



Alfa 156 16v TSpark Spark Plugs

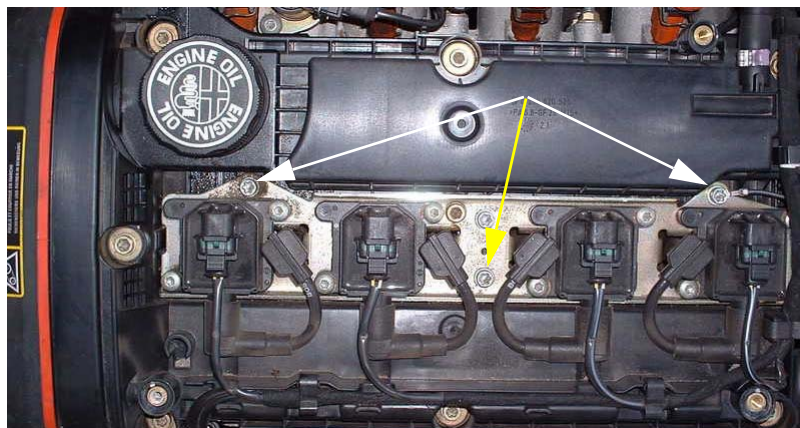
Changing the spark plugs is not difficult, but you do need to take care as they are located deep inside the cylinder head, and if you break one it is going to be more difficult to remove. Worse still is if you cross the threads on replacing, that's going to be expensive!!

The Twinspark engine is fitted with EIGHT spark plugs ... two from each cylinder ... hence the "Twinspark" name. Four are 14mm plugs and four smaller 10mm plugs. The recommended replacements are NGK Platinum: BKR6EKPA and PMR7A. These are not cheap but you can find good deals on the web including eBay.

You will need a torq bit set, 16mm plug spanner/socket, and cleaning gear. If you are not replacing the plugs, you'll probably need a wire brush and feeler gauges to reset the plug gaps.

First remove the engine cover. Undo the four torq bolts which should stay with the cover and not fall out. You'll see something like this underneath.

Remove the two torq bolts at the back of the plate that runs across the top of the engine - marked with white arrows in the picture. Then remove the bolt/bolts in the centre shown by the yellow arrow.



The older style with HT leads that are connected between different cylinders only have one, the newer style (as here) might have two.

NOTE: The one on the right has an earth cable attached. Remember to put this back at the end.

Four of the plugs have "normal" HT leads, but the other four each have a coil-pack. Starting from the left the fitment is as shown below.



Notice how one of the leads is plugged in to a coil-pack. There are two types of wiring used on early and later models. The earlier models have cylinders 1 & 4 and 2 & 3 interconnected. Later models use the arrangement shown above i.e. both plugs are powered by the same coil-pack.



Remove the two torq screws holding each coil-pack to the plate, and gently pull the pack off the plug. Then pull the separate HT leads off. They do not come out of the plate.

Now unclip any wiring that run through or near the HT plate. On the older style, wiring to the coils and air-conditioning (if fitted) runs through three plastic clips at the front of the cam covers. If you don't you may break them when you lift the plate and HT leads out.

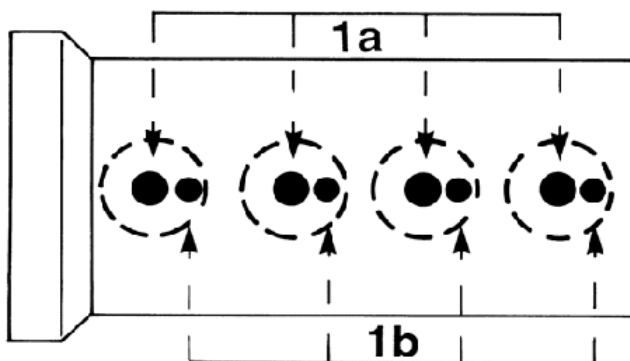
You should now be able to take the plate and HT system away from the engine. This is what you will see underneath.

If you replace the coil-pack fitting screws, don't tighten them. They have to come out again.

Give all the boots and stems a good clean and dry them. The boots are replaceable if damaged, etc.



Now remove the plugs. You will need a narrow 16mm plug spanner. Clean up each "hole" as much as you can before you remove the plugs as anything down there will most likely end up in the engine when you do. Cylinder 1 nearest the cambelt is prone to getting oil as it is near to the filler. The plugs be 14mm in the centre (1a), and 10mm (1b) to the right in each cylinder. The same plug spanner should remove both as it is the thread that is smaller on the 10mm plugs, not the body.



Replace the new plugs. Make sure you don't cross-thread them or tighten them to much. If like me you use a socket set, the plug will normally stay in the socket as they have a rubber insert. Start the plug by turning the socket extension by hand. When, and only when, you are happy the plug is hand tight and correctly installed, tighten the plug with the socket wrench.

Plug size & NGK part no Torque Settings Gaps

Centre 14mm BKR6EKPA:	2.5-3.6 daNm/25-36Nm/18-26ft/lb	0.9mm
Side 10mm PMR7A:	1.1-1.6 daNm/11-16Nm/6-11 ft/lb	0.8mm

Push the leads back on the plugs individually making sure they locate on the plug. replace the plate and finally screw the coil packs back onto the plate. Don't forget the earth lead on the right most plate bolt!

Start the engine check it runs ok and finally replace the engine cover.