

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

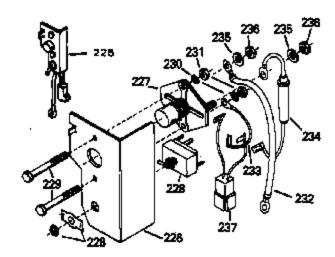
Ref #	Part Number Qt	/ Description
39	650736	Screw, 10-16 x 3/8"
	33495	Cover, Cylinder head
	34225A	* Gasket, Cylinder head
	34753	Head, Cylinder
	33657	Spark Plug (L-82C)
	650691	Washer, Flat
	650690	Washer, Belleville
	650746	Screw, 5/16-18 x 1-3/8"
	650692	Screw, 5/16-18 x 1-3/4"
	730218	
		Valve 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
	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.
61	30312	Screw, 10-32 x 1/2"
62	650544	Screw, Torx T-25, 10-24 x 7/8"
63	7975	Nut, 10-24
64	31965	Plate, Governor spring
65	31984A	Lever Assy., Control
66	28558	Washer, Wave
67	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
	610909	Flywheel
	730201	Trigger Pin Kit (Use as required)
	650594	Nut, Flywheel
	610906	Solid State Magneto (Incl. 158 thru 1 61)
	650661	
	33479	Screw, 1/4-20 x 3/4" Extension, Blower bousing
		Extension, Blower housing
	30063	Screw, 1/4-20 x 1/2" Serow, 1/4-20 x 7/46"
	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
94	33484	* "O" Ring (Also Incl. in 251)
	650168	Washer, Flat
96	32610A	Screw, 1/4-20 x 29/32"

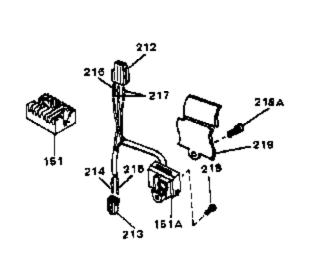
Pof #	Part Number C	ty Description
	33485	Arm, Rocker
	33486	Ring, Retaining
	650755	Screw, 1/4-20 x 3/4"
	650864	Nut, Hex, 1/4-20
	650756	Stud, Rocker arm
	33487	* "O" Ring (Also Incl. in 251)
	33488	Cover, Rocker arm
	31958A	* Gasket, Breather (Also Incl. in 251)
	33489	Body Assy., Breather
	33490	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
	35472	Bracket, Air cleaner
	650399	Screw, 10-32 x 5/8"
	32008	Element, Air cleaner
	32810	Cover, Air cleaner
	650513	Nut, Wing
	32426	Spacer, Screen
	33776	Screen, Pulley
	650670	Screw, 1/4-20 x 3/4"
123	27070	Washer, Lock
123	650675	Washer, Flat
125	650590	Nut, Conduit
126	32043B	Muffler
127	32143	Nipple, Exhaust
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
158	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"
170		

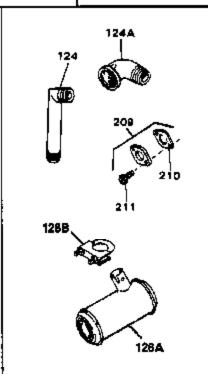
Ref #	Part Number (	Qty	Description
189	33764		Dipstick (Incl. 190)
190	29985		"O" Ring
191	33468		Tube Assy., Oil filler
192	29673		* Gasket, Oil filler tube
244	34346		Decal, Instruction
244A	34768		Decal, Name
244B	31752		Decal, Air cleaner
246	631687		Valve, Seat & Spring Assy.
247	632329		Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A,
			page 160 for breakdown)
250	33516G		* Gasket Set (Incl. items marked *)
	35075		"O" Ring Kit (Incl. Nos. items marked +)
201	00010		o rang rat (moi. 1400. homo manea r)

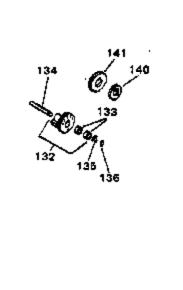
## ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY CEM.

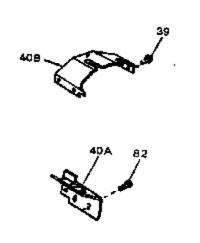
## VIEW 2 of 3

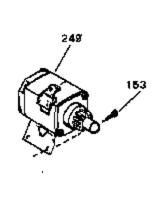


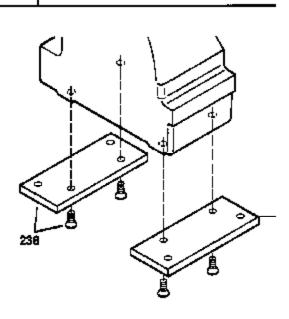






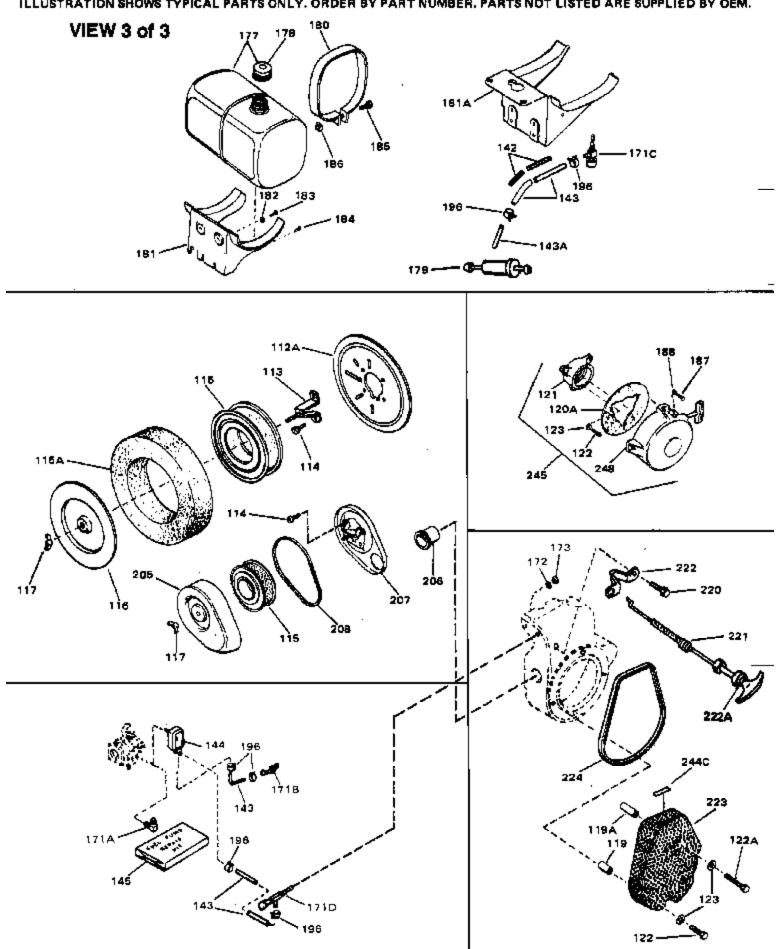






Ref #	Part Number	Qty	Description
82	650736 30063 35731		Screw, 10-16 x 3/8" Screw, 1/4-20 x 1/2" Muffler (Incl. 126B) Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.)
149 151A 153 153 162A 163 163A 209 210 211 212 213 214 215 216 217	610902 650521 610996 792028 650781 610903 610904 610905 730178 34102B 30196 610990 610921 610922 610989 610992 610992 610991 30063 730212		Alt.Coil Ass'y. (Incl.162,163,163A) ( 20 amp) Screw, 10-32 x 1-1/8" Regulator (20 Amp) (Incl. 212 thru 21 8) Screw, 5/16-18 x 7/8"(Use w/32817 str .motor) Screw,5/16-18 x 11/16"(Use w/33835 st r.motor) Connector, Flat Terminal Terminal Ech.Adapter Kit (Incl.210 & 211)(As r equired) Gasket, Exhaust (Use as required) Screw, 5/16-18 x 3/4" (Use as require d) Connector, Male Connector Terminal Terminal Terminal Terminal, Female Screw, 1/4-20 x 1/2" 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
249	33835		top mounting sys  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.



Ref #	Part Number Qty	Description
114	650399	Screw, 10-32 x 5/8"
115	32008	Element, Air cleaner
117	650513	Nut, Wing
119	32426	Spacer, Screen
122	650670	Screw, 1/4-20 x 3/4"
123	27070	Washer, Lock
123	650675	Washer, Flat
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	35018	Pump, Impulse fuel
145	33010	Repair Kit, Impulse fuel pump
171A	28566	Fitting, Fuel line
178	410144B	Fuel Cap (White Plastic)(Std)(As requ ired)
178	34210	Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)
	26460 730134	Clamp, Fuel line (Use as required) Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248) (Use as required)