



AUTOMATIC INFLATION SYSTEMS




Automatic inflation systems are activated by ingress of water. Upon immersion in water, a firing mechanism will activate and pierce a CO₂ cylinder. The gas released from the cylinder will inflate the bladder of the lifejacket and create buoyancy. All automatic systems have an alternative manual override, which allows the user to pull the toggle and inflate the lifejacket if necessary.




 <p>HALKEY ROBERTS®</p>	<p><u>HALKEY ROBERTS Alpha Auto</u></p> <p>The Alpha® Auto Inflator activates when the cartridge comes into contact with water. The cartridge mechanism consists of a clear cap cartridge with water access apertures and a compressed high powered spring which is held by a cellulose salt bobbin. When the cellulose salt bobbin comes into contact with water the cellulose dissolves and it releases the spring which pushes a plunger forward, in turn forcing a cutter into the CO₂ cylinder. The cutter allows the CO₂ to travel through the one way valve in the inflator head and inflate the lifejacket.</p> <p>The Automatic system is backed up by a manual override, which allows the user to pull the toggle and activate the cutter to pierce the gas cylinder in order to inflate the lifejacket alternatively.</p>
 <p>UML United Moulders Ltd</p>	<p><u>UNITED MOULDERS LTD MK5 Auto</u></p> <p>The UML MK5 Automatic system activates when the cartridge comes into contact with water. The cartridge mechanism contains a compressed high powered spring which is held by a cellulose paper element. When the paper element comes into contact with water it dissolves and releases the spring which pushes a cutter forward to pierce the CO₂ cylinder and release the CO₂ gas. The gas then travels through the one way valve in the inflator head and inflates the lifejacket.</p> <p>The Automatic system is backed up by a manual override, which allows the user to pull the toggle and activate the cutter to pierce the gas cylinder in order to inflate the lifejacket alternatively.</p>

MANUAL INFLATION SYSTEMS

Manual-only inflation systems are activated by the user by pulling on a toggle or handle. By pulling on the toggle or handle a lever system is released which will activate the cutter to pierce the CO₂ cylinder and thereby release the gas into the lifejacket to achieve full inflation.

There are three different options for manual inflation systems:

 <p>The image shows a cylindrical metal CO2 cylinder with a yellow plastic handle attached to the front. A small yellow pull handle is also visible. The HAMMAR logo is at the bottom.</p>	<p><u>HAMMAR MA1/ EC Hydrostatic Single Point Indicator Auto</u></p> <p>This inflation mechanism also requires both water and pressure combined to activate automatically. It requires full immersion in water to a minimum 10 cm depth to activate fully. At this point the hydrostatic valve opens and lets the water meet the water sensitive element that in turn releases a stainless steel coil spring. The spring then drives a cutter into the end of the gas cylinder to pierce it and release the gas through the sealing ring aperture in the bladder and inflate the lifejacket. This system differs from the A1 / M1 inflator in that it has the advantage of the cylinder being glued into the back of the system to give a secure seal so that it cannot come loose or detached in use. The single point indicator on the front also gives the user an immediate visual check of the operational status of the cylinder and cartridge. The Automatic system is backed up by a manual override, which allows the user to pull the toggle and activate the cutter to pierce the gas cylinder in order to inflate the lifejacket alternatively.</p>
 <p>The image shows a cylindrical metal CO2 cylinder with a yellow plastic handle attached to the front. A red pull handle is visible at the end. The HAMMAR logo is at the bottom.</p>	<p>HAMMAR A1 / M1 Hydrostatic Auto</p> <p>This inflation mechanism requires both water and pressure combined to activate automatically. It requires full immersion in water to a minimum 10 cm depth to activate fully. At this point the hydrostatic valve opens and lets the water meet the watersensitive element that in turn releases a stainless steel coil spring. The spring then drives a cutter into the end of the gas cylinder to pierce it and release the gas through the sealing ring aperture in the bladder and inflate the lifejacket. The Automatic system is backed up by a manual override, which allows the user to pull the toggle and activate the cutter to pierce the gas cylinder in order to inflate the lifejacket alternatively.</p>
 <p>The image shows a cylindrical metal CO2 cylinder with a yellow plastic handle attached to the front. A red pull handle is visible at the end. The HAMMAR logo is at the bottom.</p>	<p>HAMMAR M1 Manual</p> <p>The Hammar Manual only system will not activate automatically and can only be activated by means of the pull handle which breaks off completely when pulled correctly</p>

 <p>UML United Moulders Ltd</p>	<p>UNITED MOULDERS LTD Pro Sensor Auto Dual Point Indicator</p> <p>This system activates when the cartridge comes into contact with water. The cartridge mechanism contains a compressed high powered spring which is held by a cellulose paper element. When the paper element comes into contact with water it dissolves and releases the spring which pushes a cutter forward to pierce the CO2 cylinder and release the CO2 gas. The gas then travels through the one way valve in the inflator head and inflates the lifejacket.</p> <p>Benefits of the Dual Point indicator system: the user has immediate visual check of the operational status of the cylinder and cartridge. The Automatic system is backed up by a manual override, which allows the user to pull the toggle and activate the cutter to pierce the gas cylinder in order to inflate the lifejacket alternatively.</p>
 <p>UML United Moulders Ltd</p>	<p>UNITED MOULDERS LTD Mini-Manual</p> <p>The UML Manual only system will not activate automatically and can only be activated by means of the pull toggle which breaks off the green clip when pulled correctly.</p>
 <p>UML United Moulders Ltd</p>	<p>UNITED MOULDERS LTD Pro Sensor Manual Single Point Indicator</p> <p>The UML Pro Sensor Manual only Single Point Indicator system will also not activate automatically and can only be activated by means of the pull toggle. There is no clip to break off on this system. The lever is simply pulled down fully and can be clicked back into place afterwards.</p> <p>Benefits of the Single Point indicator system: the user has immediate visual check of the operational status of the cylinder.</p>