Nitrogen Tire Inflation Systems

Extend Tire Life • Enhance Safety • Improve Fuel Efficiency • Prevent Under Inflation
**Parker** is the world’s leading diversified manufacturer of motion and control technologies and systems serving many markets.

**Markets Parker serves:**
- Commercial transport
- Military aircraft and missiles
- Regional transports
- General aviation
- Business aircraft
- Helicopters
- Engines
- Power plants/power generation
- Construction machinery
- Automotive
- Agriculture
- Transportation
- Mobile machinery
- Natural resources
- Machine tools
- Aerial lift
- Plastic machinery
- Mining equipment
- Hoists & cranes
- Lawn & garden
- Industrial machinery
- Conveyors
- Pulp & paper
- Metalworking
- Process control
- Printing
- Semiconductor manufacturing
- Packaging
- Mobile air conditioning
- Mobile & industrial generators
- Industrial refrigeration
- Supermarket refrigeration
- Commercial refrigeration
- Residential air conditioning
- Fuel dispensing
- Chemical processing
- Telecommunications
- Information technology
- Marine
- Environmental
- Oil & gas exploration
- Process analytical applications
- Medical & bio/pharmaceutical

**Aerospace**
Control systems and components for aerospace and related high-technology markets. Aviation fuel filtration products.

**Mobile Machinery**
Hydraulic and fluid connector components and complete systems for mobile machinery.

**Food & Beverage**
Pneumatic, electromechanical and connector components plus filtration for automation systems.

**Refrigeration & Air Conditioning**
System-control and fluid-handling components and systems for refrigeration, air-conditioning and industrial equipment.

**Machine Tool**
Rigid and flexible connectors and associated products for pneumatic and fluid systems. Hydraulic & pneumatic components and systems.

**Electronics**
Industrial and commercial sealing devices plus connector and related products.

**Instrumentation**
High-quality critical flow components for process instrumentation, ultra-high-purity, medical and analytical applications.
The Parker Nitrogen Tire Inflation System

- Produces high purity (95-98%) nitrogen from compressed air
- Requires simple wall mount installation (floor standing model also available)
- Allows inflation of up to 68 truck tires per hour
- Requires no storage of nitrogen
- Operates in the low pressure range up to 150 psig
- Inflates tires at the same rate as compressed air
- Includes two stages of high efficiency prefiltration and oil removal filtration
- Extends tire life by up to 25%
- Improves fuel efficiency by up to 3.3%
- Provides more consistent tire pressure
- Prevents auto-ignition of tires
- Eliminates rim corrosion
- Results in tires operating at lower temperature

Features and Benefits

- Auto shut down = less wear and tear on compressor, less energy use
- Complete prefiltration package offering maximum reliability and longest operating life
- Receiver tank optional
- Broad operating temperature range. Nitrogen can be generated automatically, without electricity (and troublesome heaters), in a cold garage bay
- Optional wall mount system, frees up floor space
- No electricity, easy installation
- Membrane does not degrade over time providing consistent high performance throughout life of membrane
- No moving parts, reliable operation
- Simple annual maintenance
- High capacity floor standing model are ideal for high volume dealerships

How does the TireSaver system work?

The benefits of inflating tires with nitrogen as opposed to compressed air have been well known to the tire and transportation industries for many years. In general, tires filled with nitrogen improve tire life, reduce operating costs and improve safety. Until recently, there has not been a convenient, reliable, economic means of providing nitrogen to inflate tires. In the past, nitrogen would be provided in large liquid tankers transferring the nitrogen to large storage vessels or as a gas in high pressure cylinders at 2500 psig.

In recent years membrane technology has been developed to purify air into a stream of high purity nitrogen. This technology is being used to generate nitrogen gas at the point of use for a wide variety of applications including general manufacturing, food processing and packaging, chemical blanketing, and chemical analysis. This same technology is now available for inflating tires with nitrogen.

Hollow fiber membrane technology is used to generate nitrogen on site.
The Parker Nitrogen Tire Inflation Systems

Michelin Supports the use of nitrogen based on its ability to better retain pressure over a period of time.

Goodyear says 15% under-inflation = 8% less tread mileage and 2.5% decrease in fuel economy.
- Goodyear Radial Truck Tire and Retread Service Manual, Pg. 40

Pirelli says 20% under-inflation = 15% shorter tire life.

United States Department of Energy says the United States loses over 2 million gallons of fuel each day due to under-inflation.

TMC (Technology & Maintenance Council of the American Trucking Association) says that about 90% of tire failures causing tire road debris is caused by under-inflation.
- TMC Tire Air Pressure Study, May 2002

Bridgestone says air inflated tires lost an average of 2.7 psi per month and nitrogen inflated tires lost an average of 0.7 psi per month.
- Guy Walenga, Clemson Tire Conference, March, 2004

What Industry Leaders Say:
### Principal Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>TS021</th>
<th>TS051</th>
<th>TS076</th>
<th>TS123</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen Purity</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Nitrogen Capacity</td>
<td>2.1 SCFM</td>
<td>5.1 SCFM</td>
<td>7.6 SCFM</td>
<td>12.3 SCFM</td>
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<tr>
<td>Inlet pressure</td>
<td>145 psig</td>
<td>145 psig</td>
<td>145 psig</td>
<td>145 psig</td>
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<tr>
<td>Ambient temperature</td>
<td>68°F</td>
<td>68°F</td>
<td>68°F</td>
<td>68°F</td>
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<tr>
<td>Tire Inflation Capacity</td>
<td>36 tires/hour</td>
<td>87 tires/hour</td>
<td>130 tires/hour</td>
<td>200 tires/hour</td>
</tr>
<tr>
<td>Auto Tire(1) (195/65R15 size)</td>
<td>N/A</td>
<td>10 tires per hour</td>
<td>15 tires/hour</td>
<td>24 tires/hour</td>
</tr>
<tr>
<td>Truck Tire(1) (295/75R22.5 size)</td>
<td>-50°F</td>
<td>-50°F</td>
<td>-50°F</td>
<td>-50°F</td>
</tr>
<tr>
<td>Ambient Operating Temperature</td>
<td>33°F - 110°F</td>
<td>33°F - 110°F</td>
<td>33°F - 110°F</td>
<td>33°F - 110°F</td>
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<tr>
<td>Compressed Air Pressure Required</td>
<td>100 - 145 psig</td>
<td>145 - 189 psig</td>
<td>145 - 189 psig</td>
<td>145 - 189 psig</td>
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<tr>
<td>Maximum Compressed Air Pressure</td>
<td>145 psig (10 bar)</td>
<td>189 psig (13 bar)</td>
<td>189 psig (13 bar)</td>
<td>189 psig (13 bar)</td>
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<tr>
<td>Compressed Air Temperature Range</td>
<td>50°F - 104°F</td>
<td>50°F - 104°F</td>
<td>50°F - 104°F</td>
<td>50°F - 104°F</td>
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<tr>
<td>Compressed Air Consumption</td>
<td>5.5 SCFM</td>
<td>13 SCFM</td>
<td>20 SCFM</td>
<td>31 SCFM</td>
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<tr>
<td>Compressed Air Pre-filtration</td>
<td>Two Stages</td>
<td>Four Stages Including Carbon Filtration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activated Carbon Filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall Mount Generator Dimensions</td>
<td>58&quot;h x 17&quot;w x 12&quot;d</td>
<td>58&quot;h x 17&quot;w x 12&quot;d</td>
<td>58&quot;h x 17&quot;w x 12&quot;d</td>
<td>58&quot;h x 17&quot;w x 12&quot;d</td>
</tr>
<tr>
<td>Tank/Floor Mount Generator Dimensions</td>
<td>75&quot;h x 25&quot;w x 31&quot;d</td>
<td>75&quot;h x 25&quot;w x 31&quot;d</td>
<td>75&quot;h x 25&quot;w x 31&quot;d</td>
<td>75&quot;h x 25&quot;w x 31&quot;d</td>
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<tr>
<td>Portable Generator Dimensions</td>
<td></td>
<td>60&quot;h x 23&quot;w x 26&quot;d</td>
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<tr>
<td>Wall Mt. Generator Wt.</td>
<td>200 lb.</td>
<td>200 lb.</td>
<td>200 lb.</td>
<td>200 lb.</td>
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<tr>
<td>Floor Mt. Generator Wt</td>
<td>400 lb.</td>
<td>400 lb.</td>
<td>400 lb.</td>
<td>400 lb.</td>
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<tr>
<td>Inlet/Outlet Connection</td>
<td>1/2&quot; NPT/1/2&quot; NPT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise Level</td>
<td>&lt;45dBA</td>
<td>&lt;45dBA</td>
<td>&lt;45dBA</td>
<td>&lt;45dBA</td>
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<tr>
<td>Required Maintenance</td>
<td>Annual Filter Element Change</td>
<td>Annual Filter Element Change</td>
<td>Annual Filter Element Change</td>
<td>Annual Filter Element Change</td>
</tr>
<tr>
<td>Application</td>
<td>Motorcycle and Auto Tires</td>
<td>Auto Tires &amp; Light Truck</td>
<td>Truck Tires</td>
<td>Truck Tires</td>
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</tbody>
</table>

### Ordering Information - Nitrogen Generators

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Mount without tank(4)</td>
<td>TS021-000000</td>
</tr>
<tr>
<td>with Commercial POP(2) &amp; with Retail POP(3)</td>
<td>TS021-0000C</td>
</tr>
<tr>
<td>with 30 gal. tank</td>
<td>TS021-0000B0</td>
</tr>
<tr>
<td>with Commercial POP(2) &amp; with Retail POP(3)</td>
<td>TS021-0000BC</td>
</tr>
<tr>
<td>with Commercial POP(2) &amp; with Retail POP(3)</td>
<td>TS021-0000AC</td>
</tr>
<tr>
<td>with Commercial POP(2) &amp; with Retail POP(3)</td>
<td>TS021-0000AR</td>
</tr>
<tr>
<td>with Commercial POP(2) &amp; with Retail POP(3)</td>
<td>TS021-0000AO</td>
</tr>
<tr>
<td>Nitrogen Generator Portable with Retail POP</td>
<td>TS01P-00BCBR</td>
</tr>
</tbody>
</table>

**Notes:**

1. Nominal value based on a single inflation from 0 psig with valve stem removed. Actual results depend on operating pressure, inflation pressure, hose length, and other factors.
2. See page 7 for details on Commercial POP Package.
3. See page 7 for details on Retail POP Package.
4. Wall Mount requires at least a 30 gallon tank. TS-30G Tank Mount includes 60 gallon tank, Floor Standing includes 30 gallon tank.
Retail Tire Dealer Accessories

**Retail Tire Dealer Components**
*Included in TS-SRTD*

- **#B04-0155**: Green Tire Valve Caps for Autos
  - 400 pcs
- **#TS-UB8**: Banner for Retail Tire Dealers
  - 1 pcs
  - Dimensions: 24" x 96"
- **#Tricar**: Trifold Product Brochure for Retail Tire Fleet Dealers
  - 200 pcs
  - Dimensions: 3.75" x 8.5"
- **#TS-carlabel**: Static Cling Windshield Labels for Autos
  - 250 pcs
  - Dimensions: 2.25" x 1.5"
- **#TS-ButtonCar**: "Ask Me About Nitrogen" Buttons
  - 5 pcs
  - Diameter: 2.25"
- **#TS-Postcar**: Retail Tire Dealer Poster
  - 1 pcs
  - Dimensions: 24" x 30"
- **#TS-Displaycar**: Countertop Display for Retail Tire Dealers
  - 1 pcs with 200 #Tricar
  - Dimensions: 9.5" x 15.5"

For Assistance Call 1-800-343-4048 or, go to www.parkertiresaver.com
Commercial Tire Dealer Accessories

Commercial Tire Dealer Components Included in TS-SCTD

#A05-0056: Green Tire Valve O-Rings for Trucks
400 pcs

#TS-UB8: Banner for Commercial Tire Dealers
1 pcs
Dimensions: 24" x 96"

#Trifleet: Trifold Product Brochure for Commercial Tire Fleet Dealers
200 pcs
Dimensions: 3.75" x 8.5"

#TS-Trklabel: Adhesive Backed Label for Trucks
200 pcs
Dimensions: 2.75" x 3.75"

#TS-ButtonCar: "Ask me About Nitrogen" Buttons
5 pcs
Diameter: 2.25"

#TS-Displaytrk: Countertop Display for Commercial Tire Dealers
1 pcs with 200 #Trifleet
Dimensions: 9.5" x 15.5"

#TS-Posttrk: Commercial Tire Dealer/Fleet Poster
1 pcs
Dimensions: 24" x 30"

For Assistance Call 1-800-343-4048 or, go to www.parkertiresaver.com
# High Volume Nitrogen Inflation System

## Principal Specifications and Ordering Information

### Principal Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>TS20F</th>
<th>TS34F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen Purity</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Nitrogen Capacity</td>
<td>19.9 SCFM</td>
<td>34 SCFM</td>
</tr>
<tr>
<td>Inlet pressure</td>
<td>145 psig</td>
<td>145 psig</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>68°F</td>
<td>68°F</td>
</tr>
<tr>
<td>Tire Inflation Capacity</td>
<td>N/A (195/65R15 size)</td>
<td>N/A (295/75R22.5 size)</td>
</tr>
<tr>
<td>Truck Tire(1)</td>
<td>38 tires/hour</td>
<td>68 tires/hour</td>
</tr>
<tr>
<td>Nitrogen Dewpoint</td>
<td>-50°F</td>
<td>-50°F</td>
</tr>
<tr>
<td>Ambient Operating Temperature</td>
<td>33°F - 110°F</td>
<td>33°F - 110°F</td>
</tr>
<tr>
<td>Compressed Air Pressure Required</td>
<td>145 - 189 psig</td>
<td>145 - 189 psig</td>
</tr>
<tr>
<td>Maximum Compressed Air Pressure</td>
<td>189 psig (13 bar)</td>
<td>189 psig (13 bar)</td>
</tr>
<tr>
<td>Compressed Air Temperature Range</td>
<td>50°F - 104°F</td>
<td>50°F - 104°F</td>
</tr>
<tr>
<td>Compressed Air Consumption</td>
<td>46 SCFM</td>
<td>88 SCFM</td>
</tr>
<tr>
<td>Pre-filtration Activated Carbon Filter</td>
<td>Four Stages Including Carbon Filtration</td>
<td></td>
</tr>
<tr>
<td>Wall Mount Generator Dimensions</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Tank/Floor Generator Dimensions</td>
<td>69&quot;hx24&quot;wx20&quot;d</td>
<td>69&quot;hx24&quot;wx20&quot;d</td>
</tr>
<tr>
<td>Wall Mt. Generator Wt.</td>
<td>400 lb.</td>
<td>422 lb.</td>
</tr>
<tr>
<td>Floor Mt. Generator Wt.</td>
<td>3/4&quot; NPT/1/2&quot; NPT</td>
<td>3/4&quot; NPT/1/2&quot; NPT</td>
</tr>
<tr>
<td>Noise Level</td>
<td>&lt;45dBA</td>
<td>&lt;45dBA</td>
</tr>
<tr>
<td>Required Maintenance</td>
<td>Annual Filter</td>
<td>Annual Filter</td>
</tr>
<tr>
<td></td>
<td>Element Change</td>
<td>Element Change</td>
</tr>
<tr>
<td></td>
<td>Annual Carbon Change</td>
<td>Annual Carbon Change</td>
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<tr>
<td>Application</td>
<td>Truck Tires</td>
<td>Truck Tires</td>
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### Ordering Information - Nitrogen Generators

<table>
<thead>
<tr>
<th>Floor Standing(4) with Commercial POP(2) with Retail POP(3)</th>
<th>TS20F</th>
<th>TS34F</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS20F-C</td>
<td>TS34F-C</td>
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</tr>
<tr>
<td>TS20F-R</td>
<td>TS34F-R</td>
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</tbody>
</table>

### Notes:

1. Nominal value based on a single inflation from 0 psig with valve stem removed. Actual results depend on operating pressure, inflation pressure, hose length, and other factors.
2. See page 7 for details on Commercial POP Package.
3. See page 7 for details on Retail POP Package.
4. Wall Mount requires at least a 30 gallon tank, TS-30G Tank Mount includes 60 gallon tank, Floor Standing includes 30 gallon tank.
5. Not available on Model TS051-00BCBR.
Automatic Tire Inflation

Safe, Accurate, and Easy Operation

- Indoor or outdoor use
- Inflates 1 to 4 tires simultaneously
- Accurate to within .3 psi
- Ideal complement to the TireSaver Nitrogen Inflation System
- Save time and money
- Free up technician's time
- Extend tire life
- Increase vehicle performance
- Increase gas mileage
- The inflator is designed to allow service technician to back-away during tire inflation
- Includes 4 hoses and manifold

Principal Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>TS89XDB-G</th>
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</thead>
<tbody>
<tr>
<td>Min/Max Inlet Air Pressure</td>
<td>5 psig/145 psig</td>
</tr>
<tr>
<td>Operating Range</td>
<td>5 psi - 145 psi (other ranges available)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>14°F - 122°F</td>
</tr>
<tr>
<td></td>
<td>(-4°F - 122°F with optional heater)</td>
</tr>
<tr>
<td>Materials of Construction</td>
<td>Die Cast Aluminum</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>110V a.c.</td>
</tr>
<tr>
<td>Unit of measurement</td>
<td>1 psi</td>
</tr>
<tr>
<td>Dimensions</td>
<td>11”h x 10.25”w x 4.25”d</td>
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<tr>
<td>Shipping Weight</td>
<td>19 lbs.</td>
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Ordering Information

<table>
<thead>
<tr>
<th>Automatic Tire Inflator</th>
<th>TS89XDB-G</th>
</tr>
</thead>
</table>
Parker Mobile TireSaver™ Nitrogen Inflation System for Use on Service Trucks

Generate Nitrogen On Demand

- Service breakdowns and blowouts
- Provide value added service
- Convert fleets to nitrogen at the fleet yard
- Achieve consistent tire pressure
- Prevent under inflation
- Tires run cooler
- Reduce blowouts
- Extend tire life
- Reduce tire maintenance
- Improve retread casing quality
- Improve efficiency

Model MTS06

High capacity output for rapid inflation

Designed for extreme conditions, -30°F to 120°F

Complete system for quick, easy installation

Rugged weather proof system

Small, compact unit takes up minimal space

No operator attention required

Service truck with a Parker TireSaver Nitrogen Inflation System on the bed
### Principal Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>MTS06</th>
<th>MTS12</th>
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</thead>
<tbody>
<tr>
<td>Nitrogen Purity</td>
<td>95%</td>
<td>95%</td>
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<tr>
<td>Nitrogen Capacity</td>
<td>6 SCFM</td>
<td>12 SCFM</td>
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<tr>
<td>Nitrogen Output Dewpoint</td>
<td>&lt;40°F pressure dewpoint</td>
<td>&lt;40°F pressure dewpoint</td>
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<tr>
<td>Delivery Output Pressure</td>
<td>10 psi minus inlet pressure</td>
<td>20 psi minus inlet pressure</td>
</tr>
<tr>
<td>Min/Max Inlet Air Pressure</td>
<td>145 psig/175 psig</td>
<td>145 psig/175 psig</td>
</tr>
<tr>
<td>Min/Max Inlet Air Temperature</td>
<td>40°F/250°F</td>
<td>40°F/250°F</td>
</tr>
<tr>
<td>Inlet Air Requirement</td>
<td>16 scfm</td>
<td>32 scfm</td>
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<tr>
<td>Min/Max Ambient Temperature</td>
<td>-30°F/120°F**</td>
<td>-30°F/120°F**</td>
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<tr>
<td>Electrical Requirements</td>
<td>Voltage 12 VDC</td>
<td>Voltage 12 VDC</td>
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<tr>
<td>Current Draw</td>
<td>6.5 Amps</td>
<td>Current Draw 13 Amps</td>
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<tr>
<td>Inlet/Outlet Connection</td>
<td>1/2” FNPT/1/2” FNPT</td>
<td>1/2” FNPT/1/2” FNPT</td>
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<tr>
<td>Dimensions</td>
<td>42.5”h x 28.7”w x 11.5”d</td>
<td>42.5”h x 28.7”w x 11.5”d</td>
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<tr>
<td>Net Weight</td>
<td>200 lb.</td>
<td>220 lb.</td>
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<tr>
<td>Tire Inflation Capacity</td>
<td>12 tires/hour (295/75R22.5 size)</td>
<td>24 tires/hour (295/75R22.5 size)</td>
</tr>
<tr>
<td>(295/75R22.5 size)</td>
<td>90 tires per hour (195/65R15 size)</td>
<td>180 tires per hour (195/65R15 size)</td>
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### Ordering Information

<table>
<thead>
<tr>
<th>Nitrogen Generator</th>
<th>MTS06</th>
<th>MTS12</th>
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<tbody>
<tr>
<td>Maintenance Kit*</td>
<td>MK-MTS</td>
<td>MK-MTS</td>
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</table>

*Maintenance Kit includes filter elements and carbon bed for annual change.

**120°F Max Temp, intermittent use only. 110°F Max. Temp. for continuous use.

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**Bring Nitrogen to Your Fleet**

Nitrogen is a dry, inert gas used to inflate airplane tires, off-road truck tires, military vehicle tires and race car tires. When tires are inflated with compressed air, oxygen in the air permeates through the wall of the tire reducing the tire's inflation pressure and causing premature aging. Dry nitrogen will permeate more slowly through the tire. Inflating your fleet tires with nitrogen will improve safety and performance while reducing operating costs.
Why Use Nitrogen?

Nitrogen is a dry, inert gas used to inflate airplane tires, off-road truck tires, military vehicle tires, and race car tires for improved performance. Oxygen in compressed air permeates through the wall of the tire, thus reducing the tire's inflation pressure. During its journey through the tire wall, oxygen oxidizes the rubber compounds in the tire, causing under-inflation and deterioration of the rubber. Dry nitrogen will maintain proper inflation pressure and will prevent auto-ignition, will not corrode rims, and will help the tire to run cooler. The result is increased safety and reduced operating cost.

Improved Tire Life

Nitrogen will help to extend tire life by reducing premature failure of the tire.

The causes of premature tire failure which are affected by oxygen include:

- Rubber deterioration by oxidation
- Rim corrosion
- Under-inflation
- Overheating
- Pressure increase due to heat build up
- Uneven wear due to improper inflation

Experts in the tire industry indicate that oxidative aging is one of the primary causes of limited tire life. Oxidative aging is caused by the diffusion of air from the pressurized air cavity of the tire to the outside atmosphere. Tests have shown that if tires are inflated with nitrogen, there is a significant reduction in tire failure.
Reduced Operating Cost

Tires are one of the primary costs of operating a fleet of vehicles. Tire costs include procurement, maintenance and the cost of blowouts.

A typical truck tire with two retreads costs $480.00 and lasts approximately 270,000 miles. Inflating tires with nitrogen will help to prevent premature casing failure and allow tires to be retread multiple times, with confidence and reliability. Inflating tires with nitrogen to eliminate oxidative aging might extend tire life by up to 25%. Increasing tire life to 337,500 miles would save $120 per tire. A fleet with 50 trucks and 900 wheel positions would save over $100,000 in tire cost by inflating with nitrogen.

The primary cost of maintaining tires is the cost of labor to check tire pressures and top off tires with compressed air on a periodic basis. Tire pressure must be checked and the tires topped off due to the diffusion of air through the tire. Tires filled with nitrogen will not experience this diffusion and resulting loss of pressure. Tires filled with nitrogen maintain pressure for a much longer period of time than tires filled with air. If a truck fleet conducts preventative maintenance on 5 trucks per day and presently spends 30 minutes per truck topping off tires, they could realize savings of $31,250 per year based on a labor rate of $50 per hour and 250 work days per year, by inflating tires with nitrogen.

The cost of a service call to repair a blowout can be $500 or more. Consider the hidden costs of a blowout:

- Penalties for delayed product delivery
- Spoilage of product
- Driver idle time
- Cost of lost production or lost revenue from having the truck out of service
- Extra travel time for a mechanic
- Extra repair time due to field conditions
- Damage of associated parts
- Refunds of shipping costs
- Loss of goodwill
- Overhead costs

Enhanced Safety for Vehicles

The most significant benefit of filling tires with nitrogen on automobiles is enhanced safety. Underinflation of tires due to the diffusion of air through the tire was identified as a significant cause of recent tire failures. In fact, the TREAD Act recently passed by the US Congress requires the National Highway and Transportation Safety Administration (NHTSA) to develop an on board warning of low tire pressure in all automobiles.

A recent article from the Wall Street Journal states:

“One thing government and tire-industry officials agree on is the importance of keeping tires properly inflated. The risks of underinflation, which stresses tires by causing their sidewalls to flex more and the air temperature inside to rise, were highlighted during congressional hearings two years ago into the Firestone tire problems. Underinflation was identified as a factor in the failure of Firestone tires.”


Reaction from Fleet Owners:

“I don’t have to waste time during routine maintenance topping off tires, just a quick check does it. It’s a real timesaver.”
- Long Haul Fleet Owner

“Nitrogen eliminated an uneven wear problem we had with our vehicles.”
- Chief of Police

“As a result of filling tires with nitrogen, we save about one half hour per PM for each truck.”
- Long Haul Fleet Owner
Commercial airlines have used nitrogen tire inflation for years for consistent inflation pressure and minimized oxidation of rubber compounds.

Race cars and motorcycles use nitrogen in tires for improved, consistent handling and reduced operating temperatures.

Off-road construction vehicles use nitrogen tire inflation to achieve consistent tire pressure and to prevent auto ignition.

Truck fleets can use nitrogen tire inflation to improve fuel efficiency, extend tire life and reduce the frequency of blowouts.

Automobiles use nitrogen tire inflation to improve safety and extend tire life.

Parker Hannifin is the global leader in supply of nitrogen generator technology for inflation of tires. Parker’s success includes:

- 350 Automobile service garages in Germany
- Volvo Netherlands uses nitrogen for tire inflation
- The largest taxi company in the world uses the Parker Nitrogen Generator for tire inflation
- Leading garage equipment manufacturers worldwide use Parker membranes
- More than 4000 units in service worldwide
- Nitrogen and Parker nitrogen generators have been used successfully for years to inflate tires used on automobiles, trucks, race cars, military vehicles, airplanes and off road construction vehicles.
# Filtration Group Technical Sales & Service Locations

## Filtration Group North America

### Filtration and Separation Division
242 Neck Rd., P.O. Box 8223
Haverhill, MA 01835-0723
Phone: (978) 858-0505
Fax: (978) 556-7510

Baltimore, MD
Phone: (410) 792-2330
Oxford, MI
Phone: (248) 628-6400

### Hydraulic Filter Division
16810 Fulton County Road #2
Metamora, OH 43540-9714
Phone: (419) 644-4311
Fax: (419) 644-6205

### Process Filtration Division
6410 Intech Boulevard
Indianapolis, IN 46278
Phone: (317) 275-8300
Fax: (317) 275-8413

Tell City, IN
Phone: (812) 547-2371

### Racor Division
3400 Finch Road
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Modesto, CA 95353
Phone: (209) 521-7860
Fax: (209) 529-3278

Beaufort, SC
Phone: (843) 846-3200
Henryetta, OK
Phone: (918) 451-7299
Holly Springs, MS
Phone: (662) 252-2656

## Filtration Group Europe

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The Netherlands
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England
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Filtration Group
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Hwaseong-city
Gyeonggi-do, 445-813, Korea
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## Filtration Group Latin America

Parker Hannifin Ind. e Com. Ltda.
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Brazil
Phone: +55 (12) 40093500
Fax: +55 (12) 40093519

Mexican Sales Office
Ant. Camino a San Lorenzo No. 338
Col. Zona Industrial, C.P. 50010
Toluca, Edo. De Mexico
Phone: 722-272-2222, Ext. 246, 247
Fax: 722-272-2168

## Pan American Division

7400 N.W. 19th Street, Suite A
Miami, Florida 33126
Phone: 305-470-8800
Fax: 305-470-8808

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# Parker Worldwide Sales Offices

Contact Parker's worldwide service and distribution network by calling:

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<thead>
<tr>
<th>Argentina</th>
<th>+54 (11) 4752 4129</th>
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<tbody>
<tr>
<td>Australia</td>
<td>+61 (2) 9 634 7777</td>
</tr>
<tr>
<td>Austria</td>
<td>+43-2622-23501-0</td>
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<tr>
<td>Belgium</td>
<td>+32 (67) 280900</td>
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<td>Brazil</td>
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<tr>
<td>Canada</td>
<td>1-800-272-7537</td>
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<td>Central &amp; South</td>
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<tr>
<td>America/Caribbean</td>
<td>1-305-470-8800</td>
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<tr>
<td>China</td>
<td>+86 (21) 6445 9393</td>
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<tr>
<td>Czech Republic</td>
<td>42-0-2-830-85-221</td>
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<td>Denmark</td>
<td>45-0-43-56-04-00</td>
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<tr>
<td>Finland</td>
<td>+358 (0)3 54100</td>
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<td>France</td>
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<td>Germany</td>
<td>49-0-2131-513-350</td>
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<tr>
<td>Hong Kong</td>
<td>+852 (2) 428 8008</td>
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<tr>
<td>Hungary</td>
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<td>India</td>
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<td>Italy</td>
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<td>Jordan</td>
<td>(962) (6) 810679</td>
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<td>Korea</td>
<td>82-41-583-1410</td>
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<td>Korea Chungnam</td>
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<td>Korea Seoul</td>
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<td>Malaysia</td>
<td>60-3-5638-1476</td>
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<td>Mexico</td>
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<tr>
<td>Netherlands</td>
<td>31-0-541-585000</td>
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<tr>
<td>New Zealand</td>
<td>+64 (9) 573 1523</td>
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<td>Norway</td>
<td>47-64-91-1000</td>
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<tr>
<td>Poland</td>
<td>48-22-863-4942</td>
</tr>
<tr>
<td>Singapore</td>
<td>+65 6281 5233</td>
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<tr>
<td>South Africa</td>
<td>+27 (11) 392 7280</td>
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<tr>
<td>Spain</td>
<td>+34 (91) 675 7300</td>
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<tr>
<td>Sweden</td>
<td>46-8-5979-5000</td>
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<tr>
<td>Switzerland</td>
<td>41-0-22-307-7111</td>
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<tr>
<td>Taiwan</td>
<td>+886 (2) 2298 8987</td>
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<tr>
<td>Thailand</td>
<td>+662 693 3304</td>
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<tr>
<td>United Arab Emirates</td>
<td>971-2-6788587</td>
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<td>United Kingdom</td>
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<td>USA</td>
<td>1-800-272-7537</td>
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<td>Venezuela</td>
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</tbody>
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Note: The (+) sign in front of the country code indicates that you may need to dial an additional prefix.

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