

HOW TO INSTALL : SPRING STARTER

The Startwell Starter is easy to install and operate. It requires no special skills or tools. You should, however, still read the following step by step instructions before fitting or operating the starter.

Rotation:

The SNC, SDC, SDCH, SXC and SSXC starters ranges are designed for anti-clockwise rotation engines only, viewed from the flywheel end. In other words, the starter replaces clockwise rotation electrical, pneumatic or hydraulic starters. (See Appendix II)

Engine Space:

a) Check that you have sufficient room on the engine crank case to fit the starter. (See Appendix I)

Replacing the Original Electrical Starter:

b) Remove the existing electric, pneumatic or hydraulic starting device, ensuring that you retain any spacers already present, unless the starter model that you have already has a spacer included with it.

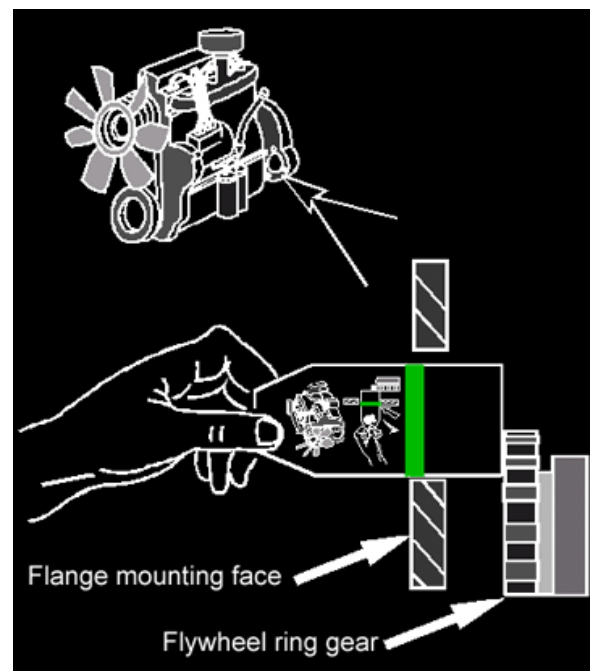
c) Make sure that while removing the old starter you do not disconnect the fuel shut-off valve. On some applications there may be an electrical engine shut-off valve. This can either be operated by direct supply from the battery or converted to manual shut-off.

Startwell Design:

d) You may find when replacing your current starter with the Startwell Starter that there is a difference between the number of teeth on the two pinions. This is a design feature adapted to make a larger body diameter Startwell Starter replace a smaller diameter electric starter. This is achieved by off-setting the spigot and mounting holes of the starter from its centreline and increasing the number of teeth to compensate for this.

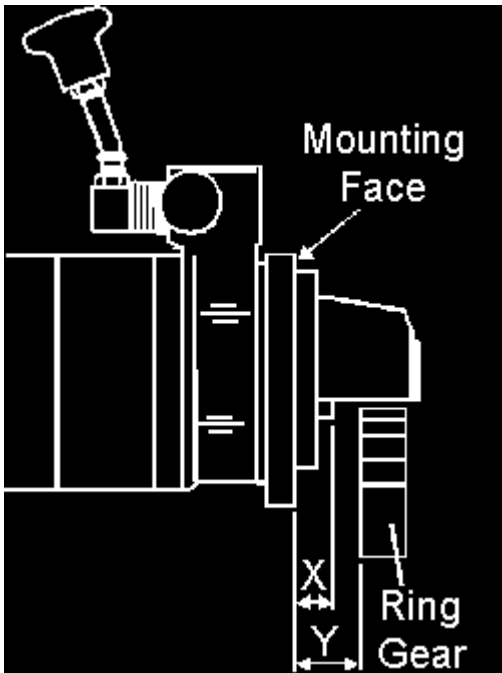
Pre Installation check:

e) The Startwell Starter is designed so that when installed on the engine, in the unwound position, there is between 3 and 5 mm clearance between the pinion face and the flywheel ring gear. To ensure that the clearance is correct, press the 'check card' (provided) against the ring gear and ensure the flange mounting face sits in the green area.



Alternative:

measure the mounting face to pinion face dimension 'X', and the mounting face to ring gear depth 'Y'. The distance Y-X should be between 3 and 5 mm. (See Fig 2)



Final Preparation:

f) To complete the installation tighten the nuts or bolts (whichever is appropriate for your application) to the torque recommended by the engine manufacturer. The starter is assembled so that in the majority of applications the winding handle is in a position suitable for you to wind the starter comfortably. If this is not the case the angle of the winding handle position can be changed to suit your needs. See Position Code Procedure.