

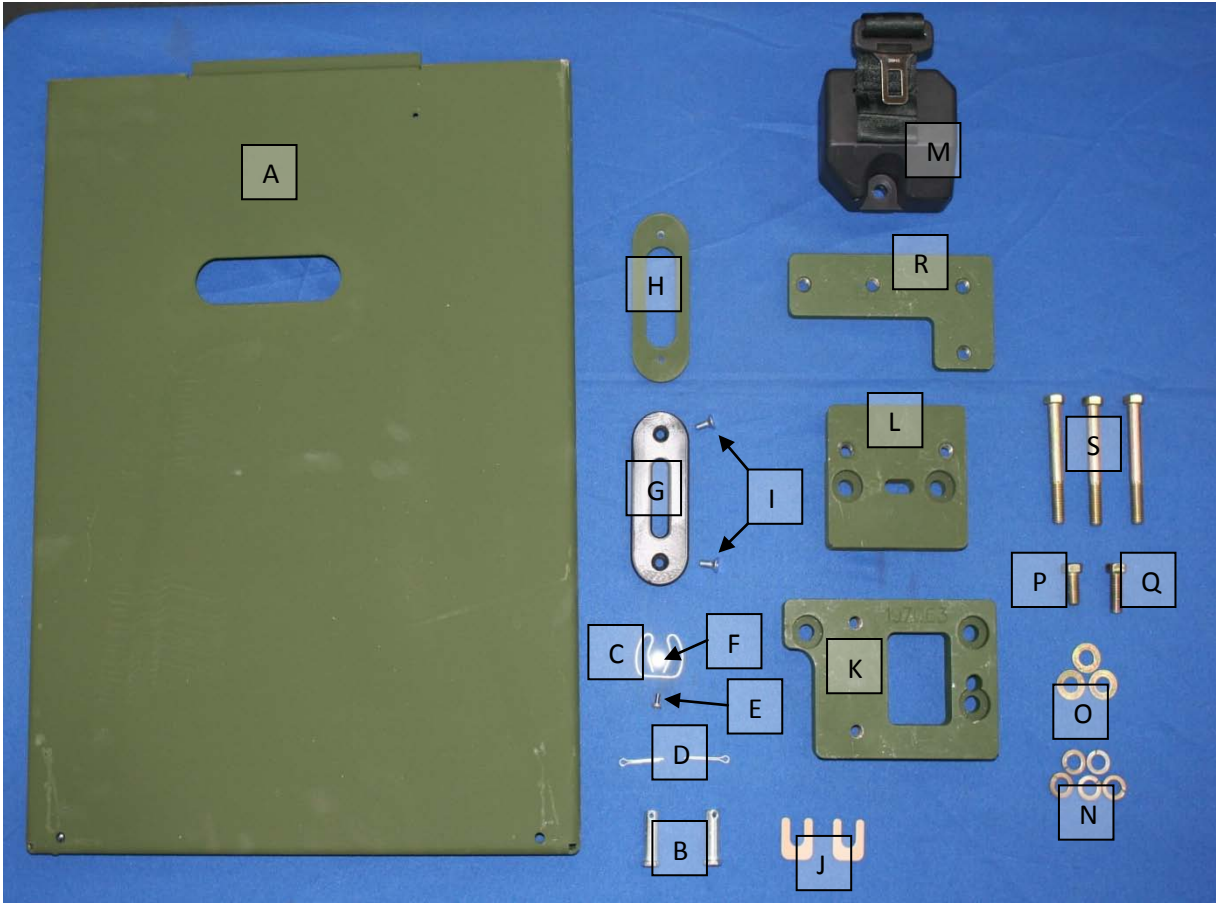
Draft Installation Instructions

15 January 2010

Gunner Restraint System (GRS) for the HEMTT/PLS

HEMTT/PLS GRS Packing List			
Item	Qty	Part Number	Part Description
A	1	DTA196978	GUNNER PLATFORM WELDMENT
B	2	39428-87245A415	CLEVIS PIN (1/2" DIA)
C	1	97084-225-L	GRIPPER CLIP
D	2	39428-98338A180	COTTER PIN
E	1	MS35206-243	PAN HEAD MACHINE SCREW (#8-32X.375)
F	1	12387277-282	HEX NUT (#8-32)
G	1	DTA197069	BELT GUIDE
H	1	DTA191456	PLATE
I	2	MS24667-29Z	FLAT HEAD CAP SCREW (1/4-20X.625)
J	2	DTA197066	SHIM
K	1	DTA197063	RETRACTOR PLATE (HEMTT)
L	1	DTA197545	RETRACTOR PLATE (PLS)
M	1	1EAW9-901-US-07301-14-USA	RETRACTOR (60.5")
N	5	MS35338-47	SPRING LOCK WASHER (7/16" NOM)
O	3	MS27183-62	FLAT WASHER (7/16" NOM)
P	1	B1821BH044C088N	HEX HEAD CAP SCREW (7/16-14X.875)
Q	1	B1821BH044C125N	HEX HEAD CAP SCREW (7/16-14X1.25)
R	1	DTA197064	BACKING PLATE
S	3	B1821BH044C375N	HEX HEAD CAP SCREW (7/16-14X3.75)

DRAFT Installation Instructions



*****Installation of the GRS Kit*****

—→ *HEMTT- Proceed to Step A.1*

—→ *PLS – Proceed to Step B.1*

A.1 Remove Seat from Seat Base (HEMTT)



A.2 Install Retractor Mounting Plate (HEMTT)

- Use mounting plate, DTA197063
- Butt the plate up against the seat belt anchor bracket and the firewall insulation, noting length of plate along tunnel



- Remove plate
- Using a utility knife, cut away insulation foam approximately 6 inches above the floor and the length of the plate. For best results, scrape the adhesive off the tunnel to allow the plate to sit flush.

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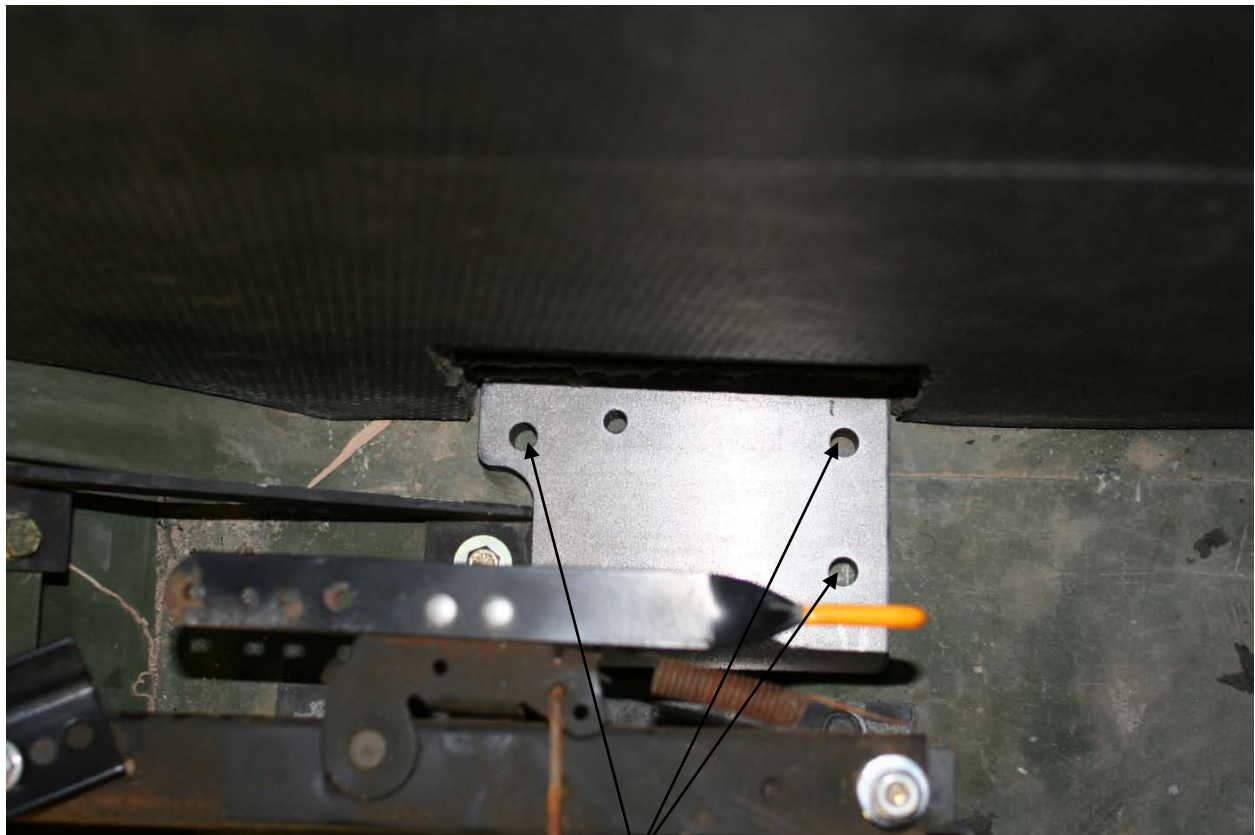


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- Reinstall plate in previous location, making sure it is butted all the way against the tunnel.

(The clearance hole in the mounting plate should align to the rivet in the floor)

- Transfer (3) hole positions through the plate and to the floor



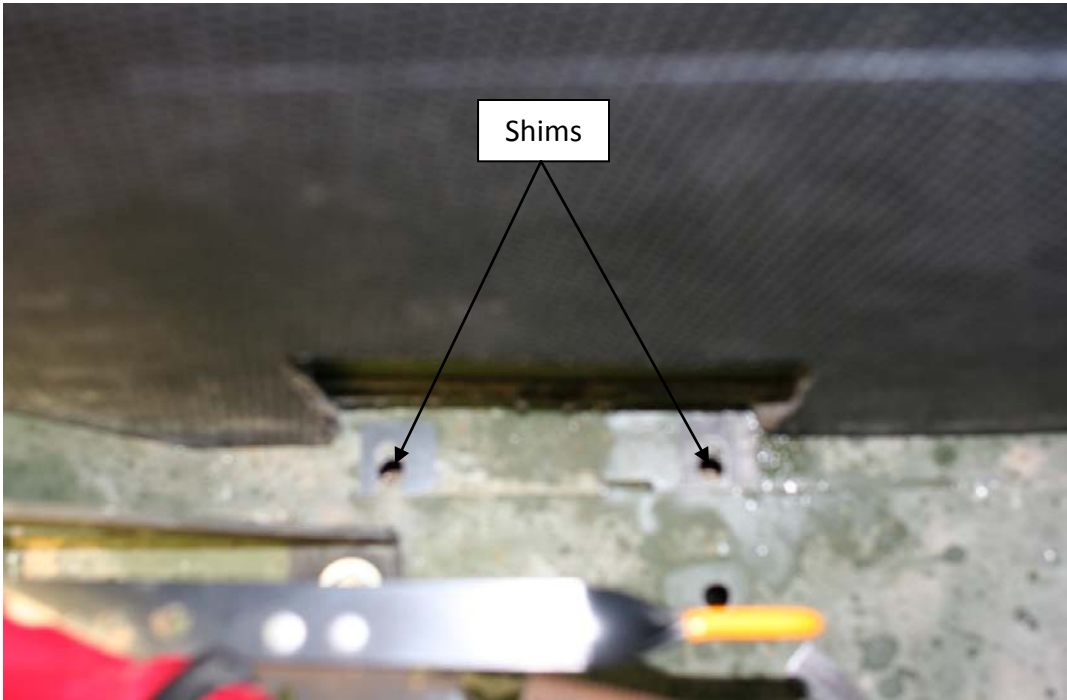
Transfer



- Remove plate
- Drill (3) holes, 1/2" diameter, through the floor.
(Take care to not damage wires on underside of cab)



- The (2) holes nearest the tunnel will each get a shim, DTA197066, between retractor plate and floor



- Reinstall plate in previous location



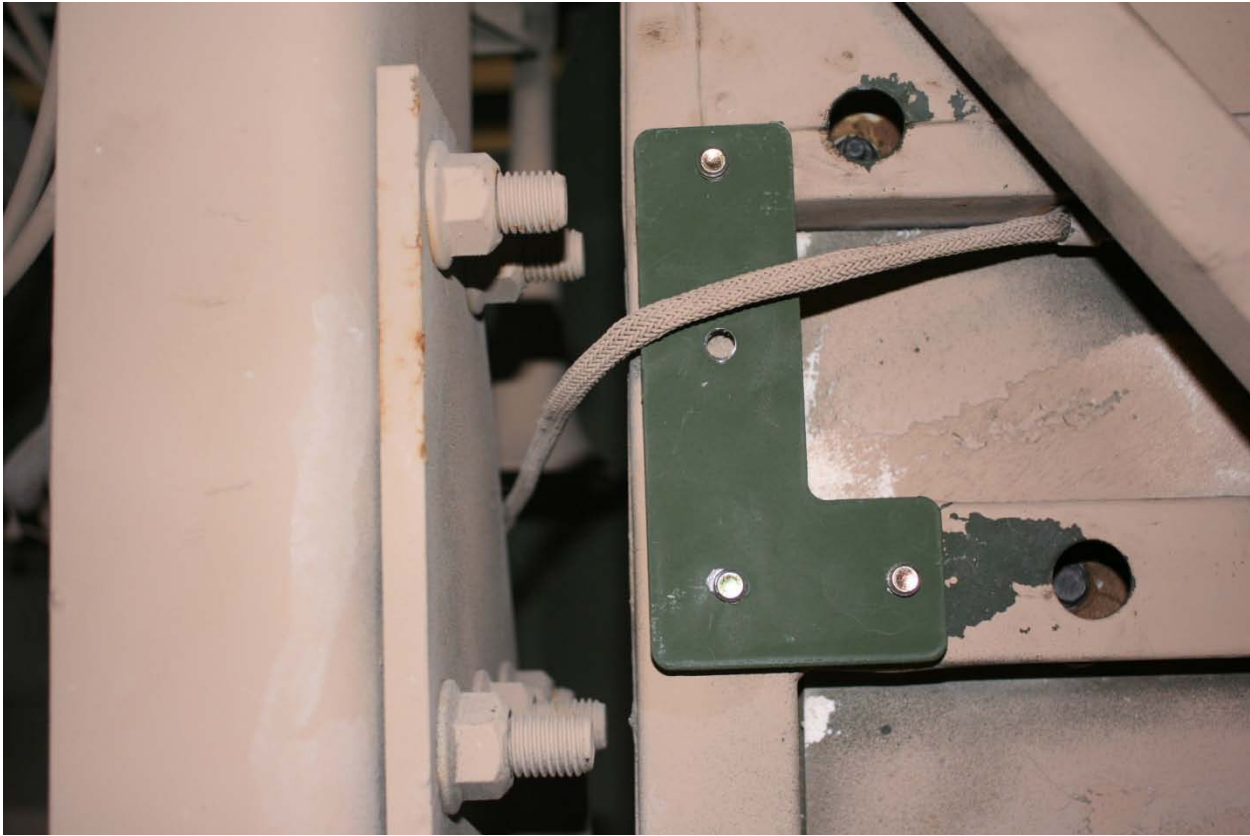
- Install backing plate, DTA197064, by dropping the following through each of the (3) holes:

(1) Flat washer, 7/16" (MS27183-62)

(1) Lock washer, 7/16" (MS35338-47)

(1) Hex bolt, 7/16-14 x 3.75" (B1821BH044C375N)

(Install through retractor plate, threading into backing plate)



A.3 Install Retractor on Mounting Plate (HEMTT)

- Mount the retractor onto the mounting plate, with the belt offset away from the tunnel, using the following hardware:

(2) Lock washers, 7/16" (MS35338-47)

(1) Hex head cap screw, 7/16-14 x 0.875"
(B1821BH044C088N)

(1) Hex head cap screw, 7/16-14 x 1.25"
(B1821BH044C125N)

(Note the longer bolt on the retractor is located closer to the tunnel, with the shorter bolt located further away from the tunnel)



B.1 Remove Seat and Seat Base (PLS)



B.2 Install Retractor Mounting Plate (PLS)

- Use mounting plate, DTA197545
- Butt the plate up against the tunnel, aligning the slot in the plate with the rivet on the floor (countersunk holes in plate will be in line with existing holes in floor)



- Remove plate

- Using a utility knife, cut away insulation foam approximately 6 inches above the floor and the length of the plate. For best results, scrape the adhesive off the tunnel to allow the plate to sit flush.



- Reinstall plate in previous location, making sure it is butted all the way against the tunnel.

- Transfer (2) hole positions through the plate and to the floor





- Remove plate
- Drill (2) holes, 1/2" diameter, through the floor.
(Take care to not damage wires on underside of cab)

DRAFT Installation Instructions



- The (2) holes will each get a shim, DTA197066, between retractor plate and floor

- Re-install seat base and seat



- Reinstall retractor plate in previous location
- Install backing plate, DTA197064, by dropping the following through each of the (2) holes:
 - (1) Flat washer, 7/16" (MS27183-62)
 - (1) Lock washer, 7/16" (MS35338-47)
 - (1) Hex bolt, 7/16-14 x 3.75" (B1821BH044C375N)





B.3 Install Retractor on Mounting Plate (PLS)

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(B1821BH044C088N)

(1) Hex head cap screw, 7/16-14 x 1.25"
(B1821BH044C125N)

(Note the longer bolt on the retractor is located closer to the tunnel, with the shorter bolt located further away from the tunnel)



4. Install Gunner's Platform (HEMTT/PLS)

(Reference drawing attached, DTA196977A, for this step)

- Remove the leg from the existing platform and discard all remaining components

- Install belt guide (DTA197069) onto the top of the new gunner platform (DTA196978) using:

(2) Flat head cap screws, 1/4-20 x 5/8"

(1) Plate, DTA191456, used as a backing



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- Install gripper clip (97084-225-L) using pan head machine screw (8-32 x 3/8") and hex nut (12387277-282)



- Install leg onto platform using (2) clevis pins (39428-87245A415) and secure with (2) cotter pins (39428-98338A180)



*****Proper Use of Gunner Restraint System*****

→ *Follow these steps for both HEMTT and PLS*

- Insert tab of gunner platform into the slot on the tunnel, with the leg extended



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- Thread retractor buckle through the bushing on the platform



To unthread retractor:

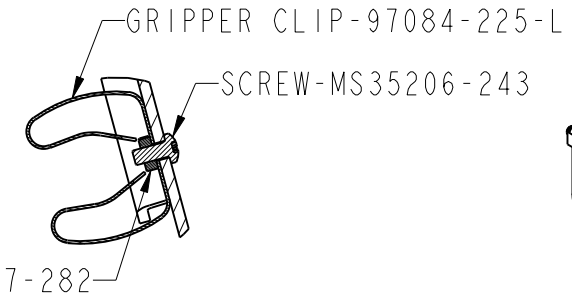
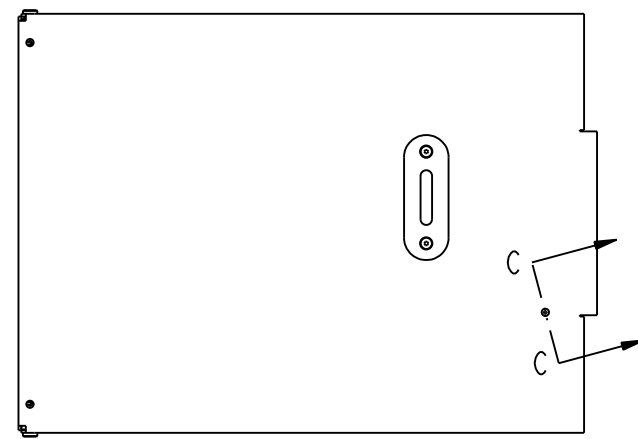
- Pull buckle up
- Fold belt flap in
- Drop through platform



NOTES:
 1. APPLICABLE STANDARDS/SPECIFICATIONS:
 A. ASME Y14.100-2000
 B. ASME Y14.5M-1994

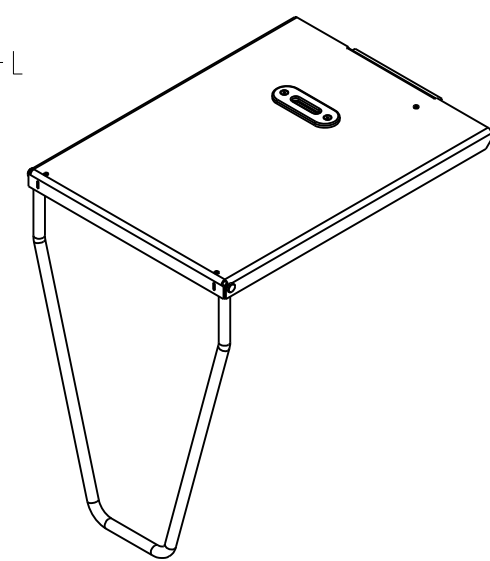
② REUSED FROM ORIGINAL GUNNER PLATFORM

REVISIONS				DATE (YR-MO-DA)	APPROVED
ZONE	MODEL REV	DRAWING REV	DESCRIPTION		
	A	A	CHANGED DIST NOTE	09-12-10	JRM

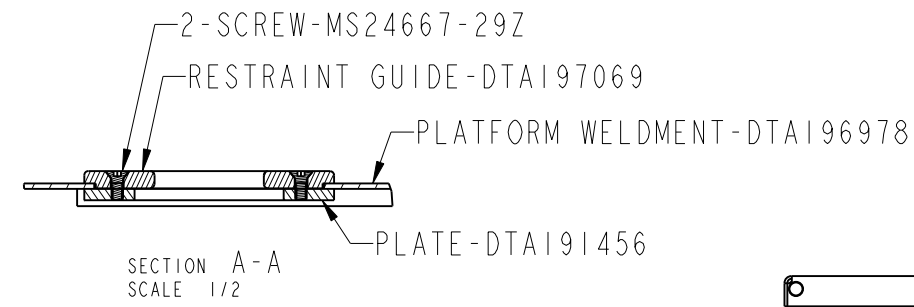


HEX NUT-12387277-282

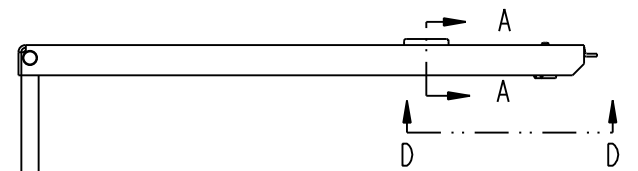
SECTION C-C
SCALE 1/1



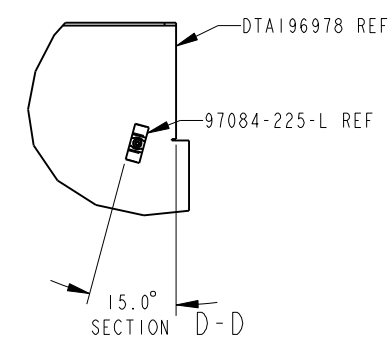
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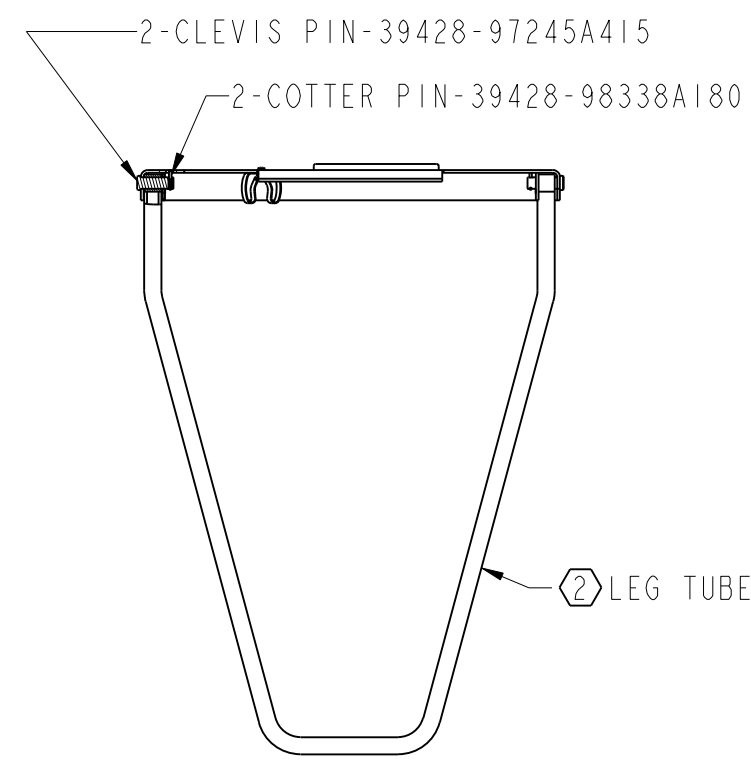
SECTION A-A
SCALE 1/2



SECTION D-D



SECTION D-D



② LEG TUBE

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MECHANICAL PROPERTIES	TOLERANCES ON ANGLES ± 2° 2 PLACE DECIMALS ± 3 PLACE DECIMALS ±		DRAWN BY JSM	DATE (YR-MO-DA) 09-12-10	GUNNER PLATFORM ASSEMBLY	
YP	THIRD ANGLE PROJECTION		CHECKER JRM	ENGINEER JRM		
TS			ENGINEER JRM	QUALITY ENGINEER	SIZE	
EL2			DRAWING APPROVAL		CAGE CODE	
RA	DTA197062	HEMTT	DESIGN APPROVAL		D 19207	
BH	NEXT ASSY	USED ON	DESIGN APPROVAL		DWG NO	
RH	APPLICATION		SCALE		DTA196977	
			MATERIAL ENGR		SCALE 1/4	
			MODELED BY		UNIT WT 23.2 lb REF	
			JRM		SHEET 1 OF 1	