



<b>TANK TYPE</b> Diaphragm	<b>MOUNT</b> Flange	<b>LOCATION</b> Girth
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This is a 18-inch diameter oblate frustriod pressure vessel constructed of 6Al-4V titanium and overwrapped with composite. The tank has two elliptical heads with integral frustriums which will allow complete reversal of the elastomeric diaphragm. This tank is a technology development tank. It has not been through qualification testing.

**ATK Part Number 80483-1 (SK-1655)**

**SIZE: 18" x 52" Frustriod Spheroid**  
**SIZE: 457.2-mm x 1321 mm**

**ISO 9001 & AS 9100 REGISTERED**

<b>DIAPHRAGM INFORMATION</b>	<b>TANK CHARACTERISTICS</b>	<b>ACCEPTANCE TESTS</b>
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Diaphragm P/N	80-351007-1
Diaphragm Mold P/N	N/A
Diaphragm Gross Wt	N/A
Diaphragm Matl Type	AF-E-332
Material Spec, Rubber	MT3-73
Diaphragm Processing, Note 2	90-000094
N-Ray Inspection Procedure	1002

Operating Pressure, psig	600	Total Volume, ci	9,250
Proof Pressure, psig	790	Prop Mass, lbm	1,000
Cryo Proof, psig	NA	Max Design Wt, lbm	27.7
Design Burst, psig	900	Minimum Liner Wall, inch	0.005

Performed per SN 1265540

**Notes:**

- 1: Tooling owned by ATK
- 2: Proprietary Document
- 3: Fracture Critical

<b>TANK CHARACTERISTICS (Metrics)</b>			
Operating Pressure, Bar	41.37	Total Volume, l	151.6
Proof Pressure, Bar	54.47	Prop Volume, l	16.4
Cryo Proof, Bar	NA	Max Design Wt, Kg	12.6
Design Burst, Bar	62.05	Minimum Wall, mm	0.127

**PROGRAM INFORMATION**

Program	Ultralight
Customer	JPL
Customer P/N	N/A
Original Job No	0419
Customer Installed Device	No
Customer Controlled Design	No
Subcontract #	1265540

**FORGINGS**

<b>FORGINGS P/N</b>	<b>SUPPLIER</b>	<b>Die No</b>
80-351061		

**TUBE TYPE AND SIZE (in.)**

<b>6Al-4V titanium</b>	<b>SIZE</b>
Integral	.750 OD

**TUBE SIZE (mm)**

Integral	19.05
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