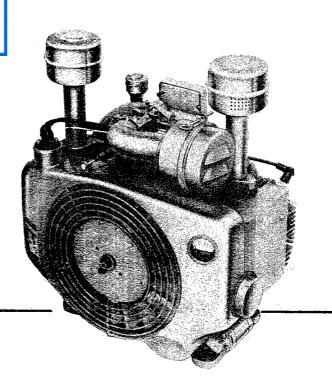
Onan

Parts Manual

NH Engine

 $U_{ser}F_{riendly}^{\bullet}CD_{s}$



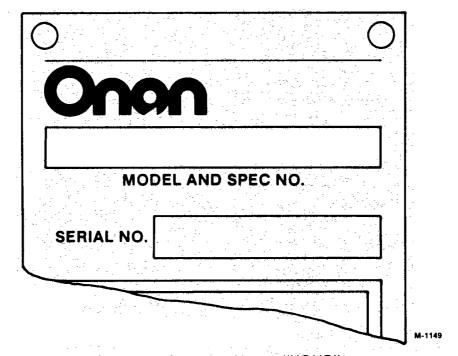
940-0253 8-85 (SPEC A-D)

http://stores.ebay.com/UserFriendlyCDs

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.



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Introduction

This catalog applies to the standard NH Engines as 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 below the illustration. Parts illustrations are typical. Using the *Model and Spec No*. from the plant nameplate, select the *Parts Key No*. (1, 2, etc., in the last column) that applies to your *Engine Model and Spec No*. This *Parts Key No*. represents parts that differ between models. Unless otherwise mentioned in the description, parts are interchangeable between models. Right and left plant sides are determined by facing the blower end (front) of the engine.

ENGINE DATA TABLE

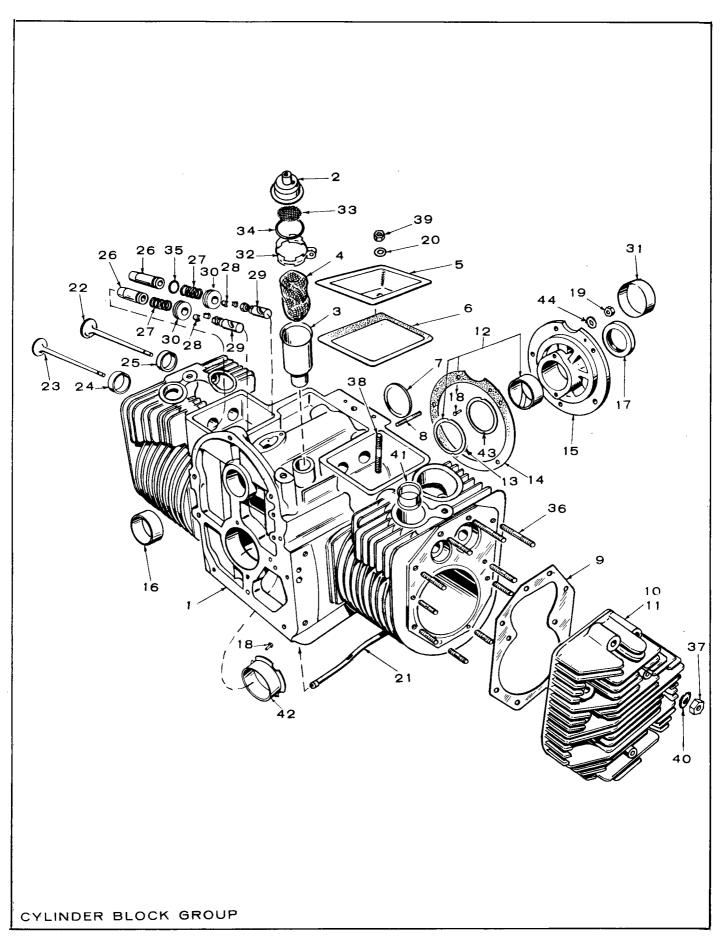
MODEL AND SPEC NO.	PARTS KEY NO.	MODEL AND SPEC NO.	PARTS KEY NO.
NH-S/*	l	NH-MS/*	2

^{*} The Specification Letter Advances (A to B, B to C, etc.) with manufacturing changes.

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.

Standard Engine Parts Section



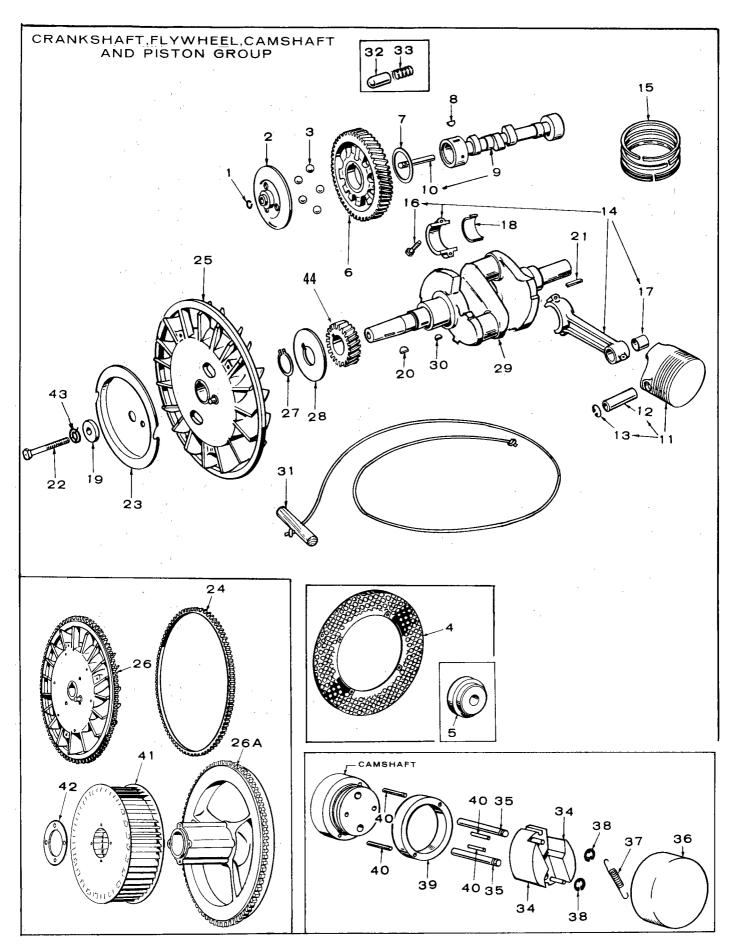
REF.		QTY. USED	PART DESCRIPTION
			Block Assembly, Cylinder
	* .	•	(Includes Parts Marked *)
2	123A954	1	Cap & Valve, Breather
3	123A952	i	Tube, Breather
4	123P865	i	Baffle, Breather Tube
5	110A1624	2	Cover, Valve Compartment
6	110B1720	2	Gasket, Valve Cover
7	517-48	ī	Plug, Camshaft Expansion
é -	520A736	5	Stud, Rear Bearing Plate Mtg.
9	110C1731	2	Gasket, Cylinder Head
ΙÓ	HEAD, CYL	INDER (#2	
. 0	110D1732	1	Spec A and B
	110B1905	ı	Begin Spec C
1.1	HEAD, CYL	INDER (#1) - LH
	110D1733	1	Spec A and B
	110B1906	l	Begin Spec C
12	*BEARING, C	RANKSHA	AFT ~ REAR
	101K420	1	Standard
	101K420-02	L	.002 'Undersize .010 'Undersize
	101K420-10	l	.010 Undersize
	101K420-20	ļ	.020 "Undersize
	101K420-30	1 -	.030 "Undersize
13	104A575	. 2 *	▲Washer, Thrust - Crankshaft
		1	Bearing Gasket, Bearing Plate
14	101B415	1	
15	*PLATE, RE Includes Pir		NG (Excludes Bearing -
	101-0439	1	Engines Without Reduction
	1010417		Gear Assembly Engine With Reduction Gear
	101B417)	Assembly
16	101B405	2	*Bearing, Camshaft Front &
			Rear (Precision)
17	509A41	1	Seal, Bearing Plate
18	516A72	4	*Pin, Main Bearing Stop
19	104-91	5	Nut, Bearing Plate Stud
20	526-63	2	Washer (Copper), Valve Compartment Cover
21	1200400	1	*Tube, Crankcase Oil
21 22	120B680 110B1756	2	Valve, Intake (Stellite)
23	110B1736	2	Valve, fittake (Stellite)
23 24	*INSERT EV		ALVE SEAT (STELLITE)
۷ 1	110A1716	.n Ausi <i>vi</i> 2	Standard
	110A1716	_	.002 "Oversize
	110A1716-02		005 Oversize
	110A1716-03		.005 "Oversize .010 "Oversize
	110A1716-10		.025 "Oversize
		-	.020 0,0.0.20

REF NO		QTY. USED	PART DESCRIPTION
25	*INSERT. IN	TAKE VA	LVE SEAT (STELLITE)
_5	110B1933	- 2	Standard
	110B1933-02	2	.002 (Oversize .005 (Oversize
	110B1933-05	2	.005 ''Oversize
	110B1933-10	2	.010 "Oversize
	110B1933-25	2	.025 ''Oversize
26	110A3167	4 '	*Guide, Valve
27	110A539	4	Spring, Valve
28	110A639	8	Lock, Valve & Spring,
			Retaining
29	TAPPET, VA		Considerable
•	115A6	4	Standard
2.0	115A6-05	4	.005 "Oversize
30	110A904	4	Rotocap
31	110A1283	J	Cover, Timing Control (Also in Camshaft Group)
32	123A951	1	Clamp, Breather Tube Cap
33	123A958	i	Screen, Breather Tube
34	509-117	i	Seal, "O" Ring, Breather Tube
35	110A68		*Gasket, Valve Guide (Intake)
36			AD MOUNTING
	520A717	8	3/8 "x 2 " 3/8 "x 2-1/4"
	520A715	. 8	3/8 "x 2-1/4"
	520A716	4	3/8 "× 2-5/8 "
37	NUT, FLANG	E - CYLI	NDER HEAD STUD
	870-248	20	Spec A and B
	104A91	20	Begin Spec C
38	520A714	2	Stud, Valve Box Cover
39	115A25	2	Nut, Hex - Valve Box Cover
			Stud
40	526A250	20	Washer, Flat - Cylinder Head
			Stud - Begin Spec C
41	154A1424	2	Insert, Exhaust Port - Begin
			Spec C
42	*BEARING, CI		
	101K432	J	Standard
	101K432-02	ļ	.002 ″ Undersize .010 ″ Undersize
	101K432-10	ı	.010 Undersize
	.101K432-20	ı	.020 "Undersize
40	101K432-30		.030 "Undersize
43	104A776	As Req.	Shim (,005 ") - Crankshaft Thrust
44	526-251	5	Washer, Flat - Bearing
			Plate Stud
	800-46	2	Screw, Hex Head Cap (3/8-16 x
-	F2(((-	1/2) - Cylinder Block
	526-66	2	Washer (3/8 Copper) - Cylinder Block

^{★-} Order by description, giving complete Model, Spec and Serial Number.

^{* -} Included in Cylinder Block Assembly.

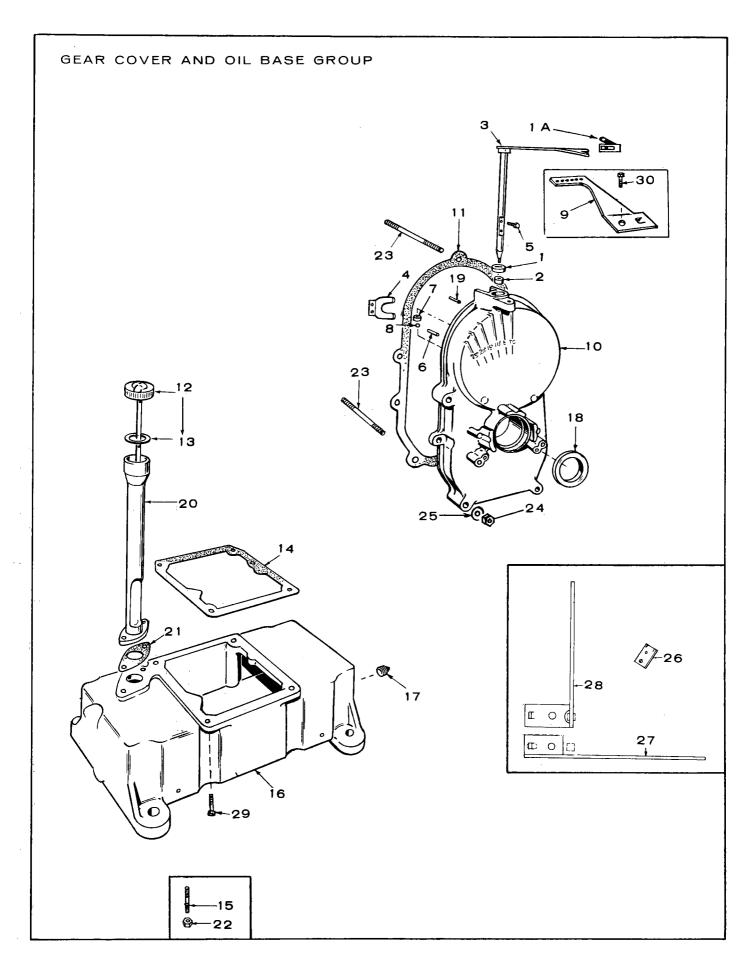
^{▲ -} Use one only with rear bearing on units with flange type front bearing.



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REF.	PART NO.	QTY. USED	PART DESCRIPTION
٠,١	150A78	i	*Ring, Snap - Camshaft Center Pin
. 2	150B612	1	*Cup, Governor
3	510-15	5	*Ball, Fly - Governor
4	134B1889	1	Guard, Blower Wheel - Optional
5		=RONT	POWER TAKE OFF - KEY 2 - OPT.
	104A700 .	1	Spec A Only
_	104A732	1	Begin Spec B
6	105-0332	,	Gear, Assembly, Camshaft (Incl. Flyball Spacer & Plate)
			(IIICI, FIYDAII SPACEI & Flate)
7	105-0541	1	Washer, Camshaft Gear Thrust
8	515-1	1	Key, Camshaft Gear Mounting
9	CAMSHAFT		
	105B309	1	*Governor Controlled Engine
			(Includes Center Pin)
	105B317	ı	★*Governor Controlled Engine
			(Includes Center Pin & Spark
	1050210		Advance Mechanism Pins)
	105C310	!	Manually Controlled Engine ★Manually Controlled Engine
	105B321	Ī	(Includes Spark Advance
			Mechanism Pins)
10	150A75	J	*Pin, Center - Camshaft
11		PIN (II	NCLUDES RETAINING RINGS)
	112-111	2	Standard
	1.12-111-05	$\tilde{2}$.	.005 "Oversize .010 "Oversize
	112-111-10	2	.010 "Oversize
	112-111-20	2	.020 Oversize
	112-111-30	2	.030 "Oversize
	112-111-40	2	.040 'Oversize
12	PIN, PISTON		
	112A112	2	Standard
	1-12A112-02	2	.002 "Oversize
13	518P294	4	Ring, Piston Pin Retaining
. 14	114C203	2	Rod, Connecting (Includes
15	RING SET, F	PISTON	Bushing & Bolts)
	113A165	2	Standard
	113A165-05	2	.005 '' Oversize
	113A165-10	2	.010 "Oversize
	113A165-20	2	.020 "Over size
	113A165 - 30	2	.030 Oversize
	113 A 165-40	2	.040 "Oversize
1.6	805A10	4	Bolt, Place - Connecting Rod Cap
17	114A36	2	Bushing, Piston Pin - Connect-
18	BEARING H	ALE CO	ing Rod DNNECTING ROD
10	114B188	4	Standard
	114B188-02	4	.002 "Undersize
	114B188-10	4	010 "Indersize
	114B188-20	4	.020 "Undersize
-	114B188-30	4	.030 ″ Undersize

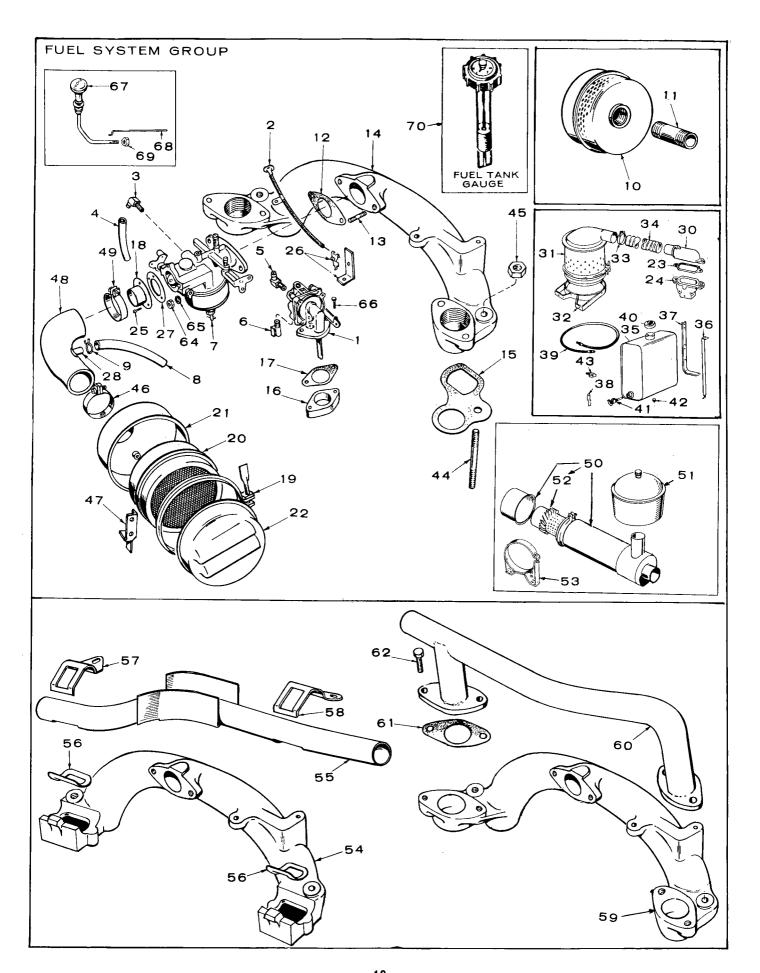
REF.	PART NO.	QTY. USED	PART DESCRIPTION
19	WASHER	WHEEL MO	NINTING
17	526A 17	I	Key I and Vacu-Flo Cooled
	320/17		Engines
	526A128	ŧ	Key 2
20	515-2	í	Key, Wheel Mounting
21	515A198	i	Key, Crankshaft Stub
22	104A170	i	Screw, Wheel Mounting
23	192B308	į	Sheave, Starter Rope - Key I
24	134C673	i	Gear, Ring - Flywheel, Key 2
27	1340073		& Vacu-Flo Cooled Engines
	FLYWHEE	ΞL	4
25	160E1080		Key!
26	134B2071	i	Key 2 (Includes Ring Gear) -
		•	Spec A Only
26 -	134B1895	1	Key 2 (Includes Ring Gear) -
		•	Begin Spec B
26A	104B740	J	Vacu-Flo Cooled Engines
20		·	(Includes Ring Gear)
27	518-14	1	Lock, Crankshaft Gear Washer
28	104A43	i	Washer, Crankshaft Gear Ret.
29	**	i	Crankshaft
30	515-1	ì	Key, Crankshaft Gear Mtg.
31	192A83	i	Rope, Manual Starting - Key
32	105A58	i	Plunger, Camshaft, Thrust
	. 00, 100	•	(Manually Controlled Engine)
33	105A59	1	Spring, Camshaft Plunger
33	103/13/	'	(Manually Controlled Engine)
34	★WEIGHT A	SSEMBLY	TIMING CONTROL - INCLUDES
	PINS	.002.122.	, , , , , , , , , , , , , , , , , , , ,
	160A1049	2	Magneto Ignition
	**	2	Battery Ignition
35	516P172	2	★Pin, Groove (1-1/16") Timing
00	5101 172	-	Control
36	110A1283	t	★Cover, Timing Control (Also in
			Cylinder Block Group)
37	160A1051	1	★Spring, Timing Control
38	518P129	2	★Ring, Timing Control Retainer
39	160A791	I	★Cam, Timing Control
40	516-144	. 5	★Pin, Roll (7/16") Camshaft &
		-	Timing Control Cam
41	134C2130	1	Wheel, Blower - Vacu-Flo
			Cooled Engines
42	134A911	1	Plate, Blower Wheel - Vacu-Flo
			Cooled Engines
43	850-55	1	Washer, Lock (7/16 ")
44	104-0032	1	Gear, Crankshaft
			nal for Key 2.
			engine only.
			and Serial Number.
		, - , - ,	



REF.	PART NO.	QTY. USED	PART DESCRIPTION
-1	509P8	1	*Seal, Oil - Governor Shaft
IΑ	150A678	* 1	Clip, Governor Sensitivity
			Adjustment (Standard
_			Speed Governor) Key 2
2 3	-510P13 150B1260	1	*Bearing, Governor Shaft (Upper) *Shaft & Arm, Governor
3 4	150B1260	· ¦	*Yoke, Governor Shaft
5	819-46	2	*Screw, Yoke Mounting
,	01740	~	(8-32 × 3/8 '')
6	516-130	. 1	*Pin, Governor Cup Stop
			(In Gear Cover)
7	510A8	t	*Bearing, Governor Shaft (Lower)
8	510P14	l	*Ball, Bearing, Governor Shaft
9	150B1073	1	Extension, Governor Arm
10	COVER AS	SEMBLY,	
	103-0655	I	Standard Governor (Also for
		*	Flywheel Alternator Models) - Includes Parts Marked * -
	103-0649	1	Key I (and Key 2 Begin Spec B) Standard Governor (Also for
	100 00 10	·	Flywheel Alternator Models)
			- Includes Parts Marked * -
			Key 2 - Spec A Only
	103-0653	1 .	Manual Throttle - Includes Oil
			Seal (Also for Flywheel
			Alternator Models) - Key I
			(and Key 2 Begin Spec B)
1	103-0650	J	Manual Throttle - Includes Oil
			Seal (Also for Flywheel
			Alternator Models) - Key 2 -
	102511		Spec A Only
11	103BII	 	Gasket, Gear Cover
12 13	123A191	[Cap & Indicator, Oil Fill Gasket, Oil Fill Cap
	1237 (17)	•	Gaunce, on I in Cap

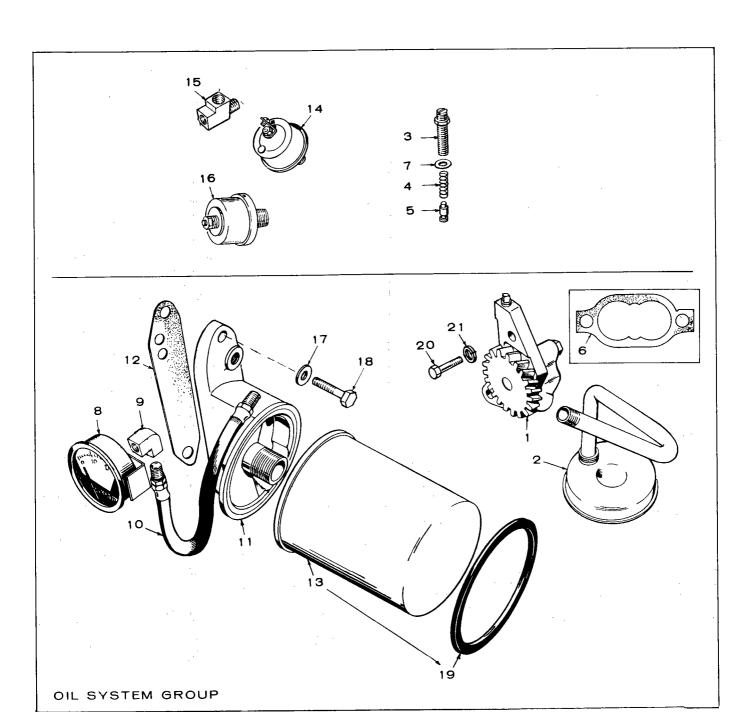
REF.	PART	QTY.	PART
NO.	NO.	USED	DESCRIPTION
14	102B646		Gasket, Oil Base Mounting
15		4	Stud, Oil Base to Block - Early
			Models (Order #800-51 Cap Screw)
16	†	ŀ	Base, Oil
17	505-56	I	Plug, Oil Drain
18	*SEAL, GEA	AR COVER	\
	509A40	1	Key I (and Key 2 Begin Spec B)
	.509A97	. 1	Key 2 - Spec A Only
19	516A11	⁻2	Pin, Gear Cover (5/16 x 1-1/8 ")
20	123B1117	I	Tube, Oil Fill
21	141A78	. 1	Gasket, Oil Fill Tube Mounting
22	104A91	4 _	Nut, Hex - Oil Base Stud - Early Models
23	STUD, GE	AR COVER	R TO BLOCK
	520A710	4	5/16 x 2-1/8 "
	520A7!I	1	5/16 x 3-11/16 "
24	110A445	5	Nut, Gear Cover Mounting Stud
25	526-65	5	Washer (Copper), Gear Cover Mounting
	ARM, GOV	ERNOR PI	JLL - CONSTANT SPEED
	GOVERNO		
26	150A1268	1	Rear Pull
27	150A755	1	Front Pull
28	150A752	1	Right Pull
29	800-51	4	Screw (3/8-16 x 1-1/4 ") -
_	-		Oil Base to Block
30	815-181	1	Screw, Governor Arm
			Extension Mounting

^{*} Included in Gear Cover Assembly.
† Order by description, giving complete Model, Spec and Serial Number.



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REF.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	149K526		Repair Kit, Fuel Pump	40	159A7	J	Cap, Fuel Tank - Optional
11.	149D1223	i	Pump, Fuel	41	504A13	l l	Valve, Shut-off - Optional
2	149A1024	i	Rod, Fuel Pump Primer, Key I	42	505-57	į	Plug, Fuel Tank Drain - Optional
3	502-313	j	Elbow, Carburetor Inlet	43	502-20	ĺ	Elbow, Fuel Pump to Fuel
4	149A 228	1	Line, Fuel Pump to Carburetor		J-1		Line (Use with Optional
5	502-313	i	Elbow, Fuel Pump Outlet				Side Mounted Fuel Tank)
6	502-2	i	Elbow, Fuel Pump Inlet	44	520A713	2	Stud, Intake Manifold Mounting
7		OR GASO	LINE (Separate Group for	45	104A91	2	Nut, Intake Manifold Stud
,	Components)		LINE (SSPEN SIS CI SUP 10)	46	503-311	1	Clamp, Hose - Air Cleaner
	141D689	1	Manual Choke	47	140BI067	i	Bracket, Air Cleaner Mounting
	141D690	i	Electric Choke	48	140A1075	1	Elbow, Carburetor Air Inlet
8	503A582	i	Hose, Breather	49	503-4	1	Clamp, Hose - Air Inlet Elbow to
9	503-170	2	Clamp, Breather Hose				Adapter
ΙÓ	155B1092	2	Muffler, Exhaust	50	140P721	Ĺ	Cleaner, Air - Optional
11	505-263	2	Nipple, Exhaust (1-1/4 x 6 ")	51	140P723	1	Pre-Cleaner (Plastic) - Air Cleaner
12	141 A281	ĩ	Gasket, Carburetor Mounting				- Optional
13	520A526	2	Stud, Carburetor Mounting	52	140P765	1	Element Only, Air Cleaner -
14	154C1286	ĩ	Manifold, Intake				Optional
15	154A1250	2	Gasket, Intake Manifold to	53	140P722	ı	Band, Air Cleaner Mounting -
	15 11 11 200	~	Cylinder Block				Optional
16	149A45	. 1	Spacer, Fuel Pump Mounting	54	154C1238	1	Manifold, Intake - Crossover
17	149A3	2	Gasket, Fuel Pump Mounting				Exhaust (Low Profile) - Opt.
18	145A398	ī	Adapter, Carburetor Air Inlet	55	155B1069	1	Tube, Exhaust - Crossover
19	140B1073	i	Clamp, Air Cleaner				Exhaust - Optional
20	140B1071	i	Element, Air Cleaner	56	155A1070	2	Gasket, Exhaust Tube - Opt.
21	140C1066	i	Cleaner, Air	57	155B1052	1	Clamp, Exhaust Tube, L.H
22	14001061	i	Cover, Air Cleaner				Optional
23	140A584	i	Gasket, Air Cleaner - Optional	58	155B1053	1	Clamp, Exhaust Tube, R.H
24	140A936	1	Adapter, Air Cleaner - Optional				Optional
25	815-199	3	Screw (10-32 x 5/16 ") - Adapter	59	154C1384	Į.	Manifold, Intake - Crossover
			Mounting			-	Exhaust (High Profile) - Opt.
26	153-263	1	Bracket & Clamp, Manual Choke	60	MANIFOLD	EXHAUST	(HIGH PROFILE) - OPTIONAL
			- Optional		154C 1386	1	L.H. Outlet
27	140A921	1	Gasket, Adapter to Carburetor		154C1382	1	R.H. Outlet
28	I 23 A7 33	1	Tube, Elbow to Breather Hose	61	154A1383	2	Gasket, Exhaust Manifold - Opt.
30	140C645	I	Adapter, Air Cleäner - Optional	62	821-16	4	Screw, Locking $(5/16-18 \times 3/4)$
31	140B500	1	Cleaner, Air (Oil Bath) - Optional				Exhaust Manifold Mounting
32	140B519	1	Band, Air Cleaner - Optional				
33	503P365	2	Clamp, Air Cleaner Hose - Opt.	64	868-2	2	Nut, Hex (Jam) - Carburetor Mtg.
34	503A444	1	Hose, Air Cleaner - Optional	65	85 4 -17	2	Washer, Lock - Carburetor Mtg.
35	159B575	1	Tank, Fuel - Optional	66	806-9	2	Screw (1/4-20 x 1-1/4") - Fuel
36	159A596	2	Strap, Fuel Tank - Optional				Pump Mounting
37	159B595	2	Bracket, Fuel Tank - Optional	67	153C439	ŧ	Lever, Choke - Engines With Top
38	134A599	i	Clip, Fuel Line - Optional	l			Mounted Control - Optional
39	501A8	1	Line, Fuel - Optional (Use With	68	153A442	1	Linkage, Choke - Engines With Top Mounted Control - Optional
			Opt. Side Mounted Fuel Tank)	69	870-53	1	•
				70	193P207	j	Nut (10-32) - Choke Lever Cap and Gauge Assembly -
				, 0	1/31/20/	ı	Optional

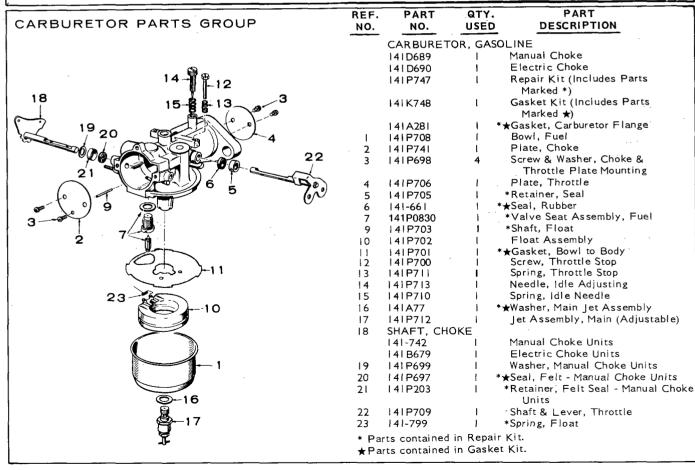


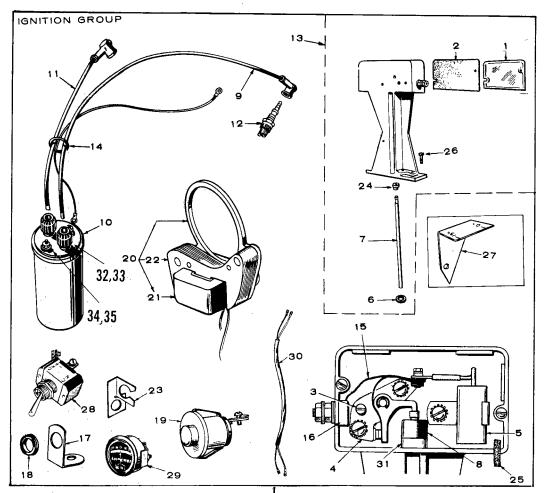
REF.	PART NO.	QTY. USED	PART DESCRIPTION
- 1	120A491	1	Pump, Oil (Components Not Sold Separately)
2	*	l	Intake, Oil Pump - Includes Cup, Screen & Pipe
3	120A187	ı	Stud Assembly, By-Pass Adjusting (Includes Nut)
4	120A [40	1	Spring, By-Pass Valve
5	120A398	i	Valve, By-Pass
6	120K161	1	Gasket Kit, Oil Pump
7	526-66	I	Washer, Oil Pressure Relief Valve Adjusting Screw
8	193P5		Gauge, Oil Pressure
9	502-5	l	Elbow, Oil Line to Gauge
10	501-3	1	Line, Flexible - Oil Gauge
1.1	122D320	1	Adapter, Oil Filter

REF.	PART NO.	QTY. USED	PART DESCRIPTION
12	122A321	1	Gasket, Adapter
13	122 B323	1	Filter, Oil
14	309A10	I	Switch, Low Oil Pressure - Opt.
15	502-58	I	Tee, Low Oil Pressure Switch - Optional
16	193-108	1	Sender, Oil Pressure - Optional
17	526-65	2	Washer (Copper), Adapter Mtg.
18	800-28	2	Screw, Hex Cap - Adapter Mtg.
19	122A347	ī	Gasket, Oil Filter
20	800-7	2	Screw (1/4-20 x 1 ") - Oil Pump Mounting
21	850-40	2	Washer, Lock (1/4")

^{* -} Order by description, giving complete Model, Spec and Serial Number.

REF.	PART NO.	QTY. USED	PART DESCRIPTION	
	149D1223	I	Pump, Fuel (Illustrated in Fuel System Group)	
	149K526	l	Repair Parts Kit - Includes Parts Marked *	19
1		į.	Body, Not Sold Separately	○ F
2	815-148	4	Screw, Machine, #8-32 x 7/8 "	
3	815-147	2	Screw, Phillips Self Tapping, #6-32 x 5/8, Valve Retainer	4-9
4	149-96	2	*Valve and Cage	8
5	149A95	2	*Gasket, Valve	
6	149A582	Į.	*Diaphragm Assembly	
7	149A672	1	*Spring	3—1 1 1 − 3
8	149A539	1	Retainer, Valve Cage	
9	149A675	1	*Spring	√19 - -17
10	516A11.3	1	Pin, Rocker Arm	
11		1	Body, Not Sold Separately	13
12	149A670	1	Link, Rocker	
13	149B1148	1	Arm, Rocker	12
1.4	149A1042	1	Lever, Primer	
15	509-65	2	Seal, "O" Ring	9 8 10
16	SPRING, PR	IMER LEV	/ER	
	149-1044	1	RH - Side	
	149-0404	1	LH - Side	
17	149A3	I	*Gasket, Pump Mounting	
18	518P129	-	Ring, Retainer, Primer Lever	18
19	149A858	1	*Gasket, Diaphragm-Lower Side	14

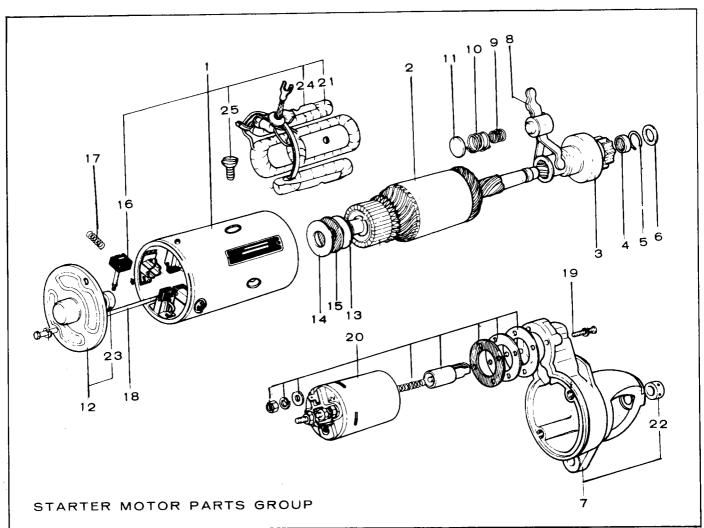




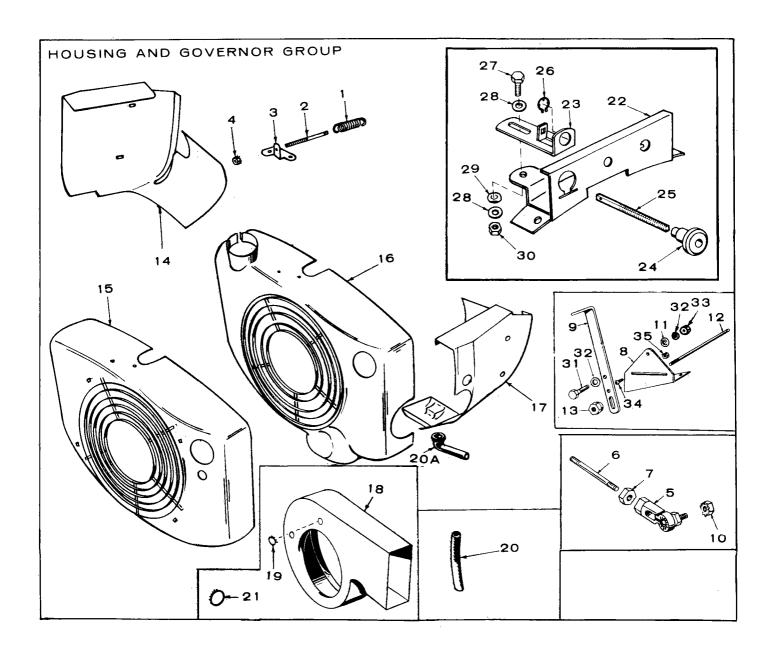
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
		0360	DESCRIP 1 (ON
1	I 60 A 930	1	Cover, Breaker Box
2	160A150	1	Gasket, Breaker Box Cover
3	160A75	1	Cam, Point Gap Adjusting
4	160A2	t	*Point Set,Breaker
5	312A69	1	*Condenser, Breaker Points
6	160A1040	1	Gasket, Breaker Box Mounting
7	160A723	1	Plunger
8	160A1143	ļ	Diaphragm, Breaker Box
9	CABLE, SF	ARK PLUC	- RIGHT HAND
	167 A I 464	1	Key 2 (24 ")
	167A 548	1	Key I (21 '')
10	166B535	1	Coil, Ignition, Key 2
111	167A1463	ı	Cable (19"), Spark Plug - L.H.
12	167-241	2	Plug, Spark
13	160A1135	1	Box, Breaker (Includes Points,
			Condenser Cover, Gasket & Bushing)
14	50 9 -35	I	"O" Ring - Spark Plug Cables
15	160 A428	1 .	Strap, Point Set to Terminal
			Block
16	160A349	1	Block & Terminal Assembly

RE NC		QTY. USED	PART DESCRIPTION
17	332A273	I	Clip, Magneto Lead, Key
18	GROMMET		Marrata Land Clin Koy I
	508 A 2	1	Magneto Lead Clip, Key I Ignition Coil Lead, Key 2
	508P114	1	
	508P95	2	Spark Plug Cables
19	313-18	!	Switch, Ignition Stop, Key I
20	160B1121	1	Magneto Stator Assy., Key
21	160D1124	1	Coil, Magneto Stator, Key I
22	160B1118	I,	Pole Shoe, Magneto Stator, Key I
23	167A188	4	Clip, Spark Plug Cables, Key I
24	160A1041	1	Bushing, Breaker Box (Bottom)
25	160A261	1	Wick, Breaker Box
26	815P357	2	Screw, Mounting - Breaker Box
27	166B519	1	Bracket, Timing - Vacu-Flo Cooled Engines
28	308AI 40	ı	Switch, Toggle - Ignition (Start- On-Off) - Optional
29	302A60	i	Ammeter, DC (20-0-20) - Opt.
30	338A613	i	Harness, Wiring - Ammeter to Terminal Block - Optional
31	160A931	1	Guide, Plunger
	160-0836	Í	Ignition Tune-Up Kit (Incl. Parts Marked *)
32	166-0604	2	Cap, Coil Terminal (Part of Coil)
33	166-0614	2	Bushing, Rubber
		_	(Inside Cap 166-0604)
34	166-0554	2 2	Nut, Hex (Special)
35	850-2005	2	Washer, Lock-Spring (Metric)

^{* -} Parts Included in 160-0836 Ignition Tune-Up Kit.



REF.	PART NO.	QTY. USED	PART DESCRIPTION	REF.	PART NO.	QTY. USED	PART DESCRIPTION
	191D734		Motor Assembly, Starting	14	191-755		Washer, Plain
1	191-742	i	Yoke Assembly (Frame) - Includes	15	191-756	1	Washer, Insulator
			Parts Marked *	16	191-757	4	* Bru sh
2.	191-743	1	Armature	17	191-758	4	Spring, Brush
3	191-744	1	Clutch, Starter	18	191-759	2	Bolt, Through
4	191-745	1	Stop, Pinion	19	191-760	3	Screw, Machine P.H.
5	191-746	i i	Ring	20	191-761	1	Switch Assembly, Solenoid
. 6	191-747	ı	Washer, Plain	21	191-762	1	*Coil Assembly, Field
7	191-748	1	Bracket Assembly, Front	22	191-763	1	Bearing, Front
8	191-749	1	Lever Assembly	23	191-764	1	Bearing, Rear
9	191-750	1	Spring, Lever	24	191-765	4	*Pole Shoe
10	191-751	J	Spring, Lever	25	191-766	4	*Screw, Pan Head
LĪ	191-752	1	Holder, Spring	İ			
12	191-753	1	Bracket Assembly, Rear	* In	cluded in Yo	ke Assem	bly.
13	191-754	1	Washer, Plain				



REF.	PART NO.	QTY. USED	PART DESCRIPTION	REF.	PART NO.	QTY. USED	PART DESCRIPTION
	150A98		Spring, Governor (All Governor	17	HOUSING,	CYLINDER	AIR - RIGHT
			Controlled Engines)	ì	134B1990	1	Key I - Spec A and B
2	150A96	l	Stud, Speed Adjustment (Std.	Ì	134B2142	1	Key I - Begin Spec C
_		_	Governor Controlled Engine)		134B1997	1	Key 2 - Spec A and B
3	150A1262	ı	Bracket, Speed Stud (Standard		134B2143	1	Key 2 - Begin Spec C
			Governor Controlled Engine)	18	134B2149	I	Scroll, Air - Vacu-Flo Cooled
4	870-131	ı	Nut, Speed Adjustment (Std.				Engines - Optional
-	150 40 20	_	Governor Controlled Engine)	19	517-21	2	Plug, Dot Button (7/8") - Air
5	150A939	2	Joint, Ball (All Governor	l	-		Scroll - Vacu-Flo Cooled
,	E20 A (2 2		Controlled Engines)	1			Engines - Optional
6	520A623	I	Link, Throttle (All Governor	İ	HOSE, OIL	. DRAIN	
7	0700100	3	Controlled Engines)	20	503A391	1	Early Models
7	870P188	2	Palnut, Locking Bracket, Variable Speed		122B345	ι	Later Models
8	I 52B86	ļ	Control (Optional)	21	517-35	l	Plug, Dot Button (1-1/16") -
9	152A83	1	Lever, Variable Speed Control	i			Vacu-Flo Cooled Engines -
9	152/463	1	(Optional)	1			Optional
10	870-131	2	Nut, Keps	22	134B2251	l	Panel & Support, Control -
11	152A41	1	Washer, Variable Speed Lever		15001000		Optional
	132/71	'	Tension (Optional)	23	150B1323	Į.	Slide, Governor Control - Opt.
12	152A90	1	Stud, Variable Speed Adjust-	24	150A1324	l	Knob, Governor Control - Opt.
12	132470	'	ment (Optional)	25	150A1325	1	Stud, Governor Control - Opt.
13	150A621	1	Nut, Variable Speed Adjustment	. 26	518-305	l í	Ring, Retainer
13	150/4621	1	Stud (Optional)	27	800-4	ı	Screw (1/4-20 x 5/8 ")
14	HOUSING	CYLINDER	AIR - LEFT	28	526-18	2	Washer, Flat
17	134D1986	CILINDEN	Spec A and B	29	851-21	l i	Washer, Tension
	134D1986 134D2141	i	Begin Spec C	30	870-259	Į,	Nut, Lock (1/4-20)
	HOUSING.	BLOWER	Degin Spec C	31	800-5	1	Screw (1/4-20 x 3/4")
15	134C1988	BLOWER	Key I	32	526-15	2	Washer, Flat (1/4)
15 16	134C1988		Key 2	33	870-65	1	Nut, Hex (1/4-20)
	134C1992	!	Vacu-Flo Cooled Engines -	34	815-199	2	Screw (10-32 x 5/16")
16		I	Optional	35	870-131	. 2	Nut & Washer (10-32)
16	134C2264	١	Engines With Optional Top Mounted Control				

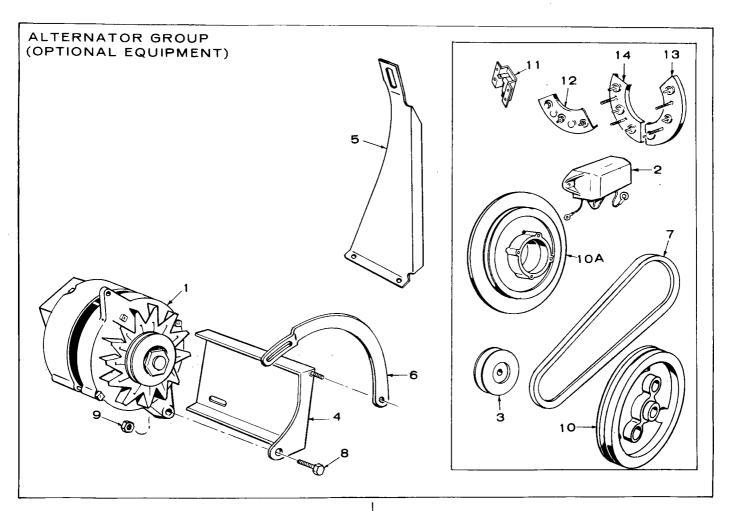
SERVICE KITS AND MISCELLANEOUS

NOTE: For other kits, refer to the group for the part in question.

PART NO.	QTY. USED	PART DESCRIPTION
168K113	1	Gasket Kit, Complete Engine
168K115	1	Gasket Kit, Carbon Removal
522K254	1	Overhaul Kit, Engine
525P137	1	Paint, Green Touch-Up Enamel
		 16 Oz. Pressurized Can

OPTIONAL EQUIPMENT SECTION

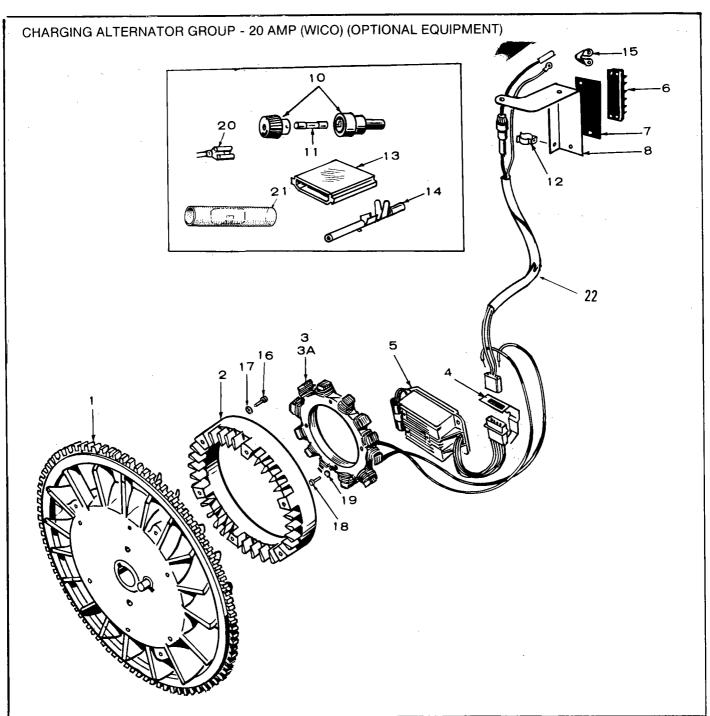
This section contains illustrated parts listing of factory installed options for these industrial engines. Options may not be applicable to all models; for field conversions additional parts are usually required. Optional parts listed in this section are in addition or in place of those shown in the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



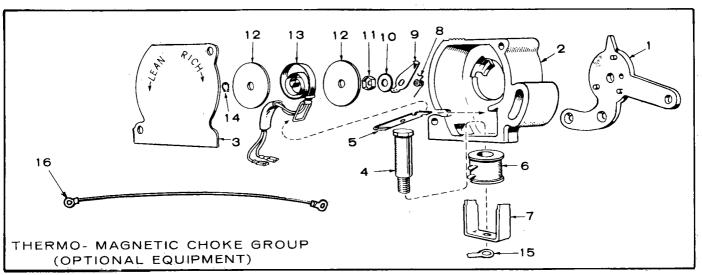
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191-573	1	★Alternator, 12 Volt, 35 Amp.
_			Less Reg. & Pulley
2	191-574	1	Regulator, Voltage
3	191C623	1	Pulley, Alternator
4	BRACKET	, ALTERNA	TOR MOUNTING
	191B537	1	Key 2
	191B811	1	Vacu-Flo Cooled Engines
5	191C840	1	Bracket, Stiffener -
			Vacu-Flo Cooled Engines
6	191A535	1 .	Bracket, Alternator
			Adjusting
7	511-51	1	Belt, Alternator Drive
8	800-94	1	Screw (1/2-13 x 2'') -
_			Alternator Mounting
9	862-16	ı	Nut, Hex (1/2-13) - Alternator Mounting

REF.	PART NO.	QTY. USED	PART DESCRIPTION
	PULLEY,	ALTERNAT	OR DRIVE
10	191C848	1	Key 2 - Spec A Only
10	191C812	1	Key 2 - Begin Spec B
I OA	191C134	1	Vacu-Flo Cooled Engines
11	191P659	ł	Brush & Holder Assembly (Alternator)
12	191P671	1	Diode Assembly, Isolation (Alternator)
13	191P662-	1	Diode Assembly, Rectifier- Negative (Alternator)
i 4	191P661	1	Diode Assembly, Rectifier- Positive (Alternator)

^{★-} For components not listed, contact your nearest Motorola Dealer or Motorola Automotive Products, Inc., 9401 W. Grand Ave., Franklin Park, Illinois 60131.

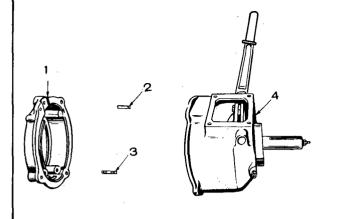


REF.	PART NO.	QTY. USED	PART DESCRIPTION	REF.	PART NO.	QTY. USED	PART DESCRIPTION
ï	FLYWHEEL in Crankshaf 134B2071	- INCLUE t and Fly	Spec A Only	10 11 12	321P165 321-162 321B169	 	*Holder Assembly, Fuse *Fuse - 30 Amp Clip, Fuse Holder Mounting
2 3	134B1895 191C400 191-1636	 	Begin Spec B Rotor Stator Assembly (Includes Parts Marked *)	13 14 15 16	323P759 323C488 337A88 812-156	 4 6	*Connector, Socket Housing *Socket, Connector Jumper, Terminal Block Screw (1/4-20 x 1-1/2 ") - Roto to Flywheel
4	332A1410	1	Bracket, Connector Mounting	17 18	850-40 813-108	6 3	Washer, Lock (1/4) Screw (10-32 x 1-1/2) - Stator
5 6 7 8	305C0478 332A604 332A1273 301B3230	 	Regulator - Rectifier Assembly Block, Terminal (5-Place) Strip, Marker Bracket, Terminal Block Mtg.	19 20 21 22	850-30 332P529 332-556 338-0518	3 1	to Gearcover Washer, Lock (#10) *Terminal, Faston *Connector, Faston Harness, Wiring



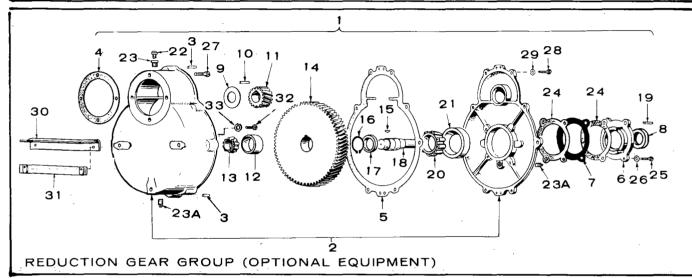
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF.	PART NO.	QTY. USED	PART DESCRIPTION
	153K429	ı	Replacement Kit (Includes complete Choke-less leads)	10	526-18	I	Washer (17/64"1.D. x 5/8"0.D. x 1/16")
ļ	153C385	1	Plate, Mounting	11	870-134	1	Palnut (1/4 - 20)
2	153D386	1	Body	12	153A399	2	Insulator
3	153C389	1	Cover	13	153 B400	1	Heater Assembly
4	153B391	1	Core, Solenoid	14	518-129	ŧ	Ring, Retaining
5	153A395	1	Armature	15	332A876	1	Terminal, Ground
6	307 B80 l	1	Coil, Solenoid Assembly	16	LEAD, CH	OKE	
7	153 B392	1	Frame, Solenoid		336A1550	F	Choke to Ground
8	153B387	1	Spring	l l	336A1549	ŀ	Choke Solenoid Ground
9	153B390	1	Lever, Thermostat	Į.			

CLUTCH GROUP (OPTIONAL EQUIPMENT)

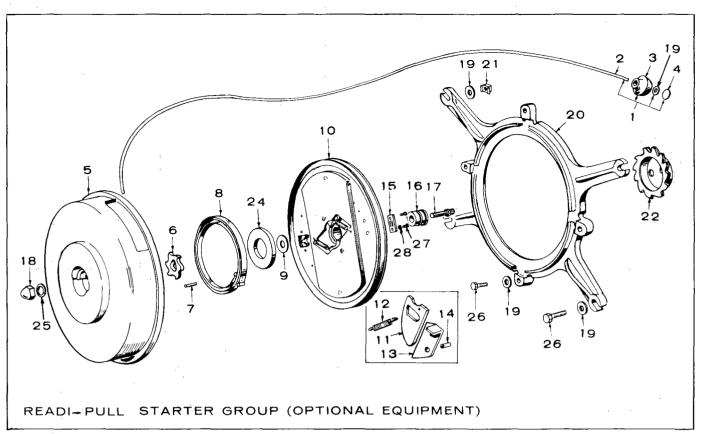


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	190D171	J	Adapter, Clutch to Engine
2	515-0041	E	Key, Clutch
3	STUD, CL	UTCH HO	DUSING TO ENGINE
	520A738	L	3/8-16 × 4"
	520A739	2	3/8-16 × 3 "
4	190D288	1	*Clutch Assembly
	190K289	1	Clutch Kit-Includes complete
			Clutch, Adapter, Mounting
			Hardware & Instructions

* For component parts, check clutch nameplate and order by description from your nearest Rockford Dealer.



REF.	PART NO.	QTY. USED	PART DESCRIPTION	REF.	PART NO.	QTY. USED	PART DESCRIPTION
1	190C290	.1 ,	Reduction Gear Assembly (4-1) Complete	20	510-23	1	Cone, Roller Bearing, Take-off End
.2	190A300	1	Housing - Includes Cover (Also Order 2 #516Al2 Pins)	21	510-24	1	Cup, Roller Bearing, Take-off End
3	516A12	2	Pin, Dowel, Cover to Housing	22	518P172	1	Vent
4	190A20	1	Gasket, Housing to Engine	23	505-7	i	Bushing, Reducer (1/4 x 1/8)
5	190B21	1	Gasket, Cover to Housing	23A	505-54	2	Plug, Pipe (1/4)
6 7	190B16 190A115	1	Plate, Bearing Retainer Shim Set, End-Play Adjustment	24	190A306	2	Gasket, Bearing Plate to Housing
			(each .005", .009", .012" .016", .020", .025")	25	800-7	4	Screw (1/4-20 x 1 ") - Bearing Plate to Housing
8	509-16	1	Seal, Oil, Retainer Plate	26	526-63	4	Washer, Flat (Copper)
9	190A195	1	Washer, Pinion Gear	27	805-9	4	Bolt, Place (5/16-18 x 1 ") -
10	515A142	I	Key, Pinion Gear				Housing to Engine
11 12	190A191 510-22	1	Gear, Pinion Cup, Roller Bearing, Engine	28	800-28	8	Screw (5/16-18 x 1 ") - Cover to Housing
			End	29	526-65	8	Washer, Flat (Copper)
13	510-21	i	Cone, Roller Bearing, Engine	30	190B297 ·	I	Support, Housing Assembly
14	190B190	1	End Gear, Driven	18	190A298	1	Fastener, Support - Housing Assembly
15	515A159	ì	Key, Driven Gear	32	800-26	2	Screw (5/16-18 x 3/4 '') -
16	518-13	ı	Ring, Snap, Retainer				Housing to Support
17	190A202	I	Spacer, Bearing	33	526-65	2	Washer, Flat (Copper) - Housing
18	190A192	l l	Shaft, Take-Off				to Support
19	515A103	l	Key, Take-Off Shaft				(p =



REF.	NO.	USED_	PART DESCRIPTION
	192K325	ı	Starter Kit, Complete - Includes Mounting Ring & Ratchet Wheel
1	192A45	1	Rope & Grip Assembly
2	192A43	1	Rope, Starter, Less Grip (83 '')
3	192 A44	1,	Grip, Starter Rope - Rubber
4	517A25	T.	Plug, Starter Rope Grip
5	192C152	1	Cover, Starter
6	192A153	. 1	Wheel, Cog-Anti-Backlash
7	516-138	" I	Pin (3/16 x 5/8") Recoil Spring
8	192A39	. 1	Spring, Recoil
9	526A123	1	Washer, Thrust (Sheave Bushing to Cover)
10	.192B180	1	Sheave, Rope (Includes Parts Marked *)
11	192A172	2	*Pawl
12	192A165	2	*Spring, Pawl
13.	192A168	. 2	*Arm, Ratchet
14	516-110	4	*Pin, Roll (5/16 x 1/2 ") - (2) Ratchet Arm, (2) Pawl
15	192A167	ł	*Clamp, Rope
16	192A163	i'	Bearing, Sheave Hub (Bronze)
17	192A323	í	Capscrew (3/8-16 x 1-1/2")
18	870-138	Ì	Nut, Bushing to Cover Screw

REF.		QTY, JSED	PART DESCRIPTION
19	WASHER, FLAT		
	526 A 180	4	Starter to Mounting Ring
	526 A 169	1	Starter Rope Grip
	526-130	4	Starter Ring to Blower Housing (1/16" Thick)
	526-158	4	Starter Ring to Blower Housing (1/8'Thick)
20	1920186	1 .	Ring, Starter to Blower Housing Mounting
2.1	870-110	4	Nut, Speed Grip, Starter Ring to Blower Housing
22	192B309	1	Wheel, Ratchet
24 25	526A168 WASHER, LOCK	1	Washer, Recoil Spring Retainer
2.5	850-50	ı	Cover Nut
- 26	SCREW, HEX CA	ΔP	
20	800-7	4	Starter Ring to Blower Housing
	815-137	4	Starter to Mounting Ring
27	815-137	2	*Screw, Hex Cap - Rope Clamp Mounting
28	526-15	2	*Washer, Flat - Rope Clamp Mounting

^{* -} Included in #192B180 Rope Sheave Assembly.

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







INTERNAL TOOTH LOCK (IT)



EXTERNAL -INTERNAL TOOTH LOCK (EIT)



COUNTERSUNK EXTERNAL TOOTH LOCK

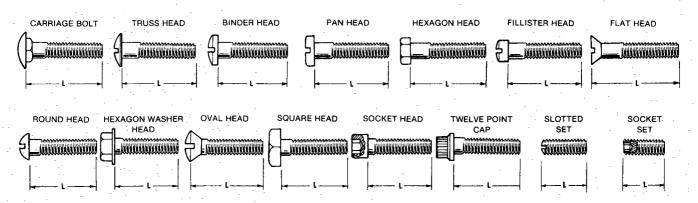




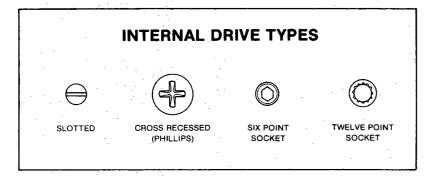


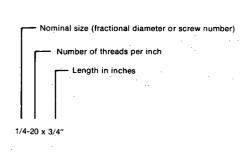
Flat washer dimensions given are: Inside Diameter (ID), Outside Diameter (OD) and Thickness (Thk).

BOLT AND SCREW TYPES



L - Measure length between these points.





NUT TYPES













FULL HEXAGON

JAM HEXAGON

HEXAGON WASHER

SQUARE

WING

ACORN

N	١	ł	_	M	S	

MODEL_

SP

2053B

	QUAN.	DESCRIPTION
		NOTE: Charging Alternator group in the main
		parts catalog applies to this plant.
1028649	1	Base, Oil
104D715	1	Crankshaft
110A1851	1	Block Assy., Cylinder - Incl. Bearings, Guides Seats
120B691	1	Intake, Oil Pump - Incl. Cup, Screen and Pipe
123A527	1 . 1	Cap and Indicator, Oil Fill
150A1315	1	Shaft and Arm, Governor
313-16	1	Spacer, Fuse Clip
301B3352	1	Bracket, Terminal Block and Governor Arm
150A1314	1	Arm, Governor - Rear Pull
152A155	1	Swivel, Choke Lever
516~59	1	Pin, Cotter - Choke Lever
150-147	1	Stud, Governor Spring
152A179	1	Bracket, Throttle
152A9J	1	Rod, Variable Speed Adjustment
150A939	1	Joint, Ball
150A1081	2	Joint, Ball
153A327	1	Bracket, Manual Choke
518P176	1	Clip, Choke Cable
134C2228	1	Housing, Blower
134B1895	1	Flywheel - Includes Ring Gear
509A97	1	Seal, Oil - Gear Cover (Std. Spec A Only)
134B2071	1	Flywheel & Ring Gear (Std. Spec A Only)

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2000	3 1			
893				

SPEC.

SUPPLEMENTARY PARTS LIST 900- 43 (per above model and spec.) Parts listed belowapply to the above model. Use these parts in in the standard parts catalog No. 940-4520253

PART NO.	QUAN.	DESCRIPTION
		NOTE: Charging Alternator group in the main parts catalog applies to this plant.
102B649	1	Base, Oil
104D716	1	Crankshaft
110A1851	1	Block Assy., Cylinder - Incl. Bearings, Guides & Seats
1208691	1	Intake, Oil Pump - Incl. Cup, Screen and Pipe
123A527	1	Cap and Indicator, Oil Fill
150A1315	1	Shaft and Arm, Governor
313-16	1	Spacer, Fuse Clip
301B3352	1.	Bracket, Terminal Block and Governor Arm
150A1314	1	Arm, Governor - Rear Pull
152A155	1	Swivel, Choke Lever
516-59	1	Pin, Cotter - Choke Lever
150-147	1	Stud, Governor Spring
152A179	1	Bracket, Throttle
152A90	1	Rod, Variable Speed Adjustment
153A327	1	Bracket, Manual Choke
518P176	1	Clip, Choke Cable
134A2269	1	Housing, Blower
140C1135	1	Clcaner, Air
140B1133	1	Bracket, Air Cleaner Mounting
134B1895	1	Flywheel - Includes Ring Gear

NH-MS NH-MS	COFC	2136B 2156C
	TOE!	

SUPPLEMENTARY PARTS LIST 900-43 (per above model and spec.)
Parts listed below apply to the above model. Use these parts in place of (or in addition to) the parts listed for Parts Key. 2 in the standard parts catalog No. 940-40203

		NOTE: Charging Alternator group in the main parts catalog applies to this plant.
102B649	1	Base, Oil
1040716	1	Crankshaft
110A1851	1	Block Assembly, Cylinder - Incl. Bearing, Guide
		La & Seats
120B691	1	Intake, Oil Pump - Inci. Cup, Screen and Pipe
123A527	1	Cap and Indicator, Oil Fill
150A1315	1	- Shaft and Arm, Governor
313-16	1	Spacer, Tuse Clip
301B3352	.1	Bracket, Terminal Block and Governor Arm.
150A1314	1	Arm, Governor - Rear Pull
15 ² A155	1.	Swivel, Choke Lever
516-59	1	Pin, Cotter - Choke Lever
150-147	1	Stud, Governor Spring
150A1329	1	Bracket, Throttle
152A90	1	Rod, Variable Speed Adjustment
153A327	1	Bracket, Manual Choke
518P176	1	Clip, Choke Cable
134C2281	1	Housing, Blower
134B2279	1 ×	Guard, Gille, Blower Housing
140C1135	1	Cover, Air Cleaner (Outlet)
140B1133	1	Bracket, Air Cleaner Mounting
134D2141	,1	Housing, Cylinder Air - Left
13462143	1	Housing, Cylinder Air - Right
134B1895	1	Flywheel - Includes Ring Gear

1

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VII-NS	SPEC	2259C
•••	 VMP	

SUPPLEMENTARY PARTS LIST 900-43 (per above model and spec.)
Parts listed below apply to the above model Use these parts in place of (or in addition to.) the parts listed for Parts Key 2 in the standard parts catalog No. 940- ## 0253

1020475		
1020475		NOTE: Charging Alternator group in the main parts catalog applies to this plant.
192B675	1	Base, Oil
103A400	1.	Cover, Assembly Gear
104D817	· 1	Crankshaft
110A195A	. 1	Block Assy., Cylinder - Incl Bearings, Guides &
110A1939	.1	Guide, Valve
1,10A1932	, J	Insert, Intake Valve Seat
1208691	1	Intake, Oil Pump - Incl. Cup, Screen & Pipe
123A1160	1	Cap & Indicator, Oil Fill
150A1315	1	Shaft & Arm, Governor
313-16	1	Spacer, Fusc Clip
301B3352	1 1	Bracket, Terminal Block & Governor Arm
150A1314	1	Arm, Governor - Rear Pull
152A155	1 .	Swivel, Choke Lever
516-59	1	Pin, Cotter - Choke Lever
503A546	1	Hose, Breather
150-147	1	Stud, Governor Spring
150A98	1	Spring, Governor
150A1329	1	bracket, Throttle
152A90	1	Rod, Variable Speed Adjustment
150A939	1	Joint, Ball
167-241	79	Plug, Spark
193A h08	1	Sender, Oil Pressure
517-9	1	Plug, Dot Button - Blower Housing
337A88	1	Jumper, Terminal
1404867	1	Adapter & Breather Connector Assy, Air Cleaner
154C1384	1	Manifold, Intake
153A327	1	Bracket, Manual Choke
518P176	1	Clip, Choke Cable
		Not Furnished by Onan:
		Oil Gauge
		Air Cleaner

NODEL NI-MS	SPEC 2589 C
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SUPPLEMENTARY PARTS LIST 900- 43 (per above model and spec.) Parts listed below apply to the above model. Use these parts in place of (or in addition to) the parts listed for Parts Kev 2 in the standard parts catalog No. 940-412 0253

	QUAN.	DESCRIPTION
		NOTE: This Unit is Vacuum Flo Cooled
110-1851	1	Block Assembly, Cylinder (Includes Bearings, Guide
		្នុង Seats) Shims (Used As Required)
104-0776	2 2	Šhims (Used As Required)
516-0011	2	Pin, Dowel
104-0817	3	Crankshaft
102-0649	1	Base, Oil
120-0648	ı	Intake, Oil Pump (Includes Cup. Screen & Pipe)
149-0136	14	Cover, Fuel Pump Hole
134-1362	1	Housing Assembly, Blower
153-0328	1 1	Cable Assembly, Choke
153-0327	1	Bracket, Manual Choke
518-0176	1	Clip, Choke Cable
502-0313	1	Elbow, Carburetor Inlet
308-0334	1	Switch & Lead Assembly, Start and Stop
308-0140	1	Switch Only
517-0009	1	Button, Plug Dot
		Parts Not Furnished By ONAN: Fiel Pump Oil Gauge
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