

### Attention!

We want your Castrads radiator(s) to arrive in perfect condition and be kept in perfect condition to ensure they last you a lifetime. Mishandling during carriage can lead to faults. In order to ensure that your radiators do not get damaged during transit, please note the following; -

Whilst your radiator is on the palette, the full length of the radiator is supported. Once the palette is removed the radiator needs to be carried upright at all times. A common cause of leaks is strain on gaskets caused by carrying the radiator flat without supporting the middle sections. The longer the radiator is the greater the strains incurred. Two short pieces of wood 20mm x 50mm x 250mm make good handles when inserted between the last 2 sections at either end. Please see photo overleaf. For radiators of 10 sections or less the strains are small enough that such short radiators *can* be carried flat.

### Paint.

Damage to paint in transit is minimised by use of packaging.

However, small scratches often occur during unpacking and handling. For this reason a can of touch up paint is supplied.

### Notes important for installation of your radiator.

*The most common cause of leaks is over tightening of the valve tails into the bottom bushes of the radiator. Over tightening will crack the bush.*

When screwing the valve tail in to the bush turn it finger tight then using a spanner turn it till there is only moderate resistance. Using a 4" (100mm) spanner it is difficult to over tighten. It is easy to over tighten and crack the bush with an 8" spanner. A thread sealant must be applied to the valve tail threads to get a water tight seal. LSX sealant available at all plumber's merchants is recommended. PTFE tape is an acceptable alternative.

It should not normally be necessary to unscrew the bushes, but if for any reason you do, retighten them gently, enough only to create a good seal. 18" Stilsons should not be used! The torque from an 8" adjustable spanner is more than enough to create a good seal.

The male thread on each bush on the bleed valve side of the radiator is left hand thread i.e. turn anticlockwise to unscrew. This is the thread that screws into the radiator casting.

The female threads on the bushes on the bleed valve side of the radiator are normal right hand thread. This is the thread that the inlet or outlet valve or bleed valve screws into.

The threads on the opposite side of the bleed valve are all normal right hand thread.

### Carrying

The correct way to carry a radiator keeping is upright at all times. Please use pieces of wood as handles at either end of the radiator.



### Connection Details

Your radiator can be connected in 3 out of 4 ways. Please check the table below. If you want to connect using the TBOE or TBSE method (middle in the table) Please advise us in advance and we'll put the bushes in the right places for you. If you really must connect by the 4th BTSE method, please advise us when placing your order and an internal extension tube will be fitted to ensure even heat. There is a charge for this.

Bottom Bottom Opposite Ends (BBOE) <b>YES</b>	Top Bottom Opposite Ends (TBOE) <b>YES</b>	Top Bottom Same Ends (TBSE) YES, though the end section may be a little cooler.	Bottom Top Same Ends (BTSE) <b>NO</b>

### Wall Stays

Wall stays should be clamped between 2 adjacent rear columns of the radiator. The pictures below show examples. The long threaded rod should be cut to length so that the radiator is close to the wall.



**Radiator Assembly.**

Read this if your radiator is extra long and is supplied partly as loose sections.

1. Place the part assembled radiator on a sturdy bench or stout pieces of wood on the floor. The radiator must be sufficiently raised from the floor that the tool can be turned unhindered. Insert the 2 nipples turning them a ¼ turn or so, the minimum to hold the nipple in place. Note that each nipple has a left hand thread and a right hand thread. Likewise one end of the radiator is left hand and one end is right hand thread. Put a gasket around each nipple



2. Offer up a section of radiator squarely then turn the 1st nipple a couple of turns so that one end of the section is secure but loosely attached.



3. Repeat the procedure at the other end of the section. Tighten the nipples a couple of turns at a time moving from one nipple to the other until both are tight.



## Radiators in Full Polish

Radiators in full polish are prone to rust. The radiator is made of iron and this is a fact of life.

To minimise this;

The radiator is rubbed down with a dry metal scourer as used for washing up. Wire wool can be used, but tends to leave short metal fibres which must be dusted off.

The rad is then wiped with a clean cloth.

WD40 is then sprayed on.

The rad is wiped again with a clean cloth.

This should give protection for a few months depending on humidity. Castrads has tried lacquer but the metal slowly turns brown as a tiny amount of rust appears under the lacquer.

### Tools For The Job

