

TANK TYPE Diaphragm	MOUNT Pedestal	LOCATION Apex
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This is a 16.5-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the sphere mid-plane. Mounting is accomplished on a pedestal mount located on the apex of the propellant hemisphere.

Part Number 80276-1

SIZE: 16.5-inch ID Sphere
SIZE: 419-MM

ISO 9001 (1994) REGISTERED

NG Analysis **Stress Fracture**

APPLICABLE DOCUMENTS	
Acceptance Test Procedure	50-000220
Qualification Test Procedure	50-000221
Qualification Test Report	56-000081
Traceability	60-000042
Powder Blast	65-000030
Fusion Welding, TIG	90-000003
Radiographic Acceptance STD	90-000004
Radiographic Inspection	90-000006
Pre-Weld Cleaning	90-000022
Identification	90-000047
Electrochemical Etch	90-000049
Heat Treat	90-000082
Closed Die Forging	90-000083
Penetrant Inspection, Note 3	90-000086
Pre-Penetrant Etch, Note 3	90-000088
Radiographic, Note 3	90-000103
Weld, Electron Beam	AMS 2681
Cleaning	CPP 3441

TANK CHARACTERISTICS			
Operating Pressure, psig	320	Total Volume, ci	2,300
Proof Pressure, psig	478	Prop Volume, ci	1,840
Cryo Proof, psig	NA	Max Design Wt, lbs	9.5
Burst Pressure, psig	682	Minimum Wall, inch	0.020

ACCEPTANCE ENVIRONMENTAL TESTS
Random Vibration

DIAPHRAGM INFORMATION			
Diaphragm P/N	80-271007-1		
Diaphragm Mold P/N	SK 666		
Diaphragm Gross Wt	0.88		
Diaphragm Matl Type	AF-E-332		
Diaphragm, Material	Note 2	90-000075	
Diaphragm Processing	Note 2	90-000087	
N-Ray Inspection Procedure		1002	

PROGRAM INFORMATION	
Program	ECS
Customer	ERNO
Customer P/N	SK 01066
Original Job No	7908
Customer Installed Device	No
Customer Controlled Design	No

- Notes:**
- 1: Tooling owned by Northrop Grumman
 - 2: Proprietary Document
 - 3: Fracture Critical

FORGINGS		
FORGINGS P/N	SUPPLIER	Die No
80011-63, Pressurant	ARCTURUS	2272
80-276061-1, Propellant	ARCTURUS	2849A
RING FORGING		
RING SIZE, (Rough Machined)		
80-214065-1, Retainer	16.75 +.06 OD x 15.5 -.06 ID x 1.4 +/--.06 Lg	
80-276065-1, Base	9.5 +.09 OD x 7.03 -.09 ID x 1.38 +.09 Lg	

TUBE TYPE AND SIZE	
TITANIUM	SIZE
80-276080-3 (2)	

All dimensions are in inches

