Guide To NH3 Break-Away Coupling Device Installation On Tool Bars

1. Most important, always follow the installation and maintenance guidelines provided by each equipment manufacturer.

2. Always use both double swivel brackets and accessories provided by the equipment manufacturer. Each type of break-away coupling device comes with parts and accessories that can only be used for each type of coupling device.

3. **Coupling Device To Heat Exchanger or Flow Meter**: Correct hose length is critical to allow articulation of the coupling device in all directions when attaching hose from the coupling device to the heat exchanger or flow meter. The coupling device should freely articulate 80° side to side and 30° up and down. Failure to allow for 80°/80° and 30°/30° articulation will prevent proper functioning of tool-bar coupling device.

In the picture to the left, the proper hose length may have been used from the coupling device to the heat exchanger/flow meter but notice zip ties were also used to secure the hose. **Do not use zip ties.** Zip ties will restrict the proper articulation of the coupling device.
4. **Hose Length**: Proper hose length from the coupling device to the NH3 nurse tank is essential. If a hose is too long it can become trapped, pinched, cut or entangled. If the hose is too short it can activate or pull the coupling device unintentionally. Different nurse tank configurations will require different hose length. The coupling device should freely articulate 80° side to side and 30° up and down. Failure to allow for 80°/80° and 30°/30° articulation will prevent proper functioning of the break-away coupling device.

5. **Never use any straps, zip ties, rope, wire**, etc... to tie down the NH3 hose from the coupling device to the NH3 nurse tank or heat exchanger/flow meter. This will restrict proper articulation of the coupling device, preventing proper activation.
6. **Always adhere to replace by dates stamped on quick coupler devices.** Some coupling devices have a replace by date and some do not. If a coupling device does not have a replace by date, always follow manufacturer’s maintenance guidelines prior to use.

7. **Always use mounting equipment provided by the coupling device manufacturer.** **Never weld a mounting bracket in place.** Welding the coupling device bracket prevents proper articulation and activation of the coupling device.

Both pictures below are examples of coupling device mounting brackets welded together or welded to the tool bar. This will prevent proper articulation and activation of the coupling device.
8. If utilizing more than one coupling device on a tool bar, each device must be allowed to articulate freely and independently of the opposing break-away coupling device.

In the picture on the left, both coupling devices are plumbed together preventing proper articulation and activation of the devices. The picture on the right however, both coupling devices are properly plumbed independent of each other allowing for proper articulation and activation of the devices.