

Flame Pack 400 Start-up and Calibration Test Checklist

- Inspect for any damage (missing parts, broken controls, etc.)
- Verify fill tank contains appropriate fuel mixture (60% nitrogen/40% hydrogen) and remove safety cap
- Attach fill assembly/ gauge to the fill tank (blow out any dust/dirt that may be in fill assembly)
- Close shut-off valve on the Flame Pack, remove the end cap from tank, and attach tank to fill assembly
- Ensure the front of the fill assembly is clear of personnel, slowly open fill tank until pressure balances, take note of fill tank pressure on the gauge
- Close valve on fill tank
- Relieve pressure in fill assembly from bleeder stem
- Disconnect Flame Pack from fill assembly and replace end cap
 - Remove filter, washer, and spring from primary filter housing
 - Extend stiffener on intake probe, press filter housing up to fill assembly, and manually blow out dust/dirt from intake assembly
 - Replace filter, washer, and spring in primary filter housing with appropriate orientation
- Remove fill assembly from fill tank and replace safety cap
- Turn adjustment knob counterclockwise until it stops
- Open the shut-off valve until it stops and back it off ¼ turn (fuel flowing should be audible)
- Turn on Flame Pack (to Search/Survey position). The audible alarm should sound, and the LED light should be on
- Depress the igniter. The alarm and light should turn off within 2-3 seconds, which indicates the Flame Pack is lit
- Turn the adjustment knob clockwise until the needle moves to 100% scale. This is visually confirming the winding is not damaged.
- Allow 5 minutes for warm-up
- Adjust the needle to a “floating” zero
- Spray or introduce 50 PPM test gas into intake cone
 - Needle should move to full scale (90% or higher is a passed test)
- Move needle from “floating” zero upscale until alarm sounds, and turn back to just below the alarm point
 - Alarm should be 40% scale or higher
 - If the alarm sounds below 40% scale, change both 9-volt batteries
 - If, after the batteries are charged, the alarm still sounds below 40% scale, the Flame Pack must be sent to the lab for repair



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SHUT DOWN PROCEDURE

- Place thumb over intake cone. This will put out the flame by stopping the air flow. Both audible and visual alarms should come on within 3 seconds
- Turn switch to the off position. Allow the fuel to flow for no less than 15 to 20 minutes with exhaust flame arrestor pointed down. Doing this will dry the cell
- Close the fuel valve

NOTE: After valve is closed, it is normal to continue to hear the sound of gas flowing for several seconds as pressure in the Flame Pack is released.

- Return Flame Pack to carry case