



Swift Group
Dunswell Road
Cottingham
East Yorkshire HU16 4JX
Tel **01482 875740**
Fax **01482 840082**
email enquiry@swiftgroup.co.uk

For more information visit
www.swiftgroup.co.uk

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Esprit / Bessacarr 400 Tech Handbook



Specifications 2

Capacities 8

Towing Capabilities 10

Jacking 12

Wiring Diagrams 13

Bulb Chart 19

Bulb Replacement..... 20

Specifications

Model	Esprit 484 / Bessacarr 484 Standard (Air Con / Cruise Control)	Esprit 484 / Bessacarr 484 Optional (Air Con / Cruise Control / Auto)
Roof Profile	Low Line	Low Line
Engine	130 MJT	130 MJT
Engine Capacity	2287cc	2287cc
Max Power	96kW @ 3600rpm	96kW @ 3600rpm
Torque	320 @ 1800 rpm	320 @ 1800rpm
Chassis	MLWB Fiat Chassis	MLWB Fiat Chassis
Wheel base	3.80m/12'6"	
Designated Passenger Seats excluding Driver	3	
Berths (sleeping positions)	4	
Overall Length (no ladder)*	6.72m/22'1"	
Overall Width (mirrors folded)	2.31m/7'7"	
Overall Height*	2.85m/9'4"	
Maximum Technical Permissible Laden Mass (A)	3500kg	
Mass in Running Order (B)	3125kg	3142kg
Maximum User Payload (A-B)	375kg	358kg
Unladen Weight	2869kg	2886kg
Essential Habitation Equipment	9kg	
Thermal Insulation Grade	THREE	
Bed Sizes		
Front Double	2.04m x 1.21m/0.94m/6'8" x 4'4"/3'1"	
Front Nearside Single		
Front Offside Single		
Rear Double	2.06m x 1.21m/6'9" x 4'0"	
Rear Nearside Single		
Rear Offside Single		
Overcab Bed		

Esprit 454 / Bessacarr 454 Standard (Air Con / Cruise Control)	Esprit 454 / Bessacarr 454 Optional (Air Con / Cruise Control / Auto)	Esprit 442 / Bessacarr 442 Standard (Air Con / Cruise Control)	Esprit 442 / Bessacarr 442 Optional (Air Con / Cruise Control / Auto)	
Low Line	Low Line	Low Line	Low Line	
130 MJT	130 MJT	130 MJT	130 MJT	
2287cc	2287cc	2287cc	2287cc	
96kW @ 3600rpm	96kW @ 3600rpm	96kW @ 3600rpm	96kW @ 3600rpm	
320 @ 1800rpm	320 @ 1800rpm	320 @ 1800rpm	320 @ 1800rpm	
LWB Fiat Chassis	LWB Fiat Chassis	LWB Fiat Chassis	LWB Fiat Chassis	
4.04m/13'3"		4.04m/13'3"		
3		1		
4		2		
6.97m/22'10"		7.25m/23'9"		
2.31m/7'7"		2.31m/7'7"		
2.85m/9'4"		2.85m/9'4"		
3650kg	3650kg	3500kg	3650kg	3500kg
3162kg	3179kg	3100kg	3100kg	3117kg
488kg	471kg	400kg	550kg	383kg
2906kg	2923kg	2844kg	2844kg	2861kg
9kg		9kg		
THREE		THREE		
2.04m x 1.21m/1.04m/6'8" x 4'0"/3'5"		2.04m x 1.42m/6'8" x 4'8"		
		1.88m x 0.70m/6'2" x 2'4"		
		1.88m x 0.70m/6'2" x 2'4"		
1.88m x 1.25m/6'2" x 4'1"				

NOTE: 1. The **Maximum User Payload** includes:

- a) the **conventional load** (this is the allowance for passengers)
- b) **essential habitation equipment** (items and fluids required for safe and proper functioning of habitation equipment)
- c) **optional equipment** (items available from the manufacturer over and above the standard specification)
- d) **personal effects** (those items not covered by the above)

2. The **Mass in Running Order** is the mass of the unladen vehicle including a 75kg allowance for the driver plus engine coolants and 90% of the fuel tank, water tank and gas capacity.

3. PLEASE TAKE CARE TO ENSURE THAT YOU HAVE ALLOWED FOR THE MASSES OF ALL ITEMS YOU INTEND TO CARRY IN THE MOTOR CARAVAN, e.g. passengers, optional equipment, essential habitation equipment and personal effects, such as clothing, food, pets, bicycles, sailboards, sports equipment etc.

4. **WARNING** - UNDER NO CIRCUMSTANCES SHOULD THE MAXIMUM TECHNICAL PERMISSIBLE LADEN MASS OF THIS MOTOR CARAVAN BE EXCEEDED.

* For optional roof ladder add 125mm to length and 40mm to Low Line height.

Specifications

Model	Esprit 444 / Bessacarr 444 Standard (Air Con / Cruise Control)	Esprit 444 / Bessacarr 444 Optional (Air Con / Cruise Control / Auto)
Roof Profile	Low Line	Low Line
Engine	130 MJT	130 MJT
Engine Capacity	2287cc	2287cc
Engine Power	96kW @ 3600rpm	96kW @ 3600rpm
Torque	320 @ 1800rpm	320 @ 1800rpm
Chassis	Fiat/AL-KO High Line Chassis	Fiat/AL-KO High Line Chassis
Wheel base	4.48m/14'8"	
Designated Passenger Seats excluding Driver	3	
Berths (sleeping positions)	4	
Overall Length (no ladder)*	7.65m/25'1"	
Overall Width (mirrors folded)	2.31m/7'7"	
Overall Height*	2.85m/9'4"	
Maximum Technical Permissible Laden Mass (A)	4250kg	4250kg
Mass in Running Order (B)	3190kg**	3207kg**
Maximum User Payload (A-B)	1060kg**	1043kg**
Unladen Weight	2934kg**	2951kg**
Essential Habitation Equipment	9kg	
Thermal Insulation Grade	THREE	
Bed Sizes		
Front Double	2.04m x 1.21m/1.04m/6'8" x 4'0"/3'5"	
Front Nearside Single		
Front Offside Single		
Rear Double	1.88m x 1.26m/6'2" x 4'2"	
Rear Nearside Single		
Rear Offside Single		
Overcab Bed		

Esprit 496 / Bessacarr 496 Standard (Air Con / Cruise Control)	Esprit 496 / Bessacarr 496 Optional (Air Con / Cruise Control / Auto)
High Line	High Line
130 MJT	130 MJT
2287cc	2287cc
96kW @ 3600rpm	96kW @ 3600rpm
320 @ 1800rpm	320 @ 1800rpm
Fiat/AL-KO High Line Chassis	Fiat/AL-KO High Line Chassis
4.48m/14'8"	
5	
6	
7.65m/25'1"	
2.31m/7'7"	
2.94m/9'8"	
4250kg	4250kg
3384kg	3401kg
866kg	849kg
3128kg	3145kg
9kg	
THREE	
1.90m x 1.24m/6'3" x 4'1"	
1.90m x 0.92m/6'3" x 3'0"	
2.04m x 1.67m/6'8" x 5'6"	
1.86m x 0.66m/6'1" x 2'2"	
1.67m x 0.66m/5'6" x 2'2"	
1.91m x 1.37m/6'3" x 4'6"	

NOTE: 1. **The Maximum User Payload** includes:

- a) the **conventional load** (this is the allowance for passengers)
- b) **essential habitation equipment** (items and fluids required for safe and proper functioning of habitation equipment)
- c) **optional equipment** (items available from the manufacturer over and above the standard specification)
- d) **personal effects** (those items not covered by the above)

2. The **Mass in Running Order** is the mass of the unladen vehicle including a 75kg allowance for the driver plus engine coolants and 90% of the fuel tank, water tank and gas capacity.

3. PLEASE TAKE CARE TO ENSURE THAT YOU HAVE ALLOWED FOR THE MASSES OF ALL ITEMS YOU INTEND TO CARRY IN THE MOTOR CARAVAN, e.g. passengers, optional equipment, essential habitation equipment and personal effects, such as clothing, food, pets, bicycles, sailboards, sports equipment etc.

4. **WARNING** - UNDER NO CIRCUMSTANCES SHOULD THE MAXIMUM TECHNICAL PERMISSIBLE LADEN MASS OF THIS MOTOR CARAVAN BE EXCEEDED.

* For optional roof ladder add 125mm to length and 40mm to Low Line height.

** Estimated

Capacities

Water Tank Capacities

	Fresh Water Tank	Waste Water Tank	Water Heater
Esprit / Bessacarr 400	90 litre	68 litre	10 litre
Esprit 462 & 464 / Bessacarr 462 & 464	94 litre	60 litre	10 litre

Gas Capacities

	Capacity
Esprit / 400	2 x 7kg

The above are recommended gas bottle sizes

NOTICE : For technical data on the base vehicle please refer to manufacturer's handbook

Towing Capabilities

Esprit / Bessacarr 400 Towing Capabilities

Model	Engine / Chassis	MTPLM	Permissible Front Axle Load	Permissible Rear Axle Load	Recommended Maximum Trailer Weight	Gross Train Weight
Esprit 412 / Bessacarr 412	130MJT (2.3L) / SWB / AC / CC	3300kg	1750kg	1900kg	1600kg	4900kg
Esprit 412 / Bessacarr 412	130MJT (2.3L) /SWB / AC / CC / AUTO	3300kg	1750kg	1900kg	1600kg	4900kg
Esprit 462 / Bessacarr 462	130MJT (2.3L) / MWB / AC/ CC	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 462 / Bessacarr 462	130MJT (2.3L) / MWB / AC / CC / AUTO	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 464 / Bessacarr 464**	130MJT (2.3L) / MWB / AC/ CC	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 464 / Bessacarr 464**	130MJT (2.3L) / MWB / AC / CC / AUTO	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 484 / Bessacarr 484**	130MJT (2.3L) / MLWB / AC/ CC	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 484 / Bessacarr 484**	130MJT (2.3L) / MLWB / AC / CC / AUTO	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 454 / Bessacarr 454	130MJT (2.3L) / LWB / AC/ CC	3650kg	1850kg	2000kg	1600kg	5250kg
Esprit 454 / Bessacarr 454	130MJT (2.3L) / LWB / AC / CC / AUTO	3650kg	1850kg	2000kg	1600kg	5250kg
Esprit 442 / Bessacarr 442	130MJT (2.3L) / LWB / AC / CC	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 442 / Bessacarr 442	130MJT (2.3L) / LWB / AC / CC / AUTO	3500kg	1850kg	2000kg	1600kg	5100kg
Esprit 442 / Bessacarr 442	130MJT (2.3L) / LWB / AC / CC	3650kg	1850kg	2000kg	1600kg	5250kg
Esprit 442 / Bessacarr 442	130MJT (2.3L) / LWB / AC / CC / AUTO	3650kg	1850kg	2000kg	1600kg	5250kg
Esprit 444 / Bessacarr 444	130MJT (2.3L) / AL-KO / AC / CC	4250kg	2100kg	2400kg	2000kg	6000kg
Esprit 444 / Bessacarr 444	130MJT (2.3L) / AL-KO / AC / CC / AUTO	4250kg	2100kg	2400kg	2000kg	6000kg
Esprit 496 / Bessacarr 496	130MJT (2.3L) / AL-KO / AC / CC	4250kg	2100kg	2400kg	2000kg	6000kg
Esprit 496 / Bessacarr 496	130MJT (2.3L) / AL-KO / AC / CC / AUTO	4250kg	2100kg	2400kg	2000kg	6000kg

CAUTION: When fitting a towbar, it must meet certain minimum requirements as specified by Type Approval Regulations. The bar will have marked on it the approval standard (94/20/EC or 55RECE) and the maximum download, or noseweight, that it can accept. It must fit the manufacturer's approved mounting points and must not obscure the towing vehicle's number plate.

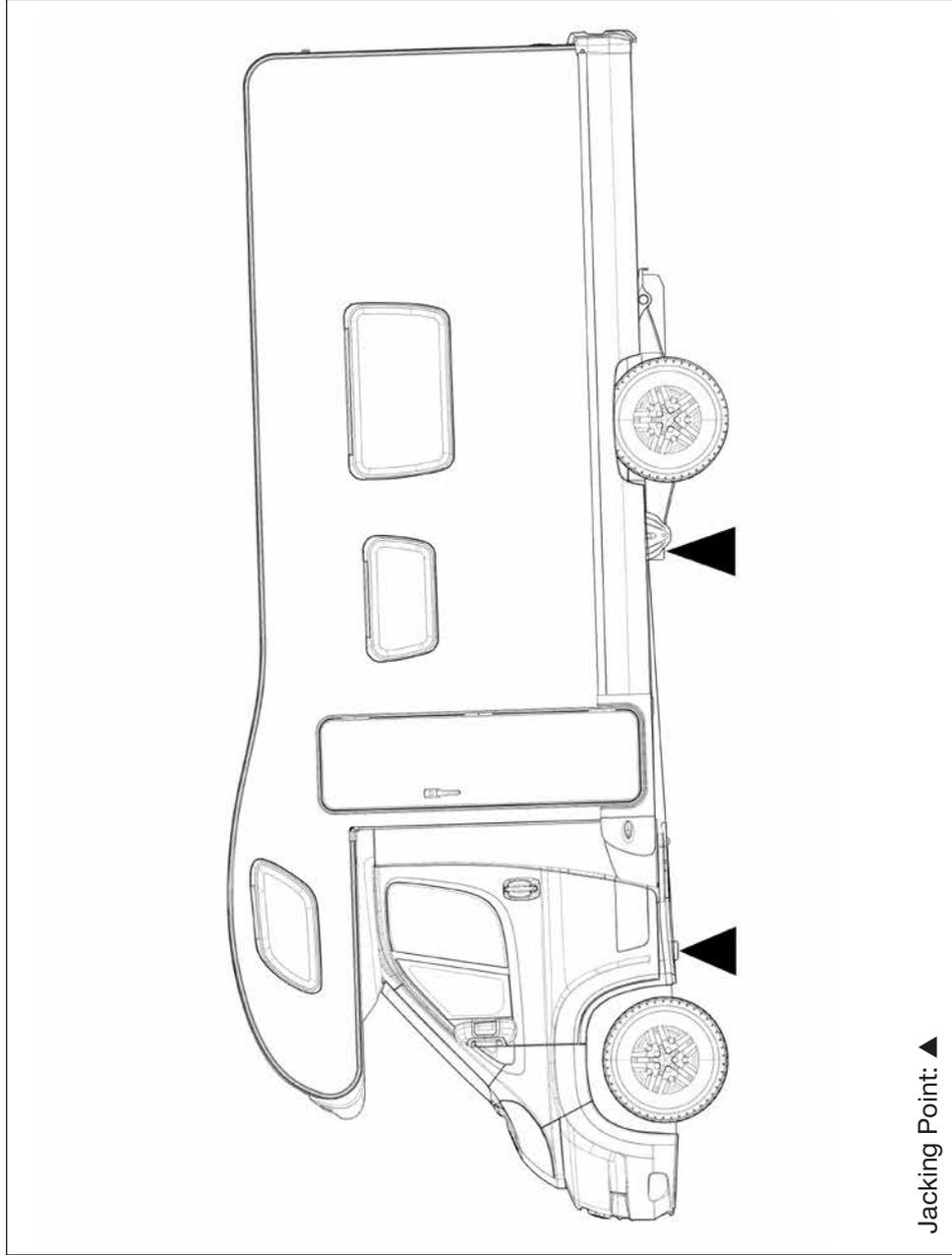
Please note that the additional weight of the tow bar and trailer nose weight increases the rear axle loading of the motor home so care should be taken that the rear axle load is not exceeded when towing.

** With this vehicle configuration it will be necessary to reduce the payload carried inside the van when towing to ensure that the MTPLM and maximum axle loads are not exceeded.

To ensure adequate road holding, the load on the front axle, under all conditions, must not be less than 40% or more than 70% of the total weight.

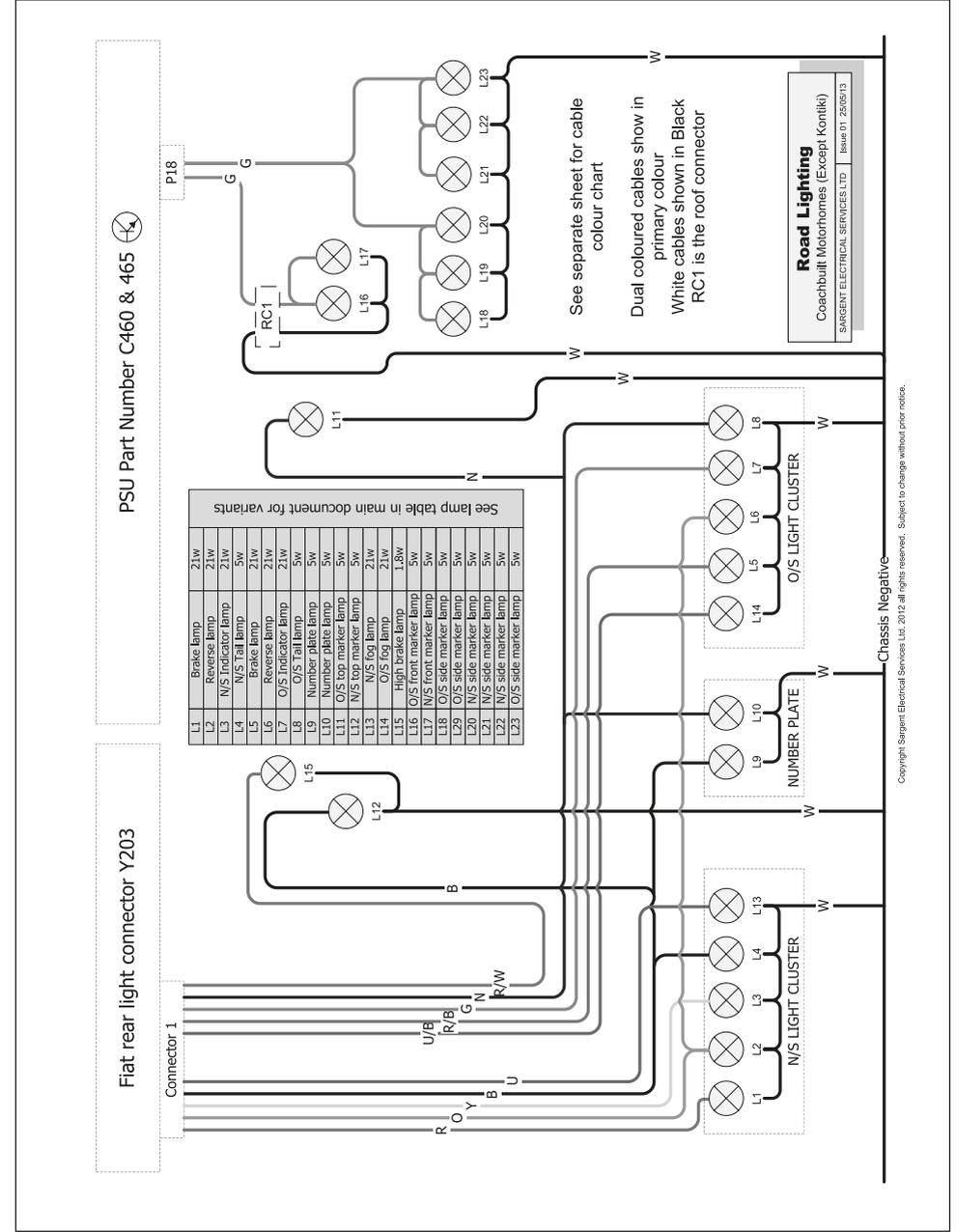
Care must be taken when distributing loads. The loadings and weights above are maximums and must not be exceeded under any circumstances.

Esprit / Bessacarr 400

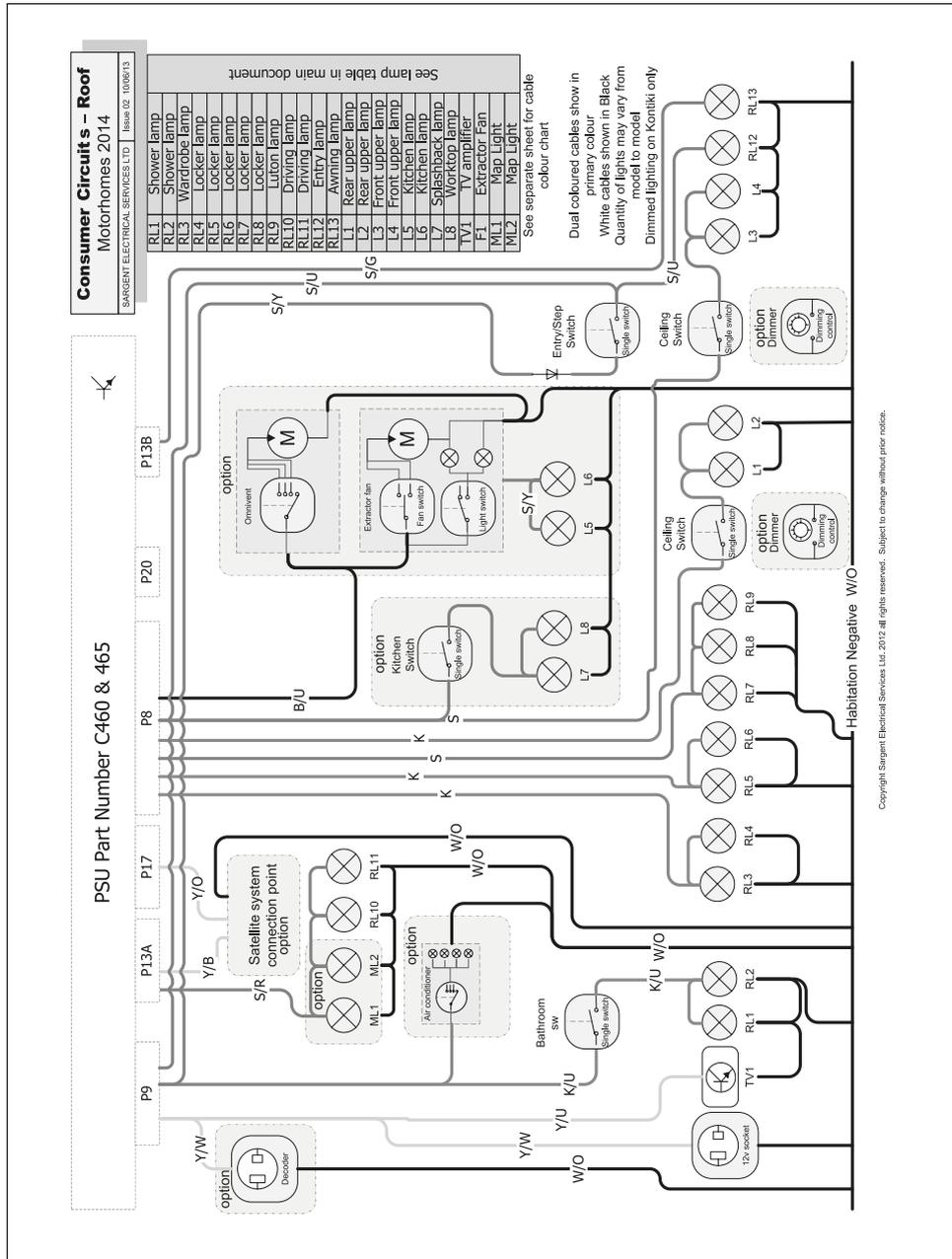


Jacking Point: ▲

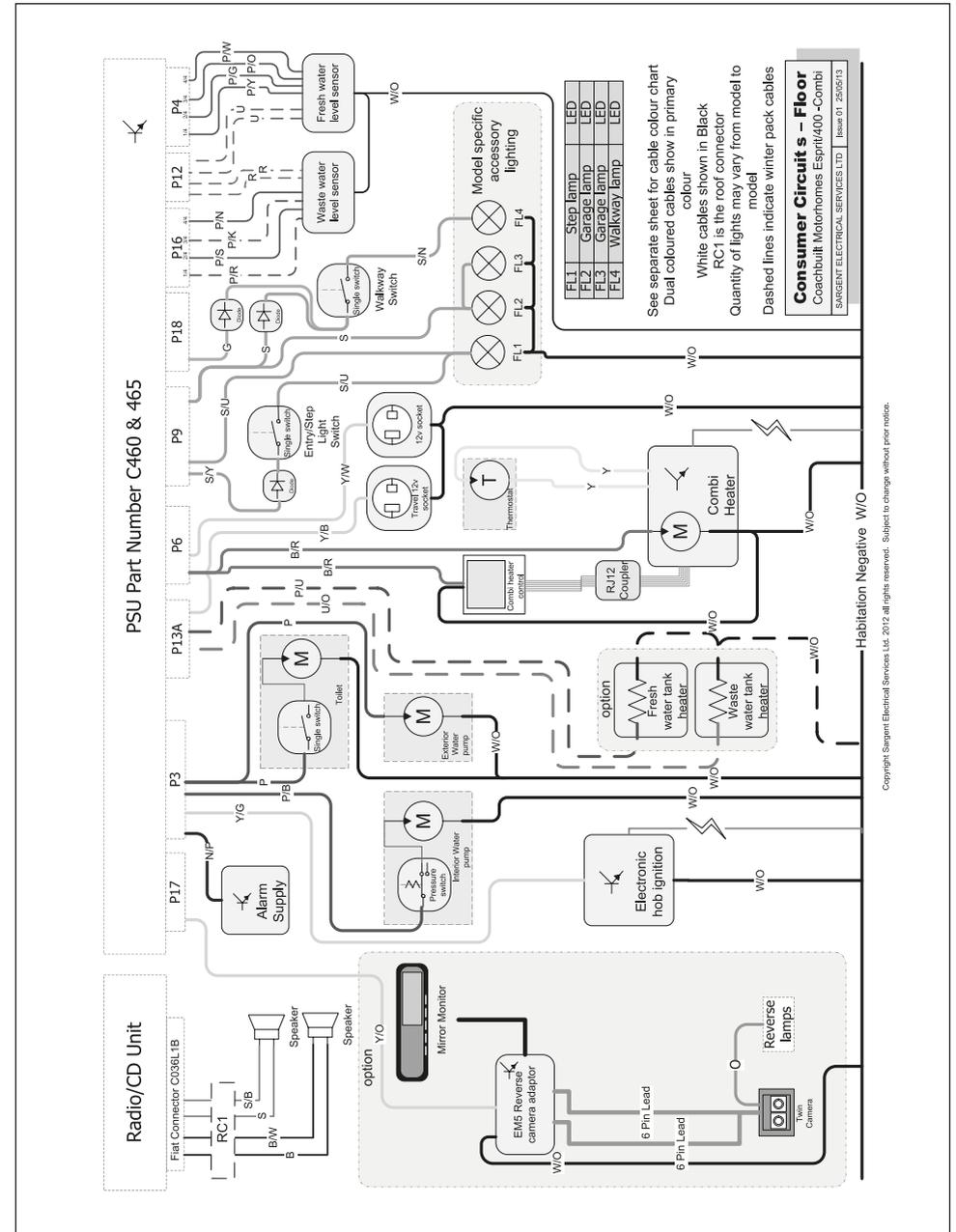
Esprit / Bessacarr 400 - Road lighting circuits



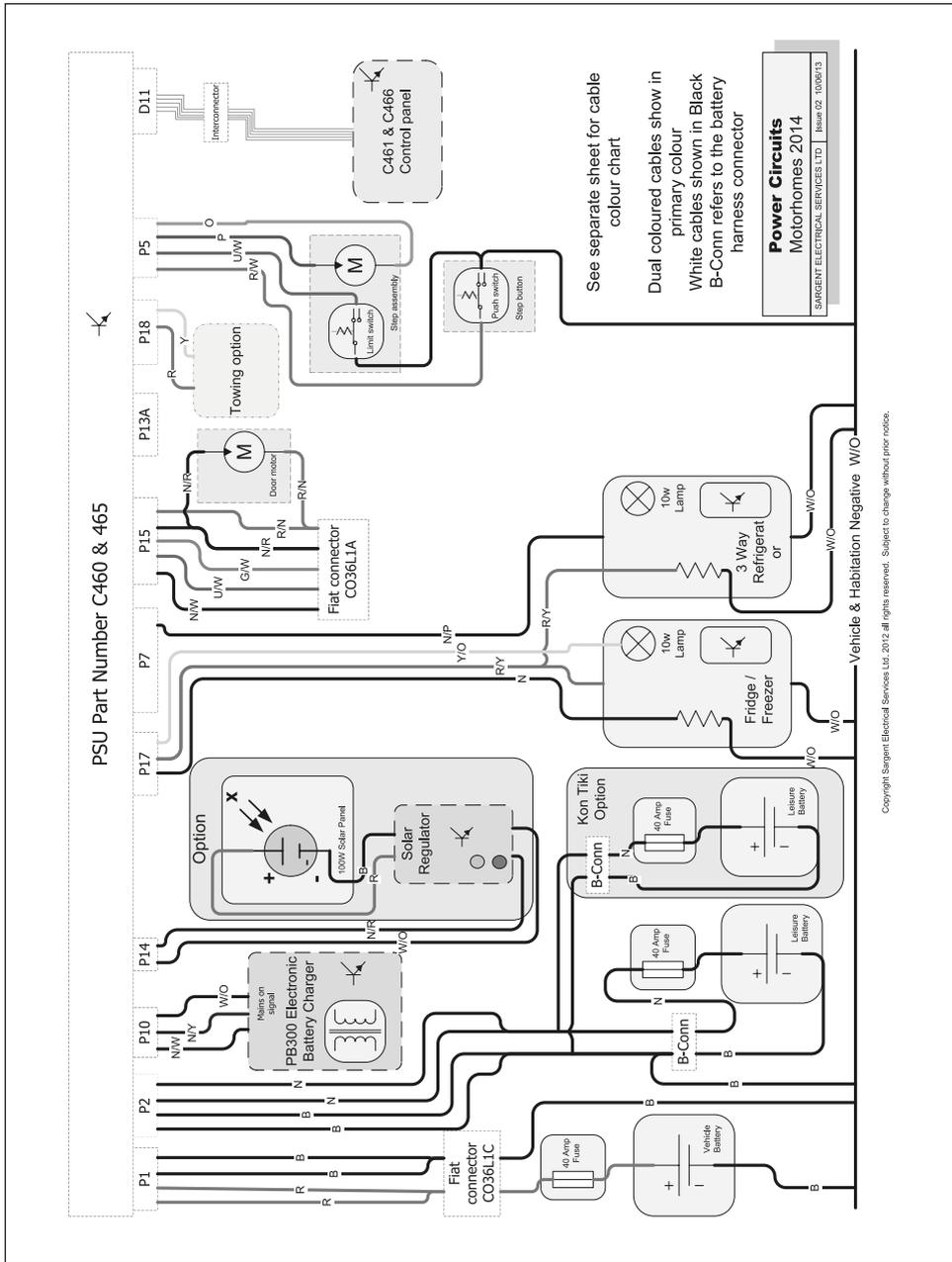
Esprit / Bessacarr 400 - Roof lighting circuits



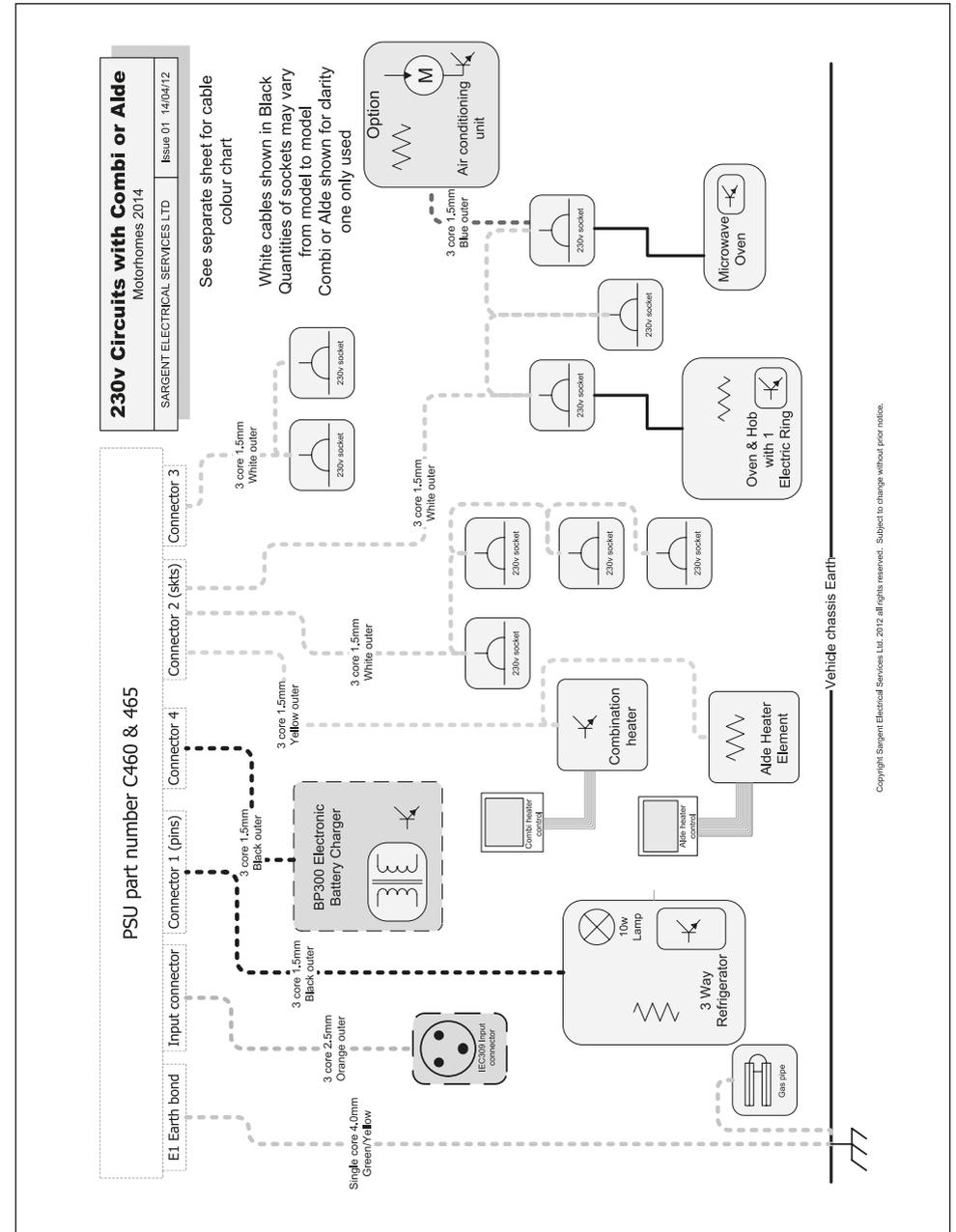
Esprit / Bessacarr 400 - Consumer Circuits - Floor circuits



Esprit / Bessacarr 400 - Power circuits



Esprit / Bessacarr 400 - 230v with combi heating



Esprit / Bessacarr 400 - Cable Colour Chart

	
Y/U	Example Yellow cable with Blue stripe
Cable Colour Chart Swift Group SARGENT ELECTRICAL SERVICES LTD Issue 01 01/09/08	
12v Cable Colours	
B	BLACK
N	BROWN
R	RED
O	ORANGE
Y	YELLOW
G	GREEN
U	BLUE
P	PURPLE
S	SLATE GREY
W	WHITE
K	PINK
230v Cable Colours	
B	BLACK
N	BROWN
W	WHITE
O	ORANGE
Y	YELLOW
G	GREEN
U	BLUE

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Road Lights		
Application	Bulb Reference	Bulb Rating
Front marker light	W5W	12v 5W
Side marker light	W5W	12v 5W
Rear high level marker light	LED	12v <1W
High level stop lamp	T5/13.5	12v 2.3W
Rear indicator lamp	P21	12v 21W
Rear Stop / Tail lamp	P21/5W	12v 21w / 5W
Rear reverse lamp	P21	12v 21W
Rear fog lamp	P21	12v 21W
Number plate light	C5W	12v 5W
Interior / Other		
Application		Bulb Rating
Locker spot lights, LED	FEM0854 complete lamp	12v LED
Luton lamp	300mm fluorescent	12v 8W
China locker light	500mm cold cathode 4.5W light	12v 4.5W CCFL
B-pillar map reading lamps	Complete lamp on 'swan neck' flexible arm	GU4 12v 10W
Awning lamp, LED	FEM0945 LED complete unit	12v LED
Over locker / high level furniture lights	FEM1214 flexible LED light strip cut to length	12v LED
Illuminated back lighting	FEM1214 flexible LED light strip cut to length	12v LED
Walk way single LED lights, black surround	FEM0993 LED complete ubit	12v LED
Downlighter, ceiling panel, black surround	FEM0993 LED complete ubit	12v LED
Downlighter, chrome	FEM1189 LED complete ubit	12v LED

Note: Not all lights feature on all models within a range

Bulb replacement

ESPRIT / BESSACARR 400 ROAD LIGHTING, COACH-BUILT BODY MOUNTED LAMPS

STOP / TAIL, INDICATOR, FOG AND REVERSE LAMPS

Bulb access is from front / via lense of each lamp.

Remove 2x screws from each light lense and withdraw lense.

Bulbs are a bayonet fitting – apply slight pressure on bulb towards light fitting, and twist to release.

Reverse procedure to re-fit bulb and lense.

Take care when replacing stop/tail lamp bulb, that orientation of bulb is correct – to check, brake light operation should be brighter than tail lamp operation.

UPPER REAR SIDE POSITION LAMPS (RED / CLEAR LENS)

- Lens is removed from base to access bulb
- Carefully insert small flat bladed screwdriver into recess in lower edge of lamp base. Apply pressure to release locking barb.

- Lift lens upwards and away from lamp base, lower edge first
- Lever bulb out of retaining clips
- Reverse procedure to re-fit bulb and lens

HIGH LEVEL BRAKE LAMP

- Remove 2x screws at either end of lamp, and withdraw lamp away from cowl
- Harness connects via a connector with retention barb into the rear of the lamp. With finger pressure or using a small screwdriver release the barb by pushing it toward the harness, and unplug the harness from the lamp
- Push fit connector back into replacement lamp, and secure lamp to motorhome body with 2x screws
- Lamp retaining screws are fixed into a rubber sleeve with a threaded insert, often known as a rawlnut. If lamp has been removed / re-fitted several times the rubber sleeve may need replacing, these are available through your dealer

FRONT UPPER MARKER / POSITION LAMPS

Bulb access is from rear of lamp.

Remove 2x screws from light fitting, and withdraw whole fitting from motorhome body.

Harness plugs into bulb holder – Twist bulb holder relative to lamp body to release bulb holder from lamp body.

Bulbs are push fit into bulb holder – pull bulb directly away from holder to release.

Reverse procedure to replace bulb in holder, holder in lamp and lamp onto motorhome body.

FRONT HIGH LEVEL MARKER / POSITION LAMPS (RECTANGULAR LENSE)

These lamps are LED and have no user servicable parts inside.

Replacements should be undertaken by your dealer, as the lamps are sealed onto the mounting panel.

SIDE MARKER / POSITION LAMPS

Bulb access is from rear of lamp.

Check first within motorhome if rear of lamp is visible.

If rear of lamp is visible:

Harness plugs into bulb holder – Twist bulb holder relative to lamp body to release bulb holder from lamp body.

Bulbs are push fit into bulb holder – pull bulb directly away from holder to release.

Reverse procedure to replace bulb in holder, holder in lamp and lamp onto motorhome body.

If rear of lamp is not visible:

Remove 2x screws from light fitting, and withdraw whole fitting from motorhome body.

Harness plugs into bulb holder – Twist bulb holder relative to lamp body to release bulb holder from lamp body.

Bulbs are push fit into bulb holder – pull bulb directly away from holder to release.

Reverse procedure to replace bulb in holder, holder in lamp and lamp onto motorhome body.