

Introduction

You have just been issued the Modular Lightweight Load-Carrying Equipment known as MOLLE.

MOLLE is a modular Load-Carrying system designed to enhance the survivability and lethality of the modern Soldier and Marine. MOLLE is a replacement for the All-Purpose Lightweight Individual Carrying Equipment system (ALICE) and components of the Integrated Individual Fighting System including the Enhanced Tactical Load-Bearing Vest.

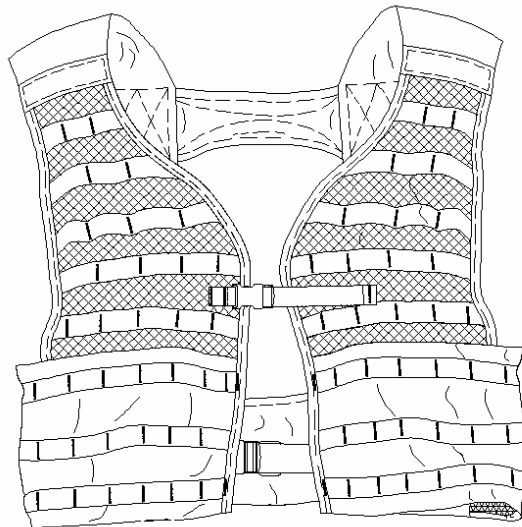
Your Central Issue Facility or Supply should issue a complete MOLLE set with the appropriate pockets to match your squad position.

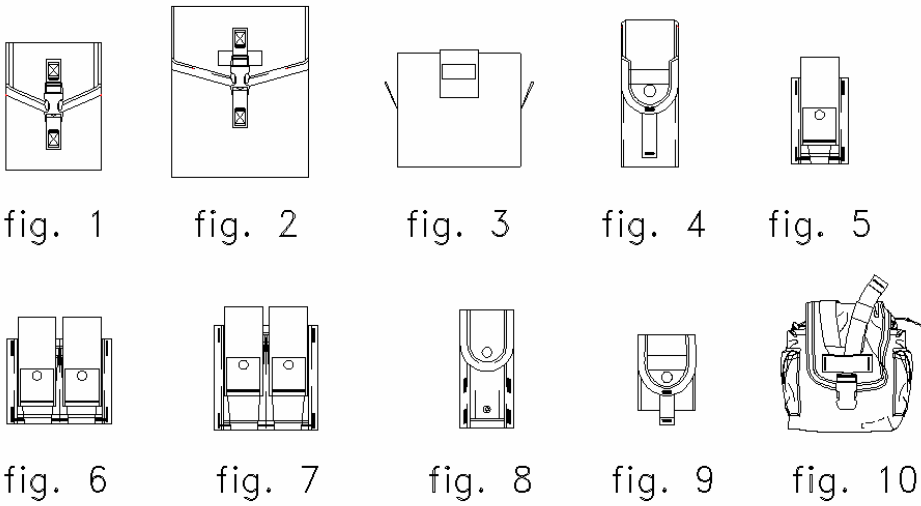
The MOLLE system

consists of the fighting load carrier (FLC), the main rucksack, the sleep system carrier, the patrol pack, the frame, sustainment pockets, waistpack, six foot lashing straps, hydration system, repair kit, and additional pockets.

A common vest is provided for all Soldiers and Marines with specialized removable pockets for Rifleman, Pistol, SAW Gunner, Grenadier and Medic or Corpsman configurations.

Fighting Load Carrier (FLC)





Pockets:

Fig.1- 100 round SAW pouch

Fig.2- 200 round SAW pouch

Fig.3- Medical pocket

Fig.4- 30 round double magazine pocket

Fig.5- Single high explosive grenade pocket

Fig.6- Double high explosive grenade pocket

Fig.7- Double illumination round pocket

Fig.8- 9 mm magazine pocket

Fig.9- Fragmentation grenade pocket

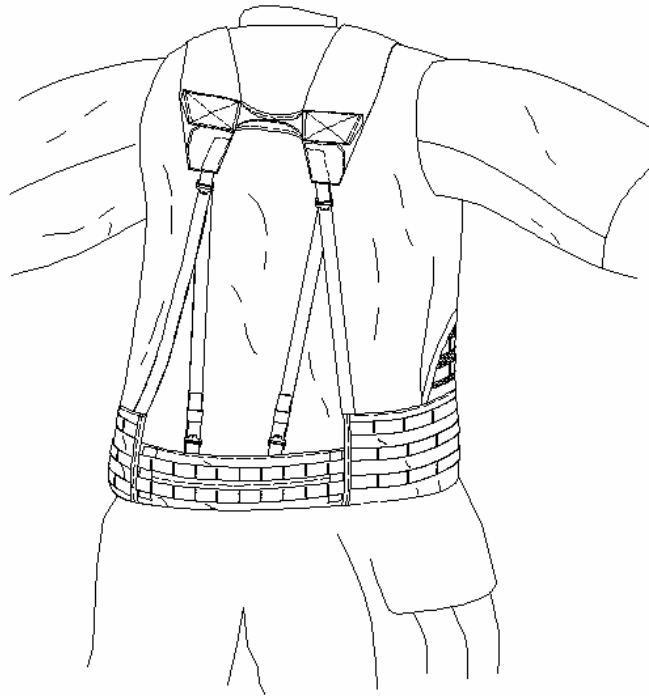
Fig. 10- Canteen/general purpose pouch

Every vest, regardless of duty position comes with 2 Canteen/General purpose pouches.

The **rucksack** and **shoulder straps** come pre-assembled to the **frame**. The other components are provided as add-ons that can be attached by the individual soldier or marine as needed.

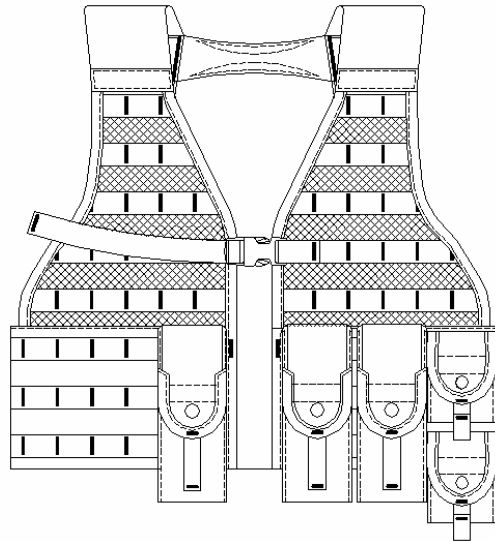
The MOLLE system provides far more load carrying capabilities than the ALICE system. However, proper new equipment training (NET) is required in order for the system to be used to its maximum capabilities. These capabilities are illustrated to assist soldiers and marines with familiarization of the system.

The vest modularity allows for commanders to tailor the loads to meet mission needs without unnecessary extra pockets and gear.

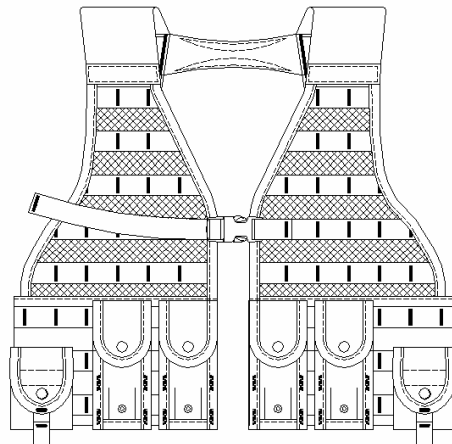


The vest is designed to reduce heat build up on the back with minimum area of coverage of the **H-Harness design**. The **wide shoulder straps** of the vest help distribute the load without the need for excessive padding that can hinder mobility and sighting a weapon.

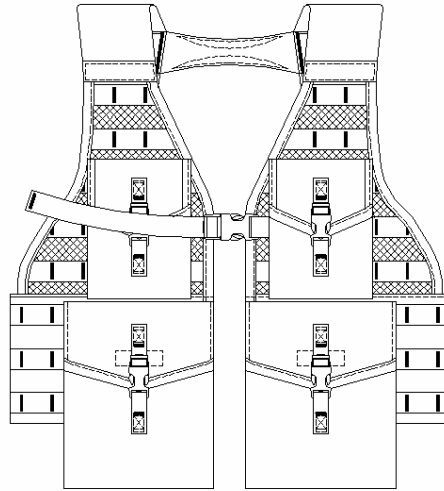
The **Rifleman configuration** is designed to hold three double 30 round magazine pockets. Two fragmentation grenade pockets are also worn by the rifleman.



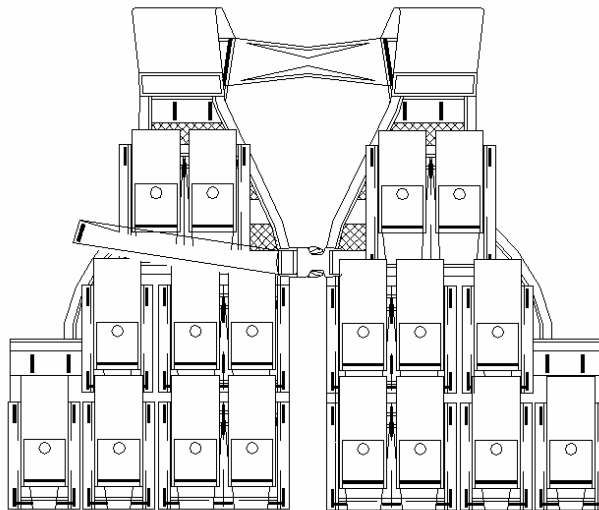
The **Pistol configuration** holds four single 9mm magazine pockets and two fragmentation grenades as shown.



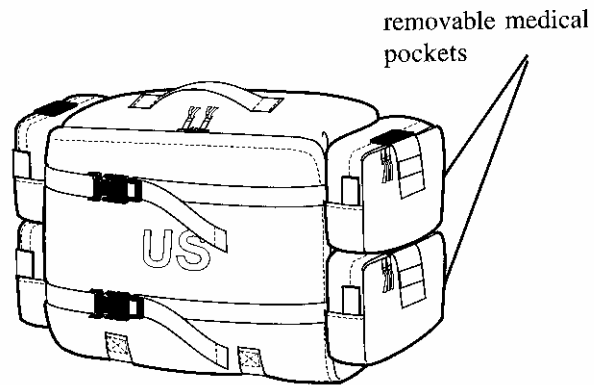
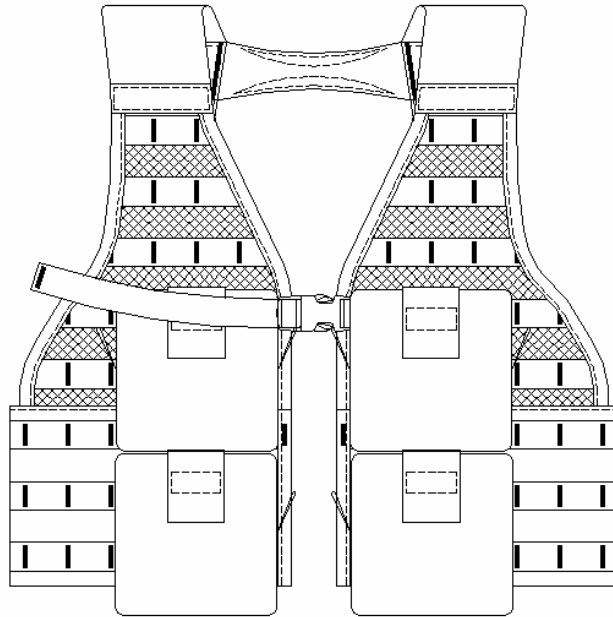
The **SAW Gunner configuration** accommodates two 200 round magazine pockets and two 100 round magazine pockets.



The **Grenadier configuration** consists of ten single high explosive grenade pockets, two double high explosive grenade pockets and two double protechnic round pockets.



The Medic configuration will receive four zippered medical pockets for the vest and three double 30 round magazine pockets as shown below. There will also be a specialized panel loading medical bag that has an additional four removable medical pockets attached to it.



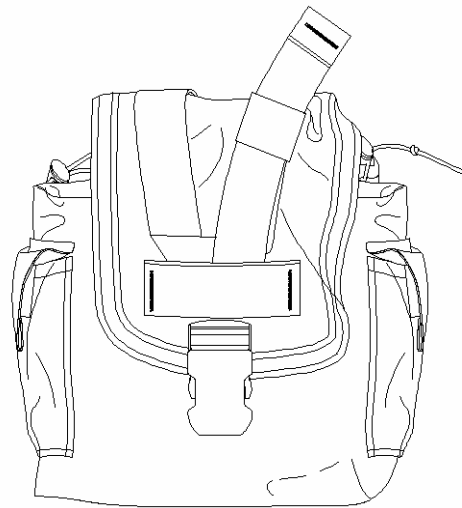
Medical Bag

Canteen/General Purpose Pouch

The canteen/general purpose pouch has a variety of uses.

When using as a canteen carrier, simply slide the top flap down inside the back of the pouch before inserting the canteen and cup. Allow the V-shaped straps to pass over the neck of the canteen and fasten the buckle.

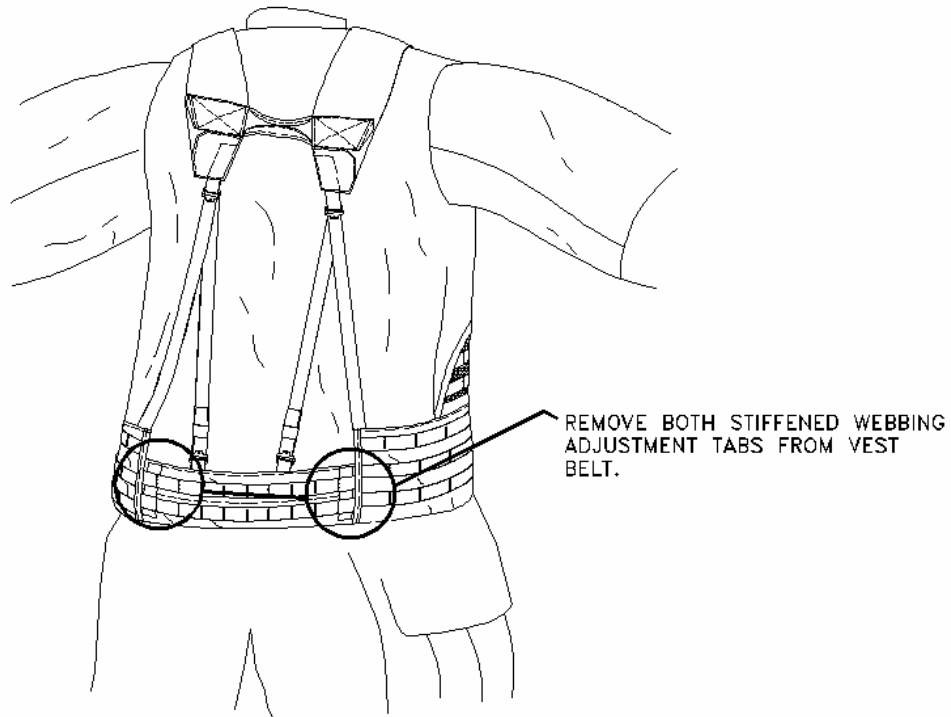
For all other applications pull the top flap out, insert the V-shaped strap under the webbing on the top flap and secure the plastic fastener on the front of the pouch. This pouch is able to hold one stripped down MRE, 5 M-16/M-4 magazines, or ANPVS 7 goggles, and various other items. The side pockets on the pouch are designed for first aid dressings, water purification tablets or other small equipment.



Vest Adjustments

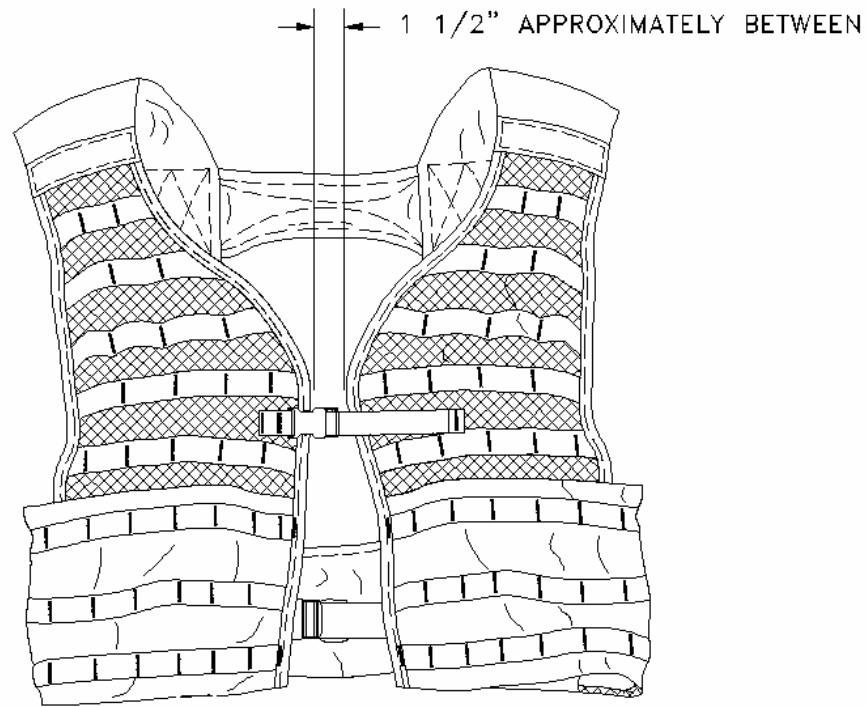
Size adjustments to the vest are made in the following manner:

- A- Remove the stiffened webbing adjustment tabs from the two slots on the vest belt.
- B- Place the vest on the body.



C- Position both vest panels so they fit comfortably on the torso.

D- The panels should fit close together on the front of the torso with approximately 1 1/2" between them.

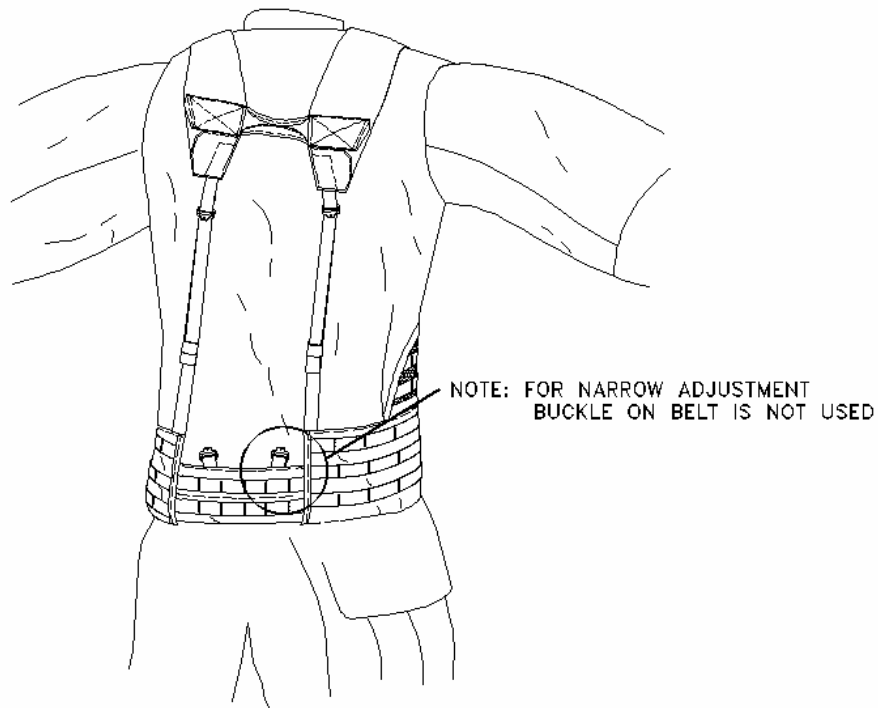


Reinsert the stiffened webbing tabs on the back of the belt in the appropriate location.

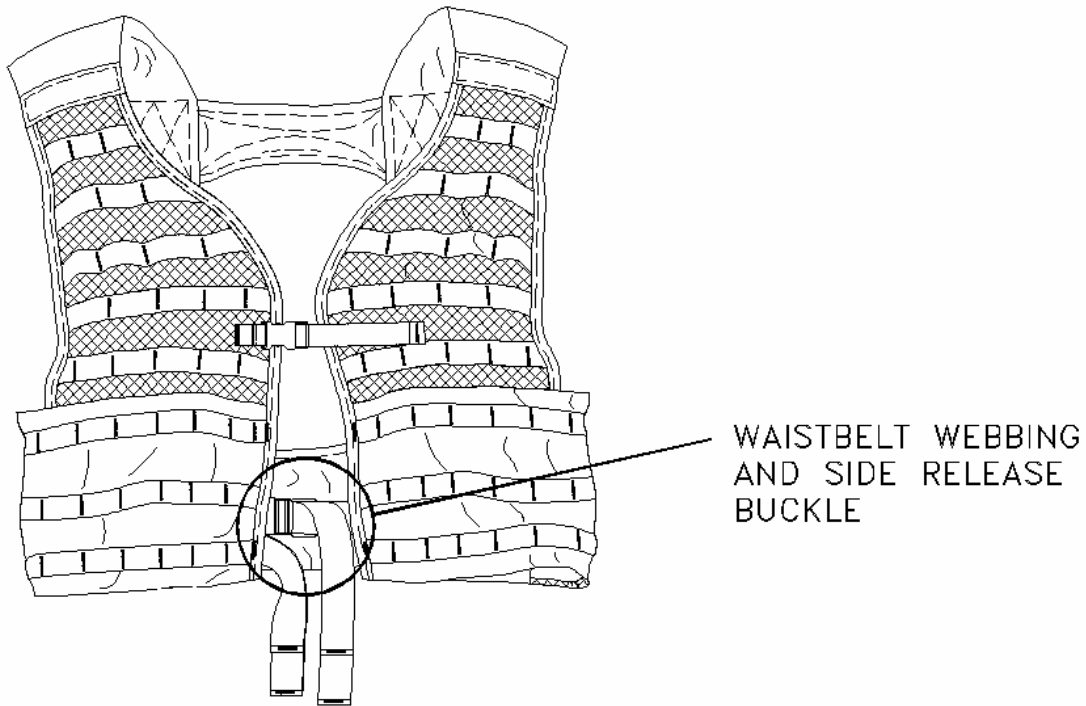
To fit extremely narrow torsos, remove each of the 1" webbing from the two metal friction buckles on the back of the belt. Slide the vest panels towards the center back of the belt until a proper fit is achieved. Secure the webbing adjustment tabs and wear the vest as shown.

Note that with narrow waists the metal friction buckle on the belt is not used.

Buckles shown for clarity, but when properly adjusted for narrow waists, will be hidden inside vest panel tunnels



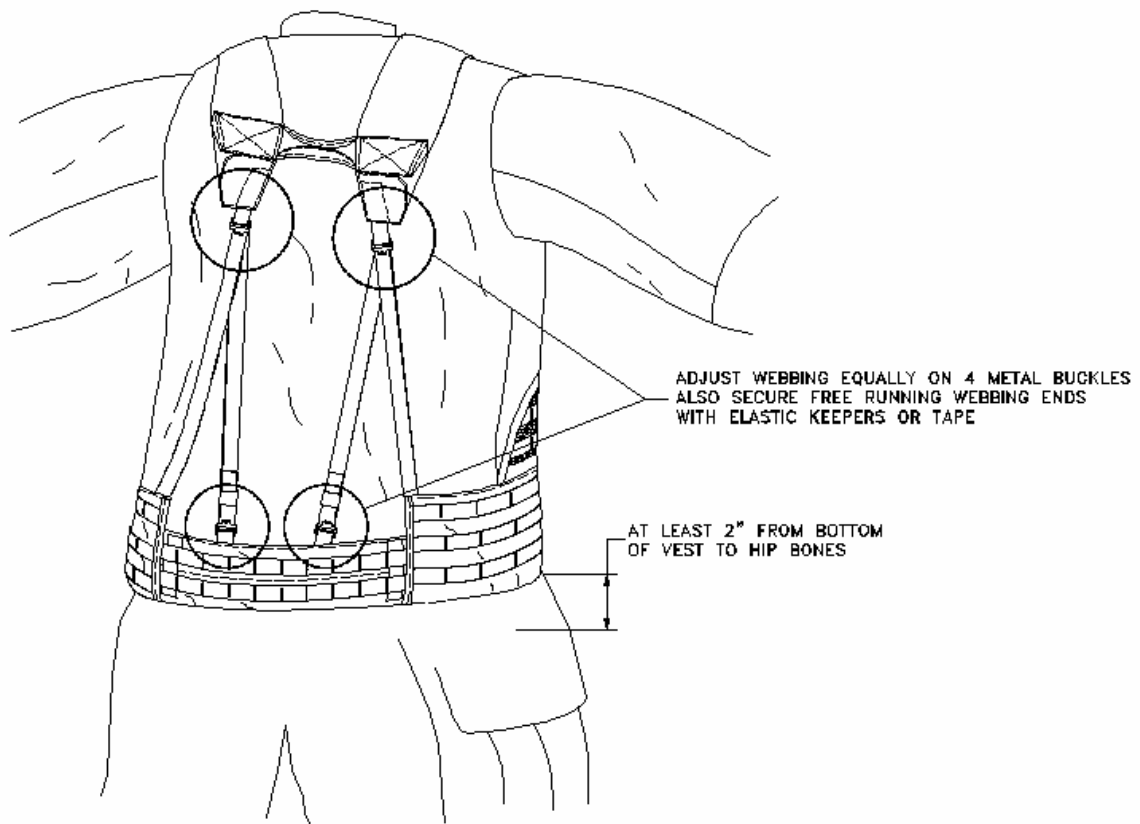
Once the belt is adjusted properly, adjust the waist belt webbing and side release buckle. Stow the remaining webbing in the keeper buckle, and tuck free running ends of webbing in the vest panel tunnels.



To adjust the height of the vest, position the bottom of the vest no less than 2 inches above the wearer's hip bones to allow space for proper use of the pack hip belt.

Adjust the webbing equally on the 4 metal buckles on the back of the vest.

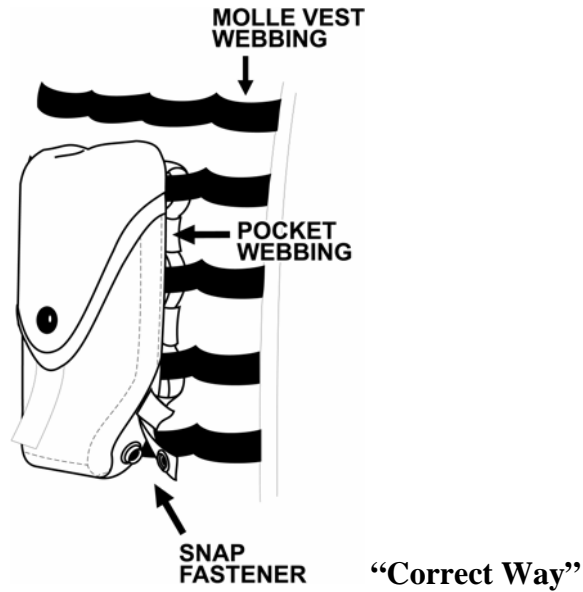
Secure the free running ends of all webbing with the elastic keepers or tape.



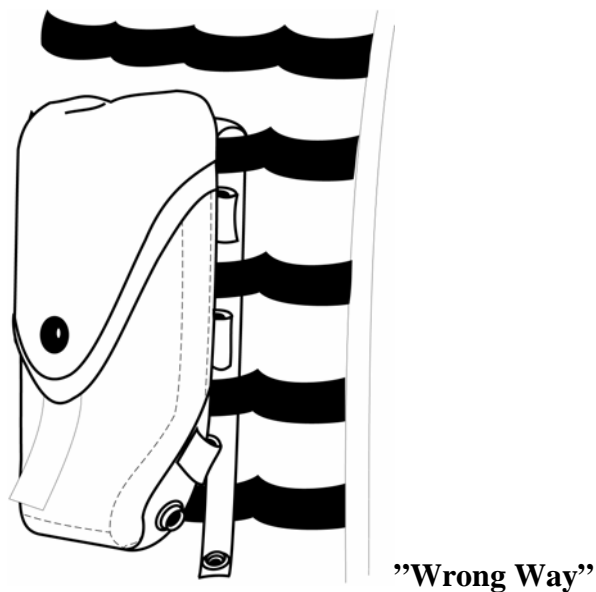
Pocket Attachment

To properly attach a pocket, choose the desired attachment point on the vest panel. Line up the top of the pocket evenly with the top of the nearest horizontal one-inch webbing that goes across the panels. Insert the pocket attachment strap down the 1 1/2" channel, then behind the 1" webbing on the back of the pocket. Continue weaving the attaching strap behind the horizontal webbing on the vest and the webbing on the back of the pocket until the pocket is secured along its entire length.

This attachment system is extremely secure and stable when used properly.

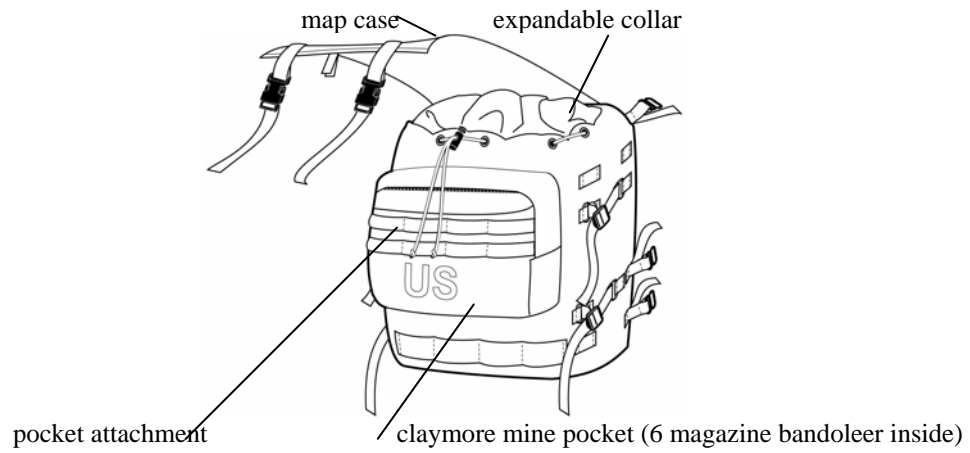


Do not simply place the attaching strap through the vest webbing without the interlocking weave. The pockets will not be secure if attached in this manner.



The MOLLE ruck consists of:

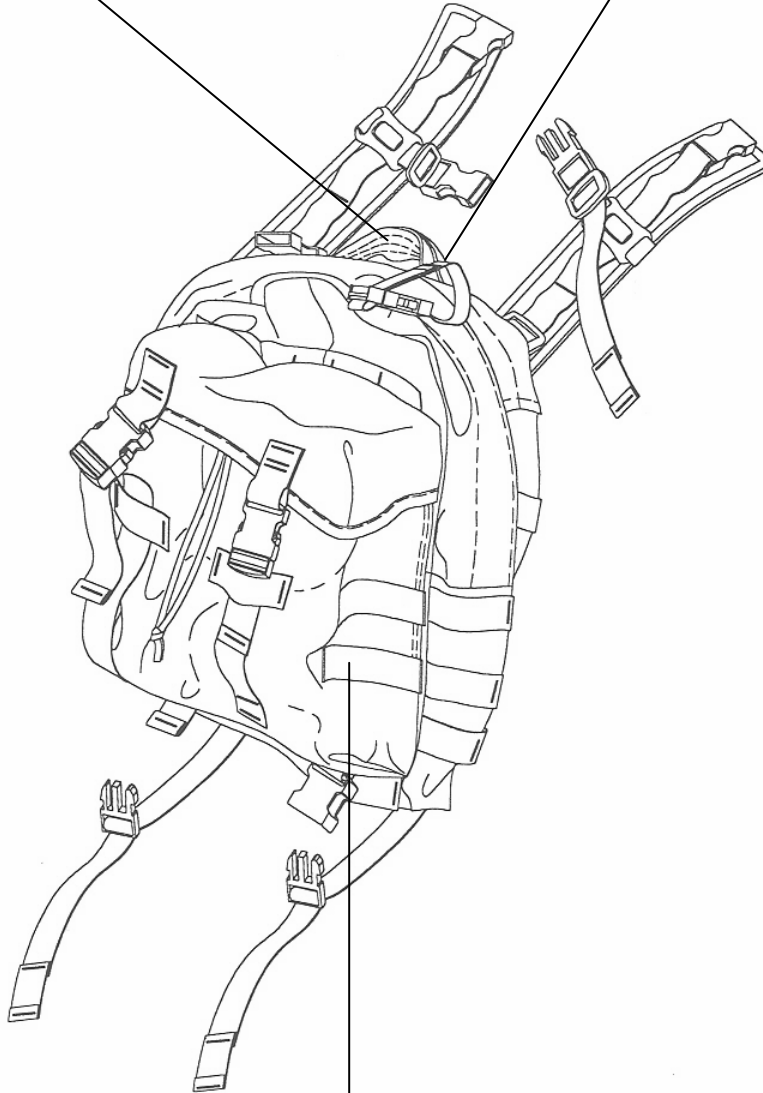
The Main Ruck



The Patrol Pack

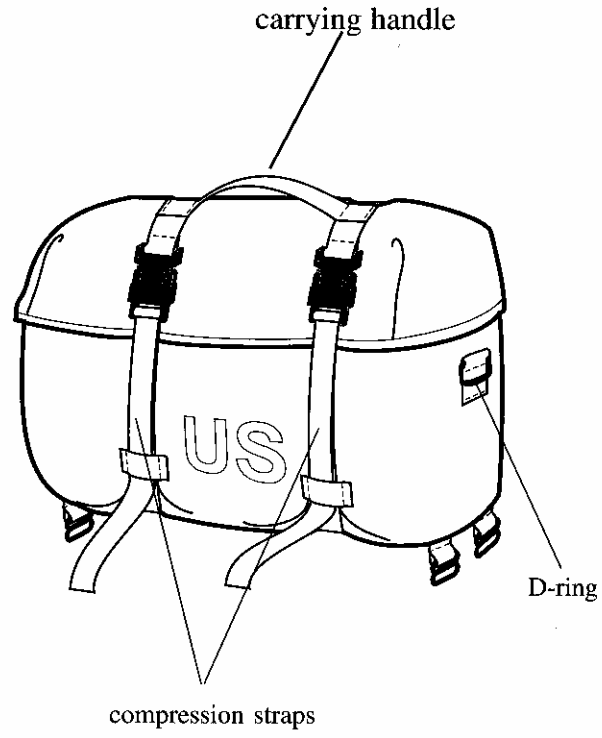
carrying handle

attachment strap to frame

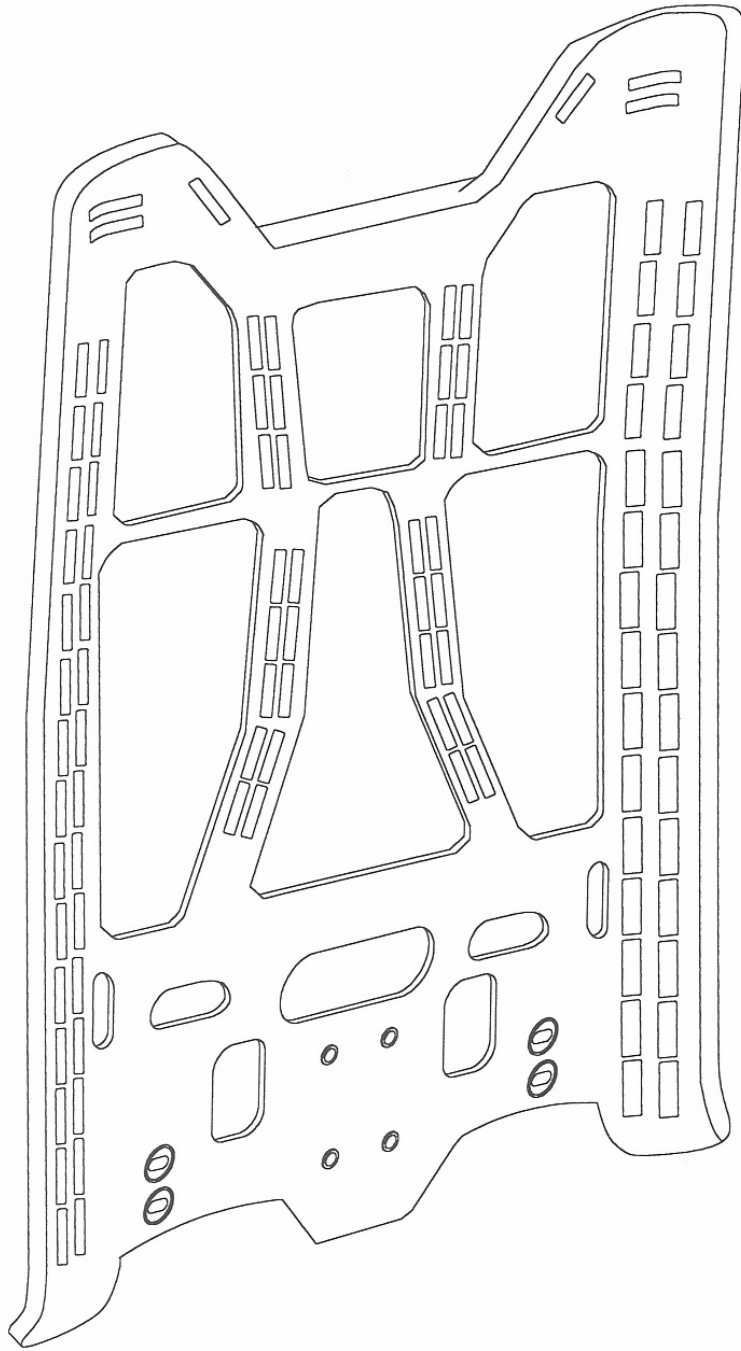


pocket attachment webbing

The Sleep System Carrier



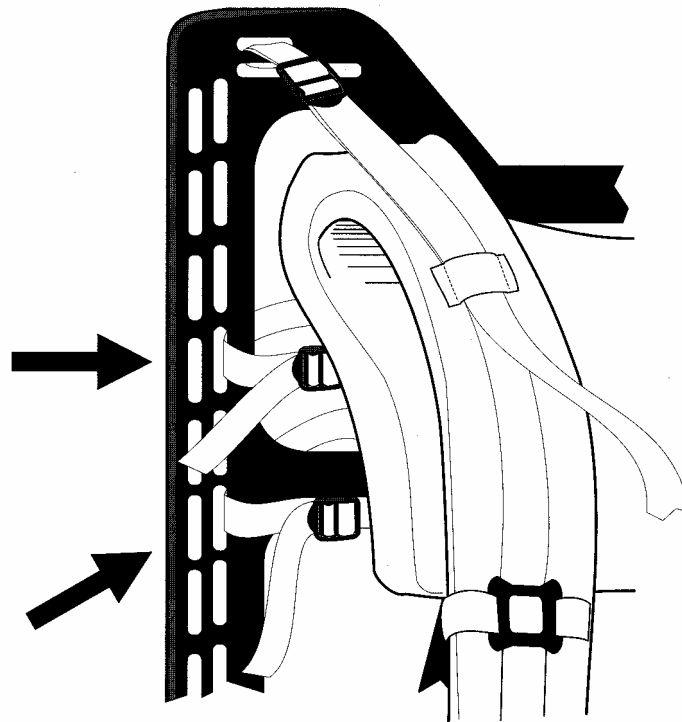
Frame



The shoulder strap suspension of the frame is adjusted by securing the one inch webbing around the frame in the appropriate location using the slide buckle.

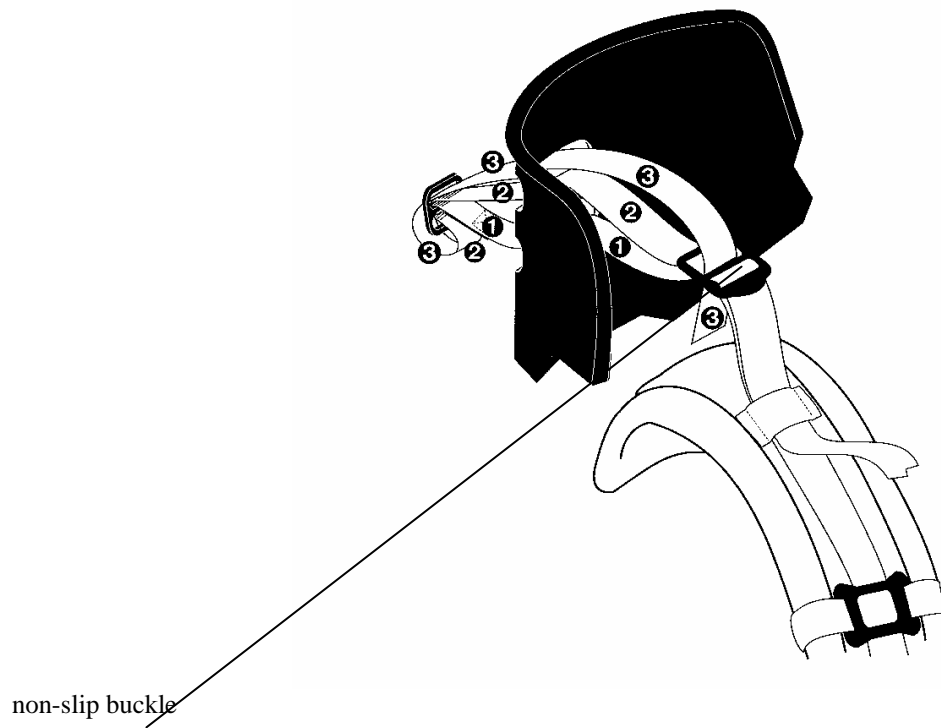
The proper location is determined by donning the frame, and fastening the waist belt buckle while wearing the vest. Position the shoulder straps so there is complete contact with the shoulder.

A properly positioned waist belt will cover the hip bone. After the one inch webbing is secured around the frame to hold the shoulder straps in place, wrap the 1 ½ inch webbing around the cross bar and secure with the slide buckle.



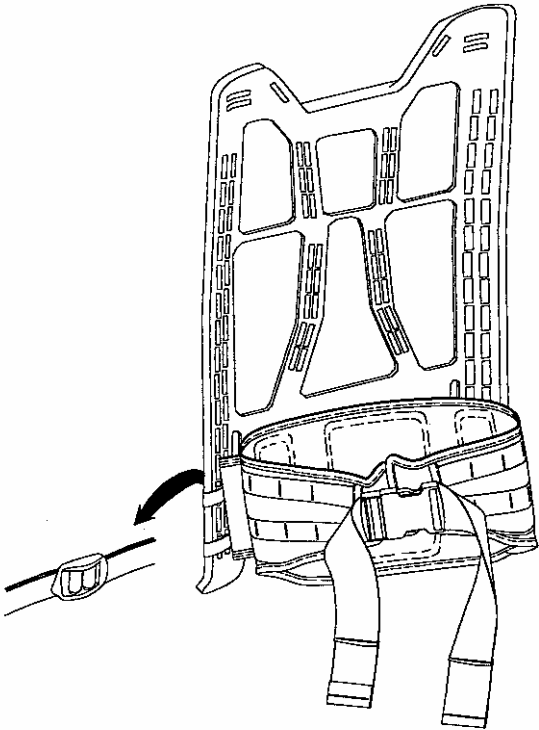
CAUTION

Proper attachment of the shoulder straps is **extremely** important to prevent unstable loads.



Front stabilizer straps can be used to adjust the pack while marching. The weight of the pack can be transferred from the shoulders to the hips and back again by either cinching the 1" webbing down or by loosening the webbing by adjusting the non-slip buckle.

The waistbelt should be permanently connected to the frame utilizing 4 non-slip buckles as shown.



The ruck attachment straps are attached at the top slot on the frame with a three bar buckle and webbing. The sides of the ruck are attached to the frame by using the buckles as toggles through the vertical openings.

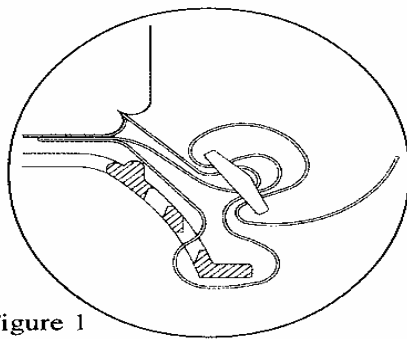
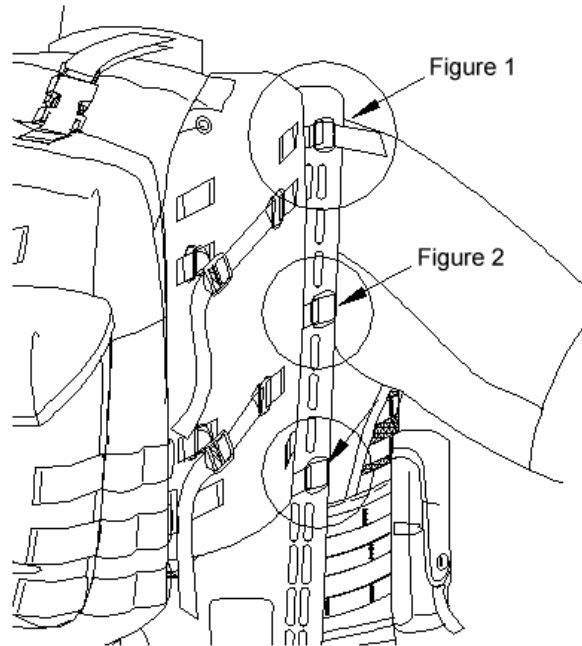


Figure 1

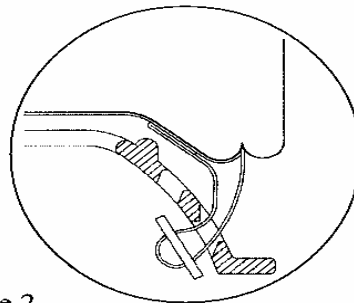
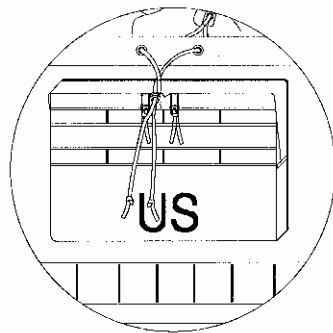
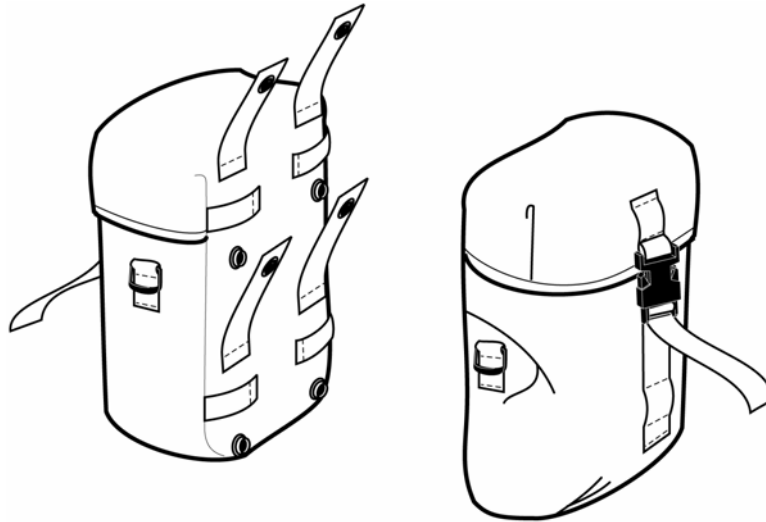


Figure 2

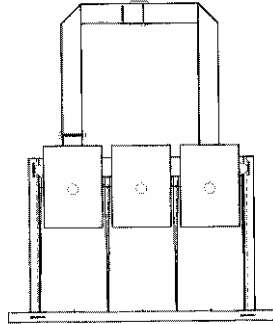
The rucksack has two large, removable sustainment pouches which attach to the side of the rucksack using the same interlocking attachment system as the vest pockets. These sustainment pouches each contain two D-rings on the sides which allow them to be carried by the General Purpose Sling for alternate uses.

The sustainment pouches can also be added to the side of the Patrol Pack to nearly double its capacity. All of the large pockets of the MOLLE system have D-rings on the sides to allow the item to be slung with a GP sling.

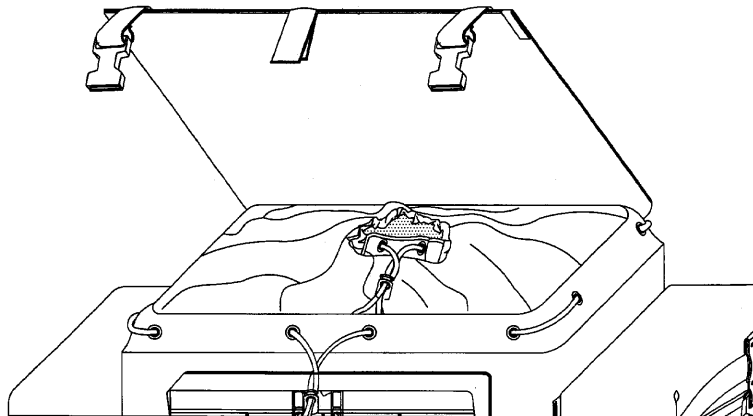


The front pocket on the rucksack is designed to accommodate a claymore mine.

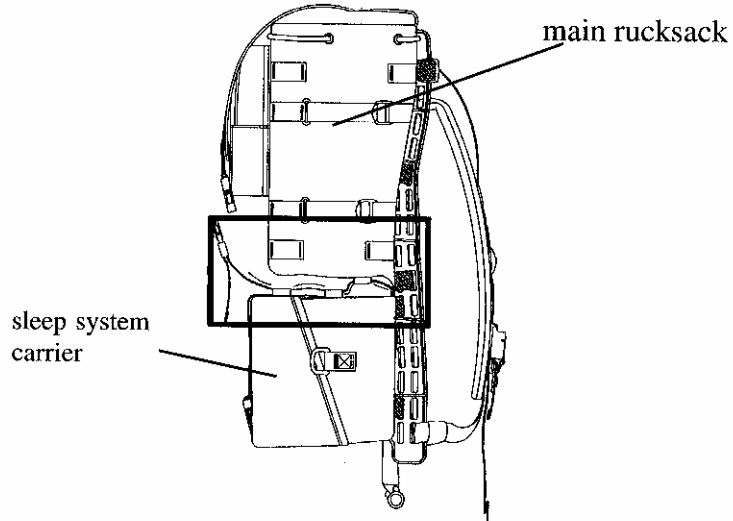
The claymore mine pocket also contains a removable bandoleer which holds up to six additional thirty round magazines which can be slung across the shoulders.



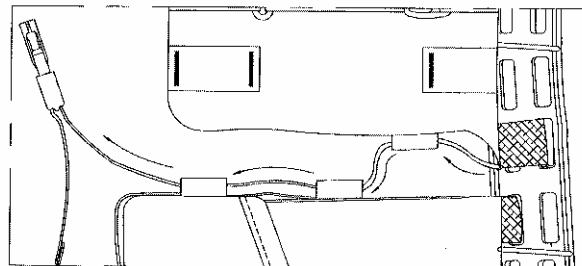
The top flap of the rucksack is a clear removable map case with a hook and loop closure. The clear side can be written on with a grease pencil.



The sleep system carrier is attached directly below the ruck in the same manner. It is sized to accommodate the Modular Sleep System. When the sleep system carrier is secured, the top opening is oriented 180 degrees to the frame for easy access to the flap and opening. The straps, which close the rucksack are inserted through the webbing loops on the sleep system carrier to prevent the sleep system carrier from bouncing.



IF SLEEP SYSTEM CARRIER BOUNCES, IT IS NOT ATTACHED PROPERLY

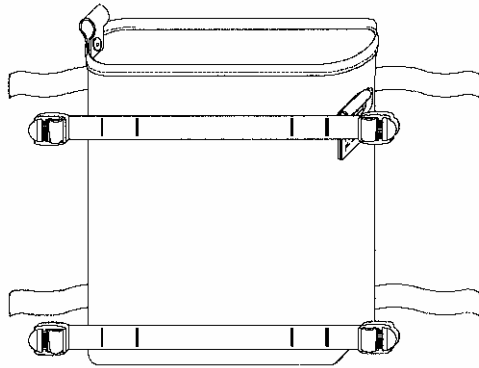


Proper use of the straps to stabilize sleep system carrier

Radio Operators:

The rucksack contains a collar made of water-resistant material which is secured with a cord and barrel lock. Inside the rucksack, against the back panel is a removable radio pocket designed to carry a SINGARS radio.

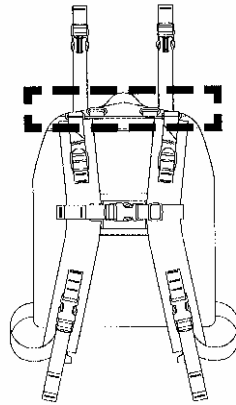
Radio Pocket



This removable pocket contains D-rings on each side to allow the radio to be carried by the General Purpose Sling when a ruck is not needed. When the radio must be carried in the rucksack, the radio pocket is secured to the four black metal loops on the inside of the rucksack using the one inch webbing.

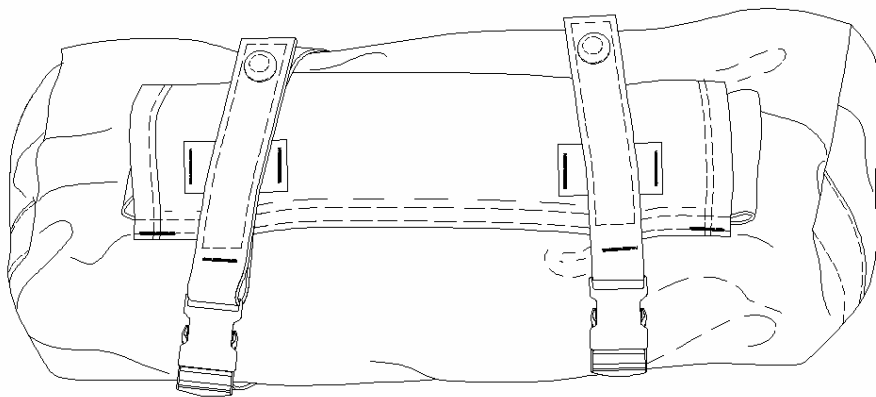
The patrol pack is intended to be worn on top of the load bearing vest. The patrol pack has a volume of approximately 1,500 cubic inches including the outside pocket.

There are two black metal loops at the top of the back panel of the patrol pack. These loops are attachment points for the shoulder straps. The two outer loops are to provide better compatibility with bulky armor or clothing, and the inside loops are used for narrower chest and neck circumferences.



There is a multi-purpose waist pack which can be worn in one of four ways. It can be attached to the bottom of the assault pack by passing the stiffened webbing straps with the female side release buckles through the four webbing keepers on the bottom of the assault pack.

It can be attached directly to the FLC by utilizing the stiffened webbing tabs on back woven into the corresponding slots on the back of the FLC. It can be carried in the “stand alone” configuration by utilizing the attached two inch wide waist belt. This method allows the user to rotate the waist pack around in front to easily access the contents of the pack, without removing the FLC or Assault pack. [Note: When not used in this mode, ensure the attached waist belt is stowed into the tunnel on back of the waist pack.] The Waist pack can also be attached directly to the Main pack by passing the side release buckles and straps through the webbing below the claymore pouch on the main pack.



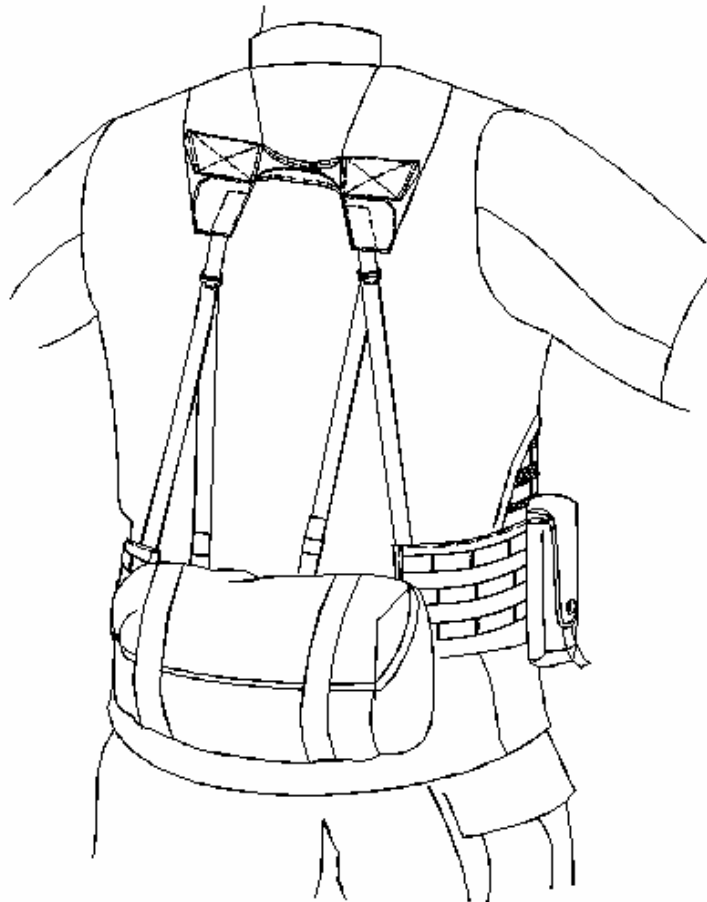
WAISTPACK

Get to know your MOLLE system and experiment with different load configurations. Get used to removing items that are not needed so the load is as clean and streamlined as possible.

There are several possible load configurations.

Five common configurations are:

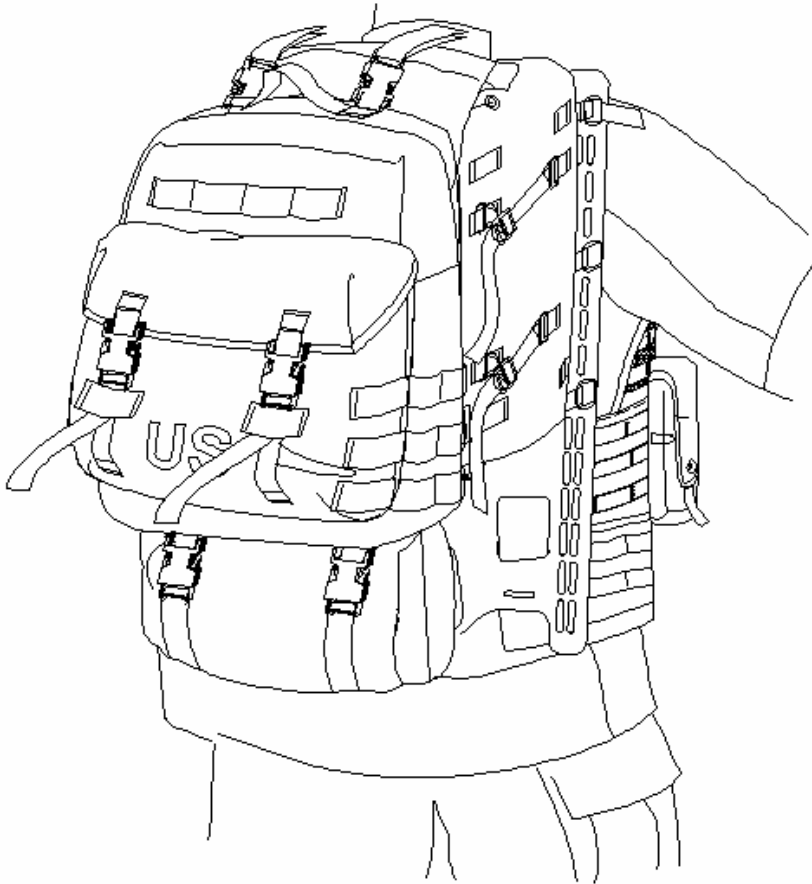
1. The Light Fighting Load which consists of the Load-Bearing Vest and Waistpack



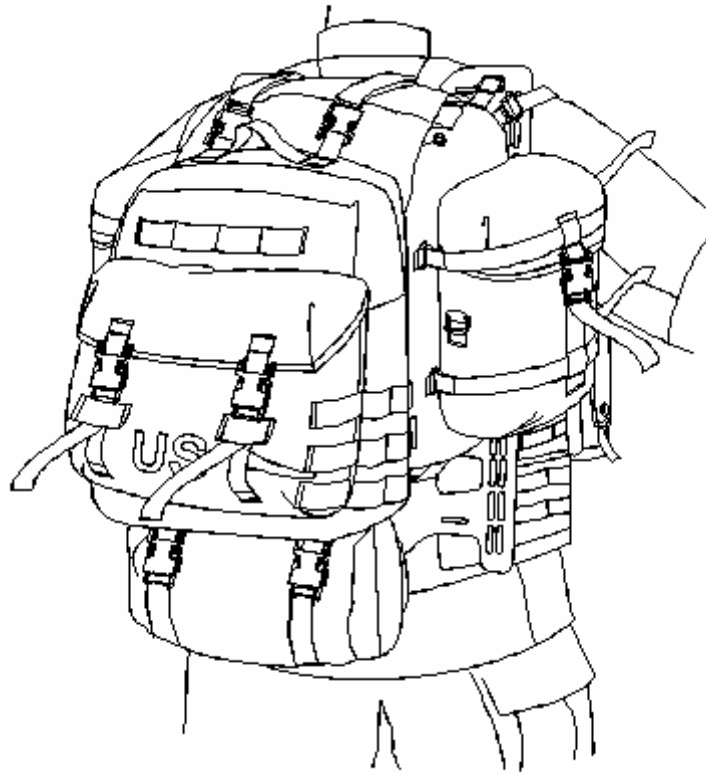
2. The Assault Pack Load consists of the Load-Bearing Vest, Waistpack and Patrol Pack.



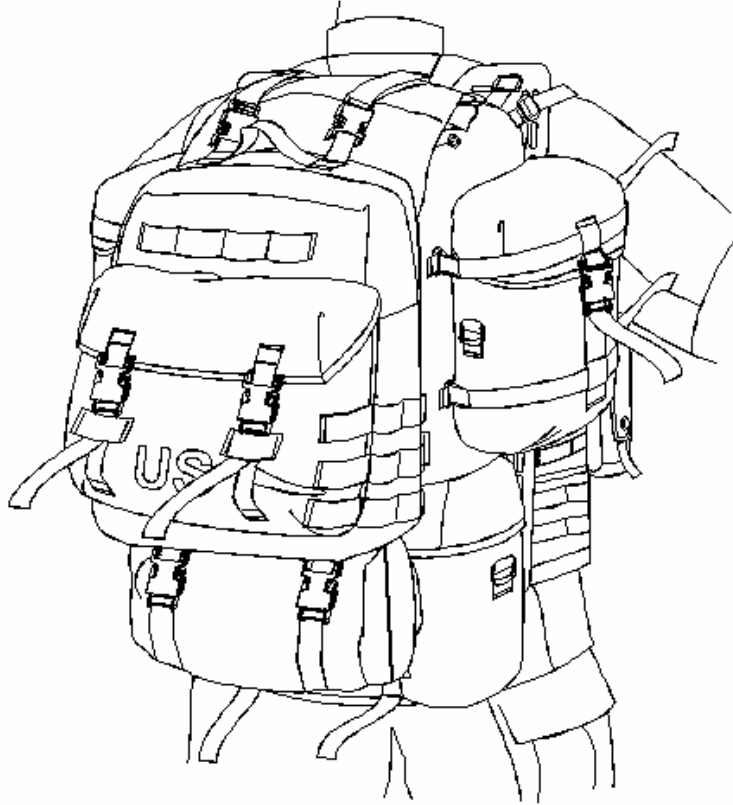
3. The Light Rucksack Load consists of the Load Bearing Vest, Waistpack, Patrol Pack plus Rucksack and Frame.



4. The Intermediate Rucksack Load consists of the Load Bearing Vest, Waistpack, Patrol Pack plus Rucksack with 2 side Sustainment Pouches and Frame.

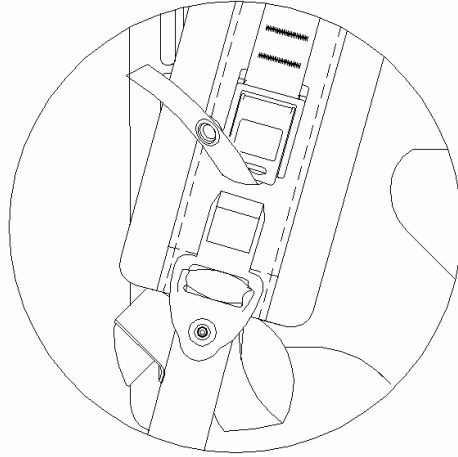


5. The Full Rucksack Load consists of the Load Bearing Vest, Waistpack, Patrol Pack plus Rucksack with side sustainment pouches, and Frame with Sleep System Carrier attached.



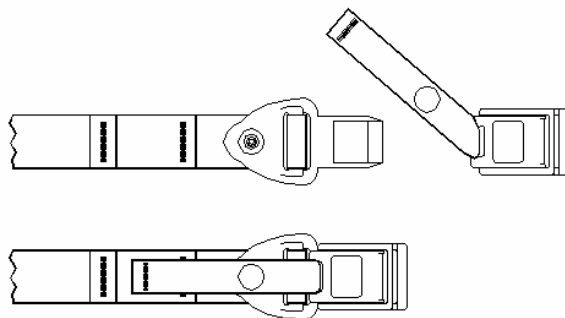
Donning and Doffing

ALWAYS disengage waistbelt buckle and chest strap first.



Emergency doffing can be accomplished by sharply pulling upward on the quick-release lanyard to disengage the buckle and letting the ruck fall away.

The ruck can also be doffed when in the prone position by simply activating one of the shoulder strap quick-releases and letting the ruck fall off by twisting to one side when the waist belt and chest straps are also disengaged. To re-attach the quick-release buckle, simply insert the male portion into the female portion and push until the latch tab clicks. Do not try to push down on the latch tab.



Cleaning and Maintenance

Scrape dirt and dust from the item using a brush that will not cut into the fabric.

Hose or wash the item in a pail of water using mild detergent or soap.

Rinse thoroughly with clean water.

Do not use chlorine bleach, yellow soap, cleaning fluids, or solvents that will discolor or deteriorate the item.

Dry the item in shade or indoors. Do not dry in direct sunlight, direct heat or open flame.

Do not launder or dry item in fixed commercial home type laundry equipment.

Do not attempt to dye or repair.

Turn in for repair or replacement.

Remember, extremely dirty or damaged equipment can eventually fail to perform its intended function.

Our mission is to provide Soldiers and Marines with the best combat equipment possible.



We are interested in hearing from you regarding MOLLE. If you have any questions or comments which can enhance the MOLLE system, please feel free to contact the SBCCOM MOLLE team at DSN 256-5453, commercial 508-233-5453, or email john.kirk@natick.army.mil



If you have any comments concerning any other SBCCOM commodities, such as Clothing, Individual Equipment, Food, Shelters, or Airdrop Items, call our **hotline** at DSN 256-5341 or commercial 508-233-5341.

MOLLE COMPONENTS

Description	NSN Number
MOLLE, Rifleman, Complete Pack Set	8465-01-459-6572
MOLLE, SAW Gunner, Component Set	8465-01-459-6580
MOLLE, Grenadier, Component Set	8465-01-459-6582
MOLLE, Pistolman Component Set	8465-01-459-6584
MOLLE, Combat Medic Component Set	8456-01-459-6585
MOLLE, Waistbelt, Molded	8456-01-465-2109
MOLLE, Bladder, Hydration	8465-10-465-2096
MOLLE, Pouch, Grenade, Hand	8465-01-465-2093
MOLLE, Pouch, Magazine, M16A2, Double (30 rounds)	8465-01-465-2092
MOLLE, Pack, Patrol	8465-01-465-2088
MOLLE, Adapter, ALICE Clip	8465-01-465-2062
MOLLE, 100 Round Pouch	8465-01-465-2070
MOLLE, Set Buckles	8465-01-465-2080
MOLLE, Waist Pack	8465-01-465-2058
MOLLE, Canteen, General Purpose Pouch	Not Yet Assigned

MOLLE COMPONENTS

Description	NSN Number
MOLLE, Pouch, Radio	8465-01-465-2057
MOLLE, Straps, Lashing	8465-01-465-2095
MOLLE, Fighting Load Carrier (FLC)	8465-01-465-2056
MOLLE, Pack, Frame	8465-01-465-2158
MOLLE, Carrier, Sleep System	8465-01-465-2124
MOLLE, Carrier, Hydration	8465-01-465-2131
MOLLE, Pouch, Sustainment	8465-01-465-2152
MOLLE, Straps, Shoulders, Frame	8465-01-465-2133
MOLLE, Pouch, 6 Magazines, Bandoleer, M16A2	8465-01-465-2144
MOLLE, System, Hydration	8465-01-465-2154
MOLLE, Pack, Main	8465-01-465-2289
MOLLE, Pouch, 200 Round SAW Gunner	8465-01-465-2263
MOLLE, Adapter, K-Bar	8465-01-465-2272
MOLLE, 40mm High Pyrotechnic Double	8465-01-465-4445
MOLLE, 40 mm High Explosive Double	8465-01-465-4417
MOLLE, 40mm High Explosive Single	8465-01-465-4416

NOTES

The manufacturer of the MOLLE System is

Specialty Defense Systems

Dunmore, Pennsylvania

To procure components directly from the manufacturer, contact

Specialty Defense Systems

570-961-2042



www.specialtydefense.com

email: spp@epix.net