

Waste Jettison Mechanism Specifications and Capabilities Checklist

This form should not be included directly in any submission. It is a checklist of key information that NASA will require to assess submissions and should assist you with knowing what basic elements should be submitted with an entry. Please note, this checklist is not exhaustive and solvers should include additional detail where they feel it supports submissions.

Solution Title	
Blueprints/Schematics/Diagrams/Illustrations	
Dimensions of Jettison Mechanism (mm)	<i>Include internal and external elements.</i>
Mass of Jettison Mechanism (g)	<i>Total mass and mass of sub components if separated.</i>
Shape and Volume of Jettison Mechanism (m³)	<i>Specify rough shape and volume.</i>
Power Requirements (W), Voltage (V)	<i>Include peak power/voltage</i>
Mounting System	<i>Describe how the jettison mechanism will be fitted to the airlock/spacecraft.</i>
Stowage Methodology	<i>How will the mechanism be stowed or stored when not in use?</i>
Operating Temperatures	<i>Include maximum and minimum temperatures and any cyclical limitations.</i>
Construction Materials	
TRL of overall design and/or sub components	
Reliability Data for Key Components	
Consumables Required (if any)	
Mechanical Requirements (if any)	
Stability/Environmental Requirements (if any)	

Processing Requirements (if any)	
Ideal location in spacecraft	
Environmental & Safety Hazards	<i>Internal and upon jettison</i>
Operational Precautions	
Operator Inputs/Activities Required	<i>How will the crew operate the system?</i>
Prototype Rough Cost (\$USD)	<i>Give rough order costs for design and manufacture of a prototype.</i>
Description of how the jettison mechanism will operate	
Description of how the jettison system will support the overall Mars mission	
Estimate of maximum trash volume and mass that the mechanism will handle on a single use	
Estimate of the maximum trash volume and mass that the mechanism will handle in a three- year mission	