



Artist concept of NASA's Juno spacecraft, exploring Jupiter. Credit NASA/JPL-Caltech



NON-PYROTECHNIC Hold Down and Release Mechanisms

High-reliability, non-explosive (split-spool) HDRMs, separation nuts, and pin pushers/pushers for dependable preload retention and release of deployable space systems



Glenair pyrotechnic-free release mechanisms offer near-simultaneous release time, low shock performance, with relatively low initiation power input.

HDRM Series includes separation nuts, pin pushers, and pin pullers—direct wired or connectorized—with a broad range of preload carrying capacity.

- Pyrotechnic-free alternative (low-shock fuse-wire) for single-event release of deployable space systems
- Configurable electrical initiation with no (amperage) upper limit
- Near-simultaneous release dependent on temperature and power
- User-serviceable and refurbishable units
- Redundant or non-redundant actuation circuit
- Not susceptible to transient and noise (EMI/EMP/ESD/RFI) inputs
- Extended temperature ranges: -150°C to +150°C

NON-PYROTECHNIC

Hold Down and Release Mechanisms

Separation nut, pin puller, and pin pusher configurations with flight heritage



HDRM DUTY CLASSES



Light-Duty HDRM
Redundant circuit,
5 – 75 lb release preload



Medium-Duty HDRM
Redundant circuit,
300 – 4000 lb release preload



Heavy-Duty HDRM
Redundant circuit,
5000 – 20,000 lb release preload

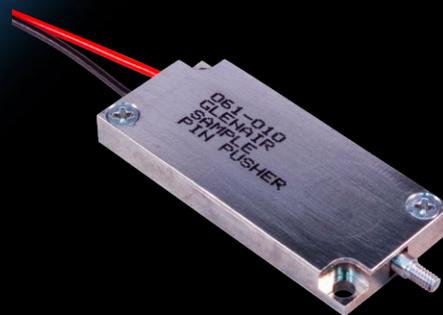
HDRM RELEASE TYPES



Separation nut



Pin puller



Pin pusher

NORTH AMERICAN AND EUROPEAN HDRM SOLUTIONS



SPACE SYSTEMS

Glennair is pleased to offer both our North American and European customers access to our innovative hold-down release mechanism technologies. These non-pyrotechnic space mechanisms are ideally suited for satellite, payload fairing, antenna array, solar array, and boom and mast deployment. Glennair medium-duty HDRMs and pin pullers can ship to most customers without an export license, although light- and heavy-duty HDRMs do typically require one. Certain designs may be manufactured by Glennair Space Systems in Salem, Germany. Consult factory for complete information.

