

Earthquake

Operator's Manual
Original Operating Instructions
**Mini-Cultivator
MC43 Series and
Dethatcher**



MC43E
(electric start)



MC43
(manual start)

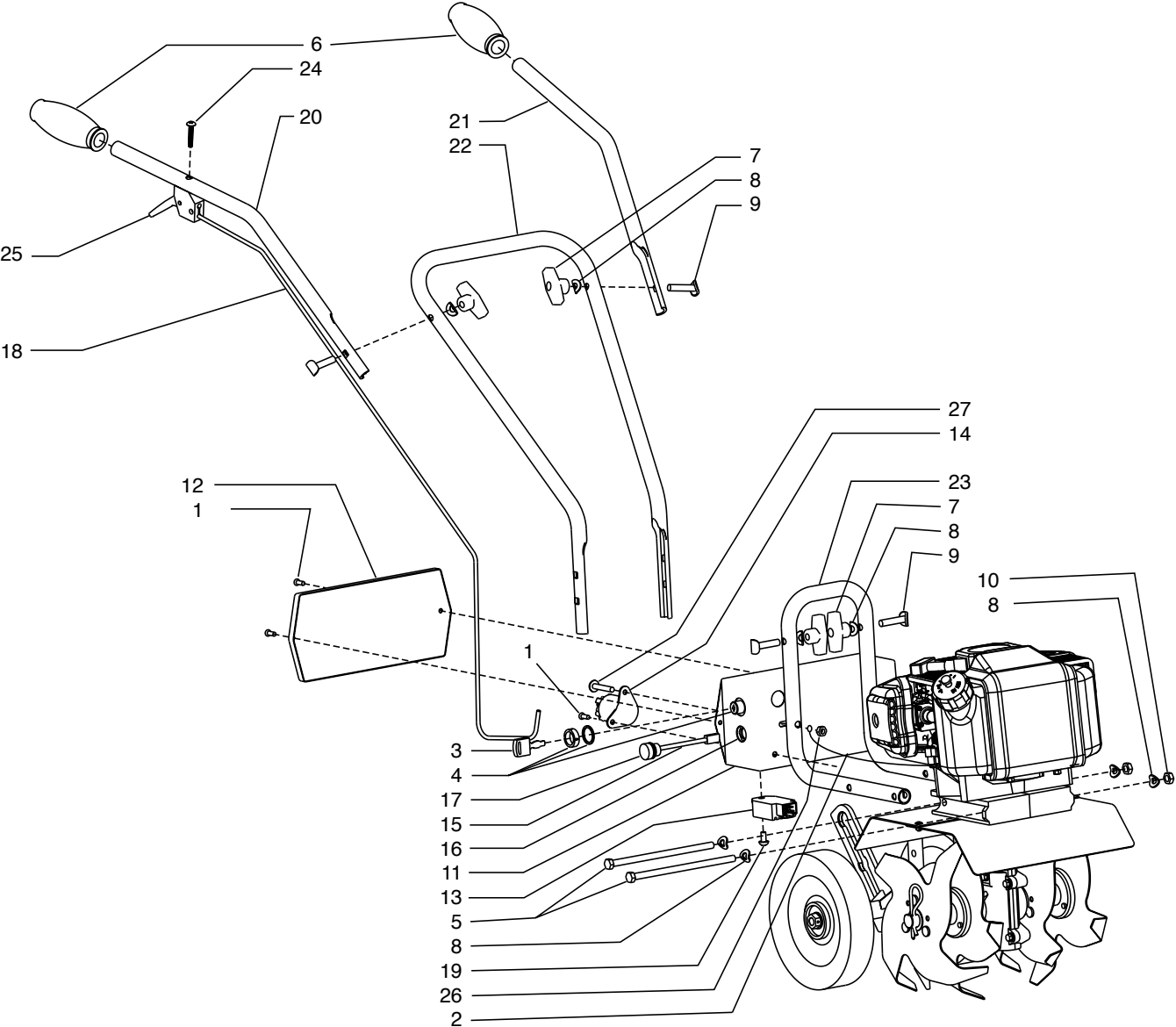
Includes models:

- MC43
- MC43E
- MC43ECE
- MC43CE
- MC43RCE
- MD43

P/N: OMMC43VE
Rev. 06/30/11

PARTS BREAKDOWN

MC43E HANDLEBAR PARTS EXPLOSION

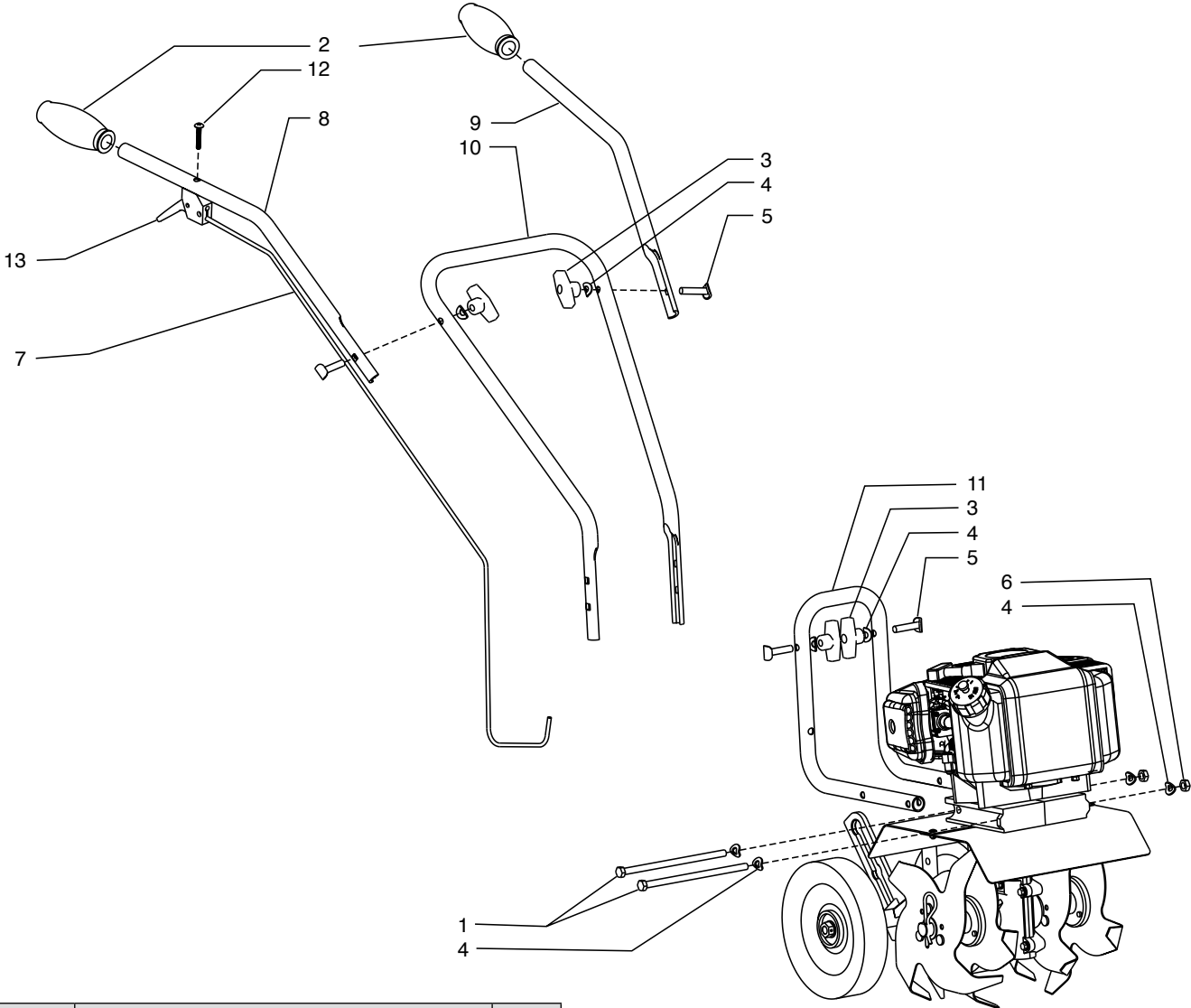


MC43E HANDLEBAR PARTS LIST

KEY	PART #	DESCRIPTION	QTY.
1	300471	BOLT, M5 X 12MM	3
2	300523	GROUND WIRE	1
3	46139	KEY ONLY	1
4	46140	KEY SWITCH	1
5	46141	BOLT, HEX HD M8 X 1.25 X 160MM	2
6	4639	GRIP, HANDLEBAR	2
7	4640	NUT, T-HANDLE	4
8	4641	WASHER	8
9	4642	BOLT, HANDLE CLAMP	4
10	4655	NUT, HEX HD M8 X 1.25	2
11	4656	BATTERY BOX MC43E	1
12	4657	COVER, BATTERY BOX	1
13	4659	VOLTAGE RECTIFIER	1
14	4660	SOLENOID	1
15	4661	CHARGER PIGTAIL	1
16	4662	NUT, CHARGER PIGTAIL	1
17	4663	CAP, CHARGER PIGTAIL	1

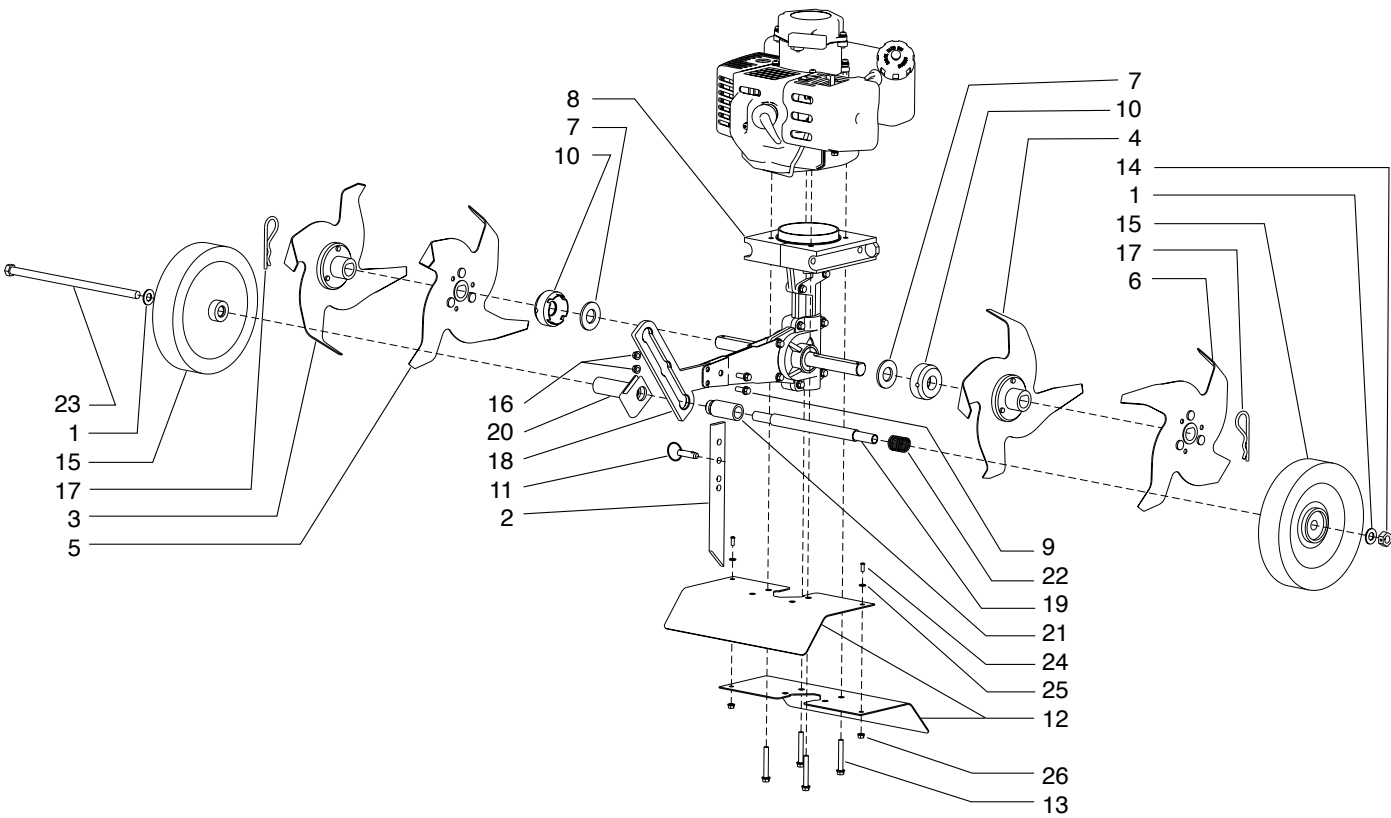
KEY	PART #	DESCRIPTION	QTY.
18	4667	THROTTLE CABLE	1
19	4669	BOLT, M6 X 1MM X 12MM PAN HD	1
20	4689	HANDLEBAR, UPPER RIGHT	1
21	4690	HANDLEBAR, UPPER LEFT	1
22	4693	HANDLEBAR, MIDDLE	1
23	4695	HANDLEBAR, LOWER	1
24	4814	BOLT, PHILLIPS TRUSS HD ZN 10-24 X 1-1/4	1
25	4819	TRIGGER ASSEMBLY, LONG THROW W/O CABLE	1
26	53106	NUT, LOCK BI-WAY 1/4-20	2
27	6041612	BOLT, PTH ZN 1/4-20 X 1-1/2	2
--	46122	BATTERY 12V 7A (not shown)	1
--	4653	FUSE HOLDER (not shown)	1
--	4658	FUSE 10 AMP (not shown)	1
--	4675	BATTERY CONNECTOR SET, WHITE (not shown)	1
--	4681	BATTERY CHARGER (not shown)	1

MC43 HANDLEBAR PARTS EXPLOSION



KEY	PART #	DESCRIPTION	QTY.
1	46141	BOLT, HEX HD M8 X 1.25 X 160MM	2
2	4639	GRIP, HANDLEBAR	2
3	4640	NUT, T-HANDLE	4
4	4641	WASHER	8
5	4642	BOLT, HANDLE CLAMP	4
6	4655	NUT, HEX HD M8 X 1.25	2
7	4667	THROTTLE CABLE	1
8	4689	HANDLEBAR, UPPER RIGHT	1
9	4690	HANDLEBAR, UPPER LEFT	1
10	4693	HANDLEBAR, MIDDLE	1
11	4695	HANDLEBAR, LOWER	1
12	4814	BOLT, PHILLIPS TRUSS HD ZN 10-24 X 1-1/4	1
13	4819	TRIGGER ASSEMBLY, LONG THROW W/O CABLE	1

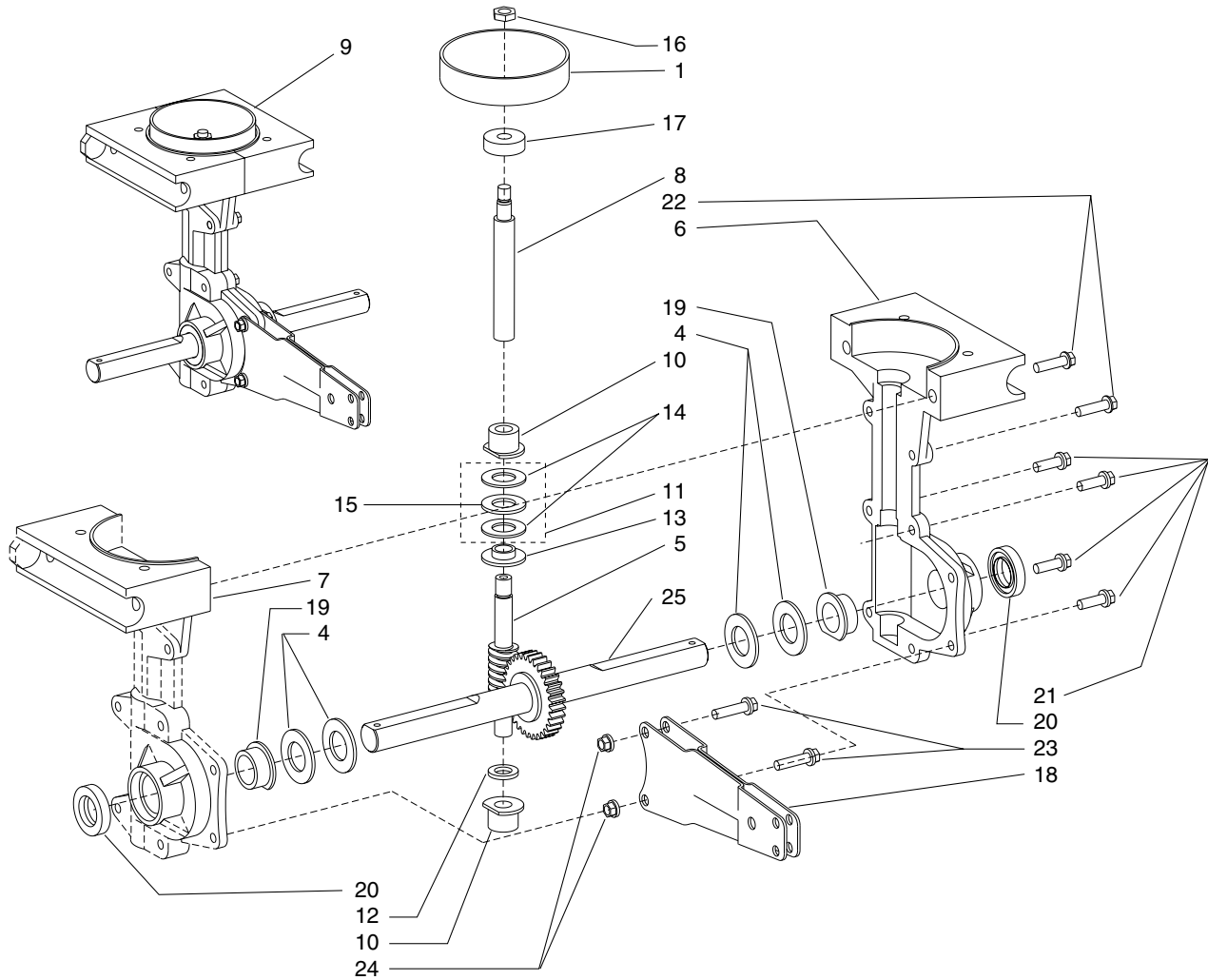
HOOD & TINES PARTS EXPLOSION



KEY	PART #	DESCRIPTION	QTY.
1	2431	WASHER, 10MM NARROW FLAT	2
2	4600	DRAG BAR	1
3	4601	TINE "A" RIGHT OUTSIDE	1
4	4602	TINE "C" LEFT INSIDE	1
5	4603	TINE "B" RIGHT INSIDE	1
6	4604	TINE "D" LEFT OUTSIDE	1
7	4606	WASHER, FIBER	2
8	46138	TRANSMISSION ASSEMBLY	1
9	46142	BOLT M6 X 1.0 X 15MM FLANGED HEX HD	2
10	46144	DUST CAP	2
11	46145	DETENT PIN 5/16 X 1-1/2"	1
12	46146	TINE SHIELD	2
13	4625	BOLT, M6 X 1.0 X 42MM FLANGED HEX HD	4
14	4629	NUT M10 X 1.5 CENTER LOCK HEX HD	1

KEY	PART #	DESCRIPTION	QTY.
15	4634	WHEEL	2
16	4650	NUT M6 X 1.0 FLANGED HEX HD	2
17	4652	HAIR PIN, 5/8-3/4 COTTER	2
18	4673	WHEEL HOLDER	1
19	4674	WHEEL TUBE	1
20	4678	GUIDE, WHEEL TUBE	1
21	4684	TUBE, WHEEL LOCK	1
22	4685	SPRING, WHEEL LOCK	1
23	4687	BOLT M10 X 1.5 X 225MM HEX HD	1
24	4691	BOLT, M4 X 0.7 X 10MM PHILLIPS PAN HD	2
25	4692	WASHER, M4 FLAT	2
26	4694	NUT M4 X 0.7 FLANGED HEX HD	2
--	E43CCMCV	ENGINE 43CC CAT CONVERT	1
--	E43MCEVE	ENGINE 43CC CAT CONVERT ELEC START	1

TRANSMISSION PARTS EXPLOSION



KEY	PART #	DESCRIPTION	QTY.
1	300414	CLUTCH DRUM	1
	4608	TINE SHAFT (USE P/N 4651)	
	4609	GEAR, TINE SHAFT (USE P/N4651)	
4	4610	SHIM, TINE SHAFT	4
5	4613	WORM SPUD	1
6	46135	TRANSMISSION CASTING, RIGHT	1
7	46136	TRANSMISSION CASTING, LEFT	1
8	46137	DRIVE SHAFT	1
9	46138	TRANSMISSION ASSEMBLY	1
10	4614	BUSHING, DRIVE SHAFT	2
11	4615	THRUST BEARING ASSEMBLY	1
12	4616	SPACER, BUSHING	1
13	4617	REDUCER, THRUST BEARING	1

KEY	PART #	DESCRIPTION	QTY.
14	4618	WASHER, THRUST	2
15	4619	THRUST BEARING CAGE WASHER	1
16	4620	NUT, JAM M8	1
17	4623	BALL BEARING, 9MM	1
18	4633	ARM WHEEL/DRAW STAKE MOUNT	1
19	4645	BUSHING, TINE SHAFT	2
20	4646	SEAL, TINE SHAFT	2
21	4647	BOLT, FLG HEX HD M6 X 1.0 X 18MM	4
22	4648	BOLT, FLG HEX HD M6 X 1.0 X 22MM	2
23	4649	BOLT, FLG HEX HD M6 X 1.0 X 24MM	2
24	4650	NUT, FLANGED HEX HD M6	2
25	4651	TINE GEAR & SHAFT ASSEMBLY	1

ENGINE PARTS EXPLOSION



ENGINE PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	300484	FLYWHEEL, MAGNETO	1
2	300337	NUT, FLANGE M8	1
3	300462	WASHER, ROTOR	2
4	300413	CLUTCH ROTOR ASSEMBLY W/SPRING	1
5	300449	WASHER, SPRING	2
6	300450	BOLT, SHOULDER	2
7	300467	PIN, LOCATING	2
8	300487	MOUNT RING & SHROUD	1
9	300491	RECOIL CLUTCH	1
10	300429	PLATE, RECOIL	1
11	3004121	HANDLE, RECOIL (STANDARD)	1
12	300430	RECOIL ASSEMBLY WITH STANDARD HANDLE	1
13	300472	IGNITION COIL, MC43	1
	300472CE	IGNITION COIL, MC43 CE	1
	300191	IGNITION COIL, MC43E	1
	300191CE	IGNITION COIL, MC43E CE	1
14	300482	SHROUD, ENGINE	1
15	300493	BOLT, STUD M6 X 62MM	2
16	300475	GASKET, MUFFLER	1
17	4813	MUFFLER	1
18	4812	COVER, MUFFLER	1
19	BM6A	SPARK PLUG	1
20	300483	COVER, ENGINE SHROUD	1
21	300476	GASKET, INTAKE	1
22	300478	WINDPIPE, INTAKE 43CC/51CC	1
23	300479	GASKET, CARBURETOR	1
24	300486	CARBURETOR	1
25	300481	O-RING, CARBURETOR	1
26	3004109	PRIMER BULB	1
27	3004158	COVER, AIR FILTER	1
28	3004150*	AIR FILTER ASSEMBLY	1
29	3004156	FOAM, AIR FILTER	1
30	3004157	PLATE, REINFORCEMENT	1

*Air filter assembly includes: air filter base (28), choke lever bolt (31), two choke lever washers (32), nylock choke lever nut (33), choke lever (34) and choke paddle (35)

KEY NO.	PART NO.	DESCRIPTION	QTY.
31*	3004150	AIR FILTER ASSEMBLY	1
32*	3004150	AIR FILTER ASSEMBLY	2
33*	3004150	AIR FILTER ASSEMBLY	1
34*	3004150	AIR FILTER ASSEMBLY	1
35*	3004150	AIR FILTER ASSEMBLY	1
36	56105	BRACKET, GAS TANK	1
37 ^(a)	3004118	GAS TANK KIT	1
38	300401	GAS CAP, MANUAL VENTING	1
39	300332	SHROUD, GAS TANK	1
40	1021	SWITCH, ROCKER	1
--	1021CE	ON/OFF SWITCH WIRE ASSEMBLY REMOTE HANDLEBAR (Not Shown-For CE Models Only)	1
41 ^(b)	3004105	KIT FUEL LINE TWO HOLE GROMMET	1
42 ^(b)	3004105	KIT FUEL LINE TWO HOLE GROMMET	1
43 ^(b)	3004105	KIT FUEL LINE TWO HOLE GROMMET	1
44	300335	BOLT W/WASHER PHILLIPS HH	4
45	300492	NUT, FLANGE M6	2
46	300471	BOLT W/WASHER M5 X 12MM	4
47	300439	BOLT W/WASHER PH M5 X 18MM	7
48	300336	BOLT HH M6 X 10MM	2
49	300438	BOLT W/WASHER M5 X 25MM	2
50	300456	BOLT M5 X 50MM	2
51	300338	KEY, FLYWHEEL	1
52	3004103	FILTER, FUEL	1
53	300351	BOLT HH M6 X 8MM	2
61	300326	GUARD	
-	3004114	KIT, CARBURETOR	1
--	KITTU101	KIT, TUNE UP	1
MC43E ELECTRIC START MODEL ONLY			
54	300525	STUD BOLT M6 X 41MM	1
55	300339	KEY, ELECTRIC STARTER	1
56	300527	STARTER WIRE	1
57	300529	STARTER MOTOR KIT (includes starter, stud bolt, clutch drum & ground wire)	1
58	300445	WASHER M5	2
59	300438	BOLT W/WASHER M5 X 25MM	2
60	300439	BOLT W/WASHER PH M5 X 18MM	2

(a) Gas tank kit includes: gas tank (37), gas cap (38), two-hole grommet (41), fuel line and fuel filter (43, 52).

(b) These parts are available as part of fuel line repair kit. Fuel line repair kits includes: two-hole grommet (41), fuel line hose (42), primer line hose (43) and fuel filter (52)

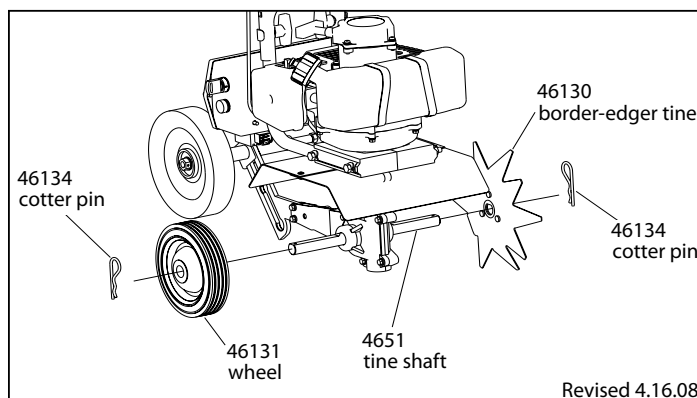
EK43 BORDER-EDGER KIT INSTALLATION (OPTIONAL ACCESSORY)

The Border-Edger Kit is a useful tool for making clean cuts in the lawn along the borders of gardens, flower beds, walkways, and driveways for a well manicured look. To install the Border-Edger Kit, do the following:

1. Disconnect spark plug wire from spark plug.
2. Remove the cotter pins from both sides of the tine shaft.
3. Remove the cultivating tines from the shaft, remembering which direction they are facing.
4. Put the tines in a safe place and save the (2) cotter pins, they will be used on the Border-Edger Kit.
5. Slide the Border-Edger attachment on either side of the tine shaft. Make sure that the hub collar of the border edger tine faces outward, away from the transmission of the mini-cultivator.
6. Put (1) cotter pin, flat side facing edger attachment, through the shaft hole that is further down the shaft from the hole where the cultivating tines were placed.
7. Slide the wheel on the opposite tine shaft.
8. Insert the remaining cotter pin, flat side facing wheel, through the hole next to the wheel at the end of the tine shaft.
9. Re-connect spark plug wire.
10. Before using the Border-Edger Kit, remove the drag stake from the unit.
11. Set the mini-cultivator wheels to their highest (top) position.

CAUTION

BE AWARE THAT THE MINI-CULTIVATOR COULD UNEXPECTEDLY BOUNCE UPWARD, OR JUMP FORWARD IF THE TINES STRIKE CONCRETE, PAVEMENT, OR OTHER HARD SURFACES OR HARD OBSTACLES BURIED UNDER GROUND.



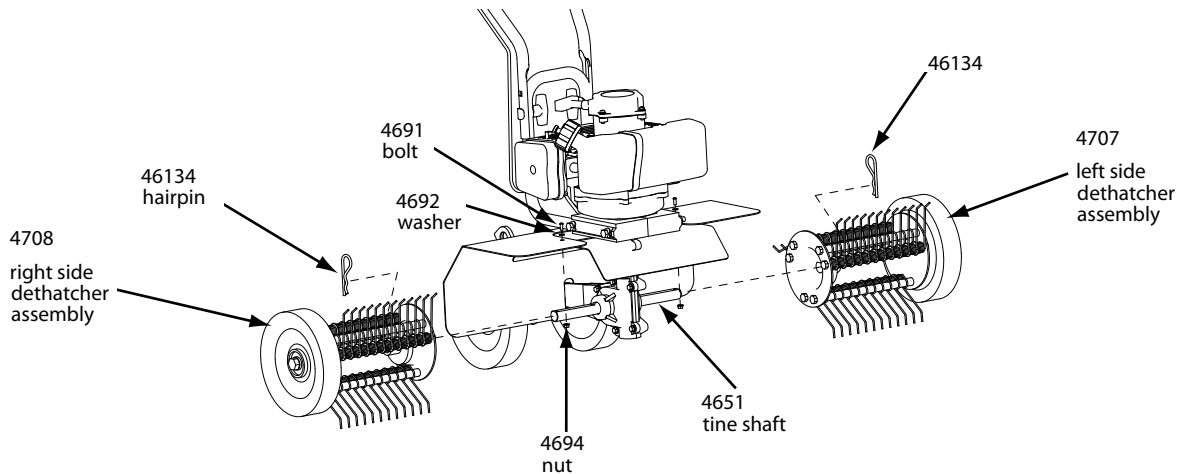
EK43 Border-Edger Attachment Kit (fits both Models MC43 & MC43E)

DK43 DETHATCHER KIT INSTALLATION (OPTIONAL ACCESSORY)

The Dethatcher Kit is very effective for lifting away the excessive matted layers of thatch that can prevent moisture, oxygen and nutrients from penetrating the soil and can harbor disease and insects. Use in Spring, Summer, and Fall to bring life and color back to your lawn.

1. Disconnect spark plug wire from spark plug. Remove the cultivating tines (if so equipped). Refer to exploded view below for detailed assembly.
2. Slide the Left and Right Dethatcher Assemblies onto the tine shaft making sure the Right Assembly is installed on the right side and Left Assembly is installed on the left side as defined from the user's position.
3. Secure dethatcher assemblies using the hairpins (46134).
4. Slide dethatcher shield over the unit's tine shield from the rear of the unit and secure using bolts (4694), washers (4692), and nuts (4694).
5. Secure the lower part of the dethatcher shield to the drag stake mount using the detent pin (46145). Re-connect spark plug wire.
6. Install wheel extension plate (4676) using additional bolts (46142) and nuts (4650).

NOTE: The drag stake should not be used when using the dethatcher kit.



DK43 Dethatcher Kit (fits both Models MC43 & MC43E or stand-alone as MD43)

