

2. Amendment/Modification No. 0003	3. Effective Date 2004JUN07	4. Requisition/Purchase Req No. SEE SCHEDULE	5. Project No. (If applicable)
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6. Issued By Code W56HZV TACOM WARREN BLDG 231 AMSTA-AQ-ATAD JOHN JOLOKAI (586)574-8507 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: JOLOKAIJ@TACOM.ARMY.MIL	7. Administered By (If other than Item 6) Code SCD PAS ADP PT
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8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)	<input checked="" type="checkbox"/>	9A. Amendment Of Solicitation No. W56HZV-04-R-0764
	<input type="checkbox"/>	9B. Dated (See Item 11) 2004MAY07
	<input type="checkbox"/>	10A. Modification Of Contract/Order No.
	<input type="checkbox"/>	10B. Dated (See Item 13)
Code	Facility Code	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning 2 signed copies of the amendments; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. Accounting And Appropriation Data (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS
It Modifies The Contract/Order No. As Described In Item 14.

<input type="checkbox"/>	A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A.	The Changes Set Forth In Item 14 Are Made In
<input type="checkbox"/>	B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).	
<input type="checkbox"/>	C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:	
<input type="checkbox"/>	D. Other (Specify type of modification and authority)	

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the Issuing Office.

14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE SECOND PAGE FOR DESCRIPTION

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. Name And Title Of Signer (Type or print)	16A. Name And Title Of Contracting Officer (Type or print)
15B. Contractor/Offeror _____ (Signature of person authorized to sign)	15C. Date Signed
	16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)
	16C. Date Signed

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SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of this Amendment, 0003, is to clarify the requirements in regards to the Special Packaging Instructions.
2. The paragraphs in Section C of this solicitation as well as Section J, attachment 004, which read SPI AK 14233640 are hereby changed to read SPI AK11332143.
3. Attachment 004 has added information concerning the instructions. Please open the attachment to read these.
4. All other terms and conditions remain unchanged. The solicitation closing date is not extended.

*** END OF NARRATIVE A 003 ***

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SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

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SCOPE OF WORK
for
THE REPAIR OF THE M939 SERIES
RADIATOR, ENGINE COOLANT
NSN 2930-01-133-2143

I. General:

This scope of work covers the repairing of items as contained in the attached instruction sheet on the radiator engine coolant, NSN 2930-01-133-2143 for use on the M939 Series 5 Ton Trucks.

II. Applicable Documents:

You can receive copies of the applicable documents by calling the TACOM Acquisition Center at (586) 574-8507, or by sending a written request to: jolokaij@tacom.army.mil

U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-AQ-AHAD-C
POC: Mr. John Jolokai
6501 E. 11 Mile Road
Warren, MI 48397-5000

The following documents form a part of this scope of work:

1. TM 750-254, dated March 1972
2. TM 9-2320-272-24-3, dated June 1998
3. Functional Test.
4. Attachment 001, Drawings: 11669165 Sheets 1-4,
5. Attachment 002, Test Certification.
6. Attachment 003, Points of Contact.
7. Attachment 004, Special Packaging Instruction. (DD Form 2169)

III. Requirements:

A. Radiator Cleaning and Inspection

1. Refer to TM 750-254 for cleaning and inspection procedures.
2. Clean and inspect the radiator to determine extent of repair required.

B. Radiator Disassembly/Assembly

1. Refer to TM 9-2320-272-24-3

C. Radiator Repair / Replacement Procedure

1. All radiators are visually inspected for fin erosion, cracks at solder joints, damage to core, and or tanks to determine if the radiator is repairable.
2. If the radiator appears to be repairable the next step is to power flush and steam clean the radiator.
3. The radiator is then flow tested to determine if the flow is possible.
4. The radiator is then pressure tested under water at 25 PSI.

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5. At this point if the leaks are repairable, the radiator is solid, and has good flow, a repair can be initiated.

D. Reasons for not being able to repair a Radiator

1. External fin corrosion.

2. External damage to core.

3. Radiator continues to remain plugged inside after power flushing.

4. Internal core leaks in radiator. This is when the tubes of the core have begun to corrode, normally caused by age, poor maintenance of anti-freeze, climate - salt, or electrolysis.

5. Split tubes. This is usually caused from age of core, a radiator that is subjected to constant high pressure and heat, and in vehicle accidents.

6. If the amount of the repair will exceed the amount of replacement.

Upon completion of repair, you will do a functional test on all radiator specified in paragraph K of this Scope of Work. After testing, you will complete Test Certification-Attachment 002. Forward completed certifications to:

U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-TR-E/TRKS/MAIL STOP #406
POC: Mr. Walt Howard
6501 E. 11 Mile Road
Warren, MI 48397-5000

E. Disposal

You are responsible for disposal of any non-repairable radiators and any unused parts. Dispose of non-repairable radiators and unused parts according to State and Local ordinances.

F. Preservation and Packaging

Perform military preservation and packing Level A IAW Special Packaging Instruction (SPI) SPI NO. AK 11332143, dated 12-09-1993 for NSN 2930-01-133-2143. See Attachment 004.

G. Shipment

Equipment shall be prepared for shipment as instructed in packaging data sheet.
Shipment shall be accomplished in accordance with terms of the contract.

H. Storage

1. Preparation of Equipment: Equipment shall be prepared for storage as instructed in applicable packaging data sheets. Storage shall be accomplished in accordance with terms of the contract.

2. Preservation During Interim Storage: During interim storage at the contractor's facility, parts which are subject to deterioration or corrosion shall be cleaned and preserved by methods which will protect against such damage.

I. Marking

In addition to any special marking requirements annotated on the SPI, all unit packages, intermediate packs, exterior shipping containers and unitized loads shall be marked in accordance with MIL-STD-129, Revision P, Dated 15 Dec 2002, including bar coding as applicable.

1. The repair facility is responsible for application of special markings as discussed in the Military Standard regardless if specified within applicable contract or purchase order or not. Special markings include, but are not limited to, shelf-life markings, structural markings, and during transportation, special handling markings. The marking of pilferage and sensitive materiel will not identify the true nature of the materiel.

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2. The repair facility shall apply identification and address markings with bar codes in accordance with this standard.

3. Military Shipment Label (MSL) is required for all shipments except from contractor to contractor. The MSL will include both linear and 2D bar codes per the standard. MSL may be created using the Computer Automated Transportation Tool MSL / Issue Receipt Release Document (CATT MSL/IRRD). See the web site: <http://www.asset-trak.com/catt/catt.htm>. The software may be downloaded from the web site at http://www.asset-trak.com/catt/msl_irrd/msl_irrddownload.htm. Be sure to bookmark this page for future releases of CATT MSL/IRRD.

J. Special Packaging Instructions

The SPI has been validated and the method of preservation and packing has proven successful in meeting the needs of the military distribution system, including indeterminate storage and shipment throughout the world.

Special instructions have been detailed in Attachment 004 of this text . A prototype package is required to validate the form, fit and function requirements of the SPI.

Minor dimensional and size changes are acceptable provided an email notification is provided to packaging@tacom.army.mil. Any design changes or changes in the method of preservation that provide a cost savings without degrading the original method of preservation or packing or affecting the serviceability of the item, will be considered and responded to within 10 days of submission to above email. USA TACOM reserves the right to require testing to validate alternate preservation methods, materials, blocking, bracing, cushioning, and packing.

K. Functional Test

1. General- Before testing a radiator to locate leakage, inspect it carefully for visible leaks and solder them promptly, so that the test will be sensitive enough to reveal less obvious defects. There are two standard methods of testing one by introducing air (under light pressure) into the radiator, immersing it in water, and locating the leaks by the appearance of bubbles, and the other, by filling the radiator with water and locating the leaks through the moisture seeping through. Either test is satisfactory, although the air test method is preferred. Mark the leaks as soon as found to facilitate locating them during repairs.

2. Visual Inspection - Inspect outside surfaces of radiator for deposits of lime or magnesia, which is left by evaporating water and indicates leaks. Do not attempt to make an air water test until all the leaks indicated by visual inspection have been repaired.

3. Air Leak Test**WARNING**

The operating pressure of cooling systems is being progressively increased and some exceed 15 psi. When testing at pressures of more than 15 psi, the push-on rubber caps and plugs may blow off. To prevent this danger, clamps or wires should be used for holding those plugs or caps firmly.

CAUTION

Never attempt to air test a radiator with a direct air hose from the usually available 125 psi air source always use regulated air pressure.

NOTE

Before leak testing, the inside of the radiator should be thoroughly dry.

a. Examine the radiator tanks, core and fittings for physical damage and for large obvious leaks. Repair these obvious leaks before air testing.

b. Attach a filler neck adapter plug (Filler Neck Tester with air connection) to the filler neck of radiator. The adapter must seal the filler neck opening the same as the radiator cap but must provide a means of applying compressed air through a hose connection in the filler neck adapter.

c. To leak test a radiator and locate leaks, the radiator is submerged in a tank of water. Most radiators are tested at approximately 15 psi. An air pressure regulator and a low pressure gage is required for air pressure control.

NOTE

Radiators are tested at pressures of 3 psi above the maximum operating pressure.

d. Seal all other radiator openings with push-on rubber caps or plugs.

e. Apply regulated air pressure to the radiator before submerging in test tank.

NOTE

Pressure is applied to radiator before submerging to prevent water from entering the inside of radiator through any leak.

f. With test air pressure applied, lower radiator slowly into test tank while observing for air bubbles.

g. Mark the source of the leak with scribe or other satisfactory means.

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- h. Some leaks are difficult to locate because of bubble deflections by the core fins. Lowering and raising slowly or reducing air pressure will have advantages for locating some difficult leaks.
- i. To find very small leaks, place the bench light in back of the radiator so that the interior of the core can be seen. Stand the radiator on the bench, and spread the supposed leak with flux or soapy water from an eyedropper, oil can, acid brush, or swab. Compressed air seeping through the leak will cause the liquid to foam
- j. The number of leaks and their location and the general condition of the radiator will determine the advisability of repairing.
- k. The leak test is conducted many times during most repairs and requires raising and lowering the radiator each time.
- l. In some cases a new core may be recommended when there are a large number of leaks or the core shows deterioration.

4. Water Test

- a. General - The water test, so called because leaks are indicated by escaping water, replaces the air test when equipment is limited or supplements it when the air test is suspected of being inadequate. Sediment and lime deposited about leaky joints may be forced into the joints by air pressure when the radiator is air tested; sealing the leak Leaks at the joint of tubes and header plates often refuse to show up under air pressure.
- b. Test Procedure
 - (1) Dry radiator after repairing leaks found by air pressure, and test by water method.
 - (2) Remove plug from filler neck and fill radiator with water, being careful not to run it over or spill on the outside.
 - (3) Examine core carefully for leaks.
 - (4) Place air hose over lower end of overflow tube and hold palm of hand over filler neck, while a 5-pound pressure passes in against the water

*** END OF NARRATIVE C 001 ***

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SECTION D - PACKAGING AND MARKING

<u>Status</u>	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
D-1 CHANGED	52.211-4515 (TACOM)	PACKAGING REQUIREMENTS (SPECIAL PACKAGING INSTRUCTIONS)	JUN/2004

(a) Military preservation, packing, and marking for this contract/order shall be accomplished in accordance with the specific requirements identified below, all the applicable requirements of, MIL-STD-2073-1, Revision D, Dated 15 Dec 1999 and Notice 1, dated 10 May 2002, and the Special Packaging Instruction, see below.

- (1) LEVEL OF PRESERVATION: Military
- (2) LEVEL OF PACKING: A
- (3) QUANTITY PER UNIT PACKAGE: 001
- (4) SPECIAL PACKAGING INSTRUCTION NUMBER. 11332143
 - (a) REVISION C
 - (b) DATE OF REVISION 09 December 1993

(b) Unitization: Shipments of identical items going to the same destination shall be palletized if they have a total cubic displacement of 50 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads must be stable, and to the greatest extent possible, provide a level top for ease of stacking. A palletized load shall be of a size to allow for placement of two loads high and wide in a conveyance. The weight capacity of the pallet must be adequate for the load. The preferred commercial expendable pallet is a 40 x 48 inch, 4-way entry pallet although variations may be permitted as dictated by the characteristics of the items being unitized. The load shall be contained in a manner that will permit safe handling during shipment and storage

(c) Marking:

(1) In addition to any special markings called out on the SPI, all unit packages, intermediate packs, exterior shipping containers, and, as applicable, unitized loads shall be marked in accordance with MIL-STD-129P(2), dated 10 Feb 2004, including bar coding. The contractor is responsible for application of special markings as discussed in the Military Standard regardless of whether specified in the contract/order or not. Special markings include, but are not limited to, Shelf-life markings, structural markings, and transportation special handling markings. The marking of pilferable and sensitive materiel will not identify the nature of the materiel.

(2) Contractors and vendors shall apply identification and address markings with bar codes in accordance with this standard. For shipments moving to overseas locations and for mobile deployable units, the in-the-clear address must also include the host country geographic address and the APO/FPO address. A Military Shipment Label (MSL) is required for all shipments except contractor to contractor. The MSL will include both linear and 2D bar codes per the standard. DVD shipment documentation must also be marked with additional bar codes. The DD Form 250 or the commercial packing list shall have additional issue/receipt bar coding applied as per Direct Vendor Delivery Shipments in the standard (except for deliveries to DLA Distribution Depots, e.g. New Cumberland, San Joaquin, Red River, Anniston). . Packing lists are required in accordance with the Standard, see paragraph 5.3.

(3) Contractor to contractor shipments shall have the address markings applied to the identification marked side of the exterior shipping container or to the unitized load markings. The following shall be marked "FROM: name and address of consignor and TO: name and address of consignee".

(4) Computer Automated Transportation Tool (CATT). The following website provides detailed instructions for downloading and installing the Military Shipment Label/Issue Receipt Document (CATT MSL/IRRD) software that will generate a Military Shipping Label to include the required Code 39 and 2D(PDF417) bar codes on the label: <http://www.asset-trak.com/catt/msl_irrd/mslirrdmain.htm> This program was developed by the Army and is free to those with government contracts. Two contractors have introduced a version of the MSL software that can be purchased by contractors. Both programs produce labels that appear to be in compliance with the requirements of MIL-STD-129P. Contractors are MILPAC (<<http://milpac.com/>>) and Easysoft Corporation (<<http://easysoftcorp.com/>>). Ensure that the ship to and mark for in-the-clear delivery address is complete including: consignees name, organization, department name, office, building, room, street address, city, state, country code, & DODAAC.

(d) Heat Treatment and Marking of Wood Packaging Materials: Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet

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manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organizations compliance program.

(e) Hazardous Materials(As applicable):

(1) Hazardous Materials is defined as a substance, or waste which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated. (This includes all items listed as hazardous in Titles 29, 40 and 49 CFR and other applicable modal regulations effective at the time of shipment.)

(2) Unless otherwise specified, packaging and marking for hazardous material shall comply with the requirements herein for the mode of transport and the applicable performance packaging contained in the following documents:

International Air Transport Association (IATA) Dangerous Goods Regulations
 International Maritime Dangerous Goods Code (IMDG)
 Code of Federal Regulations (CFR) Title 29, Title 40 and Title 49
 Joint Service Regulation AFJMAN24-204/TM38-250/NAVSUPPUB 505/MCO
 P4030.19/DLAM 4145.3 (for military air shipments).

(3) If the shipment originates from outside the continental United States, the shipment shall be prepared in accordance with the United Nations Recommendations on the Transport of Dangerous Goods in a manner acceptable to the Competent Authority of the nation of origin and in accordance with regulations of all applicable carriers. A Product Material Safety Data Sheets (MSDS) is required to be included with every unit pack and intermediate container and shall be included with the packing list inside the sealed pouch attached to the outside of the package.

(f) This SPI has been validated and the method of preservation/packing has proven successful in meeting the needs of the military distribution system, including indeterminate storage and shipment throughout the world. Special instructions and/or tailoring of the SPI is detailed in the Supplemental Instructions below. A prototype package is required to validate the sizes and fit requirements of the SPI. Minor dimensional and size changes are acceptable provided contractor provides the PCO and ACO with notification 60 days prior to delivery. Any design changes or changes in the method of preservation that provide a cost savings without degrading the method of preservation or packing or affecting the serviceability of the item will be considered and responded to within 10 days of submission to PCO and ACO. Government reserves the right to require testing to validate alternate industrial preservation methods, materials, alternate blocking, bracing, cushioning, and packing.

(f) SUPPLEMENTAL INSTRUCTIONS: See Scope of Work

[End of Clause]

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SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Attachment 004	SPI AK11332143	09-DEC-1993	002	DATA