



National Aeronautics and
Space Administration

SA-08-03



Langley Research Center Safety Alert

Date: October 1, 2003

TO: Facility Coordinators and Facility Safety Heads

FROM: 429/Head, Safety and Facility Assurance Office, OSMA

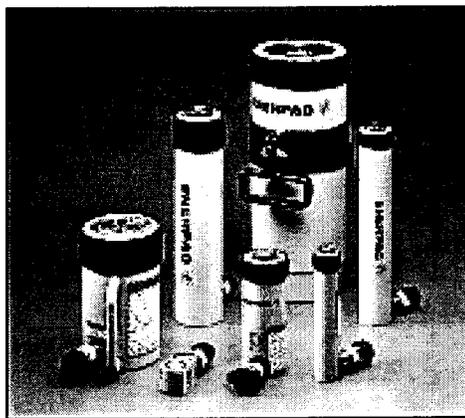
SUBJECT: Hydraulic Jacks (Power Packs)

A recent inspection of several hydraulic Enerpac™ / porta-powers (small hydraulic jack, hand-pump, and interconnecting hose) at LaRC discovered some have deficiencies that prevent them from being used safely.

These devices can operate at pressures of 10,000 psi or higher. Consequently, they should be treated, operated, and maintained as a high-pressure device.

If your facility has one or more of these units, you should promptly inspect them for the following problems:

- Worn or kinked hoses,
- Hoses that do not have a strain relief spring at each end,
- Hydraulic leaks,
- Air in the system,
- Adequacy of custom made accessories or attachments,
- Excessive wear, nicks, or damage to the plunger/piston or cylinder, and
- The lack of a saddle to protect the end of the plunger (black attachment in picture).



Units that exhibit any of these characteristics should not be used until the deficiency is corrected. Repairs can be obtained through a trouble-call to Johnson Controls Inc.

Questions about hydraulic system integrity can be addressed to Carlos Perez-Ramos (47258), the Standard Practice Engineer for Pressure Systems. Questions about custom made mechanical accessories or attachments should be directed to Roslyn McCreery (46940), Standard Practice Engineer for Mechanical Systems. General safety questions can be addressed to Troy Middleton (SFAO) at 46948.

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43069

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(This Safety Alert to be posted on Facility Bulletin Boards for a Minimum of 30 days.)