



## AIR COIL SELECTION & INSTALLATION PRACTICES

The following practices should be adhered to in order to maximize performance and life of tractor/trailer connection lines. As an additional resource, please refer to *TMC Recommended Practices RP417A and RP435* that also address the selection, installation, and inspection of pneumatic tractor trailer connection lines.

### SELECTING PROPER LINE LENGTH

Measure the distance between the tractor and trailer connection points at the point of greatest extension during a full right turn articulation. **Note:** In the case of lines that are suspended off the deck by a clamp, the point at which the line is clamped should be considered the tractor connection point for purposes of this measurement.

Use the following chart to determine the correct working length to select:

Distance between tractor/trailer connection points	Less than 8 ft	8 ft – 10 ft	Greater than 10 ft
Recommended Working Length	12 ft	15 ft	20 ft

### UTILIZING LINES WITH AN EXTENDED TRACTOR SIDE LEAD LENGTH

If the distance between the tractor deck and tractor side connection point (typically the tractor protection valve) is less than 18 inches, a good rule of thumb is to utilize lines with a longer tractor side lead length along with properly suspending the lines between the tractor and trailer. In these cases, **TECTRAN** offers lead length options of 24 inch, 40 inch, 48 inch, and 72 inch

### PROPER SUSPENSION OF TRACTOR/TRAILER CONNECTION LINES

- Tractor/trailer connection lines should not be allowed to contact the deck or other tractor/trailer accessories throughout the range of application possibilities (including bobtailing or extreme right turn articulation).
- Lines should be secured via clamps specifically designed to contain air or electrical lines and be suspended via tender springs (affixed to a slide bar or similar device) or pogo sticks. Clamps should be affixed to a portion of the line that has a spring guard to protect the line from damage. Optimally, the clamping position on the spring guard would be just behind the tightly coiled (coils touching one another) section of spring on the spring itself. *See also, "Utilizing Lines with an Extended Tractor Side Lead Length" section above.*
- **TECTRAN** offers a wide range of clamps, tender kits and pogo sticks to cover nearly any application need. Tarp straps, cable ties, duct tape or similar items should not be used.
- When choosing a tender kit configuration, the installer should consider the height of suspension required to prohibit lines from making contact with any part of the tractor or trailer body. **TECTRAN** offers varying spring lengths for this consideration. The installer should also consider the weight of the lines being suspended when determining whether to utilize a single or double spring tender kit configuration. **TECTRAN** recommends a double spring design for all 3 line (two air lines, one electrical line) connection systems.
- When bobtailing, the trailer side gladhands and electrical plug should be properly contained in a caddy or bracket in a manner that prevents connection lines from contacting any tractor decking, body parts, or accessories.
- Care should also be taken to avoid line entanglement in order to maximize connection line life. Tangled lines are a leading cause of breakaway failures due to the effect of shortening the length of lines when they are in a tangled condition. Consider upgrading to **TECTRAN MAGNUMFLEX-HD™** or 3-in-One AirPower Line to permanently avoid tangled line situations.

### FITTING INSTALLATION

Fittings on both connection line ends (either to the tractor protection valve or gladhand) should be coated with a wet sealant to assist in the avoidance of leaks per the sealant manufacturers guidelines. Once the sealant has been applied, both the tractor side connections and gladhands on the trailer side should be tightened to ensure that no leakage occurs.