

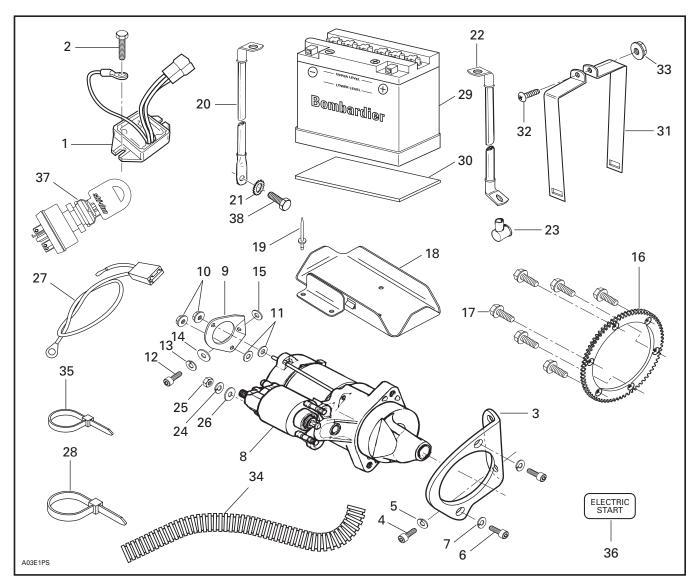
# **4**

## **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. Regulator/Rectifier
- 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 (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 (5)
- 20. Battery Ground Cable (BLACK)

- 21. Star Washer
- 22. Battery Positive Cable (RED)
- 23. Protector Cap (2)
- 24. Lock Washer M8
- 25. Hex. Nut M8
- 26. Flat Washer M8
- 27. Fuse Holder
- 28. Locking Tie (8)
- 29. Batterv
- 30. Rubber Insulator
- 31. Steel Strip (2)
- 32. Hex. Screw M5 x 16
- 33. Hex. Flanged Nut M5
- 34. Protector
- 35. Locking Tie
- 36. Decal
- 37. Ignition Switch
- 38. Self-tapping Screw
- 39. Elbow Fitting (Not Illustrated)

## VEHICLE PREPARATION

## Battery

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



## **WARNING**

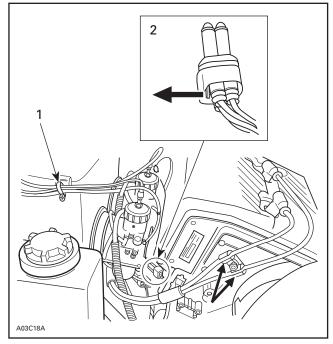
Never charge or boost battery while connected or installed in vehicle.

#### Vehicle

Remove exhaust system, belt guard and drive

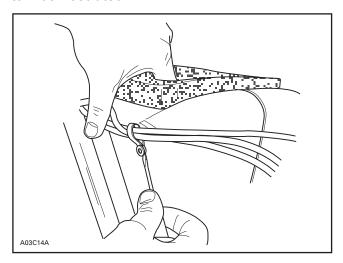
Unfasten spark plug cables from fan housing. Unplug spark plug caps.

Unplug electronic box harness underneath carburetors by inserting a screwdriver in the connector tab and pull tab as illustrated.



- Plastic clip
  CDI box harness connector

PAGE 2 OF 7 415 1207 01 Open the plastic clip that is positioned on the air intake silencer. Insert a flat tip screw driver and turn as illustrated.



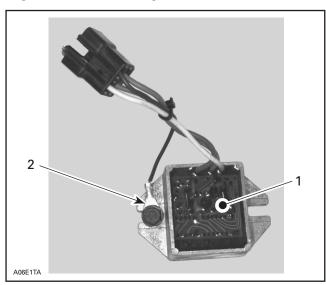
Remove the air intake silencer.

Empty fuel tank, change hose fitting with an elbow type fitting no. 39 and outlet toward exterior, to clear battery corner.

### INSTALLATION

## Regulator/Rectifier

1. Remove original regulator/rectifier, located along RH side member of frame. Secure new regulator/rectifier no. 1 using self tapping screws no. 2. Use 1 screw to connect the ground wire from regulator/rectifier as shown.



- 1. Regulator/rectifier
- 2. Connect ground wire here
- 2. Apply silicone dielectric grease (P/N 413 7017 00) in the regulator/rectifier 4-connector housing as well as the vehicle harness 4-connector housing and plug them together.

## 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 self tapping screws no. 17.

## **CAUTION**

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

Torque screws to 27 N•m (20 lbf•ft) in a crisscross sequence.

Do not reinstall drive pulley at this time.

## **Ignition Switch**

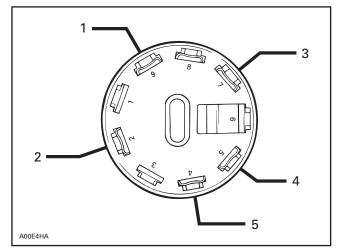
Cut locking tie and unplug switch connector housing from ignition switch.

Install new ignition switch no. 37.

Insert the shortest wire of the fuse holder no. 27 inside switch connector housing.

Insert connector in position number 7 on the switch-connector housing.

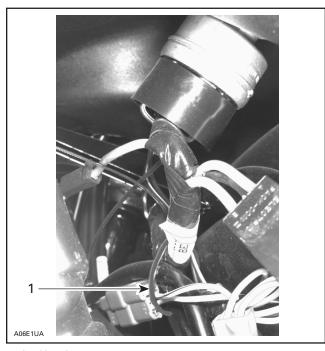
Reposition connectors respecting the vehicle connector code as illustrated.



- RED/GREEN wire to solenoid
- 2. BLACK/YELLOW3. RED wire with fuse to battery
- BLACK

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

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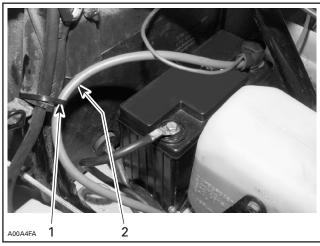
1. Locking tie

# Wire/Cable Connections and Routing

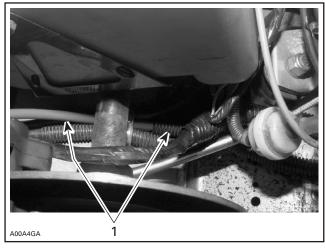
Ensure one connector of the RED battery cable no. 22 is straight and other connnector is bent at 60°. Bend or straighten as required.

The straight connector will be connected to the solenoid.

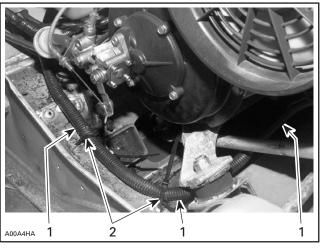
Starting from battery location, route battery positive cable along vehicle harness to the starter location. See following illustrations.



Secure with locking tie Secure with locking tie
 RED positive cable routing



1. RED positive cable routing

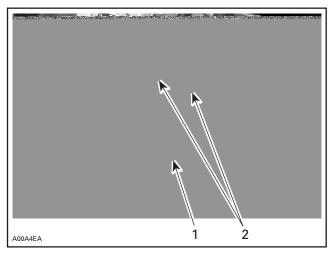


 RED positive cable routil
 Secure with locking ties RED positive cable routing

NOTE: Route battery cables through free bracket underneath countershaft.

Connect battery BLACK ground cable no. 20 to side of fan housing using self-tapping screw no. 38 and star washer no. 21. Refer to next photo.

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- 1. Connect battery ground cable here
- 2. Spark plug wires

## **Electric Starter**



## **CAUTION**

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

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

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

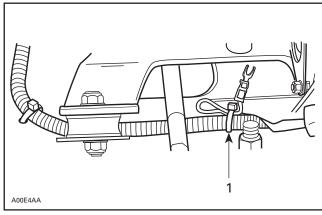
Install washers **no. 11** over nuts of starter through bolts (MAG side).

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 the gap between the support and the engine. Secure support to the engine with 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 cable **no. 22**. Install RED cable on starter with washer **no. 26**, lock washer **no. 24** and nut **no. 25**. Bend connectors as required.

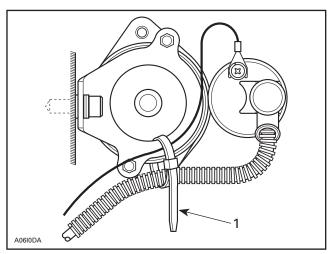
Cut the locking tie that is retaining the RED/GREEN wire to the wiring harness beneath engine.



1. Cut locking tie

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

Secure cables loosely to the 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**

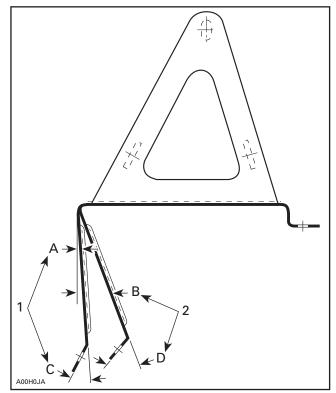
Cover carburetor intakes with a clean rag during the following drilling operation.

Remove oil reservoir from its support.

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Remove reservoir support (keep the bolts for reinstallation), then the plate underneath it by drilling out retaining rivets.

Install support in a vice to bend to proper angle, refer to following illustration.



- Original angles
- 2. New 8 A. 4° B. 24° C. 31.6° D. 60° New angles

Join battery seat no. 18 to oil reservoir support using 2 rivets no. 19, making sure that support is mounted on top of battery seat.

Drill out battery vent fitting on body.

Install this assembly in place and secure, in same holes, by using previously removed oil reservoir support bolts.

At battery seat, use existing outer rivet hole as a first hole and drill two 5.2 mm (13/64 in) holes in body then secure with rivets no. 19.

Install rubber insulator no. 30 and battery no. 29 with positive post inside.

Secure battery in place with steel strips no. 31, using screw no. 32 and flanged nut no. 33.

Insert protector cap no. 23 onto red positive cable.

Connect battery RED positive cable and RED wire with fuse from ignition switch to battery post, upward angle, and tighten. Cover battery post with protector cap, then connect the BLACK ground cable and secure to battery post.

### **WARNING**

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

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 the Ski-Doo Shop Manual for proper reinstallation procedure.

Reinstall oil reservoir in its support.

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.

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## Decal

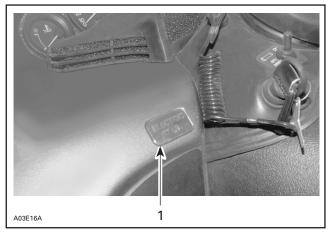
Clean decal area with soapy water or isopropyl alcohol using a soft clean cloth and dry thoroughly.



Do not apply isopropyl alcohol on decal.

Remove backing from decal.

Apply decal no. 36 as shown.



1. Decal

# 861 5042 00

1.	515 1639 00	Regulator/Rectifier	Régulateur/redresseur
2.	732 6000 02	Self-tapping Screw M6 x 16 (2)	Vis autotaraudeuse M6 x 16 (2)
3.	420 9516 92	Starter Support PTO	Support de démarreur (côté PDM)
4.	222 9820 65	Socket Screw M8 x 20 (2)	Vis à tête creuse M8 x 20 (2)
5.	420 9457 52	Lock Washer M8 (2)	Rondelle-frein M8 (2)
6.	222 9825 65	Socket Screw M8 x 25 (2)	Vis à tête creuse M8 x 25 (2)
7.	224 7811 40	Lock Washer M8 (2)	Rondelle-frein M8 (2)
8.	410 2124 00	Starter	Démarreur
9.	420 9517 02	Starter Support MAG	Support de démarreur (côté MAG)
10.	228 7510 45	Flanged Elastic Nut M5 (2)	Écrou d'arrêt élastique à épaulement M5 (2)
11.	391 3017 00	Flat Washer (2)	Rondelle plate (2)
12.	222 9820 65	Socket Screw M8 x 20	Vis à tête creuse M8 x 20
13.	420 9457 52	Lock Washer M8	Rondelle-frein M8
14.	224 0811 71	Flat Washer M8	Rondelle plate M8
15.	503 0079 00	Hardened Washer (2)	Rondelle trempée (2)
16.	415 0431 00	Ring Gear	Couronne de lancement
17.	732 6012 46	Self-tapping Screw M8 x 16 (6)	Vis autotaraudeuse M8 x 16 (6)
18.	517 3017 00	Battery Seat	Support de batterie
19.	390 4022 00	Rivet (5)	Rivet (5)
20.	515 1570 00	Battery Ground Cable (BLACK)	Câble de masse de la batterie (NOIR)
21.	394 0019 00	Star Washer	Rondelle en étoile
22.	515 1613 00	Battery Positive Cable (RED)	Câble positif de la batterie (ROUGE)
23.	570 1510 00	Protector Cap (2)	Capuchon de protection (2)
24.	420 9457 52	Lock Washer M8	Rondelle-frein M8
25.	228 0810 45	Hex. Nut M8	Écrou hexagonal M8
26.	224 0811 71	Flat Washer M8	Rondelle plate M8
27.	515 1573 00	Fuse Holder	Porte-fusible
28.	414 1152 00	Locking Tie (8)	Attache (8)
29.	410 3013 00	Battery	Batterie
30.	570 0703 00	Rubber Insulator	Bande isolante de caoutchouc
31.	517 3016 00	Steel Strip (2)	Bande d'acier (2)
32.	222 0516 65	Hex. Screw M5 x 16	Vis à tête hexagonale M5 x 16
33.	228 7510 45	Hex. Flanged Nut M5	Écrou hexagonal à épaulement M5
34.	414 6273 00	Protector	Gaine de protection
35.	748 0010 01	Locking Tie	Attache
36.	418 0013 00	Decal	Autocollant
37.	410 1113 00	Ignition Switch	Interrupteur d'allumage
38.	732 6011 20	Self-tapping Screw	Vis autotaraudeuse
39.	414 5806 00	Elbow Fitting (Not Illustrated)	Raccord coudé (non illustré)