

# **SEAT SLINGS**

## **STANDARD & MOLDED DONNING & USE**



**COMPLETE PARACHUTE SOLUTIONS, INC.  
1320 EAST INTERNATIONAL SPEEDWAY BLVD. SUITE 1  
DELAND, FLORIDA 32724**

**WWW.CPSWORLD.COM EMAIL: TECHNICAL@CPSWORLD.COM**

---

Revision 0: Jun 9, 2015

CPS-SEAT SLING-REV-0

# SEAT SLINGS - STANDARD & MOLDED DONNING & USE



*This user manual provides suggested procedures for prep, donning and use of CPS seat slings. Adaptation and use of additional combat equipment (oxygen, PDB, weapons, etc.) is not part of the scope of this user manual. Each military group should carefully review the procedures for the use of these components and determine the best way to integrate the seat sling with their other ancillary equipment. The “Molded Seat Sling” is compatible with Military Javelin (MJ) systems and Special Operations Vector (SOV3 - HH, MM, MM2) systems. The “Standard Seat Sling” is only compatible with SOV3 systems set up with seat sling attachment points (MS-70101 adapter mounted at hip level.)*

## REVISION LISTING

[illegible]

## **MOLDED SEAT SLING**



**Figure 1.** The “Molded Seat Sling”

1. The “Molded Seat Sling” consists of a contoured, padded seat with two (2) adjustable Quick-Ejector Snaps running along a fixed piece of Type-VII webbing.

## **PREP AND DONNING OF MOLDED SEAT SLING WITH THE MILITARY JAVELIN (MJ)**

**2.** The MJ system must have cargo attachment rings just below chest strap height. These rings may be mounted on the front or rear side of the main lift web (MLW).



**Figure 2. Military Javelin (MJ) with Cargo Rings**

**3.** Attach the Quick-Ejector (QE) snaps to the cargo rings as shown.



**Figure 3. Attach QE Snaps to Cargo Rings**

**4.** Don the MJ system and tighten all adjustment points on the standard harness (MLW, laterals, chest strap, leg straps and bellyband). Slide the seat portion under the back pad as shown and tighten left and right straps.

Initially, it is recommended to have another individual assist with donning the seat sling until the jumper is familiar with the donning procedure.



**Figure 4. Don MJ - Tighten - Slide Seat Under Back Pad**



**5.** Ensure the seat sling does not interfere with the BOC hand-deploy handle.



**Figure 5. Ensure Seat Sling is Clear of BOC Handle**

**6.** Perform several handle checks to ensure the BOC handle is completely clear.



**Figure 6. Perform Handle Checks**

**7.** Roll up the excess Type-VII webbing and secure it with the elastic keeper.



**Figure 7. Secure Excess Webbing - Right Side**

8. Roll up the excess Type-VII webbing and secure it with the elastic keeper.



**Figure 8. Secure Excess Webbing - Left Side**

## **UNDER CANOPY - INSTRUCTIONS FOR DEPLOYING THE SEAT SLING - MJ**

**9.** After main canopy deployment, the seat sling should still be tucked under the back pad.



**Figure 9. Under Canopy - Prepare to Deploy Seat Sling**

**10.** Remove the excess webbing from the elastic keeper on the right side.



**Figure 10. Remove Webbing from Keeper**

**11.** Remove the excess webbing from the elastic keeper on the left side.



**Figure 11. Remove Webbing from Keeper**



**12.** To loosen the seat slings's webbing, grasp the adjustable QE snap and rotate the bottom portion upward.



**Figure 12. Grasp the QE Snap to Loosen Webbing**

**13.** Loosen both sides simultaneously by rotating the bottom of the snaps upwards.



**Figure 13. Loosen Webbing Simultaneously**

**14.** With both hands, reach behind and grasp the seat and pull it down.



**Figure 14. Pull Seat Down**

**15.** To position the seat under your upper legs, hook both thumbs behind the webbing just above the seat and push the seat forward.



**Figure 15. Seat Positioning**

**16.** Continue to push the seat forward until you feel it's in a comfortable and supportive position under your upper legs.

An ideal seat position would place the leg straps inline with the seat's webbing. However, the seat can be pushed farther forward so the seat's webbing is forward of the leg straps.



**Figure 16. Position Seat Under Upper Legs**

**17.** Retighten the webbing on both sides to take the majority of your body's weight off the leg straps so the seat is providing the support.



**Figure 17. Retighten Webbing**

**18.** Grasp both rolled ends of the webbing and tighten the seat as far as possible.



**Figure 18. Hand Position for Retightening Webbing**

**19.** Lift one knee at a time to further tighten that side.



**Figure 19. Lift Right Knee and Tighten Webbing**

**20.** Lift the other knee and tighten that side as well.



**Figure 20. Lift Left Knee and Tighten Webbing**



**21.** Check the symmetry of the excess webbing to ensure even loading, left and right.



**Figure 21. Check Symmetry of Excess Webbing**

**22.** Front view of symmetrically loaded seat position.



**Figure 22. Front View - Symmetrical Position**

**23.** Profile view of symmetrically loaded seat position. The seat can be placed farther forward at the jumper's discretion.

**Note:** In preparation for landing, the jumper should push out of the seat sling prior to entering the landing pattern.



**Figure 23. Profile View - Seat Position**

## **PREP & DONNING OF MOLDED SEAT SLING WITH THE SOV3-HH, MM, MM2**

**24.** The SOV3 system must have cargo attachment rings just below chest strap height. These rings may be mounted on the front or rear side of the main lift web (MLW).



**Figure 24. SOV3 with Cargo Rings**

**25.** Attach the Quick-Ejector (QE) snaps to the cargo rings as shown.



**Figure 25. Attach QE Snaps to Cargo Rings**

**26.** Don the SOV3 system and tighten all adjustment points on the standard harness (MLW, Laterals, Chest strap, leg straps and bellyband).

Slide the seat portion under the back pad as shown and tighten left and right straps. Initially, it is recommended to have another individual assist with donning the seat sling until the jumper is familiar with the donning procedure.



**Figure 26. Don SOV3 - Slide Seat Under Back Pad**



**27.** Ensure the seat sling does not interfere with the BOC hand-deploy handle (HH); drogue handle or drogue release handle (MM-MM2).



**Figure 27. Ensure Seat Sling is Clear of BOC Handle(s)**

**28.** Perform several handle checks to ensure BOC handle(s) are completely clear.



**Figure 28. Perform a Handle(s) Check**

**29.** Roll up the excess Type-VII webbing and secure it with the elastic keeper.



**Figure 29. Secure Excess Webbing - Right Side**

**30.** Roll up the excess Type-VII webbing and secure it with the elastic keeper.



**Figure 30. Secure Excess Webbing - Left Side**

## **UNDER CANOPY - INSTRUCTIONS FOR DEPLOYING THE MOLDED SEAT SLING - SOV3**

**31.** After main canopy deployment, the seat sling should still be tucked under the back pad.



**Figure 31. Under Canopy - Prepare to Deploy Seat Sling**

**32.** Remove the excess webbing from the elastic keeper on the right side.



**Figure 32. Remove Webbing from Keeper**

**33.** Remove the excess webbing from the elastic keeper on the left side.



**Figure 33. Remove Webbing from Keeper**



**34.** To loosen the seat slings's webbing, grasp each adjustable QE snap and rotate the bottom portion upward.



**Figure 34. Grasp the QE Snap to Loosen Webbing**

**35.** Loosen both sides simultaneously by rotating the bottom of the snaps upwards.



**Figure 35. Loosen Webbing Simultaneously**

**36.** Lower the seat sufficiently so you are able to slide into it.



**Figure 36. Lower the Seat for Entry**

**37.** To position the seat under your upper legs, hook both thumbs behind the webbing just above the seat and push the seat forward.



**Figure 37. Seat Positioning**

**38.** Continue to push the seat forward until you feel it's in a comfortable and supportive position under your upper legs.

An ideal seat position would place the leg straps inline with the seat's webbing. However, the seat can be pushed farther forward so the seat's webbing is forward of the leg straps.



**Figure 38. Position Seat Under Upper Legs**

**39.** Retighten the webbing on both sides to take the majority of your body's weight off the leg straps so the seat is providing the support.



**Figure 39. Retighten Webbing**



**40.** Grasp both rolled ends of the webbing and tighten the seat as far as possible.



**Figure 40. Hand Position for Retightening Webbing**

**41.** Lift one knee at a time to further tighten that side.



**Figure 41. Lift Right Knee and Tighten Webbing**

**42.** Lift the other knee and tighten that side as well.



**Figure 42. Lift Left Knee and Tighten Webbing**

**43.** Check the symmetry of the excess webbing to ensure even loading, left and right.



**Figure 43. Check Symmetry of Excess Webbing**

**44.** Profile view of symmetrically loaded seat position. The seat can be placed farther forward at the jumper's discretion.

**Note:** In preparation for landing, the jumper should push out of the seat sling prior to entering the landing pattern.

**Note:** Use of the seat sling in “tandem mode” with the MM/MM2 series systems is not recommended for the instructor due to interference with the passenger.



**Figure 44. Profile View - Seat Position**

## **STANDARD SEAT SLING**



**Figure 45. The “Standard Seat Sling”**

**45.** The “Standard Seat Sling” consists of a padded seat with a continuous piece of Type-VII webbing with two (2) rolled ends.

## **PREP & DONNING OF STANDARD SEAT SLING WITH THE SOV3-HH, MM, MM2**

**46.** The “Standard Seat Sling” is compatible with many versions of the SOV3-HH, SOV3-MM and MM2.



**Figure 46. SOV3-MM System**

**47.** Note: The Standard Seat Sling requires that the SOV3 harness be factory-configured with MS-70101 adapters sewn just below the upper leg strap junction on the MLW. A special “Red” Type-IV release handle is sewn to each adapter to facilitate the release of webbing tension when the Seat Sling is deployed for use.



**Figure 47. Seat Sling Attached**

**48.** Thread the Seat Sling’s webbing through the MS-70101 adapter located on the right side.



**Figure 48. Right Side Connection**



**49.** Thread the Seat Sling's webbing through the MS-70101 adapter located on the left side.



**Figure 49. Left Side Connection**

**50.** Don the SOV3 system and tighten all adjustment points on the standard harness (MLW, Laterals, Chest strap, leg straps and bellyband).

Slide the seat portion under the back pad as shown and tighten left and right straps. Initially, it is recommended to have another individual to assist with donning the seat sling until the jumper is familiar with the donning procedure.



**Figure 50. Don SOV3 - Slide Seat Under Back Pad**

**51.** Ensure the seat sling does not interfere with the BOC hand-deploy handle (HH); drogue handle or drogue release handle (MM-MM2).



**Figure 51. Ensure Seat Sling is Clear of BOC Handle(s)**



**52.** Perform several handle checks to ensure BOC handle(s) are completely clear.



**Figure 52. Perform Handle(s) Check**

**53.** In preparation of stowing the excess webbing, slide the 1-inch elastic keeper up over the MS-70101 adapter as shown.



**Figure 53. Slide Elastic Keeper Over Hardware**

**54.** Roll up the excess Type-VII webbing as well as the red Type-IV release handle and secure both with the elastic keeper.



**Figure 54. Secure Excess Webbing and Release Handle**

**55.** Repeat this roll and stow process on the other side.

Perform additional handle checks to ensure the handle is clear.

**Note:** The rolled webbing is in close proximity to all BOC handles. When cold-weather gloves are worn, dexterity and feel are reduced. Do not mistake the rolled webbing for the handle.



**Figure 55. Repeat on Other Side - Handle Check**

## **UNDER CANOPY - INSTRUCTIONS FOR DEPLOYING THE STANDARD SEAT SLING - SOV3**

**56.** After main canopy deployment, the seat sling should still be tucked under the back pad.



**Figure 56. Under Canopy - Prepare to Deploy Seat Sling**

**57.** Remove the excess webbing from the elastic keeper on the right side.



**Figure 57. Remove Webbing from Keeper**

**58.** Remove the excess webbing from the elastic keeper on the left side.



**Figure 58. Remove Webbing from Keeper**



**59.** To loosen the seat slings's webbing, grasp each red Type-IV release handle and pull upward.



**Figure 59. Grasp Red Release Handle - Loosen Webbing**

**60.** Lower the seat sufficiently so you are able to slide into it.



**Figure 60. Lower the Seat for Entry**

**61.** To position the seat under your upper legs, hook both thumbs behind the webbing just above the seat and push the seat forward.



**Figure 61. Seat Positioning**

**62.** Continue to push the seat forward until you feel it's in a comfortable and supportive position under your upper legs.

A typical seat position would be to place the seat inline with the leg straps.



**Figure 62. Position Seat Under Upper Legs**

**63.** The seat can be pushed farther forward so the seat's webbing is just forward of the leg straps. Jumper preference dependent upon physical size and other ancillary equipment being carried.



**Figure 63. Alternate Seat Position**

**64.** Retighten the webbing on both sides to take the majority of your body's weight off the leg straps so the seat is providing the support.



**Figure 64. Retighten Webbing**



**65.** Grasp both rolled ends of the webbing and tighten the seat as far as possible.



**Figure 65. Hand Position for Retightening Webbing**

**66.** Lift one knee at a time to further tighten that side.



**Figure 66. Lift Right Knee and Tighten Webbing**

**67.** Lift the other knee and tighten that side as well.



**Figure 67. Lift Left Knee and Tighten Webbing**

**68.** Check the symmetry of the excess webbing to ensure even loading, left and right.

**Note:** In preparation for landing, the jumper should push out of the seat sling prior to entering the landing pattern.



**Figure 68. Check Symmetry of Excess Webbing**