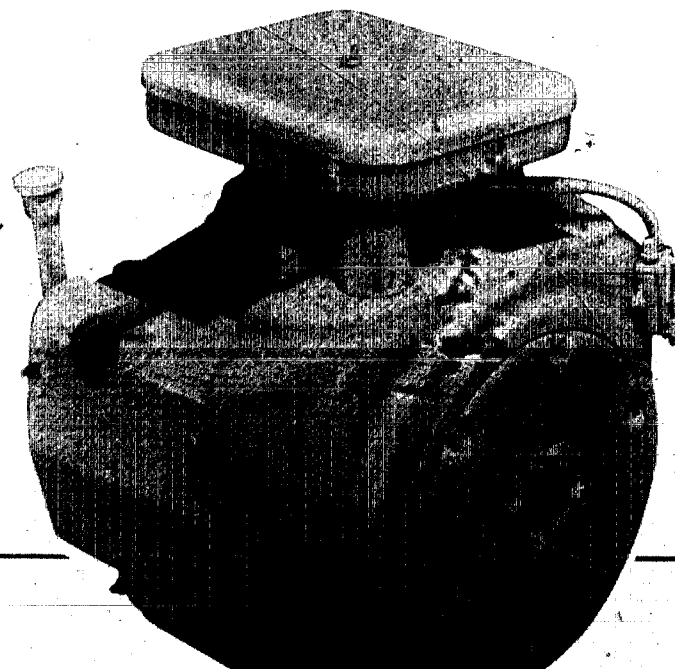


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Onan

Parts Manual

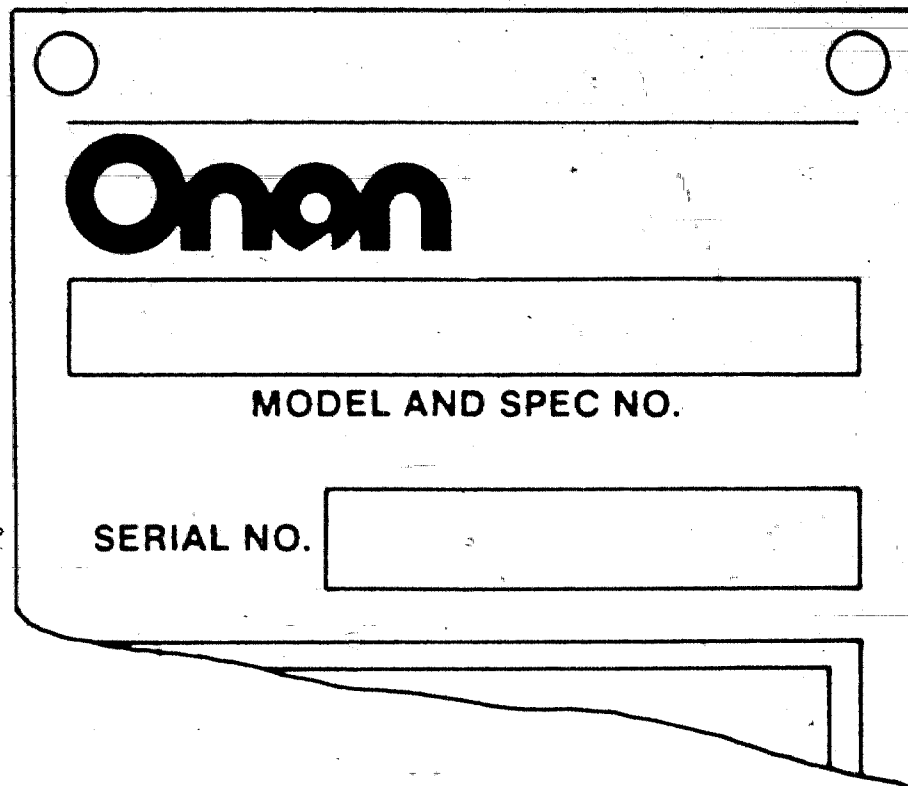
**B43E-GA016
Engine**



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 rounded corners and two circular mounting holes at the top. The Onan logo is prominently displayed in the upper left. Below the logo is a large rectangular box for the model and specification number. Further down is a smaller rectangular box for the serial number, preceded by the text 'SERIAL NO.'. The bottom right corner of the template is cut off diagonally.

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

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

▲WARNING

TAKE ALL NECESSARY PRECAUTIONS WHEN CHECKING OR CHANGING ENGINE OIL. DO NOT 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 standard B43E-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. Part illustrations are typical. Using the Model and Spec No. from the nameplate, select 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 blower end (front) of the engine.

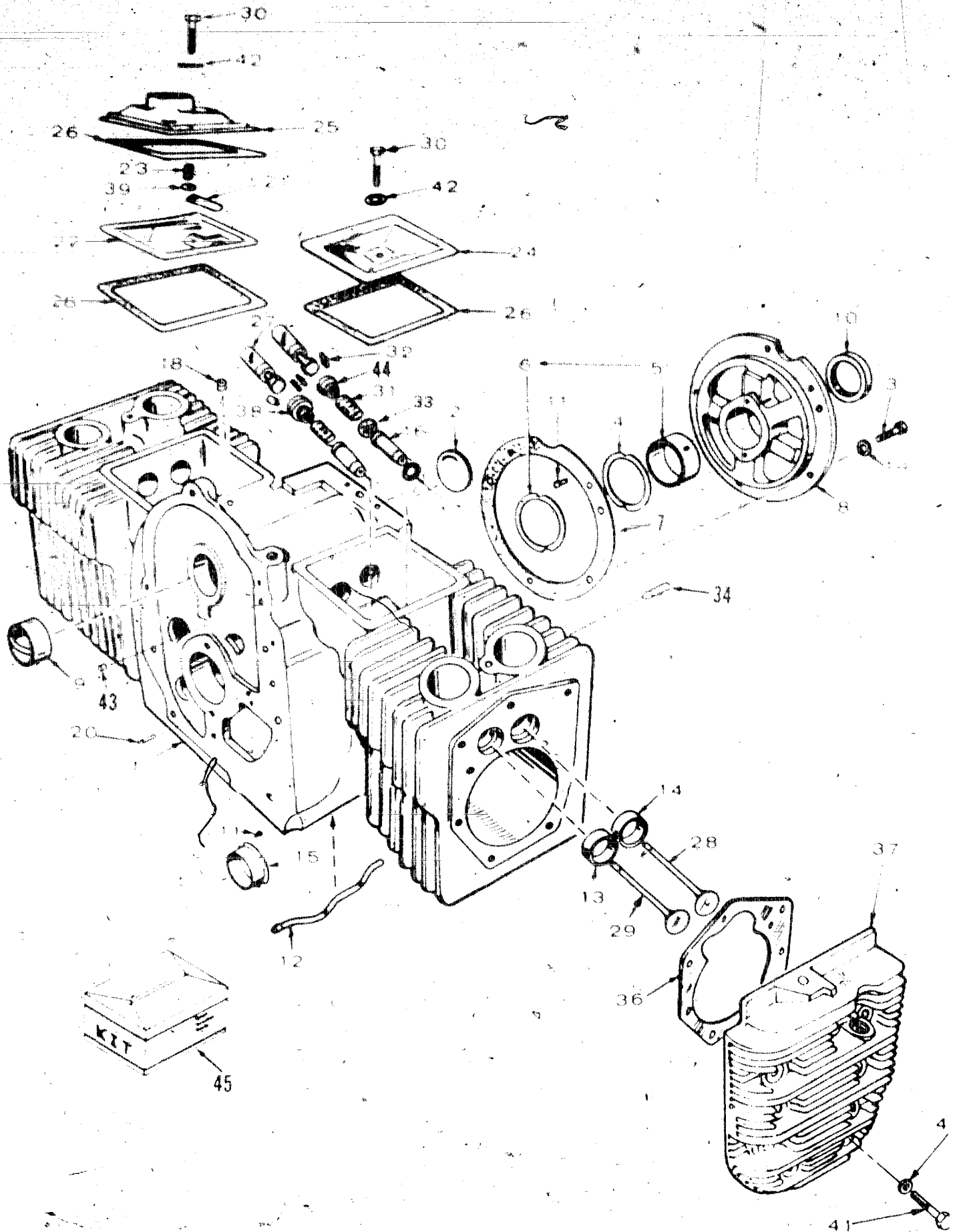
⚠ WARNING

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 not be applicable to all models. For field conversions additional are usually required.

Cylinder Block

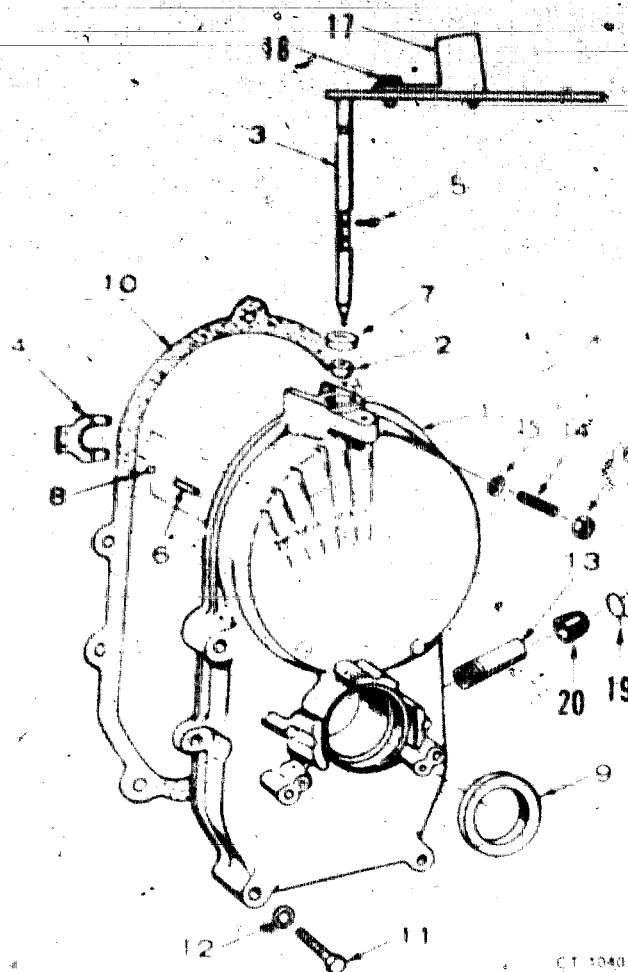


Cylinder Block

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Block Assembly, Cylinder	17	110-0068	2	*Gasket, Intake Valve Gui
			(All Replacement Cylinder	18	517-0120	1	*Plug, Breather Hole
			Block Assemblies Use Intake	19	850-0050	5	*Washer, Lock - Spring (3
			Valve Seals and Include	20	516-0141	2	*Pin, Gear Cover Alignmen
			Parts Marked *)	21	123-1175	1	Reed, Breather Valve
110-3148	1		Engines with Standard Rear	22	123-1173	1	Baffle, Breather Valve
			Bearing Plate	23	123-1174	1	Spring, Breather Valve
110-3151	1		Engines with 4 Boss Bearing	24	110-1879	1	Cover, Valve - RH
			Plate	25	110-2274	1	Cover, Valve - LH
110-3154	1		Engines with SAE A or SAE B	26	110-1921	3	Gasket, Valve Cover
			Rear Bearing Plate (Does	27			Tappet, Valve
			NOT Include Rear Bearing		115-0006	4	Standard
			Plate)		115-0006-02	4	002" Oversize
2	517-0048	1	*Plug, Welch (1-5/8")		115-0006-05	4	005" Oversize
			Camshaft Opening	28	110-2368	2	Valve, Intake
3	800-0051	5	*Screw, Cap - Hex Head	29	110-1955	2	Valve, Exhaust
			(3/8-16 x 1-1/4")	30	800-0010	2	Screw, Cap - Hex Head
4	104-0776	AR	*Shim, Crankshaft End Play				(1/4-20 x 1-3/4")
			(.005")	31	110-0539	4	Spring, Valve
5			Bearing, Crankshaft - Rear	32	110-0639	8	Lock, Valve Spring
			(Includes Thrust Washer)	33	509-0168	2	Seal, Valve - Intake
			*Standard				(Optional)
101-0450	1		002" Undersize	34	803-0071	2	*Screw, Set (3/8-16 x 1/2
101-0450-02	1		010" Undersize	36			Gasket, Cylinder Head
101-0450-10	1		020" Undersize		110-2287	2	Standard
101-0450-20	1		030" Undersize		110-3181	2	Optional (Graphoil)
101-0450-30	1						Head, Cylinder
6	104-0575	1	*Washer, Thrust	37			Right Side
7	101-0415	1	*Gasket, Bearing Plate		110-3214	1	Left Side
8			Plate Bearing - Rear		110-3213	1	Roto Cap - Valve
			*Standard	38	110-0904	4	Washer, Flat (1/4" Screw
101-0439	1		*Optional - 4-Boss	39	526-0018	1	Washer, Flat (5/16" Scre
101-0551	1		*Optional - SAE B	40	526-0122	18	Screw, Cap - Hex Head
101-0430	1		*Optional - SAE A	41			(Special)
101-0437	1						5/16-18 x 1-5/8"
9	101-0405	2	*Bearing, Camshaft		800-0540	8	2" Long
10	509-0041	1	*Seal, Oil - Crankshaft Rear		800-0571	10	Washer, Flat - Copper
11	516-0072	4	*Pin, Drive - Bearing Stop	42	526-0063	2	(1/4" Screw)
12	120-0735	1	*Tube, Oil - Cylinder Block				Plug, Core Hole
13			Insert, Valve Seat - Exhaust	43	517-0067	1	Washer, Intake Valve
			*Standard	44	110-0893	2	Spring Retainer - Optic
			002" Oversize				Kit, Gasket
			005" Oversize		168-0140	1	Gasket Kit, Valve Grir
			010" Oversize				Carbon Removal (Stand
			025" Oversize				Head Gaskets)
14			Insert, Valve Seat - Intake		168-0183	1	Gasket Kit, Valve Grir
			*Standard				Carbon Removal (Graph
			002" Oversize				Head Gaskets)
			005" Oversize		168-0153	1	Gasket Kit, Complete
			010" Oversize				(Standard Head Gasket
			025" Oversize		168-0182	1	Gasket Kit, Complete
15			Bearing, Crankshaft - Front				(Graphoil Head Gasket
			(Flanged)				
			*Standard				
101-0432	1		002" Undersize				
101-0432-02	1		010" Undersize				
101-0432-10	1		020" Undersize				
101-0432-20	1		030" Undersize				
101-0432-30	1						
16			Guide, Valve				
			Engines w/o Intake Valve				
			Seals				
110-1807	2		Intake				
110-1807	2		Exhaust				
			Engines with Intake Valve				
			Seals				
110-1807	2		*Exhaust				
110-3161	2		*Intake				

* - Parts Included in the Cylinder Block Assembl

Gearcase

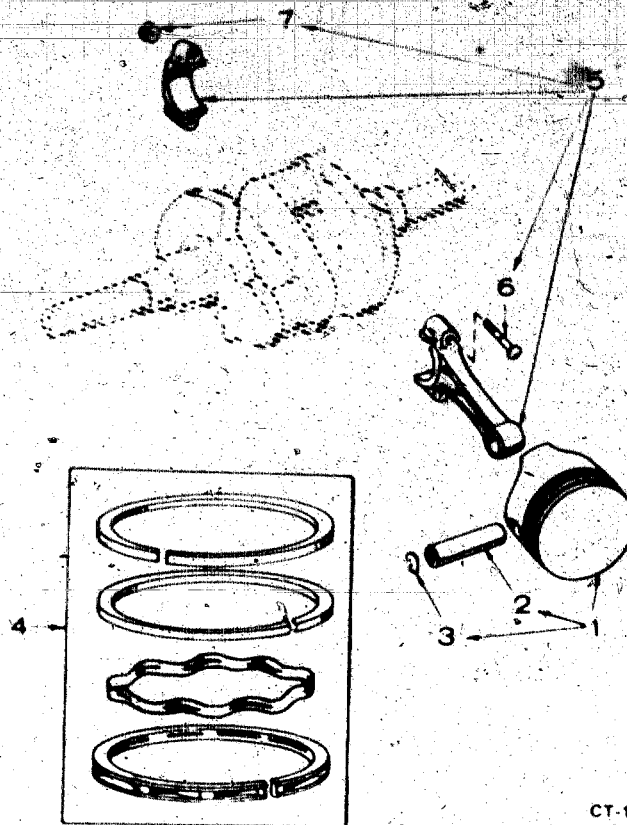


CT 1040 1

REF NO	PART NO	QTY USED	PART DESCRIPTION	REF NO	PART NO	QTY USED	PART DESCRIPTION
1	103-0738	1	Gearcase Assembly (Entire) (Includes Parts Marked *)	12	526-0065	5	Washer, Flat - Copper (5/16" Screw)
2	510-0105	1	*Bearing, Governor Shaft	13	149-1299	1	*Tube, Vacuum Port
3	150-1470	1	*Shaft and Arm, Governor	14	520-0933	1	Stud, Gear Cover
4	150-1187	1	*Yoke, Governor Shaft	15	526-0065	1	Washer, Flat - Gear Cover (5/16" Screw)
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	17	150-2090	1	Bracket, Dashpot - Govern Arm - Begin Spec B
7	509-0008	1	*Seal, Oil - Governor Shaft	18	815-0194	2	Screw, Hex Head - w/1" (10-32 x 3/8")
8	510-0014	1	*Ball, Bearing - Governor Shaft	19	503-0301	1	*Clamp, Vacuum Port Cap
9	509-0040	1	*Seal, Oil - Crankshaft	20	149-1321	1	*Cap, Vacuum Port
10	103-0408	1	Gasket, Gearcase Mounting				
11	800-0032	4	Screw, Cap - Hex Head 5/16-18 x 1-3/4"				
	800-0545	1	5/16-18 x 3/4" (Special)				

* - Parts Included in 103-0738 Gearcase Assembly

PISTON AND ROD

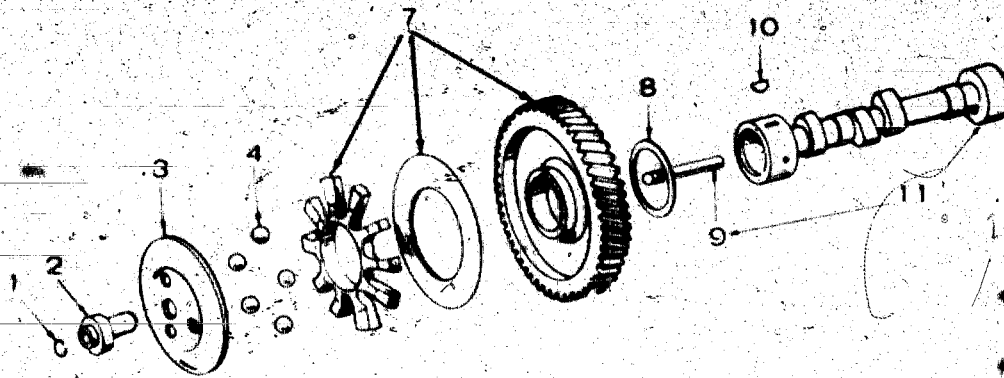


CT-1055

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)
	114-0300	2	Standard
	114-0300-10	2	.010" Undersize
	114-0300-20	2	.020" Undersize
	114-0300-30	2	.030" Undersize
6	114-0240	4	Bolt, Connecting Rod (S)
7	870-0302	4	Nut, Hex - Crown Lock (5/16-24)

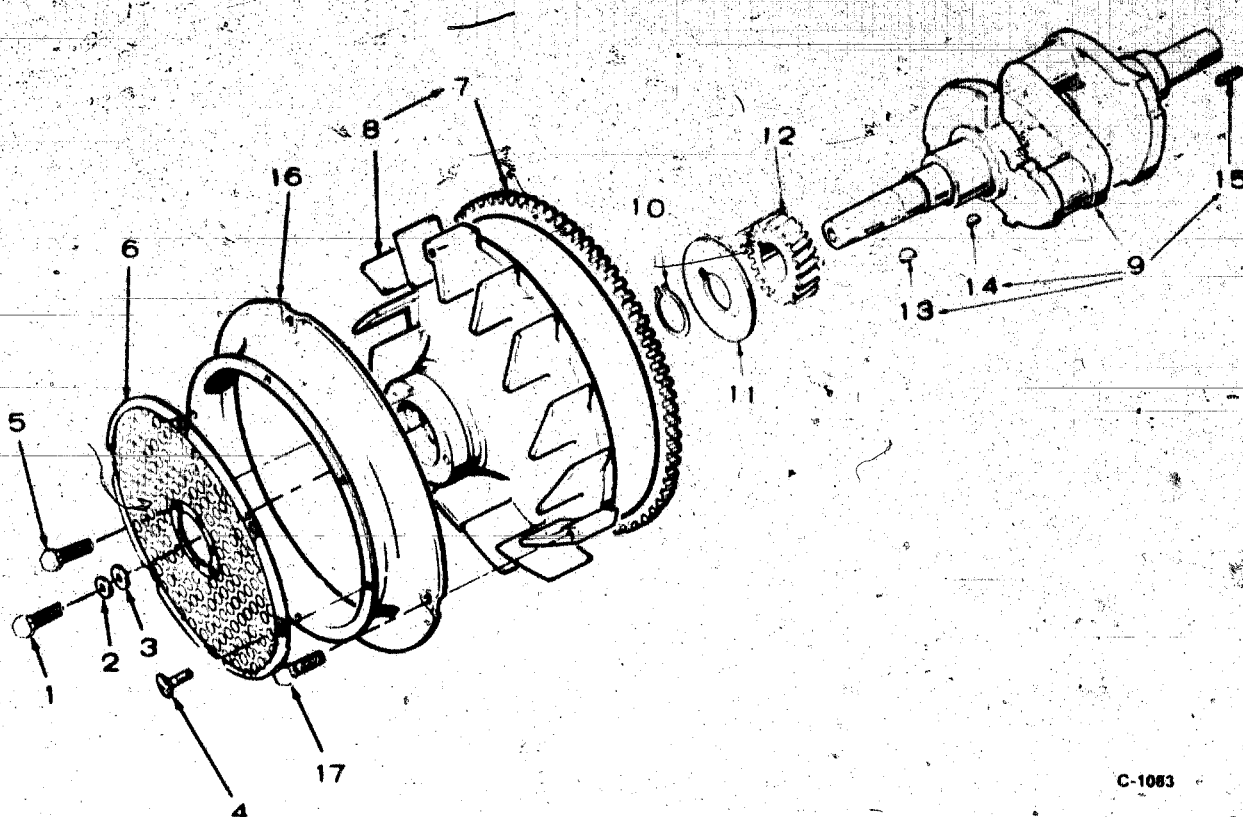
Camshaft



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
4	510-0015	5	Ball, Governor	11	105-0376	1	Camshaft (Includes Center
7	105-0332	1	Gear Assembly, Camshaft. (Includes Plate and Spacer)				

Crankshaft and Flywheel

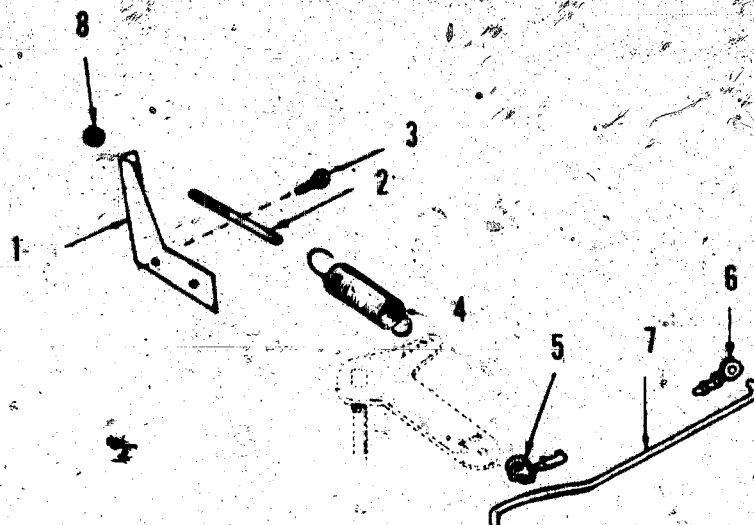


C-1083

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	9			Crankshaft (Includes Part Marked *)
2	850-0055	1	Washer, Lock - Spring (7/16")		104-1548	1	Spec A through D
3	526-0017	1	Washer, Flat (7/16" Screw)		104-1441	1	1-7/16" Stud - Begin St
4	815-0519	6	Screw, Tapping - Hex Washer Head (#10-32 x 1/2")	10	518-0014	1	Ring, Retaining
5	821-0014	4	Screw, Cap - Hex Head Locking (5/16-18 x 1/2")	11	104-0043	1	Washer, Gear Retaining - Special
6	134-4120	1	Guard, Flywheel	12	104-0032	1	Gear, Crankshaft
7	104-0779	1	Gear, Ring	13	515-0263	1	*Key, Flywheel
8			Flywheel (Includes Ring Gear)	14	515-0001	1	*Key, Crankshaft Gear
	134-3806	1	Engines without Flywheel	15	515-0103	1	*Key, Crankshaft Stub
			Alternator	16	134-3847	1	Venturi, Blower Wheel
			Engines with Flywheel	17	821-0010	5	Screw, Cap - Hex Washer (1/4-20 x 1/2")
			Alternator				
	134-3938	1	Without Imbalance Weight				
	134-3912	1	With Imbalance Weight (Identify by 3/4" Drilled Holes on Backside of Flywheel.)				

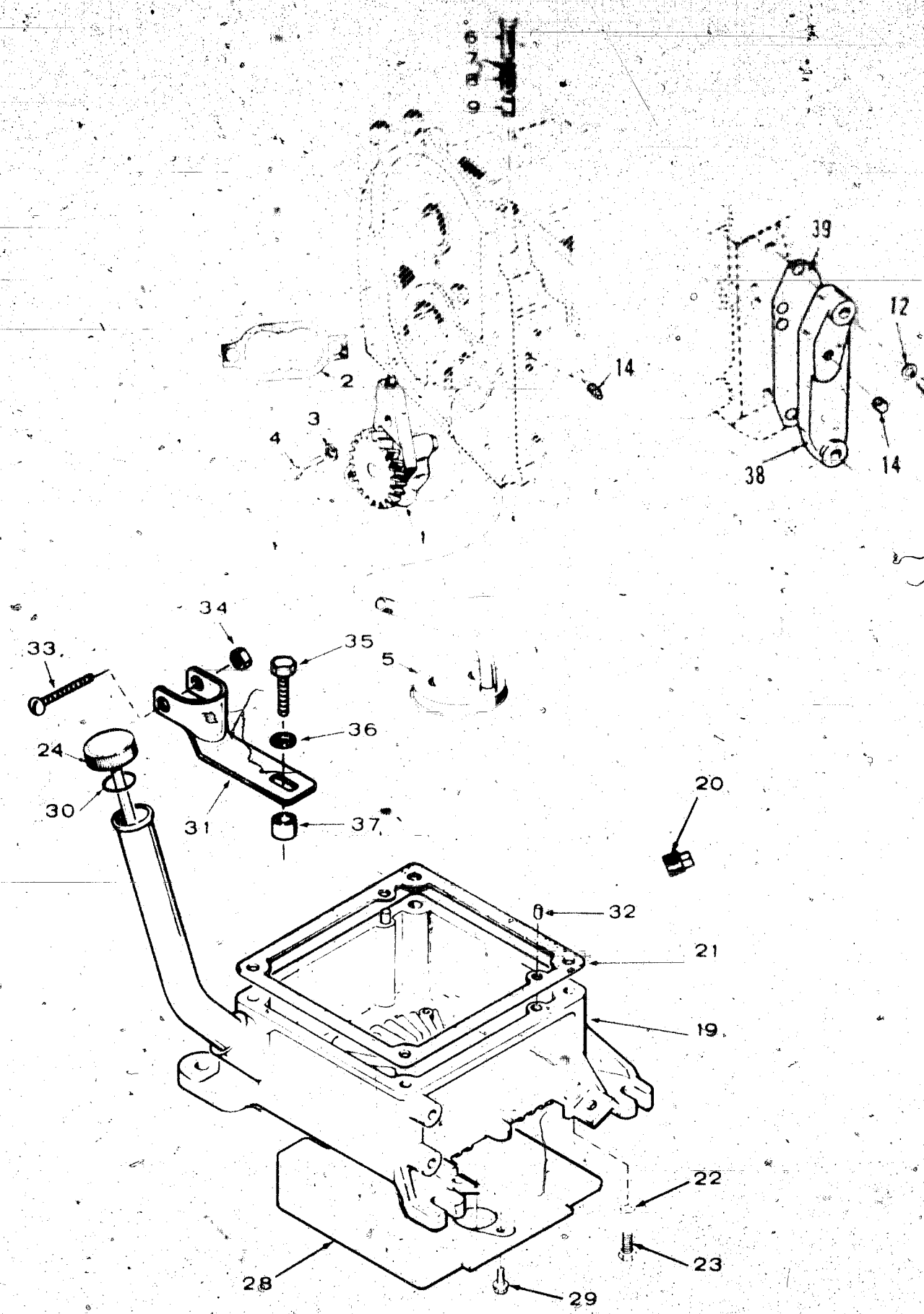
* - Parts Included in Crankshaft Kit.

Governor



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

011 System

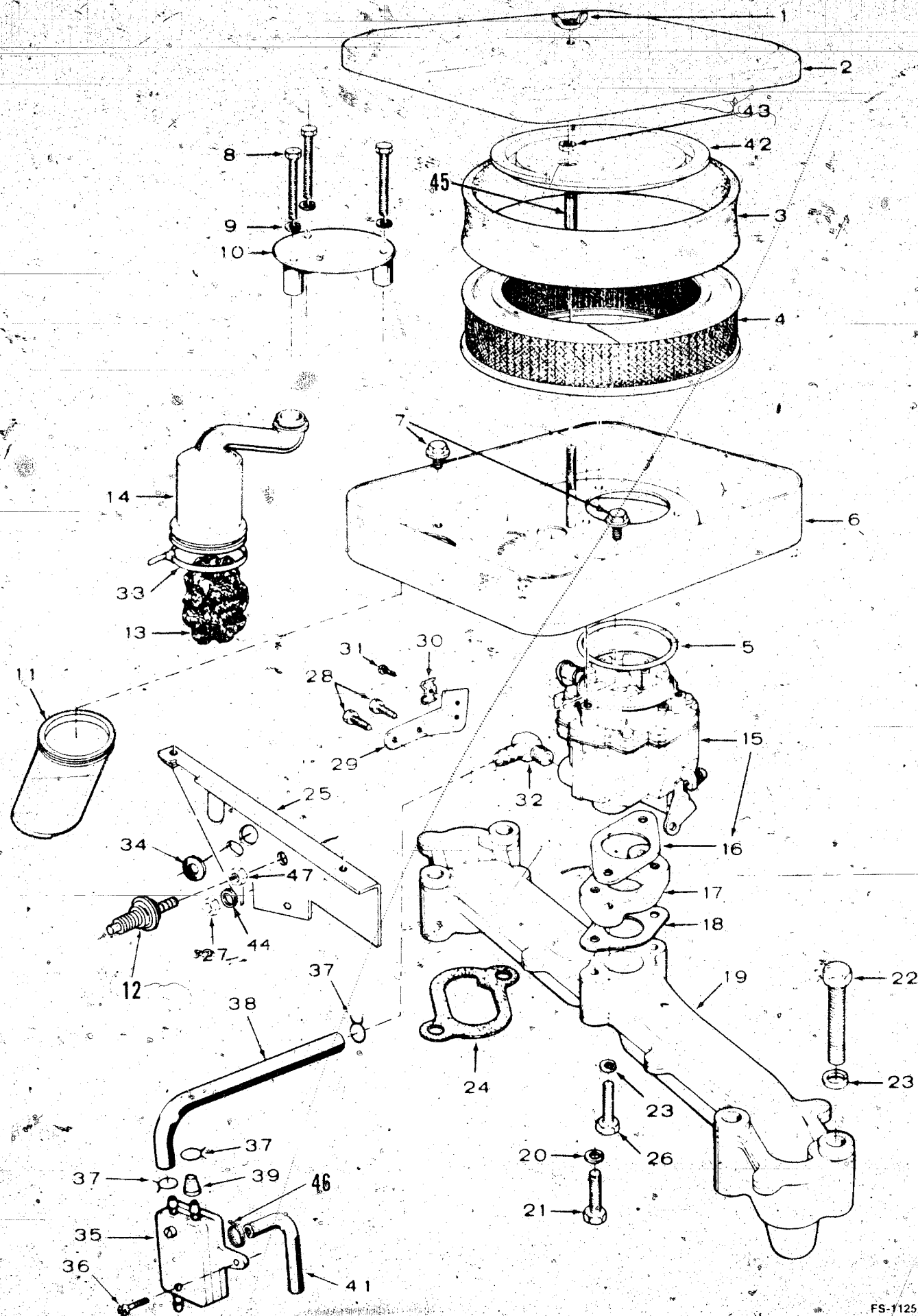


Oil System

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)	23	800-0056	4	Screw Cap - Hex Head Spec A, B, C
2	120-0161	1	Gasket Kit Oil Pump		800-0061	4	Begin Spec D
3	850-0040	2	Washer Lock Spring (1/4")	24	123-1402	1	Cap and Indicator Oil F
4	800-0007	2	Screw Cap - Hex Head (1/4-20 x 1")	28	134-3864	1	Baffle Oil Base Air
5	120-0713	1	Cup Intake - Oil Pump	29	815-0340	2	Screw Tapping - Hex Was Head (#10-32 x 3/8")
6	801-0049	1	Screw Cap - Hex Head (3/8-24 x 7/8")	30	509-0142	1	O-Ring Oil Fill Gap
7	526-0066	1	Washer Flat - Copper (3/8" Screw)	31	123-1612	1	Bracket Fill Tube
8	120-0140	1	Spring Bypass Valve	32	516-0212	2	*Pin, Dowel
9	120-0398	1	Plunger Bypass Valve	33	815-0576	1	Screw Round Head (#10 x 1-1/4")
12	526-0065	2	Washer Flat - Copper (5/16" Screw)	34	870-0120	1	Nut Speed
13	800-0028	2	Screw Cap - Hex Head (5/16-18 x 1")	35	800-0034	1	Screw Hex Head - Cap (5/16-18 x 2-1/4")
14	505-0057	1	Plug Pipe	36	850-0045	1	Washer Lock (5/16")
19	102-1220	1	Base Oil (Includes Parts Marked *)	37	123-1611	1	Spacer Fill Tube Brack
20	505-0056	1	*Plug Pipe - Oil Drain (1/2")	38	122-0438	1	Cover Oil Filter Pad (Engines without Oil F - Optional)
21	102-1200	1	Gasket Oil Base	39	122-0375	1	Gasket Oil Filter Pad (Engines without Oil F
22	850-0050	4	Washer Lock - Spring (3/8")				

* - Parts Included in 102-1220 Oil Base.

Fuel System



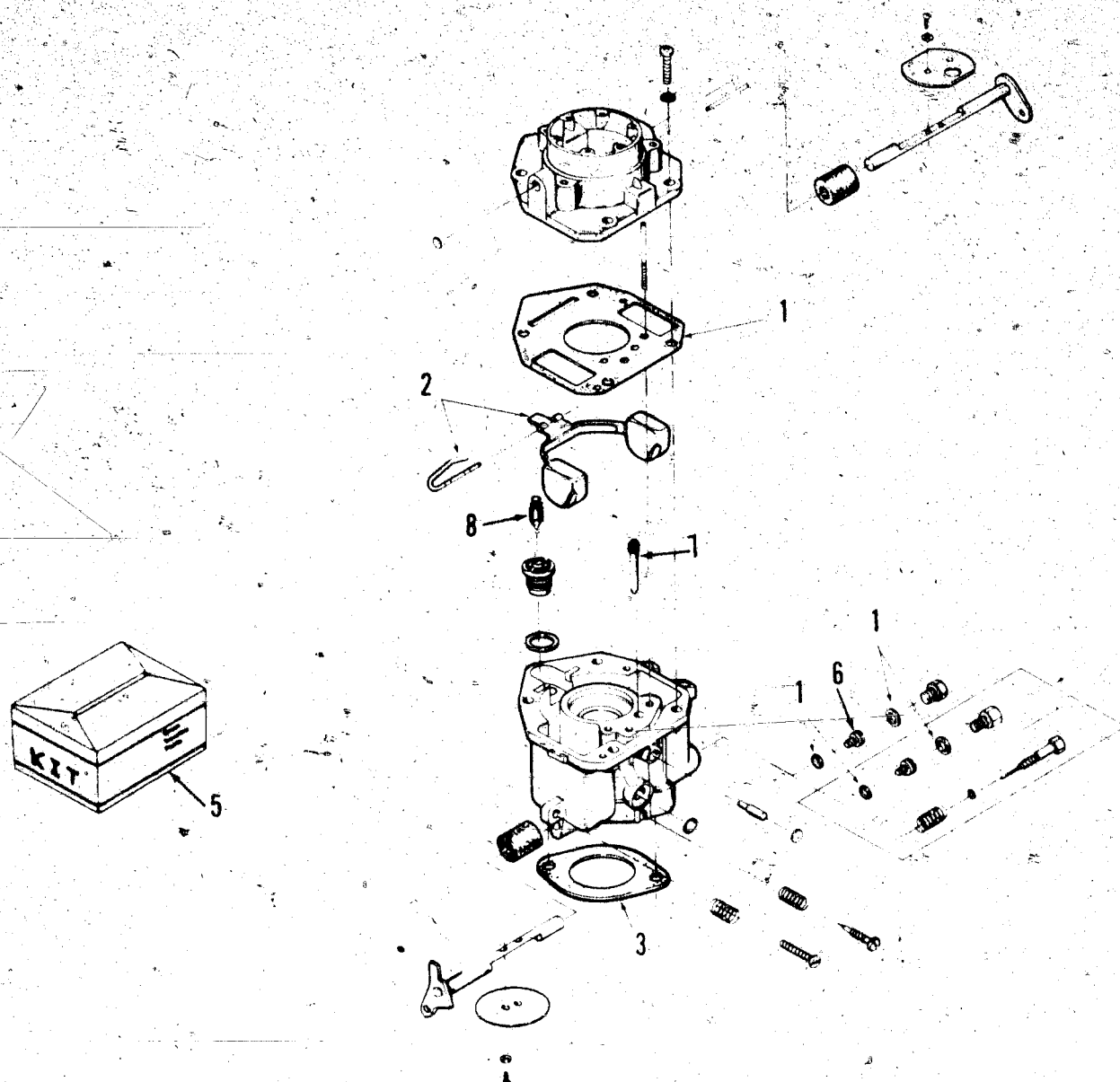
Fuel System

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)	24	154-1744	2	Gasket, Manifold to Block
2	140-1663	1	Cover, Air Cleaner	25	140-1961	1	†Support, Air Cleaner
3	140-1496	1	Wrapper, Air Cleaner Element	26	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")
4	140-1228	1	Element, Air Cleaner (Paper)	27	870-0399	1	†Nut, Hex Washer Head (5/16
5	509-0145	1	Seal, O-Ring	28	821-0002	2	Screw, Cap - Hex Washer He
6	140-1885	1	†Housing, Air Cleaner		821-0004	2	(#10-32 x 1/4") Spec A
7	815-0575	2	†Screw, Tapping - Hex Washer Head (1/4-20 x 3/8")				(#10-32 x 5/16") Begin
8	815-0470	3	Screw, Machine - Hex Head (#10-32 x 1-1/2")	29	153-0515	1	Bracket, Choke Cable
9	526-0234	3	Washer, Flat (7/32 ID x 17/32 OD x .105" THK)	30	153-0514	2	Clip, Choke Cable - Begin
10	145-0521	1	Plate, Air Deflector	31	815-0359	1	Screw, Tapping - Slotted
11	140-1661	1	Tube, Air Intake				Hex Washer Head
12	150-2091	1	Dashpot - Begin Spec B	32	502-0313	1	(#10-32 x 7/8")
13	123-1417	1	Filter, Breather Tube	33	332-1567	1	Elbow, Hose
14	123-1429	1	Tube, Crankcase Breather	34	508-0021	1	Tie, Breather Tube
15			Carburetor, Complete (See Separate Page for Components) (Includes Mounting Gasket)	35	149-1982	1	Grommet, Rubber (3/4" Hole)
	146-0389	1	Without Semi-Automatic Choke				Pump, Fuel - Mounted on
	146-0428	1	With Semi-Automatic Choke - Begin Spec D	36	815-0555	2	Blower Housing (Includes
16	154-0733	1	Gasket, Carburetor to Adapter				Parts Marked *)
17	154-1977	1	Adapter, Carburetor	37	503-0301	3	Screw, Tapping - Pan Head
18	145-0438	1	Gasket, Adapter to Manifold	38	503-1199	1	(#10-24 x 5/8")
19	154-2666	1	Manifold, Intake	39	149-1321	1	*Clamp, Hose (7/16")
20	850-0040	2	Washer, Lock - Spring (1/4")	41	503-0707	1	*Hose, Fuel (13")
21	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")	42	140-1692	1	*Cap, Fuel Outlet
22			Screw, Cap - Hex Head 5/16-18 x 2" - Spec D Use 4	43	864-0001	1	Hose, Fuel Pump Vacuum
	800-0033	3	5/16-18 x 2" - Spec D Use 4	44	526-0041	1	Cover, Element - Optional
	800-0034	1	5/16-18 x 2-1/4"	45	301-0458	1	Nut, Hex (1/4-20) - Optior
23	850-0045	4	Washer, Lock - Spring (5/16")	46	503-0301	2	†Washer, Flat - Air Cleaner
					140-1492	1	Support (5/16" Screw)
				47	868-0002	1	Air Cleaner - Spacer
							Clamp, Hose (7/16" Dia.)
							Kit, Housing - Air Cleaner
							(Includes Parts Marked †)
							Nut, Hex - Jam (5/16-24)

* - Parts Included in 149-1982 Fuel Pump Kit.

† - Parts Included in 140-1942 Housing Kit.

Carburetor Components



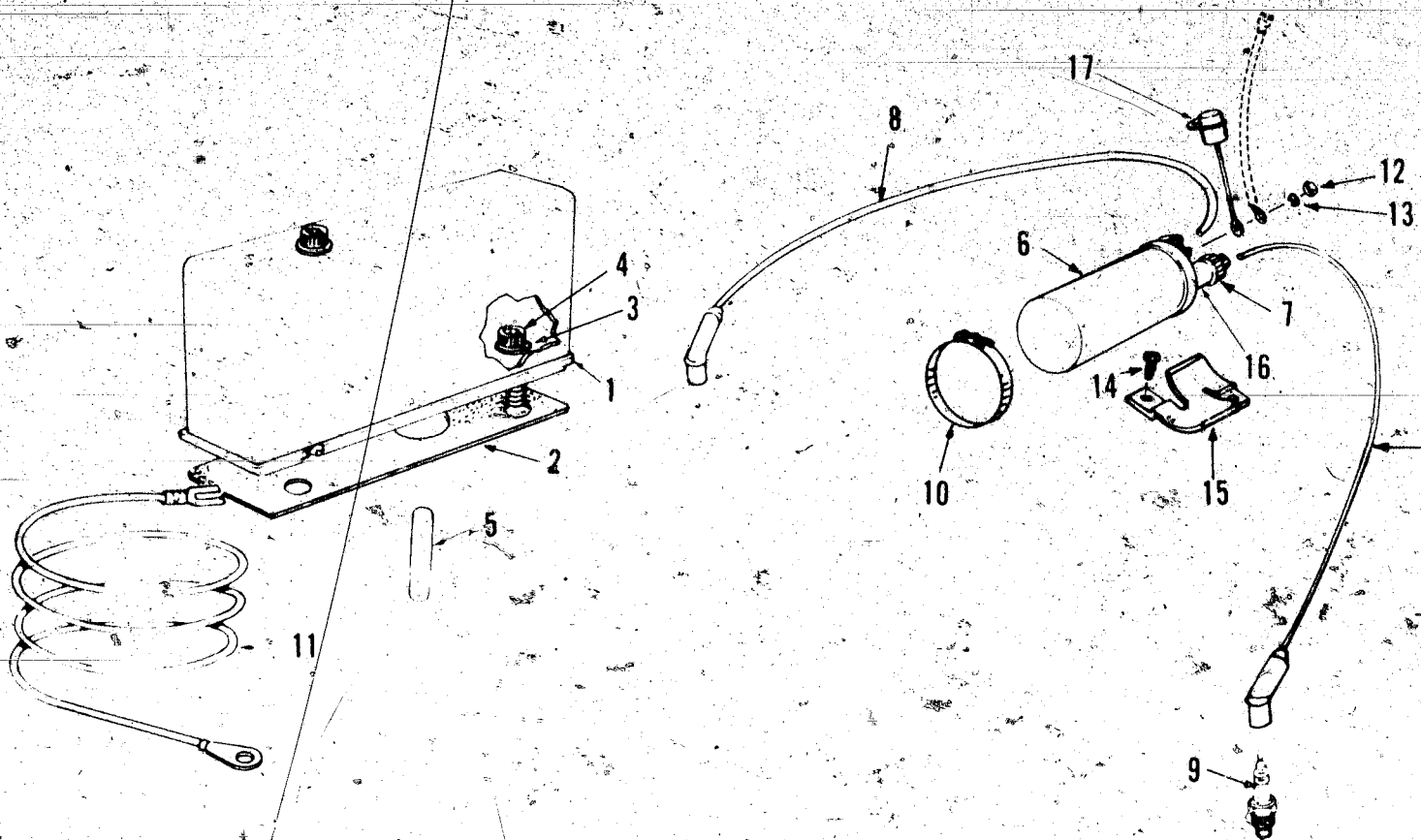
FS-1440

REF NO	PART NO	QTY USED	PART DESCRIPTION
			Carburetor Complete (Includes Mounting Gasket)
	146-0428	1	With Semi-Automatic Choke
1	146-0389	1	Without Semi-Automatic Choke
	146-0326	1	*Carburetors Without Semi-Automatic Choke
	146-0438	1	+Carburetors With Semi-Automatic Choke
2			Float Package
	146-0325	1	Carburetors Without Semi-Automatic Choke
	146-0437	1	Carburetors With Semi-Automatic Choke
3	154-0733	2	**Gasket, Carburetor Mounting

REF NO	PART NO	QTY USED	PART DESCRIPTION
4	146-0327	1	Variable Jet Kit - Option (High Altitude Application)
5			Kit, Repair
	146-0356	1	Carburetors Without Semi-Automatic Choke (Includes Parts Marked *)
	146-0432	1	Carburetors With Semi-Automatic Choke (Includes Parts Marked +)
6	146-0396	1	Jet, Power - Carburetor
7			Jet, Idle
	146-0425	1	With Semi-Automatic Choke
	146-0370	1	Without Semi-Automatic Choke
8	146-0423	1	Valve Float

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

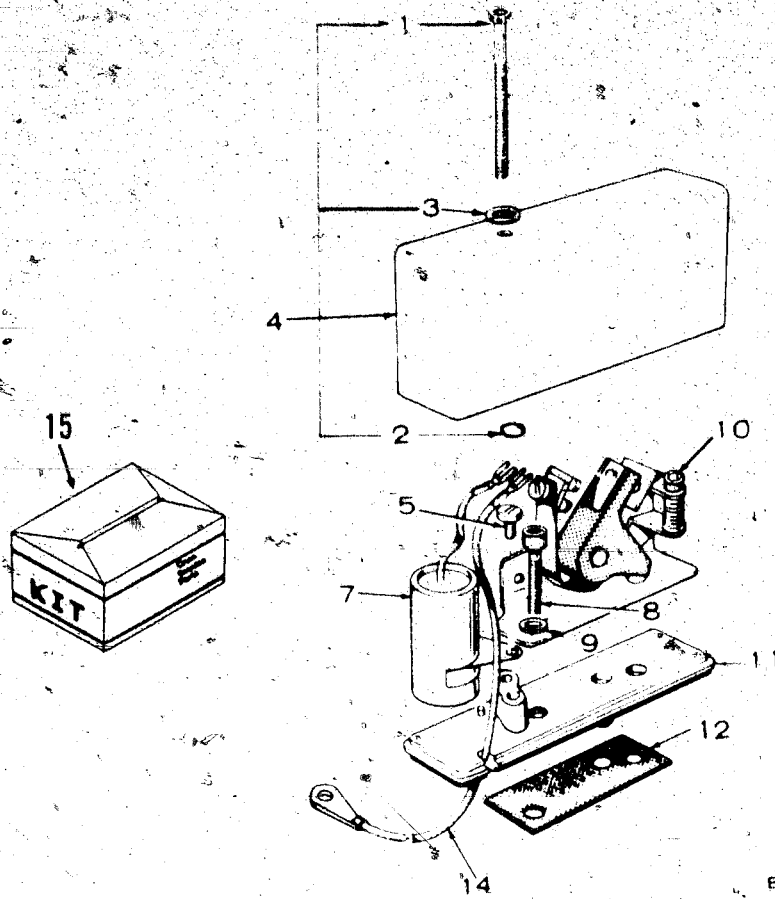
Ignition System



ES-1180

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	160-1303	1	Box, Breaker (See Separate Page for Components) (Includes Mounting Gasket)	10	503-0311	1	Clamp, Coil
2	160-1150	1	Gasket, Breaker Box Mounting	11	336-2378	1	Lead, Breaker Box to Coil
3	850-0038	2	Washer, Lock - Spring (1/4")	12	166-0554	2	Nut, Hex (Special)
4	802-0034	2	Screw, Socket Head (1/4-20 x 3/4")	13	850-2005	2	Washer, Lock - Spring (M)
5	160-1151	1	Plunger, Breaker Points	14	815-0389	2	Screw, Tapping - Hex Wash Head (1/4-20 x 1/2")
6	166-0772	1	Coil, Ignition (Includes Nuts and Washers)	15	166-0741	1	Bracket, Ignition Coil
7	166-0604	2	Cap, Coil Terminal (Part of Coil)	16	166-0614	2	Bushing, Rubber (Inside (166-0604)
8	167-1602	2	Cable, Spark Plug	17	312-0255	1	Capacitor, Ignition Coil Attached to Air Cleaner Support
9	167-0291	2	Spec A - Plug, Spark		312-0256	1	Attached to Coil Bracket
	167-0263	2	Spec B - Plug, Spark		815-0178	1	Screw, Hex Head (10-32 5/8") (Not Shown) Ign Coil

Breaker Box

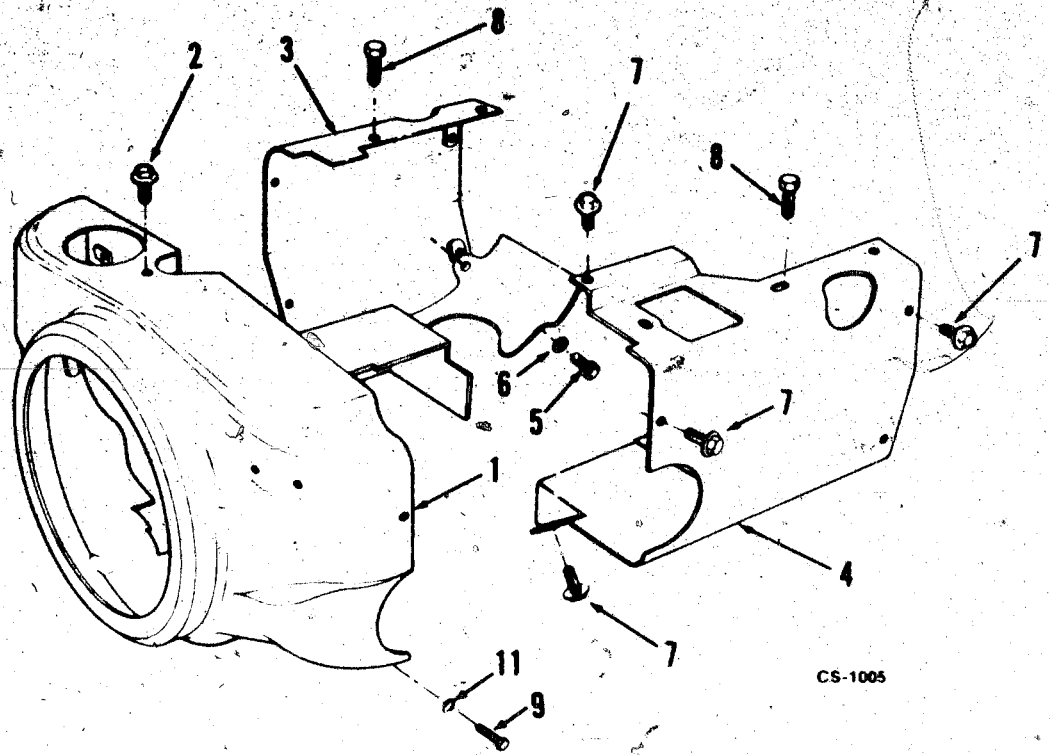


ES-1217

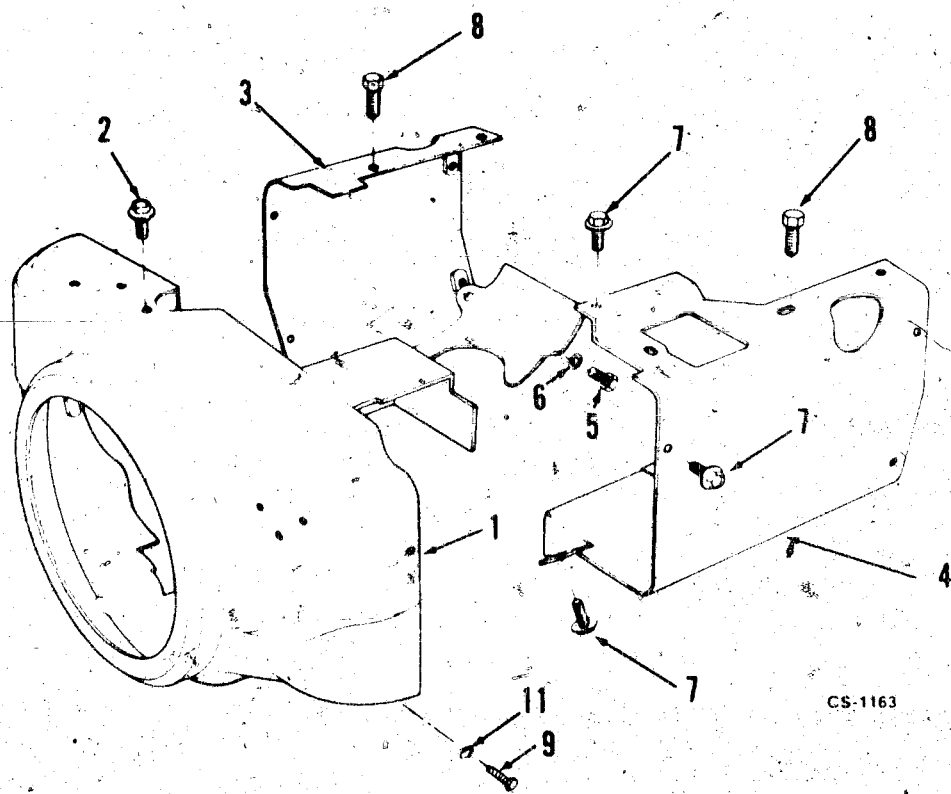
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	160-1303	1	Box, Breaker (Includes Parts Marked *)	8	802-0034	2	*Screw, Cap - Socket Head (1/4-20 x 3/4")
1	802-0022	1	*Screw, Cap - Hex Socket (#10-24 x 1-1/2")	9	850-0040	2	*Washer, Lock (1/4")
2	509-0065	1	*Retainer ("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	15	160-1311	1	Tune Up Kit (Includes Point and Condenser)

* - Parts Included in 160-1303 Breaker Box.

Air Housing



CS-1005

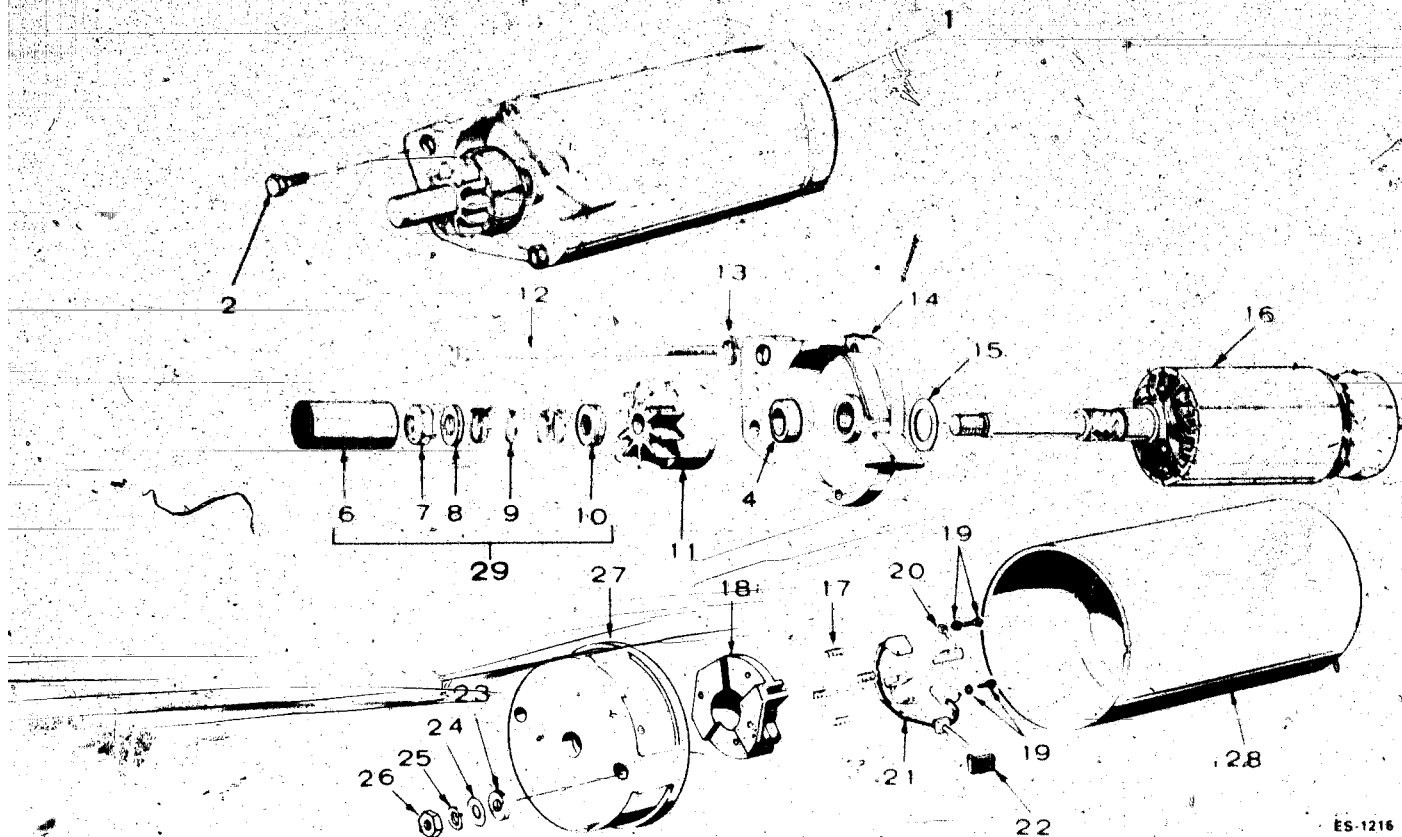


CS-1163

Air Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	134-4288	1	Housing, Blower				Engines Without Oil F
	134-4257	1	Engines with Mounted Oil Filter	134-3518	1		Use Without Top Mou
	134-4285	1	With Standard Air Cleaner - Without Oil Filter	134-4297	1		Voltage Regulator Without Weld Nuts
2	815-0261	1	With Remote Air Cleaner - With Oil Filter	134-4340	1		Use With Top Mounte
3			Screw, Tapping - Hex Washer Head (1/4-20 x 7/16")	134-4476	1		Voltage Regulator
	134-3862	1	Housing, Cylinder Air - Left Side	134-4512	1		Use Without Top Mou
			For Models Without Overheat Switch, Without Weld Nuts				Voltage Regulator
	134-3803	1	For Models With Overheat Switch				Ampere Without Wel
	134-4265	1	With Weld Nuts - 6.64" Long	5	815-0290	2	Use Without Top Mou
			With Weld Nuts - 7.33" Long	6	526-0021	2	Voltage Regulator
4			Housing, Cylinder Air - Right Side	7	821-0008	5	Without Weld Nuts
	134-4270	1	Engines With Mounted Oil Filter	8	821-0016	2	Screw, Tapping - Hex Wa
	134-4272	1	Use Without Top Mounted Voltage Regulator - With Weld Nuts	9	815-0290	2	Head (1/4-20 x 5/8")
	134-4276	1	Use With Top Mounted Voltage Regulator - 15 Ampere With Weld Nuts	11	526-0018	2	Washer, Flat (1/4" Scre
	134-4280	1	Use With Top Mounted Voltage Regulator - 20 Ampere Without Weld Nuts				
			Use With Remote Oil Filter - With Top Mounted Voltage Regulator - With Weld Nuts				

Starter Components



ES-1216

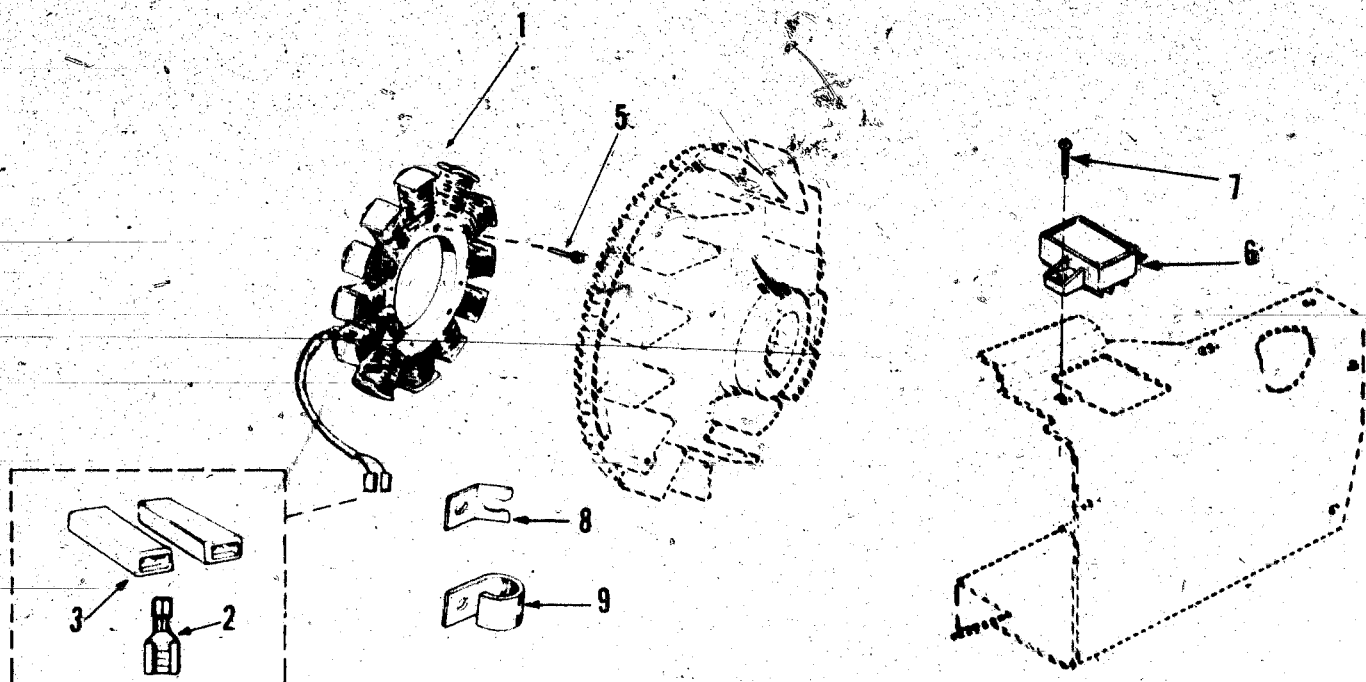
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1567	1	Motor, Starter (Complete)	20	§	2	†*Brush, Ground
2	815-0570	2	Screw, Cap - Hex Washer Head (5/16-18 x 1")	21	§	1	†*Stud and Brush Assembly, Input
4	191-1534	1	Cap, Dust - Drive End	22	§	1	†Bushing, Insulation - 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")		191-1533	1	Repair Kit, Brush Spring Stud (Includes Parts Marked †)
14	191-1597	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				

† - 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.

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 engines parts section.

Option 1 Flywheel Alternator - 20 Ampere (Phelon)



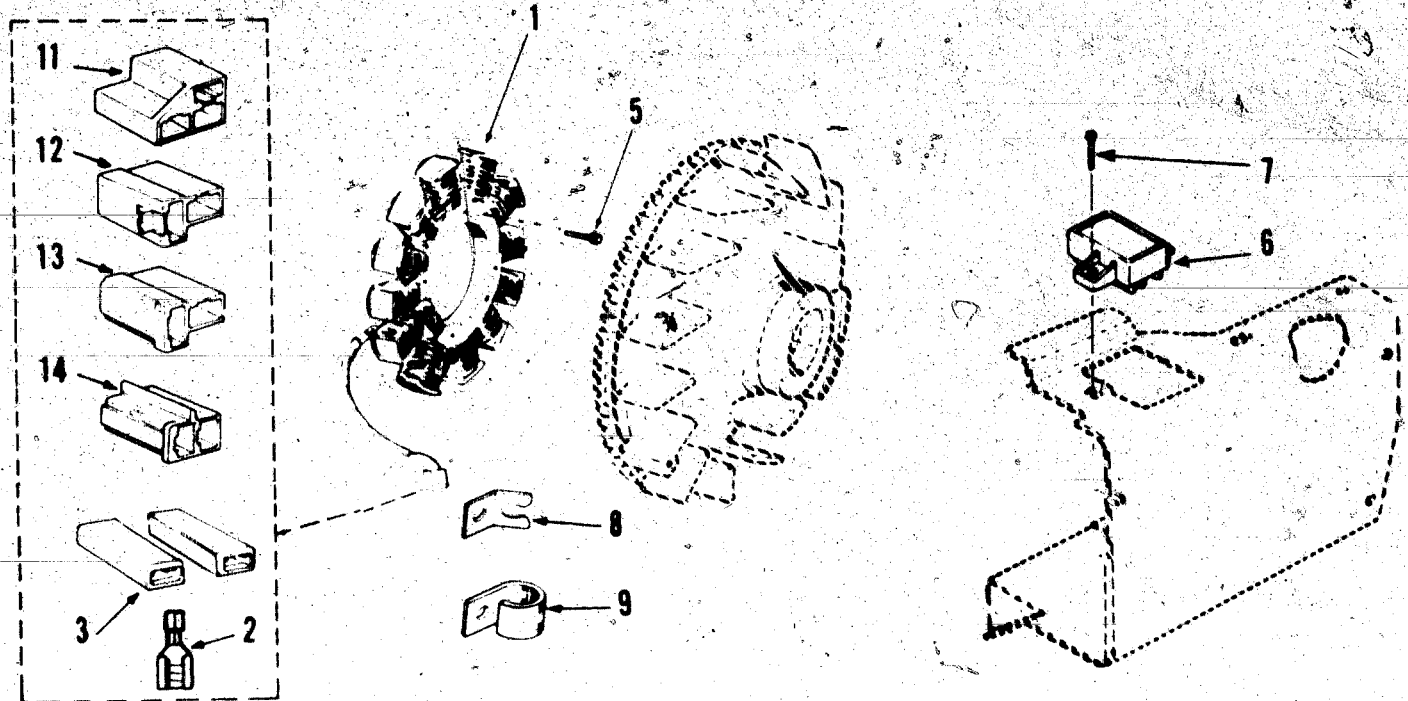
ES-1353

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1276	1	Stator (Includes Terminals and Connector Bodies)
2	332-2423	3	*Terminal, Stator Leads
3	323-1257	2	Body, Terminal Connector - Kit (Includes Parts Marked *)
5	815-0470	3	Screw, Machine - Hex Head - Self-Lock (#10-32 x 1-1/2")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	191-1275	1	Regulator, Voltage
7	821-0007	1	Screw, Cap - Hex Washer H. (1/4-20 x 1/4")
8	167-0188	1	Clip, Cable
9	332-2319	1	Clamp, Wire - Alternator

* - Parts Included in 323-1257 Alternator Connector Body

Option 2 **Flywheel Alternator - 15 Ampere (Phelon)**

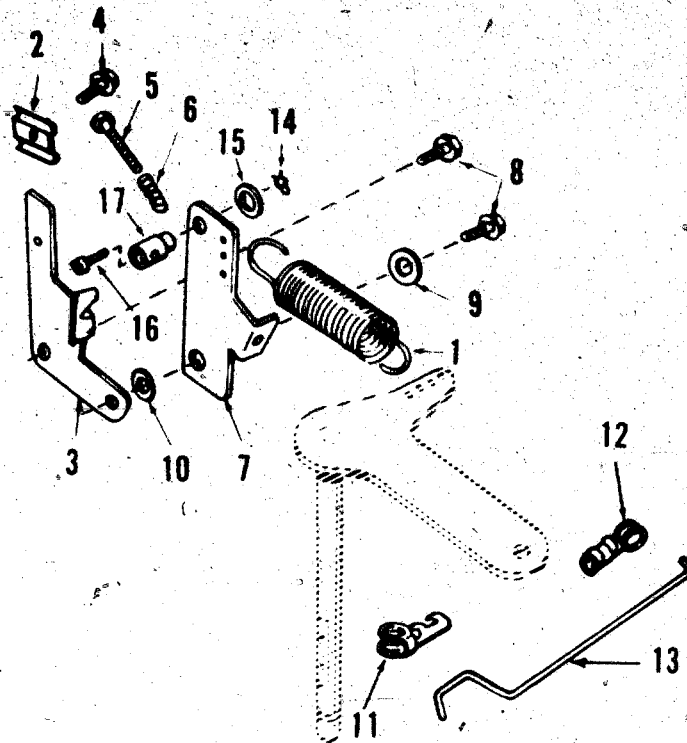


ES-1354

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 He (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 Connector - Kit (Includes Parts Marked *)	9	332-2319	1	Clamp, Wire - Alternator L
5	815-0593	3	Screw, Machine - Hex Head - Self-Lock (#10-32 x 1-3/8")	11	323-0853	1	Body, Terminal Connector
6	191-1206	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 Connect Body Kit

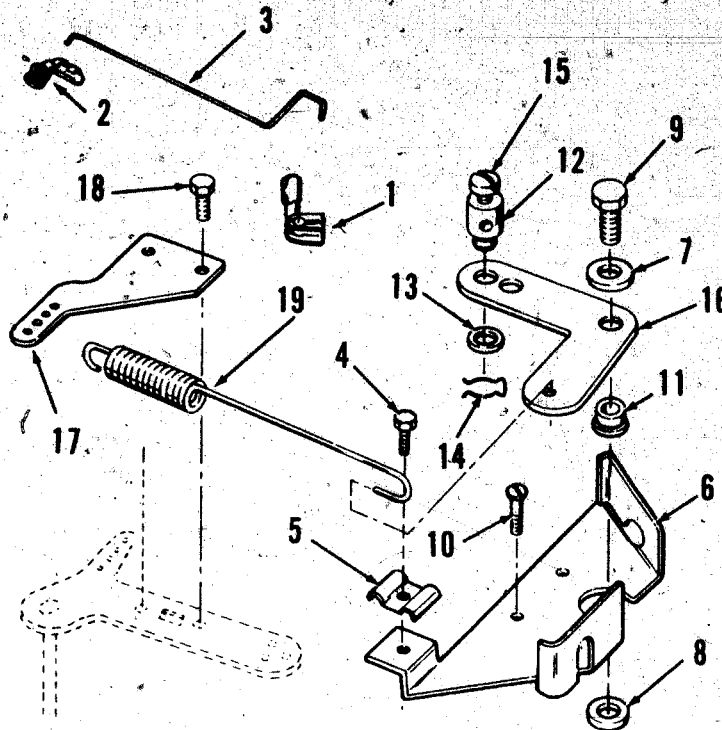
Option 3
Governor Control - Variable Speed
(Side Pull)



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 (1/4" Scre
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 - Contr
4	815-0359	1	Screw, Tapping - Hex Head (#10-32 x 7/8")				to Governor Shaft
5	815-0510	1	Screw, Tapping - Hex Head (#6-32 x 5/8")	12	518-0004	1	Clip, Retaining - Contr
6	150-1398	1	Spring, Idle Setting				to Carburetor
7			Arm, Governor Control	13	150-1924	1	Rod, Governor Control
	150-1345	1	Use With Swivel	14	516-0059	1	Pin, Cotter
	150-1576	1	Use Without Swivel	15	526-0006	1	Washer, Flat (#12 Screw
8	815-0436	2	Screw, Cap - Hex Washer Head (1/4-20 x 1/2")	16	815-0104	1	Screw, Machine - Fillis
							Head (#8-32 x 5/16")
				17	152-0155	1	Swivel, Cable Holding

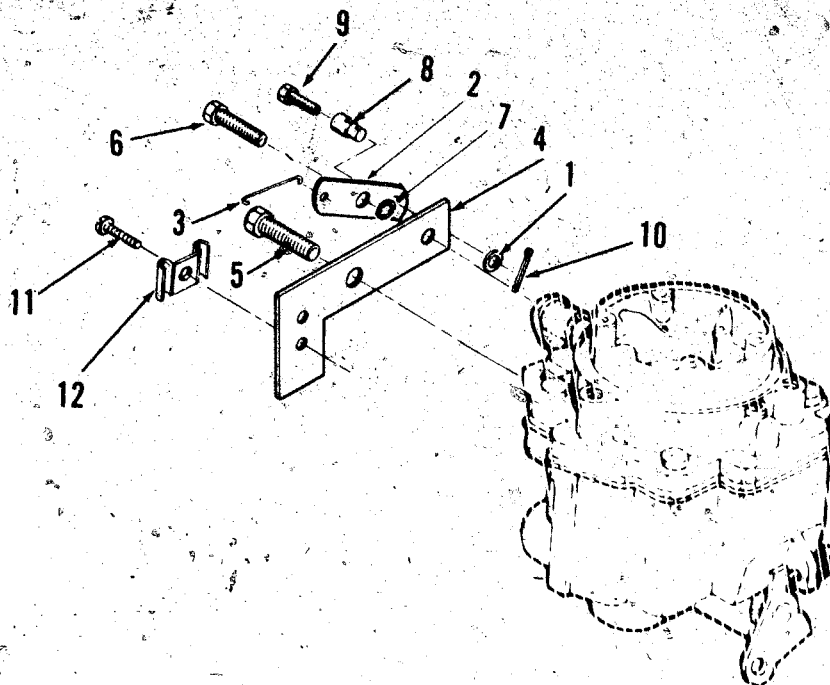
**Option 4
Governor Control - Variable Speed
(Front Pull)**



FS-1138

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	518-0406	1	Clip, Retaining - Control Rod to Governor Arm	10	815-0439	3	Screw, Tapping - Hex Washer Head (8-15 x 1/2")
2	518-0004	1	Clip, Retaining - Control Rod to Carburetor	11	150-1727	1	Bushing, Governor Control
3	150-1924	1	Rod, Control	12	152-0155	1	Swivel, Throttle Lever
4	815-0359	1	Screw, Tapping - Hex Head (#10-32 x 7/8")	13	526-0006	1	Washer, Flat (#12 Screw)
5	153-0514	1	Clamp, Throttle Cable	14	516-0059	1	Pin, Cotter
6	150-1726	1	Bracket, Governor Control Mounting	15	815-0104	1	Screw, Machine - Fillister Head (#8-32 x 5/16")
7	526-0021	1	Washer, Flat (1/4" Screw)	16	150-1366	1	Link, Governor Control
8	850-0040	1	Washer, Lock - Spring (1/4")	17	150-1754	1	Adapter, Governor Arm
9	800-0007	1	Screw, Cap - Hex Head (1/4-20 x 1")	18	815-0181	2	Screw, Tapping - Hex Head w/ET (#10-32 x 1/2")
				19	150-1755	1	Spring, Governor

Option 5 Choke Control (Front Pull)

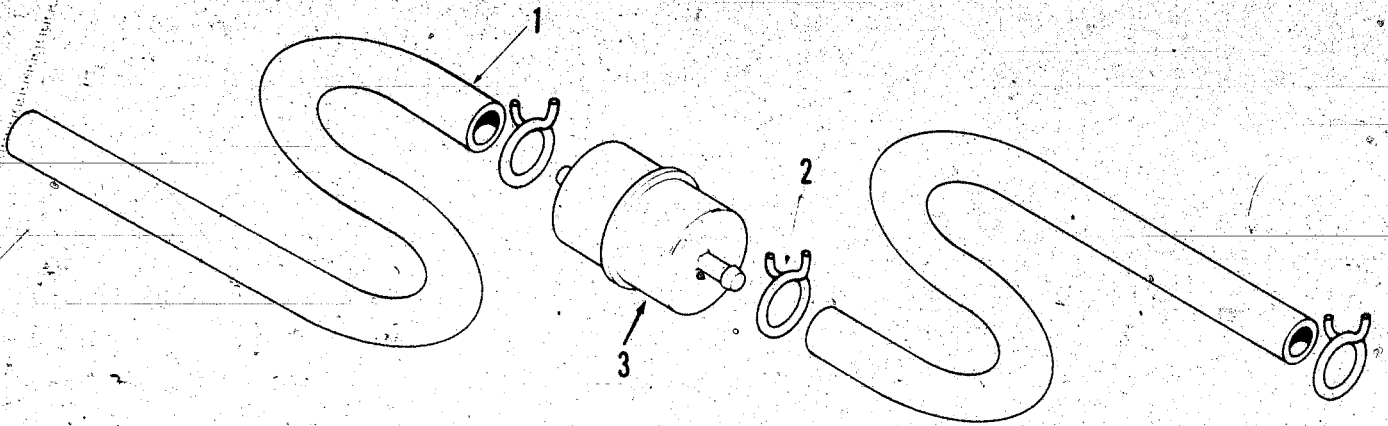


FS-1131R

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	526-0140	1	Washer, Flat (#10 Screw)
2	153-0523	1	Lever, Choke
3	153-0500	1	Link, Choke
4	153-0524	1	Bracket, Choke Cable
5	821-0002	1	Screw, Cap - Hex Washer Head (#10-32 x 1/4")
6	815-0480	1	Screw, Shoulder (#10-32 x .34")
7	854-0010	1	Washer, Lock - IT (#10)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	152-0155	1	Swivel, Choke Lever
9	815-0693	1	Screw, Machine - Hex (#8-32 x .31")
10	516-0059	1	Pin, Cotter
11	815-0359	1	Screw, Tapping - Hex (#10-32 x 7/8")
12	153-0514	1	Clip, Choke Cable

Option 6 Fuel Line Filter

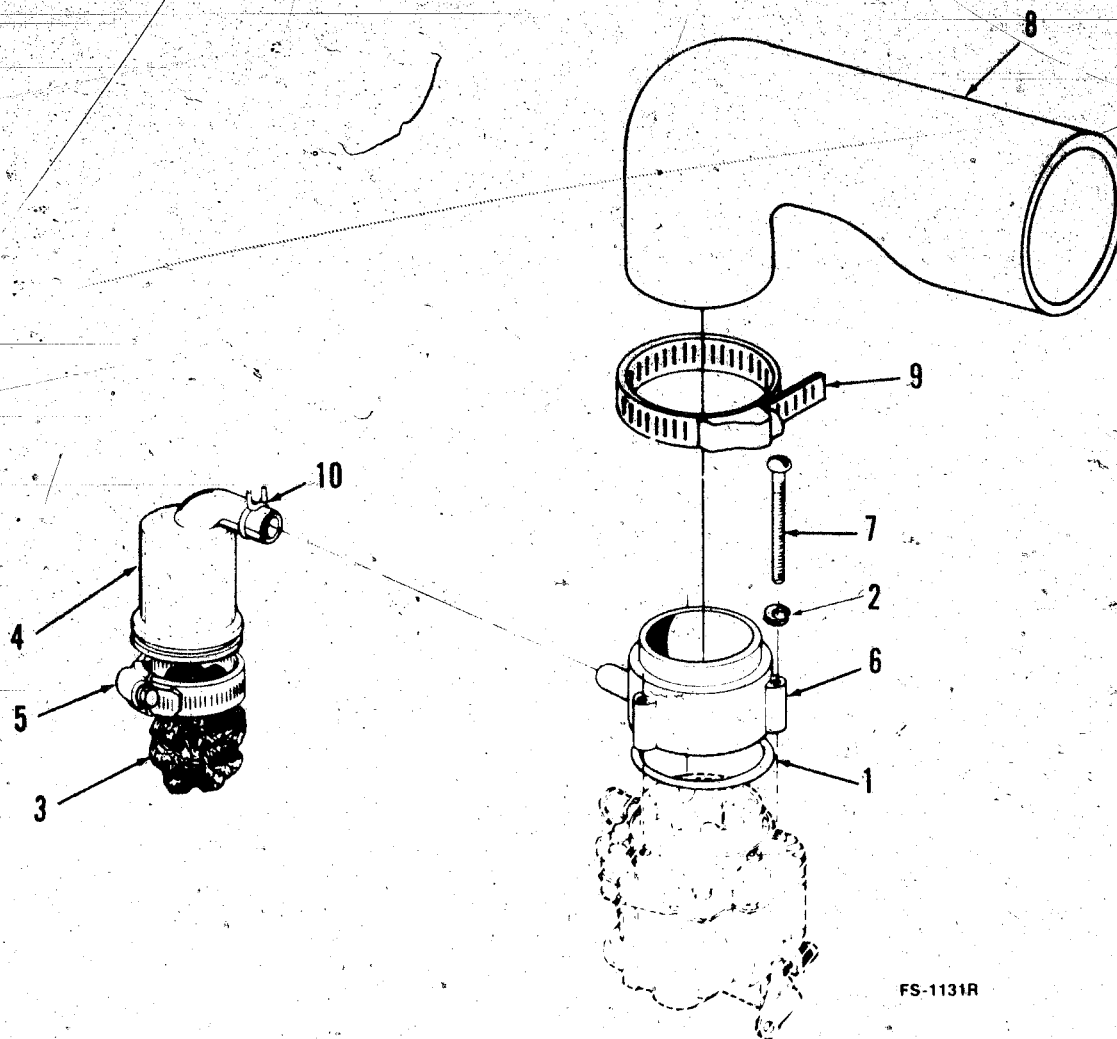


FS-1522

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0707	2	Hose (1/4" ID. x 7/16" OD x .12" Long)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	503-0301	3	Clamp, Hose (7/16")
3	149-2005	1	Filter, Fuel

Option 7 Remote Air Cleaner Adapter

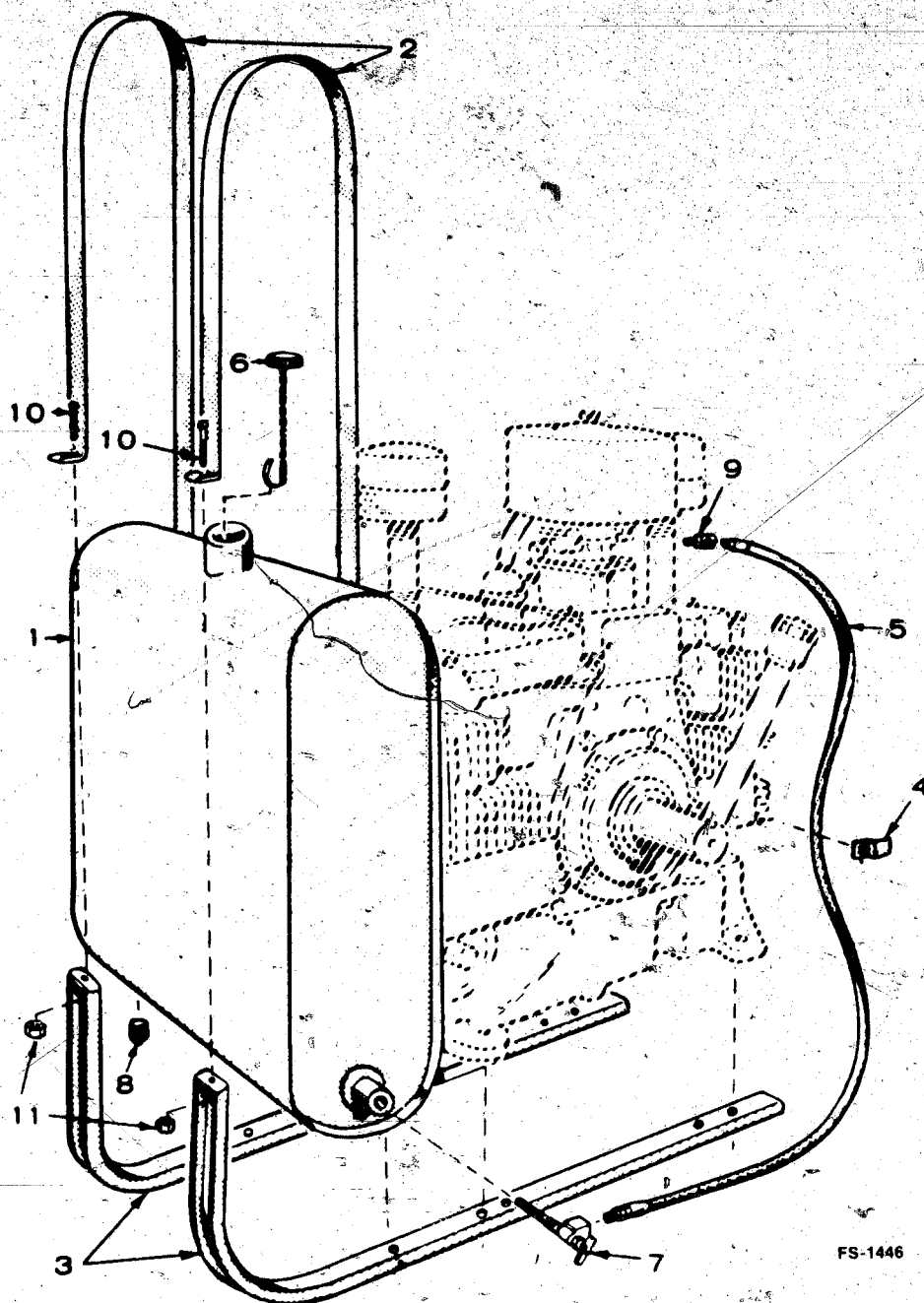


FS-1131R

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 *)	5	503-0107	1	Clamp, Breather Tube
1	509-0145	1	Seal, O-Ring	6	140-1714	1	*Adapter, Carburetor Air Int
2	850-0030	3	*Washer, Lock - Spring (#10)	7	813-0106	3	*Screw, Machine - Round Head (#10-32 x 1-1/8")
3	123-1417	1	*Filter, Breather Tube	8	140-1428	1	*Elbow, Air Intake
4	123-1539	1	*Tube, Crankcase Breather	9	503-0274	1	*Clamp, Hose - Air Intake
				10	503-0171	1	*Clamp, Hose

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

Option 8 Fuel Tank (Side Mounted)

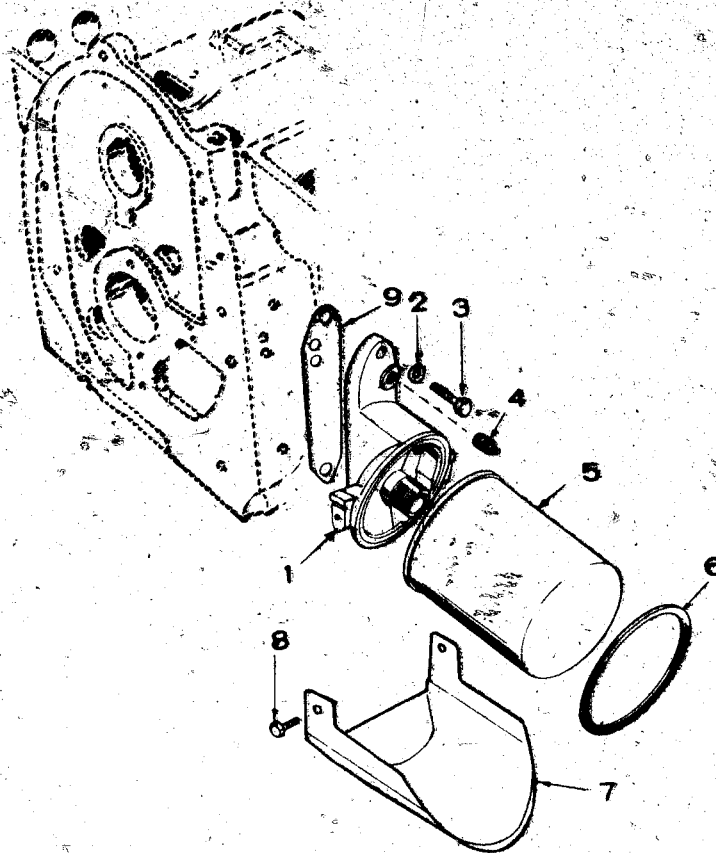


FS-1446

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	159-0597	1	Kit, Fuel Tank - Complete
1	159-0981	1	Tank, Fuel (Less Cap)
2	159-0596	2	Strap, Fuel Tank
3	159-0595	2	Bracket, Fuel Tank
4	134-0599	1	Clip, Fuel Line
5	501-0008	1	Line, Fuel
6	159-0020	1	Cap, Fuel Tank

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
7	504-0013	1	Valve, Shut-off
8	505-0057	1	Plug, Tank Drain
9	502-0020	1	Elbow, Carburetor Inlet
10	813-0108	2	Screw, Machine - Round Head (#10-32 x 1-1/2")
11	870-0053	2	Nut, Hex (#10-32)

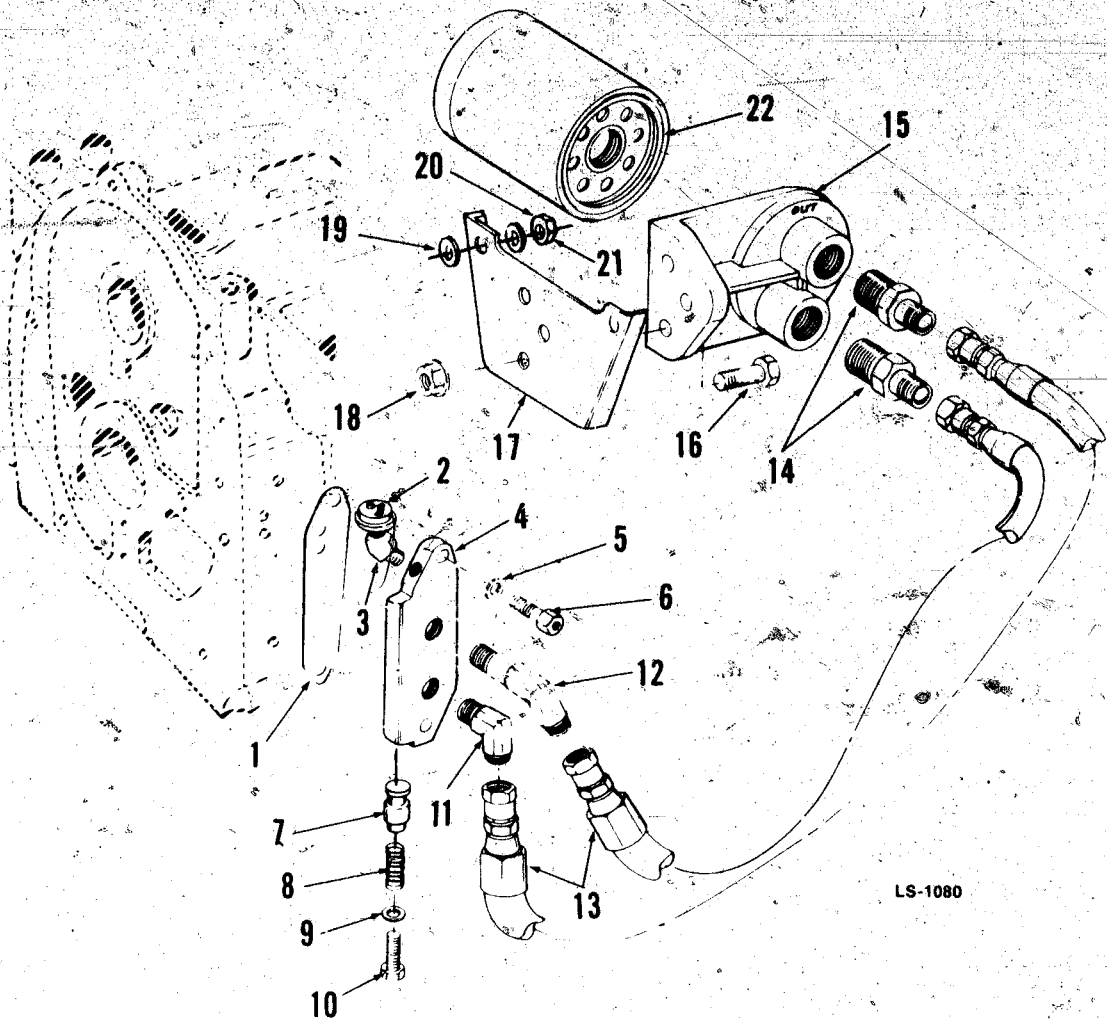
Option 9 Oil Filter (Spin-On)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	122-0320	1	Adapter, Oil Filter
2	526-0065	2	Washer, Flat - Copper (5/16" Screw)
3	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")
4	505-0067	1	Plug, Pipe (1/8")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	122-0645	1	Filter, Oil
6	122-0347	1	Seal, Air - Filter to Hou
7	122-0360	1	Drain, Oil Filter
8	815-0194	2	Screw, Cap - Hex Head w/E (#10-32 x 3/8")
9	122-0321	1	Gasket, Oil Filter Adapte

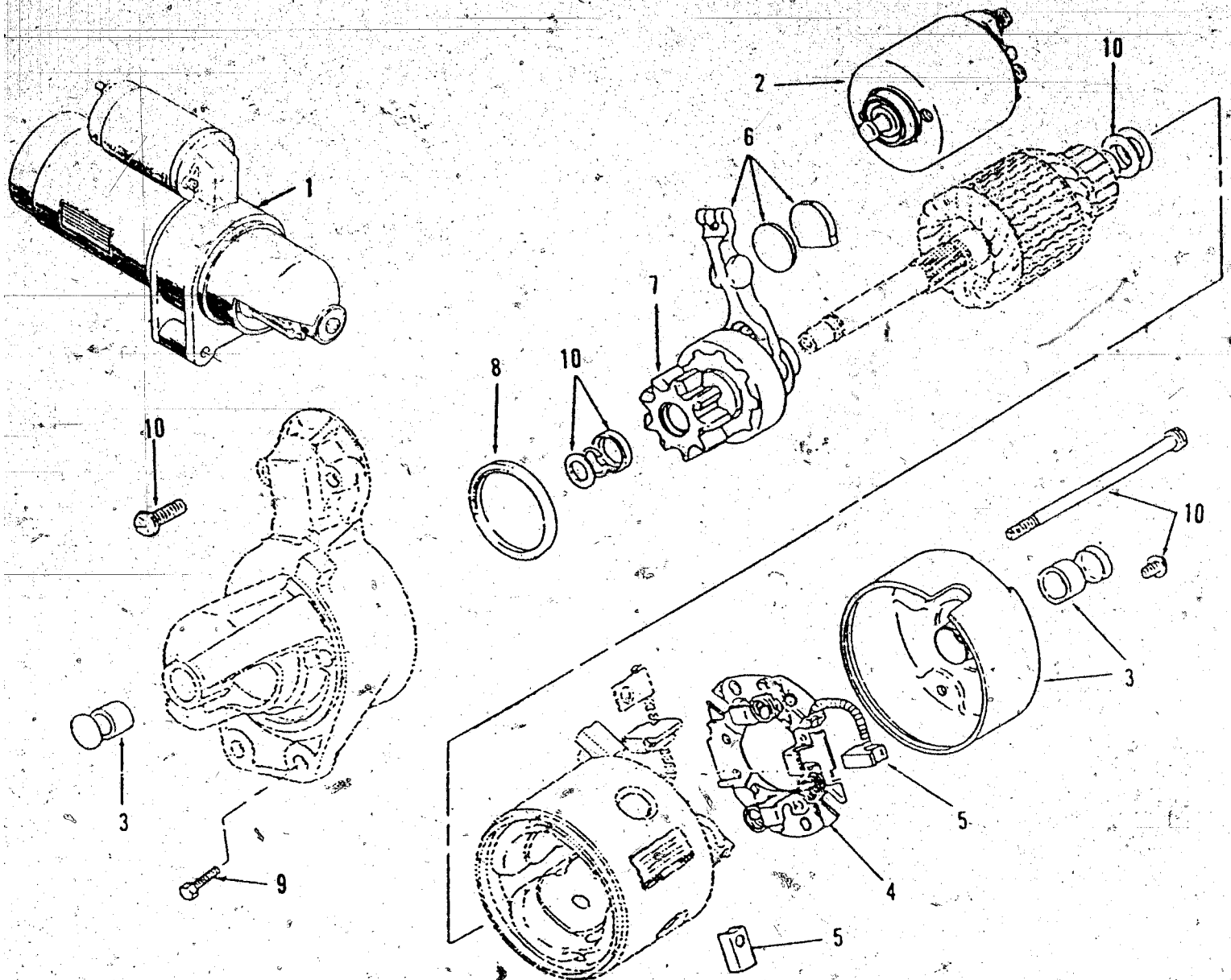
Option 10 Remote Oil Filter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	122-0375	1	Gasket, Oil Filter Adapter
2	309-0105	1	Switch, Low Oil Pressure
3	502-0053	1	Elbow, Street (45°)
4	122-0369	1	Adapter, Oil Filter
5	526-0065	2	Washer, Flat - Copper (5/16" Screw)
6	802-0057	2	Screw, Cap - Socket Head Prior to 6/86 (5/16-18 x 1-1/2")
	802-0056	2	Begin 6/86 (5/16-18 x 1-1/4")
7	120-0398	1	Valve, Bypass Plunger
8	120-0140	1	Spring, Bypass
9	526-0066	1	Washer, Flat (3/8" Screw)
10	801-0047	1	Screw, Cap - Hex Head (3/8-24 x 5/8")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	502-0805	1	Elbow, Male (From Filter)
12	502-0806	1	Elbow, Male (To Filter)
13	501-0440	2	Hose, Oil
14	502-0804	2	Connector, Male
15	122-0476	1	Base, Remote Oil Filter
16	800-0027	3	Screw, Cap - Hex Head (5/16" - 18 x 7/8")
17	122-0559	1	Bracket, Remote Oil Filter
18	870-0257	3	Nut, Self-Lock (5/16-18")
19	526-0030	2	Washer, Flat (3/8" Screw)
20	526-0174	2	Washer, Flat (13/32" ID x 25/32" OD x .1345 Thk)
21	862-0003	2	Nut, Hex (5/16-18")
22	122-0469	1	Filter, Oil

Option 11
Starter Components - Solenoid Shift
191-1682-01 & 191-1801-01 (Standard Begin Spec D)



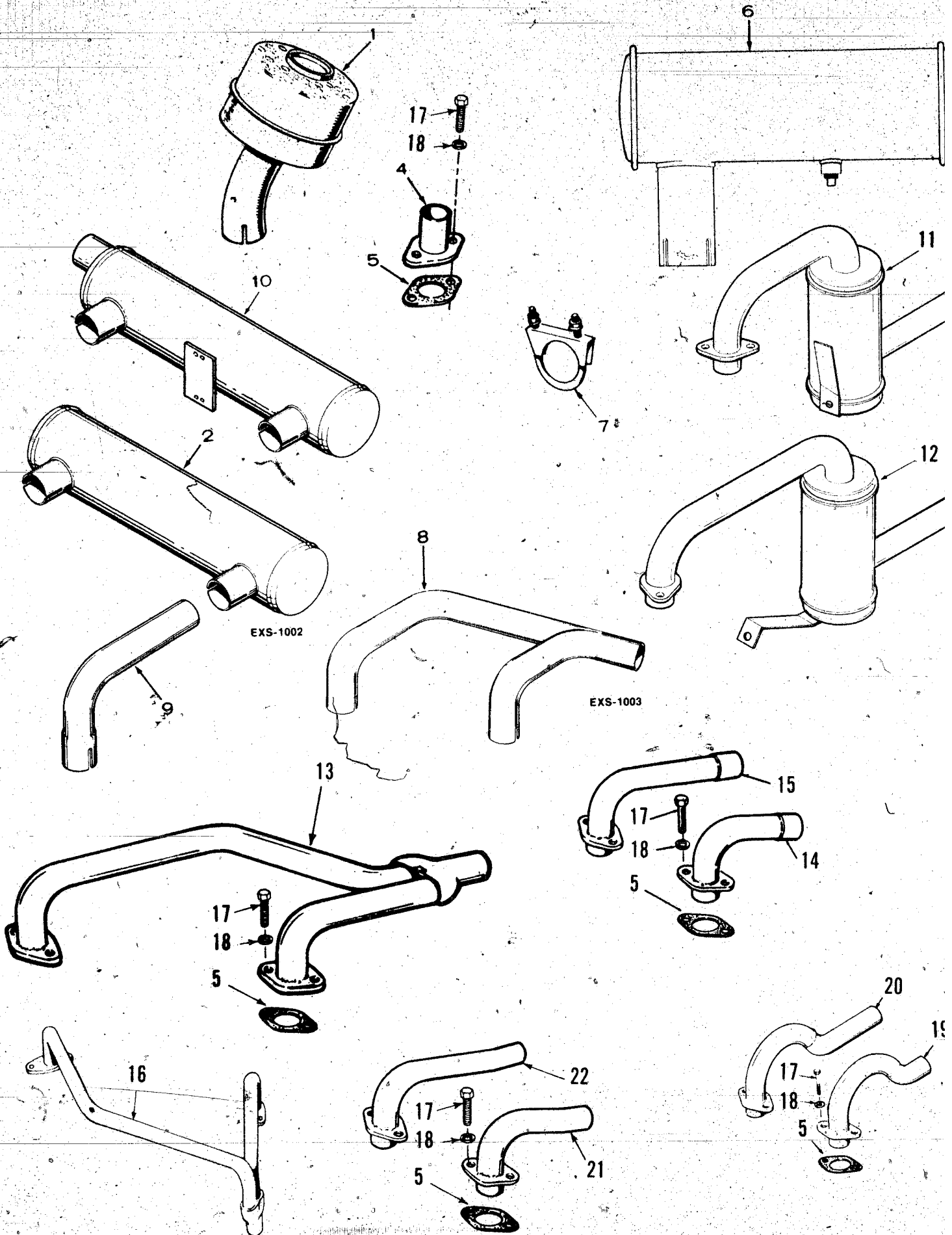
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1682-01	1	Starter, Solenoid Shift Without Dust Seal
	191-1808-01	1	With Dust Seal
	191-1682-02	1	Top Position
2	191-1809	1	Kit, Solenoid - Starter (Includes Solenoid and Spring Plunger)
3	191-1762	1	Kit, Bushing - Starter (Includes Rear Cap with Bushing and Front Bushing)
4	191-1764	1	Holder, Brush (Includes Negative Brush)
5	191-1763	1	Kit, Brush - Starter (Includes (2) Negative and (1) Positive Brushes)
6	191-1766	1	Kit, Shift Lever - Starter (Includes Lever, Wear Plate and Rubber Plug)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
7			Clutch Assembly, Starter (Includes Pinion Gear)
	191-1767	1	Used on 191-1682-01 0
	191-1810	1	Used on 191-1808-01 0
8	191-1811	1	Seal, Dust (Used on 191-1808-01 Only)
9	815-0570	2	Screw, Cap - Hex Washer Start Mount (5/16-18 x
10	191-1765	1	Kit, Hardware - Starter (Includes (2) Solenoid Mounting Screws, 2 Thr Bolts, Armature Shims, Pinion Collar and Retaining Ring)

NOTE: Onan Part Number Stamped on the Starter Nameplate for Identification.

NOTE: Phantom Items Not For Sale, For Replace Order Complete Starter.

Miscellaneous Exhaust Options

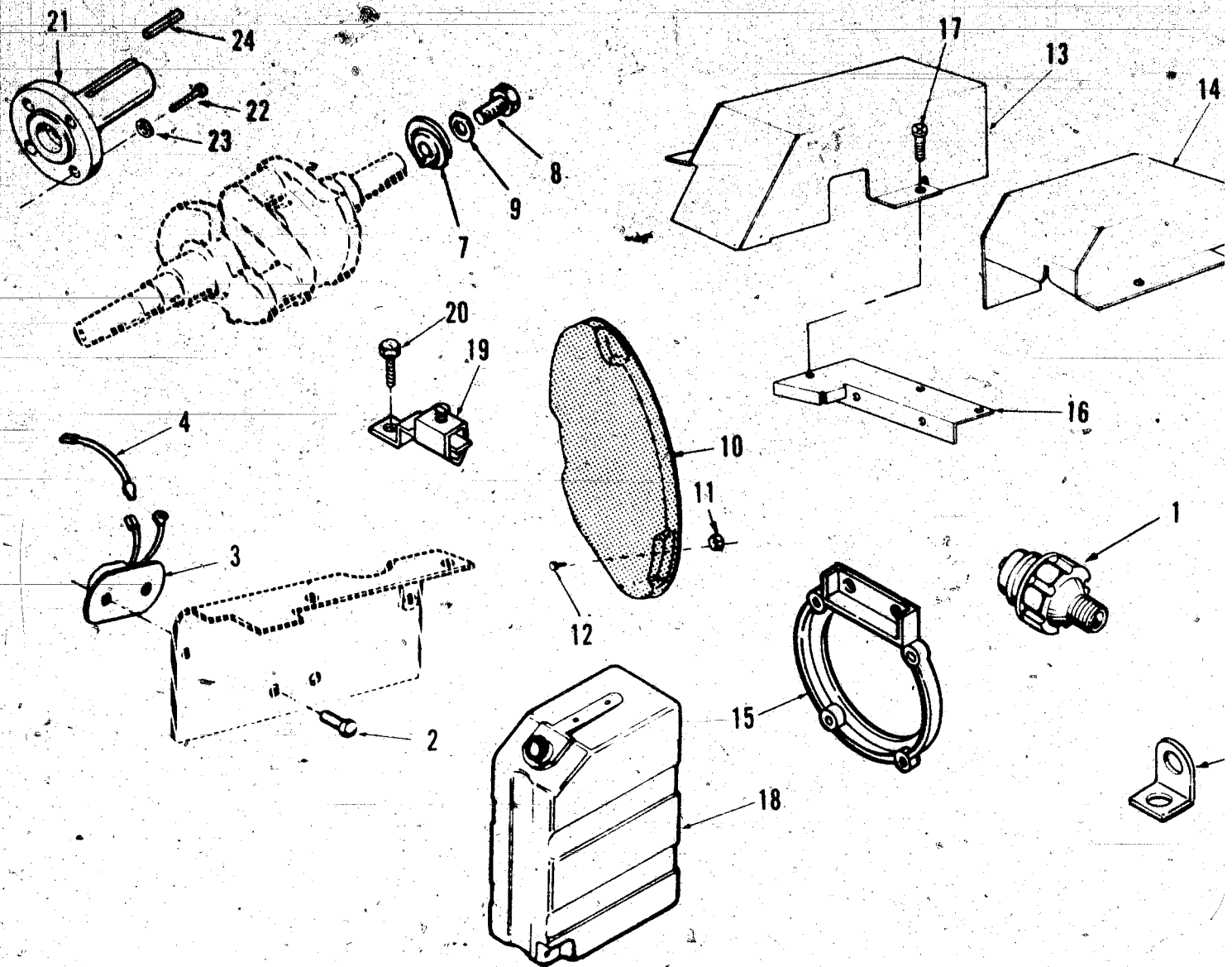


Miscellaneous Exhaust Options

NOTE: Various exhaust options are used on B43E 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	13			Manifold, Exhaust
2	155-1692	1	Muffler, Exhaust		154-2243	1	Crossover (Rear Back Out
4	154-1958	2	Adapter, Exhaust (Flange Type)		154-2457	1	Right Rear Outlet
5	154-1725	2	Gasket, Exhaust Adapter	14	154-2128	1	Adapter, Exhaust - Right
6			Muffler, Exhaust - Raygun				(1-1/4" OD Outlet)
	155-1697	2	With Spark Arrestor	15	154-2129	1	Adapter, Exhaust - Left
	155-1693	2	Without Spark Arrestor				(1-1/4" OD Outlet)
7			Clamp, Muffler	16	154-2178	1	Manifold, Exhaust (Right
	155-1256	2	1-1/4"				Rear Downward Outlet)
	155-1257	2	1-3/8"	17	800-0026	4	Screw, Cap - Hex Head
8			Manifold, Exhaust - Crossover				(5/16-18" x 3/4")
	154-1986	1	Left Rear Outlet	18	850-0045	4	Washer, Lock - Spring (5/16
	154-1669	1	Left Front Outlet	19	154-2158	1	Adapter, Exhaust - Right
	154-1986	1	Right Front Outlet				(1-1/8" OD Outlet)
	154-1669	1	Right Rear Outlet	20	154-2159	1	Adapter, Exhaust - Left
9			Pipe, Exhaust (90°)				(1-1/8" OD Outlet)
	155-1703	1	Left	21	154-2343	1	Adapter, Exhaust - Right
	155-1704	1	Right				(1-15/64" OD Outlet)
10	155-1848	1	Muffler, Crossover	22	154-2344	1	Adapter, Exhaust - Left
11	155-1722	1	Muffler, RH				(1-15/64" OD Outlet)
12	155-1723	1	Muffler, LH				

Miscellaneous Optional Parts



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	309-0105	1	Switch, Low Oil Pressure	14	134-3890	1	Cover, Exhaust - RH
	309-0237	1	2 Terminal				- Use with 154-2128 Exh Adapter
2	818-0076	2	1 Terminal		134-4341	1	- Use with 154-2343 Exh Adapter
3	309-0497	1	Rivet, Switch (1/8")	15	190-0597	1	Adapter, Clutch - Elect
4	336-9501	1	Switch, High Air Temperature				Begin Spec B
			Lead, High Air Temperature	16	134-3905	1	Support Assy, Exhaust C
5	403-1523	2	Switch	17	821-0009	2	Screw, Lock Head (1/4-2 3/8")
6	526-0009	3	Bracket, Lifting	18	159-1150	1	Tank, Fuel - Plastic (3.5 Gal. Capacity)
7	104-1156	1	Washer, Flat (#10 Screw)	19	332-1319	1	Terminal, Solderless -
8	801-0050	1	Weight, Balance				Begin Spec B
			Screw, Cap - Hex Head (3/8-24 x 1")	20	815-0261	1	Screw, Tapping - Hex Wa Head (1/4-20 x 7/16")
9	850-0050	1	Washer, Lock - Spring (3/8")	21			Shaft, PTO (2" Pilot)
10	134-3875	1	Screen, Flywheel (Stationary)		190-0546	1	1-7/8" Diameter
11	134-3868	3	Spacer, Flywheel Screen		190-0687	1	1" Diameter
12	815-0359	3	Screw, Tapping - Hex Washer Head (#10-32 x 7/8")	22	800-0552	4	Screw, Cap - Hex Head (5/16-18 x 1-1/8")
13			Cover, Exhaust - LH	23	850-0045	4	Washer, Lock (5/16")
	134-4028	1	- Use with 154-2129 Exhaust Adapter	24	515-0007	1	Key (1/4 x 2")
	134-4254	1	- Use with 154-2344 Exhaust Adapter				

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