

Installation Instructions

Electric Start Kit

No. 0134-649

1. Remove starter plate which is attached to the mounting position under exhaust outlet. See Fig. 1. Discard cap screws used to secure the starter plate on the KT 150 model engine.

Note: The installation of starter motor can easily be done if muffler is removed.

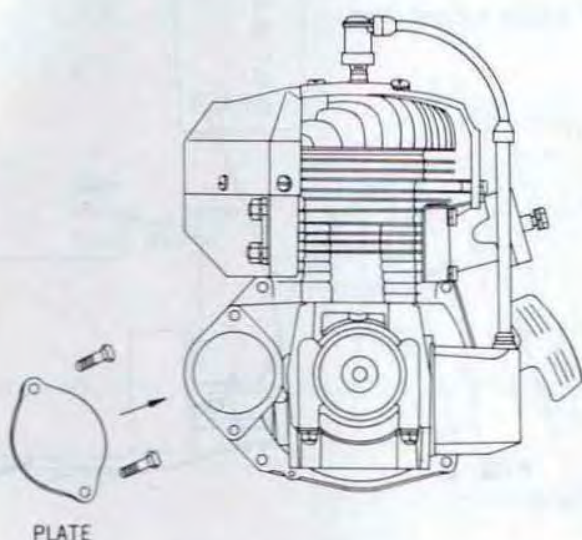
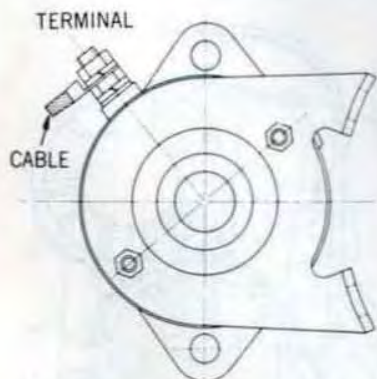


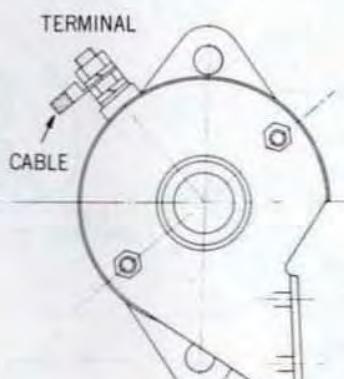
FIG. 1

2. Install the support bracket on the starter motor using 5 mm. dia. nuts and washers. Use the bracket for T1A engine when installing on T1A engine and use the bracket for KT 150 when installing on KT 150 engine respectively. See Figs. 2-1, 2-2, 2-3. Fasten 11.8" cable with small terminals (solenoid to starter) to the terminal on starter motor.



BRACKET FOR KT150 ENGINE

FIG. 2-1



BRACKET FOR T1A ENGINE

FIG. 2-2

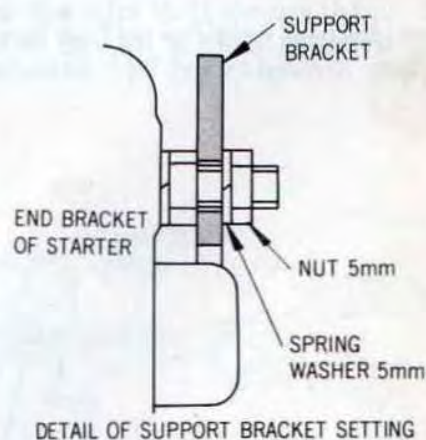


FIG. 2-3

Place starter motor in mounting position. Secure the rear support bracket to the starter motor first. Next, fasten the front bracket of starter motor to the engine and then fasten the support bracket tightly by means of the hex head 6 mm. $\times$ 16 mm. bolts provided in the kit. Be sure to use locking washer with bolt.

For KT 150 engine:

Use hex head 8 mm. $\times$ 25 mm. bolts provided with the kit to secure front bracket.

For T1A engine:

Use stud bolts and nuts which were originally used for fixing starter plate to secure front bracket.

Install the solenoid switch using 3/8" motor mount stud.

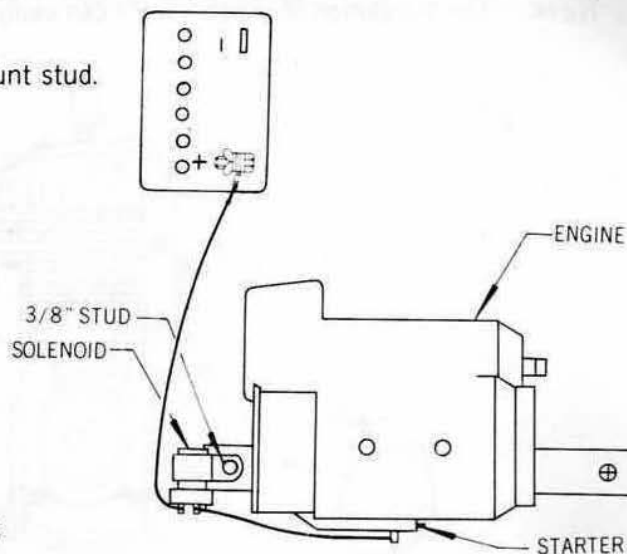


FIG. 3

Connect cable (solenoid to starter) to one terminal of the solenoid switch and 32.3" cable (solenoid to positive $\oplus$ battery terminal) to the second terminal. See Fig. 3.

Install ground, 12.2" cable with large terminals (engine to body earth) from one of the fan housing bolts on engine to one of the nuts on bearing flange plate. See Fig. 4.

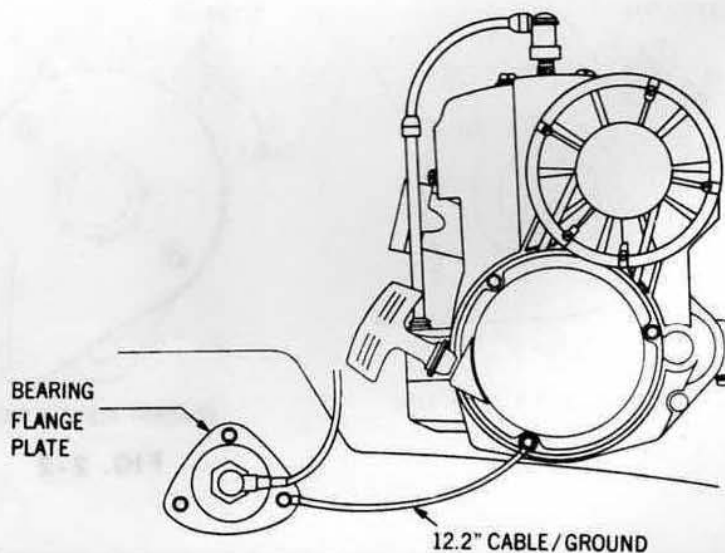


FIG. 4

7. Remove plastic socket housing from ignition switch which is located under the console. Disconnect choke cable from carburetor and remove seat cushion. Remove console by using $\frac{1}{4}$ turn fasteners.
8. Remove small voltage regulator from steering post support. Disconnect plastic male connector from yellow wire with a small knife or screwdriver by pressing down tab inside socket. See Fig. 6-2.
9. Install voltage regulator on steering post support using No. 8-32 $\times$ 1 $\frac{1}{4}$ screws with nuts and washers. The two holes in the regulator will line up with two holes on the steering post support.
10. Attach green wire from the voltage regulator and 14.9" ground cable (battery negative $\ominus$ to body ground) to the bolt on top of the steering post support. See Fig. 5.

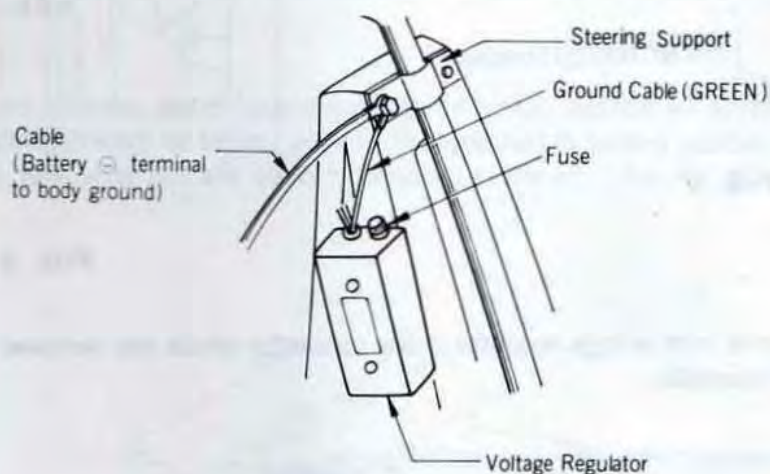


FIG. 5

11. Locate plastic socket which was attached to ignition switch. Remove yellow wire from the socket as illustrated in Fig. 6-2.

Note: Each slot in the socket has a matching terminal on the ignition switch and each terminal is labeled, "B" for battery, "M" for magneto, "S" for solenoid, etc.

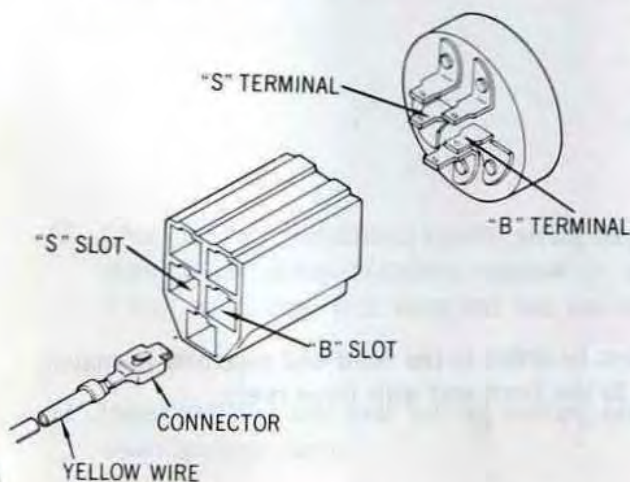


FIG. 6-1

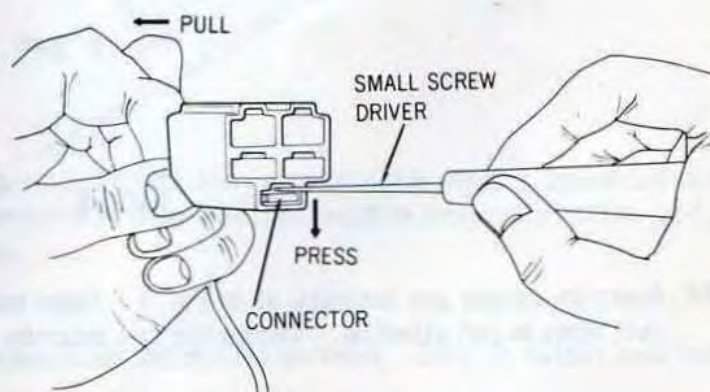


FIG. 6-2

12. Insert single wire terminal of wiring harness, which comes from solenoid switch, into "S" slot of plastic socket. This will mate with "S" on ignition switch as shown in Fig. 6-1. Insert twin wire terminal which comes from the voltage regulator into "B" slot of plastic socket. This will mate with "B" on ignition switch as shown in Fig. 6-1. See Fig. 7.

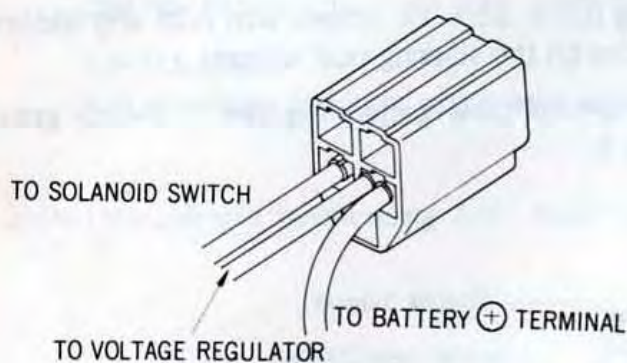


FIG. 7

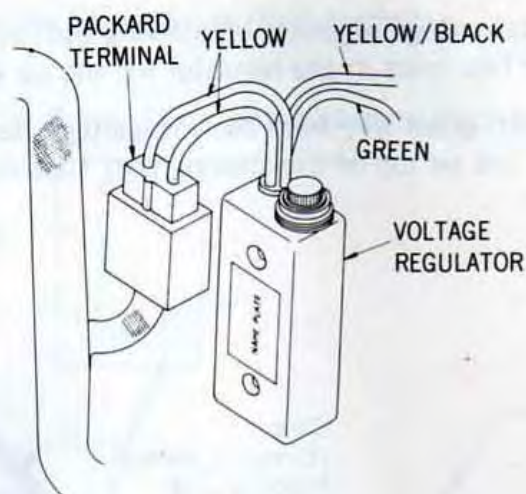


FIG. 8

13. Insert two yellow wires from voltage regulator in the connector which was removed from regulator originally supplied with snowmobile.

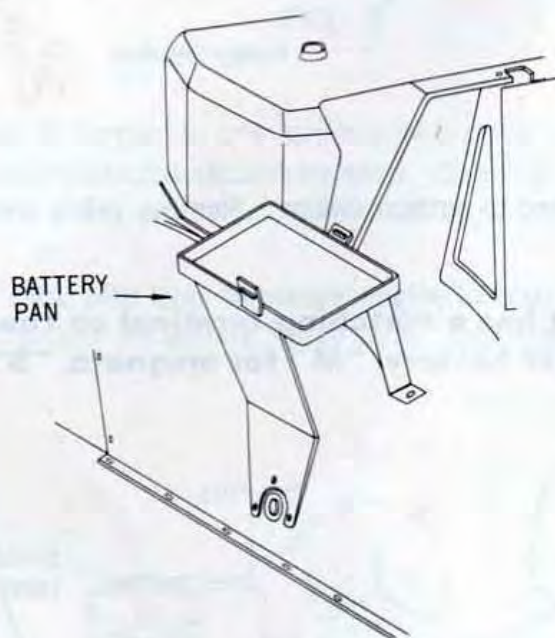


FIG. 9

14. Assemble battery pan assembly as to Fig. 9. Holes must be drilled in the front end assembly to match rivet holes in pan assembly. Secure the pan assembly to the front end with three rivets.

NOTE: BATTERY PAN IS OPTIONAL FOR ALL 1972 ATRCTIC CAT SNOW-MOBILES.

15. Assemble battery and housing in sequence as illustrated in parts sheet.

- A. Place pad in pan.
- B. Place battery box on pad.
- C. Place battery in box.

It will be necessary to purchase pan kit, Pt. No. 0134-670 from your dealer or distributor for electric start installation on all models. See Fig. 9 for assembly.

Note: A special battery with spillproof caps and "L" terminals must be used. Use the "ARCTIC CAT" power-pak "L" terminal acid pak battery, Part No. 0134-469.

16. Connect wire from solenoid switch (solenoid switch to battery positive $\oplus$ terminal) and wire from twin wire terminal (ignition switch to battery positive $\oplus$ terminal) to battery positive $\oplus$ terminal by using 6mm. $\times$ 16mm. bolt, wing nut and washer furnished in the kit. See Fig. 10.

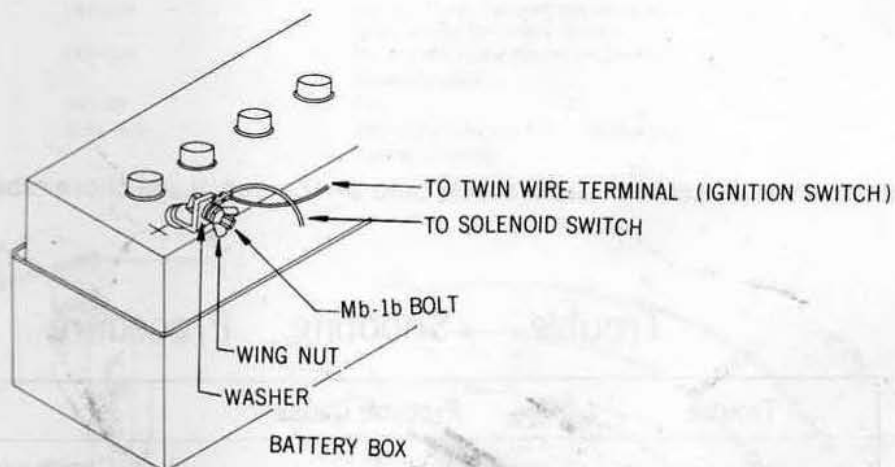


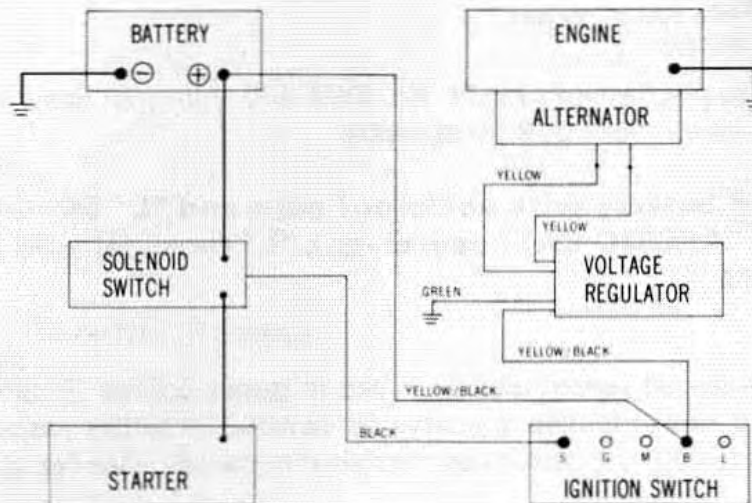
FIG. 10

17. Check wiring connections against wiring diagram furnished, then connect cable which is connected to the steering post support (battery negative $\ominus$ terminal to body earth) to negative terminal of battery using 6 mm. $\times$ 16 mm. bolt, wing nut and washer.

18. Install battery cover over battery, making certain cables are in slots provided. Snap on battery case hold down bracket (clamp).

19. Two plastic clamps bands are provided in the kit to secure any loose wires or cables.

Wiring Diagram



Reinstall console, connect plastic socket onto ignition switch and choke cable to carburetor.

Trouble Shooting Procedure

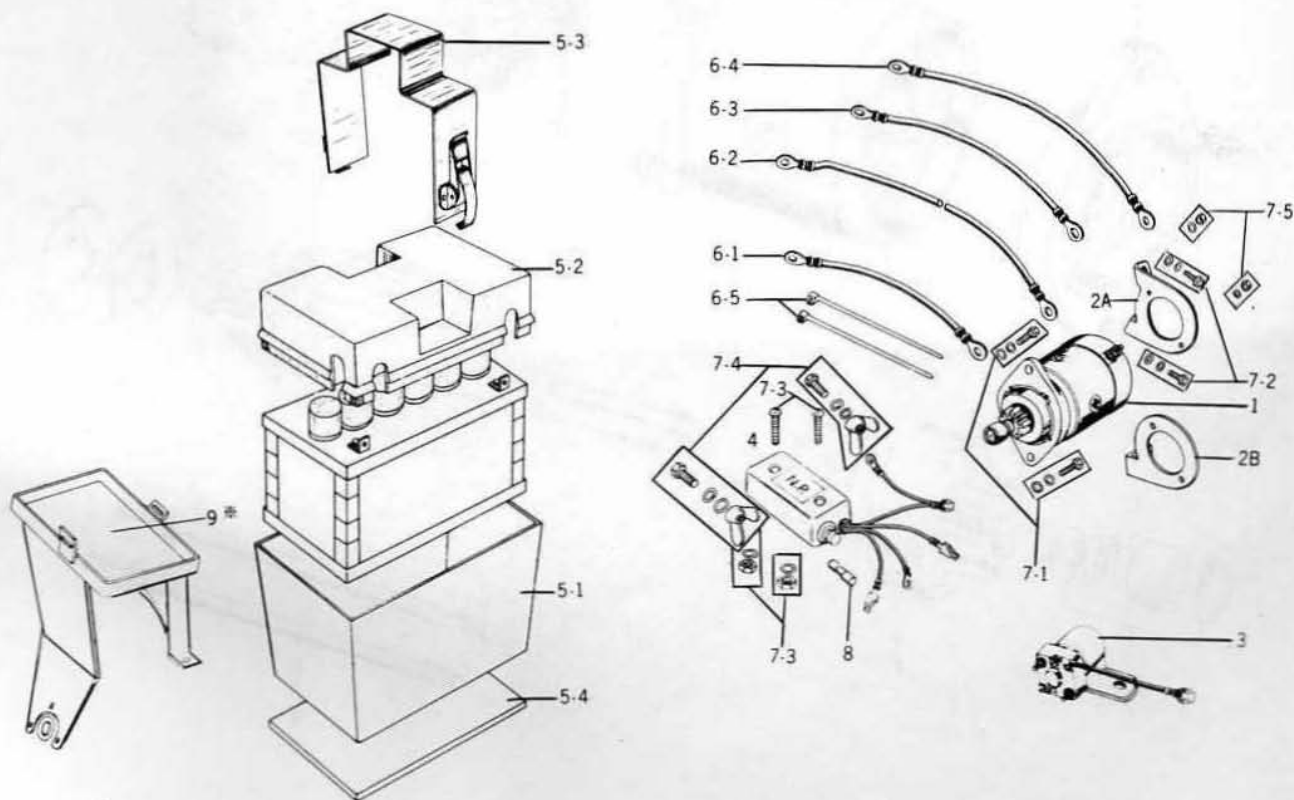
Trouble	Probable Cause	Remedy
Hot or Smoking Wires	System wired incorrectly	Check wiring against wiring diagram.
Starter does not turn over	Discharged Battery	Check
	Loose Connection	Check tightness of all connection
	Improper grounding	Check ground connection

Parts List

Electric Start Kit No. 0134-649

Ref. No.	Part No.	Qty.	Description
1	145-073	1	Starter
2A	145-074	1	Starter Support Bracket for T1A engine
2B	145-075	1	Starter Support Bracket for KT150 engine
3	145-076	1	Solenoid Switch
4	145-077	1	Voltage Regulator
5-1	145-078	1	Battery Box
5-2	145-079	1	Cover, Battery Box
5-3	145-080	1	Battery Case Clamp
5-4	145-021	1	Pad
6-1	145-081	1	Cable, Solenoid to Starter
6-2	145-082	1	Cable, Solenoid to (+) Battery Terminal
6-3	145-083	1	Ground Cable, Engine to Body
6-4	145-084	1	Ground Cable, (-) Battery Terminal to Body
6-5	145-085	2	Cable Clamp Band
7-1	145-086	2	Bolt (8 - 25mm.) w/ plane and spring washer For KT150 Engine.
7-2	145-087	2	Bolt (6 - 16mm.) w/ plane and spring washer For Support Bracket.
7-3	145-088	2	Screw w/ nut and spring washer. Rd. Hd. No. 8-32 slotted.
7-4	145-089	2	Bolt (6 - 16mm.) w/ wing nut, plane and spring washer for Battery Terminal.
7-5	145-090	2	Nut M5 and Spring Washer for Starter Support Bracket.
8	145-091	1	Fuse
*9	0134-670	1	Battery Pan/Bracket Assy, Lynx/Puma/ Panther/Cheetah.

* Not Included In Kit



Parts List

Starter Assy Pt. No. 0145-073

Ref. No.	Part No.	Qty.	Description
1	0145-062	1	Armature
2	0145-063	1	Yoke
3	0145-064	1	Rear Cover
4	0145-065	1	Pinion
5	0145-066	1	Brush Holder
6	0145-067	1	Front Cover
7	0145-068	1	Pinion Stopper
8	0145-069	1	Bolt Kit
9	0145-070	1	Washer Kit
10	0145-071	1	Brush (+)
11	0145-072	1	Brush (-)

