

ELECTRIC START KIT



P/N 2879330

APPLICATION

All Polaris Pro-Ride Snowmobiles

BEFORE YOU BEGIN

Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

KIT CONTENTS

This Kit includes:

REF	QTY	PART DESCRIPTION	PART NUMBER
1	1	Stud Plate Assembly	1017181
2	1	Weld Battery Box	1017182
3	1	Battery Box Bracket Assembly-Model: RMK	1017775
4	1	Battery Box Bracket Assembly- Models: Switchback Assault/RMK 600 144	1017820
5	1	Stud Plate Assembly, 60.96mm	1017255
6	1	Pinion/Pinion Bracket Assembly	1204372
7	1	Drive Clutch Assembly, ES	1323088-SP
8	1	Harness ES, DC-SDI Rush	2411513
9	1	Circuit Breaker, 12 amp	2411592
10	1	Cable, Battery/Solenoid	2460393
11	1	Switch, Magnetic	4012358
12	1	Red Cable, 1045mm	4013289
13	1	Black Cable, 1335mm	4013290
14	1	Starter Motor Assembly	4012729
15	2	Hook- "D"	5224468
16	1	Bracket, Electric Start/ Clip	5252966
17	1	Bracket, Electric Start/ UCA Tube Upper	5254790
18	1	Bracket, Electric Start/ UCA Tube Lower	1018033
19	1	Shield-Heat Battery	5260401
20	1	Strap-Rubber	5410608
21	1	Shaft-Flex Starter	6230404
22	6	Cable Tie	7080138
23	1	Clamp-Band, Narrow 70-90mm	7081279
24	4	Nut, ¼-20 Nyloc	7542153

REF	QTY	PART DESCRIPTION	PART NUMBER
25	6	Nut, M6 X 1.0 Flange - Nyloc Olive	7547339
26	5	Rivet, 3/16	7661637
27	1	Tie Cable Press Mount Black	7080999
28	1	Screw HXFL M6 X 1 X 16	7518548
29	3	Screw M8 X 1.25 X 25	7518699
30	2	Screw M6 X 1 X 30	7518993
31	2	Bolt-M6 X 1.0 X 15, PH/TX	7518656
32	1	Foam-Seal, Rear Cooler	5810947
33	2	Strap Panduit 14"	7080761
34	1	Clip Routing	7670109
35	1	Nut 1/4-20 Hex-Y	7542105
36	1	Washer 1/4 Spring Lock-Y	7552801
37	4	Screw-TXTH-M5X 0.8X 15	7519113
38	1	Screw-HXFL-M8 X 1.25	7519243
49	1	Nut, M8 X 1.25 Flange	7547332
40	1	Bracket, Battery Box Front	1018527
	1	Instructions	9924156

TOOLS REQUIRED

- Battery (PN 4013045)
- Clutch Puller (PN 2872085)
- Strap Puller (PN 2870336)
- Spring Puller
- Flat Screwdriver
- Metric Socket Set
- Metric Wrench Set
- Torque Wrench
- Side Cutter
- Large Phillips Screwdriver
- Rivet Gun
- 6mm Allen Wrench or Short Allen Socket
- Master Repair Manual (MRM)

IMPORTANT

Your ELECTRIC START KIT is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

ASSEMBLY TIME

Approximately 90 minutes

INSTALLATION INSTRUCTIONS

⚠ WARNING

Battery electrolyte contains sulfuric acid and is poisonous! Serious burns can result from contact with the skin, eyes, or clothing. Avoid contact with electrolyte.

1. Order battery (PN 4012638).
2. Charge battery per instructions included with the battery.
3. Remove hood and both side panels.
4. Remove the exhaust pipe and silencer.
5. Verify unit is not in reverse.

NOTE

Driven clutch cover will not open if stopped in reverse mode.

6. Apply parking brake and remove drive belt.
7. Remove drive clutch per **MRM (Master Repair Manual)**.
8. Remove Y-pipe from engine using a 6mm Allen socket.
9. Install pinion and pinion bracket assembly ⑥. Torque bolts to below specification.

TORQUE

15 ft. lbs. (20.3 Nm)



10. Route cables ⑫ and ⑬ on outboard side of coolant bottle and under the recoil housing. Part number labels on battery cables should face towards the battery. Fasten cables with cable tie ⑫.



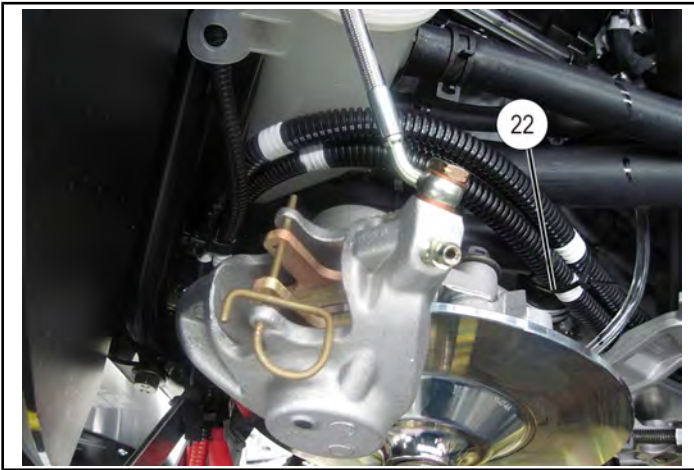
Pro RMK: Fasten cables around white tape marks as shown.



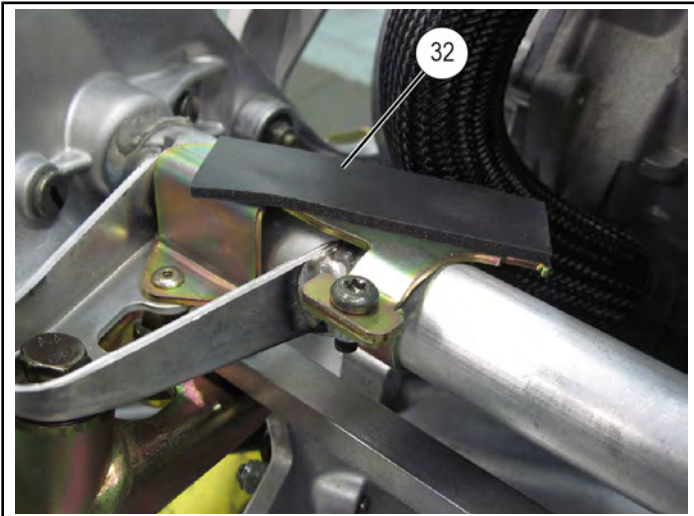
Switchback Assault; Base RMK: as shown.



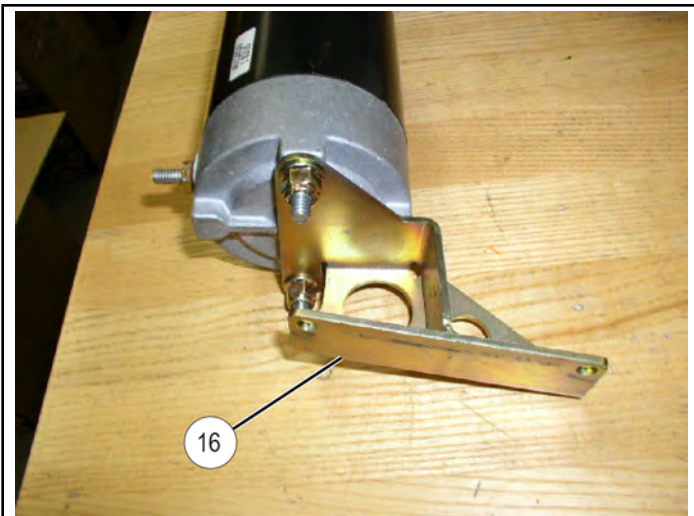
600 Rush; Switchback 136: as shown.



11. Install upper e-start bracket ⑰ and lower e-start bracket ⑱ on crosstube. Ensure that the brackets are tight to the tube before installing screws ⑳. Install third rivet to hole in steering frog support. Install foam pad ㉓ to top of bracket as shown.



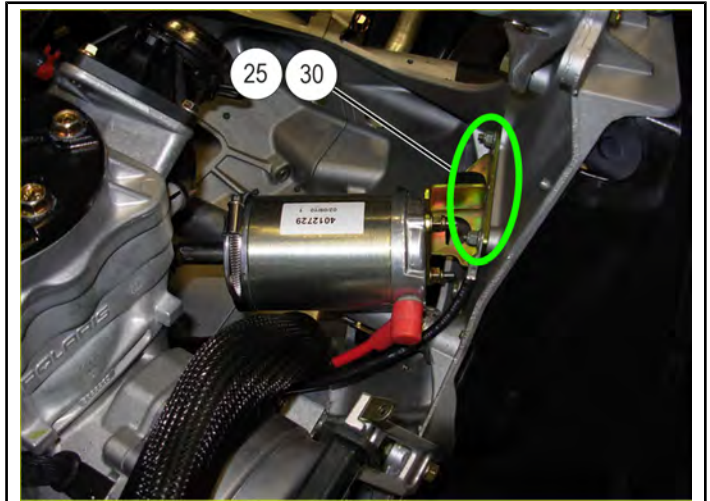
12. Install starter motor bracket (Bracket, Electric Start/Clip, ⑯) on end of starter as shown.



13. Install flex drive on starter drive assembly. Loosely install band clamp over starter motor.
14. Lay starter motor on e-start bracket. Install two 6mm bolts ㉔ and nuts ㉕ through side casting and starter motor bracket with nuts on inside toward starter motor.
15. Install black battery cable (PN 4012712) on rear 6mm starter motor bracket bolt and install nut. Torque both 6mm bolts to below specification.

TORQUE

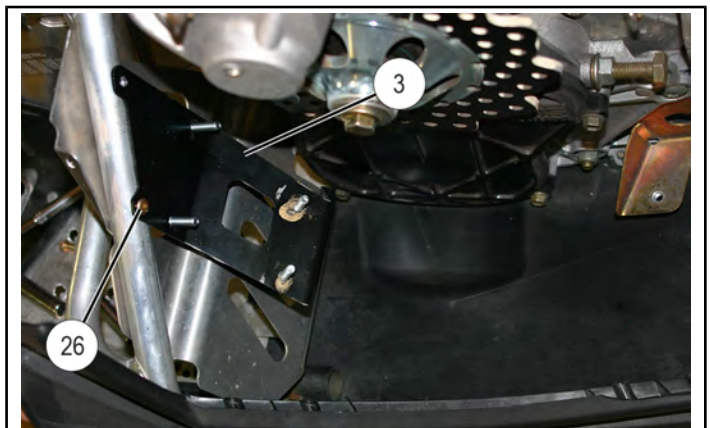
8 ft. lbs. (10.8 Nm)



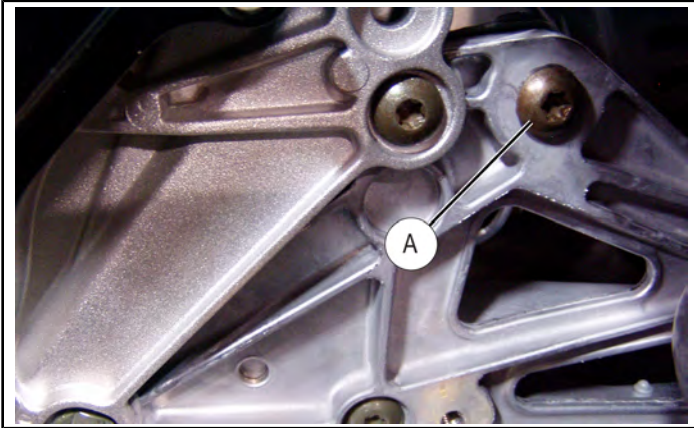
16. Tighten band clamp around starter motor and lower e-start bracket. Fasten red battery cable (PN 4012711) using washer ㉖ and nut ㉗ to starter motor terminal. Install protective cover.
17. **MY11-12 RMK:** Drill out two lower footrest rivets to mount bracket ③. Use four rivets ㉘ supplied in kit to mount bracket.

SWITCHBACK: Mount bracket ④ to footrest with four rivets ㉘.

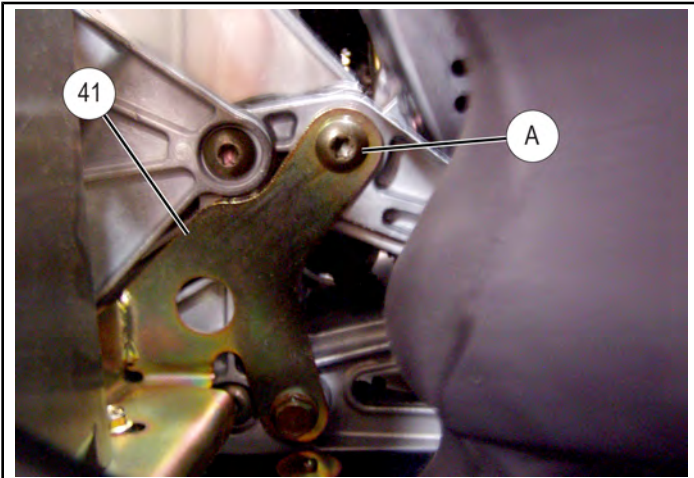
MY13 RMK: Use four screws ㉙ supplied in kit to mount bracket ③.



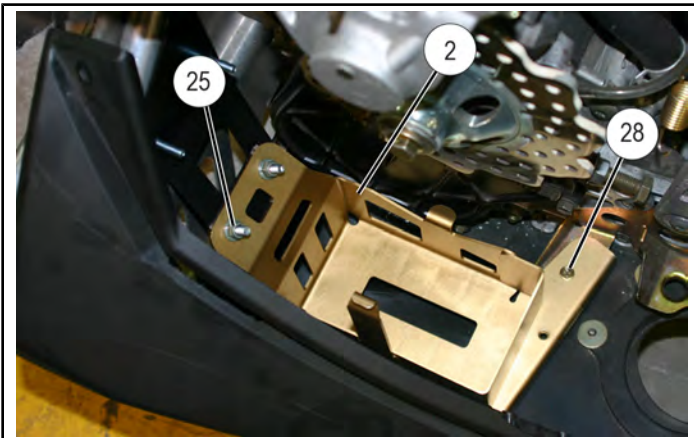
18. **MY13 RMK Only:** Remove and save screw (A) in bulkhead side casting.



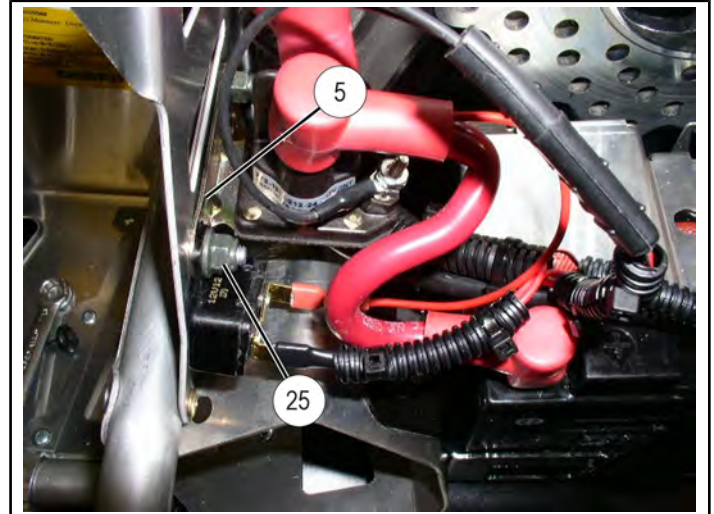
19. Install mount bracket (40), using the M8 screw (38), and nut (39) supplied in kit and screws (A) removed at Step 18.



20. Install battery box (2) as shown. Using two 6mm nuts (25), one 6mm screw (28) and stud plate (1).



21. Install stud plate (5). Mount solenoid switch and circuit breaker to stud plate using two nuts (25).

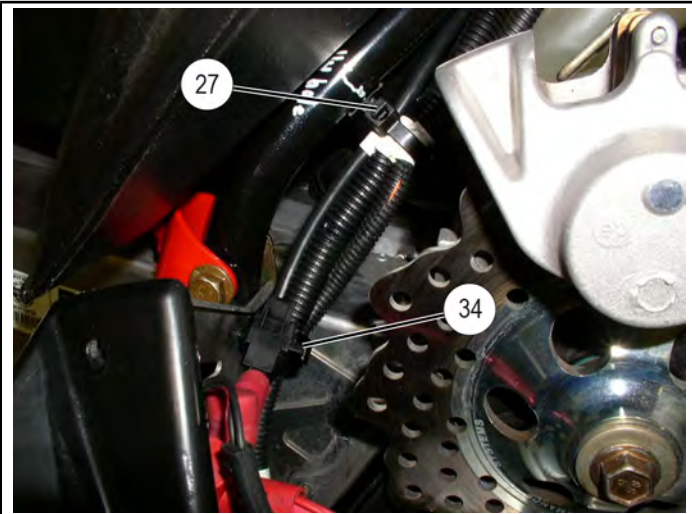


22. Connect e-start harness to connector at top right side of steering post casting. Install cable ties (2) in locations shown.

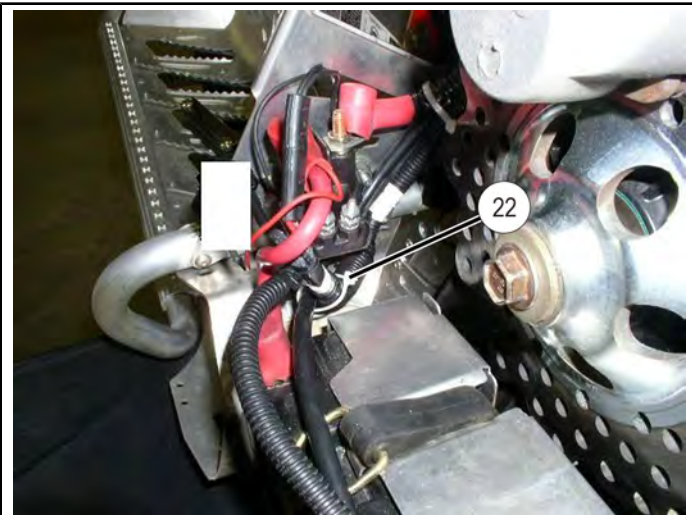


23. **Rush; Switchback 136:** Install cable tie ⑳ in 1/4" hole in right upright tube. Tie both battery cables and e-start harness ⑧ to upright tube using cable tie around tape mark.

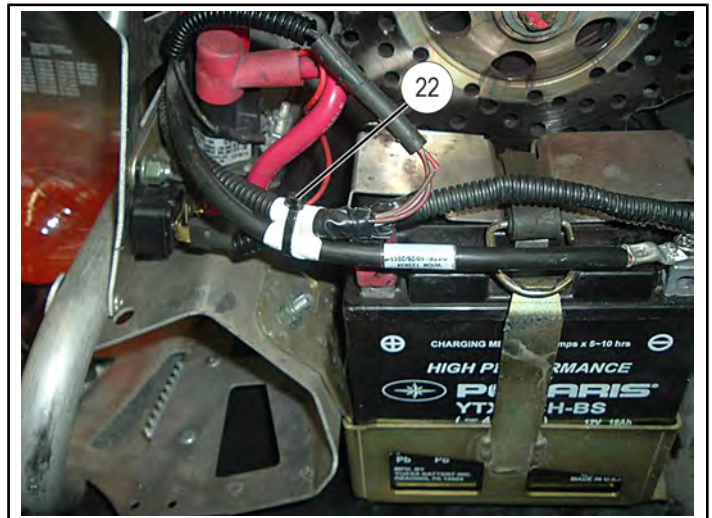
Install plastic clamp ㉔ in hole located at top inside corner of foot rest. Install both battery cables and e-start harness in clamp and close clamp.



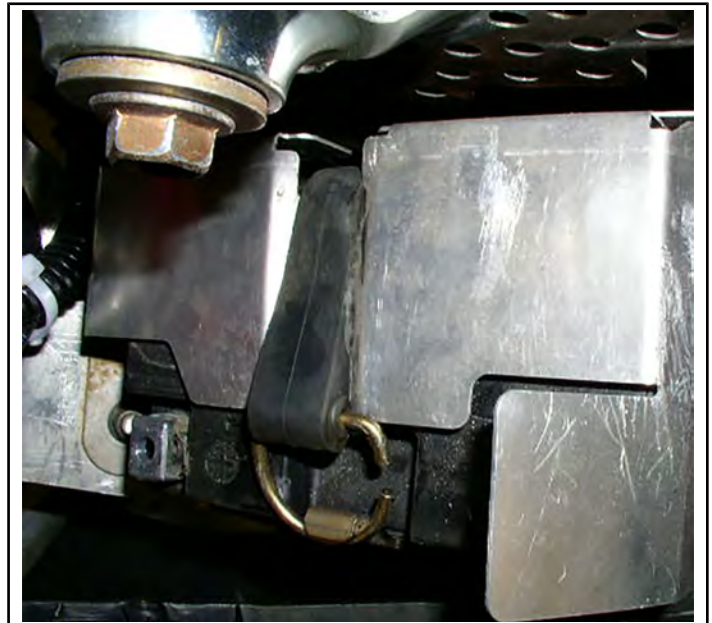
24. Connect e-start harness to solenoid switch and circuit breaker. Connect red battery cable to inside terminal of solenoid switch. Install protective cover over terminal. Tie e-start harness to black battery cable directly under solenoid with cable tie ㉒.



25. Route cables and wires as shown.



26. Install battery (PN 4013045) into battery box. Install battery heat shield with rubber tie down strap as shown.



27. Install short red battery cable ⑩ on outside terminal of starter solenoid and to positive terminal of battery as shown Step 21. Install protective covers. Connect end of small gauge wire to circuit breaker.

28. Install new E-start clutch and torque to specifications. Install belt, Y-pipe, exhaust pipe and resonator.

29. Install hood, connect hood electrical harness to chassis harness. Install side panels.