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Issued July 2013

# Challenger Sport - Eccles Sport Technical Handbook

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# Specification

Challenger Sport	442	514	524	544
Berths	2	4	4	4
Axles	1	1	1	1
Internal Length (bed box height)	4.40m/14'5"	5.23m/17'2"	5.29m/17'4"	5.60m/18'4"
Overall Width*	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"
Overall Height (inc. TV Aerial)*	2.64m/8'8"	2.65m/8'8"	2.65m/8'8"	2.65m/8'8"
Maximum Internal Headroom	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"
Overall Length*	6.06m/19'11"	6.88m/22'7"	6.94m/22'9"	7.25m/23'9"
Awning A/A dimension	8.79m/28'10"	9.62m/31'7"	9.68m/31'9"	9.99m/32'9"
Mass in Running Order (inc. tolerance)	1118kg/22.0cwt	1234kg/24.3cwt	1258kg/24.8cwt	1292kg/25.4cwt†
Maximum Technical Permissible Laden Mass (Lower limit)	1239kg/24.4cwt	1384kg/27.2cwt	1408kg/27.7cwt	1445kg/28.4cwt†
Maximum Technical Permissible Laden Mass (Upper limit)	1350kg/26.6cwt	1500kg/29.5cwt	1500kg/29.5cwt	1500kg/29.5cwt
Total user Payload	121kg/2.4cwt	150kg/3.0cwt	150kg/3.0cwt	153kg/3.0cwt
Personal Effects	121kg/2.4cwt	150kg/3.0cwt	150kg/3.0cwt	153kg/3.0cwt
Options	0kg/0cwt	0kg/0cwt	0kg/0cwt	0kg/0cwt
Tyre Size	185 R14C 102Q	185 R14C 102Q	185 R14C 102Q	185 R14C 102Q
Tyre pressure at Lower limit MTPLM	3.5 bar / 51 psi	4.0 bar / 58 psi	4.1 bar / 59 psi	4.2 bar / 61 psi
Tyre pressure at Upper limit MTPLM	3.8 bar / 55 psi	4.4 bar / 64 psi	4.4 bar / 64 psi	4.4 bar / 64 psi
Static Load on Coupling Head	100kg	100kg	100kg	100kg
Thermal Insulation Grade	THREE	THREE	THREE	THREE
<b>Bed Sizes</b>				
Front Double	202cm x 180cm 6'8" x 5'11"	202cm x 153cm/ 6'8" x 5'0"	202cm x 180cm/ 6'8" x 5'11"	202cm x 159cm/ 6'8" x 5'3"
or Front Nearside Single	190cm x 72cm/6'3" x 2'4"	153cm x 72cm/5'0" x 2'4"	180cm x 72cm/5'11" x 2'4"	160cm x 72cm/5'3" x 2'4"
and Front Offside Single	180cm x 72cm/5'11" x 2'4"	160cm x 72cm/5'3" x 2'4"	190cm x 72cm/6'3" x 2'4"	160cm x 72cm/5'3" x 2'4"
Rear Double		198cm x 133cm/6'6" x 4'4"		191cm x 133cm/6'3" x 4'4"
Rear Bunk				
Side Single (offside)			180cm x 62cm/5'11" x 2'0"	
Side Single (nearside)				
Side Bunk (offside)			176cm x 59cm/5'9" x 1'11"	
Side Bunk (nearside)				
Rear Fixed Lower Bunk				
Rear Fixed Mid Bunk				
Rear Fixed Upper Bunk				
Side Fixed Lower Bunk				
Side Fixed Mid Bunk				
Side Fixed Upper Bunk				

**Weights:** The method of calculating the Mass in Running Order (MRO) and user payload figures has changed in order to bring it in line with European Vehicle Directives.

Allowances for essential equipment (e.g. gas cylinders) previously allowed for in the user payload are now contained within the MRO. A provision for a leisure battery which used to be within the essential

equipment payload has now been included within the personal effects payload allowance.

Although the method of calculation has changed, the overall effect is that the amount of payload available to the customer has remained the same, it is just calculated in a different manner

**Bed Sizes :** Please note that the front double bed sizes quoted are for seating configurations without chest of drawers. The front double bed width for a layout with a chest of drawers fitted will be reduced by 0.4m(1'4") from that stated.

554	564	584	586	636	640
4	4	4	6	6	6
1	1	1	1	2	2
5.60m/18'4"	5.60m/18'4"	5.83m/19'2"	5.83m/19'2"	6.27m/20'7"	6.27m/20'7"
2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"
2.65m/8'8"	2.65m/8'8"	2.65m/8'8"	2.65m/8'8"	2.62m/8'7"	2.62m/8'7"
1.95m/6'5"	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"
7.25m/23'9"	7.25m/23'9"	7.48m/24'6"	7.48m/24'6"	7.93m/26'0"	7.93m/26'0"
9.99m/32'9"	9.99m/32'9"	10.22m/33'6"	10.22m/33'6"	10.66m/35'0"	10.66m/35'0"
1279kg/25.2cwt†	1290kg/25.4cwt	1295kg/25.5cwt	1361kg/26.8cwt	1508kg/29.7cwt	1542kg/30.4cwt
1432kg/28.2cwt	1443kg/28.4cwt	1451kg/28.6cwt	1550kg/30.5cwt	1750kg/34.4cwt	1750kg/34.4cwt
1500kg/29.5cwt	1500kg/29.5cwt	1500kg/29.5cwt	1550kg/30.5cwt	1800kg/35.4cwt	1850kg/36.4cwt
153kg/3.0cwt	153kg/3.0cwt	156kg/3.1cwt	189kg/3.7cwt	242kg/4.8cwt	208kg/4.1cwt
153kg/3.0cwt	153kg/3.0cwt	156kg/3.1cwt	176kg/3.5cwt	180kg/3.5cwt	180kg/3.5cwt
0kg/0cwt	0kg/0cwt	0kg/0cwt	0kg/0cwt	0kg/0cwt	0kg/0cwt
185 R14C 102Q	185 R14C 102Q	185 R14C 102Q	185 R14C 102Q	185/70 R14 88T	185/70 R14 88T
4.1 bar / 59 psi	4.2 bar / 61 psi	4.2 bar / 61 psi	4.5 bar / 65 psi	2.1 bar / 30 psi	2.1 bar / 30 psi
4.4 bar / 64 psi	4.4 bar / 64 psi	4.4 bar / 64 psi	4.5 bar / 65 psi	2.2 bar / 32 psi	2.3 bar / 33 psi
100kg	100kg	100kg	100kg	100kg	100kg
THREE	THREE	THREE	THREE	THREE	THREE
202cm x 159cm/ 6'8" x 5'3"	202cm x 159cm/ 6'8" x 5'3"	202cm x 159cm/ 6'8" x 5'3"	202cm x 180cm/ 6'8" x 5'11"	202cm x 180cm/ 6'8" x 5'11"	202cm x 180cm/ 6'8" x 5'11"
160cm x 72cm/5'3" x 2'4"	160cm x 72cm/5'3" x 2'4"	160cm x 72cm/5'3" x 2'4"	190cm x 72cm/6'3" x 2'4"	180cm x 72cm/5'11" x 2'4"	190cm x 72cm/6'3" x 2'4"
160cm x 72cm/5'3" x 2'4"	160cm x 72cm/5'3" x 2'4"	160cm x 72cm/5'3" x 2'4"	180cm x 72cm/5'11" x 2'4"	190cm x 72cm/6'3" x 2'4"	180cm x 72cm/5'11" x 2'4"
191cm x 133cm/6'3" x 4'4"		185cm x 133cm/6'1" x 4'4"			202cm x 133cm/6'8" x 4'4"
	192cm x 71cm/6'4" x 2'4"				186cm x 64cm/6'1" x 2'1"
	183cm x 75cm/6'0" x 2'6"		180cm x 62cm/5'11" x 2'0"	180cm x 82cm/5'11" x 2'8"	176cm x 64cm/5'9" x 2'1"
					173cm x 59cm/5'8" x 1'11"
			176cm x 59cm/5'9" x 1'11"	176cm x 59cm/5'9" x 1'11"	163cm x 59cm/5'4" x 1'11"
			183cm x 57cm/6'0" x 1'10"	181cm x 57cm/5'11" x 1'10"	
			183cm x 57cm/6'0" x 1'10"	181cm x 57cm/5'11" x 1'10"	

**Awning sizes:** Due to varying awning designs and sizes the awning sizes given are approximate only. Specific awning sizes must be confirmed by your dealer or awning manufacturer prior to purchase.

\* The dimensions given are approximate due to slight variations in suspension ride heights, loading conditions and tyre pressures. Customers should verify the actual dimensions of their touring caravan before committing to anything that could be impacted by these dimensions

**Please note:** Any dealer fit options will reduce the overall payload available to the user of the caravan. If you require additional payload it is possible to upgrade the MTPLM to the upper limit. Please contact your Swift caravan dealer for more information.

# Specification

Eccles Sport	442	514	554
Berths	2	4	4
Axles	1	1	1
Internal Length (bed box height)	4.40m/14'5"	5.23m/17'2"	5.60m/18'4"
Overall Width*	2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"
Overall Height (inc. TV Aerial)*	2.64m/8'8"	2.65m/8'8"	2.65m/8'8"
Maximum Internal Headroom	1.95m/6'5"	1.95m/6'5"	1.95m/6'5"
Overall Length*	6.06m/19'11"	6.88m/22'7"	7.25m/23'9"
Awning A/A dimension	8.79m/28'10"	9.62m/31'7"	9.99m/32'9"
Mass in Running Order (inc. tolerance)	1123kg/22.1cwt	1239kg/24.4cwt	1284kg/25.3cwt†
Maximum Technical Permissible Laden Mass (Lower limit)	1244kg/24.5cwt	1389kg/27.3cwt	1437kg/28.3cwt†
Maximum Technical Permissible Laden Mass (Upper limit)	1350kg/26.6cwt	1500kg/29.5cwt	1500kg/29.5cwt
Total user Payload	121kg/2.4cwt	150kg/3.0cwt	153kg/3.0cwt
Personal Effects	121kg/2.4cwt	150kg/3.0cwt	153kg/3.0cwt
Options	0kg/0cwt	0kg/0cwt	0kg/0cwt
Tyre Size	185 R14C 102Q	185 R14C 102Q	185 R14C 102Q
Tyre pressure at Lower limit MTPLM	3.5 bar / 51 psi	4.0 bar / 58 psi	4.2 bar / 61 psi
Tyre pressure at Upper limit MTPLM	3.8 bar / 55 psi	4.4 bar / 64 psi	4.4 bar / 64 psi
Static Load on Coupling Head	100kg	100kg	100kg
Thermal Insulation Grade	THREE	THREE	THREE
<b>Bed Sizes</b>			
Front Double	202cm x 180cm/6'8" x 5'11"	202cm x 153cm/6'8" x 5'0"	202cm x 159cm/6'8" x 5'3"
or Front Nearside Single	190cm x 72cm/6'3" x 2'4"	153cm x 72cm/5'0" x 2'4"	160cm x 72cm/5'3" x 2'4"
and Front Offside Single	180cm x 72cm/5'11" x 2'4"	160cm x 72cm/5'3" x 2'4"	160cm x 72cm/5'3" x 2'4"
Rear Double		198cm x 133cm/6'6" x 4'4"	191cm x 133cm/6'3" x 4'4"
Rear Bunk			
Side Single (offside)			
Side Single (nearside)			
Side Bunk (offside)			
Side Bunk (nearside)			
Rear Fixed Lower Bunk			
Rear Fixed Mid Bunk			
Rear Fixed Upper Bunk			
Side Fixed Lower Bunk			
Side Fixed Mid Bunk			
Side Fixed Upper Bunk			

† Estimate

**Weights:** The method of calculating the Mass in Running Order (MRO) and user payload figures has changed in order to bring it in line with European Vehicle Directives.

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584	586	640
4	6	6
1	1	2
5.83m/19'2"	5.83m/19'2"	6.27m/20'7"
2.25m/7'4½"	2.25m/7'4½"	2.25m/7'4½"
2.65m/8'8"	2.65m/8'8"	2.62m/8'7"
1.95m/6'5"	1.95m/6'5"	1.95m/6'5"
7.48m/24'6"	7.48m/24'6"	7.93m/26'0"
10.22m/33'6"	10.22m/33'6"	10.66m/35'0"
1300kg/25.6cwt	1367kg/26.9cwt	1547kg/30.5cwt
1456kg/28.7cwt	1550kg/30.5cwt	1750kg/34.4cwt
1500kg/29.5cwt	1550kg/30.5cwt	1850kg/36.4cwt
156kg/3.1cwt	183kg/3.6cwt	203kg/4.0cwt
156kg/3.1cwt	176kg/3.5cwt	180kg/3.5cwt
0kg/0cwt	0kg/0cwt	0kg/0cwt
185 R14C 102Q	185 R14C 102Q	185/70 R14 88T
4.2 bar / 61 psi	4.5 bar / 65 psi	2.1 bar / 30 psi
4.4 bar / 64 psi	4.5 bar / 65 psi	2.3 bar / 33 psi
100kg	100kg	100kg
THREE	THREE	THREE
202cm x 159cm/6'8" x 5'3"	202cm x 180cm/6'8" x 5'11"	202cm x 180cm/6'8" x 5'11"
160cm x 72cm/5'3" x 2'4"	190cm x 72cm/6'3" x 2'4"	190cm x 72cm/6'3" x 2'4"
160cm x 72cm/5'3" x 2'4"	180cm x 72cm/5'11" x 2'4"	180cm x 72cm/5'11" x 2'4"
185cm x 133cm/6'1" x 4'4"		202cm x 133cm/6'8" x 4'4"
		186cm x 64cm/6'1" x 2'1"
	180cm x 62cm/5'11" x 2'0"	176cm x 64cm/5'9" x 2'1"
		173cm x 59cm/5'8" x 1'11"
	176cm x 59cm/5'9" x 1'11"	163cm x 59cm/5'4" x 1'11"
	183cm x 57cm/6'0" x 1'10"	
	183cm x 57cm/6'0" x 1'10"	

**Awning sizes:** Due to varying awning designs and sizes the awning sizes given are approximate only. Specific awning sizes must be confirmed by your dealer or awning manufacturer prior to purchase.

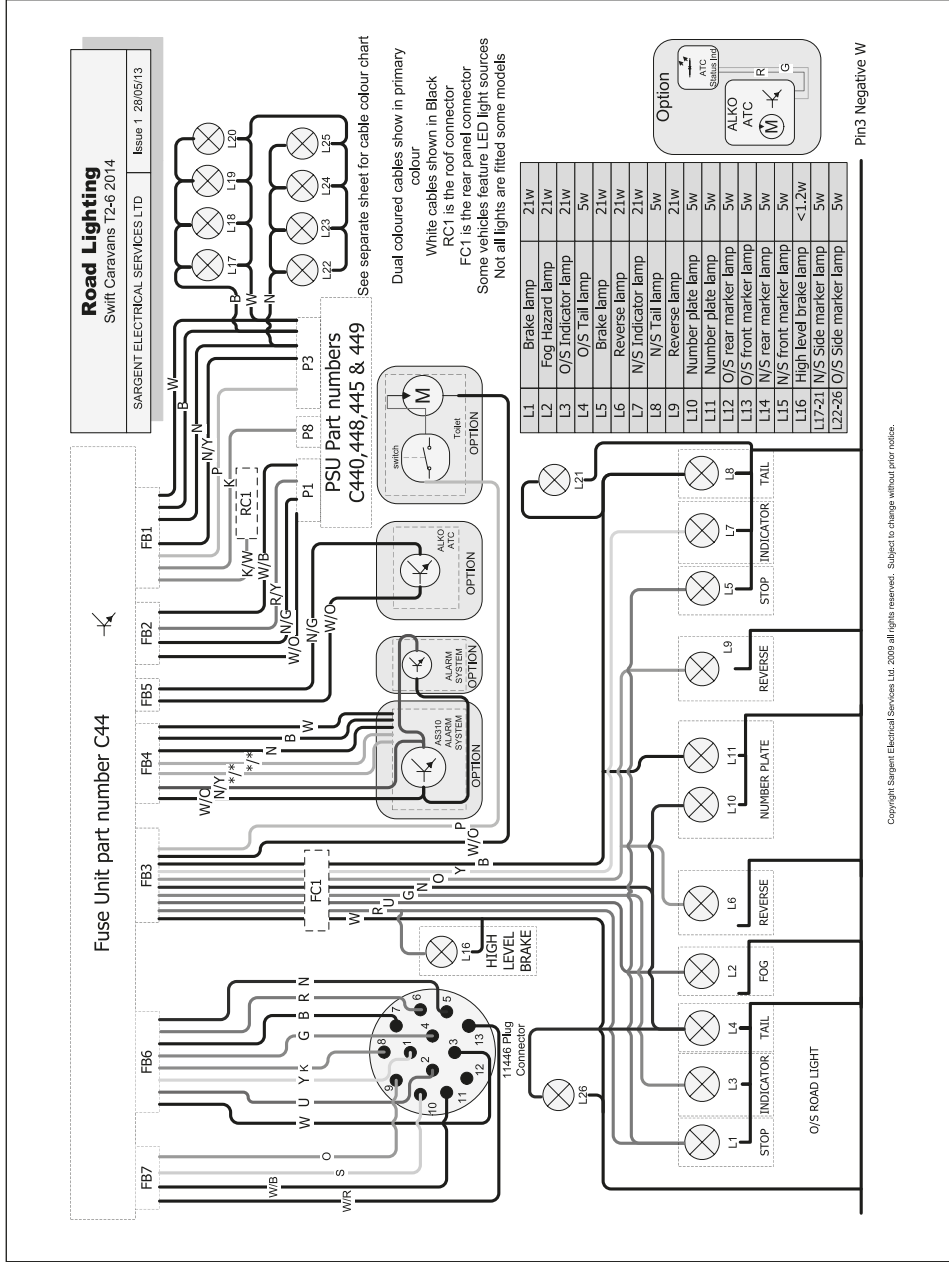
\* The dimensions given are approximate due to slight variations in suspension ride heights, loading conditions and tyre pressures.

Customers should verify the actual dimensions of their touring caravan before committing to anything that could be impacted by these dimensions

**Please note:** Any dealer fit options will reduce the overall payload available to the user of the caravan.

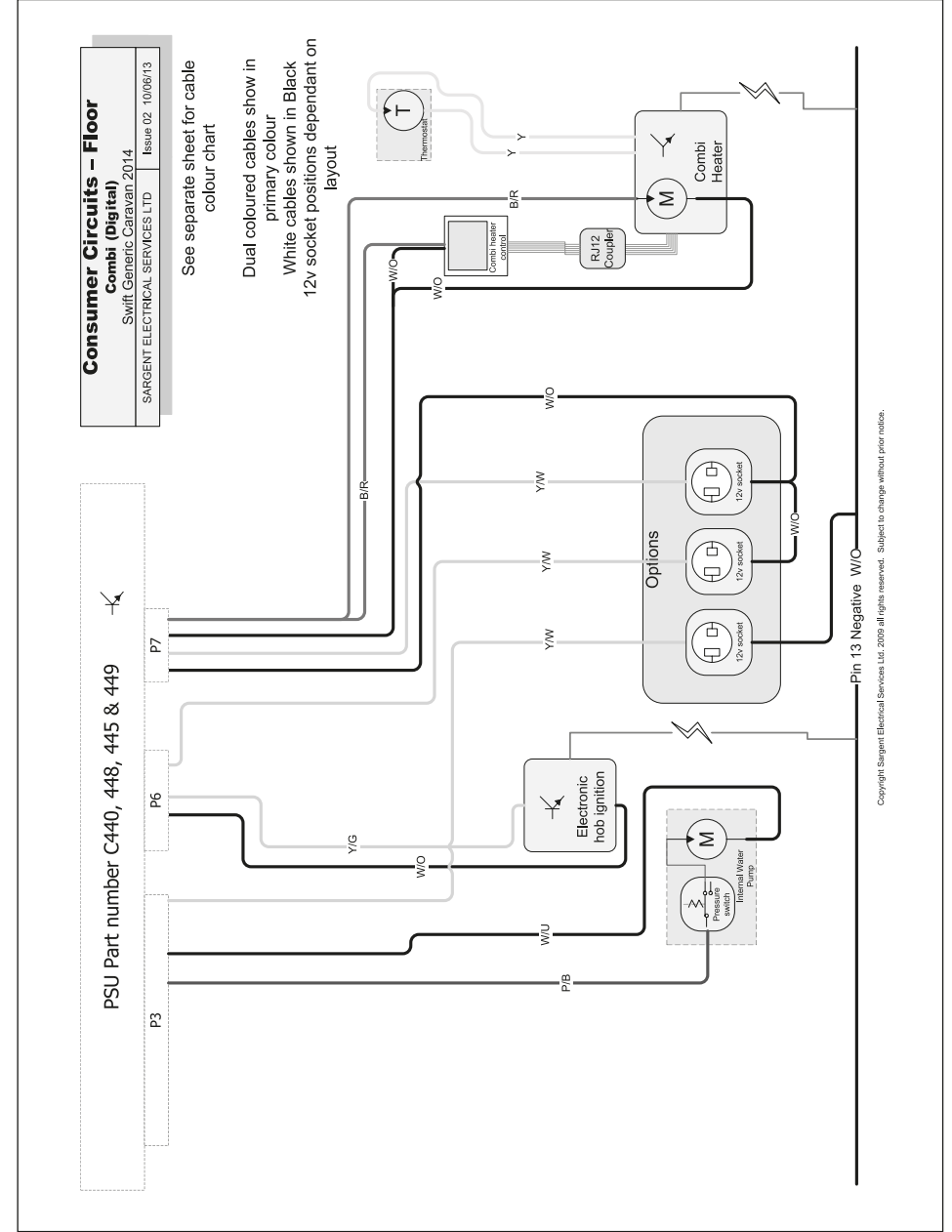
If you require additional payload it is possible to upgrade the MTPLM to the upper limit. Please contact your Swift caravan dealer for more information.

## Challenger Sport - Eccles Sport Road lighting circuits

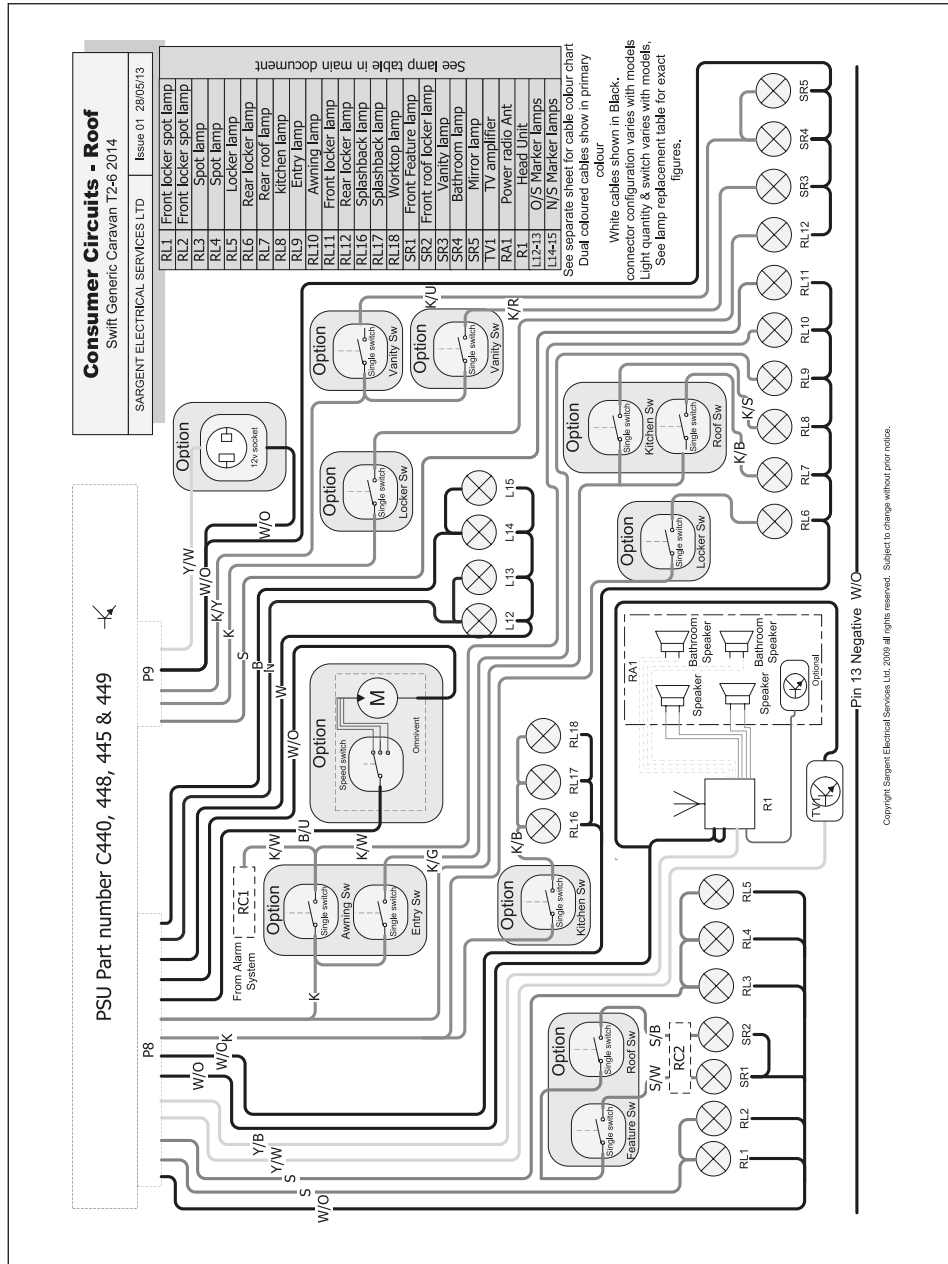


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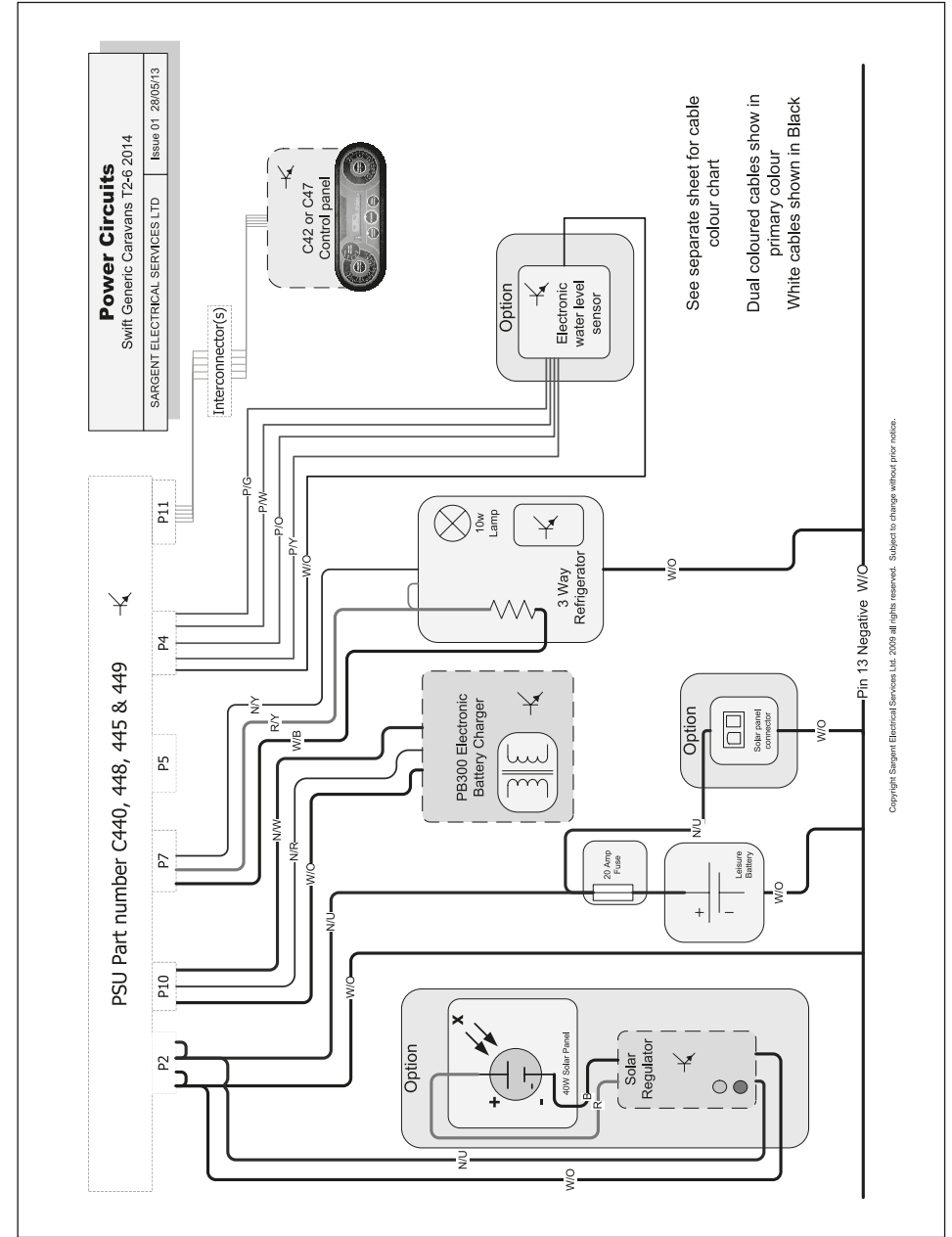
## Challenger Sport - Eccles Sport - Consumer Circuits - Floor circuits



## Challenger Sport - Eccles Sport - Roof lighting circuits

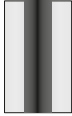


## Challenger Sport - Eccles Sport - Power circuits





## Challenger Sport - Eccles Sport - Cable Colour Chart



**Y/U**  
Yellow cable with Blue stripe

Example

**Cable Colour Chart**  
Swift range

SARGENT ELECTRICAL SERVICES LTD

Issue 06/07/10

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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Exterior Lights	Bulb type	Bulb rating
Front marker lights	Complete lamp	12v LED
Side marker - Low Level	W5W	12v 5W
Side marker - High Level	R5W	12v 5W
Reversing light	P21	12v 21W
Rear indicator light	P21	12v 21W
Rear indicator light	P21W Orange Bulb	12v 21W
Brake / tail light	P21/5W	12v 21W/5W
Fog light	P21	12v 21W
Number plate light	C5W	12v 5W
High level brake light	Jokon ZHBL 12 Red	LED
Interior / Other Lights	Bulb type	Bulb rating
Awning lamp	FEM0945 complete lamp	12v LED
Locker spotlights	FEM0854 complete lamp	12v LED
Downlighters, Chrome	FEM1189 LED complete unit	12v LED
Downlighters, Offset lense	FEM0855 complete lamp, silver	12v LED
Kitchen light (splashback)	FEM1043 complete lamp, surface mount	12v LED
Kitchen light	500mm cold cthode 4.5W light	12v 4.5W CCFL
Over locker lighting	Fluorescent 300mm	12v 8W
Feature light over front seating	FEM0937 complete lamp	12v LED
Ceiling light, Triple LED	FEM0858 complete lamp	12v LED
Ceiling light, Halogen	Halogen capsule bulb	12v 10W

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



## Bulb replacement

### CHALLENGER SPORT/ ECCLES SPORT ROAD LIGHT BULB ACCESS

#### STOP / TAIL / INDICATOR 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.

#### REAR CENTRAL FOG LIGHT

- Bulb access is from front / via lense of lamp
- Remove 2x screws from light lense and withdraw lense
- Bulb is a bayonet fitting – apply slight pressure on bulb towards light fitting, and twist to release
- Reverse procedure to re-fit bulb and lense.

#### UPPER REAR SIDE POSITION LAMPS (RED / CLEAR LENSE)

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

### HIGH LEVEL BRAKE LAMP

- Remove 2x screw cover caps from front face of lamp using small flat bladed screwdriver.
- Remove screws at either end of lamp, and withdraw whole fitting away from rear panel of caravan
- Disconnect lamp from harness
- Re-connect new lamp to harness, and secure lamp to caravan 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

### NUMBER PLATE LAMPS

- Bulb access is from the front / via lense of each lamp
- Remove the two screws in the lense of the lamp
- Lever the bulb out of retaining clips
- Reverse the procedure to re-fit a new bulb and the light lense

### FRONT MARKER POSITION LAMPS

- Bulb access is from rear of lamp
- Remove 2x screws from light fitting, and withdraw whole fitting from caravan front panel
- 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 caravan body.

### SIDE MARKER POSITION LAMPS

- Bulb access is from rear of lamp. First check from within caravan if the rear of the lamp is accessible:
- If rear of light is accessible:
- 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 and holder in lamp
- If rear of light is not accessible:
- Remove 2x screws from light fitting, and withdraw whole fitting from caravan 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 caravan body

