

Anchor Removal

Resin Anchor Removal Tool

The tool has gone through a series of modifications. Earlier versions suffered from failure of the thread and the bearing. The latest version uses an M16 x 1.5 thread which is smaller than the M24 used earlier and gives less torsional resistance due to friction so it's easier to turn and uses a ratchet spanner. The longer nut means less chance of damaging the thread. There is a flange on the nut and there is a flange near the bottom end of the stud to keep the stud aligned. Both of these are measures to load the bearing more evenly. The three feet now have height adjustment and give access to the anchor as it is removed.



The tube is 54mm OD 3mm wall ERW tube. The adjustable feet are M12 set screws. The thread is M16 x 1.5mm. The thrust bearing is 42mm OD. The bearing is a clearance fit in the housing which is a clearance fit in the tube held in place by a screw. The shackle pin is a 10mm capscrew. The spanner is a 30mm ratchet spanner. The bearing and the main thread need to be kept clean and well greased.



Removal of a loose DMM anchor installed in the early 1990s.

A collection of removed anchors:



Spit Removal

Spit was the most common brand of self-drilling anchor and the name Spit has come into general use to describe self drilling anchors. Before becoming very much frowned upon thousands of them were installed in caves and crags in Britain.

Spits have been shown to become unsafe after only two years in corrosive sites. Often Spits take up the best position and so it is advantageous to be able to remove them and re-use the same site for a resin anchor.

Using the method described here it is easy to remove them. It uses no special tools, takes only a couple of minutes and leaves a hole which can be enlarged to take an IC resin anchor.

You will need a battery drill, a 6mm bit, a 10mm wide cold chisel and a hammer.



Spits are 12mm diameter and 30mm long. Drill two holes close to the Spit leaving a web of about 3mm then with the same bit drill at an angle and slide the bit across to remove the web and leave a slot. If you intend to install a resin anchor the slot should be aligned with the direction that you want the countersink of the anchor. Drive the chisel down the opposite side to force the Spit into the slot. The spit might then just lift out but might require a bit of waggling.



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The data in this document was originally written by Simon Wilson, the developer of the IC Anchor.
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