

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN
 DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER

**3/4-TON 4 X 4 TRUCK CHASSIS M56 AND M56C,
 AMBULANCE TRUCK M43, CARGO TRUCK M37,
 COMMAND TRUCK M42, MAINTENANCE TRUCK
 M201 (SIGNAL CORPS MODEL V-41/GT), AND
 PANEL TRUCK M152 (SNL G-741): INSTALLA-
 TION OF HOT WATER PERSONNEL HEATER KIT**

Departments of the Army and the Air Force, Washington 25, D. C.
 19 December 1956

	Paragraph	Page
SECTION I. GENERAL		
Scope.....	1	1
Application.....	2	2
II. INSTALLATION INSTRUCTIONS		
Personnel heater.....	3	6
Thermostat replacement.....	4	8
Water hose installation.....	5	8
Diverter and defroster installation.....	6	9
Electrical installation.....	7	11
Radiator cover installation.....	8	14
III. OPERATING INSTRUCTIONS		
Heater controls.....	9	16
Radiator cover adjustments.....	10	16

SECTION I
 GENERAL

1. Scope. *a.* These instructions apply to those vehicles in the 3/4-ton 4 x 4 series vehicles, operated under conditions set forth in this bulletin.

b. The sequence of operations given herein is the result of a trial installation. However, interferences may be encountered due to modi-

fication or damage to a vehicle as outlined in this publication. In such cases, a field expedient may be resorted to by the installing personnel to overcome the interference found on the particular vehicle, and the installation procedure may be altered accordingly.

c. TM 9-2855 provides information on preparation and operation of wheeled and tracked vehicles in arctic conditions of extreme cold (0° to -65° F.), ((1) through (6) below).

- (1) Winterization equipment and processing, installation instructions, and methods.
- (2) Operation and maintenance in extreme cold.
- (3) Preparation of cooling system for low temperatures.
- (4) Storage, handling, and use of fuels, lubricants, and anti-freeze compounds.
- (5) Method of adjusting specific gravity readings of batteries exposed to low temperatures.
- (6) Application of insulating compound.

Note. TM 9-2855 is applicable to this vehicle as well as to all other vehicles. This bulletin and TM 9-2855 must be considered as one publication, not merely explanatory supplements to each other.

d. Reference will also be made to publications (1) through (7) below.

- (1) TM 9-850, Abrasive, Cleaning, Preserving, Sealing, Adhesive, and Related Materials Issued for Ordnance Materiel.
- (2) TM 9-2835, Lubrication.
- (3) TM 9-2857, Storage Batteries, Lead-Acid Type.
- (4) TM 9-2858, Cooling Systems: Vehicle and Powered Ground Equipment.
- (5) TM 9-8030, $\frac{3}{4}$ -ton 4 x 4 Trucks, SNL G741-series.
- (6) FM 31-70, Basic Arctic Manual.
- (7) FM 31-71, Operations in the Arctic.

2. Application. a. The personnel heater kit is used in areas where the normal ambient temperature is $+40^{\circ}$ to -20° F. It is installed on vehicles provided with soft- or hard-top closure.

b. The kit is to be installed by Ordnance maintenance units or by troop units under supervision of Ordnance mechanics.

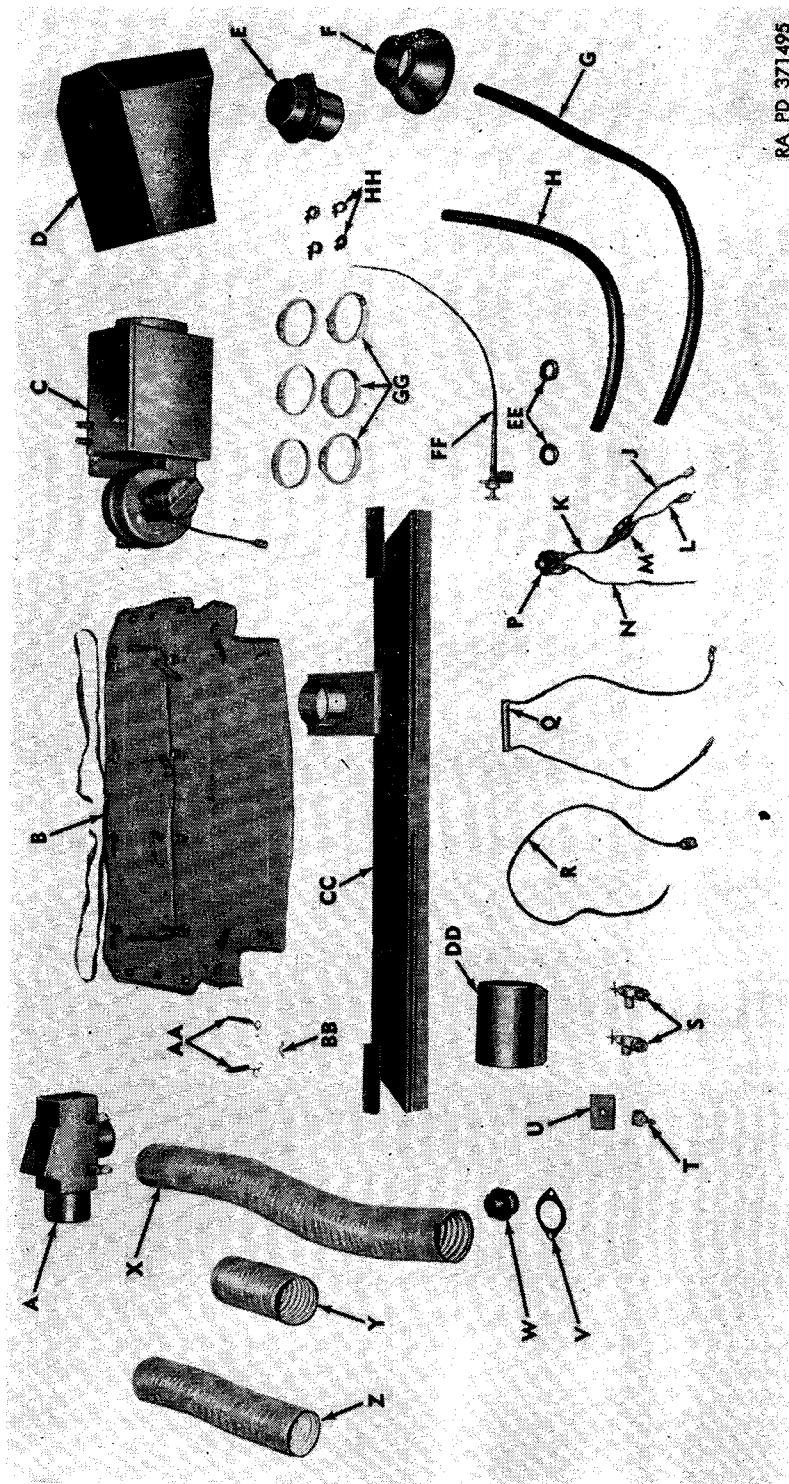
c. The personnel heater is a blower-type hot water heater. It is secured to the top of the left front fender (fig. 4). Heated air is distributed from the heater to vehicle cab and/or windshield defroster by a blower and heat diverter. Heat is controlled by a "diverter" control knob on the instrument panel, which in turn operates a butterfly or damper valve in the heat diverter assembly.

d. A canvas winterfront radiator cover is supplied with the kit to reduce flow of air to engine compartment. An adjustable aperture flap in the cover permits manual regulation of cold air through the

radiator as conditions demand, in accordance with the engine temperature gage.

e. The personnel heater kit is packaged under the title "Kit, Hot Water Personnel Heater," and bears the stock No. G249-5702003, and is composed of the following items:

<i>Name</i>	<i>Part No.</i>	<i>Quantity</i>
ADAPTER, duct.....	7700292	1
ADAPTER, hot air outlet.....	8380648	1
BRACKET, duct protector.....	8707737	1
BRACKET, heater switch.....	8710612	1
BREAKER, circuit, 15 amp.....	8376915	1
BUSHING, pipe, shoulder, ½ x ¾.....	144039	2
CABLE, assy.....	8710631	1
CABLE, assy.....	8710635	1
CABLE, assy.....	8710638	1
CABLE, assy.....	8710639	1
CABLE, assy.....	8710670	1
CLAMP, heater cable.....	7724765	2
CLAMP, heater duct.....	7537473	6
CLAMP, hot water hose.....	502913	4
COCK, shutoff, ¾NPTF male inlet, hose, nipple outlet, ½ id hose.....	7524043	2
CONNECTOR, Y, assy.....	7982404	1
CONTROL, diverter, assy.....	7700298	1
COVER, heater.....	8380649	1
COVER, radiator, assy.....	7387274	1
Composed of:		
1 COVER.....	7399400	--
2 LOOP, 90 degree.....	7716428	--
10 LOOP, flat.....	7717706	--
4 SCREW, TAPPING, THREAD CUTTING:		
No. 10-16 x ¾.....	141592	--
20 SCREW, TAPPING, THREAD CUTTING:		
pan-hd, sltd-blunt-pt, S, cd- or zn-pltd, No. 10 (0.190)-24NC-2 x ¾.....	171716	--
2 SPRING, winterfront, cover, retaining.....	771706	--
DEFROSTER, assy.....	7700288	1
DIVERTER, assy.....	7700289	1
DUCT, hot air (11 in. long).....	8711056	1
DUCT, hot air (20 in. long).....	7961512	1
DUCT, hot air (38 in. long).....	7399962	1
GASKET, thermostat.....	7702588	1
GROMMET, ¾ id, 1-½ x 1-⅞, w/groove.....	8707736	1
GROMMET, 1 id, 1¾ dia, ⅞ w.....	187954	2
HEATER, assy.....	8380650	1
HOSE, hot water intake.....	8710561	1
HOSE, hot water return.....	8710559	1
NUT, PLAIN, HEXAGON: S, cd- or zn-pltd, No. 8		
(0.164)-32NC-2B, ½ w, ¼ thk.....	120622	2
NUT, PLAIN, HEXAGON: S, cd- or zn-pltd, No. 10		
(0.190)-32NF-2B, ¾ w, ¼ thk.....	120614	1



RA PD 371495

Figure 1. Hot-water personnel heater kit.