

1) ENGINE START PROCEDURES IN TEMPS BELOW 32°F (0°C) (continued)

D.) Pull Ether Inject knob once, then completely push back in. Simultaneously push Safety Circuit Bypass and Start buttons. Release Start button when engine starts. Release Safety Circuit Bypass button when engine oil pressure reaches 20psi (138 kPa). Pull Ether Inject knob if engine falters, but **DO NOT use more than once every 15 seconds.**

E) Once compressor unit had started, gradually close manual blowdown valve to keep engine running and allow to warm up for 10 minutes. *NOTE: DO NOT open manual blowdown valve during operation (Engine shutdown may result from excessive compressive oil carryover).

F) Push Service-Air button. Slowly close service valve until unit is at idle. If safety relief valve opens, completely open service valve. Gradually close service valve until discharge pressure reaches and holds at 110psi (758 kPa). Let unit run for 5 minutes. Service valve can now be completely closed & service lines attached.

2) OPERATION in EXTREME COLD:

A) Keep the unit clean and free of snow and/or mud accumulation.

B) DO NOT allow snow and/or mud to get inside housing. If it does, then clean thoroughly

C.) Keep cooling fans clean & unobstructed.

D.) Drain engine oil and refill when temperature drops below 15°F (-9°C).

E.) At temperatures below 20°F (-29°C), the engine must be warmed up before starting operations.

2) OPERATION in EXTREME COLD (continued):

F.) At temperatures below -4°F (-20°C) lubricate fly-wheel ring gear with low temperature grease (This will ensure full engagement of the starter pinion).

3.) JUMP STARTING the ENGINE:

A) **USING SLAVE RECEPTACLES:** BE AWARE THAT IN EXTREMELY COLD WEATHER, CRANKING POWER OF STORAGE BATTERIES CAN BE REDUCED BY 50% OR MORE. / IN EXTREMELY COLD WEATHER, IT IS ADVISABLE TO REMOVE STORAGE BATTERIES FROM THE UNIT & STORE IN A WARM AREA UNTIL NEEDED.

B) **USING JUMPER CABLES: WARNING!** Batteries generate hydrogen, a highly explosive gas. DO NOT connect the negative (-) jumper cable to the negative (-) terminal on the weak battery. **IF THIS WARNING IS NOT ADHERED TO, SERIOUS INJURY OR DEATH MAY RESULT.**

250CFM COMPRESSOR
COLD WEATHER/DESERT OPERATION

This abbreviated checklist is not to be used as a replacement for the -10 Series Technical Manuals or any other PMCS guide.

References: FM 90-3, DESERT OPERATIONS; FM 9-207, OPERATIONS and MAINTENANCE of ORDINANCE MATERIAL in COLD WEATHER; TM 5-4310-452-14; TB 43-0245-50, COLD WEATHER OPERATIONS, MATERIAL READINESS: TANK-AUTOMOTIVE ARMAMENT EQUIPMENT

1) ENGINE START PROCEDURES IN TEMPS BELOW 32°F (0°C) USING ETHER STARTING AID: *CAUTION: USE EXTREME CAUTION WHEN USING ETHER. IT IS AN EXTREMELY VOLITILE GAS WITH A COMBUSTION TEMP LOWER THAN THAT OF A VAPORIZED DIESEL FUEL. TOO MUCH ETHER CAN CAUSE AN UNCONTROLLED EXPLOSION AND MAY RESULT IN SEVERE ENGINE DAMAGE.

- A) Disconnect any service air lines.
- B) Ensure that manual stop handle is completely pushed in.
- C) Open manual blowdown valve and service valve *NOTE: When using Ether Inject Knob, ensure that the knob is pushed in immediately after pulling out.

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