

**WARRANTY PROGRAM  
FOR**

**AIR CONDITIONER, HORIZONTAL COMPACT,  
36,000 Btu/Hr, MULTIPLE POWER INPUT  
MODEL MH40-MP  
NSN: 4120-01-330-6543**

**Approved for public release; distribution is unlimited.**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY  
30 September 1991**



**Department of the Army Technical Bulletin**

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**Headquarters, Department of the Army  
Washington, D.C.**

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**1. GENERAL.** The purpose of this technical bulletin is to outline the procedures for identifying warranted items of the air conditioner. This bulletin defines a material and workmanship warranty for the equipment described within this document.

**2. EXPLANATION OF TERMS.** The definitions that apply to this Warranty Technical Bulletin can be found in Appendix A.

**3. COVERAGE.** The contractor, Airtacs Corporation, guarantees the air conditioner as described within Table 1-1 and all parts thereof, at the time of acceptance or delivery, to be free from all defects in material and workmanship for 12 months from the date unit is placed into service not to exceed 24 months from acceptance date. An additional 12 month applies to the motor controller and logic box assembly. Expendable items such as filters (air, fuel and oil), or any expendable items provided as part of spares, are not covered under the warranty on this contract.

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**Table 1-1. Covered Item.**

Nomenclature:	Air Conditioner, Horizontal Compact, 36000 Btu/Hr
Line Item Number:	0001
Model Number	MH40-MP
NSN:	4120-01-330-6543
Manufacturer and Part Number	Airtacs Corporation Red Lion, PA 19363 FSCM: 67302 Part Number: 13229E6700
Serial Numbers:	0001 through 1072
Contract Number:	DAAK01-90-D-0062
Coverage Period:	24 months
Type of Coverage:	Material and workmanship

**4. CONTRACTOR RESPONSIBILITIES.** The contractor is responsible for providing repair or replacement of warranted items as prescribed by this Technical Bulletin upon receipt, within the warranty period, of a properly completed Material Deficiency Report (MDR) along with the hardware to be repaired or replaced.

a. The contractor shall repair or replace all defective parts within 10 days of receipt as above provided, or within such additional time as the contractor and attracting officer shall agree is reasonable under all circumstances.

b. If the contractor fails to accomplish the repair or replacement within the prescribed time limits, the government may procure the required parts from another source and the contractor shall be responsible to reimburse the government the costs of such procurement as well as reasonable labor charges to effect the repair. In such event, the contractor may retain the items which were returned and not timely repaired or replaced.

c. If the government determines that a defective warranted item is within the maintenance capability of the user, but is within

the responsibility of the contractor as prescribed herein, the user may proceed to repair or replace. Any parts which are shown to be defective at the time of delivery, may be returned to the contractor for replacement and the contractor will replace them at no cost to the government.

d. In all situations where repair or replacement requires transportation of the nonconforming or defective item(s), shipping costs from the original line item delivery point to the contractor's plant and return shall be at the expense of the contractor.

**5. GOVERNMENT RESPONSIBILITIES.** The Government will initiate warranty claim actions (WCA) for warranted items and material deficiency reporting (MDR) actions for system failures in accordance with DA PAM 738-750. The TROSCOM warranty control office (WARCO), AMSTR-MEPN, DSN 693-9393, CMCL (314) 263-9393, will handle warranty claims that are generated by the using units. The TROSCOM WARCO, in conjunction with the TROSCOM Contracting Officer will generate action with the contractor to resolve the WCA's.

a. **Government Maintenance.** Using units are allowed to perform troubleshooting, preventive maintenance and replacement of defective components as authorized by Technical Manual TM 9-4120-404-14 and the Maintenance Allocation Chart included in that manual.

b. **Owning Unit Responsibilities.** Owning unit will initiate warranty claim actions (WCA) for warranted items in accordance with DA PAM 738-750.

c. **Army Oil Analysis.** Not applicable.

d. **Alterations / Modifications.** Alterations and/or modifications shall not be made unless expressly authorized or directed by U.S. ARMY TROOP SUPPORT COMMAND, 4300 GOODFELLOW BLVD., ATTN: AMSTR-MEP, ST. LOUIS, MO 63120-1798, AUTOVON 693-9404, CMCL (314) 263-9404.

**6. DESIGN / PERFORMANCE SPECIFICATIONS.** Not applicable.

**7. NULLIFICATIONS TO WARRANTY.** This warranty does not apply to equipment performance deficiencies attributable to:

a. Installation, utilization or operation not in accordance with the operating instructions and technical data provided with the unit.

b. Operation, repair or alteration by individuals not trained in proper operation or maintenance of the unit.

c. Repairs with, or an addition of, items not supplied by or approved by Airtacs Corporation.

d. Failure to perform operation and maintenance in accordance with Technical Manual TM 9-4120-404-14 and the Maintenance Allocation Chart included in that manual.

e. Any abuse or misuse of the equipment.

e. Damage caused by combat conditions.

**8. ABUSE DETERMINATION.** Abuse of the equipment defined within this bulletin shall be defined as any improper use, repair, or handling of the warranted items.

**9. CLAIMS PROCEDURES.** DA Forms 2402 (Exchange Tag) and 2407 (Maintenance Request) shall be used by the field in reporting warranty claim actions. The purpose of these forms is for the seller to repair or replace any defective part so the equipment can be returned to an operational readiness mode. Warranty claims from using field units shall be forwarded to the TROSCOM Customer Feedback Center, AMSTR-MOF, 4300 Goodfellow Boulevard, ST. Louis, MO 63120-1798, DSN 693-2249, CMCL (314) 263-2249. Data FAX number DSN 693-1836, CMCL (314) 263-1836. Upon receipt of these forms TROSCOM will initiate and forward an MDR to the Contractor.

a. **Identification of Failed Item.** All failed warranty items shall be tagged/identified to prevent improper repair or use. All failed items shall be tagged using DA Form 2402, Exchange Tag, and DA Form 2407, Maintenance Request, will be completed in accordance with DA PAM 738-750.

b. **Disposition.** In the event of a failed warranty item, all procedures for handling, repair, and evacuation of the failed item shall be as determined by the applicable WARCO.

c. **False Returns.** If items are returned to the Contractor that are found to be serviceable, nullified in accordance with paragraph 3.1, or it is determined that the failure was not subject to the guarantee set forth, then the contract price will be equitably adjusted.

d. **Reimbursement for Army Repair.** Refer to paragraph 4. for definition of contractor reimbursement for Army repair.

e. **Claims/Denials/Disputes.** In the event the Contractor denies or disputes a warranty claim, the claim shall be referred to the WARCO who initiated the warranty claim for final disposition.

f. **Reporting.** Reporting or recording action on a failed item shall be as specified in DA PAM 738-750.

**10. STORAGE /SHIPMENT / HANDLING.** Storage and handling of the equipment or its components shall be as prescribed in applicable Technical Manual TM 9-4120-404-14. Instructions for shipment of components will be provided by the TROSCOM Warranty Control Officer. No shipment shall be made without direct authority from the WARCO.

## APPENDIX A

### TERMS

1. **Abuse.** The improper use, repair, or handling of warranted items such that the warranty may become void.
2. **Acceptance Date.** The date an item of equipment is accepted into the Army's inventory by the execution of the acceptance block and signing of a DD Form 250 or approved acceptance document, by an authorized representative of the government.
3. **Alterations/Modifications.** Any alteration after production such as retrofit, conversion, remanufacture, design change, engineering change and the like.
4. **Defect.** Any condition or characteristic in any supplies or services furnished by the contractor under the contract that is not in compliance with the requirements of the contract.
5. **Failed Item.** A part, component, or end item that fails to perform its intended use.
6. **False Return Rate.** The return of suspected defective warranty items to the manufacturer that are eventually determined to be serviceable.
7. **Reimbursement.** A written provision in a warranty contract whereby the user may make the necessary repairs with or without prior approval of the contractor and the Government will be reimbursed for the repair parts and/or labor costs.
8. **Repair.** To restore an item to serviceable condition without affecting the warranty.
9. **Repairable.** An item that may be reconditioned or economically repaired for reuse when it becomes unserviceable.
10. **Serviceable.** The condition of an item which may be new or used that meets all the requirements and performs the functions for which it was originally intended.
11. **WARCO.** Warranty Control Offices established at the intermediate General Support/Director of Industrial Operations Level or equivalent who serve as the intermediary between the troops owning the equipment and the local dealer, contractor, or manufacturer. All warranty claim actions will be processed through the WARCO.
12. **Warranty.** A promise or statement of fact from a seller to a purchaser on the nature, usefulness, or condition of the supplies or performance of services to be furnished. The main purposes of a warranty in a government contract are to outline the rights and obligations of the contractor and the government for defective items and services. It also serves to foster quality performance by the contractor but is not a substitute for an adequate quality assurance program.
13. **Warranty Claim.** Action started by the equipment user for authorized warranty repair, replacement, or reimbursement made from the local dealer or manufacturer.
14. **Warranty Period.** Time during which the warranty is in effect. Normally measured as the maximum number of years, months, days, miles, or hours used.
15. **Warranty Start Date.** The date the warranty is put into effect.

## APPENDIX B

## TROSCOM WARRANTY CONTROL OFFICES (WARCO'S)

Command	Location/Station	Address	Phone AV/COMM
TROSCOM	HEADQUARTERS	Cdr, TROSCOM ATTN: AMSTR-MEP 4300 Goodfellow Blvd. St. Louis, MO 63120-1798	693-9404
USACSLA	FT. HUACHUCA	Cdr, USA CSLA ATTN: SELCLMMP-MM Ft. Huachuca, AZ 85613-7090	879-6037
USAEMRA	VINT HILL FARMS	Cdr, USA EMRA ATTN: SELEM-A Vint Hill Farms Station Warrenton, VA 22186	249-6781
USAREUR	Belgium, Chivres	Cdr, 47th Area Spt Group ATTN: AERUK-Q APO NY 09075	243-1274
USAREUR	GE, ANSBACH	Cdr, 1st AD ATTN: AETS-KGD-M APO NY 09326	ETS 468-8467
USAREUR	GE, BAD KREUZNACH	Cdr, 8th DMMC ATTN: AETH-MC APO NY 09111	ETS 490-7181/7148
USAREUR	GE, BERLIN	Cdr, USA Berlin ATTN: AEBA-MA-O APO NY 09742	ETS 332-3249/3189
USAREUR	GE, BREMERHAVEN	Cdr, 543D Area Support Grp. ATTN: AERB-GM APO NY 09069	ETS 342-8285/8588
USAREUR	GE, CHIVRES BERLIN	Cdr, 80th Area Support Grp. ATTN: AERSH-LM APO NY 09088	ETS 361-5454
USAREUR	GE, DARMSTADT	Cdr, 32D AADCOM ATTN: AETL-GD-CM APO NY 09175	ETS 348-6532/7186

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Command	Location/Station	Address	Phone AV/COMM
USAREUR	GE, FRANKFURT	Cdr, 3D DMMC (3d AD) ATTN: AETFOE-MMO-MAT APO NY 09039	ETS 328-7221/8281
USAREUR	GE, FRANKFURT	Cdr, V Corps ATTN: AETV-GDM-M APO NY 09079	ETS 320-6062/5773
USAREUR	GE, FULDA	Cdr, 11th ACR ATTN: AETO-CSS-MMC APO NY 09146	ETS 321-3679/3779
USAREUR	GE, GARLSTEDT	Cdr, 2D Arrnd Div (FWD) ATTN: AEUAD-498-MAT APO NY 09355	ETS 342-6730-6728
USAREUR	GE, GOEPPINGEN	Cdr, 1st Inf Div Fwd ATTN: AETSGSB-MM-MMD APO NY 09137	ETS 425-3637/3753
USAREUR	GE, GRAFENWOEHR	Cdr, 7th ATC ATTN: AETT-DOL-SM-E APO NY 09114	ETS 476-2567/2767
USAREUR	GE, GRAFENWOEHR	Cdr, MI Mat Fielding ATTN: AMCPM-GCM-MFT-E APO NY 09114	ETS 476-2757/2612
USAREUR	GE, HEIDELBERG	Cdr, 7th MEDCOM ATTN: AEMLO-L APO NY 09102-3304	ETS 370-2718/2719
USAREUR	GE, HEIDELBERG	Cdr, 26th Spt Gp ATTN: AGUSG-LG-M APO NY 09102-0161	ETS 370-8319/6478
USAREUR	GE, KAEFERTAL	Cdr, 51st Maint Bn ATTN: AERAB-MO APO NY 09086	ETS 380-6773/7416
USAREUR	GE, KAISER- SLAUTERN	Cdr, 9th Spt Ctr ATTN: AERLM-LS APO NY 09325-3704	ETS 483-7561/8625



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Command	Location/Station	Address	Phone AVICOMM
USAREUR	GE, KAISER-SLAUTERN	Cdr, 29th Area Support Grp. ATTN: AERAS-MM APO NY 09054	ETS 483-7347/8235
USAREUR	GE, KAISER-SLAUTERN	Cdr, HHD 66th Maint Bn ATTN: AERAS-W-D APO NY 09227	ETS 489-6636/6676
USAREUR	GE, KARLSRUHE	Cdr, 18th Eng Bde ATTN: AEUEG-S APO NY 09164-2934	ETS 376-6069/7102
USAREUR	GE, MANNHEIM	Cdr, CBT Equip Gp Europe Grp. ATTN: AERSE-M-SMO APO NY 09166-3768	ETS 380-7686/6285
USAREUR	GE, MOEHRINGEN	Cdr, VII Corps ATTN: AETS-GD-MR APO NY 09107	ETS 421-2622/2382
USAREUR	GE, MUNICH	Cdr, 66th MI GP ATTN: IAGPE-LO-MM APO NY 09108-4827	ETS 440-7306/6433
USAREUR	GE, NELLINGEN	Cdr, 800th CMMCS ATTN: AETS-SC-CMMC-OP APO NY 09061	ETS 421-6500/6372
USAREUR	GE, NELLINGEN	Cdr, 2d SUPCOM Corps ATTN: AETS-SC-GE-TAAEM APO NY 09160	ETS 421-6385
USAREUR	GE, NEU ULM	Cdr, 55th Maint Bn ATTN: AEUATS-MMC APO NY 09035	ETS 427-6189/17193
USAREUR	GE, NUERNBERG	Cdr, 2d ACR ATTN: AETSAC-AL-RMO APO NY 09093	ETS 460-5757/5805
USAREUR	GE, OBERURSEL	Cdr, 4th TRANSCOM ATTN: AEUTR-SVC-M APO NY 09451-4006	ETS 325-2743/2808

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Command	Location/Station	Address	Phone AV/COMM
USAREUR	GE, PIRMASENS	Cdr, 59th Ord Bn ATTN: AEUSA-DMM APO NY 09189	ETS 495-7216/7276
USAREUR	GE, RHEINBERG	Cdr, 7th SUPCOM ATTN: AERSC-LM APO NY 09712	Comm 02843-70757
USAREUR	GE, RHEINBERG	Cdr, 54 Area Support Gp ATTN: AERV-L APO NY 09712	Comm 02843-70674
USAREUR	GE, SANDHOFEN	Cdr, 70th TRANS BN ATTN: AERSS-S APO NY 09028	ETS 382-6110/7236
USAREUR	GE, SECKENHEIM	Cdr, HQ AMC Europe ATTN: AMXEU-CQ APO NY 09333	ETS 380-6222 Comm 0621-478791
USAREUR	GE, WIESBADEN	Cdr, 19th Support Center ATTN: AETV-SCM-PF APO NY 09757-5000	ETS 337-5851/15377
USAREUR	GE, WORMS	Cdr, 5th SIGCOM ATTN: ASELG-M APO NY 09056	ETS 383-7554/7548
USAREUR	GE, WUERZBERG	Cdr, 3d ID ATTN: AETSBGD-MR APO NY 09036	ETS 350-7188/6226
USAREUR	GE, WUERZBERG	Cdr, 3d ID ATTN: AETSBSC-DM-(WARCO) APO NY 09701	ETS 355-2603/2782
USAREUR	GE, ZWEIBRUECKEN	Cdr, 60th Ord Gp ATTN: AEROD-LM APO NY 09052-3818	ETS 494-6275/7398
USAREUR	GE, ZWEIBRUECKEN	Cdr, 200th TAMMC ATTN: AEAGD-MMC-RL-W APO NY 09052-5356	ETS 494-6568/8268

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Command	Location/Station	Address	Phons AV/COMM
USAREUR	IT, LIVORNO	Cdr, 201st MMC (USASETAFETS) ATTN: AESE-MMX-M APO NY 09019	ETS 633-7002/7087
USARJ	JAPAN, ZAMA	Cdr, USA Garrison Honshu ATTN: AJGH-ID-MS-Q APO San Francisco 96343-0071	228-4194
WESTCOM	FT. SHAFTER	Cdr, USASCH ATTN: APZV-DLM Ft. Shafter, HI 96858	438-1410

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 DATE SENT

PUBLICATION NUMBER

TB 9-4120-404-24

PUBLICATION DATE

PUBLICATION TITLE

AIR CONDITIONER, HORIZONTAL

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
6	2-1 a		
B1		4-3	
125	line 20		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

In line 6 of paragraph 2-1a the manual states the engine has 6 Cylinders. The engine on my set only has 4 Cylinders. Change the manual to show 4 Cylinders.

Callout 16 on figure 4-3 is pointing at a bolt. In key to figure 4-3, item 16 is called a skin - Please correct one or the other.

I ordered a gasket, item 19 on figure B-16 by NSN 2 910-00-762-3001. I got a gasket but it doesn't fit. Supply says I got what I ordered, so the NSN is wrong. Please give me a good NSN

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

**JOHN DOE, PFC (E5) 253-1111**

SIGN HERE

**JOHN DOE**

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TEAR ALONG PERFORATED LINE

# The Metric System and Equivalents

## Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

## Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 dekagram = 10 grams = .35 ounce  
 1 hectogram = 10 dekagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

## Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons

## Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

## Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

## Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

## Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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