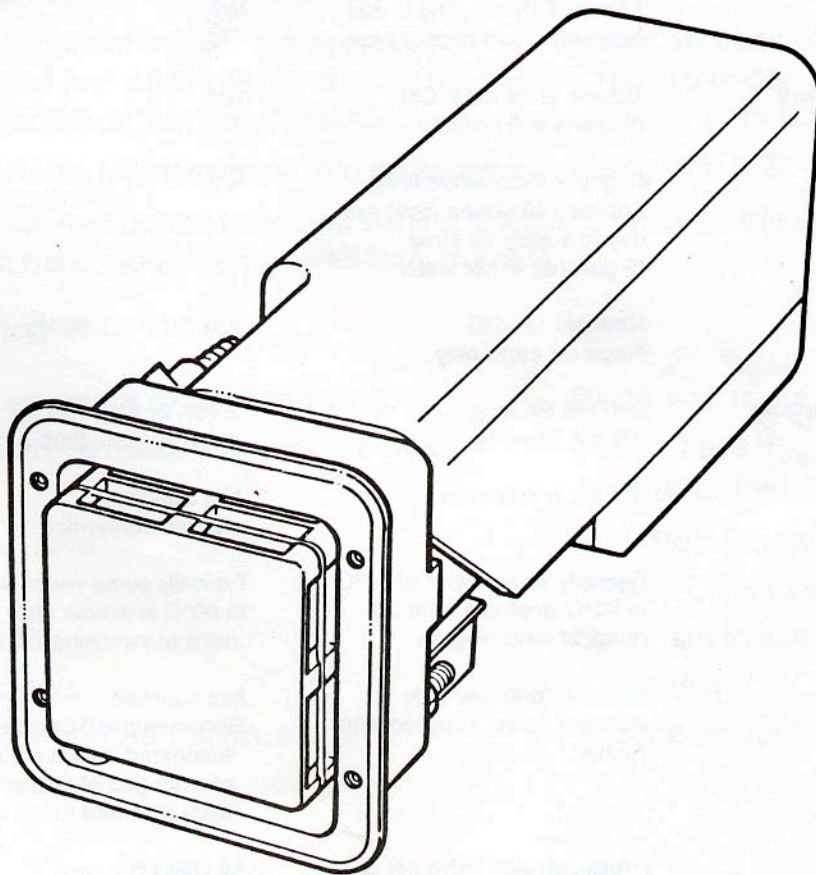




**CASCADE 2**  
**&**  
**CASCADE 2 GE**  
**CARAVAN WATER HEATER**



**INSTALLATION INSTRUCTIONS**

**LEAVE THESE INSTRUCTIONS WITH THE USER**

## 1:0 SPECIFICATIONS

Water capacity	9 litres (2 gallons)
Water connections	Male nozzles to suit 12mm bore reinforced hose. The cold inlet incorporates a non-return valve.
Water supply	Maximum recommended pressure from pump 1.4bar (20p.s.i.) or from header tank 13m (40ft) head.

NOT SUITABLE FOR DIRECT CONNECTION TO THE MAINS WATER SUPPLY.

Weight	Empty	5.64 kg (12.4 lbs)
	Full	14.64 kg (32.4 lbs)

OPERATION	GAS	MAINS ELECTRIC
	Cascade 2 & 2GE	Cascade 2 GE only
Temperature Range	70°C approx. non-adjustable	70° C approx. non-adjustable
Insulation Heat Loss	3° C per hour	3°C per hour
Efficiency	Better than 75%	N/A
Gas Connection	Female DIN coupling to suit 8mm or ¼" o/d copper pipe.	N/A
Gas Supply Pressure	Butane at 28 mbar OR Propane at 37 mbar	N/A
Gas consumption	87 gm/hr (3oz) when firing. Approx 140 grams (5oz) per day to supply 23 litres (5 gallons) of hot water.	N/A
Electrical Supply	Nominal 12v DC Negative earth only	220-240v AC. 50 Hz
Electrical Consumption	250 mA Heating 25 mA Standby	2.75A at 240v (660w) 2.5A at 220v (605w)
Fuses	2 x 1A in controller	Not Supplied. 5A recommended
Warm up Time	Typically some water at 55°C to 60°C available after 30 mins of switching on.	Typically some water at 55°C to 60°C available after 55 mins of switching on.
User Control	Remote controller with indicator lights, supplied with heater.	Not supplied. Recommended Double Pole Illuminated switch outlet with a contact gap of at least 3mm in each pole and fused at 5 amp.
Safety Features	Pressure relief valve set at 3 bar and fusible plug set at 96°C both venting onto burner.	As Gas Only plus over temperature thermostat with manual reset at 85°C
Other Features	The electronic burner control features protection against flame failure, gas supply interruption and low voltage.	

## 2:0 WARNINGS AND INFORMATION

This heater must be installed by a competent gas fitter working to the Gas Safety (Installation and use) Regulations 1984, and as amended 1990, the Health and Safety at Work Regulations and these Fitting Instructions.

In addition the installation of the mains electrics for the Cascade 2 GE must be carried out by a competent electrician working to the IEE Regulations 16th edition 1991 and these Fitting Instructions.

For **USER SAFETY** attention is drawn to Section 4.1 i.e. Balanced Flue Terminal Position.

The gas control circuit must only be connected to a 12volt dc. negative earth supply.

Before commencing any work on the caravan disconnect the battery and isolate the caravan from the mains supply.

Mains connection for the Cascade 2 GE should be made via the a double pole switched outlet with a contact gap of at least 3mm in each pole.

Water hoses should be reinforced, opaque **FOOD QUALITY**.

Cascade 2 GE mains cable must be less than that recommended, i.e. 3 core (blue, brown and green/yellow) with a CSA of 0.75mm<sup>2</sup>.

This heater does not contain asbestos or asbestos related products.

The Cascade 2 and Cascade 2 GE are approved to the relevant sections of B.S. 5258 part 7.1977 and B.S. 3456 part 101. 1987 and part 102. section 102. 15 under The National Measurement Accreditation Service (NAMAS), and are manufactured to B.S. 5750 part 2 1987.

The heaters are suitable for installation into caravans complying with B.S. 4626:1970.

The data badge is located on the bulkhead behind the flue cowl or on the outside of the bulkhead to the left hand side when viewed from the rear.

## 3:0 THE HEATER KIT

### The heater kit consists of the following:

- 1 Assembled Heater complete with multicore cable
- 1 Wallswitch
- 1 DIN 8mm dia. Olive
- 1 1/4" dia. Olive
- 1 Compression Nut
- 9 Csk. Head Screws
- 4 Stainless steel Pan Head Screws
- 2 Round head Screws
- 1 Set literature

### Parts and tools required:

- Mastic Tape
- Jig Saw or Padsaw
- No.2 Pozi Screw Driver
- Jubilee Clips to suit your pipe fitted
- Spanners to suit your gas fittings
- 10mm drill
- Silicone sealant

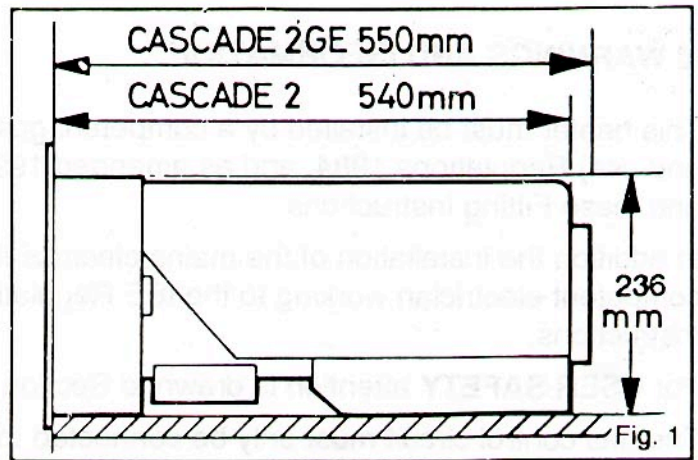
#### 4:0 SELECTING THE POSITION

Choose a flat vertical wall without interference of trims etc. if possible.

Ensure that the overall depth of the heater will fit into the locker or cupboard (see fig 1)

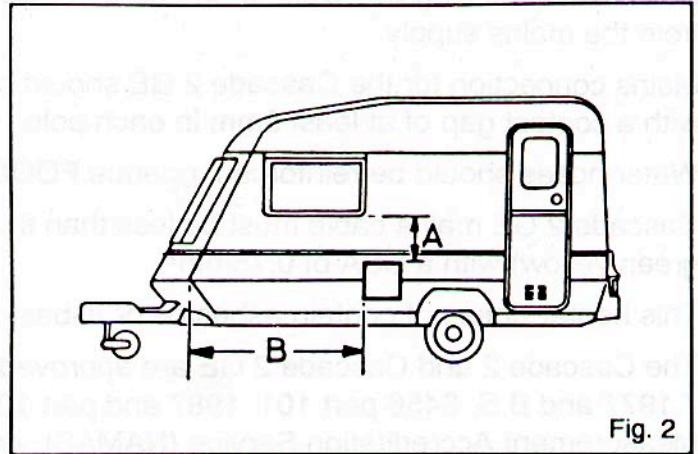
Ensure that any trims can be refitted or cut to make a water tight seal and a neat installation. Structural sections within the walls of the caravan should be avoided for safety reasons.

Ensure the rear of the appliance (ie tank end) is always supported or fitted at floor level.



#### 4:1 BALANCED FLUE TERMINAL POSITION

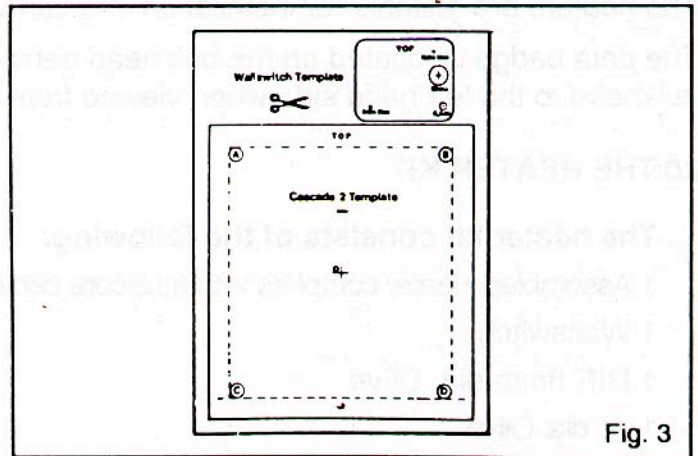
Location	Minimum dimension
A Below an opening window	300mm
B Vertical corner (see fig 2)	600mm



#### 5:0 CUTTING THE HOLE

At the centre fold of these instructions you will find a sheet of paper on which is printed the template for fitting the heater and the wallswitch.

Remove the template from these instructions (see fig 3.) and separate it into two templates



#### 6:0 INSIDE THE CARAVAN

Temporarily tape the template to the inside wall at the position required. Ensure that the bottom of the template, i.e. the line CD, is to the floor or above any strength beam in the base of the wall. Mark the 'O' position through the template onto the wall.

Remove the template and drill a 4mm dia. hole through the inner and outer walls at the 'O' position. Ensure that the drill is kept square to the wall.

## 7:0 OUTSIDE THE CARAVAN

The pilot hole drilled through the wall will allow the template to be positioned correctly on the outside wall.

Tape the wall template (see fig 4.) and align the 'O' position with the previously drilled hole. Ensure that the template is square to the caravan body. The line CD should be level with the caravan floor or above any strength beam on the base of the wall.

Drill four 10mm dia. holes at the positions A, B, C, & D as shown on the wall template. The drill should pass through the inner and outer walls. Using a jigsaw or padsaw cut to the lines shown on the template. (see fig 5)

Remove all traces of the template and masking tape from the caravan wall.

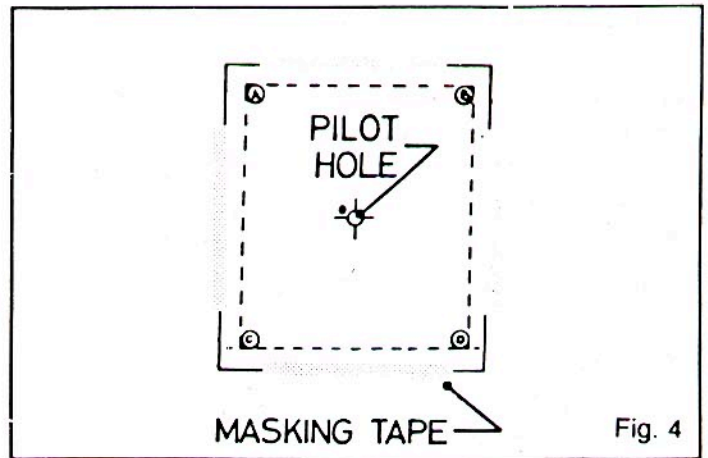


Fig. 4

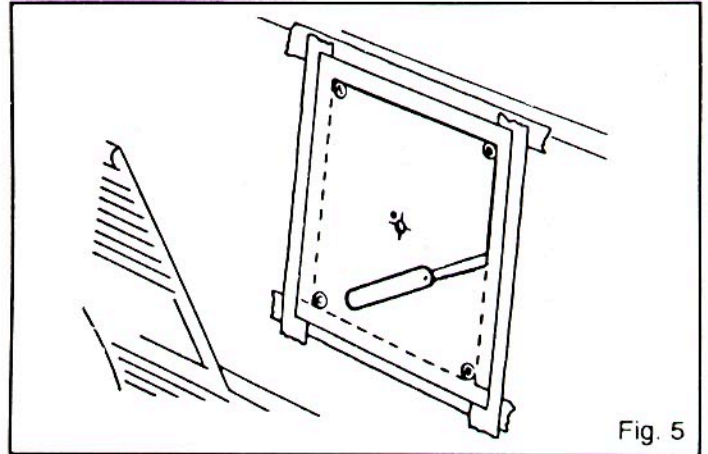


Fig. 5

## 8:0 LINING THE HOLE

The hole in the caravan wall must be lined with timber to give a firm support for holding the heater in position. (see fig. 6)

Before fitting the timber lining first remove any insulation from between the inner and outer walls to the depth of the timber. The finished hole size should be 240mm x 212mm.

Use a silicone sealant to seal the lining to the inner and outer walls. Secure the inner walls to the lining with panel pins. The panel pins should be fitted within 10mm of the edge of the hole at the top and sides only. Trim the edges of the hole to remove any burrs etc... The use of silicone sealant is to prevent water from entering the walls and floor of the caravan.

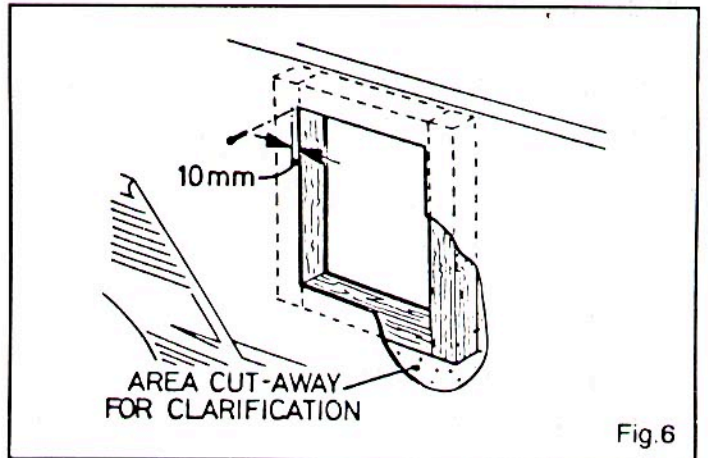


Fig. 6

## 9:0 240 VOLT CONNECTION (GE ONLY)

Any work on mains electric should be carried out by a competent electrician working to the current IEE Regulations.

Ensure the caravan is isolated from the mains supply before starting any work.

The illuminated double pole switched outlet fused at 5amp should be located in a position convenient for easy operation by the user, ie. on the outside of the bedding locker adjacent to the Cascade 2 GE. The mains cable should be connected from the fused outlet to either the RCCB or joined into the existing wiring via a 15amp junction box.

The cable required to connect the Cascade 2 GE to the fused mains outlet should be to a minimum standard of 3 core double sheathed (blue, brown and green/yellow) with a cross sectional area of  $0.75\text{mm}^2$ . Estimate the length of cable required from the fused outlet to the Cascade 2 GE and allow extra to enable the heater to be partially withdrawn through the side of the caravan with-out disconnection.

Remove the plate covering the electrical connections of the Cascade 2 GE.

Prepare the end of the cable as shown in fig. 7.

Pass the prepared end through the cable entry and under the cable clamp.

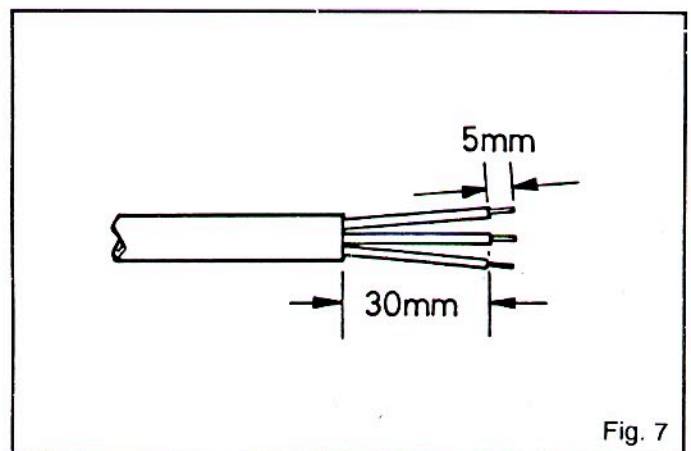


Fig. 7

Connect the cable into the three way terminal block (see fig 8). The brown wire is connected to the terminal marked 'L', blue to the 'N' and the green/yellow to the 'E'

Tighten the cable clamp taking care not to damage the cable or screws.

Replace the cover plate with the 3 screws provided.

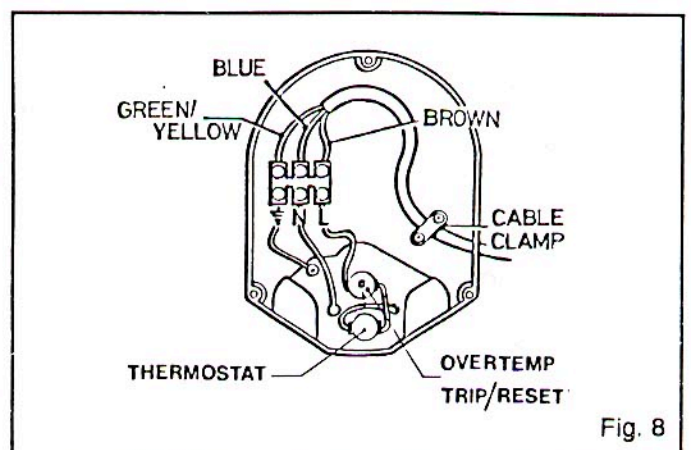


Fig. 8

## 10:0 WATER CONNECTIONS

**10:1** Use ONLY reinforced FOOD QUALITY opaque hose to avoid unpleasant tastes and smells in the water.

**Note:** the reason for the use of opaque hose is that this reduces the possibility of the build up of algae in the system.

**10:2** When connecting into the water supply pipes it is advisable to use a 'Y' connector as this does not reduce the flow to the same degree as a 'TEE'. (see fig.9)

Connect the cold feed hose for the heater to the existing cold water supply by the use of a 'Y' connector. Allow enough length on the hose to make the connection to the heater through hole in the wall of the caravan (see fig. 10).

Complete the hot water system allowing enough hose to make the connection to the heater through the hole in the caravan wall.

## 10:3 Pumps & Taps

Taps which control the pump by a switch in each tap are considered most suitable but the heater will also work on systems using a pressure switch to control the pump (provided that the pressure operating the switch is below 1.4bar). Where a pressure switch is used temperature fluctuations can be expected when showering.

## 11:0 FITTING THE HEATER

**11:1** Ensure that the DIN plug is connected to the electronics module at the bottom of the heater.

Offer the heater through the hole in the wall making sure that the multicore cable and the 240 volt cable in the case of the C2GE are not trapped under the heater.

Make the water connections... The cold water inlet is fitted to the bottom hose connector of the heater, this connector also incorporates a non return valve. The hot water flow hose fits to the top connector. Secure the hoses to the connectors using suitable pipe clips. (see fig. 11)

Coat the black flange with a film of mastic to provide a water tight seal with the caravan wall.

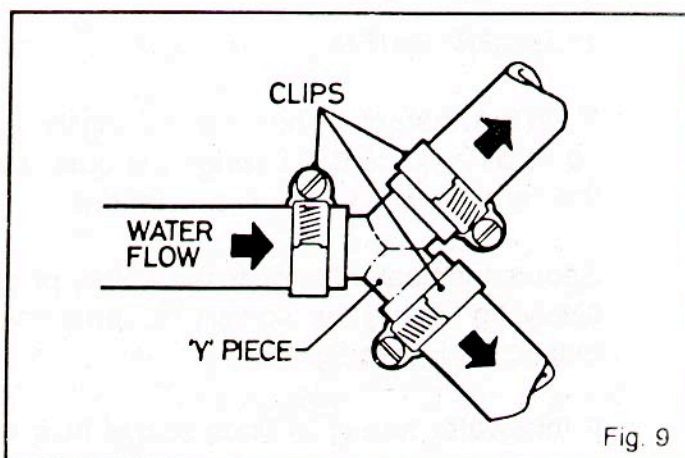


Fig. 9

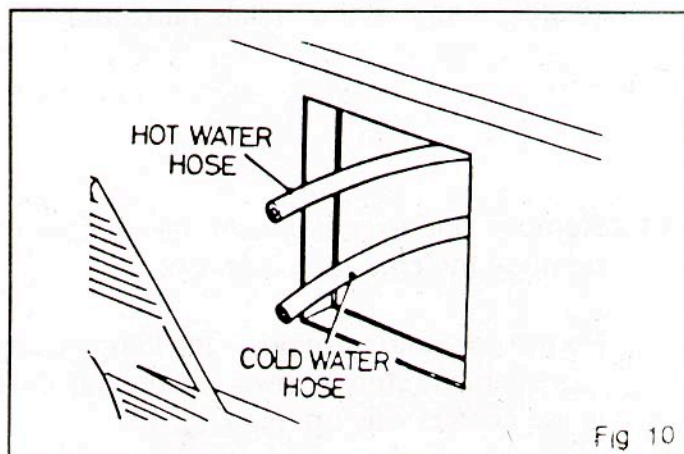


Fig 10

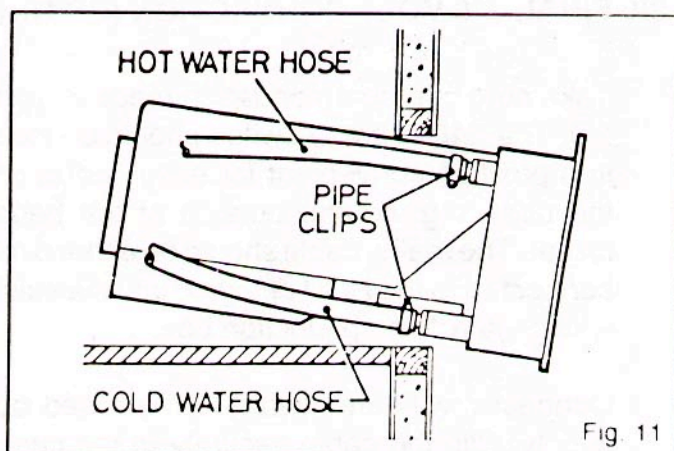


Fig 11

## 11:0 CONTINUED

Push the heater fully home and using the flange holes as a guide drill through the outer skin of the caravan wall with a 4mm dia. drill.

Secure the heater flange to the wall by progressively tightening the screws to compress the mastic seal. (see fig. 12)

If this water heater is fitted above floor level, support the underside of the water heater tank insulation so that the tank is horizontal.

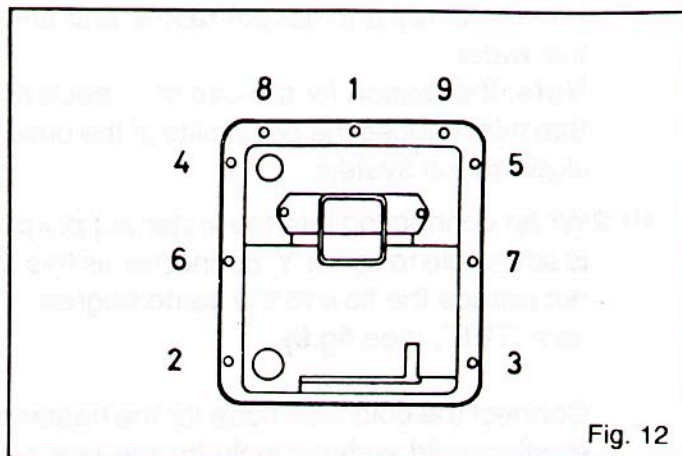


Fig. 12

11:2 Remove any excess mastic taking care not to damage the caravan paintwork.

Fix the cowl into position on the flange using the four stainless steel screws. Ensure that the cowl is the correct way up. (see fig. 13)

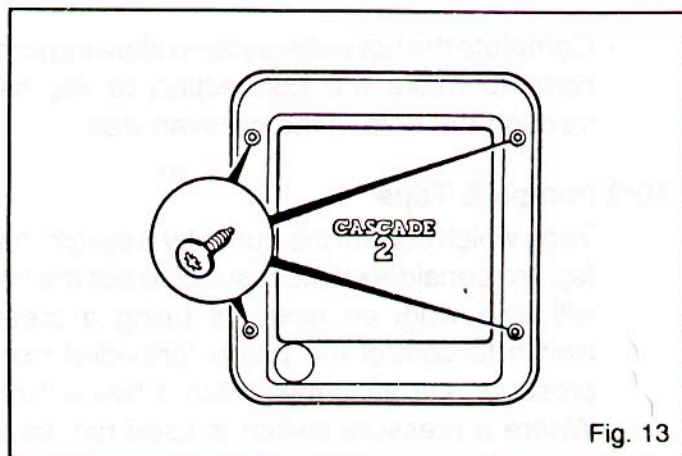


Fig. 13

## 12:0 FINAL 240 VOLT CONNECTION (GE ONLY)

Take note of recommendation made in section 1:0. The 240 volt wall switch should be located in a position convenient for easy operation by the user. e.g. on the outside of the bedding locker. The mains cable should be either directly connected to the RCD or joined into the existing wiring via a 15amp junction box.

Connect the heater cable to the fused outlet supply. Clip the cable securely to the caravan structure and ensure that the cable is long enough to allow partial withdrawal of the heater through the caravan wall for servicing.

### 13:0 WALL SWITCH

Remove the backing from the wall switch template and place in the required position. Take note that the multicore cable is only 3 metres long. Therefore run the cable to the wall switch location before drilling any holes. Drill the holes to the sizes shown on the template.

Fix the wall switch with the two screws provided.

Feed the DIN plug through the 18mm dia. hole and connect into the DIN socket. (see fig. 14)

The DIN plug and socket are keyed so that they will only fit one way.

Connect the wall switch to the 12volt supply .

The DIN Caravan wiring colour code is as follows:

Green...12 volt positive (live)

White....12 volt negative (earth)

Note: Some caravans are wired with blue as positive (live) so exercise caution on the 12 volt wiring.

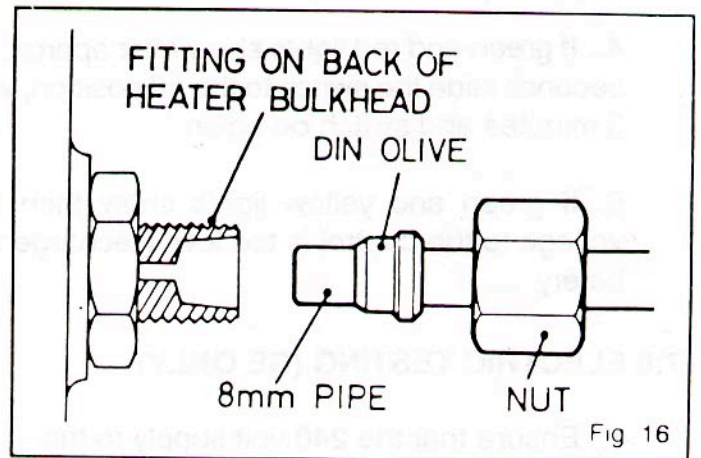
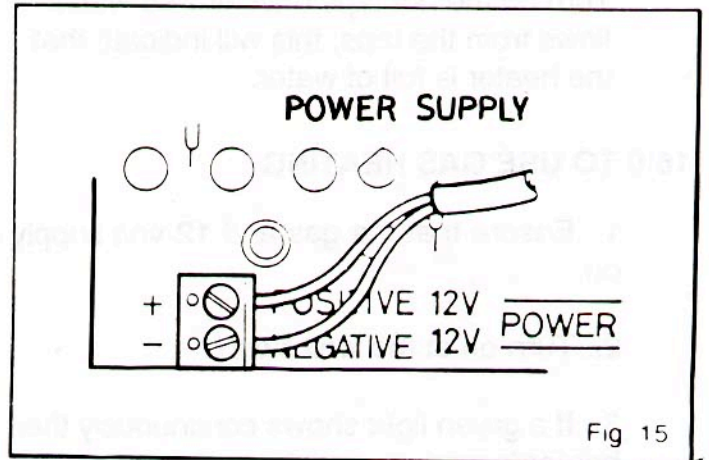
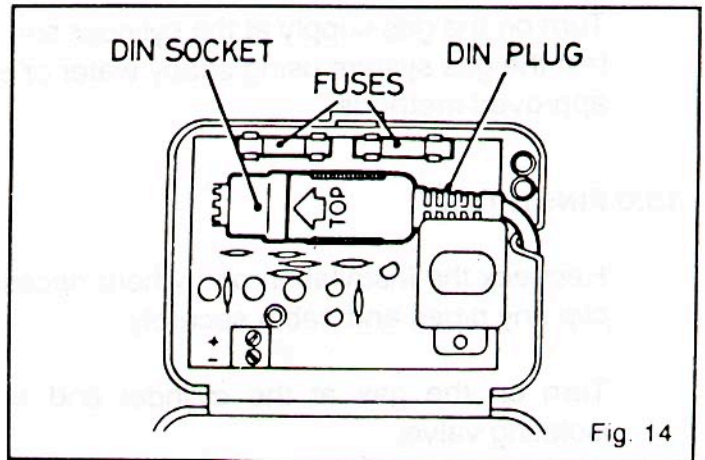
Ensure that the polarity of the wiring to the wall switch is correct. (see fig. 15)

### 14:0 GAS CONNECTION

Ensure that the gas supply is turned off at the cylinder.

Connect the heater to the caravan gas system via. an approved isolating valve. The gas inlet fitting is suitable for 8mm or 1/4" dia. copper pipe. The 8mm dia. pipe DIN gas fitting should be assembled as in fig. 16. The olive for the 1/4" dia. pipe is symmetrical.

It is recommended that a 25mm dia. gas drop hole be drilled through the floor adjacent to where the gas supply joins the heater. When this recommendation is followed the gas feed must be separated from the bedding locker with an enclosure to maintain compliance with the caravan ventilation regulations. The bedding locker lid may form the top of the enclosure to give access to the isolating valve.



## 14:0 CONTINUED

Turn on the gas supply at the cylinder and leak test the gas system using soapy water or other approved methods.

## 15:0 FINAL TEST

Recheck the installation and where necessary clip any pipes and cable securely.

Turn on the gas at the cylinder and at the isolating valve.

Switch on the 12 volt supply.

Place the pump in a full container of water.

Turn on the hot taps until air free water flows from the taps, this will indicate that the heater is full of water.

## 16:0 TO USE GAS HEATING

1...Ensure that the gas and 12 volt supply are on.

2...Turn on at the wall switch

3...If a green light shows continuously then the heater is working satisfactorilly.

4...If green and red lights show after approx. 10 seconds slide the switch to the off position, wait 3 minutes and switch on again..

5...If green and yellow lights show then the voltage to the control is too low. Recharge the batery.

## 17:0 ELECTRIC TESTING (GE ONLY)

1...Ensure that the 240 volt supply to the caravan is connected and that the RCD is switched on.

2...Switch on the 240 volt supply to the heater.

3...Wait to check that the water is warming.

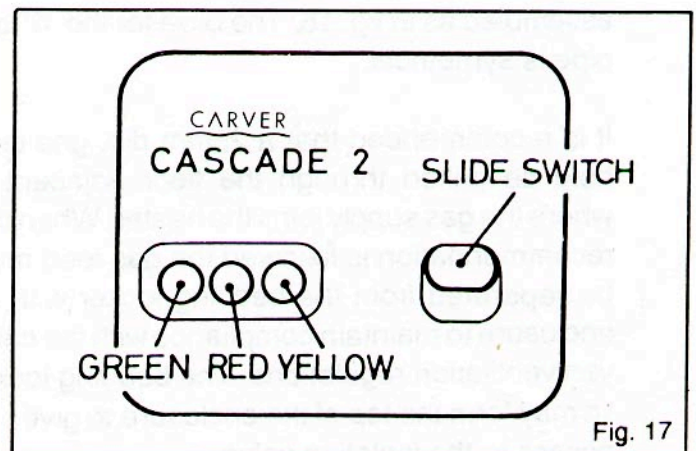


Fig. 17

## 18.0 HEATER FAULT TRACING GUIDE

GAS OPERATION			
Primary Symptom	Secondary Symptom	Cause	Cure
When switching on from cold no indicator lights come on	Heater does not operate	Reversed power supply	Check connection from caravan wiring to wall switch
		Power not reaching heater	Check wiring from wall switch to caravan supply
		Fuses not in place or blown	Check for wiring fault and replace fuse
When switching on from cold green light only comes on and stays on.	Heater does not operate No fail light. Ignitor not working. Gas valve not working.	Multi-pin plug disconnected at wall switch or heater.	Re-connect multi-pin plug
When switching on from cold green & yellow lights come on	Heater does not operate Battery condition low causing pump to run slowly.	Voltage at wall switch below 10.5v	Charge up caravan battery
When switching on, green light comes on and after 10 seconds the red as well.	When listening to the heater during this sequence a click should be heard followed by intermittent ticking for 10 seconds.	Air in gas supply pipe	Purge pipe by switching off and off again. Repeat if necessary.
		No gas supply	Check isolation valves & bottle
		Incorrect gas pressure	
		Intake of flue obstructed	Check and clear
	Water coming from cowl	Pump pressure too high	
	A click heard but no ticking or ticking but no click	Poor connection at multi-pin plug in wall switch or on heater	Pull out and reinsert plugs
Yellow light comes on when pump is operated	Pump runs slowly	Low battery voltage or inadequate pump wiring	Check and charge battery. If not successful. Check wiring.
Red light comes on after about 30-45mins. with water and steam from cowl	No continuous water flow from cowl when pump is running	Pressure relief valve operating on temperature rise	Pump pressure too high
	Continuous water flow from cowl when pump is operated	Fusible plug blown indicating thermostat failure	Do not continue to use heater Seek service attention.
MAINS ELECTRIC OPERATION			
Mains immersion heater does not operate	Indicator light on isolating switch not alight	Caravan not connected to site supply	Connect
		RCD in caravan tripped	Reset and try again. If not successful seek service attention.
		Site supply not adequate	Switch off. Seek warden attention.
	Indicator light on isolating switch alight	Over temp. thermostat operated	Check water & press reset button
		Fails again	Switch off & seek service attention

**IF FAULT PERSISTS CONSULT YOUR CARVER APPROVED DEALER.**

If you experience difficulties with any Carver product, please contact the dealer from whom it was purchased, or if this is not possible any Carver **MAIN DEALER** listed below. A Main dealer will also undertake warranty work on all Carver products, regardless of where they were purchased.

## AVON

Avon County Caravans  
97 Bridgewater Road  
Bedminster Down  
Bristol, Avon  
Tel: 0272 642030

Avon Leisure  
Hartcliffe Way  
Bristol, Avon  
Tel: 0272 667511

Chipping Sodbury Caravans  
Badminton Road  
Chipping Sodbury, Avon  
Tel: 0454 318374

Cross Country Caravans  
47-55 Broad Street  
Staple Hill  
Bristol, BS16 5LS  
Tel: 0272 564562

Davan Caravans  
St. Georges  
Weston-Super-Mare  
Avon, BS22 0XF  
Tel: 0934 510606

Mendip Caravan Centre  
Hewish  
Nr. Weston-Super-Mare  
Avon  
Tel: 0934 832 094

## BEDFORDSHIRE

Luton Caravan Centre Ltd.  
107-111 Wingate Road  
Luton, LU4 8PZ  
Tel: 0582 490079

Mantles Caravans Ltd.  
115 London Road  
Biggleswade  
Beds. SG18 8EX  
Tel: 0767 313444 (X220)/312884

Mantles Caravans Ltd.  
Northampton Turn  
Bromham, Bedford.  
Tel: 02302 2961

## BERKSHIRE

Berkshire Caravans Care  
16A Church Lane  
Three Mile Cross  
Reading  
Berks. RG7 1HB  
Tel: 0734 882590 (Service only)

Berkshire Caravans Ltd.  
247 Wokingham Road  
Earley  
Reading  
Berkshire, RG6 2DU  
Tel: 0734 65233 (Sales only)

## BUCKINGHAMSHIRE

Sundown Caravans  
Wycombe Road  
Studley Green  
High Wycombe  
Bucks. HP14 3XB  
Tel: 0494 484255

## CAMBRIDGESHIRE

Courtesy Caravans  
The Drift  
Elsworth, Cambridge.  
Tel: 09547 280 or 525

Deeping Caravans  
Spalding Road  
Deeping Street, James  
Peterborough  
Tel: 0778 344848

Pioneer Caravans  
Thorney Road  
Eye, Peterborough, Cams.  
Tel: 0733 222244

St. Ives Caravans  
Old Ramsey Road  
St. Ives, Cams.  
Tel: 0480 300621

Welland Holiday Hire &  
Sales Centre Limited.  
Postland Road, Crowland  
Peterborough, PE6 0JB  
Tel: 0733 210560

The Whittlesey Caravan Centre  
148 Station Road,  
Whittlesey,  
Peterborough, Cams.  
Tel: 0733 205238

## CHESHIRE

Northern Caravans  
Earl Road  
Cheadle, Hulme  
Cheshire  
Tel: 061 485 8611/  
061 480 7267 (Service)

U-Tow Caravans  
Poole Hall, Ind. Est.  
Netherpool Road  
Ellesmere Port, Cheshire  
Tel: 051 357 1735

Widnes Caravan Centre  
Moor Lane  
Widnes, Cheshire  
Tel: 051 424 3378

Dave Baron Caravans  
(Cheshire) Limited  
365 Warrington Road  
Culcheth, Nr. Warrington  
Cheshire, WA3 5JQ  
Tel: 0925 764802

Northern Caravans  
Wilmslow Road  
Handforth  
Tel: 061 437 4255

Harringtons Caravans  
Chester Road  
Delamere  
Nr. Northwich, Cheshire  
Tel: 0606 882032

## CLEVELAND

Burtree Caravans  
Longlands Road  
Middlesborough  
Cleveland, TS4 2JY  
Tel: 0642 246966

West Hartlepool Leisure T/A  
A19 Camping & Leisure  
13 Park View Ind. Est.  
Brenda Road, Hartlepool,  
Cleveland, TS25 1PE  
Tel: 0429 869811

## CORNWALL

G.B. Caravans  
Scorrier  
Redruth, TR15 1BG  
Tel: 0209 820254

Launceston Caravan  
Centre Ltd.  
Pennygillam Ind. Est.  
Launceston, Cornwall  
Tel: 0566 773711

Mount Caravans Ltd.  
Daniels Lane  
Holmbush  
St. Austell, Cornwall, PL15 7ED  
Tel: 0726 75056

Caraleisure Cornwall  
Scorir, Redruth  
Cornwall TR16 5EG  
Tel: 0209 820451

## CUMBRIA

Bardsea Leisure Park  
Priory Road  
Ulverston  
Cumbria, LA12 9QE  
Tel: 0229 54712

Carlisle Caravan Centre Ltd.  
Harker  
Nr. Carlisle  
Cumbria, CA6 4DS  
Tel: 0228 74570

## DERBYSHIRE

Brookside Caravans  
8 Main Street,  
Breedon-on-the-Hill,  
Derby  
DE7 1AN  
Tel: 0332 862623

Derby Caravan & Leisure  
Centre  
London Road  
Derby, DE2 8QA  
Tel: 0332 572207 Ex.130

Don Amott  
Hilton  
Nr Derby  
Tel: 028 373 4244

Glossop Caravans  
Main A57 Brookfield  
Glossop, Derbys.  
Tel: 0457 868011/865215

Kettles Caravans  
Nottingham Road, Somercotes,  
Derbys., DE55 4NJ  
Tel: 0773 521313 Ex.241

Robinsons Caravans  
Ringwood Road  
Brimington, Derbys.  
Tel: 0246 230000

Spondon Caravan Centre  
Nottingham Road  
Spondon, Derbys., DE2 7NJ  
Tel: 0332 663191

Hanley Caravan Service Ltd.  
Eagle Road  
Quarry Hill Ind. Est.  
Ilkeston, Derbys.  
Tel: 0602 440710

## DEVON

Ashburn Caravan Sales Ltd.  
Chuly Road  
Ashburton  
Newton Abbot, Devon  
Tel: 0364 52377

Caracamp  
53 Union Street  
Plymouth  
Devon  
Tel: 0752 664 695

Martins Caravan Co.  
(Exeter) Ltd.  
Pinn Hill  
Pinhoe  
Exeter, EX1 3TH  
Tel: 0392 66211

Mullacott Caravan Co. Ltd.  
Mullacott Cross  
Ilfracombe, North Devon  
Tel 0271 862212

Pathfinder Workshops  
Pathfinder Village  
Nr. Tedburn St. Mary  
Exeter, Devon  
Tel: 0647 61794

Compass Caravans (Devon)  
Higher Brocks Plantation  
Teigngrace, Newton Abbot,  
Devon, TQ12 9QZ  
Tel: 0626 832792

## DORSET

Autohomes (UK) LTD  
59 Old Wareham Road  
Poole  
Dorset  
Tel: 0202 715000

Hargold Leisure  
152 Stanley Green Road  
Poole  
Dorset  
Tel: 0202 668554

Lady Bailey Caravans  
Winterborne Whitechurch  
Nr. Blandford, Dorset  
Tel: 0258 880786

Poole Harbour Caravan Centre  
Creekmoor Service Station  
Upton Road A35  
Creekmoor, Poole, Dorset  
Tel: 0202 675552

Trailblazers  
Unit 2, A31 Ringwood Road  
Tricketts Cross  
Ferndown, Dorset  
Tel: 0202 894441

Prestonstar Ltd.  
Great Western Centre  
Maumbury Road  
Dorchester, Dorset, DT1 1SA  
Tel: 0305 269400

**DURHAM**

Burtree Caravans  
Burtree Gate (A68)  
Darlington  
Co. Durham, DL2 3XZ  
Tel: 0325 467451 Ext.F7 or G

**ESSEX**

Anglia Caravans  
475 Ipswich Road  
Colchester, Essex, CO4 4HQ  
Tel: 0206 841111

Cranham Caravans  
Gailey Park  
Front Lane, Cranham, Essex  
Tel: 0277 222555

Homestead Caravan Centre Ltd.  
Thorpe Road  
Weeley, Essex, CO16 9JN  
Tel: 0255 830671  
0255 830830 (Workshops Direct)

**GLOUCESTERSHIRE**

Cross Country Caravans  
A38 Roundabout  
Bristol Road  
Gloucester, Glos.  
Tel: 0452 29237

Forest of Dean Caravans  
Parkend  
Lydney, Glos.  
Tel: 0594 562206

Golden Castle Caravans Ltd.  
Stratford Bridge  
Nr. Tewkesbury, Glos.  
Tel: 0684 592201

Golden Castle Caravans Ltd.  
Staverton Airport  
Cheltenham Road East  
Gloucester, Glos.  
Tel: 0452 713311

McIntyre Caravans  
Hempstead Bridge  
Bristol Road  
Glos.  
Tel: 0452 20737 / 410710

Pearman Briggs Leisure Ltd.  
224 Cheltenham Road  
Gloucester, Glos.  
Tel: 0452 524192

**HAMPSHIRE**

Hants & Dorset  
Caravan Centre Ltd.  
London Road  
Purbrook  
Portsmouth, Hants.  
Tel: 0705 374921

Hampshire Caravans  
Winchester Road, A 33  
Popham  
Nr Basingstoke  
Hants  
Tel: 0256 397304

South of England  
Caravans Ltd.  
51 Portsmouth Road  
Liphook, Hants.  
Tel: 0428 724160

Green Pennant Caravans  
West End Road  
Burllesdon  
Hampshire, SO3 8BP  
Tel: 0703 405122

Krueger Ltd.  
Unit16, Queensway  
Stem Lane Ind. Est.  
New Milton, Hants. BH25 5NN  
Tel: 0425 619869

**HEREFORD & WORCS**

Cross Country Caravans  
Worcester Road  
Upton Warren  
Bromsgrove  
Worcs  
Tel: 0527 31515 Hereford

Hereford Caravan Centre  
Holmer Road  
Hereford  
Tel: 0432 269476

**HERTFORDSHIRE**

Cross Country Caravans  
London Road  
Stevenage, Herts  
Tel: 0438 350021

Gt. Herts. & North London  
Caravan Co. Ltd.  
Great North Road, A1000  
Hatfield, Herts., AL9 5SD  
Tel: 0707 262875

**HUMBERSIDE**

Springfield Caravans  
Market Place  
Hornsea  
Tel: 0964 532253 / 535530

Robert Traves Holiday Homes  
Barmston  
Driffield  
South Humberside,  
Tel: 0262 86371

T.C. Caravan & Home Services  
The Caravan Centre  
Brough Road  
South Cave  
North Humberside, HU15 2DB  
Tel: 0430 423950

Kirton Caravans Ltd.  
Station Road  
Kirton in Linsay  
Gainsborough, DN21 4JR  
Tel: 0652 648569

**KENT**

V.A.S. (Kent) Ltd.  
Vauxhall Place  
Lowfield Street  
Dartford, Kent, DFA1 1HU  
Tel: 0322 222835 / 223180

Arthur Fitt Caravans  
Sweechbridge Road  
Herne Bay, Kent  
Tel: 0227 373848

J.M.K. Caravan Repairs  
Unit 4,  
The Dry Wall Trading Estate  
Castle Road,  
Merstan,  
Sittingbourne,  
Tel: (0795) 427873

Orpington Caravans  
Green St. Green,  
Orpington  
BR6 7LR  
Tel: (0689) 855661

**LANCASHIRE**

Dave Barron Caravans Ltd.  
Chapel Lane  
Coppull, Nr. Chorley, PR7 4NB  
Tel: 0257 793377

Campbells Caravans  
Watkin Lane, Lostock Hall  
Preston, Lancs.  
Tel: 0772 627627

Burlingham Caravans  
A6 Road, Cabus  
Garstang, Lancs.  
Tel: 0995 602145

Red Lion Caravan Centre  
Scarbrick Bridge  
Southport Road  
Nr. Ormskirk, Lancs.  
Tel: 0704 840263

Harrington Caravans Ltd.  
Whitebirk Drive  
Blackburn, Lancs.  
Tel: 0254 54222

W. & A. Hartley Ltd.  
Blackpool Road  
Kirkham, Nr. Preston  
Tel: 0772 683868 / 685592

M.G. Caravan Co. Ltd.  
Burnley Road  
Todmorden, Lancs. OZ14 7DJ  
Tel: 0706 812832

Stewart Longton Caravans Ltd.  
Friday Street, off Stump Lane  
Chorley, Lancs. PR6 0AH  
Tel: 02572 79921

**LEICESTERSHIRE**

Caravan Services (Leicester)  
17 Abbey Court  
Wallingford Road  
Leicester, LE4 5RD  
Tel: 0533 668948

Priory Caravans  
Ashby Road, Shepshed  
Nr. Loughborough, Leics.  
Tel: 0509 508951

**LINCOLNSHIRE**

Carligh Trailers  
Church Lane  
Sleaford, Lincs.  
Tel: 0529 302120

Brayford Leisure  
Caravan Centre  
Tritton Road  
Lincoln  
Tel: 0522 686996

Coupland Caravans  
Tatershall Way, Fairfield Est.  
Louth, Lincs.  
Tel: 0507 603496 / 600824

Alan Kerr Caravan Maintenance  
The Haven, Wharf Lane  
Kirkby-on-Bain, Woodall Spa  
Lincs.  
Tel: 0526 52482

Lincolnshire Gases  
Ashby Road  
Spilsby  
Tel: 0790 53544

Sutterton Caravan & Camping  
Post Office Lane  
Sutterton  
Boston  
Lincs  
Tel: 0205 460485

**GREATER LONDON**

County Caravans  
Osterley Garden Centre  
Windmill Lane  
Isleworth  
Middlesex  
Tel: 081 758 9654

United British Caravans  
Coinbrook By-Pass (A4)  
Nr. West Drayton  
Middlesex, UB7 0HE  
Tel: 0753 682606

**GREATER MANCHESTER**

Emm-Bee Caravans  
Prettywood  
Bury, Lancs.  
Tel: 061 797 2988

Jacks Bros.  
53 Manchester Road  
Clifton, Swinton  
Manchester, M27  
Tel: 061 793 6000

Progress Caravans  
1050 Manchester Road  
Castleton, Rochdale  
Greater Manchester  
Tel: 0706 44095

Shipleys  
Dale Street, Henry Square  
Ashton-under-Lyne, Lancs.  
Tel: 061 330 2054 / 4790

**MERSEYSIDE**

Wirral Caravans Ltd.  
389 Hoylake Road  
Moreton, Wirral  
Merseyside, L46 0RW  
Tel: 051 605 0770

**NORFOLK**

Anglia Caravans (Shrningham)  
Weybourne Road, Sherringham  
Norfolk, NR2 6BHF  
Tel: 0263 822172

Drayton Caravans  
231 Heigham Street  
Norwich, Norfolk  
Tel: 0603 628981

Greentree Caravans  
Norwich Road, Dereham  
Norfolk, NR20 3PX  
Tel: 0362 696434

Brian J. Allen Caravans  
Austinfields  
Kings Lynn, Norfolk  
Tel: 0553 761813

Caravan Service Centre  
Unit 4, Bessemer Road  
Norwich, Norfolk  
Tel: 0603 623102

Pentney Park Caravans  
Pentney, Kings Lynn  
Norfolk, PE32 1HU  
Tel: 0760 337479

Norwich Caravans  
Ber Street  
Norwich, Norfolk  
Tel: 0603 626641

Whiteley & Hines Ltd.  
Ketts Hill  
Bishopbridge Road  
Norwich, Norfolk  
Tel: 0603 621640 / 625692

## NORTHAMPTONSHIRE

Go-Camping  
Toll House, A5  
Watford Gap, Northants.  
Tel: 0327 703371

White Arches Caravans  
Wellingborough Road  
Rushden, Northants.  
Tel: 0933 50042 / 53818

## NOTTINGHAMSHIRE

Norcol Sales  
Great North Road  
Barns Moor  
Retford, Notts.  
Tel: 0777 701994

Gordon Lamb  
Station Road  
Lowdham  
Notts  
Tel: 0602 663554

Kimberley Caravan Centre  
Eastwood Road  
Kimberley, Notts.  
Tel: 0602 382401

Brownhills Ltd,  
Newark Caravan Centre,  
A46 Farndon Road,  
Newark  
Tel: (0636) 704201

## OXFORDSHIRE

Bicester Caravan Centre  
Buckingham Road  
Bicester, Oxon, OX6 7EL  
Tel: 0869 242320

CTC Leisure  
89-91 Corn Street  
Witney  
Oxford  
Tel: 0993 771080

Kidlington Caravans  
208 The Moore  
Kidlington, Oxon  
Tel: 08675 4572

## SHROPSHIRE

Salop Caravan Centre  
(Cosford) Ltd.  
Newport Road  
Albrighton  
Nr. Wolverhampton, Shropshire  
Tel: 0902 374170

Telford Caravan Centre  
Holyhead Road  
Oakengates  
Telford, Salop  
Tel: 0952 612233

## SOMERSET

Highbridge Caravan Centre Ltd.  
A38 Bristol Road  
Highbridge, Somerset  
Tel: 0278 782725

Jaydees Caravan Services  
67 Alcombe Road  
Alcombe  
Minehead  
Somerset  
Tel: 0643 705748

Somerset Camping & Leisure  
A38 Walford Cross  
Taunton, TA2 8QP  
Tel: 0823 413333

Taunton Caravan Services  
Gravelands Lane  
Henlade  
Taunton, Somerset  
Tel: 0823 443491

Wessex Caravan Centre  
Station Road  
Wanstrow  
Nr. Shepton Mallet  
Somerset  
Tel: 074985 338

Southfork Caravans + Leisure  
Centre,  
Parrett works,  
Martock  
Tel: (0935) 825661

## STAFFORDSHIRE

Central Park Caravans  
Main Street  
Newhall, Burton-on-Trent,  
Staffs.  
Tel: 0283 217513

Gailey Park Caravans  
Gailey Island  
Nr. Stafford, Staffs.  
Tel: 0902 791256

North Staffs. Caravans  
Stonewall Place  
Silverdale,  
Newcastle-under-Lyme  
Tel: 0782 717293 / 622581

Potteries Caravan &  
Leisure Centre  
Sneyd Hill, Smallthorne  
Burslem, Stoke-on-Trent  
Tel: 0782 577414

Tuckers Caravan &  
Coachwork Services  
Unit 11,  
Anglesey Business Park  
Littleworth Road  
Hednesford, Cannock  
Tel: 0543 877023

Cannock Caravans  
Longford Island  
Cannock, Staffs.  
Tel: 0543 577011 (Sales only)

Cannock Caravans  
Service Centre  
Fairway, off Delta Way  
Bridgetown, Cannock  
Staffs. WS11 3DJ  
Tel: 0543 572799 (Service only)

## SUFFOLK

Brian Fuller Caravans Ltd.  
Main A12, Farnham  
Nr. Saxmundham  
Suffolk, IP17 1LE  
Tel: 0728 602858/623352

Fuller Leisure  
Lower Road, Glemsford  
Nr. Sudbury,  
Suffolk, CO10 7QU  
Tel: 0787 280263

M&M Leisure Centre Ltd.  
Field Road  
Mildenhall, Suffolk  
Tel: 0638 714095

Outney Meadow Caravans  
Outney Meadow Caravan Park  
Bungay, Suffolk, NR35 1HG  
Tel: 0986 892338

Stowmarket Caravan Sales Ltd.  
Bury Road, Stowmarket  
Tel: 0449 612677

Barry Sharman Caravans Ltd.  
The Caravan Centre  
Colchester Road, Ipswich  
Tel: 0473 713284 / 728238

Elmer Caravans Ltd,  
Gloster Road,  
Mortlesham Heath,  
Ipswich  
Tel: (0473) 622715

## SURREY

Cross Country Caravans  
18A Brighton Road  
Salmonds, Nr. Redhill  
Surrey, RH1 5BX  
Tel: 0737 768266

Downers Gas & Leisure Centre  
102 Kingston Road  
Leatherhead  
Surrey, KT22 7BT  
Tel: 0372 375275

## SUSSEX

Chichster Caravans  
A259 Nutbourne  
Chichester  
West Sussex, PO18 8RL  
Tel:  
0243 377 441

Chichester Caravans  
London Road  
Uckfield  
East Sussex, TN22 2EA  
Tel: 0825 764151

Cross Country Caravans  
London Road, Hurst Green  
East Sussex  
Tel: 058086 260

Roundstone Caravan Depot  
Worthing Road  
Southwater, Horsham  
West Sussex, RH13 7HA  
Tel: 0403 730218

Otters Cars & Caravans  
Amberley Road  
Storrington, Sussex  
Tel: 0903 744444

## TYNE & WEAR

North Eastern Caravans  
Algernon Ind. Est.  
New York Road, Shiremoor  
Tyne & Wear, NE27 0NB  
Tel: 091 2522337

Burtree Caravans  
New Hartley Drive  
Seaton Delaval  
Tyne & Wear, NE25 0PP  
Tel: 091 2374444

Burtree Caravan (Washington)  
Hartburn Ind. Est.  
District 11  
Washington  
Tyne & Wear  
Tel: 091 417 1000

Tyneside Caravans Ltd.  
Portobello Ind. Est.  
Birtley  
Tel: 091 4105221

Ropers Caravan World  
Peel Centre  
Glover Ind. Est. East  
District 10  
Washington  
Tyne & Wear  
Tel: 091 419 1631

United British Caravans  
(Northumbria) Ltd.  
Sandy Lane  
Wideopen  
Newcastle-upon-Tyne, NE3 5HA  
Tel: 091 2363156

## WARWICKSHIRE

Broadlane Caravans  
Birmingham Road  
Kings Coughton  
Alcester, Warwicks.  
Tel: 0789 763432

Broadlane Caravans  
Leek Wootton  
Warks.  
Tel: 0926 58880

Canwell Caravans  
A38 London Road  
Canwell  
Sutton Coldfield  
Tel: 021 308 0583

## WEST MIDLANDS

Meriden Caravan &  
Leisure Centre  
Old Birmingham Road  
Meriden, Warks.  
Tel: 0676 22292

Raymond James Caravans  
245 Torrington Avenue  
Tile Hill, Coventry  
Tel: 0203 474747/Rugby  
Caravans  
1 Somers Road  
Rugby, Warks. CV22 7DB  
Tel: 0788 542672

Birches Caravans  
423 Alcester Road  
Wythall  
Birmingham, B47 6JL  
Tel: 0564 826931/2 & 823384

## WILTSHIRE

Blunsdon Abbey Caravans Ltd.  
Blunsdon  
Swindon, SN2 4DU  
Tel: 0793 721345 / 6

Cross Country Caravans  
London Road  
Devizes, Wilts.  
Tel: 0380 723196

Pickwick Caravans  
12A Bradford Road  
Corsham, Wilts.  
Tel: 0249 713572

Swindon Caravan Centre  
Greatfield  
Wootton Bassett  
Swindon, Wilts.  
Tel: 0793 772096

Martin Yates Caravans  
Old Road, Alderbury  
Salisbury, Wilts.  
Tel: 0722 710622

## NORTH YORKSHIRE

Broadwood Caravans  
Ingleton, LA6 3EX  
(opposite waterfalls)  
Tel: 0468 41253

Ebor Caravans Ltd.  
A64 Malton Road  
Flaxton Moor,  
York, YO6 7SF  
Tel: 0904 86323

H. C. Fawcett  
Caravan Centre  
201 Acomb Road  
York  
Tel: 0904 798321

Catterick Caravan Centre  
Catterick Bridge  
Richmond, N.Yorks.  
Tel: 0748 818391

Teeside Caravan Services  
Gatherley Road Ind. Est.  
Brompton-on-swale  
Richmond, North Yorks.  
Tel: 0748 818451  
(Service only)

W.H.R. (Water Heater Repairs)  
30 North Marine Road  
Scarborough  
N.Yorks., YO12 7PE  
Tel: 0723 500109  
(Service only)

## SOUTH YORKSHIRE

C.C.C. Leisure  
Hill Street, Bramall Lane  
Sheffield  
Tel: 0742 729733

Glentworth Caravans  
Lidget Lane  
Thurnscoe, Rotherham  
Tel: 0709 893332

South Yorkshire Caravans Ltd.  
Rotherham Road  
Dinnington, Sheffield, S31 7RG  
Tel: 0909 565661  
568720 (service)

Yorkshire Caravans  
of Bawtry Ltd.  
Doncaster Road, Bawtry  
Doncaster, S.Yorks.  
Tel: 0302 710366

Swallownest Caravans  
Chesterfield Road  
Swallownest, Sheffield, S31 0TL  
Tel: 0742 694027 / 540611

Goodalls Caravans  
2 Smithybrook Road  
Renishaw, Sheffield  
Tel: 0246 435761

## WEST YORKSHIRE

A1 Caravans Sales Ltd.  
Thorp Arch Trading Estate  
Wetherby, Yorkshire, LS23 7BJ  
Tel: 0937 842845

Caraland Caravans  
Victoria Avenue  
Yeadon, Nr. Leeds  
Tel: 0532 505155

Dickinson Caravans Ltd.  
Canal Road  
Bradford, BD2 1AL  
Tel: 0274 392250 / 391847

J.B. Cara-Cars  
The Caravan Centre  
Leeds Road, Ilkley,  
West Yorkshire, LS29 2AS  
Tel: 0943 607811

Pleasuretime Caravans Ltd.  
Cambridge Street  
Castleford, West Yorks.  
Tel: 0977 557798

Towler & Staines Ltd.  
85 Bradford Road  
Keighley, West Yorks.  
Tel: 0535 606631

Goodalls Caravans  
Crosland Hill  
Huddersfield, HD4 5NU  
Tel: 0484 642613 (Sales)  
0484 642614 (Service)

Tourer World  
Goodalls Caravans  
Huddersfield Road  
Mirfield  
Tel: 0924 498311

Four Season Caravan Centre  
Springfield, Bagley Lane  
Farsley, Pudsey  
West Yorkshire, LS28 7UT  
Tel: 0532 564373

Kenmore Caravans  
Bradford Road, Birkenshaw  
Bradford, W.Yorks  
Tel: 0274 682017

Kenmore Caravans  
Sherwood Road  
Brighouse  
Tel: 0484 400602

## BORDERS

Crossburn Caravan Services  
Edinburgh Road, Peebles  
Tel: 0721 20501

## CENTRAL

Stirlingshire Caravans Ltd.  
1 Henderson Street  
Bridge of Allan  
Stirlingshire  
Tel: 0786 833236

Stewart Taylor Caravans  
Kincardine Bridge Road  
Airth, Nr Falkirk  
Tel: 032 483 250

## DUMFRIES & GALLOWAY

Dumfries Caravan Centre  
Brasswell, Annan Road  
Dumfries  
Tel: 0387 52917

## FIFE

Kirkcaldy Caravan Centre  
Randolph Industrial Estate  
Kirkcaldy  
Tel: 0592 51969

Wallace Caravans  
Thornton Road, Kirkcaldy  
Tel: 0592 774265

## GRAMPIAN

Dee Valley Caravans  
Drumoak, Aberdeenshire  
Tel: 03308 351

Greenbank Caravans  
Hillhead  
Fraserburgh  
Tel: 0346 24747

Hillhead Caravans  
Hillhead Caravan Park  
Kintore, Aberdeenshire  
Tel: 0467 32809 / 24867

Turriff Caravan Centre  
Greengate Lodge, Delgaty  
Turriff, Aberdeenshire, AB5 7TA  
Tel: 0888 62186

Wilson Wallace Caravans  
Denhead, Mintlaw  
Peterhead, Grampian  
Tel: 0771 23224

## HIGHLAND

G.N.R. Sutherland  
Caravan Sales  
Edderton, By Tain  
Ross-shire  
Tel: 086 282 253

## LOTHIAN

Knowe Park Caravans Ltd.  
Hardie Road  
Deans Ind. Est., Livingston  
Tel: 0506 411827

Scott Touring Caravans  
Mayfield Ind. Est.  
Dalkeith, Lothian  
Tel: 031 663 1471

## STRATHCLYDE

Duncan of Wishaw  
Wishaw Road  
Waterloo, Wishaw  
Tel: 0698 350190

Halley's Burnhouse Caravans  
Burnhouse, By Beith, Ayrshire  
Tel: 0560 84859 / 84771

Hurlford Caravans  
71-75 Mauchline Road  
Hurlford, Ayrshire, KA1 5DE  
Tel: 0563 23559

Strathclyde Caravans Ltd.  
341 Windmillhill Street  
Motherwell  
Tel: 0698 69418

Trail West  
3-4 Mill Lane,  
Lochavullin Ind. Est.  
Oban Argyll, Strathclyde  
Tel: 0631 63638

Eglinton Caravans,  
Shewan,ton,  
Irvine,  
Ayrshire  
KA11 5AS  
Tel: (0924) 311002

## TAYSIDE

Grant's (Craigmills) Caravans  
Strathmartine, Dundee  
Tel: 0382 817979

Perthshire Caravan Co.  
Dundee Road  
Errol, Perth  
Tel: 0821 670212

Tayside Caravan Ltd.  
Baldovie Road, West Pitkerro  
Dundee, DD4 8UD  
Tel: 0382 737037

## WALES

A.B.C. Caravan Services  
Gorseinon Road  
Penllergaer, Swansea  
Tel: 0792 898158

Barry Caravans  
Cardiff Road  
Barry, Glamorgan  
Tel: 0446 720011

Leeway Leisure  
Leeway Industrial Estate  
Newport, Gwent  
Tel: 0633 276611

Continental Caravans  
Cross Hands Business Park  
Cross Hands, Dyfed  
Tel: 0269 831151

Cardiff Caravan Centre  
Cowbridge Road West  
Cardiff, Glamorgan  
Tel: 0222 593276

Caravan Repair Centre  
Coed Emlyn Park A 48  
St. Hilary  
Nr Cardiff  
South Glamorgan  
Tel: 0446 774747

Michael Rowles Caravans  
Old Village Hall, Main A470  
Llanbrynmair  
Powys, SY19 7AA  
Tel: 0650 521516

Pontypridd Caravans Sales  
Cardiff Road  
Treforest  
Pontypridd  
Glamorgan, CF37 5RF  
Tel: 0443 402629 / 407331

Heritage Caravans  
Wyevale Garden Centre  
Valleyway  
Swansea Enterprise Park  
Morrison  
Swansea, Glamorgan  
Tel: 0792 700950

Gwynedd Caravans  
Madoc Street  
Porthmadoc  
Gwynedd  
Tel: 0766 513589

Caravan services (Dee-Side)  
76 Station Road  
Queensferry  
Clwyd  
Tel: 0244 819922

Bancroft Leisure  
269 Victoria Road  
Prestatyn  
Clwyd  
Tel: 0745 853749 / 646

## NORTHERN IRELAND

Downshire Camping  
& Caravans  
12 Newry Road  
Banbridge, Co. Down  
Tel: 08206 22217 / 23378

W.A. Harkness Caravans  
1A Ardculmer Road,  
Cookstown  
Co. Tyrone, N.Ireland  
Tel: 06487 63936

Scott Caravan Distributors Ltd.  
10 Ganaway Road  
Ballywalter, Newtownards  
Co. Down, BT22 2LG  
Tel: 02477 58422

Hagens Caravans  
184 Templepatrick Road  
Ballyclare  
Co. Antrim, BT39 0RA  
N. Ireland  
Tel: 09603 40200

## EIRE

Young Caravans  
Dodder Park Road  
Rathfarnham  
Dublin 14, Eire  
Tel: 908993 / 4

Sunnyhill Caravans  
Sunnyhill  
Kilcullen, Nr. Naas  
Co. Kildare, Eire  
Tel: Kilcullen 81384

## **WARRANTY**

**Carver Products are fully warranted for a period of 2 years from date of first purchase against faulty workmanship or materials.**

**We will repair or replace any such faulty items "FREE OF CHARGE" provided they have been installed and used in accordance with our instructions.**

**This warranty applies only to the United Kingdom.**

**Acceptance of this warranty does not in any way diminish your rights enjoyed under the Sale of Goods Act, 1979.**

**NOTE: The customer must wherever practical return the product to the Carver Dealer from whom it was purchased. In special circumstances, however, it may be taken to another Carver Main Dealer.**

**CUSTOMER SERVICE DEPARTMENT  
CARVER & CO. (ENGINEERS) LIMITED  
COPPICE SIDE INDUSTRIAL ESTATE,  
BROWNHILLS, WALSALL, ENGLAND, WS8 7ES.  
TEL: 0543 452127 FAX: 0543 452950**

