

Checking Insulation between Field Coil and Yoke



Fig. N-62 Checking Insulation

- (1) Place the tester probes on the field coil and yoke. If it is not conducting, the insulation is good; if it is conducting, the insulation is defective.
- (2) If conducting, replace.

Checking Wear of Brush

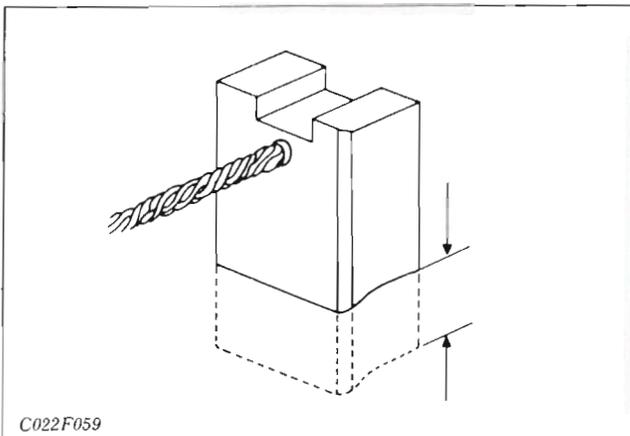


Fig. N-63 Checking Wear of Brush

- (1) Check to see that the brush has worn down more than 1/3 of the standard dimensions.
 - (2) If it wears down more than the allowable limit, replace.
- Reference value:

length:	16mm (0.6299 in.)
width:	12mm (0.4724 in.)
thickness:	7mm (0.2756 in.)
 - Allowable limit:

Wear 1/3 of the standard length or more
5.33mm (0.210 in.)

Checking Brush Spring Pressure

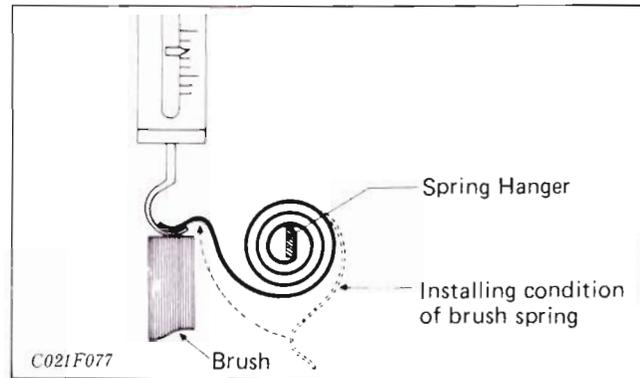


Fig. N-64 Checking Brush Spring Pressure

- (1) Measure the tension with a new brush in place.
 - (2) Replace if the tension is under the reference value.
- Reference value:

9.8N (1 kgf, 2.2 lbs.)

Checking Brush Holder

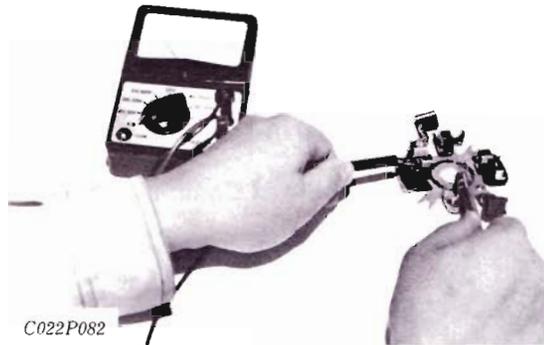


Fig. N-65 Checking Brush Holder

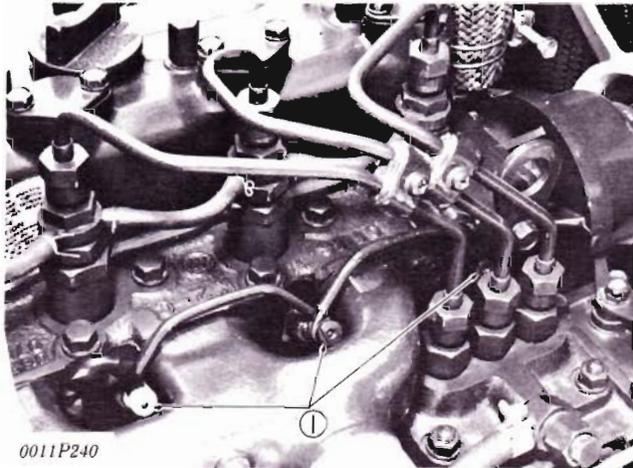
- (1) Check the insulation of the positive brush holder.
 - (2) Replace if defective.
- Reference:

The positive brush holder is made of an insulation material.
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Group 5

Glow Plug and Safety Switch

Glow Plug



1. Glow Plugs

Fig. N-66

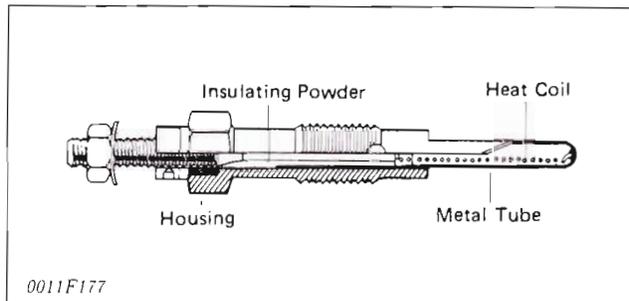
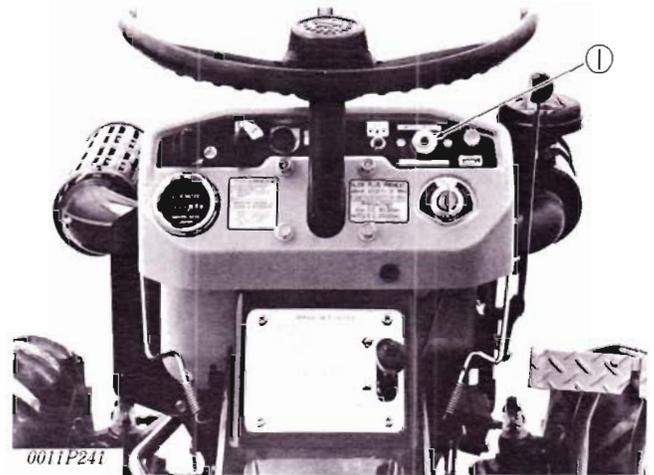


Fig. N-67 Construction of Bar Glow Plug



1. Glow Plug Lamp

Fig. N-68

A glow plug is used for each pre-combustion chamber of the cylinder head to make starting easier. (A three-cylinder engine, therefore, has three glow plugs.)

A glow plug lamp is provided on the meter panel to confirm glow plug condition.

Safety Switch

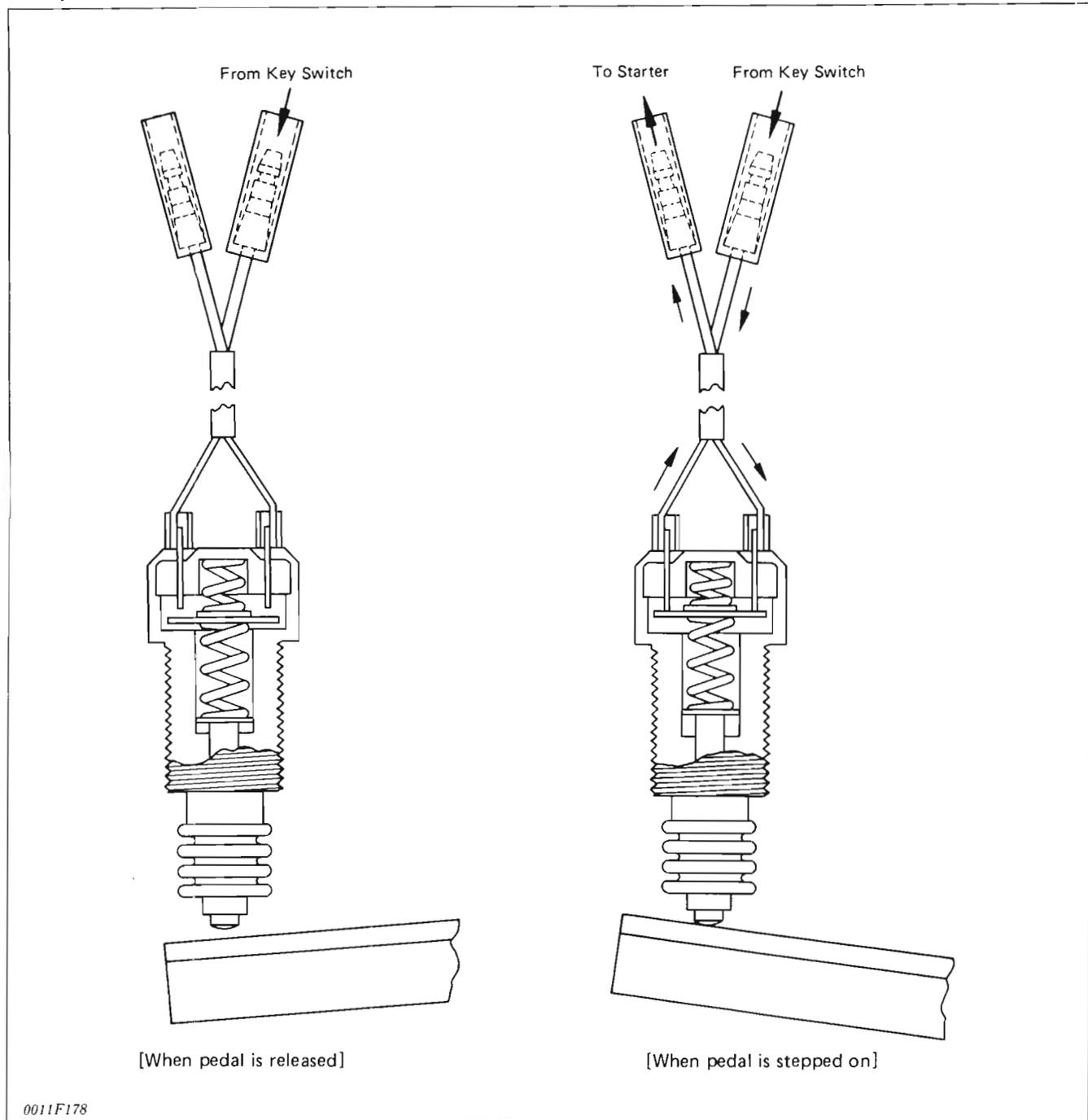


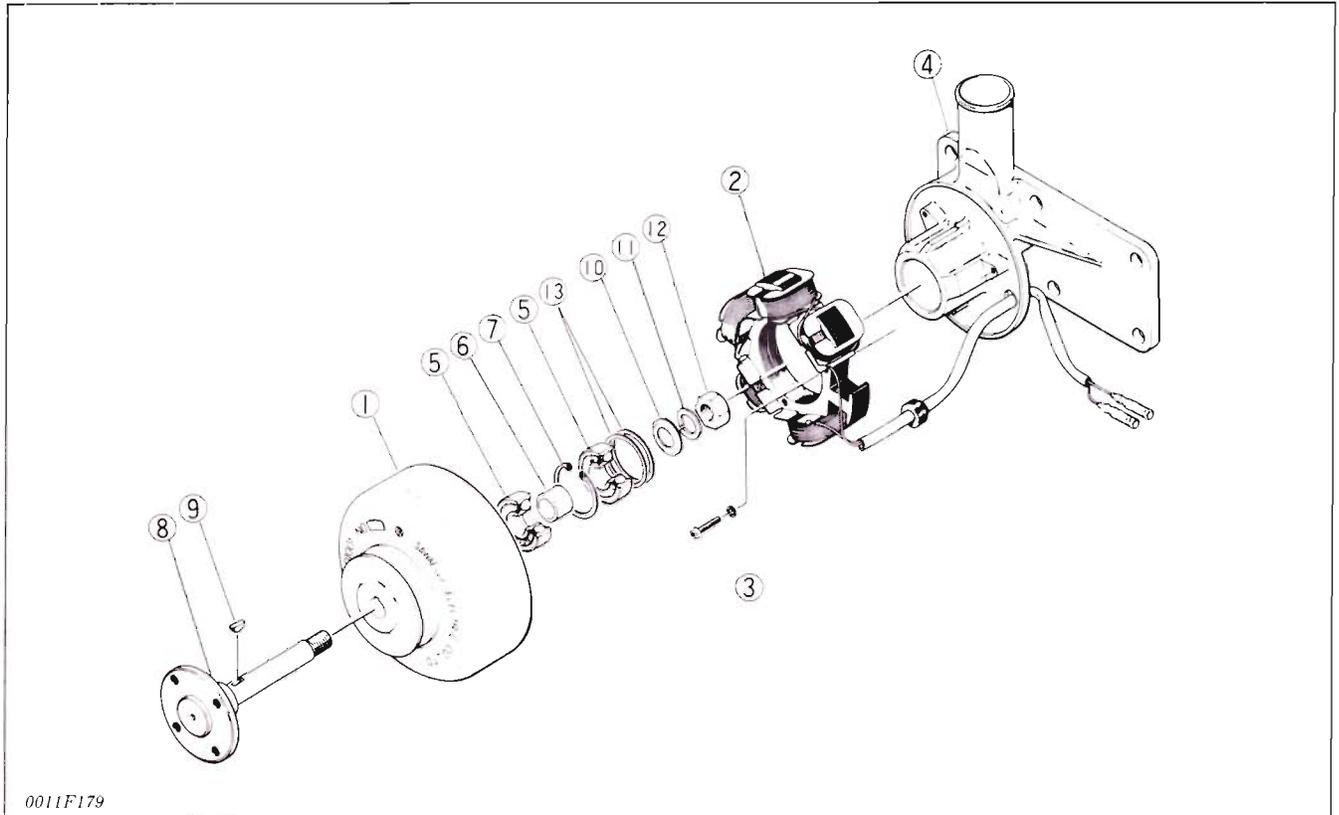
Fig. N-69 Safety Switch Operation

For safe starting, the safety switch prevents current from flowing to the starter if the clutch pedal is not depressed.

Group 6

AC Dynamo and Regulator

AC Dynamo



- | | | | | |
|--------------------|-----------------|---------------------|-------------------|----------|
| 1. Rotor | 4. Stator Base | 7. Internal Circlip | 10. Plain Washer | 13. Shim |
| 2. Stator Assembly | 5. Ball Bearing | 8. Fan Shaft | 11. Spring Washer | |
| 3. Screw | 6. Collar | 9. Key | 12. Nut | |

Fig. N-70 AC Dynamo

This AC dynamo (Code No.15372-6401-1) is an 8-8 pole rotating magnet type generator. It is simple in construction, consisting of a stator and rotor. The rotor is made up of eight permanent magnet pole pieces assembled on a shaft and rotates on the center of the stator around which eight electro-

magnetic coils are provided for. AC dynamo produces higher voltage in slow speed rotation, compared with DC generator, and charges electric current to the battery during engine idling. Accordingly, there is no fear of battery failure.

Regulator

The regulator performs rectification and voltage regulation. On this tractor, all these functions are controlled by the electronic circuit.

The regulator converts AC current into DC current which flows through the power consuming circuits and the battery, and also charges the battery. If, however, the battery voltage exceeds a certain level, the DC current is cut off from the charging circuit to prevent overcharging.



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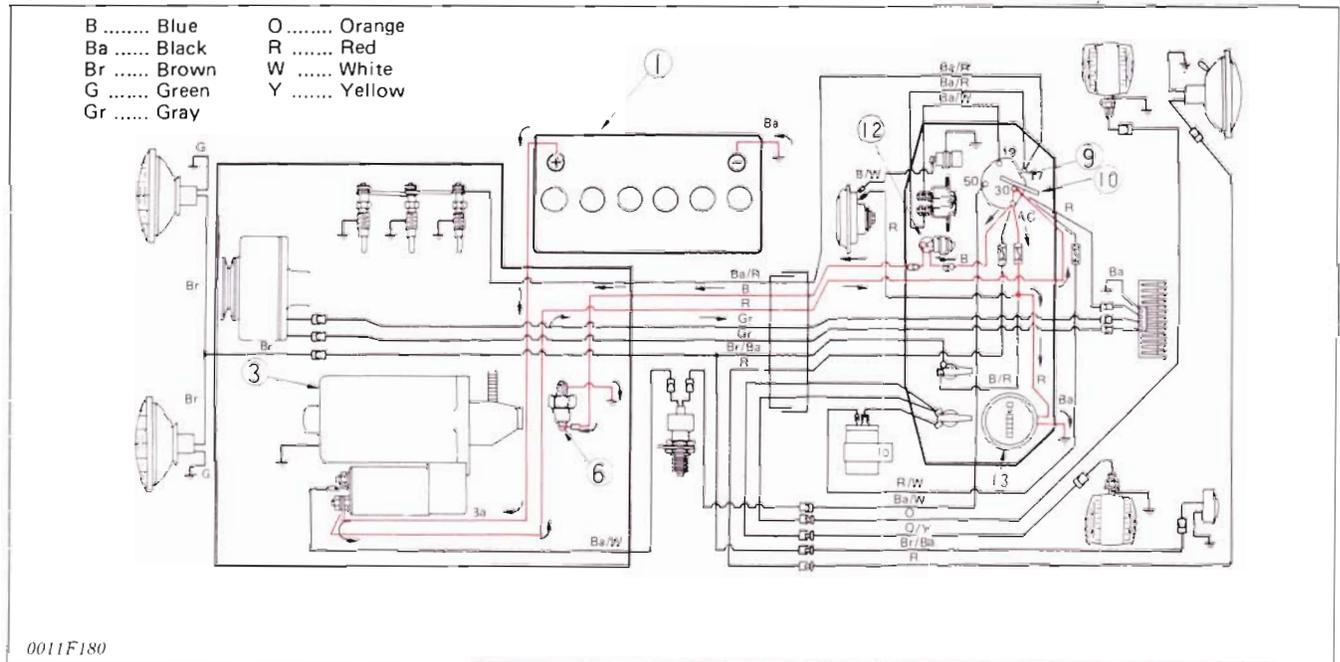
Fig. N-71 Regulator

Group 7

Hourmeter, Headlights, Hazard Lamps

When the key switch is turned ON, the hourmeter starts operating. On/off of headlights and hazard lamps is controlled by switches.

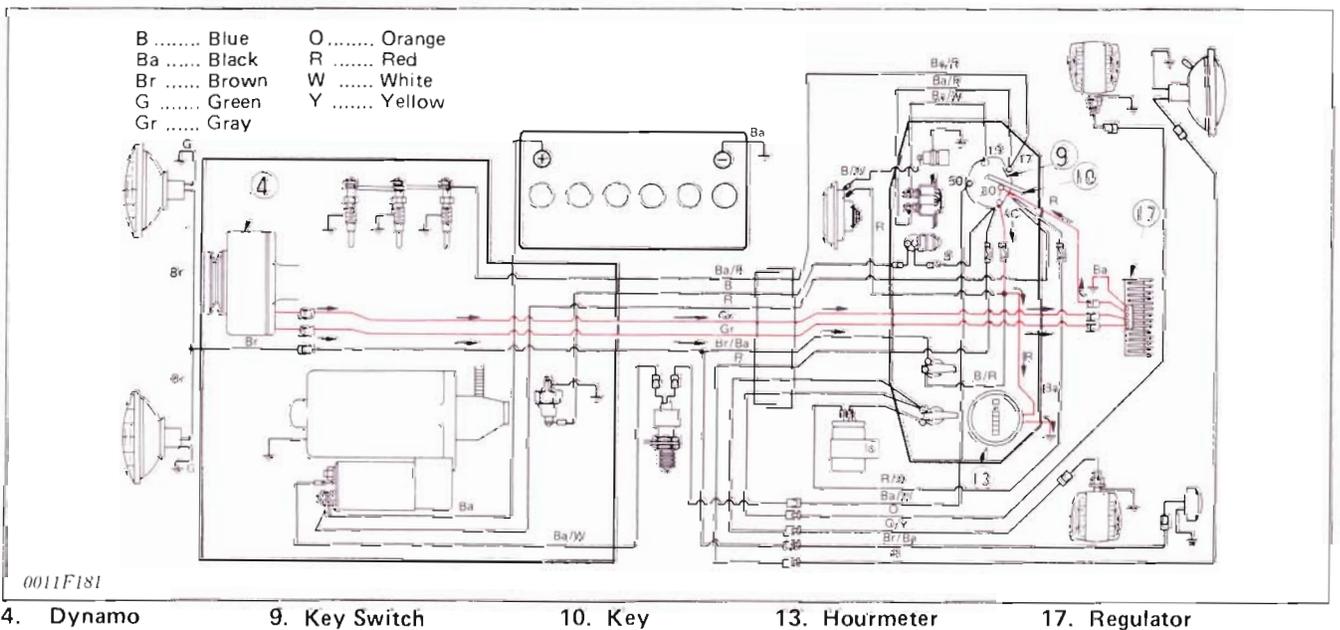
These units receive power from the AC dynamo when the engine is running, and from the battery when the engine stops.



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1. Battery 6. Oil Switch 10. Key 13. Hourmeter
3. Starter 9. Key Switch 12. Oil Lamp

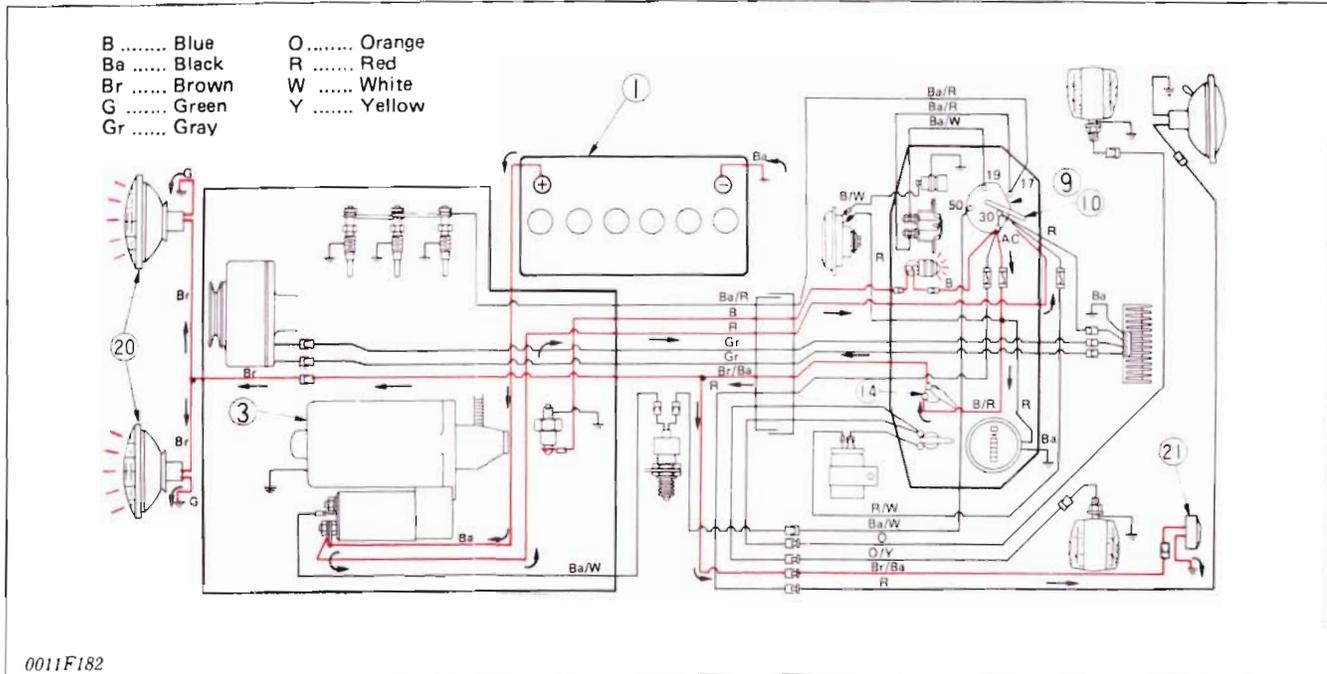
Fig. N-72 Hourmeter Circuit when Engine is Stopped (Key Switch "ON")



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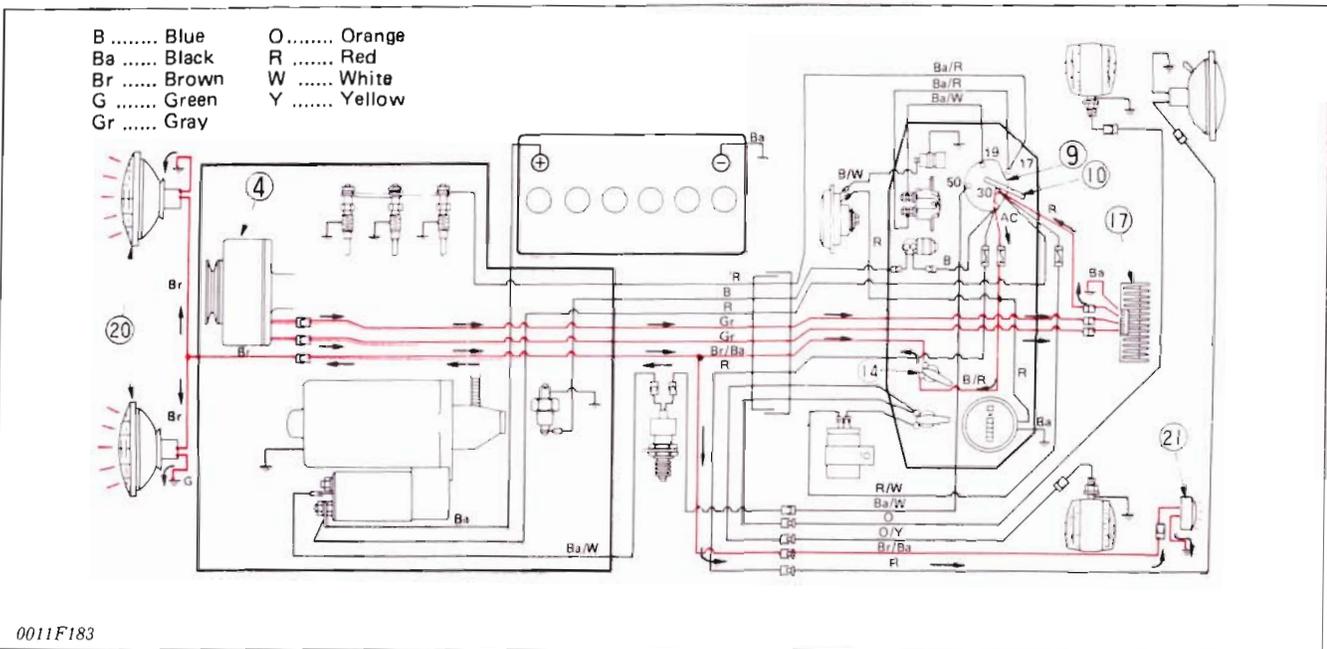
4. Dynamo 9. Key Switch 10. Key 13. Hourmeter 17. Regulator

Fig. N-73 Hourmeter Circuit when Engine is Rotating



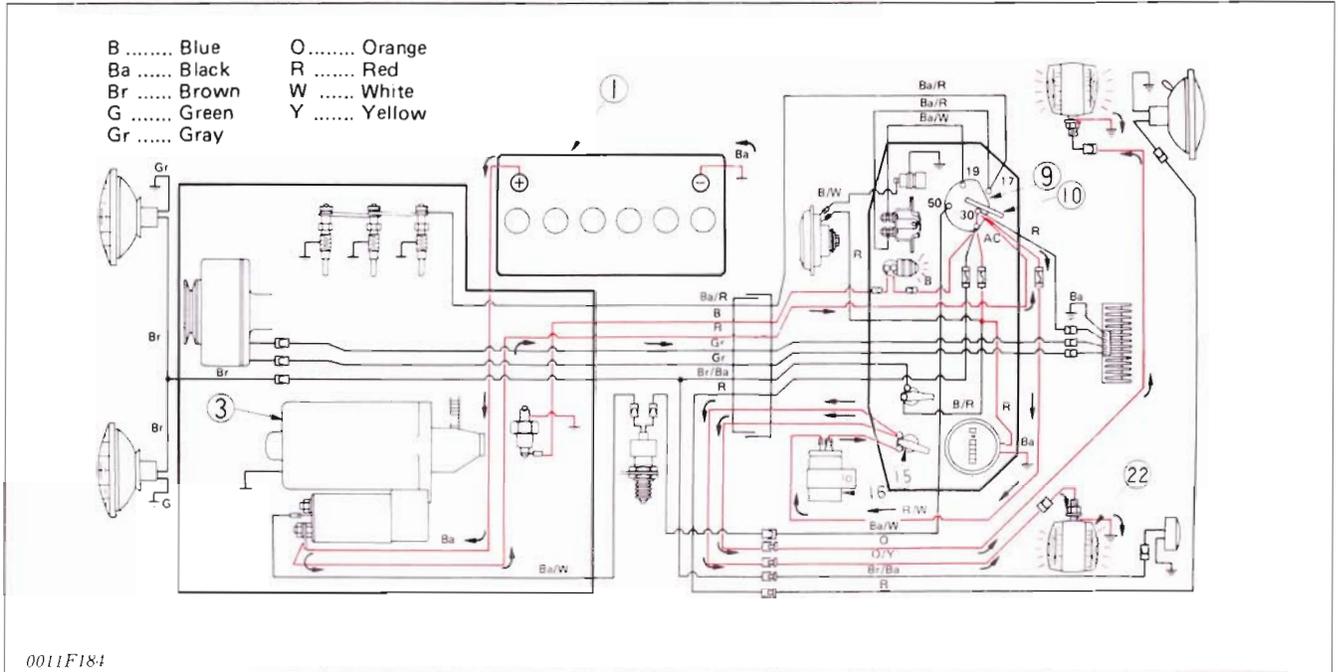
- 1. Battery
- 3. Starter
- 9. Key Switch
- 10. Key
- 14. Headlight Switch
- 20. Headlight
- 21. Taillight

Fig. N-74 Headlight and Taillight Circuit when Engine is Stopped (Key Switch "ON")



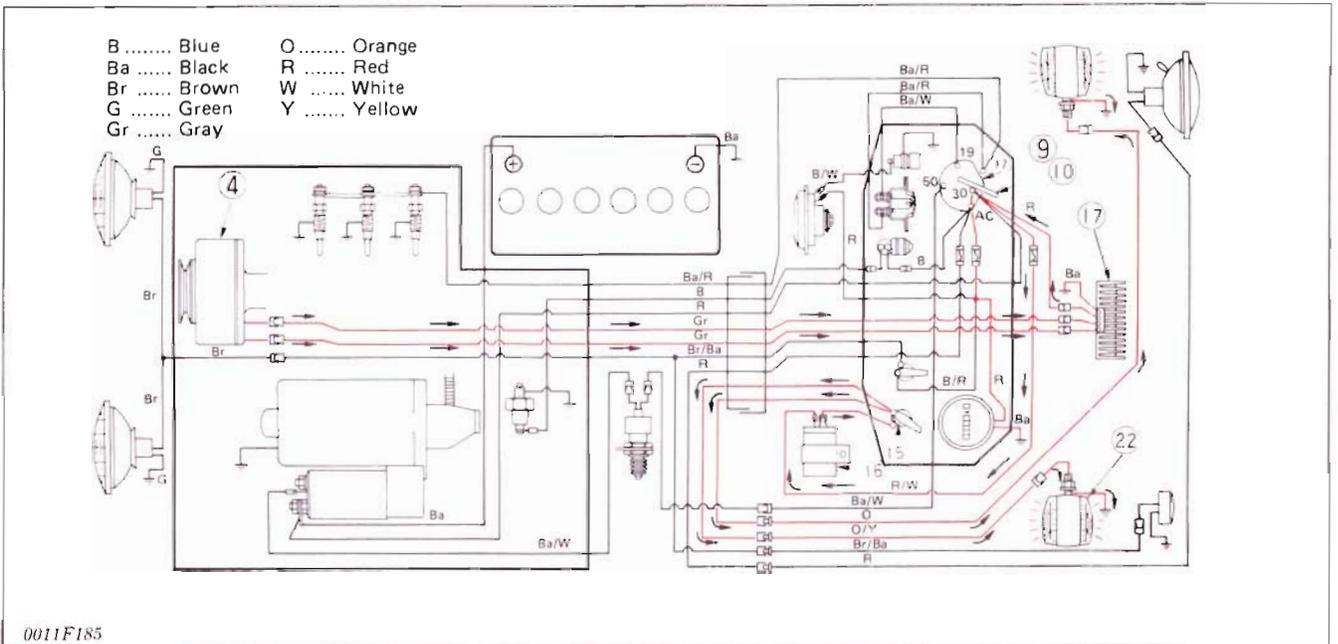
- 4. Dynamo
- 9. Key Switch
- 10. Key
- 14. Headlight Switch
- 17. Regulator
- 20. Headlight
- 21. Taillight

Fig. N-75 Head light and Taillight Circuit when Engine is Rotating



- 1. Battery
- 3. Starter
- 9. Key Switch
- 10. Key
- 15. Hazard Switch
- 16. Hazard Unit
- 22. Hazard Lamp

Fig. N-76 Hazard Lamp Lighting Circuit when Engine is Stopped (Key Switch "ON")



- 4. Dynamo
- 9. Key Switch
- 10. Key
- 15. Hazard Switch
- 16. Hazard Unit
- 17. Regulator
- 22. Hazard Lamp

Fig. N-77 Hazard Lamp Lighting Circuit when Engine is Rotating

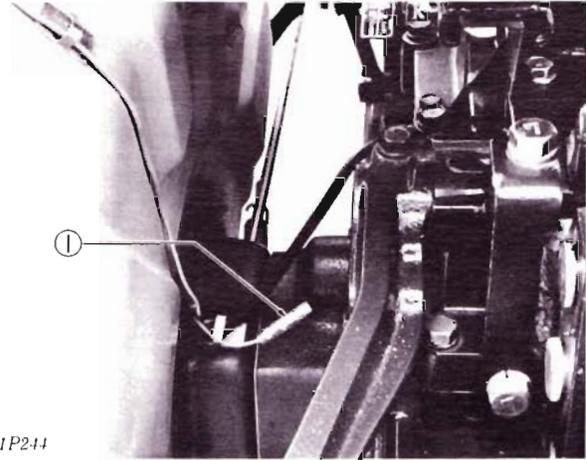
Horn, Work Lamp (Option)

A horn and work lamp are available optionally.



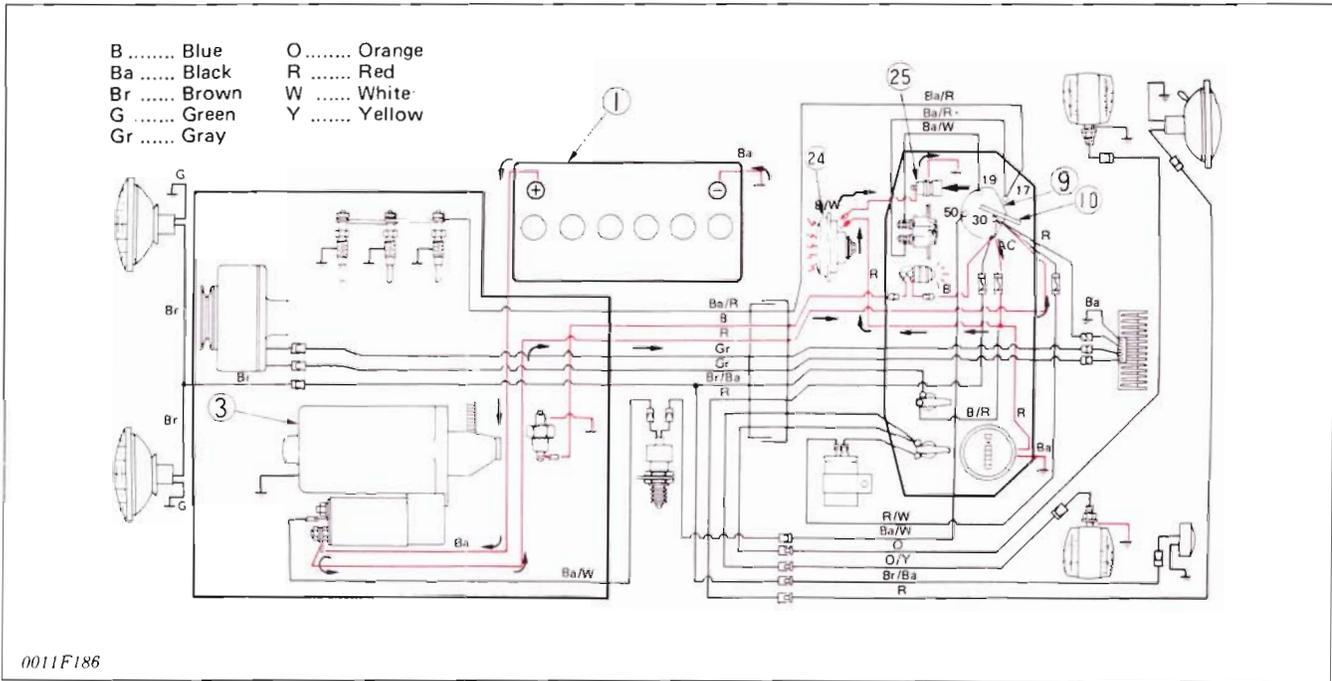
0011P243
 1. Horn Switch

Fig. N-78 Horn



0011P244
 1. Work Lamp Coupler

Fig. N-79 Work Lamp Coupler



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 1. Battery 3. Starter 9. Key Switch 10. Key 24. Horn (option) 25. Horn Switch (option)

Fig. N-80 Horn Operating Circuit when Engine is Stopped (Key Switch "ON")

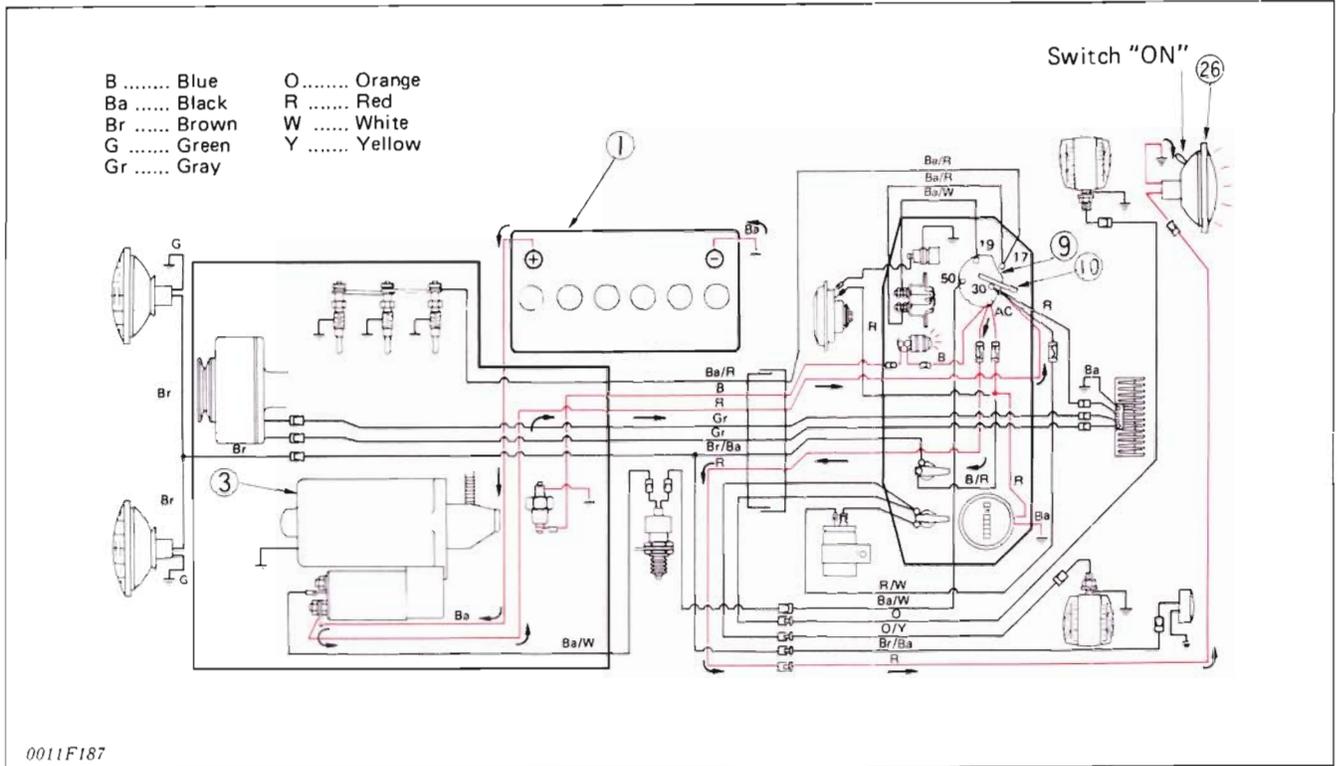


Fig. N-81 Work Lamp Operating Circuit when Engine is Stopped (Key Switch "ON")