Commercial Preservation Packaging for Storage of Mechanical-Hydraulic Controls

Manual 25075 (Revision A)

In order to protect a governor or actuator from damage caused by rust or corrosion, certain storage procedures must be followed. The procedures outlined here do not replace military specifications, although some military specifications are listed as references. These procedures are meant for commercial use only.

Storage Procedures

Use rust- and oxidation-inhibiting oil such as Texaco Regal R & O oil, or other oil that meets US MIL-H-17672 (hydraulic fluid, petroleum inhibited) specifications, to coat all internal surfaces of the device. If the governor or actuator is operated with oil other than rust- and oxidation-inhibiting oil, flush the unit with rust- and oxidation-inhibiting oil during operation before storage.

Plug all external openings to prevent contamination by solvents, cleaning agents, moisture, or other elements.

Coat the external surface of the governor or actuator with rust- and oxidation-inhibiting oil. Wrap the unit in a cushioning material to prevent projections, sharp corners, and sharp edges from damaging the barrier bag.

Enclose the governor or actuator in a barrier bag just large enough to enclose the control. Enclose the unit in a second heat-sealed barrier bag of the same material as the inner bag with the calculated amount of desiccant.

Calculate the amount of desiccant required by using the following formula:

U = AC + DX

where:

- **U** = The number of units of desiccant required
- **A** = Area (square inches) of barrier material to be used
- **C** = 0.011
- **D** = The number of pounds of packing material, other than metal, used within the barrier
- **X** = 8 for cellulosic material, including wood, use as packing material. See US MIL-P-116 for other materials.

Use desiccants which meet the requirements of US MIL-D-3464 Type I or Type II. One producer of such desiccants is the Eagle Chemical Company, Inc.

Position the desiccant in bags of standard unit size and in appropriate locations in order to expose all voids in the governor to the dehydrating action of the desiccant.

Use a heat-sealable barrier bag that meets the requirements of Type I material per US MIL-B-22191 (latest revision).

Visually inspect the barrier material to see if the heat seal is complete and that no tears or damages are present. Pad the storage or shipping crate sufficiently to prevent tearing the barrier material.

Tag each packaged unit with the following:

NOTICE

Damage to the barrier material in any way requires a complete repeat of the storage procedure.

References

These US Military Specifications were used as references:

MIL-P-116	Preservation-packaging, methods of
MIL-B-22191	Barrier materials, transparent, flexible, heat-sealable
QPL-22191	Qualified products list of MIL-B-22191
MIL-D-3464	Desiccants, activated, bagged, packaging use and static dehumidification
QPL-3464	Qualified products list of MIL-D-3464

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