

# MERITOR®

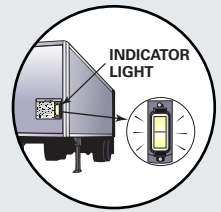
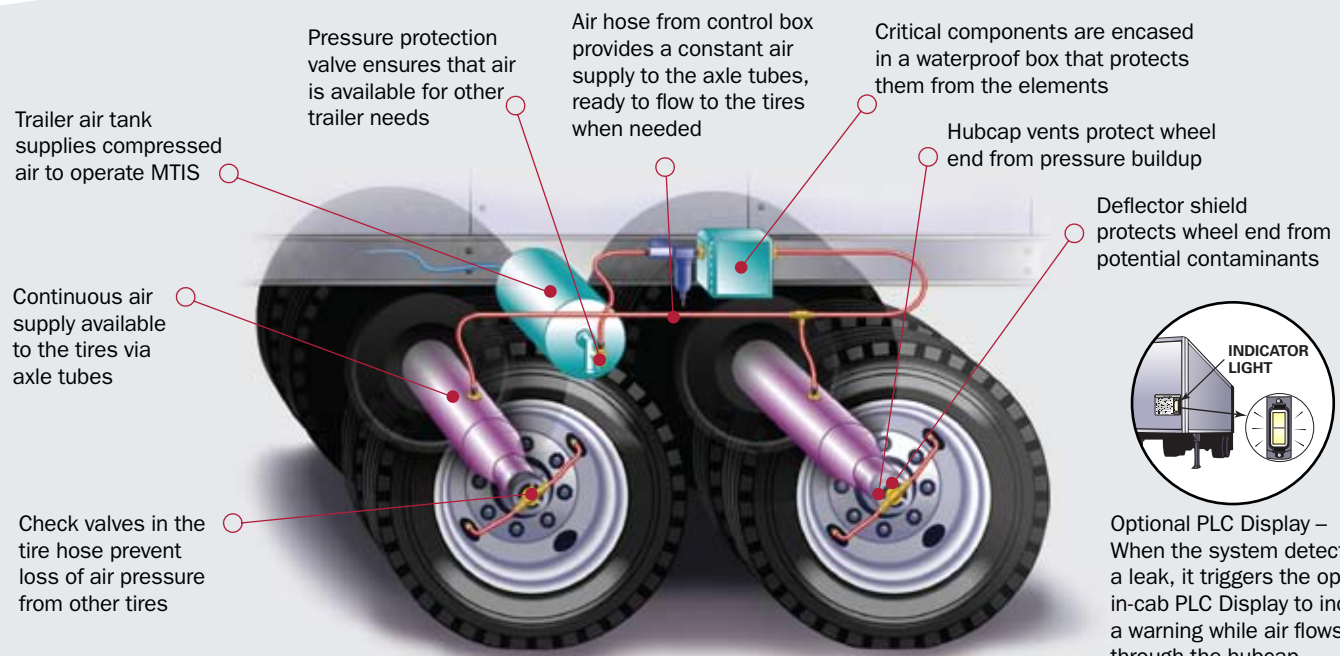
**MERITOR® TIRE INFLATION SYSTEM BY P.S.I. –  
WITH THERMALERT™ OPTION**



## Performance Advantages:

- The market leader for safety, fuel economy, longer tire life, reduced maintenance and increased uptime – with nearly two million tires protected
- Maintains full tire pressure to compensate for typical tread punctures and slow leaks until the driver can have repairs made – for hundreds of miles if necessary
- Faster payback – usually in less than one year
- Now available with Meritor® ThermALERT™ wheel-end heat-sensor technology
- Compatible with Meritor WABCO PLC Display for tractor-trailer communications as well as other telematic devices
- Easy to install on new and existing trailers

## MERITOR® TIRE INFLATION SYSTEM BY P.S.I.



Optional PLC Display – When the system detects a leak, it triggers the optional in-cab PLC Display to indicate a warning while air flows through the hubcap tee vent



### How It Works

Air from the existing trailer air supply is routed to a control box, then into each axle. Acting as a conduit, the axles carry air through a rotary union assembly at the spindle end, which then distributes the air to each tire as needed. The rotary union is the only moving part in the entire system, making it virtually maintenance-free. (Periodic inspection required. See MTIS Maintenance Manual 14P.)

## Fast Payback, Higher Profits:

More than 80% of fleet tire problems are caused by improper inflation. Underinflation leads to higher fuel consumption from increased rolling resistance, accelerated and uneven tread wear, and heat buildup, which can destroy tire casing. MTIS by P.S.I. keeps tires properly inflated, delivering increased profitability year after year.

To calculate your savings, try the online interactive payback calculator at [arvinmeritor.com](http://arvinmeritor.com).

### Average Annual Cost Savings per Trailer with the Meritor Tire Inflation System (MTIS™)

<b>Tread Wear<sup>1</sup></b>	<b>\$200</b>
<b>Maintenance<sup>2</sup></b>	<b>\$150</b>
<b>Fuel<sup>3</sup></b>	<b>\$500</b>
<b>Tire Downtime/Replacement<sup>4</sup></b>	<b>\$350</b>
<b>Total</b>	<b>\$1,200</b>

<sup>1</sup> Tread Wear: based on 10% extended life of 8 tires traveling 90,000 miles per year and a tire cost of \$250.

<sup>2</sup> Maintenance: based on 25 minutes per month spent checking and filling tires by a tire professional at \$25 per hour.

<sup>3</sup> Fuel: based on 1.25% annual savings, assuming 90,000 miles per year at 6 mpg and \$3.00 per gallon.

<sup>4</sup> Tire Downtime/Replacement: based on one service call and new tire cost.

# ThermALERT™ Option – A MTIS by P.S.I. Technology

## ThermALERT Adds High-Temperature Protection to the Industry-Leading Automatic Tire Inflation System

ThermALERT wheel-end heat-sensing technology helps alert drivers to take preventive action that avoids damage caused by elevated wheel-end temperatures. ThermALERT reduces vehicle downtime, risk and costs to keep your business moving ahead.

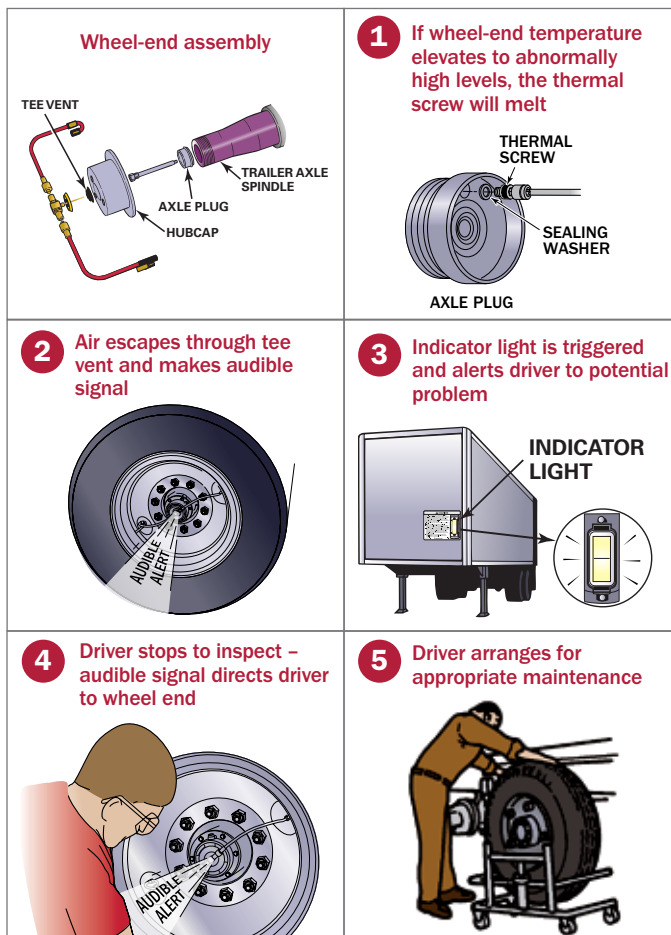
### How ThermALERT\* Works

A patented eutectic insert (thermal screw) in a ThermALERT-equipped spindle plug melts if the wheel end reaches abnormally high temperatures, allowing air to escape through the hubcap tee vent and triggering the system's exterior light. In addition, when the driver exits the cab to inspect, an audible signal will be heard at the suspected wheel end. The alert can also be communicated to the cab through the Meritor WABCO PLC Display or to an operations center via a telematic system. See diagram below for more information:

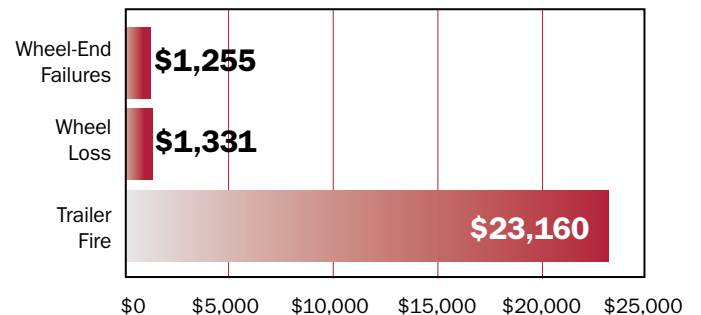
### Additional Advantages of ThermALERT:\*

- A previously melted eutectic insert (thermal screw) can be easily replaced (See MTIS Maintenance Manual 14P for full details)
- Unique thermal-equipped spindle plug utilizing new six-vent hubcaps allows a path for air to escape
- New LED indicator light offers longer life and increases driver visibility and awareness (mounted on trailer exterior)
- New instructional decal provides simple operating guidelines to the driver

\*Patent pending. ThermALERT does not eliminate the need to perform recommended wheel-end maintenance procedures.



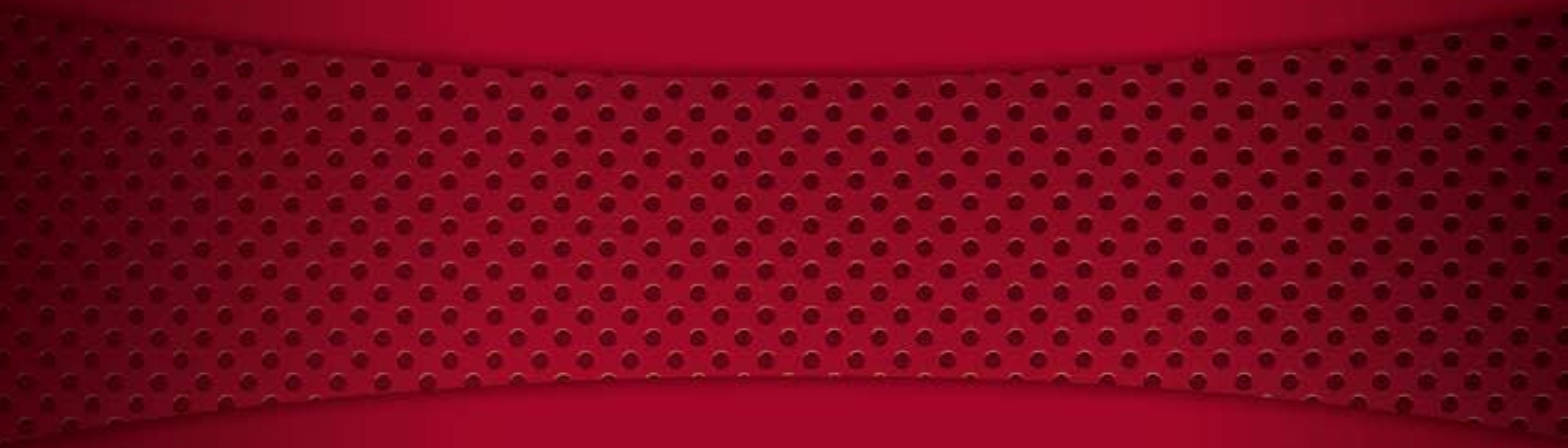
### Average Cost-per-Incident Caused by Excess Heat in Trailer Wheel Ends



SOURCE: 2005 Trucking Industry Research Survey conducted by CK Marketing & Communications.

**Optional PLC Display –** When the system detects a leak, it triggers the optional in-cab PLC Display to indicate a warning while air flows through the hubcap tee vent.

For more information, call our ArvinMeritor customer service team at 800-535-5560 or visit [arvinmeritor.com](http://arvinmeritor.com).



**ArvinMeritor™**

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P.S.I. MTIS is covered by one or more of the following U.S. Patents:  
5,287,906; 5,584,949; 5,797,398;  
5,797,979; 6,698,482; 5,377,736;  
5,538,062; 5,868,881; 6,269,691;  
6,435,238; 6,892,778

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