



AIR PRESSURE SETTING RECOMMENDATION for Sustained High Altitude Operations

Sustained operation and servicing of the X45 compressor above 4,000 ft (1219 m) requires the compressor setting be checked and/or adjusted for proper combustion.

For sustained operation above 7000 feet (2134 m) the compressor must be adjusted in order to maintain proper combustion.

Requirements

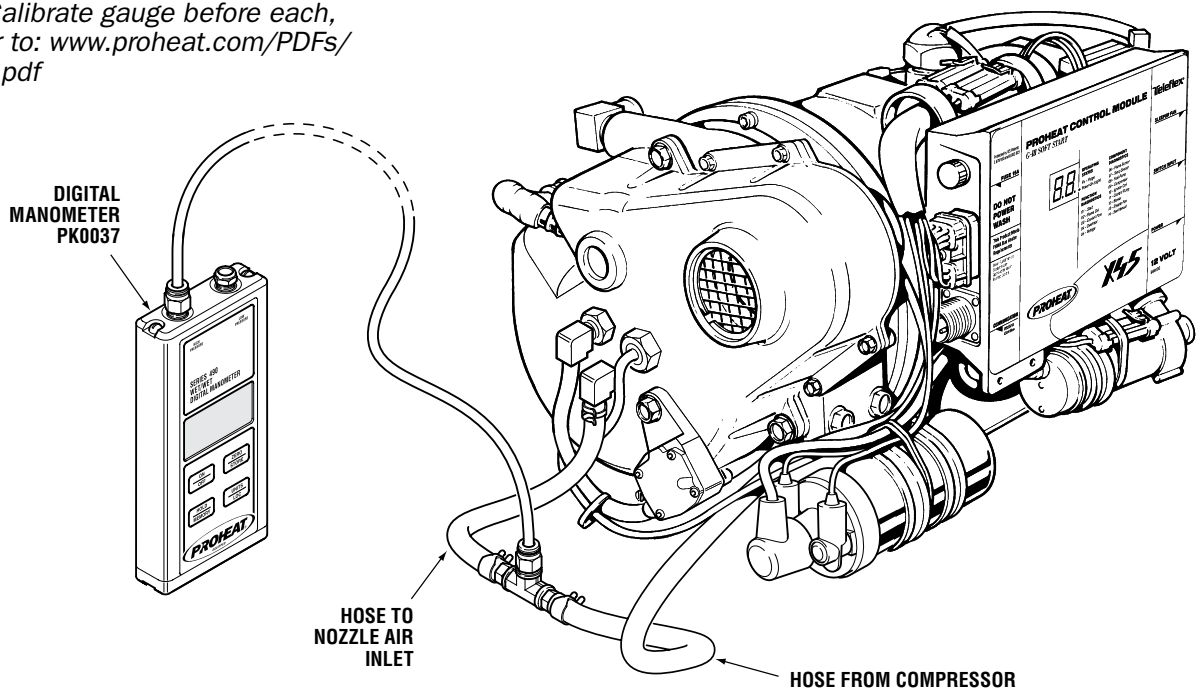
- Basic Hand Tools.
- Proheat Remote Start Switch (P/N 952925K).
- Proheat Digital Manometer Test Gauge (P/N PK0037).
- Or Proheat Analog Air Pressure Test Gauge (P/N PK0060).

Test Procedure

NOTICE

If using PK0060, Analog air pressure gauge, Calibrate gauge before each, use refer to: www.proheat.com/PDFs/990614.pdf

- Run heater until warm to the touch. This ensures the heater components are up to normal operating temperature.
- Switch heater off.
- Connect Digital Manometer PK0037 (or analog gauge PK0060) in-line as shown in figure A.



NOTICE

Remove Pressure Gauge when finished with measuring & setting procedure.

Figure A. Digital Manometer PK0037.

- Locate the rubber boot on the positive end of the ignition coil and peel it back to expose the positive terminal.

5. Select the DC Volts range of a multimeter and connect as per Figure B. The positive lead of the multimeter should be attached to the positive coil lead. The negative lead of the multimeter should be attached to the heater chassis.
6. With the heater running in full output (flame on and ignition is off) read the voltage at the coil to ensure voltage is nominally 12 +/- 1V for 12 V models and 24 +/- 1V for 24 V models. Check air pressure reading using the correct altitude for your location.
7. The reading must be within the range of the shaded area as shown in figure C.

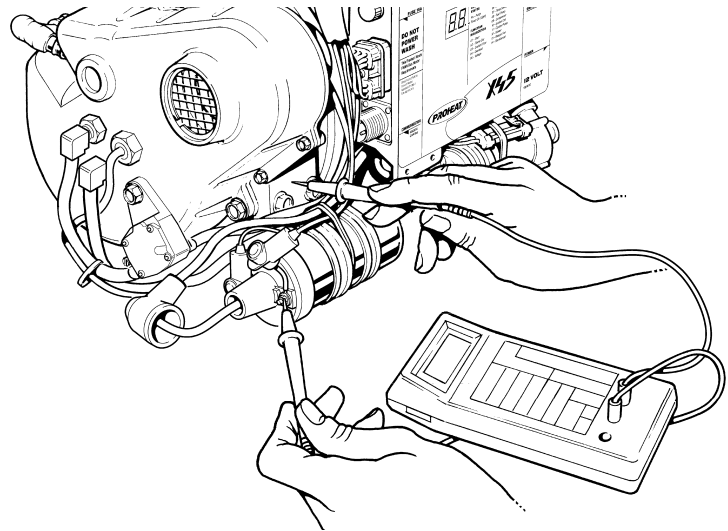


Figure B.

X45 Compressor Pressure Altitude Setpoint

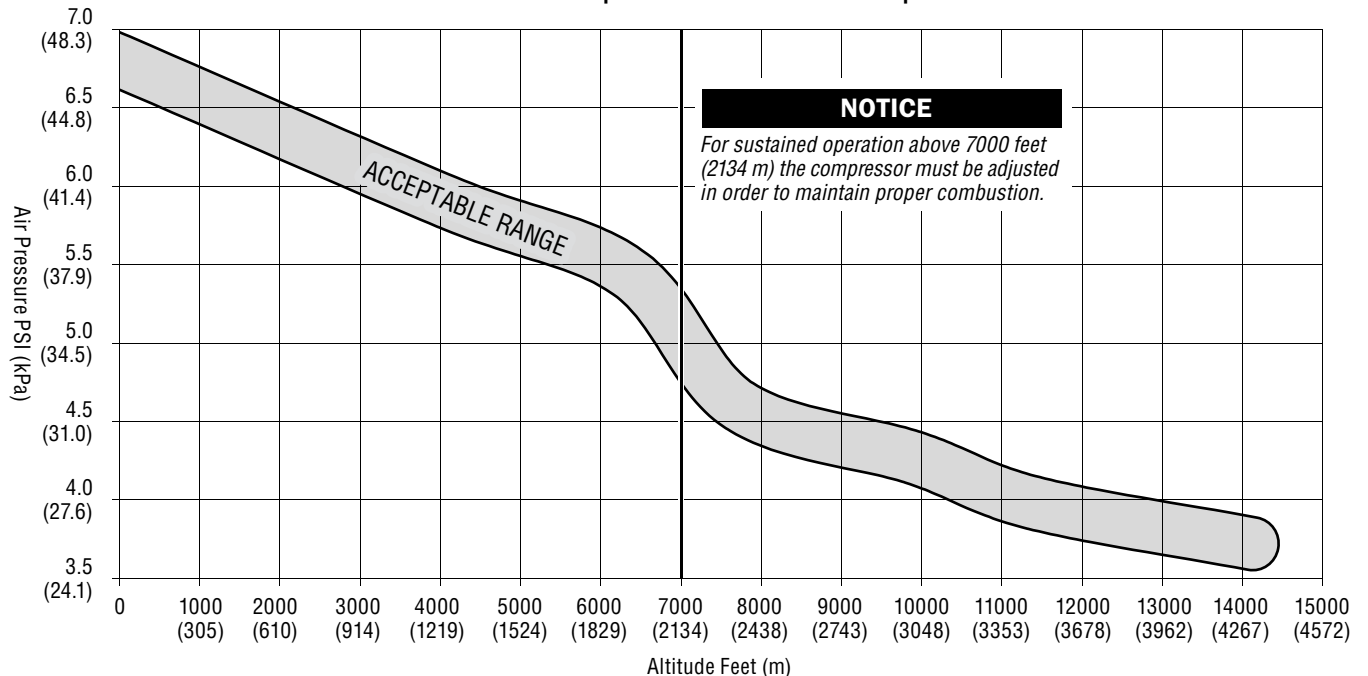


Figure C. Air Pressure Chart.

Air Pressure Checks

If air pressure is outside the recommended setting for your location please perform the following checks **before adjusting** the compressor:

Low Pressure Reading – Check:

Ensure the coil voltage is nominally $12 \pm 1V$ for 12V models and $24 \pm 1V$ for 24V models. If voltage is low, charge batteries and check compressor reading again.

- i) Inspect air line from compressor outlet to fan end inlet for leaks, kinks or other restrictions.
- ii) Check condition of air compressor filter. Retest with the filter removed.

High Pressure Reading – Check:

Ensure the coil voltage is nominally $12 \pm 1V$ for 12V models and $24 \pm 1V$ for 24V models. If voltage is high, stop charging batteries (turn engine off) and check compressor reading again.

- i) Nozzle and cavity for blockage. Refer to Step 5 on page 5-10 of the X45 service manual.

Compressor Adjustment

If after performing the above checks and the air pressure is still outside the recommended setting for your location, adjust the air pressure by turning the screw as shown in figure D.

NOTICE

Altitude correction is needed above 7,000 feet (2134 m) (see figure C on page 2).

NOTICE

If the air compressor pressure cannot be adjusted back into normal range, repair or replace air compressor. Refer to parts manual.

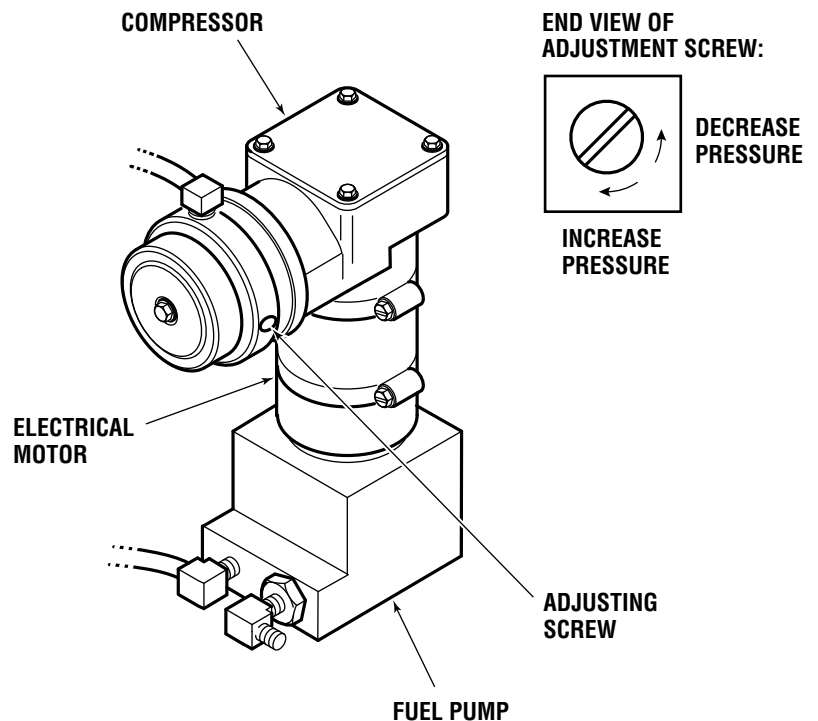


Figure D. Compressor/Fuel Pump Assembly