

OPTIONAL WIRING LOOM **MANUAL**

TG SPORTS (1955)

SEMI BUILT VEHICLE

This loom covers all aspects of the vehicle, when using our loom, with the exception of the engine management system.

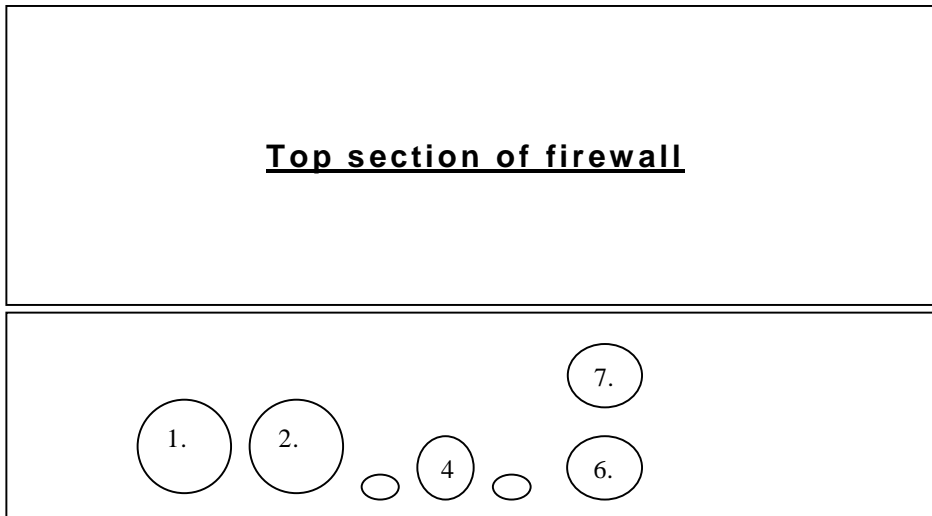
16 March, 2007

Alternative Cars (Intl) Ltd

www.sportscars.net.nz

Firewall holes

If using our looms these are the pre punched holes in the firewall. **Note** that the Mazda Miata MX5 Engine Management loom is reused. If using the Mazda Looms in their entirety use which ever holes that suit.



- | | |
|-------|-------------------------------------|
| 1. | 44.5mm Front loom |
| 2. | 44.5mm EM loom from Mazda Miata MX5 |
| 3 & 5 | 15mm washer, speedo, or vac tubes |
| 4. | 25.5 Rear loom |
| 6 & 7 | 34mm Heater hoses |

Feed all looms through the firewall, preferably prior to engine fitting

Battery leads required are:

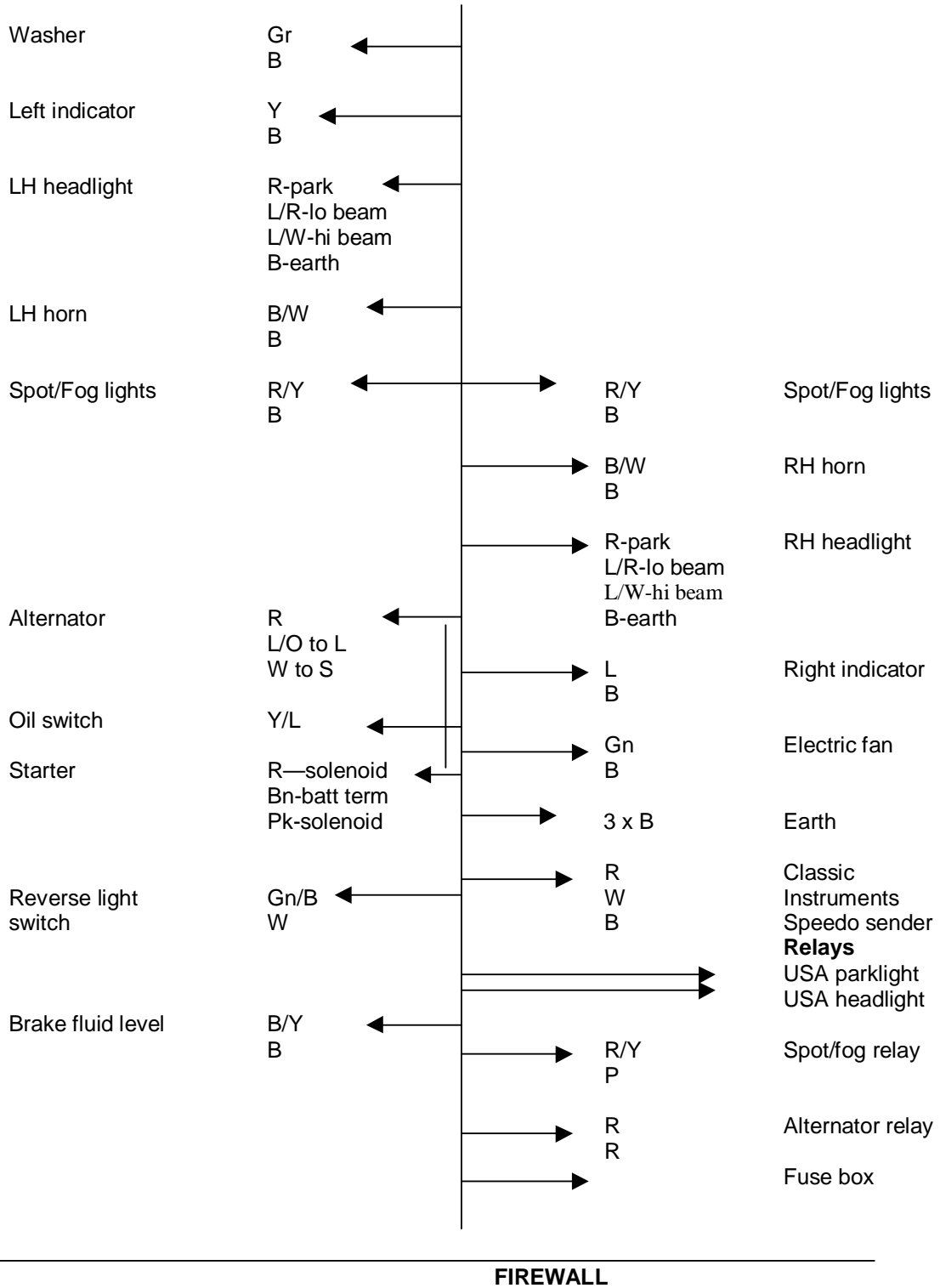
- 400mm from M8 captive nut on firewall to battery terminal
- 800mm from starter motor to battery terminal
- Any small lead from chassis to engine

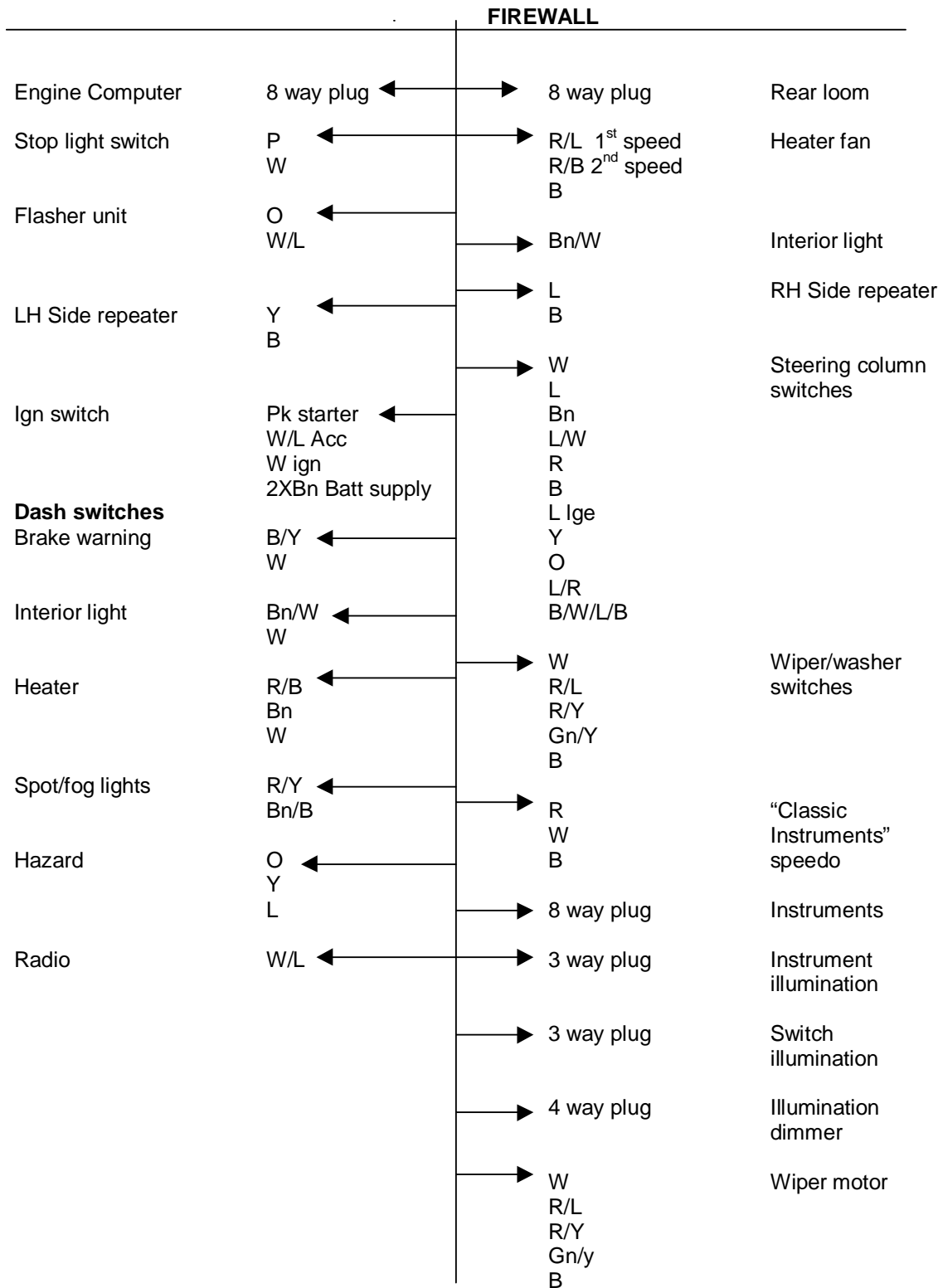
Relays required are

- Bosch 332 019 150 or equivalent

WIRING DIAGRAM FOR TG SPORTS

DRAWING A





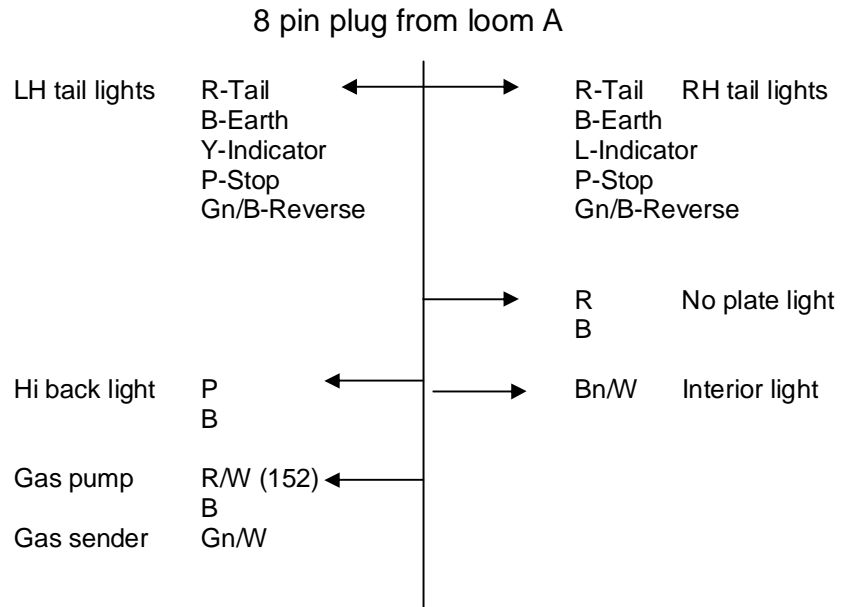
DRAWING B

- 3 / 4 pin connection to dimmer rheostat instrument illumination. If not using dimmer just loop with plug supplied
- 3/3 pin to instruments
- 3/3 pin to switches
- 8 pin connection to dash instruments and indicator cluster (IC)
- 8 pin connection to rear loom
- 8 pin (7/8) connection to computer
1. B---BLACK wire is always earth. (ground)
 2. Colours

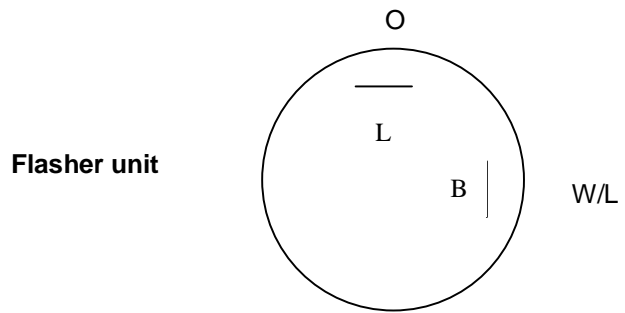
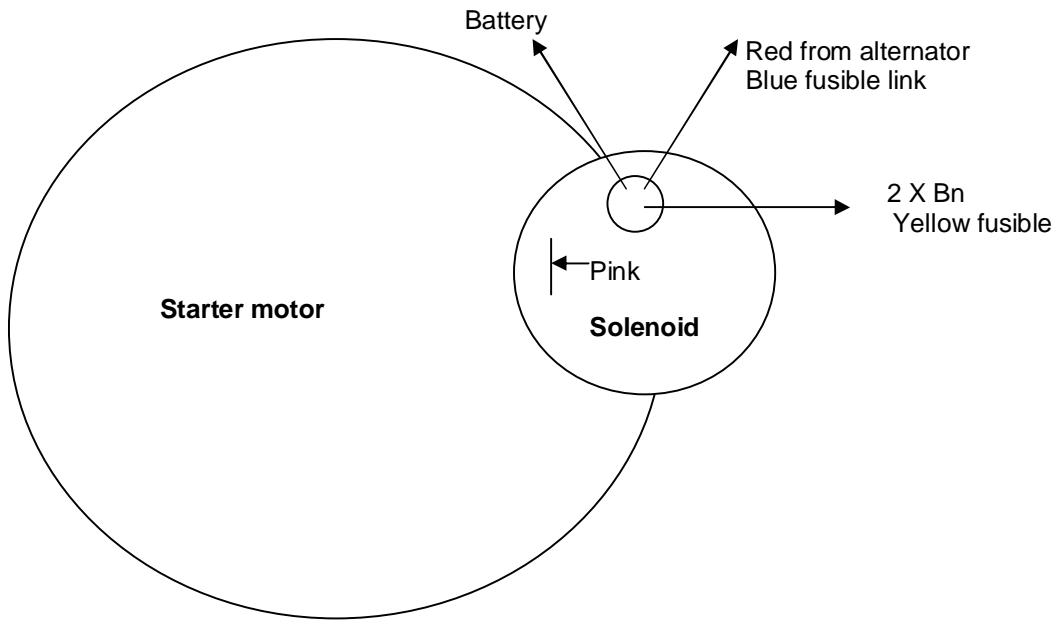
B	Black	always earth (ground)		
Bn	Brown		P	Purple
Gn	Green		Pk	Pink
Gr	Grey		R	Red
L	Blue		W	White
Y	Yellow		O	Orange
- 2 colours are expressed as 1 / 2. That is 1st colour 2nd colour.
- B. all instruments & indicator light cluster
W Fuel gauge
W Speedo
W Rev counter
W Temp gauge
W Indicator light cluster
R/W to all illumination
- W cut, remove and tape over
R/W to illumination except brake
B to illumination except brake
- O Rev counter
Gn/Y Temp gauge
W/Gn Fuel gauge. You will note that this wire has a short black piece of heat shrink tube. This has a resistor under it to enable the MX5 fuel float/sender unit to be read by the "Classic Instruments" fuel gauge. If using anything else but the MX5 unit, our custom tank for instance, cut the wire above the shrink tube.
L/W Hi beam IC
Y LH indicator IC
L RH indicator IC
L/O Battery charge Indicator IC
Y/L Oil light or gauge, if fitted
- R Tail light
Y L/H indicator
P Stop light
R/W Pump (152)
L R/H indicator
Gn/B Reverse
B Earth
W/Gn Petrol sender
Bn/W interior light in boot
- Gn Fan
Gn/Y Water temp gauge
Bn + Battery
R/W Fuel pump
B Earth
W + Ign
O Tacho

e.g. B/Y = Black with secondary yellow, Black with Yellow stripe.

DRAWING C **Rear loom**



Drawing D
Starter Motor



DRAWING E **INSTRUMENT WIRING**

Check on the brand of instruments first as they can vary

Gauge	Terminal	Colour
Fuel	I	W
	S	W/Gn
Tacho	+	W
	S	O
	E	B
	E	B
Temp	B	W
	I	Gn/Y
Oil		Y/L
Indicator Cluster	LH indicator	Y
	RH indicator	L
	Battery indicator	L/O and W
	Hi beam	L/W

Our dashboard has been cut out to suit cluster instruments. That is a Speedo, a Tacho, and a Quad. The Quad has oil pressure, temp, volts, and fuel gauges within the same instrument. We have converters for Classic Insts to Mazda senders 240/33 ohm, if you are using the Mazda MX5 loom

ILLUMINATED ROCKER SWITCHES (if used)

Rheostat if used

use one from a Mazda 323 wreck.

Red wire from 3 pin connector to one side and feeding back to the Bn/R in the same plug.

Brake warning if used.

The actual switch is not used, just the illumination sector. W on one side and B/Y to the other.

The other switches are over to you, we have a range of matching ones available.

Heater 2 position

Lights 2 position

Spot lights

Fog lights

Hazard

Wiper

Windscreen wash

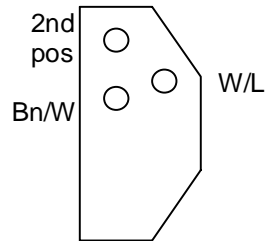
Relays

Purchase number required as

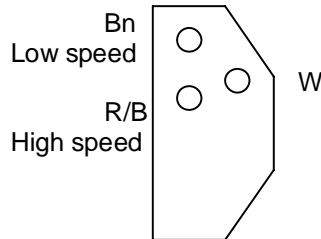
Standard 4 pin relays with pins "30" and "87" opposite.

Rocker switch blocks, looking at the back of the plug

Interior lights

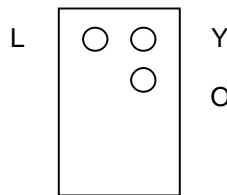


Heater fan

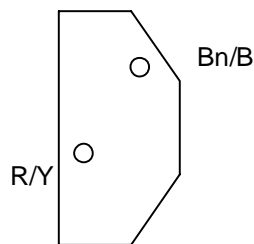


To run a two speed fan purchase a ballast resistor, run the wire from heater to one terminal of the resistor and then run from that terminal to the switch at terminal R/B. The other terminal of the resistor runs to Bn.

Hazard

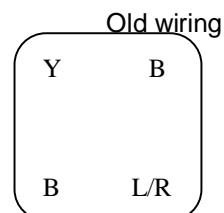
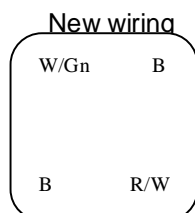


Front Spotlights

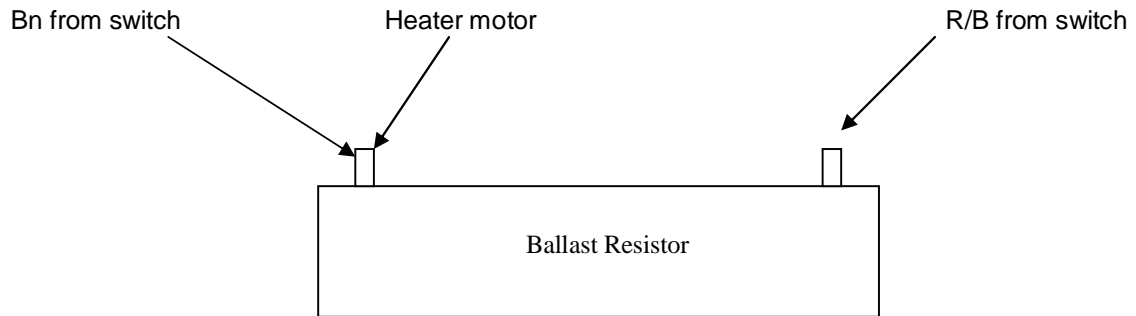


Feed at fuse box, for Spot the Bn/B doubles up into the L/W connector. Otherwise R or Fog

Petrol/Gas tank wiring

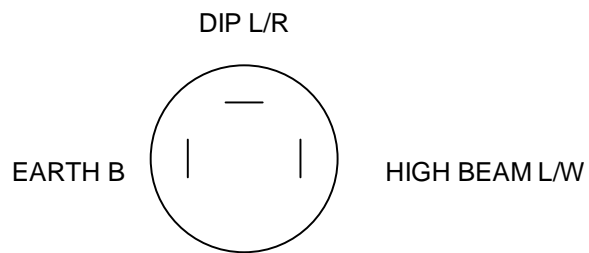


Ballast resistor for 2 speed heater fan



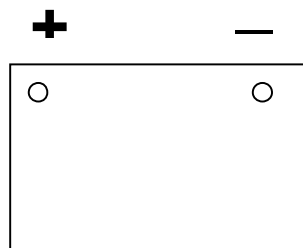
Head light wiring

Looking at the back of the lamp



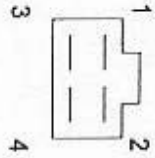
Battery type

Purchase a DIN Type battery with poles as per diagram and a maximum height of 175mm.

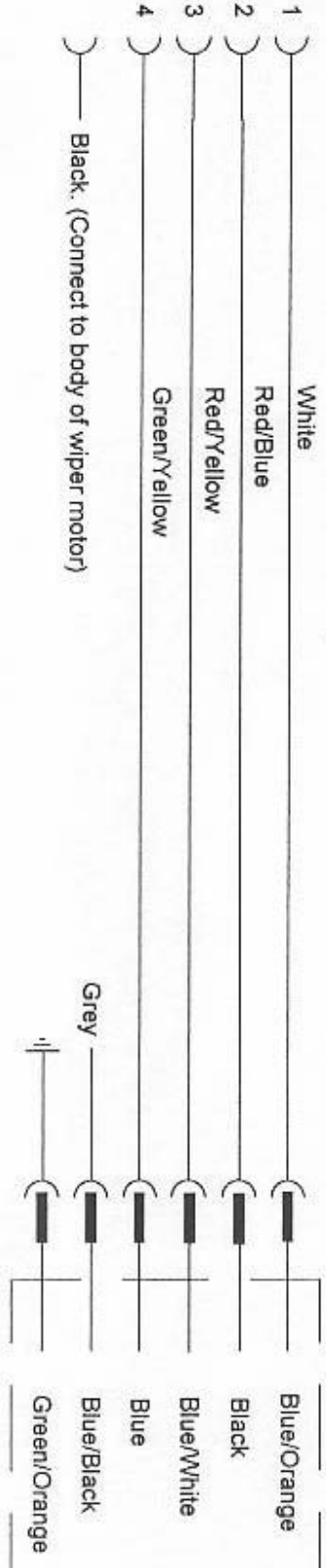


DRAWING L

WIPER / STEERING COLUMN HOOKUP

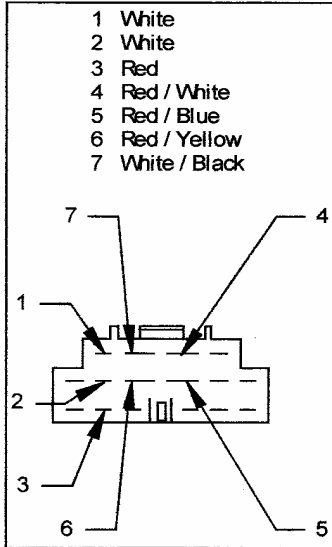


- 1 Low speed
- 2 High Speed
- 3 Ign Feed
- 4 Park switch



Notes

Park light Relay	USA	Fit relay and wire switch as per below layout
	Rest of world	Fit bridge wire between 87 and 85. No relay needed
Head light relay	USA	Fit relay and wire switch as per below layout
	Rest of world	No relay fitted



USA connector	Loom
Headlights	
1 White	White
2 White	Red
3 Red	Brown/white
4 Red/White	Blue (Large)
5 Red/Blue	Blue/Red
6 Red/Yellow	Blue/White
7 White/Black	Brown

Wipers

Blue/Orange	White
Black	Red/Blue
Blue/White	Red/Yellow
Blue	Green/Yellow
Blue/Black	Gray
Green/Orange	Black