

INTRODUCTION

Health and safety

Always follow health and safety guidelines, specifically those detailed in the Workshop Manual.

Using this publication

The information provided in this publication is for use only by competent, qualified auto-electricians. Good product knowledge is assumed, as well as the ability to access and use recommended test equipment and other reference material provided.

Test equipment and other reference material

The information in this publication should be used in conjunction with the recommended test equipment; refer to Workshop Manual. Other reference material includes: Technical Service Bulletins (TSB) and the Workshop Manual.

The Electrical Reference Library (ERL) may also prove useful since it provides detailed connector information.

Battery disconnection and reconnection

It is imperative that any information relating to battery disconnection and reconnection is followed; refer to the appropriate sections in the Workshop Manual.

Fault Diagnosis

Always use the recommended test equipment for correct and reliable fault diagnosis, refer to the Workshop Manual.

Harness Repair

Repairs should only be undertaken for connectors where a Service Repair Kit is available; refer to the appropriate Electrical Reference Library (ERL).

Note: Fibre Optic circuits cannot be repaired; refer to the Workshop Manual.

Abbreviations

Abbreviation	Description
ABS	Anti-lock braking system
AFS	Adaptive front lighting system
AUTO	Automatic transmission
CAN	Controller area network
DSC	Dynamic stability control
DV6	Diesel engine - V6
DV8	Diesel engine - V8
EGR	Exhaust gas recirculation
FET	Field effect transistor
GPS	Global positioning system
PV6	Petrol engine - V6
PV8	Petrol engine - V8
PV8NA	Naturally aspirated engine - V8
PV8SC	Super charged engine - V8
LH	Left-hand
MAF/IAT	Mass air flow / intake air temperature
NAS	North American specification
PDC	Park distance control
RH	Right-hand
TPMS	Tire pressure monitoring system
TSD	Touch screen display

Section numbering

The sections in this publication are ordered to match the Global Outline numbering system as found in the current Workshop Manual. The Power and Ground distribution circuits can be found under section 414-01, BATTERY, MOUNTING AND CABLES.

Note: Where circuit diagrams show more than one sub-system, the circuit will be located in the section that carries the first-named sub-system, for example: Starting and Charging will be located under section 303-06 Starting System, since 'Starting' is the first-named sub-system.

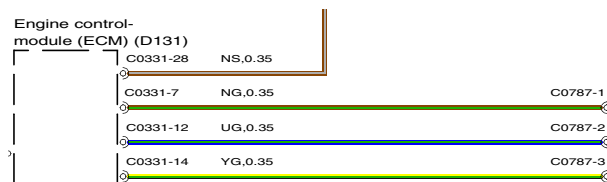
Circuit sheet numbering

The figures in brackets to the left of the page number indicate a circuit sheet number and the total number of sheets per circuit, for example (01 / 05) represents sheet 1 of 5.

INTRODUCTION

Understanding the circuit diagrams

Components



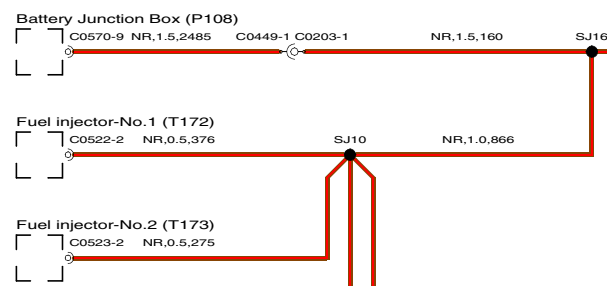
After each component description, a translation code is displayed in brackets, for example: Starter relay (R102), Engine control-module (ECM)(D131). The codes can be ignored.

Note: A dotted outline indicates that the component identified is not shown in its entirety.

Connectors

Connectors and header joints are identified by their corresponding connector number with a numbered suffix to indicate the pin-out detail of the wire, i.e. C0292-1 identifies connector 292, pin number 1. Wire insulation colours are listed in a table at the end of this section. Where wires have a predominant colour with a secondary colour tracer, the main colour is identified first, i.e. LGS - light green with a slate tracer.

Splices



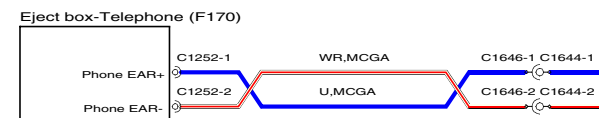
The splices (and where appropriate, the header) circuit pages show the full interconnectivity of components and systems.

Note: The splice information shown on individual system circuits is not complete. Always refer to the splices circuit pages for complete information for each splice.

Wire length (Splices, Power and Ground Distribution only)

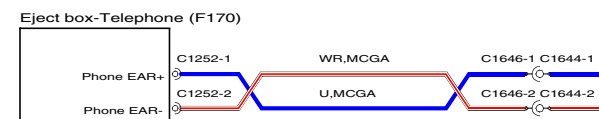
The wire length (in millimetres) is displayed after the colour and cross sectional area; for example, SR,0.35,480. In this example, the figure, 480 indicates the approximate position of the harness splice is 480mm from connector C2335.

Wire Types

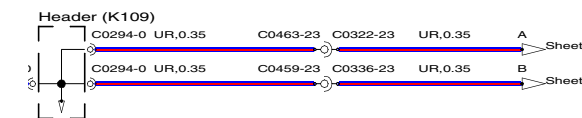


Multicore wires are identified by the prefix M suffixed by three or four other letters, for example MCGA, MAPN. The suffix precisely defines the parameters that comprise the specification of the wire type. The specification is defined during the design process of an electrical system, therefore it is imperative that the correct specification is maintained to ensure the correct operating characteristics and continued functionality for a given system.

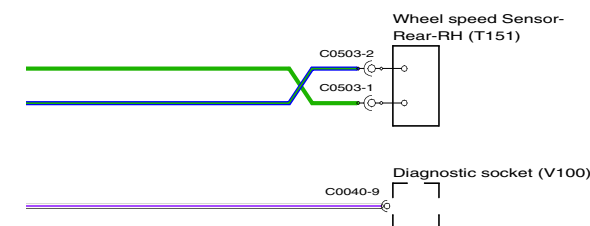
Line Types



Crossed wires as illustrated above show an example of how a twisted pair of wires may be represented on the circuits.



The arrows illustrated above show an example of the page break symbols, identifying that the circuit continues at the corresponding letter on the sheet number indicated.



The cup and ball symbol represents the male and female halves of connector. Most connectors plug directly into a component but some are wired directly to the component using a 'flylead' as with C503 above.

INTRODUCTION

Ground points

Ground points are identified with an eyelet symbol and a connector number, except where components are grounded through its fixings, when only the eyelet is shown.

Colour Codes

DRAADKLEURCODES	CODES DES COULEURS DES FILS	KABELFARBCODES
CODICI COLORI DEI CAVI	CODIGOS DE COLORES DE LOS CABLES	CÓDIGOS DAS CORES DOS FIOS

CODE	COLOUR	CODE	KLEUR	CODE	COULEUR	CODE	FARBE	CODICE	COLORE	CODIGO	COLOR	CÓDIGO	COR
B	BLACK	B	ZWART	B	NOIR	B	SCHWARZ	B	NERO	B	NEGRO	B	PRETO
G	GREEN	G	GROEN	G	VERT	G	GRÜN	G	VERDE	G	VERDE	G	VERDE
K	PINK	K	ROZE	K	ROSE	K	ROSA	K	ROSA	K	ROSA	K	ROSA
LG	LIGHT GREEN	LG	LICHTGROEN	LG	VERT CLAIR	LG	HELLGRÜN	LG	VERDE CHIARO	LG	VERDE CLARO	LG	VERDE CLARO
N	BROWN	N	BRUIN	N	BRUN	N	BRAUN	N	MARRONE	N	MARRON	N	CASTANHO
O	ORANGE	O	ORANJE	O	ORANGE	O	ORANGE	O	ARANCIONE	O	NARANJA	O	LARANJA
P	PURPLE	P	PAARS	P	VIOLET	P	LILA	P	PORPORA	P	PURPURA	P	ROXO
R	RED	R	ROOD	R	ROUGE	R	ROT	R	ROSSO	R	ROJO	R	VERMELHO
S	SLATE (grey)	S	LEIGRIJS	S	GRIS	S	GRAU	S	ARDESIA (grigio)	S	PIZARRO (gris)	S	CINZENTO
T	TRANSPARENT	T	TRANSPARANT	T	TRANSPARENT	T	TRANSPARENT	T	TRASPARENTE	T	TRANSPARENTE	T	TRANSPARENTE
U	BLUE	U	BLAUW	U	BLEU	U	BLAU	U	BLU	U	AZUL	U	AZUL
W	WHITE	W	WIT	W	BLANC	W	WEISS	W	BIANCO	W	BLANCO	W	BRANCO
Y	YELLOW	Y	GEEL	Y	JAUNE	Y	GELB	Y	GIALLO	Y	AMARILLO	Y	AMARELO