

TANK TYPE	MOUNT	LOCATION
DIAPHRAGM	FLANGE	GIRTH

The Landsat Propellant Tank is a lightweight titanium tank with an AF-E-332 Rubber Diaphragm attached to the inside of the tank near the mid plane. There is an internal titanium dome to support the diaphragm in the fully loaded condition. There are two (2) ports; one for pressurization gas and one for the propellant supply.

Part Number 80523-1

SIZE: 40.85" DIA x 41.70" LONG
SIZE: 1037.59mm DIA x 1059.18mm LONG

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000733
Qual Test Procedure-QBS	50-000606
Qualification Test Report	56-000205
Stress and Dynamics Report	
FMECA	
Cleaning	CPP 4032

TANK CHARACTERISTICS

Operating Pressure, psig	395	Total Volume, in ³	38,000
Proof Pressure, psig	494	Max Design Wt, lbs	110.0
Cryo Proof, psig	N/A	Minimum Wall, inch	
Burst Pressure, psig	825	Qual Tank Mass	
Actual Burst, psig	1,015		

ACCEPTANCE TESTS

- Preliminary Examination of Product
- Pre-Proof Volumetric Capacity Test
- Proof Pressure Test
- Post-Proof Volumetric Capacity Test
- Expulsion Efficiency
- Internal Leak Test
- External leak Test
- Weld Quality Inspection
- Final Examination of Product and mass measurement
- Cleanliness Test
- Data Review

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	27	Total Volume, l	623
Proof Pressure, bar	34	Max Design Wt, kg	49.90
Cryo Proof, bar	N/A	Minimum Wall, MM	
Burst Pressure, bar	57	Qual Tank Mass	
Actual Burst, bar	70		

80451-1 QUALIFICATION TESTS

- Preliminary Examination of Product
- Pre-Proof Volumetric Capacity Test
- Proof Pressure Test
- Post-Proof Volumetric Capacity Test
- Expulsion Efficiency
- Internal Leak Test
- External leak Test
- Weld Quality Inspection
- Mass Measurement
- Diaphragm Cycling Test
- Proof Pressure Cycling Test
- MEOP Cycling and Expulsion Efficiency
- Internal Vacuum Test
- Internal Leak Test
- External Leak Test
- Vibration Test
- Cleanliness Test
- Acceleration Test
- Internal Leak Test
- External leak Test
- Weld Quality Inspection
- Burst Test
- Data Review

HEMISPHERE FORGINGS

HEMI P/N	QTY
80-260061-3	1
80-260061-1	1

RING FORGINGS

P/N	QTY	SIZE
80-263065-1	1	39.12" ID x 40.46" OD x 1.68" LONG
		993.648mm ID x 1027.684mm OD x 42.672mm LONG

TUBE TYPE AND SIZE

TI 3AL-2.5V	QTY	SIZE
80-451001-3	1	0.250" OD x 0.016" Wall x 6.50" LONG
NOTE: Customer Supplied Tubing		6.35mm OD x 0.4064mm Wall x 1651.1mm LONG
80-451003-3	1	0.375" OD x 0.025" Wall x 7.00" LONG
NOTE: Customer Supplied Tubing		9.525mm OD x 0.635mm Wall x 177.8mm LONG

