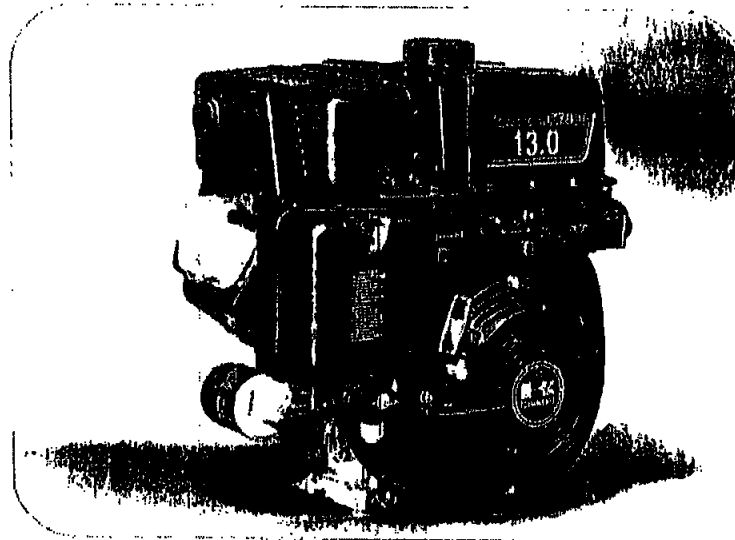




FE 250D – S52

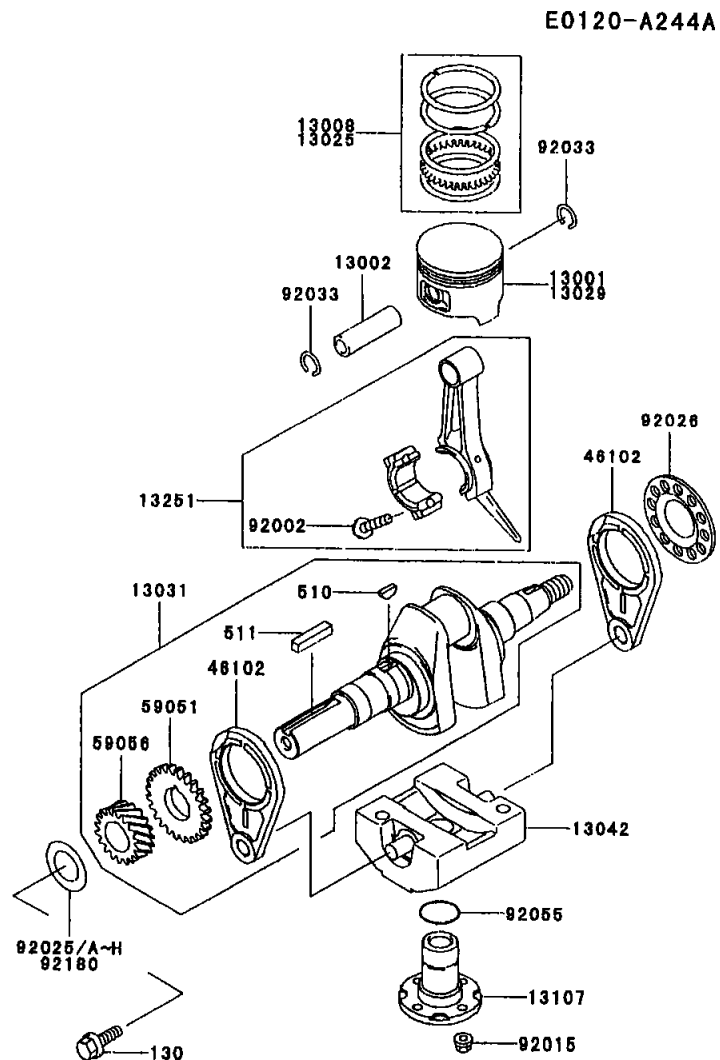
Hako-Jonas 980V/VH



4-stroke air-cooled gasoline engine

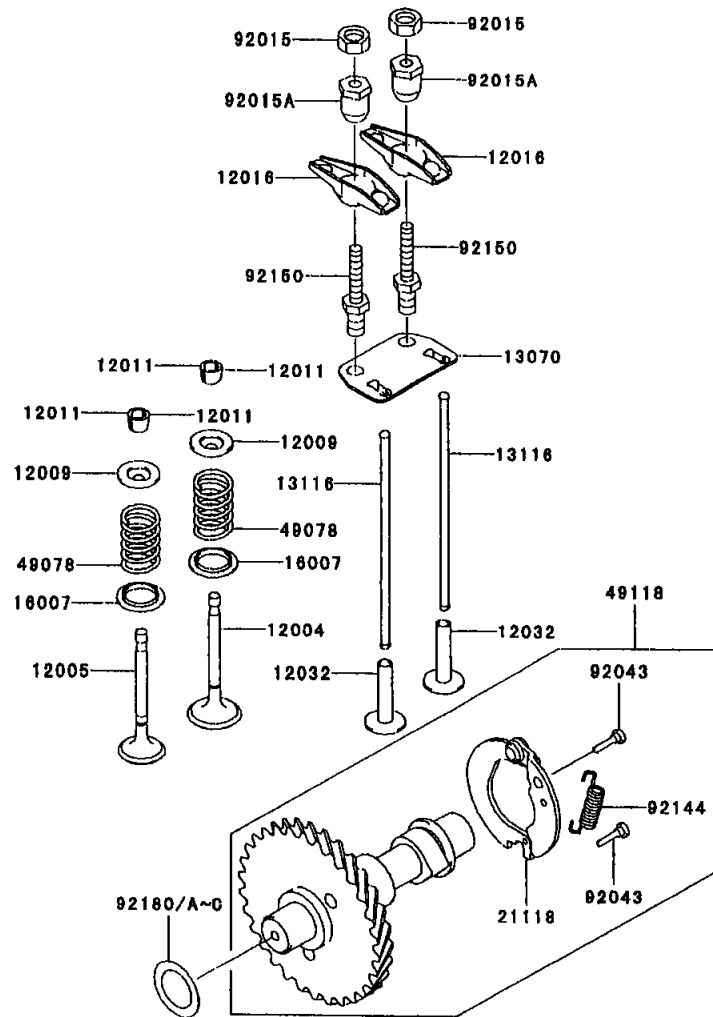
Ersatzteilliste/ Spare part list

Catalog No.	99907-2386-01
Catalog Name	FE250D- S52
Charge No.	331219
Charge Name	
Print Maker No.	
Print Maker Name	
Production Date	200309
Sale Date	200310A
Appointed Date	20030926
Delivery Date	
Maintenance Date	
Registration Date	09/26/2003



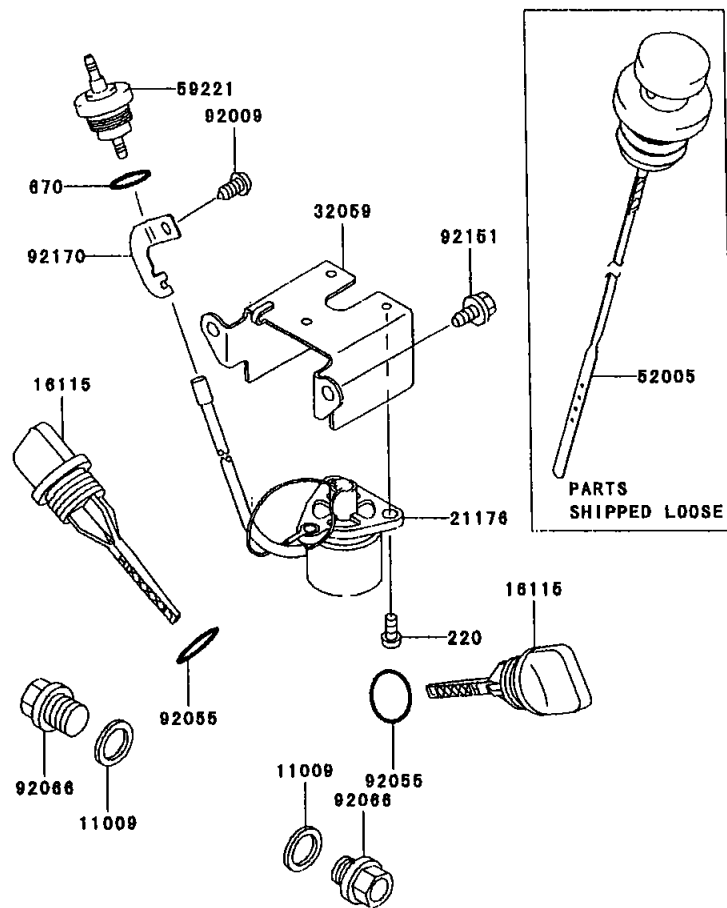
Ref No.	Part No.	Part Name	Qty	A
130	130G0825	BOLT-FLANGED	1	
510	510A5100	KEY-WOODRUFF	1	
511	511A0735	KEY-SUNK	1	
13001	13001-2128	PISTON-ENGINE	1	
13002	13002-2077	PIN-PISTON	1	
13008	13008 2055	RING-SET-PISTON	1	
13025	13025-2097	RING-SET-PISTON L,O,5	AR	
13029	13029-2117	PISTON-ENGINE L,O,5	AR	
13031	13031-2056	CRANKSHAFT-COMP	1	
13042	13042-6012	WEIGHT	1	
13107	13107-2088	SHAFT	1	
13251	13251-6038	ROD-ASSY-CONNECTING	1	
46102	46102-2075	ROD	2	
59051	59051-2097	GEAR-SPUR	1	
59056	59056-2995	GEAR-HELICAL	1	
92002	92002-2053	BOLT	2	
92015	92015-1193	NUT	4	
92025	92025-2168	SHIM,T-1.13	AR	
92025A	92025-2169	SHIM,T-1.18	AR	
92025B	92025-2170	SHIM,T-1.23	AR	
92025C	92025-2171	SHIM,T-1.28	AR	
92025D	92025-2172	SHIM,T-1.33	AR	
92025E	92025-2173	SHIM,T-1.38	AR	
92025F	92025-2174	SHIM,T-1.43	AR	
92025G	92025-2175	SHIM,T-1.48	AR	
92025H	92025-2207	SHIM,T-1.53	AR	
92026	92026-2052	SPACER	1	
92033	92033-1099	RING-SNAP	2	
92055	92055-2072	RING-O	1	
92180	92180-2027	SHIM	AR	

E0130-A011F

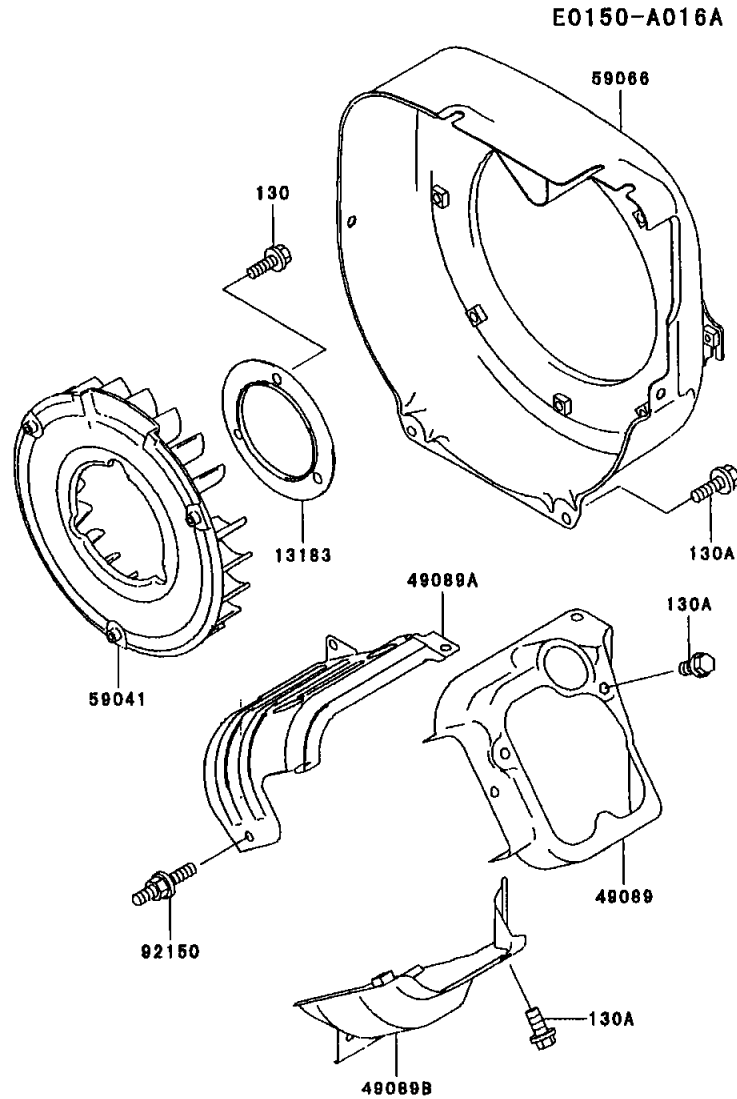


Ref No.	Part No.	Part Name	Qty	A
12004	12004-2093	VALVE-INTAKE	1	
12005	12005-2081	VALVE-EXHAUST	1	
12009	12009-2066	RETAINER-VALVE SPRING	2	
12011	12011-2056	COLLET	4	
12016	12016-2080	ARM-ROCKER	2	
12032	12032-2060	TAPPET	2	
13070	13070-2086	GUIDE	1	
13116	13116-2071	ROD-PUSH	2	
18007	16007-2072	SEAT-SPRING	2	
21118	21118-2087	DECOMPRESSOR	1	
49078	49078-2067	SPRING-ENGINE VALVE	2	
49118	49118-2108	CAMSHAFT-COMP	1	
92015	92015-2240	NUT	2	
92015A	92015-2253	NUT	2	
92043	92043-2113	PIN	2	
92144	92144-2323	SPRING	1	
92150	92150-2188	BOLT	2	
92180	92180-2010	SHIM,T-0.3	AR	
92180A	92180-2011	SHIM,T-0.4	AR	
92180B	92180-2012	SHIM,T-0.5	AR	
92180C	92180-2062	SHIM,T-0.2	AR	

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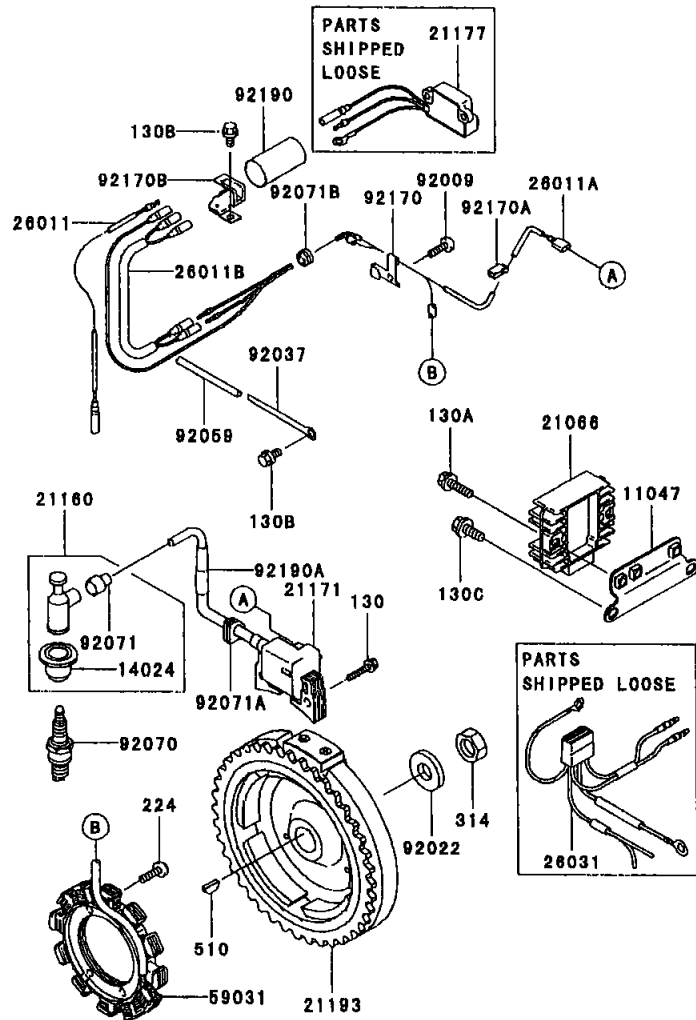


Ref No.	Part No.	Part Name	Qty	A
220	220B0408	SCREW-PAN-CROS	3	
870	870B2015	RING-O	1	
11009	11009-2175	GASKET,14.2X19X2	2	
16115	16115-2079	CAP-OIL FILLER	2	
21176	21176-2091	SENSOR	1	
32058	32058-2089	BRACKET-SWITCH	1	
52005	52005-2112	GAUGE	1	
59221	59221-2123	CONNECTOR-CORD	1	
92009	92009-2308	SCREW	1	
92055	92055-2185	RING-O,20MM	2	
92066	92066-2203	PLUG,DRAIN	2	
92151	92151-2166	BOLT	2	
92170	92170-2052	CLAMP	1	

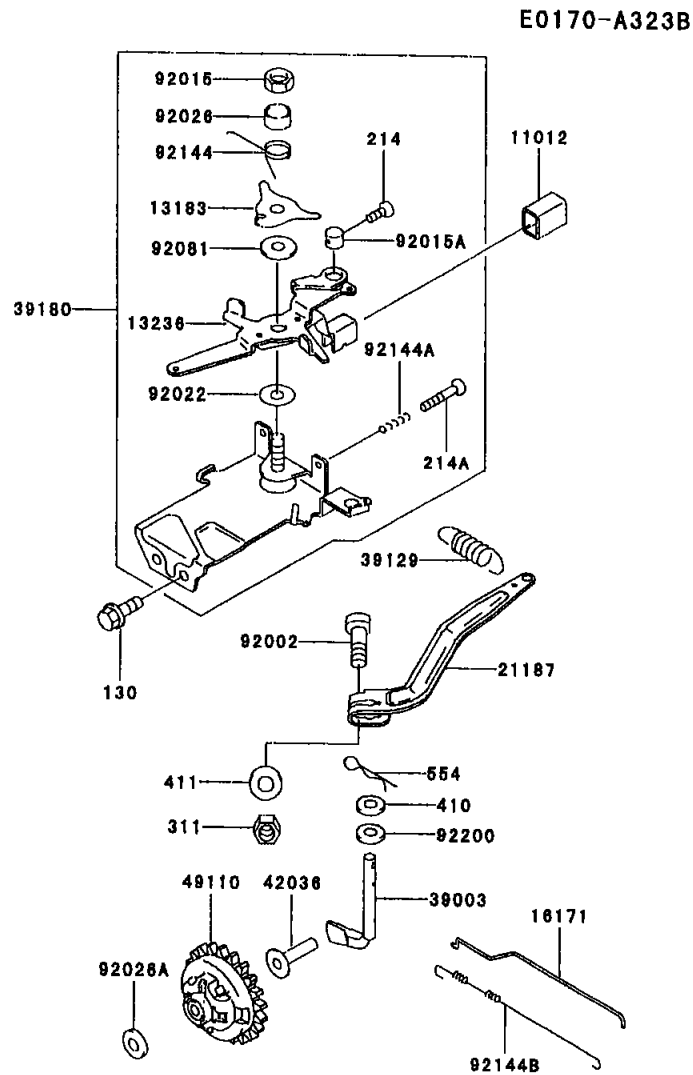


Ref No	Part No.	Part Name	Qty	A
130	130G0610	BOLT-FLANGED	3	
130A	130G0612	BOLT-FLANGED	12	
13183	13183-2407	PLATE	1	
49089	49089-2327-9H	SHROUD-ENGINE	1	
49089A	49089-2328-9H	SHROUD-ENGINE	1	
49089B	49089-2344-9H	SHROUD-ENGINE	1	
59041	59041-2072	FAN	1	
59066	59066-2586-9H	HOUSING-FAN	1	
92150	92150-2197	BOLT	1	

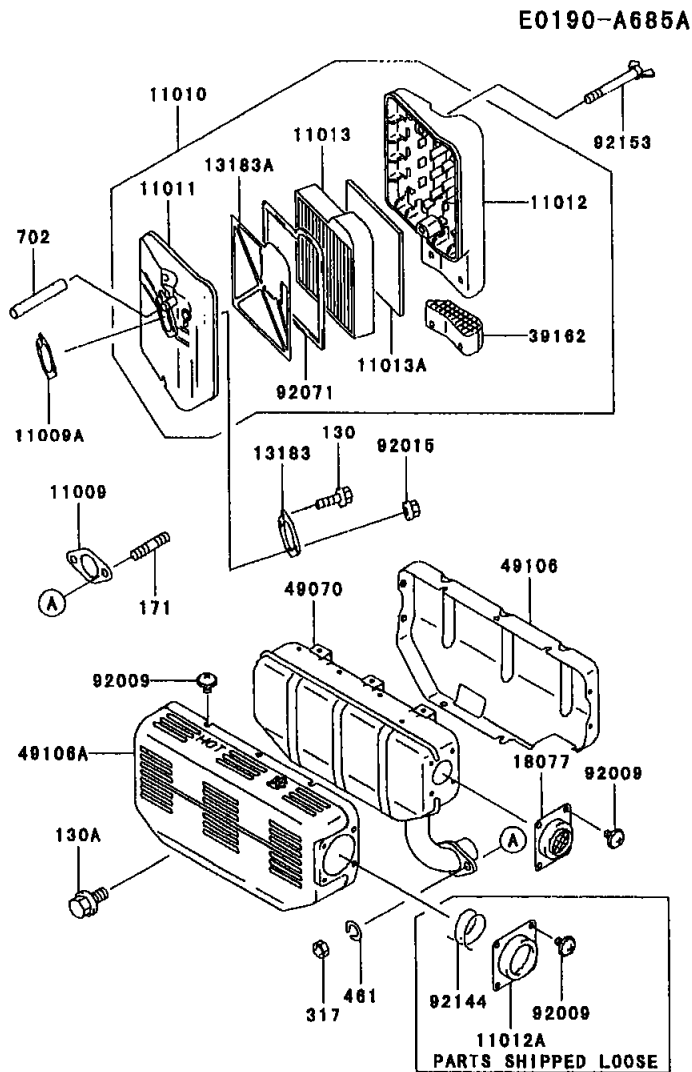
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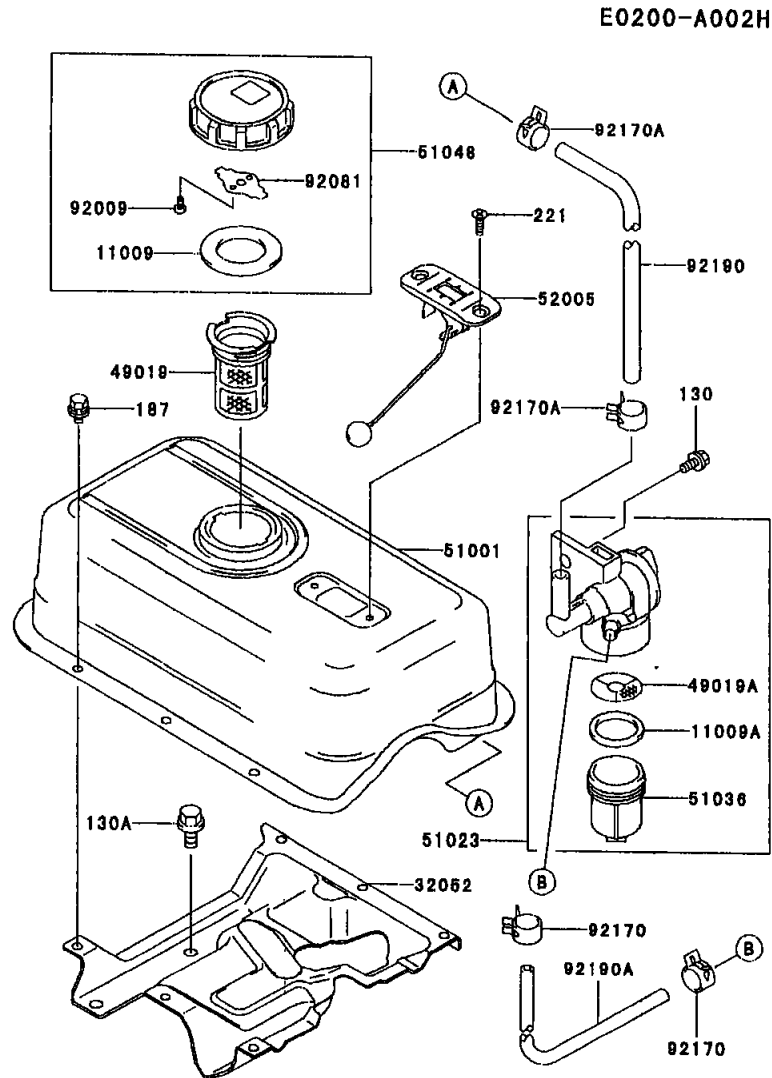
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130	130B0525	BOLT-FLANGED	2	
130A	130B0625	BOLT-FLANGED	2	
130B	130G0612	BOLT-FLANGED	2	
130C	130G0816	BOLT-FLANGED	2	
224	224B0620	SCREW-PAN-WP-CROS	4	
314	314G1600	NUT-HEX-FINE	1	
510	510A5100	KEY-WOODRUFF	1	
11047	11047-2127	BRACKET	1	
14024	14024-2234	COVER	1	
21066	21066-2070	REGULATOR-VOLTAGE	1	
21160	21160-2051	CAP-ASSY-PLUG	1	
21171	21171-2206	COIL-ASSY-IGNITION	1	
21177	21177-2062	CONTROLLER	1	
21193	21193-2122	FLYWHEEL-ASSY	1	
26011	26011-2243	WIRE-LEAD	1	
26011A	26011-2359	WIRE-LEAD	1	
26011B	26011-2378	WIRE-LEAD	1	
26031	26031-2066	HARNESS	1	
59031	59031-2088	COIL-CHARGING	1	
92009	92009-2308	SCREW	1	
92022	92022-2205	WASHER	1	
92037	92037-2006	CLAMP	1	
92059	92059-2011	TUBE, 5X8X75	1	
92070	92070-2077	PLUG-SPARK, BPR5ES(NGK), SOLID	1	
92071	92071-2008	GROMMET	1	
92071A	92071-2112	GROMMET	1	
92071B	92071-2125	GROMMET	1	
92170	92170-2016	CLAMP	1	
92170A	92170-2017	CLAMP	1	
92170B	92170-2051	CLAMP	1	
92190	92190-2052	TUBE, 25X26X50	1	
92190A	92190-2069	TUBE, 7.5X10X35	1	



Ref No.	Part No.	Part Name	Qty	A
130	130G0612	BOLT-FLANGED	2	
214	214B0408	SCREW-PAN+-	1	
214A	214B0422	SCREW-PAN+-	2	
311	311B0600	NUT-HEX	1	
410	410B0600	W-PLAIN-S	1	
411	411B0600	WASHER-PLAIN	1	
554	554A0600	PIN-SNAP	1	
11012	11012-2282	CAP	1	
13183	13183-2343	PLATE	1	
13236	13236-2116	LEVER-COMP	1	
16171	16171-2063	LINK	1	
21187	21187-2061	ARM-ASSY	1	
39003	39003-2076	ARM-PIVOT	1	
39129	39129-2113	SPRING-GOVERNOR	1	
39180	39180-2643	PANEL-ASSY-CONTROL	1	
42036	42036-2060	SLEEVE	1	
49110	49110-2069	GOVERNOR-ASSY	1	
92002	92002-2269	BOLT	1	
92015	92015-2051	NUT	1	
92015A	92015-2120	NUT	1	
92022	92022-2103	WASHER	1	
92026	92026-2304	SPACER	1	
92026A	92200-2036	SPACER	1	
92081	92081-2104	SPRING	1	
92144	92144-2257	SPRING	1	
92144A	92144-2266	SPRING	2	
92144B	92144-2279	SPRING	1	
92200	92200-2029	WASHER,6.5X11.5X2.0	1	

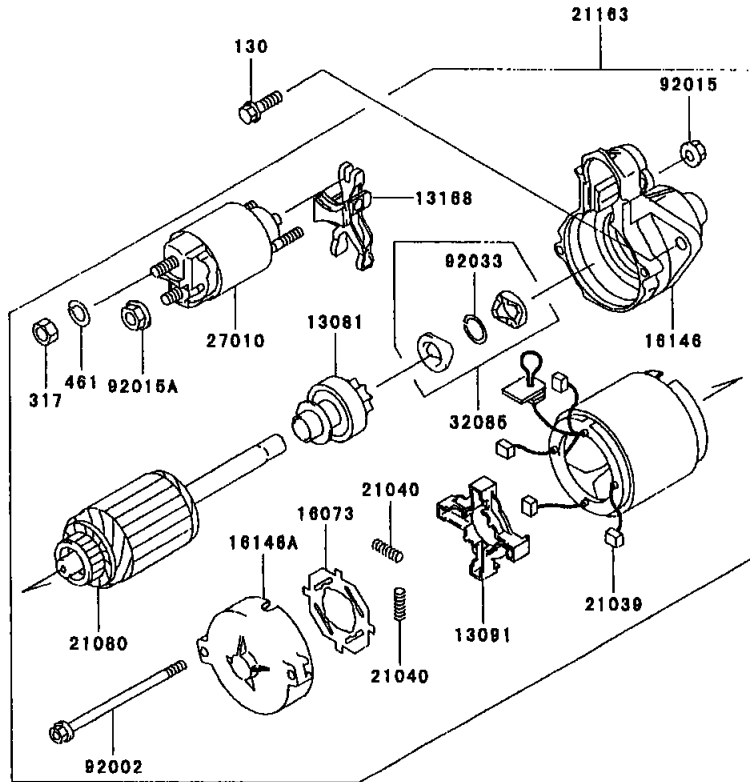


Ref No.	Part No.	Part Name	Qty	A
130	130B0818	BOLT-FLANGED	1	
130A	130G0818	BOLT-FLANGED	1	
171	171G0820	BOLT-STUD	2	
317	317R0800	NUT-HEX-SMALL	2	
461	461F0800	WASHER-SPRING	2	
702	702A081000	TUBE-RUBBER	1	
11009	11009-2487	GASKET,MUFFLER	1	
11009A	11009-2925	GASKET,AIR FILTER	1	
11010	11010-2404	FILTER-ASSY-AIR	1	
11011	11011-2221	CASE-AIR FILTER	1	
11012	11012-2276	CAP,AIR FILTER	1	
11012A	11012-2297	CAP,SPARK ARRESTER	1	
11013	11013-2128	ELEMENT-AIR FILTER	1	
11013A	11013-2129	ELEMENT-AIR FILTER	1	
13183	13183-2322	PLATE	1	
13183A	13183-2388	PLATE,AIR FILTER	1	
18077	18077-2094	ARRESTER-SPARK	1	
39162	39162-2052	SILENCER-INTAKE	1	
49070	49070-2548	MUFFLER-COMP	1	
49106	49106-2485	COVER-MUFFLER	1	
49106A	49106-2547	COVER-MUFFLER	1	
92009	92009-2322	SCREW	15	
92015	92015-1193	NUT	2	
92071	92071-2138	GROMMET	1	
92144	92144-2262	SPRING	1	
92153	92153-2084	BOLT,8X50	2	



Ref No.	Part No.	Part Name	Qty	A
130	130G0812	BOLT-FLANGED	1	
130A	130G0818	BOLT-FLANGED	4	
187	187L0612	BOLT-UPSET-WSP	6	
221	221F0512	SCREW-CSK-CROSS	2	
11009	11009-2115	GASKET	1	
11009A	11009-2876	GASKET,FUEL TAP	1	
32052	32052-2201-9H	BRACKET-TANK	1	
48019	49019-2051	FILTER-FUEL - 113-425	1	
49019A	49019-2095	FILTER-FUEL	1	
51001	51001-2241-9H	TANK-COMP-FUEL	1	
51023	51023-2148	TAP-ASSY	1	
51036	51036-2071	CUP,FUEL TAP	1	
51048	51048-2055	CAP-ASSY-TANK	1	
52005	52005-2100	GAUGE	1	
92009	92009-2021	SCREW	2	
92081	92081-2036	SPRING	1	
92170	92170-2042	CLAMP	2	
92170A	92170-2082	CLAMP	2	
92190	92190-2073	TUBE,7X12X205	1	
92190A	92190-2118	TUBE,6X10X120	1	

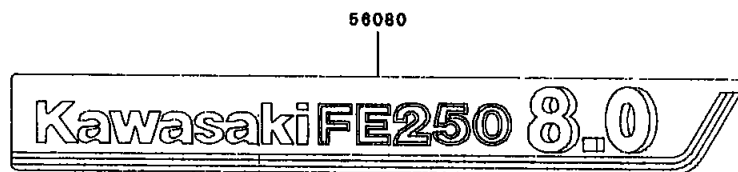
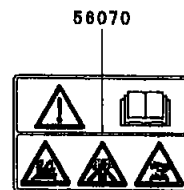
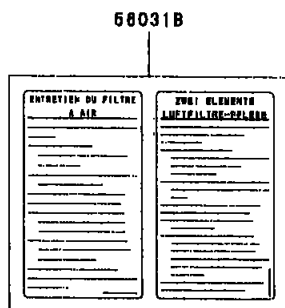
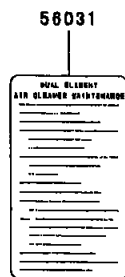
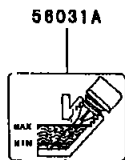
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Ref No.	Part No.	Part Name	Qty	A
130	13060825	BOLT-FLANGED	2	
317	317B0800	NUT-HEX-SMALL	1	
461	461F0800	WASHER-SPRING	1	
13081	13081-2108	CLUTCH-ASSY	1	
13091	13091-2068	HOLDER,BRUSH	1	
13168	13168-2148	LEVER,SHIFT	1	
16073	16073-2098	INSULATOR	1	
16146	16146-2163	COVER-ASSY,FR	1	
16146A	16146-2164	COVER-ASSY,RR	1	
21039	21039-2059	BRUSH	4	
21040	21040-2052	SPRING-BRUSH	4	
21080	21080-2054	ARMATURE	1	
21163	21163-2089	STARTER-ELECTRIC	1	
27010	27010-2122	SWITCH	1	
32085	32085-2097	STOPPER	1	
92002	92002-2277	BOLT	2	
92015	92015-2146	NUT	2	
92015A	92015-2147	NUT	1	
92033	92033-2081	RING-SNAP	1	

F0290-B096A

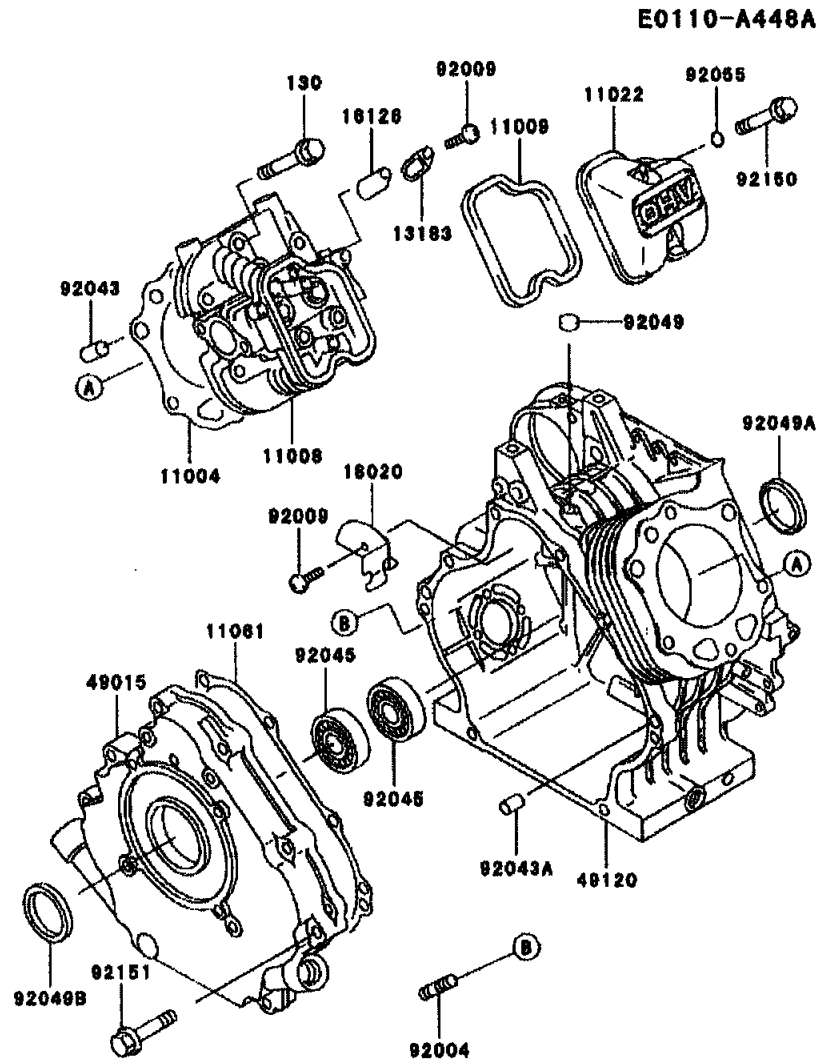
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56031	56031-2387	LABEL-MANUAL		1
56031A	56031-2458	LABEL-MANUAL		1
56031B	56031-2461	LABEL-MANUAL		1
56070	56070-2021	LABEL-WARNING		1
56080	56080-2076	LABEL-BRAND		1



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B-03

CYLINDER/CRANKCASE

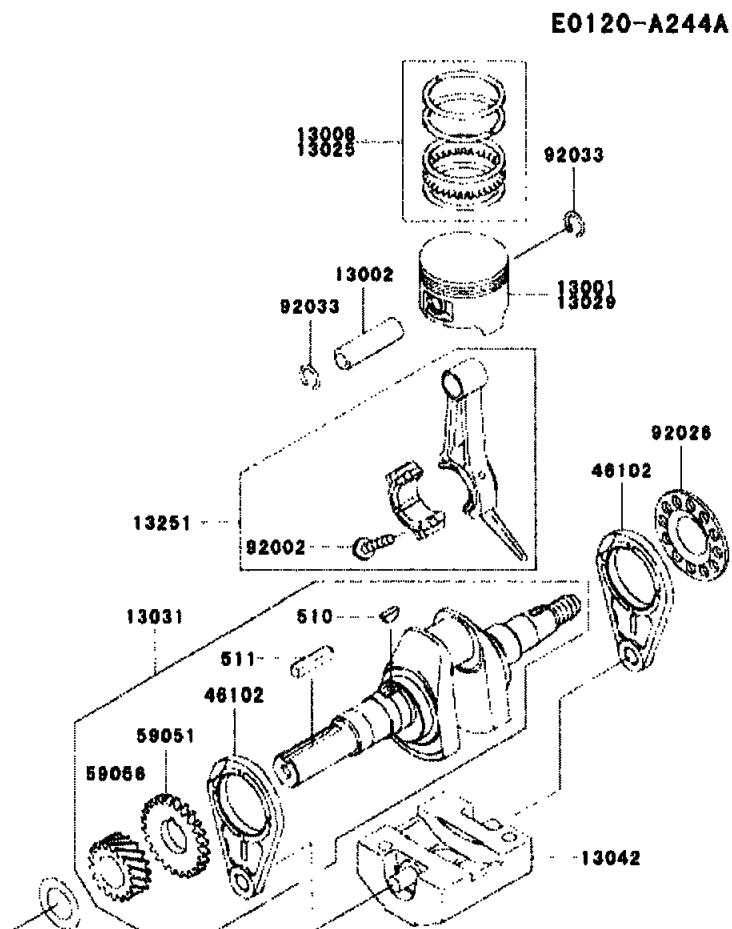


Ref No.	Part No.	Part Name	Qty	A
	E0110-A448A			
	130	130T0845	BOLT-FLANGED	6
	11004	11004-2106	GASKET-HEAD	1
	11008	11008-2086	HEAD-COMP-CYLINDER	1
	11009	11009-2923	GASKET,ROCKER CASE	1
	11022	11022-6002	CASE-ROCKER	1
	11061	11061-2069	GASKET	1
	13183	13183-2299	PLATE	1
	16126	16126-2107	VALVE	1
	18020	18020-2073	BAFFLE	1
	49015	49015-6237	COVER-CRANKCASE	1
	49120	49120-2309	CRANKCASE-COMP	1
	92004	92004-2083	STUD,6X14	4
	92009	92009-2308	SCREW	2
	92043	92043-1037	PIN	2
	92043A	92043-1263	PIN	2
	92045	92045-2188	BEARING-BALL,6206CM	2
	92049	92049-2097	SEAL-OIL	1
	92049A	92049-2199	SEAL-OIL	1
	92049B	92049-2220	SEAL-OIL	1
	92055	92055-1343	RING-O	2
	92150	92150-2145	BOLT,6X35	2
	92151	92151-2130	BOLT,8X40	8

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B-04

PISTON/CRANKSHAFT



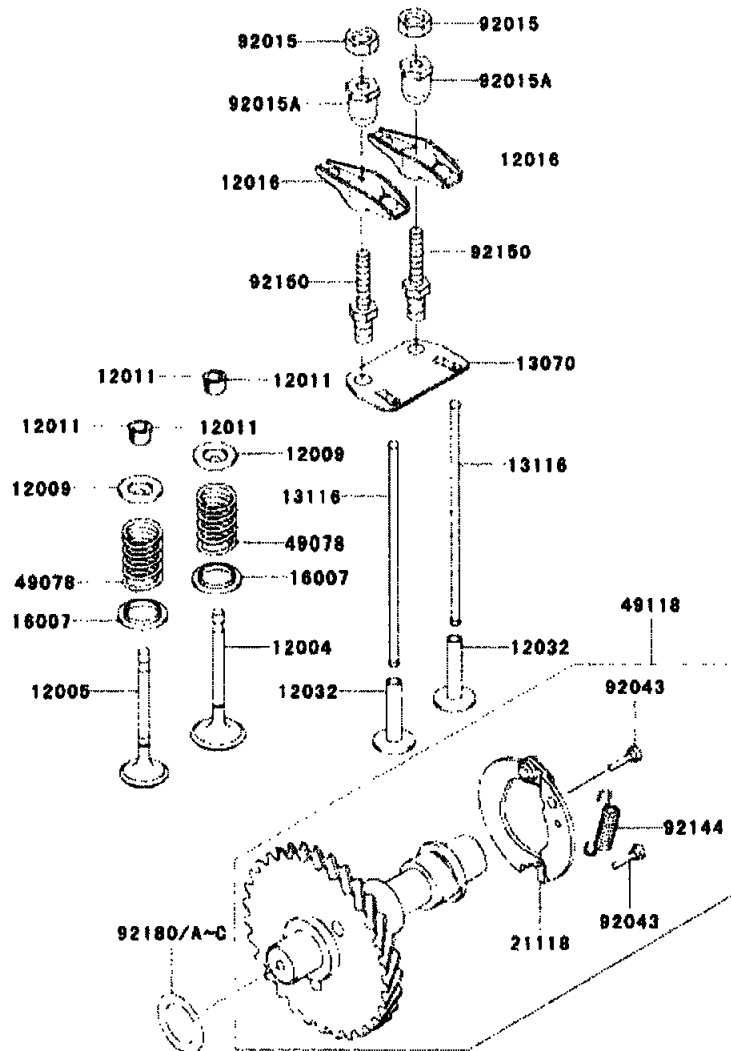
Ref No.	Part No.	Part Name	Qty	A
	E0120-A244A			
130	130G0825	BOLT-FLANGED	1	
510	510A5100	KEY-WOODRUFF	1	
511	511A0735	KEY-SUNK	1	
13001	13001-2128	PISTON-ENGINE	1	
13002	13002-2077	PIN-PISTON	1	
13008	13008-2055	RING-SET-PISTON	1	
13025	13025-2097	RING-SET-PISTON L,0.5	AR	
13029	13029-2117	PISTON-ENGINE L,0.5	AR	
13031	13031-2056	CRANKSHAFT-COMP	1	
13042	13042-6012	WEIGHT	1	
13107	13107-2088	SHAFT	1	
13251	13251-6038	ROD-ASSY-CONNECTING	1	
46102	46102-2075	ROD	2	
59051	59051-2097	GEAR-SPUR	1	
59056	59056-2995	GEAR-HELICAL	1	
92002	92002-2053	BOLT	2	
92015	92015-1193	NUT	4	
92025	92025-2168	SHIM,T=1.13	AR	
92025A	92025-2169	SHIM,T=1.18	AR	
92025B	92025-2170	SHIM,T=1.23	AR	
92025C	92025-2171	SHIM,T=1.28	AR	
92025D	92025-2172	SHIM,T=1.33	AR	
92025E	92025-2173	SHIM,T=1.38	AR	
92025F	92025-2174	SHIM,T=1.43	AR	

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B-05

VALVE/CAMSHAFT

E0130-A011F

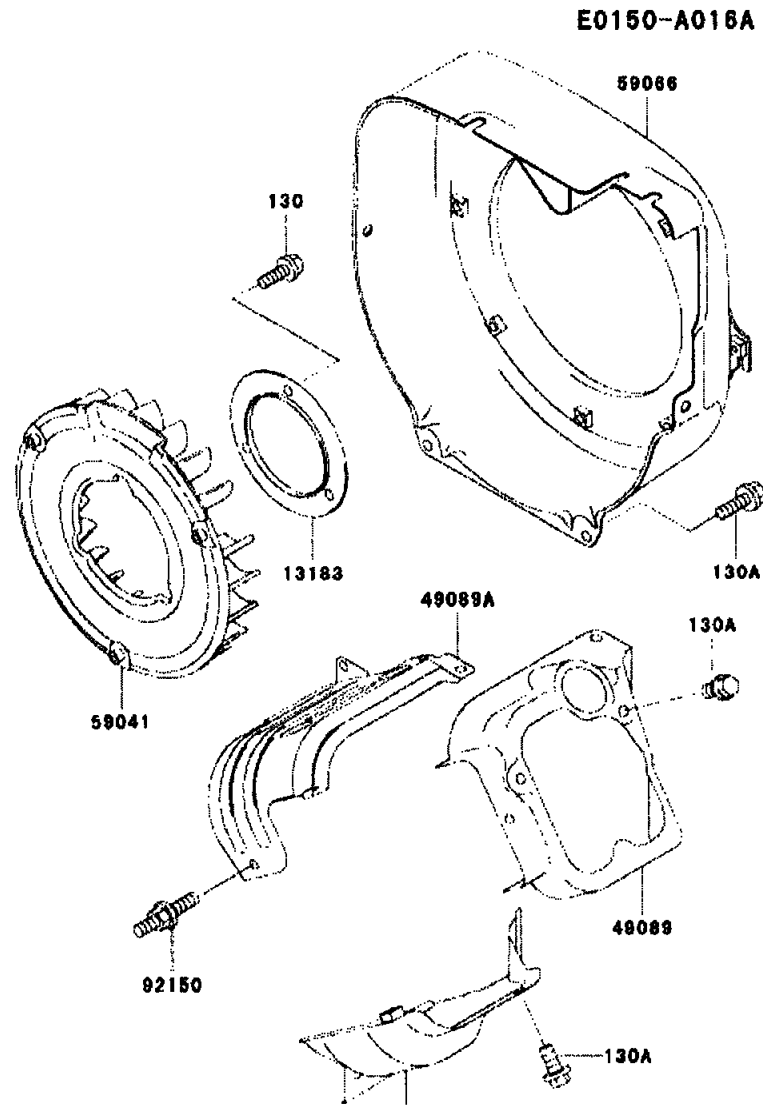


Ref No.	Part No.	Part Name	Qty	A
12004	12004-2093	VALVE-INTAKE	1	
12005	12005-2081	VALVE-EXHAUST	1	
12009	12009-2066	RETAINER-VALVE SPRING	2	
12011	12011-2056	COLLET	4	
12016	12016-2060	ARM-ROCKER	2	
12032	12032-2060	TAPPET	2	
13070	13070-2086	GUIDE	1	
13116	13116-2071	ROD-PUSH	2	
16007	16007-2072	SEAT-SPRING	2	
21118	21118-2087	DECOMPRESSOR	1	
49078	49078-2067	SPRING-ENGINE VALVE	2	
49118	49118-2108	CAMSHAFT-COMP	1	
92015	92015-2240	NUT	2	
92015A	92015-2253	NUT	2	
92043	92043-2113	PIN	2	
92144	92144-2323	SPRING	1	
92150	92150-2198	BOLT	2	
92180	92180-2010	SHIM,T=0.3	AR	
92180A	92180-2011	SHIM,T=0.4	AR	
92180B	92180-2012	SHIM,T=0.5	AR	
92180C	92180-2062	SHIM,T=0.2	AR	

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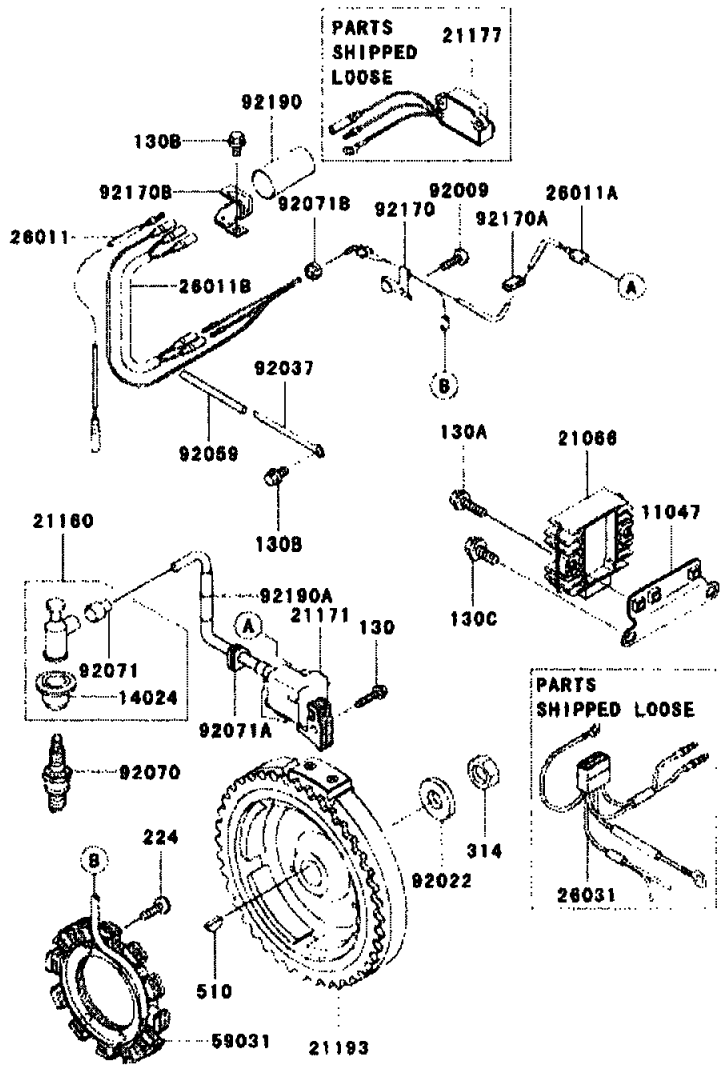
B-07

COOLING-EQUIPMENT



Ref No.	Part No.	Part Name	Qty	A
130	130G0610	BOLT-FLANGED	3	
130A	130G0612	BOLT-FLANGED	12	
13183	13183-2407	PLATE	1	
49089	49089-2327-9H	SHROUD-ENGINE	1	
49089A	49089-2328-9H	SHROUD-ENGINE	1	
49089B	49089-2344-9H	SHROUD-ENGINE	1	
59041	59041-2072	FAN	1	
59066	59066-2586-9H	HOUSING-FAN	1	
92150	92150-2197	BOLT	1	

E0160-A920A



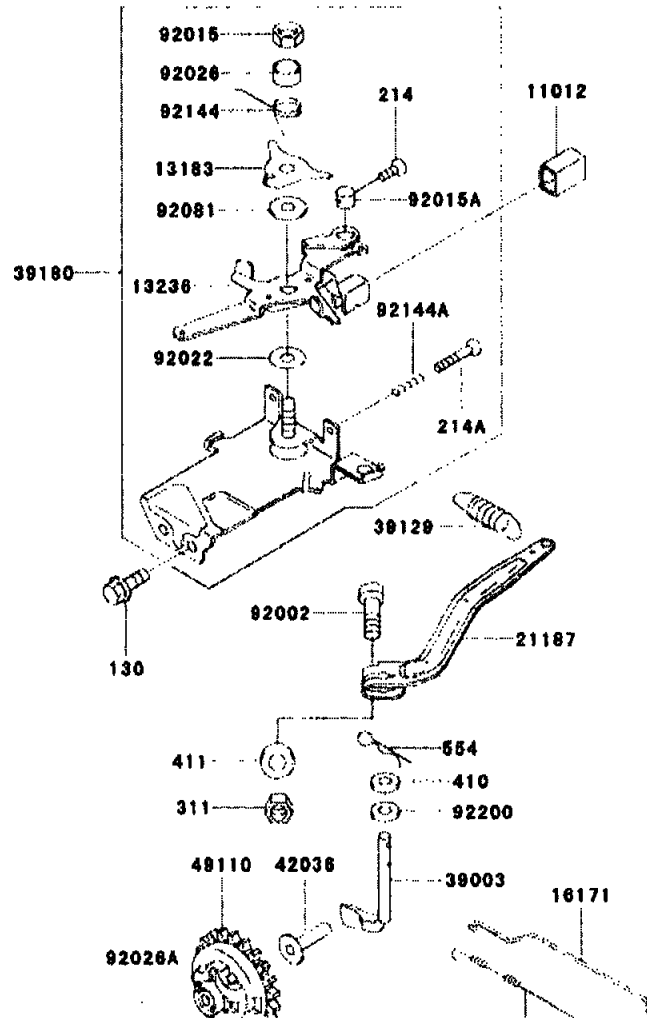
Ref No.	Part No.	Part Name	Qty	A
	130	130B0525	BOLT-FLANGED	2
	130A	130B0625	BOLT-FLANGED	2
	130B	130G0612	BOLT-FLANGED	2
	130C	130G0816	BOLT-FLANGED	2
	224	224B0620	SCREW-PAN-WP-CROS	4
	314	314G1600	NUT-HEX-FINE	1
	510	510A5100	KEY-WOODRUFF	1
	11047	11047-2127	BRACKET	1
	14024	14024-2234	COVER	1
	21066	21066-2070	REGULATOR-VOLTAGE	1
	21160	21160-2051	CAP-ASSY-PLUG	1
	21171	21171-2206	COIL-ASSY-IGNITION	1
	21177	21177-2062	CONTROLLER	1
	21193	21193-2122	FLYWHEEL-ASSY	1
	26011	26011-2243	WIRE-LEAD	1
	26011A	26011-2359	WIRE-LEAD	1
	26011B	26011-2378	WIRE-LEAD	1
	26031	26031-2066	HARNESS	1
	59031	59031-2088	COIL-CHARGING	1
	92009	92009-2308	SCREW	1
	92022	92022-2205	WASHER	1
	92037	92037-2006	CLAMP	1
	92059	92059-2011	TUBE,5X6X75	1
	92070	92070-2077	PLUG-SPARK,BPR5ES(NGK),SOLID	1
	92071	92071-2008	GROMMET	1
	92071A	92071-2112	GROMMET	1
	92071B	92071-2125	GROMMET	1
	92170	92170-2016	CLAMP	1
	92170A	92170-2017	CLAMP	1
	92170B	92170-2051	CLAMP	1

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B-09

CONTROL-EQUIPMENT

E0170-A323B



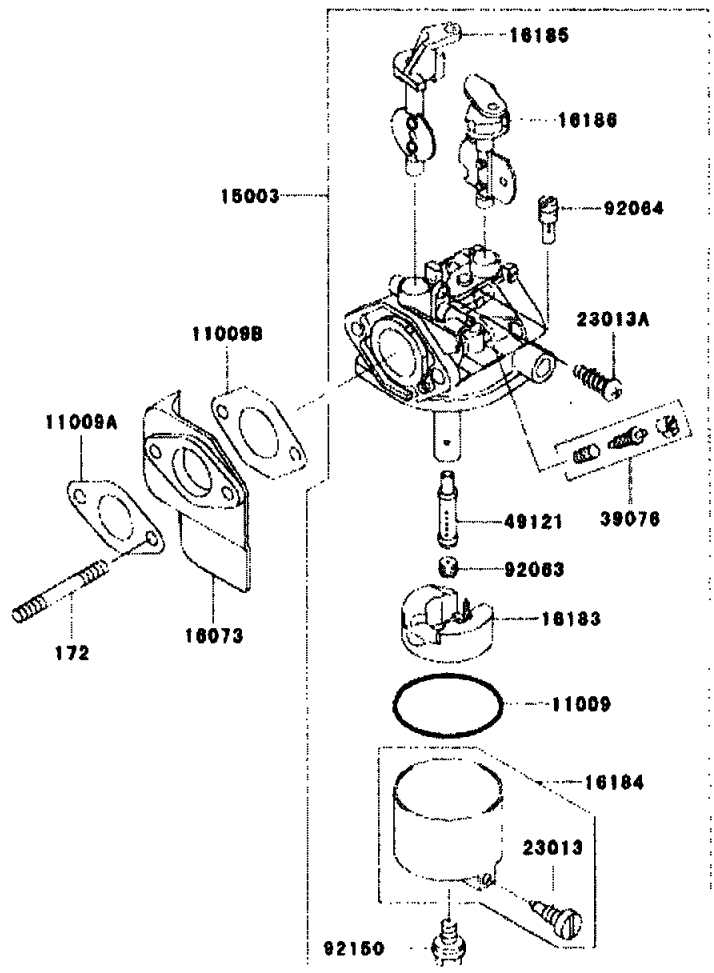
Ref No.	Part No.	Part Name	Qty	A
130	130G0612	BOLT-FLANGED	2	
214	214B0408	SCREW-PAN+-	1	
214A	214B0422	SCREW-PAN+-	2	
311	311B0600	NUT-HEX	1	
410	410B0600	W-PLAIN-S	1	
411	411B0600	WASHER-PLAIN	1	
554	554A0600	PIN-SNAP	1	
11012	11012-2282	CAP	1	
13183	13183-2343	PLATE	1	
13236	13236-2116	LEVER-COMP	1	
16171	16171-2063	LINK	1	
21187	21187-2061	ARM-ASSY	1	
39003	39003-2076	ARM-PIVOT	1	
39129	39129-2113	SPRING-GOVERNOR	1	
39180	39180-2643	PANEL-ASSY-CONTROL	1	
42036	42036-2060	SLEEVE	1	
49110	49110-2069	GOVERNOR-ASSY	1	
92002	92002-2269	BOLT	1	
92015	92015-2051	NUT	1	
92015A	92015-2120	NUT	1	
92022	92022-2103	WASHER	1	
92026	92026-2304	SPACER	1	
92026A	92200-2036	SPACER	1	
92081	92081-2104	SPRING	1	
92144	92144-2257	SPRING	1	
92144A	92144-2266	SPRING	2	
92144B	92144-2279	SPRING	1	

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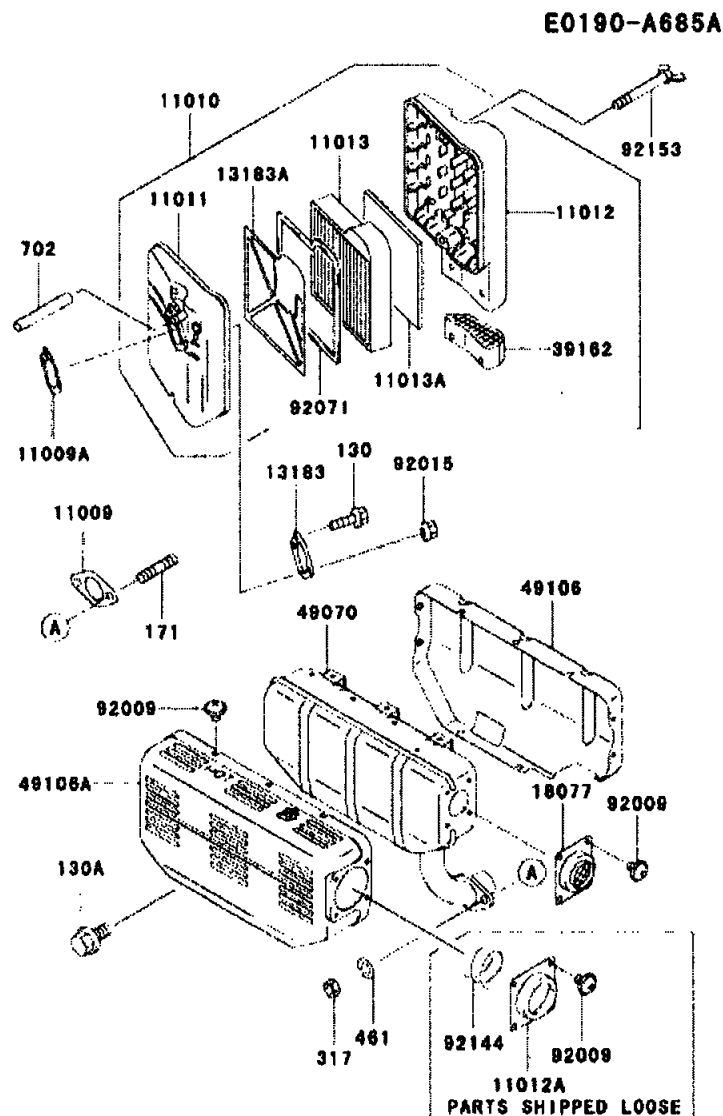
B-10

CARBURETOR

E0180-A202A



Ref No.	Part No.	Part Name	Qty	A
172	172G0677	BOLT-STUD	2	
11009	11009-2919	GASKET	1	
11009A	11009-2927	GASKET,INSULATOR	1	
11009B	11009-2928	GASKET,CARBURETOR	1	
15003	15003-2646	CARBURETOR-ASSY	1	
16073	16073-2150	INSULATOR	1	
16183	16183-2005	FLOAT-ASSY	1	
16184	16184-2002	CHAMBER-ASSY-FLOAT	1	
16185	16185-2003	VALVE-ASSY-THROTTLE	1	
16186	16186-2002	VALVE-ASSY-CHOKE	1	
23013	23013-2053	SCREW-ASSY	1	
23013A	23013-2054	SCREW-ASSY	1	
39076	39076-2055	LIMITER	1	
49121	49121-2210	NOZZLE-MAIN	1	
92063	92063-2284	JET-MAIN,#80	1	
92064	92064-2086	JET-PILOT,#40	1	
92150	92150-2209	BOLT	1	

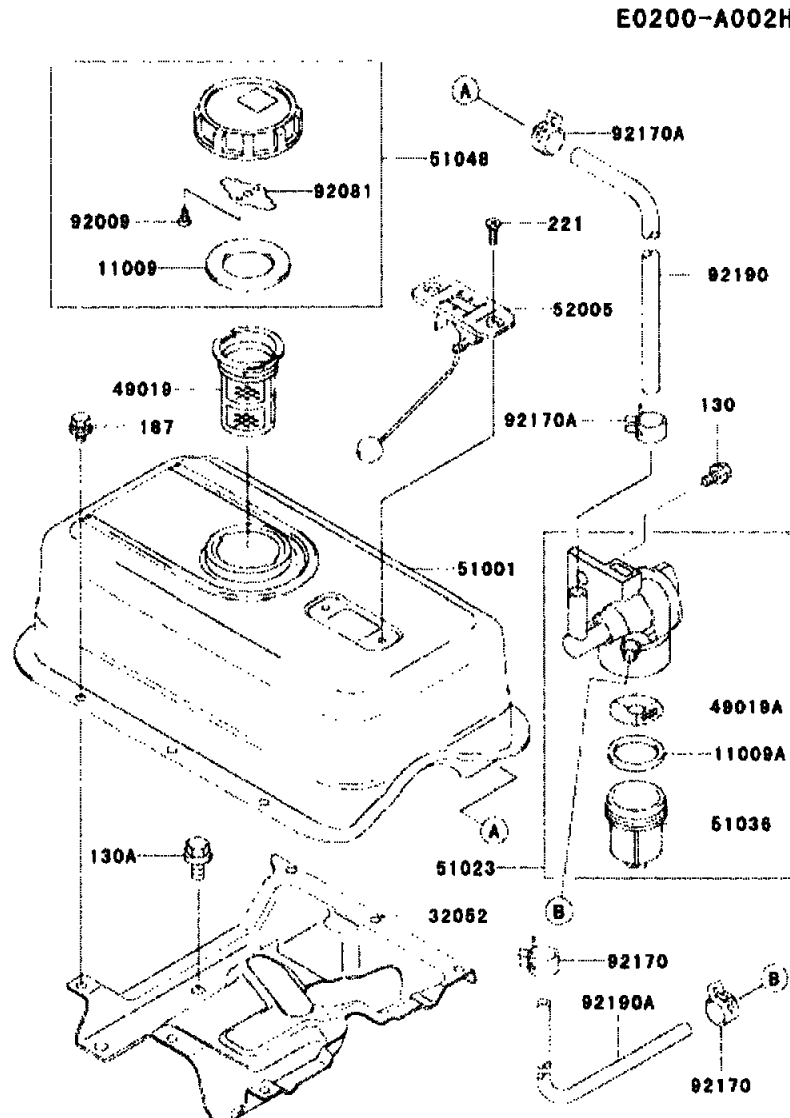


Ref No.	Part No.	Part Name	Qty	A
130	130B0618	BOLT-FLANGED	1	
130A	130G0816	BOLT-FLANGED	1	
171	171G0820	BOLT-STUD	2	
317	317R0800	NUT-HEX-SMALL	2	
461	461F0800	WASHER-SPRING	2	
702	702A081000	TUBE-RUBBER	1	
11009	11009-2487	GASKET,MUFFLER	1	
11009A	11009-2925	GASKET,AIR FILTER	1	
11010	11010-2404	FILTER-ASSY-AIR	1	
11011	11011-2221	CASE-AIR FILTER	1	
11012	11012-2276	CAP,AIR FILTER	1	
11012A	11012-2297	CAP,SPARK ARRESTER	1	
11013	11013-2128	ELEMENT-AIR FILTER	1	
11013A	11013-2129	ELEMENT-AIR FILTER	1	
13183	13183-2322	PLATE	1	
13183A	13183-2388	PLATE,AIR FILTER	1	
18077	18077-2094	ARRESTER-SPARK	1	
39162	39162-2052	SILENCER-INTAKE	1	
49070	49070-2546	MUFFLER-COMP	1	
49106	49106-2485	COVER-MUFFLER	1	
49106A	49106-2547	COVER-MUFFLER	1	
92009	92009-2322	SCREW	15	
92015	92015-1193	NUT	2	
92071	92071-2136	GROMMET	1	
92144	92144-2262	SPRING	1	
92153	92153-2084	BOLT,6X50	2	

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FUEL-TANK/FUEL-VALVE



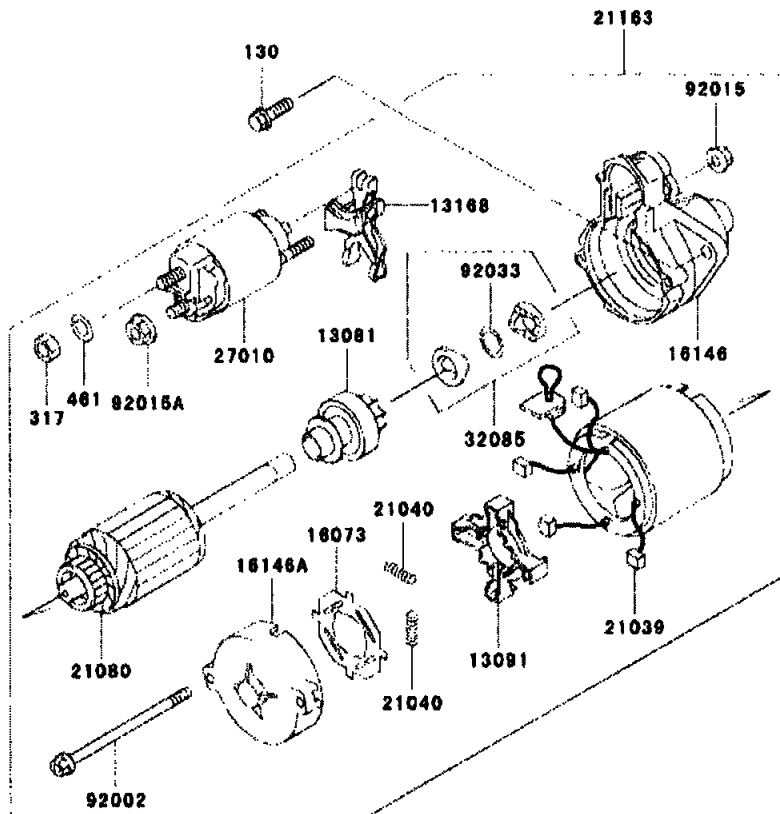
Ref No.	Part No.	Part Name	Qty	A
	130	130G0612		1
	130A	130G0816		4
	187	187L0612		6
	221	221F0512		2
	11009	11009-2115		1
	11009A	11009-2876		1
	32052	32052-2201-9H		1
	49019	49019-2051		1
	49019A	49019-2095		1
	51001	51001-2241-9H		1
	51023	51023-2148		1
	51036	51036-2071		1
	51048	51048-2055		1
	52005	52005-2100		1
	92009	92009-2021		2
	92081	92081-2036		1
	92170	92170-2042		2
	92170A	92170-2082		2
	92190	92190-2073		1
	92190A	92190-2118		1

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STARTER

E0210-A123A



Ref No.	Part No.	Part Name	Qty	A
	130	130G0825		2
	317	317B0800		1
	461	461F0800		1
	13081	13081-2108		1
	13091	13091-2068		1
	13168	13168-2148		1
	16073	16073-2098		1
	16146	16146-2163		1
	16146A	16146-2164		1
	21039	21039-2059		4
	21040	21040-2052		4
	21080	21080-2054		1
	21163	21163-2089		1
	27010	27010-2122		1
	32085	32085-2097		1
	92002	92002-2277		2
	92015	92015-2146		2
	92015A	92015-2147		1
	92033	92033-2081		1

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D-03

LABEL

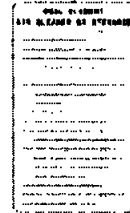
F0290-B096A

Ref No.	Part No.	Part Name	Qty	A
56031	56031-2387	LABEL-MANUAL	1	
56031A	56031-2458	LABEL-MANUAL	1	
56031B	56031-2461	LABEL-MANUAL	1	
56070	56070-2021	LABEL-WARNING	1	
56080	56080-2076	LABEL-BRAND	1	

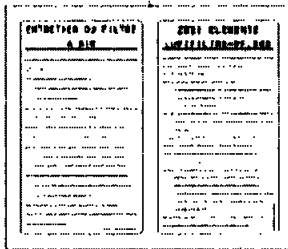
56031A



56031



56031B



56070



56080



1-10 GENERAL INFORMATION

Exploded View

FE250

