

CHANGE
NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 31 JULY 2011

**TECHNICAL MANUAL
OPERATOR MANUAL**

FOR

IMPROVED OUTER TACTICAL VEST (IOTV)

AND

IMPROVED OUTER TACTICAL VEST GEN II (IOTV GEN II)

A PART OF THE

INTERCEPTOR BODY ARMOR SYSTEM

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TM 10-8470-208-10, 01 March 2010, is updated as follows:

1. File this sheet in the front of the manual for reference.
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WP 0008

TM 10-8470-208-10

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WP 0002 (18 pgs)	0
WP 0003 (2 pgs)	0
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HOW TO USE THIS MANUAL

HOW TO OBTAIN TECHNICAL MANUALS

When a new system is introduced to the Army inventory, it is the responsibility of the receiving units to notify and inform the Unit Publications Clerk that a Technical Manual is available for the new system. Throughout the life cycle of the new system, the Publications Proponent will also provide updates and changes to the Technical Manual.

To receive new Technical Manuals or change packages to fielded Technical Manuals, provide the Unit Publications Clerk the full Technical Manual number, title, date of publication, and number of copies required. The Unit Publications Clerk will then justify the request through the Unit Publications Officer. When the request is approved, DA Form 12-R is used to order the Technical Manual from the Army Publishing Directorate (APD). Obtain the form and request a publications account from the APD Web site at <http://www.apd.army.mil>. Once on the Website click on the "Orders/Subscriptions/Reports" tab. From the dropdown menu, select "Establish an Account," then select "Tutorial" and follow the instructions in the tutorial presentation.

Complete information for obtaining Army publications can be found in DA PAM 25-33.

Organization of This Manual

In this manual, primary chapters appear in upper case/capital letters; work packages are presented in numeric sequence, e.g., 0001, 0002; paragraphs within a work package are not numbered and are presented in a titled format. For a first level paragraph, titles are in all bold, upper case, capital letters, e.g., **FRONT MATTER**. Subordinate paragraph titles will have the first letter of the first word of each principle word all upper case, capital letters, all bold, e.g., **Manual Organization and Page Numbering System**. The location of additional material that must be referenced is clearly marked. Illustrations supporting maintenance procedures/text are located underneath, or as close as possible to, their referenced paragraph. Notes, Cautions, and Warning are located directly above the procedure to which they apply.

FRONT MATTER. Front matter consists of front cover, warning summary, title block, table of contents, and how to use this manual page.

CHAPTER 1 - GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION. Chapter 1 contains introductory information on the Interceptor Body Armor (IBA) as well as theory of operation.

HOW TO USE THIS MANUAL – CONTINUED

CHAPTER 2 - OPERATOR INSTRUCTIONS. Chapter 2 contains information on assembling, donning, doffing and operating the IBA system..

CHAPTER 3 – PREVENTIVE MAINTENANCE CHECKS AND SERVICES. Chapter 3 identified preventive maintenance checks and services information.

CHAPTER 4 – MAINTENANCE INSTRUCTIONS. Chapter 4 provides maintenance procedures, preparations for storage and shipment authorized at the service level.

CHAPTER 5 - SUPPORTING INFORMATION. Chapter 5 contains references, Components of End Items List (COEI), Basic Issue Items List (BII), and expendable and durable items list.

REAR MATTER. Rear matter consists of alphabetical index, DA Form 2028, authentication page, and back cover.

Manual Organization and Page Numbering System. The manual is divided into eight major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the form XXXX-YY where XXXX is the work package number (e.g. 0010 is work package 10) and YY represents the number of the page within that work package. A page number such as 0010-1/ 2 blank means that page 1 contains information but page 2 of that work package has been intentionally left blank.

Finding Information. The table of contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The table of contents lists the topics, figures, and tables contained within each chapter and the work package sequence number where it can be found.

An Alphabetical Index can be found at the back of the manual; specific topics are listed with the corresponding work package number.

WARNINGS, CAUTIONS, AND NOTES

A warning identifies a clear danger to the person doing that procedure.

A caution identifies risk of damage to the equipment.

A note is used to highlight essential procedures, conditions, or statements or convey important instructional data to the user.

**OPERATOR MAINTENANCE
IMPROVED OUTER TACTICAL VEST
IMPROVED OUTER TACTICAL VEST GEN II
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

INITIAL SETUP**References:**

WP 0015

Materials/parts:

Cleaning Foam System, Outer Vest (WP 0015, Item 1)

General

Preventive maintenance checks and services (PMCS) are performed to keep the IOTV and IOTV Gen II in operating condition. The checks are used to find, correct, and report problems. The operator is to do the PMCS tasks shown in PMCS

Table 1. PMCS is to be done before and after use of the IBA system and monthly.

Before you use the IOTV or IOTV Gen II, perform PMCS.

After you have used the IOTV or IOTV Gen II, perform PMCS.

PMCS Column Description

Column (1) ITEM NO. The order the PMCS should be performed.

Column (2) INTERVAL. Tells when the check should be performed.

Column (3) ITEM TO BE CHECKED OR SERVICED. Tells which items to perform the PMCS procedure on.

Column (4) PROCEDURE. Tells which procedure is to be performed. If item cannot be repaired, it must be replaced.

Column (5) EQUIPMENT NOT READY/AVAILABLE IF. Tells what conditions render the IOTV or IOTV Gen II unfit to perform the mission.

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PMCS PROCEDURES

NOTE

Illustrations in this manual show, for the most part, the IOTV. Unless otherwise indicated, the procedures for the IOTV and IOTV Gen II are identical and the use of IOTV illustrations does not affect the procedure.

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
1	Before	Base Vest Assembly	<p>Soldier Inspect Base Vest Assembly.</p> <p>a. Open the vest assembly and lay it flat on a clean surface so the exterior of the vest is facing the ground and the interior of the vest is facing up.</p> <p>b. Inspect the interior fabric of the vest and collar/yoke assembly for any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.</p> <p>c. Inspect the interior fabric of the vest and collar/yoke assembly for any dirt, stains or debris. Brush off any dirt or debris with a brush or rag.</p>	<p>Any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.</p> <p>Any petroleum-based stains.</p>

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PMCS PROCEDURES - CONTINUED

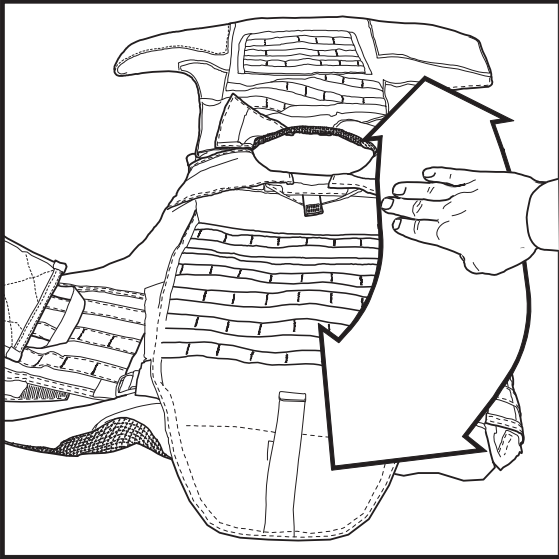
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	Base Vest Assembly - Continued	<p>d. Run hands over entire surface of body armor to ensure ballistic inserts are flat. Smooth out any folds or bunching.</p> <p>e. Check the security of the hook and loop fasteners that close the inside fabric of the vest and that attach the ballistic inserts to the interior vest fabric.</p> <p>f. Run fingers or hand around collar/yoke assembly checking for creases or bunching in the ballistic fabric. Smooth out any folds or bunching.</p> <p>g. Turn vest over so that interior fabric faces down and the exterior fabric faces up (Figure 1).</p> <p>h. Inspect the exterior fabric of the vest and collar/yoke assembly for any cuts, frays or abrasions or any damage that may interfere with the proper function of the body armor.</p>	<p>Cannot be flattened.</p> <p>Hook and loop fastener tape does not function.</p> <p>Cannot be flattened.</p> <p>Any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.</p>

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
 <p>The diagram shows a hand with the index finger pointing to a rectangular ceramic tile on the front of an Improved Outer Tactical Vest (IOTV). The vest has a grid of these tiles. The hand is shown in the process of smoothing the tile into the vest's cover.</p>				
<p>Figure 1. Smoothing Out IOTV.</p>				
2	Before	ESBI/ESAPI	<p>Soldier Inspect ESAPI/ESBI plates (Figure 2). Turn in plates if:</p>	<ul style="list-style-type: none"> a. Outer cover is damaged exposing the ceramic tile material. b. Plate is cracked and you hear loose pieces rattling around when shaken. c. Creaking or squeaking of ceramic tile heard when plate twisted by hand. d. Composite backing is delaminating (backing material plies are separating).

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	ESBI/ESAPI - Continued		e. Cracking of the ceramic tile is felt or heard as you firmly pinch the outer 1/2-inch perimeter of the plate. f. Plate has been hit by a bullet or fragment.

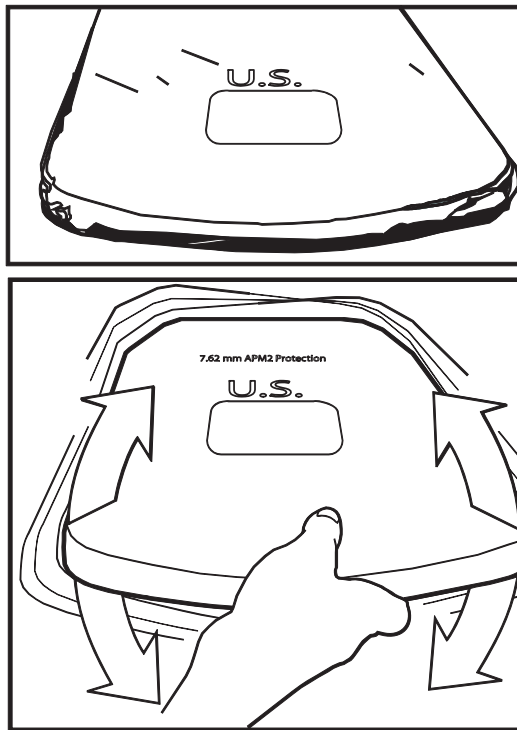


Figure 2. Inspect Plates.

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PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
3	Before	IOTV or IOTV Gen II Vest	<p>Soldier Don the IOTV</p> <ul style="list-style-type: none"> a. Slip over head if the left shoulder is connected, or slide onto shoulders from right side if left shoulder strap is separated. b. To connect left shoulder straps, sandwich hook and loop fastener strap on front carrier between the two hook and loop fastener straps on back carrier. c. Secure snap fastener. d. Cover the buckle by folding over fabric flaps on carrier and securing hook and loop fastener. 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued		



Figure 3. Donning IOTV (Over-the-Head Method).

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued	<p>e. Secure internal elastic band by lifting front carrier and pulling two halves of the elastic band forward and connecting hook and loop fasteners (Figure 4).</p> <p>f. With the front carrier down, lift up the front flap to reveal the side plate carrier attachment points (Figure 5).</p> <p>g. Pull on of the side plate carriers around the body and attach to same side hook and loop fastener in front. Repeat with other side.</p> <p>h. Close the front flap, securing with hook and loop fasteners, and tuck the bottom of the front flap up into the front flap pocket.</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued		

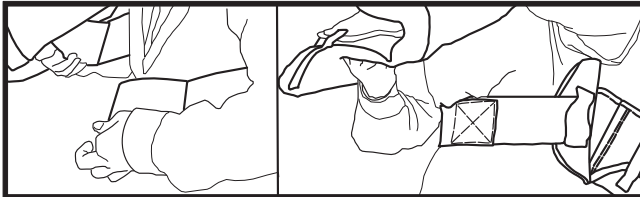


Figure 4. Securing Internal Elastic Bands.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued		

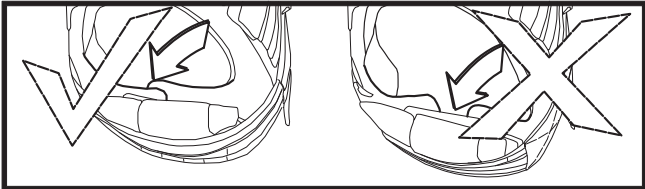


Figure 5. Securing Side Plate Carriers.

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PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

PMCS PROCEDURES - CONTINUED

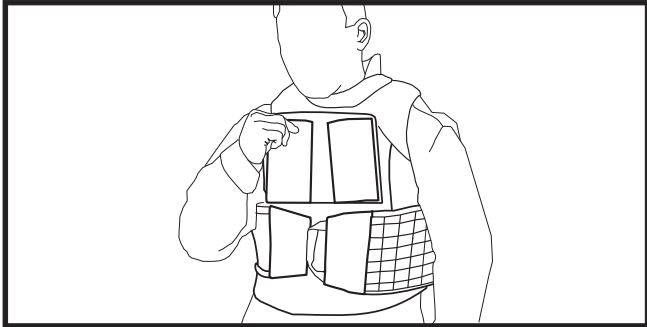
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
4.	Before	IOTV or IOTV Gen II Vest	Second Soldier Check for proper fit of IOTV or IOTV Gen II.	
			a. Carrier should fit snugly with no gaps or folds in fabric. There should be a 1-inch overlap of the front and back carriers under the arm (Figure 6). Readjust if necessary.	Overlap is less than 1 inch.
 <p>Figure 6. Correct Side Ballistic Protection.</p>				
			b. Lift front cover. Side plate carriers should not overlap. Readjust if necessary.	

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PMCS PROCEDURES - CONTINUED

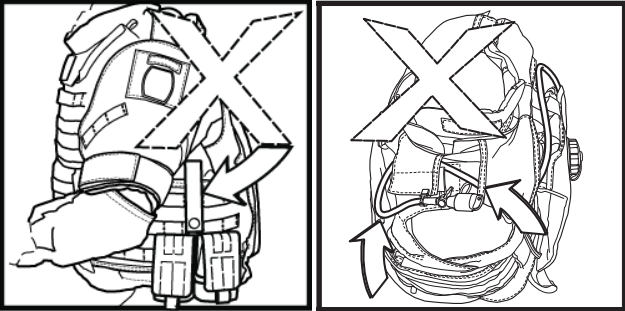
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued		
 <p>Figure 7. Side Plate Carrier Check.</p>				
			<p>c. Any additional pouches or gear should not cross front and back carriers, interfere with the cable release or connect the side plate carrier to the back carrier. Readjust if necessary.</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	IOTV or IOTV Gen II Vest - Continued		
 <p>Figure 8. Check for Bridging.</p>				
5.	Before	Cable Release	<p>d. Check both shoulders for proper overlap. Front and back carriers should overlap a minimum of 1-inch. Readjust if necessary.</p> <p>e. Check the cable release handle pocket on the front of the vest. The cable release handle should be fully seated and should not be hanging out. (IOTV Only) Ensure the cable stop is present.</p> <p>Second Soldier Check for proper cable release routing.</p> <p>a. Open top panel on back carrier.</p>	Cable stop is not present.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	Cable Release - Continued	<ul style="list-style-type: none"> b. Ensure the long and short cables are not crossing and run freely through the vest. Readjust if necessary. c. Ensure the cable routes through both webbing loops (Figure 10, Items 1 and 2). Readjust if necessary. d. Ensure the cable extends at least 1 ½ inches past the left-most webbing loop (Figure 10, Item 1). e. Ensure the cable is not taped, tied or otherwise secured to the IOTV and the Land Warrior webbing is not to secure the cable release. Remove any tape or ties. f. Close top flap and open back flap. g. Ensure all six straps from the side plate carriers and internal elastic bands are attached to the three pieces of center webbing. 	Cable is too short.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Before	Cable Release - Continued	h. Ensure the cable extends at least 1½ inches past the last webbing loop (Figure 10, Item 3). i. Ensure the cable is not taped, tied or otherwise secured to the IOTV. Remove any tape or ties. j. Ensure all excess webbing is secured in the webbing retainer bands (Figure 9).	Cable is too short.

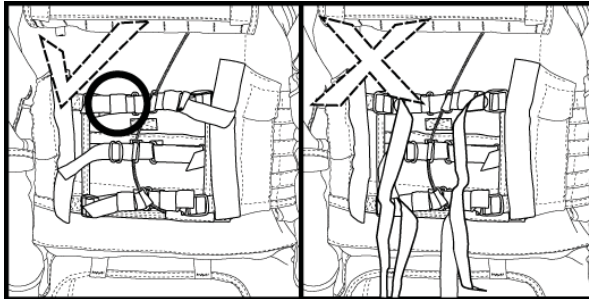
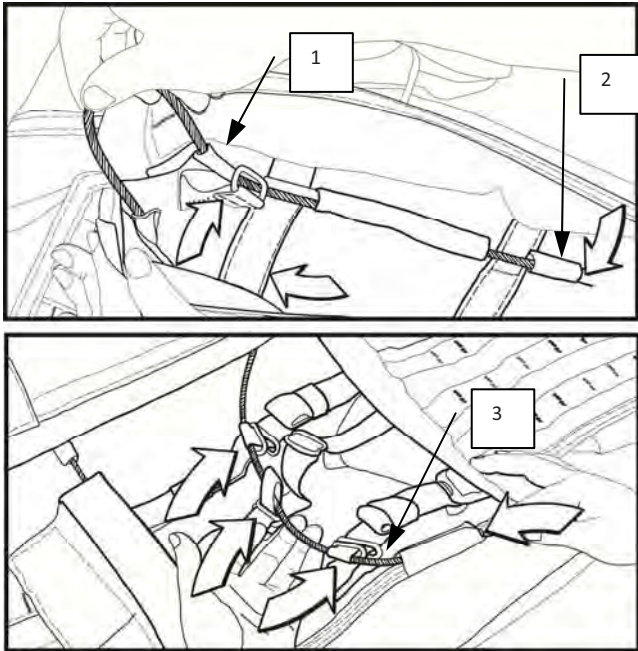


Figure 9. Webbing Properly Stowed.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
6.	Before	IOTV or IOTV Gen II	Second Soldier Re-seal back flap.	
 <p>Figure 10. Back Cable Routing.</p>				
7.	Before	IBA	Soldier Ensure all components are attached to IOTV per unit SOP.	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
8.	After	IBA	<p>Soldier Doff IOTV.</p> <ul style="list-style-type: none"> a. Lift front flap and detach side plate carriers by separating hook and loop fastener tapes. b. Lift front carrier and detach elastic band at hook and loop fasteners. c. Either lift the IOTV over the head or separate the left shoulder strap and slide IOTV off the right shoulder. 	
9.	After	ESAPI/ESBI	<p>Soldier</p> <ul style="list-style-type: none"> a. Inspect ESAPI/ESBI plates. Turn in plates if: 	<p>Outer cover is damaged exposing the ceramic tile material.</p> <p>Plate is cracked and you hear loose pieces rattling around when shaken.</p> <p>Creaking or squeaking of ceramic tile heard when plate twisted by hand.</p> <p>Composite backing is delaminating (backing material plies are separating).</p> <p>Cracking of the ceramic tile is felt or heard as you firmly pinch the outer ½-inch perimeter of the plate.</p> <p>Plate has been hit by a bullet or fragment.</p>

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PMCS PROCEDURES - CONTINUED

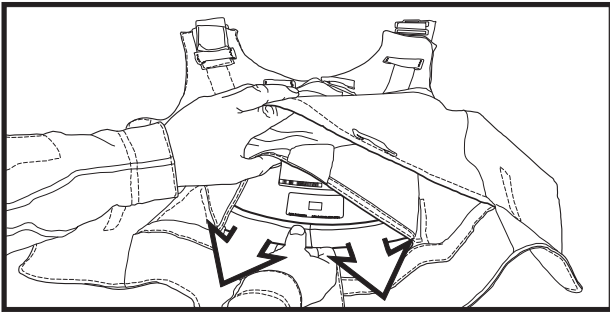
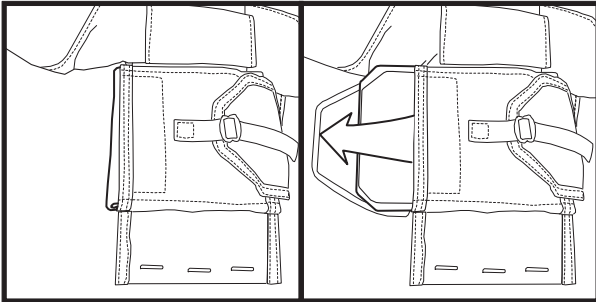
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	After	ESAPI/ESBI - Continued	b. Clean your ESAPI/ESBI thoroughly before storing c. Place the ESAPI/ESBI into the IOTV pockets in the same manner as when worn. This prevents loss of plates.	
			d. Store the IOTV system as flat as possible to avoid bunching of materials.	
			e. It is recommended that the system, when dry, be stored in a plastic bag to keep out dirt, dust and moisture	
10.	Monthly	IBA	Soldier Disassemble IOTV. a. Remove SAPI/ESAPI plates from the front and back carriers, if installed (Figure 11).	

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PMCS PROCEDURES - CONTINUED

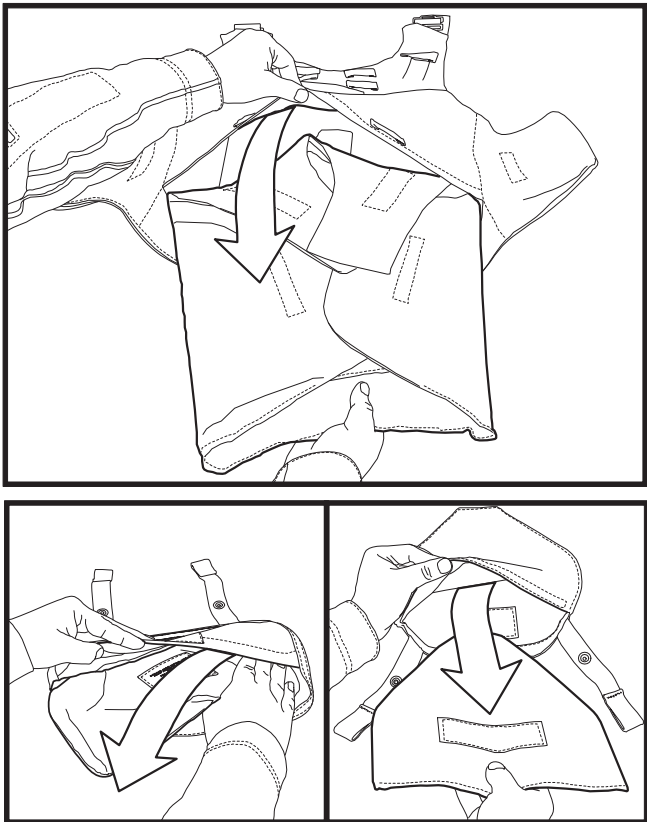
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		
 <p>Figure 11. Removing ESAPI Plates.</p>				
			b. Remove ESBI plates from side carriers, if installed (Figure 12).	
 <p>Figure 12. Removing ESBI Plates.</p>				
			c. Remove the deltoid protectors, lower back protector and groin protector, if attached and remove ballistic inserts from each (Figure 13).	

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PMCS PROCEDURES - CONTINUED

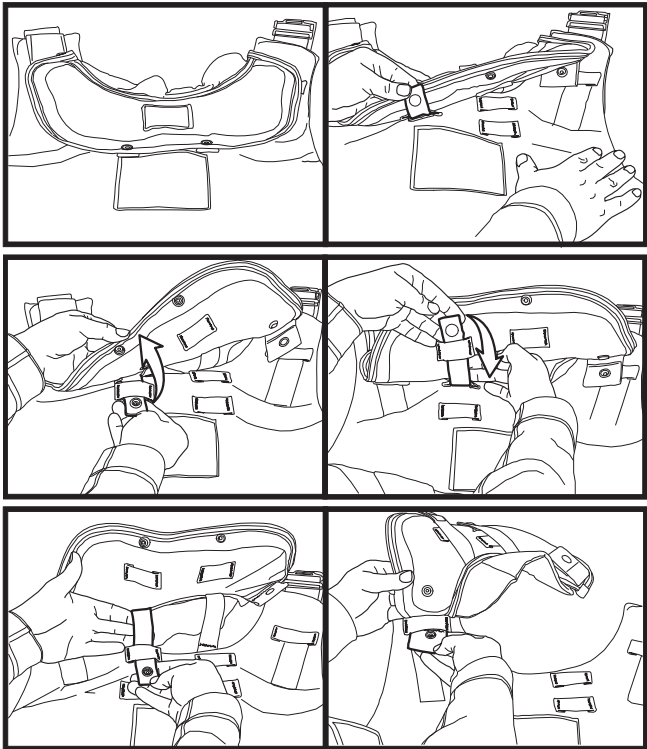
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		
 <p>Figure 13. Removing Soft Ballistic Inserts.</p>				
			d. Remove yoke/collar from vest and remove yoke/collar ballistic inserts (Figure 14).	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		
 <p data-bbox="417 1334 841 1361">Figure 14. Removing Yoke/Collar Assembly.</p>				
			<p>e. Separate the front and back IOTV carriers by removing the cable release completely, and unfastening and releasing the hook and loop fasteners on the left shoulder.</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued	f. Remove side plate carriers and internal elastic band. g. Remove ballistic inserts from front and back carriers.	
11.	Monthly	IBA	Soldier Inventory the body armor. a. Check the data label on each component to ensure each component is in the same size or size range (Figure 15 for IOTV, Figure 16 for IOTV Gen II).	Item sizes are mismatched.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

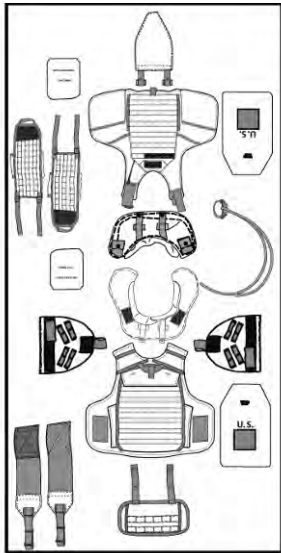
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		
		<ul style="list-style-type: none"> • Front Carrier <ul style="list-style-type: none"> ○ Front Ballistic Insert • Back Carrier <ul style="list-style-type: none"> ○ Back Ballistic Insert • Side Plate Carrier (Right & Left) • Right & Left Internal Elastic Band • Cable Release Assembly <ul style="list-style-type: none"> ○ Cable Stop • Yoke/Collar Assembly • Lower Back Protector <ul style="list-style-type: none"> ○ Lower Back Protector Ballistic Insert • Groin Protector <ul style="list-style-type: none"> ○ Groin Protector Ballistic Insert • Deltoid Protector (x2) <ul style="list-style-type: none"> ○ Deltoid Protector Ballistic Insert (x2) • ESAPI (x2) • ESBI (x2) 		

Figure 15. IOTV Inventory.

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PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

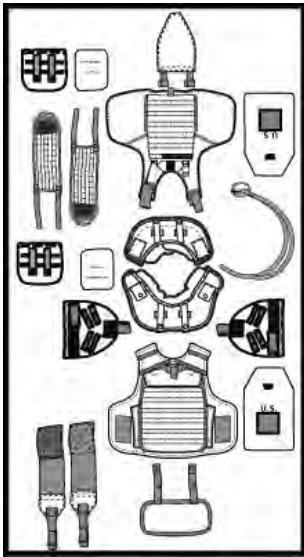
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		
		<ul style="list-style-type: none"> • Front Carrier <ul style="list-style-type: none"> ○ Front Ballistic Insert • Back Carrier <ul style="list-style-type: none"> ○ Back Ballistic Insert • Universal Side Plate Carriers (x2) <ul style="list-style-type: none"> ○ Universal Side Plate Pockets(x2) • Right & Left Internal Elastic Band • Cable Release Assembly • Yoke/Collar Assembly • Lower Back Protector <ul style="list-style-type: none"> ○ Lower Back Protector Ballistic Insert • Groin Protector <ul style="list-style-type: none"> ○ Groin Protector Ballistic Insert • Deltoid Protector (x2) <ul style="list-style-type: none"> ○ Deltoid Protector Ballistic Insert (x2) • ESAPI (x2) • ESBI (x2) 		
12.	Monthly	IBA Cloth Items	Soldier Inspect each cloth item for tears, punctures or abrasions.	Any tears, punctures or abrasions.
13.	Monthly	Soft Ballistic Inserts	Soldier Inspect soft ballistic inserts for any tear, puncture, abrasion or heavy discoloration.	Any damage or heavy discoloration.
14.	Monthly	IBA	Soldier Inspect each item for heavy staining.	

Figure 16. IOTV Gen II Inventory.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued	a. Apply foaming cleanser (issued with IOTV) to stain and scrub using applicator head (Figure 17). If foaming cleanser is not available, use a mixture of mild detergent and water and scrub with a soft bristle brush. b. Wait 1 minute and wipe excess foam away with a cloth.	

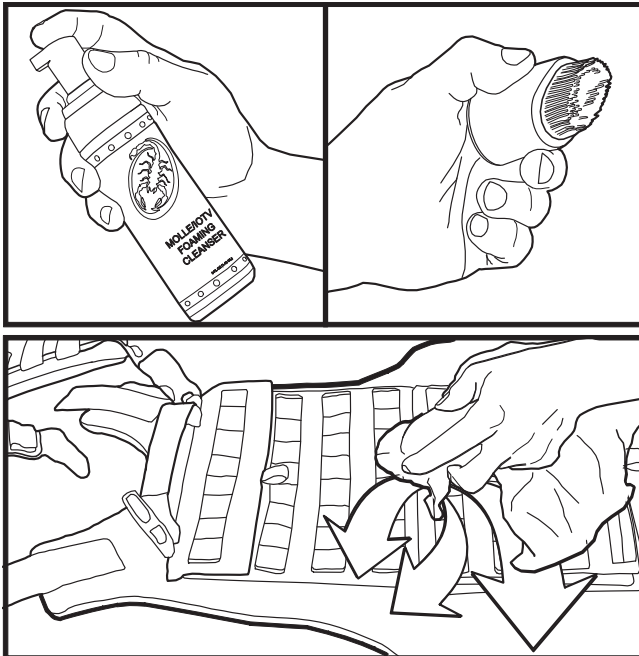
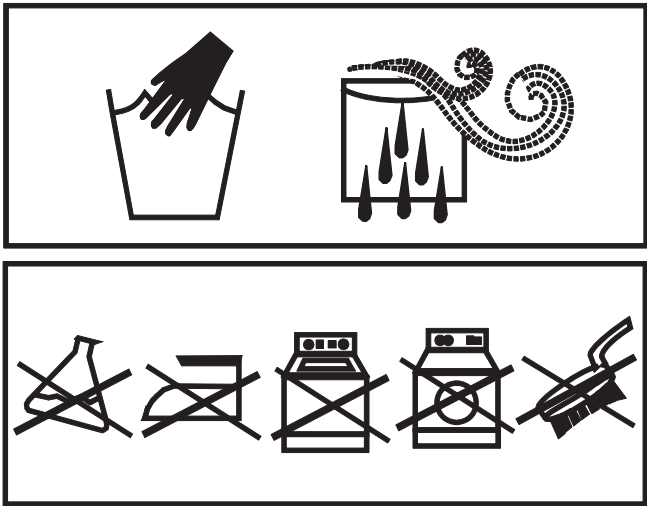


Figure 17. Cleaning IOTV.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued	<div style="text-align: center;">  </div> <p style="text-align: center;">Figure 18. Cleaning Restrictions.</p>	
		<p>WARNING</p> <p>WASHING IOTV COMPONENTS IN HOT WATER WILL DAMAGE THE FABRIC. WASH IOTV COMPONENTS IN COLD WATER ONLY.</p>		
15.	Monthly	Soft Ballistic Inserts	<p>Soldier</p> <p>Wash all components, except ESAP/ESBI, soft ballistic inserts and cable assembly (Figure 18).</p> <p>a. Remove dirt from outer surface using a cloth or soft bristle brush.</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Soft Ballistic Inserts - Continued	b. Hand wash IOTV outer-shell and component carrier covers only in cold or warm water, with mild detergent or soap. c. Air dry all components away from direct heat or sun.	
16.	Monthly	ESAPI/ESBI	Soldier Clean ESAPI/ESBI plates. a. Remove loose dirt and lint from the outer surface of the ESAPI/ESBI using a cloth or soft bristle brush. Never use a stiff bristle brush. b. Wet the ESAPI/ESBI in a sink or shower using warm, not hot, water. c. Apply a mild soap or detergent to the soiled areas and scrub with a cloth or soft bristle brush. Scrub only long enough to remove soil. d. Heavy grease/oil stains may be pre-spotted with a detergent mixture and scrubbed with a soft brush. e. Rinse the ESAPI/ESBI with warm water until all suds are completely gone.	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	ESAPI/ESBI - Continued	f. Let the plate dry by itself, away from heat or open flame.	
17.	Monthly	Soft Ballistic Inserts	<p>Soldier</p> <p>Clean soft ballistic inserts, and cable assembly with a damp cloth.</p>	
18.	Monthly	IBA	<p>Soldier</p> <p>Install soft ballistic inserts in carrier (front, back, lower back protector, groin protector, yoke/collar, and deltoid protector).</p> <p>a. Lay the carrier on a flat surface with inner side (or side with label) facing up (Figure 19).</p> <p>b. Separate hook and loop seam and install soft ballistic insert with the label side facing up.</p> <p>c. Position insert, aligning the hook and loop tapes and ensuring the carrier material is smooth and flat after the installation.</p> <p>d. Re-seal seam of the insert pocket.</p>	Seam does not re-seal.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued		

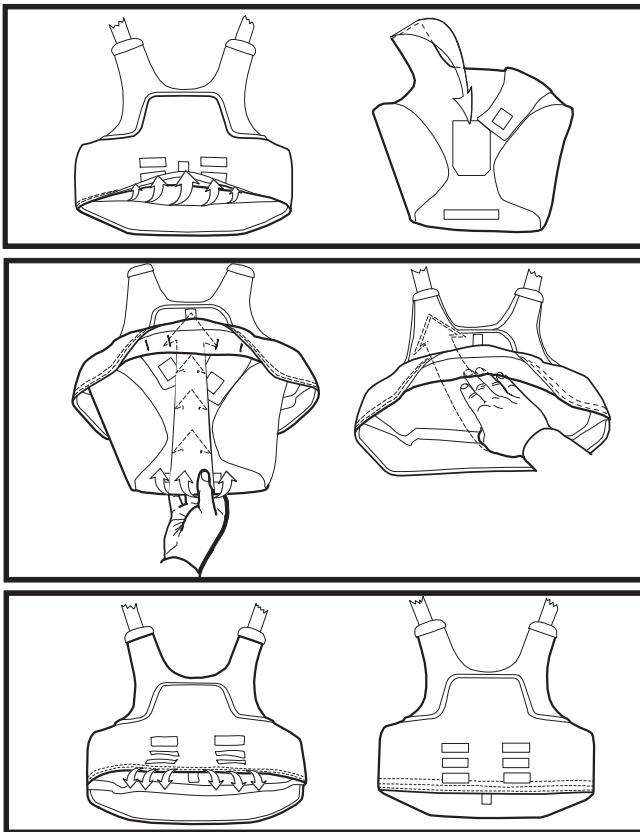


Figure 19. Installing Soft Ballistic Inserts.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
19.	Monthly	Cable Release Assembly	<p>Soldier</p> <p>Install cable release assembly.</p> <p>a. (IOTV ONLY) Route the cables through the grommets on the cable stop. It does not matter which cable goes through which grommet.</p> <p>b. Insert the cable through the cable release handle pocket and route through the right shoulder (Figure 20).</p> <p style="text-align: center;">NOTE</p> <p>On the IOTV Gen II, the cable release routing channel is sewn as one piece throughout the front carrier. The second step in Figure 19 is only required for the IOTV.)</p> <p>c. (IOTV ONLY) Continue to route cable through the release cable webbing channel on the right shoulder of the front carrier (Figure 20).</p> <p>d. Stow the cable-release handle in the cable release handle pocket and secure with the hook and loop patches inside the pocket.</p>	

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PMCS PROCEDURES - CONTINUED

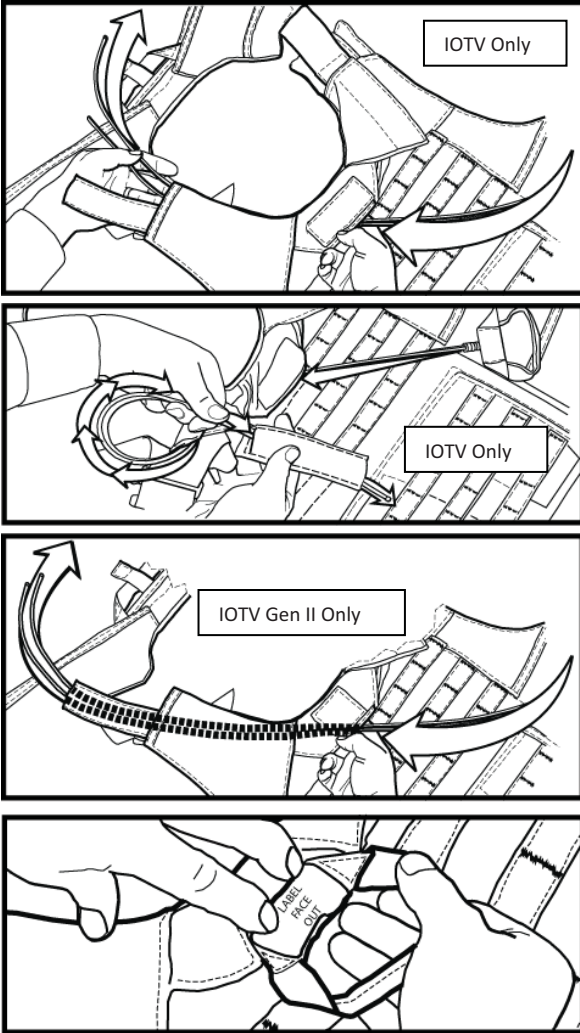
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Cable Release Assembly - Continued	e. Adjust right shoulder buckle so that the reducer buckle is even with the cable webbing channel.	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
				
<p>Figure 20. Installing Cable Release on Front Carrier.</p> <p>0008-32</p>				

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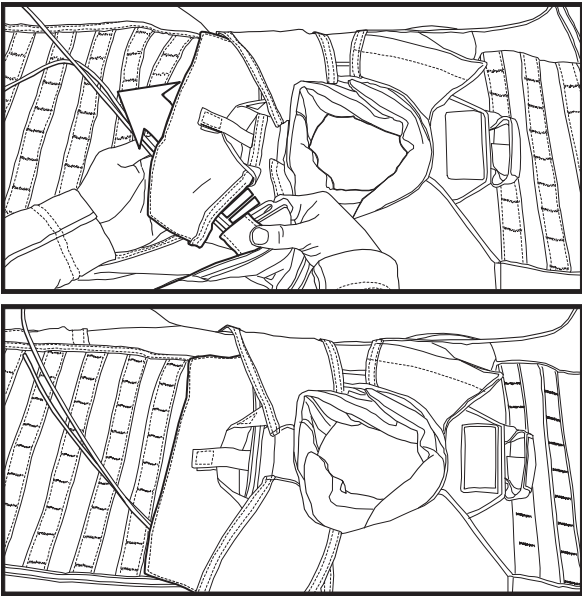
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
20.	Monthly	Vest	<p>Soldier Assemble the front and back carriers.</p> <ul style="list-style-type: none"> a. Lay both back and front carriers on a flat surface with like shoulder together (right to right, left to left) (Figure 21). b. Route the left shoulder of the front carrier into the left shoulder of the back carrier. Repeat for right side. c. Open the upper access panel on the back carrier. The buckle from the front carrier shoulder straps should now be in the back carrier. d. Route both lengths of the cable release through the opening at the top of the upper access panel. 	

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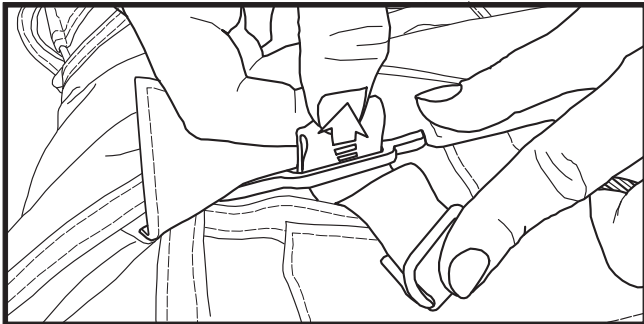
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Vest - Continued		
 <p data-bbox="400 1184 858 1208">Figure 21. Connecting Front and Back Carriers.</p>				
			<p>e. For both shoulders, insert strap loops into the front carrier shoulder buckles (Figure 22).</p>	

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PMCS PROCEDURES - CONTINUED

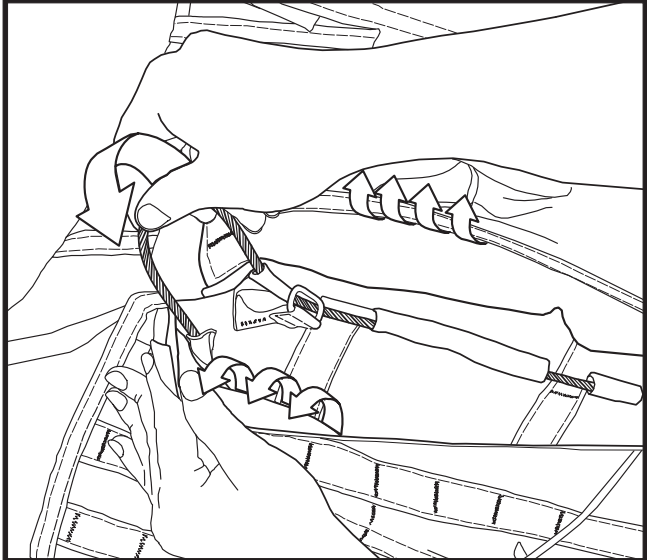
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Vest - Continued		
 <p>Figure 22. Routing Strap Loops into Front Carrier Shoulder Buckles.</p>				
			<ul style="list-style-type: none"> f. Route the short cable release through the portion of the right hand webbing loop that sticks out of the buckle (Figure 23). g. Continue routing the release cable through the center cable routing channel and through the left hand webbing loop that sticks out of the buckle. h. Secure upper access panel at hook and loop seam. 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Vest - Continued		
 <p>Figure 23. Routing Cable Release (Upper Panel).</p>				
21.	Monthly	Internal Elastic Bands	<p>Soldier</p> <p>Install the internal elastic bands and side plate carriers (Figure 24).</p> <ol style="list-style-type: none"> a. Lay back carrier flat with label side facing down. b. Route the 1-inch strap of the right internal elastic band through the webbing loop and wing channel on the right side of the carrier. Repeat for left side. 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Internal Elastic Bands - Continued	<p>c. Ensure the internal elastic bands are flat and the labels are facing down (toward the carrier). Route the free end of the 1-inch webbing on the right internal elastic band through the metal ring on the center webbing loop.</p> <p>d. Route the end of the webbing back through the buckle leaving at least 2 inches of excess.</p> <p>e. Route the right side plate carrier through the right wing channel, positioning the metal rings near the webbing loops. The label should be facing the carrier. Repeat for the left side.</p> <p>f. Starting at the top center webbing loop, place the metal ring on the left side plate carrier over the top center webbing. Place the metal ring from the right side plate carrier over the center webbing (right over left).</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Internal Elastic Bands - Continued	<p>g. Place the metal ring from the left internal elastic band over the middle webbing loop. Place the metal ring from the right internal elastic band over the middle webbing loop (right over left).</p> <p>h. Place the metal ring on the left side plate carrier over the bottom center webbing. Place the metal ring from the right side plate carrier over the bottom center webbing (right over left).</p> <p>i. Route the cable release through the center webbing loops from top to bottom.</p> <p>j. Place end of release cable in the retention pocket.</p> <p>k. Gather any loose straps and secure using elastic keepers.</p> <p>l. Close back pocket and tuck the bottom of back flap up into the back flap pocket.</p>	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

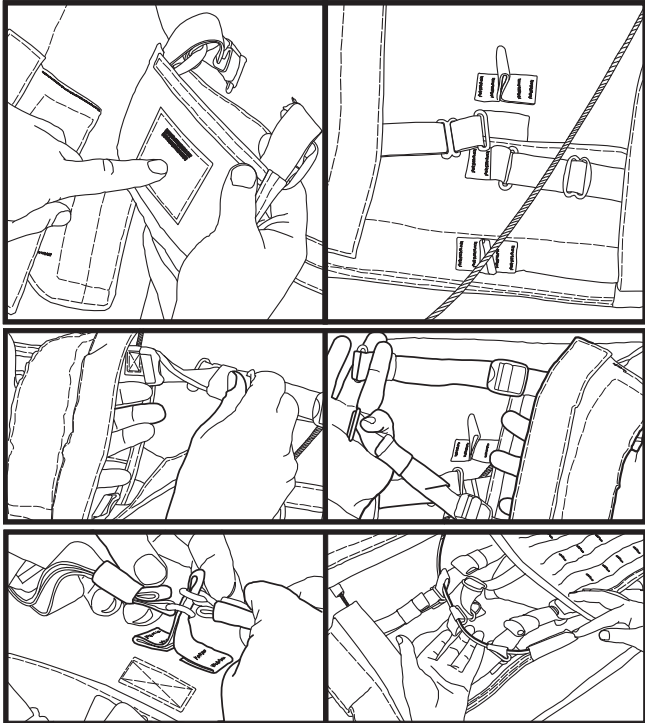
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Internal Elastic Bands - Continued		
				
22.	Monthly	Yoke/Collar Assembly	<p>Soldier Attach yoke/collar assembly (Figure 25).</p> <p>a. Lay IOTV on a flat surface with the inside surface facing up.</p>	

Figure 24. IOTV Cable Routing, Lower Panel.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Yoke/Collar Assembly - Continued	b. Position the yoke back collar on the back carrier with label facing up. c. Attach back collar assembly to back carrier using standard MOLLE weave at both attachment points. d. Mate hook and loop fasteners to complete attachment. e. Position the front yoke on the front carrier with label facing up. f. Route side straps on collar through mating loops on carrier and snap. g. Use standard MOLLE weave to attach remaining straps to carrier.	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Yoke/Collar Assembly - Continued		

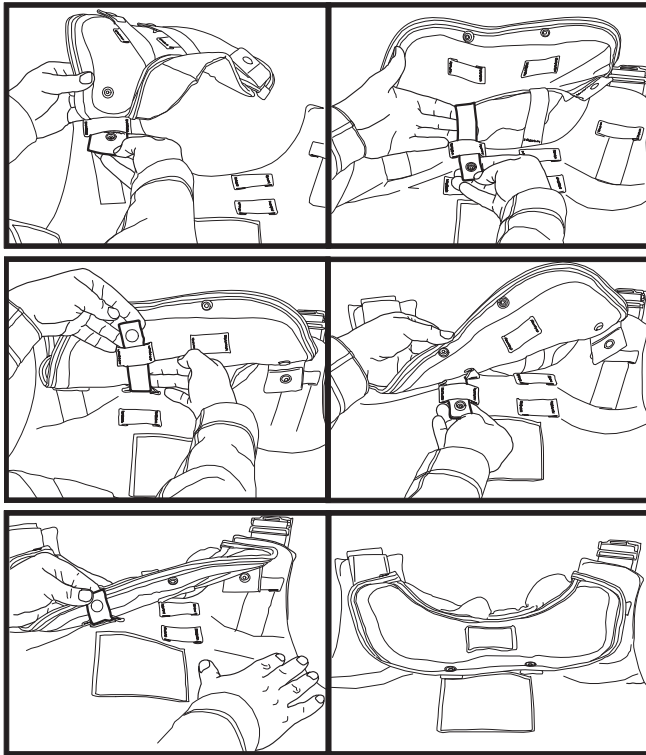


Figure 25. Attaching Yoke/Collar Assembly.

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PMCS PROCEDURES - CONTINUED

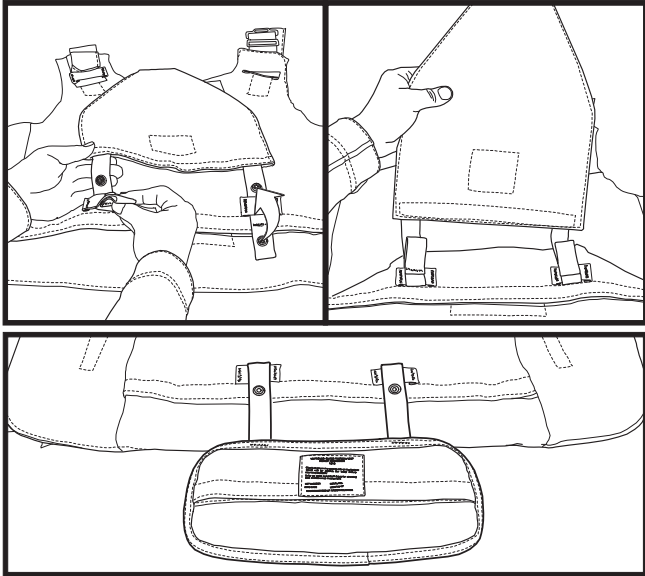
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
23.	Monthly	Groin and Lower Back Protectors	<p>Soldier</p> <p>Install groin protector and lower back protector (as required) (Figure 26).</p> <ul style="list-style-type: none"> a. Lay carriers on flat surface with interior facing up. b. Lay groin protector near bottom of front carrier with label facing up. c. Route straps on groin protector through loops and snap. d. Lay the lower back protector near the bottom of the back carrier with label facing up. e. Route straps on lower back protector through loops and snap. 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Groin and Lower Back Protectors		
 <p>Figure 26. Attaching Groin and Lower Back Protectors.</p>				
24.	Monthly	Deltoid Protector	<p>Soldier</p> <p>Install deltoid protector (as required) (Figure 27).</p> <p>a. Route the nylon webbing at the top of the deltoid protector over the top of the shoulder channels of the IOTV/IOTV Gen II vest.</p>	

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PMCS PROCEDURES - CONTINUED

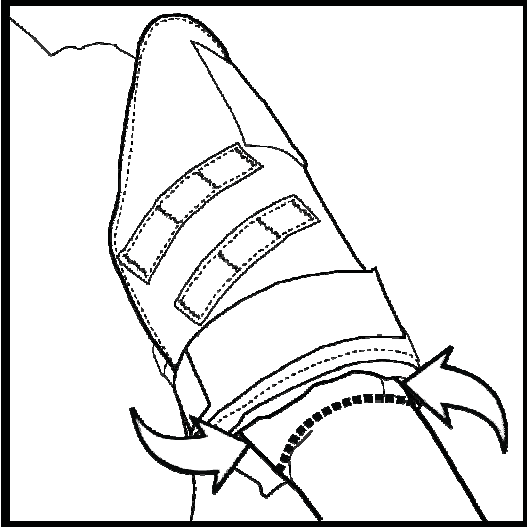
Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Deltoid Protector - Continued	b. Continue to route the webbing back underneath the shoulder channels but above the yoke/collar assembly (if installed). c. Secure with hook and loop fasteners and repeat for other side. d. Don vest. Deltoid protectors should be as high as possible without interfering with motion. Deltoid protectors should be centered on the arm. e. Route bicep webbing through straps and snap. Deltoid protector should be above the crease of the elbow.	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	Deltoid Protector - Continued		
 <p data-bbox="442 1139 816 1166">Figure 27. Installing Deltoid Protectors.</p>				
25.	Monthly	ESAPI	<p>Soldier</p> <p>Install ESAPI plates (as required) (Figure 28).</p> <ol style="list-style-type: none"> a. Lay carriers on a flap surface with interior facing up. b. Separate seam to open insert pocket and lift soft armor insert by pulling strap. c. Insert ballistic plate so that it curves up (label faces up). 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	ESAPI - Continued	d. Secure ballistic plate in pocket by attaching the strap to surface of pocket exterior. e. Re-seal seam of the insert pocket. f. Repeat for other plate.	

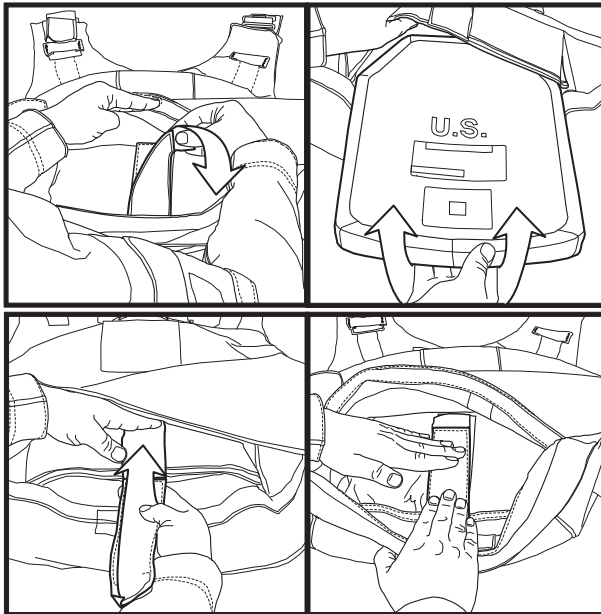


Figure 28. Inserting ESAPI Plates.

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
26.	Monthly	ESBI	<p>Soldier Install ESBI plates (as required).</p> <ul style="list-style-type: none"> a. Lay back carrier on flap surface with the interior facing up and side plate carriers folded out, exposing the side plate pockets. b. Unfasten hook and loop fasteners on top flap of side plate pocket and pull out flap. c. Insert the side ballistic plate. d. Fold flap back into pocket and reattach the hook and loop fastener tape. e. If using X-Small ESAPI plates, insert into unbuckled bottom flap and into top flap. Buckle bottom flap closed, ensuring the nylon webbing is routed back through the buckle (from bottom to top). 	

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PMCS PROCEDURES - CONTINUED


Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
27.	Monthly	IBA	<p>Soldier</p> <p>Adjust IOTV size (Figure 29).</p> <ol style="list-style-type: none"> a. Don IOTV. b. When securing the internal elastic bands, ensure the hook and loop fastener tapes are matched and square. c. When securing the side plate carriers to the front carrier, ensure the side plate carriers are squared on the hook and loop fastener tape. The hook and loop fastener tape should match as closely as possible. d. Have an assistant open the lower access panel on the back carrier. e. The assistant should tighten straps until the vest fits firmly and comfortably on the body. Ensure all straps are adjusted evenly. Start with the internal elastic bands and then adjust the side plate carriers. f. Secure excess webbing in webbing keepers. 	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	IBA - Continued	g. When completed, close the lower access panel and tuck the bottom up into the back flap pocket.	
 <p>Figure 29. Adjusting Size.</p>				
28	Monthly	ESBI Pocket	Soldier Adjust ESBI pocket position (Figure 30).	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	ESBI Pocket – Continued.	a. The ESBI pocket on the IOTV Gen II may be repositioned to provide more protection and comfort depending on individual and mission needs.	
			b. To reposition the ESBI pocket, unsnap and remove MOLLE straps. Reattach pockets using standard MOLLE weave as necessary.	
			c. The pocket may be adjusted to the front or back of the carrier as necessary.	
			d. The pocket may be moved up (toward the head) or down (toward the legs).	

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PMCS PROCEDURES - CONTINUED

Table 1. Preventive Maintenance Checks and Services for IOTV and IOTV Gen II – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF
	Monthly	ESBI Pocket – Continued.	e.	

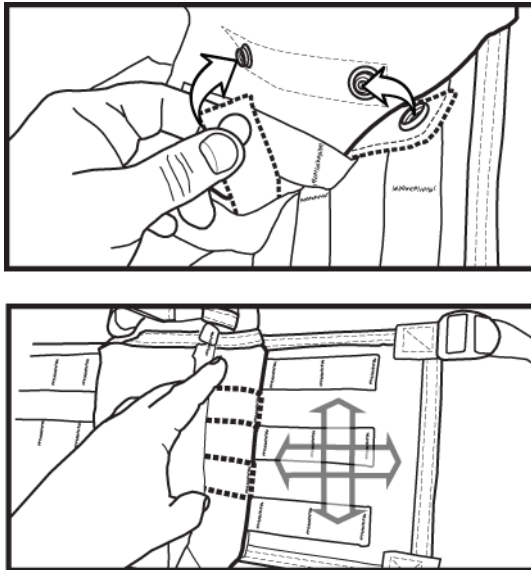


Figure 30. Adjusting ESBI Plates.

END OF TASK

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MANDATORY REPLACEMENT PARTS

There are not mandatory replacement parts for the IOTV or IOTV Gen II.

END OF TASK

END OF WORK PACKAGE

