

5.2 AKTIVITI PERBINCANGAN

Prinsip operasi enjin petrol dan diesel empat lejang

Operational principle of the four-stroke petrol and diesel engines

2002 BHG. B, S5 2006 BHG. B, S9 2014 BHG. B, S9 (b) & (c) 2017 BHG. B, S9 (a)–(d)

- 1 Labelkan komponen asas silinder enjin petrol empat lejang.

Label the basic components of the cylinder of a four-stroke petrol engine.

Silinder

Aci engkol

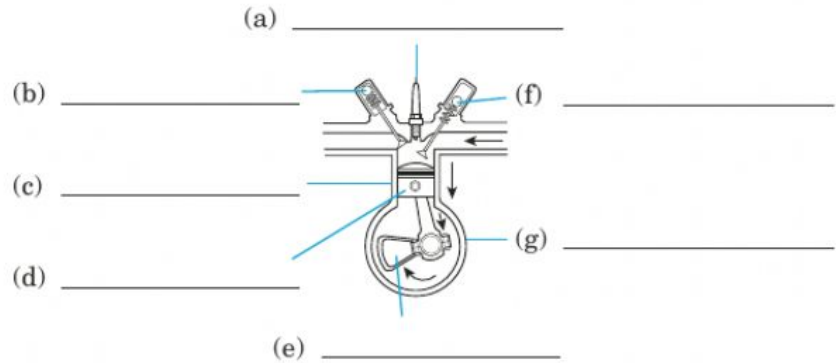
Injap masuk

Ombok

Kebuk engkol

Palam pencucuh

Injap ekzos

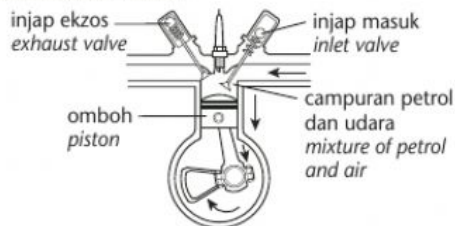


- 2 Bulatkan jawapan yang betul tentang prinsip operasi enjin petrol dan diesel empat lejang.

Circle the correct answers on the operational principle of the four-stroke petrol and diesel engines.

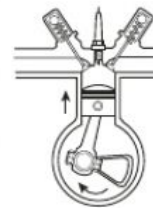
KBAT
BAB 5

A. Lejang aruhan Induction stroke



- (a) Ombok bergerak ke (atas, bawah).
The piston moves (up, down).
- (b) Injap masuk (terbuka, tertutup) dan injap ekzos (terbuka, tertutup). Campuran petrol dan udara memasuki silinder.
The inlet valve (opens, closes) and the exhaust valve (opens, closes). A mixture of petrol and air enters the cylinder.

B. Lejang mampatan/Compression stroke

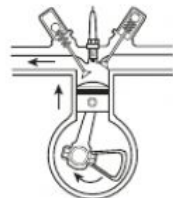


Galeri Info

Hampir semua kereta menggunakan enjin petrol empat lejang.
Almost all cars use four-stroke petrol engine.

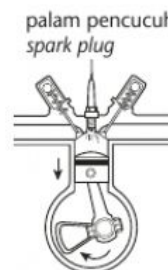
- (c) Kedua-dua injap (terbuka, tertutup).
Both valves are (open, closed).
- (d) Ombok bergerak ke (atas, bawah).
The piston moves (up, down).
- (e) Campuran petrol dan udara (dinyalakan, dimampatkan).
The mixture of petrol and air is (ignited, compressed).

D. Lejang ekzos/Exhaust stroke



- (i) Ombok bergerak ke (atas, bawah).
The piston moves (up, down).
- (j) Injap masuk (terbuka, tertutup) dan injap ekzos (terbuka, tertutup) untuk melepaskan gas ekzos ke luar silinder.
The inlet valve (opens, closes) and the exhaust valve (opens, closes) to release exhaust gas out of the cylinder.

C. Lejang kuasa/Power stroke



- (f) Kedua-dua injap (terbuka, tertutup).
Both valves are (open, closed).
- (g) Palam pencucuh menghasilkan (haba, bunga api) untuk menyalakan campuran petrol dan udara.
The spark plug produces (heat, sparks) to ignite the petrol and air mixture.
- (h) Tekanan udara panas yang terhasil menolak ombok ke (atas, bawah).
The hot air pressure produced pushes the piston (up, down).