ET1422

GLOW PLUG REMOVAL KIT

Introduction:

Design to remove damaged / broken glow plugs from the cylinder head.
Suitable for glow plug with M8 x 1 mm or M10 x 1 mm thread.
The set includes all required adaptors for centering, drilling and pulling for the safe removal of the glow plug.

Item	Description
A	Puller Housing-1-Hex 12 mm spindle; Hex 30 mm nut; cone center tool
B	Drill Holding Adaptor
C	Puller Adaptor Mandrel (2 pcs/set)- 1/4”-28 UNF; Hex 8 mm ×2 pcs
D	Pilot Drill Centering Sleeve (2 pcs/set)- Φ6×3.5×40L ×2 pcs
E	Hex Key (3 mm)
F	Star Socket (E10)- 9.7 mm square socket
G	Drill Bit (7 mm/5.5 mm)
H	Drill Bit (9 mm/5.5 mm)
I	Ratchet T - Bar
J	Pilot Drill (2 pcs/set)- Φ3.5 drill ×2 pcs
K	Tap (M10 x 1.0)
L	Tap (M8 x 1.0)
M	Tap (1/4”-28UNF)

Instruction:

Note: To minimise the possibility of damage to the engine, it is advisable to remove the cylinder head from the engine to work on it. Alternatively, remove the relevant injector and connect an airline via an appropriate adaptor to the aperture to ensure dirt and swarf do not enter the combustion chamber as the procedure is carried out. **Wear eye protection.**

1. Push fit (F) onto the top of the glow plug; it may need to be tapped on lightly. Then, using a ⅜" ratchet, remove/break off the top part of the glow plug.
2. (See Fig.2) Insert (D) into the recess in the top of the glow plug. Fit (J) to an electric drill and insert pilot drill into centering sleeve, drill a pilot hole in the center of the glow plug remains. Ensure that pilot drilling is at least 15mm deep.
   Clean away the swarf using an airline.
   Note: If the electrode can be withdrawn in one piece, the aperture created may be used as a pilot. If this is the case, proceed to **4**.

Fig.1

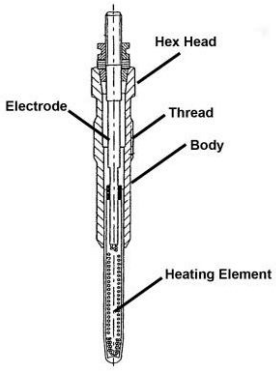
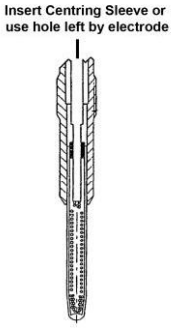


Fig.2



3. Fit either (G) or (H) into the (B) and lock in place with the grub screw, using the (E).
Make sure that the grub screw bears on the flat, machined into the shank of the drill bit. Carefully drill out the center of the glow plug and threaded portion of glow plug body. Take care not to damage the female threads in the cylinder head. Clean out the swarf using an airline.

4. Fit the ¼" tap provided into the ratchet T-bar. Cut a thread with this in the remains of the glow plug body, cutting at least 15 mm of thread.

5. Screw a (C) into the thread that has just been cut into the glow plug. Remove the nut from the force screw in the (A) and thread the force screw onto the mandrel. Slide the outer sleeve of the puller housing over the force screw.

6. Re-fit the nut to the force screw with the collar facing the outer sleeve. Hold the head of the force screw with a 12 mm wrench or socket and wind the nut down using a 30 mm wrench. This will draw the remaining lower part of the glow plug free from the cylinder head.

7. Fit either (L) or (K) into (I). Run the tap down to clean/restore the threads in the cylinder head.
An application of grease to the tap will both lubricate and help contain the swarf.

8. Clean thoroughly the thread and surrounding area and make sure that the combustion chamber (if head is in-situ) is free from debris before fitting a replacement glow plug.

9. Ensure all tools are removed from the engine bay and returned to the tool tray, and store this in a safe, dry, childproof location.