

TECHNICAL BULLETIN

**INSTALLATION OF
CREW II MODIFICATION KIT
19207 – 12498030**

FOR

**CARRIER, MORTAR, 120-MM M121,
SELF-PROPELLED M1064A3
2350-01-369-6082 (EIC AE8)**

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

JUNE 2009

WARNING SUMMARY

WARNING SUMMARY

This list summarizes critical WARNINGS in this bulletin. They are repeated here to let you know how important they are. Study these WARNINGS carefully; they can save your life and the lives of personnel you work with.

LIST OF WARNINGS IN WP PROCEDURES

This list includes all WARNINGS in the bulletin. These WARNINGS must be studied carefully and obeyed. They can save your life and the lives of soldiers with whom you work. Failure to obey a warning could cause death or injury as well as destruction of, or damage to, the vehicle and/or equipment.

WARNING



Flammable or explosive compounds can ignite and seriously injure or kill personnel. Remove and stow all flammable and explosive materials from vehicle and surrounding area.

WARNING

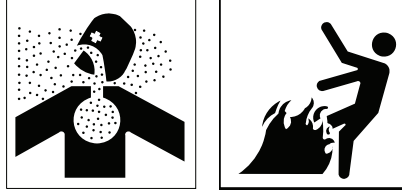


Hanging loads, heavy parts, and overhead equipment can fall unexpectedly. Falling loads can kill or seriously injure personnel.

Keep away from hanging loads, heavy parts, and overhead equipment. Use correct lifting devices to move hanging loads and heavy parts. Always have a helper guide you. Keep your hands and feet out of confined spaces in which heavy loads are being installed or removed.

WARNING SUMMARY – Continued

WARNING



Adhesive, primer, sealant compounds, and isopropyl alcohol are toxic and flammable. These compounds are toxic to eyes, skin, and respiratory tract. Continued exposure can make you dizzy and irritate your eyes and throat.

Always use in well ventilated areas, away from heat, sparks, and flames. Do not breathe fumes. Do not allow into contact with skin and eyes. Use goggles or face shield and protective gloves.

FIRST AID

For first aid information, see FM 4-25.11.

INSERT LATEST UPDATED PAGES/WORK PACKAGES. DESTROY SUPERSEDED DATA.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

Note: The portion of text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands.

Dates of issue for original and changed pages/work packages are:

Original 30 June 2009

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 22 AND TOTAL NUMBER OF WORK PACKAGES IS 14 CONSISTING OF THE FOLLOWING:

Page/WP No.	*Change No.	Page/WP No.	*Change No.	Page/WP No.	*Change No.
Cover	0				
a – b	0				
A/B blank	0				
i – v/vi blank	0				
Chapter 1 Index	0				
WP 0001 00 – 0002 00	0				
Chapter 2 Index	0				
WP 0003 00 – 0005 00	0				
Chapter 3 Index	0				
WP 0006 00 – 0009 00	0				
Chapter 4 Index	0				
WP 0010 00 – 0014 00	0				
Index-1 – Index-3/4 blank	0				
DA 2028 Sample/Reverse	0				
DA 2028/Reverse (3)	0				
Authentication	0				
Metric Chart	0				
Back Cover	0				

*Zero in this column indicates an original page or work package.

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.D., 30 JUNE 2009

TECHNICAL BULLETIN

INSTALLATION OF CREW II MODIFICATION KIT 19207 – 12498030

FOR

CARRIER, MORTAR, 120-MM M121, SELF-PROPELLED M1064A3 2350-01-369-6082 (EIC AE8)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any errors, or if you would like to recommend any improvements to the procedures in this publication, please let us know. The preferred method is to submit your DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <https://aeeps.ria.army.mil>. The DA Form 2028 is located under the Public Applications section in the AEPS Public Home Page. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, e-mail, or fax your comments or DA Form 2028 directly to the U.S. Army TACOM Life Cycle Management Command. The postal mail address is U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LC-LMPP / TECH PUBS, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The e-mail address is tacomlcmc.daform2028@us.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

TABLE OF CONTENTS

	WP Sequence No. Page No.
WARNING SUMMARY	
CHAPTER 1 – GENERAL INFORMATION	
Introduction	0001 00
Table 1. Kit List	0001 00-1
Table 2. Retained Parts	0001 00-2
Table 3. Excess Parts to be Discarded.....	0001 00-2
Table 4. Parts Required (Not Furnished With Kit)	0001 00-3
Equipment Description	0002 00
Figure 1. CREW II Kit Hardware	0002 00-2
Figure 2. Location of CREW II Mounting Components.....	0002 00-4
CHAPTER 2 – MAINTENANCE INSTRUCTIONS	
Removal Procedures	0003 00
Figure 1. Stoplight-Tailight Mounting Bracket Removal.....	0003 00-2
Figure 2. Fuel Tank Angle Bracket Removal	0003 00-3
Figure 3. SINCGARS Antenna Removal	0003 00-4
Figure 4. Antenna Cover Removal.....	0003 00-5
Modification Procedures	0004 00
Figure 1. Locate and Mark CREW II Cable Port.....	0004 00-2
Figure 2. Location for CREW II Cable Port.....	0004 00-3
Figure 3. Location for CREW II Antenna Stowage Bracket	0004 00-4
Figure 4. Location for CREW II RCU/PDA Bracket	0004 00-5
Installation Procedures	0005 00
Figure 1. CREW II Mount Assembly Installation	0005 00-2
Figure 2. Tank Mount Support Installation	0005 00-3
Figure 3. Cable Adapter Seal Installation	0005 00-4
Figure 4. Cable Positioning and Installation	0005 00-5
Figure 5. Antenna Base Cover Installation	0005 00-7
Figure 6. Cable Routing and Power Harness Installation.....	0005 00-8
Figure 7. Cable Installation	0005 00-9
Figure 8. GPS Mount Installation	0005 00-10
Figure 9. GPS Cable and Antenna Installation	0005 00-11
Figure 10. GPS Antenna Cover Installation.....	0005 00-11
Figure 11. RCU/PDA Assembly Installation.....	0005 00-12
Figure 12. RCU/PDA Cable Installation.....	0005 00-13
Figure 13. Antenna Stowage Bracket Installation.....	0005 00-14
Figure 14. Secure CREW II Cables	0005 00-15
Figure 15. Enclosure Assembly Cover Removal	0005 00-16
Figure 16. Enclosure Assembly Installation.....	0005 00-17
Figure 17. Ground Strap and Cable Guard Installation	0005 00-18

TABLE OF CONTENTS – Continued

	WP Sequence No. Page No.
CHAPTER 3 – REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)	
Repair Parts and Special Tools List (RPSTL) Introduction	0006 00
CREW II Modification Kit - 12498030	0007 00
Figure 1. CREW II Modification Kit - 12498030 (Sheet 1 of 4)	0007 00-1
Figure 1. CREW II Modification Kit - 12498030 (Sheet 2 of 4)	0007 00-2
Figure 1. CREW II Modification Kit - 12498030 (Sheet 3 of 4)	0007 00-3
Figure 1. CREW II Modification Kit - 12498030 (Sheet 4 of 4)	0007 00-4
National Stock Number Index.....	0008 00
Part Number Index	0009 00
CHAPTER 4 – SUPPORTING INFORMATION	
References	0010 00
Common Tools and Supplements and Special Tools/Fixtures List.....	0011 00
Table 1. Tool Identification List	0011 00-2
Fabricated Tools.....	0012 00
Figure 1. Magentic Drill Base Plate/Template	0012 00-1
Expendable/Durable Items List	0013 00
Table 1. Expendable/Durable Items List.....	0013 00-1
Replacement Kit Parts.....	0014 00
Table 1. CREW II Modification Kit - 12498030	0014 00-1
INDEX	INDEX-1

HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

The safest, easiest, and best way to use and maintain CREW II is to use this bulletin. Learning to use this bulletin is as easy as reading it. Knowing what is in this bulletin and how to use it will save you time. Becoming familiar with the work, procedures, and cautions will help you in your job and reduce your exposure to unnecessary hazards.

WHERE DO YOU START

This bulletin is divided into chapters and front and rear matter. The chapters are further divided into Work Packages (WPs) for ease of use. Go to the area within the manual that covers what you are to do and follow the instructions. Be sure to read and follow the WARNINGS, CAUTIONS, and NOTES.

HOW THIS BULLETIN IS ORGANIZED

The WARNING SUMMARY section provides safety and first aid information. This section includes a list of the most important warnings extracted from the WPs. All of these warnings cover hazards that could kill or injure personnel.

The TABLE OF CONTENTS lists the WPs in each Chapter.

CHAPTER 1 covers general information.

CHAPTER 2 covers maintenance instructions.

CHAPTER 3 contains repair parts and special tools list information.

CHAPTER 4 contains supporting information, such as lists of references, tools, expendable/durable items, etc.

The INDEX is an alphabetical listing of all the WPs in this manual. Each entry is cross-referenced to the WP number and page number.

The DA FORM 2028 is used to report errors and to recommend improvements for procedures in this bulletin. Three blank DA Form 2028s are in the back of this bulletin.

The back cover includes a METRIC CONVERSION CHART that can be used to convert U.S. customary measurements to their metric equivalents. Measurements in this manual are given in U.S. customary unit with metric units in parentheses.

HOW TO USE THE WORK PACKAGES

Pick a key word and look in the INDEX for this key word. Turn to the WP and page indicated.

How to Read the WP

WPs provide either descriptive/supporting information or detailed procedures for repair.

Pay attention to all WARNINGS, CAUTIONS, and NOTES. These can appear in all types of procedures. They help you avoid harm to yourself, other personnel, and equipment. They also tell you things you should know about the procedure.

HOW TO USE THIS MANUAL (CONT)

Before you start a procedure, get all the tools, supplies, and personnel you need to do the procedure. These items will be listed in the INITIAL SETUP of the WP.

Start with Step 1 and do each step in the order given. Numbered primary steps tell you WHAT to do. Alpha substeps tell you HOW to do it.

Look at the illustrations. Locators show you where the parts are located. Close-up illustrations show the details you need to do the procedure.

The words END OF WORK PACKAGE will tell you when you have finished the procedure.

DEFINITION OF WP TERMS

WARNINGS, CAUTIONS, and NOTES

Pay attention to all WARNINGS and CAUTIONS within the WP. Ignoring a WARNING could cause death or injury to yourself or other personnel. Ignoring a CAUTION could cause damage to equipment. NOTES contain facts to make the procedure easier. WARNINGS, CAUTIONS, and NOTES always appear just above the step to which they apply.

WARNING

Highlights an essential operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to, long term health hazards for, or death of, personnel.

CAUTION

Highlights an essential operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in damage to or destruction of equipment, or loss of mission effectiveness.

NOTE

Highlights an essential operating or maintenance procedure, condition, or statement.

Helper

Helpers are needed in procedures that require more than one person. A helper may be needed to help lift objects or act as an outside observer.

If a helper is needed to perform a procedure, the INITIAL SETUP will list "Helper (H)" under the PERSONNEL REQUIRED heading.

If a helper assists with a step, the step will include: "Have helper assist."

If a helper performs the action alone, the step will start with "(H):."

**CHAPTER 1
GENERAL INFORMATION**

WORK PACKAGE INDEX

<u>Title</u>	<u>Sequence No.</u>
INTRODUCTION	0001 00
EQUIPMENT DESCRIPTION.....	0002 00

INTRODUCTION

0001 00

PURPOSE

The purpose of this technical bulletin (TB) is to provide instructions and guidance on the method of modifying the M1064A3, 120-MM M121, Self-Propelled Mortar Carrier for CREW II. It further provides instruction on the installation of the CREW II modification kit P/N 12498030. The CREW II modification kit provides mounting for the next generation of improvised explosive device (IED) jammers. The modular CREW II “plug and play” design, allows the main line replaceable unit (LRU), FRF-105C dual antenna, and the remote control unit (RCU) to be utilized by any Heavy Brigade Combat Team (HBCT) vehicle. The M1064A3 location was chosen to provide the least impact on mission requirements, for example the 120-MM mortar must retain full operation for fire missions and the commander’s cupola with .50 caliber machine gun must rotate 360°; however, care must be taken when operating any weapon toward the left rear when the antenna is fixed in that position.

GENERAL

1. Priority. This bulletin is classified NORMAL.
2. End item(s) to be modified. This TB applies to the M1064A3, 120-MM M121, Self-Propelled Mortar Carrier, 2350-01-369-6082, P/N 8750287.
3. Module(s) (components, assemblies, subassemblies, boards, and cards) to be modified. Not applicable.
4. Parts to be modified. Not applicable.
5. Application.
 - a. Time compliance schedule. Not applicable.
 - b. Lowest level of maintenance authorized to apply this modification. The lowest level of maintenance authorized to perform installation described by this TB is Sustainment Maintenance.
 - c. Work force and man-hour requirements for application of the modification to a single unit, end item, or system are approximately 9 man-hours for a mechanic and helper.
 - d. Modifications to be applied to or concurrently with the application of this kit. Not applicable.
 - e. Additional information deemed necessary to assist in the application of this modification. Kit application will be concurrent with other depot overhaul/conversion programs, as applicable.
6. Technical publications affected/changed. The installation will be supported by TM 9-2350-277 series technical manuals with the upcoming Change 6.
7. Modification kits, parts, and their disposition.
 - a. Kit(s)/Part(s) needed to apply this modification.

Table 1. Kit List

KIT NO.	CAGE	KIT NOMENCLATURE	NSN
12498030	19207	Carrier, 120-MM Mortar, M1064A3 CREW II Modification Kit	

(1) Shipping data. Not applicable.

- b. Contents of modification kit. Kit 12498030 parts are listed in WP 0007 00.
- c. Parts that are removed and retained for reuse are listed in Table 2.

Table 2. Retained Parts

QTY.	NOMENCLATURE	PART NUMBER	CAGE	NSN
1**	SINGARS Antenna	AS-3900	1R8M6	5985-01-551-1218
1**	Screw, Machine	511355-23	31550	5305-01-225-2589
1	Bracket	12268806-2	19207	5340-01-070-9575
1	Stoplight-tailight	MS51329-1	96906	6220-00-669-5623
1	Gasket	7006237	19207	5330-00-700-6237
1	Bracket	12269502	19207	5340-01-124-9311
** Secondary SINGARS antenna mounted				

- d. Bulk and expendable material. Expendable/durable items list. See WP 0013 00.
- e. Parts disposition. Parts removed and not reinstalled are considered excess for TB application. Excess parts listed in Table 3 should be discarded IAW AR 725-50 or local standard operating procedures (SOP).

Table 3. Excess Parts to be Discarded

QTY.	NOMENCLATURE	PART NUMBER	CAGE	NSN
4	Screw, Cap, Hexagon	B1821BH038C100N	80204	5305-00-068-0510
6	Washer, Lock	MS35333-42	80204	5310-00-595-7237
4	Screw, Cap, Hexagon	B1821BH038C063N	80204	5305-00-721-5492
4	Washer, Flat	MS27183-15	96906	5310-00-809-4061
2	Washer, Flat	MS27183-12	96906	5310-00-081-4219
2	Washer, Lock	MS35333-41	80205	5310-00-167-0721
2	Washer, Lock	MS45904-76	96906	5310-00-061-1258
2	Screw, Cap, Hexagon	MS90725-59	80205	5305-00-269-3210
2	Washer, Flat	MS27183-14	96906	5310-00-080-6004
3	Screw, Cap, Hexagon	B1821BH050F138N	80204	5305-00-725-0154
3	Washer, Flat	MS27183-18	96906	5310-00-809-5998
3	Washer, Lock	MS35333-44	80205	5310-00-194-1483
4**	Washer, Lock	MS45904-76	96906	5310-00-061-1258
1**	Washer, Lock	A3103122-5	51792	5310-01-205-9199
4	Screw, Cap, Hexagon	B1821BH038C275N	80204	5305-00-781-3926

Table 3. Excess Parts to be Discarded – Continued

QTY.	NOMENCLATURE	PART NUMBER	CAGE	NSN
2*	Screw, Cap, Hexagon	B1821BH038C125N	80204	5305-00-068-0511
2*	Washer, Flat	10910174-22	19207	5310-00-728-9957
6*	Washer, Flat	10910174-5	19207	5310-00-866-4417
2*	Screw, Cap, Hexagon	B1821BH050C175N	80204	5305-00-071-2070
2*	Nut, Self-locking	M45913/1-8CG8Z	81349	5310-01-527-9521
* Carrier equipped with bar armor				
** Secondary SINCGARS antenna mounted				

- f. Parts that are required for installation but not provided in the modification kit are listed in Table 4.

Table 4. Parts Required (Not Furnished With Kit)

QTY.	NOMENCLATURE	PART NUMBER	CAGE	NSN
4**	Washer, Lock	MS45904-76	96906	5310-00-061-1258
1**	Washer, Lock	A3103122-5	51792	5310-01-205-9199
2	Washer, Flat	MS27183-14	96906	5310-00-080-6004
2*	Screw, Cap, Hexagon	B1821BH050C175N	80204	5305-00-071-2070
2	Washer, Lock	MS45904-76	96906	5310-00-061-1258
* Carrier equipped with bar armor				
** Secondary SINCGARS antenna mounted				

8. Special tools, tool kits, jigs, test, measurement, and diagnostic equipment (TMDE); and fixtures required. Installation requires common hand and power tools (wrenches, drill, etc.) furnished by the maintenance shop/contractor. No special TMDE, jigs, or fixtures are required.
9. Expendable/durable items list. See WP 0013 00.
10. Calibration requirements. No calibration is required.
11. Weight and balance data. Weight and balance are not affected.
12. Facilities. No special facilities are required. No welding is required.
13. Inspection requirements.
 - a. Prior to kit installation, inspect all mounting provisions for signs of fatigue, failure, cracking, and loose or missing attaching hardware. The CREW II Kit cannot be installed until certain hull mounting provisions have been completed. See WP 0003 00 and WP 0004 00 for hull preparation procedures.

- b. Ensure all kit parts are available prior to installation. See WP 0014 00 for a list of kit parts. Inspect all kit parts for signs of cracking or distortion of the supports and brackets, damaged cables, and missing hardware.
- c. After kit installation, ensure all kit components are mounted securely. Inspect new cables to ensure they are securely clamped and tied to the existing cables and will not be pinched or damaged during carrier operation.

14. Tools and Equipment.

- a. Commonly used tools and equipment having application to sustainment maintenance, in general, furnished by the maintenance activity/contractor. See WP 0011 00.
- b. Special tools. See WP 0011 00.
- c. Fabricated tools. See WP 0012 00.

15. Recording and reporting of the installation.

- a. Reporting requirements. Refer to AR 750-10/DA Pamphlet 750-8.
- b. Marking equipment. No marking of equipment or vehicle is required.

16. Material change (MC) number. Not applicable.

END OF WORK PACKAGE

EQUIPMENT DESCRIPTION

0002 00

CREW II KIT HARDWARE

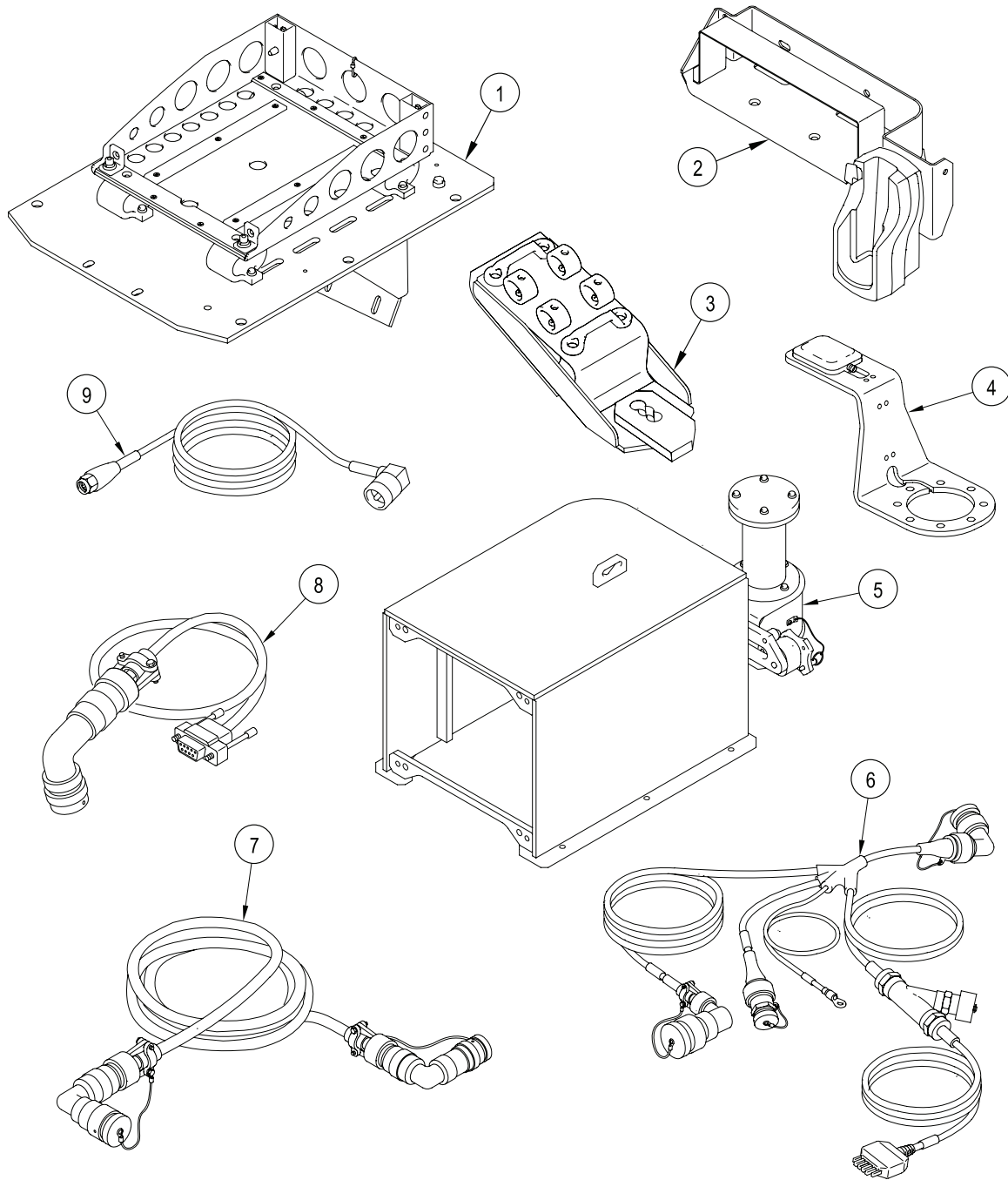


Figure 1. CREW II Kit Hardware

EQUIPMENT DESCRIPTION – Continued

0002 00

KEY	NOMENCLATURE	FUNCTION
1	CREW II Mount Assembly	Supports primary unit located above exterior fuel storage tank at left rear of carrier.
2	Remote Control unit (RCU)/Personal Digital Assistant (PDA) Assembly	Supports the RCU and PDA cradle. The PDA cradle provides hands-free operation of the PDA while the operator is in the carrier. It can also be used for charging the PDA main battery and the PDA internal memory battery. Power is provided via the vehicle power cable.
3	Antenna Bracket	Stows and secures CREW II antenna when not in use.
4	CREW II Global Positioning System (GPS) Mount	Provides the GPS antenna and exterior bracket with hardware to mount the GPS antenna.
5	Enclosure Assembly	Provides ballistic and environmental protection to the CREW II primary unit necessary with exterior mounting.
6	Power Harness	Provides power to the carrier cradle from the carrier power source. It contains a 5 amp in-line circuit breaker. The circuit breaker provides over-current protection to the PDA. If the circuit breaker trips due to over-current condition, the circuit breaker can be reset.
7	RCU Cable	Main interface cable between CREW II Primary Unit located in the rear of the carrier and the RCU.
8	Tactical PDA Cable	Connects the RCU interface cable to the RCU. This cable is used when the PDA is being operated in the PDA (carrier) cradle (2) or desktop cradle.
9	GPS Cable	Provides GPS positioning data from the GPS sensor to the CREW II Primary Unit.

LOCATION OF CREW II MOUNTING COMPONENTS

The primary unit mounts inside the enclosure assembly (5) above the exterior fuel tank on the left side of the carrier. The CREW II antenna bracket (3) is mounted on the mid point at the extreme rear of the hull. The RCU/PDA assembly (2) is mounted on the right side engine bulkhead with the CREW II GPS mount and antenna (4) located just above on the right front of the roof over the secondary SINGARS antenna port. Prior to CREW II mounting, the carrier hull must be modified per WP 0003 00 and WP 0004 00.

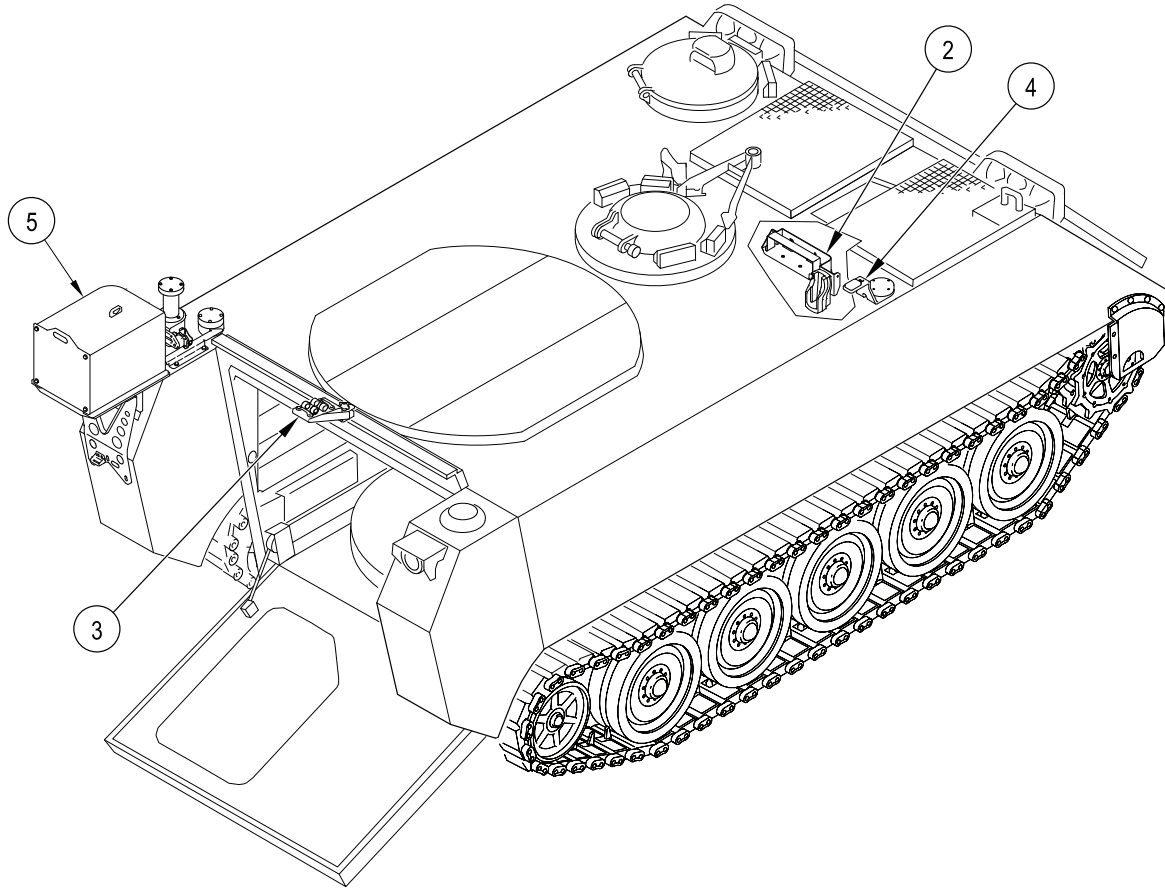


Figure 2. Location of CREW II Mounting Components

END OF WORK PACKAGE

CHAPTER 2 MAINTENANCE INSTRUCTIONS

WORK PACKAGE INDEX

<u>Title</u>	<u>Sequence No.</u>
REMOVAL PROCEDURES.....	0003 00
MODIFICATION PROCEDURES.....	0004 00
INSTALLATION PROCEDURES.....	0005 00

REMOVAL PROCEDURES

0003 00

THIS WORK PACKAGE COVERS:

- Remove Stoplight-Taillight and Mounting Bracket (page 0003 00-1).
 - Remove Fuel Tank Angle Bracket (page 0003 00-3).
 - Remove SINGARS Antenna/Antenna Cover (page 0003 00-4).
-

INITIAL SETUP:

Maintenance Level

Sustainment

Equipment Conditions

Carrier parked on level ground
Engine stopped (TM 9-2350-277-10)
Vehicle blocked (TM 9-2350-277-10)
Radio and mount removed
(TM 11-5820-498-12)

Tools and Special Tools

General Mechanic's Tool Kit (WP 0011 00, Item 4)

Materials/Parts

Cleaning Compound (WP 0013 00, Item 1)

Personnel Required

Mechanic

REMOVE STOPLIGHT-TAILLIGHT AND MOUNTING BRACKET

NOTE

Tag leads for identification to aid in installation.

1. Disconnect left side stoplight-taillight circuit 21 lead (7), circuit 22 lead (8), and circuit 24 lead (9) from stoplight-taillight (13).

NOTE

If vehicle is equipped with bar armor, removal of upper left fuel tank support, four screws, flat washers, and two lock washers is required prior to continuing.

2. Remove two screws (4), lockwashers (3), and washers (2) from top of mounting bracket (1).
3. Remove bottom two screws (12), lockwashers (11), washers (10), and mounting bracket (1) with stoplight-taillight (13) from carrier.
4. Remove two screws (6) and lockwashers (5) from stoplight-taillight (13). Separate stoplight-taillight (13) and gasket (14) from mounting bracket (1).
5. Retain stoplight-taillight and gasket for installation, return mounting bracket to supply. Discard all screws, lockwashers, and washers.

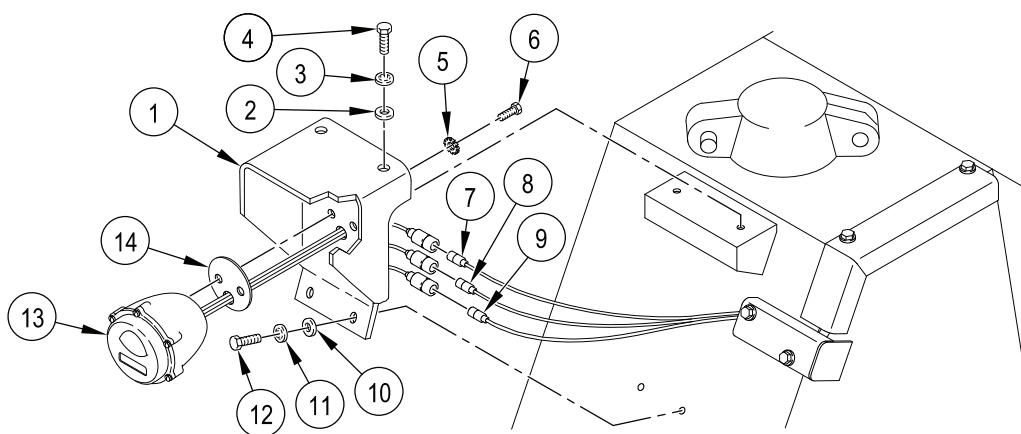


Figure 1. Stoplight-Taillight Mounting Bracket Removal

REMOVE FUEL TANK ANGLE BRACKETS

NOTE

If angle bracket is welded to fuel access cover, it is considered an unauthorized modification and the fuel cover and bracket must be replaced. Refer to TM 9-2350-277-24P and TM 9-2350-277-20-2.

1. Remove two screws (19), lockwashers (20), washers (21) and angle bracket (22) from left fuel tank (15). Save angle bracket for reinstallation. Discard screws, lockwashers, and washers.
2. Remove three screws (18), lockwashers (17), and washers (16) from left fuel tank access cover (23). Discard screws, lockwashers, and washers.

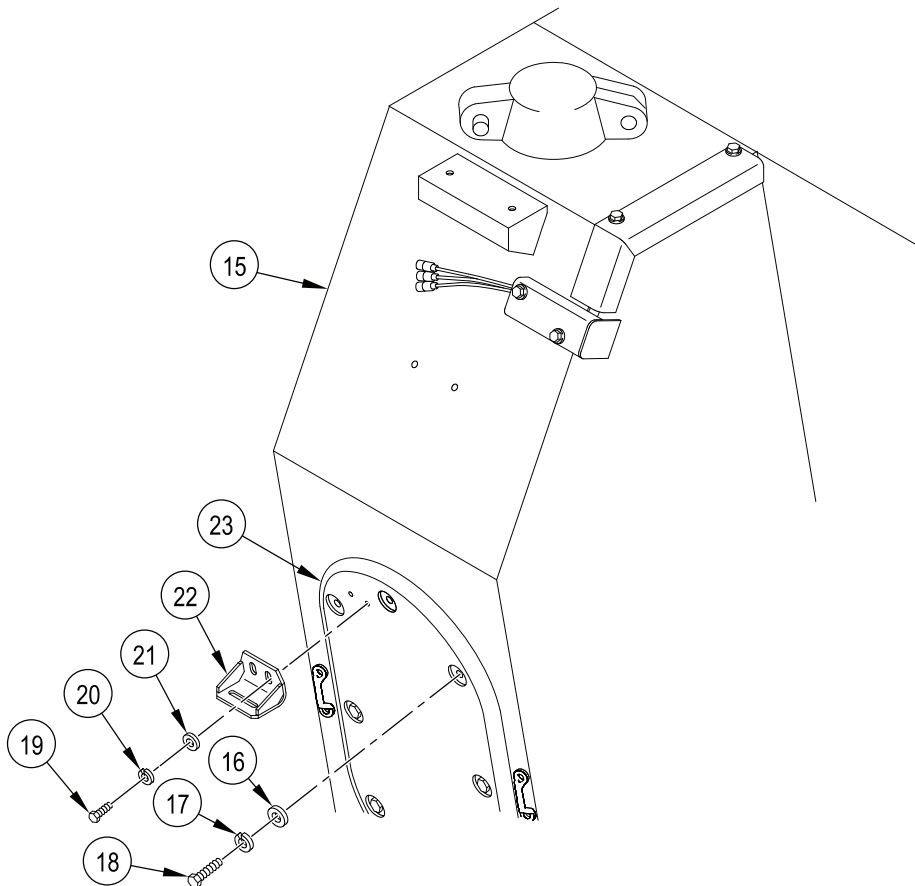


Figure 2. Fuel Tank Angle Bracket Removal

REMOVE SINCGARS ANTENNA/ANTENNA COVER

NOTE

If carrier has a SINCGARS antenna mounted, do Steps 1-4. If carrier has no antenna, go to Step 5.

1. Remove four screws (24) and lockwashers (31) from antenna base (25).
2. Lift antenna base (25). Remove screw (28), lockwasher (27), and disconnect antenna ground wire (26). Discard lockwasher.
3. Disconnect antenna cable (30) from antenna base (25).
4. Remove antenna base (25) and gasket (29). Discard gasket. Scrape any remaining gasket material from mating surface and clean with cleaning compound.

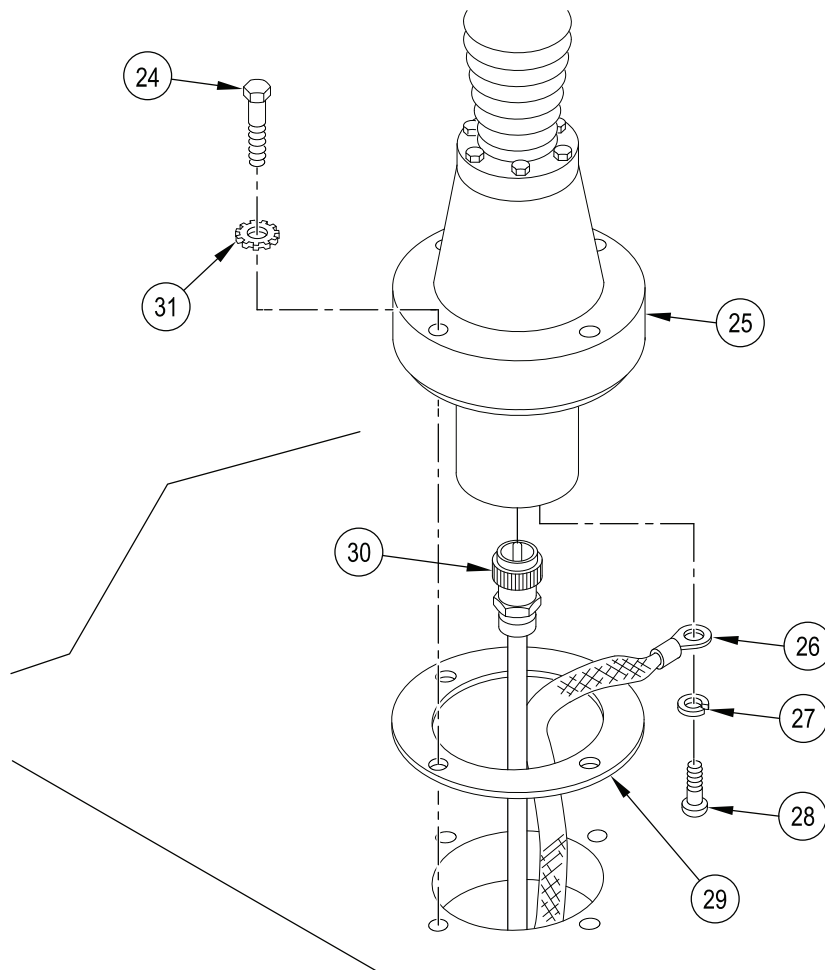


Figure 3. SINCGARS Antenna Removal

5. Remove antenna cover (33) from carrier.
 - a. Remove four screws (32), cover (33), and gasket (29) from antenna mounting location.
 - b. Scrape any gasket residue from mating surface and clean area with cleaning compound.

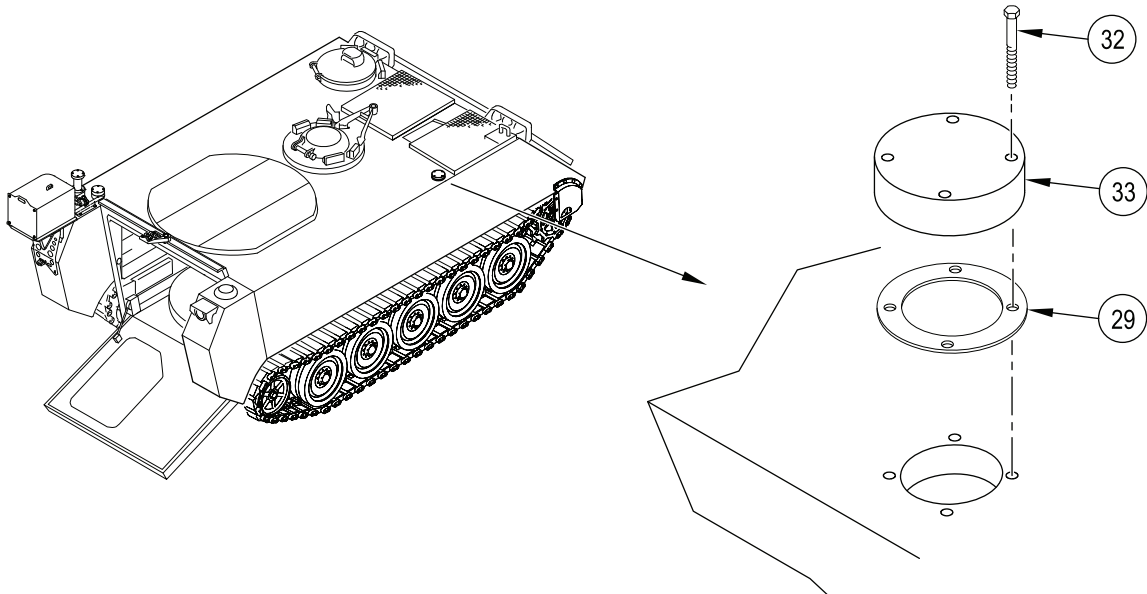


Figure 4. Antenna Cover Removal

END OF WORK PACKAGE

MODIFICATION PROCEDURES**0004 00****THIS WORK PACKAGE COVERS:**

- Drill CREW II Cable Port (page 0004 00-1).
- Drill CREW II Antenna Stowage Bracket (page 0004 00-4).
- Drill CREW II RCU/PDA Bracket (page 0004 00-5).

INITIAL SETUP:Maintenance Level

Sustainment

Personnel Required

Mechanic

Tools and Special Tools

- Die and Tap Set, Thread Cutting (WP 0011 00, Item 1)
- Drilling Machine, Upright (WP 0011 00, Item 2)
- Drill Set, Twist (WP 0011 00, Item 3)
- General Mechanic's Tool Kit (WP 0011 00, Item 4)
- Hole Saw Set, Carbide Tipped (WP 0011, Item 5)
- Magnetic Drill Base Plate/Template (WP 0012 00)
- Portable Drill, Electric, 1/2 inch (WP 0011, Item 7)

References

TM 43-0139

Equipment Conditions

- Carrier parked on level ground
- Engine stopped (TM 9-2350-277-10)
- Carrier blocked (TM 9-2350-277-10)

Materials/Parts

CREW II Modification Kit (12498030)

DRILL CREW II CABLE PORT**WARNING**

Flammable or explosive compounds can ignite and seriously injure or kill personnel. Remove and stow all flammable and explosive materials from vehicle and surrounding area.

CAUTION

Remove all equipment and gear from the top left side rear area to prevent damage when drilling holes in upper hull.

1. Locate and mark for center hole (3), measuring from left hull edge (2) 12-7/8 inches and 5-1/2 inches from the rear edge of hull (1).

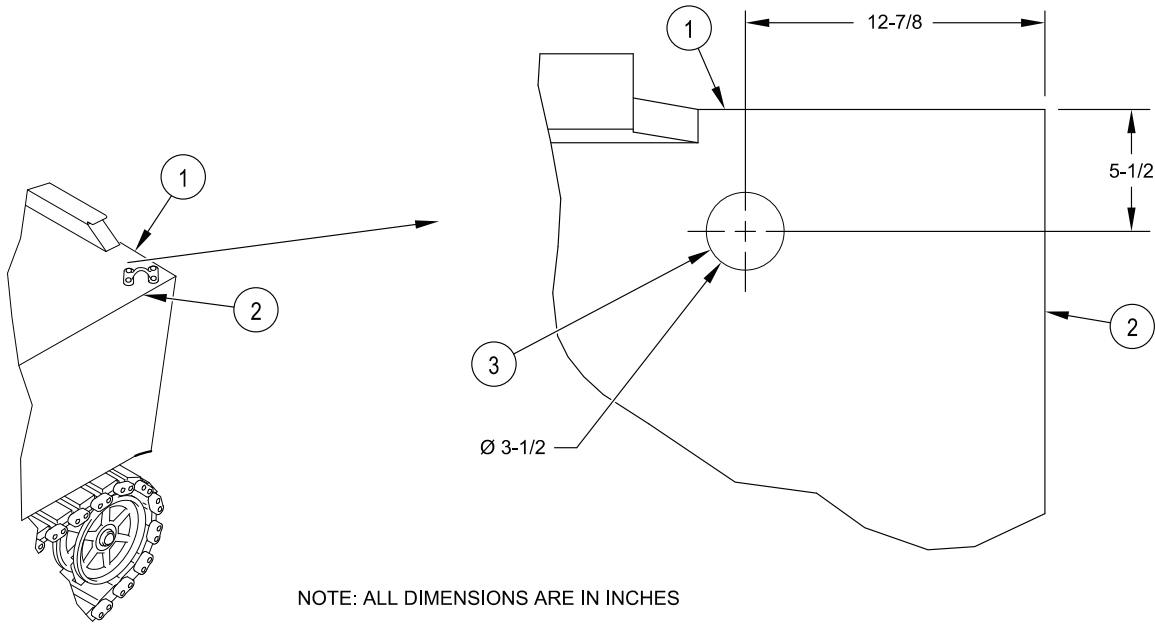


Figure 1. Locate and Mark CREW II Cable Port
(External Fuel Tank Not Shown)

NOTE

The 3-9/16 inch hole in the magnetic drill base plate/template must align with 3-1/2 inch hole previously marked on hull roof. Minor adjustments to position magnetic drill base plate/template may be necessary.

2. Position magnetic drill base plate/template (3) on hull roof 45 degrees diagonally across left rear corner. Measure 1-61/64 inches from the rear edge of hull (1). Measure 12-7/8 inches for furthest point and 1-15/32 inches for closest point from the left hull edge (2).

NOTE

The magnetic drill base plate/template is 1 inch thick. Marking the drill for a maximum depth of 2-1/4 inches will prevent any break thru.

3. Drill four holes (4) using a 5/16 inch drill bit to a maximum depth of 1-1/4 inches into hull. DO NOT BREAK THRU.
4. Drill a pilot hole (6) using a 1/4 inch drill bit and magnetic drilling machine.
5. Drill center hole (5) using a 3-1/2 inch saw drill bit and magnetic drilling machine.
6. Tap four holes (4) using a 3/8 x 16 tap to a minimum of 1 inch depth. Break all sharp edges.

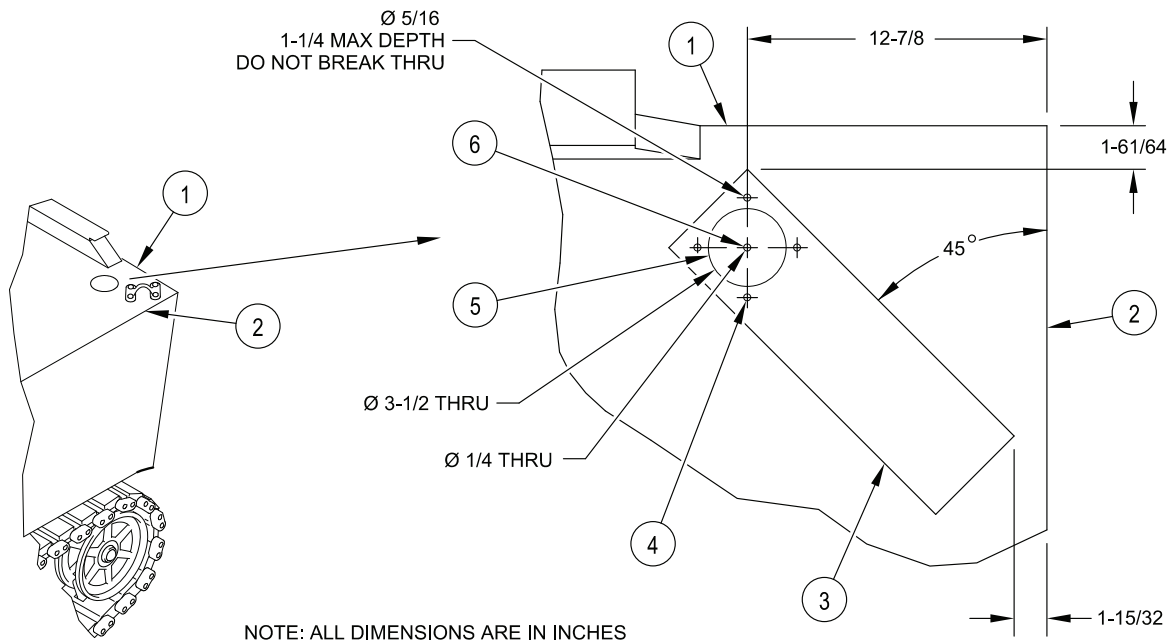


Figure 2. Location for CREW II Cable Port
(External Fuel Tank Not Shown)

7. Paint drilled areas to prevent corrosion. Reference TM 43-0139.

DRILL CREW II ANTENNA STOWAGE BRACKET

1. Locate and mark a hole (8) on top of hull bracket, measuring 32 inches from the left external fuel tank and 1-3/4 inches from rear edge of bracket (9).
2. Locate and mark a second hole (7) starting from the first hole (8), measuring 2-15/32 inches to the right and 3/8 inches from rear edge of bracket (9).
3. Drill one hole (8) using a 27/64 inch drill and tap using a 1/2 x 11 tap to a minimum depth of 1-1/4 inches. Break thru is permissible. Break all sharp edges on tapped holes.
4. Drill one hole (7) using a 5/16 inch drill and tap using a 3/8 x 16 course tap to a minimum 1 inch depth. DO NOT BREAK THRU. Break all sharp edges on tapped holes.

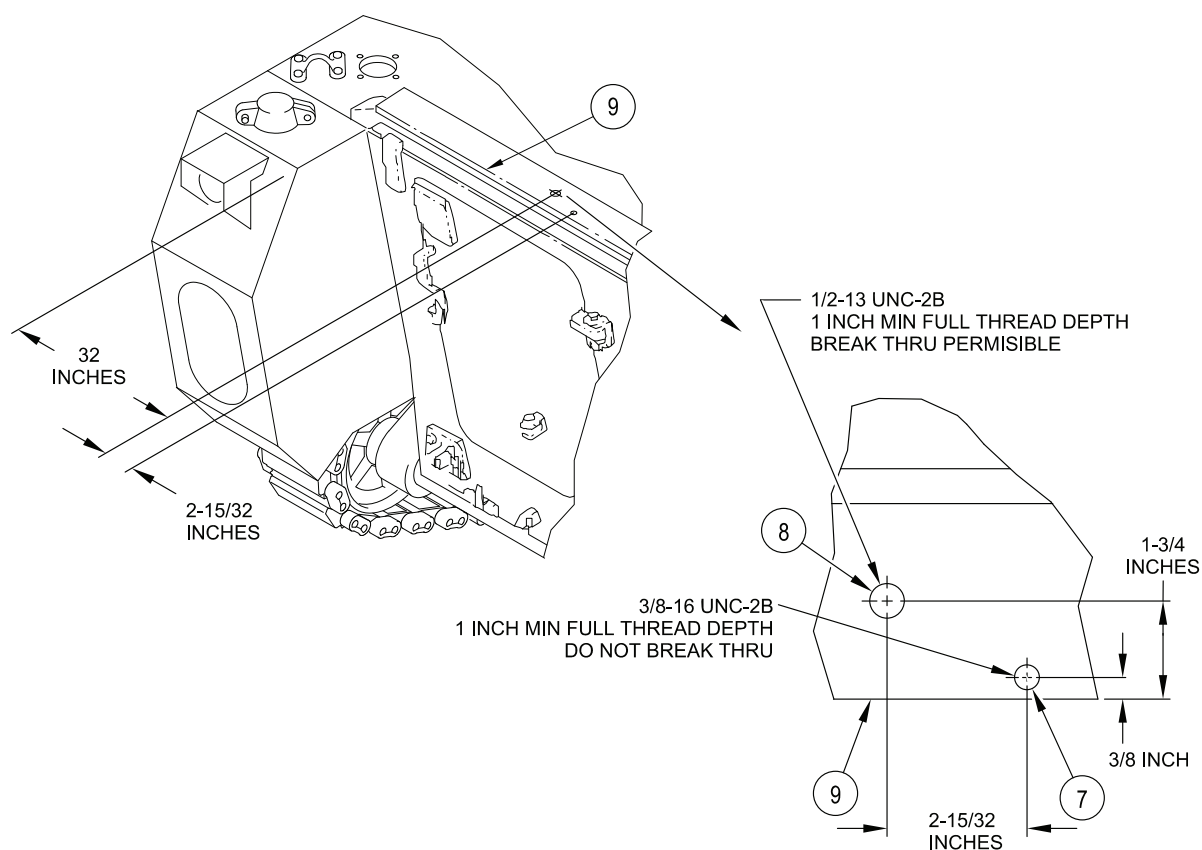


Figure 3. Location for CREW II Antenna Stowage Bracket

5. Paint drilled areas to prevent corrosion. Reference TM 43-0139.

DRILL CREW II RCU/PDA BRACKET

CAUTION

Remove all equipment and gear from the right side engine compartment to prevent damage when drilling holes in engine compartment bulkhead.

1. Locate and mark a hole (12) on the right side engine compartment bulkhead (10), measuring from right side hull (11) 24-7/64 inches and down 4-41/64 inches from inside top plate.
2. Locate and mark a second hole (12) starting from the first hole, measuring 5 1/2 inches to the left and down 4-41/64 inches from inside top plate.
3. Drill two holes (12) using a 3/8 inch drill bit thru engine compartment bulkhead (10).

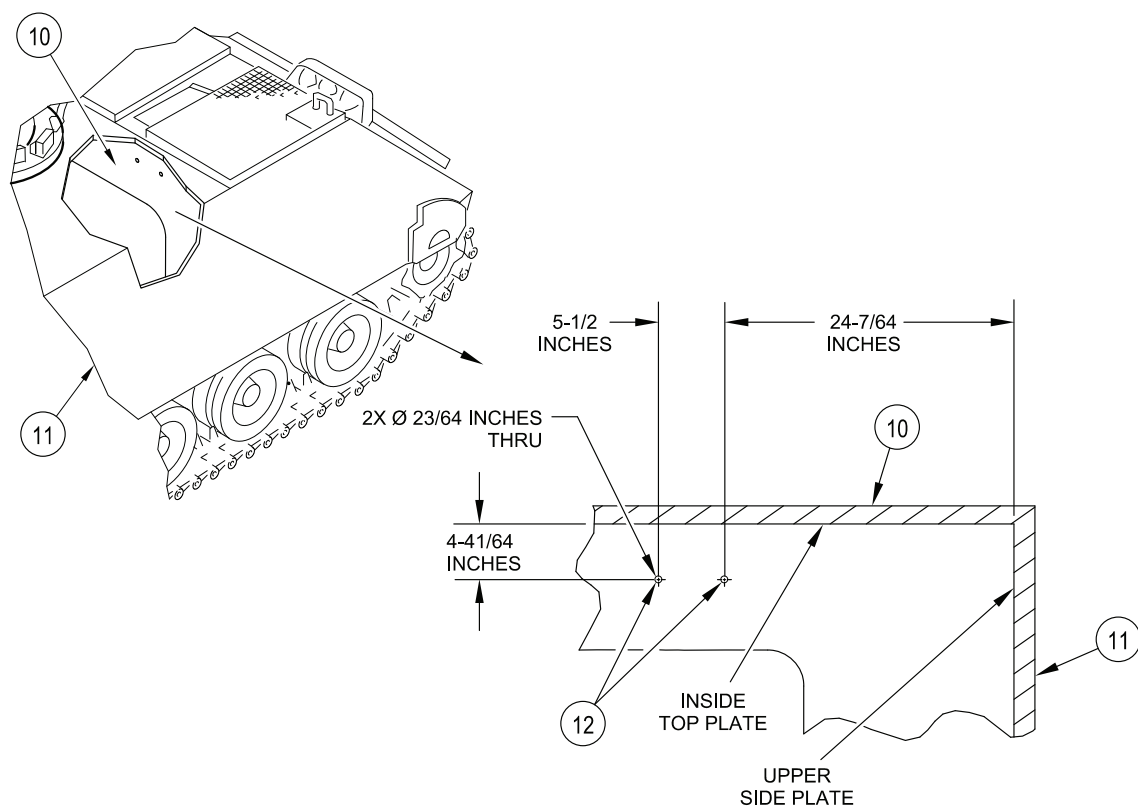


Figure 4. Location for CREW II RCU/PDA Bracket

4. Paint drilled areas to prevent corrosion. Reference TM 43-0139.

END OF WORK PACKAGE

INSTALLATION PROCEDURES**0005 00****THIS WORK PACKAGE COVERS:**

- Install CREW II Mount Assembly (page 0005 00-1).
- Install Tank Support Mount (page 0005 00-3).
- Install GPS, RCU, and Primary Power Cables (page 0005 00-4).
- Install GPS Antenna Kit (page 0005 00-9).
- Install PDU/RCU Bracket Assembly (page 0005 00-11).
- Install Antenna Stowage Bracket (page 0005 00-13).
- Install Enclosure Assembly (page 0005 00-14).

INITIAL SETUP:Maintenance Level

Sustainment

Tools and Special Tools

- General Mechanic's Tool Kit (WP 0011 00, Item 4)
- Measuring Tape (WP 0011 00, Item 6)
- Endless Sling (WP 0011 00, Item 8)
- Torque Wrench (WP 0011, Item 9)

Materials/Parts

- Cleaning Compound (WP 0013 00, Item 1)
- Sealing Compound (WP 0013 00, Item 3)
- Sealing Compound Primer (WP 0013 00, Item 4)
- CREW II Modification Kit (12498030)

Personnel Required

- Mechanic
- Helper (H)

References

- TM 9-2350-277-10
- TM 9-2350-277-20

Equipment Conditions

- Carrier parked on level ground
- Engine stopped (TM 9-2350-277-10)
- Vehicle blocked (TM 9-2350-277-10)
- CREW II cable port drilled (WP 0004 00)
- Top shelf of vertical ammo rack removed (TM 9-2350-277-20-4)
- Top door of horizontal ammo rack opened
- Power plant rear access panel removed (TM 9-2350-277-20-4)
- Bulkhead drilled for PDA/RCU bracket (WP 0004 00)
- Antenna stowage bracket holes drilled (WP 0004 00)

INSTALL CREW II MOUNT ASSEMBLY**NOTE**

If bar armor is installed, discard all existing hardware and use new hardware for installation. Use additional washers (MS10910174-5) as spacers to shim bar armor to CREW II mounting bracket.

1. Route three stoplight-taillight circuit leads; circuit 21 lead (9), circuit 22 lead (8), and circuit 24 lead (7) thru gasket (12) and CREW II mount assembly (1). Secure stoplight-taillight (11) to CREW II mount assembly (1) with two screws (6) and lockwashers (5).

NOTE

Do not tighten hardware until installation is complete.

2. Position CREW II mount assembly (1) on top of left fuel tank and secure using two screws (2), lockwashers (3), and washers (4).
3. Attach right bottom of CREW II mount assembly (1) to fuel tank with screw (10), lockwasher (3), washer (4), and lockwasher (5).
4. Secure left bottom of CREW II mount to fuel tank with screw (10), lockwasher (3), and washer (4).
5. Connect three stoplight-taillight circuit leads; circuit 21 lead (9), circuit 22 lead (8), and circuit 24 lead (7) to stoplight-taillight (11).

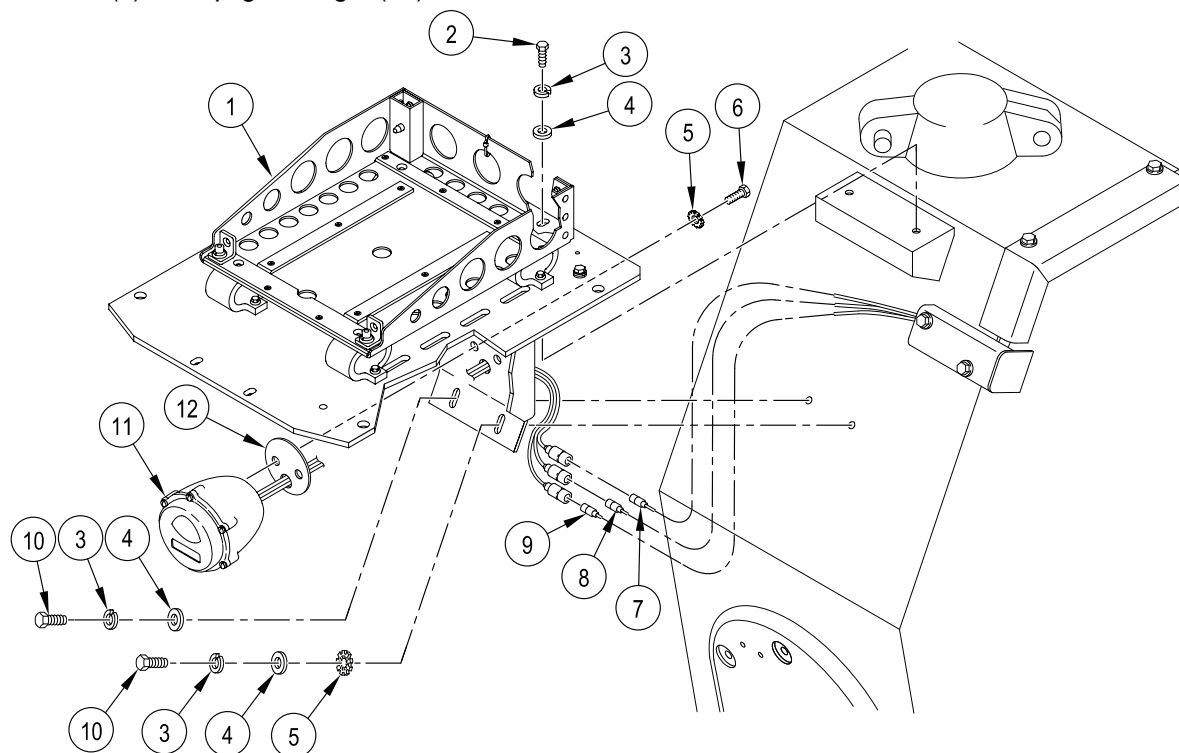


Figure 1. CREW II Mount Assembly Installation

INSTALL TANK MOUNT SUPPORT

1. Position tank mount support (20) on left fuel tank (13) and secure to fuel tank access cover (14) with three screws (17), lockwashers (16), and washers (15).
2. Install angle bracket (19) on tank mount support (20) with two screws (2), lockwashers (3), and washers (18).
3. Align holes in tank mount support (20) with CREW II mount assembly (1) to ensure proper mating of holes in enclosure assembly.
4. Tighten all hardware. **TORQUE THREE SCREWS (17) SECURING TANK MOUNT SUPPORT (20) TO FUEL TANK ACCESS COVER (14) TO 45-50 LB-FT (61-68 N·M).** Use torque wrench.

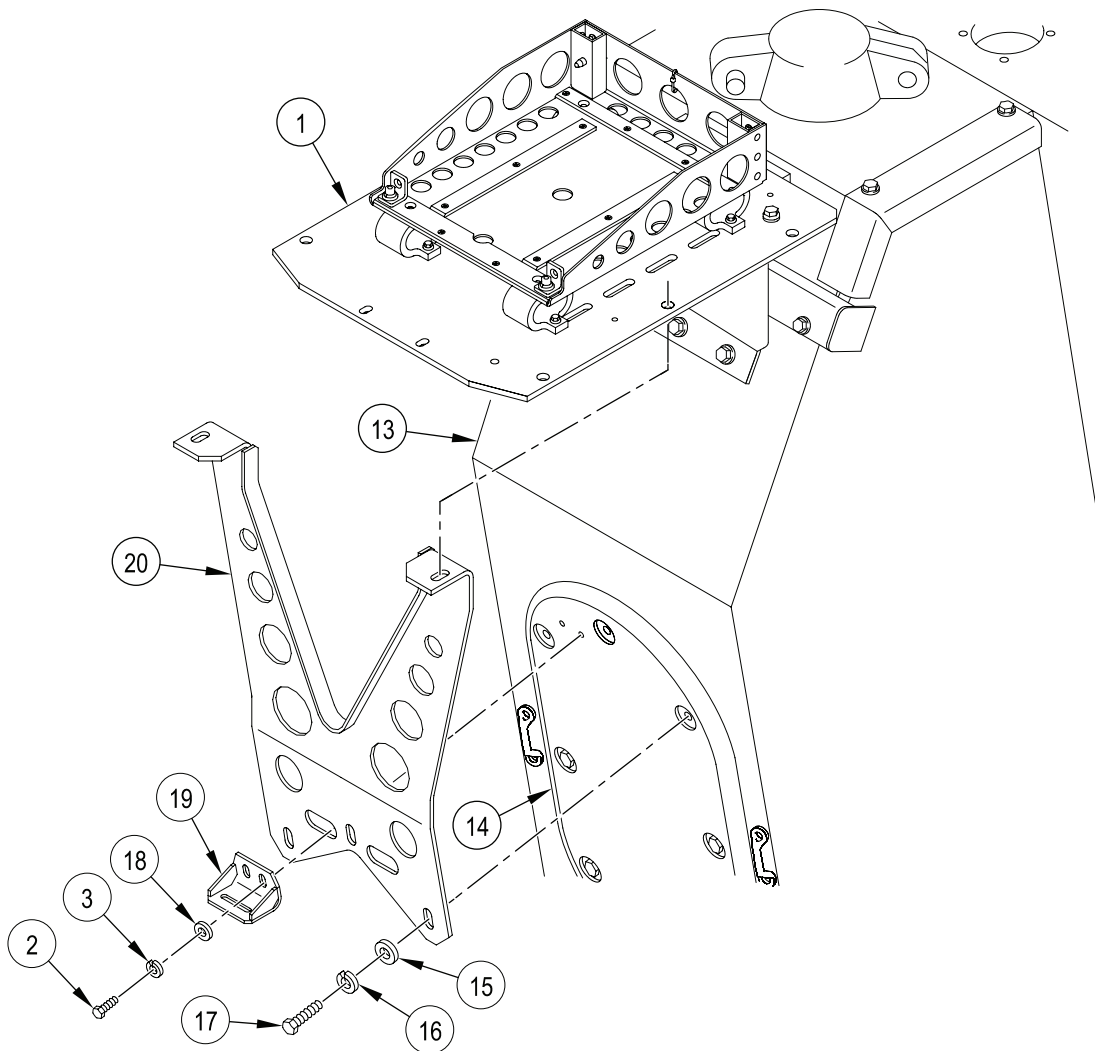


Figure 2. Tank Mount Support Installation

INSTALL GPS, RCU, AND PRIMARY POWER CABLES

1. Position gasket (24) and cable adapter seal (21) over primary unit cable port (25) with indentation (23) of adapter seal facing the middle rear of carrier.
2. Temporarily mount cable adapter seal (21) to hull using two screws (22) until cables are routed and secured.

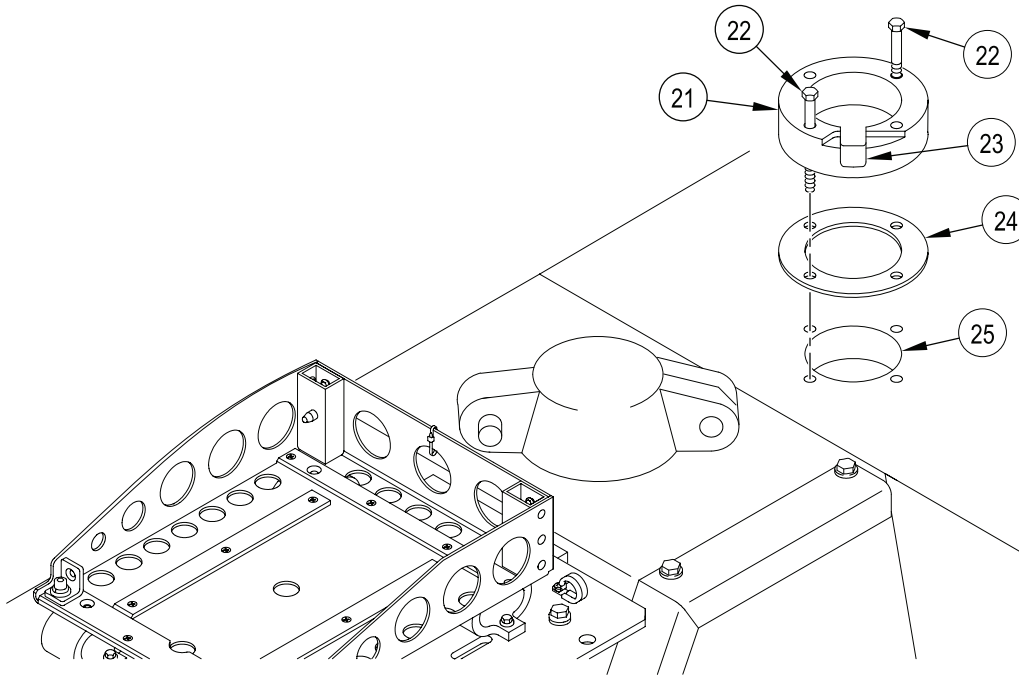


Figure 3. Cable Adapter Seal Installation

NOTE

The GPS cable is part of the GPS Kit. The RCU and power harness are part of the CREW II modification kit.

3. From inside, route the GPS cable (31), RCU cable (33), and power harness (32) thru the cable adapter seal (21) out and over the rear of the carrier. Pull the cables until the connectors extend over the CREW II mount assembly (1).
4. Secure cables to the CREW II mount assembly (1) using two clamps (27) screws (26) and locknuts (28). Position clamps in opposite directions but do not tighten until Steps 5-8 are completed.
5. Measure and pull GPS cable (31) to extend 9 inches beyond rear clamp (27).
6. Measure and pull RCU cable (33) to extend 11 inches beyond rear of clamp (27).
7. Measure and pull power harness (32) to extend 14-1/2 inches beyond rear of clamp (27).
8. Tighten two screws (26) and locknuts (28) on clamps (27) securing cables to CREW II mount assembly (1).
9. Attach ground strap (29) to top of CREW II mount assembly (1) using screw (10), lockwasher (5), and locknut (30).

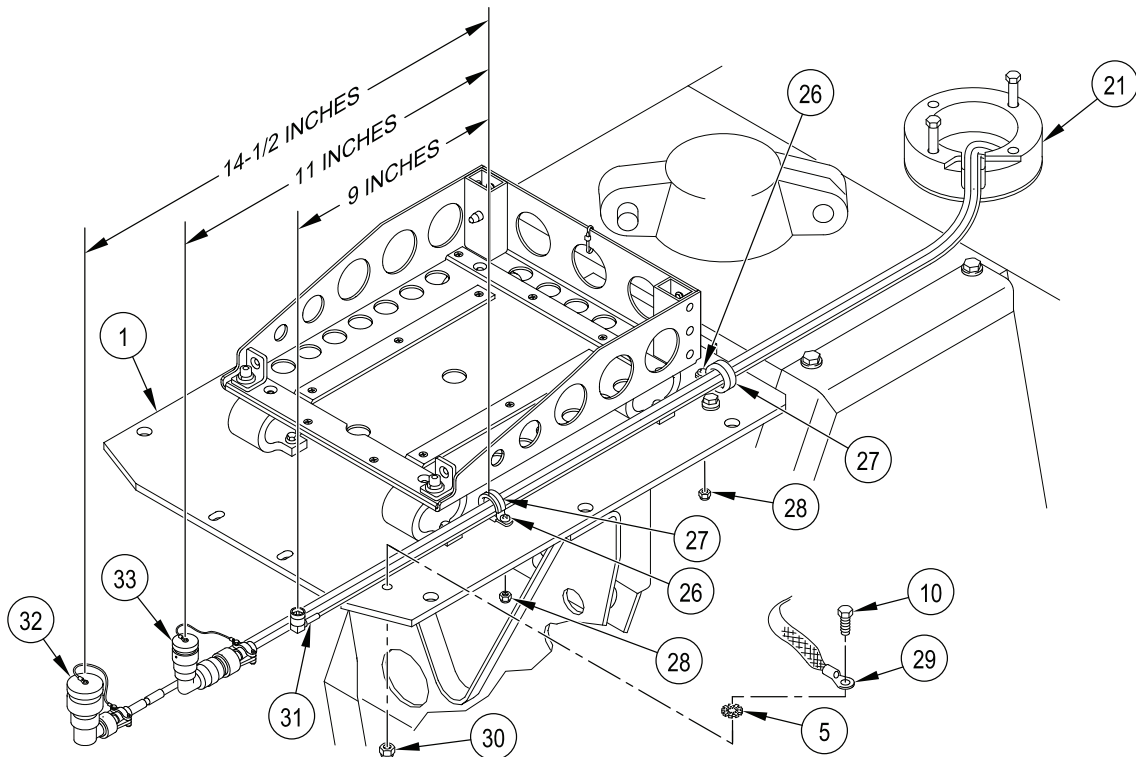
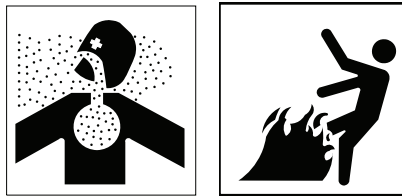


Figure 4. Cable Positioning and Installation

10. Arrange GPS cable (31), RCU cable (33), and power harness (32) along top of fuel tank and thru the indentation (23) in cable seal adapter (21). Ensure cables are not pinched.
11. Remove two screws (36), lockwashers (37), and washers (18) from angle bracket on top side of fuel tank. Discard screws, lockwashers, and washers.
12. Position guard (35) over cables and edge of cable seal adapter (21). Using holes in angle bracket, install cable guard (35) with two screws (36), lockwashers (37), and washers (18).
13. Remove two screws (22) previously installed in (Step 2, page 0005 00-4) that are temporarily securing cable seal adapter (21) to hull.

WARNING

Adhesive, primer, sealant compounds, and isopropyl alcohol are toxic and flammable. These compounds are toxic to eyes, skin, and respiratory tract. Continued exposure can make you dizzy and irritate your eyes and throat.

Always use in well ventilated areas, away from heat, sparks, and flames. Do not breathe fumes. Do not allow into contact with skin and eyes. Use goggles or face shield and protective gloves.

14. Apply adhesive to area around cables and in indentation (23) of cable seal adapter (21).
15. Position a second gasket (24) and antenna base cover (34) on cable adapter seal (21) and secure with four screws (22).

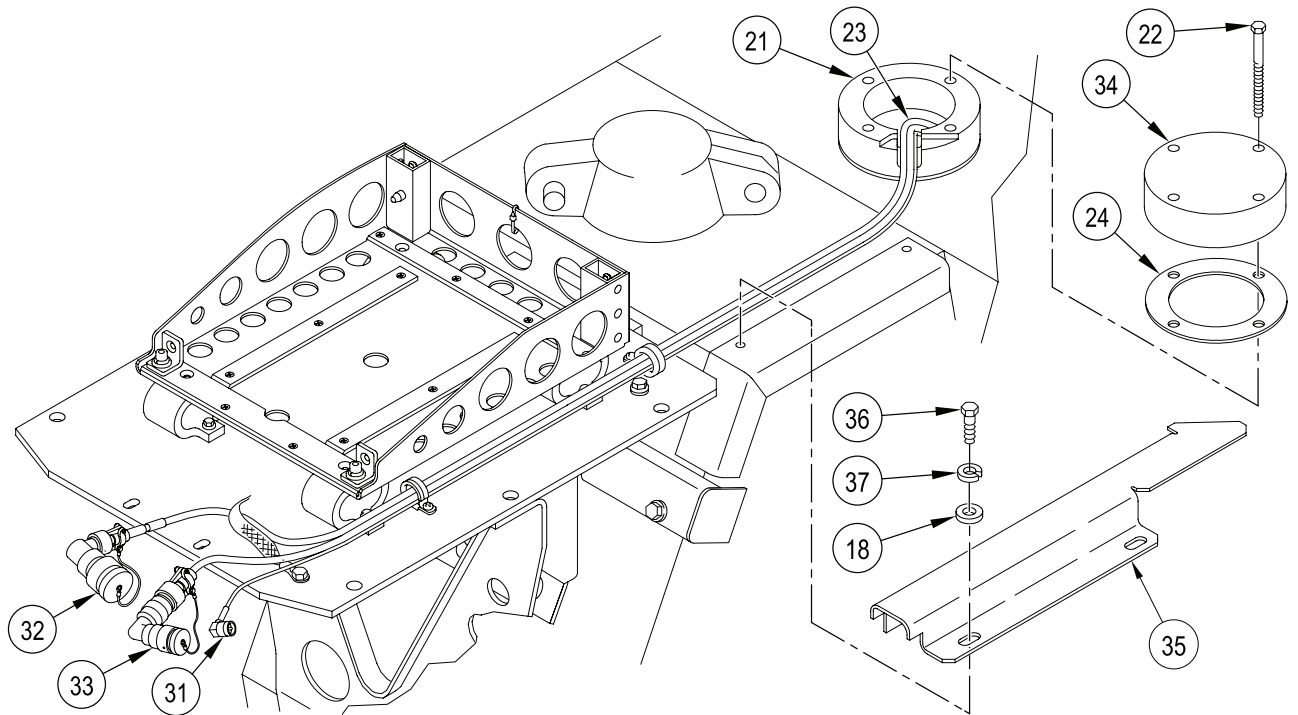


Figure 5. Antenna Base Cover Installation

NOTE

Do not secure cables with tie straps until installation is complete and the cables have been adjusted at both ends.

- Route power harness (32), GPS cable (31), and RCU cable (33) behind the horizontal and vertical ammo racks and along existing left side hull wiring, stopping at the carrier radio to radio power connect.

NOTE

Verify main keyway of radio power connect is clocked upward. If not clocked upward, remove connector and reinstall with keyway upward at the twelve o'clock position.

- Disconnect the carrier radio connector (44) from the carrier radio power connect (42) and connect the power harness (32) connector P1 (41) to carrier radio power connect (40).
- Remove the protective cap (43) from primary power connect J1 (42) and connect the carrier radio connector (44).
- Remove screw (46) and lockwasher (38) from clamp (45). Discard screw and lockwasher.
- Attach power harness ground strap (39) to hull with clamp (45), screw (46) and lockwasher (38).

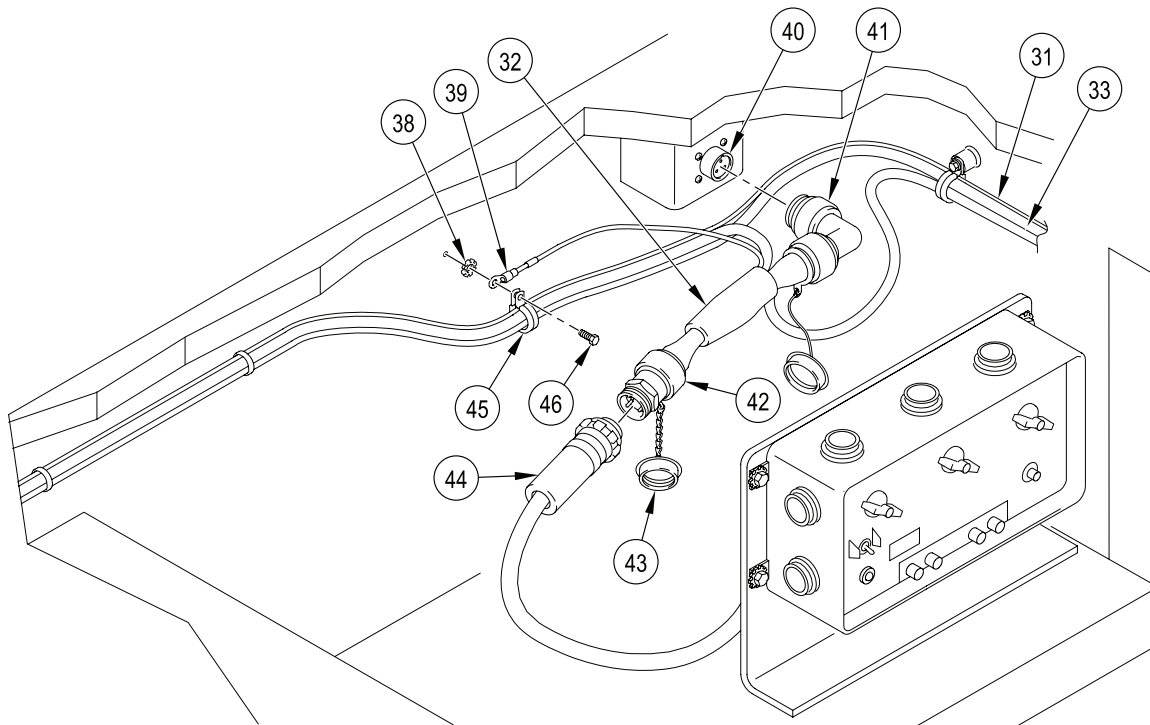


Figure 6. Cable Routing and Power Harness Installation

21. Continue routing the GPS cable (31), RCU cable (33), and power harness lead P3 (32) around the engine bulkhead toward the right side of the carrier hull where the PDA/RCU bracket assembly will be mounted.

NOTE

Do not tighten cable clamps until adjustment and installation is complete.

22. Locate two existing cable clamps (45) on engine bulkhead. Remove two screws (47) and cable clamps (45). Discard screws and clamps.
23. Group the power harness (32), GPS cable (31), and RCU cable (33) with the existing cables and route thru two cable clamps (45). Attach cable clamps (45) to weld nuts on engine bulkhead with two screws (47) and lockwashers (48).

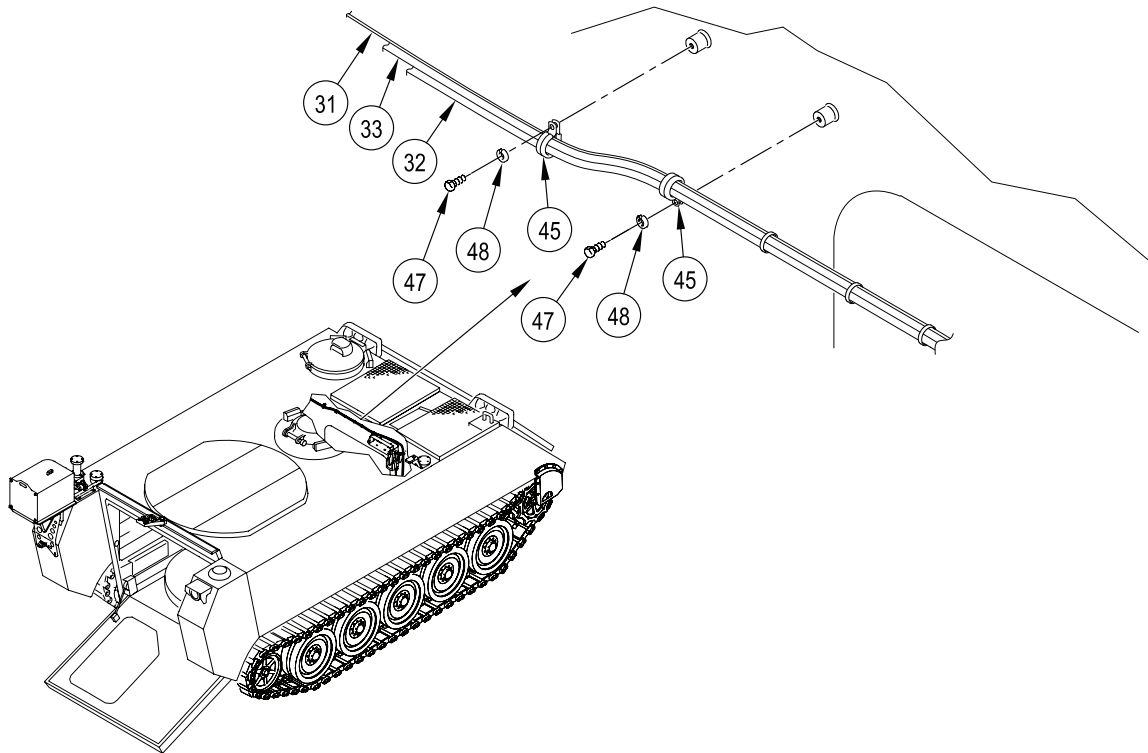


Figure 7. Cable Installation

INSTALL GPS ANTENNA KIT

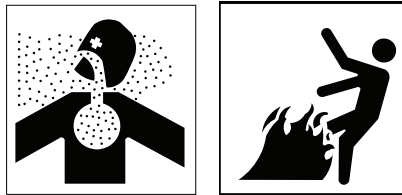
1. Position gasket (24) and GPS mount (51) over antenna opening. Point GPS arm toward the rear of carrier.
2. Route GPS cable (31) up and thru antenna opening, gasket (24), and groove (50) in GPS mount (51). Allow enough cable to connect to the GPS sensor.

NOTE

Remove and discard mounting plate from GPS sensor.

3. Connect the GPS cable (31) to the GPS sensor (49) and install GPS sensor on GPS mount (51) using two screws (53).
4. Adjust GPS cable (31) and secure to GPS mount (51) with three tie straps (52).

WARNING



Adhesive, primer, sealant compounds, and isopropyl alcohol are toxic and flammable. These compounds are toxic to eyes, skin, and respiratory tract. Continued exposure can make you dizzy and irritate your eyes and throat.

Always use in well ventilated areas, away from heat, sparks, and flames. Do not breathe fumes. Do not allow into contact with skin and eyes. Use goggles or face shield and protective gloves.

5. Apply a generous amount of adhesive over GPS cable (31) and groove (50) of the GPS mount (51).

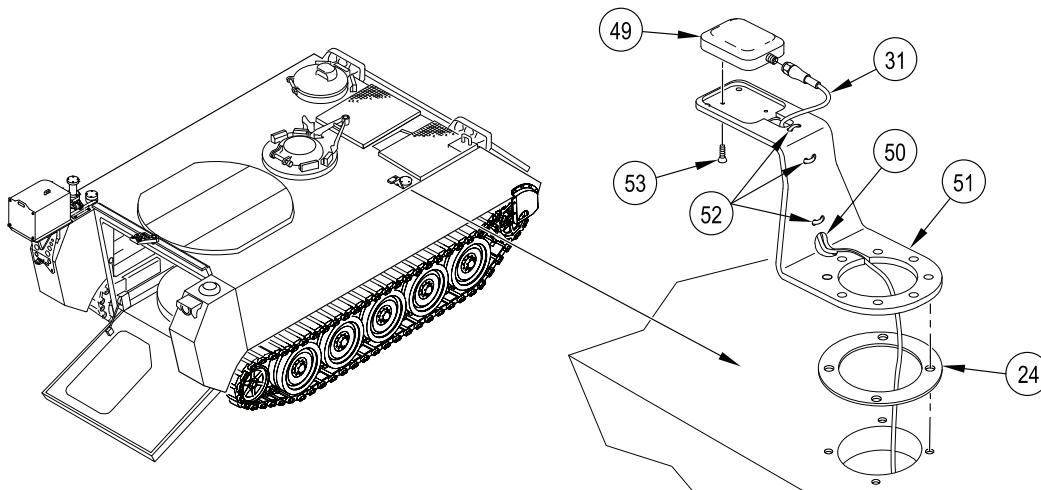


Figure 8. GPS Mount Installation

NOTE

If installing SINGARS antenna, do Steps 6-9 using four shorter screws (B1821BH038C175N). If installing antenna cover, go to Step 10.

6. Position gasket (24) on GPS mount (51).
7. Pull antenna cable (59) thru gasket and attach to antenna base (55).
8. Pull ground strap (56) thru gasket and attach to antenna base (55) with screw (58) and lockwasher (57).
9. Secure antenna base (55) to GPS mount (51) using four screws (54) and lockwashers (60). Ensure cable (59) is properly adjusted and not pinched; tighten screws.

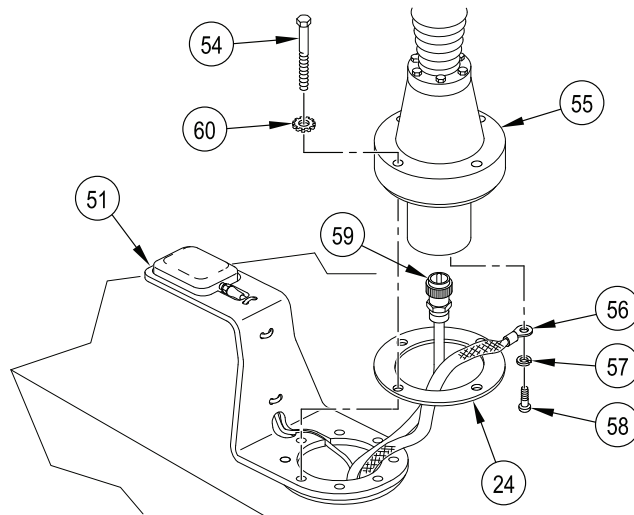


Figure 9. GPS Cable and Antenna Installation

10. Position gasket (24) and cover (34) on GPS mount (49) and secure using four screws (22). Ensure cable is properly adjusted and not pinched; tighten screws.

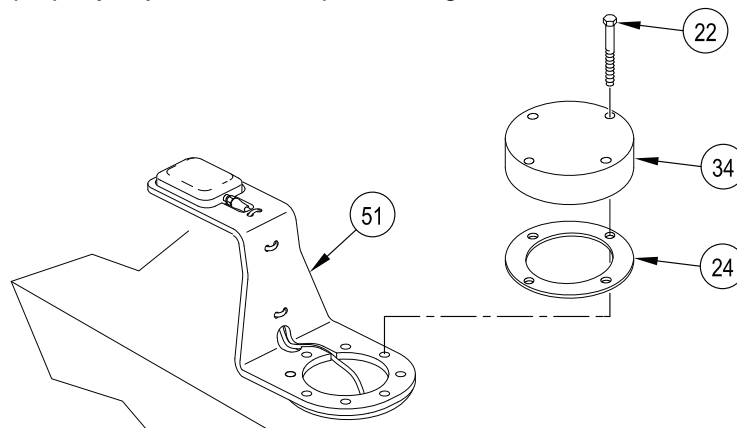


Figure 10. GPS Antenna Cover Installation

INSTALL PDA/RCU BRACKET ASSEMBLY

1. Route the power harness (32), GPS cable (31), and RCU cable (33) thru a third cable clamp (45). Position the RCU/PDA assembly (65) close to mounting holes in engine bulkhead and attach clamp (45) with cables to RCU/PDA assembly (65) using screw (47) and locknut (61).
2. On the cradle side of the RCU/PDA assembly (65), attach a fourth clamp (45) on cables using screw (47) and locknut (61).
3. Mount the RCU/PDA assembly (65) to holes in engine bulkhead with two screws (62), four lockwashers (63), and two locknuts (64).

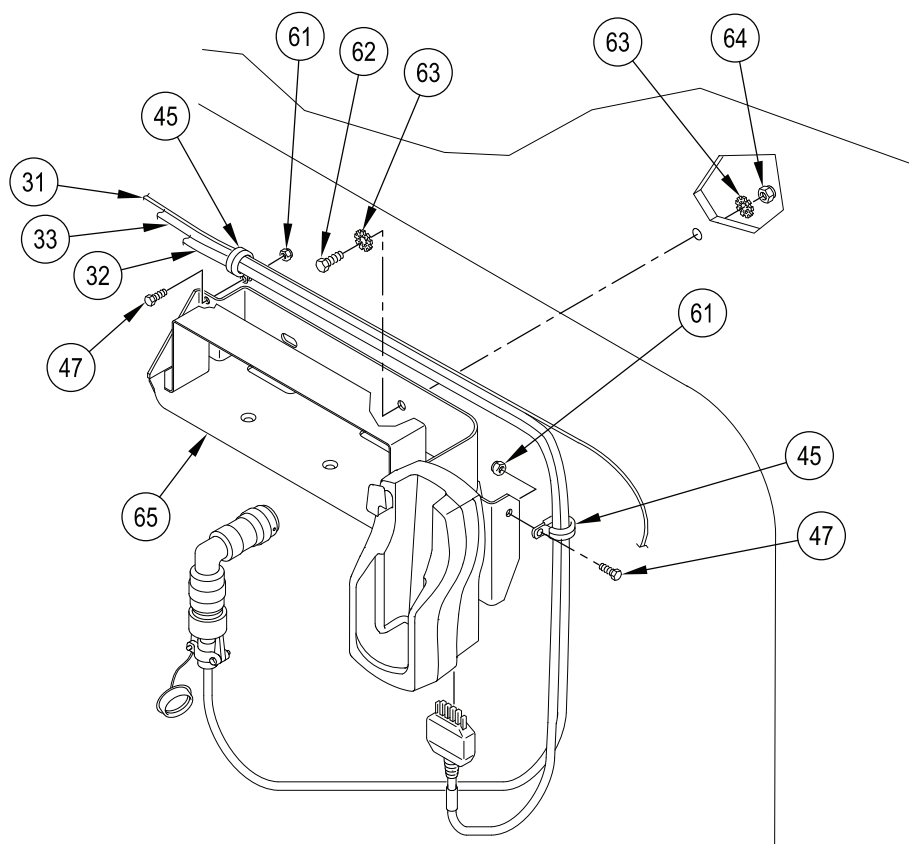


Figure 11. RCU/PDA Assembly Installation

4. Adjust RCU cable (33) until it measures 25 inches (63.50 cm) from cable clamp (45) to end of cable.
5. Adjust power harness (32) until it measures 20 inches (51 cm) from cable clamp (45) to end of cable.
6. Connect P3 lead of power harness (32) to PDA cradle (66).
7. Tighten all cable clamps and secure cables to existing wiring harnesses as needed with tie straps.

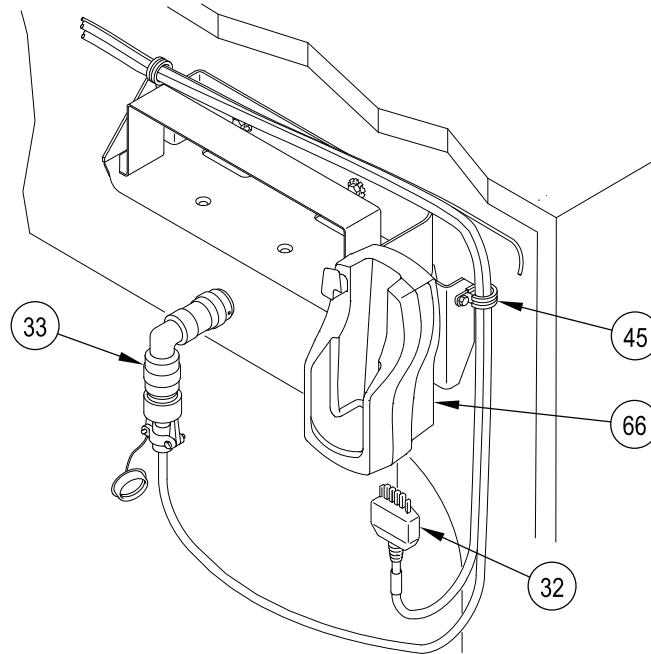


Figure 12. RCU/PDA Cable Installation

INSTALL ANTENNA STOWAGE BRACKET

1. Locate two holes (72) and (73) drilled in the center rear of the roof of carrier.
2. Position antenna bracket (76), washer (71), and lockwasher (70) over center hole (72) in edge of bracket and secure with handle (69) and antenna screw (68).
3. Install screw (75) and lockwasher (74) in hole (73) next to antenna bracket to serve as a stop.
4. Stow strap (67) to antenna bracket (76).

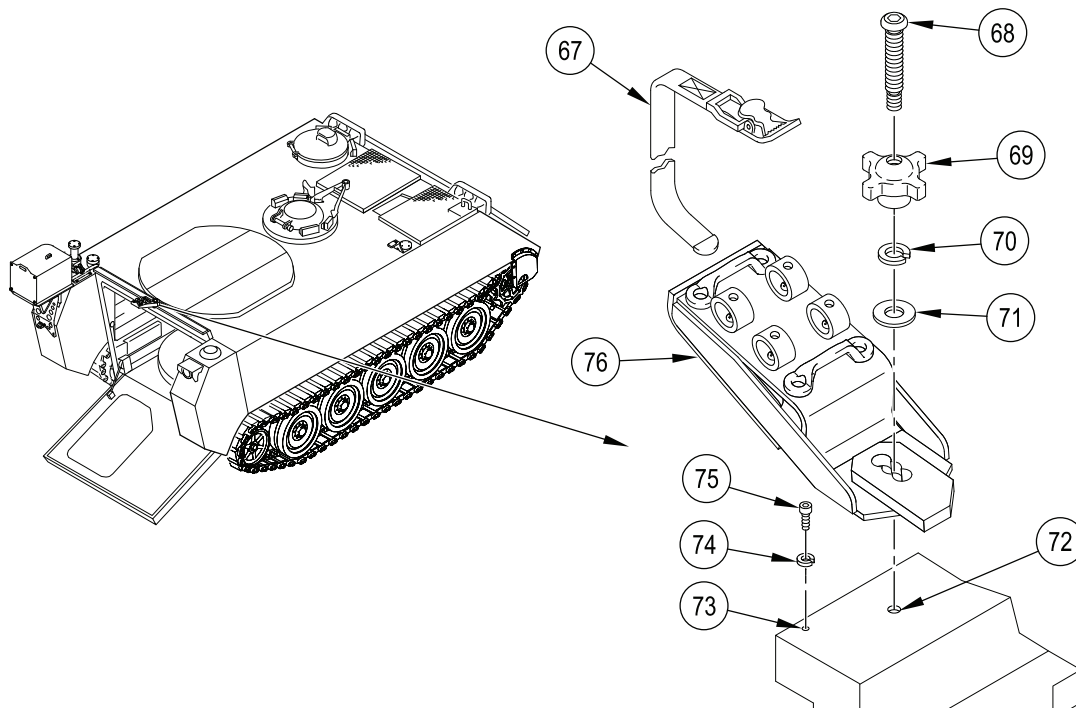


Figure 13. Antenna Stowage Bracket Installation

INSTALL ENCLOSURE ASSEMBLY

CAUTION

Ensure the CREW II cables and ground strap are not pinched during enclosure installation. Failure to comply could result in equipment damage.

1. Secure the CREW II cables (77) and ground strap (29) to the CREW II mount assembly (1) using a tie strap (78).

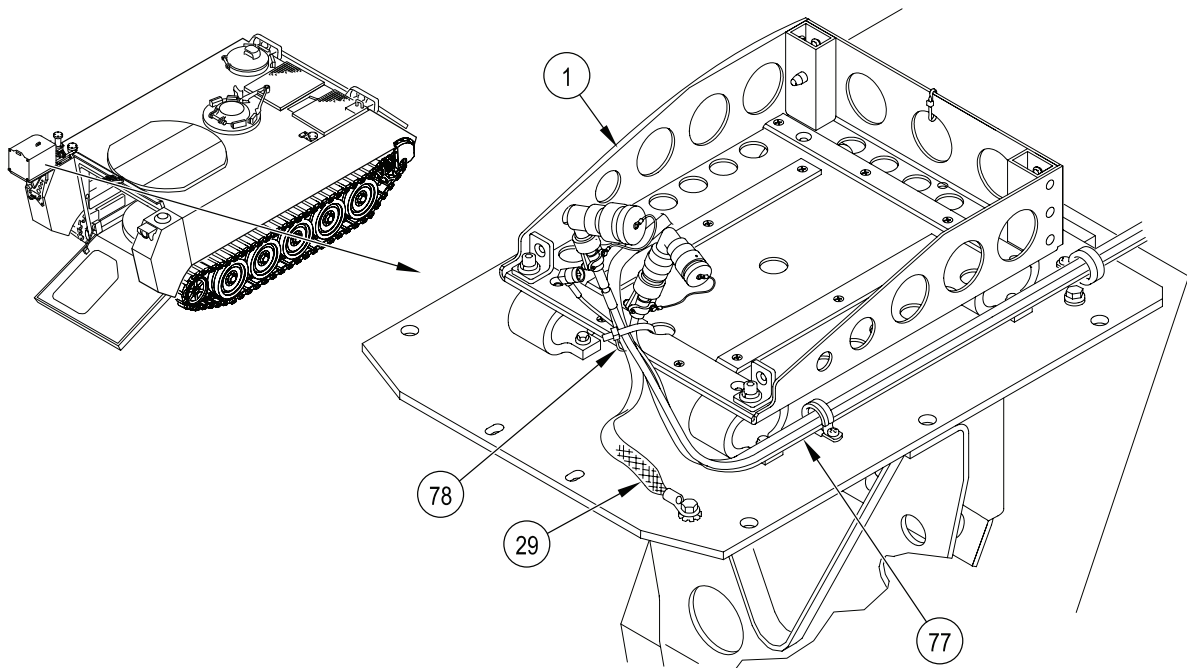


Figure 14. Secure CREW II Cables

2. Remove four screws (81), lockwashers (16), washers (15), and enclosure cover (82) from enclosure assembly (79).

WARNING

Hanging loads, heavy parts, and overhead equipment can fall unexpectedly. Falling loads can kill or seriously injure personnel.

Keep away from hanging loads, heavy parts, and overhead equipment. Use correct lifting devices to move hanging loads and heavy parts. Always have a helper guide you. Keep your hands and feet out of confined spaces in which heavy loads are being installed or removed.

3. Attach endless sling (80) to enclosure assembly (79) and lift with suitable lifting device. Position enclosure assembly (79) on CREW II mount assembly (1). Have helper assist.

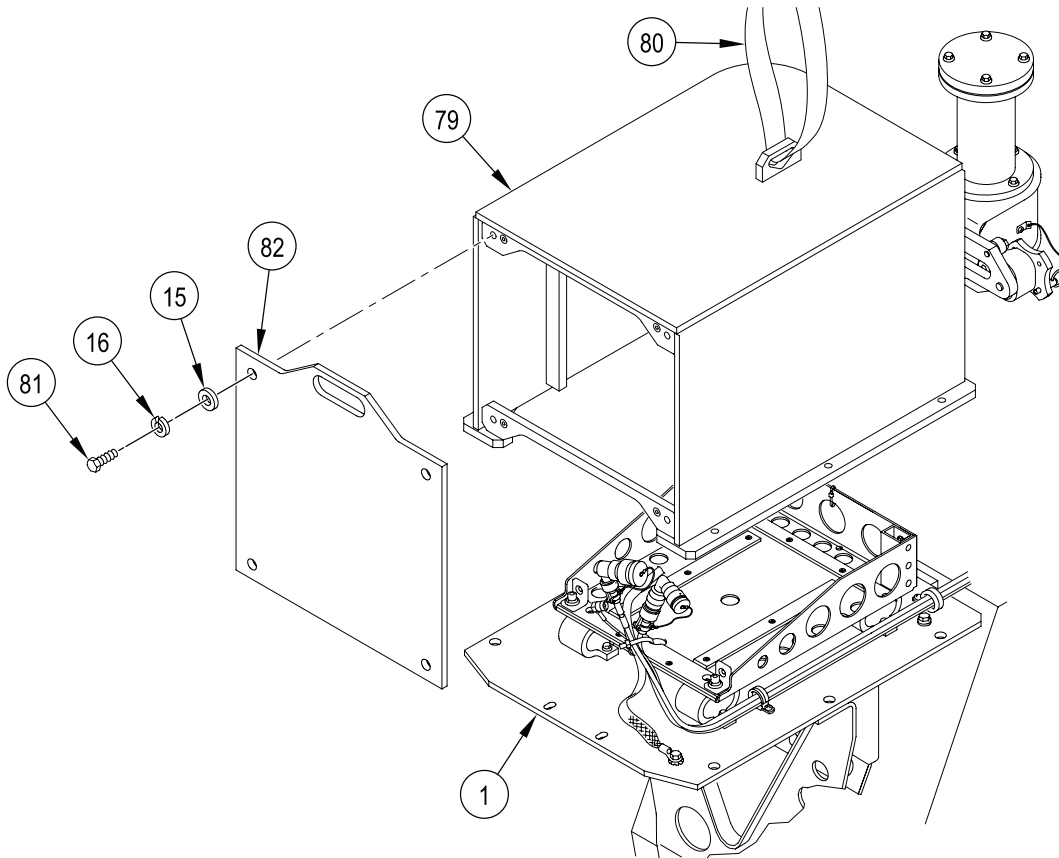
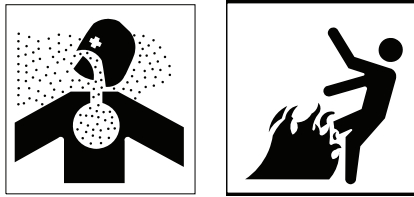


Figure 15. Enclosure Assembly Cover Removal

WARNING

Adhesive, primer, sealant compounds, and isopropyl alcohol are toxic and flammable. These compounds are toxic to eyes, skin, and respiratory tract. Continued exposure can make you dizzy and irritate your eyes and throat.

Always use in well ventilated areas, away from heat, sparks, and flames. Do not breathe fumes. Do not allow into contact with skin and eyes. Use goggles or face shield and protective gloves.

4. Apply sealing compound primer to threads of screws (83) and (81).
5. Apply sealing compound to four screws (83). While sealing compound is still wet, secure four corners of enclosure assembly (79) to CREW II mount assembly (1) using four screws (83), lockwashers (16), and washers (15).
6. Apply sealing compound to two screws (81). While sealing compound is still wet, attach enclosure assembly (79) to tank mount support (20) with two screws (81), lockwashers (16), and washers (15).
7. Remove endless sling (80).

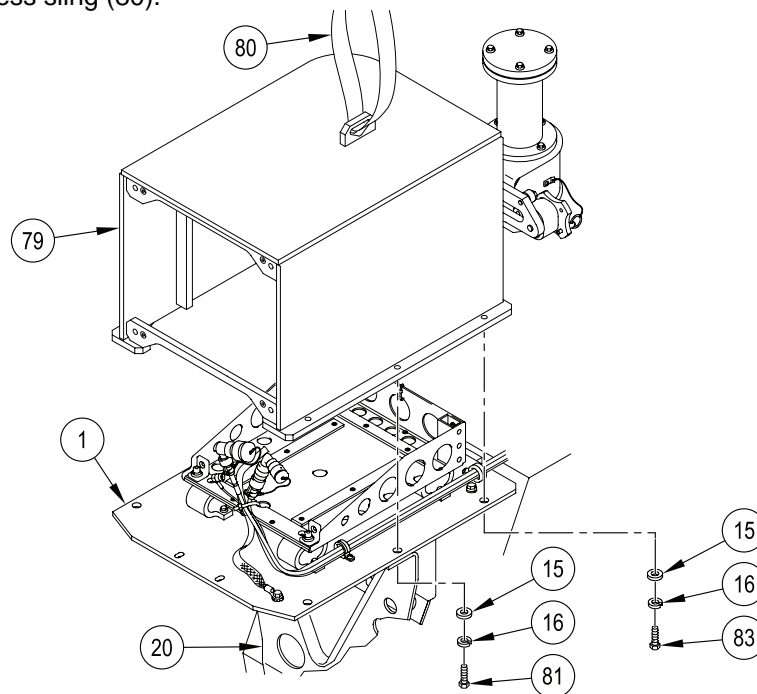


Figure 16. Enclosure Assembly Installation

8. Locate ground strap (29) on the inside of enclosure assembly (79). Cut the tie strap and route ground strap out the back of the enclosure assembly (79).
9. Pull and position ground strap (29) to attach to rear screw (36) on cable guard (35).
10. Remove screw (36), lockwasher (37), and washer (18) from cable guard (35). Discard lockwasher.

NOTE

Mount ground strap next to head of screw.

11. Install screw (36), ground strap (29), lockwasher (37), and washer (18) on cable guard (35).
12. Attach enclosure assembly cover (82) to enclosure assembly (79) using four screws (81), lockwashers (16), and washers (15).

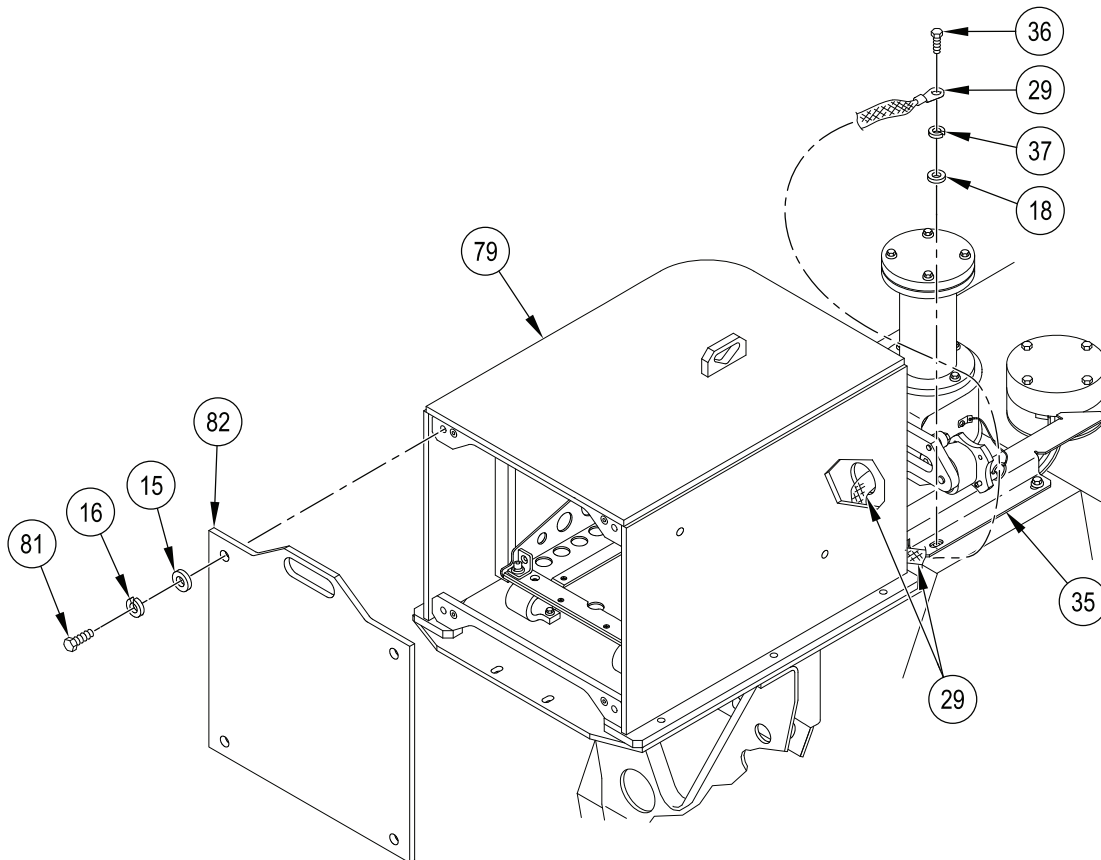


Figure 17. Ground Strap and Cable Guard Installation

FOLLOW-THROUGH STEPS

1. Install power plant rear access panel. See TM 9-2350-277-20-4.
2. Install top shelf of vertical ammo rack. See TM 9-2350-277-20-4.
3. Close and secure top door of horizontal ammo rack.

END OF WORK PACKAGE

CHAPTER 3
REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

WORK PACKAGE INDEX

<u>Title</u>	<u>Sequence No.</u>
REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) INTRODUCTION.....	0006 00
CREW II MODIFICATION KIT - 12498030	0007 00
NATIONAL STOCK NUMBER INDEX.....	0008 00
PART NUMBER INDEX	0009 00

**REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
INTRODUCTION**

0006 00

SCOPE

This Repair Parts and Special Tools List (RPSTL) lists and authorizes spares and repair parts for performance of sustainment on the CREW II modification kit for the M1064A3. It authorizes the requisitioning, issue, and disposition of spares and repair parts as indicated by the Source, Maintenance, and Recoverability (SMR) codes

GENERAL

In addition to the Introduction work package, this RPSTL is divided into the following work packages:

1. **Repair Parts List Work Packages.** Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.
2. **Special Tools List Work Packages.** Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
3. **Cross-Reference Indexes Work Packages.** There are two cross-reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package, and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

Item No. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR Code (Column (2)). The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:

TABLE 1. SMR Code Explanation

Source Code XXxxx	Maintenance Code xxXXx	Recoverability Code xxxxX
1 st two positions: How to get an item.	3 rd position: Who can install, replace, or use the item.	4 th position: Who can do complete repair* on the item.
		5 th position: Who determines disposition action on unserviceable items?

* Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
INTRODUCTION – Continued

0006 00

- a. Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

Source Code	Application/Explanation
PA PB PC PD PE PF PG PH PR PZ	<p>Stocked items: Use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code.</p> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Items coded PC are subject to deterioration.</p>
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
MF - Made at field MH - Made at below depot/sustainment level ML - Made at SRA MD - Made at Depot	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group of the repair parts list in the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
AF - Assembled by field AH - Assembled by below depot sustainment level AL - Assembled by SRA AD - Assembled by Depot	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
XA	Do not requisition an XA-coded item. Order its next higher assembly. (Also, refer to the note below.)
XB	If an XB-coded item is not available from salvage, order it using the CAGEC and part number given.
XC	Installation drawing, diagram, instruction sheet, field service drawing that is identified by manufacturer's part number.
XD	<p>Item is not stocked. Order an XD-coded item through normal supply channels using the CAGEC and part number given if no NSN is available.</p> <p style="text-align: center;">NOTE</p> <p>Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source-coded "XA" or those aircraft support items restricted by requirements of AR 750-1.</p>

**REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
INTRODUCTION – Continued**

0006 00

- b. Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use the repair support items. The maintenance codes are entered in the 3rd and 4th positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance:

Maintenance Code	Application/Explanation
F	Field maintenance can remove, replace, and use the item.
H	Below Depot Sustainment maintenance can remove, replace, and use the item.
L	Specialized repair activity can remove, replace, and use the item.
G	Afloat and ashore intermediate maintenance can remove, replace, and use the item (Navy only)
K	Contractor facility can remove, replace, and use the item
Z	Item is not authorized to be removed, replaced, or used as any maintenance level
D	Depot level can remove, replace, and use the item.

*NOTE – Army may use C in the third position. However, for joint service publications Army will use O.

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

NOTE

Some limited repair may be done on the item at a lower level of maintenance if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Maintenance Code	Application/Explanation
F	Field is the lowest level that can do complete repair of the item.
H	Below Depot Sustainment is the lowest level that can do complete repair of the item.
L	Specialized repair activity is the lowest level that can do complete repair of the item.
D	Depot is the lowest level that can do complete repair of the item.
K	Complete repair is done at contractor facility.
Z	Nonreparable. No repair is authorized.
B	No repair is authorized. No parts or special tools are authorized for the maintenance of a B-coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

**REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
INTRODUCTION – Continued**

0006 00

- c. Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR code as follows:

Recoverability Code	Application/Explanation
Z	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR code.
F	Reparable item. When uneconomically repairable, condemn and dispose of the item at the field level.
H	Reparable item. When uneconomically repairable, condemn and dispose of the item at the below depot sustainment level.
D	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
A	Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.
K	Reparable item. Condemnation and disposal to be performed at contractor facility.

National Stock Number (Column (3)). The NSN for the item is listed in this column.

CAGE Code (Column (4)). The Commercial and Government Entity Code (CAGEC) is a 5-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

Part Number (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

NOTE

When you use an NSN to requisition an item, the item you receive may have a different part number from the number listed.

Description and Usable on Code (UOC) (Column (6)). This column includes the following information:

1. The Federal item name and, when required, a minimum description to identify the item.
2. Part numbers of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
INTRODUCTION – Continued

0006 00

QTY (Column (7)). The QTY (quantity per figure column) indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, sub-functional group, or an assembly. A "V" appearing in this column in place of a quantity indicates that no specific quantity is applicable (e.g., shims, spacers).

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package. NSNs in this index are listed in National Item Identification Number (NIIN) sequence.

STOCK NUMBER Column. This column lists the NSN in NIIN sequence. The NIIN consists of the last nine digits of the NSN. When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

For example, if the NSN is 5385-01-574-1476, the NIIN is 01-574-1476.

FIGURE NUMBER Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list work packages.

ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIGURE column. This item is also identified by the NSN listed on the same line.

2. Part Number (P/N) Index Work Package. Part numbers in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

PART NUMBER Column. Indicates the part number assigned to the item.

FIGURE Column. This column lists the number of the figure where the item is identified/located in the repair parts and special tools list work packages.

ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

END OF WORK PACKAGE

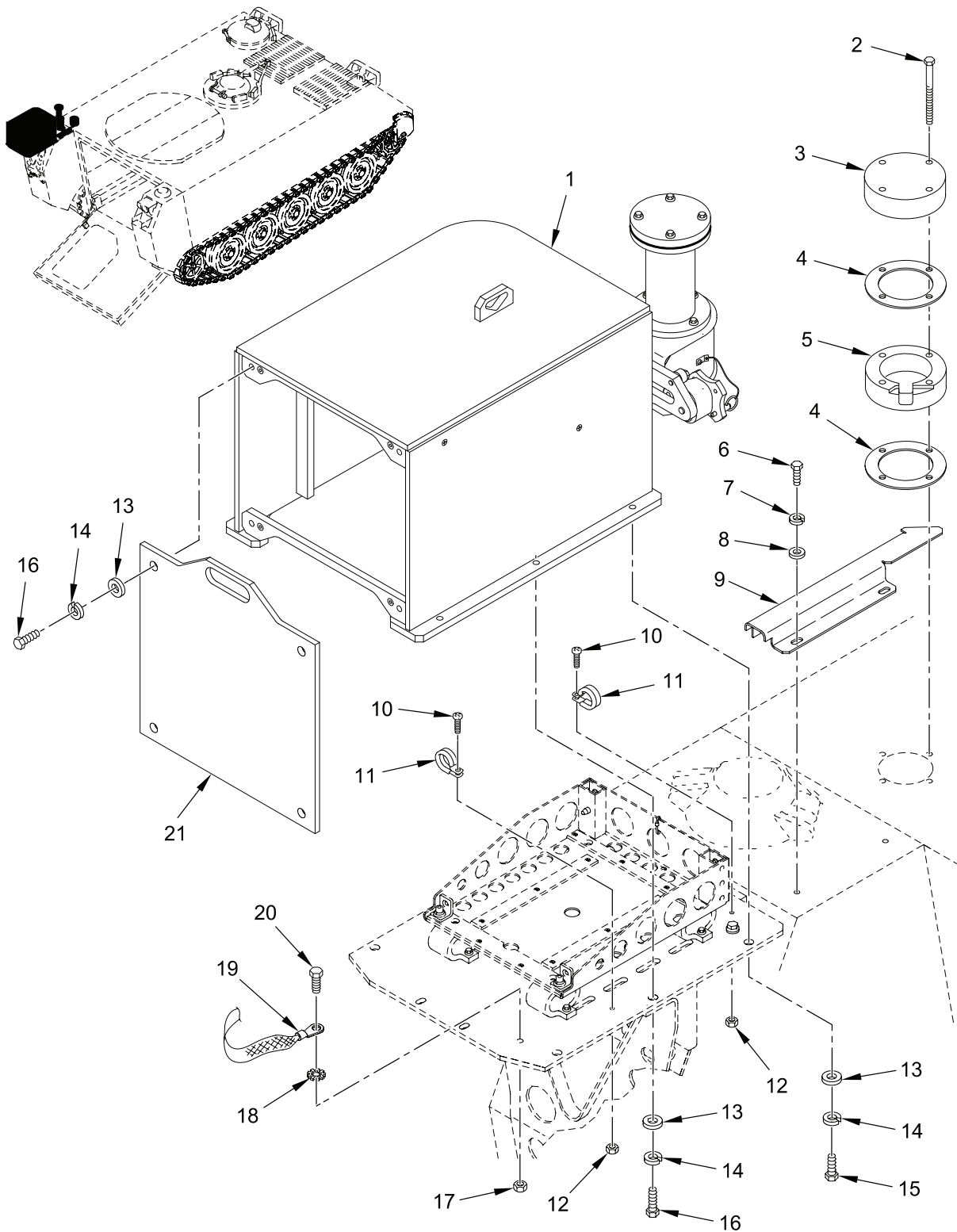


Figure 1. CREW II Modification Kit - 12498030
(Sheet 1 of 4)

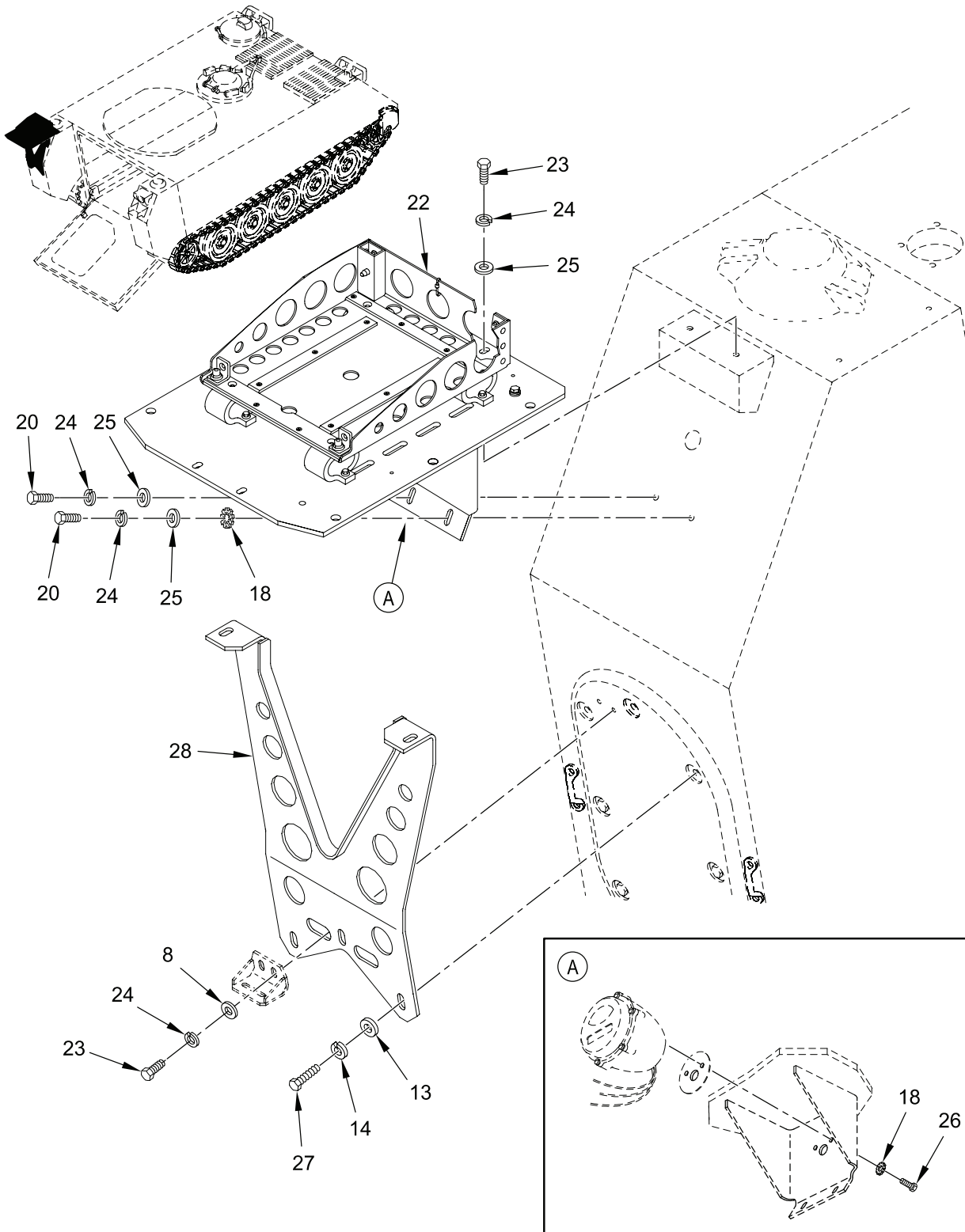
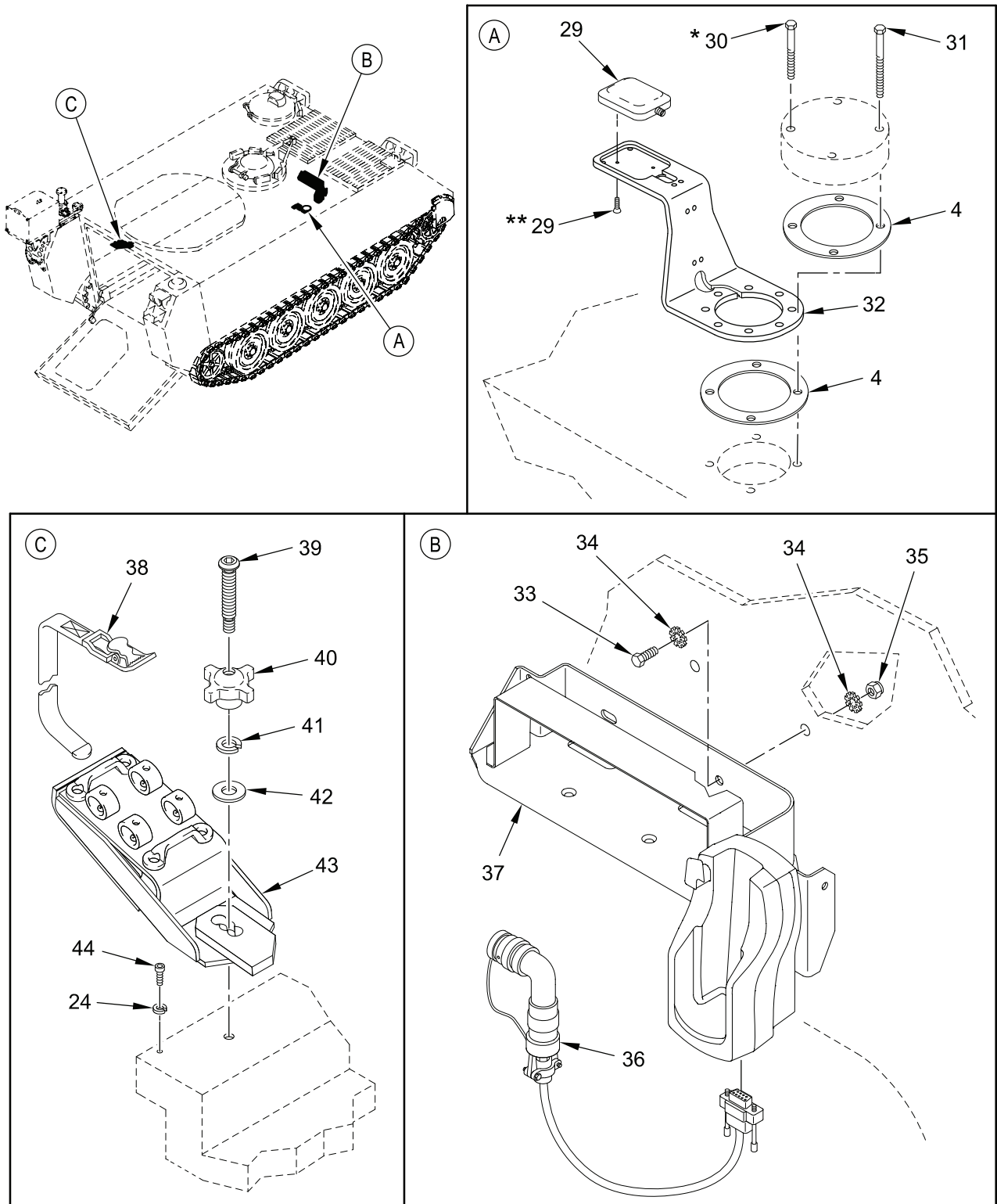


Figure 1. CREW II Modification Kit - 12498030
(Sheet 2 of 4)



* REQUIRED WHEN SINCARS ANTENNA IS INSTALLED
 ** PART OF ANTENNA ASSEMBLY

Figure 1. CREW II Modification Kit - 12498030
 (Sheet 3 of 4)

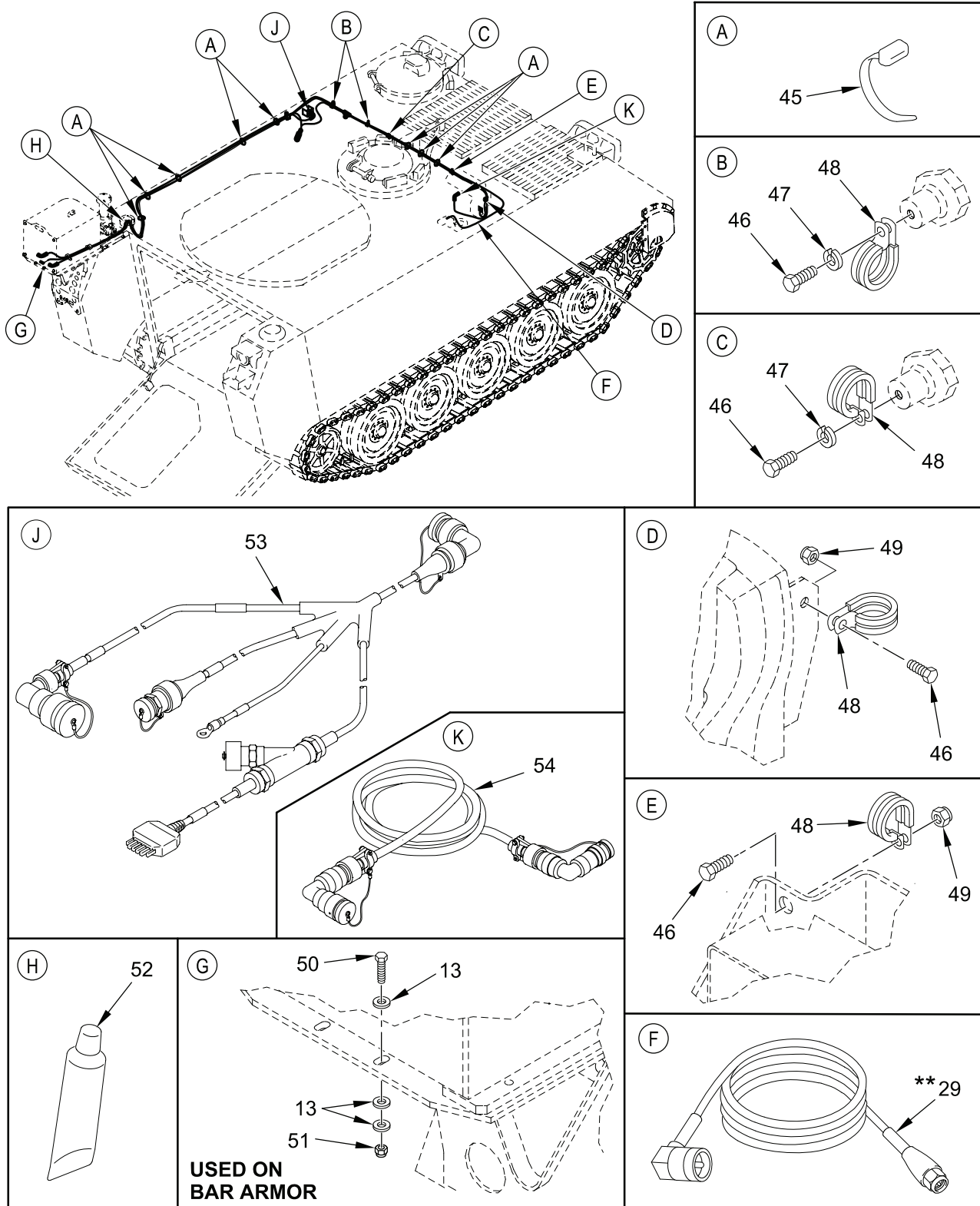


Figure 1. CREW II Modification Kit - 12498030
(Sheet 4 of 4)

CREW II MODIFICATION KIT - 12498030 – Continued

0007 00

(1) ITEM NO	(2) SMR	(3) NSN	(4) CAGE	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP 4202 SPECIAL PURPOSE KITS FIG. 1 CREW II MODIFICATION KIT 12498030 (M1064A3)						
1	PAFZZ		19207	12498015	ENCLOSUE ASSEMBLY	1
2	PAFZZ	5305-00-990-8632	80204	B1821BH038C375N	UOC:AP2, SCREW, CAP, HEX HEAD	4
3	PAFZZ	5340-00-851-4894	80212	10861974	UOC:AP2, COVER, ACCESS	1
4	PAFZZ	5330-00-772-6600	19207	7726600	UOC:AP2, GASKET	4
5	PAFZZ		19207	12498036	UOC:AP2, ADAPTER, CABLE, SEAL	1
6	PAFZZ	5306-00-226-4825	80204	B1821BH031C075N	UOC:AP2, BOLT, MACHINE	2
7	PAFZZ	5310-00-974-6623	80205	MS35338-140	UOC:AP2, WASHER, LOCK	2
8	PAFZZ	5310-00-081-4219	96906	MS27183-12	UOC:AP2, WASHER, FLAT	2
9	PAFZZ		19207	12498035	UOC:AP2, GUARD	1
10	PAFZZ	5305-00-984-6212	80205	MS35206-265	UOC:AP2, SCREW, MACHINE	2
11	PAFZZ	5340-00-926-5449	80205	MS21334-28	UOC:AP2, CLAMP, LOOP	2
12	PAFZZ	5310-01-516-3969	81349	M45913/1-010CG5Z	UOC:AP2, NUT, SELF-LOCKING, HEX	2
13	PAFZZ	5310-00-866-4417	19207	10910174-5	UOC:AP2, WASHER, FLAT	19
14	PAFZZ	5310-00-933-8778	80205	MS35338-143	UOC:AP2, WASHER, LOCK	13
15	PAFZZ	5305-00-071-2067	80204	B1821BH050C125N	UOC:AP2, SCREW, CAP, HEX HEAD	4
16	PAFZZ	5305-00-071-2069	80204	B1821BH050C150N	UOC:AP2, SCREW, CAP, HEX HEAD	6
17	PAFZZ	5310-01-505-0245	81349	M45913/1-6CG5Z	UOC:AP2, NUT, SELF-LOCKING, HEX	1
18	PAFZZ	5310-00-061-1258	96906	MS45904-76	UOC:AP2, WASHER, LOCK	4
19	PAFZZ		19207	12498047-1	UOC:AP2, GROUND STRAP	1
20	PAFZZ	5305-00-543-2419	80204	B1821BH038C113N	UOC:AP2, SCREW, CAP, HEX HEAD	3
21	PAFZZ		19207	12498014	UOC:AP2, COVER, ENCLOSURE	1
22	PAFZZ		19207	12498064	UOC:AP2, MOUNT, CREW II, ASSEMBLY	1
23	PAFZZ	5305-00-068-0511	80204	B1821BH038C125N	UOC:AP2, SCREW, CAP, HEX HEAD	4
24	PAFZZ	5310-00-984-7042	80205	MS35338-141	UOC:AP2, WASHER, LOCK	7
25	PAFZZ	5310-00-877-5972	19200	10910174-3	UOC:AP2, WASHER, FLAT	4
26	PAFZZ	5301-00-721-5492	80204	B1821BH038C063N	UOC:AP2, SCREW, CAP, HEX HEAD	2
27	PAFZZ	5305-00-719-5238	80204	B1821BH050F200N	UOC:AP2, SCREW, CAP, HEX HEAD	3
28	PAFZZ		19207	12498034	UOC:AP2, SUPPORT, TANK MOUNT	1
29	PAFZZ	5985-01-552-5896	1BEX2	35089	UOC:AP2, ANTENNA ASSEMBLY	1

CREW II MODIFICATION KIT - 12498030 – Continued

0007 00

(1) ITEM NO	(2) SMR	(3) NSN	(4) CAGE	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
30	PAFZZ	5305-00-821-3869	80204	B1821BH038C175N	SCREW, CAP, HEX HEAD UOC:AP2,*	4
31	PAFZZ	5305-00-781-3926	80204	B1821BH0C8C275N	SCREW, CAP, HEX HEAD UOC:AP2,	4
32	PAFZZ		19207	12498024	MOUNT, GPS, CREW II UOC:AP2,	1
33	PAFZZ	5306-00-226-4826	80204	B1821BH031C088N	BOLT, MACHINE UOC:AP2,	2
34	PAFZZ	5310-00-889-2527	96906	MS45904-72	WASHER, LOCK UOC:AP2,	4
35	PAFZZ	5310-01-494-9745	81349	M45913/1-5CG5Z	NUT, SELF-LOCKING, HEX UOC:AP2,	2
36	PAFZZ		1YF27	A3312450-4	CABLE, RCU TO PDA UOC:AP2,	1
37	PAFZZ		19207	12498068	ASSEMBLY, RCU/PDA UOC:AP2,	1
38	PAFZZ	5340-00-753-3743	19207	8690519	STRAP, WEBBING UOC:AP2,	1
39	PAFZZ		19207	12498080	SCREW, MOUNTING, ANTENNA UOC:AP2,	1
40	PAFZZ	5355-01-123-7148	99862	CL-5HK-6	KNOB UOC:AP2,	1
41	PAFZZ	5310-00-937-0453	80205	MS35338-145	WASHER, LOCK UOC:AP2,	1
42	PAFZZ	5310-01-203-2314	19207	10910174-44	WASHER, FLAT UOC:AP2,	1
43	PAFZZ		19207	12498040	BRACKET, ANTENNA UOC:AP2,	1
44	PAFZZ	5305-00-978-9392	80205	MS16997-97	SCREW, CAP, SOCKET HEAD UOC:AP2,	1
45	PAFZZ	5975-00-074-2072	81343	MS3367-1-9	STRAP, TIE DOWN UOC:AP2,	50
46	PAFZZ	5305-00-068-0508	80204	B1821BH025C075N	SCREW, CAP, HEX HEAD UOC:AP2,	5
47	PAFZZ	5310-00-933-8121	80205	MS35338-139	WASHER, LOCK UOC:AP2,	3
48	PAFZZ	5340-00-984-8541	80205	MS21333-106	CLAMP, LOOP UOC:AP2,	5
49	PAFZZ	5310-01-505-0247	81349	M45913/1-4CG8Z	NUT, SELF-LOCKING, HEX UOC:AP2,	2
50	PAFZZ	5305-00-071-2070	80204	B1821BH050C175N	SCREW, CAP, HEX HEAD UOC:AP2,	2
51	PAFZZ	5310-01-527-9521	81349	M45913/1-8CG8Z	NUT, SELF-LOCKING, HEX UOC:AP2,	2
52	PAFZZ	8040-01-501-5557	71984	732RTV	ADHESIVE, MIL-A-46106 UOC:AP2,	1
53	PAFZZ		1YF27	A3312451-4	POWER HARNESS UOC:AP2,	1
54	PAFZZ		1YF27	A3312449-8	CABLE, RCU UOC:AP2,	1

* Required when SINCGARS antenna is installed

** Part of GPS Kit

END OF FIGURE

NATIONAL STOCK NUMBER INDEX**0008 00**

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIGURE NO	ITEM NO	STOCK NUMBER	FIGURE NO	ITEM NO
5310-00-061-1258	1	18			
5305-00-068-0508	1	46			
5305-00-068-0511	1	23			
5305-00-071-2067	1	15			
5305-00-071-2069	1	16			
5305-00-071-2070	1	50			
5975-00-074-2072	1	45			
5310-00-081-4219	1	8			
5306-00-226-4825	1	6			
5306-00-226-4826	1	33			
5305-00-543-2419	1	20			
5305-00-719-5238	1	27			
5305-00-721-5492	1	26			
5340-00-753-3743	1	38			
5330-00-772-6600	1	4			
5305-00-781-3926	1	31			
5305-00-821-3869	1	30			
5340-00-851-4894	1	3			
5310-00-866-4417	1	13			
5310-00-877-5972	1	25			
5310-00-889-2527	1	34			
5310-00-933-8121	1	47			
5310-00-933-8778	1	14			
5310-00-937-0453	1	41			
5310-00-974-6623	1	7			
5305-00-978-9392	1	44			
5305-00-984-6212	1	10			
5310-00-984-7042	1	24			
5340-00-984-8541	1	48			
5310-01-527-9521	1	51			
5305-00-990-8632	1	2			
5340-00-926-5449	1	11			
5355-01-123-7148	1	40			
5310-01-203-2314	1	42			
5310-01-494-9745	1	35			
8040-01-501-5557	1	52			
5310-01-505-0245	1	17			
5310-01-516-3969	1	12			
5310-01-531-7280	1	49			

END OF WORK PACKAGE

PART NUMBER INDEX**0009 00**

PART NUMBER INDEX

PART NUMBER	FIGURE NO	ITEM NO	PART NUMBER	FIGURE NO	ITEM NO
10861974	1	3	MS21334-28	1	11
10910174-3	1	25	MS27183-12	1	8
10910174-44	1	42	MS3367-1-9	1	45
10910174-5	1	13	MS35206-265	1	10
12498014	1	21	MS35338-139	1	47
12498015	1	1	MS35338-141	1	24
12498024	1	32	MS35338-143	1	14
12498034	1	28	MS35338-145	1	41
12498035	1	9	MS45904-76	1	18
12498036	1	5			
12498040	1	43			
12498047-1	1	19			
12498064	1	22			
12498068	1	37			
12498080	1	39			
35091	1	29			
732RTV	1	52			
7726600	1	4			
8690519	1	38			
A3312449-8	1	54			
A3312450-4	1	36			
A3312451-4	1	53			
B1821BH025C075N	1	46			
B1821BH031C075N	1	6			
B1821BH031C088N	1	33			
B1821BH038C063N	1	26			
B1821BH038C113N	1	20			
B1821BH038C125N	1	23			
B1821BH038C175N	1	30			
B1821BH038C275N	1	31			
B1821BH038C375N	1	2			
B1821BH050C125N	1	15			
B1821BH050C150N	1	16			
B1821BH050C175N	1	50			
B1821BH050F200N	1	27			
CL-5HK-6	1	40			
M45904-72	1	34			
M45913/1-010CG5Z	1	12			
M45913/1-4CG8Z	1	49			
M45913/1-5CG5Z	1	35			
M45913/1-6CG5Z	1	17			
MS35338-140	1	7			
M45913/1-8CG8Z	1	51			
MS16997-97	1	44			
MS21333-106	1	48			

END OF WORK PACKAGE

CHAPTER 4 SUPPORTING INFORMATION

WORK PACKAGE INDEX

<u>Title</u>	<u>Sequence No.</u>
REFERENCES	0010 00
COMMON TOOLS AND SUPPLEMENTS AND SPECIAL TOOLS/FIXTURES LIST	0011 00
FABRICATED TOOLS.....	0012 00
EXPENDABLE AND DURABLE ITEMS LIST	0013 00
REPLACEMENT KIT PARTS.....	0014 00

REFERENCES

0010 00

SCOPE

This work package lists all field manuals, forms, technical manuals, and miscellaneous publications referenced in this manual.

FIELD MANUALS

First Aid for Soldiers FM 4-25.11

FORMS

Recommended Changes to Publications and Blank Forms DA Form 2028

MISCELLANEOUS PUBLICATIONS

Army Material Maintenance Policy AR 750-1

Army Medical Department Expendable/Durable Items CTA 8-100

Army Modification Program AR 750-10

Expendable/Durable Items (except Medical, Class V Repair Parts, and Heraldic Items) CTA 50-970

Field and Garrison Furnishings and Equipment CTA 50-909

Requisition, Receipt, and Issue System AR 725-50

The Army Maintenance Management System (TAMMS) User's Manual DA PAM 750-8

TECHNICAL MANUALS

Operator's Manual for Carrier, Personnel, Full-Tracked, Armored, M113A3; Carrier, Command Post, Light Tracked, M577A3; Carrier, Smoke Generator, Full Tracked, M1059A3; Carrier, Mortar, 120-MM M121, Self Propelled, M1064A3; Carrier, Standardized Integrated Command Post System (SICPS) M1068A3; Carrier, Mechanized Smoke Obscurant, M58 TM 9-2350-277-10

Painting Instructions for Army Material TM 43-0139

Unit Maintenance, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools List) for Carriers: M113A3, M577A3, M1059A3, M1064A3, M1068A3, and M58 TM 9-2350-277-24P

Unit Maintenance Manual for Carrier, Personnel, Full Tracked, Armored M113A3; Carrier, Command Post, Light Tracked M577A3; Carrier, Smoke Generator, Full Tracked M1059A3; Carrier, Mortar, 120-MM M121, Self- Propelled M1064A3; Carrier, Standardized Integrated Command Post System (SICPS) M1068A3; Carrier, Mechanized Smoke Obscurant M58 TM 9-2350-277-20 Volumes 1-6

END OF WORK PACKAGE

**COMMON TOOLS AND SUPPLEMENTS AND SPECIAL
TOOLS/FIXTURES LIST**

0011 00**SCOPE**

This work package lists all common tools, supplements, and special tools/fixtures needed.

Explanation of Columns

Column (1) – Item Number. This number is assigned to the entry in the list and is referenced in the Initial Setup section of the work package under “Tools” to identify the item (e.g., “General Mechanic’s Tool Kit (WP 0011 00, Item 4)”).

Column (2) – Item Name. This column lists the item by noun nomenclature and other descriptive features (e.g. “General Mechanic’s Tool Kit,”).

Column (3) – National Stock Number. This is the National Stock Number (NSN) assigned to the item; use it to requisition the item.

Column (4) – Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

Column (5) – Reference. This column identifies the authorizing Supply Catalog (SC) or Repair Parts and Special Tools List (RPSTL) for items listed in this work package.

**COMMON TOOLS AND SUPPLEMENTS AND SPECIAL
TOOLS/FIXTURES LIST – Continued**

0011 00

Table 1. Tool Identification List

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) REFERENCE
1	Die and Tap Set	5180-00-317-8263	41-8789-930-050	SC 4940-95-B02
2	Drilling Machine, Upright	N/A	2805A24 (07BY4)	
3	Drill Set, Twist	5133-00-293-0983	DB129B (55719)	SC 4910-95-A74
4	General Mechanic's Tool Kit	5180-00-177-7033	SC 5180-90-CL-N26 (50980)	SC 5180-95-N26
5	Hole Saw Set, Carbide Tipped	N/A	TL1-LNS-30801D	
6	Measuring Tape	5210-00-554-7085	403 (37163)	
7	Portable Drill, Electric, 1/2 inch	5130-00-889-9004	5130-00-889-9004	SC 4910-95-A31
8	Sling, Endless	3940-00-675-5003	PD101-96	SC 5190-92-M05
9	Wrench, Torque, 1/2 inch Drive, 0-175 ft-lb	5120-00-640-6364	A-A-2411	SC 4940-95-B21

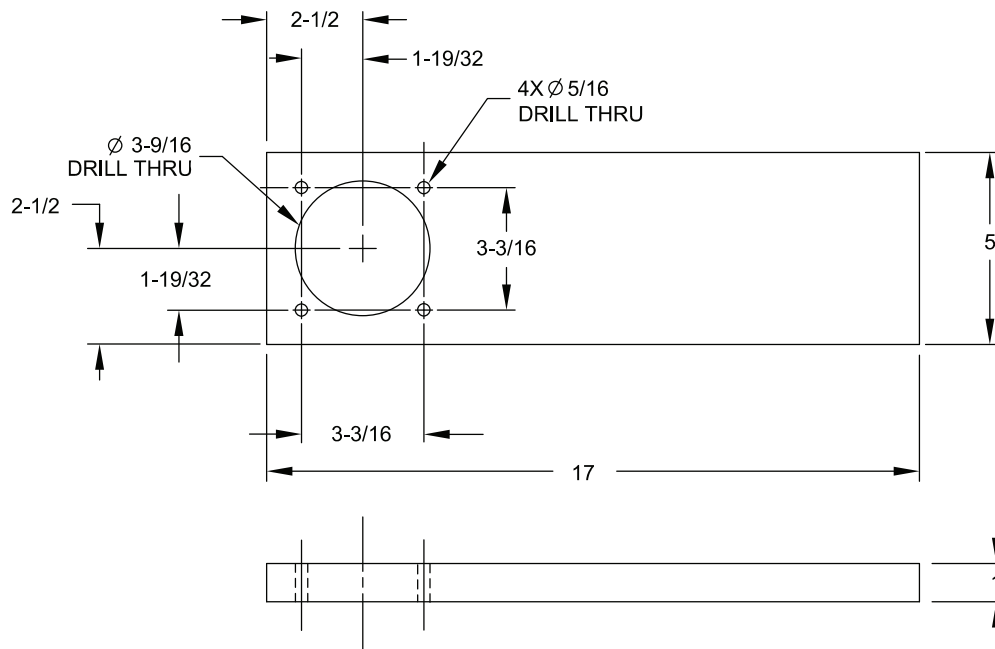
END OF WORK PACKAGE

SCOPE

This work package includes instructions for making tools authorized to be fabricated at sustainment level. These tools are needed for special installation procedures, but are not available in the supply system. The tools are normally fabricated locally when required by the task.

FABRICATION ILLUSTRATIONS

The following figure provides tool fabrication instructions. All parts and bulk materials needed for manufacturing the tool are listed on each figure. When needed, any special explanatory instructions are included in the notes on the figure.



NOTE: ALL DIMENSIONS ARE IN INCHES

Figure 1. Magnetic Drill Base Plate/Template

MATERIAL REQUIRED

Steel, Plate, 1 inch Thick

NOTES:

1. Fabricate as illustrated.
2. Break all sharp edges and corners.

END OF WORK PACKAGE

EXPENDABLE/DURABLE ITEMS LIST

0013 00

SCOPE

This work package lists expendable and durable items that you will need to operate and maintain the M1064A3 CREW II Hardware. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items), CTA 50-909, Field and Garrison Furnishings and Equipment, or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Items List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., "Use cleaning compound (WP 0013, Item 1)").

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item.

- F – Maintainer or ASB
- H – Below Depot or TASMG
- D – Depot

Column (3) National Stock Number (NSN). This is the National Stock Number (NSN) assigned to the item, which you can use to requisition the item.

Column (4) Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) Unit of Measure (U/M). This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

Table 1. Expendable/Durable Items List

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGEC, PART NUMBER	(5) U/M
1	H	6850-01-277-0595	Cleaning Compound, Solvent (59557) 134-HI-SOLV	GL
2	H	7920-00-205-1711	Wiping Rag (58536) A-A-2522	LB
3	H	8030-00-081-2339	Sealing Compound (05972) 088-21 MIL-S-22473 GRA	CC
4	H	8030-00-900-2373	Sealing Compound Primer (05972) 764-55	OZ

END OF WORK PACKAGE

REPLACEMENT KIT PARTS

0014 00

SCOPE

This work package includes a table of modification kit parts required for CREW II. The unique components of this kit may not currently be available through the normal supply system.

Table 1. CREW II MODIFICATION KIT - 12498030

NSN	CAGE	PART NUMBER	DESCRIPTION	QTY
5985-01-552-5896	1BEX2	35089	Antenna Assembly	1
5330-00-772-6600	19207	7726600	Gasket	4
5340-00-851-4849	80212	10861974	Cover, Access	1
5310-00-877-5972	19200	10910174-3	Washer, Flat	4
5310-01-203-2314	19207	10910174-44	Washer, Flat	1
5310-00-866-4417	19207	10910174-5	Washer, Flat	13
	19207	12498014	Cover, Enclosure	1
	19207	12498015	Enclosure Assembly	1
	19207	12498024	Mount, GPS, CREW II	1
	19207	12498034	Support, Tank Mount	1
	19207	12498035	Guard	1
	19207	12498036	Adapter, Cable, Seal	1
	19207	12498040	Bracket, Antenna	1
	19207	12498064	Mount, CREW II, Assembly	1
	19207	12498068	Assembly, RCU/PDA	1
	19207	12498080	Screw, Mounting, Antenna	1
5305-00-068-0508	80204	B1821BH025C075N	Screw, Cap, Hexagon	4
5306-00-226-4825	80204	B1821BH031C075N	Bolt, Machine	2
5306-00-226-4826	80204	B1821BH031C088N	Bolt, Machine	2
5305-00-543-2419	80204	B1821BH038C113N	Screw, Cap, Hexagon	3
5305-00-068-0511	80204	B1821BH038C125N	Screw, Cap, Hexagon	2
5305-00-821-3869	80204	B1821BH038C175N	Screw, Cap, Hexagon	4
5305-00-781-3926	80204	B1821BH038C275N	Screw, Cap, Hexagon	4
5305-00-990-8632	80204	B1821BH038C375N	Screw, Cap, Hexagon	4
5305-00-071-2067	80204	B1821BH050C125N	Screw, Cap, Hexagon	4
5305-00-071-2069	80204	B1821BH050C150N	Screw, Cap, Hexagon	6
5305-00-071-2070	80204	B1821BH050C175N	Screw, Cap, Hexagon	2

Table 1. CREW II MODIFICATION KIT - 12498030 – Continued

NSN	CAGE	PART NUMBER	DESCRIPTION	QTY
5305-00-719-5238	80204	B1821BH050F200N	Screw, Cap, Hexagon	3
5355-01-123-7148	99862	CL-5HK-6	Knob	1
5305-00-721-5492	80204	B1821BH038C063N	Screw, Cap, Hexagon	2
5310-01-516-3969	81349	M45913/1-010CG8Z	Nut, Self-Locking	2
5310-01-531-7280	81349	M45913/1-4CG8Z	Nut, Self-Locking	2
5310-01-494-9745	81349	M45913/1-5CG8Z	Nut, Self-Locking	2
5310-01-516-3509	81349	M45913/1-6CG8Z	Nut, Self-Locking	1
5310-01-527-9521	81349	M45913/1-8CG8Z	Nut, Self-Locking	2
8040-01-501-5557	71984	732RTV	Adhesive	1
5305-00-978-9392	80205	MS16997-97	Screw, Cap, Socket Head	1
5340-00-984-8541	80205	MS21333-106	Clamp, Loop	5
5340-00-926-5449	80205	MS21334-28	Clamp, Loop	2
5310-00-081-4219	96906	MS27183-12	Washer, Flat	2
5305-00-984-6212	80205	MS35206-265	Screw, Machine	2
5310-00-933-8121	80205	MS35338-139	Washer, Lock	3
5310-00-974-6623	80205	MS35338-140	Washer, Lock	2
5310-00-984-7042	80205	MS35338-141	Washer, Lock	5
5310-00-933-8778	80205	MS35338-143	Washer, Lock	13
5310-00-937-0453	80205	MS35338-145	Washer, Lock	1
5310-00-889-2527	96906	MS45904-72	Washer, Lock	4
5310-00-061-1258	96906	MS45904-76	Washer, Lock	2
5975-00-074-2072	96906	MS3367-1-9	Strap, Tiedown, Electrical	50
	1YF27	A3312451-4	Power Harness	1
	1YF27	A3312449-8	Cable, RCU	1
	19207	12498047-1	Ground Strap	1
	1YF27	A3312450-4	Cable, RCU to PDA	1
5340-00-753-3743	19207	8690519	Strap, Webbing	1

END OF WORK PACKAGE

INDEX

A

Antenna Stowage Bracket, Install0005 00-14

B

C

Common Tools and Supplements and Special Tools/Fixtures List.....0011 00-1

CREW II Mount Assembly, Install0005 00-1

D

Drill

CREW II Antenna Stowage Bracket0004 00-3

CREW II Cable Port0004 00-1

CREW II RCU/PDA Bracket.....0004 00-4

E

Enclosure Assembly, Install0005 00-15

Equipment Description

CREW II Kit Hardware0002 00-1

Location of CREW II Components0002 00-3

Expendable/Durable Items List0013 00-1

G

GPS Antenna Kit, Install.....0005 00-10

GPS, RCU, and Primary Power Cables, Install.....0005 00-4

F

Fabricated Tools.....0012 00-1

Fuel Tank Angle Brackets, Removal0003 00-3

H

INDEX – Continued

I

Installation Procedures

Antenna Stowage Bracket	0005 00-14
CREW II Mount Assembly	0005 00-1
Enclosure Assembly.....	0005 00-15
GPS Antenna Kit	0005 00-10
GPS, RCU, and Primary Power Cables.....	0005 00-4
PDA/RCU Bracket Assembly	0005 00-12
Tank Mount Support.....	0005 00-3

Introduction.....

General	0001 00-1
Purpose.....	0001 00-1

J – L

M

Modification Procedures

CREW II Antenna Stowage Bracket, Drill	0004 00-3
CREW II Cable Port, Drill	0004 00-1
CREW II RCU/PDA Bracket, Drill	0004 00-4

O

P

PDA/RCU Bracket Assembly, Install.....	0005 00-12
--	------------

Q

R

References

Field Manuals.....	0010 00-1
Forms	0010 00-1
Miscellaneous Publications	0010 00-1
Scope	0010 00-1
Technical Manuals	0010 00-1

Removal Procedures

Fuel Tank Angle Brackets	0003 00-3
SINCGARS Antenna/Antenna Cover.....	0003 00-4
Stoptlight-Taillight and Mounting Bracket	0003 00-1

INDEX - Continued

Replacement Kit Parts.....0014 00-1

Repair Parts and Special Tools List (RPSTL)

- CREW II Modification Kit - 124980300007 00-1
- Explanation of Columns in the Repair Parts List and Special Tools List Work Packages.....0006 00-1
- Explanation of Cross-Reference Indexes Work Packages Format and Columns0006 00-5
- General0006 00-1
- Scope0006 00-1
- National Stock Number Index0008 00-1
- Part Number Index0009 00-1

S

SINCGARS Antenna/Antenna Cover, Removal.....0003 00-4

Stoplight-Taillight and Mounting Bracket, Removal0003 00-1

T

Tank Mount Support, Install0005 00-3

Tools/Fixtures List, Common Tools and Supplements0011 00-1

U – Z

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE Date you filled out this form.
TO: (Forward to proponent of publication or form) (Include ZIP Code) U.S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LC-LMP/TECH PUBS 1 Rock Island Arsenal, Rock Island, IL 61299-7630						FROM: (Activity and location) (Include ZIP Code) Your mailing address	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TB 9-2350-277-40&P-1						DATE 30 JUNE 2009	Title Installation of Crew II Modification Kit 19207-12398030 for Carrier Mortar M1064A3
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Provide exact wording of recommended changes, if possible).	
						SAMPLE	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE Your Name				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		Signature Your Signature	

TO: (Forward direct to addressee listed in publication) U. S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LC-LMPP/TECH PUBS 1 Rock Island Arsenal, Rock Island, IL 61299-7630	FROM: (Activity and location) (Include ZIP Code) Your address	DATE Date you filled out this form
--	---	--

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TB 9-2350-277-40&P-1	DATE 30 June 2009	TITLE Installation of Crew II Modification Kit 19207 for Carrier, Mortar, M1064A3
---	-----------------------------	---

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
SAMPLE								

PART III – REMARKS (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)

TYPED NAME, GRADE OR TITLE Your Name	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE Your Signature
--	---	------------------------------------

TO: (Forward direct to addressee listed in publication) U. S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LC-LMPP/TECH PUBS 1 Rock Island Arsenal, Rock Island, IL 61299-7630	FROM: (Activity and location) (Include ZIP Code)	DATE
--	---	-------------

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TB 9-2350-277-40&P-1					DATE 30 June 2009		TITLE Installation of Crew II Modification Kit 19207 for Carrier, Mortar M1064A3	
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
----------------------------	--	-----------

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
For use of this form, see AR 25-30; the proponent agency is ODISC4.							
TO: (Forward to proponent of publication or form) (Include ZIP Code) U. S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LC-LMPP/TECH PUBS 1 Rock Island Arsenal, Rock Island, IL 61299-7630						FROM: (Activity and location) (Include ZIP Code)	
PUBLICATION/FORM NUMBER TB 9-2350-277-40&P-1						DATE 30 June 2009	TITLE Installation of Crew II Modification Kit for Carrier, Mortar, M1064A3
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Provide exact wording of recommended changes, if possible).	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE					TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE

TO: (Forward direct to addressee listed in publication) U. S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LC-LMPP/TECH PUBS 1 Rock Island Arsenal, Rock Island, IL 61299-7630	FROM: (Activity and location) (Include ZIP Code)	DATE
--	---	-------------

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TB 9-2350-277-40&P-1				DATE 30 June 2009			TITLE Installation of Crew II Modification Kit 19207 for Carrier, Mortar M1064A3	
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

--

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
----------------------------	--	-----------

By Order of the Secretary of the Army:

Official:



JOYCE E. MORROW
*Administrative Assistant to the
Secretary of the Army*

0914701

GEORGE W. CASEY, JR.
*General, United States Army
Chief of Staff*

Distribution:

To be distributed in accordance with the initial distribution number (IDN) 344979 requirements for TB 9-2350-277-40&P-1.

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 Lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

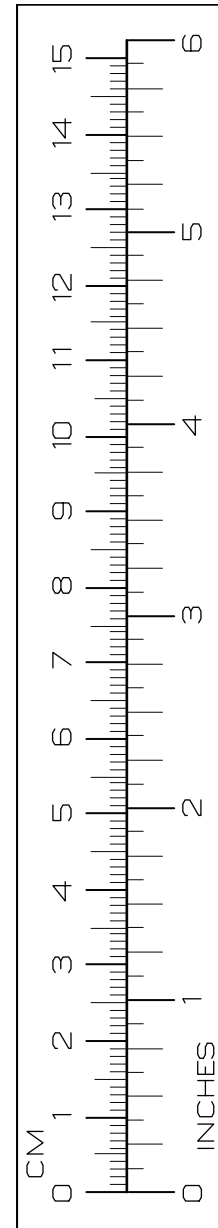
1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

$5/9 (^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 $212^{\circ}\text{ Fahrenheit is equivalent to } 100^{\circ}\text{ Celsius}$
 $90^{\circ}\text{ Fahrenheit is equivalent to } 32.2^{\circ}\text{ Celsius}$
 $32^{\circ}\text{ Fahrenheit is equivalent to } 0^{\circ}\text{ Celsius}$
 $(9/5 \times ^{\circ}\text{C}) + 32 = ^{\circ}\text{F}$

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621



PIN: 085515-000