

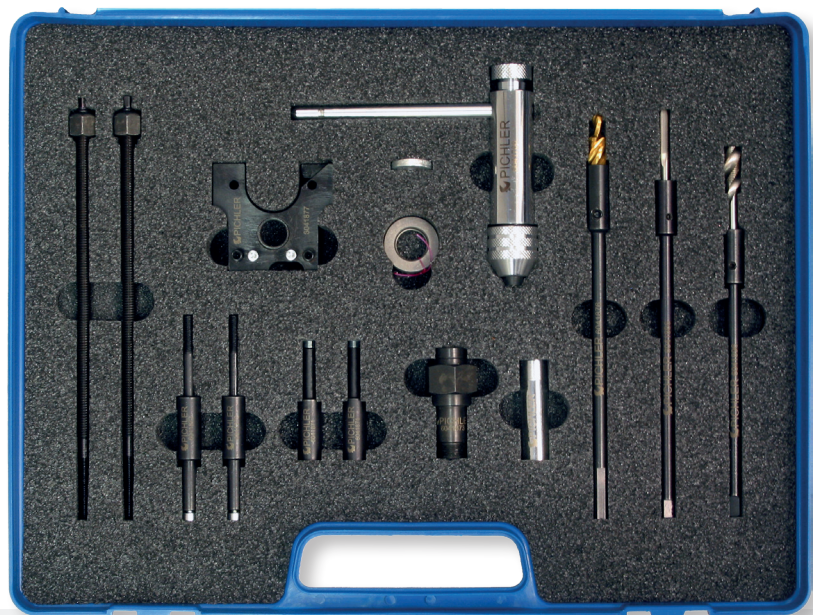


Manual

Glow Plug Removal Kit G9T and G9U

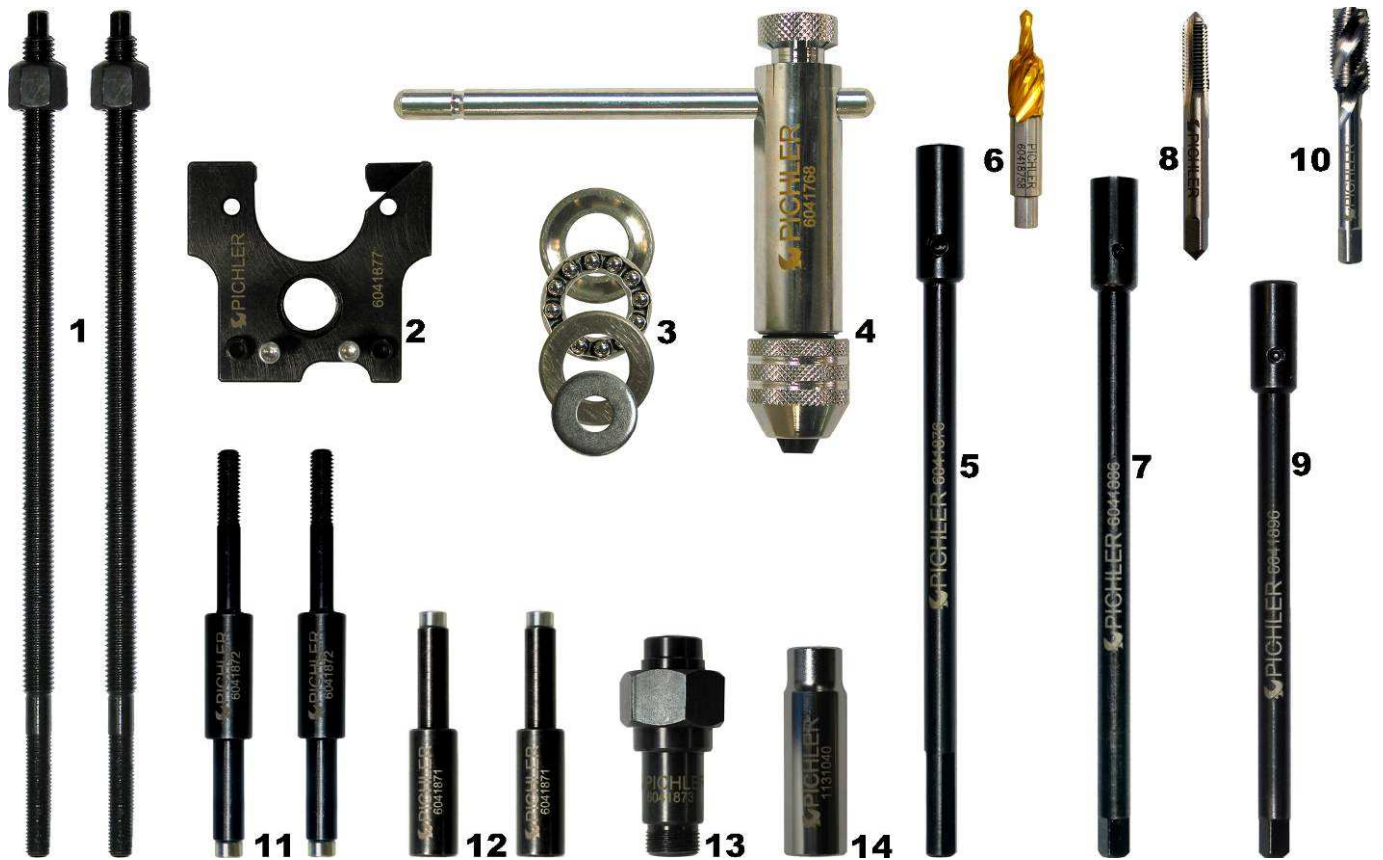
Removing Broken Glow Plugs of M10x1 Renault engines

6041870



Safety notice

- ▶ Important - read these instructions before assembling, during installation and throughout use.
- ▶ The use of the tools should only be carried out by qualified personnel.
- ▶ Always refer to the OEM manufacturer's instructions and service manuals for the latest data and to maintain the correct sequence.
- ▶ These work instructions and the recommended tools shown are meant to serve as aides only and are by no means a guarantee for certain results.
- ▶ In some cases, due to insufficient space the engine or the cylinder head will need to be removed.
- ▶ This tool kit is a special collection and it has been tested and used successfully on several occasions.
- ▶ It is of the utmost importance to maintain the correct procedure as per the instructions.



N°	P/n	Description	6041870
1	6041887	Extraction Spindle with shouldered Nut M8 / UNF 1/4"	2
2	6041877	Locating Plate Height Adjustable for Combined Sleeve (legally protected)	1
3	6041881	Bearing with Washer	1
4	6041768	Tool Holder with Ratchet "Keeper" short for M5-M12	1
5	6041876	Drill Holder "long" for Drill 9.0mm	1
6	60418758	Shouldered Drill HSS 9.0x5.5mm (custom made)	1
7	6041886	Tap Holder "long" for Tap UNF 1/4"	1
8	6041743	Manual Tap HSSG UNF 1/4"	1
9	6041896	Tap Holder "long" for Tap M 10x1	1
10	6041874	Tap M 10x1 (custom made)	1
11	6041872	Legs Pair for models with screws	1
12	6041871	Legs Pair for models with studs	1
13	6041873	Combined Guide-/Extraction Sleeve	1
14	1131040	Stud Remover 4,0mm (custom made)	1

1. Place the 4.0mm Stud Puller (: 1131040) on the central electrode, and then try to break it off, by turning it several times clockwise with a wrench. **If successful continue to work from step 5!**



Attention!!! In case the central electrode doesn't break, but turns idle, then continue with the special extractor 6041756 from the Supplementary kit . 6041880, with step 2.

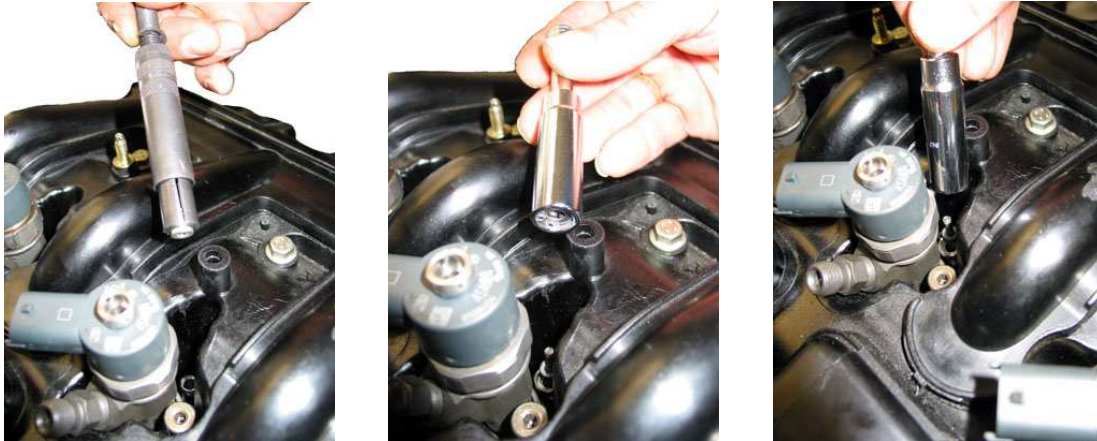
2. Remove the stud puller open extractor 6041756 fully. Place the extractor in the nut of the cap and close it tight with both hands.



3. Screw the Slide Hammer 1030210 on the extractor and remove the cap with slight blows of the Hammer.



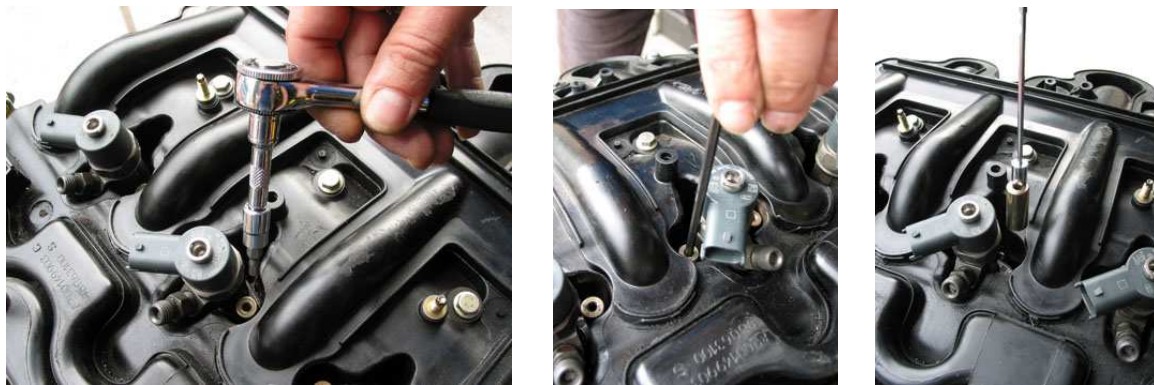
4. Remove the cap from the central electrode and place the stud remover 6041704 on the now freed central electrode and break it off by turning it several times clockwise with a wrench.



5. Remove the central electrode, if needed with a magnet. Remove the now freed hexagon also with a magnet.



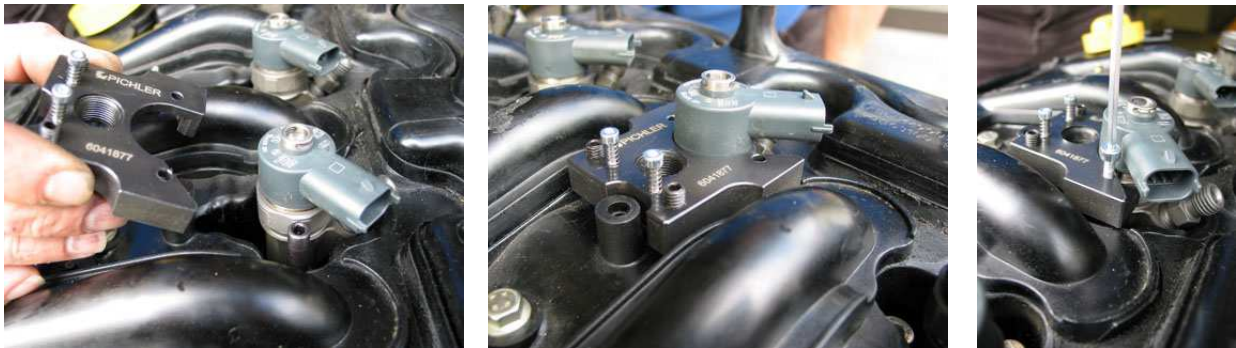
6. Remove the fastening screws of the injector. (The mounting can consist of studs with Allen nuts or Torx screws).



7. Depending on the mounting, use either the long Legs 6041872 for models with screws or the Legs 6041871 for models with studs and remove the screws of the Legs. Screw the Legs manually in and tighten them with an Allen key 4, until they stop. **Careful important:** tighten them lightly and check how they sit.



8. Place Locating Plate 6041877 and mount it with the allen screws on the Legs and tighten it with an Allen key.



Careful important: The Locating Plate has to sit solidly on the injector.
If not turn the Legs slightly till the Plate slides in underneath.

9. By turning the set screws ensure that the cylindrical bit sits solidly on the valve cover.



cylindrical,
movable bit

10. Lubricate the Drill holder 6041876 and Drill 60418758 and slide them in the Combined Sleeve 6041873. Mount it all in a normal drilling machine and screw the combination in the Locating Plate 6041877. Drill till the stop. Do not try to drill all at once, but lift the drill often! Lubricate the stem and drill bit.



Combined Sleeve 6041873



Before removing the Drill and Combined Sleeve remove the chips and dirt by means of compressed air, magnet and/or a vacuum cleaner and make sure that there has been drilled to the stop.

Tip: Good results can be obtained, by putting a funnel on the nozzle of the vacuum cleaner



11. Replace the drill holder with the Tap Holder 6041886 and Tap UNF 1/4" 6041743 in the Locating Plate 6041877. Cut with tool holder 6041768 the thread in the glow plug.



The Tap should be lubricated with some oil!!

Before removing the Tap and Combined Sleeve remove the chips and dirt by means of compressed air, magnet and/or a vacuum cleaner. For a visual check the Locating Plate has to be removed.

If it is now possible to remove the glow plug, than continue from step 14.

12. Replace the Combined Sleeve and the Locating Plate, place Bearing 6041881 on the sleeve. Screw the Spindle 6041887 (there are 2 of them in the kit) with the washer in the glow plug and screw on the Nut until it stops.

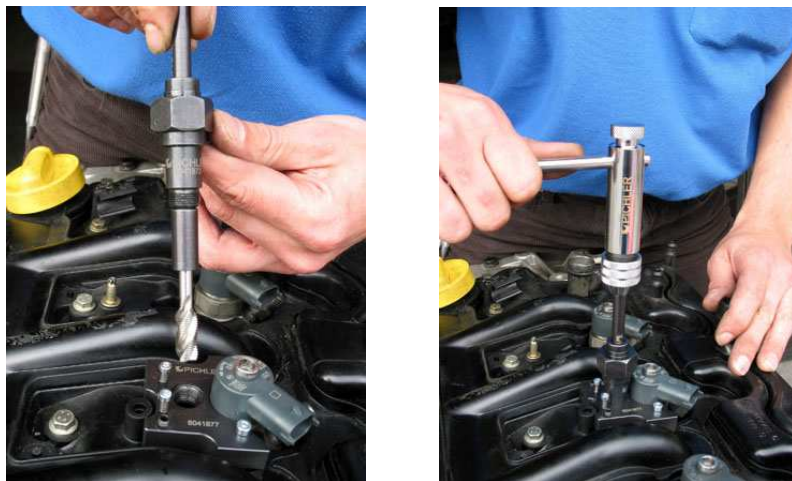


13. Extract the remains of the glow plug by stopping the Spindle 6041887 and turning the Nut.



**CAUTION! During extraction it is most important to prevent the spindle from turning –
Be sure to use a wrench on the hex to prevent rotation.**

14. Place the Tap Holder 6041896 with Tap 6041874 in the Sleeve and screw the combination into the Locating Plate then clean the thread by turning the tap using the Tool Holder. Wet the Tap; the grease should prevent chips ending up in the combustion chamber).



Remove the chips and dirt by means of compressed air and/or a vacuum cleaner.

Fit the new glow plug and mount all removed parts.
We recommend that if the injector has been loosened, to replace the seal.

If the thread M 10x1 in the cylinder head has been damaged,
it can then be repaired with the optional kit 6041880.

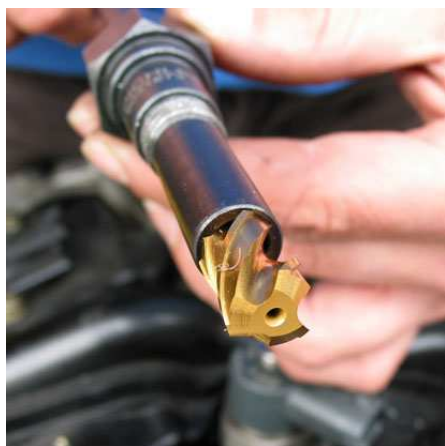
Details Below.

For this purpose, proceed with the following steps according instructions with the optional tools from kit 6041880.

15. Clean the removed glow plug by means of a glow plug cut approx. 10 mm of the end. The glow plug can now be used to plug the hole to the combustion chamber.



16. Replace the Locating Plate 6041877, replace drill in Holder 6041876 by drill 6041895 and screw it with the Sleeve in the Locating Plate. Drill into the cylinder head till the stop.



Before removing the Drill and Combined Sleeve remove the chips and dirt by means of compressed air and/or a vacuum cleaner and check that has been drilled till the stop.

Tip: Good results can be obtained, by putting a funnel on the nozzle of the vacuum cleaner.



17. Remove the tap in Tool Holder 6041896 with Tap M12x1 6041884 Screw it with the Sleeve in the Locating Plate. Cut a new tread with Tool Holder 6041768 for the Thread Bush in the cylinder head and remove all tools including the Locating Plate.



18. Screw Thread Bush 6044100 on the Setting Tool 6041704 and put some heat resistant locking fluid on the bush and screw the bush in the cylinder head.



19. Remove the plug from step 15. Place the Reamer 6041714 with Knob 6041726 in the shaft and with slight pressure, turning clockwise clean the shaft and sit.



CAUTION! During the cleaning no metal should be removed, use the reamer only in a clockwise direction.

Place the new glow plug and mount all removed parts.
We recommend that in case the injector has been loosened, to replace the seal.



AUSTRIA

✉ info@pichler-werkzeug.com

☎ +43 512 344552

PICHLER Werkzeug GmbH & CoKG
Pacherstrasse 20
A-6023 Innsbruck

GERMANY

✉ info@pichler-werkzeug.de

☎ +49 8821 6869780

PICHLER Werkzeug GmbH
Zugspitzstrasse 33
D-82467 Garmisch-Partenkirchen

SWITZERLAND

✉ pichler@werkzeugag.ch

☎ +41 61 981 33 55

PICHLER Werkzeug AG
Rünenbergerstraße 31
CH-4460 Gelterkinden

FRANCE

✉ pichler@pichler.fr

☎ +33 389 551 596

PICHLER Outillage Sàrl
19a, rue de Reiningue
F-68310 Wittelsheim

BELGIUM

✉ belgique@pichler.fr

☎ +32 495 400810

PICHLER Outillage BVBA
Industrieweg 45
B-8800 Roeselare

GREAT BRITAIN & IRELAND

✉ office@pichler-tools.com

☎ +44 1335 360759

PICHLER TOOLS LTD
Ednaston Business Centre
Hollington Lane, Ednaston
Ashbourne
DE6 3AE