



ILLUSTRATED PARTS BOOK

Front Tine Tiller

MODEL#: P-FTT-160MD-[E], P-FTT-160MD



Table of Contents

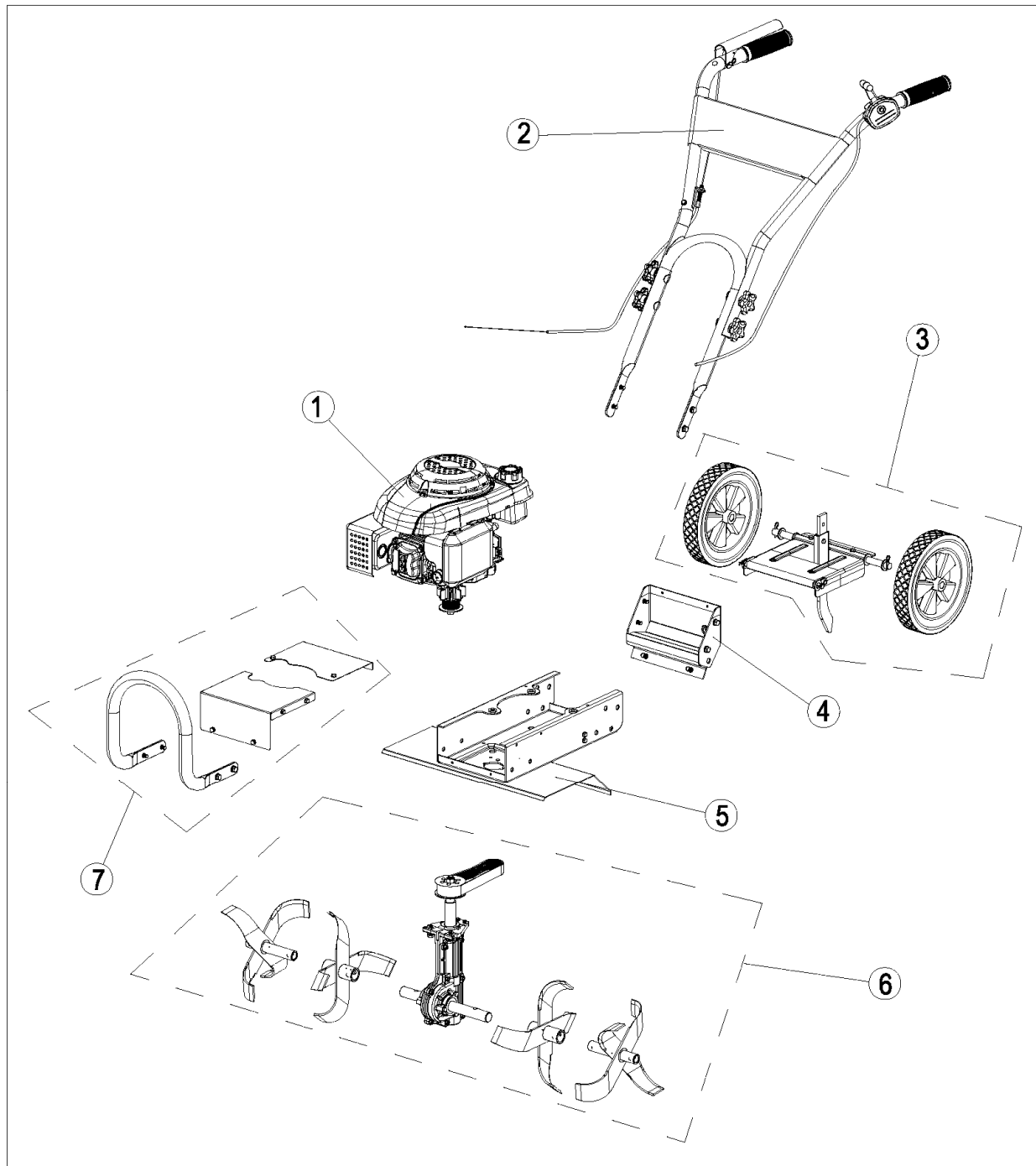
Top Level Assembly.....	4
Engine – Top Level Assembly.....	5
Handle Assembly.....	6-7
Swing Plate Assembly.....	8
Swing Plate Mount Assembly.....	9
Base Assembly.....	10-11
Tine and Transmission Assembly.....	12-13
Carry Handle and Inspection Plates.....	14
Warning and Safe Operation Labels.....	15-16

Kohler CARB Engine (A200622) – Consult Your Local Supplier

159cc Engine (A201229)

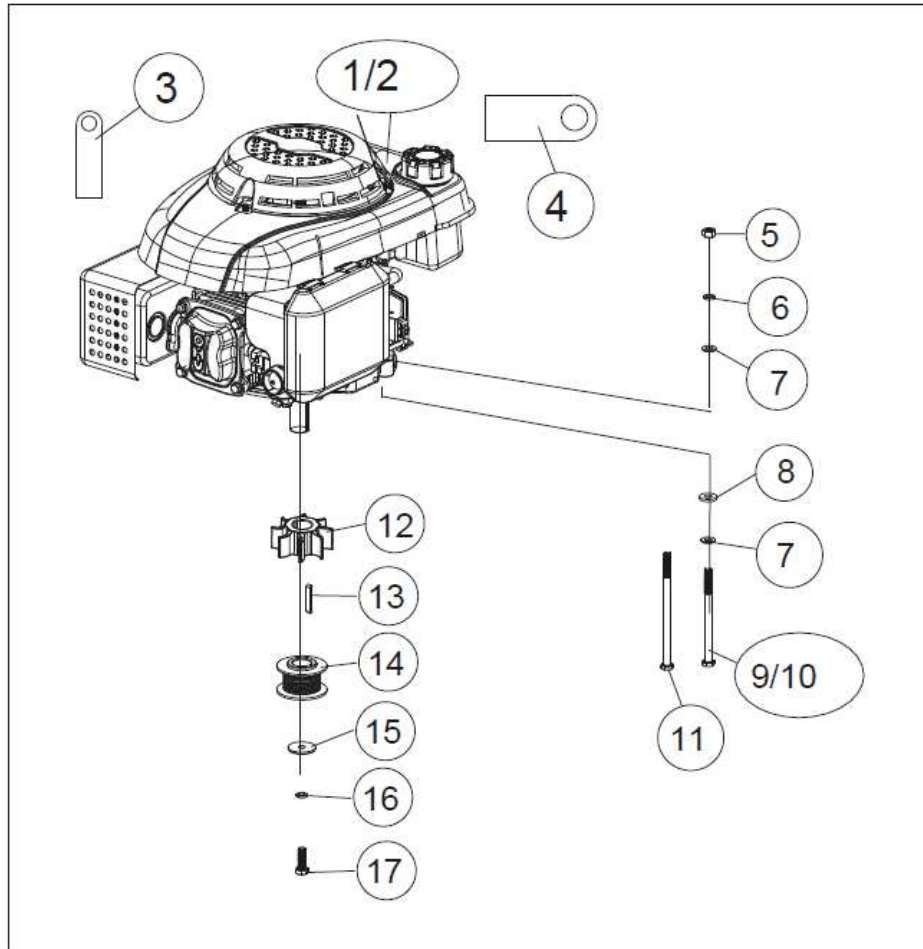
Cylinder Head.....	17
Short Block Assembly.....	18-19
Camshaft.....	20
Recoil Starter.....	21
Carburetor.....	22
Flywheel / Ignition.....	23
Air Cleaner.....	24
Control.....	25
Muffler.....	26
Fuel Tank.....	27
Decals.....	28

Top Level Assembly



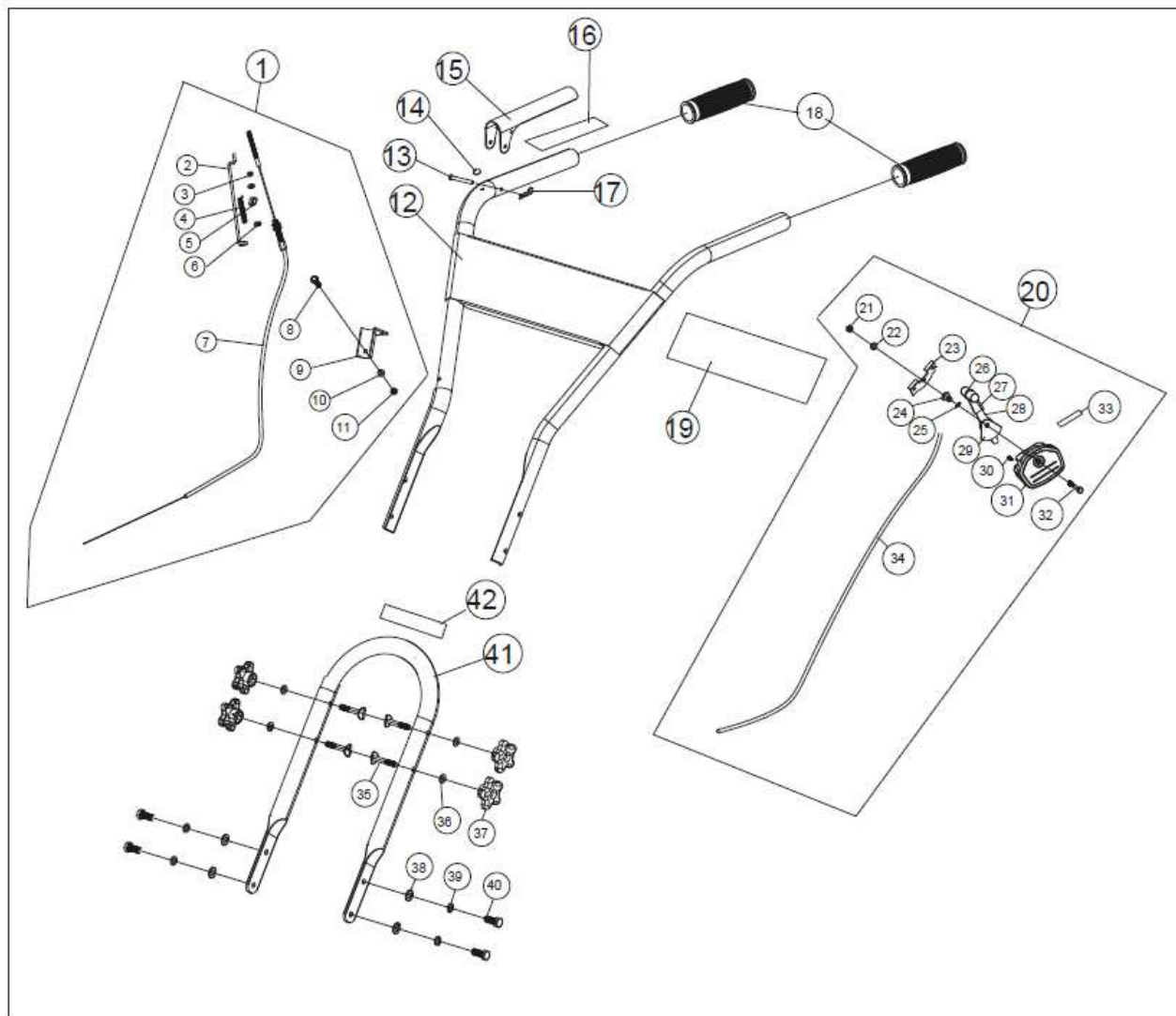
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Engine-Top Level Assembly	See Page 5	1
2	Handle Assembly	See Page 6	1
3	Swing Plate Assembly	See Page 8	1
4	Swing Plate Mount Assembly	See Page 9	1
5	Base Assembly	See Page 10	1
6	Tines & Transmission Assembly	See Page 12	1
7	Carry Handle & Inspection Plates	See Page 14	1

Engine – Top Level Assembly



REF. NO.	DESCRIPTION	PART NO.	RQD
1	Engine, Loncin 159cc Vertical	A200713	1
2	Engine, Kohler (Carb) Vertical	A200622	1
3	Oil Hang Tag - Oil Dipstick	<i>Reference Only</i>	1
4	Oil Hang Tag - Fuel Tank	<i>Reference Only</i>	1
5	Nut, M8	A200524	3
6	Spring Washer, M8	A200514	3
7	Flat Washer, M8	A200506	6
8	Spacer, Engine Mounting	A200664	3
9	Bolt, M8x130	A200655	1
10	Bolt, M10x130 (Carb Engine)	A200812	1
11	Bolt, M8x150	A200656	2
12	Fan, Pulley	A200714	1
13	Key, Engine	A200715	1
14	Engine Pulley	A200716	1
15	Spacer, 10x32x4	A200717	1
16	Spring Washer, M10	A200531	1
17	Bolt, 3/8-24	A200718	1

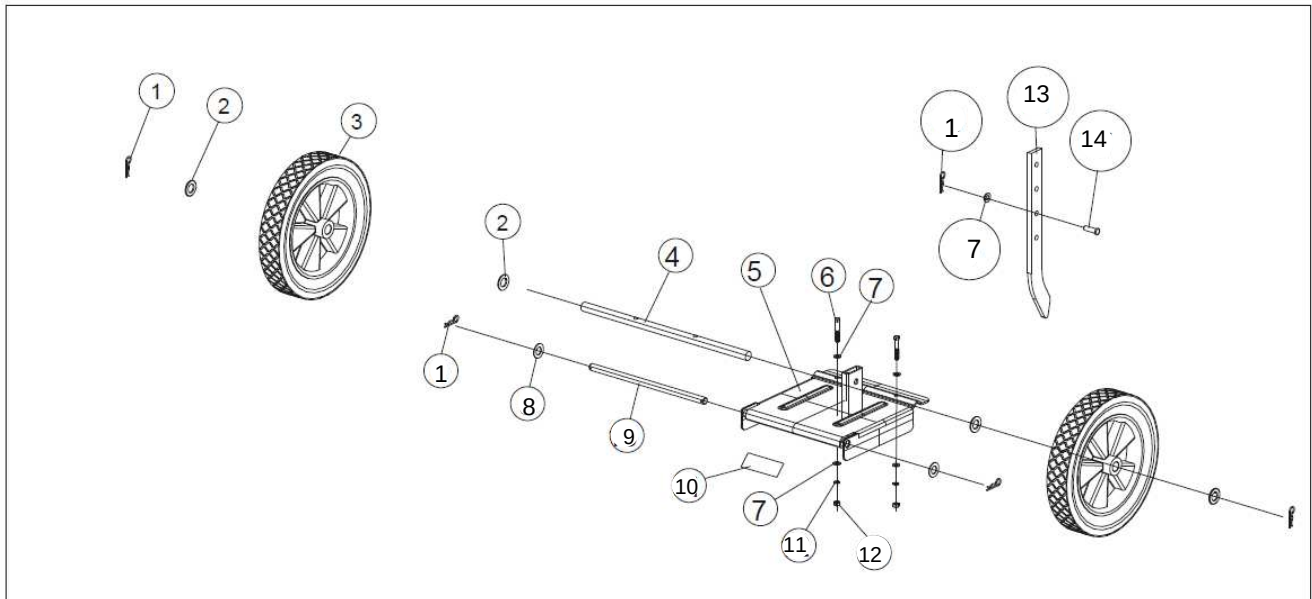
Handle Assembly



Handle Assembly

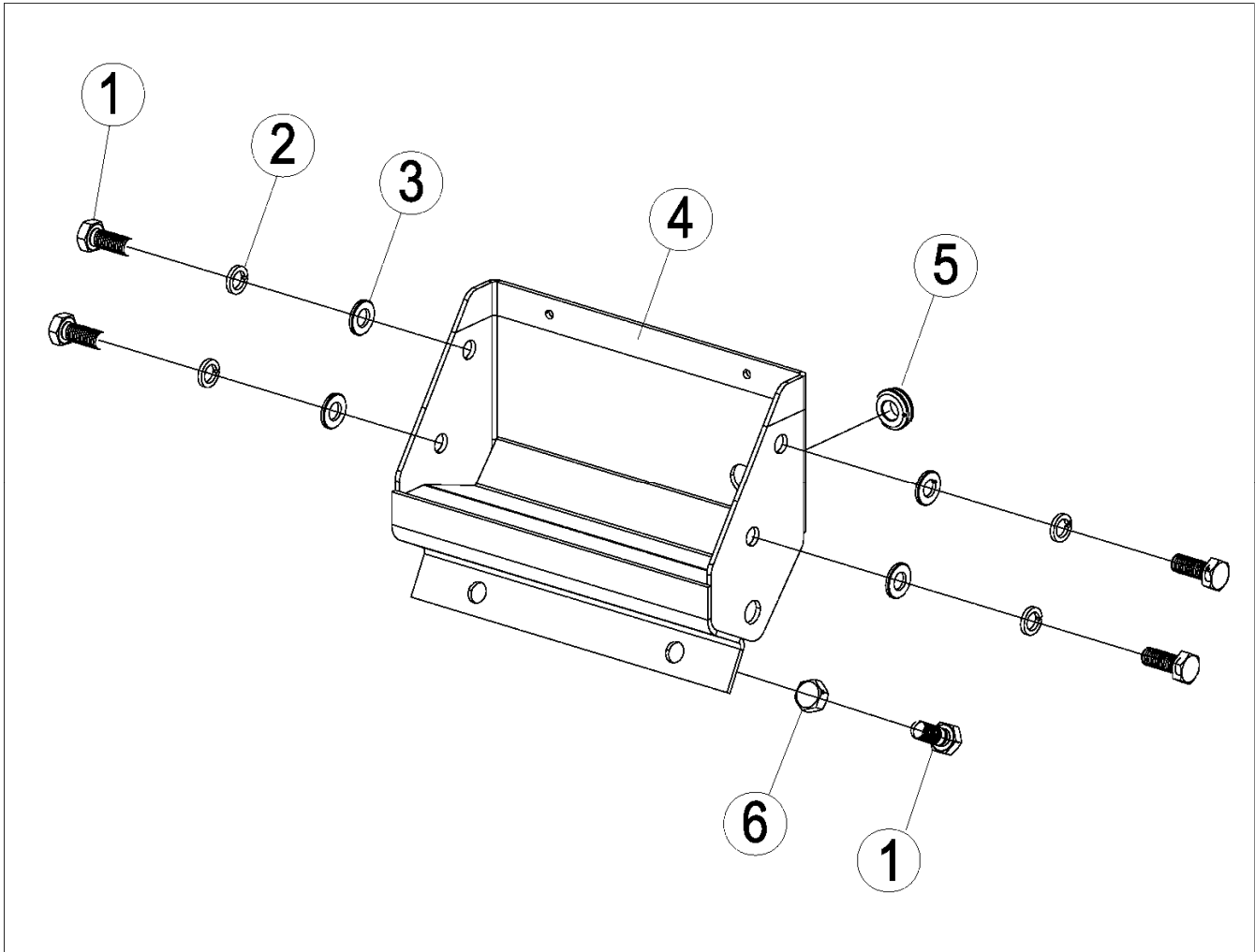
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Kit, Clutch Cable Control	A200819	1
2	Rod, Clutch	A200701	1
3	Locknut, M5	A200500	1
4	Spring, Clutch Cable	A200503	1
5	Bracket, Clutch Rod	A200501	1
6	Flat Washer, M5	A200502	2
7	Clutch Cable	A200707	1
8	Bolt, M6x45	A200488	1
9	Handle Bracket, Clutch Cable	A200495	1
10	Flat Washer, M6	A200496	1
11	Lock Nut, M6	A200497	1
12	Upper Handle	A200710	1
13	Pin, 6x40	A200700	1
14	Rubber Spacer, Clutch Lever	A200490	1
15	Clutch Lever	A200698	1
16	Decal, Clutch Control	A200947	1
17	Cotter Key, 2x37	A200671	1
18	Grip, Handle	A200709	2
19	Decal, Brand Label - Powermate	Reference Only	1
20	Kit, Throttle Control	A200830	1
21	Lock Nut, M6	Reference Only	1
22	Flat Washer, M6	Reference Only	1
23	Bracket, Throttle	Reference Only	1
24	Rivet Stud	Reference Only	1
25	Wave Washer, M8	Reference Only	1
26	Grip, Throttle Lever	Reference Only	1
27	Lever, Throttle	Reference Only	1
28	Bracket, Throttle	Reference Only	1
29	Mounting Bracket, Throttle Lever	Reference Only	1
30	Bolt, Thread Forming 3x30	Reference Only	2
31	Throttle Control	Reference Only	1
32	Bolt, M6x70	Reference Only	1
33	Decal, Throttle Control	Reference Only	1
34	Cable, Throttle	Reference Only	1
35	Bolt, Handle	A200487	4
36	Flat Washer, M8	A200506	4
37	Knob, Handle	A200486	4
38	Flat Washer, M10	A200518	4
39	Spring Washer, M0	A200531	4
40	Bolt, M10x25	A200539	4
41	Handle, Lower	A200695	1
42	Decal, Lower Handle	A200945	1

Swing Plate Assembly



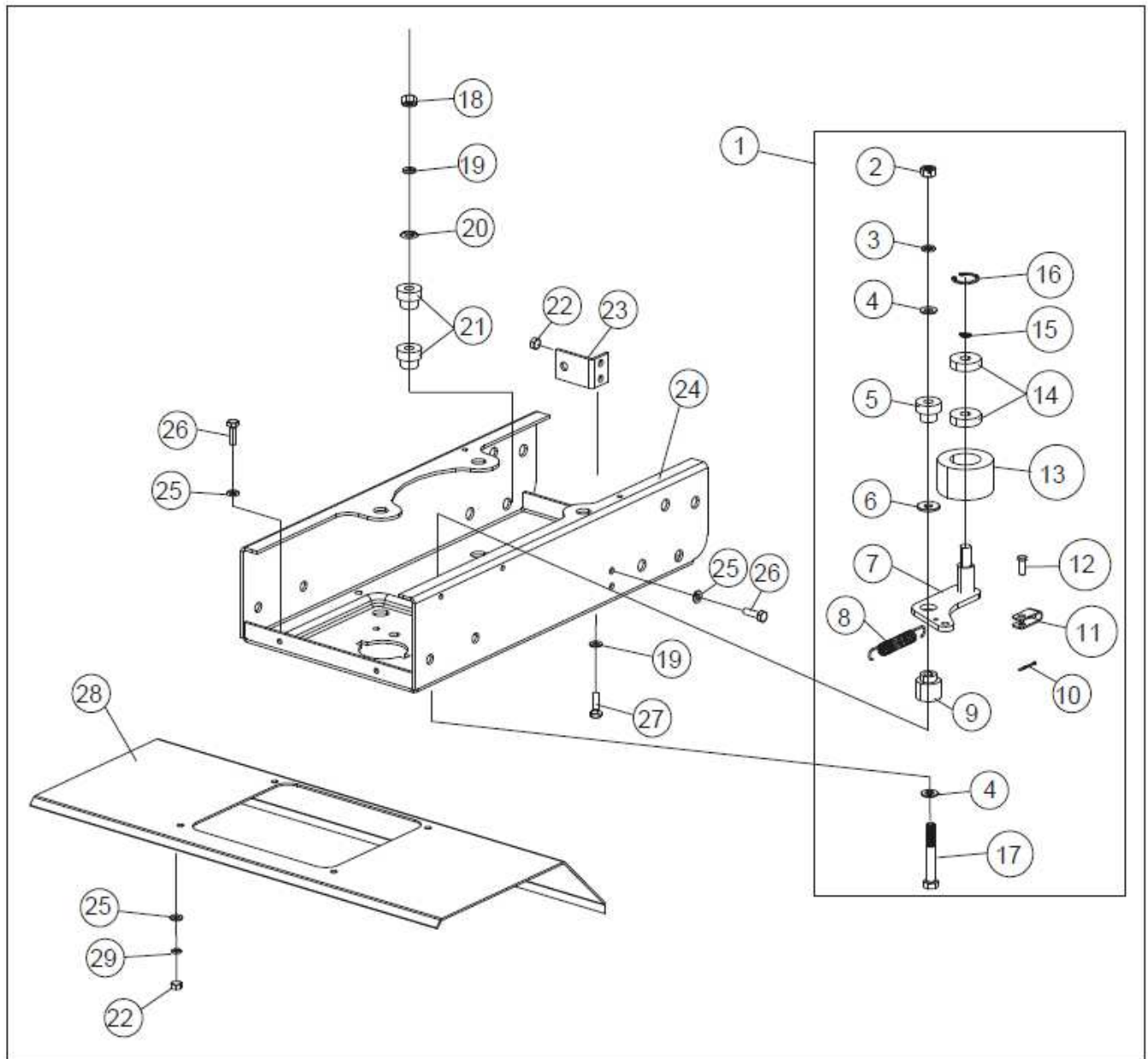
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Cotter Key, 2x37	A200671	5
2	Flat Washer, M14	A200688	2
3	Wheel, 10 Inch	A200694	3
4	Axle, Wheel	A200690	1
5	Swing Plate	A200692	1
6	Bolt, M8x30	A200545	2
7	Flat Washer, M8	A200506	5
8	Flat Washer, M12	A200689	2
9	Axle, Swing Plate	A200691	1
10	Decal, Pinch Point	A200942	1
11	Spring Washer, M8	A200514	2
12	Lock Nut, M8	A200524	2
13	Drag Bar	A200672	1
14	Pin, 8x23	A200673	1

Swing Plate Mount Assembly



REF. NO.	DESCRIPTION	PART NO.	RQD
1	Bolt, M10x25	A200539	6
2	Spring Washer, M10	A200531	4
3	Flat Washer, M10	A200518	4
4	Swing Plate Mounting Frame	A200667	1
5	Grommet	A200569	1
6	Nut, M10	A200532	2

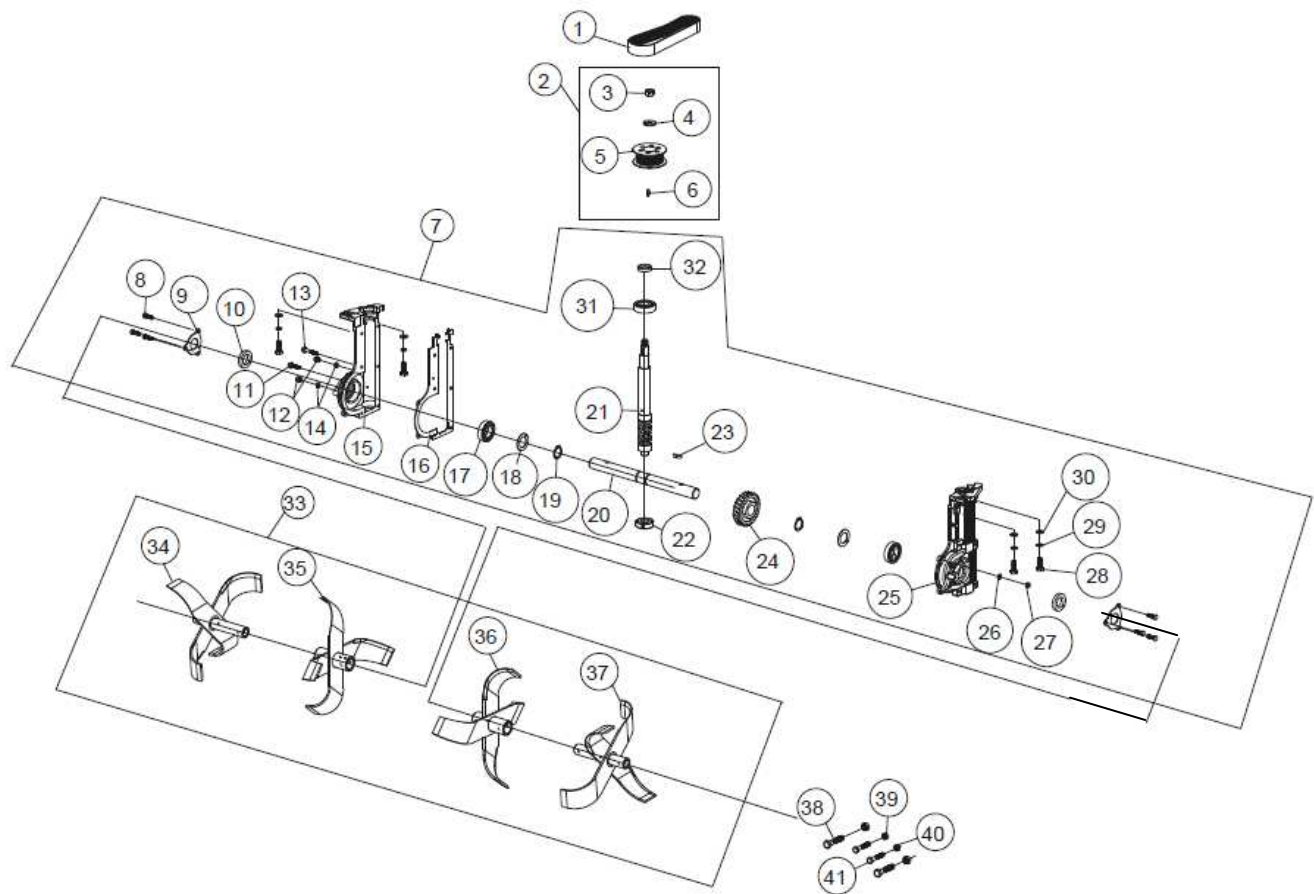
Base Assembly



Base Assembly

REF. NO.	DESCRIPTION	PART NO.	RQD
1	Kit, Tension Idler	A200826	1
2	Lock Nut, M8	A200524	1
3	Spring Washer, M8	A200514	1
4	Flat Washer, M8	A200506	2
5	Bushing, Belt	A200658	1
6	Flat Washer, 8x22x2	A200513	1
7	Tensioner Arm	<i>Reference Only</i>	1
8	Spring, Clutch	A200676	1
9	Bushing, Tensioner Arm	A200677	1
10	Cotter Key, 1.5x20	A200678	1
11	Clip, Clutch Cable	A200520	1
12	Pin, 6x16	A200521	1
13	Tensioner	A200681	1
14	6200 Ball Bearing	<i>Reference Only</i>	2
15	Circlip, 10	<i>Reference Only</i>	1
16	Circlip, 30	<i>Reference Only</i>	1
17	Bolt, M8x60	A200625	1
18	Lock Nut, M8	A200524	1
19	Spring Washer, M8	A200514	2
20	Flat Washer, M8	A200506	1
21	Bushing, Belt	A200658	2
22	Locknut, M6	A200497	2
23	Bracket, Clutch Cable	A200665	1
24	Mounting Frame	A200653	1
25	Flat Washer, M6	A200496	10
26	Bolt, M6x18	A200654	6
27	Bolt, M8x50	A200652	1
28	Tine Shield	A200649	1
29	Spring Washer, M6	A200651	4

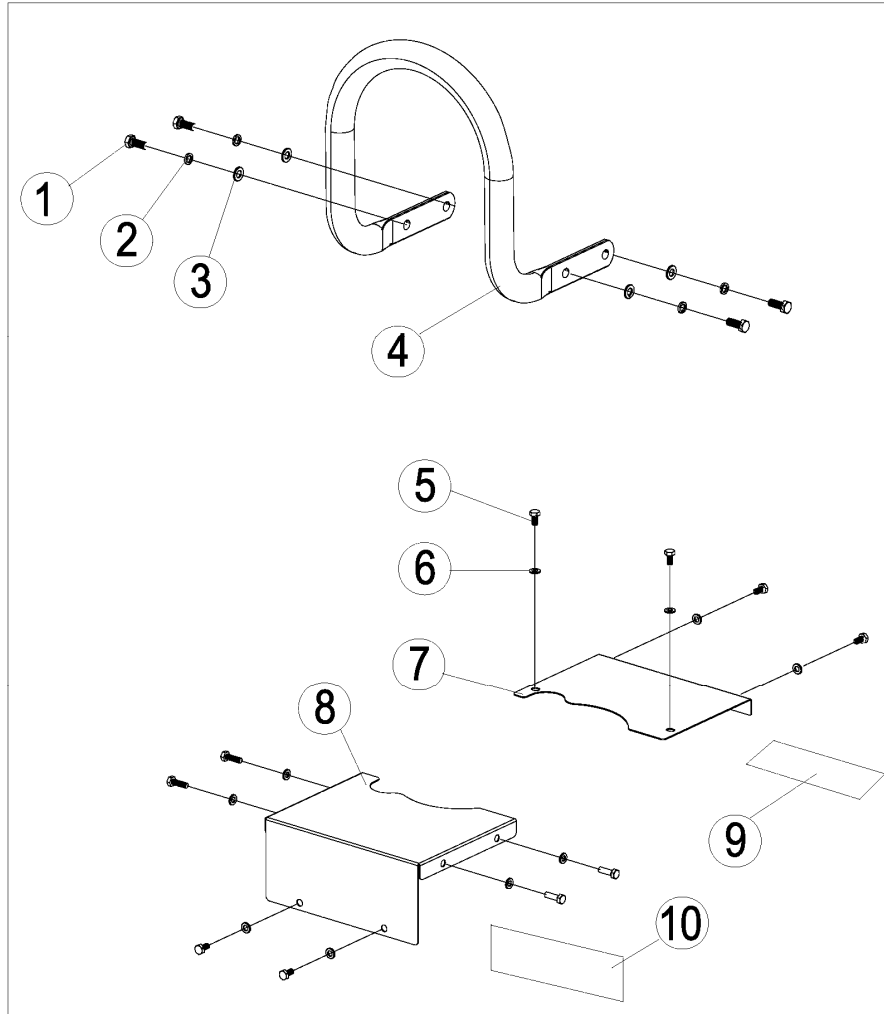
Tine and Transmission Assembly



Tine and Transmission Assembly

REF. NO.	DESCRIPTION	PART NO.	RQD
1	Drive Belt, 10PJ508	A200659	1
2	Kit, Transmission Pulley	A200822	1
3	Lock Nut, M12	A200660	1
4	Flat Washer, 12x28x3	A200661	1
5	Pulley, Transmission	A200662	1
6	Key, 4x6.5x16	A200663	1
7	Kit, Transmission Assembly	A200829	1
8	Hex Bolt, M6x12	A200619	6
9	Gear Box Seal Cover	A200620	2
10	Transmission Seal 25x40x7	A200621	2
11	Hex Flange Bolt, M6x25	Reference Only	4
12	Hex Flange Bolt, M10x14	Reference Only	2
13	Hex Flange Bolt, M6x35	Reference Only	4
14	Flat Washer, M10	Reference Only	2
15	Housing, Left Gear Box	Reference Only	1
16	Gear Box Gasket	Reference Only	1
17	Ball Bearing 6005, Gear Box	Reference Only	2
18	Washer, Gear Box	Reference Only	2
19	Circlip, 25	Reference Only	2
20	Tine Shaft	Reference Only	1
21	Worm Shaft	Reference Only	1
22	Bearing 30203, Gear Box	Reference Only	1
23	Key 5x9x22, Gear Box	Reference Only	1
24	Worm Gear	Reference Only	1
25	Housing, Right Gear Box	Reference Only	1
26	Flat Washer, M6	Reference Only	1
27	Lock Nut, M6	Reference Only	1
28	Hex Flange Bolt, M8x25	Reference Only	1
29	Spring Washer, M8	Reference Only	4
30	Flat Washer, M8	Reference Only	4
31	6204 Ball Bearing	Reference Only	1
32	30203 Bearing	Reference Only	1
33	Kit, Right & Left Tine	A200827	1
34	Left Tine, Outside	A200615	1
35	Left Tine, Inside	A200617	1
36	Right Tine, Inside	A200640	1
37	Right Tine, Outside	A200642	1
38	Bolt, M8x45	A200533	2
39	Lock Nut, M8	A200524	2
40	Bolt, M10x45	A200578	2
41	Lock Nut, M10	A200532	2

Front Carry Handle and Inspection Plates



REF. NO.	DESCRIPTION	PART NO.	QTY
1	Bolt, M8x25	A200573	4
2	Spring Washer, M8	A200514	4
3	Flat Washer, M8	A200506	4
4	Front Carry Handle	A200647	1
5	Bolt, M6x12	A200685	10
6	Flat Washer, M6	A200496	10
7	Rear Inspection Plate	A200686	1
8	Front Inspection Plate	A200687	1
9	Decal, Gear Drive	A200948	1
10	Decal, Powermate Brand	A200949	1

Warning and Safe Operation Labels

1



2



3



4



5



6



7



8



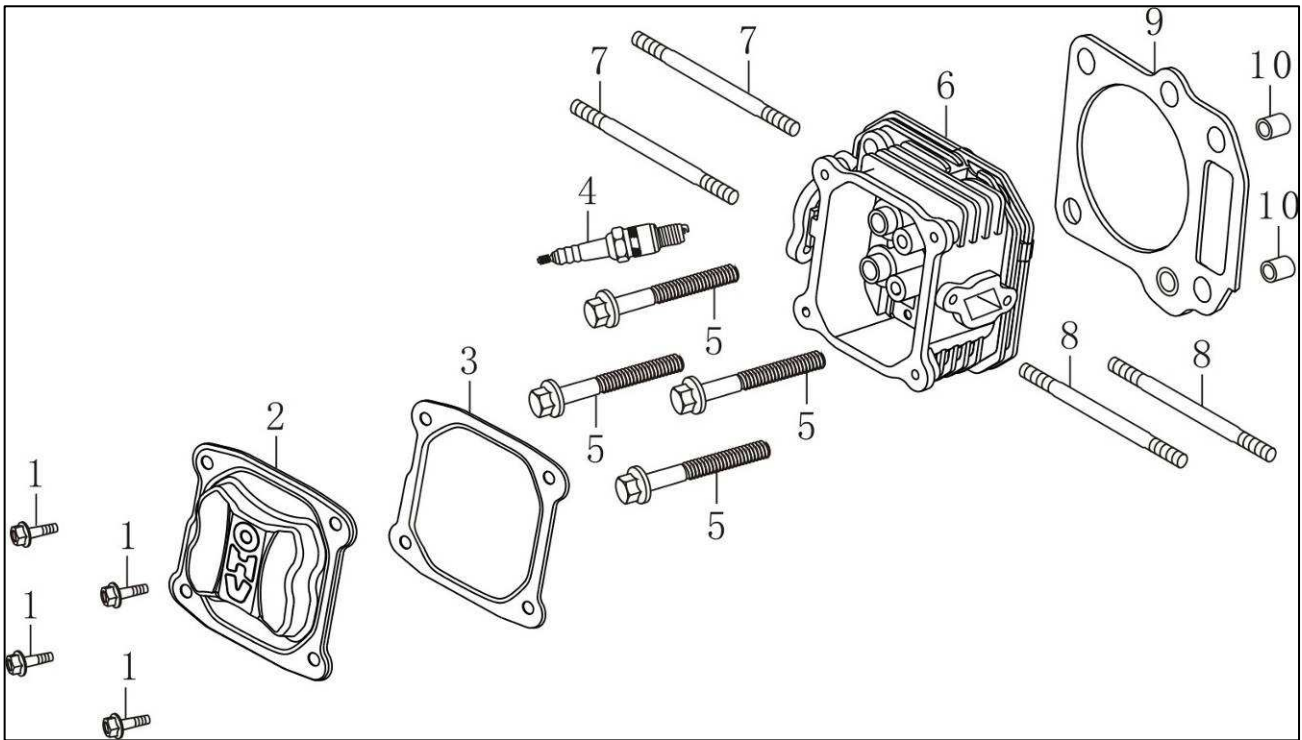
9



Warning and Safe Operation Labels – Cont.

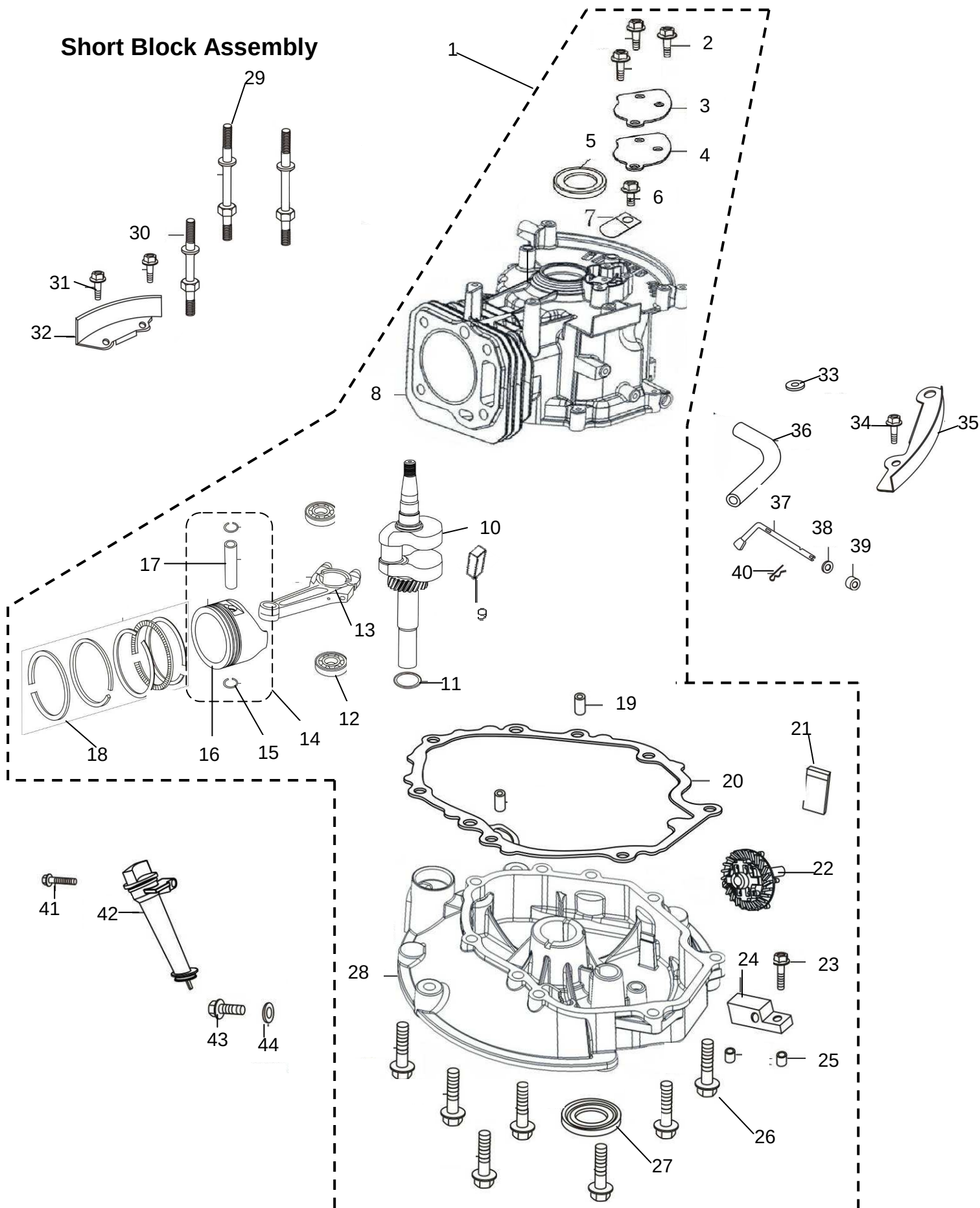
REF. NO.	DESCRIPTION	PART NO.	QTY
1	Decal, Safe Operation Warning	A201742	1
2	Decal, Swing Plate Pinch Point Warning	A200942	1
3	Decal, Belt Covers Warning	A201747	1
4	Decal, Rotating Tines Warning	A201744	2
5	Decal, Outdoor Use Only Warning	A201758	1
6	Decal, Belt Tension Adjustment Warning	A201738	1
7	Decal, Hot Surface Warning	A201755	1
8	Decal, Clutch Control	A200947	1
9	Decal, Hand Placement While Starting	A200945	1
10	Kit, Warning and Safe Operation Decal (# 1-9)	A201871	1

Cylinder Head



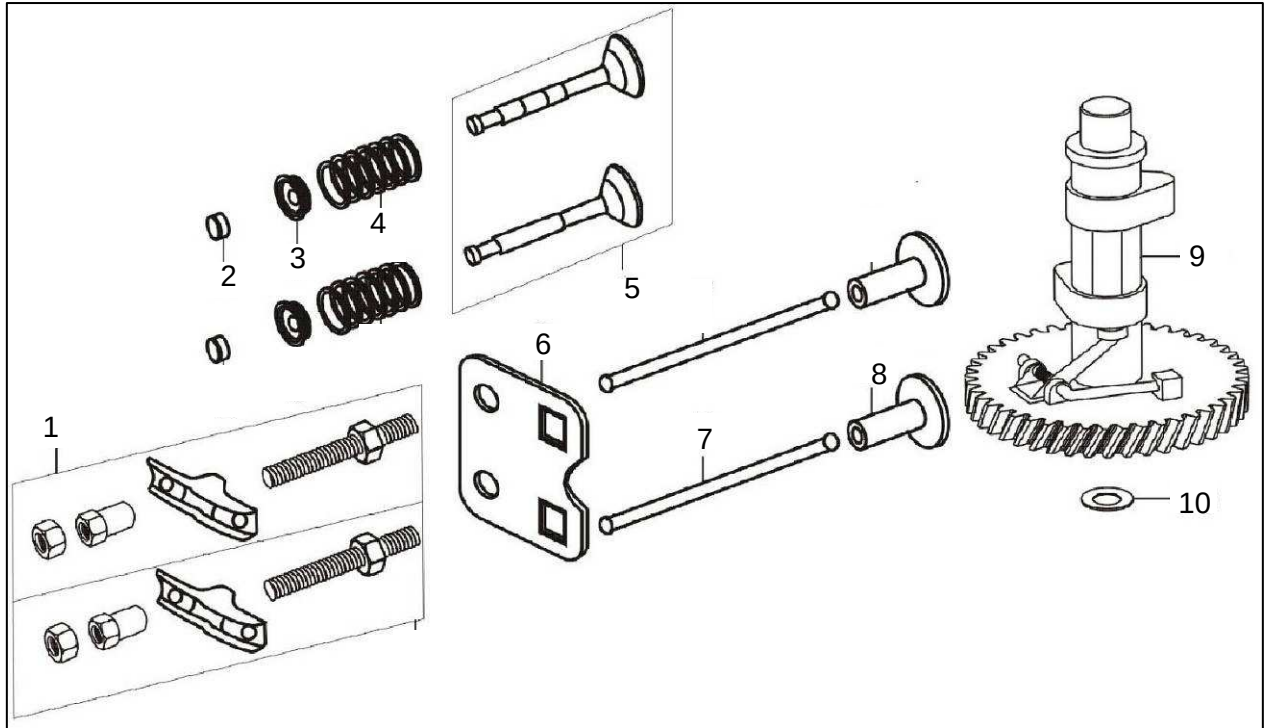
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Flange Bolt, Valve Cover, M6X16.5	A201230	4
2	Cover, Valve	A201231	1
3	Gasket, Valve Cover	A201232	1
4	Plug, Spark (Torch F7TC, NGK BPGES, Champion RN9YC4)	A201233	1
5	Flange Bolt, Cylinder Head, M5X50	A201234	4
6	Head, Cylinder	A201235	1
7	Bolt, Stud, M6X91	A201236	2
8	Bolt, Stud, M6X95	A201237	2
9	Gasket, Cylinder Head	A201238	1
10	Pin, Dowel	A201239	2

Short Block Assembly



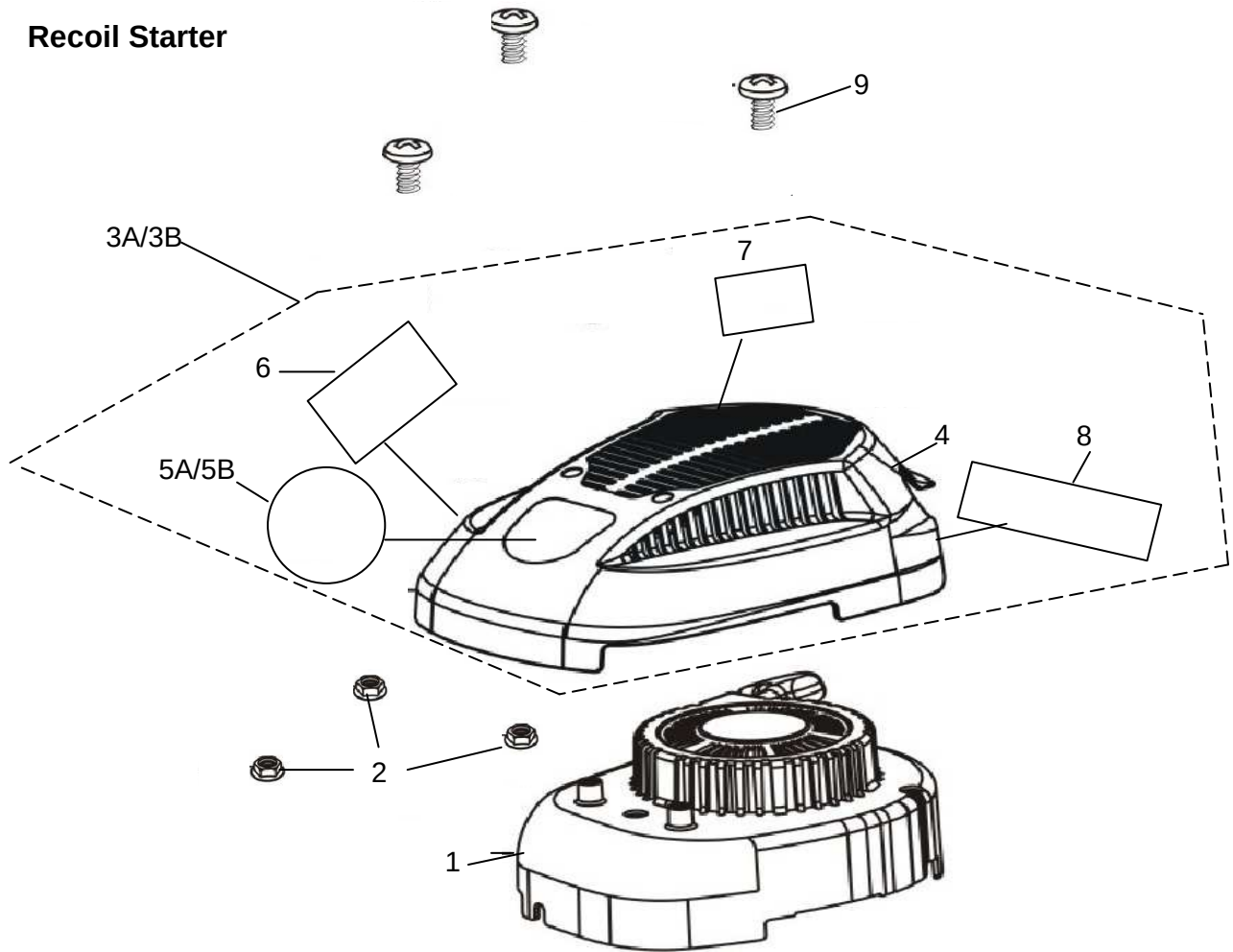
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Kit, Short Block (Includes # 2-14 & 18-28)	A202134	1
2	Bolt, Flange, M6X14	A201248	3
3	Bracket, Breather	A201249	1
4	Gasket, Breather	A201250	1
5	Seal, Oil, 25X38X7	A201245	1
6	Bolt, Flange, M6X10	A201247	1
7	Valve, Reed	A201246	1
8	Crankcase	Reference Only	1
9	Key, Crankshaft	A201282	1
10	Crankshaft	Reference Only	1
11	Washer, 25x34x1	Reference Only	1
12	Ball Bearing, 6205	Reference Only	2
13	ASM, Connecting Rod	A201278	1
14	Kit, Piston (Includes # 15-17)	A202135	1
15	Clip, Piston Pin	Reference Only	2
16	Piston	Reference Only	1
17	Pin, Piston	Reference Only	1
18	Kit, Piston Rings	A201274	1
19	Pin, Dowel M8x14	Reference Only	2
20	Gasket, Crankcase	A201267	1
21	Rubber Bracket, Oil	Reference Only	1
22	ASM, Governor	A201265	1
23	Bolt, Flange M6x20	A201264	1
24	Bracket, Speed Adjust	A201266	1
25	Pin, Dowel M8x10	Reference Only	2
26	Bolt, Flange M6x28	A201261	7
27	Seal, Oil 25x41x6	A201262	1
28	Cover, Crankcase	Reference Only	1
29	Bolt, Stud, M5X85	A201244	2
30	Bolt, Stud, M6X78	A201243	1
31	Bolt, Flange, M6X16	A201242	2
32	Shield, Tank Side 2	A201241	1
33	Bushing	A201252	2
34	Bolt, Flange, M6X22	A201253	2
35	Shield, Tank Side 1	A201251	1
36	Tube, Breather	A201254	1
37	Arm, Governor	A201255	1
38	Washer, 6X13X1	A201256	1
39	Seal, Oil, 6X11X4	A201257	1
40	Pin, Governor	A201258	1
41	Bolt, Flange M6x35	A201273	1
42	ASM, Oil Fill Tube	A201272	1
43	Plug, Oil Drain	A201270	1
44	Washer, 10x16x1.5	A201271	1

Camshaft



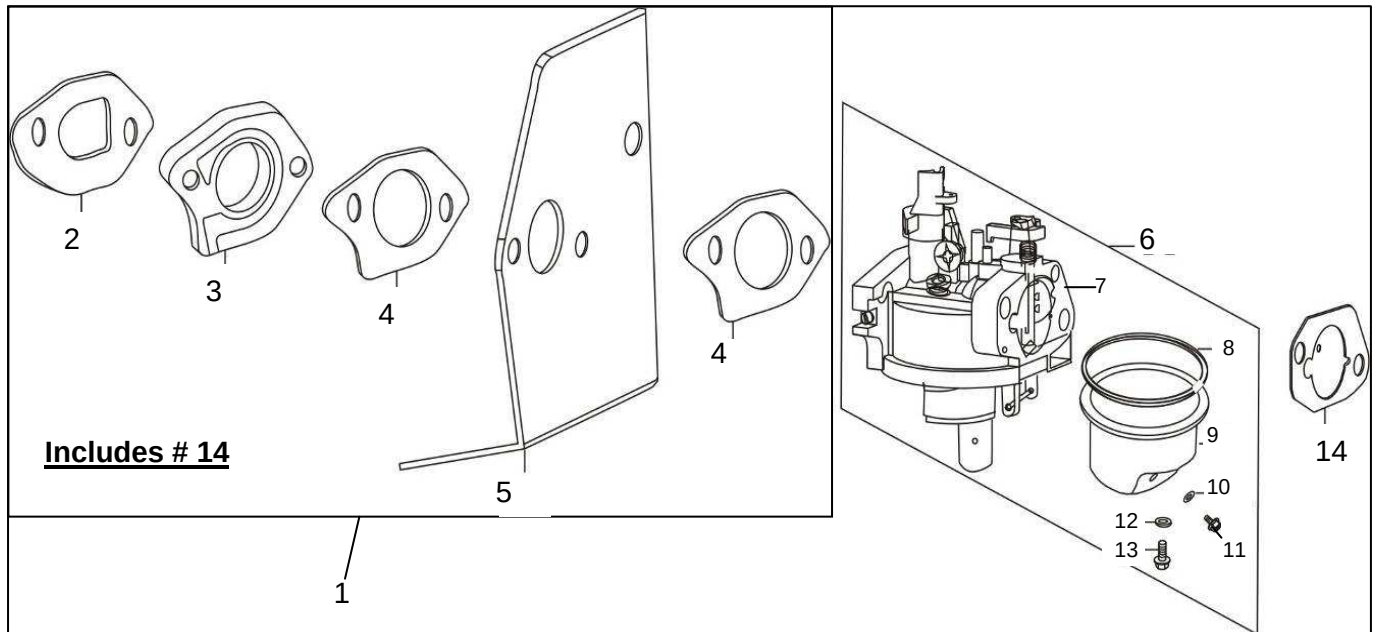
REF. NO.	DESCRIPTION	PART NO.	RQD
1	ASM, Valve Rocker Arm	A201284	2
2	Retainer, Valve Spring	A201285	2
3	Seat, Valve Spring	A201286	2
4	Spring, Valve	A201287	2
5	Valve	A201288	2
6	Bracket, Valve	A201289	1
7	Rod, Camshaft	A201290	2
8	Lifter, Valve	A201291	2
9	ASM, Camshaft	A201292	1
10	Washer, Camshaft, 14X20X1	A201293	1

Recoil Starter



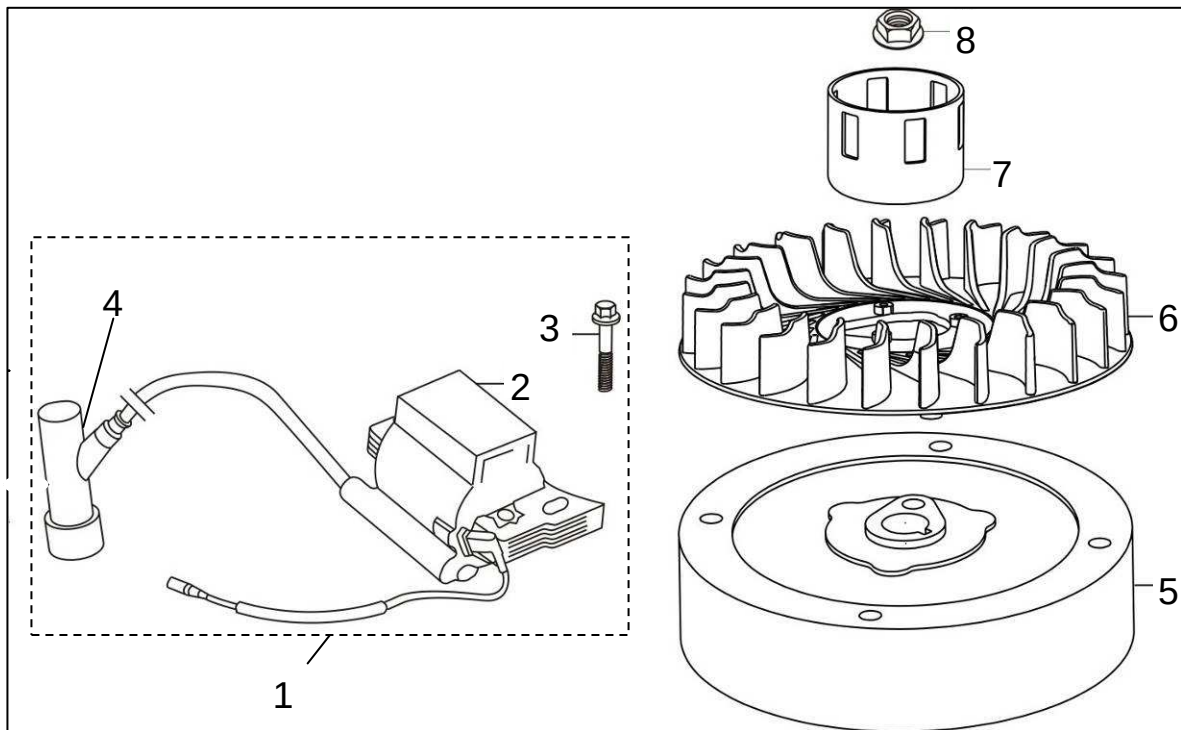
REF. NO.	DESCRIPTION	PART NO.	RQD
1	ASM, Starter Shroud	A201294	1
2	Nut, Flange M6	A201297	3
3A	Kit, Engine Housing-Southland(Includes # 4,5A,6-8)	A201808	1
3B	Kit, Engine Housing-Powermate(Includes # 4,5B,6-8)	A202136	1
4	Housing, Recoil	Reference Only	1
5A	Decal, Engine Spec-Southland	Reference Only	1
5B	Decal, Engine Spec-Powermate	Reference Only	1
6	Decal, Hot Surface Warning	A201755	1
7	Decal, Oil Fill	Reference Only	1
8	Decal, Outdoor Use Only	A201758	1
9	Screw, M4x10	A201296	3

Carburetor



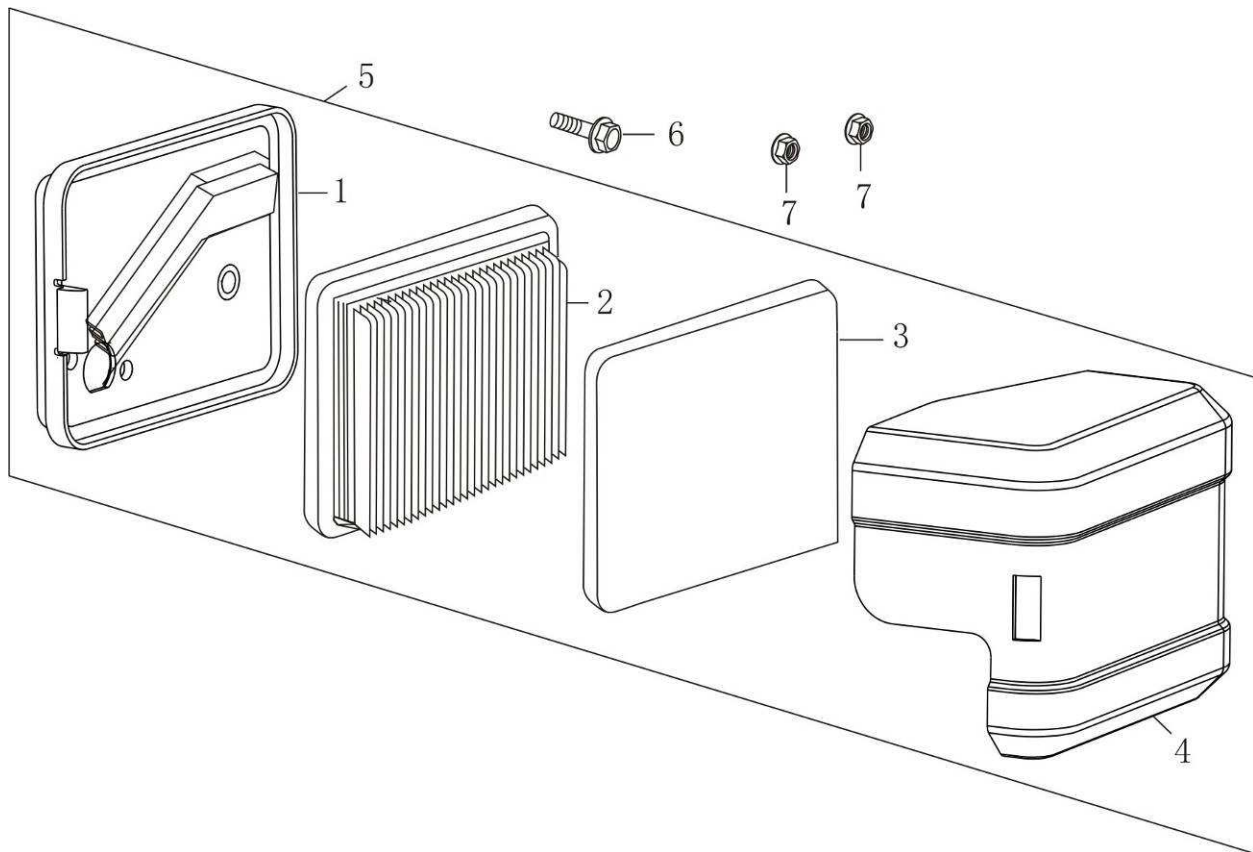
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Kit, Carburetor Gasket (Includes # 2-5 & 14)	A201772	1
2	Gasket, Insulator	Reference Only	1
3	Spacer, Gasket	Reference Only	1
4	Gasket, Carburetor	Reference Only	2
5	Heat Shield, Carburetor	Reference Only	1
6	ASM, Carburetor (Includes # 7-13)	A201771	1
7	Body, Carburetor	Reference Only	1
8	Gasket, Float Bowl	Reference Only	1
9	Bowl, Float	Reference Only	1
10	Washer, Carburetor Drain Plug	Reference Only	1
11	Plug, Carburetor Drain	Reference Only	1
12	Gasket, Plug	Reference Only	1
13	Plug, Carburetor	Reference Only	1
14	Gasket, Air Filter	Reference Only	1

Flywheel / Ignition



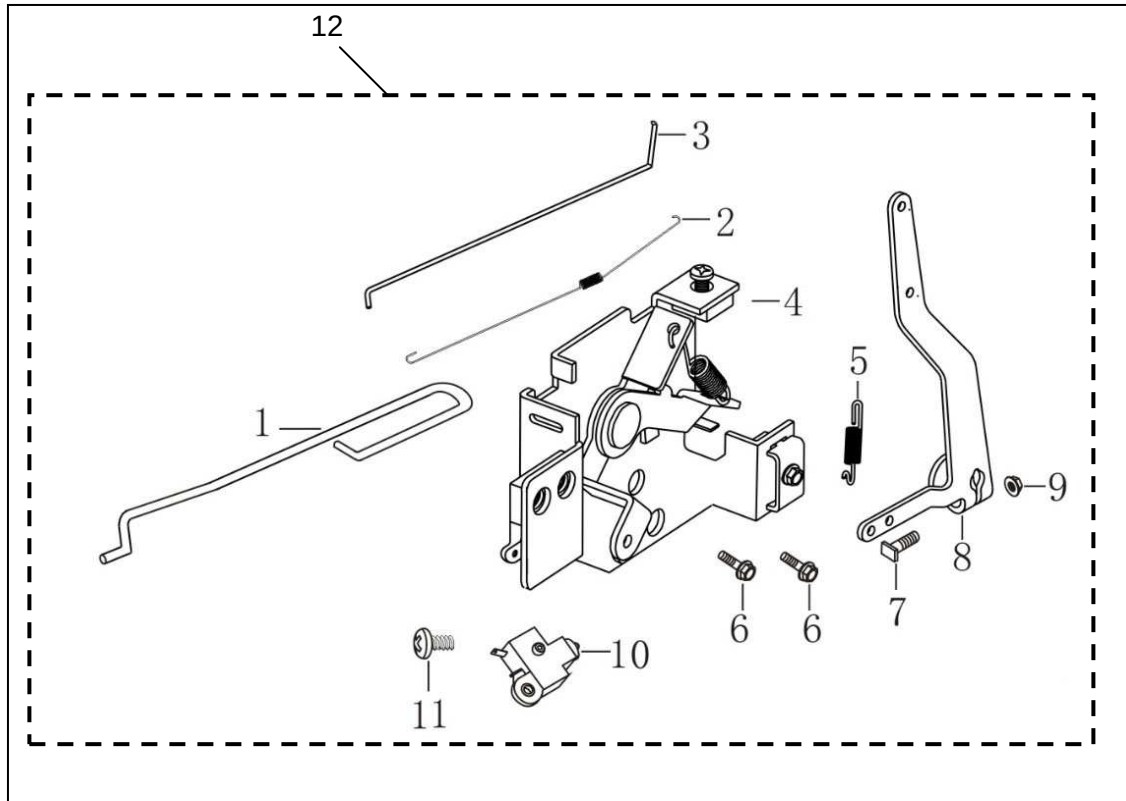
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Kit, Ignition Coil (Includes # 2-4)	A201773	1
2	Coil, Ignition	<i>Reference Only</i>	1
3	Bolt, Flange	A201311	2
4	Boot, Spark Plug	<i>Reference Only</i>	1
5	Flywheel	A201312	1
6	Fan, Flywheel	A201313	1
7	Pulley, Starter	A201314	1
8	Nut, Flywheel	A201315	1

Air Cleaner



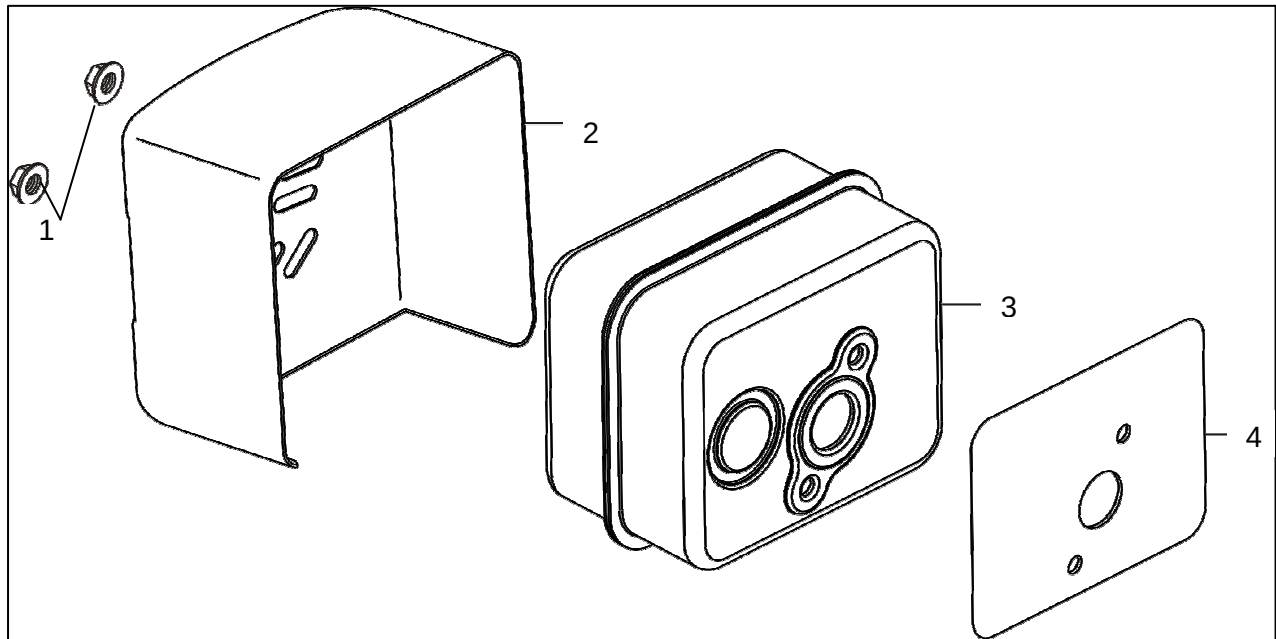
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Mount, Air Filter Housing	A201318	1
2	Element, Air Filter	A201319	1
3	Filter, Foam	A201320	1
4	Cover, Air Filter	A201321	1
5	Kit, Air Filter Assembly (Includes #1-4)	A201775	1
6	Bolt, Flange – M6 x 16mm	A201323	1
7	Nut, M6 x 1.0	A201324	2

Control Assembly



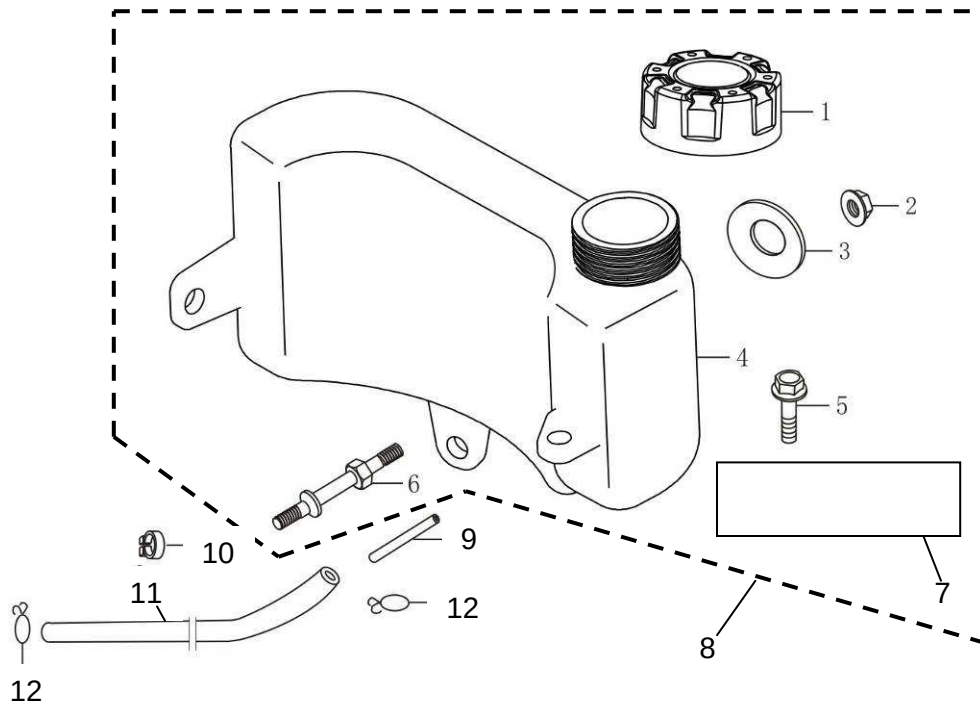
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Rod, Throttle	A201325	1
2	Spring, Long Governor	A201326	1
3	Rod, Governor	A201327	1
4	ASM, Throttle Control Bracket	<i>Reference Only</i>	1
5	Spring, Short Governor	A201329	1
6	Bolt, Flange, M6	A201330	2
7	Bolt, Governor Arm	A201331	1
8	Arm, Governor	A201332	1
9	Nut, Governor, M6	A201333	1
10	ASM, On/Off Switch	A201334	1
11	Screw, Philips, M4X10	A201335	1
12	Kit, Throttle Control	A201730	1

Muffler



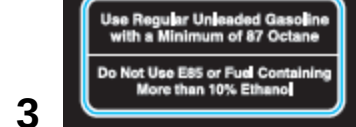
REF. NO.	DESCRIPTION	PART NO.	RQD
1	Nut, Flange, M6	A201333	2
2	Shield, Muffler	A201337	1
3	Assembly, Muffler	A201338	1
4	Gasket, Muffler	A201339	1

Fuel Tank



REF. NO.	DESCRIPTION	PART NO.	RQD
1	Cap, Fuel	A201340	1
2	Nut, Flange, M6	A201333	1
3	Washer, 6X25X2	A201342	1
4	Tank, Fuel	A201343	1
5	Bolt, Flange, M6X16	A201344	2
6	Bolt, Stud, 6X60	A201345	1
7	Decal, Fuel Usage	<i>Reference Only</i>	1
8	Kit, Fuel Tank	A201731	1
9	Filter, Fuel	A201346	1
10	Clip, Fuel Tank	A201347	1
11	Line, Fuel	A201348	1
12	Clamp, Fuel Line	A201349	2

Engine Warning and Maintenance Labels



REF. NO.	DESCRIPTION	PART NO.	RQD
1	Decal, Air Filter Maintenance	Reference Only	1
2	Decal, Hot Surface Warning	A201755	1
3	Decal, Fuel Usage	A201756	1
4	Decal, Outdoor Use Only Warning	A201758	1
5	Decal, Oil Fill	Reference Only	1
6	Decal, Engine Spec-Southland	Reference Only	1
7	Decal, Engine Spec-Powermate	Reference Only	1
8	Kit, Southland Engine Decal (#1-6)	A201805	1
9	Kit, Powermate Engine Decal (# 1-5 & 7)	A202139	1

