



Parts Manual

Mfg. No: 228510X99B
Walk-Behind Mower (2005)

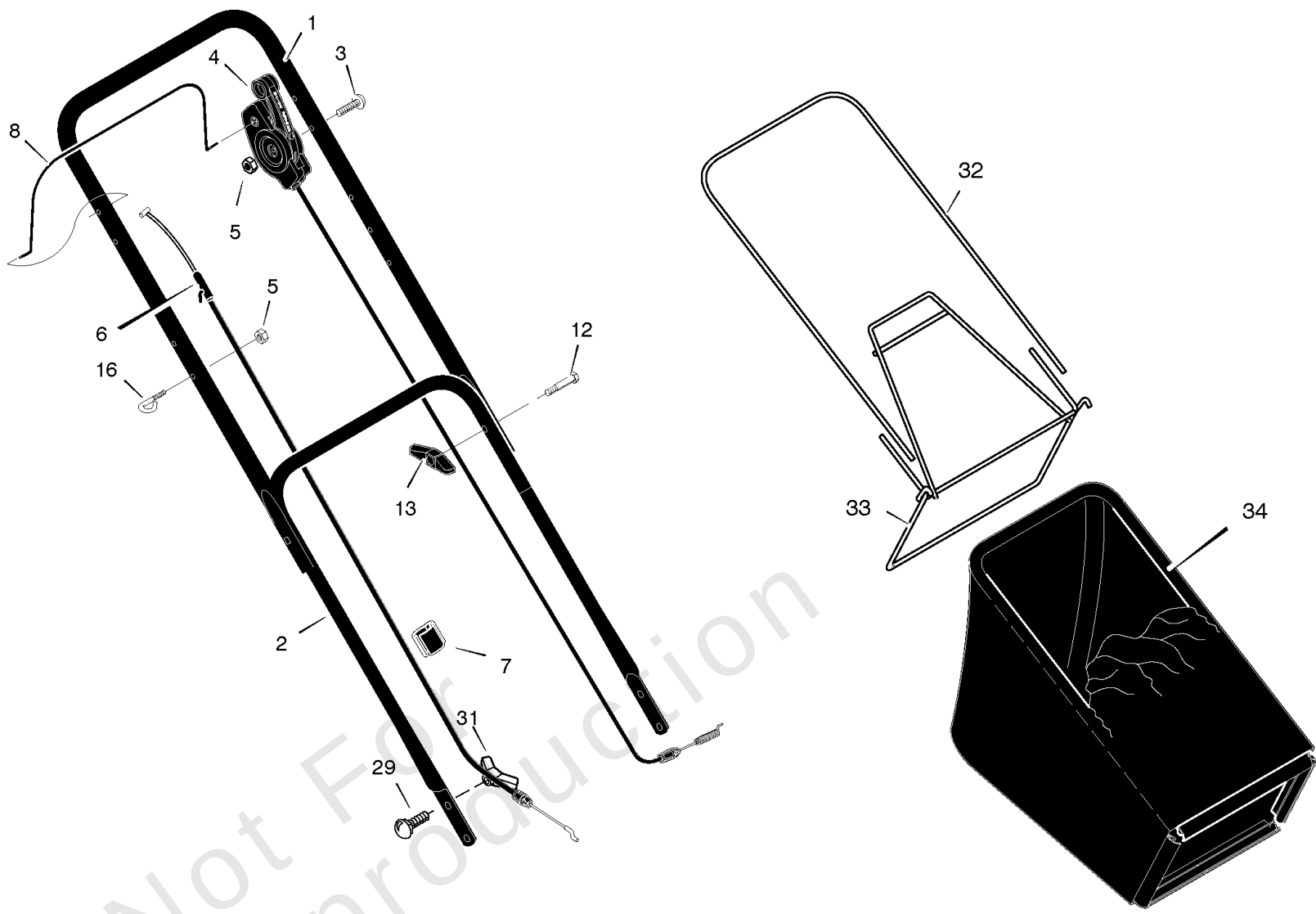
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Handle & Bag Assembly

Note: Unless noted otherwise, use the standard torque specifications

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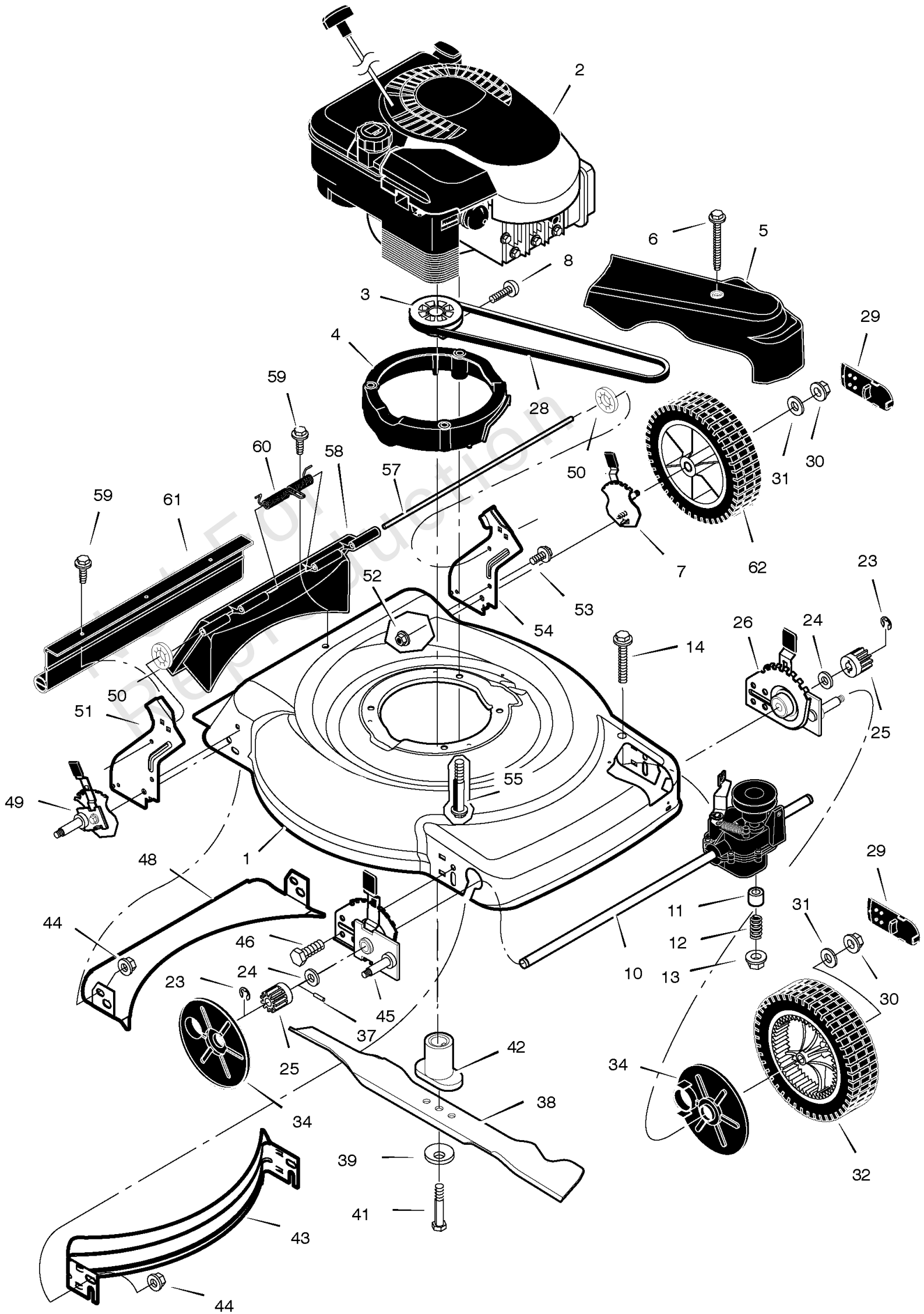
Handle & Bag Assembly

REF NO	PART NO	QTY	DESCRIPTION
1	1101557E724		Handle, Upper (Gray)
2	1102089E724		Handle, Lower (Gray)
3	025X14MA		Bolt
4	1101670MA		Control, Drive
5	15X116MA		Locknut
6	1101365MA		Cable, Stop (Briggs)
7	1101353MA		Fastener, Double Cable
8	1101076E701MA		Lever, Stop
12	002X77MA		Bolt
13	071294		Knob
16	071530MA		ROPE GUIDE-UPPER
29	002X81MA		Bolt, Carriage
31	071495MA		Knob, Plastic
32	1101075MA		Tube, Bag
33	1101074MA		Frame Assembly
34	1101005MA		Bag, Cloth

Mower Housing Assembly

Note: Unless noted otherwise, use the standard torque specifications

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Mower Housing Assembly

REF NO	PART NO	QTY	DESCRIPTION
1	7501041		Housing
2	-----		Engine *
3	1101653MA		Pulley, Drive
4	1101640		Spacer, Engine -(Gray)
5	1101568MA		Cover, Belt (Gray)
6	26X304MA		Screw
7	672605MA		Adjuster, Left Rear Height
8	26X303MA		Screw
10	1101571MA		Transmission *
11	043844MA		Spacer
12	164X27MA		Spring, Compression
13	015X88MA		Nut
14	01X156MA		Bolt
23	011X16MA		E-Ring
24	17X186MA		Washer
25	071792MA		Gear, Pinion
26	1101029		Adjuster, Left Front Height
28	37X123MA		Belt
29	672122MA		Cap, Hub
30	015X84MA		Nut, Flange
31	17X169MA		Washer
32	071133MA		Wheel & Tire, Front
34	071780MA		Cover, Dust
37	043629MA		Pin, Drive
38	1101823E701MA		Blade
39	1101989MA		Washer, Belleville
41	01X144MA		Bolt
42	1101826		Adapter, Blade
43	672915E700		Baffle, Front -(Included with Ref. No. 1)
44	015X68MA		Nut, Flange
45	1101028MA		Adjuster, Right Front Height
46	001X85MA		Bolt
48	672916E700		Baffle, Rear -(Included with Ref. No. 1)
49	672604MA		Adjuster, Right Rear Height
50	028X49MA		Retainer, Push -(Included with Ref. No. 58)
51	1101238E701MA		Bracket, Right Handle
52	015X79MA		Nut, Flange
53	001X45MA		Bolt
54	1101239E701MA		Bracket, Left Handle
55	025X11MA		Bolt, Engine
57	215X21MA		Rod, Pivot -(Included with Ref. No. 58)
58	1101071MA		Door, Rear (Gray)
59	26X245MA		SCREW-#10X.5 B W/WAS
60	166X44MA		Spring -(Included with Ref. No. 58)

Footnotes:

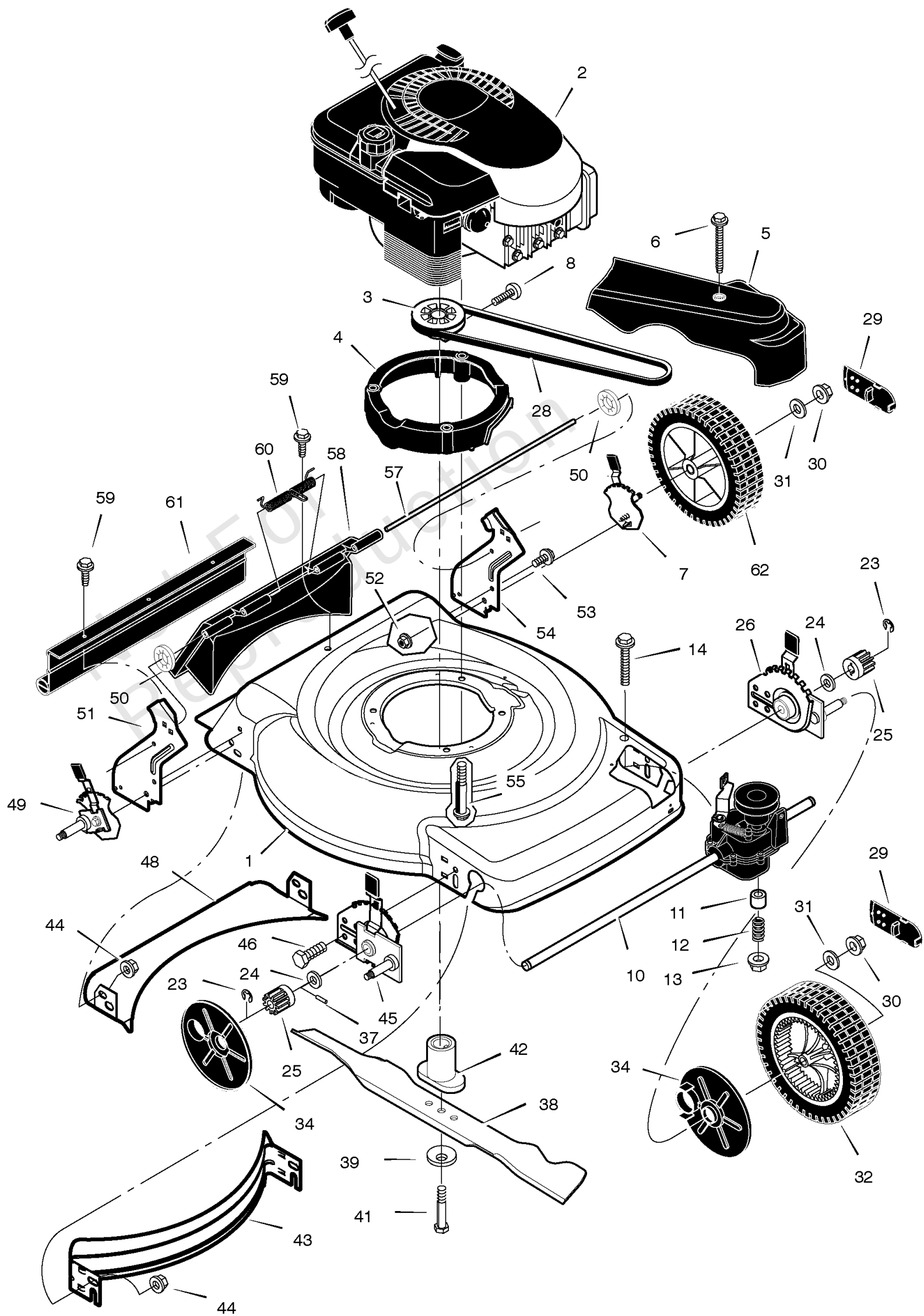
Note* There are no internal serviceable parts for the transmission.

Note* For Information on Replacement Parts for this engine contact the Manufacturer.

Mower Housing Assembly

Note: Unless noted otherwise, use the standard torque specifications

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Mower Housing Assembly

REF NO	PART NO	QTY	DESCRIPTION
61	1101105MA		Guard, Rear
62	071132MA		Wheel & Tire, Rear
--	F-050408L		Book, Instruction

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Footnotes:
Note* There are no internal serviceable parts for the transmission.
Note* For Information on Replacement Parts for this engine contact the Manufacturer.

Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	 Class 5.6		 Class 8.8		 Class 10.9		 Class 12.9	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs 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.



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*, (*distance between threads*). 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	 SAE Grade 2		 SAE Grade 5		 SAE Grade 8	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs 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



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

