DIAGNOSTICS & TROUBLE SHOOTING FAULTS:

1. Dispenser will not start or will not flow gas:
    a. Is the dispenser powered? (Does the keypad display have a message? If not, then there is no power)
        i. If Yes, then go to B
        ii. If NO, then check that there is power to the dispenser. If there is power on the BLACK & WHITE main power lines to the dispenser, then check the 2 amp fuses on both the power supply and the main board.
    b. Does Keypad Display say “PLEASE LOGIN”?
        i. If YES, then go to Attendant Menu and log in
        ii. If NO, go to C
    c. Does the Keypad display say “INITIALIZING….” while the sales display resets, and then changes to “FUELING….”?
        i. If YES, then go to D
        ii. If NO, then go to E
    d. Does the pump turn on?
        i. If NO, is there 120 vac on the red pump motor starter wire when the keypad display says ‘FUELING?
            1. If YES, Check motor starter relay for proper operation, then go to G
            2. If NO, Then motor starter control relay on main board may be bad. Call PARAFOUR
    e. Is there a trouble code on the price display?
        i. If YES, what code”
            1. If EO2, then check nozzle switch setting in TECHNICIAN Menu.
                a. Press PTS button to turn off, and reset nozzle switch configuration, or;
                b. Replace nozzle in boot with nozzle switch, and reset nozzle switch configuration
            2. If EO4, then check that the pulser connections are good at the main board TP2 connector, Pins 1-4, and at the pulser connector in Ex-Proof enclosure on meter.
            3. If EO6, then reverse the GREEN & Yellow wires on TP2-Pins 2 & 3, for proper pulser rotation.
        ii. In NO, then go to F

f. Are the meter liquid inlet valve and vapor return valve open?
    i. If YES, go to G
    ii. If NO, then open the vapor valve first, allow for pressure to equalize, then open the liquid valve
g. What is the Differential Pressure? Look at the vapor and liquid pressure gauges in the hydraulics enclosure, and record the difference. There should be a minimum of 50 psi for proper operation (For Autogas fueling of LPI vehicles, there must be a minimum of 130 PSI differential.
    i. If less than 20, then go to H
    ii. If more than 50, then go to I
    iii. If LPI vehicle and less than 130 psi, then go to H
h. Is the pump making adequate differential pressure?
    i. If YES, then go to I
    ii. If NO, then check that the internal valves in the tank are fully open BEFORE the motor starts. Check to ensure that the bypass valve is installed and adjusted properly for the application, and has unrestricted flow returning to the vapor space of the tank.
i. Is the meter working properly?
    i. Inspect the meter strainer, clean and replace if required
    ii. Inspect the measuring chamber for free and smooth movement, clean, polish or replace as required
    iii. Inspect the differential valve, repair or replace seals as required
    iv. Inspect the vapor eliminator, repair or replace as required.

2. The dispenser does not appear to be sending pulses to the Card Reader:
    a. Is the pulser + and pulser - (red/black shielded pair in main conduit) connected to the card reader?
    b. Is the connection between the dispenser pulse supply wires and the card reader installed with shielded wire, with the drain grounded on the card reader side ground?
    c. Is the card reader supplying +5vdc reference voltage to the red wire?
    d. Is a resistor between the red/black wires required, and if so, is it present (consult with card reader manufacturer for connecting to an “Open Collector” type 2-wire pulse output circuit
    e. Is the dispenser and card reader both configured the same for pulses? (ie, 100:1, 10:1, pulse width, etc)
3. The dispenser is not authorizing the dispenser
    a. Is the Black/white shielded pair connected to a normally OPEN, close to authorize relay on the card reader?
    b. Has the card reader, been configured (or modified if so required as with the Fuel master FMU-2500)
    c. Is there continuity on the SW2 wires when the card reader is authorized?
    d. Has the SW2 configuration in the TECHNICIAN Menu been set to “MCR INPUT”