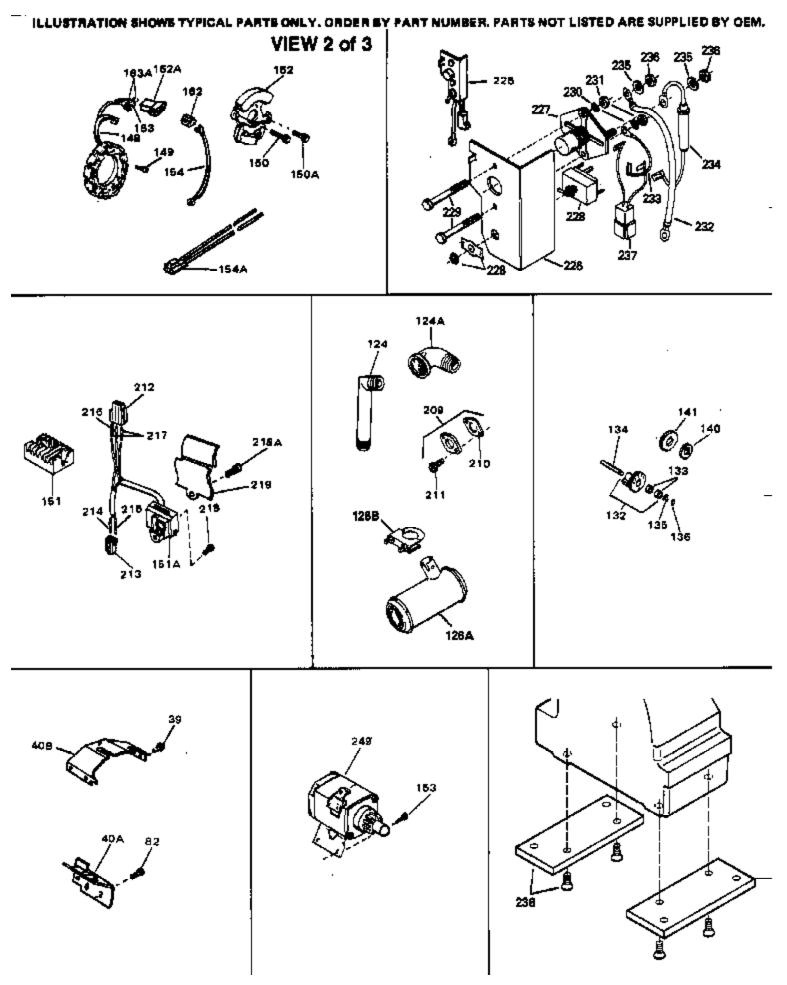


1 33823A 2 31927 2 28483	Cylinder (Incl. 2, 4 & 33) (3-5/16" B ore)
2 20403 2 2 9556 2 28534 4 27652 5 33397A	Pipe Plug, 3/8-18 sq. head (Use as re quired) Pipe Plug (3/8-18 hex countersunk) (A s req.) Pipe Plug (3/4-14 sq.hd.)(As req.)(Bu y local) Pipe Plug (1/8-27 sq. hd.) (Use as re quired) Pipe Plug(1/8-27 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.
6 29783 7 31931 8 31932 9 31928 11A 32001C 11A 32002B 11A 32003B 11 34508 11 34509 11 34510 12 31919 13 32004 13 32006 14 33093A 14 34383 14 34383 14 34384 15 32077 16 26073 17 28264 18 33470 19 33472 20 33471 21 33505 21 33645 22 33506 22 33646 23 33507 24 33508 25A 34410 25 33509 26 33510 27 33473 28 650745 29 36479 29 30590A 30 31948 31 31956B 32 32580A	Pin, Crankshaft gear Gear, Crankshaft (Straight) Bearing, Tapered roller Cup, Bearing Piston & Pin Ass'y. (Std.)(3-5/16")(I ncl.12) Piston & Pin Ass'y. (J00" OS) (Incl. 12) Piston & Pin Ass'y. (J00" OS) (Incl. 12) Piston, Pin & Ring Set (Std.) (3-5/16 " Bore) Piston, Pin & Ring Set (J010" OS) Piston, Pin & Ring Set (J020" OS) Ring, Piston pin retaining Ring Set (J010" OS) Ring Set (J010" OS) Ring Set (J010" OS) Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17) Connecting Rod Assy.(J010" US)(Incl.1 5,16,17) Connecting Rod Assy.(J020" US)(Incl.1 5,16,17) Bolt, Connecting rod Washer, Connecting rod Nut Assy. Camshaft (MCR) (Straight) Lifter, Valve Rod, Push Intake Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) Exhaust Valve (Std.) Cap, Valve Governor Gear & Shaft Ass'y. (Straigh t) Washer, Flat Washer, Flat (Use with 35322 spool) Washer, Flat Spool, Governor * Gasket, Cylinder cover Cylinder Cover Assy.(Incl.2,33,36,37 & 38)
33 31950 34 650451 35 650588 36 32425 37 32426	* Seal, Oil Screw, 1/4-20 x 1" Screw, 1/4-20 x 2" Rod Assy., Governor Spacer, Governor rod

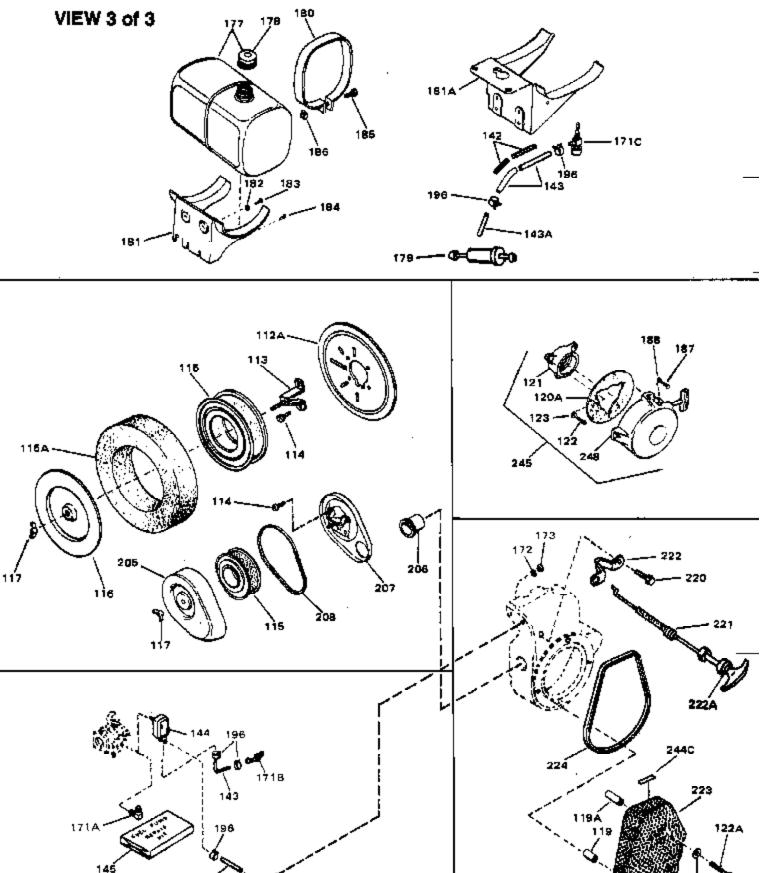
	Part Number Qty	
	650736	Screw, 10-16 x 3/8"
	33495	Cover, Cylinder head
	34225A	* Gasket, Cylinder head
	33763	Head, Cylinder
45	35552	Spark Plug (RL-82C)
46	650690	Washer, Belleville
46A	650691	Washer, Flat
47	650692	Screw, 5/16-18 x 1-3/4"
47A	650746	Screw, 5/16-18 x 1-3/8"
48	730218	Valve Guide Kit (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 31963	Link, Governor lever-to-throttle leve r
		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
65	31984A	Lever Assy., Control
66	28558	Washer, Wave
67	31966	Bushing, Governor lever
68	650597	Screw, 10-24 x 5/8"
69	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
	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	Washer, Lock
85	8274	Washer, Lock
86A	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
	33484	* "O" Ring (Also Incl. in 251)
	650168	Washer, Flat
	32610A	Screw, 1/4-20 x 29/32"
()/		

		<u> </u>	
	Part Number	Qty	Description
	33485		Arm, Rocker
	33486		Ring, Retaining
	650755 650864		Screw, 1/4-20 x 3/4" Nut, Hex, 1/4-20
	650756		Stud, Rocker arm
	33487		
	33488		* "O" Ring (Also Incl. in 251)
	31958A		Cover, Rocker arm
	33489		* Gasket, Breather (Also Incl. in 251)
	33490		Body Assy., Breather 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
	650513		Nut, Wing
	650675		Washer, Flat
	32426		Spacer, Screen
	33776		Screen, Pulley
	650670		Screw, 1/4-20 x 3/4"
	27070		Washer, Lock
	32577		Cover, Cylinder NOTE: Determine the gap between the cover
	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
	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
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		•
107	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
	610118		Cover, Spark plug
	610750		Grommet, Lead wire
	610408		Nut, 8-32
	610908		Terminal, Female
	27793		Clip, Conduit
170	28942		Screw, 10-32 x 3/8"
189	33764		Dipstick (Incl. 190)
190	29985		"O" Ring
191	33468		Tube Assy., Oil filler
	29673		* Gasket, Oil filler tube
244A	32730		Decal, Long Life



Ref #	Part Number	Qty	Description
39	650736		Screw, 10-16 x 3/8"
82	30063		Screw, 1/4-20 x 1/2"
126A	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"
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
163A	610905		Terminal
163	610904		Terminal
209	730178		Ech.Adapter Kit (Incl.210 & 211)(As r equired)
210	34102B		Gasket, Exhaust (Use as required)
211	30196		Screw, 5/16-18 x 3/4" (Use as require d)
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.



143

1710 196

122

112A 33777 Bracket, Air cleaner 113 33778 Bracket, Air cleaner 114 650399 Screw, 10-32 x 5/8" 115A 32906 Filter, Pre Air 115 32008 Element, Air cleaner 116 32904 Cover, Air cleaner 117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 143 30705 Fuel Line (Braided 8.25")(21 cm)(As r equired) 143 30962 Fuel Line (Braided 32")(81 cm)(As req uired) 144 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 1718 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As required) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)	Ref #	Part Number Qty	Description
114 650399 Screw, 10-32 x 5/8" 115A 32906 Filter, Pre Air 115 32008 Element, Air cleaner 116 32904 Cover, Air cleaner 117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 143 29774 Fuel Line (Braided 8.25")(21 cm)(As r equired) 143 30962 Fuel Line (Braided 3.2")(81 cm)(As req uired) 144 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 171B 32958 Fitting, Fuel pump 171B 32958 Fuel Cap (White Plastic)(Std)(As requ ired) 178 410144B Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	112A	33777	Bracket, Air cleaner
115A 32906 Filter, Pre Air 115 32008 Element, Air cleaner 116 32904 Cover, Air cleaner 117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 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 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 171B 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As requ ired) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	113	33778	Bracket, Air cleaner
115 32008 Element, Air cleaner 116 32904 Cover, Air cleaner 117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 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 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 1718 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As requ ired) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	114	650399	Screw, 10-32 x 5/8"
116 32904 Cover, Air cleaner 117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 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 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel 145 32958 Fitting, Fuel pump 171B 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As requ ired) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	115A	32906	Filter, Pre Air
117 650513 Nut, Wing 119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 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 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 171B 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As requ ired) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	115	32008	Element, Air cleaner
119 32426 Spacer, Screen 122 650670 Screw, 1/4-20 x 3/4" 123 27070 Washer, Lock 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 32959 Pump, Impulse fuel 145 33010 Repair Kit, Impulse fuel pump 171B 32958 Fitting, Fuel pump 178 410144B Fuel Cap (White Plastic)(Std)(As requ ired) 178 34210 Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	116	32904	Cover, Air cleaner
122650670Screw, 1/4-20 x 3/4"12327070Washer, Lock14329774Fuel Line (Braided 8.25")(21 cm)(As r equired)14330705Fuel Line (Braided 16")(41 cm)(As req uired)14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	117	650513	Nut, Wing
12327070Washer, Lock14329774Fuel Line (Braided 8.25")(21 cm)(As r equired)14330705Fuel Line (Braided 16")(41 cm)(As req uired)14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	119	32426	Spacer, Screen
14329774Fuel Line (Braided 8.25")(21 cm)(As r equired)14330705Fuel Line (Braided 16")(41 cm)(As req uired)14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	122	650670	Screw, 1/4-20 x 3/4"
14330705Fuel Line (Braided 16")(41 cm)(Ås req uired)14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	123	27070	Washer, Lock
14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	143	29774	Fuel Line (Braided 8.25")(21 cm)(As r equired)
14330962Fuel Line (Braided 32")(81 cm)(As req uired)14432959Pump, Impulse fuel14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	143	30705	Fuel Line (Braided 16")(41 cm)(As req uired)
14533010Repair Kit, Impulse fuel pump171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	143	30962	
171B32958Fitting, Fuel pump178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	144	32959	Pump, Impulse fuel
178410144BFuel Cap (White Plastic)(Std)(As requ ired)17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	145	33010	Repair Kit, Impulse fuel pump
17834210Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as	171B	32958	Fitting, Fuel pump
	178	410144B	Fuel Cap (White Plastic)(Std)(As required)
required)	178	34210	Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as
			required)
196 26460 Clamp, Fuel line (Use as required)	106	26460	Clamp, Fuel line (Llse as required)
245 730134 Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248)			
(Use as required)	240		