



Parts Manual



Walk Behind Mower

Models

Mfg. No.	Description
7800864	EM2045, 4.5GT 20" Walk Behind Mower, CE (2012)
7800888	MD20450FC, 4.5GT 20" Walk Behind Mower, CE (2012)

Manual Part No. 1754788

Revision -

Rev. Date: 3/5/2012

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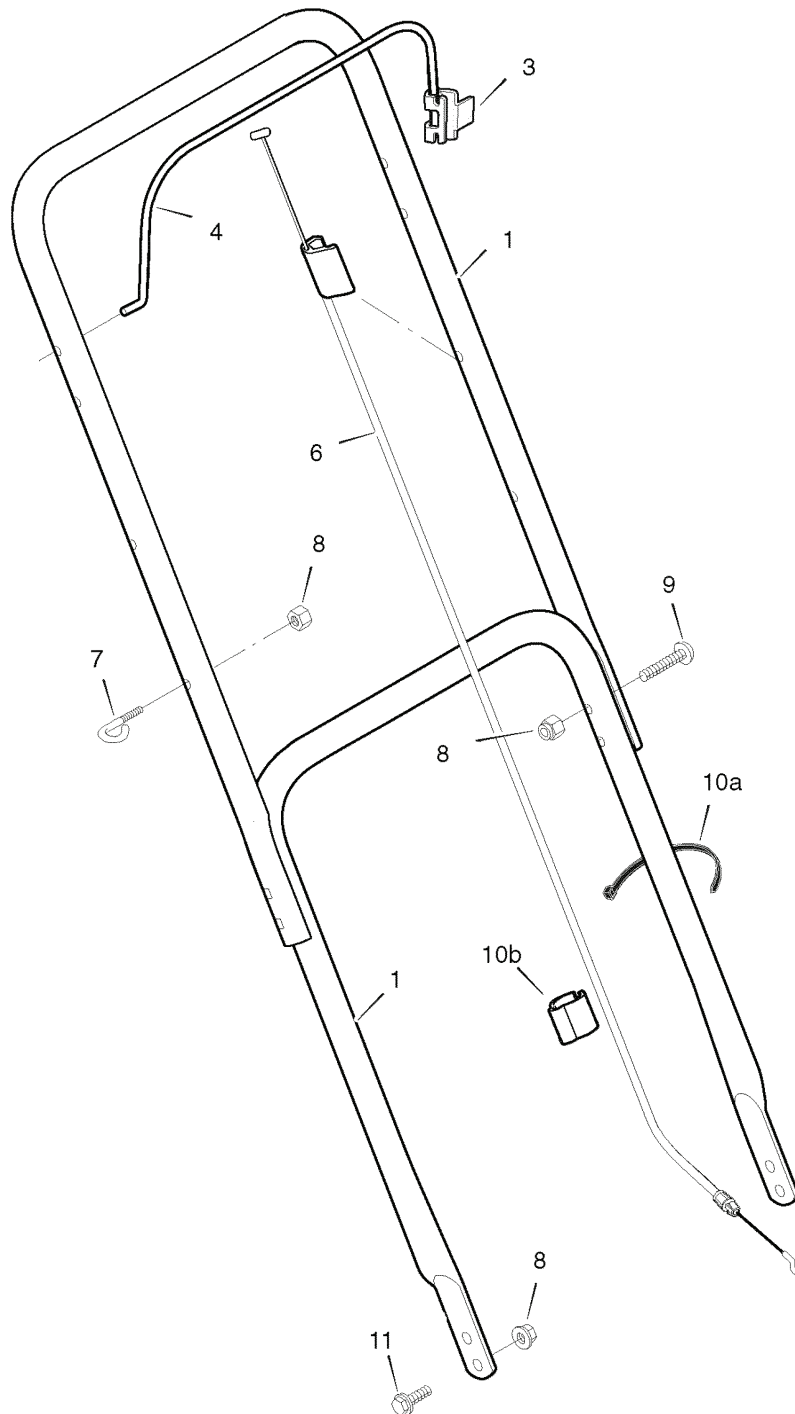
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Handle Assembly

7800711ha

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

7800864 - EM2045

7800888 - MD20450FC

Handle Assembly

REF NO	PART NO.	QTY.	DESCRIPTION
1	7301150AYP	2	HANDLE
3	1101454E701MA	1	BRACKET, Stop Lever
4	7104326AYP	1	LEVER, Stop
6	1101093MA	1	CABLE, Stop
7	043956MA	1	GUIDE, Rope
8	1908125MA	9	NUT, Hex Nylock, 1/4-20
9	7090947YP	4	BOLT, Carriage, Short Neck, 1/4-20 x 1-3/8
10a	7024641YP	2	WIRE TIE, 5.5"
10b	1101352MA	1	CLIP, CABLE
11	1931317SM	4	BOLT, Carriage, Short Neck, 1/4-20 x 3/4, G5

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Footnotes

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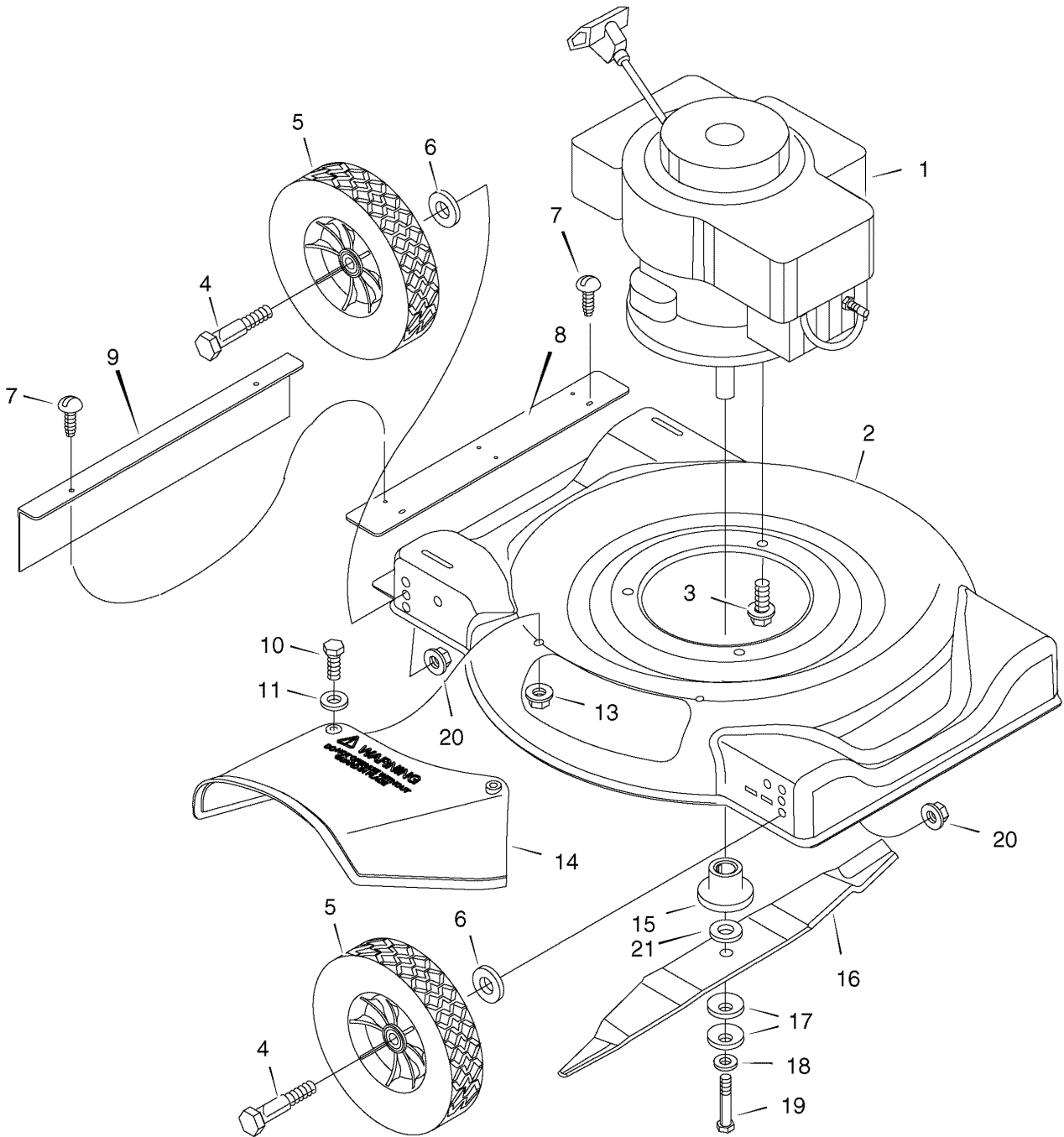
7800864 - EM2045

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Deck & Engine Group

7800711dk

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

7800864 - EM2045

7800888 - MD20450FC

Deck & Engine Group

REF NO	PART NO.	QTY.	DESCRIPTION
1	09T502-3121-H1	1	* ENGINE, 450 Series, Briggs & Stratton (Engine Model: 09T502-0121-B1) (Used on EM2045)
1	09L602-0110-F1	1	* ENGINE, 450 Series, Briggs & Stratton (Engine Model: 09L602-0110-F1) (Used on MD20450FC)
2	-----	1	HOUSING, 20"
3	7090324SM	3	CAPSCREW, Hex Washer Head, Self Tap, 3/8C x 1
4	009X10MA	4	BOLT, Shoulder, 3/8-16 x 2
5	7101738YP	4	WHEEL, 6 x 1.50 (Used on EM2045)
5	7102068YP	4	WHEEL, 7 x 1.50 (Used On MD20450FC)
6	17X168ZMA	4	WASHER, Flat, 3/8
7	26X245MA	2	CAPSCREW, Hex Washer Head, SEMS, #10 x 1/2
8	7300714YP	1	EXTENSION
9	671912MA	1	GUARD, Rear
10	01X121MA	2	BOLT, Hex, 1/4-20 x 3/4
11	017X37MA	2	WASHER, 1/4
13	1908125MA	2	NUT, Hex Nylock, 1/4-20
14	671929MA	1	DEFLECTOR
15	071056MA	1	ADAPTER, Blade
16	042785E701MA	1	BLADE, 20"
17	17X137MA	2	WASHER, Blade
18	1918266SM	1	WASHER, 3/8
19	01X142MA	1	BOLT, Hex, 3/8-24 x 1-1/2
20	1499MA	4	NUT, Hex Flange, Serrated, 3/8-16
21	17X191MA	1	WASHER, Plain, .40

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Footnotes

Note* To verify your specific engine model, please reference the ID Tag located on your engine. See your local Briggs & Stratton distributor for parts and service.

The above parts group applies to the following Mfg. Nos.:

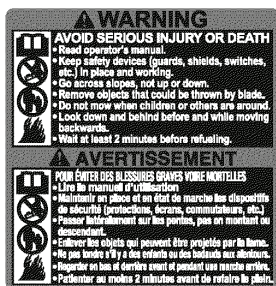
7800864 - EM2045

7800888 - MD20450FC

Decal Group

7800864dc1

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.



7



4



6



5



2



1



3

The above parts group applies to the following Mfg. Nos.:

7800864 - EM2045

7800888 - MD20450FC

Decal Group

REF NO	PART NO.	QTY.	DESCRIPTION
1	7029782MA	1	DECAL, OPC BAIL
2	7104063YP	1	DECAL, 450 Series
3	7102124YP	1	DECAL, Logo, Deck (Used on EM2045)
3	7102124YP	1	DECAL, Logo, Deck (Used on MD2045FC)
4	7101084YP	1	DECAL, Warning, Multi Panel (Used on EM2045)
5	7101495YP	1	DECAL, CPSC, FR / NG (Used on MD2045FC)
6	7103405YP	1	DECAL, Danger, FR / ENG (Used on MD2045FC)
7	7103406YP	1	DECAL, Warning, FR / ENG (Used on MD2045FC)

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Footnotes

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7800864 - EM2045

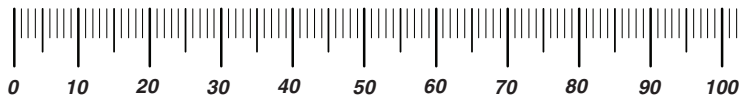
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Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	5.6		8.8		10.9		12.9	
	Class 5.6		Class 8.8		Class 10.9		Class 12.9	
Size Of Hardware	in/lbs		in/lbs		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	ft/lbs	Nm.	ft/lbs	Nm.
M3	5.88	.56	13.44	1.28	19.2	1.80	22.92	2.15
M4	13.44	1.28	30.72	2.90	43.44	4.10	52.56	4.95
M5	26.4	2.50	60.96	5.75	5.97	8.10	7.15	9.7
M6	44.64	4.3	7.3	9.9	10.3	14	12.1	16.5
M7	5.2	7.1	12.1	16.5	16.9	23	19.9	27
M8	7.7	10.5	17.7	24	25	34	29	40
M10	15	21	35	48	50	67	59	81
M12	26	36	61	83	86.2	117	103	140
M14	42	58	101	132	136	185	162	220
M16	64	88	147	200	210	285	250	340
M18	89	121	202	275	287	390	346	470
M20	126	171	290	390	405	550	486	660
M22	169	230	390	530	559	745	656	890
M24	217	295	497	375	708	960	840	1140
M27	320	435	733	995	1032	1400	1239	1680
M30	435	590	995	1350	1401	1900	1681	2280
M33	590	800	1349	1830	1902	2580	2278	3090
M36	759	1030	1740	2360	2441	3310	2935	3980
M39	988	1340	2249	3050	3163	4290	3798	5150

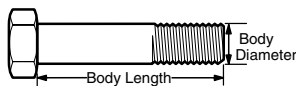
The guides and ruler furnished below are designed to help you select the appropriate hardware.



Nut, M8

Thread Diameter (mm)
Inside Diameter (in)
Threads per inch

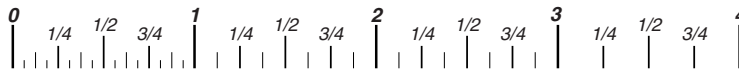
Nut, 1/2-16



Screw, M8- 1.25 x 25

Thread Diameter (mm)
Body Diameter
Distance between threads (mm)
Threads per inch
Body Length (mm)
Body Length (in)

Screw, 1/2- 16 x 2



Standard Hardware Sizing

When a washer or nut is identified as **1/2"** (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

When bolt or capscrew is identified as **1/2 - 16 x 2"** (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*1.25 thread diameter*). The final number is the body length of the bolt or screw, 2 inches (50mm).

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks		SAE Grade 5		SAE Grade 8	
	SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	29	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
 - for prevailing torque locknuts - use 65% of grade 5 torques.
 - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Common Hardware Types

Hex Head Capscrew



Washer



Lockwasher

Carriage Bolt



Hex Nut

Wrench & Fastener Size Guide

1/4" Bolt or Nut Wrench—7/16"	5/16" Bolt or Nut Wrench—1/2"	3/8" Bolt or Nut Wrench—9/16"	7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16"	1/2" Bolt or Nut Wrench—3/4"
M6 Bolt or Nut Wrench—10mm	M8 Bolt or Nut Wrench—13mm	M10 Bolt or Nut Wrench—17mm	M12 Bolt or Nut Wrench—19mm	M14 Bolt or Nut Wrench—22mm



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