

SOME OF YOUR VEHICLES MAY HAVE BEEN ALTERED BY PREVIOUS OWNERS.

Here are some original wiring diagrams and images that may help you return it to the correct state. These are typical of the ignition circuits on OPUS equipped V12's. Many early systems may have been changed by dealers/service agents to a later system. This was an attempt to cure the problems Jaguar had with the OPUS ignition system. Consequently, you may have either early colour-banded black wiring or the later self-coloured wiring. **To print these pages, go to "File" and select Page Setup. Set to "Landscape". Use "Print Preview" to check pages required. Better still, save yourself a .pdf version [here](#)**

Early type wiring diagram:

THE IGNITION SYSTEM (12 CYLINDER CARS)

Description

'OPUS' Electronic ignition system, which is fitted, comprises the following:—

1. DISTRIBUTOR
2. AMPLIFIER UNIT
3. BALLAST RESISTANCE UNIT
4. IGNITION COIL
5. WIRE TO TACHOMETER.

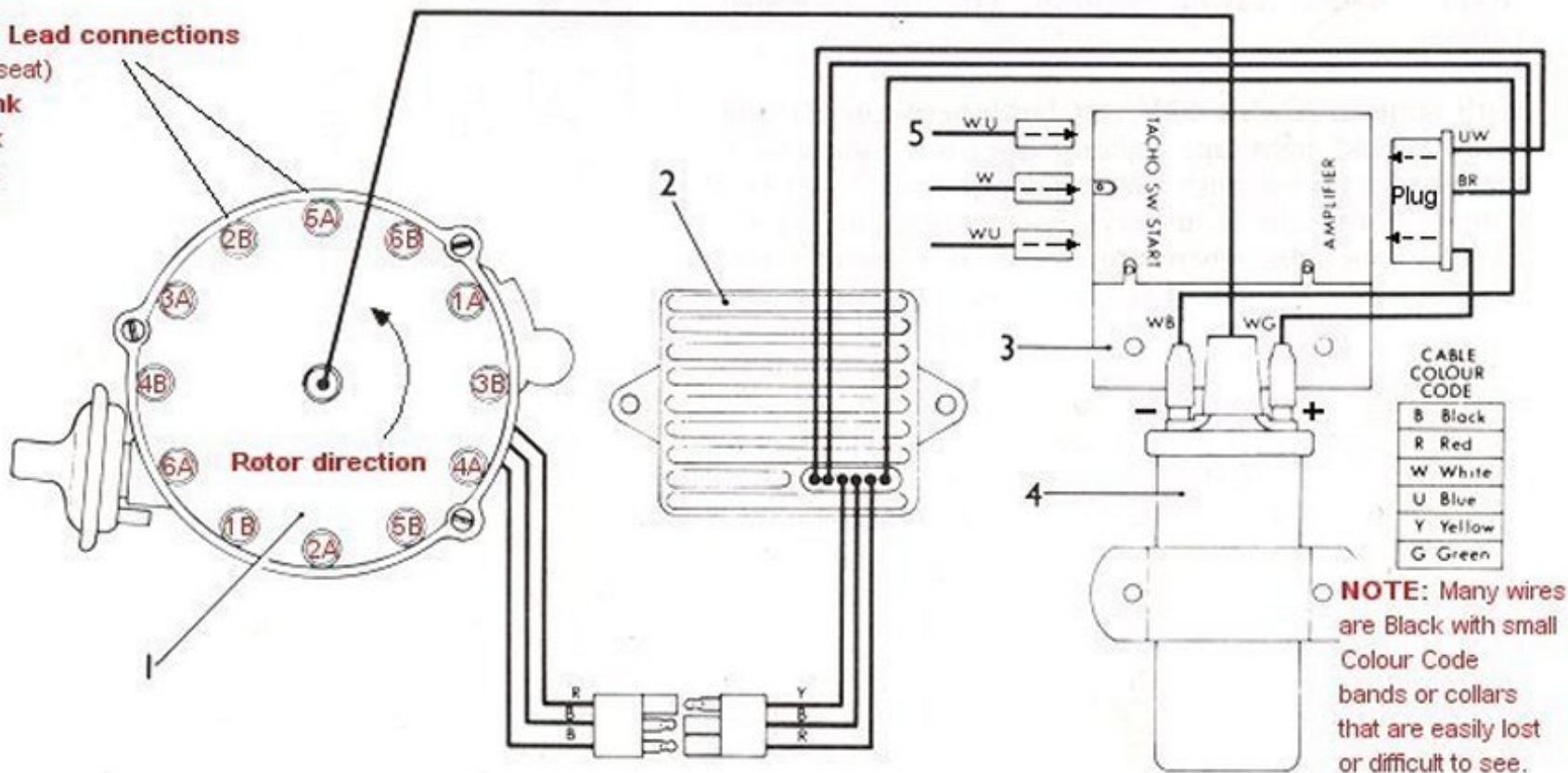
Distributor Cap HT Lead connections

(Looking from driver's seat)

A = Right Hand Bank

B = Left Hand Bank

Spark plugs numbered from front of engine.



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EARLY TYPE ALL-BLACK WIRING.

NOTE SMALL COLOUR CODE BANDS ON WIRES!

(These are often hidden under white rubbery material on original circuit boards)

Be careful not to lose any bands or overlook any of the Black Bands on Black wires (difficult to spot).

Later type had self-coloured wires. (See below)



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Later type wiring diagram:

THE IGNITION SYSTEM (12 CYLINDER CARS)

Description

'OPUS' Electronic ignition system, which is fitted, comprises the following:—

1. DISTRIBUTOR
2. AMPLIFIER UNIT
3. BALLAST RESISTANCE UNIT
4. IGNITION COIL
5. WIRE TO TACHOMETER.

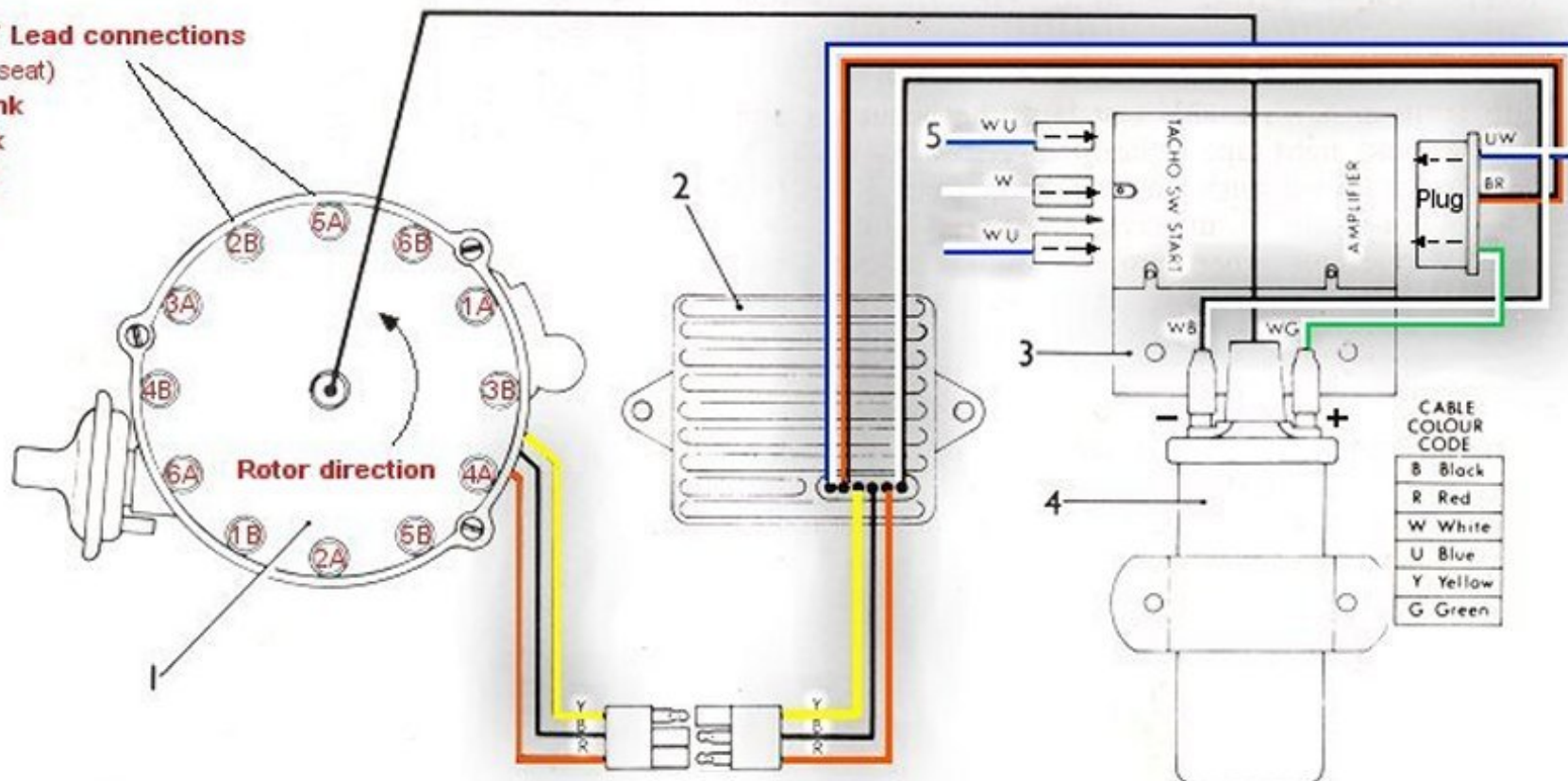
Distributor Cap HT Lead connections

(Looking from driver's seat)

A = Right Hand Bank

B = Left Hand Bank

Spark plugs numbered from front of engine.



IMPORTANT NOTE: The wiring diagram shows two WU wires to the ballast resistor pack.

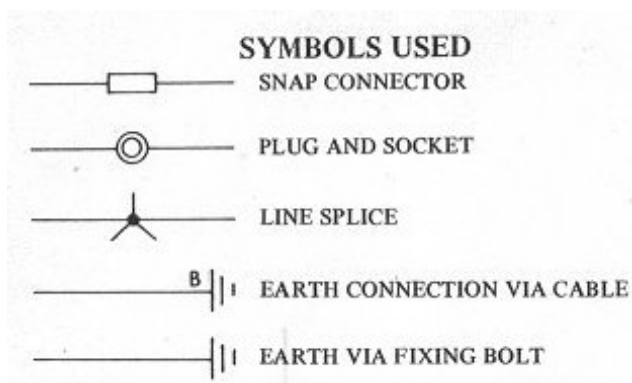
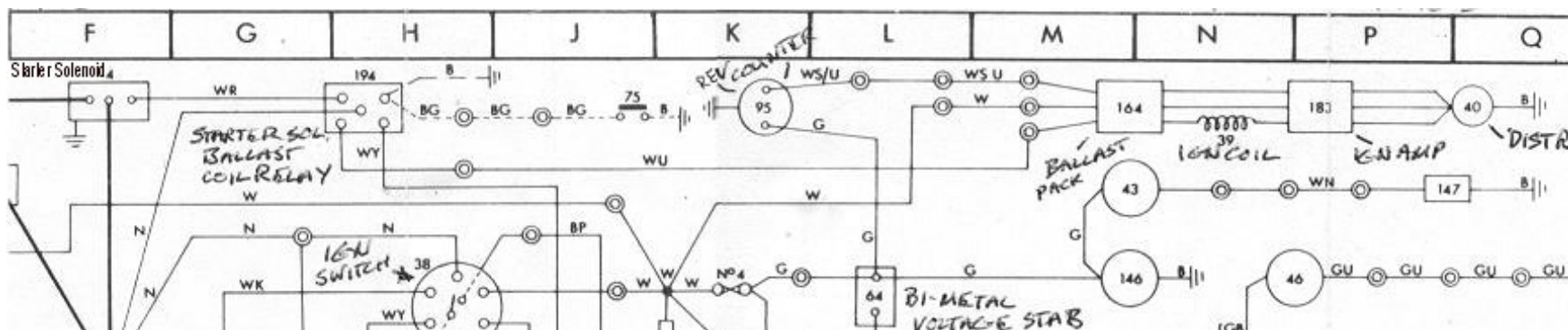
Close examination will show that the conventional WU, i.e. the one which is white with a straight blue stripe, is the one supplying power from the starter relay (# 194 on the wiring diagram below). This goes to the "START" position.

The wire for the tachometer is the other WU, and is the one in which the blue stripe SPIRALS on the white. It may also be White/Slate instead of White/Blue.

Remember, your vehicle may only have five wires going into the amplifier and it is best to keep it this way. The tachometer may have been converted to run direct from the coil.

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Below is a section from XJ12 SII Wiring diagram (with key below) showing relevant details. Other OPUS equipped vehicles will be similar.



CABLE COLOUR CODE

N. Brown	P. Purple	W. White
U. Blue	G. Green	Y. Yellow
R. Red	L. Light	B. Black
K. Pink	S. Slate	O. Orange

When a cable has two colour code letters, the first denotes the Main Colour and the second the Tracer Colour.

Early type OPUS from V12 E-type. NOTE: Red coloured PC board compared to later type green board



Later type OPUS from XJ-S showing self-coloured wires NOTE: Lack of White/Blue wire due to different Tachometer driving

arrangement.

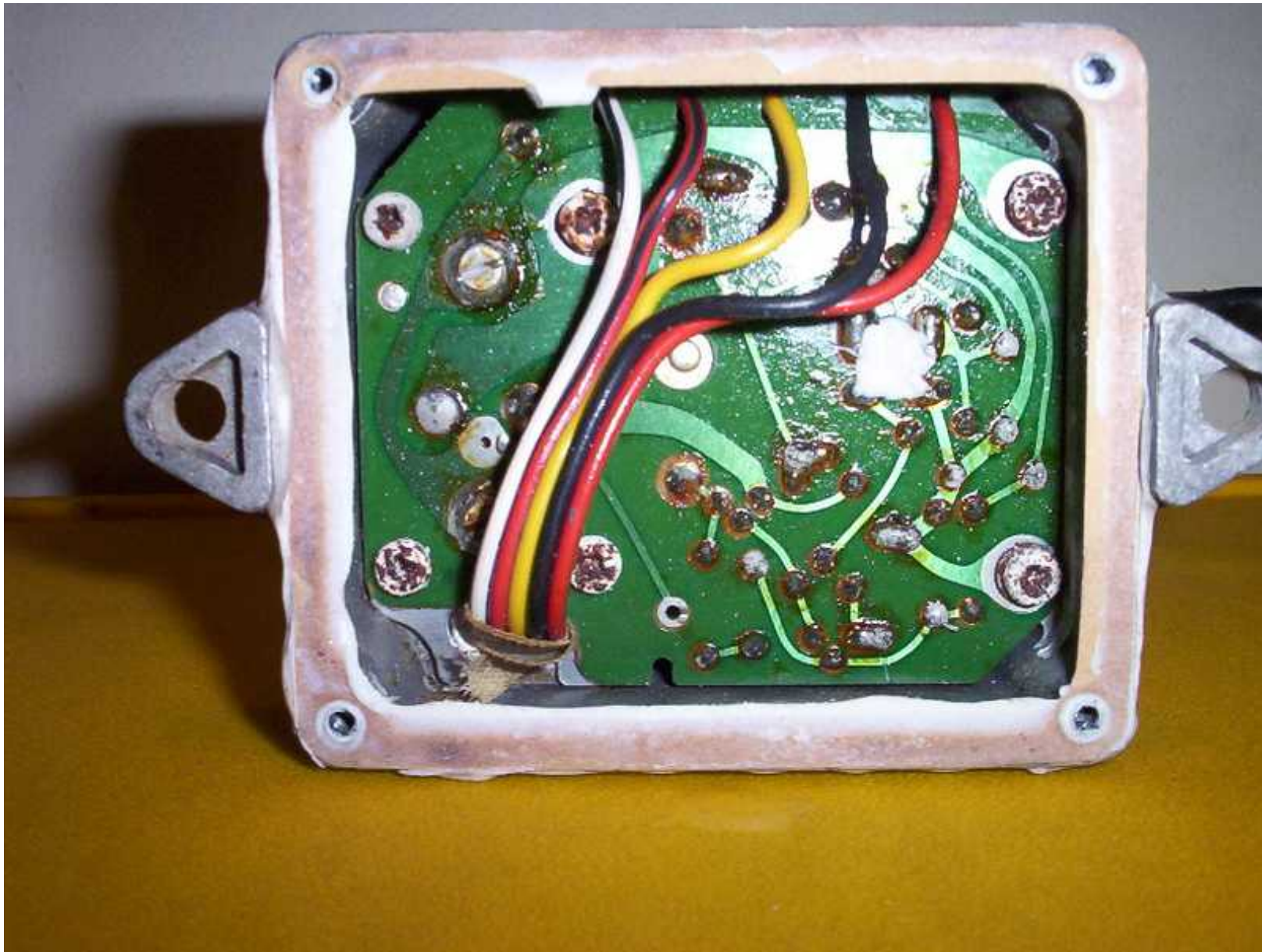
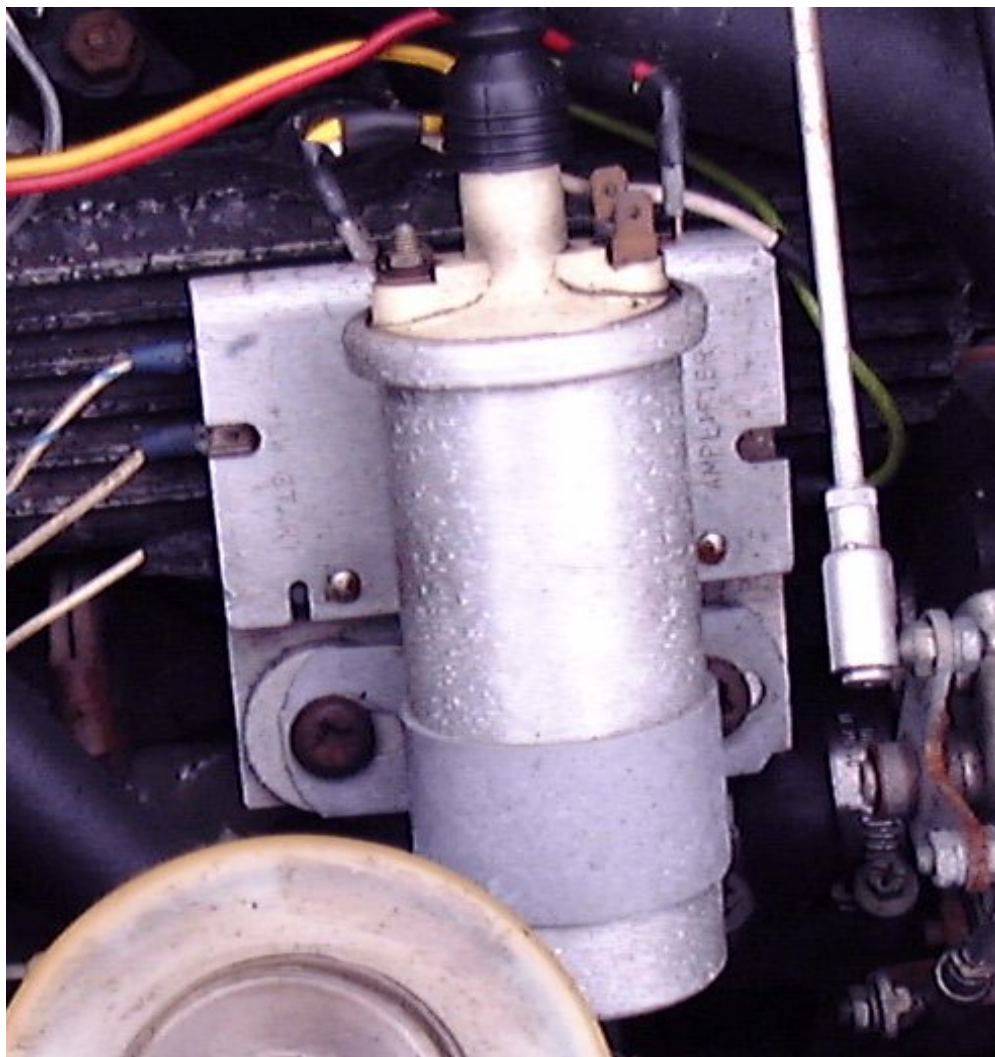


Photo of Starter Solenoid/Ballast Coil Relay from XJ12 SII. Again, other vehicles will be similar.



Typical Ballast Resistor Pack with Coil bolted over top. NOTE: inputs stamped on casing - SII XJ12. In this photo, wiring to coil is NOT original, however the white/blue-spiral wire for the tachometer is typical. Later wiring harnesses may substitute this wire with white/slate.



WE WOULD WELCOME PHOTOS, DIAGRAMS, NOTES, ETC., OF ANY INSTALLATION YOU HAVE THAT MIGHT HELP OUR CUSTOMERS IN THE FUTURE.

MORE ON COLOUR CODES

British vehicles used colour coded wiring to help identify various circuits employed. This is from BS-AU7a 1983 Colour Code for Vehicle Wiring, from the British Standards Institution.

(These colour codes may not be totally applicable to older cars. However, the tables are a pretty good guide).

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Black		All earth connections
Black	Brown	Tachometer generator to tachometer
Black	Blue	Tachometer generator to tachometer
Black	Red	Electric or electronic speedometer to sensor
Black	Purple	Temperature switch to warning light
Black	Green	Relay to radiator fan motor
Black	Light green	Vacuum brake switch or brake differential pressure valve to warning light and/or buzzer
Black	White	Brake fluid level warning light to switch and handbrake switch, or radio to speakers
Black	yellow	Electric speedometer
Black	Orange	Radiator fan motor to thermal switch

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Blue		Lighting switch (head) to dip switch
Blue	Brown	Headlamp relay to headlamp fuse
Blue	Red	Dip switch to headlamp dip beam fuse
		Fuse to right-hand dip headlamp
Blue	Light green	Headlamp wiper motor to headlamp wash pump motor
Blue	White	a) Dip switch to headlamp main beam fuse
		b)Headlamp flasher to main beam fuse
		c)Dip switch main beam warning light
		d)Dip switch to long-range driving light switch
Blue	Yellow	Long-range driving light switch to lamp
Blue	Black	Fuse to right-hand main headlamp
Blue	Pink	Fuse to left-hand dip headlamp
Blue	Slate	Headlamp main beam fuse to left-hand headlamp or inboard headlamps when independently fused
Blue	Orange	Fuse to right-hand dip headlamp

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Brown		Main battery lead
Brown	Blue	Control box (compensated voltage control only) to ignition switch and lighting switch (feed)
Brown	Red	Compression ignition starting aid to switch
		Main battery feed to double pole ignition switch
Brown	Purple	Alternator regulator feed
Brown	Green	Dynamo 'F' to controlboxl 'F'
		Alternator field 'F' to control box 'F'
Brown	White	Ammeter to control box
		Ammeter to main alternator terminal
Brown	Yellow	Alternator to 'no charge' warning light
Brown	Black	Alternator battery sensing lead
Brown	Slate	Starter relay contact to starter solenoid
Brown	Orange	Fuel shut-off (diesel stop)

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Green		Accessories fused via ignition switch
Green	Brown	Switch to reverse lamp
Green	Blue	Water temperature gauge to temperature unit
Green	Red	Direction indicator switch to left-hand flasher lamps
Green	Purple	Stop lamp switch to stop lamps, or stop lamp switch to lamp failure unit
Green	Light green	Hazard flasher unit to hazard pilot lamp or lamp failure unit to stop lamp bulbs
Green	White	Direction indicator switch to right hand flasher lamps
Green	Yellow	Heater motor to switch single speed (or to 'slow' on two or three-speed motor)
Green	Black	Fuel gauge to fuel tank unit or changeover switch or voltage stabilizer to tank units
Green	Pink	Fuse to flasher unit
Green	Slate	a)Heater motor to switch ('fast' on two- or three-speed motor)
		b)Coolant level unit to warning light
Green	Orange	Low fuel level switch to warning light

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Light Green		Instrument voltage stabilizer to instruments
Light green	Brown	Flasher switch to flasher unit

Light green	Blue	a)Flasher switch to left-hand flasher warning light
		b)Coolant level sensor to control unit
		c)Test switch to coolant level control unit
Light green	Red	Fuel tank changeover switch to right-hand tank unit or entry and exit door closed switch to door actuator
Light green	Purple	Flasher unit to flasher warning light
Light green	Green	Start inhibitor relay to change speed switch; or switch to heater blower motor second speed on three-speed unit
Light green	White	Low air pressure switch to buzzer and warning light
Light green	Yellow	Flasher switch to right-hand warning light; or differential lock switch to differential lock warning light
Light green	Black	Front screen jet switch to screen jet motor
Light green	Slate	Fuel tank changeover switch to left-hand tank unit; or entry and exit door open switch to door actuator
Light green	Orange	Rear window wash switch to wash pump; or cab lock-down switch to warning light

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Orange		Wiper circuits fused via ignition switch
Orange	Blue	Switch to front screen wiper motor first speed timer or intermittent unit
Orange	Green	Switch to front screen wiper motor second speed
Orange	Black	Switch to front screen wiper motor parking circuit, timer or intermittent unit
Orange	Purple	Timer or intermittent unit to motor parking circuit
Orange	White	Timer or intermittent unit to motor parking circuit
Orange	Yellow	Switch to headlamp or rear window wiper motor feed, timer or relay coil
Orange	Light green	Switch to headlamp or rear window wiper motor parking circuit timer or relay coil
Orange	Pink	Timer or relay to headlamp or rear window wiper motor feed
Orange	Slate	Timer or relay to headlamp or rear window wiper motor parking circuit

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Pink	White	Ballast terminal to ignition distributor

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Purple		Accessories fed direct from battery via fuse
Purple	Brown	Horn fuse to horn relay when horn is fused separately
Purple	Blue	Fuse to heated rear window relay or switch and warning light
Purple	Red	Switches to map light, under bonnet light, glove box light and boot lamp when fed direct from battery fuse
Purple	Green	Fuse to hazard flasher

Purple	Light green	Fuse to relay for screen demist
Purple	White	Interior lights to switch (subsidiary circuit door safety lights to switch)
Purple	Yellow	Horn to horn relay
Purple	Black	Horn to horn relay to horn push
Purple	Pink	Rear heated window to switch or relay
Purple	Slate	Aerial lift motor to switch up
Purple	Orange	Aerial lift motor to switch down

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Red		Main feed to all circuits mastered by sidelamp switch
Red	Brown	Rear fog guard switch to lamps
Red	Blue	Front fog lamp fuse to fog lamp switch
Red	Purple	Switches to map light, under bonnet light, glove box light and boot lamp when sidelamp circuit fed
Red	Green	Bulb failure unit to right-hand-side and rear lamps
Red	White	a)Sidelamp fuse to right-hand side and rear lamps
		b)Sidelamp fuse to panel light rheostat
		c)Fuse to panel light switch or rheostat
		d)Fuse to fibre optic source
Red	Yellow	Fog lamp switch to fog lamp or front fog fuse to fog lamps
Red	Black	Left-hand, sidelamp fuse to side and tail lamps and number plate illumination
Red	Pink	Sidelamp fuse to lighting relay
Red	Slate	Lamp failure unit to left-hand side and tail lamps
Red	Orange	Fusebox to rear fog guard switch

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
Slate		Window lift main lead

<i>MAIN</i>	<i>TRACER</i>	<i>PURPOSE</i>
White		Ignition switch or starter solenoid to ballast resistor
White	Brown	Oil pressure switch to warning light or gauge, or starter relay to oil pressure switch
White	Blue	Choke switch to choke solenoid (unfused) and/or choke to switch to warning light, or electronic ignition distributor to drive resistor
White	Red	Starter switch to starter solenoid or inhibitor switch or starter relay or ignition (start position) to bulb failure unit

White	Purple	Fuel pump no 1 or right-hand to changeover switch
White	Green	Fuel pump no 2 or left-hand to changeover switch
White	Light green	Start switch to starter interlock or oil pressure switch to fuel pump or start inhibitor switch to starter relay or solenoid
White	Yellow	Ballast resistor to coil or starter solenoid to coil
White	Black	Ignition coil contact breaker to distributor contact breaker, or distributor side of coil to voltage impulse tachometer
White	Pink	Ignition switch to radio fuse
White	Slate	Current tachometer to ignition coil
White	Orange	Hazard warning lead to switch

MAIN	TRACER	PURPOSE
Yellow		a)Overdrive
		b)Petrol injection
		c)Door locks
		d)Gear selector switch to start