

FOUO

PM MTV Armor Smartbook



**Rev 2
August 2012**



FOUO



VEHICLE ARMOR CONFIGURATIONS



Radian Armor Crew Kit (RACK)

- RACK is installed on all FMTV A0 and A1 variants.
 - Interim solution for armor FMTVs until LSACs were fielded
- No Gunner Protection Kit (GPK) is authorized for RACK equipped trucks.
 - RACK comes equipped with a small gunner's shield (two square plates)
 - Left, Turret Armor
 - PN 12489189-1
 - NSN 2540-01-525-0752
 - Right, Turret Armor
 - PN 12489189-2
 - NSN 2540-01-525-0756
- RACK Gunner's Restraint Kit. This kit is also used on the FMTV standard cabs if a gun ring is installed.
 - PN 57K4941
 - NSN 2540-01-569-8599
- Per ALARACT 197/2009, RACK armor protection level is deemed "not acceptable". Contact ARCENT for a replacement armored FMTV.

RACK TB 9-2320-326-24&P





Low Signature Armor Cab (LSAC)



LSAC with Upgrade Kit installed



LSAC without Upgrade Kit installed

- LSAC is installed on all FMTV A0, A1, and A1R variants (FMTVA0P1 or FMTVP1; FMTVA1P1).
- LSACs (cab SN 30001-302036) fielded in support of OIF/OEF require the installation of an Upgrade Kit to provide increased crew protection and improved components.
 - The Upgrade Kit includes appliqué panels, upgraded HVAC, upgraded cab lift and support, and a 260 amp alternator.
- The baseline GPK is authorized for LSAC equipped trucks.
 - This GPK does not include transparent armor; steel only.
 - PN 6431770
 - NSN 2510-01-532-5221
- The Gun Shield (GS) that accompanies the GPK is:
 - PN 57K4470
 - NSN 2510-01-498-4996
- LSAC Gunner's Restraint Kit
 - PN 57K4942
 - NSN 2540-01-569-6578
- Counterweight Bumper Kit
 - M1078/M1081: PN 57K4950-001
 - M1088 (truck SN 0-22,694): PN 57K4950-002
 - M1088 (truck SN 22,695-199,999): PN 57K4950-003

LSAC TB 9-2320-320-13&P



Long Term Armor Strategy (LTAS)



- LTAS (FMTVA1P2) is a modular concept consisting of an A-cab designed to accept armor called a B-kit.
- To mount a crew served weapon and/or an OGPK on LTAS, the Weapon Station Kit is required. This kit includes the turret ring assembly and the appropriate hardware and interface ring to mount the turret ring assembly to the cab.
 - PN 57K6026
 - NSN 2510-01-567-8727
- If a turret ring assembly is already in the possession of the unit, only the Weapon – Transfer Mounting Kit is required to mount the turret ring assembly to the cab.
 - PN 57K2756
 - NSN 1005-01-577-2656
- LTAS Gunner's Restraint Kit is included with kits PN 57K6026 and 57K2756. It can be obtained as a separate kit, if necessary.
 - PN 57K6027
 - NSN 2540-01-571-8576
- The Objective Gunner Protection Kit (OGPK) is authorized for use on LTAS.
 - OGPK includes transparent armor and steel to allow for increase situational awareness.
 - A Battery Powered Motorized Traversing Unit (BPMTU) is also included with the OGPK for ease in rotating the turret/ring.
 - PN 13018180
 - NSN 2540-01-543-8325

LTAS IETM 9-2320-333-14&P



ARMOR KITS

LSAC ONLY

LSAC Upgrade Kit

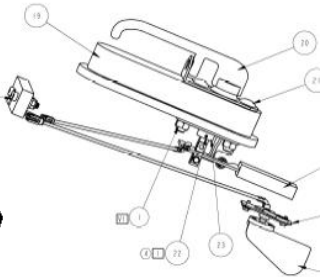
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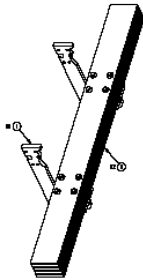
- Required to Install
- Install as needed



Door Panel Upgrade Kit



CW Bumper Kit

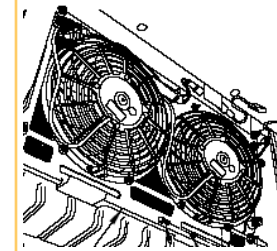
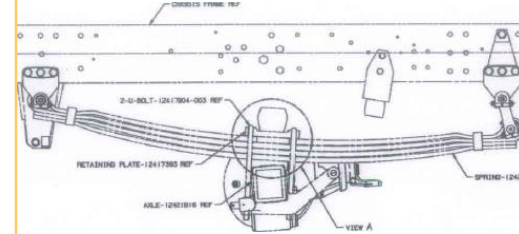


To support the Appliqué

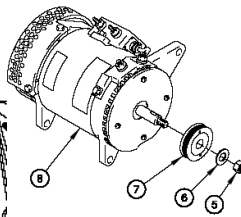
Improved Survivability

Opportunity for Enhancement

Bump Stop Kit



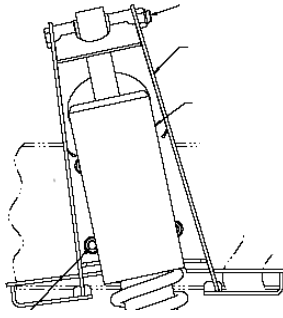
HVAC Upgrade



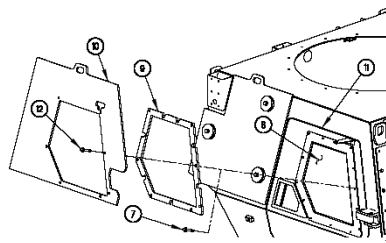
260 amp ALT Kit



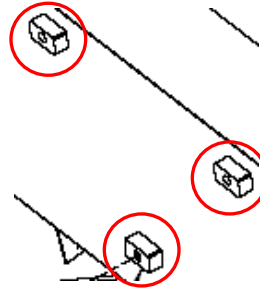
Lift and Support Kit



Passenger Side Coil Over shock bracket



Appliqué Kit



Appurtenances Kit



Gunner's Restraint Kit

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LSAC Upgrade Kit (cont.)

- Door Kit
 - Left Door:
 - ❖ PN: APC30406-001
 - ❖ NSN: 2510-01-555-6304
 - Right Door:
 - ❖ PN: APC30406-002
 - ❖ NSN: 2510-01-555-6312
- Bump Stop Kit
 - Bolt, M14: PN 12422628-001; NSN 5305-01-498-2277
 - Resilient Mount: PN 12422593; NSN 5340-01-495-5767
 - Nut, M14: PN 12414308-023; NSN 5310-01-369-6705
 - Spacer: PN 12422505; NSN 5365-01-493-8572
 - U-bolt, M18: PN 12417904-003; NSN 5306-01-369-8889
 - Concave Washer: PN D63546/8-06G; NSN 5310-01-391-7887
 - Nut, M18: PN 12418084; NSN 5310-01-371-8419
- Passenger Side Coil Over Bracket
 - PN: 12423981
 - NSN: 2590-01-568-0086
- Appliqué Kit
 - PN: 57K2742
 - NSN: 2510-01-573-5973
- HVAC Kit
 - PN: 57K4947
 - NSN: n/a
- 260 Amp Alternator
 - PN: 12423713
 - NSN: 2920-01-559-2715
- Lift and Support Kit
 - PN: 57K2745
 - NSN: n/a

Counterweight Bumper Kit (LSAC only)



- M1078P1/A1P1 and M1081P1:
 - Counterweight Bumper Kit required when LSAC w/ appliqué applied.
 - PN: 57K4950-001
- M1088P1/A1P1:
 - Counterweight Bumper Kit required with LSAC w/ appliqué (bobtail – without trailer only).
 - ❖ When installing a trailer, removal of Counterweight Bumper Kit is required.
 - Kit Part Numbers:
 - ❖ PN: 57K4950-002 (truck SN 0 – 22,694)
 - ❖ PN: 57K4950-003 (truck SN 22,695 – 199,999)



M1078P1 with Counterweight Bumper

Baseline Gunner Protection Kit (GPK)



<u>PN</u>	<u>NSN</u>	<u>Description</u>	<u>PN</u>	<u>NSN</u>	<u>Description</u>
6431770	2510-01-532-5221	Gunner Protection Kit			
6431779	5340-01-535-4868	• Gunner Protection Hardware Kit - Capscrew, .375-16 x 1.00 - Capscrew, .375-16 x 1.25 - Capscrew, .375-16 x 1.50 - Capscrew, .375-16 x 1.75 - Capscrew, .375-16 x 2.00 - Capscrew, .375-24 x 1.25 - Washer, Lock-Spring, .375 - Washer, Flat, .375 USS - Nut, Hex Locking, .375-16 - Screw, Flat HD, .375-16 x 4.00 - Screw, BTN HD, .375-16 x 2.00 - Capscrew, .375-16 x 5.00	6431507-01M1	5340-01-536-9918	• Gunner Protection Kit - Left Side Aluminum Plate - Rear Aluminum Plate - Right Side Steel Plate - Rear Plate - Right Side Aluminum Plate - Left Side Steel Plate - LH Corner Brace Bracket - RH Corner Brace Bracket - Small Mounting Angle Bracket - Large Mounting Angle Bracket - Gap Strip Plate - Bottom Plate - LH Rear Support Bracket - RH Rear Support Bracket - Hatch Mounting Bracket - Tie Bar - Handle - Clamping Nut Plate - Crossmember Bracket - Crossmember Nut Plate - Universal Crossmember
4397000-060	5306-01-433-9196		6431493	2540-01-536-1118	
4397000-062	5306-01-433-9197		6431494	2540-01-536-3581	
4397000-064	5305-01-436-6377		6431495	N/A	
4397000-065	5306-01-433-9198		6431496	N/A	
4397000-066	5306-01-448-5073		6431499	2540-01-536-0927	
7397001-062	5306-01-436-5393		6431500	N/A	
4397004-008	5310-01-417-7273		6431560	N/A	
4397005-015	5310-01-436-3742		6431561	N/A	
1397064-005	5310-01-439-8177		6431611	N/A	
6431753	N/A		6431612	N/A	
6431754	N/A		6431613	N/A	
4397000-078	5305-01-535-5709		6431614	N/A	
6431780	5340-01-535-6946	• Traversing Unit Hardware Kit - Capscrew, .375-16 x .875 - Washer, Flat, .375 - Screw, PAN HD, #10 x .625 - Capscrew, .250-20 x .625 - Washer, Flat, .250 - Screw, SOC HD, .375-24 x .875	6431616	N/A	
4397000-059	5305-01-513-5667		6431617	N/A	
4397005-014	5310-01-419-2413		6431637	N/A	
4397054-032	5305-01-513-5711		6431638	N/A	
4397000-005	5306-01-433-9180		6431639	N/A	
4397005-010	5310-01-435-7784		6431642	N/A	
4397030-120	5305-01-535-5632		6431644	N/A	
6435129-01M1	3830-01-536-4083	• Traversing Unit Kit	6431645	N/A	
6431785	N/A	• Installation Instructions	6431647	N/A	





Baseline Gun Shield (GS)

<u>PN</u>	<u>NSN</u>	<u>Description</u>
57K4470	2510-01-498-4996	Gun Shield Kit
12012065	1010-01-447-2983	• Handle Assy, Locking
12012067	3040-01-447-2276	• Pawl, Clamping
12012071	5325-01-447-2281	• Sleeve, Split
12484846	2540-01-500-3446	• Shield, Gunner
12484852	1005-01-500-3744	• Bracket, Gun Shield Sup
12484847	2540-01-500-0309	• Adapter, Pintle
12484848	5340-01-500-5572	• Lock, Pintle
12484857	N/A	• Installation Instructions
12484861-054	5305-01-564-2524	• Screw
12484861-055	5305-01-564-1667	• Screw
12484862-006	5310-01-433-0941	• Lockwasher
12484862-008	5310-01-417-7273	• Lockwasher
12484863-005	5305-01-564-3583	• Screw
12484864-005	5310-01-439-8177	• Nut
5140237	5305-00-514-0237	• Screw
9421888	5310-01-442-1109	• Washer





ARMOR KITS

LTAS ONLY



Gun Rings

- **M66 Gun Ring Mount**

- Required when mounting a crew served weapon
 - ❖ GPK/OGPK will NOT mount to this ring
- Mounts directly to the roof of the LTAS cab
- Only requires a seal (see #10 on the following chart) to help mitigate water intrusion; quantity required – 4 each
 - ❖ PN 12505430
 - ❖ NSN 5330-01-567-9060

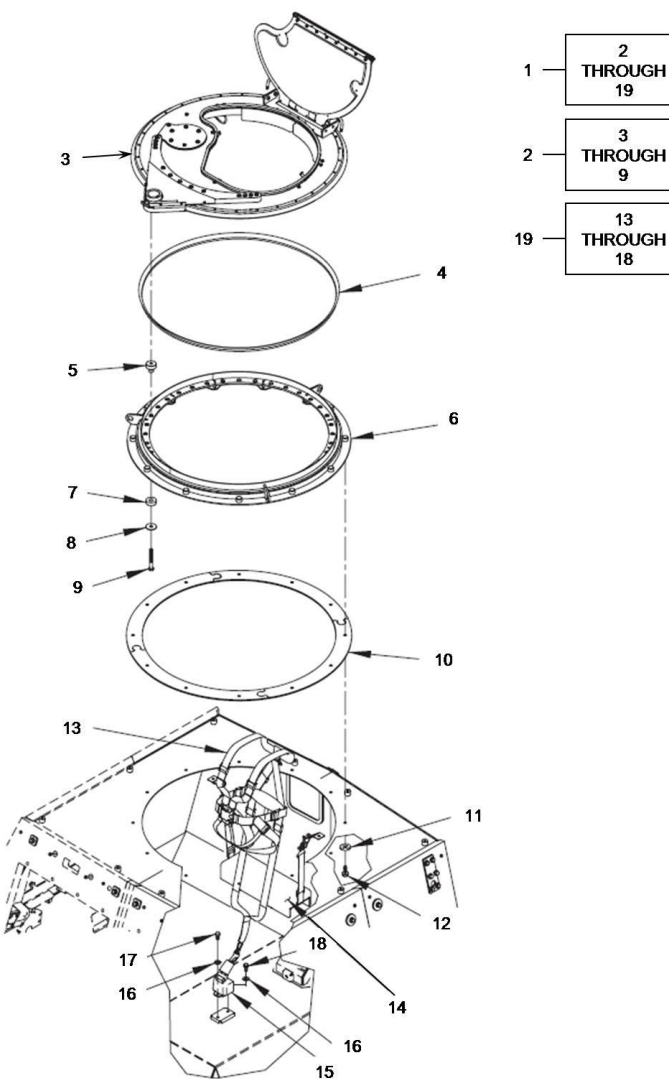
- **M1114 Gun Ring Mount****

- Required when mounting a crew served weapon and/or GPK/OGPK
- Kit: M1114 gun ring mount and all associated mounting components
 - ❖ PN 57K6026
 - ❖ NSN 2510-01-567-8727
- Kit: All associated mounting components (M1114 gun ring mount NOT included) – used if unit already has a M1114 gun ring mount available for use
 - ❖ PN 57K2756
 - ❖ NSN 1005-01-577-2656

****See the following chart for a kit breakdown for the M1114 Gun Ring Mount**



Weapon Station Kit (LTAS only)



To mount either a crew serve weapon or OGPK on LTAS, the Weapon Station Kit is needed.

PN 57K6026; NSN 2510-01-567-8727

Call Out Number

PN

NSN

Description

1	57K6026	2510-01-567-8727	Kit, Weapon Station
2	12505884	2510-01-583-8987	• Weapon Station Assembly
3**	12505891	2510-01-578-4322	- Turret, Ring Assembly
5	4668958-1	5365-01-571-1041	- Bushing, Upper
7	4668958-2	5365-01-570-7459	- Bushing, Lower
8	12505366-004	5310-01-570-7676	- Washer, Snubber
9	AEB021375C00AW8A2	N/A	- Screw, Cap, Hexagon
4	12505479	5330-01-573-8894	- Seal, Wipe
6	12505480	1005-01-575-6054	- Ring, Interface
10	12505430	5330-01-567-9060	• Seal, Nonmetallic
11	12414473-016	5310-01-375-0659	• Washer, Flat
12	12505457-002	5306-01-567-6548	• Bolt, Machine
19	57K6027	2540-01-571-8576	• Kit, Gunner's Restraint
13	900-US-07301	4240-01-542-8160	- Safety Device, Person
14	13014413	2540-01-550-7246	- Seat, Vehicular
15	901-US-07301-1	2540-01-543-0747	- Assembly Kit, Vehicular
16	12422608-015		- Washer, Flat
17	B1821BH044F125N	5305-00-709-8523	- Screw, Cap, Hexagon
18	B1821BH044F100N	5305-00-709-8517	- Screw, Cap, Hexagon

**** Note:** If the unit already has a M1114 Gun Ring (Call Out Number 3 above) on hand, only the Weapon-Transfer Mounting Kit (PN 57K2756; NSN 1005-01-577-2656) is needed.



Objective Gunner Protection Kit (OGPK)

OGPK - M1114 version: PN 13018180 (NSN 2540-01-543-8325)

<u>PN</u>	<u>NSN</u>	<u>Description</u>
13014372	2540-01-550-7387	Armor Panel, Right
13014373	2540-01-550-7253	Armor Panel, Left
13014374	2540-01-550-7386	Armor Panel, Rear
13014375	2590-01-563-4687	Bracket, Rear Corner
13018195	-	Plate, Base, MRAP
13014377	3120-01-564-2279	Sleeve, Bearing
13014378	2540-01-563-4524	Panel, Front
13014380	2590-01-563-3670	Bracket, Left Front
13014381	2590-01-563-4901	Bracket, Point
13014382	2540-01-563-6583	Plate, Seam
13014384	6650-01-550-7534	Window, Large
13014388	2590-01-563-3359	Bracket, Side
13014389	2590-01-563-2468	Bracket, Right Front
13014390	6650-01-550-7525	Window, Front Right
13014393	6650-01-550-7555	Window, Front Left
13014395	2590-01-563-3664	Spacer, Shield, Aangled
13014397	2590-01-563-4933	Spacer, Shield, Vertical
13014398	2590-01-563-5219	Window Bracket Assembly, Short

<u>PN</u>	<u>NSN</u>	<u>Description</u>
13014399	2590-01-564-2161	Window Bracket Assembly, Long
13014402	5340-01-564-2281	Handle
13014403	5325-01-563-3845	Grommet, Rubber
13014404	5975-01-563-3002	Cover, Wire
13014405	2590-01-563-2960	M4 Bracket, Rear
13014406	5340-01-568-3611	Hatch Bracket Kit
13014407	2540-01-563-5854	Pintle Adapter Kit
13014408	3830-01-536-4083	Manual Traversing Gear Kit
13014410	5306-01-568-3615	OGPK Fasteners
13014411	2590-01-563-6505	Window Bracket Assembly, Top
13014412	2590-01-563-5835	Window Bracket Assembly, Bottom
13014413	2540-01-550-7246	Picatinny Seat Assembly
13014414	9905-01-563-9863	Plate, Data
13014416	5340-01-568-3618	M4 Bracket Assembly, Front
13014420	2540-01-564-2115	Shield, Front
13018182	-	BPMTU Kit – M1114 version
57K3214	2540-01-436-1626	Parts Kit, Mirror Assembly, Rearview





ARMOR KITS

ALL ARMOR CONFIGURATIONS



Fuel Tank Fire Suppression (FTFS) – 58 gal

58 gallon FTFS Kit

<u>PN</u>	<u>NSN</u>	<u>Description</u>
57K2765-001	2910-01-578-7417	58 Gal FTFS Kit
12509884-001	2510-01-578-4582	• Forward End Cap Section
12509844-002	2510-01-578-4588	• Center Section
12509884-003	2510-01-576-9031	• Aft End Cap Section
12509901-002	-	• Installation Strap N
12532086	5330-01-584-0079	• Trim, Edge Guard
IM57K2765	N/A	• Intallation Manual

SPARES

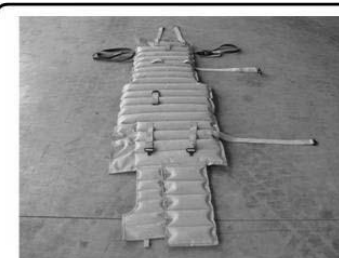
12509889	5340-01-579-6251	Buckle
12509900-001	-	Buckle Ratchet Assembly
12509906-001	-	Fire Suppression Packet (90g)
12509906-002	-	Fire Suppression Packet (400g)

58 gallon:

- All A0 models (base P1)
- M1078A1P1, M1079A1P1, M1083A1P1, M1084A1P1, M1085A1P1, M1086A1P1, M1090A1P1
- M1078A1P2, M1079A1P2, M1080A1P2, M1083A1P2, M1092A1P2



Forward End Cap
P/N 12509884-001



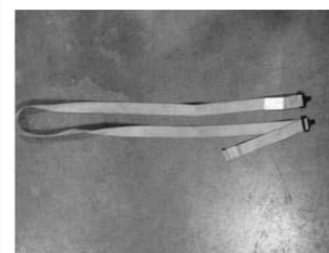
Center Section
P/N 12509884-002



Trim, Edge Guard (pre-cut shown)
P/N 12532086
Quantity 3



Aft End Cap
P/N 12509884-003



Installation Strap
P/N 12509901



Ratchet Strap
P/N 12509900-001
Quantity 3



Fuel Tank Fire Suppression (FTFS) – 58 gal

58 gallon FTFS Kit – Optional Design

<u>PN</u>	<u>NSN</u>	<u>Description</u>
57K2765-002		58 Gal FTFS Kit
12509884-001	2510-01-578-4582	• Forward End Cap Section
12509844-002	2510-01-578-4588	• Center Section
12509884-003	2510-01-576-9031	• Aft End Cap Section
12509901-002	-	• Installation Strap N
12532086	5330-01-584-0079	• Trim, Edge Guard
IM57K2765	N/A	• Intallation Manual

SPARES

12509889	5340-01-579-6251	Buckle
12509900-001	-	Buckle Ratchet Assembly
12509906-001	-	Fire Suppression Packet (90g)
12509906-002	-	Fire Suppression Packet (400g)

58 gallon:

- All A0 models (base P1)
- M1078A1P1, M1079A1P1, M1083A1P1, M1084A1P1, M1085A1P1, M1086A1P1, M1090A1P1
- M1078A1P2, M1079A1P2, M1080A1P2, M1083A1P2, M1092A1P2





Fuel Tank Fire Suppression (FTFS) – 78 gal

78 gallon FTFS Kit

<u>PN</u>	<u>NSN</u>	<u>Description</u>
57K2763	2910-01-578-9918	78 Gal FTFS Kit
12509885-001	2510-01-578-4572	• Forward End Cap Section
12509885-002	2510-01-578-6350	• Top Center Section
12509885-003	2510-01-578-4577	• Bottom Center Section
12509885-004	2510-01-578-4568	• Aft End Cap Section
12509901-001	-	• Installation Strap P
12532086	5330-01-584-0079	• Trim, Edge Guard
IM57K2763	N/A	• Intallation Manual
SPARES		
12509889	5340-01-579-6251	Buckle
12509900-002	-	Buckle Ratchet Assembly
12509906-001	-	Fire Suppression Packet (90g)
12509906-002	-	Fire Suppression Packet (400g)

78 gallon:

• M1087A1P1, M1088A1P1,
M1089A1P1, M1157A1P1

• M1084A1P2, M1085A1P2,
M1086A1P2, M1087A1P2,
M1088A1P2, M1089A1P2,
M1096A1P2, M1148A1P2,
M1157A1P2



Forward Center Cap
P/N 12509885-001



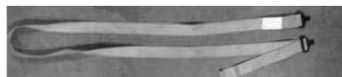
Aft End Cap
P/N 12509885-002



Rear Center Section
P/N 12509885-003



Forward End Cap
P/N 12509885-004



Installation Strap
P/N 12509901



Trim, Edge Guard (pre-cut shown)
P/N 12532086
Quantity 3



Ratchet Strap
P/N 12509900-002
Quantity 3



Fuel Tank Fire Suppression (FTFS) – 78 gal

78 gallon FTFS Kit – Optional Design

<u>PN</u>	<u>NSN</u>	<u>Description</u>
57K2763-002		78 Gal FTFS Kit
12509885-001	2510-01-578-4572	• Forward End Cap Section
12509885-002	2510-01-578-6350	• Top Center Section
12509885-003	2510-01-578-4577	• Bottom Center Section
12509885-004	2510-01-578-4568	• Aft End Cap Section
12509901-001	-	• Installation Strap P
12532086	5330-01-584-0079	• Trim, Edge Guard
IM57K2763	N/A	• Intallation Manual

SPARES

12509889	5340-01-579-6251	Buckle
12509900-002	-	Buckle Ratchet Assembly
12509906-001	-	Fire Suppression Packet (90g)
12509906-002	-	Fire Suppression Packet (400g)

78 gallon:

• M1087A1P1, M1088A1P1,
M1089A1P1, M1157A1P1

• M1084A1P2, M1085A1P2,
M1086A1P2, M1087A1P2,
M1088A1P2, M1089A1P2,
M1096A1P2, M1148A1P2,
M1157A1P2





Questions/Comments

Carly Goward
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PM Medium Tactical Vehicles

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