

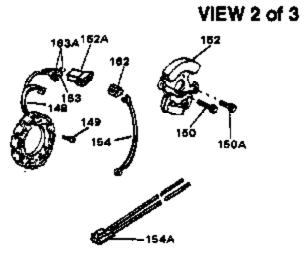
Ref #	Part Number	Qty	Description
2 2 2 2 2 4	33823A 31927 28483 9556 28534 27652 33397A		Cylinder (Incl. 2, 4 & 33) (3-5/16" B ore) Pipe Plug, 3/8-18 sq. head (Use as re quired) Pipe Plug (3/8-18 hex countersunk) (A s req.) Pipe Plug (3/4-14 sq.hd.)(As req.)(Bu y local) Pipe Plug (1/8-27 sq. hd.) (Use 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 34508 34509 34510 32001C 32002B 32003B 31919 32004 32005 32006 33093A 34383 34384 32077 26073 28264 34752 33472 33471 33505 33645 33506 33646 33507 33508 34410 33509 33510 34751 650745 35479 30590A 31948 31956B 32580A		to the complete the repair.  Pin, Crankshaft gear Gear Crankshaft (Helical) Bearing, Tapered roller Cup, Bearing Piston, Pin & Ring Set (Std.) (3-5/16 " Bore) Piston, Pin & Ring Set (.010" OS) Piston, Pin & Ring Set (.020" OS) Piston & Pin Ass'y. (Std.)(3-5/16")(I ncl.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.) (3-5/16" Bore) Ring Set (.010" OS) Ring Set (.010" 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.) Intake Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) 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 Washer, Flat Spool, Governor * Gasket, Cylinder cover Cylinder Cover Assy.(Incl.2,33,36,37 & 38)
33 34 35 36 37	31950 650451 650588 32425 32426 29193		* Seal, Oil Screw, 1/4-20 x 1" Screw, 1/4-20 x 2" Rod Assy., Governor Spacer, Governor rod Ring, Retaining

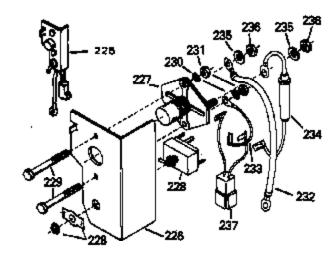
		ty Description
39	650736	Screw, 10-16 x 3/8"
40	33495	Cover, Cylinder head
41	34225A	* Gasket, Cylinder head
42	33763	Head, Cylinder
	35552	Spark Plug (RL-82C)
	650691	Washer, Flat
	650690	Washer, Belleville
	650692	Screw, 5/16-18 x 1-3/4"
	650746	Screw, 5/16-18 x 1-3/8"
	730218	·
		Valve Guide Kit (Incl. 49)
	792035	Ring, Retaining
	33515A	* Gasket, Intake pipe
	33475	Pipe, Intake
	650378	Screw, Torx T-30, 5/16-18 x 1-1/8"
	792028	Screw, 5/16-18 x 7/8"
	33476A	* Gasket, Carburetor
	33477A	Baffle, Air cleaner
56	792075	Nut, Lock 5/16-24 (Used in early prod uction)
57	33478	Link, Governor lever-to-throttle leve r
58	31963	Lever, Governor
59	31964	Clamp, Governor lever
60	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
	32599	"O" Ring (Incl. in 251)
	650666	Washer, Lock
	32579	Baffle, Blower housing
	650561	Screw, 1/4-20 x 5/8"
	650592	Key, Flywheel
77	610909	Flywheel
77A	730201	Trigger Pin Kit (Use as required)
78	650594	Nut, Flywheel
79	610906	Solid State Magneto (Incl. 158 thru 1 61)
80	650661	Screw, 1/4-20 x 3/4"
81	33479	Extension, Blower housing
82	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	Washer, Lock
	8274	Washer, Lock
	650595	Screw, 5/16-24 x 3/8"
	650595	Screw, 5/16-24 x 3/8"
	650752	Screw, 1/4-20 x 7/16"
		·
	35475	Tube, Push rod
	33481	* "O" Ring (Also Incl. in 251)
	34754	Housing, Rocker arm
	33013	Cover, Starter bubble
	650701	Screw, 8-18 x 7/16"
94	33484	* "O" Ring (Also Incl. in 251)

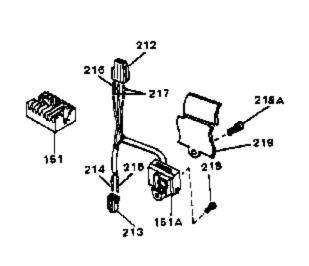
	Part Number	Qty	Description
	650168		Washer, Flat
96	32610A		Screw, 1/4-20 x 29/32"
97	33485		Arm, Rocker
98	33486		Ring, Retaining
	650755		Screw, 1/4-20 x 3/4"
	650864		Nut, Hex, 1/4-20
	650756		Stud, Rocker arm
			·
	33487		* "O" Ring (Also Incl. in 251)
	33488		Cover, Rocker arm
104	31958A		* Gasket, Breather (Also Incl. in 251)
105	33489		Body Assy., Breather
106	33490		Tube, Breather
	30102		* Screw, 10-32 x 5/8" (Also Incl. in 25 1)
	650738		Screw, 1/4-20 x 5/8"
	35471		·
			* Gasket, Air cleaner
	650399		Screw, 10-32 x 5/8"
	32008		Element, Air cleaner
117	650513		Nut, Wing
119	34379		Spacer, Screen
122	650808		Screw, 1/4-28 x 1-3/4"
	27070		Washer, Lock
	32577		Cover, Cylinder NOTE: Determine the gap between the cover
140	02011		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
4.47	700000		O 5/40 40 7/0!
	792028		Screw, 5/16-18 x 7/8"
155	31971		* Gasket, Shim (.004/.005 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
			spacersmust be used a
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 con
15/	J2UJ I		* 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
			opassismast be assa as to
158	610118		Cover, Spark plug
159	610750		Grommet, Lead wire
	610408		Nut, 8-32
	610908		Terminal, Female
	27793		Clip, Conduit
	27793		Clip, Conduit
170A	28942		Screw, 10-32 x 3/8"
170	28942		Screw, 10-32 x 3/8"
	33764		Dipstick (Incl. 190)
	29985		"O" Ring
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191	33468		Tube Assy., Oil filler

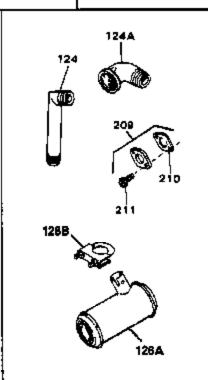
Ref #	Part Number	Qty	Description
192	29673		* Gasket, Oil filler tube
244	34346		Decal, Instruction
246	631687		Valve, Seat & Spring Assy.
247	632204		Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A, page 160 for breakdown) (Refer to Division 5, Section D for breakdown)
	33516G 35075		* Gasket Set (Incl. items marked *) "O" Ring Kit (Incl. Nos. items marked +)

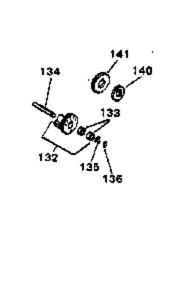
## ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY CEM.

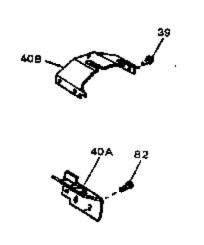


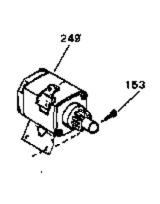


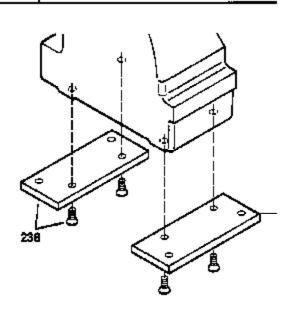






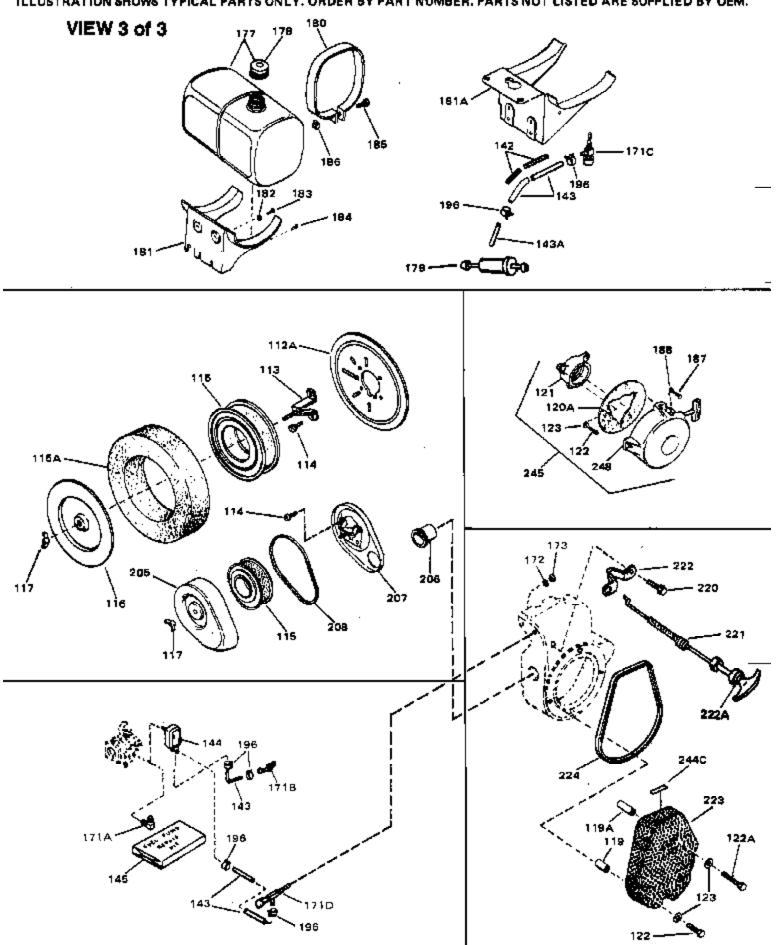






Ref #	Part Number Qty	Description
	650736	Screw, 10-16 x 3/8"
	30063	Screw, 1/4-20 x 1/2"
	35731	Muffler (Incl. 126B)
141		Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.)
148	610902	Alt.Coil Ass'y. (Incl.162,163,163A) ( 20 amp)
149	650521	Screw, 10-32 x 1-1/8"
151A	610996	Regulator (20 Amp) (Incl. 212 thru 21 8)
153	792028	Screw, 5/16-18 x 7/8"(Use w/32817 str .motor)
153	650781	Screw,5/16-18 x 11/16"(Use w/33835 st r.motor)
162A	610903	Connector, Flat
	610904	Terminal
163A	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

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Ref #	Part Number	Qty	Description
112A	33777		Bracket, Air cleaner
113	33778		Bracket, Air cleaner
114	650399		Screw, 10-32 x 5/8"
115	32008		Element, Air cleaner
115A	32906		Filter, Pre Air
116	32904		Cover, Air cleaner
117	650513		Nut, Wing
119A	34378		Spacer, Screen
119	34379		Spacer, Screen
122A	650809		Screw, 1/4-28 x 2-9/16"
122	650808		Screw, 1/4-28 x 1-3/4"
123	27070		Washer, Lock
142	31778		Spring, Fuel line
143	29774		Fuel Line (Braided 8.25")(21 cm)(As r equired)
143	30705		Fuel Line (Braided 16")(41 cm)(As req uired)
143	30962		Fuel Line (Braided 32")(81 cm)(As req uired)
144	34392A		Pump, Impulse fuel
145	33010		Repair Kit, Impulse fuel pump
171A	28566		Fitting, Fuel line
178	410144B		Fuel Cap (White Plastic)(Std)(As required)
178	34210		Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as
			required)
196	26460		Clamp, Fuel line (Use as required)
223	34376		Screen, Blower housing (Incl. 224)
224	34377		Seal, Guard
244C	34387		Decal, Instruction
245	730134		Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248) (Use as required)