**PIA Technical Standard TS-102 v1**
**Parachute Industry Association Publications**
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# Major Component Definitions and Standard Equipment Lists For Sport Parachute Equipment Sub-Assemblies

The following definitions and standard equipment lists (for shipping requirements) are put forth as recommended practice by the members of the PIA and are intended to help manufacturers, distributors, riggers and users avoid duplication of effort and equipment (or worse, absence of a required piece of equipment).

It should be noted that 95% or more of the harness/containers (H/C) systems built as of this writing are custom-built for each specific jumper. The H/C manufacturer determines pack volume compatibility with the associated parachutes. However, equipment suppliers providing stock H/Cs to sport jumpers may benefit from the information contained herein.

This document does not pertain to emergency parachute assemblies used for non-premeditated parachute jumps.

## 1.0 Definitions

**1.1 Pack Volume Compatibility:** The harness/container's pack volume must properly fit the main and reserve parachutes, as determined by the component manufacturers and verified by the rigger who assembles and packs the parachute system.

**1.2 Parachute System / Parachute Assembly:** The terms "parachute system" or "parachute assembly" means a jumpable rig/kit that is completely assembled and ready for use (with the exception of a possible unpacked main parachute). A parachute system/assembly will typically consist of the following components.

**1.3 Parachute, Main:** The main parachute, excluding all the harness/container components and reserve parachute, is the primary parachute intended for a premeditated jump. For shipping purposes, the main parachute shall consist of everything from the connector links up to the bridle attachment point (this does not include the steering toggles). The major parts of the main parachute are the connector links, the suspension and control lines, a reefing device (typically a slider) and the canopy.

**1.4 Parachute, Reserve:** The reserve parachute, excluding the harness/container and main parachute, is worn for emergency use during a premeditated jump when the main parachute assembly fails to function properly. For shipping purposes, the reserve parachute shall consist of everything from the connector links up to the bridle attachment point, if one is present, (this does not include the steering toggles). The major parts of the reserve parachute are the connector links, the suspension and control lines, a reefing device (typically a slider) and the canopy.

**1.5 Harness/Container:** The harness/container shall consist of all remaining parts required to complete an airworthy parachute system/assembly (except for the main and reserve parachutes listed in 1.3 and 1.4 above). The detachable parts of the harness/container are listed below. Each harness/container is unique and the available options are numerous, but these parts are generally present (but not limited to):

**1.5.1** Pilot chute and bridle for main parachute
**1.5.2** Ripcord or equivalent device for main parachute activation
**1.5.3** Main parachute static line (as appropriate)
**1.5.4** Deployment device for main parachute (bag or other, as appropriate).
**1.5.5** Main risers, steering toggles and compatible means to attach them
**1.5.6** Main closing loop
**1.5.7** Main parachute release mechanism (cutaway / breakaway handle)
**1.5.8** Reserve static line lanyard (RSL)
**1.5.9** Ripcord or equivalent device for reserve parachute activation
**1.5.10** Main Assisted Reserve Deployment (MARD) components (as appropriate)
**1.5.11** Pilot chute and bridle for reserve parachute
**1.5.12** Deployment device for reserve parachute (bag or other, as appropriate)
**1.5.13** Reserve toggles
**1.5.14** Reserve closing loop
**1.5.15** Set-up for a specific automatic activation device (AAD), (as appropriate)
**1.5.16** Any of the above listed parts may be excluded from the shipment for the harness/container assembly, if the affected parts are specifically excluded, in writing, at the time of sale.

**1.6 Tandem Harness/Container:** The tandem harness/container shall consist of all remaining parts required to complete a tandem parachute system/assembly (except for the main and reserve parachutes listed in 1.3 and 1.4 above). The detachable parts of the tandem harness/container as listed below. Each tandem harness/container is unique and the available options can vary, however these parts are generally present (but not limited to):

**1.6.1** Drogue, bridle and bridle attachment device (i.e.; 3-Ring, Disk, or other) for main parachute
**1.6.2** Drogue release handle(s)
**1.6.3** Deployment device for the main parachute (bag or other, as appropriate)
**1.6.4** Main risers, steering toggles and compatible means to attach them
**1.6.5** Main closing loop
**1.6.6** Main parachute release mechanism (cutaway / breakaway handle)
**1.6.7** Reserve static line lanyard (RSL)
**1.6.8** Ripcord(s) or equivalent device(s) for reserve parachute activation
**1.6.9** Main Assisted Reserve Deployment (MARD) components (as appropriate)
**1.6.10** Pilot chute and bridle for reserve parachute
**1.6.11** Deployment device for the reserve parachute (bag or other, as appropriate)
**1.6.12** Reserve toggles
**1.6.13** Reserve closing loop
**1.6.14** Set-up for a specific automatic activation device (AAD), (as appropriate)
**1.6.15** Passenger Harness (as appropriate)
**1.6.16** Any of the above listed parts may be excluded from the shipment for the harness/container assembly, provided that the affected parts are specifically excluded, in writing, at the time of sale.

## 2.0 Documentation:

**2.1** The manufacturer of each parachute component shall provide an owner's manual for their product to include specific assembly and packing instructions. The harness/container manufacturer shall provide a comprehensive owner's manual covering the necessary rigger's work to assemble the compatible components for the entire parachute system/assembly. If there is a conflict between the user manuals, the harness/container manual normally takes precedence. However, the rigger should contact the component manufacturers for clarification and/or confirmation.

**2.2** The manufacturers should also confirm compatibility regarding the components for any specific parachute system/assembly.

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