



PIA Technical Standard TS-102
Parachute Industry Association Publications
February 1986

Major Component Definitions and Standard Equipment List for Sport Parachute
Equipment Subassemblies

There are numerous variations on the problem that has brought about this document. The basic problem is that the customer does not always receive what is needed to assemble a complete and functional sport parachute assembly due to different practices at each of the various equipment manufacturers. 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 and users avoid duplication of effort and equipment (or worse, absence of a required piece of equipment). This document does not pertain to emergency parachute assemblies used for non- premeditated parachute jumps.

1.0 Definitions:

1.1 Compatible: In this document, the term "**compatible**" shall be taken to mean that the particular components in question have been tested, as an assembly.

1.2 Parachute System (Parachute Assembly): The terms "**parachute system**" or "**parachute assembly**" shall be taken to mean a parachute that is completely assembled and ready for use (with the possible exception of an unpacked main parachute) by a member of the intended user group. A parachute system will typically consist of the components listed below.

1.3 Parachute, Main: A parachute, excluding the harness, that is used in conjunction with a reserve parachute assembly as the primary parachute assembly (the one intended for use) for a premeditated jump. For shipping purposes, the main parachute shall consist of everything from the main riser connector links to the bridle attachment point (this does not include the steering toggles). The major parts of the canopy are the suspension lines and the canopy.

1.4 Parachute, Reserve: A parachute which is worn in conjunction with a main parachute used for premeditated jumps. For shipping purposes, a reserve parachute shall consist of everything from the reserve riser connector links to the bridle attachment point (this does not include the steering toggles). The major parts of a reserve parachute are the suspension lines and the canopy; also included is any type of deployment device that is sewn to the canopy or lines.

1.5 Harness/Container: For shipping purposes, the harness and container assembly shall consist of all remaining parts required to complete an airworthy parachute system (except for main and reserve parachutes listed above). The parts of a harness/container assembly are usually (but not limited to):

- **1.5.1** Basic assembly of the harness/container is that which remains when all items that can be removed without unstitching have been removed.
- **1.5.2** Pilot parachutes and bridles for main and reserve parachutes.
- **1.5.3** Ripcords or equivalent devices for main and reserve parachute container.
- **1.5.4** Main parachute release mechanism and associated handles or static lines.
- **1.5.5** Deployment devices for the main and reserve parachutes as appropriate.
- **1.5.6** Steering toggles and means of attaching and activating same; including a deployment brake mechanism for ram-air type parachutes. Control line guide rings for ram-air parachutes should be installed on the back of the rear riser on both sides. The top of the ring should be 4" from the end of the riser per PIA TS 100.
- **1.5.7** Any of the above listed parts may be excluded from the shipset for the harness and container assembly, provided that the affected parts are specifically excluded, in writing, at the time of sale.

2.0 Documentation:

2.1 Each component manufacturer shall list, in the owner's manual for each of his components, the complementary components for which he has demonstrated compatibility for that particular component. Each manufacturer shall also ensure that the PIA Technical Committee is advised of each change or addition to this list. The PIA Technical Committee will publish an annual compatibility listing for all equipment manufactured by the member companies.

TS-102: Definitions & Equipment List for Subassemblies