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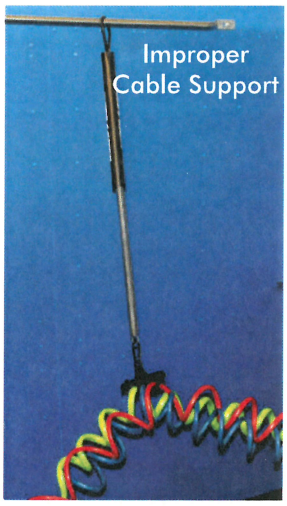
Proper Support for Coiled Cables with Long Leads

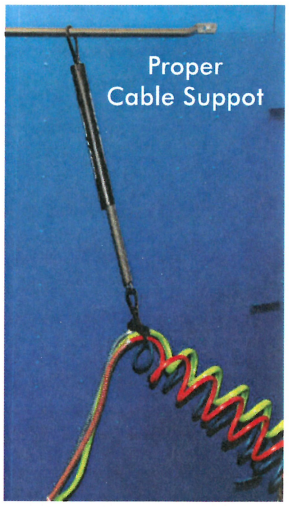
A coiled cable was designed to expand and recoil back to its original form as a truck turns and moves. The coiled portion of a cable expands and contracts like a spring, while the leads, whether long or short, should be thought of as an extension from the connection on the tractor or trailer to the coiled portion of the cable. Tractors with air and electrical connections located at the bottom of the tractor, require the use of coiled cables with an extended, or long lead. A long lead, (when supported correctly), is an extended length of straight cable between the tractor 7-way connection and the hose holder on a tender spring assembly, or pogo stick. The purpose of this additional length, not only creates a cleaner look, but more importantly allows for the full working length of the coiled portion of the cable to be utilized, while keeping unnecessary strain off the spring in the tender spring assembly. However, the cables must be supported properly to do so.

What Happens When Cables with Long Leads are Supported Improperly?

Cables with long leads that are supported improperly can create unnecessary tension and lack of recoil on a tender spring. Additionally, the coiled portion of a cable can even become permanently stretch out, no matter what type of cable support is being used.

The most commonly seen practice of improper cable support is when any portion of the coil is divided by the hose holder. This actually reduces the coiled working length between the hose holder and the trailer. When using a sliding tender spring assembly, additional strain and tension are placed on both the reduced coiled working length and the tender spring to stretch and retract more than necessary, overcompensating for the reduction in the coiled working length. Too much of this and both will lose their ability to recoil. If a pogo stick is being used for cable support, the reduced coiled working length between the hose holder and trailer will have to work even harder. This is because a pogo stick is stationary in location, and pivots very little from side to side, offering little to no additional give.





Proper Cable Support

Cables with long leads are properly supported when the coiled portion of the cable is able to move, extend and recoil with the truck as it pivots and turns. To accomplish this, the hose holder should be placed on the cables where the long lead and coiled portion meet; with the extended lead situated between the tractor 7-way connection and the hose holder, and the coiled portion of the cable placed between the hose holder and trailer side connection. This allows for enough slack in the cable on either side of the hose holder to be able to move fluidly with the vehicle.

So by implementing something as simple as proper support for cables with long leads, this can ensure the life of the cables, as well as the cable support, avoiding possible downtime.

TIPS

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- The purpose of a long lead is to allow for the full working length of the coiled portion of the cable to be utilized, while keeping unnecessary strain off the spring in the tender spring assembly.
- The most commonly seen practice of improper support for cables with long leads is when any portion of the coil is divided by the hose holder.
- Proper support for cables with long leads is to place the hose holder where the long lead and coiled portion meet.

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