



The Toro Company

UN 38.3 Lithium Ion Battery Test Summary

Cell, Battery or Product Model Number

Item number: 88640 [also may be shipped under part number 139-9800]

Item description: BATTERY-LI ION, 60V 4.0 AH [216Wh]

Cell, battery or product manufacturer's contact information

Name: The Toro Company

Address: 8111 Lyndale Avenue South

City: Bloomington **State:** Minnesota **ZIP:** 55420-1196 **Country:** USA

Telephone: (952) 888-8801

Email: HealthandSafety@toro.com

Website: <https://www.toro.com/>

Test Laboratory

Name: Shanghai Research Institute of Chemical Industry Testing

Address: No. 345 East Yun Ling Road

City: Shanghai **State:**

ZIP: 200062

Country: P. R. China

Cell or Battery Description

Cell or Battery: 60 V / 4.0 Ah

Cell or Battery Type: Lithium Ion

Watt-hour Rating or Lithium Content: 216 Wh

Complete Cell or Battery Weight: 2157 g

Serial range	Test Report #	Report date
321001541 and up	1120040213	5/20/2020
Up to 321001540	1119070024	8/9/2019

Physical Description: Red cover w/ black handle. cells (green color) 15 series / 2 parallel

Finished Assembly: W: 151 mm H: 203 mm L: 86 mm

List of Tests Completed

YES	NO		Pass	Fail	Additional comments (or indicate compliance with other stds.)
X		Test T.1: Altitude simulation	X		38.3.4.1 T1
X		Test T.2: Thermal test	X		38.3.4.2 T2
X		Test T.3: Vibration	X		38.3.4.3 T3
X		Test T.4: Shock	X		38.3.4.4 T4
X		Test T.5: External short circuit	X		38.3.4.5 T5
X		Test T.6: Impact/Crush	X		38.3.4.6 T6
X		Test T.7: Overcharge	X		38.3.4.7 T7
X		Test T.8: Forced discharge	X		38.3.4.8 T8
Assembled Battery Testing requirements:					Per 38.3.3 (f)
Revision level and Amendments of UN Manual:					UN Manual Test and Criteria Revision 6, Amendment 1

Signature with name and title of signatory as an indication of the validity of information provided:

Rolfe Otterness, Principal Standards Engineer, The Toro Company

Date: January 8, 2021