Origin Standard Frame Control Harness

The Origin Industries Standard Frame Control Harness is an integrated component of a Origin Standard Frame Cockpit and is the the primary mechanism for directing and controlling a frame. The harness uses a combination of both neural sensors and motion controllers built into the physical structure of the harness itself to make fine and accurate control of a Frame possible and more intuitive for both seasoned pilots and beginners. it was introduced in YE 34

Components

The Frame control Harness is made up of several components which work together to convey the pilot's intents and desires to the systems of the armored frame, allowing it to move.

Helmet

A helmet is securely attached to the inside of the cockpit and acts to prevent whiplash and other various head and neck injuries while doubling as a control method. It contains a neural scanner which reads the pilot's intent, allowing for the rapid activation of thrusters, cycling of heads up display features and so on. A metal visor obscures the pilot's vision, and instead directly projects images into the eyes; they are designed for maximum comfort, and if desired, the visor may be pushed up and the screens in the cockpit used instead.

Upper Body Harness

The Upper Body Harness is composed of arm sleeves which allow pilots to control the frame's upper limb motions through a combination of actual arm movement combined with neural readings collected by several integrated sensors; the neural readings can be collected through clothing, and some pilot suits. Power Armor, however, is not compatible with this system. Physical movement while using the system is somewhat confined by the interior of the cockpit; for safety reasons, and to prevent damage to the screens, motion is limited by a built in hydraulic/pneumatic system which provides a soft, and then more persistent pressure which the pilot cannot push or move past. The hands grasp special yokes at the end of each arm sleeve; it is attached to the end of the padded arm harness, and also takes neural-electrical readings to accurately move the frame's hands and fingers.

Seat

The pilot rests in a 'seat' capable of articulating to a certain degree to follow bodily movements. A special protective chestplate restraint system acts to secure the user in place, and keep conditions comfortable with its soft, breathable padding. When entering or exiting, the chestplate leans forward to allow the pilot to slip out or in before gently locking against the seat's seals. The seat itself extends and separates into

two lower halves, each of which closes comfortably over the thigh, calves and feet of the pilot, allowing for a fair range of leg movement while collecting readings for actual frame control.

Active Feedback

Feedback comes in the form of direct neural stimulation from the contact points that the helmet, seat, harnesses and yoke, mimicking the feeling of various external forces. These include inertia, mass, gravity, damage, pressure and very basic tactile feel, allowing for fine control of the frame. Though the Active Feedback system does stimulate the nerves, the system was not built in mind to create pain. Instead, a strange and empty 'phantom' feeling is generated to signify damage and missing parts. Numerous safeguards and surge protectors prevent pilots from feeling actual pain in the case of systems damage.

OOC Notes

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