

HARK BIG BOSS GAS SMOKER

TROUBLE SHOOTING GUIDE : FLAME FAILURE

TROUBLE SHOOTING GUIDE: HK053 - HARK BIG BOSS GAS SMOKER

FLAME FAILURE / FLAME CUTTING OUT / FAULTY FFD

IDENTIFYING THE ISSUE

The flame in the Hark Big Boss Gas Smoker continually cuts out and is unable to stay lit even when there is an adequate supply of LPG. This generally happens soon after the control knob has been released.

The gas smoker's Flame Failure Device (FFD) is cutting off the gas and extinguishing the flame. This issue generally occurs after the control knob has been released. The flame is unable to remain lit, even when there is an adequate supply of LPG gas in the tank.

WHAT IS A FLAME FAILURE DEVICE (FFD)?

A FFD is a thermocouple copper wire that is connected to the gas smoker control panel valve. It is a safety feature that is required by law to be fitted to all gas appliances sold in Australia. The FFD senses the lack of flame and cuts off the supply of gas, thereby ensuring that there is no leaking gas that could be ignited when exposed to an open flame.

WHY IS THIS ISSUE OCCURING

If there is a flame and an adequate supply of gas, the flame shouldn't extinguish unless the FFD is either obstructed, off-centre or faulty. The FFD thermocouple wire is thin and delicate and is therefore susceptible to being knocked around in transit, obstructed by dust or ash particles or general wear and tear from regular after a period of time.

When the FFD is in the correct position, it should look as follows:

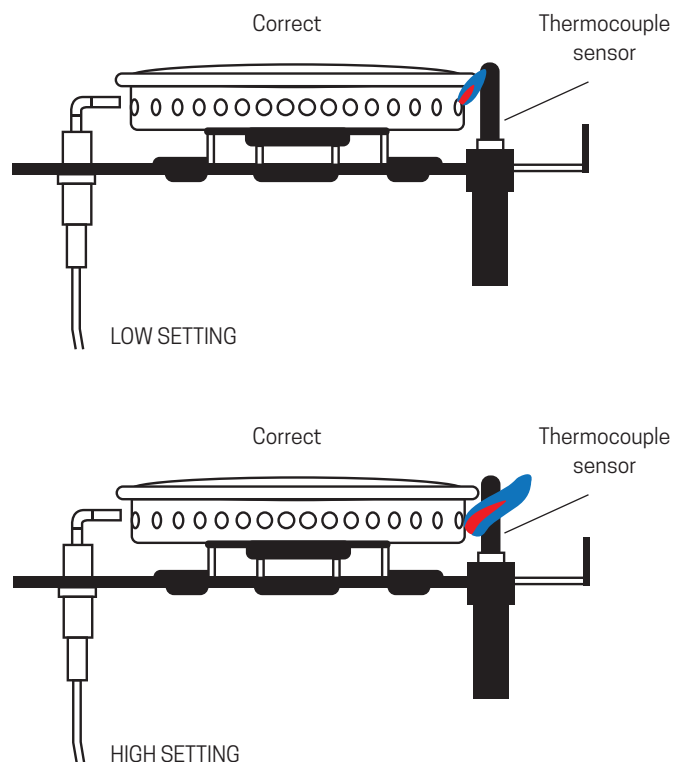


Figure 1

TROUBLESHOOTING STEPS:

NOTE: FFD ADJUSTMENT OR REPLACEMENT DOES NOT INTERFERE OR IMPACT THE OPERATION OF THE SMOKER'S GAS LINE

FFD issues occur with the the FFD thermocouple wire is off-centre, is obstructed by a particle or is faulty.

STEP 1: CHECK THE FFD

- ✓ Ensure your gas smoker is off and cool and not connected to a LPG gas bottle.
- ✓ Remove the water and wood chip bowls and racks to have clear access to the gas burner.
- ✓ Check the position of the FFD to determine if it is at the correct height and or ensure there are no dust or ash particles obstructing the FFD.
- ✓ Clean the FFD with a damp cloth to remove grease and debris that may affect its operation.
- ✓ Refer to Fig. 1 to see how the FFD should be positioned.

STEP 2: ADJUST THE FFD

- ✓ When you can see that the FFD Thermocouple thread is higher or lower than it should be.
- ✓ Loosen the two nuts on either side of the base of the FFD, then adjust the height to correct the position of the thermocouple. Refer to the below image for the location of the two nuts (Fig. 2).
- ✓ Retighten the two nuts when the FFD is in the correct position (Fig. 4).
- ✓ You can then reconnect the LPG Gas bottle and attempt to light the gas smoker.
- ✓ Please note that when you light the unit, you will need to push the control until the gas ignites and a flame is established.

Loosen the nuts to the thermocouple sensor, then adjust the height to the correct position.

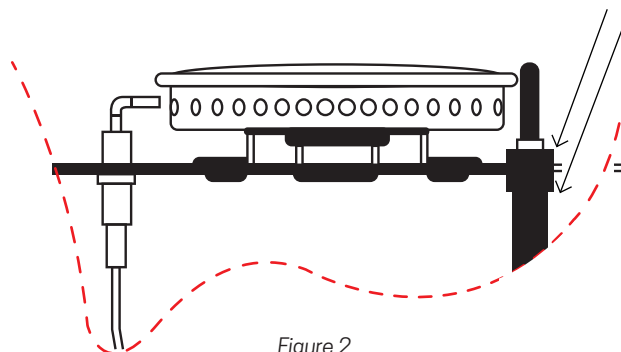


Figure 2

STEP 3: REPLACING THE FFD

If the FFD is at the correct height and has no visible blockages, it may be that the FFD needs to be replaced.

In this instance you will need to send an email to service@hark.com.au to request a new one is shipped to you. FFD replacements are free if within 12 months of original purchase (proof of receipt required) and a small charge applies when outside the warranty period.

Once you receive your FFD replacement in the mail, please follow these instructions carefully:

- ✓ Ensure your gas smoker is off and cool and not connected to a LPG gas bottle.
- ✓ Using a small shifter or 8mm spanner, unscrew the FFD Thermocouple copper wire thread from the valve connected to the control panel (Fig. 3) in an anti-clockwise direction.
- ✓ Unscrew the Hex nut on the top of the FFD sensor in an anti-clockwise direction (Fig. 4).
- ✓ Remove the old FFD thermocouple copper wire.
- ✓ Replace with the new FFD and tighten the Hex nut at the top of the FFD sensor in a clockwise direction (Fig. 4). The sensor needs to be in the flame at all times as per (Fig. 1).
- ✓ Tighten the FFD Thermocouple copper wire thread into the control panel valve (Fig.3), in a clockwise direction. DO NOT OVERTIGHTEN but screw in fully as shown.



Figure 3

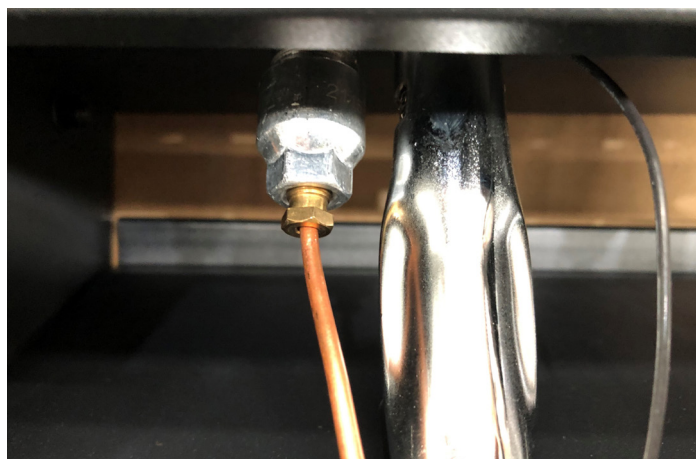


Figure 6

Fig. 6 - FFD Thermocouple copper wire thread IS tightened correctly. Tighten until can see 1 to 2 threads but do not overtighten!

- ☑ Once you have installed the new FFD correctly, you can then reconnect the LPG Gas bottle and attempt to light the gas smoker.

PLEASE NOTE THAT WHEN YOU LIGHT THE UNIT, YOU WILL NEED TO PUSH THE CONTROL KNOB IN, TURN IT TO THE LEFT AND CONTINUE TO PUSH THE CONTROL KNOB UNTIL THE GAS IGNITES AND A FLAME IS ESTABLISHED.



Figure 4

Refer Fig. 5 to demonstrate the incorrect way of tightening the wire thread. And refer Fig. 6 for the correct assembly.



Figure 5