

20. LIGHTS/SWITCHES

LIGHTS/SWITCHES

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20. LIGHTS/SWITCHES

SERVICE INFORMATION

- A continuity test can be made with the switches installed on the vehicle.
- All plastic connectors have locking tabs that must be released before disconnecting, and must be aligned when reconnecting.
- To isolate an electrical failure, check the continuity of the electrical path through the part. A continuity check can usually be made without removing the part from the vehicle. Simply disconnect the connectors and connect a continuity tester to the terminals or connections.

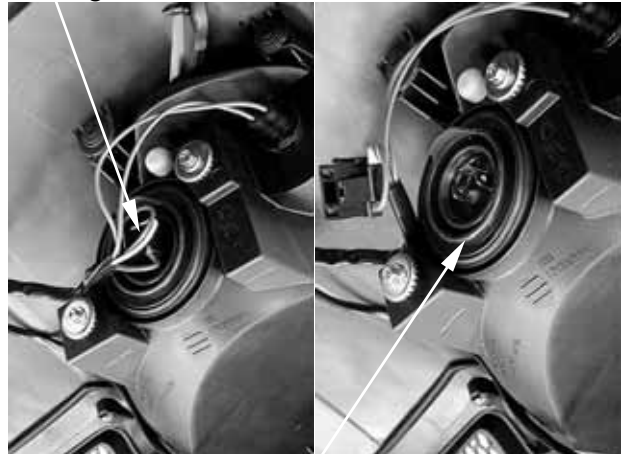
20. LIGHTS/SWITCHES

BULBS REMOVAL

HEADLIGHT

Disconnect the headlight wire connector.
Remove the rubber boot from the headlight case.

Headlight Connector



Rubber Boot

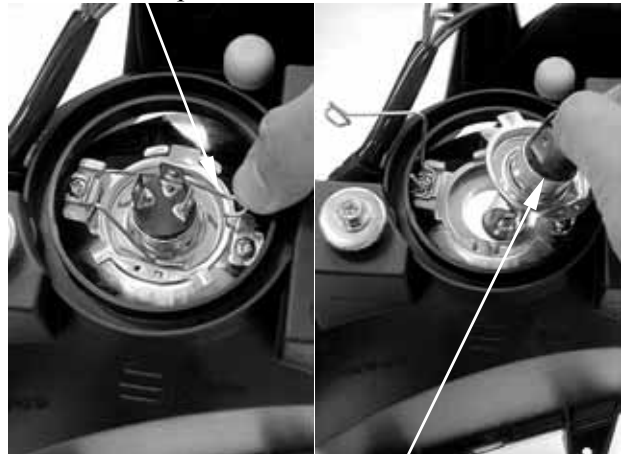
Relax the lock clip to remove the bulb and replace with a new one.

Install the bulb, aligning the bulb socket groove with the bulb tab and set the lock clip.

Connect headlight wire connector.
Install the rubber boot.

Install the front fender in the reverse order of removal.

Lock Clip

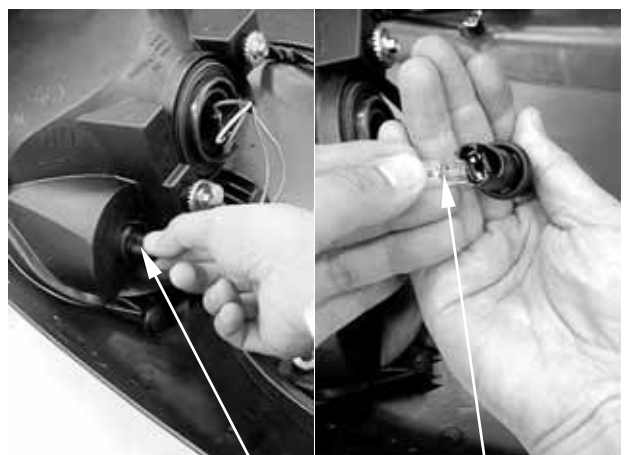


Bulb

POSITION LIGHT

Remove the bulb socket by pulling it out.
Remove the bulb.

Install the bulb in the reverse order of removal



Bulb Socket

Bulb

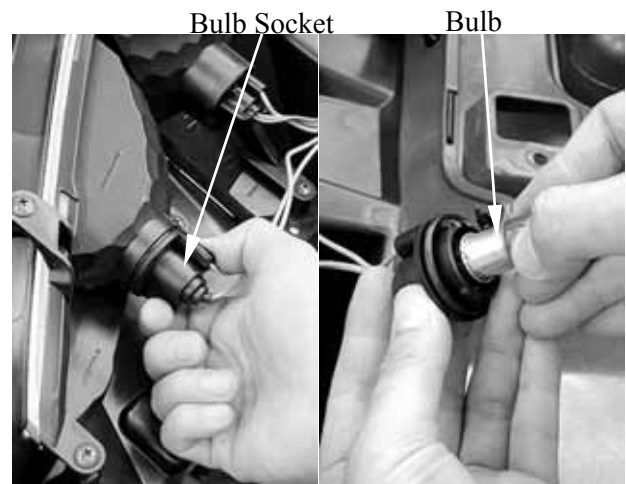
20. LIGHTS/SWITCHES

TAIL/BRAKE LIGHT

Remove the bulb socket by turning it counterclockwise.

Remove the bulb.

Install the bulb in the reverse order of removal.

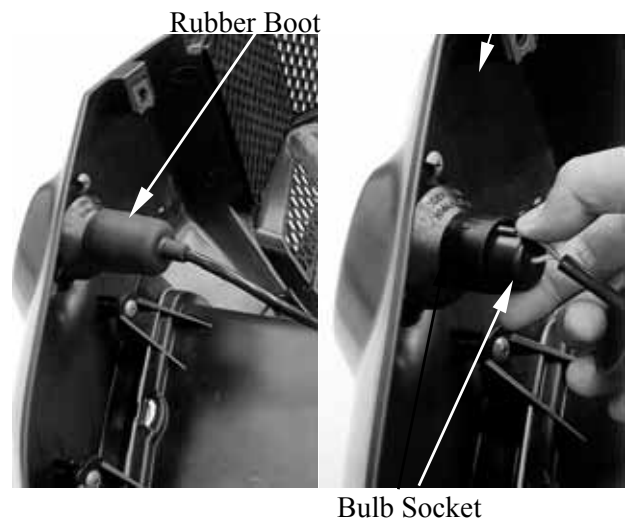


TURN SIGNAL LIGHT (ON ROAD)

FRONT

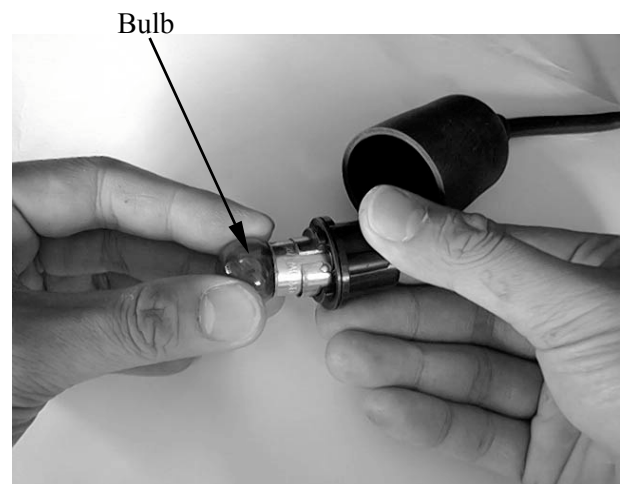
Remove the rubber boot from the turn signal light case.

Remove the bulb socket by turning it counterclockwise.



Remove the bulb.

Install the bulb in the reverse order of removal.



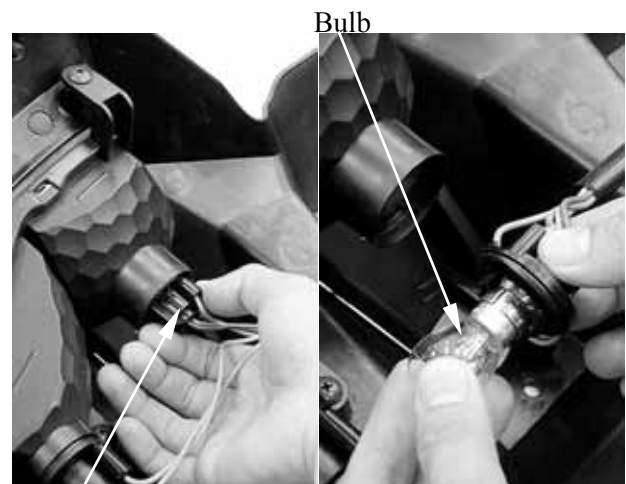
20. LIGHTS/SWITCHES

REAR

Remove the bulb socket by turning it counterclockwise.

Remove the bulb.

Install the bulb in the reverse order of removal.



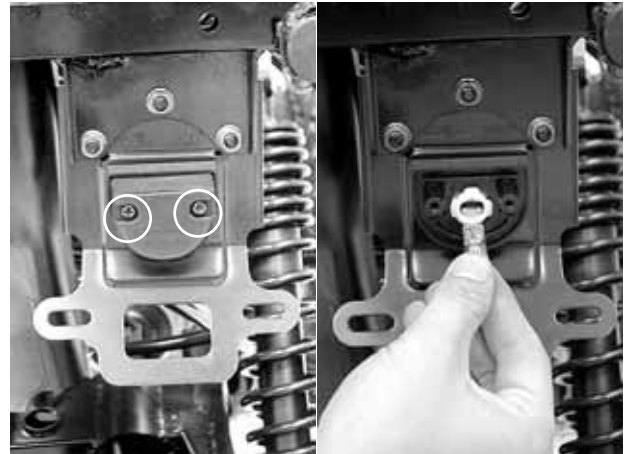
Bulb Socket

LICENCE LIGHT BULB (ON ROAD)

Remove the two screws and licence light cover.

Remove the bulb.

Install the bulb in the reverse order of removal



HORN (ON ROAD)

REMOVAL

Disconnect the horn wire leads.
Remove the bolt and remove horn.

INSTALLATION

The installation sequence is the reverse of removal.



Horn Wire Leads

Horn

20. LIGHTS/SWITCHES

IGNITION SWITCH

INSPECTION

Disconnect the ignition switch connectors.
(Refer to the “**FRAME COVER**” section in the chapter 2.)

Check for continuity between the switch side connector terminals in each switch position.

Continuity should exist between the color coded wires as right:

	IG	E	BAT1	BAT2	PO
OFF	○	○			
ON			○	○	
PO			○	○	○
COLOR	B/W	G	R	B	BR

REPLACEMENT

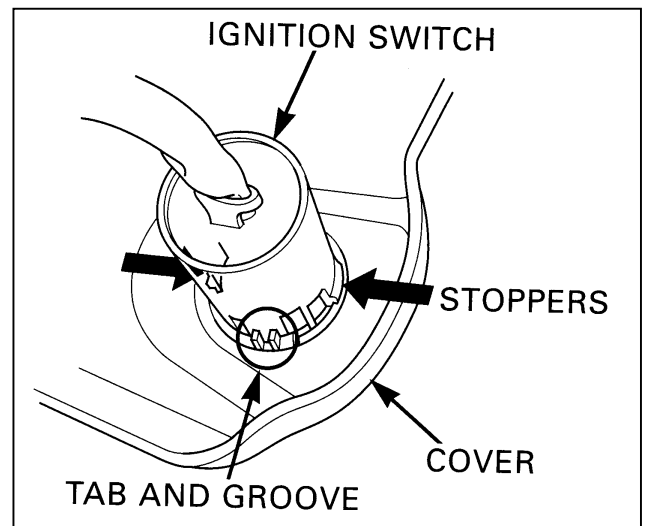
Release the switch wire from the wire clips on the steering shaft holder frame pipe.

Remove the meter cover (refer to the “**FRAME COVER**” section in the chapter 2).

Remove the ignition switch from the cover while pushing in the two stoppers.

Install a new ignition switch by aligning the locating tab with the groove in the cover.

Install the removed parts in the reverse order of removal.



HANDLEBAR SWITCH

INSPECTION

Remove front center cover (refer to the “**FRAME COVER**” section in the chapter 2).

Disconnect the connectors.

Check for continuity between the switch side connector terminals in each switch position.

Continuity should exist between the color coded wires as next page:

20. LIGHTS/SWITCHES

(ON ROAD)

HORN SW

	HO	BAT
FREE		
PUSH	○	○
COLOR	LG	B

WINKER SW

	R	L	WR
L		○	○
R	○		○
COLOR	SB	O	GR

START SW

	ST	C
FREE		
PUSH	○	○
COLOR	Y/R	Y/BR

LIGHT SW

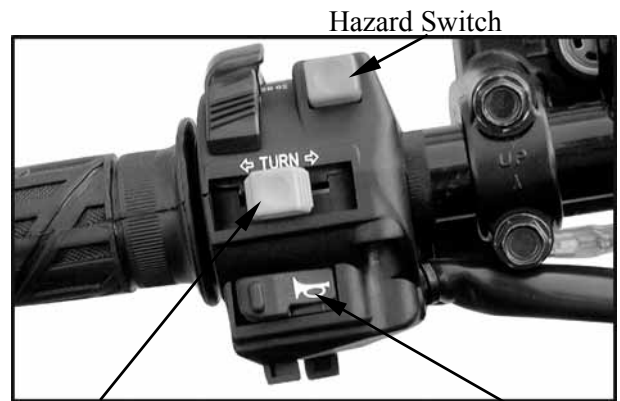
	PO	LO	HI
☰	○		
☷	○	○	
☷	○		○
COLOR	BR/B	W	L

HAZARD SW

	BAT	HA
△	○	○
●		
COLOR	R/W	Y/B

2WD/4WD SW

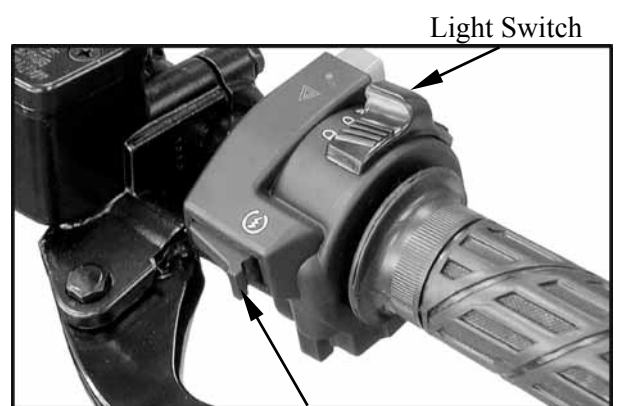
	WR	2WD	4WD
2WD	○	○	
4WD	○		○
COLOR	BR/L	W/L	W/R



Hazard Switch

Winker Switch

Horn Switch



Light Switch

Start Switch



2WD/4WD Select Button

20. LIGHTS/SWITCHES

(OFF ROAD)

ENGINE STOP SW

	E	IG
COLOR	BR/L	B/W

START SW

	ST	C
FREE		
PUSH		
COLOR	Y/R	B/W

DIMMER SW

	HL	LO	HI
COLOR	BR/B	W	L

PASSING SW

	ST	C
FREE		
PUSH		
COLOR	BR/L	L

2WD/4WD SW

	WR	2WD	4WD
2WD			
4WD			
COLOR	BR/L	W/L	W/R

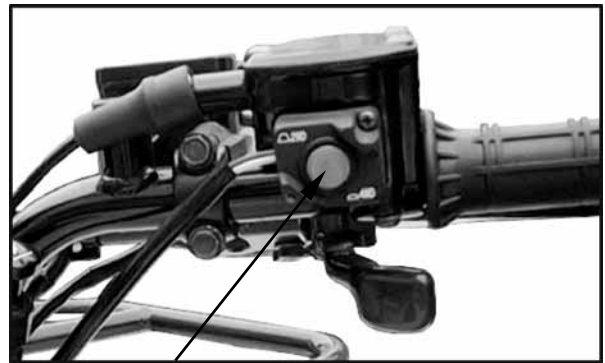
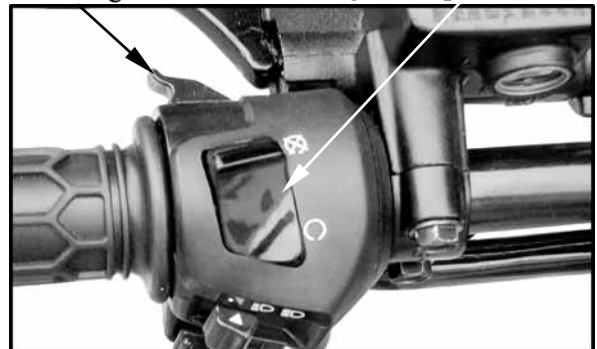
Dimmer Switch



Start Switch

Passing Switch

Engine Stop Switch



2WD/4WD Select Button

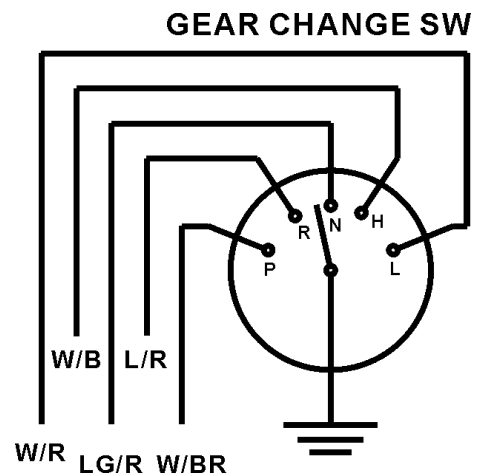
20. LIGHTS/SWITCHES

GEAR INDICATOR LIGHT SWITCHES

INSPECTION

Disconnect the gear indicator light switch wire connector.

Check for continuity between the switch side connector terminal and engine ground.



REPLACEMENT

Disconnect the gear indicator light switch connector.

Remove the bolt, then remove the gear indicator light switch and washer.

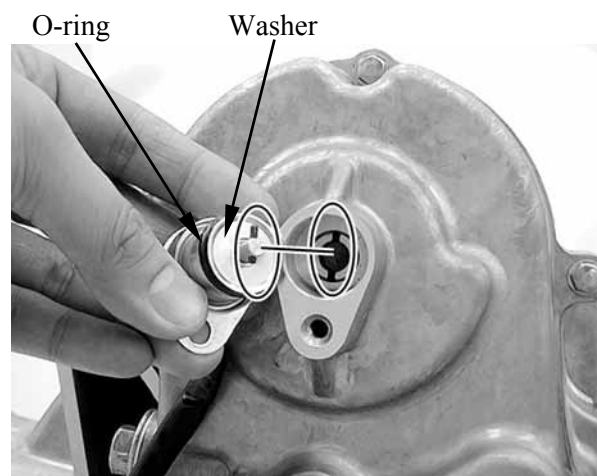
Install the washer and a new switch with a new O-ring (apply engine oil to O-ring).

***** Make sure that the lever on the gear indicator light switch correctly engages with the locating slot on the shift shaft.

Shift the drive select lever to check if the gear indicator light is correct.



Gear Indicator Light Switch Connector



20. LIGHTS/SWITCHES

SPEED SENSOR

Disconnect the connector.

Remove the bolt then remove the speed sensor.

If the speedometer, odometer or trip meter does not function properly. Inspect the connection of speed sensor connector.

If the connection is all right, replace the speedometer with a new one.

If the speedometer, odometer or trip meter still does not function properly, replace the speed sensor.



Speed Sensor

20. LIGHTS/SWITCHES

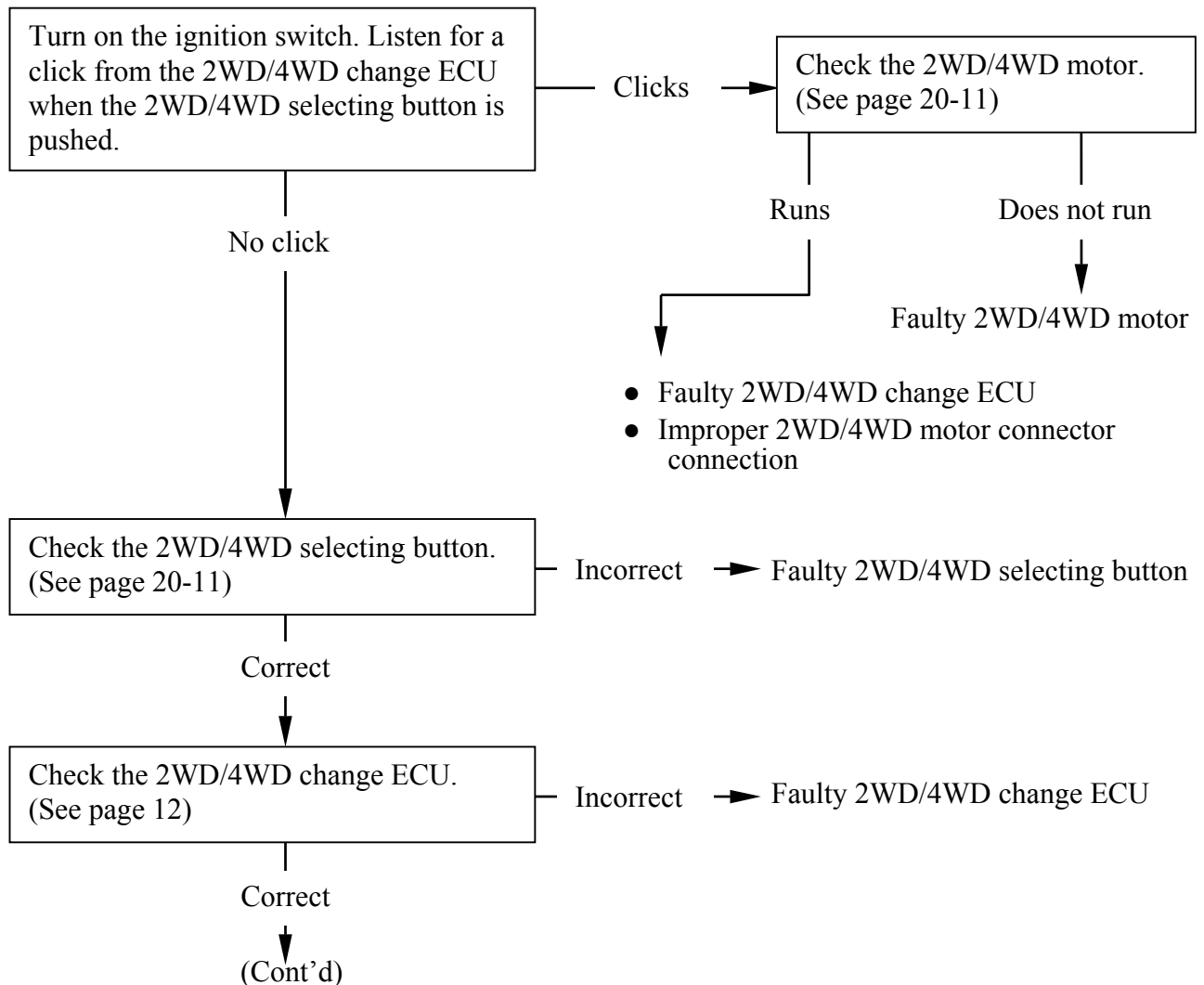
2WD/4WD SELECTING SYSTEM

The 2WD/4WD selecting system consists of the following components:

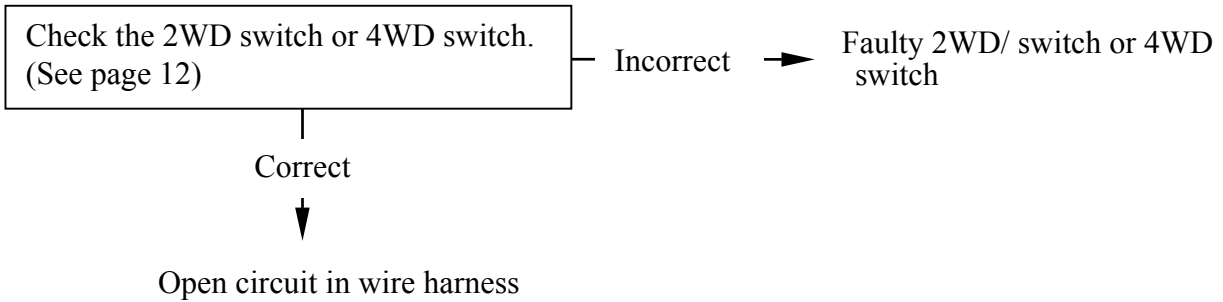
- 2WD/4WD selecting button
- 2WD switch
- 4WD switch
- 2WD/4WD change ECU
- 2WD/4WD motor
- Battery

TROUBLESHOOTING

Does not shift to 2WD/4WD (2WD/4WD motor will not run.)



20. LIGHTS/SWITCHES

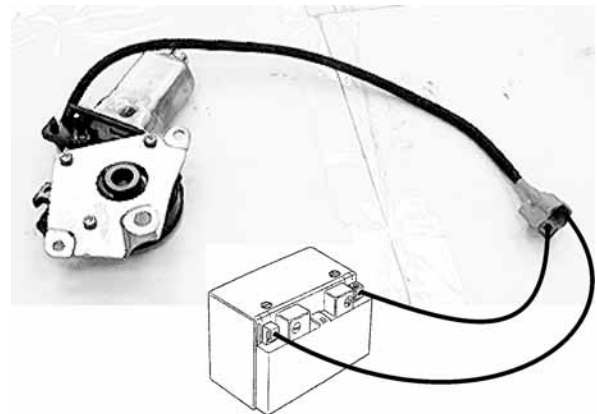


The 2WD/4WD motor runs, but does not shift to 2WD/4WD. Check the front drive sliding dog (refer to the “**FRONT DRIVE DISASSEMBLY/INSPECTION/ASSEMBLY**” section in the chapter 13).

INSPECTION

2WD/4WD motor

Remove the 2WD/4WD motor (refer to the “**FRONT DRIVE DISASSEMBLY/INSPECTION/ASSEMBLY**” section in the chapter 13).

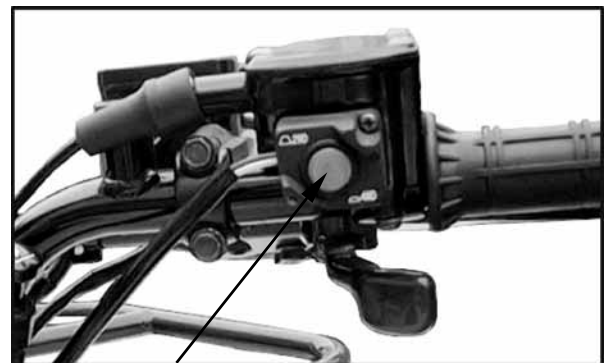


Connect the 12 V battery to the 2WD/4WD motor lead wires as shown. If the motor does not run , replace the motor assembly with a new one.

Install the 2WD/4WD motor and tighten the bolts to the specified torque (refer to the “**FRONT DRIVE DISASSEMBLY/INSPECTION/ASSEMBLY**” section in the chapter 13).

2WD/4WD selecting button

2WD/4WD SW			
	WR	2WD	4WD
2WD	○	○	
4WD	○		○
COLOR	BR/L	W/L	W/R



2WD/4WD Select Button

20. LIGHTS/SWITCHES

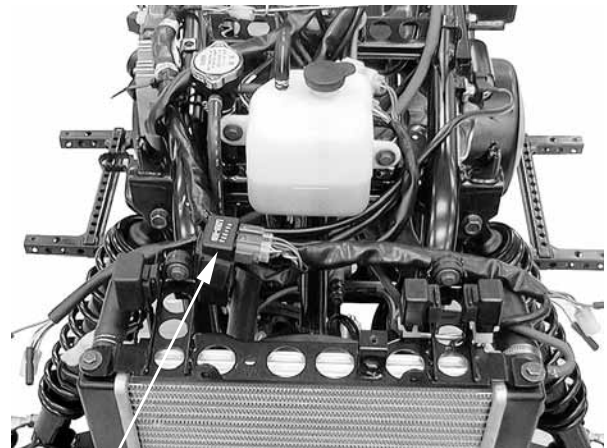
2WD/4WD change ECU

Make sure the 2WD/4WD selecting button is correct (see page 20-11).

Disconnect the 2WD/4WD motor connector.

Turn on the ignition switch.

Listen for a click from the 2WD/4WD change ECU when the 2WD/4WD selecting button is pushed.



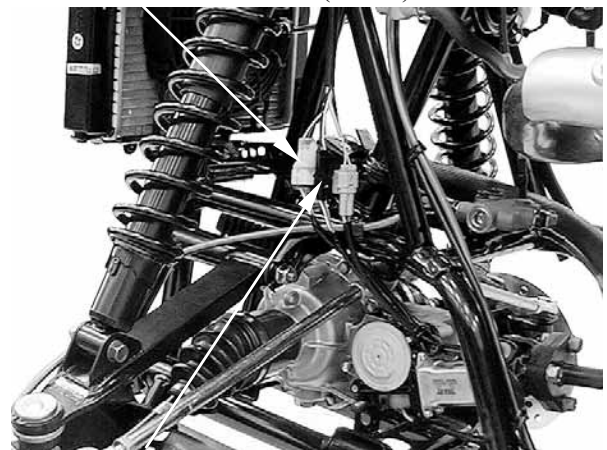
2WD/4WD Change ECU

2WD switch and 4WD switch

Remove the 2WD/4WD motor (refer to the “**FRONT DRIVE DISASSEMBLY/INSPECTION/ASSEMBLY**” section in the chapter 13).

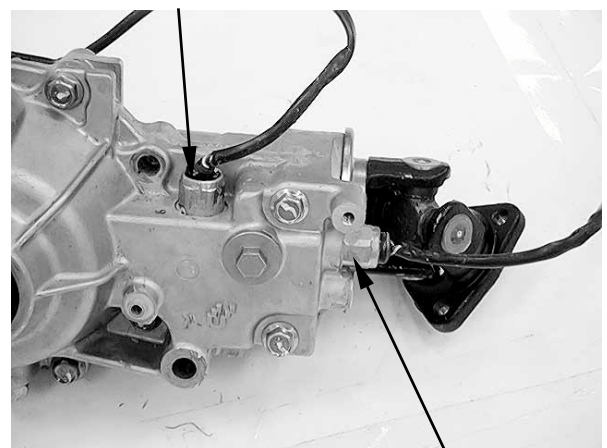
Disconnect the switch connectors.

4WD Switch Connector (White)



2WD Switch Connector (Black)

4WD Switch Connector



2WD Switch Connector

Remove the 2WD switch and 4WD switch.

Inspect the switches.

2WD SW			4WD SW		
	2WD	BAT		4WD	BAT
OPEN			OPEN		
SHORT	○—○	○—○	SHORT	○—○	○—○
COLOR	W/L	B/L	COLOR	W/R	B/R

20. LIGHTS/SWITCHES

Apply three bond: 1215 to the 2WD/4WD switches and tighten them to the specified torque.

Torque: 2.2 kgf-m (22 N-m, 16 lbf-ft)

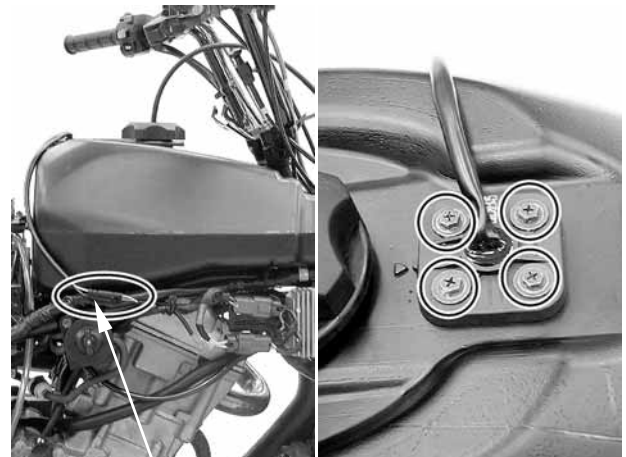
FUEL UNIT

REMOVAL

Remove the fuel tank cover (refer to the “**FRAME COVERS**” section in the chapter 2).

Remove the fuel unit connectors.

Remove the four bolts, then remove the fuel unit from fuel tank.



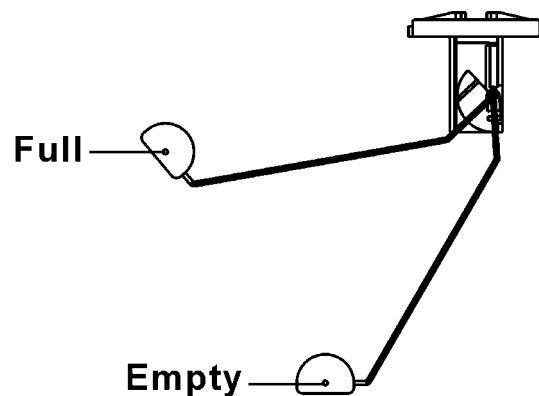
Fuel Unit Connectors

INSPECTION

Measure the resistance between the Yellow/White and Blue/White terminals of the fuel unit connector.

Standard (at 20°C/68°F):

Float at full position	1100 ± 33 Ω
Float at empty position	100 ± 3 Ω



INSTALLATION

Fuel unit installation is in the reverse order of removal.

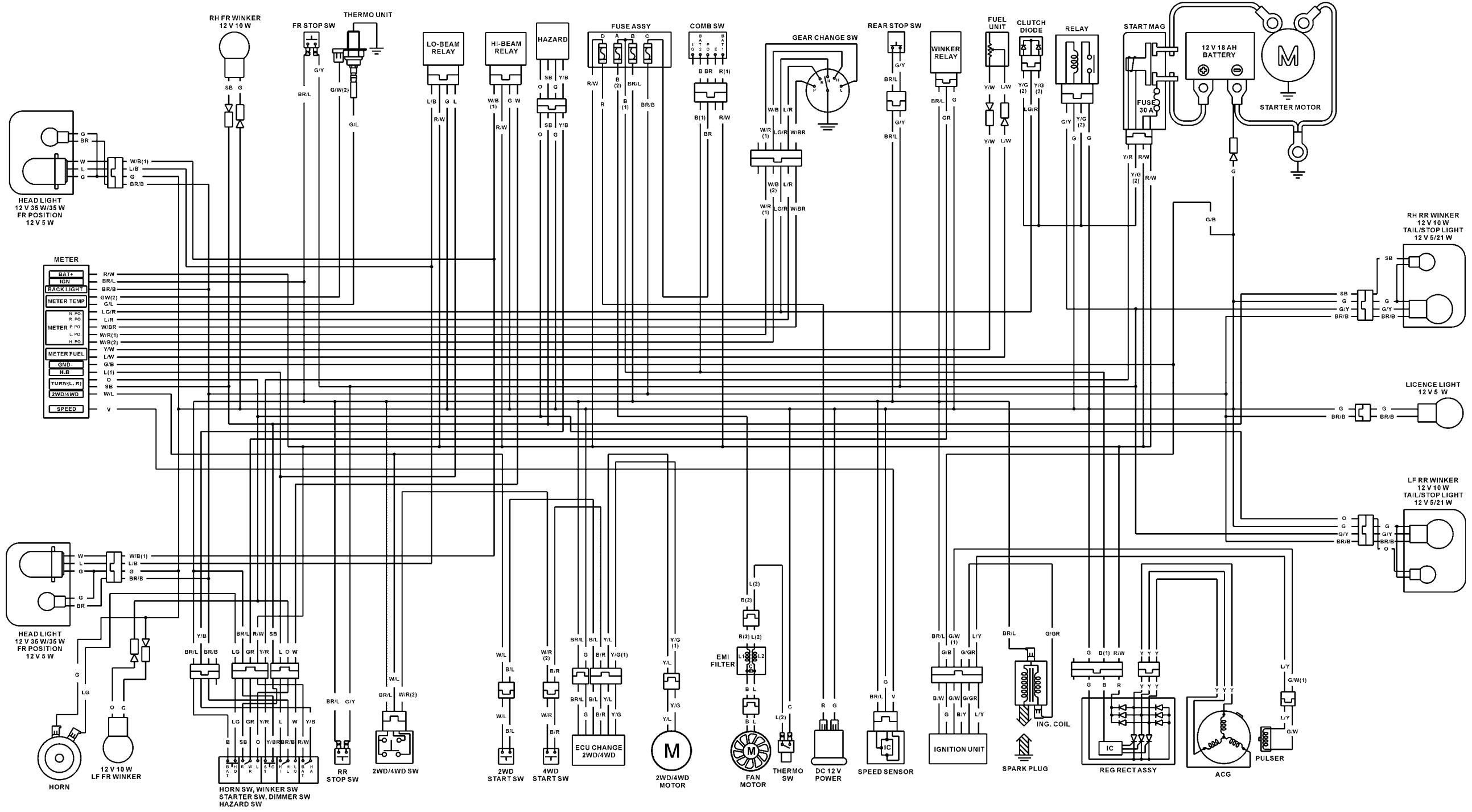
- * Align the tab on the fuel unit with the mark on the fuel tank.



21. WIRING DIAGRAMS

(ON ROAD)

FUSE A: 10 A (FAN MOTOR)
 FUSE B: 15 A (MAIN)
 FUSE C: 15 A (LIGHT)
 FUSE D: 15 A (CHARGE)



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WIRE COLORS (GROUND/MARKING)

B	BLACK	BR	BROWN
G	GREEN	GR	GRAY
O	ORANGE	SB	SKY BLUE
L	BLUE	LG	LIGHT GREEN
W	WHITE	V	VIOLET
Y	YELLOW	R	RED

2WD/4WD SW	
WR	2WD 4WD
2WD	○ ○
4WD	○ ○
COLOR	BR/L W/L W/R

2WD START SW	
2WD	BAT
OPEN	○ ○
SHORT	○ ○
COLOR	W/L B/L

4WD START SW	
4WD	BAT
OPEN	○ ○
SHORT	○ ○
COLOR	W/R B/R

HORN SW	
HO	BAT
FREE	○ ○
PUSH	○ ○
COLOR	LG B

WINKER SW	
R	L WR
L	○ ○
R	○ ○
COLOR	SB O GR

START SW	
FREE	ST C
FREE	○ ○
PUSH	○ ○
COLOR	Y/R Y/B

DIMMER SW	
HL	LO HI
HL	○ ○
LO	○ ○
HI	○ ○
COLOR	BR/B W L

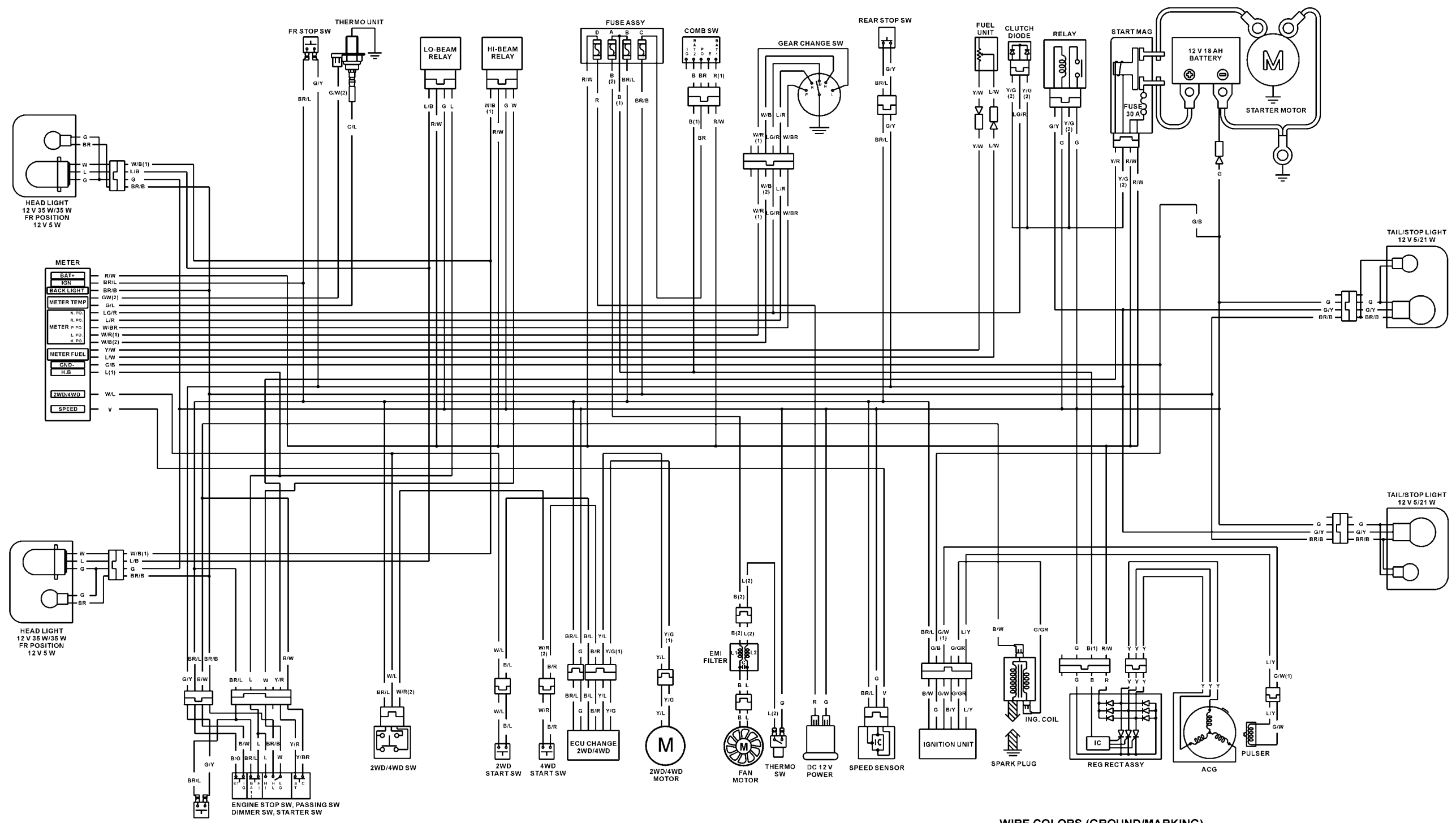
HAZARD SW	
BAT	HA
○ ○	○ ○
○ ○	○ ○
COLOR	R/W Y/B

COMB SW	
IG	E BAT1 BAT2 PO
OFF	○ ○ ○ ○
ON	○ ○ ○ ○
PO	○ ○ ○ ○
COLOR	B/W G R B BR

21. WIRING DIAGRAMS

(OFF ROAD)

FUSE A: 10 A (FAN MOTOR)
 FUSE B: 15 A (MAIN)
 FUSE C: 15 A (LIGHT)
 FUSE D: 15 A (CHARGE)



WIRE COLORS (GROUND/MARKING)

B	BLACK	BR	BROWN
G	GREEN	GR	GRAY
O	ORANGE	SB	SKY BLUE
L	BLUE	LG	LIGHT GREEN
W	WHITE	V	VIOLET
Y	YELLOW	R	RED

