



# Parts Manual

Mfg. No: 1696871-00  
SX DSS82, 82V Battery Electric Snow



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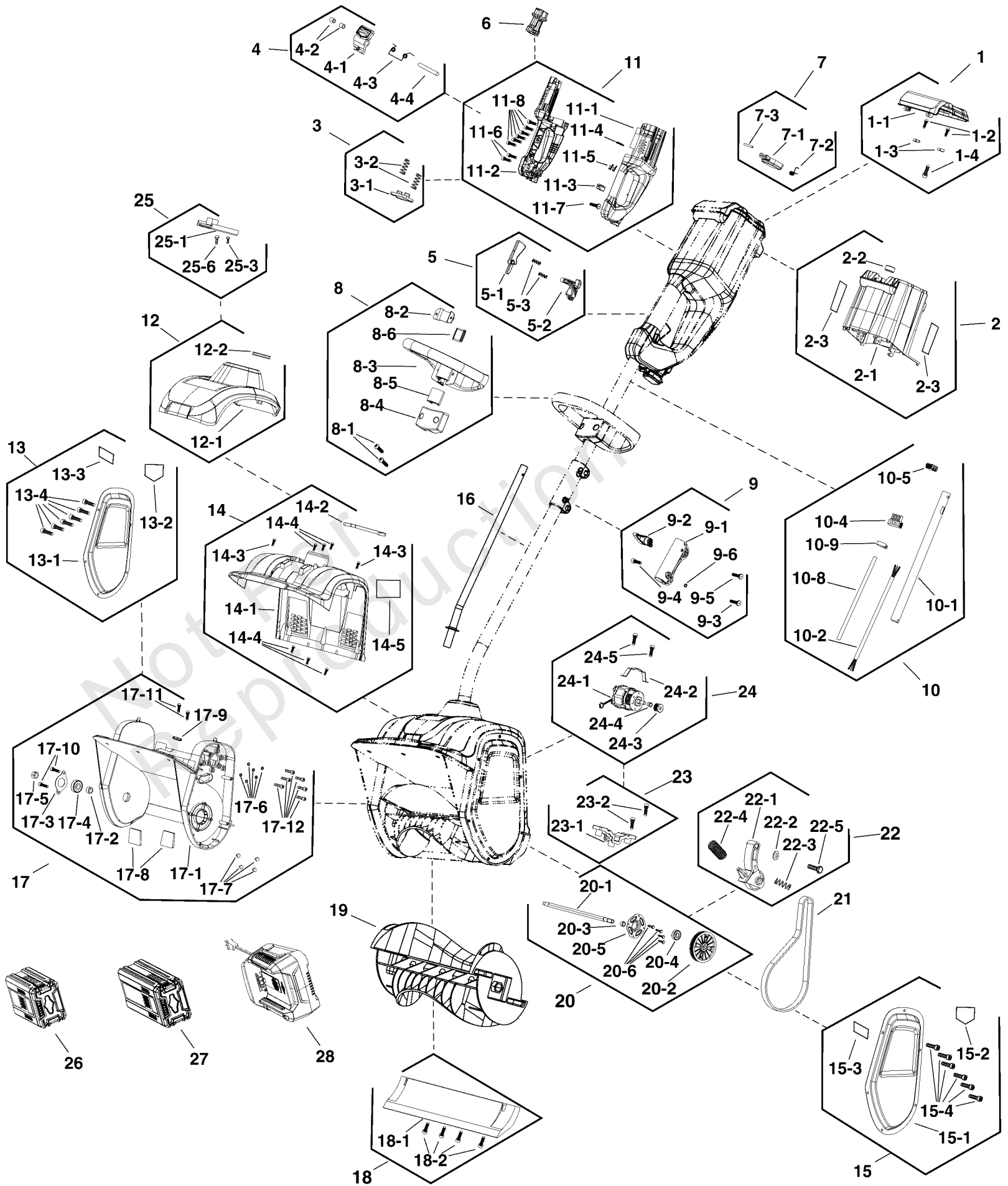
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Not For  
Reproduction

# Snow Shovel

Note: Unless noted otherwise, use the standard torque specifications

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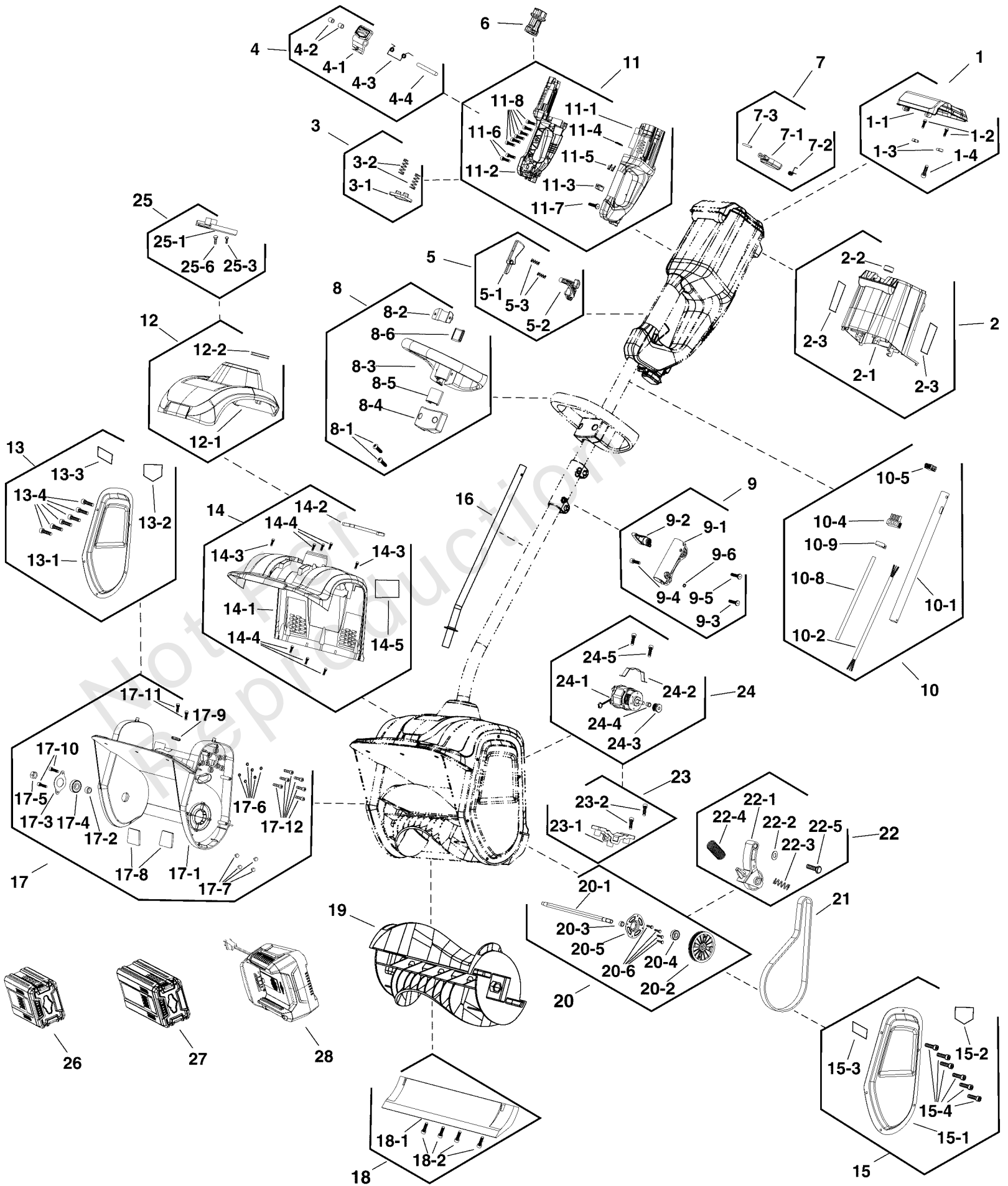
## Snow Shovel

REF NO	PART NO	QTY	DESCRIPTION
1	771076	1	KIT, BATTERY COVER
1-1		1	BATTERY COVER
1-2		2	SCREW ST4.2-12
1-3		2	PIN
1-4		1	SCREW
2	771077	1	KIT, HANDLE COVER
2-1		1	HANDLE COVER
2-2		1	MAGNET
2-3		2	LABEL
3	771078	1	KIT, BATTERY SPRING
3-1		1	SPRING SEAT
3-2		2	COMPRESSED SPRING
4	771079	1	KIT, BATTERY RELEASE
4-1		1	BATTERY RELEASE BUTTON
4-2		2	AXLE SLEEVE
4-3		1	SPRING
4-4		1	PIN
5	771080	1	KIT, SWITCH
5-1		1	TRIGGER SWITCH
5-2		1	LOCK-OUT BUTTON
5-3		2	LOCK-OUT SPRING
6	596798	1	SET, Key
7	771082	1	KIT, KEY COVER
7-1		1	KEY COVER
7-2		1	KEY COVER TORSION SPRING
7-3		1	CYLINDRICAL PIN
8	771083	1	KIT, AUXILIARY HANDLE
8-1	CM-32201836	2	SCREW
8-2		1	CLAMP
8-3		1	AUXILIARY HANDLE
8-4		1	AUXILIARY HANDLE COVER
8-5		1	RUBBER RING
8-6		1	PAD
9	771084	1	KIT, COUPLING
9-1		1	PIPE
9-2		1	ROTARY KNOB
9-3	CM-32201155	1	SCREW
9-4		1	BOLT
9-5		1	SCREW
9-6		1	SPRING WASHER
10	771101	1	KIT, HARNESS
10-1		1	UPPER PIPE
10-2		1	FIVE-CORE CABLE
10-4		1	CHARGER, SOCKET
10-5		1	SWITCH
10-8	CM-341031418	1	BELLOW
10-9		1	CLIP
11	771086	1	KIT, HANDLE
11-1		1	LEFT HANDLE
11-2	CM-341041726C	1	RIGHT HANDLE
11-3	CM-341131337	1	KEY HOLDER

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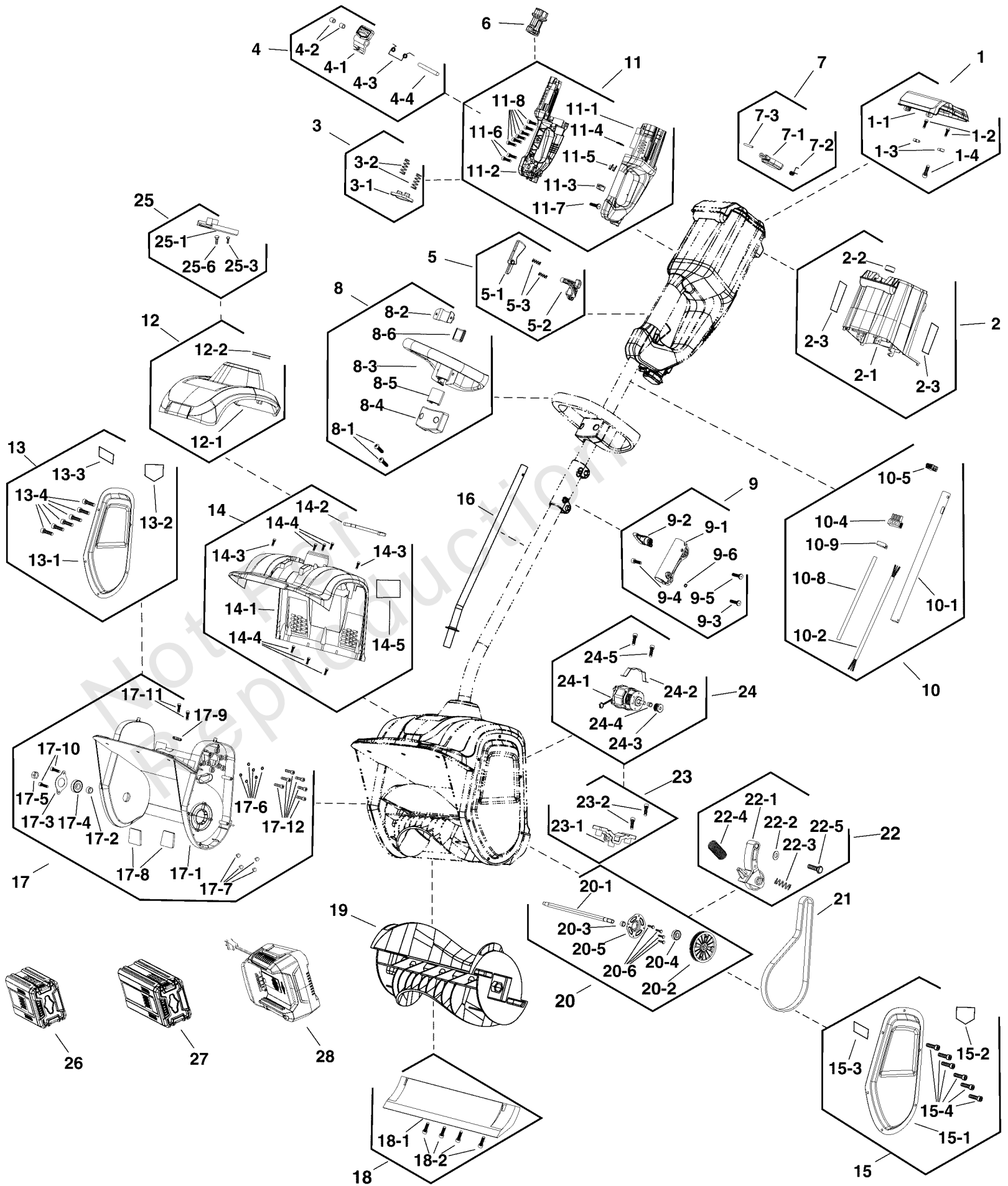
## Snow Shovel

REF NO	PART NO	QTY	DESCRIPTION
11-4	CM-341141337	1	KEY HOLDER PLATE
11-5		2	80V FEMALE INSERT
11-6		2	ST4.2-30 SCREW
11-7		1	SCREW ST4.2-16
11-8		6	ST4.2-16 SCREW BLACK
12	771087	1	KIT, CAP
12-1		1	RAIN CAP
12-2		1	SEAL RING
13	771102	1	KIT, LEFT COVER
13-1		1	LEFT SIDE COVER
13-2		1	WARNING LABEL
13-3		1	LABEL
13-4		6	SCREW ST4.2-12 -Z
14	771103	1	KIT, UPPER HOUSING
14-1		1	UPPER HOUSING
14-2		1	SEALING STRIP
14-3		2	SCREW ST4.2-12
14-4		6	ST4.2-16 SCREW BLACK
14-5		1	LABEL
15	771104	1	KIT, RIGHT COVER
15-1		1	RIGHT SIDE COVER
15-2		1	WARNING LABEL
15-3		1	LABEL
15-4		6	SCREW ST4.2-12
16	771091	1	KIT, LOWER TUBE
17	771092	1	KIT, LOWER HOUSING
17-1		1	LOWER HOUSING
17-2	CM-332021468	1	SPACER
17-3		1	BEARING PLATE
17-4		1	BEARING
17-5		1	NUT
17-6		6	SPRING WASHER
17-7	CM-342021468	4	PLUG
17-8		2	SPONGE
17-9		1	CLAMP
17-10		5	SCREW ST4.2-12
17-11		2	ST4.2-16 SCREW BLACK
17-12	CM-3220575	6	SCREW M5-10
18	771093	1	KIT, SCRAPER
18-1	CM-341041468	1	SCRAPER
18-2		4	ST4.2-16 SCREW BLACK
19	771094	1	KIT, AUGER
20	771095	1	KIT, IMPELLER SHAFT
20-1		1	IMPELLER SHAFT
20-2	CM-341051468	1	BELT PULLEY
20-3	CM-332021468	1	SPACER
20-4		1	BEARING
20-5		1	BEARING FIXED PLATE
20-6	CM-3220401	4	SCREW
21	771096	1	KIT, BELT

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## Snow Shovel

REF NO	PART NO	QTY	DESCRIPTION
22	771097	1	KIT, TENSION PULLEY
22-1	CM-3111198	1	TENSION PULLEY
22-2		1	GASKET
22-3		1	SPRING
22-4		1	COMPRESSED SPRING
22-5		1	SCREW
23	771098	1	KIT, MOTOR SUPPORT
23-1	CM-341101205	1	MOTOR SUPPORT
23-2		2	ST4.2-16 SCREW BLACK
24	771099	1	KIT, MOTOR
24-1		1	MOTOR
24-2		1	BRACKET
24-3	CM-3320399-12	1	PULLEY
24-4		1	MOTOR GASKET
24-5		2	ST4.2-16 SCREW BLACK
25	771100	1	KIT, PCB
25-1		1	PCB
25-3		1	SCREW ST4.2-12
25-6		1	ST4.2-16 SCREW BLACK
26	1760266	1	BATTERY, 2AH, NA -(Option)
27	1760265	1	BATTERY, 4AH, NA -(Option)
28	1760263	1	CHARGER, RAPID, NA -(Option)
--	770294	1	REMOTE BELT FOR BATTERY -(Not Shown)

# 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	Nm.	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs		ft/lbs	
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

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	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs	
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

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

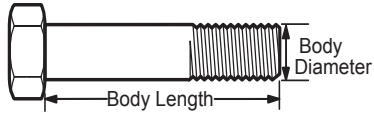


Nut, M8

Thread Diameter (mm)

Inside Diameter (in)      Threads per inch

Nut, 1/2-16

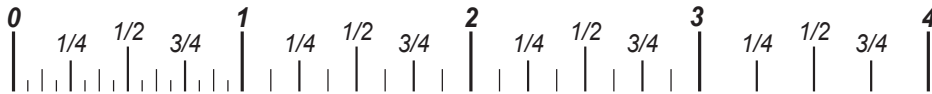


Screw, M8- 1.25 x 25

Thread Diameter (mm)      Distance between threads (mm)      Body Length (mm)

Body Diameter      Threads per inch      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).

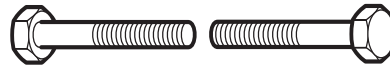
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

## NOTES

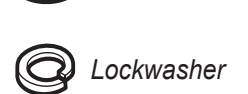
- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
  - for prevailing torque locknuts - use 65% of grade 5 torques.
  - for flange whizlock 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



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

