

ELECTRIC START KIT KIT PN 2873250



Application

2001 Polaris EDGE Models with 600 and 700 Domestic Engines

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.

The contents of this kit include:

| <u>Qty.</u> | <u>Part Description</u> | <u>Part No.</u> |
|-------------|------------------------------|-----------------|
| 1 | Battery Box (Black) | 1013256-067 |
| 1 | Battery | 4140006 |
| 1 | Cable (Battery/Solenoid) | 2460393 |
| 2 | Nylon locking nuts #10-24 | 7541925 |
| 1 | 16" Starter Cable (Red) | 4010190 |
| 1 | 11" Starter Cable (Black) | 4010114 |
| 2 | Small Insulator Cable (Red) | 5410346 |
| 1 | Bushing-Open/Close | 7080399 |
| 1 | Starter Assembly | 2410239 |
| 2 | Cable Tie | 7080138 |
| 2 | Bushing 1.00 x 1.25 x .060 | 7556509 |
| 1 | Drive Clutch Assembly | 1321932 |
| 1 | Circuit Breaker | 2434008 |
| 1 | Rectifier | 4010196 |
| 1 | Battery Strap | 5410424 |
| 2 | D Hook | 5224468 |
| 6 | Battery Pad | 5810508 |
| 1 | Short Battery Bolt | 2200361 |
| 1 | Battery Vent Tube | 5432077 |
| 1 | Cable, Solenoid/Battery 8.5" | 4010108 |
| 2 | Nut | 7542122 |
| 2 | Bolt | 7511930 |
| 1 | Rivet | 7621467 |
| 1 | Washer | 7558201 |
| 1 | Stud Plate | 1013385 |
| 1 | Instructions | 9916640 |

You will need to supply:

5/16" Socket (8 mm)
7/16" Wrench
10 mm Wrench
7/16" Socket
9/16" Socket
Petroleum Jelly

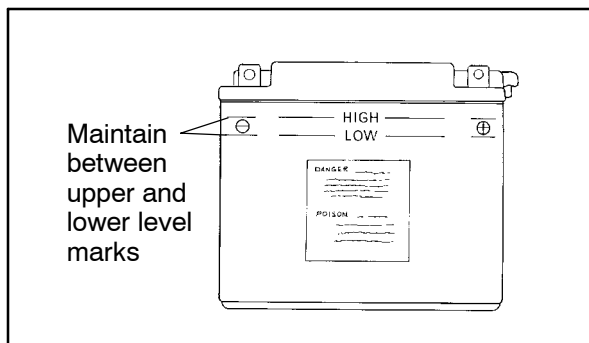
Clutch Puller (PN 2870506)
Strap Wrench (PN 2870336)
1/8" Allen Wrench (3 mm)
3/8" Combination Wrench (10 mm)
T25 Torx Wrench
Battery Hydrometer (PN 2870836)

Drill
3/16" Drill Bit
3/8" Socket
Rivet Gun
Side Cutter
Large Phillips
Screwdriver

IMPORTANT: Perform all items correctly and completely.

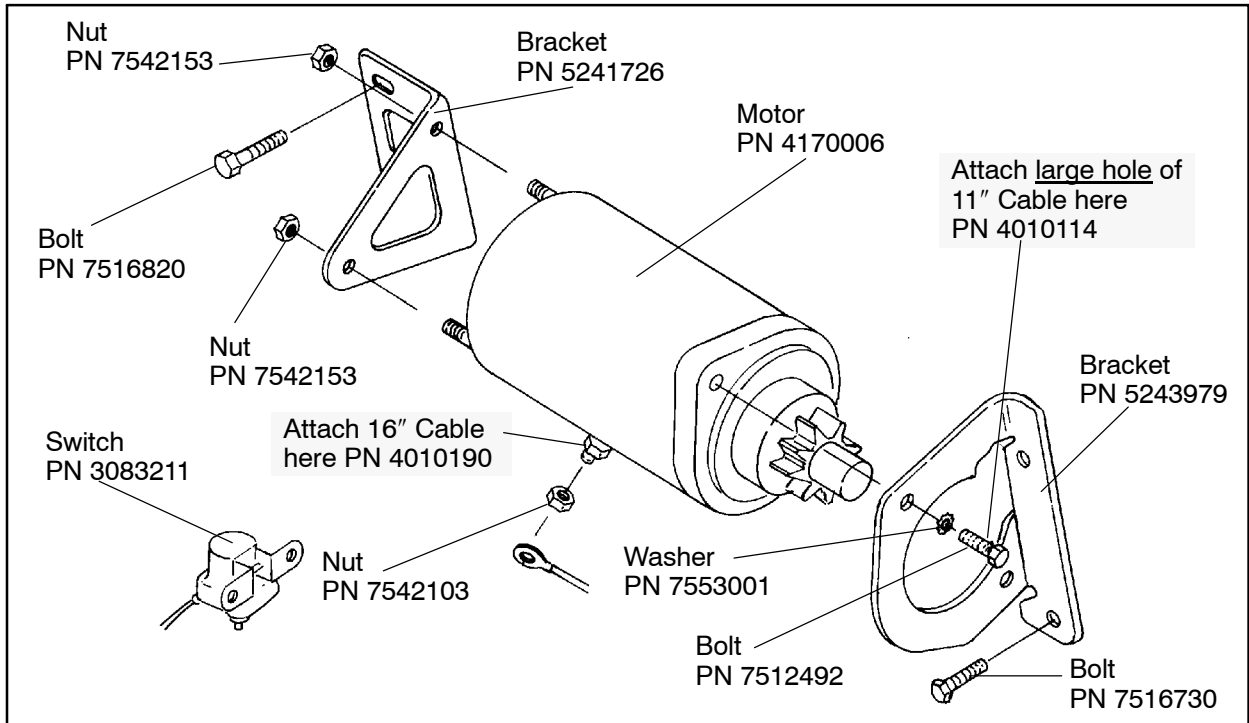
INSTALLATION INSTRUCTIONS

1. Remove vent plug from vent fitting of battery (PN 4140006).
2. Fill battery with electrolyte to upper level marks on case. See III. 1. **WARNING:** Battery electrolyte contains sulfuric acid and is poisonous! Serious burns can result from contact with the skin, eyes or clothing.
3. Set battery aside and allow it to cool and stabilize for 1/2 hour.
4. Add electrolyte to bring level back to upper level mark on case. **NOTE:** This is the last time that electrolyte should be added. If the level becomes low after this point, add only distilled water.
5. Charge battery at 1/3 of its amp/hr rating for up to two hours. **NOTE:** This charge rate is to be used only on new batteries during the first-time charge. After this charge, they should be charged at the normal 1/10 of amp/hr charge rate.
6. Check specific gravity of each cell with a hydrometer to assure each has a reading of 1.270 or higher.
7. Lift hood.
8. Release springs holding muffler and remove muffler.
9. Open clutch guard and remove drive belt and drive clutch.
10. Remove spring and weights from drive clutch. See Snowmobile Service Manual Chapter 7 for instructions.
11. Install spring and weights removed in step 10 into clutch assembly (PN 1321932) from kit.



III. 1

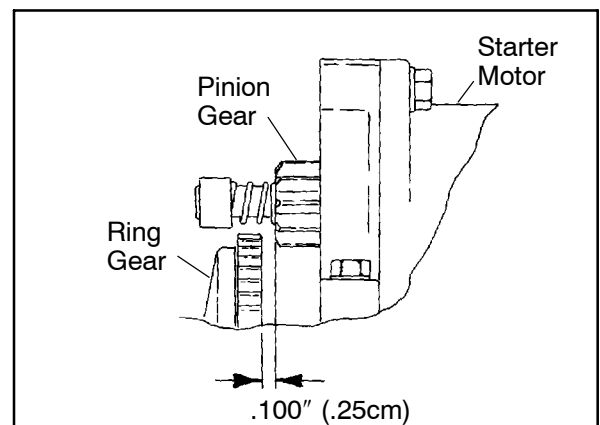
12. Locate starter/solenoid cable (PN 4010190). Attach the end without the red insulator cap to the stud and fasten with nut (PN 7542103). See Ill. 2.
13. With starter cable stud pointed down, attach large hole end of cable (PN 4010114) from kit to front starter bracket. Attach front starter bracket (PN 5243979) to starter (PN 4170006) using washer (PN 7553001) and bolt (PN 7512492). See Ill. 2.
14. Attach rear starter bracket (PN 5241726) to starter using nuts (PN 7542153) See Ill. 2.
15. Loosely install starter motor to engine crankcase using bolt (PN 7516730), on front starter bracket and bolt (PN 7516820) on rear bracket. See Ill. 2.



Ill. 2

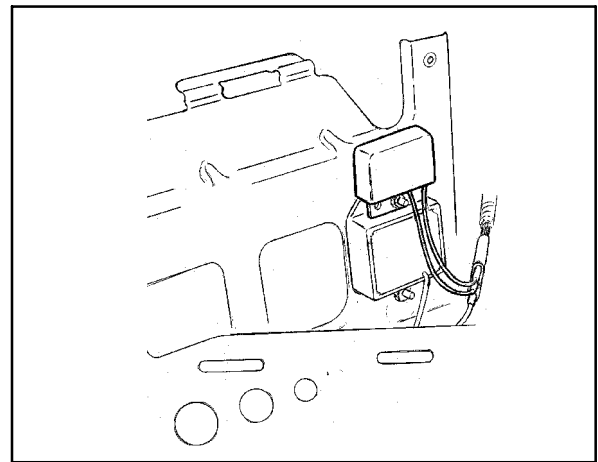
Starter Assembly 2410239

16. Check for a minimum of 1/4" (.64 cm) clearance between clutch ring gear and bulkhead. See Ill. 3. Also check to see if ring gear clears at forward end. If additional clearance is needed, bulkhead may be tapped inward with a soft face hammer. **NOTE:** A minimum of 1/4" (.64 cm) clearance is required. When high torque loads are placed on the engine, the rear of the clutch will move closer to the bulkhead.
17. Position starter motor so there is no less than .100" (.25 cm) clearance between clutch ring gear and starter motor pinion gear. See Ill. 3.
18. Tighten both front and rear starter brackets (PN 5241726) to crankcase. Torque to 55 in. lbs.
19. Torque drive clutch to 45 ft. lbs.
20. Check driven clutch offset and adjust if needed. **NOTE:** Clutch offset with ring gear installed is 1" (2.54 cm). Add washers (PN 7555734) to clutch bolt as required. See Snowmobile Service Manual for additional instructions.
21. Reinstall drive belt and close clutch guard.

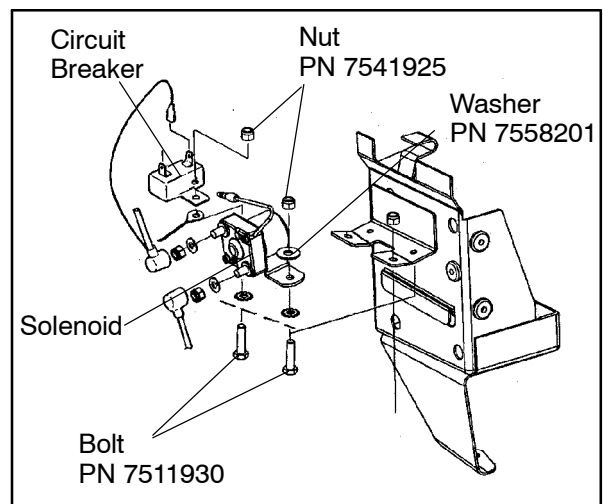


Ill. 3

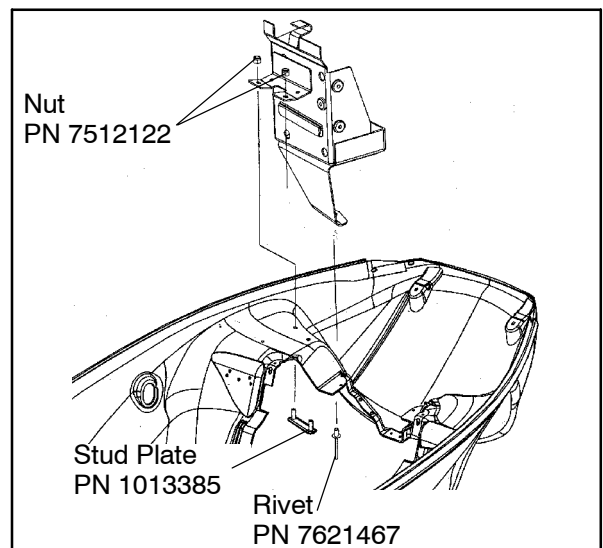
22. Remove nut from top bolt securing voltage regulator to the chassis. Mount the rectifier (PN 4010196) to this bolt and reinstall the nut.
23. Using the illustration for reference, install the solenoid and circuit breaker to the battery box.
24. Insert battery pads (PN 5810508) into battery box; two on left side, two on bottom, one on front side and one on right side.
25. Remove the two plugs covering the holes in the left shock tower and discard. Take the stud plate (PN 1013385) from the kit and insert it from the bottom side. Set the battery box over the studs and secure with nuts (PN 7512122). From the bottom of the pan, line up the hole in the pan with the hole in the battery box and secure with rivet (PN 7621467).
26. Insert solenoid and small end of jumper wire (PN 4010108). Secure with flat washer (PN 7558203) and lock nut (PN 7541925).
27. Install the cable from the starter to the solenoid.
28. Install the 7" battery cable (PN 2460393) to the other stud of the solenoid.
29. Install the small red wire from the solenoid to the battery side of the circuit breaker.
30. Connect the bullet terminal from the main wire harness to the bullet connector on the solenoid.
31. Connect the spade connector on the main wire harness to the open connector on the circuit breaker.
32. Install the battery with the terminals toward the left hand side.
33. Connect the red battery cable to the positive terminal.
34. Connect the ground cable and the other end of jumper wire (PN 4010108) to the battery and tighten.
CAUTION: To avoid the possibility of explosion, always connect the black ground cable last. When removing the battery, remove the black ground cable first.
35. Attach D hooks (PN 6224468) to battery strap (PN 5410424).
36. Attach the battery hold down strap to the tabs provided on the battery box.
37. Locate drain hole on left side of bulkhead and remove plug for battery vent line. Insert tube so that 1/8" of the tube sticks out through the pan. **NOTE:** If installing this kit on a unit with a skid plate, Remove the skid plate and hold the skid plate in place and drill for the vent line. Set skid plate aside.
38. Install one end of battery vent tube into the stand pipe and the other end through the drain hole in the bulkhead. Install open/close bushing (PN 7080399) from bottom of bulkhead. *(If the unit has a skid plate, reinstall it now. Leave 1/8" (.3 cm) of vent tube protruding through the skid plate.)* Cut any excess vent tubing which may hang below the bulkhead.



Step 22.



Step 23.



Step 25.

CAUTION: Check the vent tube to be sure it is open and not kinked or pinched. A kinked or pinched vent tube will allow battery gases to accumulate, which could result in an explosion.

39. Reinstall muffler removed in step 8.
40. Insert key and test electric start. If starter doesn't function, re-check wiring.

Instruction PN 9916640 Rev 01 8/00

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