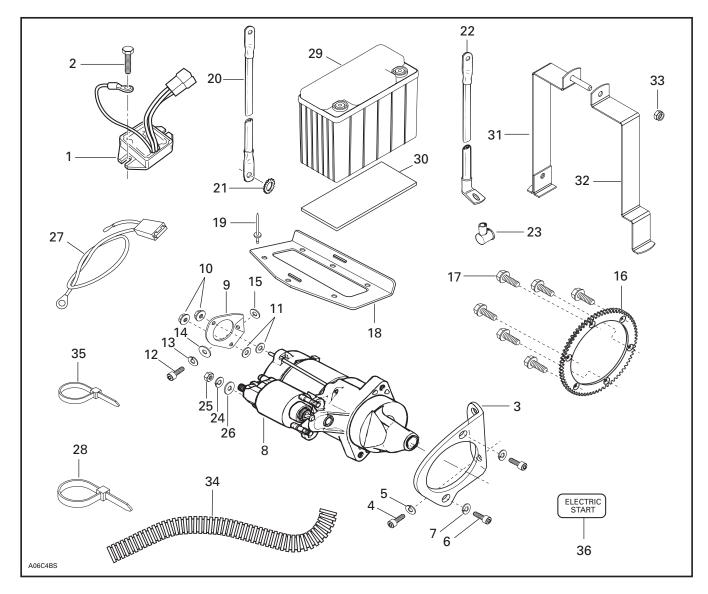


## **WARNING**

For safety reasons, this kit must be installed by an authorized Bombardier snowmobile dealer. Should removal of a locking device be required when undergoing disassembly/assembly, always replace with a new one. This instruction sheet should be given to the purchaser. This kit is designed for specific applicable models only. It is not recommended for vehicles other than those for which it was sold.

NOTE: Installation time is approximately 2.5 hours.

#### PARTS TO BE INSTALLED



- 1. Voltage Regulator
- 2. Self-Tapping Screw M6 x 16 (2)
- 3. Starter Support PTO
- 4. Socket Screw M8 x 20 (2)
- 5. Lock Washer M8 (2)
- 6. Socket Screw M8 x 25 (2)
- 7. Lock Washer M8 (2)
- 8. Starter
- 9. Starter Support MAG
- 10. Flanged Elastic Nut M5 (2)
- 11. Flat Washer M5 (2)
- 12. Socket Screw M8 x 20
- 13. Lock Washer M8
- 14. Flat Washer M8
- 15. Hardened Washer (2)
- 16. Ring Gear
- 17. Self-Tapping Screw M8 x 16 (6)
- 18. Battery Seat

- 19. Rivet (6)
- 20. Battery Ground Cable (BLACK)
- 21. Lock Washer (star)
- 22. Battery Positive Cable (RED)
- 23. Protector Cap (2)
- 24. Lock Washer
- 25. Hexagonal Nut M8
- 26. Flat Washer
- 27. Fuse Holder
- 28. Locking Tie (8)
- 29. Battery
- 30. Rubber Strip
- 31. Welded Steel Strip
- 32. Steel Strip
- 33. Flanged Élastic Nut M5
- 34. Protector
- 35. Locking Tie
- 36. Decal

#### VEHICLE PREPARATION

#### **Battery**

**NOTE:** Refer to appropriate *Ski-Doo Shop Manual* for proper battery removal/installation procedure.

Battery must be charged prior to installing this electric starter kit.



#### **WARNING**

Never charge or boost battery while connected or installed in vehicle.

#### Vehicle

Close fuel shut off valve, if equipped.

Remove exhaust system, belt guard and drive belt.

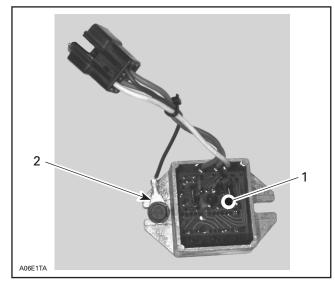
Remove air intake silencer.

#### **INSTALLATION**

# Voltage Regulator

Remove original regulator/rectifier, located along RH side member of frame, under rewind starter. Secure voltage regulator **no. 1** on both sides using self-tapping screws **no. 2** as well as connecting ground wire from voltage regulator as shown.

**NOTE:** Remove rewind starter to ease voltage regulator installation.



- 1. Voltage regulator
- 2. Connect ground wire here

Apply silicone dielectric grease (P/N 413 701 700) in voltage regulator 4-connector housing as well as vehicle harness 4-connector housing and plug them together.

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## Ring Gear

Remove drive pulley. Refer to Shop Manual to perform drive pulley disassembly/assembly procedures and to proceed with pulley alignment.

Secure ring gear no. 16 on inner half using 6 selftapping screws no. 17. Apply Loctite 271 (red) on screw threads.

## **CAUTION**

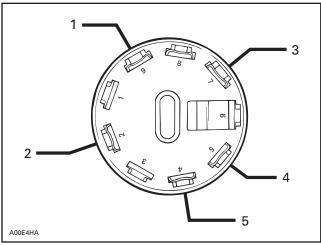
Loctite 271 (red) must be applied to properly assemble the ring gear.

Torque screws to 28 Nom (21 lbfoft) in a crisscross sequence.

Do not reinstall drive pulley at this time.

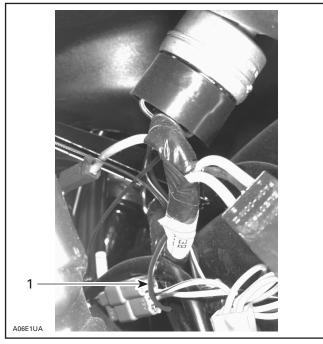
#### **Ignition Switch**

Cut locking tie and unplug switch connector housing from ignition switch. Insert shortest wire of fuse holder no. 27 inside switch connector housing. Insert connector in position number 7 on switch-connector housing. Reposition connector respecting vehicle connector code as illustrated.



- 1. RED/GREEN wire to solenoid 2. BLACK/YELLOW
- 3. RED wire with fuse to battery
- **BLACK**
- 5. RED/BLUE

Replug switch connector housing to ignition switch and secure wires with a locking tie no. 28 as shown.



1. Locking tie

#### Wire/Cable Connections and Routing

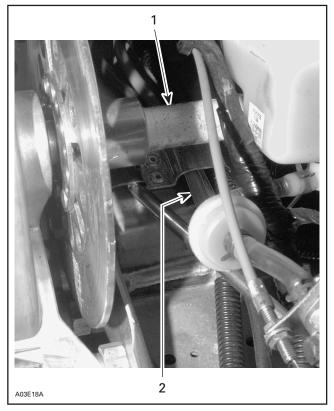
Ensure that one connector of RED battery cable no. 22 is straight and other connector bent to 60°. Bend or straighten as necessary.

Starting from battery location, route battery cable along vehicle harness to starter location.

The straight connector will be connected to bat-

NOTE: Route battery cables through free bracket underneath countershaft as illustrated.

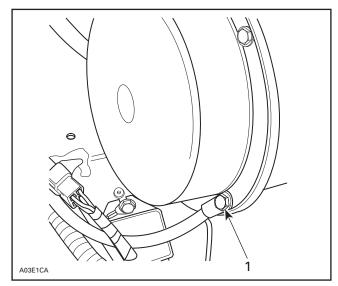
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- 1. Countershaft
- 2. Battery cables underneath bracket

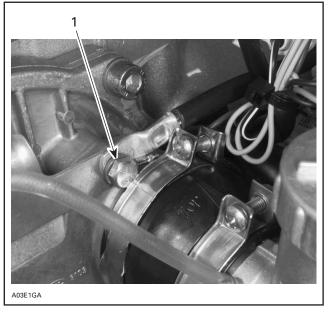
Install BLACK battery ground cable **no. 20** with star washer **no. 21** to rewind starter. Secure with original rewind starter screw. Refer to following illustration for proper cable positioning.

**NOTE:** Connect BLACK battery ground cable in the specified order. Position star washer first then BLACK ground cable and tighten with original screw.



1. Connect BLACK ground cable here

For models that do not have screws to secure rewind starter (large rewind), connect the BLACK battery ground cable **no. 20** with star washer **no. 21** to the rear of engine block, on rotary valve cover above carburetor. Refer to following photo for proper cable positioning.



1. Connect BLACK ground cable here

#### **Electric Starter**



# **CAUTION**

Apply Loctite 271 (red) on all fastener threads of starter supports.

Install starter support no. 3 (PTO side) to engine using socket screws no. 4 and lock washers no. 5. Tighten firmly.

Install electric starter **no.** 8 on support. Secure bottom first and then top using socket screws **no.** 6 and lock washers **no.** 7.

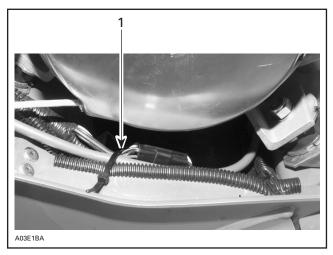
Install flat washers **no. 11** over nuts of starter through bolts (MAG side).

Install starter support no. 9 (MAG side) to starter and secure with flanged elastic nuts no. 10.

If necessary, install hardened washer(s) **no. 15** to fill gap between support and engine. Secure support to engine with flat washer **no. 14**, lock washer **no. 13** and screw **no. 12**.

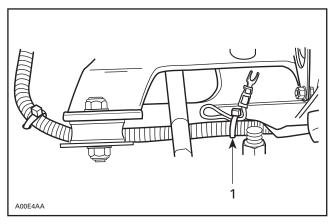
Install cable protector no. 34 then slide protector cap no. 23 onto RED battery positive cable no. 22. Bend terminal to fit. Install RED cable on starter with flat washer no. 26, lock washer no. 24 and hexagonal nut no. 25. Cover starter terminal with protector cap. Cut locking tie and install new one as shown on next photo.

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1. Cut existing locking tie and install new one

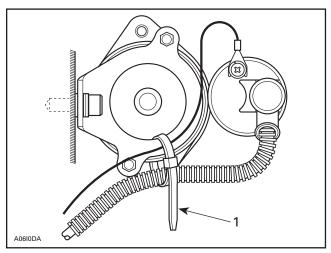
Cut the locking tie that is retaining RED/GREEN wire to wiring harness beneath engine as shown.



1. Cut locking tie

Connect RED/GREEN wire to small post on solenoid. Position connector under lock washer.

Secure cables loosely to rear bracket with a locking tie **no. 28**, as illustrated.



1. Tie loosely

Pull excess amount of cable from underneath engine.

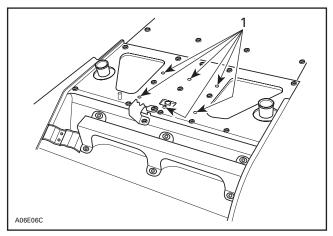
#### Battery and Rack



## **CAUTION**

Cover carburetor intakes with a clean rag during the following drilling operation.

Drill 6 holes in chassis with a 5.2 mm (13/64 in) drill bit as shown in following illustration. Use existing holes in chassis as a guide.



1. Drill 5.2 mm (13/64 in) holes

Secure battery seat **no. 18** with 6 rivets **no. 19**. Install rubber strip **no. 30** and battery **no. 29** on seat.

Insert protector cap **no. 23** onto RED positive cable. Connect battery RED positive cable and RED wire with fuse from ignition switch to battery, cover post with protector cap, THEN connect BLACK ground cable. Secure cables on top of battery posts.



## **WARNING**

Always connect the battery cables exactly in the specified order. Connect RED positive cable first, then BLACK negative ground cable.

Install strips **no. 31** and **no. 32** and secure with flanged elastic nut **no. 33**. Route RED battery cable and RED wire through indentation on front battery strip.

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Fasten battery cables using a locking tie no. 35.



## **WARNING**

Ensure all terminals are properly crimped on wires/cables and that all connector housings are properly fastened. Keep wires away from any rotating, moving, heating or vibrating parts as well as from sharp edges. Use proper fastening devices as required.

#### FINALIZING INSTALLATION

**NOTE:** Refer to appropriate *Ski-Doo Shop Manual* for proper reinstallation procedure.

Reinstall drive pulley.

Check pulley alignment.



#### **WARNING**

Drive pulley alignment must always be checked whenever pulleys have been removed, replaced or disassembled.

Reinstall remaining removed parts.

#### Decal

Clean decal area with soapy water or isopropyl alcohol using a soft clean cloth and dry thoroughly.

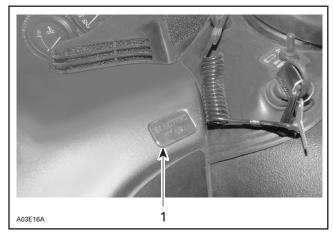


## **CAUTION**

Do not apply isopropyl alcohol on decal.

Remove backing from decal.

Apply decal no. 36 as shown.



1. Decal

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