



U.S. Department
of Transportation

Research and
Special Programs
Administration

SEP 19 1998

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 11287
(SECOND REVISION)

EXPIRATION DATE: August 31, 2000

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: DADCO, Detroit, Michigan
2. PURPOSE AND LIMITATION: This exemption authorizes the manufacture, mark, and sale of certain gas springs, considered accumulators containing Division 2.2 materials, for transportation in commerce, subject to the specific requirements prescribed herein. This exemption provides no relief from any regulation other than as specifically stated.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107, and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Sections 173.306(f)(2)(iii), 173.306(f)(3), and 175.3.
5. BASIS: This exemption is based on DADCO's application dated August 18, 1998, submitted in accordance with 49 CFR 107.109.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials description/proper shipping name	Hazard Class or Division	Identification Number	Packing Group
Accumulator, pressurized pneumatic (containing non-flammable gas).	Division 2.2	NA 1956	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES -

a. PACKAGING: Packaging prescribed is a gas spring, considered an accumulator as defined in the Hazardous Materials Regulations (HMR) 49 CFR 173.306(f), and described in DADCO's application on file with the Office of Exemptions and Approvals (OHMEA). The maximum charge pressure is 2,175 psig at 70°F. Accumulators authorized under this exemption, when conforming to the following, are excepted from labeling (except when offered for transportation by air) and the specification packaging requirements of the HMR:

- (1) Each accumulator must be shipped as an inside packaging.
- (2) Each accumulator may not have a gas space exceeding 190 cubic inches.
- (3) Prior to shipment, each completed accumulator must be inspected for leakage under the charge pressure at 70°F. Any accumulator with evidence of leakage must be rejected.
- (4) Each accumulator must be designed and fabricated with a burst pressure of not less than five times its charge pressure at 70°F when shipped.
- (5) Each accumulator design type must be such that when subjected to fire, the internal pressure must be relieved by means of fire degradable seals, or a pressure relief device, in order to prevent accumulator rupture.
- (6) Each accumulator covered by this exemption must be manufactured under a written quality assurance program which monitors parameters controlling burst strength, burst mode and performance in a fire situation. A copy of the quality assurance program must be maintained at each facility where an accumulator subject to this exemption is manufactured and made available to a DOT representative upon request.

b. TESTING -

- (1) Design Type: A design type is defined as that representing accumulators with identical bore size, design pressure, configuration, manufacturing methods, and materials of construction. The following qualification test must be performed:
 - i. At least one accumulator for each design type must be hydrostatically pressurized to failure. Failure must be at a pressure not less than five times the charge pressure at 70°F. The observed failure mode may not be by other than through a seal or a pressure relief device.
- (2) Lot size: A lot is defined as that quantity of 200

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or less accumulators of the same design type, successively produced over a production shift not exceeding 10 hours. The following production test must be performed:

i. The welds of one accumulator from each lot must be ultrasonically tested in conformance with DADCO Engineering Procedure # 01-6514 on file with the OHMEA.

8. SPECIAL PROVISIONS:

a. Offerors for transportation of the hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials so long as no modifications or changes are made to the packages, all terms of this exemption are complied with, and a copy of the current exemption is maintained at each facility from which such offering occurs.

b. Each accumulator manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated for a specific manufacturing facility.

c. A copy of this exemption, in its current status, must be maintained at each manufacturing facility at which each accumulator is manufactured and must be made available to a DOT representative upon request.

e. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

d. MARKING -

(1) Each accumulator manufactured under this exemption must be legibly marked "DOT-E 11287" in letters and numerals at least one-quarter inch high on a contrasting background.

(2) Each outside package shipped under this exemption must be marked "INSIDE CONTAINERS CONFORM TO DOT E-11287."

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9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger aircraft.

10. MODAL REQUIREMENTS: A copy of this exemption must be carried aboard each aircraft and vessel used to transport packages covered by this exemption. The shipper shall furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. Section 5101 et seq.:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 et seq., when applicable.

Each "hazmat employee" as defined in 49 CFR 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by 49 CFR 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or it is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

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Issued at Washington, D.C.:

for Alan I. Roberto
Associate Administrator
for Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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