



## **OVERSIZE RADIATOR ASSEMBLY GUIDE**

# Castrads®

Est. 2006

Version 100.1



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## Before you start

Read this Assembly Guide in full.



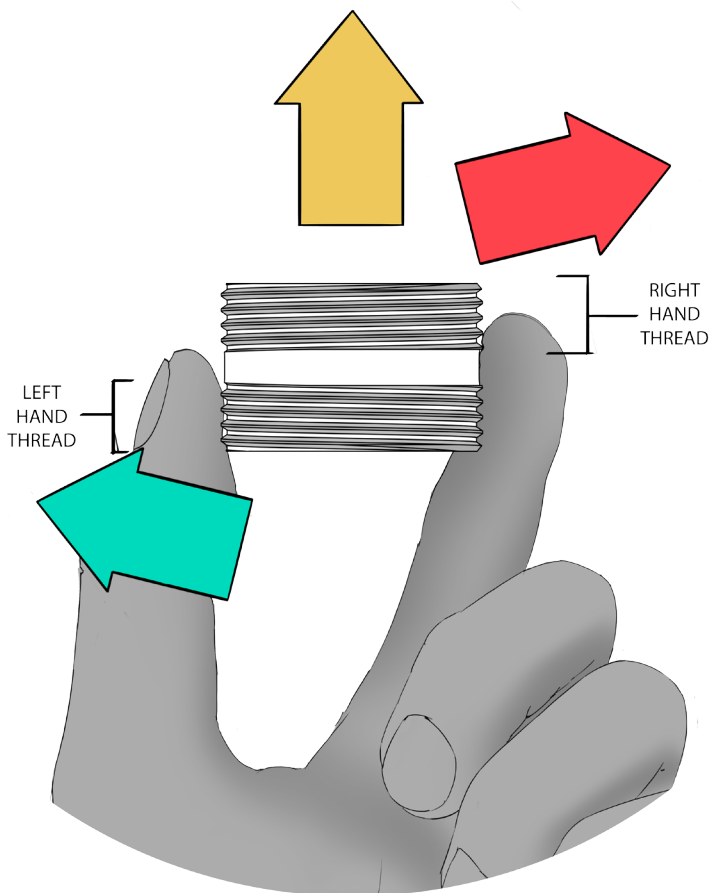
This guide explains how to assemble your oversize radiator safely and securely. Please call if you have any questions.



+44 (0)161 4399350

## DOUBLE THREADED NIPPLES

Looking at the diagram below, orient the joining nipple in the hand so that it is pointing up following the yellow arrow as in the picture.



The diagram to the left shows how to recognise the two thread directions of a double threaded nipple used to join cast iron radiators.

If the thread is pointing upwards and to the right [the red arrow] it is right-hand or normal thread and will screw in clockwise.

If the thread is pointing upwards and to the left [the green arrow] it is left-hand or reverse thread and will screw in counter-clockwise.

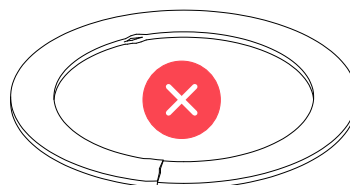
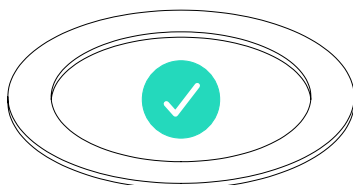
### TIP

Some nipples have one smooth edge and one serrated edge. If your radiator uses this type of nipple, the smooth edge designates the right-hand thread and the serrations denote the left-hand thread.

## GASKETS



Check that the gaskets have not become damaged or split since leaving the factory.



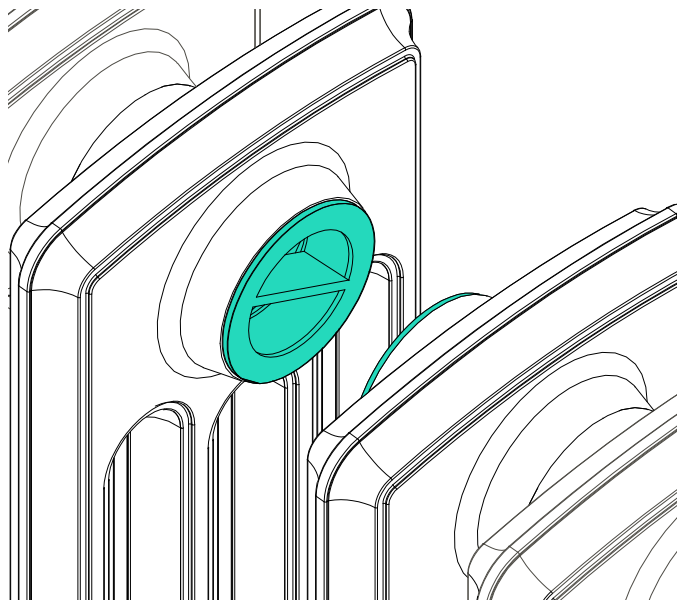
# Radiator Assembly

## 1. POSITIONING THE RADIATOR AND REMOVING THE BUSHES

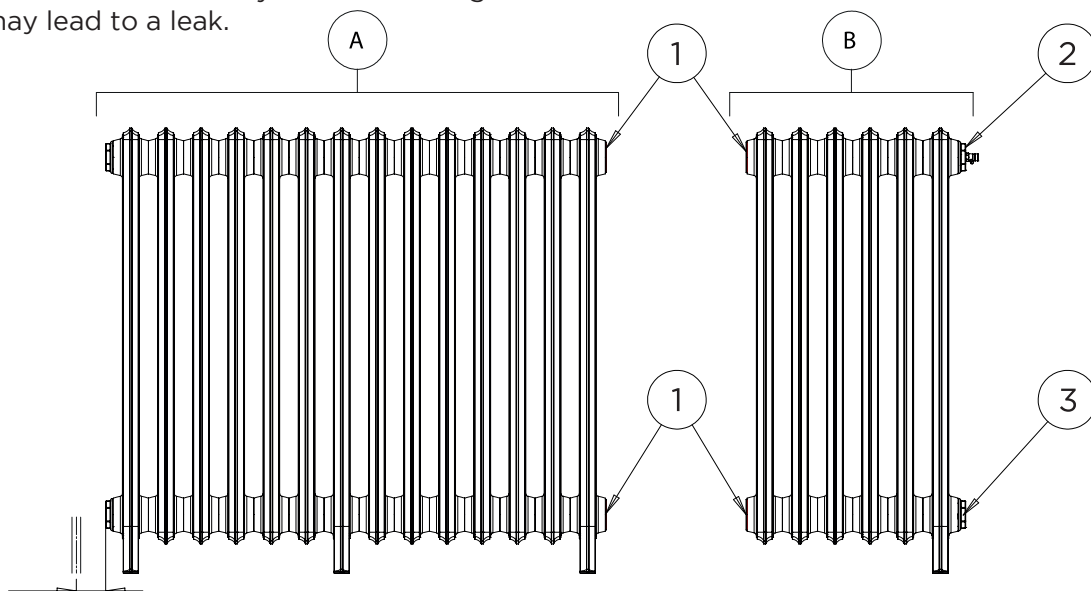
a. Check you have all pieces of the radiator (refer to the Assembly Diagram) and place them as close as possible to the final installation location.

b. The plastic caps at the joins are colour coded. Place green next to green or yellow next to yellow for instance.

c. Remove the end bushes [2] & [3] as required for assembly of your radiator. You may need to use the Castrads assembly tool in Socket Mode for this. See the Assembly Tool Quick Start Guide for more information.

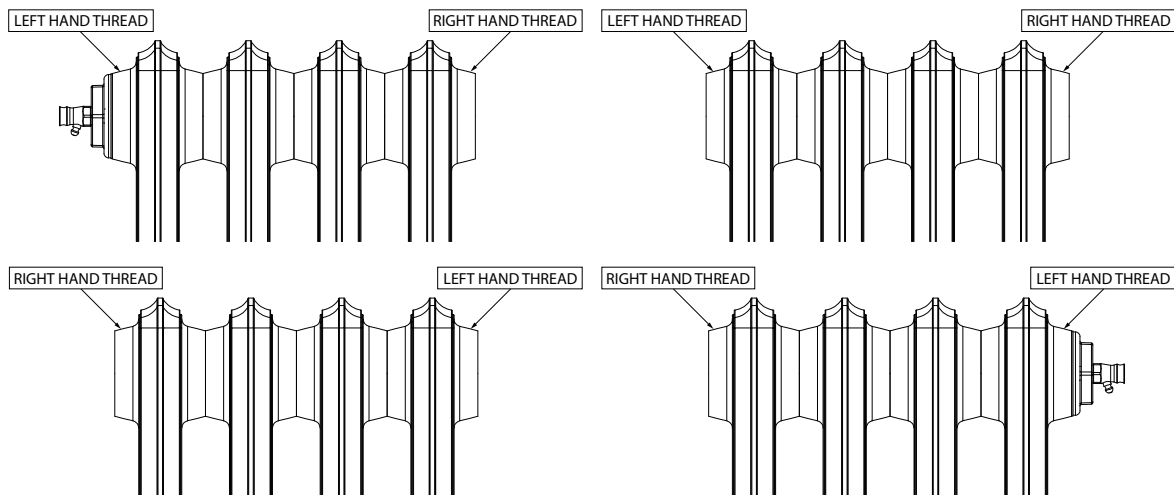


Moving the assembled radiator more than a very short distance is likely to cause damage that may lead to a leak.



### TIP

Castrads bleed bushes are left-hand thread. You can use them to identify all of the left-hand threads in your radiator. Once all the radiator pieces are in position and the coloured caps are matching, the side with the bleed valve on is the left-hand thread side for all of the radiator sections



### TIP

Leaving the bushes on the same side of the radiator that they came from will make it easier to know which end to put them back into in the final stage of assembly.

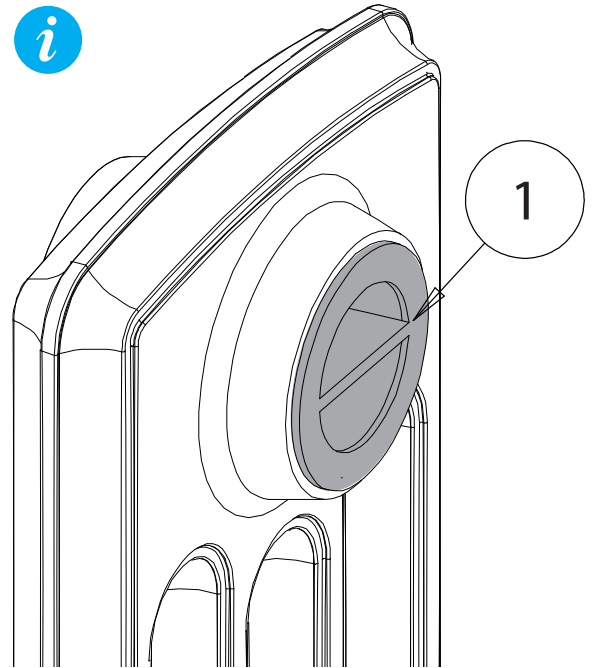
## 2. INSERTING THE THREADED NIPPLES

a. Check that all joining faces are clean and free of paint, rust or remnants of previous gaskets. Use a sharp blade to clean them back to bare metal if necessary.

b. Insert a nipple by just a quarter turn into the top and bottom female threads on one side of the first join. See the tip box on the previous page to ensure thread orientation of the nipple matches that of the radiator part.

### TIP

If the nipple doesn't seem to engage well in the thread, try flipping it over and inserting the other end. The nipple should stay in the radiator if you tug it gently. Check the thread is correctly engaged by screwing it fully in and then bringing it back to its original position.



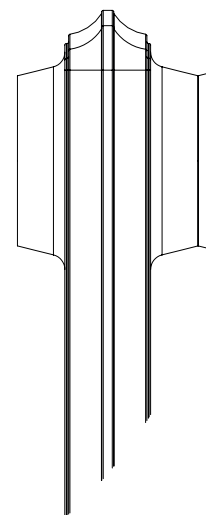
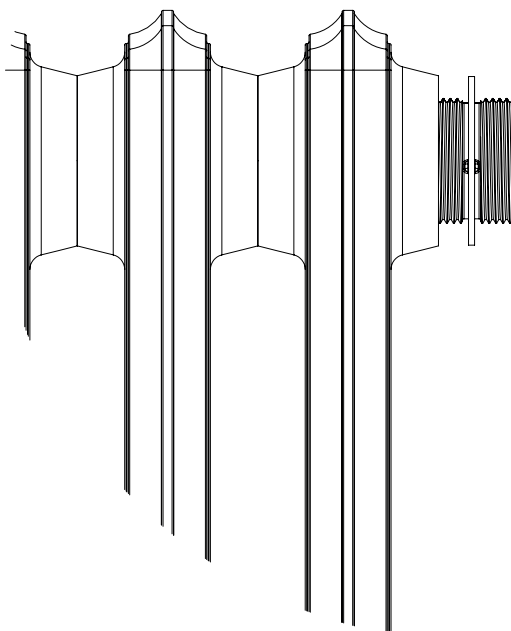
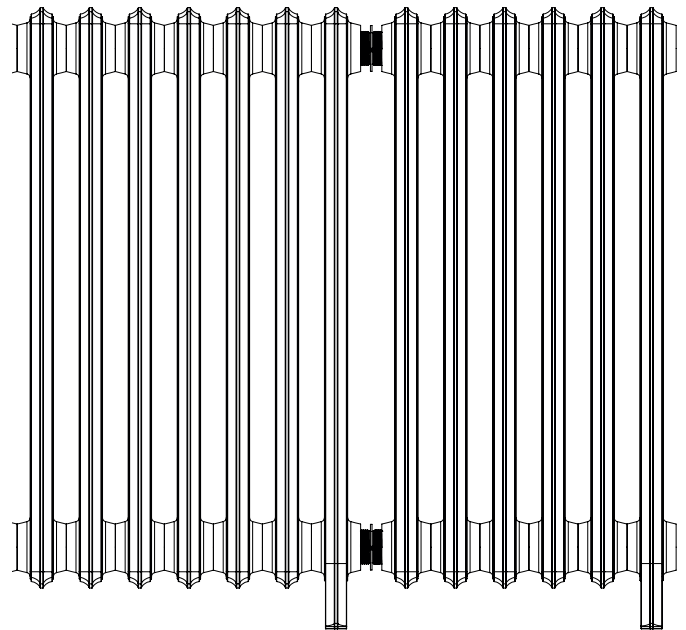
## 3. ADDING THE GASKETS



Place a gasket over each nipple.

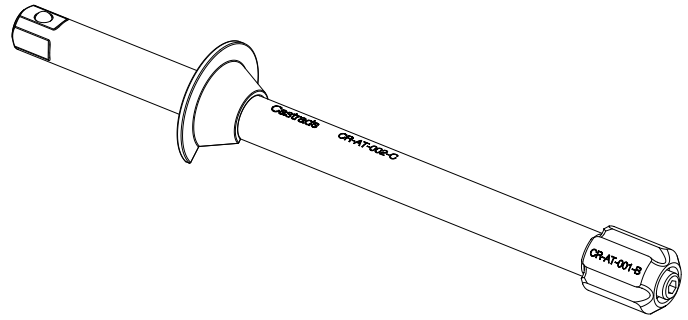


Failure to add a gasket will result in a leaking radiator. Don't forget this essential component.



## 4. HAND TIGHTENING THE JOINTS

- With the Castrads assembly tool in Assembly Mode set the depth stop to the correct position. The distance from the depth stop to end of the assembly tool should be about an 2cm to 3cm longer than the piece of the radiator you are attaching.
- Insert the assembly bar through the top joining hole until it engages with the correct nipple as indicated by the depth stop.
- Tighten the top joint about two turns. Pull slightly on the radiator to ensure the two pieces are connected.
- Repeat at the bottom join, tightening only a couple of turns.
- Repeat steps c and d, tightening each join a little at a time, until both are closed and hand tight.

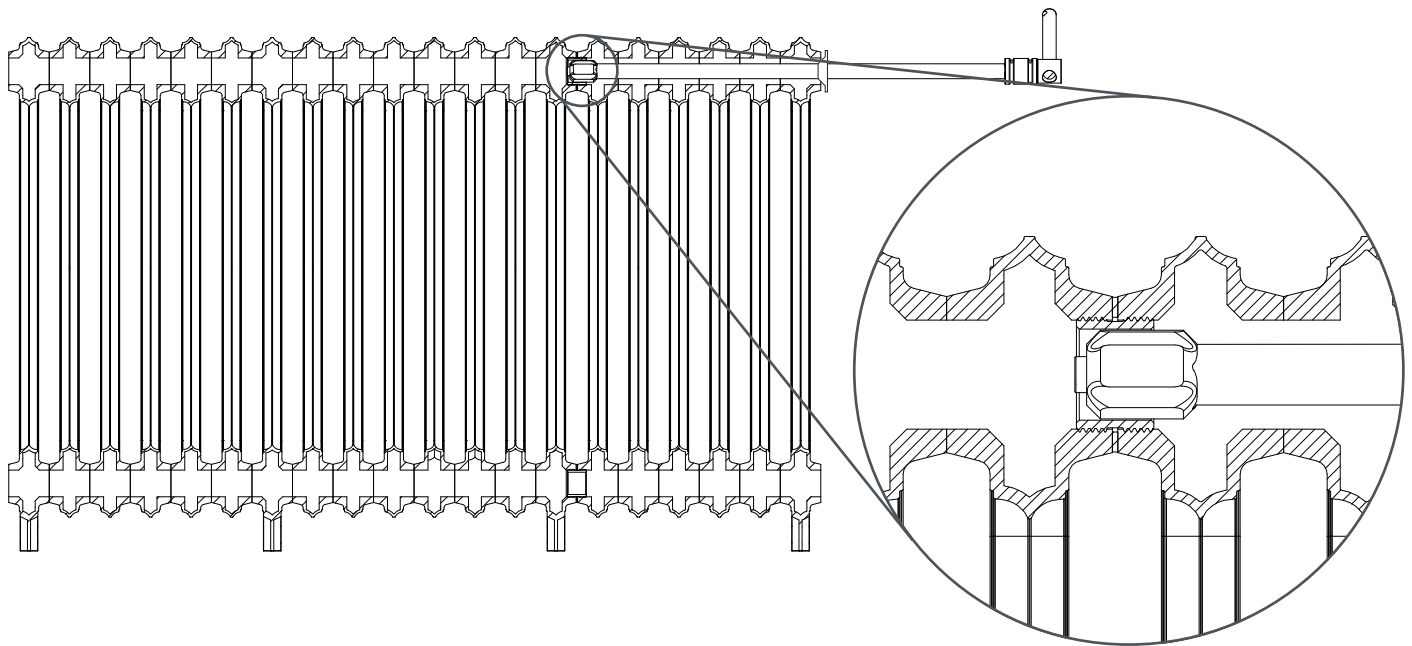


### TIP

The assembly tool will catch on the factory joins as you pass it through the radiator. Rotate the tool a little to push it past each join.



If the nipple doesn't screw in easily it's likely that it has been inserted the wrong way. If this is the case, undo the join and check the thread orientations. It is important not to force the thread as this will damage the radiator and cause a leak.



## 5. CLOSING THE JOINS

- Attach the breaker bar to the assembly bar.
- Fully tighten the top joint with the breaker bar.
- Repeat on the bottom join.
- Finally, repeat steps b and c on both joins to ensure a watertight seal. The breaker bar is designed to be long enough that an average adult placing their full weight on the end of the bar will generate sufficient torque at the join to form an effective seal.



Be careful that neither you nor the radiator become unbalanced during this process. Always have a second person holding the radiator at this point.

## 6. ADDITIONAL JOINS (IF APPLICABLE)

You will need to repeat steps 2 to 5 for each additional join if your radiator has been delivered in more than two parts

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## 7. INSERTING THE BUSHES

- a. For each bush, check that all joining faces are clean and free of paint, rust or remnants of previous gaskets. Use a sharp blade to clean them back to bare metal if necessary.
- b. Add a gasket to the bush.
- c. Insert the bush into the radiator.
- d. Tighten the bush using the Castrads assembly tool in Socket Mode.
- e. Repeat steps a to d for each bush that has been removed.



Now that your radiator is fully assembled, moving it more than a very short distance to install it is likely to cause damage that may lead to a leak.



The assembled radiator may be extremely heavy. Ensure it is fastened to the wall using appropriate wall stays to avoid the possibility of it falling.

