

INCH-POUND

MIL-PRF-44494
 AMENDMENT 2
27 February 1998
 SUPERSEDING
 AMENDMENT 1
 1 December 1997

PERFORMANCE SPECIFICATION

HEATER, SPACE - RADIANT, NON-POWERED, LIQUID & SOLID FUEL

This amendment forms a part of MIL-PRF-44494, dated 5 February 1997, and is approved for use by all Departments and Agencies of the Department of Defense.

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Paragraph 1.2: Change in line 1 from "40,000 BTU" to **"45,000 BTU"**

Paragraph 1.2: Change in line 2 from "20,000 BTU" to **"22,000 BTU"**

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Table I: Change row 4, column 3 from "9130-00-031-5816" to **"9130-01-031-5816"**

Paragraph 3.4.3.1: Change in line 1 from "Fuel control on/off switch" to **"On/off switch"**

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Paragraph 3.4.5: Change in line 2 from "30,000 BTU/hr" to **"40,000 BTU/hr"**

Paragraph 3.4.5: Change in line 3 from "10,000 BTU/hr" to **"15,000 BTU/hr"**

Paragraph 3.4.6: Change in line 2 from "20,000 and 40,000 BTU/hr" to **"20,000-45,000 BTU/hr"**

Paragraph 3.4.6: Change in line 3 from "8,000-20,000 BTU/hr" to **"9,000-22,000 BTU/hr"**

Delete Table II and replace with:

TABLE II Heat Output Requirements

Ambient temp (F)	Fuel Type	Type I (Low) (BTU/Hr)	Type I (High) (BTU/Hr)	Type II (Low) (BTU/Hr)	Type II (High) (BTU/Hr)
40	DF2/JP8	20,000	30,000	9,000	15,000
-25	JP8	30,000	45,000	10,000	22,000
-60	JP8	30,000	45,000	10,000	22,000

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Paragraph 3.4.9: Change in line 2 from “(NSN 7240-21-911-8834)” to “(NSN 7240-21-912-7162)”

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Paragraph 3.5.1: Change in line 3 from “60” to “**66**” and “38” to “**48**”

Paragraph 3.6.2: Change in line 1 from “Operation with the thermo-electric fan” to “**Thermo-electric fan interface**”

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Table III: Change row 13, column 1 from “Automatic shut off capability” to “**Automatic fuel shut off capability**”

Table III: Change row 14, column 1 from “Fuel lines” to “**Fuel lines and fittings**”

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Table III: Change row 25, column 1 from “Operation with thermo-electric fan” to “**Thermo-electric fan interface**”

Table III: Delete row 30 “Operator/maintenance manual”

Table III: After row 35 add new row “**High Altitude, 3.8.6, 4.8.6**” and “**X**” in column 4.

Table III: Add in row 37, column 2 “**3.9**”

Table III: Add in row 38, column 2 “**3.9**”

Table III: Change row 43, column 1 from “Sharp edges/moving parts” to “**Sharp edges**”

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Paragraph 4.4.3.1: Change in line 1 from “Fuel control on/off switch” to “**On/off switch**”

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Paragraph 4.4.5: Change in line 4 from “30,000 BTU/hr” to “**40,000 BTU/hr**” and change “10,000 BTU/hr” to “**15,000 BTU/hr**”

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Delete Paragraph 4.8.2 and substitute:

4.8.2 Basic climate operation. Stabilize climatic chamber ambient air temperature at 40°F (+/- 2). Cold soak heater, accessories, and fuel. Set up heater per 4.6.1. Operate heater using fuels specified in Table II. Adjust heater to obtain low and high output requirements as specified in Table II. Measure heater performance as outlined in Appendix A. Inability of the Type I heater to operate over the minimum range of 20,000 BTU/hr to 30,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure. Inability of the Type II heater to operate over the minimum range of 9,000 BTU/hr to 15,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure.

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Delete Paragraph 4.8.3 and substitute:

4.8.3 Basic cold operation. Stabilize climatic chamber ambient air temperature at -25°F (+/- 2). Cold soak heater, accessories, and fuel. Set up heater per 4.6.1. Operate heater using fuels specified in Table II. Adjust heater to obtain low and high output requirements as specified in Table II. Measure heater performance as outlined in Appendix A. Inability of the Type I heater to operate over the minimum range of 30,000 BTU/hr to 45,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure. Inability of the Type II heater to operate over the minimum range of 10,000 BTU/hr to 22,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure.

Delete Paragraph 4.8.4 and substitute:

4.8.4 Severe cold operation. Stabilize climatic chamber ambient air temperature at -60°F (+/- 2). Cold soak heater, accessories, and fuel. Set up heater per 4.6.1. Operate heater using fuels specified in Table II. Adjust heater to obtain low and high output requirements as specified in Table II. Measure heater performance as outlined in Appendix A. Inability of the Type I heater to operate over the minimum range of 30,000 BTU/hr to 45,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure. Inability of the Type II heater to operate over the minimum range of 10,000 BTU/hr to 22,000 BTU/hr within acceptable smoke and efficiency readings shall constitute a failure.

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Paragraph 4.13.1: Change in line 2 from "Type I" to "**Type II**"

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Paragraph 6.1: Delete and substitute:

"6.1 Intended use. The Type I and Type II heaters are intended to heat personnel and equipment housed in the 5 and 10 Man Arctic Tents, the Soldier Crew Tent and General Purpose tents. The heaters provide radiant heat without the use of electrical power. The heaters can be safely operated on the following fuels: DF1, DF2, DFA, JP-8, and wood and coal."

Custodians:

Army - GL
Navy - YD1
Air Force - 99

Preparing Activity:

Army - GL

Review activities:

Army - MD1, QM1
Navy - MC
Air Force - 84
DLA-IS

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