

SITING

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CRANING

Given the high risk involved in craning operations, the legal requirements are particularly strict. Therefore, it is recommended that when a crane is to be used for lifting a caravan holiday home, then a specialist craning contractor is employed to undertake a 'Contract Lift'.

The contract lift must be organised through a reputable company which holds adequate insurance for all their operations, including liability cover for the caravan holiday home being lifted. If a specialist craning contractor is employed to undertake a 'Contract Lift', the park/ distributor is nevertheless obliged to have in place documented craning procedures and ensure that all persons involved with the instigating or the supervision of any craning work are fully conversant with such procedures.

Procedure

Selection of Nominated Contractor: – It is strongly recommended that the following information is obtained before any work can commence:-

A copy of the Craning company's Health and Safety Policy

Detailed, technical risk assessments relevant to lifting caravans and to that specific lift (including wind loading, load spread, appropriate slinging method, etc.

A copy of method statements as to how the work will be undertaken

Copies of training records for all competent persons

Copies of all test certificates received

Copy of segregation procedures received

Signed agreement from the nominated contractor to adhere to the hiring company's Contractor Code of Conduct

Copy of Public Liability insurance (Minimum cover £5 million and in date)

SITING

Your caravan holiday home should be sited on a correctly prepared standing of suitable material, which must provide adequate support for the caravan holiday home placed upon it.

Methods of siting vary and are dependent upon the ground conditions and specific requirements set by the local authority site licence.

SUPPORTING THE CHASSIS

Holiday homes up to 12.2m long should have a minimum of twelve supports. Each chassis longitudinal should have one support either side of the axle(s) and two forward and two rearward of the axle(s).

Holiday homes over 12.2m long should have a minimum of 20 supports. Each chassis longitudinal should have one support either side of the axle(s) and three forward and three rearward of the axle(s). The jacking support points either side of the axle(s) are identified by a red label and the other support points by a yellow label. (See diagram on page 15)

It is recommended that suitable load bearing blocks are used under the jacking/support points (red labels) and adjustable axle stands as shown in Fig. 1 are used under the chassis support points (yellow labels).

Hardwood packing should be used between the load bearing blocks and the chassis to cushion the weight and reduce the transmission of vibration.

Concrete blocks should not be in direct contact with the steel chassis.

JACKING

Selection of Jack

It is essential to ensure an appropriate jack is selected for any lifting operation. All jacks must have their maximum lifting capacity (safe working load) clearly and legibly marked with a permanent label or painted sign. Care must be taken to ensure the marked lifting capacity of the jack(s) is not exceeded. The jack(s) selected should be capable of lifting more than half the weight of the caravan; the distribution of the load and the nature of the terrain should be taken into account.

Jacking Procedure

- Most jacking accidents occur when lifting on an uneven surface when the jack slips out from under the caravan holiday home. Therefore care is necessary to ensure the jack is sitting on an even surface that is capable of taking the full-imposed weight at that jacking point, as indicated by the caravan manufacturer. Spreader plates should be used on uneven and/or soft surfaces;
- **Before raising the caravan holiday home, the wheel(s) remaining on the ground should be chocked;**
- Wherever possible, consideration should be given to lifting the caravan holiday home whilst still hitched to the towing vehicle to take advantage of the additional stability this can provide;
- The jack(s) should be placed under the defined jacking point(s)
- Jacking should be undertaken, one side at a time, using an appropriately rated jack(s);
- The caravan holiday home should **not** be jacked up to its final height and then supported. Rather, the caravan holiday home should be lifted up to a height whereby the support stand is barely extended to allow the earliest possible supporting of the caravan holiday home. The jacking should be slow and gradual and the caravan holiday home should be continually supported throughout the jacking operation;
- It may be necessary to lower the caravan holiday home onto the support stands and to reposition the jack at another designated jacking point to gain more height;
- While jacking at other points, it is important to check and recheck all support stands to make sure they remain in the correct position.

Siting

PLAN TO STAY SAFE

Use the most appropriate type of jack for the job.

Before raising the caravan holiday home, make sure the wheel(s) remaining on the ground are chocked.

Where possible, leave the caravan holiday home coupled to the towing vehicle.

Make sure the jack is on a hard level surface or use robust metallic spreader plates.

Locate the designated jacking point(s) on the chassis.

Jack the caravan holiday home slowly and check continually to ensure the jack is sitting squarely on and beneath the chassis jacking point.

As soon as the tyre is clear of the ground, the supports should be put in place.

No one should be under the caravan whilst it is being lifted or lowered by means of a jack.

No part of the body should ever be under the main chassis beams of a caravan holiday home that is supported only on a jack.

Given the risks of working beneath a caravan, it is recommended that at least one other person who has been trained in how to deal with an emergency is present and able to respond to any incident. One member of the team must remain outside the underside of the caravan at all times.

Wheel Chocks

The danger of movement whilst the caravan holiday home is being raised/levelled cannot be overstated. The wheels of the caravan holiday home (those still in contact with the ground) should always be braced with wheel chocks at the front and rear. These prevent the caravan holiday home shifting forwards or backwards (the most likely direction of movement).

Better quality wheel chocks are fabricated from steel or thick aluminium and are wedge-shaped so that they can be pushed into close contact with the wheel and tyre. For a caravan holiday home, the wheel chock should be at least 150mm high.

Spreader Plates

Spreader plates are a means of distributing a load over a wider area, and must always be used under jacks or support stands where ground conditions are uncertain. It may be necessary to double up spreader plates or lay them side by side where support is

required over a large area, such as under a larger trolley jack. It is important to place jacks in the centre of any spreader plate or combination of plates.

SITING THE CARAVAN HOLIDAY HOME

Methods of siting vary, dependent upon the ground conditions and specific requirements set by the local authority site licence. The method of siting a caravan holiday home in a flood risk area must be considered carefully. In some instances, insurers impose risk management controls in order to continue their provision of flood cover.

Care is required to position the caravan holiday home squarely on the pitch. The wheels should then be chocked in front and behind to resist movement.

Where practicable, the caravan holiday home should remain securely attached to the towing vehicle until the caravan holiday home is jacked and supported.

Where this is not possible, the towing vehicle should be disconnected ensuring the jockey wheel is left in a locked position and on a firm base or spreader plate.

The towing vehicle can then be removed from the siting operational area.

All the corner steadies should be wound down in contact with the base;

The caravan holiday home should be carefully jacked up in accordance with jacking instructions.

When one side of the caravan holiday home has been raised sufficiently to enable the wheel(s) to spin freely, solid concrete blocks should be placed under the main longitudinal chassis beams either side of the axle (in four positions - see diagram on page 15). The other side of the caravan holiday home can then be raised and supported in the same way. Suitable packing material should be placed between the top of the concrete block and the underside of the chassis to cushion the weight and reduce the transmission of vibration.

Concrete blocks should not be in direct contact with the steel chassis;

The corner steadies should now be extended on either side to ensure that the caravan holiday home is stable. At this point, intermediate supports should be carefully placed between the supports either side of the chassis and the corner steadies;

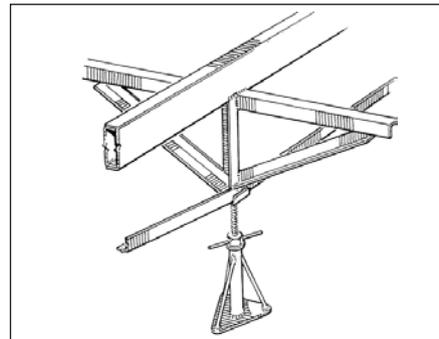
A spirit level should be used to check that the caravan holiday home is absolutely level across its width. The internal floor should be used for levelling purposes across both the width and the length of the unit.

Alternatively, a spirit level can be used by placing it under the floor joists by straddling several joists at a time, repeating this

process at appropriate intervals throughout the length of the home. Levelling the caravan holiday home is one of the most important aspects of siting a caravan holiday home. Without the correct level, much time may be wasted trying to rectify what originally may be thought of as poorly fitted doors, windows or furniture. Laser levels can be used as an alternative to spirit levels for levelling caravan holiday homes;

When the caravan holiday home is levelled correctly, the intermediate heavy duty support stands underneath the chassis should be placed and adjusted under all identified support points between the supports either side of the chassis and the corner steadies. (figure 1 below illustrates the correct position)

Figure 1. Intermediate supports



When the caravan holiday home is level in all directions, the corner steadies may be retracted into their stored position. They should not be used as additional supports and if they are to remain extended, they should be at least 6mm off the ground;

First external and then internal doors should be checked to ensure that they close and lock correctly. If there is misalignment between the door and frame, the caravan holiday home may not be level. This should be checked and adjusted as appropriate. Only minor misalignment can be corrected via the hinges and/or lock keeps;

An alignment check should be carried out four weeks after siting as settlement usually occurs. If the caravan holiday home has settled, the level should be adjusted as required. The classic signs of a caravan holiday home being out of level are doors not closing properly, locks not locking properly, cupboard doors out of line, windows binding, or floors creaking.

ANCHORS

It is good practice to anchor the caravan holiday home to the ground. Some insurance companies require that caravan holiday homes are anchored and specify minimum requirements.

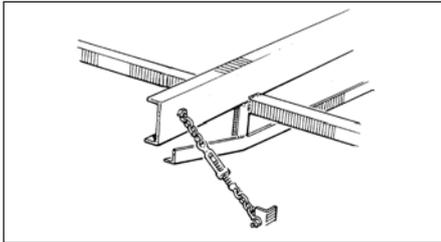
The anchor points are rated at 10kN in tension. The ground anchors should be

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capable of withstanding a minimum of 10kN. See Fig 2 for illustration of anchor points. Swift caravan holiday homes have specific holding down points, which are located approximately 1m from the ends of the main longitudinal chassis member at each corner (see figure 2). These anchors should not be over-tightened, which can stress the chassis. It is important to note that both the chain and turnbuckles should be suitably rated.

The preferred turnbuckle is the type which has an 'eyelet' at both ends (as opposed to hooks) and should be used with suitable 'D' shackles.

Fig 2. Anchor Points



SNOW LOADING

To comply with the requirements of EN1647 Section 2 for snow loading, the following method of supporting the caravan holiday home when sited must be carried out.

The main longitudinal chassis beams should be supported by concrete blocks where cross braced on either side of the axle. An axle stand should be placed underneath the cross bracing between the concrete blocks and the corner steadies in four positions as shown on the diagram.

Great caution should be used when cleaning snow from the roof of the holiday home.

All Swift models comply with snow loading Grade B.

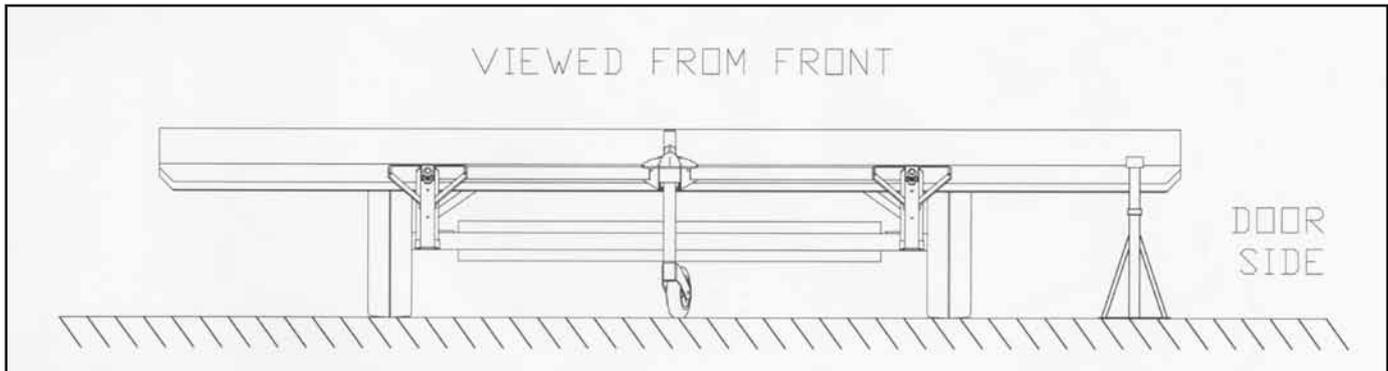
Guide to Snow Loading Grades

- Grade A - Only in parts of the UK
- Grade B - All of the UK + France and Germany
- Grade C - Higher European Ground
- Grade D - Scandinavia and Northern Europe

CHASSIS SPECIFICATION

- All chassis are built to CoP 501/502 specification.
- Holding down points capable of resisting 10KN – located 1000mm +/- 200mm from the end of each longitudinal.
- Corner steady - maximum extended height of 432mm Corner steadies must not be used to fully support the unit
- Jockey wheel assembly maximum load that can be applied in a static position is 150KG.
- Hitch – cast iron with 50mm ball. The maximum vertical load of the coupling head is 2.5 tonnes.

It is advisable on Auvergne models to position an axle stand on the front cross member in the position shown below to further support the chassis under the large tri-fold doors.



TYPICAL SUPPORT AND HOLDING DOWN POINTS

