

**FEATURED PRODUCT**

## Accessory Cable

- For auxiliary applications
- Brown & green wires are not twisted
- Flexible from -82F to 195F (-63C to 91C)
- Excellent recoil memory, chemical and abrasion resistance
- Male ground pin to prevent mis-connections



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## Proper Airline Selection (Part 2 of 2)

In last month's article we began with the focus on lead length as a topic in determining overall working length when choosing proper airlines. In this month's article we will touch on other factors that require consideration when selecting proper airlines, such as choice in suspension, choice of nylon or rubber air lines, and how to properly measure between the tractor and trailer.

### Suspension:

Your choice in airline suspensions will depend upon the length of your leads on the tractor and the desired lateral movement of airlines from side to side as the truck pivots. There are three methods of suspension that properly suspend the lines over the deck plate.

- A fixed clamp connection at the back of the cab without lateral movement.
- A slider bar with a dual or single "tender" spring and a clamp hose holder which slides from side to side during turns.
- A pogo stick with a clamp hose holder, which also allows the line to extend and move laterally.

### Nylon vs. Rubber:

When installing straight rubber airlines, versus nylon air coils, it's important to take into consideration the added weight of the rubber airlines, which will require a stronger suspension system. Nylon air coils also "recoil" when in a relaxed position, whereas rubber air lines come closer to the deck plate when the truck is in a straight position.

### Measuring Distance Between the Tractor and Trailer:

To find the correct assembly length the user must measure the distance between the tractor and trailer hookup points at the point of greatest extension. On the tractor, this would be the hookup point at the electrical/air connection if a suspension system is not in place. If a suspension system is being used for longer leads, it is the point at which the lines are attached to the clamp on the suspension system. On the trailer, the hookup point would be at the electrical/air connection.

With the tractor/trailer parked in a straight position, measure the distance between the tractor and trailer hookup points. Then with the truck in an extreme right turn, measure the "maximum" distance between the tractor and trailer hookups.

Use the maximum distance measurement and add the following "safety" factor to your number to determine the length of the assembly. Most assemblies come in 12FT, 15FT and 20FT lengths.

For example, if you are using nylon air coils and a sliding bar suspension with a tender spring, measure from the clamp on the tender spring, to the air connection on the trailer with the truck in an extreme right turn. If your maximum distance is 152", add 25% as a safety factor. So...

$$\text{(Maximum distance measured + Safety Factor)} / 12$$

$$152" + 25\% = 190" \quad (15\text{FT} = 188")$$

$$\text{Assembly needed} = 15\text{FT}$$

### AIRLINE SAFETY FACTOR CHART

Nylon Coiled Air Lines		Straight Rubber Air Lines	
Type of Suspension	Safety Factor	Type of Suspension	Safety Factor
Slide Bar and Tender Spring (Long Tractor Lead)	25%	Slide Bar and Tender Spring	10%
Pogo Stick (Long Tractor Lead)	25%	Pogo Stick	10%
Fixed Clamp to Cab (Long Tractor Lead)	35%	Fixed Clamp to Cab	20%



- Two of the three types of suspension offer lateral movement, the sliding bar with tender spring and the pogo stick.
- Nylon air coils are lighter than rubber air lines and recoil when in a relaxed position.
- Measure the "maximum" distance and add the safety factor to determine the length of the assembly needed.

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