

TANK TYPE	MOUNT	LOCATION
DIAPHRAGM	TABS	SEE SKETCH

This is a 28-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 four bosses.

PSI Part Number 80227-1

SIZE: 28-inch ID sphere

ISO 9001 (1994) REGISTERED

Customer Stress

APPLICABLE DOCUMENTS	
Acceptance Test Procedure	50-000193
Weld Qual Report	55-000055
Traceability	60-000042
QA Plan	60-000106
Powder Blast	65-000030
Standard Safety Plan	65-000043
Ti Compatible Shop Materials	65-000048
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
EB Weld	AMS 2681
Penetrant, Type 1, Meth B	MIL-I-6866
Ultrasonic Insp, Class AA	MIL-STD-2154

TANK CHARACTERISTICS	
Operating Pressure, psig _____	Total Volume, ci _____
Proof Pressure, psig _____	Prop Volume, ci _____
Cryo Proof, psig _____ NA	Max Design Wt, lbs _____
Burst Pressure, psig _____	Minimum Wall, inch _____

ACCEPTANCE ENVIRONMENTAL TESTS

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DIAPHRAGM INFORMATION	
Diaphragm P/N	80-227017
Diaphragm Mold P/N	T-1669
Diaphragm Gross Wt	4.16
Diaphragm Matl Type	AF-E-332
Diaphragm, Material, Note 2	90-000075
Diaphragm Processing, Note 2	90-000079

PROGRAM INFORMATION

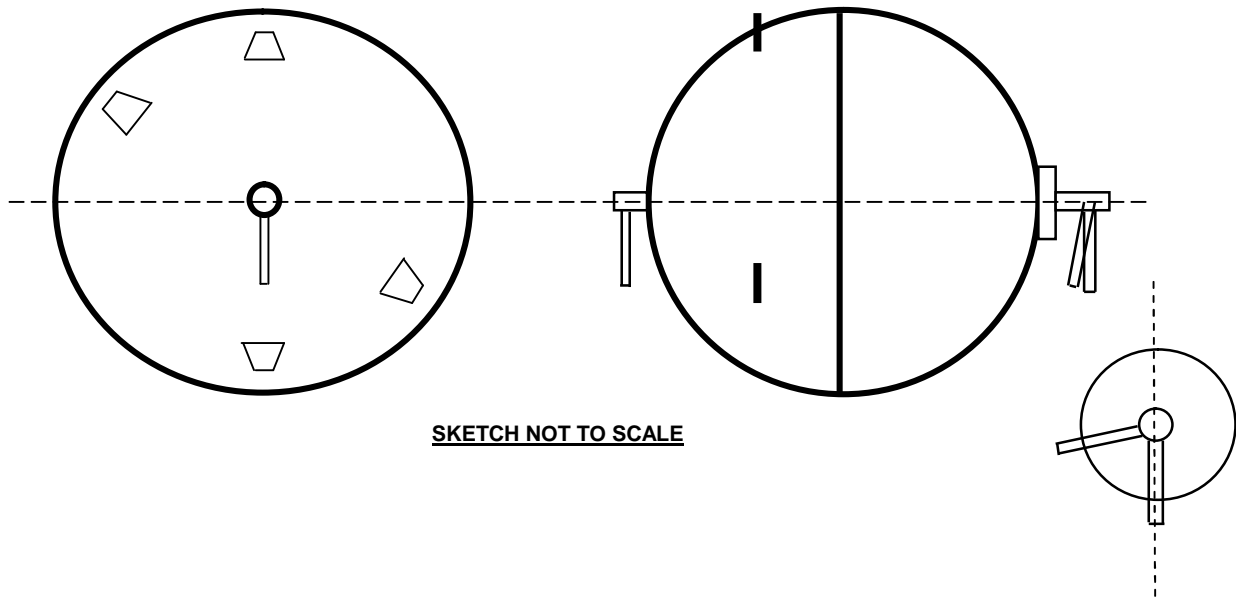
Program	MJS 77 (Voyager)
Customer	JPL
Customer P/N	10073600-1
Original Job No.	
Customer Installed Device	No
Customer Controlled Design	No

- Notes:**
- 1: Tooling belongs to PSI
 - 2: Proprietary Document

FORGINGS P/N	SUPPLIER	Die No
80-227061-1 (2)	ARCTURUS	3089
RING FORGING		
RING SIZE, (Rough Machined)		
80-227063-1, Retainer	28.31 +.25 OD x 25.5 -.25 ID x 4.18 +.25 Lg	
80-227051	Support Blank, Diaphragm retainer	

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-227001	.250 x .020 x 5.7
80-227006	.5 x .055 x 6
80-227002	.250 x .050 x 5.7



SKETCH NOT TO SCALE

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