Farley's Frigeration

Important - Read Carefully

Anhydrous Ammonia hose has a limited life and the user must be alert to signs of impending failure. Periodic inspection and testing, as described in Rubber Manufacturers Association (RMA) publication: IP-11-2, Anhydrous Ammonia Hose Manual for Maintenance, Testing, and Inspection, is recommended to detect signs indicating hose deterioration or loss of performance before conditions leading to malfunction or failure are reached. All new hose assemblies should be inspected prior to use to determine if they have been damaged in storage or shipment. Hose subjected to severe usage - for example, dragged over sharp rock surfaces, or sharply bent in storage or continually exposed to weather - will deteriorate more rapidly than carefully handled hose. The hose should be visually inspected each day before use. *Inspection Procedure:*

Lay out the full length of the hose in a clean and preferably dry area. Inspect the outside cover of the hose for blistering, excessive abrasion or cuts, and coupling slippage. This inspection will be made when the hose is not under pressure.

- 1. Cuts in hose cover which expose or damage the reinforcement are cause for immediate replacement. Small cuts, nicks, or gouges in the cover which do not go completely through the cover are not cause for replacement of the hose. Hose strength is controlled by the plies of reinforcement, and for this reason, damage in this area cannot be tolerated. Note: Pricking the hose cover is necessary for satisfactory hose performance. A uniformly pricked cover should not be viewed with alarm.
- 2. Damage to the textile or wire braid is cause for immediate hose replacement. Wire braid reinforced hose that has been kinked or flattened, so as to permanently deform the wire braid in the depressurized state, shall be removed from service.
- 3. Blistering or loose outer cover is cause for immediate hose replacement
- 4. Examine couplings for slippage. Only permanently attached fittings are to be used with anhydrous ammonia hose. Bolt on or clamp on type fittings must not be used. Slippage is evidenced by the misalignment of the hose and coupling and/or the scored or exposed area where slippage has occurred. Any evidence of slippage is cause for immediate hose replacement.

Warning:

A failure in service can result in injury to personnel or damage to property. Do not use at temperatures or pressures above those recommended by Parker Dayco. Anhydrous ammonia is extremely volatile - and poisonous - in both liquid and gaseous (vapor) states. Contact with either state of anhydrous ammonia will burn skin, and is especially damaging to the eyes and lungs. Improper hose applications or failure to inspect the hose may lead to life-threatening situations - poisonous gas leakages, fires, or explosions.



Series 7262
I.D. x O.D. Braid M.B.R. W.P. Wt. 100'
1/2" x 15/16" 2 5.0" 350# 32#
3/4" x 1-1/4" 2 8.0" 350# 50#
1" x 1-1/2" 2 10.0" 350# 60#



Designed to handle anhydrous ammonia to 350 P.S.I. working pressure with a 5:1 safety factor (1750 P.S.I. minimum burst). Degradation resistant, nylon reinforcement provides flexibility with high tensile strength. High quality synthetic compound cover provides excellent ozone and abrasion resistance. Compatible with N-Serve® when used in recommended concentrations. Meets or exceeds RMA/TFI/ANSI.

Tube: High quality synthetic compound. **Cover:** Perforated black with green stripe. **Reinforcement:** Multiple nylon braids.

Temp. Range: -40°F to 180°F.

Branding: (Side 1 embossed) Parker Dayco USA 7262 Nylon Anhydrous Ammonia - (mfg. year) - Remove No Later Than (year) - 350 P.S.I. MAX W.P. RMA (s/n) - Caution Anhydrous Ammonia Use Only. (Side 2) Green identification stripe.

Length: 25' / 50' 100' for 1/2" to 1'

Usage: This hose provides the flexibility required for farm or field applications.

WARNING: FOR OUTDOOR USE ONLY!

For anhydrous ammonia transfer use only. Do not use in LPG, natural gas or refrigeration applications. Do not use with male swivel couplings.

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As per:

http://www.osha.gov/SLTC/etools/ammonia refrigeration/receiving/hose.html

Hoses used for loading or unloading ammonia into or from the refrigeration system have a limited life. The user must be alert to signs of hose deterioration before failure occurs. This page describes some inspection and testing procedures, work practices, and hose selection criteria to ensure the safe transfer of ammonia.

Hoses

Potential Hazards

Hose failure, leading to a release of ammonia.

Possible Controls

Provide information pertaining to the hazards of ammonia to workers. [1910.119(d)(1)]



Figure 1. Unloading a railcar

- For more information see <u>Properties of Ammonia</u>. Use hoses that are designed according to generally accepted good engineering practices. [1910.119(d)(3)]
 - Use hoses that are commonly used for ammonia, such as:
 - Stainless steel braided
 - Nylon braided
 - Use hoses that:
 - Indicate suitability for ammonia.
 - Have a working pressure of at least 350 psi and a burst pressure of at least 1750 psi.
 - Mark at least every 5 feet the manufacturers name, the words Anhydrous Ammonia, the working pressure, and the year of manufacture.
 - Make up hose assembly that is capable of withstanding a test pressure of 500 psi.
 - Replace hoses according to the manufacturer's recommendations.
 - Do not use old, damaged, or mistreated hoses.

Ensure employees are trained in the proper care and maintenance of hoses. [1910.119(g)]

- Implement the following recommendations for the use of hoses:
 - Do not drag hoses over sharp or abrasive surfaces, unless specifically designed for such.
 - Protect hoses from severe end loads.
 - Ensure the pressure in the hoses is at or below its rated working pressure.
 - Change pressure gradually to prevent excessive surge pressures.
 - Do not run over hose with equipment.
 - Do not kink hoses.

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- Use dollies to handle large size hose.
- Storage of hoses
 - Protect hose from:
 - Extreme temperatures
 - Too high or low humidity
 - Ozone
 - Sunlight
 - Oils
 - Solvents
 - Corrosive liquids and fumes
 - Insects
 - Rodents
 - Radioactive materials
 - Avoid stacking hoses in such a way that the weight of the stack creates distortions on the hose at the bottom.
 - Store hoses in the original shipping container if possible.

Conduct routine inspections or testing for hoses as part of a Mechanical Integrity Program. [1910.119(j)]

- Inspect hoses and connectors prior to each use. Look for:
 - Loose covers
 - Kinks
 - Soft spots, which may indicate broken or displaced reinforcement
- Perform a hydrostatic test periodically:
 - Test for one minute at 150 percent of the recommended working pressure.
 - Test hoses when they are straight, not coiled, or kinked.
 - Flush hoses with alcohol to remove traces of moisture.
 - Never use a compressible gas for the test due to the explosive action of the hose should failure occur.
 - Bleed air through an outlet valve while filling it with the test medium.
 - Place steel rods at ends and at approximately 10 foot intervals to prevent "whipping" should failure occur.
 - Bulwark the outlet end of the hose to stop blown-out fittings.
 - Protect testing personnel from the forces of the testing media should failure occur.
 - Do not stand in front of or in back of the ends of the hose being pressure tested.
- Inspect the couplings or fittings.