

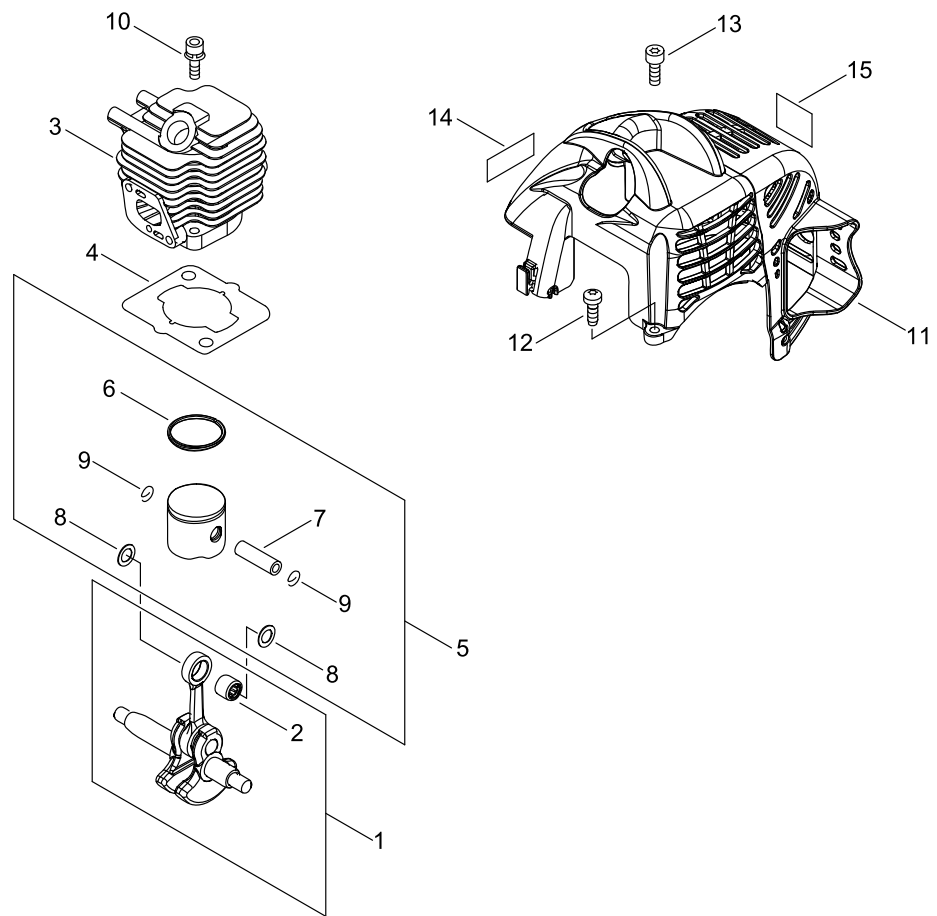
PPF-236ES

Published:11/16/2017

TABLE OF CONTENTS

CYLINDER, PISTON, CRANKSHAFT.....	1
CRANKCASE	3
MAGNETO.....	5
CLUTCH.....	7
AIR CLEANER, CARBURETOR.....	9
CARBURETOR.....	11
FUEL TANK.....	13
MUFFLER	15
RECOIL STARTER, PULLY	17
GEAR CASE.....	19
MAIN PIPE	21
THROTTLE	23
ACCESSORIES	25
OILER.....	27

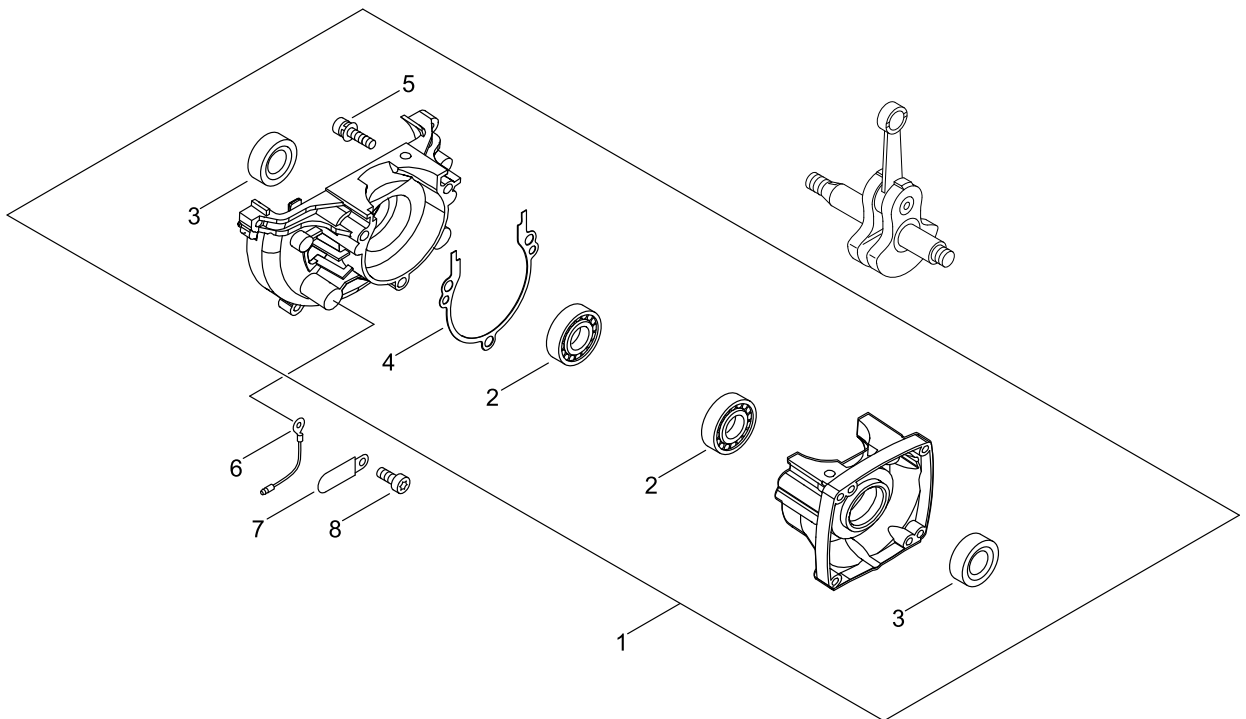
CYLINDER, PISTON, CRANKSHAFT



CYLINDER, PISTON, CRANKSHAFT

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A011-001410	CRANKSHAFT,ASY	1		
2	+	V553-000060	BEARING,NEEDLE 8	1	HK0810FMV4	
3		A130-002100	CYLINDER	1		
4		101010-44332	GASKET, CYL. BASE	1		
5		P021-007712	PISTON KIT	1		
6	+	A101-000090	RING,PISTON	1		
7	+	100013-11520	PIN, PISTON	1		
8	+	100014-11520	SPACER, PISTON PIN	2		
9	+	100015-04630	CIRCLIP, PISTON PIN	2		
10		900162-05022	BOLT, H.S. 5*22	2	5*22 W,SW	
11		A160-001090	COVER,CYLINDER	1		
12		V805-000000	BOLT, TORX 5	1	TT-5*16 DG 10.9	
13		V805-000150	BOLT, TORX 5	1	TB-5*16 10.9	
14		X547-002670	LABEL,ECHO	1	ECHO+ PPF-236ES	
15		X505-008220	LABEL,CAUTION	1	HOT CAUTION	

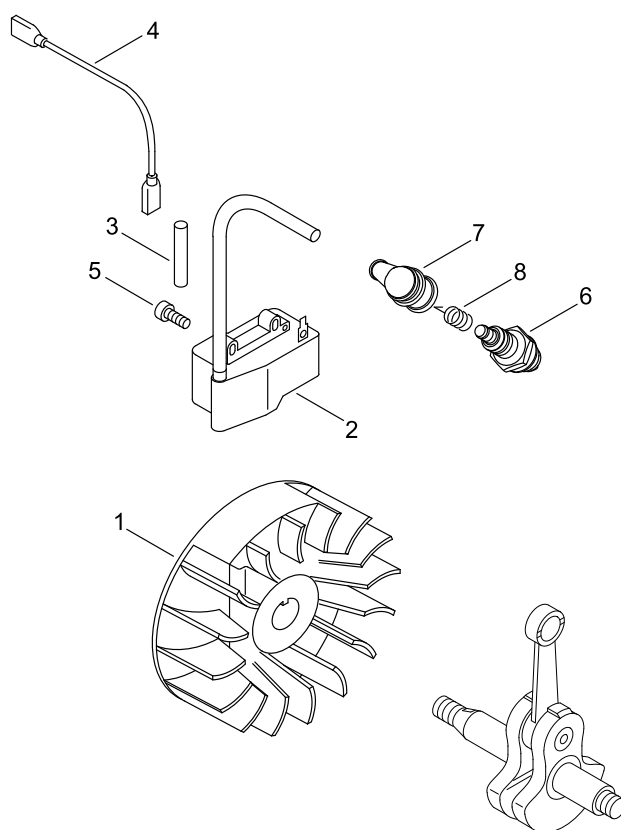
CRANKCASE



CRANKCASE

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		100204-52133	CRANKCASE KIT	1		
2	+	94035-36201	BEARING BALL	2	6201X3JR2C3	
3	+	100212-42031	OILSEAL	2	ISCD 12*22*4.5	
4	+	100242-42030	GASKET, CRANKCASE	1		
5	+	900162-05028	BOLT, H.S. 5*28	3	5*28 W,SW	
6		162014-27230	LEAD, GROUND	1		
7		159116-21231	CLAMP	1		
8		V805-000130	BOLT, TORX 5	1	TB-5*10 10.9	

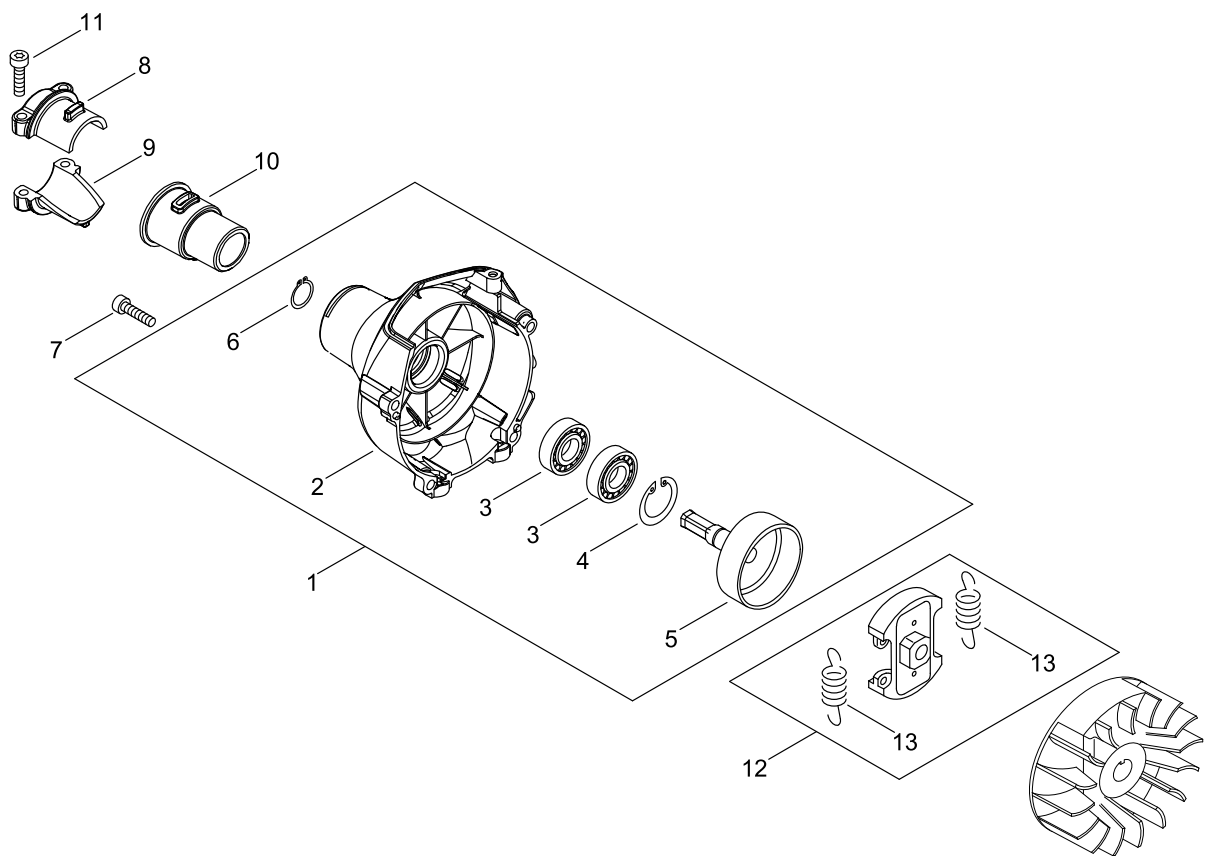
MAGNETO



MAGNETO

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A409-000160	ROTOR,MAGNETO	1		
2		A411-000130	COIL,IGNITION	1		
3		V475-007200	TUBE	1	SSG-3Φ8*L65	
4		V485-001120	LEAD	1	L210 #187 CB104	
5		V804-000070	BOLT, TORX 4	2	TB-4*20 12.9	
6		A425-000000	SPARKPLUG	1	BPMR8Y	
7		A427-000013	CAP,SPARK PLUG	1		
8		A426-000010	TERMINAL,SPARKPLUG	1		

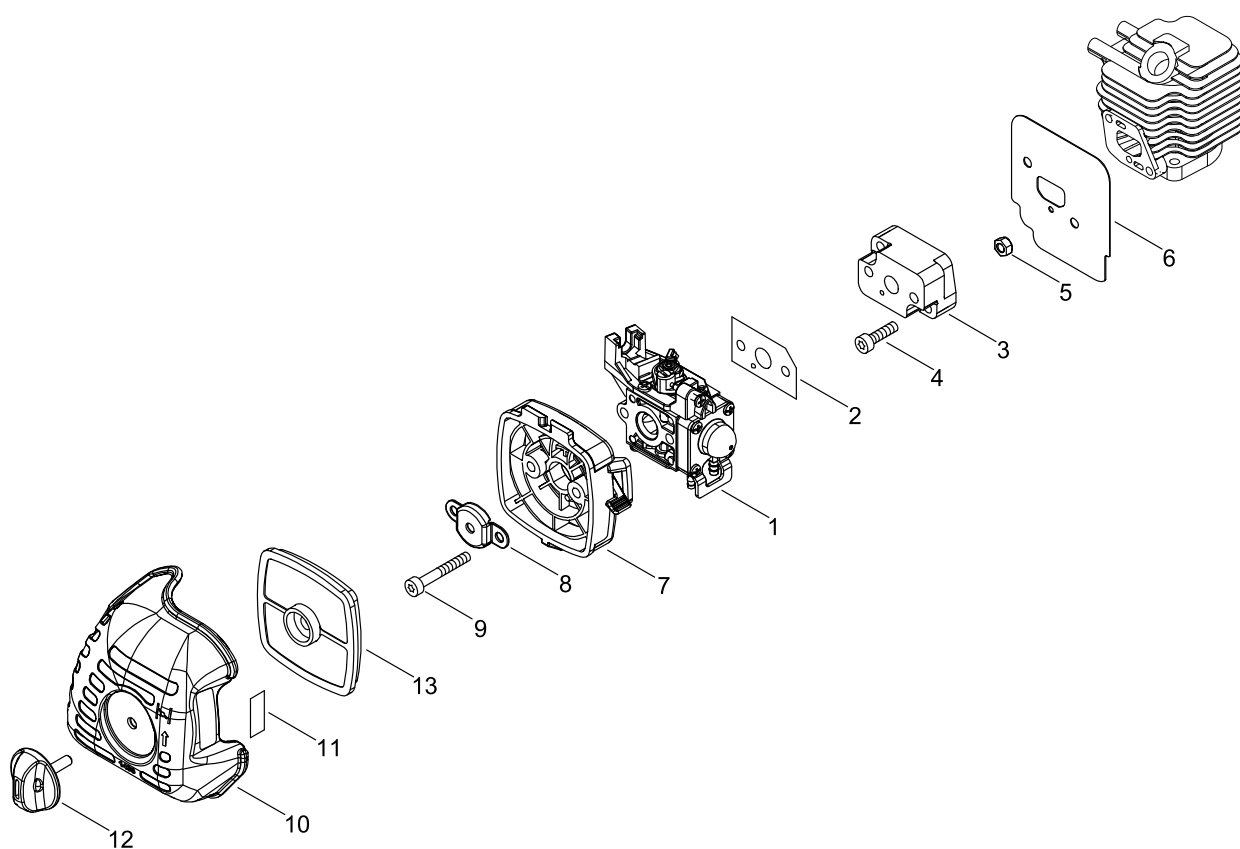
CLUTCH



CLUTCH

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		P021-049960	COVER,FAN ASY	1		
2	+	A172-000860	COVER,FAN	1		
3	+	94051-06001	BEARING, BALL	2	PEER RLD GREASE	
4	+	900702-00028	CIRCLIP 28	1	CR-28	
5	+	175005-48931	DRUM, CLUTCH	1		
6	+	900701-00012	CIRCLIP 12	1	CS-12	
7		V804-000060	BOLT, TORX 4	4	TB-4*16 10.9	
8		610922-27432	HOLDER	1		
9		610923-55230	HOLDER	1		
10		610910-55230	CUSHION	1		
11		V805-000160	BOLT, TORX 5	2	TB-5*20 10.9	
12		A056-000780	CLUTCH ASY	1	22 C0.5 D50 NONR	
13	+	V451-000680	SPRING,TENSION	2		

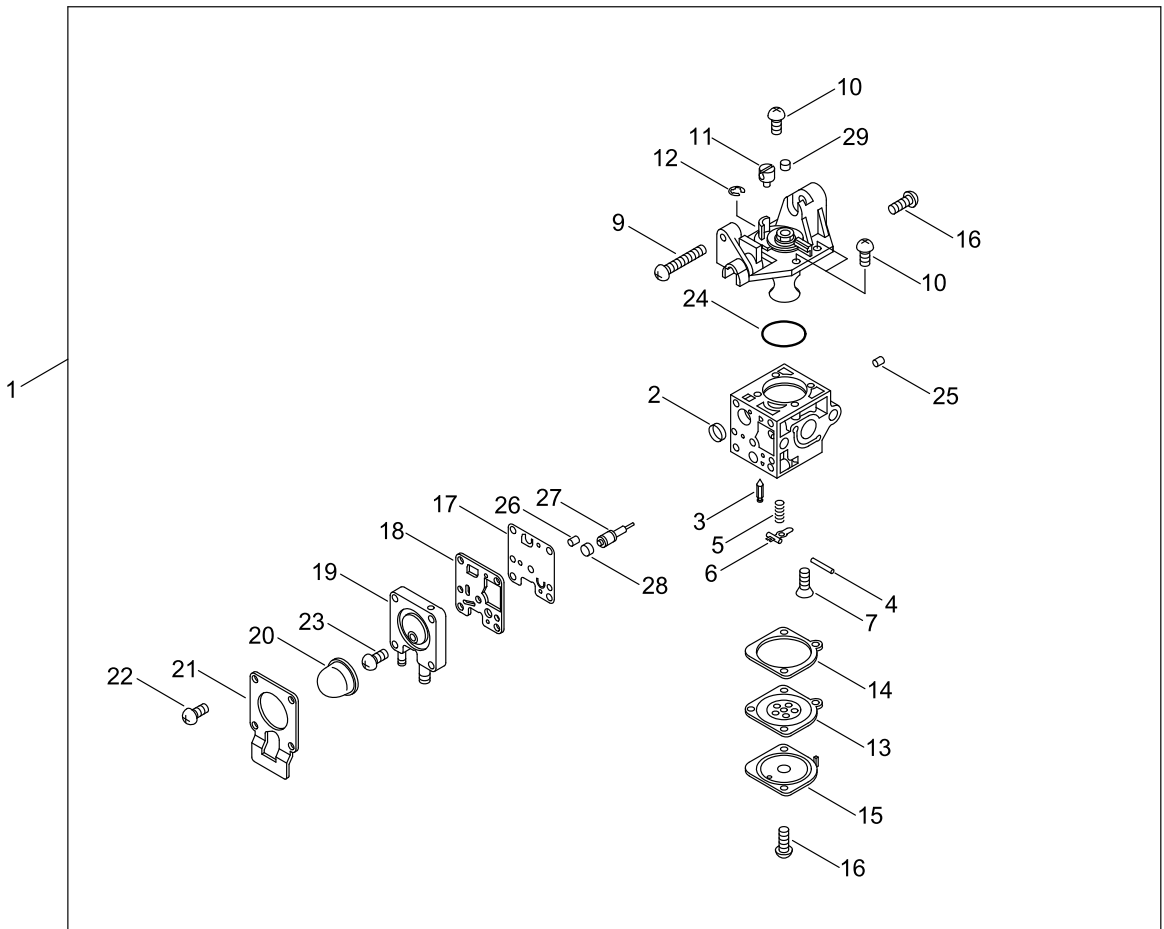
AIR CLEANER, CARBURETOR



AIR CLEANER, CARBURETOR

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A021-003881	CARBURETOR, DIAPHRAGM	1	ZAMA RB-K113	
2		V103-001390	GASKET,INTAKE	1		
3		130017-44331	INSULATOR	1		
4		V805-000160	BOLT, TORX 5	2	TB-5*20 10.9	
5		900500-00005	NUT 5	2	5	
6		V103-001360	GASKET,INTAKE	1		
7		P021-050030	CASE,CLEANER	1		
8		129011-52730	PLATE, PREVENT	1		
9		V805-000100	BOLT, TORX 5	2	TB-5*65 10.9	
10		A232-000480	LID,CLEANER	1		
11		890332-52730	LABEL, CHOKE	1		
12		V299-000250	KNOB,FASTENER	1		
13		A226-001410	ELEMENT,AIR FILTER	1		

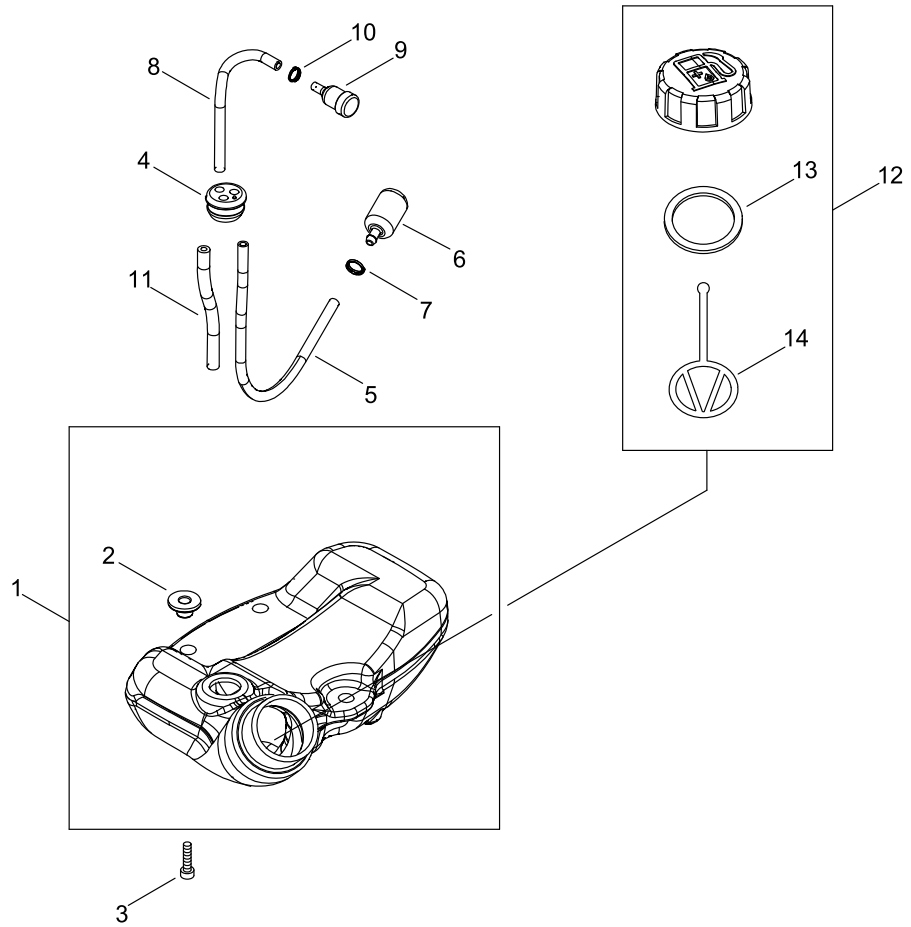
CARBURETOR



CARBURETOR

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A021-003881	CARBURETOR, DIAPHRAGM	1	ZAMA RB-K113	
2	+	P005-000010	STRAINER	1		
3	+	125337-08260	VALVE, INLET NEEDLE	1		
4	+	125338-13930	PIN, METERING ARM	1		
5	+	P005-002430	SPRING, MET. LEVER	1		
6	+	125323-08260	ARM, VALVE	1		
7	+	125339-42030	SCREW	1		
9	+	P005-000100	SCREW, THROTTLEADJUST	1		
10	+	125344-13931	SCREW	3		
11	+	P005-001240	POST	1		
12	+	P005-000190	E-RING	1		
13	+	P005-002230	DIAPHRAGM ,METERING	1		
14	+	P005-000200	GASKET, METERING	1		
15	+	125342-52130	COVER, DIAPHRAGM	1		
16	+	125344-52130	SCREW	3		
17	+	P005-000510	DIAPHRAGM, PUMP	1		
18	+	P005-000520	GASKET, PUMP	1		
19	+	P005-001890	BASE, ASY PRIMER	1		
20	+	P005-003110	PUMP, PRIMER	1		
21	+	P005-000250	RETAINER	1		
22	+	P005-001900	SCREW	4		
23	+	P005-000270	SCREW	1		
24	+	P005-000280	O-RING	1		
25	+	P005-001000	ROLLER, GUIDE	1		
26	+	P005-001250	RETAINER,PLUG BALL	1		
27	+	P005-001260	SCREW,MAINN MIXTURE	1		
28	+	P005-001270	PLUG, H AJUST SCREW	1		
29	+	A259-000010	CAP,LIMITER	1		

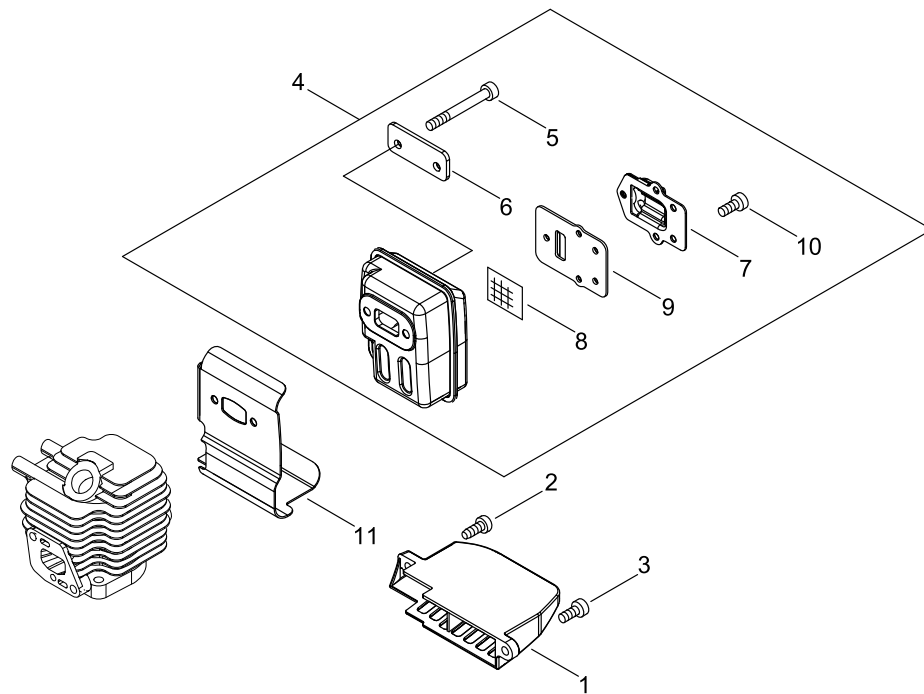
FUEL TANK



FUEL TANK

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A350-002270	TANK, FUEL	1		
2	+	V353-000231	COLLAR,5	3	16*5.5 L6 T2	
3		V805-000160	BOLT, TORX 5	3	TB-5*20 10.9	
4		132115-46730	GROMMET, FUEL	1		
5		V470-000840	PIPE	1		
6		A369-000480	STRAINER, FUEL	1	125-959	
7		V490-001240	CLIP	1	6MM	
8		V471-001210	PIPE	1	3*5*90 NBR	
9		A356-000031	VALVE,CHECK	1		
10		V490-001240	CLIP	1	6MM	
11		132012-56030	PIPE	1	3*6*80 YL	
12		P021-012210	CAP,FUEL ASY	1		
13	+	131016-55830	GASKET, FUEL CAP	1		
14	+	A365-000060	CONNECTOR,CAP	1	L=123	

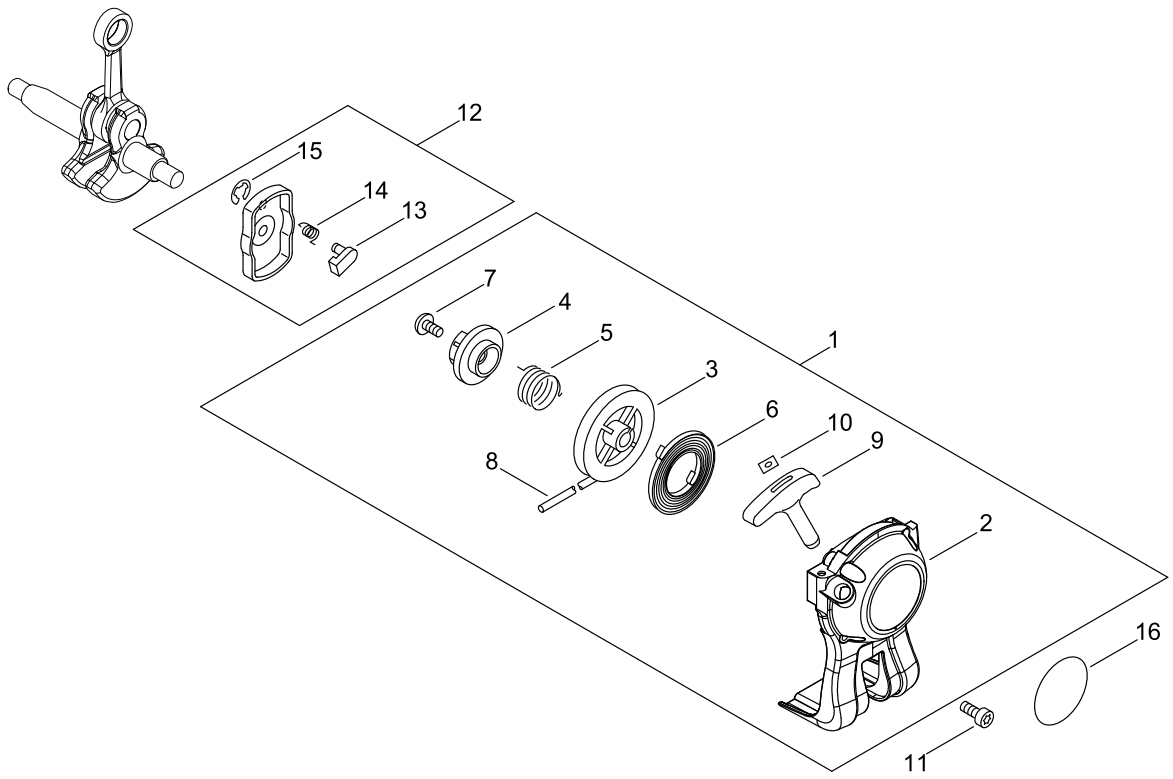
MUFFLER



MUFFLER

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A320-000480	COVER,MUFFLER	1		
2		V805-000000	BOLT, TORX 5	1	TT-5*16 DG 10.9	
3		V805-000150	BOLT, TORX 5	1	TB-5*16 10.9	
4		P021-036111	MUFFLER ASY	1	SRM-235ES	
5	+	V805-000190	BOLT, TORX 5	2	TB-5*55 12.9	
6	+	V150-000371	PLATE,EYE	1		
7	+	A313-000600	GUIDE,EXH	1		
8	+	145862-40630	SCREEN, MUFFLER	1		
9	+	V104-001760	GASKET,EXHAUST	1		
10	+	V804-000030	BOLT, TORX 4	5	TB-4*8 10.9	
11		V104-000850	GASKET,EXHAUST	1	T1.0	

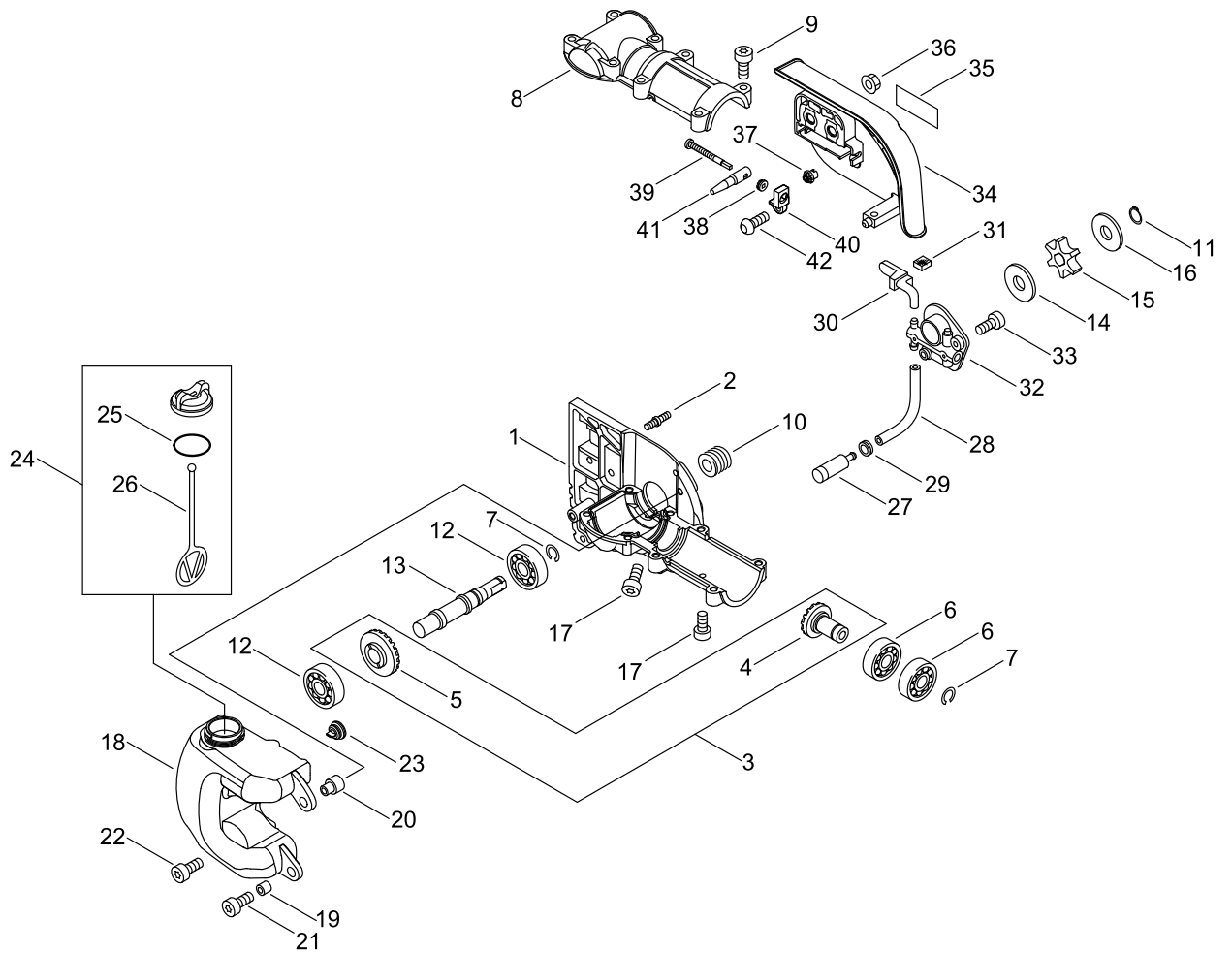
RECOIL STARTER, PULLY



RECOIL STARTER, PULLY

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		A051-001312	STARTER,RECOIL ASY	1		
2	+	P022-036970	CASE,STARTER	1		
3	+	P022-034040	DRUM, STARTER	1		
4	+	P022-034030	PLATE, CAM	1		
5	+	P022-008270	SPRING,DAMPER	1		
6	+	P022-019680	SPRING, SPIRAL	1		
7	+	177236-61830	SCREW	1		
8	+	P022-019990	ROPE, STARTER	1		
9	+	177228-27030	GRIP, STARTER	1		
10	+	P022-037670	STOPPER, ROPE	1		
11		V804-000060	BOLT, TORX 4	4	TB-4*16 10.9	
12		A052-000180	PULLEY,ASM STARTER	1		
13	+	P022-006850	PAWL, STARTER	2		
14	+	P022-006510	SPRING, RETURN	2		
15	+	P022-002100	E-RING	2	4	
16		X502-000330	LABEL,ECHO	1	ECHO	

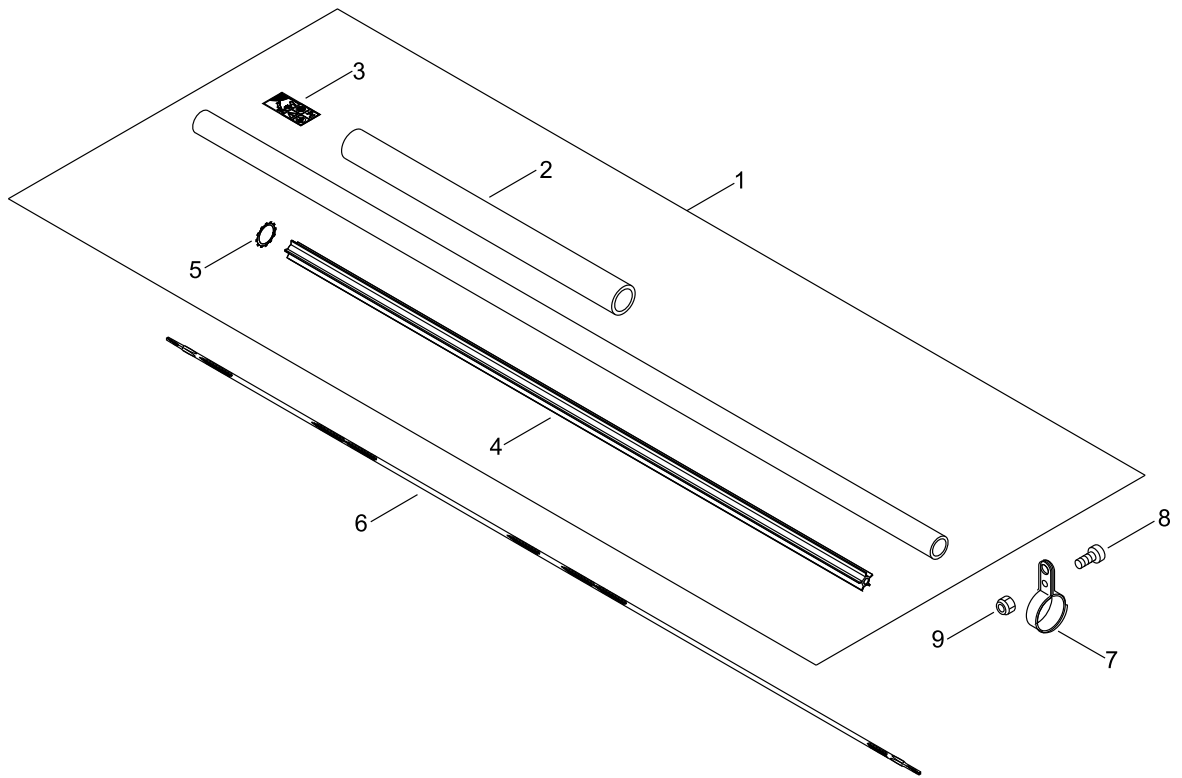
GEAR CASE



GEAR CASE

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		C531-000460	CASE,GEAR	1		
2		V224-000040	BOLT,STUD 6	2	15MM*19MM M6	
3		P021-009731	GEAR,BEVEL SET	1		
4	+	V651-000230	GEAR,BEVEL	1	MG 80.2310.001	
5	+	V651-000201	GEAR,BEVEL	1	MG 0600.2259	
6		94052-06001	BEARING BALL	2	PEER LLU,DDU 2RS	
7		900706-00012	CIRCLIP 12	2	WR-12	
8		C531-000010	CASE,GEAR	1	25.5	
9		V805-000170	BOLT, TORX 5	8	TB-5*25 10.9	
10		437063-38330	GEAR, WORM	1		
11		V583-000090	RING	1	EXTERNAL RING	
12		94052-06001	BEARING BALL	2	PEER LLU,DDU 2RS	
13		C534-000430	SHAFT, GEAR	1		
14		175014-39131	WASHER, CLUTCH	1	10.2*24.5*1.2	
15		C580-000070	SPROCKET,DRIVE	1		
16		V307-000160	WASHER,CIRCULAR 10	1	10.2*29.5*T=1.2	
17		V805-000130	BOLT, TORX 5	2	TB-5*10 10.9	
18		C200-000081	TANK, OIL	1	POWER PRUNER	
19		131045-28230	COLLAR	2		
20		V354-000010	COLLAR,6	1		
21		V805-000160	BOLT, TORX 5	2	TB-5*20 10.9	
22		V805-000170	BOLT, TORX 5	1	TB-5*25 10.9	
23		131314-06320	VALVE, CHECK	1		
24		P021-005591	CAP ASY	1		
25	+	900720-00018	O-RING 18	1	P-18	
26	+	A365-000050	CONNECTOR,CAP	1		
27		436205-02832	STRAINER, OIL	1		
28		130110-12330	PIPE, IMPULSE	1	3*6*70L	
29		132115-01461	GROMMET	1		
30		V470-000180	PIPE	1		
31		437244-39130	PAD, FORM	1		
32		C022-000010	OILER,ASM AUTO	1		
33		V805-000130	BOLT, TORX 5	2	TB-5*10 10.9	
34		C300-000920	GUARD, SPROCKET	1	COVER W/ SCREW	
35		X502-000600	LABEL,ECHO	1	48MM*15MM + ECHO	
36		433019-03933	NUT, FLANGE 6	2	6	
37		V651-000320	GEAR,BEVEL	1	14 TEETH 10MM LG	
38		V651-000310	GEAR,BEVEL	1	14 TEETH 3.0 SQ.	
39		V203-000041	BOLT,5	1		
40		V355-000140	COLLAR,8	1		
41		C309-000030	TENSIONER,CHAIN	1		
42		V252-000040	SCREW,4	1	4*8 PT SCREW	

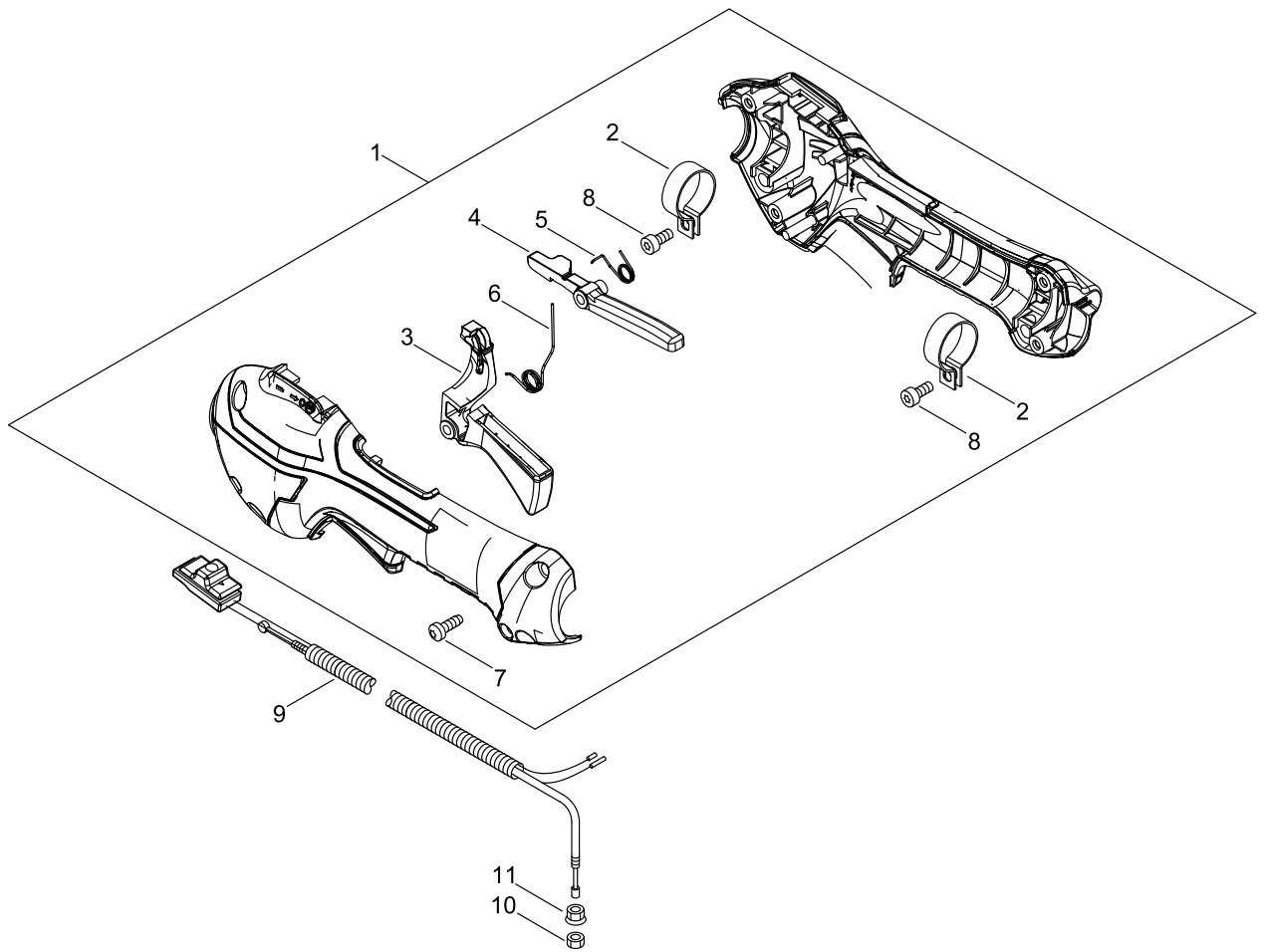
MAIN PIPE



MAIN PIPE

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		C050-002400	PIPE, MAIN	1	PPF-235ES ASM	
2	+	C403-000200	GRIP, HANDLE	1	24.7 * 33 * 483	
3	+	X505-001822	LABEL, CAUTION	1	ISO WARNINGS	
4	+	610217-22061	LINER, FLEXBLE	1		
5	+	900038-00100	WASHER, EXTERNAL	1		
6		610013-22060	SHAFT, FLEXIBLE	1		
7		300610-22061	BRACKET, HARNESS	1	24.69/24.84 I.D.	
8		V805-000130	BOLT, TORX 5	1	TB-5*10 10.9	
9		900560-00005	NUT, LOCK 5	1	5	

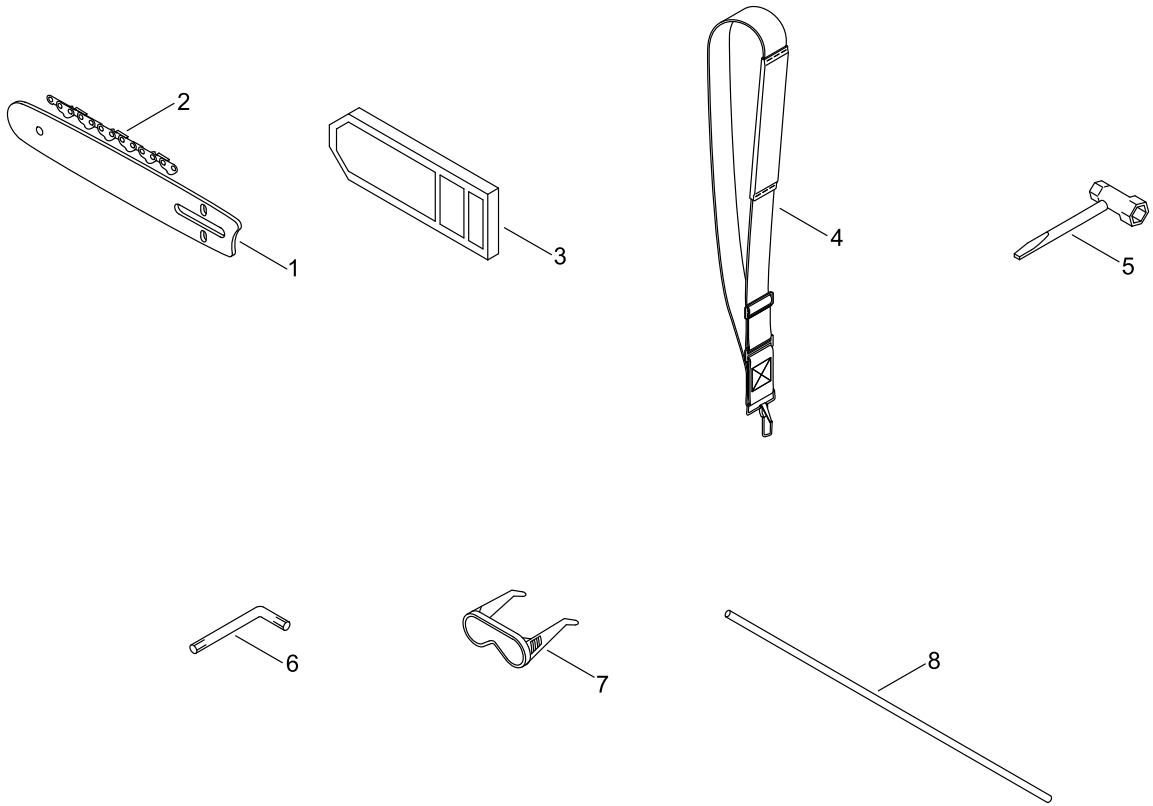
THROTTLE



THROTTLE

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		P021-047691	GRIP ASY	1		
2	+	V495-003020	BAND	2		
3	+	C453-000482	LEVER, THROTTLE	1	SRM-225 REDESIGN	
4	+	C460-000441	LOCKOUT, THROTTLE	1	SRM-225 REDESIGN	
5	+	V452-001510	SPRING,TORSION	1	LOCKOUT LEVER	
6	+	V452-001520	SPRING,TORSION	1	THROTTLE LEVER	
7	+	V805-000000	BOLT, TORX 5	4	TT-5*16 DG 10.9	
8	+	V805-000150	BOLT, TORX 5	2	TB-5*16 10.9	
9		P021-047700	CABLE ASY, CONTROL	1		
10		900502-00006	NUT 6 (3N)	1	3N6	
11		900518-00006	NUT, FLANGE	1	6	

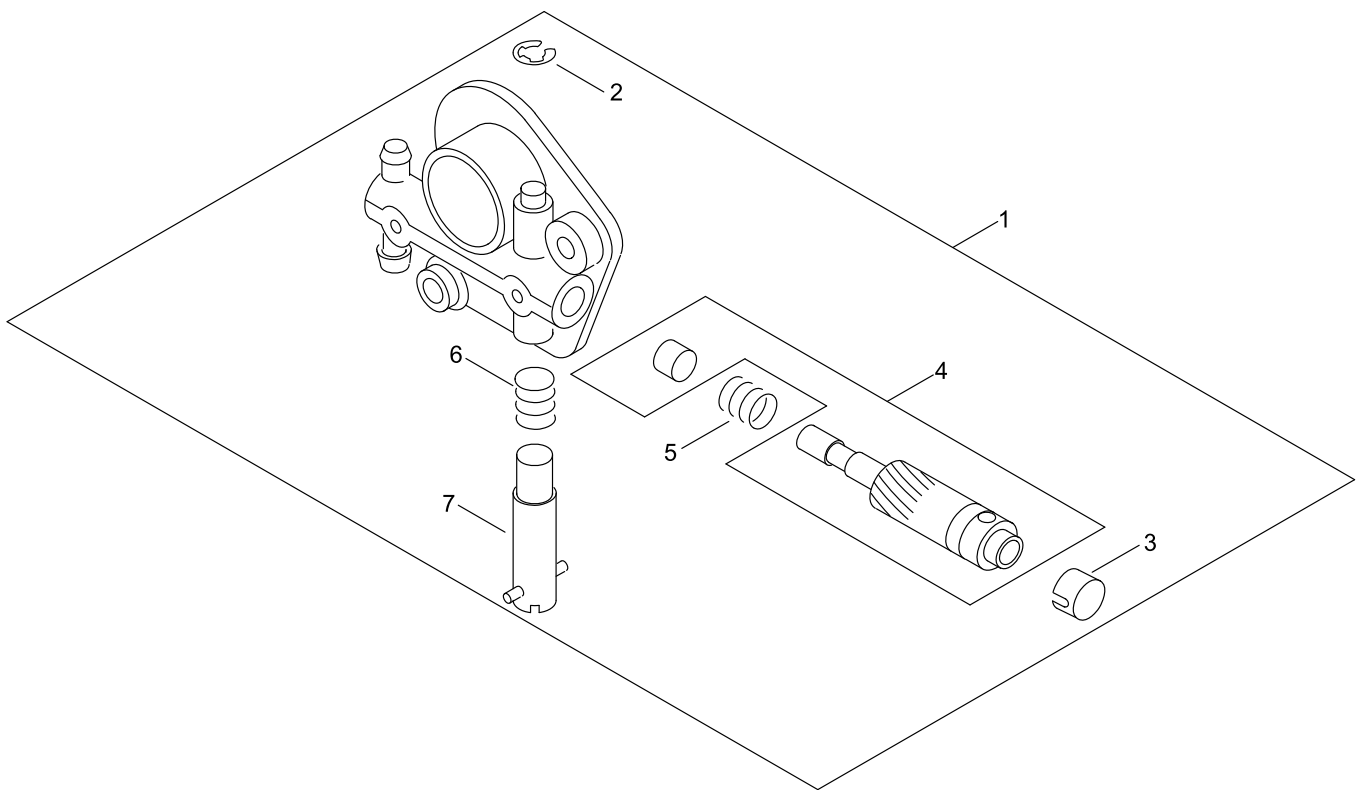
ACCESSORIES



ACCESSORIES

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		X121-000060	BAR,GUIDE 25	1	10A0CD3739	
2		X221-000070	CHAIN,SAW	1		
3		X490-000060	SCABBARD,CHAIN	1		
4		301000-22060	HARNES ASY, SHOULDER	1		
5		895410-39132	WRENCH, W/S-DRIVER	1		
6		X605-000060	TOOL,L WRENCH	1	80*30 T27 2- ENDS	
7		X690-000080	GOGGLE	1	SI CHINA, Z87.1	
8		X474-000000	CORD	1		

OILER



OILER

KEY NO	LV(+)	Part No	Description	Qty	Standard	Comment
1		C022-000010	OILER,ASM AUTO	1		
2	+	125327-15130	CLIP	1		
3	+	P022-010640	CAP, OIL PUMP	1		
4	+	P022-010650	PLUNGER	1		
5	+	P022-010660	SPRING	1		
6	+	P022-010670	SPRING	1		
7	+	P022-010680	SCREW ASS'Y, ADJUST	1		

NUMERICAL PARTS INDEX

Part No	Part description	Page	Part No	Part description	Page	Part No	Part description	Page
100013-11520	PIN, PISTON	2	900038-00100	WASHER,EXTERNAL	22	C309-000030	TENSIONER,CHAIN	20
100014-11520	SPACER, PISTON PIN	2	900162-05022	BOLT, H.S. 5*22	2	C403-000200	GRIP, HANDLE	22
100015-04630	CIRCLIP, PISTON PIN	2	900162-05028	BOLT, H.S. 5*28	4	C453-000482	LEVER, THROTTLE	24
100204-52133	CRANKCASE KIT	4	900500-00005	NUT 5	10	C460-000441	LOCKOUT, THROTTLE	24
100212-42031	OILSEAL	4	900502-00006	NUT 6 (3N)	24	C531-000010	CASE,GEAR	20
100242-42030	GASKET, CRANKCASE	4	900518-00006	NUT, FLANGE	24	C531-000460	CASE,GEAR	20
101010-44332	GASKET, CYL. BASE	2	900560-00005	NUT, LOCK 5	22	C534-000430	SHAFT, GEAR	20
125323-08260	ARM, VALVE	12	900701-00012	CIRCLIP 12	8	C580-000070	SPROCKET,DRIVE	20
125327-15130	CLIP	28	900702-00028	CIRCLIP 28	8	P005-000010	STRAINER	12
125337-08260	VALVE, INLET NEEDLE	12	900706-00012	CIRCLIP 12	20	P005-000100	SCREW, THROTTLEADJUST	12
125338-13930	PIN, METERING ARM	12	900720-00018	O-RING 18	20	P005-000190	E-RING	12
125339-42030	SCREW	12	94035-36201	BEARING BALL	4	P005-000200	GASKET, METERING	12
125342-52130	COVER, DIAPHRAGM	12	94051-06001	BEARING, BALL	8	P005-000250	RETAINER	12
125344-13931	SCREW	12	94052-06001	BEARING BALL	20	P005-000270	SCREW	12
125344-52130	SCREW	12	A011-001410	CRANKSHAFT,ASY	2	P005-000280	O-RING	12
129011-52730	PLATE, PREVENT	10	A021-003881	CARBURETOR, DIAPHRAGM	10	P005-000510	DIAPHRAGM, PUMP	12
130017-44331	INSULATOR	10	A021-003881	CARBURETOR, DIAPHRAGM	12	P005-000520	GASKET, PUMP	12
130110-12330	PIPE, IMPULSE	20	A051-001312	STARTER,RECOIL ASY	18	P005-001000	ROLLER, GUIDE	12
131016-55830	GASKET, FUEL CAP	14	A052-000180	PULLEY,ASM STARTER	18	P005-001240	POST	12
131045-28230	COLLAR	20	A056-000780	CLUTCH ASY	8	P005-001250	RETAINER,PLUG BALL	12
131314-06320	VALVE, CHECK	20	A101-000090	RING,PISTON	2	P005-001260	SCREW,MAINN MIXTURE	12
132012-56030	PIPE	14	A130-002100	CYLINDER	2	P005-001270	PLUG, H AJUST SCREW	12
132115-01461	GROMMET	20	A160-001090	COVER,CYLINDER	2	P005-001890	BASE, ASY PRIMER	12
132115-46730	GROMMET, FUEL	14	A172-000860	COVER,FAN	8	P005-001900	SCREW	12
145862-40630	SCREEN, MUFFLER	16	A226-001410	ELEMENT,AIR FILTER	10	P005-002230	DIAPHRAGM ,METERING	12
159116-21231	CLAMP	4	A232-000480	LID,CLEANER	10	P005-002430	SPRING, MET. LEVER	12
162014-27230	LEAD, GROUND	4	A259-000010	CAP,LIMITER	12	P005-003110	PUMP, PRIMER	12
175005-48931	DRUM, CLUTCH	8	A313-000600	GUIDE,EXH	16	P021-005591	CAP ASY	20
175014-39131	WASHER, CLUTCH	20	A320-000480	COVER,MUFFLER	16	P021-007712	PISTON KIT	2
177228-27030	GRIP, STARTER	18	A350-002270	TANK, FUEL	14	P021-009731	GEAR,BEVEL SET	20
177236-61830	SCREW	18	A356-000031	VALVE,CHECK	14	P021-012210	CAP,FUEL ASY	14
300610-22061	BRACKET, HARNESS	22	A365-000050	CONNECTOR,CAP	20	P021-036111	MUFFLER ASY	16
301000-22060	HARNESS ASY, SHOULDER	26	A365-000060	CONNECTOR,CAP	14	P021-047691	GRIP ASY	24
433019-03933	NUT, FLANGE 6	20	A369-000480	STRAINER, FUEL	14	P021-047700	CABLE ASY, CONTROL	24
436205-02832	STRAINER, OIL	20	A409-000160	ROTOR,MAGNETO	6	P021-049960	COVER,FAN ASY	8
437063-38330	GEAR, WORM	20	A411-000130	COIL,IGNITION	6	P021-050030	CASE,CLEANER	10
437244-39130	PAD, FORM	20	A425-000000	SPARKPLUG	6	P022-002100	E-RING	18
610013-22060	SHAFT, FLEXIBLE	22	A426-000010	TERMINAL,SPARKPLUG	6	P022-006510	SPRING, RETURN	18
610217-22061	LINER, FLEXBLE	22	A427-000013	CAP,SPARK PLUG	6	P022-006850	PAWL, STARTER	18
610910-55230	CUSHION	8	C022-000010	OILER,ASM AUTO	20	P022-008270	SPRING,DAMPER	18
610922-27432	HOLDER	8	C022-000010	OILER,ASM AUTO	28	P022-010640	CAP, OIL PUMP	28
610923-55230	HOLDER	8	C050-002400	PIPE, MAIN	22	P022-010650	PLUNGER	28
890332-52730	LABEL, CHOKE	10	C200-000081	TANK, OIL	20	P022-010660	SPRING	28
895410-39132	WRENCH, W/S-DRIVER	26	C300-000920	GUARD, SPROCKET	20	P022-010670	SPRING	28

NUMERICAL PARTS INDEX

Part No	Part description	Page	Part No	Part description	Page
P022-010680	SCREW ASS'Y, ADJUST	28	V805-000130	BOLT, TORX 5	20
P022-019680	SPRING, SPIRAL	18	V805-000130	BOLT, TORX 5	22
P022-019990	ROPE, STARTER	18	V805-000150	BOLT, TORX 5	2
P022-034030	PLATE, CAM	18	V805-000150	BOLT, TORX 5	16
P022-034040	DRUM, STARTER	18	V805-000150	BOLT, TORX 5	24
P022-036970	CASE,STARTER	18	V805-000160	BOLT, TORX 5	8
P022-037670	STOPPER, ROPE	18	V805-000160	BOLT, TORX 5	10
V103-001360	GASKET,INTAKE	10	V805-000160	BOLT, TORX 5	14
V103-001390	GASKET,INTAKE	10	V805-000160	BOLT, TORX 5	20
V104-000850	GASKET,EXHAUST	16	V805-000170	BOLT, TORX 5	20
V104-001760	GASKET,EXHAUST	16	V805-000190	BOLT, TORX 5	16
V150-000371	PLATE,EYE	16	X121-000060	BAR,GUIDE 25	26
V203-000041	BOLT,5	20	X221-000070	CHAIN,SAW	26
V224-000040	BOLT,STUD 6	20	X474-000000	CORD	26
V252-000040	SCREW,4	20	X490-000060	SCABBARD,CHAIN	26
V299-000250	KNOB,FASTENER	10	X502-000330	LABEL,ECHO	18
V307-000160	WASHER,CIRCULAR 10	20	X502-000600	LABEL,ECHO	20
V353-000231	COLLAR,5	14	X505-001822	LABEL,CAUTION	22
V354-000010	COLLAR,6	20	X505-008220	LABEL,CAUTION	2
V355-000140	COLLAR,8	20	X547-002670	LABEL,ECHO	2
V451-000680	SPRING,TENSION	8	X605-000060	TOOL,L WRENCH	26
V452-001510	SPRING,TORSION	24	X690-000080	GOGGLE	26
V452-001520	SPRING,TORSION	24			
V470-000180	PIPE	20			
V470-000840	PIPE	14			
V471-001210	PIPE	14			
V475-007200	TUBE	6			
V485-001120	LEAD	6			
V490-001240	CLIP	14			
V495-003020	BAND	24			
V553-000060	BEARING,NEEDLE 8	2			
V583-000090	RING	20			
V651-000201	GEAR,BEVEL	20			
V651-000230	GEAR,BEVEL	20			
V651-000310	GEAR,BEVEL	20			
V651-000320	GEAR,BEVEL	20			
V804-000030	BOLT, TORX 4	16			
V804-000060	BOLT, TORX 4	8			
V804-000060	BOLT, TORX 4	18			
V804-000070	BOLT, TORX 4	6			
V805-000000	BOLT, TORX 5	2			
V805-000000	BOLT, TORX 5	16			
V805-000000	BOLT, TORX 5	24			
V805-000100	BOLT, TORX 5	10			
V805-000130	BOLT, TORX 5	4			