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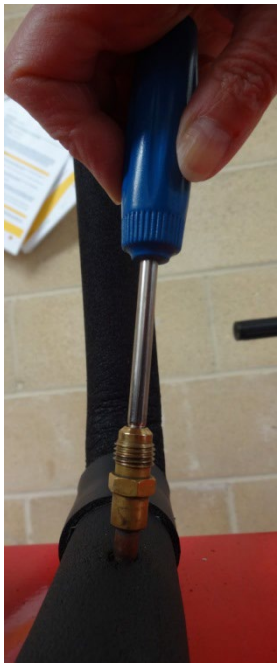
Schrader Torque Tool

This short guide explains why it is important to use a torque tool when tightening Schrader valves.



A Schrader valve is a common point of refrigerant leakage for various reasons, including the Schrader core being incorrectly tightened into the body. Over or under tightening will result in leakage. Most Schrader valve cores should be tightened to a torque of between 0.23 and 0.8 Nm.

The torque tool we can provide is non-adjustable and pre-set to between 0.45 and 0.6 Nm, so it is suitable for the majority of Schrader cores. The photo shows an example; the actual colour and shape may vary.

To use it simply tighten the core into the body until the tool clicks.

The use of the torque tool also ensures that the Schrader pin is at the correct height, so it is not depressed when a cap is fitted, but is depressed by the depressor in a gauge line.

Other ways of reducing leakage at Schrader valves include:

- If possible do not fit Schrader valves, especially during installation for pressure testing where they are left in inaccessible areas such as roof voids and service ducts. Locations of access points including Schrader valves should be marked clearly on isometric drawings for future reference.

- Ensuring the correct core is used – one type does not suit all applications, cores are colour coded and oil and refrigerant compatibility should be specifically checked against the manufacturer's data sheets including operating temperature, especially on discharge lines. The refrigerant pressure should also be considered especially with R410A and R744.

- Removing the core when brazing in the valve, and re fitting the core (using the torque tool) when the body has cooled to below 100^{O}C

- Capping the valve with an appropriate cap (such as a hexagonal cap which can be carefully tightened using a spanner). The cap should be carefully selected for use with the particular Schrader core body.

The tool is available from Amazon, search for Schrader torque tool (Draper Tools 46795).

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