

Ref #	Part Number	Qtv	Description
2 2 2 2 2 4	33707A 31927 28483 9556 28534 27652 33393A		Cylinder (Incl. 2, 4 & 33) (3-1/2" Bo re) Pipe Plug, 3/8-18 sq. head (Use as re quired) Pipe Plug (3/8-18 hex countersunk) (A s req.) Pipe Plug (3/4-14 sq.hd.)(As req.)(Bu y local) Pipe Plug (1/8-27 sq. hd.) (Use as re quired) Pipe Plug(1/8-27 hex c/sunk headless) (As req) Pin, Dowel Crankshaft (Incl. 6 thru 9) NOTE: When using this crankshaft to repair older units equippedwith straight cut cam and governor gears,it will be necessary to order 34751 helical governor gear assembly and 34752 helical camshaft in order to the complete the repair.
7 8 9 11 11 11 11 11 11 11 11 11 11 11 11 1	29783 34692 31932 31928 34511 34512 34513 32238B 32239B 32240B 31919 32241 32242 32243 33093A 34383 34384 32077 26073 28264 34752 33471 33505 33645 33506 33646 33507 33508 34410 33509 33510 34751 650745 35479 30590A 31948 31956B		to the complete the repair. Pin, Crankshaft gear Gear Crankshaft (Helical) Bearing, Tapered roller Cup, Bearing Piston, Pin & Ring Set (Std.) (3-1/2" Bore) Piston, Pin & Ring Set (.010" OS) Piston, Pin & Ring Set (.020" OS) Piston & Pin Ass'y. (Std.)(3-1/2")(In cl.12) Piston & Pin Ass'y. (.010" OS) (Incl. 12) Piston & Pin Ass'y. (.020 " OS) (Incl. 12) Piston & Pin Ass'y. (.020 " OS) (Incl. 12) Ring, Piston pin retaining Ring Set (Std.) (3-1/2" Bore) Ring Set (.010" OS) Ring Set (.020" OS) Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17) Connecting Rod Assy.(.010" US)(Incl.1 5,16,17) Connecting Rod Assy.(.020" US)(Incl.1 5,16.17) Bolt, Connecting rod Washer, Connecting rod Nut Assy. Camshaft (MCR) (Helical) Lifter, Valve Rod, Push Intake Valve (Std.) Intake Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (1/32" OS) Spring, Valve Retainer & Cap Set, Keeper valve * "O" Ring (Exhaust only) (Also Incl. in 251) * "O" Ring (Intake only) (Also Incl. in 251) Cap, Valve Governor Gear Ass'y. (Helical) Washer, Flat Washer, Flat Washer, Flat (Use with 35322 spool) Washer, Flat Spool, Governor * Gasket, Cylinder cover
32 33 34 35 36 37	32580A 31950 650451 650588 32425 32426 29193		Cylinder Cover Assy.(Incl.2,33,36,37 & 38) * Seal, Oil Screw, 1/4-20 x 1" Screw, 1/4-20 x 2" Rod Assy., Governor Spacer, Governor rod Ring, Retaining

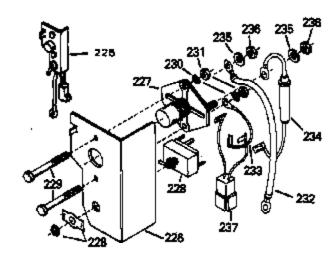
Ref #	Part Number Qty	Description
	650736	Screw, 10-16 x 3/8"
	33495	Cover, Cylinder head
	34225A	* Gasket, Cylinder head
	34753	in the second of
		Head, Cylinder
	31980	Pulley, Starter
	32046	Rope Assy., Starter
	35552	Spark Plug (RL-82C)
	650691	Washer, Flat
	650690	Washer, Belleville
	650746	Screw, 5/16-18 x 1-3/8"
47	650692	Screw, 5/16-18 x 1-3/4"
48	730218	Valve Guide Kit (Incl. 49)
49	792035	Ring, Retaining
50	33515A	* Gasket, Intake pipe
51	33475	Pipe, Intake
52	650378	Screw, Torx T-30, 5/16-18 x 1-1/8"
53	792028	Screw, 5/16-18 x 7/8"
	33476A	* Gasket, Carburetor
	33477A	Baffle, Air cleaner
	792075	Nut, Lock 5/16-24 (Used in early prod uction)
	33478	Link, Governor lever-to-throttle leve r
	31963	Lever, Governor
	31964	Clamp, Governor lever
	650518	Lockwasher, No. 10 E.T.
	30312	Screw, 10-32 x 1/2"
	650544	Screw, Torx T-25, 10-24 x 7/8"
	7975	Nut, 10-24
	31965	Plate, Governor spring
	31984A	Lever Assy., Control
	28558	Washer, Wave
	31966	Bushing, Governor lever
	650597	Screw, 10-24 x 5/8"
	31967	Spring, Governor
	650591	Screw, 10-24 x 2"
	33099	Spring
72	32599	"O" Ring (Incl. in 251)
73	650666	Washer, Lock
74	32579	Baffle, Blower housing
75	650561	Screw, 1/4-20 x 5/8"
76	650592	Key, Flywheel
77A	730201	Trigger Pin Kit (Use as required)
	610909	Flywheel
	650594	Nut, Flywheel
	610906	Solid State Magneto (Incl. 158 thru 1 61)
	650661	Screw, 1/4-20 x 3/4"
	33479	Extension, Blower housing
	30063	Screw, 1/4-20 x 1/2"
	650751	Screw, 1/4-20 x 7/16"
	33775A	Blower Hsg.(Incl.218A,219)(For elec.s tarter)
	8274 8274	Washer, Lock
		Washer, Lock
	650595 650505	Screw, 5/16-24 x 3/8" Screw, 5/16-24 x 3/8"
	650595	Screw, 5/16-24 x 3/8" Screw, 1/4 20 x 7/46"
	650752	Screw, 1/4-20 x 7/16"
	35475	Tube, Push rod
	33481	* "O" Ring (Also Incl. in 251)
	34754	Housing, Rocker arm
94	33484	* "O" Ring (Also Incl. in 251)

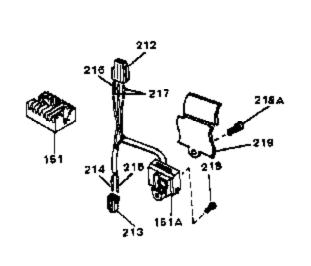
Ref #	Part Number	Qty	Description
	650168		Washer, Flat
96	32610A		Screw, 1/4-20 x 29/32"
97	33485		Arm, Rocker
98	33486		Ring, Retaining
99	650755		Screw, 1/4-20 x 3/4"
100	650864		Nut, Hex, 1/4-20
101	650756		Stud, Rocker arm
102	33487		* "O" Ring (Also Incl. in 251)
103	33488		Cover, Rocker arm
104	31958A		* Gasket, Breather (Also Incl. in 251)
105	33489		Body Assy., Breather
106	33490		Tube, Breather
107	30102		* Screw, 10-32 x 5/8" (Also Incl. in 25 1)
108	650738		Screw, 1/4-20 x 5/8"
111	35471		* Gasket, Air cleaner
112	35472		Bracket, Air cleaner
114	650399		Screw, 10-32 x 5/8"
115	32008		Element, Air cleaner
116A	32810		Cover, Air cleaner
117	650513		Nut, Wing
119	31992		Spacer, Screen
120	33776		Screen, Pulley
	650680		Screw, 1/4-20 x 1-1/2"
	27070		Washer, Lock
146	32577		Cover, Cylinder NOTE: Determine the gap between the cover
			and the machined surface on the cylinder, which can be
			from .001" up to .007", in which case no shim gaskets will be
			required. Use of gaskets must be limited to a combined total
			of .010" thick. Steel spacersmust be used as required to eli
147	792028		Screw, 5/16-18 x 7/8"
	31971		* Gasket, Shim (.004/.005 thick) NOTE: Determine the gap
.00			between the cover and the machined surface on the
			cylinder, which can be from .001" up to .007", in which case
			no shim gaskets will be required. Use of gaskets must be
			limited to a combined total of .010" thick. Steel
			spacersmust be used a
450	04070		•
156	31972		* Gasket, Shim (.005/.007 thick) NOTE: Determine the gap
			between the cover and the machined surface on the
			cylinder, which can be from .001" up to .007", in which case
			no shim gaskets will be required. Use of gaskets must be
			limited to a combined total of .010" thick. Steel
			spacersmust be used a
157	32031		* Spacer, Steel (.010 thick) NOTE: Determine the gap
			between the cover and the machined surface on the
			cylinder, which can be from .001" up to .007", in which case
			no shim gaskets will be required. Use of gaskets must be
			limited to a combined total of .010" thick. Steel
			spacersmust be used as re
450	640440		•
	610118		Cover, Spark plug
	610750		Grommet, Lead wire
	610408		Nut, 8-32
	610908		Terminal, Female
	27793		Clip, Conduit
	28942		Screw, 10-32 x 3/8"
	33984A		Dipstick (Incl. 190)
190	33590		"O" Ring

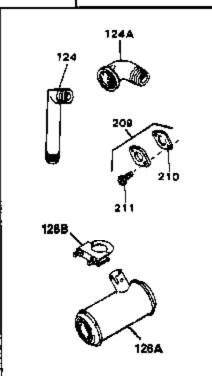
Ref #	Part Number	Qty	Description
191	33893A	Ť	Tube, Oil filler
244B	31752		Decal, Air cleaner
244A	34768		Decal, Name
244	34346		Decal, Instruction
246	631687		Valve, Seat & Spring Assy.
247	632329A		Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A, page 192 for breakdown)
	33516G 35075		* Gasket Set (Incl. items marked *) "O" Ring Kit (Incl. Nos. items marked +)

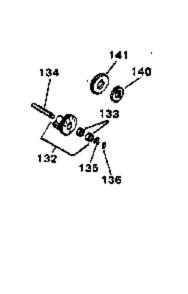
ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY CEM.

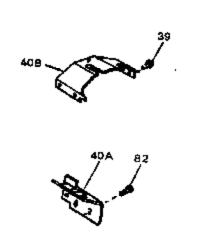
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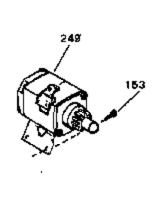


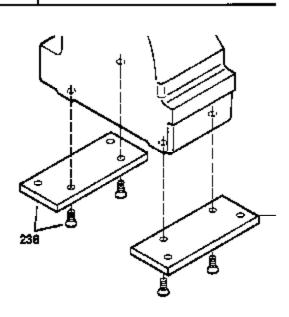






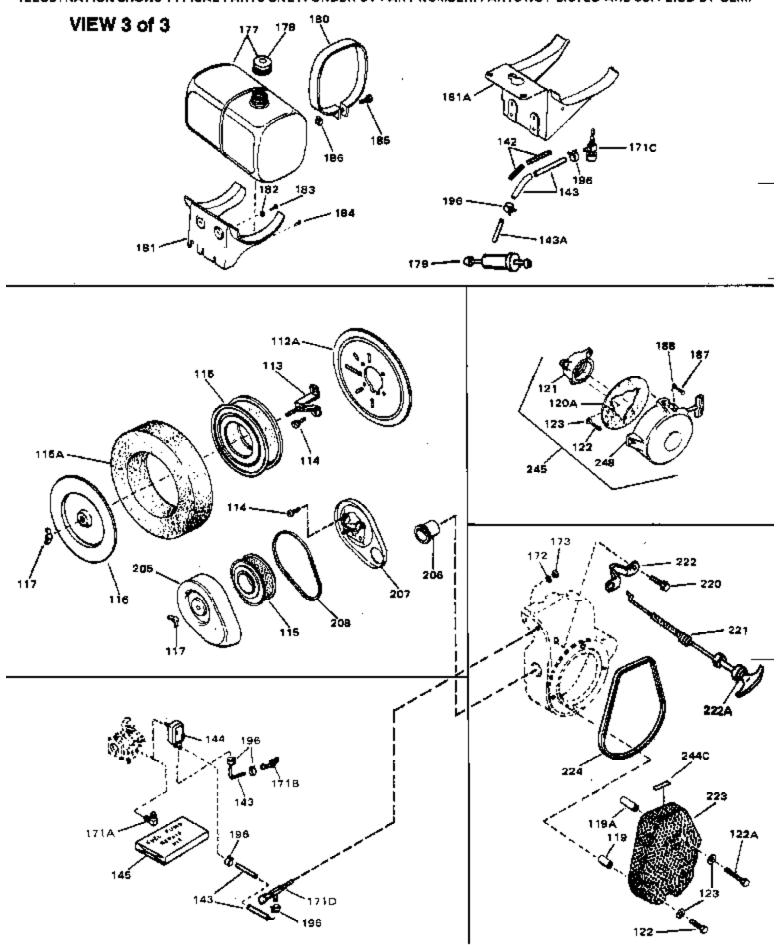






Ref #	Part Number	Qty	Description
	650736		Screw, 10-16 x 3/8" Screw, 1/4 30 x 1/2"
	30063 35731		Screw, 1/4-20 x 1/2" Muffler (Incl. 126P)
141	33731		Muffler (Incl. 126B) Gear, Counterbalance weight (Straight teeth) (For
141			replacement see Ref. 132. Order correct kit for your
			enginemodel number.)
			,
	610902		Alt.Coil Ass'y. (Incl.162,163,163A) (20 amp)
	650521		Screw, 10-32 x 1-1/8"
	610996		Regulator (20 Amp) (Incl. 212 thru 21 8)
	792028		Screw, 5/16-18 x 7/8"(Use w/32817 str .motor)
	650781		Screw,5/16-18 x 11/16"(Use w/33835 st r.motor)
	610903		Connector, Flat
	610904		Terminal
	610905		Terminal
	730178		Ech.Adapter Kit (Incl.210 & 211)(As r equired)
	34102B		Gasket, Exhaust (Use as required)
	30196		Screw, 5/16-18 x 3/4" (Use as require d)
	610990		Connector, Male
	610921		Connector
	610922		Terminal
	610989		Terminal
	610992		Terminal, Female
	610991		Terminal, Female
	30063		Screw, 1/4-20 x 1/2"
238	730212		Adapter Plate Kit (Optional) NOTE: If you are having
			mounting problems in using a HH100 thru0H180 inplace of a
			large frame competitivebrand, we would like to call your
			attention to 730212 adapter plate kit. The kit converts the
			bottom mounting system found on HH100 thru 0H180 to a
			top mounting sys
249	33835		Electric Starter Motor (12-Volt) (Refer to Division 5, Section
			D for breakdown)
			,

ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER, PARTS NOT LISTED ARE SUPPLIED BY DEM.



Dof #	Dort Number	N. D	Description
			Description
114	650399	S	Screw, 10-32 x 5/8"
115	32008	Е	Element, Air cleaner
117	650513	N	Nut, Wing
119	31992	S	Spacer, Screen
122	650680	S	Screw, 1/4-20 x 1-1/2"
123	27070	V	Vasher, Lock
143	29774	F	Fuel Line (Braided 8.25")(21 cm)(As r equired)
143	30705	F	Fuel Line (Braided 16")(41 cm)(As req uired)
143	30962	F	Fuel Line (Braided 32")(81 cm)(As req uired)
144	35018	Р	Pump, Impulse fuel
145	33010	R	Repair Kit, Impulse fuel pump
171B	32958	F	Fitting, Fuel pump
178	410144B	F	Fuel Cap (White Plastic)(Std)(As requ ired)
178	34210		Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as equired)
	26460		Clamp, Fuel line (Use as required)
245	730134		Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248) Use as required)