



TANK TYPE	MOUNT	LOCATION
Diaphragm	Flange	Girth

This is a 40-inch oblate spheroid pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by fully reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the mid-plane. Mounting is accomplished on a continuous flange parallel with and adjacent to the mid-plane.

ATK Part Number 80407-1

SIZE: 40-inch Oblate Spheroid
SIZE: 1016-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS
Acceptance Test Procedure	50-000542	Operating Pressure, psig	338	Examination of Product Pre-Proof Volumetric Capacity Test Proof Pressure Test Post-Proof Volumetric Capacity Test Internal Leak Test External Leak Test Weld Quality Inspection Outside Surface Quality Inspection Final Examination of Product Cleanliness Data Review
Qual Test Procedure	50-000209	Proof Pressure, psig	525	
Protoflight Test Report	56-000075	Cryo Proof, psig	N/A	
Cleaning	CPP 3872	Burst Pressure, psig	676	
		Total Volume, ci	28,144	
		Prop Volume, ci	Various	
		Max Design Wt, lbs	76.0	
		Minimum Wall, inch	0.050	

DIAPHRAGM INFORMATION	
Diaphragm P/N	80-263027-1
Diaphragm Mold P/N	T-1868
Diaphragm Gross Wt	7.6 lbs
Diaphragm Matl Type	AF-E-332
Material Specification, Rubber	MT3-73
Diaphragm Processing	90-000094
N-Ray Procedure	1002

TANK CHARACTERISTICS (Metrics)			
Operating Pressure, Bar	23.30	Total Volume, l	461.20
Proof Pressure, Bar	36.20	Prop Volume, l	Various
Cryo Proof, Bar	N/A	Max Design Wt, Kg	34.47
Burst Pressure, Bar	46.61	Minimum Wall, MM	1.270

Notes:

- 1: Tooling owned by TRW
- 2: Proprietary Document
- 3: Burst report is 56-000120
- 4: Fracture Critical
- 5: This tank was originally qualified under P/N 80263 and the QTP is 50-000209 & QTR is 56-000075

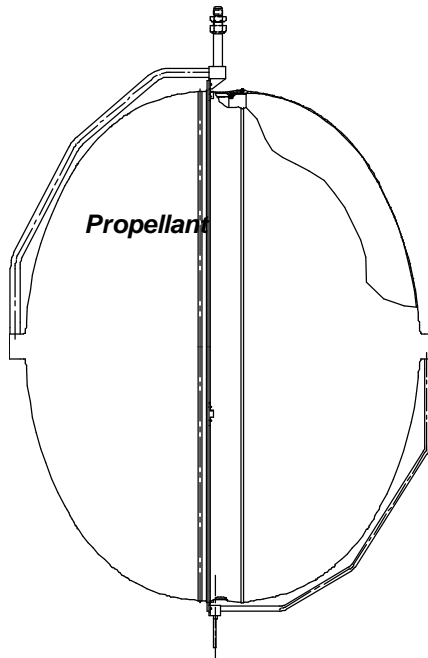
Tube Protector SK-1487
 Different tubes, same mounting flange as 80263-1

FORGINGS P/N	SUPPLIER	Die No
80-260061-1		
RING FORGING		RING SIZE, (Rough Machined)
80-263065	40.46 +.09 ODx39.12 -.09 IDx1.68 +.09 Lg	
80-263063	42.57 +.09 ODx39.56 -.09 IDx3.81 +.25 Lg	

QUALIFICATION TESTS
 Qual by similarity on 80263-1.

TUBE TYPE AND SIZE	
Transition	SIZE
80-407005-1	0.375 OD x 0.042 Wall Gas
80-407001-1	0.750 OD x 0.039 Wa.; Fuel

TUBE TYPE AND SIZE (Metrics)	
80-407005-1	9.525 x 1.067 mm
80-407001-1	19.05 x .9906 mm



Pressuran

