MICHIGAN STATE
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# Checklist for Safe Anhydrous Ammonia Equipment[1]

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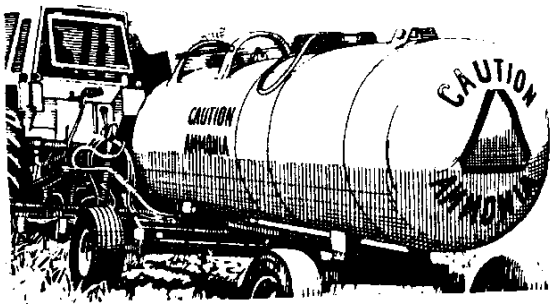
Spending a few minutes to inspect anhydrous ammonia equipment before taking it from the dealer may help reduce problems or accidents that can cause delays or injure the operator. Follow this checklist to minimize the risks associated with anhydrous applications.

## SUPPLY/NURSE TANK CHECKLIST

- Are the fittings and valves clean and free from rust and wear?
- Is the kingpin in good condition and well lubricated?
- Is the high-pressure hose secure, with no cracks or signs of wear? Replace the hose if you can see the braided layer.
- Is the hose free of cuts, soft spots, blistering, kinking, flattening, or indications that it may have been stretched? Is there slippage at any coupling connector? Check for leaks, kinks and bulges, especially near the couplings.




- Is the tank free of rust? Is the paint in good condition?
- Does the tank have a slow-moving vehicle (SMV) emblem mounted on the rear of the tank that is in good condition?
- Are the tires in good condition and properly inflated?
- Are both ends of the hose secured to prevent damage to the hose and connections during transport?
- Is the emergency water supply full? Is the grabhose clean and free of any slimly internal buildup that would impede or contaminate water flow?

If the answer to any of these questions is no, **don't take the tank**. Ask the dealer to fix it or request another tank. Although the dealer is responsible for maintaining equipment in proper working condition, you are the one who may be injured in an accident. **Take the time to inspect the equipment to reduce the risk of a serious accident. Never take a questionable tank home and try to repair it yourself.**

## TRANSPORT CHECKLIST

Before you tow the tank home, make sure:

- Towing connections are in good condition, correctly adjusted and firmly secured.

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- Hitches are secure and equipped with locking pins.
- Safety chains are securely connected.

## APPLICATION EQUIPMENT CHECKLIST

- Are applicator knives in good condition and not plugged with soil or other material?
- Is the shut-off rope the right length and in good condition?
- Are you using locking hitch pins?
- Is the nurse tank secured with a safety chain?
- Is all low-pressure tubing securely clamped and free of pinches, nicks, weak spots and leaks? *Folding and unfolding the applicator wings can pinch hoses so always inspect them before using. Are hoses clear and flexible? Hoses that are weathered, cracked, discolored or brittle need to be replaced. Check all hoses, connections and tires daily.*
- Is the regulator working properly?
- Is the applicator tool bar equipped with a breakaway coupler that is in good physical condition?
- Is the emergency five-gallon water tank filled with fresh water? *Always empty and refill the water tank at least once a day to ensure an adequate supply of fresh water*.
- Do you have a second five-gallon water tank filled with fresh water on the tractor? *A ruptured hose and the failure of a safeguard may prevent you from reaching the water tank on the nurse tank. A five-gallon water tank on the tractor may be your only available source of water*.
- Do you have a small squeeze bottle of fresh water in your pocket that will be readily accessible if ammonia gets in your eyes?

## FOR MORE INFORMATION

**Educational Safety Video:**
Available from the Cooperative Extension Service, Michigan State University: *"For the Rest of Your Life"* University of Iowa, 1974, 16 minutes.

**Publications:**
*"Personal Protection for Application of Anhydrous Ammonia"* available from the Agricultural Engineering Plan Service Office.

**Reference:**
*Anhydrous Ammonia Safety*, MF-990, July 1991, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

**Safety Tips**

- Always use gloves and goggles approved for handling anhydrous ammonia when transferring anhydrous or when checking for worn hoses and plugged applicator knives.
- An approved respirator and goggles should be available in the pickup or tractor bringing the nurse/supply tank to the site and on the tractor used to apply ammonia. If wind conditions are right, a leak could result in a cloud of ammonia that may cover the equipment - the only safe way out of this cloud is by wearing a half-face respirator and goggles or a full-face respirator. Both respirators and goggles must be approved for anhydrous ammonia applications.
- The first treatment for any exposure to anhydrous ammonia exposure is to flush the area with clear water for at least 15 minutes. Always seek medical attention after any exposure to anhydrous ammonia.