LEVEL LOAD AIR MANAGEMENT SYSTEM OVERVIEW

AIR SUSPENSION
- The Benefits of Air Springs
- Air Spring and Kit Features
- Air Spring Application Guide
  - Chevrolet/GMC
  - Dodge/Ram
  - Ford
  - Freightliner
  - Mazda
  - Mercedes
  - Nissan
  - Sterling
  - Toyota
  - Universal Fit
- Spacer Kits

IN-CAB CONTROLS
- Mechanical Gauge
  - Premium In-Cab Control Kits
  - Basic Electrical In-Cab Control Kits
- Digital Gauge
  - Premium In-Cab Control Kits
  - Basic Electrical In-Cab Control Kits

ONBOARD AIR MANAGEMENT SYSTEMS
- Onboard Air Features
- Onboard Air Kits
- LL-325 Series Air Compressor Kits
- LL-625 Series Air Compressor Kits
- Compressor Mounting Brackets
- Air Tank: Kits & Accessories

COMPONENTS AND SPECIFICATIONS
- Air Spring Specifications
  - Single Convoluted Air Spring
  - Double Convoluted Air Spring
  - Roll Plates
  - Spacer Kits
  - Hardware Specs
  - Sleeve Style Air Spring
  - In-Coil Air Spring
- In-Cab Controls Specifications
  - In-Cab Control Gauge Assembly
  - Mechanical Air Gauges
  - Digital Air Gauges
  - Paddle Valve Switches
  - Electrical Switches
  - Brackets
- Solenoid Specifications
  - 3-Way, 2-Position
  - 4-Way, 2-Position
  - 3-Way, 2-Position
- Onboard Air Specifications
  - LL-325 Series Compressor
  - LL-625 Series Compressor
  - Steel Air Tanks (½, 2½, 5 Gallon)
  - Aluminum Air Tanks (½, 2½, 5 Gallon)
- Pneumatic & Hydraulic Fittings
  - Push-to-Connect Fittings
  - Hose Barb Fittings
  - Pipe Fittings
  - SAE 45° Flare Fitting
  - Compression Fitting
  - JIC (SAE 37°) Flare Fitting
  - ISO 6149 Fittings
  - Check Valves & Quick Exhaust Valves
  - SAE 100R5 End Fittings
  - SAE 100R5 Medium Pressure Hydraulic Hose
- Airline Tubing

FREQUENTLY ASKED QUESTIONS
MAINTENANCE TIPS
WARRANTY
**LEVEL LOAD SYSTEM OVERVIEW**

Level Load offers a range of air management products. Our adjustable air springs can be used to custom-level your truck’s stance, adding support from front-to-back & side-to-side. You can inflate them manually or add an in-cab control kit which allows you to control your air spring with the touch of a button. If you require more air for your air springs (or other pneumatic accessories) you can add one of our onboard air kits which allows you to compress and store pressurized air.

**STAGE 1: AIR SUSPENSION**

Level Load offers a variety of air spring solutions. Check our application guide to find the best system for your vehicle (see page 5). With the addition of a Standen’s air spring kit, you can inflate your air springs enough to support your vehicle’s load without overtaxing its suspension, resulting in a level stance, comfortable ride and stable handling.

**STAGE 2: IN-CAB CONTROLS**

Operate your Standen’s air springs (or other pneumatic accessories) from the driver’s seat with Level Load in-cab controls. Various dash activation switch kits are available depending on your air spring and accessory requirements (see page 12).

**STAGE 3: ONBOARD AIR**

Onboard air (OBA) gives you the ability to compress and store pressurized air on your vehicle. Standen’s offers air management components, pre-made OBA kits and customized OBA kits. All kits come complete with compressor(s), air tank, fittings, pressure switch, relay(s), electrical connectors and all applicable accessories (see page 17).
Adjustable Air Springs

Use the strongest air springs on the market to eliminate your vehicle’s sag, sway and bottoming out. Level your truck’s stance while providing added support for an overall smoother, safer ride.

- Protect Your Load
- Improve Traction
- Reduce Suspension Fatigue
- Manage Unbalanced Loads
- Restore Vehicle Ride Height
- Level Headlight Alignment
- Eliminate Bottoming Out
- Better Braking
- Minimize Tire Wear
- Improve Steering
- Peace of Mind

ADJUSTABLE AIR SPRING SOLUTIONS FOR COMMON TOW/HAUL PROBLEMS

www.standens.com
LEVEL LOAD AIR SUSPENSION KITS HAVE NO EQUAL

LEVEL LOAD: THE #1 SOLUTION FOR YOUR TOW/HAUL PROBLEM

Your truck’s suspension was designed as a compromise between capacity and comfort. So when you haul heavy loads or pull a trailer, the rear springs can be pushed to their limit resulting in excessive bounce, sagging ride height, and an overall feeling of instability.

It doesn’t have to be this way. With the simple addition of a Standen’s air suspension kit, you can eliminate overtaxing your suspension by providing the extra support of an inflated air spring, resulting in a level stance, comfortable ride and stable handling.
HEAVY DUTY DESIGN & BUILD

Your truck's suspension was designed as a compromise between capacity and comfort. So when you haul heavy loads or pull a trailer, the rear springs can be pushed to their limit resulting in excessive bounce, sagging ride height, and an overall feeling of instability.

It doesn't have to be this way. With the simple addition of a Standen's air suspension kit, you can eliminate overtaxing your suspension by providing the extra support of an inflated air spring, resulting in a level stance, comfortable ride and stable handling.

**Applications vary. Kits containing LL-10068 Rated to 5320 lbs. Never exceed manufacturer’s recommended Gross Vehicle Weight Rating.**

**RATED UP TO 5,000 LBS.**

---

**Kit Features**

- Plated roll plates for corrosion resistance
- Grade 5 plated hardware*
- Precision laser cut plate, powder coated steel brackets

*Where applicable
# REPLACEMENT AIR SPRING

Vehicle Modification Required | Air Spring Style | Suggested Installation Time | DC | Double Convoluted | SS | Sleeve Style | IC | In-Coil
---|---|---|---|---|---|---|---|---
* | THE LL-10033 KIT REQUIRES 6" BETWEEN THE TIRE AND FRAME | | | | | | | |
** | WILL ONLY FIT WITH STOCK WHEELS AND TIRES | | | | | | | |
*** | FOR “C” CHANNEL FRAMES | | | | | | | |
**** | FOR HYDRO FORMED FRAMES | | | | | | | |
† | SEE MANUAL LINKED TO KIT OR CONTACT STANDENS FOR SPECIFIC SUB-MODEL APPLICATIONS | | | | | | | |
Δ | IF THE FRAME TO AXLE PAD DISTANCE IS 7.25" OR LESS, USE KIT HP10120 | | | | | | | |
†† | THE LL-10002 KITS FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 4WD VEHICLES | | | | | | | |
‡‡ | THE LL-10089 KITS WILL NOT FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 2WD VEHICLES | | | | | | | |
‡‡‡ | FOR ALL TRUCKS, INCLUDING THOSE WITH 5th WHEEL HITCHES. NOT FOR CHASSIS CAB TRUCKS | | | | | | | |
‡‡‡‡ | FOR ALL TRUCKS, INCLUDING THOSE WITH 5th WHEEL HITCHES. NOT FOR CHASSIS CAB TRUCKS | | | | | | | |
‡‡‡‡ | THE LL-10002 KITS FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 4WD VEHICLES | | | | | | | |
‡‡‡‡| THE LL-10089 KITS WILL NOT FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 2WD VEHICLES | | | | | | | |
‡‡‡‡ † † | LL-10019 KITS FIT WITH A REESE 5th WHEEL RAIL KIT (MODELS 30033, 30035 & 30729) | | | | | | | |
‡‡‡‡ † † † | LL-10070 KITS FIT WITH A DRAW TITE 15000 5th WHEEL HITCH | | | | | | | |
# Air Spring Application Guide

## Chevrolet Silverado/GMC Sierra 2500 continued

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
</table>
| SIERRA/SILVERADO 2500HD (2WD / 4WD) | 2001-2010 | LL-10005 | DC | Inside | No | 2 Hrs | LL-10000D
| SIERRA/SILVERADO 2500 (2WD / 4WD) | 2011-2017 | LL-10171 | DC | Inside | No | 2½ Hrs | LL-10000D

## Chevrolet Silverado/GMC Sierra 3500

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
</table>
| C-30 (2WD) | 1973-1987 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D
| C-30 (2WD) | 1973-1987 | LL-10033 | SS | Outside | Yes | 2½ Hrs | LL-10001
| K-30 (4WD) | 1973-1987 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D
| SIERRA/SILVERADO K/C 3500 (2WD / 4WD) | 1988-2000 | LL-10088 | DC | Inside | Yes | 3 Hrs | LL-10000D
| SIERRA/SILVERADO 2500HD 3500 (2WD / 4WD) | 2001-2010 | LL-10005 | DC | Inside | No | 2 Hrs | LL-10000D
| SIERRA/SILVERADO 3500 (2WD / 4WD) | 2011-2017 | LL-10171 | DC | Inside | No | 2½ Hrs | LL-10000D

## Chevrolet/GMC Motorhomes (Class C Vans)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
</table>
| CLASS C MOTORHOME G3500 (2WD) Dual rear wheels | 2013-2015 | LL-10227 | SC | Inside | No | 2 Hrs | LL-10083
| CLASS C MOTORHOME G4500 (2WD) Dual rear wheels | 2013-2015 | LL-10227 | SC | Inside | No | 2 Hrs | LL-10083

## Dodge/Ram

### Dodge SUVs

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
</table>
| RAM CHARGER (2WD / 4WD) | 1974-1993 | LL-10033 | SS | Outside | Yes | 2½ Hrs | LL-10001

### Dodge Pickup Trucks

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
</table>
| DAKOTA (4WD) | 1987-2004 | LL-10033 | SS | Outside | Yes | 2½ Hrs | LL-10001
| DAKOTA (2WD / 4WD) | 2005-2011 | LL-10220 | SS | Outside | Yes | 2½ Hrs | LL-10001
| DAKOTA RT (2WD) | 2000-2001 | LL-10033 | SS | Outside | Yes | 2½ Hrs | LL-10001
| W-100 (2WD / 4WD) HEAVY LOADS | 1969-1993 | LL-10033 | DC | Outside | Yes | 3 Hrs | LL-10000D
| W-100 (2WD / 4WD) | 1969-1993 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D
| D-150, W-150 (2WD / 4WD) HEAVY LOADS | 1969-1993 | LL-10033 | DC | Outside | Yes | 3 Hrs | LL-10000D
| D-150, W-150 (2WD / 4WD) | 1969-1993 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D
| D-250, W-250 (2WD / 4WD) | 1969-1993 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D
| D-350, W-350 (2WD / 4WD) | 1969-1993 | LL-10019 | DC | Outside | Yes | 3 Hrs | LL-10000D

### Ram 1500

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>SUGGESTED INSTALLATION TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPLACEMENT AIR SPRING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VEHICLE MODIFICATION REQUIRED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIR SPRING STYLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC DOUBLE CONVOLUTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS SLEEVE STYLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC SINGLE CONVOLUTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC IN-COIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* THE LL-10033 KIT REQUIRES IF BETWEEN THE TIRE AND FRAME
** WILL ONLY FIT WITH STOCK WHEELS AND TIRES
*** FOR ‘C’ CHANNEL FRAMES
**** FOR HYDRO FORMED FRAMES
† SEE MANUAL (LINKED TO KIT) OR CONTACT STANDEN’S FOR SPECIFIC SUB-MODEL APPLICATIONS
∆ IF THE FRAME TO AXLE PAD DISTANCE IS 7.25’ OR LESS, USE KIT HP10120
†† FOR ALL TRUCKS, INCLUDING THOSE WITH 5th WHEEL HITCHES. NOT FOR CHASSIS CAB TRUCKS
‡‡ THE LL-10002 KITS FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 4WD VEHICLES
††† FOR ALL TRUCKS, INCLUDING THOSE WITH 5th WHEEL HITCHES. NOT FOR CHASSIS CAB TRUCKS
◆ DRILLING MAY BE REQUIRED ON TRUCKS WITH AN AFTERMARKET 5th WHEEL HITCH
# REPLACEMENT AIR SPRING

**THE LL-10033 KIT REQUIRES 6” BETWEEN THE TIRE AND FRAME**

**WILL ONLY FIT WITH STOCK WHEELS AND TIRES**

**FOR ‘C’ CHANNEL FRAMES**

**FOR HYDRO FORMED FRAMES**

* SEE MANUAL (LINKED TO KIT) OR CONTACT STANDENS FOR SPECIFIC SUB-MODEL APPLICATIONS

**IF THE FRAME TO AXLE PAD DISTANCE IS 7.25” OR LESS, USE KIT HP10120**

**LL-10019 KITS FIT WITH A REESE 5th WHEEL RAIL KIT (MODELS 30033, 30035 & 30729)**

**LL-10070 KITS FIT WITH A DRAW TITE 15000 5th WHEEL HITCH**

**FOR ALL TRUCKS, INCLUDING THOSE WITH 5th WHEEL HITCHES. NOT FOR CHASSIS CAB TRUCKS**

**THE LL-10002 KITS FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 4WD VEHICLES**

**THE LL-10089 KITS WILL NOT FIT WITH THE 3349 & 3319 SUPERGLIDE 5th WHEEL RAIL KITS ON 2WD VEHICLES**

**DRILLING MAY BE REQUIRED ON TRUCKS WITH AN AFTERMARKET 5th WHEEL HITCH**

---

## Air Spring Application Guide

### MODEL

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>DOUBLE CONVOLUTED</th>
<th>SLEEVE STYLE</th>
<th>SUGGESTED INSTALLATION TIME</th>
<th>VEHICLE MODIFICATION REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM 1500 (2WD / 4WD)</td>
<td>1994-2001</td>
<td>LL-10033 *</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>3 ½ Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 1500 (2WD) HEAVY LOADS</td>
<td>1994-2001</td>
<td>LL-10019 †</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 1500 (2WD / 4WD) HEAVY LOADS</td>
<td>2002-2008</td>
<td>LL-10071</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>2 ½ Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 1500 (4WD)</td>
<td>2006-2008</td>
<td>LL-10002 †</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 1500 (2WD)</td>
<td>2006-2008</td>
<td>LL-10089 ††</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 1500 (2WD / 4WD) INNER COIL AIR SPRING</td>
<td>2009-2016</td>
<td>LL-10188</td>
<td>IC</td>
<td>N/A</td>
<td>Yes</td>
<td>2 ½ Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 2500 (2WD / 4WD)</td>
<td>1994-2002</td>
<td>LL-10019 †</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 2500 (4WD)</td>
<td>2003-2013</td>
<td>LL-10002 †</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 2500 (2WD)</td>
<td>2003-2013</td>
<td>LL-10089 ††</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 2500 (4WD)</td>
<td>2006-2008</td>
<td>LL-10002 †</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 2500 (2WD)</td>
<td>2006-2008</td>
<td>LL-10089 ††</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 2500 (2WD / 4WD)</td>
<td>2014-2017</td>
<td>LL-10206</td>
<td>DC</td>
<td>N/A</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 3500 (2WD / 4WD)</td>
<td>1994-2002</td>
<td>LL-10019 †</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 3500 (4WD)</td>
<td>2003-2016</td>
<td>LL-10002 †</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 3500 (2WD)</td>
<td>2006-2016</td>
<td>LL-10089 ††</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 3500 (4WD)</td>
<td>2006-2008</td>
<td>LL-10089 ††</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM MEGA CAB 3500 (2WD)</td>
<td>2007-2017</td>
<td>LL-10002 † &amp; LL-10136</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 3500 (2WD / 4WD) CHASSIS CAB</td>
<td>2007-2017</td>
<td>LL-10121</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 4500 (2WD / 4WD) CHASSIS CAB</td>
<td>2007-2017</td>
<td>LL-10121</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 5500 (2WD / 4WD) CHASSIS CAB</td>
<td>2007-2017</td>
<td>LL-10121</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>SPRINTER 2500 (2WD)</td>
<td>2007-2009</td>
<td>LL-10147</td>
<td>DC</td>
<td>Inside</td>
<td>Yes</td>
<td>2 ½ Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 4500 (2WD / 4WD)</td>
<td>2014-2017</td>
<td>LL-10206</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 5500 (2WD / 4WD)</td>
<td>2014-2017</td>
<td>LL-10206</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2 Hrs</td>
<td></td>
</tr>
</tbody>
</table>

## Dodge Vans/Commercial Vehicles

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>DOUBLE CONVOLUTED</th>
<th>SLEEVE STYLE</th>
<th>SUGGESTED INSTALLATION TIME</th>
<th>VEHICLE MODIFICATION REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM 4500 (2WD / 4WD) CHASSIS CAB</td>
<td>2007-2017</td>
<td>LL-10121</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>RAM 5500 (2WD / 4WD) CHASSIS CAB</td>
<td>2007-2017</td>
<td>LL-10121</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td></td>
</tr>
<tr>
<td>SPRINTER 2500 (2WD)</td>
<td>2007-2009</td>
<td>LL-10147</td>
<td>DC</td>
<td>Inside</td>
<td>Yes</td>
<td>2 ½ Hrs</td>
<td></td>
</tr>
</tbody>
</table>

### Ford

**AIR SUSPENSION IN-CAB CONTROL**

**SONBOARD AIR COMPONENTS**

**WARRANTY**

---

**LEVEL LOAD: AIR MANAGEMENT BY STANDENS**

**Air Spring Application Guide**
## Ford SUVs

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Kit #</th>
<th>S</th>
<th>Frame Mount</th>
<th>DC</th>
<th>Double Convoluted</th>
<th>SS</th>
<th>Sleeve Style</th>
<th>Suggested Installation Time</th>
<th>Frame Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronco</td>
<td>1980-1996</td>
<td>LL-10033</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronco II</td>
<td>1983-1990</td>
<td>LL-10033</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Ford Pickup Trucks

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Kit #</th>
<th>S</th>
<th>Frame Mount</th>
<th>DC</th>
<th>Double Convoluted</th>
<th>SS</th>
<th>Sleeve Style</th>
<th>Suggested Installation Time</th>
<th>Frame Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranger **</td>
<td>1998-2010</td>
<td>LL-10019</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-100 (4WD)</td>
<td>1966-1996</td>
<td>LL-10019</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-100 (4WD)</td>
<td>1966-1996</td>
<td>LL-10019</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-100 (2WD)</td>
<td>1966-1996</td>
<td>LL-10019</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-100 (2WD)</td>
<td>1966-1996</td>
<td>LL-10033</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Ford F-150

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Kit #</th>
<th>S</th>
<th>Frame Mount</th>
<th>DC</th>
<th>Double Convoluted</th>
<th>SS</th>
<th>Sleeve Style</th>
<th>Suggested Installation Time</th>
<th>Frame Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-150 (4WD)</td>
<td>1966-1996</td>
<td>LL-10019</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>1966-1996</td>
<td>LL-10019</td>
<td>DC</td>
<td>Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>1966-1996</td>
<td>LL-10033</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>1966-1996</td>
<td>LL-10033</td>
<td>SS</td>
<td>Outside</td>
<td>Yes</td>
<td>2½ Hrs</td>
<td>LL-10019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>2004-2008</td>
<td>LL-10004</td>
<td>DC</td>
<td>Outside</td>
<td>No</td>
<td>2 Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>2004-2008</td>
<td>LL-10153</td>
<td>SS</td>
<td>Outside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>LL-10173</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (2WD)</td>
<td>2010-2014</td>
<td>LL-10155</td>
<td>SS</td>
<td>Outside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>LL-10001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (4WD)</td>
<td>2004-2014</td>
<td>LL-10212</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-150 (4WD)</td>
<td>2015-2017</td>
<td>LL-10215</td>
<td>SC</td>
<td>Inside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>LL-10083</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Ford F-250

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Kit #</th>
<th>S</th>
<th>Frame Mount</th>
<th>DC</th>
<th>Double Convoluted</th>
<th>SS</th>
<th>Sleeve Style</th>
<th>Suggested Installation Time</th>
<th>Frame Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-250 (4WD)</td>
<td>2004-2014</td>
<td>LL-10212</td>
<td>DC</td>
<td>Inside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* The LL-10033 kit requires 6” between the tire and frame.
** Will only fit with stock wheels and tires.
*** For ‘C’ channel frames.
**** For hydro formed frames.
†††† Drill may be required on trucks with an aftermarket 5th wheel hitch.
### REPLACEMENT AIR SPRING

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>TIME</th>
<th>SLEEVE STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F-250</strong> (2WD) UNDER 7500 GVWR</td>
<td>1969-1979</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250</strong> (2WD)</td>
<td>1980-1996</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250</strong> (4WD) HEAVY DUTY OVER 8000 GVWR</td>
<td>1980-1997</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 LIGHT DUTY</strong> (2WD/4WD) UNDER 7500 GVWR</td>
<td>1997-1998</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (2WD/4WD)</td>
<td>1999-2010</td>
<td>LL-10070 † †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (2WD/4WD) WILL NOT FIT VEHICLES WITH FACTORY INSTALLED 5TH WHEEL HITCH</td>
<td>2010-2016</td>
<td>LL-10070 † †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (2WD)</td>
<td>2005-2010</td>
<td>LL-10182 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (4WD)</td>
<td>2005-2010</td>
<td>LL-10181 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (2WD)</td>
<td>2011-2016</td>
<td>LL-10194 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-250 SUPER DUTY</strong> (4WD)</td>
<td>2011-2016</td>
<td>LL-10247 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10068</td>
</tr>
</tbody>
</table>

### FORD F-350

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>TIME</th>
<th>SLEEVE STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F-350</strong> (2WD)</td>
<td>1970-1997</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350</strong> (4WD) EXCEPT SUPER HD CHASSIS</td>
<td>1980-1997</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (2WD)</td>
<td>1999-2004</td>
<td>LL-10019 †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (2WD/4WD)</td>
<td>1999-2010</td>
<td>LL-10070 † †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (2WD/4WD) WILL NOT FIT VEHICLES WITH FACTORY INSTALLED 5TH WHEEL HITCH</td>
<td>2010-2016</td>
<td>LL-10070 † †</td>
<td>DC Outside  Yes</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (2WD)</td>
<td>2005-2010</td>
<td>LL-10182 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (4WD)</td>
<td>2005-2010</td>
<td>LL-10181 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (2WD)</td>
<td>2011-2016</td>
<td>LL-10194 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-350 SUPER DUTY</strong> (4WD)</td>
<td>2011-2016</td>
<td>LL-10247 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10068</td>
</tr>
</tbody>
</table>

### FORD F-450

<table>
<thead>
<tr>
<th>MODEL</th>
<th>YEAR</th>
<th>KIT #</th>
<th>FRAME MOUNT</th>
<th>TIME</th>
<th>SLEEVE STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F-450 SUPER DUTY</strong> (2WD)</td>
<td>2011-2014</td>
<td>LL-10194 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-450 SUPER DUTY</strong> (4WD)</td>
<td>2011-2014</td>
<td>LL-10193 † † †</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-450 SUPER DUTY</strong> (2WD/4WD) INC. 5TH WHEEL HITCH</td>
<td>2008-2010</td>
<td>LL-10187</td>
<td>DC Inside  No  ♦</td>
<td>4 Hrs</td>
<td>LL-10000D</td>
</tr>
<tr>
<td><strong>F-450 SUPER DUTY</strong> (2WD/4WD) INC. 5TH WHEEL HITCH</td>
<td>2015-2016</td>
<td>LL-10195</td>
<td>DC Inside  No  ♦</td>
<td>3 Hrs</td>
<td>LL-10000D</td>
</tr>
</tbody>
</table>

### FREIGHTLINER

- **THE LL-10033 KIT REQUIRES 6" BETWEEN THE TIRE AND FRAME**
- **WILL ONLY FIT WITH STOCK WHEELS AND TIRES**
- **FOR ‘C’ CHANNEL FRAMES**
- **FOR HYDRO FORMED FRAMES**
- ☞ **SEE MANUAL LINKED TO KIT# OR CONTACT STANEN’S FOR SPECIFIC SUB-MODEL APPLICATIONS**
- ▲ **IF THE FRAME TO AXLE PAD DISTANCE IS 7.25" OR LESS, USE KIT HP10120**
### Level Load: Air Management by Standens

#### Air Spring Application Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
<th>Kit #</th>
<th>Frame Mount</th>
<th>Suggested Installation Time</th>
<th>DC</th>
<th>Double Convoluted</th>
<th>SS</th>
<th>Sleeve Style</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAZDA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MAZDA PICK-UPS (2WD/4WD)</strong></td>
<td>1998-2010</td>
<td>LL-10019†</td>
<td>DC Outside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>10000D</td>
<td></td>
<td></td>
<td>Will only fit with stock wheels and tires</td>
</tr>
<tr>
<td><strong>MERCEDES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SPRINTER, 2500 (2WD)</strong></td>
<td>2007-2014</td>
<td>LL-10147</td>
<td>DC Inside</td>
<td>Yes</td>
<td>3 Hrs</td>
<td>10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NISSAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TITAN (2WD/4WD)</strong></td>
<td>2004-2015</td>
<td>LL-10222</td>
<td>DC Inside</td>
<td>Yes</td>
<td>2 Hrs</td>
<td>10000D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STERLING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BULLET 4500, BULLET 5500 (2WD/4WD)</strong></td>
<td>2007-2011</td>
<td>LL-10121</td>
<td>DC Inside</td>
<td>No</td>
<td>3 Hrs</td>
<td>10068</td>
<td></td>
<td></td>
<td>Chassis Cab</td>
</tr>
<tr>
<td><strong>TOYOTA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Toyota Tacoma</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All Toyota kits require a minimum of 5&quot; between the tire and frame and will only fit with stock wheels and tires 1995-2004</td>
</tr>
<tr>
<td><strong>TOYOTA TACOMA (4WD)</strong></td>
<td>1995-2004</td>
<td>LL-10191</td>
<td>SS Outside</td>
<td>No</td>
<td>3 Hrs</td>
<td>10173</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOYOTA TACOMA (4WD)</strong></td>
<td>2005-2014</td>
<td>LL-10165</td>
<td>SS Outside</td>
<td>No</td>
<td>3 Hrs</td>
<td>10199</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Toyota Tundra</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All Toyota kits require a minimum of 5&quot; between the tire and frame and will only fit with stock wheels and tires 1995-2004</td>
</tr>
<tr>
<td><strong>TOYOTA TUNDRA (2WD/4WD)</strong></td>
<td>2001-2006</td>
<td>LL-10126</td>
<td>SC Outside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>10083</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOYOTA TUNDRA (2WD/4WD)</strong></td>
<td>2001-2006</td>
<td>LL-10158</td>
<td>SC Outside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>10083</td>
<td></td>
<td></td>
<td>Trucks in which the upper jounce bumper pad protrudes 1&quot; below the frame</td>
</tr>
<tr>
<td><strong>TOYOTA TUNDRA (2WD/4WD)</strong></td>
<td>2007-2017</td>
<td>LL-10128</td>
<td>SC Outside</td>
<td>No</td>
<td>2½ Hrs</td>
<td>10083</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UNIVERSAL FIT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fabricators Rear Air Spring Kit</strong> (Small Air Springs)</td>
<td>N/A</td>
<td>LL-10130</td>
<td>DC N/A N/A N/A</td>
<td>LL-10000D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fabricators Front Air Spring Kit</strong> (Large Air Springs)</td>
<td>N/A</td>
<td>LL-10086</td>
<td>DC N/A N/A N/A</td>
<td>LL-10068</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

* The LL-10033 kit requires 6' between the tire and frame
** Will only fit with stock wheels and tires
*** For 'C' channel frames
**** For hydro formed frames
† The LL-10019 kit fits with a Reese 5th wheel rail kit (Models 30033, 30035 & 30729)
†† The LL-10070 kit fits with a Draw Tite 15000 5th wheel hitch
†‡ For all trucks, including those with 5th wheel hitches. Not for Chassis Cab Trucks
§ The LL-10002 kit fits with the 3349 & 3319 SuperGlide 5th wheel rail kits on 4WD vehicles
∥ The LL-10089 kit will not fit with the 3349 & 3319 SuperGlide 5th wheel rail kits on 2WD vehicles
‡ Drilling may be required on trucks with an aftermarket 5th wheel hitch

---

---

---
LEVEL LOAD AIR SPRING SPACERS FOR LIFTED TRUCKS

Standen’s air spring spacer kits allow for installation of air springs* on lifted trucks while still keeping them at their lifted height. Made of high quality carbon steel with protective powder coating. Standen’s spacers have been manufactured for maximum strength and corrosion resistance.

*NOTE: For use only with single or double convoluted air springs

<table>
<thead>
<tr>
<th>KITS</th>
<th>PART #</th>
</tr>
</thead>
<tbody>
<tr>
<td>2” SPACERS</td>
<td>LL-10152</td>
</tr>
<tr>
<td>4” SPACERS</td>
<td>LL-10154</td>
</tr>
<tr>
<td>6” SPACERS</td>
<td>LL-10156</td>
</tr>
</tbody>
</table>
**IN-CAB CONTROLS SYSTEMS**

Operate your air springs (or other pneumatic accessories) right from the driver’s seat with Level Load in-cab controls.

**ACTIVATION OPTIONS:**

**INDEPENDENT ACTIVATION**

Inflation is achieved with two separate switches, allowing for individual inflation / deflation of air springs.

**SIMULTANEOUS ACTIVATION**

Inflation is achieved with one switch that inflates / deflates both air springs at the same time.

**PERFECT FOR A MULTITUDE OF AIR APPLICATIONS!**

**ELECTRICAL IN-CAB CONTROL**

Featuring a digital gauge or back-lit (dual or single) needle gauge, an ON/OFF compressor switch(es), inflation/deflation switch(es) for the air springs. Choose between simultaneous or independent air spring inflation.

In addition to a stackable solenoid block, each kit comes complete with a nylon hose, wire, fittings, fasteners, electrical terminals and in-line fuse holders.

**PADDLE VALVE IN-CAB CONTROLS**

An economical option for operating air springs with inflation/deflation switch(es) that attach directly to the LL-325 series compressor and the air springs. Choose between simultaneous or independent air spring inflation. Available with a digital gauge or a back-lit needle gauge.
Mechanical In-Cab Controls

Set your ride height from the comfort of your driver’s seat with Level Load’s in-cab controls. Take your towing, hauling, 4x4ing and all other onboard air management to the next level.

**PREMIUM IN-CAB CONTROL KITS – MECHANICAL GAUGE**

In-cab control kits come with everything you need to operate your air springs (or other pneumatic accessories) from the driver’s seat. Various dash activation switch kits are available depending on your air spring operation requirements. ‘Independent’ inflation is achieved with 2 separate switches, allowing inflation/deflation of each air spring individually. ‘Simultaneous’ inflation uses a single switch that inflates/deflates both air springs at the same time.

**LL-10135**

**AIR SPRING DASH SWITCH (SIMULTANEOUS ACTIVATION)**

- **LL-325 AIR COMPRESSOR SPECIFICATIONS:**
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
- **Air tank options:**
  - ½ gallon air tank (LL-10053)
  - 2½ gallon air tank (LL-10050)

*NOTE: If adding an air tank, a pressure switch is required
LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi

**LL-10098**

**AIR SPRING DASH SWITCHES (INDEPENDENT ACTIVATION)**

- **LL-325 AIR COMPRESSOR SPECIFICATIONS:**
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
- **Air Tank Options:**
  - ½ gallon air tank (LL-10053)
  - 2½ gallon air tank (LL-10050)

*NOTE: If adding an air tank, a pressure switch is required
LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi
**ELECTRICAL IN-CAB CONTROL KITS – MECHANICAL GAUGE**

(FOR USE WITH EXISTING ONBOARD AIR)

These kits allow operation of your air springs either simultaneously or independently from the comfort of your driver’s seat. Featuring back-lit dual needle gauge, an ON/OFF activation switch to control compressor operation, and switch(es) for inflation/deflation of the air springs.

Standen’s unique two way solenoid block gives you the option to stack and combine additional blocks to run your vehicle’s air accessories from one central block.

In addition to the solenoid block, each kit comes complete with a nylon hose, wire, fittings, fasteners, electrical terminals and in-line fuse holders.

**LL-10022**

SIMULTANEOUS ACTIVATION

SPECIFIC KIT INFO:
- Air spring inflation kit
- 12 VDC electric actuated two-way pneumatic solenoids
- Solenoids are stackable for multi-application use
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system

**LL-10062**

INDEPENDENT ACTIVATION

SPECIFIC KIT INFO:
- Air spring inflation kit
- 12 VDC electric actuated two-way pneumatic solenoids
- Solenoids are stackable for multi-application use
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system

**PADDLE VALVE IN-CAB CONTROL KITS – MECHANICAL GAUGE**

(FOR USE WITH EXISTING ONBOARD AIR)

An economical option for operating air spring kits with a pneumatic dash switch(es) that attach directly to the tank and the air springs. Choose between simultaneous or independent air spring inflation/deflation.

- Simultaneous inflation is done with a single switch and inflates/deflates both air springs equally, at the same time.
- Independent inflation utilizes 2 separate switches, allowing one to inflate/deflate an air spring individually. Air tank and solenoid blocks are not required for this method of in-cab air control operation, however, should you decide to add an air tank for stored onboard air, you can do so by adding either our ½ gallon or 2½ gallon air tank kit (LL-10053/LL-10050)*.

**LL-10133**

SIMULTANEOUS ACTIVATION

This LL-10133 dash actuation kit is designed to integrate in-cab air spring control with a pre-existing air system

Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system.

**LL-10124**

INDEPENDENT ACTIVATION

This LL-10124 dash actuation kit is designed to integrate in-cab air spring control with a pre-existing air system

Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system.

---

*NOTE: If adding an air tank, a pressure switch is required

Air Tank Options:
- ½ gallon air tank (LL-10053)
- 2½ gallon air tank (LL-10050)

LL-325 AIR COMPRESSOR SPECIFICATIONS:
- 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
- 12 VDC

**LL-10256**

AIR SPRING DASH SWITCHES

(SIMULTANEOUS ACTIVATION)

- 150 psi max operating pressure, draws 18 amps
- 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
- 12 VDC

**LL-10273**

AIR SPRING DASH SWITCHES

(INDEPENDENT ACTIVATION)

- 150 psi max operating pressure, draws 18 amps
- 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
- 12 VDC

**LL-10231**

AIR SPRING DASH SWITCH

(SIMULTANEOUS ACTIVATION)

- 150 psi max operating pressure, draws 18 amps
- 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
- 12 VDC
Independent inflation utilizes 2 separate switches, allowing one to inflate / deflate an air spring individually. Simultaneous inflation is done with a single switch and inflates / deflates both air springs equally, at the same time. Choose between simultaneous or independent air spring inflation / deflation.

An economical option for operating air spring kits with a pneumatic dash switch(es) that attach directly to the tank and the air springs. (FOR USE WITH EXISTING ONBOARD AIR)

PADDLE VALVE IN-CAB CONTROL KITS – Mechanical gauge

In addition to the solenoid block, each kit comes complete with a nylon hose, wire, fittings, fasteners, electrical terminals and accessories from one central block. Standen’s unique two way solenoid block gives you the option to stack and combine additional blocks to run your vehicle’s air seat. Featuring back-lit dual needle gauge, an ON / OFF activation switch to control compressor operation, and switch(es) for these kits allow operation of your air springs either simultaneously or independently from the comfort of your driver’s seat. Various dash activation switch kits are available depending on your air spring operation requirements. ‘Independent’ inflation allows inflation/deflation of each air spring individually. ‘Simultaneous’ inflation inflates/deflates both air springs at the same time.

Level Load digital in-cab control systems display pressure from 0 psi to 220 psi at 1 psi increments. They allow for continuous monitoring and adjusting of air spring pressure. Choose from independent or simultaneous control.

PREMIUM IN-CAB CONTROL KITS - DIGITAL GAUGE

In-cab control kits come with everything you need to operate your air springs (or other pneumatic accessories) from the driver’s seat. Various dash activation switch kits are available depending on your air spring operation requirements. ‘Independent’ inflation allows inflation/deflation of each air spring individually. ‘Simultaneous’ inflation inflates/deflates both air springs at the same time.

**LL-10231**
**AIR SPRING DASH SWITCH (SIMULTANEOUS ACTIVATION)**
- LL-325 AIR COMPRESSOR SPECIFICATIONS:
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
Air tank options: – ½ gallon air tank (LL-10053)
  – 2½ gallon air tank (LL-10050)
*NOTE: If adding an air tank, a pressure switch is required LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi

**LL-10256**
**AIR SPRING DASH SWITCHES (INDEPENDENT ACTIVATION)**
- LL-325 AIR COMPRESSOR SPECIFICATIONS:
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
Air Tank Options: – ½ gallon air tank (LL-10053)
  – 2½ gallon air tank (LL-10050)
*NOTE: If adding an air tank, a pressure switch is required LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi

**LL-10274**
**AIR SPRING DASH SWITCH (SIMULTANEOUS ACTIVATION)**
- LL-325 AIR COMPRESSOR SPECIFICATIONS:
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
Air tank options: – ½ gallon air tank (LL-10053)
  – 2½ gallon air tank (LL-10050)
*NOTE: If adding an air tank, a pressure switch is required LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi

**LL-10273**
**AIR SPRING DASH SWITCHES (INDEPENDENT ACTIVATION)**
- LL-325 AIR COMPRESSOR SPECIFICATIONS:
  - 12 VDC
  - 33% duty cycle (20 Minutes @ 100 psi), 1.2 CFM
  - 150 psi max operating pressure, draws 18 amps
Air Tank Options: – ½ gallon air tank (LL-10053)
  – 2½ gallon air tank (LL-10050)
*NOTE: If adding an air tank, a pressure switch is required LL-10110 is for 105-135 psi, LL-10111 is for 85-105 psi
Perfect for a multitude of air applications!

Additional quality air products from a name you trust

Quick & Effortless Inflation Power

Standen’s Level Load line offers a growing range of dependable air management products and customizable air management system solutions for your vehicle.

**ONBOARD AIR SYSTEMS**

**LEVEL LOAD AIR COMPRESSORS**

- **LL-325 SERIES** - Our 1/4 HP Level Load air compressors have a 33% duty cycle (20 minutes @ 100 psi) and are offered in both 12 and 24 VDC.

- **LL-625 SERIES** - Our 3/4 HP Level Load air compressors have a 100% duty cycle (1 Hour @ 100 psi) and are offered in two pump head configurations: vertical (available in 12 and 24 VDC) & horizontal (12 VDC).

All Level Load compressors have a max working pressure of 150 psi and are an oil-less design. They contain sealed bearings, a PTFE piston ring & a copper wire wound permanent magnet motor.

**LEVEL LOAD AIR TANKS**

- Available in three air tank sizes: ½ gallon (LL-C11940), 2½ gallon (LL-10013) and 5 gallon (LL-10014).
- Choose from polished aluminum or steel tanks. All of our steel air tanks are painted and have a rust inhibitor internally applied. Each tank meets ASME specifications and has a maximum working pressure of 150psi (steel) or 200psi (aluminum). Multiple NPT ports are provided for auto drains and various air accessories.
- All of our air tank kits have welded on mounting brackets. Kits include a 25 ft coiled air hose & accessories in a heavy duty nylon travel bag.

**BASIC ELECTRICAL IN-CAB CONTROL KITS – DIGITAL GAUGE**  
*(FOR USE WITH EXISTING ONBOARD AIR)*

These kits allow operation of your air springs either simultaneously or independently from the comfort of your driver’s seat. Featuring a digital gauge, an ON/OFF activation switch to control compressor operation, and switch(es) for inflation/deflation of the air springs.

Standen’s unique two way solenoid block gives you the option to stack and combine additional blocks to run your vehicle’s air accessories from one central block.

In addition to the solenoid block, each kit comes complete with a nylon hose, wire, fittings, fasteners, electrical terminals and in-line fuse holders.

**LL-10262**  
**SIMULTANEOUS ACTIVATION**  
**SPECIFIC KIT INFO:**
- Air spring inflation kit
- 12 VDC electric actuated two-way pneumatic solenoids
- Solenoids are stackable for multi-application use
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system

**LL-10261**  
**INDEPENDENT ACTIVATION**  
**SPECIFIC KIT INFO:**
- Air spring inflation kit
- 12 VDC electric actuated two-way pneumatic solenoids
- Solenoids are stackable for multi-application use
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system

**BASIC PADDLE VALVE IN-CAB CONTROL KITS – DIGITAL GAUGE**  
*(FOR USE WITH EXISTING ONBOARD AIR)*

An economical option for operating air spring kits with a pneumatic dash switch(es) that attach directly to the tank and the air springs. Choose between simultaneous or independent air spring inflation/deflation.

- Simultaneous inflation is done with a single switch and inflates/deflates both air springs equally, at the same time.
- Independent inflation utilizes 2 separate switches, allowing one to inflate/deflate an air spring individually. Air tank and solenoid blocks are not required for this method of in-cab air control operation, however, should you decide to add an air tank for stored onboard air, you can do so by adding either our ½ gallon or 2 ½ gallon air tank kit (LL-10053/LL10050)*.

**LL-10281**  
**SIMULTANEOUS ACTIVATION**  
**SPECIFIC KIT INFO:**
- Basic kit
- Features digital gauge and paddle Switch
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system

**LL-10272**  
**INDEPENDENT ACTIVATION**  
**SPECIFIC KIT INFO:**
- Air spring inflation kit
- 12 VDC electric actuated two-way pneumatic solenoids
- Solenoids are stackable for multi-application use
- Use this kit in conjunction with one of our air tank kits and air compressor kits to build your own customizable onboard air system
Standen’s Level Load line offers a growing range of dependable air management products and customizable air management system solutions for your vehicle.

LEVEL LOAD AIR COMPRESSORS

**LL-325 SERIES** - Our 1/4 HP Level Load air compressors have a 33% duty cycle (20 minutes @ 100 psi) and are offered in both 12 and 24 VDC.

**LL-625 SERIES** - Our 3/4 HP Level Load air compressors have a 100% duty cycle (1 Hour @ 100 psi) and are offered in two pump head configurations: vertical (available in 12 and 24 VDC) & horizontal (12 VDC).

All Level Load compressors have a max working pressure of 150 psi and are an oil-less design. They contain sealed bearings, a PTFE piston ring & a copper wire wound permanent magnet motor.

LEVEL LOAD AIR TANKS

Available in three air tank sizes: ½ gallon (LL-C11940), 2 ½ gallon (LL-10013) and 5 gallon (LL-10014).

Choose from polished aluminum or steel tanks. All of our steel air tanks are painted and have a rust inhibitor internally applied. Each tank meets ASME specifications and has a maximum working pressure of 150 psi (steel) or 200 psi (aluminum). Multiple NPT ports are provided for auto drains and various air accessories.

All of our air tank kits have welded on mounting brackets. Kits include a 25 ft coiled air hose & accessories in a heavy duty nylon travel bag.

Quick & Effortless Inflation Power
Onboard Air Kits & Compressor Kits

LL-325 SERIES ONBOARD AIR KITS
Standen’s onboard air systems are all 33% duty cycle (20 minutes @ 100 psi) and increase air volume depending on the tank size (for compressed air storage).
Each onboard air system comes complete with compressor(s), air tank, fittings, pressure switch, relay(s), electrical connectors and all applicable accessories.
Standen’s can help you make a custom onboard air kit for your specific vehicle/applications.

LL-10164
ONBOARD AIR KIT
(WITH 2½ GALLON AIR TANK)
Compressor Model: LL-10143 (12 VDC)
KIT ALSO INCLUDES:
• 2½ Gallon Air Tank (LL-10013)
• Curly Hose Air Accessory Kit (LL-C11657)
• All necessary wiring, harnesses, fittings and fasteners

LL-325 SERIES AIR COMPRESSOR KITS
Standen’s LL-325 series Level Load air compressors have a 33% duty cycle (20 minutes @ 100 psi) and are offered in both 12 and 24 VDC. These ½ horsepower compressors have an oil-less design, sealed bearings, a PTFE piston ring, a copper wire wound permanent magnet motor and a hard anodized aluminum sleeve.
The Premium Air Compressor Kit offers pre-built wiring harnesses for the ultimate ease of installation.

■ Sealed bearings
■ Cast aluminum cylinder head
■ Hard anodized aluminum cylinder
■ PTFE piston ring
■ Mountable in any orientation

LL-10066
PREMIUM KIT
Compressor Model: LL-10143 (12 VDC)
Compressor Size: 8.7” x 4” x 6.2” (LxWxH)
221 mm x 102 mm x 158 mm
Compressor Weight: 5.5 lbs (2.5 kg)

LL-10142
BASIC 12VDC KIT
Compressor Model: LL-10143 (12 VDC)
Compressor Size: 8.7” x 4” x 6.2” (LxWxH)
221 mm x 102 mm x 158 mm
Compressor Weight: 5.5 lbs (2.5 kg)

LL-10151
BASIC 24V KIT
Compressor Model: LL-10139 (24 VDC)
Compressor Size: 8.7” x 4” x 6.2” (LxWxH)
221 mm x 102 mm x 158 mm
Compressor Weight: 5.5 lb (2.5 kg)
Onboard Air Kits & Compressor Kits

Standen’s can help you make a custom onboard air kit for your specific vehicle/applications. Each onboard air system comes complete with compressor(s), air tank, fittings, pressure switch, relay(s), electrical connectors (for compressed air storage).

The Premium Air Compressor Kit offers pre-built wiring harnesses for the ultimate ease of installation. It includes a permanent magnet motor and a hard anodized aluminum sleeve.

For more information, visit www.standens.com

---

**Compressor Kits**

**LL-625 SERIES AIR COMPRESSOR KITS**

Standen’s offers various kit options for the LL-625 air compressor. The ‘premium’ kits come complete with pre-built wiring harnesses, for the ultimate ease of installation. All kits include an unloader block, which is required for the LL-625 series air compressor when used with an air tank.

**LL-10631**

**BASIC 12 VDC (H)**

- Head Configuration: Horizontal
- Compressor Model: LL-10625H
- Compressor Size: (LxWxH) 11.5” x 9.5” x 6” [293 mm x 242 mm x 153 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10632**

**BASIC 12 VDC (V)**

- Head Configuration: Vertical
- Compressor Model: LL-10625V
- Compressor Size: (LxWxH) 11.5” x 6” x 9.5” [293 mm x 153 mm x 242 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10633**

**BASIC 24 VDC (V)**

- Head Configuration: Vertical
- Compressor Model: LL-10625V-24
- Compressor Size: (LxWxH) 11.5” x 6” x 9.5” [293 mm x 153 mm x 242 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10116 (12 VDC)**

**LL-10116-24 (24 VDC)**

**UNLOADER ASSEMBLY**

(FOR USE WITH TANKS)

The LL-625 series compressor requires the use of an unloader assembly when used with an air tank.

**LL-10628**

**PREMIUM 12 VDC KIT (H)**

- Head Configuration: Horizontal
- Compressor Model: LL-10625H
- Compressor Size: (LxWxH) 11.5” x 9.5” x 6” [293 mm x 242 mm x 153 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10629**

**PREMIUM 12 VDC KIT (V)**

- Head Configuration: Vertical
- Compressor Model: LL-10625V
- Compressor Size: (LxWxH) 11.5” x 6” x 9.5” [293 mm x 153 mm x 242 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10630**

**PREMIUM 24 VDC KIT (V)**

- Head Configuration: Vertical
- Compressor Model: LL-10625V-24
- Compressor Size: (LxWxH) 11.5” x 6” x 9.5” [293 mm x 153 mm x 242 mm]
- Compressor Weight: 18.5 lbs [8.4 kg]

**LL-10115**

**OPTIONAL AIR INTAKE KIT**

LL-10115 is designed for compressor installations with significant exposure to the elements.

---

**COMPRESSOR MOUNTING BRACKETS**

These Universal Brackets can be mounted anywhere to keep your Level Load compressor safe and stable.

**LL-10204**

**COMPRESSOR BRACKET - LL-325 SERIES**

- Universal Brackets: Mount Anywhere
- Size: 5.5” x 5.125” x 12” [140 mm x 130 mm x 305 mm] (LxWxH)
- Weight: 4.1 lbs [1.86 kg]
- Material: Zinc Plated Carbon Steel
- Compressor Sold Separately

**LL-10205**

**COMPRESSOR BRACKET - HP625 SERIES**

- Universal Brackets: Mount Anywhere
- Size: 6.125” x 7.25” x 12.25” [156 mm x 184 mm x 311 mm] (LxWxH)
- Weight: 5.6 lbs [2.54 kg]
- Material: Zinc Plated Carbon Steel
- Compressor Sold Separately
**AIR TANK: KITS & ACCESSORIES**

Working in conjunction with air compressors, air tanks store the compressed air and hold it until it is required. Storing compressed air allows for quicker product activation, especially when operating more than one product simultaneously. Standen’s offers three air tank sizes to meet everyone’s needs: a ½ gallon tank, a 2 ½ gallon tank and a 5 gallon tank. Each premium air tank kit comes complete with an air tank, mounting fasteners, airline, fittings, air accessories, an air nozzle and more.

### PREMIUM STEEL AIR TANK KITS

**LL-10053**
1½ GALLON AIR TANK KIT
- TANK SPECIFICS (C11940):
  - Ports: 2 x ¼" (-4) NPT
  - Rust Inhibitor: Applied to inside of tank
  - Max Working Pressure: 150 psi
  - Size: 6.4" x 5.5" x 6.5" (LxWxH) [163 mm x 140 mm x 152 mm]
  - Weight: 3.4 lbs [1.54 kg]
- Welded on Mounting Brackets

**LL-10050**
2 ½ GALLON AIR TANK KIT
- TANK SPECIFICS (HP10013):
  - Ports: 5 x ¼" (-4) NPT
  - Rust Inhibitor: Applied to inside of tank
  - Max Working Pressure: 150 psi
  - Size: 21.0" x 6.9" x 8.9" (LxWxH) [533 mm x 175 mm x 203 mm]
  - Weight: 9.8 lbs [4.45 kg]
- Welded on Mounting Brackets

### BASIC STEEL AIR TANK KITS

**LL-10093**
2 ½ GALLON AIR TANK KIT
- TANK SPECIFICS (LL-10013):
  - Ports: 5 x ¼" (-4) NPT
  - Rust Inhibitor: Applied to inside of tank
  - Max Working Pressure: 150 psi
  - Size: 21.0" x 6.9" x 8.9" (LxWxH) [533 mm x 175 mm x 203 mm]
  - Weight: 9.8 lbs [4.45 kg]
- Welded on Mounting Brackets

**LL-10094**
5 GALLON AIR TANK KIT
- TANK SPECIFICS (LL-10014):
  - Ports: 5 x 3⁄8" (-6) NPT
  - Rust Inhibitor: Applied to inside of tank
  - Max Working Pressure: 150 psi
  - Size: 24.0" x 9.9" x 11.0" (LxWxH) [610 mm x 251 mm x 279 mm]
  - Weight: 17.8 lbs [8.07 kg]
- Welded on Mounting Brackets
* Not approved for use with an LL-325 series compressor

### ACCESSORY KITS

**LL-C11667**
AIR TANK CURLY HOSE & ACCESSORY KIT
- A 25’ curly hose with an assortment of accessories is easily stored in a heavy duty nylon bag. Just attach the curly hose to the quick disconnect chuck off of the air compressor (external air source) and perform a variety of jobs including: inflating tires, air mattresses, footballs, beach toys and blowing air (for cleaning, dusting, quick removal of debris) as well as checking air pressure
ALUMINUM AIR TANK KITS

Level Load’s polished aluminum tanks are made with less corrosive and lighter material than the standard steel tanks. These tanks also work in conjunction with air compressors to store the compressed air and hold it until it is required. This allows for quicker activation, especially when operating more than one product simultaneously. Standen’s offers three air tank sizes: a ½ gallon tank, a 2 ½ gallon tank and a 5 gallon tank. Each premium air tank kit comes complete with an air tank, mounting fasteners, airline, fittings, air accessories, an air nozzle and more.

PREMIUM ALUMINUM AIR TANK KITS

**LL-10266**

½ GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 2 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 8.4” x 5.9” x 7.1” (LxWxH)
  
(213.05 mm x 150 mm x 180 mm)
- Weight: 1.98 lbs [0.9 kg]
- Welded on Mounting Brackets

**LL-10267**

2 ½ GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 6 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 22.3” x 5.9” x 7.3” (LxWxH)
  
(592 mm x 150 mm x 186 mm)
- Weight: 4.9 lbs [2.2 kg]
- Welded on Mounting Brackets

BASIC ALUMINUM AIR TANK KITS

**LL-10263**

½ GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 2 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 8.4” x 5.9” x 7.1” (LxWxH)
  
(213.05 mm x 150 mm x 180 mm)
- Weight: 1.98 lbs [0.9 kg]
- Welded on Mounting Brackets

**LL-10264**

2 ½ GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 6 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 23.3” x 5.9” x 7.3” (LxWxH)
  
(592 mm x 150 mm x 186 mm)
- Weight: 4.9 lbs [2.2 kg]
- Welded on Mounting Brackets

**LL-10265**

5 GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 2 x ¾” (-6) NPT
  
2 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 20.1” x 9.2” x 10.3” (LxWxH)
  
(510 mm x 234 mm x 262 mm)
- Weight: 7.9 lbs [3.6 kg]
- Welded on Mounting Brackets
  
* Not approved for use with an LL-325 Level Load series compressor

**LL-10268**

5 GALLON AIR TANK KIT

TANK SPECIFICS (LL-?????):

- Ports: 2 x ¾” (-6) NPT
  
2 x ¼” (-4) NPT
- Max Working Pressure: 200 psi
- Size: 20.1” x 9.2” x 10.3” (LxWxH)
  
(510 mm x 234 mm x 262 mm)
- Weight: 7.9 lbs [3.6 kg]
- Welded on Mounting Brackets
  
* Not approved for use with an LL-325 Level Load series compressor
SINGLE CONVOLUTED AIR SPRING
- 6061-T6 aluminum black anodized end caps
- Nylon reinforced rubber air spring
- 20 reinforcement wires

LL-10083
A Working Height: 1.9” to 7.1” [48.3 mm to 180.3 mm]
B Free Height: 5.43” [137.8 mm]
C Maximum Diameter: 7” [177.8 mm]
D Mounting Hole Callout: 4 x 3/8” – 24
E Mounting Hole Spacing: 2 x 2.75” [69.9 mm]
F Port Callout: 1/4” [-4] NPT
G Port Spacing: 1.40” [35.6 mm]

DOUBLE CONVOLUTED AIR SPRING
- 6061-T6 aluminum black anodized end caps
- Nylon reinforced rubber air spring
- 20 reinforcement wires

LL-10000D
A Working Height: 3.0” to 8.4” [76.2 mm to 213.4 mm]
B Free Height: 7.41” [188.1 mm]
C Maximum Diameter: 6.30” [160 mm]
D Mounting Hole Callout: 4 x 3/8” – 24
E Mounting Hole Spacing: 2 x 2.75” [69.9 mm]
F Port Callout: 1/4” [-4] NPT
G Port Spacing: 1.40” [35.6 mm]

LL-10068
A Working Height: 2.9” to 9.5” [73.7 mm to 241.3 mm]
B Free Height: 7.24” [184 mm]
C Maximum Diameter: 7.24” [184 mm]
D Mounting Hole Callout: 4 x 3/8” – 24
E Mounting Hole Spacing: 2 x 2.75” [69.9 mm]
F Port Callout: 3/8” [-6] NPT
G Port Spacing: 1.40” [35.6 mm]
ROLL PLATES

Note: For use with double convoluted air springs
- Provides a landing surface when bellows roll over end-caps during compression
- .075” [2 mm] thick carbon steel
- Electroplated for corrosion resistance

SPACER KITS

NOTE: For use with double and single convoluted air springs
- Install with air springs to add additional height for “lifted” vehicles
- Bolt pattern compatible with all single and double convoluted Level Load air springs
- Powder coated low carbon steel construction
- .120” tube, .250” plate, .200” welds
- Mounting hardware included

HARDWARE
- Hex head and carriage bolts - Grade 5 strength equivalence (where applicable), zinc chromate plated
- Flat head and button head cap screws – ASME B18.3, ASTM F835, black phosphate
- U-bolts – Grade 2 strength equivalence, zinc chromate plated
SLEEVE STYLE AIR SPRING

- 6061-T6 aluminum black anodized end caps
- Nylon reinforced rubber air spring

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEARANCE: .5&quot; [12.7 mm] radial clearance required around air spring to avoid abrasion or puncture</td>
</tr>
<tr>
<td>INFLATION PRESSURE: 5 psi to 100 psi [34.5 kPa to 690 kPa] Note: maintain a minimum of 5 psi [34 kPa] in air springs at all times</td>
</tr>
<tr>
<td>MAXIMUM WORKING LOAD: 990 lbf [4 kN]</td>
</tr>
<tr>
<td>WORKING TEMPERATURE RANGE: -40°F to 158°F [-40°C to 70°C]</td>
</tr>
</tbody>
</table>

IN-COIL AIR SPRING

- Grey polyurethane
- Can be folded for insertion between coils

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEARANCE: .5&quot; [12.7 mm] radial clearance required around air spring to avoid abrasion or puncture</td>
</tr>
<tr>
<td>INFLATION PRESSURE: 5 psi - 35 psi [34.5 kPa to 241 kPa] Maintain a minimum of 5 psi [34 kPa] in air springs at all times</td>
</tr>
<tr>
<td>MAXIMUM WORKING LOAD: 1,000 lbf [46 kN]</td>
</tr>
<tr>
<td>WORKING TEMPERATURE RANGE: -40°F to 158°F [-40°C to 70°C]</td>
</tr>
</tbody>
</table>
IN-CAB CONTROL ASSEMBLY – MECHANICAL GAUGE

- Requires a minimum of 6” [101.6 mm] clearance behind bracket for routing of air lines

**LL-0098 GAUGE ASSEMBLY CONTENTS**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-0096</td>
<td>Bracket – Dual Paddle Valve</td>
<td>1</td>
</tr>
<tr>
<td>LL-0010</td>
<td>Double Input Needle Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1204</td>
<td>Paddle Switch</td>
<td>2</td>
</tr>
</tbody>
</table>

**LL-0084 GAUGE ASSEMBLY CONTENTS**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-1158</td>
<td>Bracket – Quadruple Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-10010</td>
<td>Double Input Needle Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1039</td>
<td>3-Way Electrical Switch</td>
<td>2</td>
</tr>
<tr>
<td>LL-1127</td>
<td>2-Way Electrical Switch</td>
<td>2</td>
</tr>
</tbody>
</table>

**LL-0117 GAUGE ASSEMBLY CONTENTS**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-0097</td>
<td>Bracket – Single Paddle Valve</td>
<td>1</td>
</tr>
<tr>
<td>LL-20520</td>
<td>Single Input Needle Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1204</td>
<td>Paddle Switch</td>
<td>1</td>
</tr>
</tbody>
</table>

**LL-0089 GAUGE ASSEMBLY CONTENTS**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-1157</td>
<td>Bracket – Dual Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-20520</td>
<td>Single Input Needle Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1039</td>
<td>3-Way Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-1127</td>
<td>2-Way Electrical Switch</td>
<td>1</td>
</tr>
</tbody>
</table>

**LL-0117 SIMULTANEOUS INFLATION SINGLE INPUT, SINGLE PADDLE VALVE**

- A: 3.78” [95.9 mm]
- B: 2.81” [71.4 mm]
- C: .22” x .52” [5.6 mm x 13.2 mm]
- D: 2.78” [70.49 mm]
- E: 56” [142.26 mm]

**LL-0089 SIMULTANEOUS INFLATION DUAL INPUT, DUAL ELECTRICAL SWITCH**

- A: 4.5” [114.3 mm]
- B: 2.8” [71.0 mm]
- C: .22” [5.6 mm]
- D: 3.5” [88.9 mm]
- E: .55” [13.95 mm]
**IN-CAB CONTROL ASSEMBLY – DIGITAL GAUGE**

- Requires a minimum of 6" [101.6 mm] clearance behind bracket for routing of air lines

### GAUGE ASSEMBLY CONTENTS

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-0096</td>
<td>Bracket – Dual Paddle Valve</td>
<td>1</td>
</tr>
<tr>
<td>LL-10218</td>
<td>Digital Air Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1204</td>
<td>Paddle Switch</td>
<td>2</td>
</tr>
</tbody>
</table>

### INDEPENDENT INFLATION
DUAL INPUT, DUAL PADDLE VALVE
ORDER PARTS SEPARATELY

- A: 5.00’ [127.0 mm]
- B: 2.81’ [71.4 mm]
- C: 22 x 52 [5.6 mm x 13.2 mm]
- D: 4’ [101.6 mm]
- E: .56’ [14.26 mm]

### LL-10269 GAUGE ASSEMBLY CONTENTS

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-1158</td>
<td>Bracket – Quadruple Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-10275</td>
<td>Digital Air Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1039</td>
<td>3-Way Electrical Switch</td>
<td>2</td>
</tr>
<tr>
<td>LL-1127</td>
<td>2-Way Electrical Switch</td>
<td>2</td>
</tr>
</tbody>
</table>

### LL-10269
INDEPENDENT INFLATION
DUAL INPUT, QUADRUPLE ELECTRICAL SWITCH

- A: 4.5’ [114.3 mm]
- B: 2.8’ [71.0 mm]
- C: .22’ [5.6 mm]
- D: 3.5’ [88.9 mm]
- E: .55’ [13.85 mm]

### GAUGE ASSEMBLY CONTENTS

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-0097</td>
<td>Bracket – Single Paddle Valve</td>
<td>1</td>
</tr>
<tr>
<td>LL-10218</td>
<td>Digital Air Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-L1204</td>
<td>Paddle Switch</td>
<td>1</td>
</tr>
</tbody>
</table>

### SIMULTANEOUS INFLATION
SINGLE INPUT, SINGLE PADDLE VALVE
ORDER PARTS SEPARATELY

- A: 3.78’ [95.9 mm]
- B: 2.81’ [71.4 mm]
- C: 52 [5.6 mm x 13.2 mm]
- D: 2.78’ [70.49 mm]
- E: .56’ [14.26 mm]

### HP10280 GAUGE ASSEMBLY CONTENTS

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL-1157</td>
<td>Bracket – Dual Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-10275</td>
<td>Digital Air Gauge</td>
<td>1</td>
</tr>
<tr>
<td>LL-1039</td>
<td>3-Way Electrical Switch</td>
<td>1</td>
</tr>
<tr>
<td>LL-1127</td>
<td>2-Way Electrical Switch</td>
<td>1</td>
</tr>
</tbody>
</table>

### LL-10280
SIMULTANEOUS INFLATION
DUAL INPUT, DUAL ELECTRICAL SWITCH

- A: 4.5’ [114.3 mm]
- B: 2.8’ [71.0 mm]
- C: .22’ [5.6 mm]
- D: 2.07’ [52.8 mm]
- E: .55’ [13.85 mm]
**Mechanical Air Gauges**

- Air pressure shown from 0 psi to 150 psi in 10 psi increments – numeric markings at 0, 50, 100 & 150 psi
- Black bezel, white dial face
- Available with single input (single needle), or dual input (dual needle)
- Installation hole Ø2-1/16" [Ø52.5 mm] (Gauge body min 2", bezel max 2.2")
- Mounting hardware provided

**LL-10010 Dual Needle**

A: 2.01" [51.1 mm]  
B: 2.25" [57 mm]  
C: 2.23" [56.5 mm]  
D: .28" [7.1 mm]  
E: 2 x 1/8" (-2) NPT Male

**LL-20520 Single Needle**

A: 2.01" [51.1 mm]  
B: 2.25" [57 mm]  
C: 2.23" [56.5 mm]  
D: .28" [7.1 mm]  
E: 1 x 1/8" (-2) NPT Male

**Digital Air Gauge Kits**

- Pressure shown from 0 psi to 220 psi – 1 psi increments
- 12 VDC supply voltage, 3 A fuse required within 20" [500 mm] of power source
- Black bezel, black face, blue digits – two stage dimming feature – can dim when headlight switch is engaged
- If signal is lost, display will flash as a warning
- Installation hole Ø2-1/16" [Ø52.5 mm]
- 24" [600 mm] wire pigtail extending from gauge
- EMC Tested – CE certified

**LL-10218 Kit**

**Dual Input**

A: 2.05" [51.9 mm]  
B: 1.22" [31 mm]  
C: 2.27" [57.5 mm]  
D: .34" [8.5 mm]

*Kit includes gauge & 2 LL-10219 sensors

**LL-10219 Air Pressure Sensor**

A: 1.75" [44.5 mm]  
B: 2.55" [64.8 mm]  
C: .70" [17.8 mm]  
D: 2 x .15" [2 x 3.9 mm]  
E: 1/8" (-2) NPT Male

**Specifications**

- **Maximum Working Pressure**: 0 psi to 150 psi [0 kPa to 1034 kPa]
- **Accuracy**: +/- 3 psi (+/- 21 kPa)
- **Working Temperature Range**: -20°F to 175°F [-29°C to 79°C]
- **Vibration**: 0.030° harmonic motion, 20 Hz to 60 Hz for 1/3 hour per axis
- **Shock**: 44 g to 55 g, 9 ms to 13 ms half sine, 25 shocks
- **Humidity**: 48 hours at 95% R.H. and 100°F [38°C]
- **Salt Spray (Bezel Face)**: ASTM 117, 48 hours

**Digital Air Gauge Kits**

- Pressure shown from 0 psi to 220 psi – 1 psi increments
- 12 VDC supply voltage, 3 A fuse required within 20" [500 mm] of power source
- Black bezel, black face, blue digits – two stage dimming feature – can dim when headlight switch is engaged
- If signal is lost, display will flash as a warning
- Installation hole Ø2-1/16" [Ø52.5 mm]
- 24" [600 mm] wire pigtail extending from gauge
- EMC Tested – CE certified

**LL-10218 Kit**

**Dual Input**

A: 2.05" [51.9 mm]  
B: 1.22" [31 mm]  
C: 2.27" [57.5 mm]  
D: .34" [8.5 mm]

*Kit includes gauge & 2 LL-10219 sensors

**LL-10219 Air Pressure Sensor**

A: 1.75" [44.5 mm]  
B: 2.55" [64.8 mm]  
C: .70" [17.8 mm]  
D: 2 x .15" [2 x 3.9 mm]  
E: 1/8" (-2) NPT Male

**Specifications**

- **Maximum Working Pressure**: 0 psi to 220 psi [0 kPa to 1.52 kPa]
- **Working Temperature Range**: -20°C to 85°C [-4°F to 185°F]
PADDLE VALVE (PNEUMATIC SWITCHES)

- 3-way dead center paddle style actuator
- 27.5° throw
- Black thermoplastic construction – meets FMVSS 302 flammability requirements
- Supply and delivery ports: barbed fitting – accepts 3/8" ID tube – vented to atmosphere through rear of switch
- Fits .89" x 1.61" [22.6 mm x 40.9 mm] openings, R.063" [1.6 mm] max corner radii, .084" to .125" [2.13 mm to 3.18 mm] panel thickness
- Rated for steady state direct current (DC) of 75 A maximum
- Maximum voltage of 15 VDC at zero current
- Maximum 25% duty cycle – maximum “on” time 60 seconds
- Voltage drop across lead wire terminal will not exceed 0.52 VDC at 7 A direct current
- 24" [609 mm] wire leads

SPECIFICATIONS

MAXIMUM WORKING PRESSURE: 150 psi [1,034 kPa]
BLOW OFF PRESSURE AND MINIMUM FLOW RATE: 30 SCFM @ 150 psi [890 L/min @ 1,034 kPa]
TEMPERATURE RANGE: -40°F to 165°F [-25°C to 120°C]

ELECTRICAL SWITCHES

- Snap-in mounting
- Fit .520" x .776" [13.2 mm x 19.7 mm] openings
- .187" [4.75 mm] wide blade terminals
- Plastic body

SPECIFICATIONS

WORKING TEMPERATURE: -4°F to 185°F [-20°C to 85°C]

BRACKETS

- Any Level Load gauge can be used with any bracket
- 14 gauge steel
- Powder coated / matte black

- LL-0096 DUAL PADDLE VALVE
  Accepted Switches: LL-1204

- LL-0097 SINGLE PADDLE VALVE
  Accepted Switches: LL-1204

- LL-1158 QUADRUPLE ELECTRICAL SWITCH
  Accepted Switches: LL-1039, LL-1127

- LL-1157 DUAL ELECTRICAL SWITCH
  Accepted Switches: LL-1039, LL-1127

www.standens.com
Solenoid Specifications

Solenoid Operated Pneumatic Directional Control Valves

Standen’s offers various vacuum and air solenoid configurations to meet any specialty requirement or mounting location. Our engineered commercial-duty and severe-duty solenoids have been through some of the toughest testing grounds the world has to offer.

Standen’s experience designing cost effective hydraulic and pneumatic solenoids with demanding requirements has equipped Standen’s with the experience to integrate solenoid controls into any application.

**Key Features**
- Vacuum and air solenoids
- 2 and 3 way solenoid configurations
- Stackable applications available
- 12 and 24 volt solenoids rated for automotive use
- Severe-duty applications

**3-way, 2-position**
- ‘IN’ port normally closed
- ‘CYL’ port normally open to exhaust (atmosphere)
- 18” [457 mm] long 18 AWG wire lead length
- Anodized aluminum valve body
- Zinc chromate plated carbon steel solenoid body

**LL-C11935 Pneumatic Solenoid**
- Voltage Range: 12 VDC
- Coil Resistance: 10 Ω
- A: 2.91” [74.0 mm]
- B (Hex): 1.50” [38.1 mm]
- C: .35” X .50” [8.9 mm X 12.7 mm]
- D: 2.00” [50.8 mm]
- E: 1.8” [45.7 mm]
- F (Port): 1/8”-27 (-2) NPTF
- G (Port): 1/8”-27 (-2) NPTF
- H: .563” [14.3 mm]

**LL-C11979 Pneumatic Solenoid**
- Voltage Range: 24 VDC
- Coil Resistance: 50 Ω
- A: 2.91” [74.0 mm]
- B (Hex): 1.50” [38.1 mm]
- C: .35” X .50” [8.9 mm X 12.7 mm]
- D: 2.00” [50.8 mm]
- E: 1.8” [45.7 mm]
- F (Port): 1/8”-27 (-2) NPTF
- G (Port): 1/8”-27 (-2) NPTF
- H: .563” [14.3 mm]
**4-WAY, 2-POSITION**

- 6 Watt
- .5 Amps current holding
- Spring return with flush non-locking override
- 1/8” (-2) NPTF
- Lubricant free assembly
- Loctite applied to fasteners
- Energize time: 0.012 ms
- De-energize time: 0.006 sec
- Designed to meet NEMA 4/IP65
- Flow capacity: 197 NI/m @ 6 bar upstream /5 bar downstream [9.3 SCM @ 80 psig upstream/atmosphere downstream]
- 15” [457 mm] long 18 AWG pigtail

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>WORKING TEMPERATURE RANGE:</th>
<th>-40°F to 185°F [-40°C to 85°C ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM WORKING PRESSURE:</td>
<td>0 psi to 135 psi [0 kPa to 931 kPa]</td>
</tr>
<tr>
<td>FLOW RATE:</td>
<td>Cv 0.20</td>
</tr>
</tbody>
</table>

**3-WAY, 2-POSITION**

- Direct acting, spring return
- Inlet – normally closed, Cyl – normally open to vent (atmosphere)
- 1/4” (-4) NPTF IN and CYL port
- 6” [152 mm] long 18 AWG (UL 3173) pigtail
- Brass solenoid base
- Zinc chromate plated carbon steel solenoid body
- 1N4006 internal suppression diode
- NEMA 1 Protection

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>WORKING TEMPERATURE RANGE:</th>
<th>-40°F to 248°F [-40°C to 120°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM WORKING PRESSURE:</td>
<td>0 psi to 135 psi [0 kPa to 931 kPa]</td>
</tr>
<tr>
<td>FLOW RATE:</td>
<td>Cv 0.18</td>
</tr>
<tr>
<td>PROOF PRESSURE:</td>
<td>500 psi [3448 kPa]</td>
</tr>
<tr>
<td>BURST PRESSURE:</td>
<td>6000 psi [41369 kPa]</td>
</tr>
<tr>
<td>ORIFICE SIZE:</td>
<td>2 x 3/32” [1.52+/-0.08 mm 2 x 2.38 mm]</td>
</tr>
<tr>
<td>MAX FREQUENCY:</td>
<td>300 Cpm</td>
</tr>
<tr>
<td>RESPONSE TIME:</td>
<td>5-15 ms</td>
</tr>
</tbody>
</table>
LL-325 SERIES AIR COMPRESSORS

Standen’s LL-325 series air compressors have a 33% (20 minutes @ 100 psi) duty cycle and are offered in both 12 and 24 VDC. These ¼ horsepower compressors utilize an oil-less design, sealed bearings, a PTFE piston ring, a copper wire wound permanent magnet motor and a hard anodized aluminum sleeve.

The Premium Air Compressor Kit offers pre-built wiring harnesses for the ultimate ease in installation.

- Sealed bearings
- Cast aluminum cylinder head
- Hard anodized aluminum cylinder
- PTFE piston ring
- Mountable in any orientation

LL-325 SERIES AIR COMPRESSOR DIMENSIONS (IN INCHES)

![LL-325 Series Air Compressor Diagram]

**LL-10143 LL-325 12 VDC AIR COMPRESSOR**
- **Duty Cycle:** 33% (20 Minutes @ 100 psi)
- **Max Working Pressure:** 150 psi [1034 kPa]
- **Voltage:** 12 VDC
- **Size:** 8.7” x 4” x 6.2” (LxWxH)
  - [221 mm x 102 mm x 158 mm]
- **Weight:** 5.5 lbs [2.49 kg]

**LL-10139 LL-325 24 VDC AIR COMPRESSOR**
- **Duty Cycle:** 33% (20 Minutes @ 100 psi)
- **Max Working Pressure:** 150 psi [1034 kPa]
- **Voltage:** 24 VDC
- **Size:** 8.7” x 4” x 6.2” (LxWxH)
  - [221 mm x 102 mm x 158 mm]
- **Weight:** 5.5 lbs [2.49 kg]
**12 VDC SPECIFICATIONS**

**GENERAL DATA**
- **PART NUMBER**: LL-10143
- **WEIGHT**: 5.5 lbs [2.49 kg]
- **AMBIENT TEMPERATURE RANGE**: -40°F to 158°F [-40°C to 70°C]
- **MAX DUTY CYCLE**: 33% (20 minutes @ 100 psi)
- **INGRESS PROTECTION**: IP55 w/remote intake (included)

**PNEUMATIC DATA**
- **RATED FLOW**: 1.1 SCFM
- **MAX WORKING PRESSURE**: 135 psi [931 kPa]
- **MAX RESTART PRESSURE**: 135 psi [931 kPa]

**ELECTRICAL MOTOR DATA**
- **MOTOR TYPE**: Permanent magnet DC
- **OPERATING VOLTAGE**: 12 VDC ± 15%
- **MAXIMUM CURRENT DRAW**: 17 A
- **NOMINAL POWER**: ⅛ HP
- **NOMINAL SPEED**: 3000 RPM

*Operating life may be dependent on application*

---

**24 VDC SPECIFICATIONS**

**GENERAL DATA**
- **MODEL**: LL-10139
- **WEIGHT**: 5.5 lbs [2.49 kg]
- **AMBIENT TEMPERATURE RANGE**: -40°F to 158°F [-40°C to 70°C]
- **MAX DUTY CYCLE**: 33% (20 minutes @ 100 psi)
- **INGRESS PROTECTION**: IP55 w/remote intake (included)

**PNEUMATIC DATA**
- **RATED FLOW**: 1.1 SCFM
- **MAX WORKING PRESSURE**: 150 psi [1034 kPa]
- **MAX RESTART PRESSURE**: 135 psi [931 kPa]

**ELECTRICAL MOTOR DATA**
- **MOTOR TYPE**: Permanent magnet DC
- **OPERATING VOLTAGE**: 24 VDC ± 15%
- **MAXIMUM CURRENT DRAW**: 9 A
- **NOMINAL POWER**: ¼ HP
- **NOMINAL SPEED**: 3000 RPM

*Operating life may be dependent on application*

---

**12 VDC TANK FILL TIME**

<table>
<thead>
<tr>
<th>TANK SIZE</th>
<th>TANK PART #</th>
<th>0 to 100 psi</th>
<th>100 to 150 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ Gallon</td>
<td>LL-10053</td>
<td>23 seconds</td>
<td>23 seconds</td>
</tr>
<tr>
<td>2 ½ Gallon</td>
<td>LL-10050</td>
<td>157 seconds</td>
<td>130 seconds</td>
</tr>
</tbody>
</table>

**24 VDC TANK FILL TIME**

<table>
<thead>
<tr>
<th>TANK SIZE</th>
<th>TANK PART #</th>
<th>0 to 100 psi</th>
<th>100 to 150 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ Gallon</td>
<td>LL-10053</td>
<td>33 seconds</td>
<td>25 seconds</td>
</tr>
<tr>
<td>2 ½ Gallon</td>
<td>LL-10050</td>
<td>174 seconds</td>
<td>155 seconds</td>
</tr>
</tbody>
</table>

---

**LL-325 12 VDC - CURRENT & FLOW RATE VS PRESSURE (13.8 VDC)**

**LL-325 24 VDC - CURRENT & FLOW RATE VS PRESSURE (27.6 VDC)**
**LL-625 SERIES AIR COMPRESSORS**

Standen’s heavy duty LL-625 series air compressors have a 100% duty cycle (1 hour @ 100 psi) and are offered in two pump head configurations: vertical and horizontal. These 3⁄4 horsepower compressors utilize an oil-less design, sealed bearings, a PTFE piston ring, a copper wire wound permanent magnet motor and a cast steel cylinder with a hard anodized aluminum sleeve. The LL-625 series compressors require an unloader assembly when used with an air tank:

- LL-10116 (12 VDC compressor)
- LL-10116-24 (24 VDC compressor)

LL-625 series heavy duty air compressors are designed with a cotton air intake filter located below the cylinder head. This type of filtration is acceptable when the compressor is mounted in an area free from moisture and subjected to minimal airborne debris.

Standen’s optional remote air intake kit (LL-10115) is designed for compressor installations with significant exposure to the elements.

- Vertical (12 VDC & 24 VDC) or Horizontal (12 VDC) head configuration
- Sealed bearings
- Cast steel cylinder with hard anodized aluminum sleeve
- PTFE piston ring
- Mountable in any orientation

<table>
<thead>
<tr>
<th>12 VDC TANK FILL TIME</th>
<th>24 VDC TANK FILL TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TANK SIZE</strong></td>
<td><strong>TANK PART #</strong></td>
</tr>
<tr>
<td>1⁄2 Gallon</td>
<td>LL-10053</td>
</tr>
<tr>
<td>2 1⁄2 Gallon</td>
<td>LL-10050</td>
</tr>
<tr>
<td>5 Gallon</td>
<td>LL-10094</td>
</tr>
</tbody>
</table>

**LL-10625V**
12 VDC AIR COMPRESSOR (VERTICAL)
- Duty Cycle: 100% (1 Hour @ 100 psi)
- Max Working Pressure: 150 psi (1034 kPa)
- Voltage: 12 VDC
- Size: 11.5" x 6" x 9.5" (LxWxH)
- Weight: 18.5 lbs (8.39 kg)

**LL-10625H**
12 VDC AIR COMPRESSOR (HORIZONTAL)
- Duty Cycle: 100% (1 Hour @ 100 psi)
- Max Working Pressure: 150 psi (1034 kPa)
- Voltage: 12 VDC
- Size: 11.5" x 9.5" x 6" (LxWxH)
- Weight: 18.5 lbs (8.39 kg)

**LL-10625V-24**
24 VDC AIR COMPRESSOR (VERTICAL)
- Duty Cycle: 100% (1 Hour @ 100 psi)
- Max Working Pressure: 150 psi (1034 kPa)
- Voltage: 24 VDC
- Size: 11.5" x 6" x 9.5" (LxWxH)
- Weight: 18.5 lbs (8.39 kg)
**12 VDC SPECIFICATIONS**

**GENERAL DATA**
- **PART NUMBER**: LL-10625V (Vertical), LL-10625H (Horizontal)
- **WEIGHT**: 18.5 lbs [8.39 kg]
- **AMBIENT TEMPERATURE RANGE**: -22°F to 158°F [-30°C to 70°C]
- **MAX DUTY CYCLE**: 100% (1 hour @ 100 psi)
- **INGRESS PROTECTION**: IP52 (IP55 w/remote intake)

**PNEUMATIC DATA**
- **RATED FLOW**: 3.1 SCFM
- **MAX WORKING PRESSURE**: 150 psi [1034 kPa]
- **MAX RESTART PRESSURE**: 5 psi [35 kPa]

**ELECTRICAL MOTOR DATA**
- **MOTOR TYPE**: Permanent magnet DC
- **OPERATING VOLTAGE**: 12 VDC ± 15%
- **MAXIMUM CURRENT DRAW**: 5 A
- **NOMINAL POWER**: 3/4 HP
- **NOMINAL SPEED**: 3000 RPM

*Operating life may be dependent on application

---

**24 VDC SPECIFICATIONS**

**GENERAL DATA**
- **PART NUMBER**: LL-10625V-24 (Vertical)
- **WEIGHT**: 18.5 lbs [8.39 kg]
- **AMBIENT TEMPERATURE RANGE**: -22°F to 158°F [-30°C to 70°C]
- **MAX DUTY CYCLE**: 100% (1 hour @ 100 psi)
- **INGRESS PROTECTION**: IP52 (IP55 w/remote intake)

**PNEUMATIC DATA**
- **RATED FLOW**: 3.1 SCFM
- **MAX WORKING PRESSURE**: 150 psi [1034 kPa]
- **MAX RESTART PRESSURE**: 5 psi [35 kPa]

**ELECTRICAL MOTOR DATA**
- **MOTOR TYPE**: Permanent magnet DC
- **OPERATING VOLTAGE**: 24 VDC ± 15%
- **MAXIMUM CURRENT DRAW**: 21 A
- **NOMINAL POWER**: 3/4 HP
- **NOMINAL SPEED**: 3000 RPM

*Operating life may be dependent on application

---

**LL-625 SERIES HORIZONTAL AIR COMPRESSOR (AVAILABLE IN 12 VDC ONLY) DIMENSIONS (IN INCHES)**

[Diagram of LL-625 12 VDC and 24 VDC compressors with specifications and measurements]
### STEEL AIR TANKS

Air tanks work in conjunction with an air compressor to store compressed air and hold it until needed. Storing air allows for quicker product activation and is especially valuable when operating more than one product. These air tanks have welded on mounting brackets. Level Load steel air tanks are powder coated, have an anti-rust inhibitor applied internally and meet ASME specifications.

#### 1/2 GALLON AIR TANK
- Welded on mounting brackets
- Anti-rust coating
- 2 x ¼" (-4) NPT Ports

**C11940**

1/2 GALLON AIR TANK

- Weight: 3.8 lbs [1.72 kg]
- Max Working Pressure: 150 psi [1034 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: -40°F to 240°F [-40°C to 120°C]

#### 2 1/2 GALLON AIR TANK
- Welded on mounting brackets
- Anti-rust coating
- 5 x ¼" (-4) NPT Ports

**LL-10013**

2 1/2 GALLON AIR TANK

- Weight: 9.8 lbs [4.45 kg]
- Max Working Pressure: 150 psi [1034 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: -40°F to 240°F [-40°C to 120°C]

#### 5 GALLON AIR TANK
- Welded on mounting brackets
- Anti-rust coating
- 5 x 3/8" (-6) NPT Ports

**LL-10014**

5 GALLON AIR TANK

- Weight: 17.8 lbs [8.07 kg]
- Max Working Pressure: 150 psi [1034 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: -40°F to 240°F [-40°C to 120°C]
**ALUMINUM AIR TANKS**

Aluminum tanks are made with less corrosive and lighter material than the standard steel tanks. These tanks also work in conjunction with air compressors to store the compressed air and hold it until it is required. This allows for quicker activation, especially when operating more than one product simultaneously. Standen’s offers three air tank sizes: a ½ gallon tank, a 2½ gallon tank and a 5 gallon tank.

### ½ GALLON AIR TANK
- Welded on mounting brackets
- Polished aluminum
- 2 x ¼” (-4) NPT Ports

**LL-10257**
- ½ GALLON AIR TANK
- Weight: 1.98 lbs [0.9 kg]
- Wall Thickness: 1/16” [2.5 mm]
- Max Working Pressure: 200 psi [1380 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: -40°F to 248°F [-40°C to 120°C]

### 2 ½ GALLON AIR TANK
- Welded on mounting brackets
- Polished aluminum
- 6 x ⅛” (-4) NPT Ports

**LL-10258**
- 2 ½ GALLON AIR TANK
- Weight: 4.9 lbs [2.2 kg]
- Wall Thickness: 1/16” [2.5 mm]
- Max Working Pressure: 200 psi [1380 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: -40°F to 248°F [-40°C to 120°C]

### 5 GALLON AIR TANK
- Welded on mounting brackets
- Polished aluminum
- 2 x ¾” (-6) NPT Ports and 2 x ¼” (-4) NPT Ports

**LL-10259**
- 5 GALLON AIR TANK
- Weight: 7.94 lbs [3.6 kg]
- Wall Thickness: 5/32” [2.5 mm]
- Max Working Pressure: 200 psi [1380 kPa]
- Burst Pressure: 600 psi [4137 kPa]
- Working Temperature: 5°F to 248°F [-40°C to 120°C]
PUSH-TO-CONNECT FITTINGS

- For use with air, water and oil
- DOT fittings are approved for automotive air brake systems using DOT approved nylon tube
- Non-DOT fittings are for use with standard nylon tube or DOT approved
- Require the use of teflon® tape or pipe sealant – some fittings may come with pipe sealant pre-applied

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT:</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>NON-DOT:</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Hose Barb Fittings

- General purpose fittings for air, water, low pressure and vacuum applications
- Tube/hose requires securing with clamps or ferrules
- Require the use of teflon® tape or pipe sealant – some fittings may come with pipe sealant pre-applied

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM WORKING PRESSURE</td>
</tr>
<tr>
<td>WORKING TEMPERATURE RANGE</td>
</tr>
</tbody>
</table>
**PIPE FITTINGS**

- General purpose fittings for use with air, natural gas, water, and oil
- Require the use of teflon® tape or pipe sealant – some fittings may come with pipe sealant pre-applied

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MAXIMUM WORKING PRESSURE</th>
<th>WORKING TEMPERATURE RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,000 psi [34.5 mPa]</td>
<td>-65°F to 250°F [-54°C to 120°C]</td>
</tr>
</tbody>
</table>

**SAE 45° FLARE FITTINGS**

- Incompatible with JIC (SAE 37°)
- For use with air, natural gas, water, oil, refrigerant & gasoline

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MAXIMUM WORKING PRESSURE</th>
<th>WORKING TEMPERATURE RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot; (-4) SAE 45°: 1,400 psi [9.65 MPa]</td>
<td>-65°F to 250°F [-54°C to 120°C]</td>
</tr>
</tbody>
</table>
COMPRESSED AIR FITTINGS

- For use with air, water and oil
- DOT fittings are approved for automotive brake systems
- Require the use of teflon® tape or pipe sealant – some fittings may come with pipe sealant pre-applied

<table>
<thead>
<tr>
<th>DOT:</th>
<th>MAXIMUM WORKING PRESSURE: ½” OD Tube: 300 psi [2.07 MPa]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WORKING TEMPERATURE RANGE: -40°F to 200°F [-40°C to 93°C]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-DOT:</th>
<th>MAXIMUM WORKING PRESSURE: ½” OD Tube: 400 psi [2.76 MPa]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAXIMUM WORKING PRESSURE: ½” OD Tube: 200 psi [1.38 MPa]</td>
</tr>
<tr>
<td></td>
<td>WORKING TEMPERATURE RANGE: -65°F to 250°F [-54°C to 120°C]</td>
</tr>
</tbody>
</table>

JIC (SAE 37°) FLARE FITTINGS

- JIC (Joint Industrial Council) also known as SAE 37° meeting SAE J514 – incompatible with SAE 45°
- For use with air, natural gas, water, oil, refrigerant & gasoline
- NPT compatible with NPTF when Teflon® tape or thread sealant is utilized

ISO 6149 FITTINGS

- For use in hydraulic power applications
- NPT compatible with NPTF when Teflon® tape or thread sealant is utilized

PNEUMATIC ACCESSORIES

Effective for muffling air valve noise, filtering exhaust/intake air & pressure/vacuum equalization

www.standens.com
CHECK VALVES

- Pneumatic Operation
- Zero Reverse Leakage
- Corrosion Proof (Brass or Stainless Steel)

**SPECIFICATIONS**

| MAXIMUM WORKING PRESSURE | 150 psi [1.03 MPa] |
| WORKING TEMPERATURE RANGE: | -40°F to 248°F [-40°C to 120°C] |
| MINIMUM FLOW RATE | 3.5 SCFM at 5 psi [0.03 MPa] |
| MAXIMUM CRACKING PRESSURE | 5 psi [0.03 MPa] |

**LL-C20506**

Material: Stainless Steel
External Hex: Standard Size
Inlet: 1/8" (-2) NPT Male
Outlet: 1/8" (-2) NPT Female

**LL-C20512**

Material: Brass
External Hex: Standard Size
Inlet: 1/4" (-4) NPT Male
Outlet: 1/4" (-4) NPT Male

QUICK EXHAUST VALVES (QEV)

When installed directly onto pneumatic cylinders, a QEV will allow for quick pneumatic cylinder retraction times, by allowing the air compressed air within the pneumatic cylinder to vent directly to atmosphere through the QEV, rather than be pushed back through a length of plumbing back to the activation solenoid.

**SPECIFICATIONS**

| PRESSURE RANGE | 3.9 psi to 145 psi [26.9 kPa to 1,000 kPa] |
| WORKING TEMPERATURE RANGE: | -40°F to 165°F [-40°C to 74°C] |

**LL-10555**

QUICK EXHAUST VALVES
Fitting End A: 1/8" (-2) NPT Female
Fitting End B: 1/8" (-2) NPT Female
Fitting End C: 1/8" (-2) NPT Female

**LL-10580**

QUICK EXHAUST VALVE
Fitting End A: 1/4" NPT (-4) Female
Fitting End B: 1/4" NPT (-4) Female
Fitting End C: 1/4" NPT (-4) Female

SAE 100R5 END FITTINGS

- Steel reusable end fittings for sae 100R5 (non skive) hose

**SPECIFICATIONS**

| MAXIMUM WORKING PRESSURE | Hose size dependent |
| WORKING TEMPERATURE RANGE: | -40°F to 250°F [-40°C to 121°C] |

**LL-C11041**

SAE 100R5 END FITTINGS
Material: Steel
Fitting End A: 1/4" Nominal ID Hose
Fitting End B: 1/8" (-2) NPT Male

**LL-C11042**

SAE 100R5 END FITTINGS
Material: Steel
Fitting End A: 1/4" Nominal ID Hose
Fitting End B: 1/4" (-4) NPT Male

**LL-C11043**

SAE 100R5 END FITTINGS
Material: Steel
Fitting End A: 1/4" Nominal ID Hose
Fitting End B: 1/4" (-4) SAE 45° Female

SAE 100R5 MEDIUM PRESSURE HYDRAULIC HOSE (HR5)

For medium pressure hydraulic service in the handling of most hydraulic fluids, gasoline, diesel fuels, lubricating oils, air and water. Recommended for power steering and power steering return lines, fuel filters, turbochargers, tilt lines, lube oil lines and machine tools. Not suitable for use with phosphate esters. Cover is not removed. Meets DOT FMVSS 106 (Non skive).

- Constructed with a textile inner braid with a single wire braid reinforcement & a cotton braided black cover
- Oil and heat-resistant synthetic rubber inner tube
- For fittings CW500 Crimp/SR500 (series) Reusable

**SPECIFICATIONS**

| WORKING PRESSURE | 3000 psi [20.68 MPa] |
| TEMPERATURE RANGE: | -40°F to 250°F [-40°C to 121°C] |
| MINIMUM BURST PRESSURE | 12,000 psi [82.73 MPa] |
| MINIMUM BEND RADIUS | 3" [76.2 mm] |

**LL-C10107**

SAE 100RS MEDIUM PRESSURE HYDRAULIC HOSE
Radius: 1/4" (-4) Nominal ID Hose
Actual ID: 3/16" [4.76 mm]
Hose OD: .52" [13.21 mm]

www.standens.com
NYLON TUBING

Nylon is strong and has a very high pressure rating making it ideal for pneumatic applications. Its strength allows it to be manufactured with thin walls while still maintaining a high pressure rating. Nylon is also stable when exposed to light and heat sources. The combination of high pressure rating, high flow rate, flexibility, and strength make it the perfect choice for the Standen’s Level Load system.

AIRLINE TUBING

DOT tubing is approved for automotive air brake systems

<table>
<thead>
<tr>
<th>COLOR</th>
<th>SIZE</th>
<th>LENGTH</th>
<th>PART #</th>
<th>STANDARD</th>
<th>DOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>¼”</td>
<td>20’ [0.508 m]</td>
<td>LL-1123-20</td>
<td>SAE J844</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>30’ [0.762 m]</td>
<td>LL-1123-30</td>
<td>SAE J844</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>40’ [1.016 m]</td>
<td>LL-1123-40</td>
<td>SAE J844</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>50’ [1.27 m]</td>
<td>LL-1123-50</td>
<td>SAE J844</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>¼”</td>
<td>20’ [0.508 m]</td>
<td>LL-M8280-20</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>¼”</td>
<td>30’ [0.762 m]</td>
<td>LL-M8280-30</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>¼”</td>
<td>40’ [1.016 m]</td>
<td>LL-M8280-40</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>¼”</td>
<td>50’ [1.27 m]</td>
<td>LL-M8280-50</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>20’ [0.508 m]</td>
<td>LL-1215-20</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>30’ [0.762 m]</td>
<td>LL-1215-30</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>40’ [1.016 m]</td>
<td>LL-1215-40</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Black</td>
<td>⅛”</td>
<td>50’ [1.27 m]</td>
<td>LL-1215-50</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Red</td>
<td>¼”</td>
<td>20’ [0.508 m]</td>
<td>LL-M8675-20</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Red</td>
<td>¼”</td>
<td>30’ [0.762 m]</td>
<td>LL-M8675-30</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Red</td>
<td>¼”</td>
<td>40’ [1.016 m]</td>
<td>LL-M8675-40</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Red</td>
<td>¼”</td>
<td>50’ [1.27 m]</td>
<td>LL-M8675-50</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Blue</td>
<td>¼”</td>
<td>20’ [0.508 m]</td>
<td>LL-M8685-20</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Blue</td>
<td>¼”</td>
<td>30’ [0.762 m]</td>
<td>LL-M8685-30</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Blue</td>
<td>¼”</td>
<td>40’ [1.016 m]</td>
<td>LL-M8685-40</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Blue</td>
<td>¼”</td>
<td>50’ [1.27 m]</td>
<td>LL-M8685-50</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Green</td>
<td>¼”</td>
<td>20’ [0.508 m]</td>
<td>LL-M8676-20</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Green</td>
<td>¼”</td>
<td>30’ [0.762 m]</td>
<td>LL-M8676-30</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Green</td>
<td>¼”</td>
<td>40’ [1.016 m]</td>
<td>LL-M8676-40</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Green</td>
<td>¼”</td>
<td>50’ [1.27 m]</td>
<td>LL-M8676-50</td>
<td>SAE J844</td>
<td>✓</td>
</tr>
<tr>
<td>Yellow</td>
<td>6 mm</td>
<td>20’ [0.508 m]</td>
<td>LL-M8299-20</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Yellow</td>
<td>6 mm</td>
<td>30’ [0.762 m]</td>
<td>LL-M8299-30</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Yellow</td>
<td>6 mm</td>
<td>40’ [1.016 m]</td>
<td>LL-M8299-40</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Yellow</td>
<td>6 mm</td>
<td>50’ [1.27 m]</td>
<td>LL-M8299-50</td>
<td>N/A</td>
<td>X</td>
</tr>
</tbody>
</table>
FREQUENTLY ASKED QUESTIONS

1. **Do air springs replace my existing suspension?**
   - No. The installation is fairly simple and can usually be completed within 2-3 hours. If installing the kit with an onboard air system, the installation procedure is a little different and may vary depending on the vehicle application.

2. **Will the installation take a long time to complete?**
   - No. You must never exceed your GVWR (Gross Vehicle Weight Rating). The air springs simply provide you with added support and therefore better control for an overall smoother, safer ride.

3. **If I have uneven weight distribution, is it easy to customize the amount of air in each spring?**
   - Yes. The air springs are adjustable. The fill valves are installed so that the fill valves are easily accessible, usually at the rear of the vehicle, and allow you to adjust each air spring's pressure from the comfort of your driver's seat.

4. **If I choose to install the AMP air suspension kit, can I increase my maximum load capacity?**
   - No. The installation is fairly simple and can usually be completed within 2-3 hours. If installing the kit with an onboard air system, the installation procedure is a little different and may vary depending on the vehicle application.

5. **What information do I need before starting the installation?**
   - Ensure that the application information is correct for the make, model, and year of the vehicle you are installing the kit on. Check the manufacturer's specifications before installing the air suspension kit, as it may affect braking performance.

6. **Before you start, any additional preparation?**
   - Before starting the installation, it is recommended to drain the air tank and dry the solenoid valves and air receivers.

7. **What is the recommended inflation pressure for the air springs?**
   - The recommended inflation pressure for the air springs is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.

8. **Can I use caustic cleaners, organic solvents or steam clean my air springs?**
   - No. The installation is fairly simple and can usually be completed within 2-3 hours. If installing the kit with an onboard air system, the installation procedure is a little different and may vary depending on the vehicle application.

9. **How do I know if my air suspension is working properly?**
   - Check the system regularly by feeling the air springs and listening for any unusual noises. Also, inspect the air springs for damage (abrasion, heat cracking) and replace if necessary.

10. **What maintenance is required for my air suspension?**
    - Maintenance of air springs is essential to prolong service life, providing safety and enjoyment for years to come. Regularly check the air springs for damage (abrasion, heat cracking) and replace if necessary.

11. **How do I clean the air springs?**
    - Take the time to clean all debris such as road salts, grime and oils from the air spring every time you wash your vehicle. Approved cleaning solutions are soap and water, methyl alcohol, ethyl alcohol, and isopropyl alcohol. Never use caustic cleaners, organic solvents or steam clean your air springs.

12. **What are the primary causes for air spring failure?**
    - The primary causes for air spring failure are the misuse and incorrect installation (loose components). Proper installation is critical. Ensure air springs are not overinflated and that all hardware is tight.

13. **What are the maintenance tips for air springs?**
    - It is important to fully drain the air tank – this removes water/moisture from the system, which can adversely affect solenoid valves by either jamming from contaminants which are carried in by water, jamming from freezing at cold temperatures, or producing more moisture and should have the tank drained more frequently.

14. **What happens if I do not maintain my air suspension?**
    - If I do not maintain my air suspension, the air springs will fail and the vehicle will ride rough and uncomfortable. It is important to follow the manufacturer's recommendations for maintenance and service intervals.

15. **What is the warranty on my air suspension system?**
    - The warranty on your air suspension system typically covers defects in materials and workmanship for a specified period, usually 5 years or 100,000 miles, whichever comes first. It is important to review the warranty details with the air suspension manufacturer.

16. **What is the recommended inflation pressure for the air suspension?**
    - The recommended inflation pressure for the air suspension is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.

17. **What is the maximum inflation pressure for the air springs?**
    - The maximum inflation pressure for the air springs is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.

18. **What is the recommended air tank pressure for the air suspension?**
    - The recommended air tank pressure for the air suspension is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.

19. **What is the recommended maintenance interval for the air suspension?**
    - The recommended maintenance interval for the air suspension is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.

20. **What is the recommended air compressor pressure for the air suspension?**
    - The recommended air compressor pressure for the air suspension is determined by the vehicle manufacturer and can be found in the owner's manual. It is important to follow these guidelines to ensure proper performance and longevity of the air suspension system.
MAINTENANCE TIPS FOR AIR SPRINGS AND ONBOARD AIR SYSTEMS

AIR SUSPENSION
The proper care and maintenance of the air springs and all related components will ensure the maximum benefit from the suspension system. Maintenance of the air springs is essential to provide a safe and enjoyable ride for the years to come.

EVERY 1 MONTHS
- Inspect that the fasteners are tight and in good condition.
- Inspect the combination toe flange for corrosion and damage.
- Inspect the spring for damage (abrasion, heat cracking) and replace if necessary.

EVERY 3 MONTHS
- Inspect the air spring brackets for damage (bent, cracked) or misalignment – replace or re-align if necessary.
- Take the time to clean the deck where the air springs pass over. This will keep the air spring system in good condition.
- Take time to clean any area of the vehicle where the air springs are archived. Approved cleaning solutions are model specific. Use model specific cleaning solutions.

EVERY 6 MONTHS
- Inspect the springbrackets for damage (bent, cracked) and replace if necessary.
- Inspect the springbrackets for damage (bent, cracked) and replace if necessary.
- Inspect all wiring for chafing, loose, or corroded terminals. Check attachment points for the compressor, tank, and solenoid valves. Repair as necessary.
- Remove the air tanks and solenoid and wash with warm soap and water solution, air dry and replace.

ONBOARD AIR SYSTEMS
The primary cause of onboard air system failures are air leaks. The onboard air systems will show a gradual loss of air pressure in the air tank. The compressor will cut on and off more frequently or the air tank will not hold pressure. A correctly sealed system will provide enjoyment for years to come.

EVERY 12 MONTHS
- Inspect the air spring (air springs, airlines & fittings) for leaks, using a soap and water solution.
- Inspect the springbrackets for damage (bent, cracked) or misalignment – replace or re-align if necessary.
- Ensure the air spring is clean and free from water. In areas of high humidity the compressor will produce more moisture and should have the tank drained more frequently.
- Inspect all wiring for chafing, loose, or corroded terminals. Check attachment points for the compressor, tank, and solenoid valves. Repair as necessary.
- Inspect the air Brackets for damage (bent, cracked) or misalignment – replace or re-align if necessary.
- Inspect the air Brackets for damage (bent, cracked) or misalignment – replace or re-align if necessary.
- Inspect that all hardware is tight – see installation manual for torque values.

Components
- Air tank
- Compressor
- Cylinder
- Solenoid
- Control Valve
- Fittings
- Air spring

Warranty
Pacbrake will not be responsible for any damage caused by improper maintenance or neglect of the air springs or the onboard air system.

www.stanens.com
AIR SPRING & AIR MANAGEMENT LIMITED WARRANTY

This warranty applies to all Air Spring and Air Management Systems delivered on or after January 1, 2014.

This warranty is non-transferable to next vehicle owner or another vehicle. The Air Spring and Air Management Systems are warranted to be free of defects in construction and operation under normal use and service for the Warranty Coverage periods set forth. There are no representations or warranties, which extend beyond the terms hereof.

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING NO WARRANTY OF MERCHANTABILITY AND NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

PRODUCT WARRANTED
Warranty Coverage applies to ALL AIR SPRING and AIR MANAGEMENT SYSTEM models.

WARRANTY COVERAGE
Air Springs (Single and Double Convoluted Only):
• Lifetime warranty on the original air springs to the original purchaser on the vehicle of first installation
• Replacement air springs 6 months warranty
Air Springs (Sleeve Style):
• two years or 24,000 miles (38,000 kms)

Air Spring Mounting Brackets, Spacers & Fasteners:
• two (2) years or 24,000 miles (38,000 kms), whichever shall occur first

Air Management Control Components including Air Compressors, Switches, Solenoids, Gauges, Air Tanks, O-Rings, Fittings, Hoses and Accessories:
• one (1) year or 24,000 miles (38,000 kms), whichever shall occur first
• Component failure as a result of corrosion is NOT covered by warranty

Air Spring and Air Management Systems Replacement Component and/or Assemblies Coverage Period:
• Six (6) months unlimited mileage or the remainder of the original warranty, whichever is longer.

Labour Charges:
Labour charges associated with repair or replacement of this product is the sole responsibility of the vehicle owner.

LIMITED WARRANTY
Under these limited warranties, we will repair or replace without charge, any part returned to us, freight prepaid, which our examination discloses to our satisfaction to have been defective within the warranty coverage period measured from the date of delivery of the product in question to the original user.

This warranty will not apply to any part or parts which have been altered or repaired, or to parts which have been subjected to misuse, abuse, neglect, off-road, racing (“Racing” is used in its broadest sense and for example, without regard to formalities in relation to prizes, competition, etc.) or accident, or to parts which have been improperly applied, or installed. Improper installation, application, or substitution of parts not manufactured or approved by us shall void this warranty.

OUR SOLE LIABILITY AND YOUR EXCLUSIVE REMEDY IS LIMITED TO THE OBLIGATIONS SET FORTH HEREIN AND STANDENS SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES.

If the product should become defective within the warranty coverage period an authorized distributor shall be notified by you within ninety (90) days of your having notice of a defect.

NOTE: OWNER’S WARRANTY WILL BE VOID IF AIR SPRINGS RUN WITH LESS THAN THE MINIMUM OF 10 PSI.
WARRANTY CARD MUST BE COMPLETED WITHIN 30 DAYS TO VALIDATE WARRANTY
Quality air products from a name you trust