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**Information BULLETIN D-MOTOR**

Information Bulletin NO. 2019-012

SUBJECT : Throttle units

MODELS : All models (LF26 and LF39)

The D-Motor throttle is the device controlling the flow of fuel or power to our engines. It is mounted on the Airboxes.

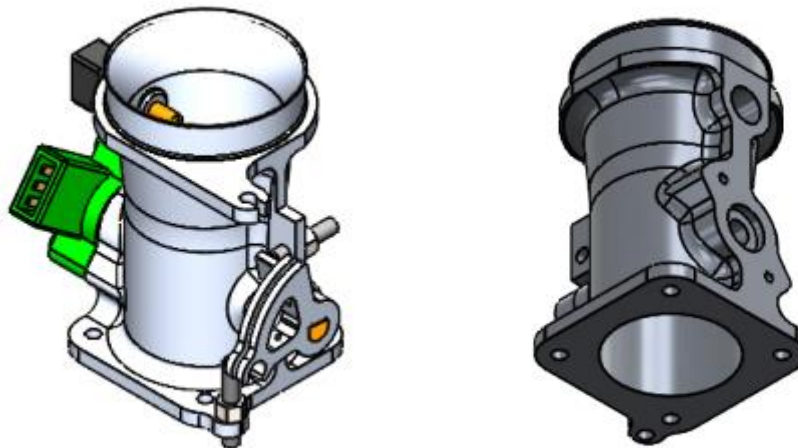


Fig. 1

D-Motor manufactures two types of throttle valves in two dimensions

D42-NO	TBO_D42_NO	Diameter 42, Normally open	For LF26 type engines
D42-NC	TBO_D42_NC	Diameter 42, Normally closed	For LF26 type engines
D45-NO	TBO_D45_NO	Diameter 45, Normally open	For LF39 type engines
D45-NC	TBO_D45_NC	Diameter 45, Normally closed	For LF39 type engines

Table 1.

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01	03	2019				5	1

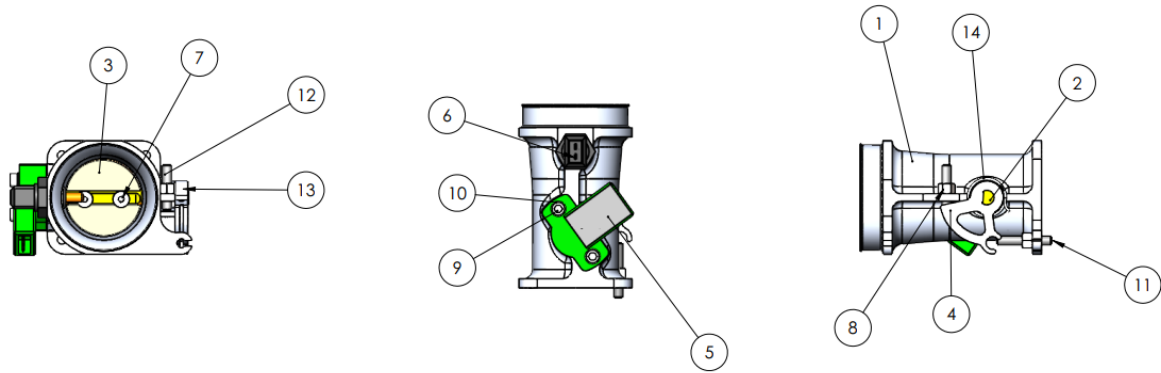


Fig 2

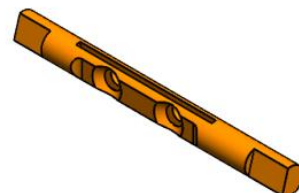
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	26_TBO_D42	Throttle body d42	1
2	26_TAX_NOR	throttle axe plane	1
3	26_TAX_D42	throttle valve D42	1
4	STD_THR_TLE_01	throttle lever	1
5	STD_ELE_TPS_01	TPS sensor	1
6	STD_ELE_ATS_01	temprature sensor	1
7	Countersunk head screw DIN 7991 Steel 8.8	countersunk flathead screw M4x10 DIN 7991	2
8	Hexagon nut DIN 934 RVS_01	hexagon nut M5 DIN934 RVS	2
9	Hexagon socket head cap screw DIN 912 Steel 8.8	Hex socket bolt M4x20	2
10	STD_WASHER	WASHER_M4VZ_040.001	2
11	Set screw hexagon DIN 914	setscrew M5X30	1
12	Set screw hexagon DIN 914	setscrew M5X25	1
13	Set screw hexagon DIN 914	setscrew M4x6	1

Depending on the **Normally Open or Normally Closed type**, the tilting axe is different !

Please order the following part numbers

STD\_TAX\_NOR for the Normally open valve

STD\_TAX\_NC for the Normally close valve



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**What is NO (Normally Open) and NC (Normally Close) ?**

The Throttle valve is controlled by the gas cable.

A Normally Open Throttle valve will give your engine full throttle in case of a gas cable failure. (when cable breaks)

A Normally Close Throttle valve will close and cut all power tot he engine in case of a gas cable failure. (when caba breaks)

The dimension of the throttle is the inner dimension (see below) :

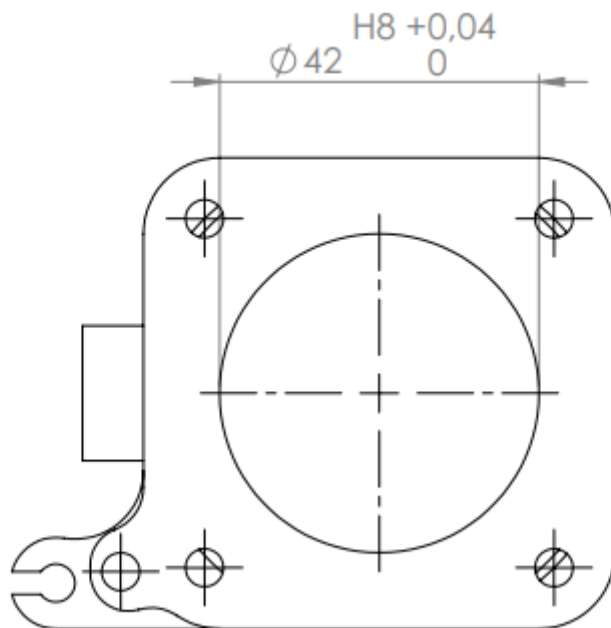


Fig 3.

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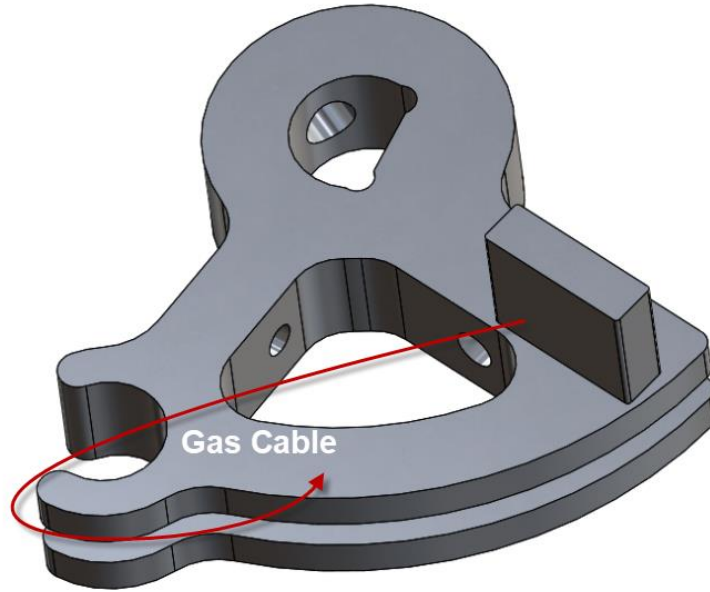


Fig 4

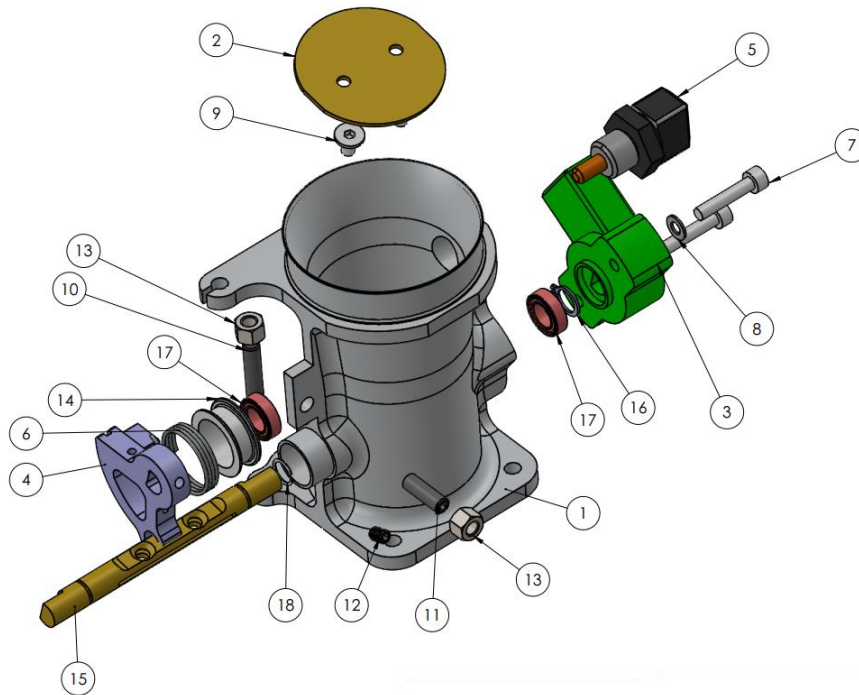


Fig 5

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**Fig 5. : T.P.S. Sensor**

The TPS or Throttle Position Sensor is a sensor used to monitor the air intake of our engine. The sensor is located on the butterfly spindle/shaft (Position 5 – Fig 5 above) so that it can directly monitor the position of the throttle. The information of the sensor is fed into our ECU and logged in the ECU logfile.

The TPS Sensor is active when the Governor function is active (helicopter). And regulates the power in function of the position of the gas lever and the RPM of the Engine).



When you order an engine from **D-Motor**, please indicate what type of Throttle valve system you require.

If you require your engine to have no power, and cut-off intake when for example the gas cable breaks, you should order a gas throttle unit that is closed in normal state.

If you require full power for your engine when a cable failure appears, choose the gas throttle unit that is open (maximum intake), so open in normal state.

‘Normal’ : when the gas cable (see Fig 4) is not operated.

**Choice of diameter ( D42 or D45) (Fig 3) :**

D 42 is used for our LF26 (4 cylinder) engines

D 45 is used for our LF39 (6 cylinder) engines

See table 1 for the correct part numbers

Contact our sales department in case of doubt.

[sales@d-motor.eu](mailto:sales@d-motor.eu)

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