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GAS EJECTION SYSTEM OVERVIEW AND DESIGN ENHANCEMENTS

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GAS EJECTION SYSTEM

- Payload mounts on ejection system which is attached to the LEP (Lower End Plate).
- Provides a 20" opening – same as GAS canister.
- Ejection force by a spring after two bolts on a marmon clamp are cut by pyrotechnics.
- Lid serves as a barrier to contain loose satellite.

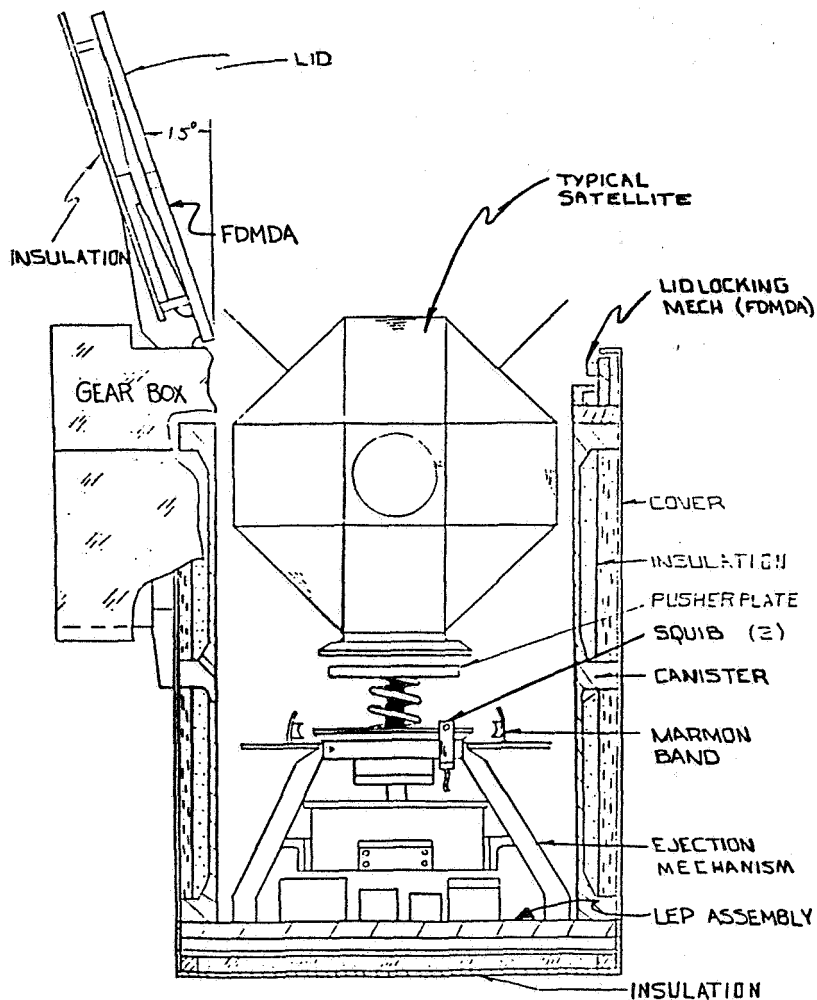


Figure 1. GAS Ejection System

OS: 75-087

SECOND GAS EJECTION SYSTEM

- First System - FDMDA Design and ready for shipping - 9 months.
- Second System - Ready for shipping in 8 weeks.
 - Started with GAS can.
 - Delivered in 9 weeks.

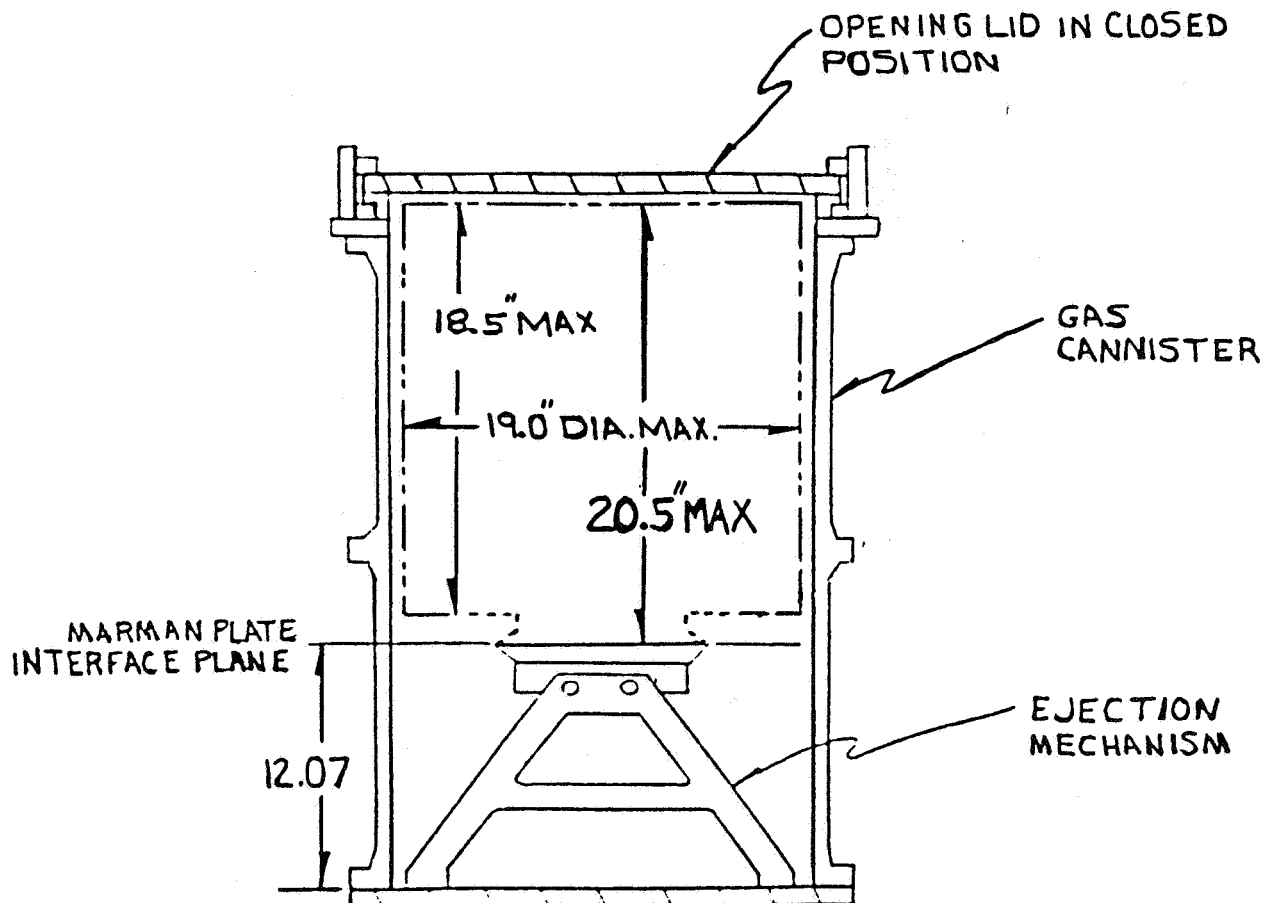
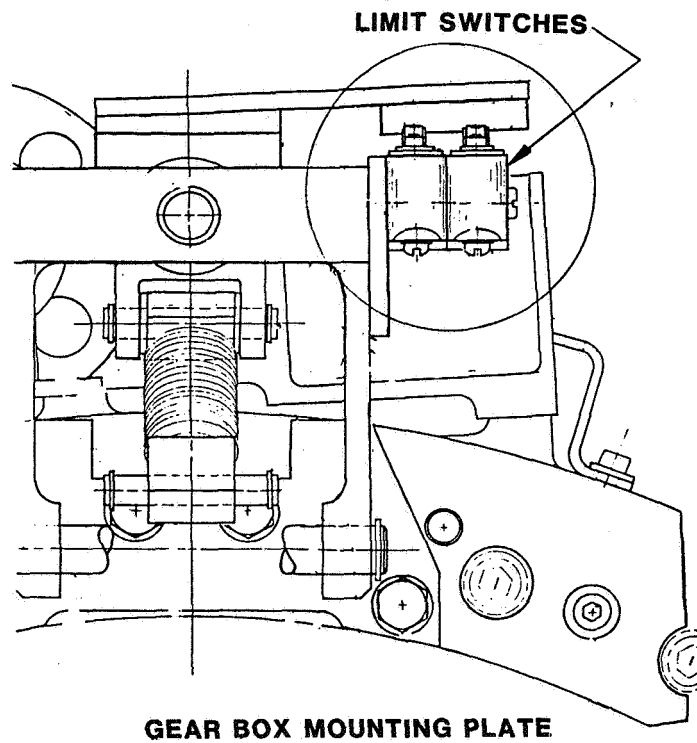
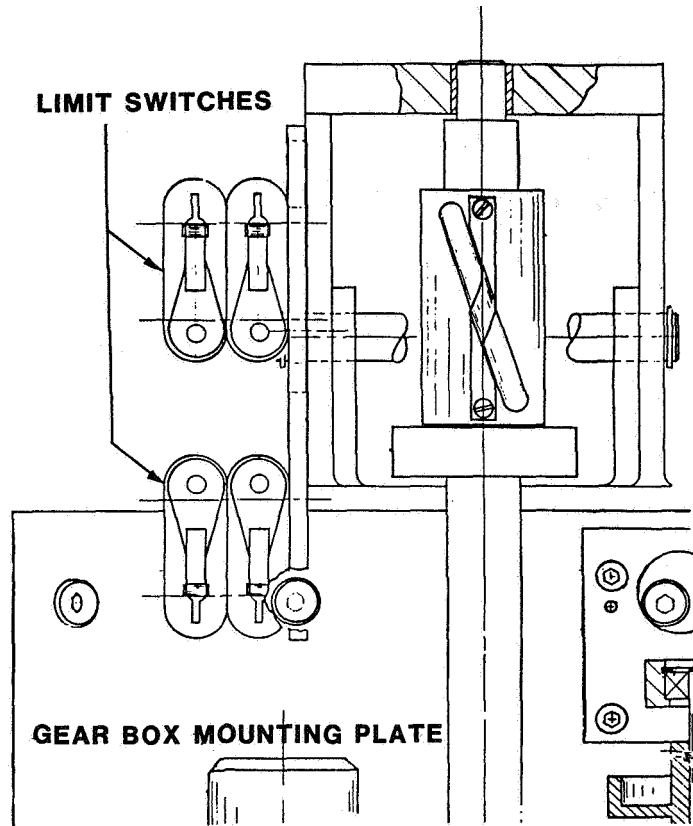


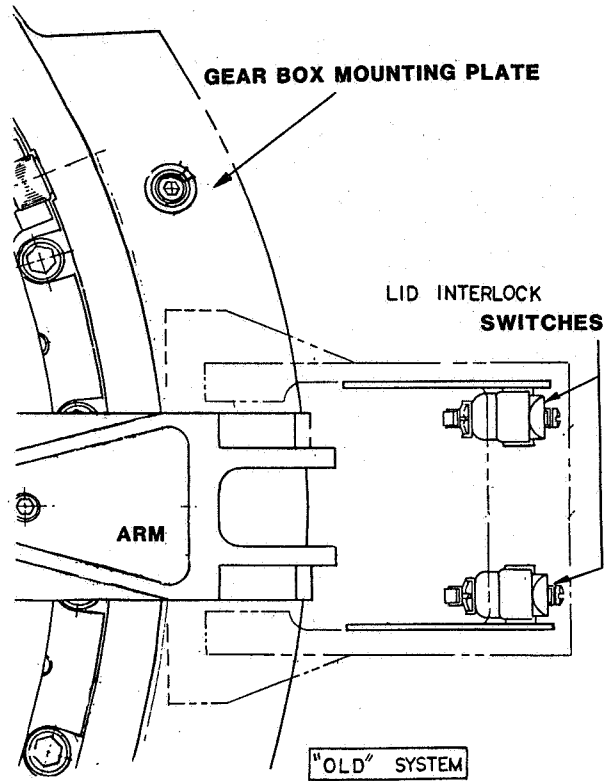
Figure 2. GAS Ejection System - Satellite Envelope

MISSION STS 51B (4/29/85)

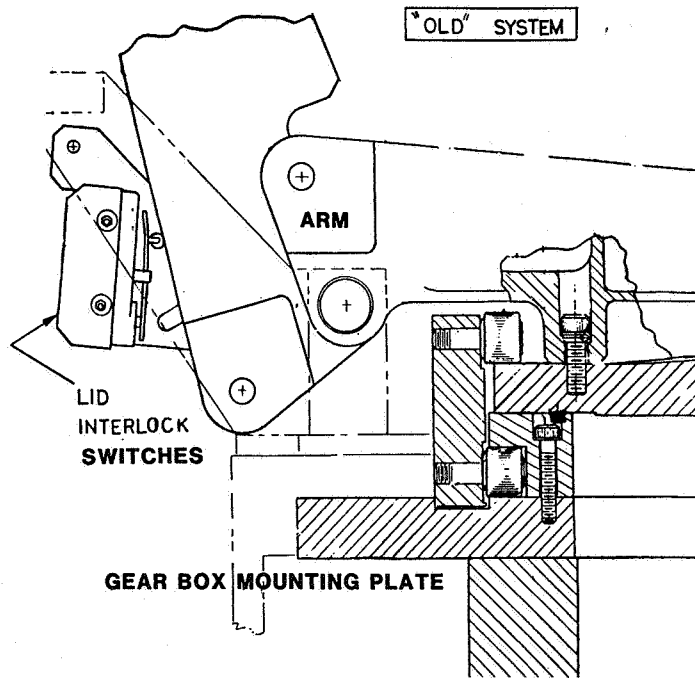
- GES #1 (NUSAT): Successfully ejected.
- GES #2 (GLOMR): Unsuccessful - returned intact.



Top View

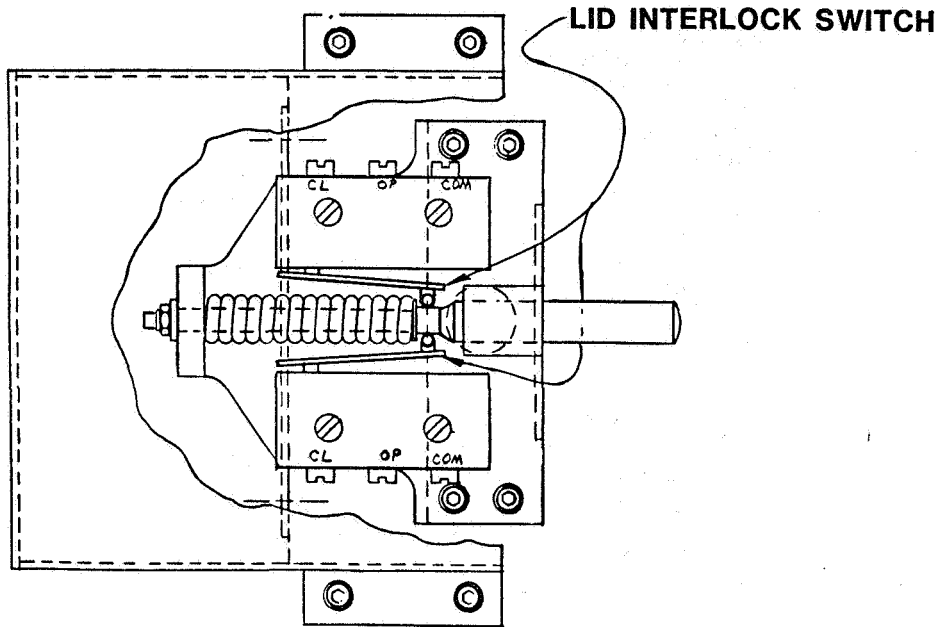


Top View



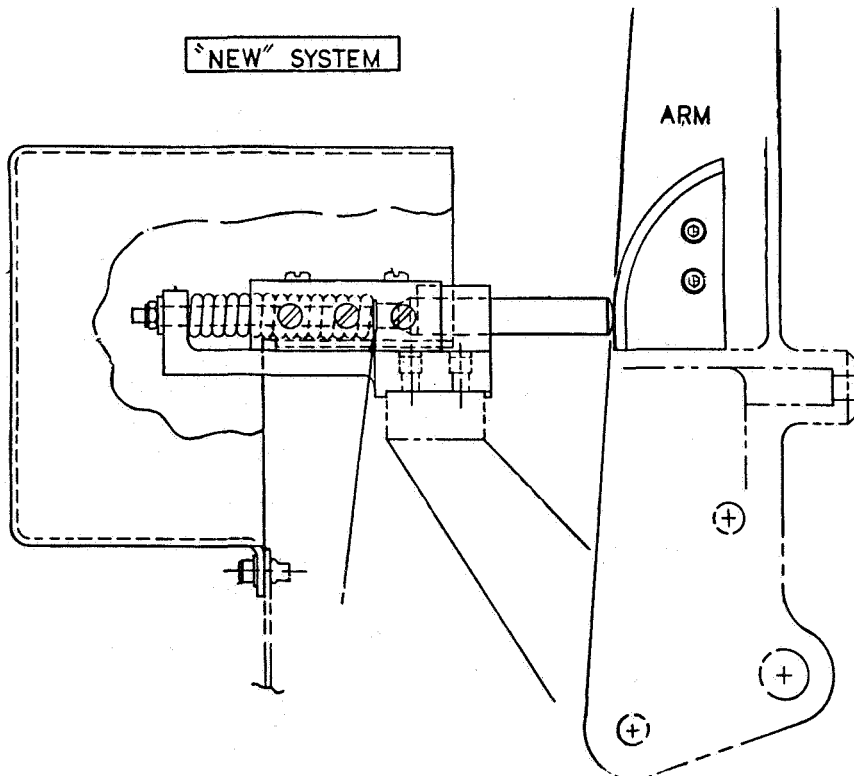
Side View

"NEW" SYSTEM



Top View

"NEW" SYSTEM



Side View

FUTURE OF GAS EJECTION SYSTEM

- Pressure tight can.
- Larger experiment volume.
- Possible attitude adjustment system.