



INSTRUCTIONS FOR INSTALLING AM54914
ELECTRIC START KIT ON TRAILFIRE SNOWMOBILES



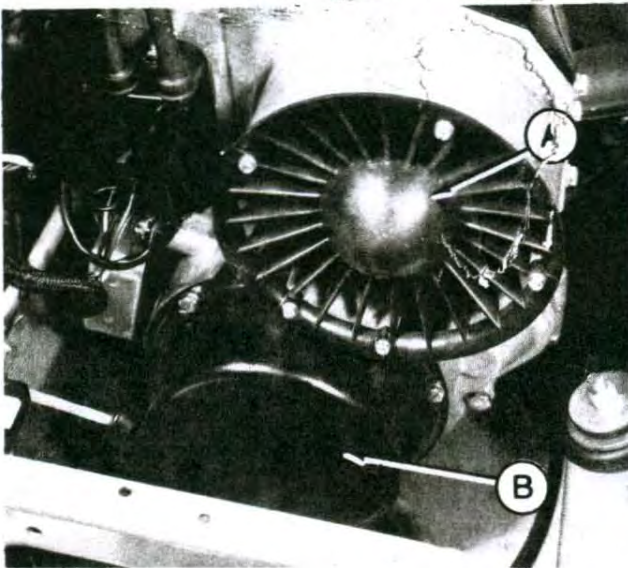
M68348 Instructions

NOTE: AM52050, 12-volt battery and electrolyte are required in addition to this kit.

Remove air intake duct on 440 Trail-fire Snowmobiles.

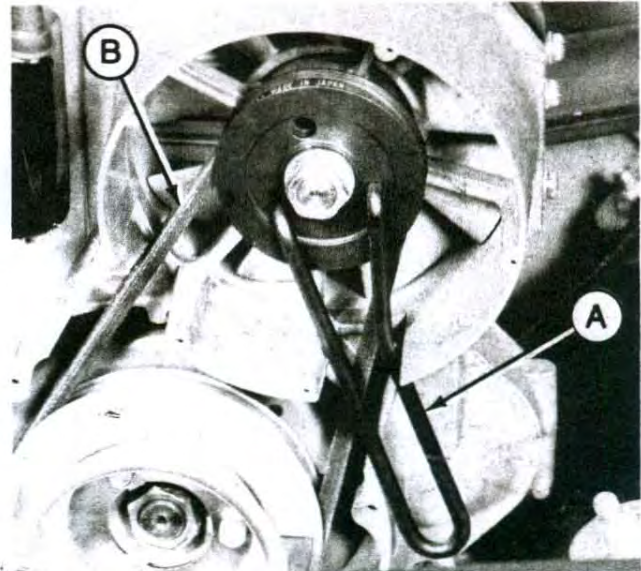
Remove muffler.

INSTALLING RING GEAR

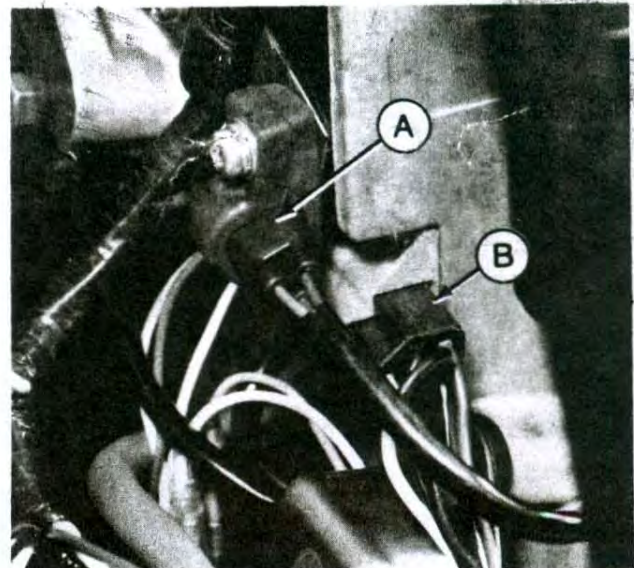


A - Fan Cover B - Recoil Starter

1. Remove fan cover (A).
2. Remove recoil starter (B). Lay starter down in tunnel. DO NOT remove rope.
3. Use JDM-112 (A) to hold fan while removing nut.
4. Remove fan belt (B).

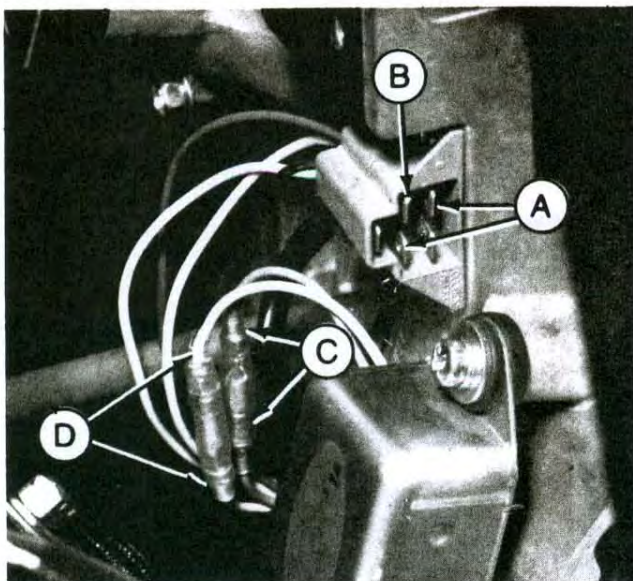


A - JDM-112 B - Fan Belt



A - Engine Wiring Harness B - Main Wiring Harness

5. Remove clamp and disconnect engine wiring harness (A).
6. Cut plastic tie strap and disconnect main wiring harness (B).

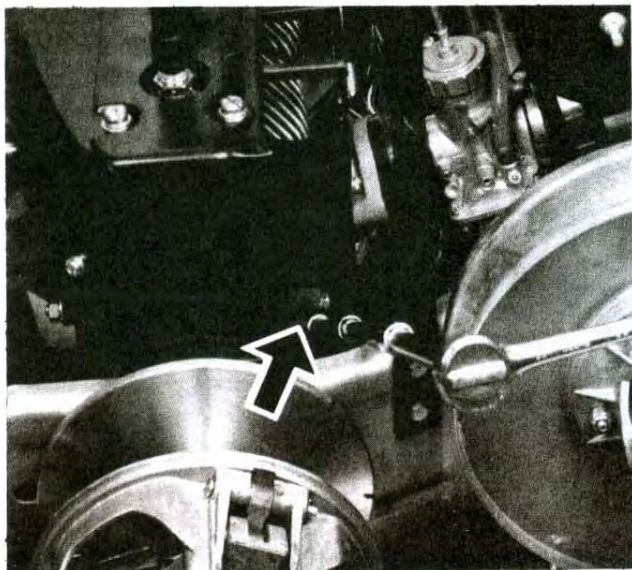


A - Yellow Leads C - Red Lead
B - Brown Lead D - White Lead

7. Remove yellow leads (A) and brown lead (B) from connector.

8. Separate red lead (C) and white lead (D).

9. Raise belt guard and remove drive belt.



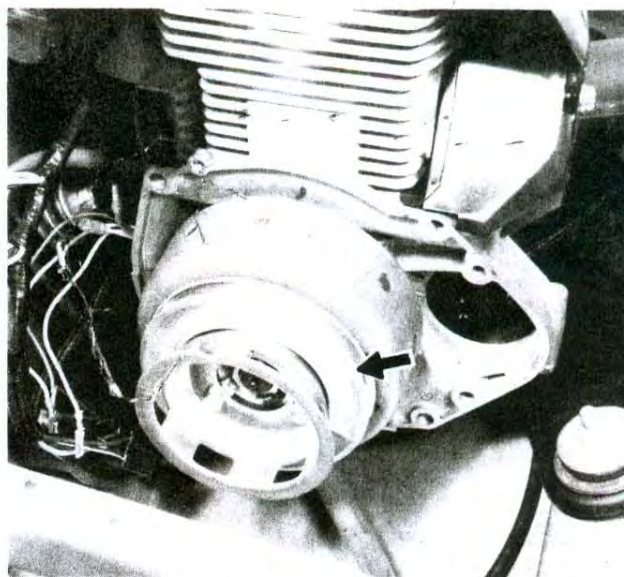
10. Remove fan housing as follows:

A. Remove four nuts from the backside of the fan housing. Use a long

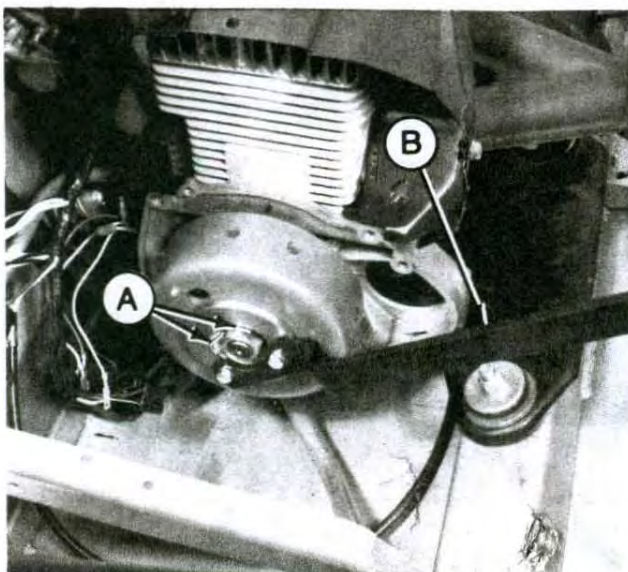
extension to remove the two lower nuts. Remove two upper nuts with a wrench. Nuts are 13 mm.

11. Remove three screws securing engine shroud to fan housing.

12. Remove starter plate from fan housing.



13. Remove starter cup and pulley.

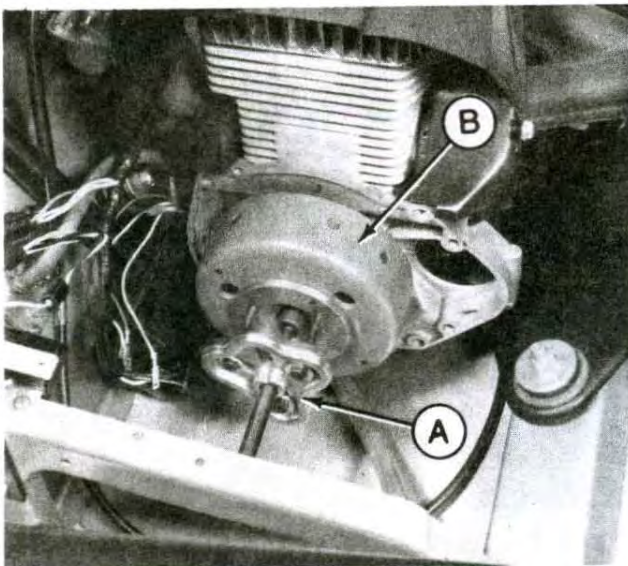


A - Tab Washer B - JDM-64-1

14. Bend back tabs on tab washer (A).

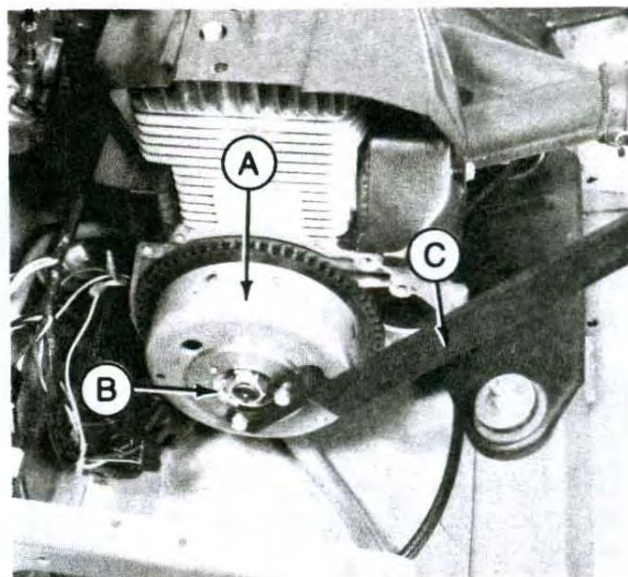
15. Hold flywheel with JDM-64-1 (B) while removing nut.

NOTE: Use cap screws from starter cup to install JDM-64-1 tool.



A - JDM-9 B - Flywheel

16. Use impact wrench with JDM-9 puller (A) to remove flywheel (B).



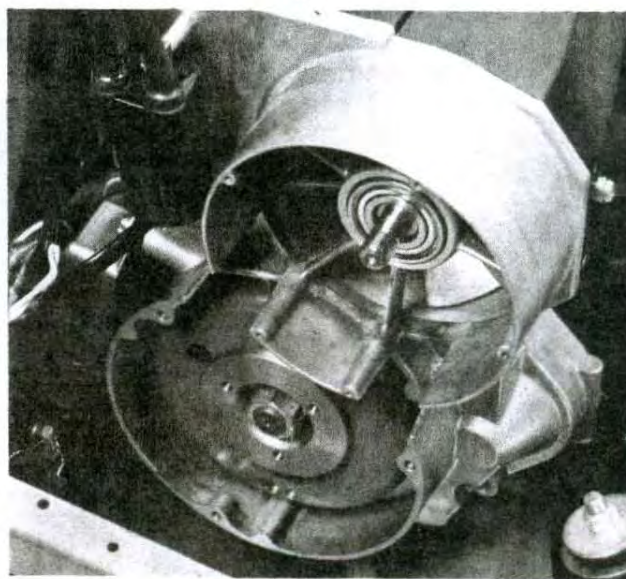
A - Flywheel C - JDM-64-1
B - Tab Washer

17. Install flywheel with ring gear (A), tab washer (B) and nut.

18. Use JDM-64-1 (C) to hold flywheel while you tighten nut to 60 ft. lbs. (8.1 Nm).

19. Bend tabs on tab washer (B) to secure nut.

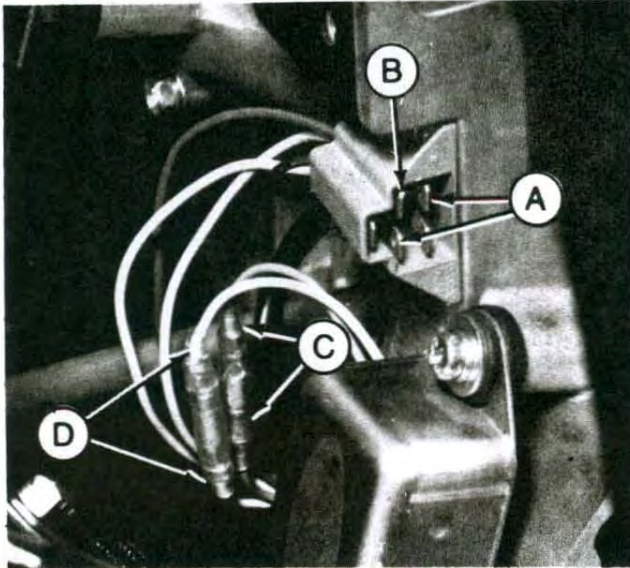
NOTE: Tab should be on flat of nut and not on edge.



20. Install fan housing.

21. Install drive belt and belt guard.

22. Install fan pulley and starter cup.



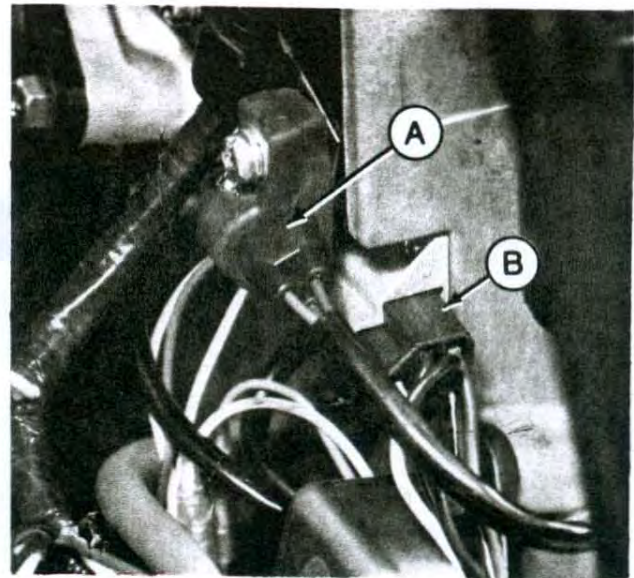
A - Yellow Leads C - Red Lead
B - Brown Lead D - White Lead

23. Connect red lead (C) and white lead (D).

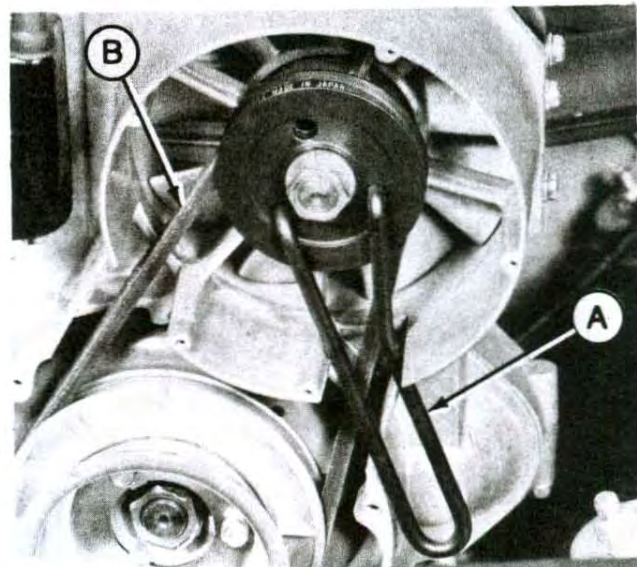
24. Install yellow leads (A) and brown lead (B) in connector.

25. Connect main wiring harness (B) and secure with tie strap.

26. Connect engine wiring harness (A) and install clamp.



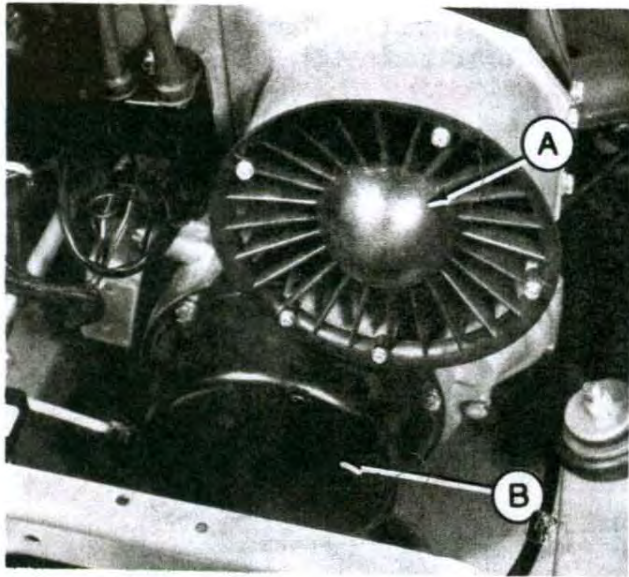
A - Engine Wiring Harness B - Main Wiring Harness



A - JDM-112 B - Fan Belt

27. Install fan belt (B).

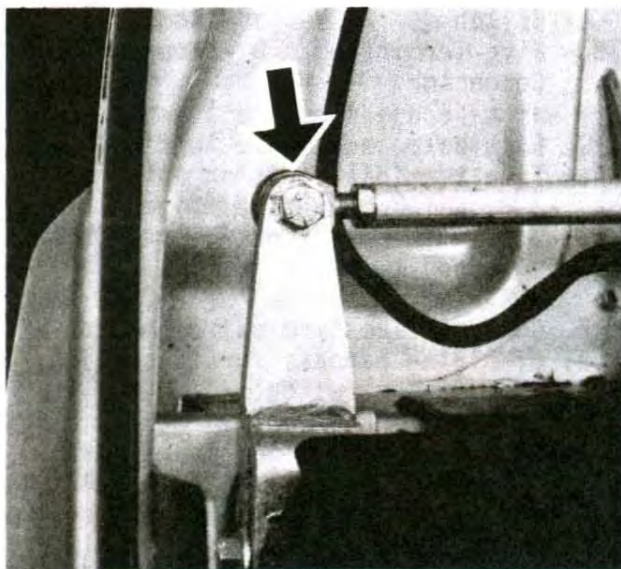
28. Hold fan pulley with JDM-112 (A) and torque nut to 47 ft. lbs. (6.3 Nm). Check fan belt for 3/8 inch deflection.



A - Fan Cover B - Recoil Starter

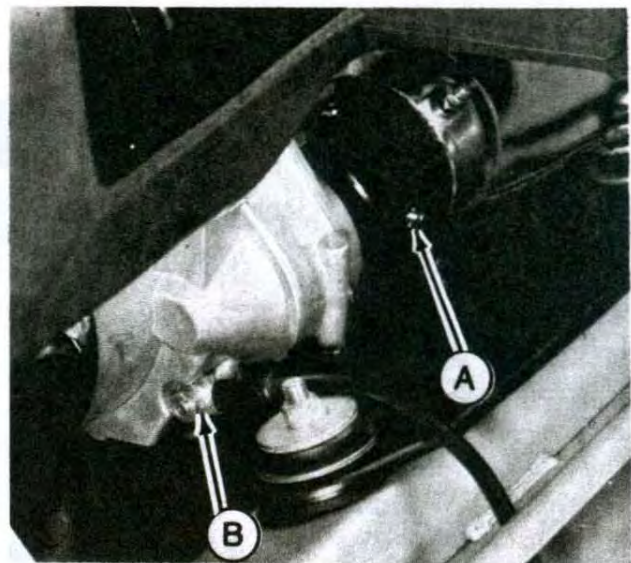
29. Install recoil starter (B).

30. Install fan cover (A). On 440 Trailfire Snowmobiles, install air intake duct.



31. Reverse the bolt securing tie rod to left-hand steering arm. Lock nut on the bottom. This must be done to prevent the bolt from interfering with the bottom of the battery box.

INSTALLING STARTER MOTOR AND BATTERY

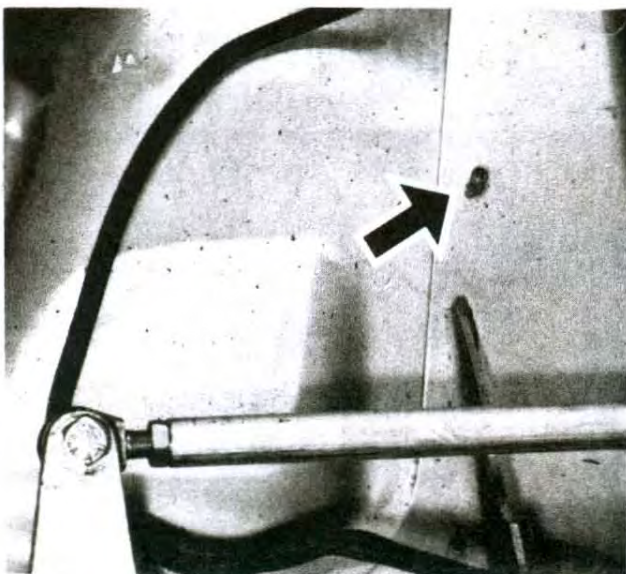


A - Starter Motor B - Ground Lead

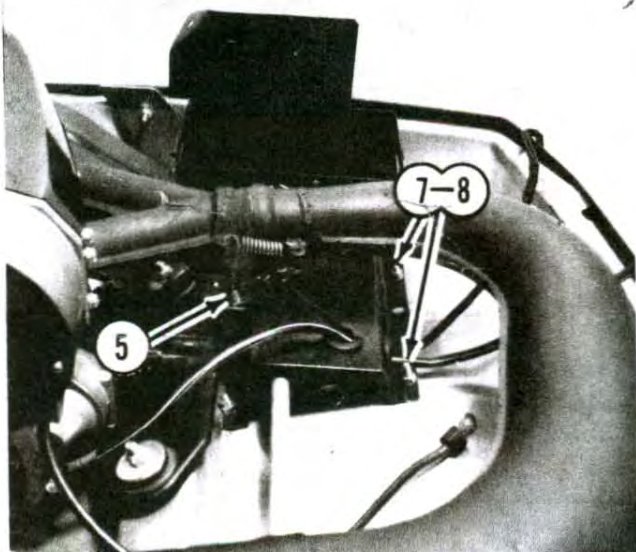
1. Install starter motor (A) on upper stud. Install lock nut but do not tighten.

2. Install lower bolt with head of bolt to the inside. Install ground lead (B) on lower bolt. Secure with flat washer, lock washer and lock nut.

3. Install starter motor bracket to starter motor (A) and engine. Tighten all hardware in steps 1, 2 & 3.



4. Use a cold chisel and remove the rivet indicated.



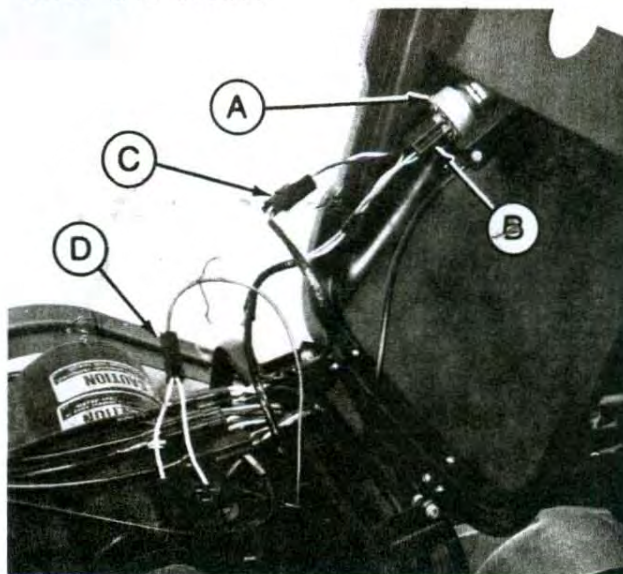
5. Position battery box so slot in box is over frame member and tight against it.

6. Use battery box as a template and scribe and center punch the four holes.

7. Drill four 17/64 inch holes in pan for battery box hardware.

8. Place flat washer on 1/4 inch cap screws and install from the bottom side of pan. Install and tighten lock nuts.

9. Remove ignition switch, choke lever and decal.



A - Five Terminal Switch

B - Five Terminal Connector

C - Two Terminal Connector

D - Brown Lead Connector

10. File hole in console to fit the new five terminal ignition switch.

11. Install decal, ignition switch and choke lever.

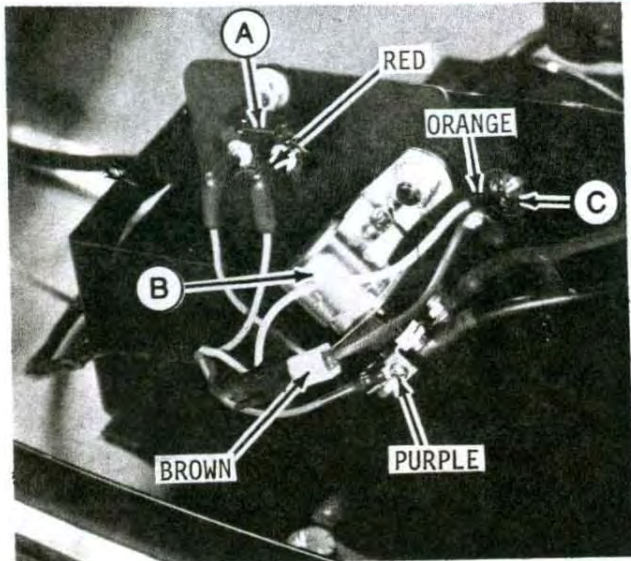
12. Connect five terminal connector (B) of wiring harness furnished with kit to ignition switch.

13. Connect two terminal connector (C) to connector that the two terminal switch was previously connected to.

14. Connect brown lead (D) to yellow accessory lead.

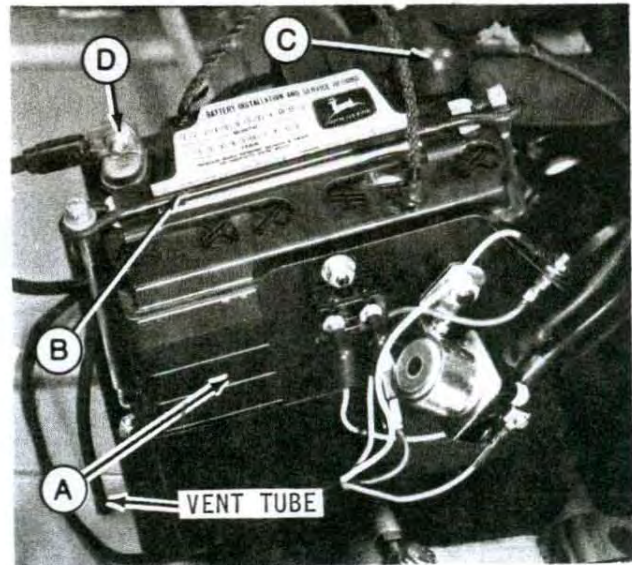
15. Run wiring harness below the center of the engine. Place the wiring harness and ground cable through both holes in battery box and install grommets.

16. Install rubber pads in bottom of battery box.



A - Circuit Breaker C - Rectifier
B - Solenoid

17. Connect wiring harness to the battery box. Red wire of harness to circuit breaker (A), purple wire to solenoid (B), orange wire to rectifier (C) and brown wire to brown wire.



A - Battery C - Positive Cable
B - Hold Down D - Ground Cable

18. Activate and install battery (A).

19. Install battery hold down (B).

20. Connect solenoid lead to positive (+) battery post and place rubber boot over post.

21. Connect ground cable to the negative (-) battery post.

22. Install battery vent tube to battery and drill a 1/4 inch hole in tunnel and place tube through hole.

23. Install muffler.