



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

Issued July 2013

Bolero / Bessacarr 500 Tech Handbook



Standard Specifications 2

Optional Specifications 4

Capacities 7

Towing Capabilities 8

Jacking 10

Wiring Diagrams 11

Bulb Chart 17

Bulb Replacement..... 18

Standard Specifications

Model	Bolero 682FB / Bessacarr 562	Bolero 684FB / Bessacarr 564
Roof Profile	Low Profile	Low Profile
Engine	130 MJT	130 MJT
Engine Capacity	2287cc	2287cc
Engine Power	96kW @ 3600rpm	96kW @ 3600rpm
Torque	320Nm @ 1800rpm	320Nm @ 1800rpm
Chassis	Fiat AL-KO low line	Fiat AL-KO low line
Wheel base	4.04m/13'3"	4.04m/13'3"
Designated Passenger Seats excluding Driver	1	3
Berths (sleeping positions)	4	4
Overall Length (no ladder)*	7.04m/23'1"	7.04m/23'1"
Overall Width (mirrors folded)	2.35m/7'9"	2.35m/7'9"
Overall Height	2.77m/9'1"	2.77m/9'1"
Maximum Technical Permissible Laden Mass (A)	3500kg	3700kg
Mass in Running Order (B)	3150kg	3222kg
Maximum User Payload (A-B)	350kg	478kg
Unladen Weight	2894kg	2966kg
Essential Habitation Equipment	8kg	8kg
Thermal Insulation Grade	THREE	THREE
Bed Sizes		
Front Double	2.08m x 1.23m/1.05m / 6'10" x 4'0"/3'5"	2.08m x 1.20m/1.05m / 6'10" x 3'11"/3'5"
Front Nearside Single		
Front Offside Single		
Rear Double	1.90m x 1.30m / 6'3" x 4'3"	1.90m x 1.30m / 6'3" x 4'3"
Rear Nearside Single		
Rear Offside Single		

Bolero 712SB / Bessacarr 572	Bolero 722FB / Bessacarr 582	Bolero 724FB / Bessacarr 584
Low Profile	Low Profile	Low Profile
150 MJT	150 MJT	150 MJT
2287cc	2287cc	2287cc
109kW @ 3600rpm	109kW @ 3600rpm	109kW @ 3600rpm
350Nm @ 1500rpm	350Nm @ 1500rpm	350Nm @ 1500rpm
Fiat AL-KO low line	Fiat AL-KO low line	Fiat AL-KO low line
4.40m/14'5"	4.40m/14'5"	4.40m/14'5"
1	1	3
4	4	4
7.71m/25'3"	7.71m/25'3"	7.71m/25'3"
2.35m/7'9"	2.35m/7'9"	2.35m/7'9"
2.77m/9'1"	2.77m/9'1"	2.77m/9'1"
4250kg	4250kg	4250kg
3315kg	3280kg	3345kg
935kg	970kg	905kg
3059kg	3024kg	3089kg
8kg	8kg	8kg
THREE	THREE	THREE
2.08m x 1.23m/1.05m / 6'10" x 4'0"/3'5"	2.08m x 1.05m / 6'10" x 3'5"	2.08m x 1.20m/1.05m / 6'10" x 3'11"/3'5"
	1.88m x 1.33m / 6'2" x 4'4"	1.88m x 1.33m / 6'2" x 4'4"
1.89m x 0.71m / 6'2" x 2'4"		
1.89m x 0.71m / 6'2" x 2'4"		

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 100mm.

Optional Specifications

Model	Bolero 682FB / Bessacarr 562
Roof Profile	Low Profile
Engine	130 MJT Auto
Engine Capacity	2287cc
Engine Power	96kW @ 3600rpm
Torque	320Nm @ 1800rpm
Chassis	Fiat AL-KO low line
Wheel base	4.04m/13'3"
Designated Passenger Seats excluding Driver	1
Berths (sleeping positions)	4
Overall Length (no ladder)*	7.04m/23'1"
Overall Width (mirrors folded)	2.35m/7'9"
Overall Height	2.77m/9'1"
Maximum Technical Permissible Laden Mass (A)	3500kg
Mass in Running Order (B)†	3167kg
Maximum User Payload (A-B)	333kg
Unladen Weight	2911kg
Essential Habitation Equipment	8kg
Thermal Insulation Grade	THREE
Bed Sizes	
Front Double	2.08m x 1.23m/1.05m / 6'10" x 4'0"/3'5"
Front Nearside Single	
Front Offside Single	
Rear Double	1.90m x 1.30m / 6'3" x 4'3"
Rear Nearside Single	
Rear Offside Single	

Bolero 684FB / Bessacarr 564	Bolero 684FB / Bessacarr 564 Optional MTPLM	
Low Profile	Low Profile	Low Profile
130 MJT Auto	130 MJT	130 MJT Auto
2287cc	2287cc	2287cc
96kW @ 3600rpm	96kW @ 3600rpm	96kW @ 3600rpm
320Nm @ 1800rpm	320Nm @ 1800rpm	320Nm @ 1800rpm
Fiat AL-KO low line	Fiat AL-KO low line	
4.04m/13'3"	4.04m/13'3"	
3	2	
4	4	
7.04m/23'1"	7.04m/23'1"	
2.35m/7'9"	2.35m/7'9"	
2.77m/9'1"	2.77m/9'1"	
3700kg	3500kg	
3239kg	3222kg	3239kg
461kg	278kg	261kg
2983kg	2966kg	2983kg
8kg	8kg	
THREE	THREE	
2.08m x 1.20m/1.05m / 6'10" x 3'11"/3'5"	2.08m x 1.20m/1.05m / 6'10" x 3'11"/3'5"	
1.90m x 1.30m / 6'3" x 4'3"	1.90m x 1.30m / 6'3" x 4'3"	

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 100mm.

Optional Specifications

Model	Bolero 712SB / Bessacarr 572	Bolero 722FB / Bessacarr 582	Bolero 724FB / Bessacarr 584
Roof Profile	Low Profile	Low Profile	Low Profile
Engine	150 MJT Auto	150 MJT Auto	150 MJT Auto
Engine Capacity	2287cc	2287cc	2287cc
Engine Power	109kW @ 3600rpm	109kW @ 3600rpm	109kW @ 3600rpm
Torque	350Nm @ 1500rpm	350Nm @ 1500rpm	350Nm @ 1500rpm
Chassis	Fiat AL-KO low line	Fiat AL-KO low line	Fiat AL-KO low line
Wheel base	4.40m/14'5"	4.40m/14'5"	4.40m/14'5"
Designated Passenger Seats excluding Driver	1	1	3
Berths (sleeping positions)	4	4	4
Overall Length (no ladder)*	7.71m/25'3"	7.71m/25'3"	7.71m/25'3"
Overall Width (mirrors folded)	2.35m/7'9"	2.35m/7'9"	2.35m/7'9"
Overall Height	2.77m/9'1"	2.77m/9'1"	2.77m/9'1"
Maximum Technical Permissible Laden Mass (A)	4250kg	4250kg	4250kg
Mass in Running Order (B)†	3332kg	3297kg	3362kg
Maximum User Payload (A-B)	918kg	953kg	888kg
Unladen Weight	3076kg	3041kg	3106kg
Essential Habitation Equipment	8kg	8kg	8kg
Thermal Insulation Grade	THREE	THREE	THREE
Bed Sizes			
Front Double	2.08m x 1.23m/1.05m / 6'10" x 4'0"/3'5"	2.08m x 1.05m / 6'10" x 3'5"	2.08m x 1.20m/1.05m / 6'10" x 3'11"/3'5"
Front Nearside Single			
Front Offside Single			
Rear Double		1.88m x 1.33m / 6'2" x 4'4"	1.88m x 1.33m / 6'2" x 4'4"
Rear Nearside Single	1.89m x 0.71m / 6'2" x 2'4"		
Rear Offside Single	1.89m x 0.71m / 6'2" x 2'4"		

Capacities

Water Tank Capacities

	Fresh Water Tank	Waste Water Tank	Water Heater
Bolero / Bessacarr 500	90 litre	95 litre	8.5 litre

Gas Capacities

	Capacity
Bolero / Bessacarr 500	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

Bolero / Bessacarr 500 Towing Capabilities

Model	Engine / Chassis	MTPLM	Permissible Front Axle Load
Bolero 682FB / Bessacarr 562	130MJT (2.3L)	3500kg	1850kg
Bolero 682FB / Bessacarr 562	150MJT (2.3L) AUTO	3500kg	1850kg
Bolero 684FB / Bessacarr 564	130MJT (2.3L)	3700kg	1850kg
Bolero 684FB / Bessacarr 564	150MJT (2.3L) AUTO	3700kg	1850kg
Bolero 684FB / Bessacarr 564	130MJT (2.3L)	3500kg	1850kg
Bolero 684FB / Bessacarr 564	150MJT (2.3L) AUTO	3500kg	1850kg
Bolero 712SB / Bessacarr 572	150MJT (2.3L)	4250kg	2100kg
Bolero 712SB / Bessacarr 572	150MJT (2.3L) AUTO	4250kg	2100kg
Bolero 722FB / Bessacarr 582	150MJT (2.3L)	4250kg	2100kg
Bolero 722FB / Bessacarr 582	150MJT (2.3L) AUTO	4250kg	2100kg
Bolero 724FB / Bessacarr 584	150MJT (2.3L)	4250kg	2100kg
Bolero 724FB / Bessacarr 584	150MJT (2.3L) AUTO	4250kg	2100kg

Permissible Rear Axle Load	Recommended Maximum Trailer Weight	Gross Train Weight
2000kg	2000kg	5500kg
2400kg	2000kg	6000kg*

The maximum trailer weight is limited by the Gross Train Weight which must not be exceeded. For example, if the vehicle is at the maximum MTPLM of 4250kg, then the maximum trailer weight possible is 1250kg. Reducing the weight of the vehicle by removing payload, will allow you to increase the trailer weight up to a maximum of 2000kg.

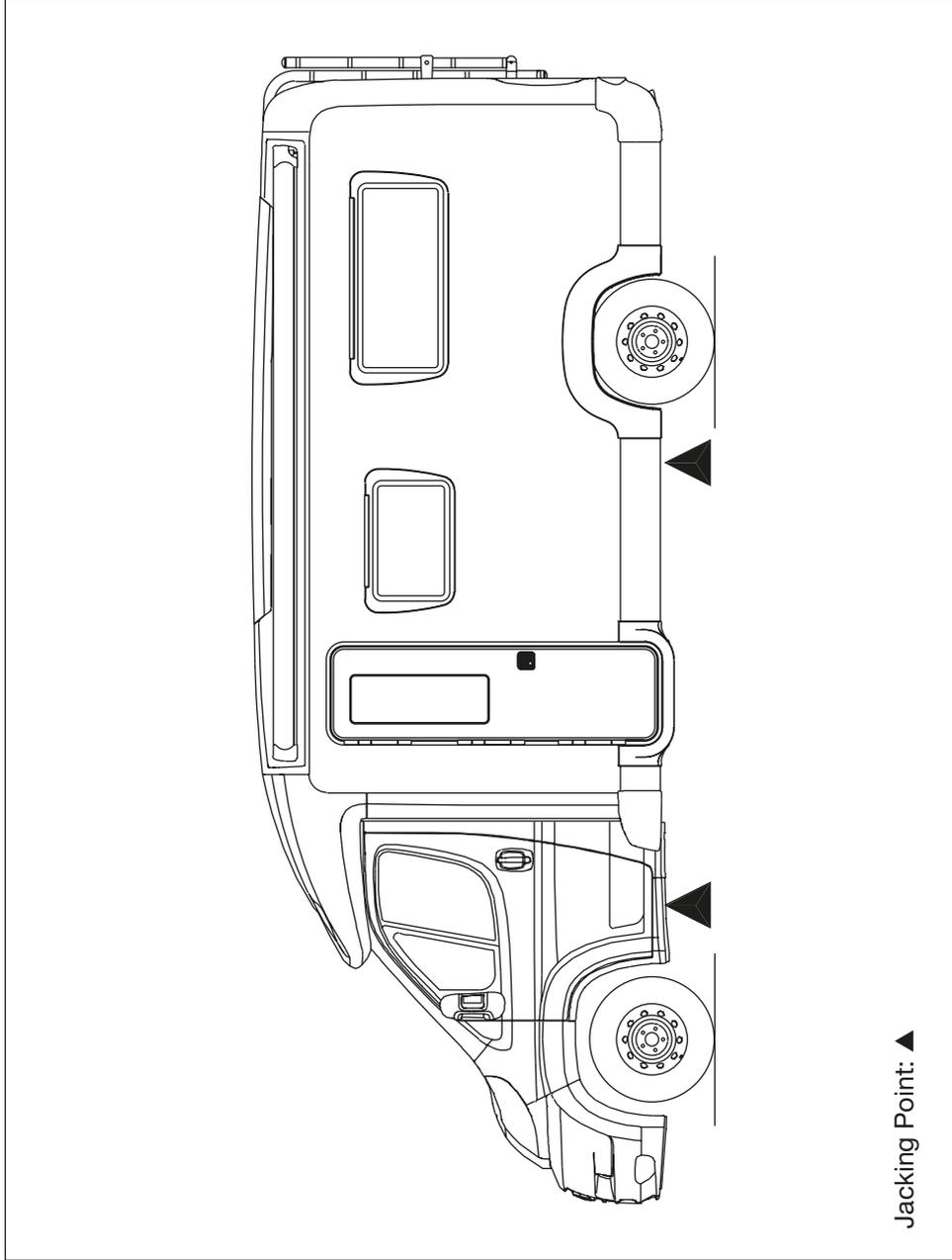
To ensure adequate road holding, the load on the front axle, under all conditions, must not be less than 40% or more than 70% of the total weight.

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

* With this vehicle configuration it will be necessary to reduce the payload carried inside the van when towing a trailer at maximum trailer weight to ensure that the Maximum Gross Train Weight and maximum axle loads are not exceeded.

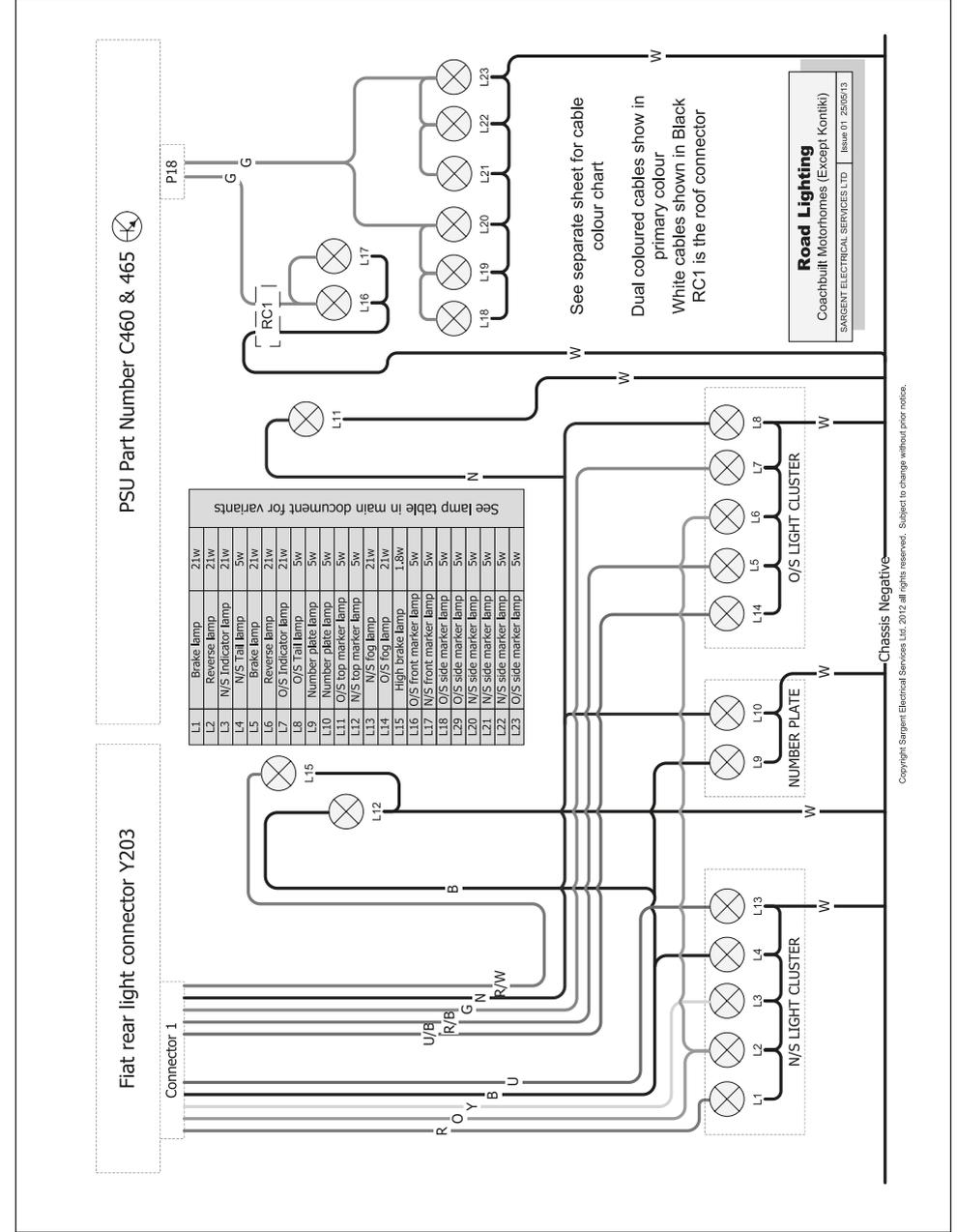
CAUTION: When fitting a towbar, it must meet certain minimum requirements as specified by Type Approval Regulations. The bar will have marked on it the approval standard (94/20/EC or 55R ECE) and the maximum download, or noseweight, that it can accept. It must fit the manufacturer's approved mounting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

Swift Bolero / Besscarr 500

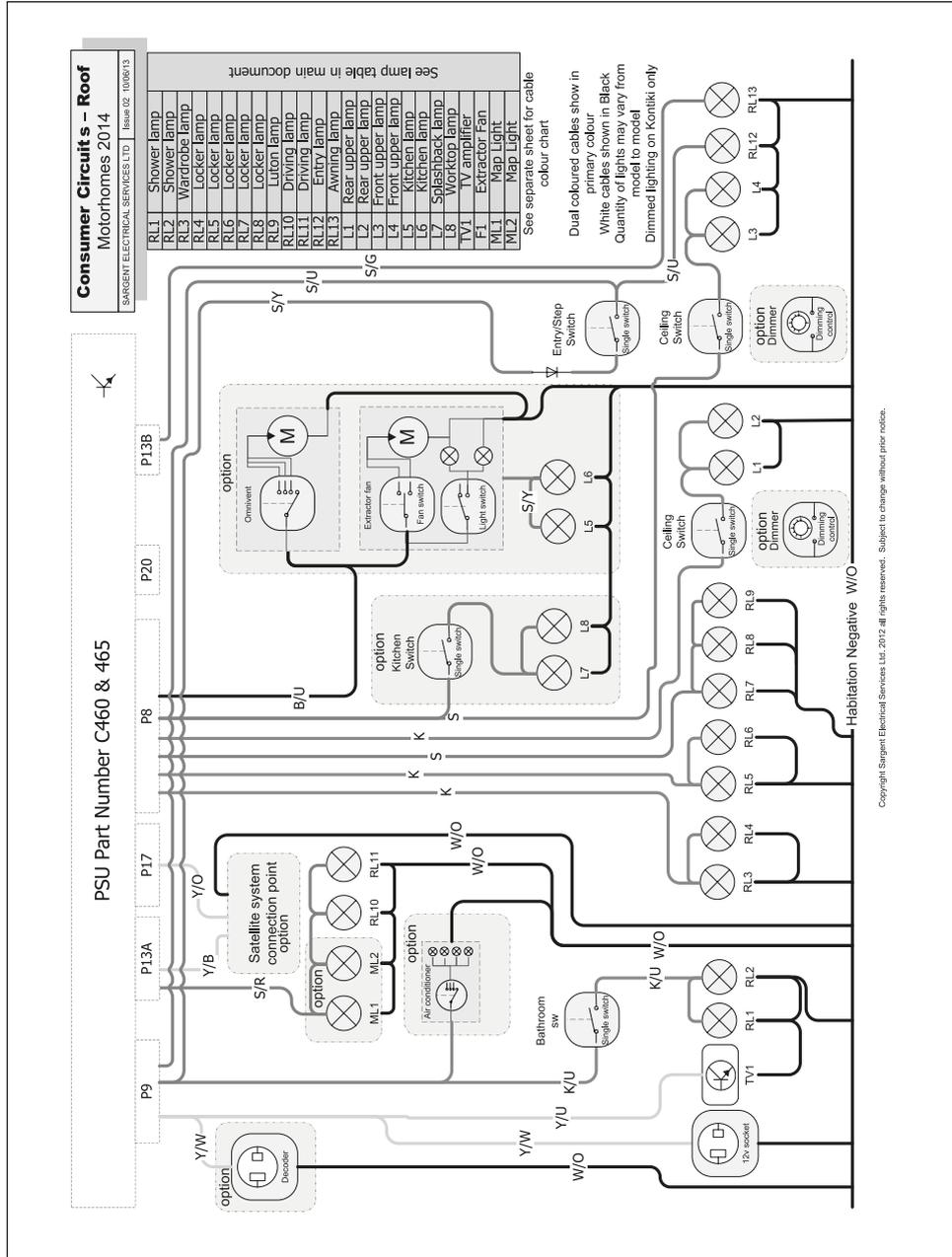


Jacking Point: ▲

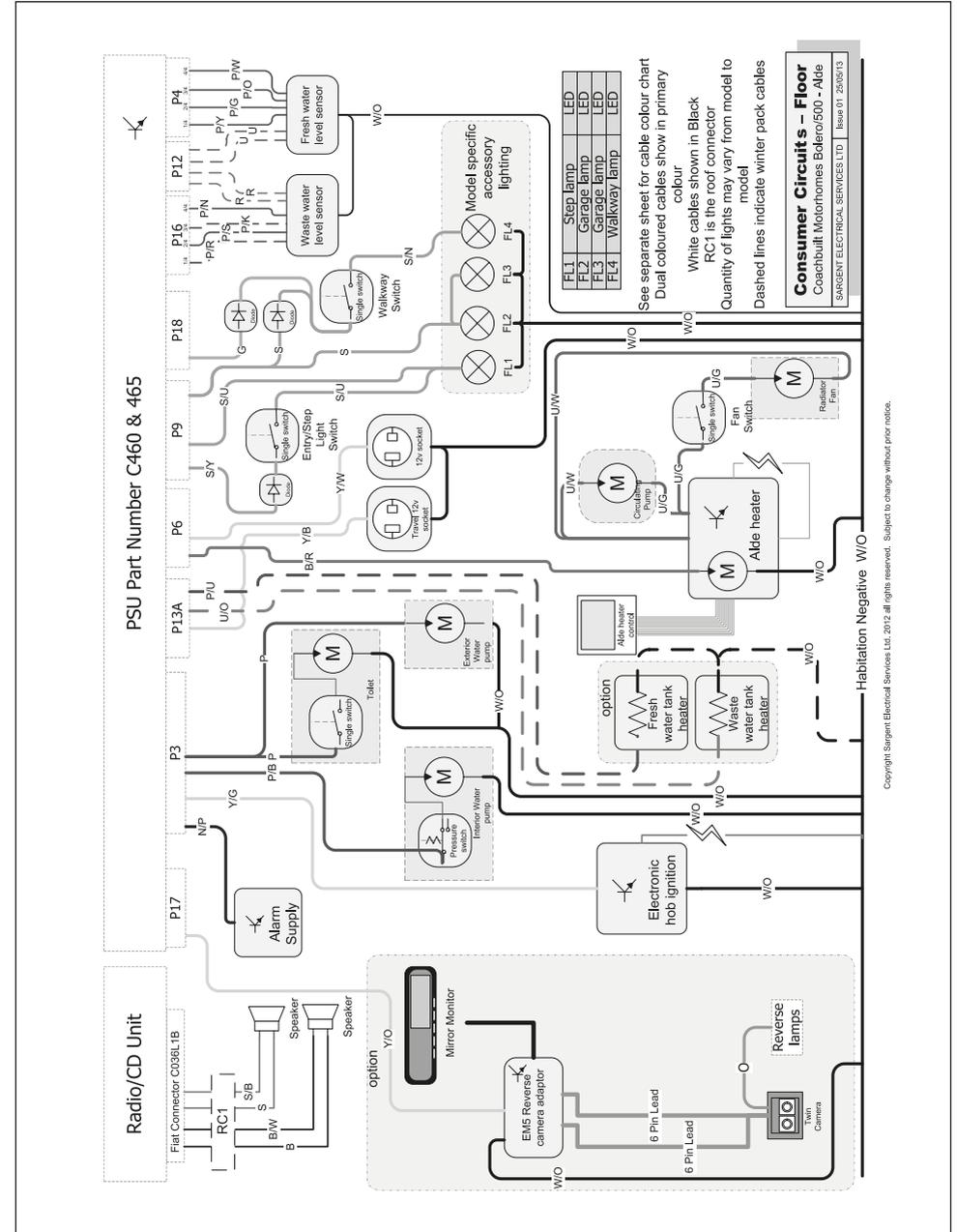
Swift Bolero / Besscarr 500 - Road lighting circuits



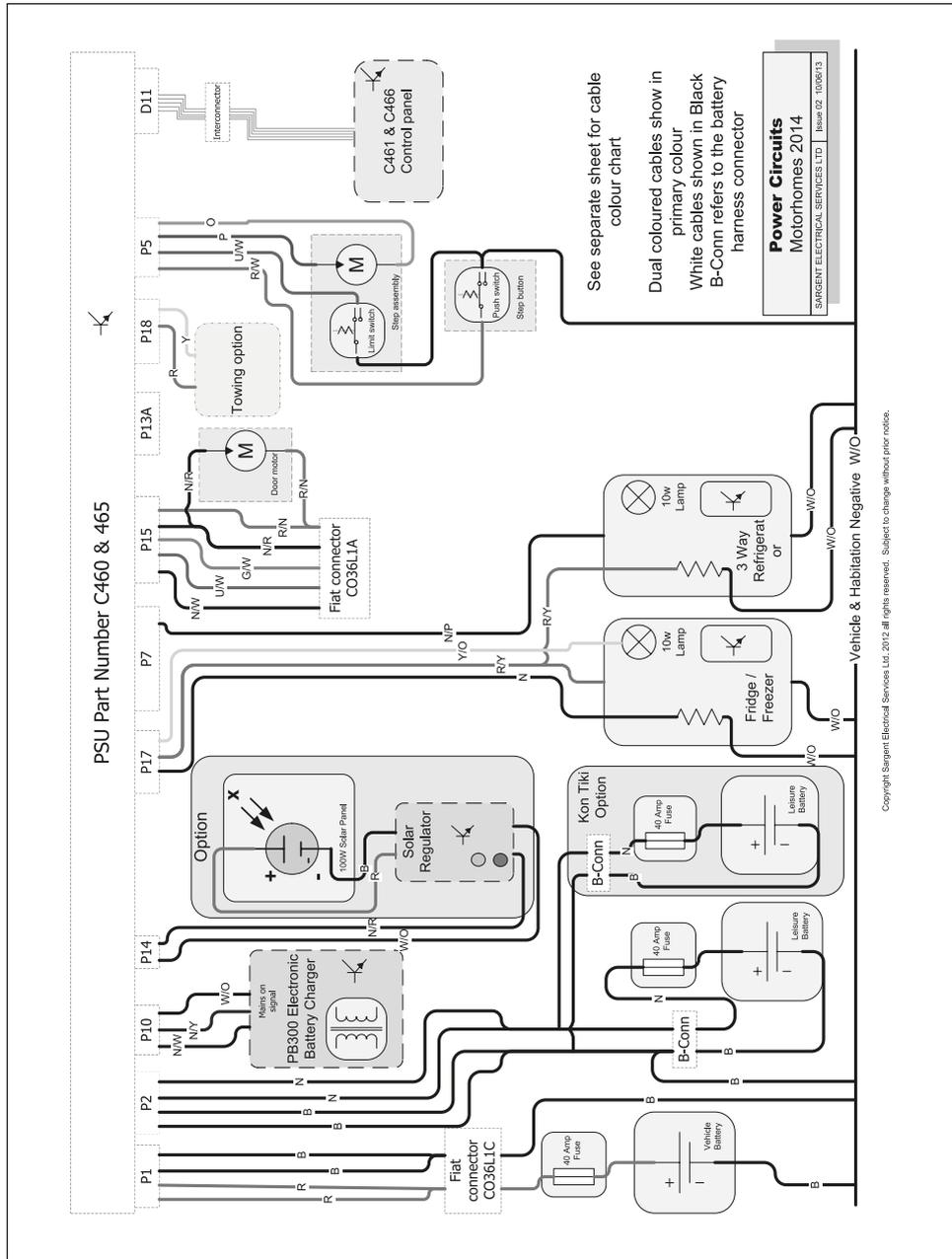
Swift Bolero / Besscarr 500 - Roof lighting circuits



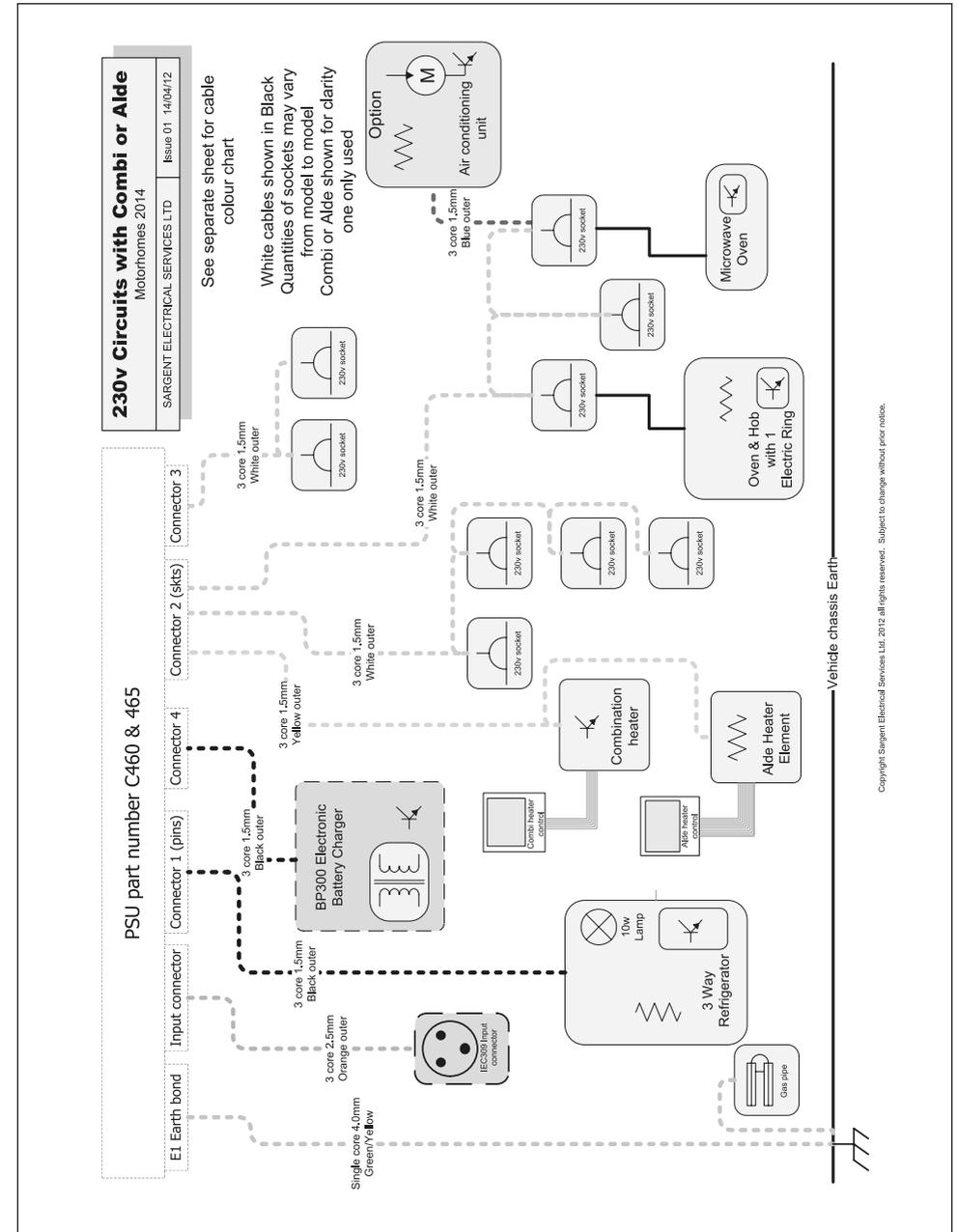
Swift Bolero / Besscarr 500 - Consumer Circuits - Floor circuits



Swift Bolero / Besscarr 500 - Power circuits



Swift Bolero / Besscarr 500 - 230V circuits



Swift Bolero / Besscarr 500 - Cable Colour Chart



Y/U Yellow cable with Blue stripe

Example

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

Copyright Sargent Electrical Services Ltd. 2012. All rights reserved. Subject to change without prior notice.

Road Lights		
Application	Bulb Reference	Bulb Rating
Front marker light	LED Complete lamp	12v <1W
Side marker light	W5W	12v 5W
Rear high level marker light	W5W	12v 5W
High level stop lamp	T5/13.5	12v 2.3W
Rear indicator lamp	PY21 Orange	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
Downlighters, LED	FEM0855 Silver	12v LED
Locker spotlights, LED	FEM0854 complete lamp	12v LED
Above locker mounted fluorescent lamps	300mm fluorescent bulb	12v 8W
Above locker mounted fluorescent lamps	600mm fluorescent bulb	12v 13W
Furniture mounted cold cathode fluorescent lamps	530mm complete lamp, front fixed	12v 5W CCFL
Ceiling lights, round, triple LED	FEM0858 complete lamp	12v LED
Kitchen splashback lighting	FEM0927 150mm / FEM0928 300mm LED strip	12v LED
Kitchen worktop recessed lighting	500mm / 1000mm LED ribbon	12v LED
B-pillar map reading lamps	Complete lamp on 'swan neck' flexible arm	12v LED
Entrance step lamp	LED complete lamp	12v LED
Awning lamp, LED	Forge Europa LED complete unit	12v 2.2W LED
Walkway single LED lights	FEM0993	12v LED
Vanity unit strip lights	FEM0927 150mm / FEM0928 300mm LED strip	12v LED

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

BOLERO / E500 SERIES ROAD LIGHT BULB ACCESS - REPLACEMENT INSTRUCTIONS

REAR INDICATOR LAMPS AND/OR REVERSE LAMPS - REPLACING

Bulb access is from rear of lamp.

The lamp is retained into the rear panel via a spring clip located at the bottom of the lamp body. To release the lamp:

Carefully insert a large flat bladed screwdriver between the top of the lamp body and the plastic of the rear panel.

Using a lever action push the lamp body down against the spring clip.

Once the spring clip is compressed sufficiently, the top of the lamp body can be withdrawn from the rear panel – with the top of the lamp withdrawn the remainder of the lamp will follow.

At the rear of the lamp, a two part metal clip holds the bulb holder in place. To release this:

Insert a flat bladed screwdriver between the rear of the lamp body and the curved section of the two part clip, and use a lever action to disengage the clip from the rear of the lamp body.

Continue to move the curved section of the clip away from the lamp body, and the second straight part will lift away from the back of the bulb holder.

The bulb holder can now be withdrawn from the lamp body.

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

Re-position the bulb holder into the lamp body and re-engage the two part clip.

Place the lamp body back into the aperture with the spring clip in position against the edge of that aperture. Using a downward force compress the spring clip until the top edge of the lamp body can also be pushed into the aperture.

STOP & TAIL LAMPS - REPLACING

The procedure for these lamps is as for the indicator or reverse lamps.

In addition care is needed when fitting the replacement bulb, that the orientation of the bulb is correct. A simple check is that the lamp when operating as a brake light should be brighter than when operating as a tail lamp, this check can be undertaken before the lamp body is re-fitted into the rear panel.

It is wise to avoid dis-connecting the bulb holder from the harness, as incorrect re-connection can cause the brake / tail operation of the bulb to be reversed, an/or cause an bulb warning light to illuminate on the Fiat dashboard.

REAR FOG LIGHTS

Bulb access is from rear of lamp.

The light fitting can be accessed from underneath the rear of the vehicle.

At the rear of the lamp, twist the bulb holder relative to the lamp body to release, and withdraw the bulb holder and bulb.

Please note: The visible rubber terminal cover is not fixed to the bulb holder, and it may be easier to grip the bulb holder with this removed.

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

Re-position the bulb holder into the lamp and twist to lock in place

FRONT HIGH LEVEL MARKER / POSITION LAMPS (CLEAR LENSE)

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

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

REAR HIGH LEVEL MARKER / POSITION LAMPS (RED LENSE)

Bulb access is via the front lense of each lamp

Remove the 2 screws from the front of the light fitting, and withdraw the whole fitting from motorhome body

The harness plugs directly into the bulb holder – twist the bulb holder relative to the lamp body to release, and withdraw the bulb holder and bulb.

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

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

HIGH LEVEL BRAKE LAMP

This lamp is single piece and has no user serviceable parts inside.

Remove the screw at both ends of lamp, and withdraw whole fitting away from rear panel of motorhome.

Please note: The screws which retain the lamp also retain the reverse camera housing.

Unplug the lamp from the harness, by squeezing the small tab on the side of the connector, and pulling the connector away from the lamp.

Re-connect the new lamp to harness, and secure with the original two screws.

Lamp retaining screws are fixed into a rubber sleeve with a threaded insert, often known as a rawlnut. If lamp has been removed and re-fitted several times the rubber sleeve may need replacing, these are available through your dealer.

NUMBER PLATE LAMPS

Bulb access is via the front lense of each lamp

Remove the two screws in the lense of the lamp, and remove

Lever the bulb out of retaining clips

Reverse the procedure to re-fit a new bulb and the light lense

SIDE MARKER / POSITION LAMPS

Bulb access is from rear of lamp

If rear of lamp is visible from inside the vehicle:

Depending on the location, a small brown plastic cover may be present covering the connections to the lamp. Remove the screws in the cover to release and access the rear of the lamp.

The harness plugs directly into the bulb holder – twist the bulb holder relative to the lamp body to release, and withdraw the bulb holder and bulb.

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

Reverse the procedure to replace the bulb in the holder, holder in the lamp and the lamp onto the motorhome body. Replace plastic cover.

If rear of lamp is not visible from inside the vehicle:

Remove the 2 screws from the front of the light fitting, and withdraw the whole fitting from motorhome body

The harness plugs directly into the bulb holder – twist the bulb holder relative to the lamp body to release, and withdraw the bulb holder and bulb.

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

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

