

CAUTION: Always wear safety goggles when performing any maintenance work.

I. Micro 180® Gas Spring Replacement

SLN.180.B and SLN.180.S Models

CAUTION!

Do not remove the rear head if the rod is stuck in the down position. If the rod cannot be pulled up, the **Micro 180®** gas spring inside may be under pressure. Contact DADCO for assistance.



1. Clamp the SLN.180 face down in a vise so the cylinder is secured. Remove the Rear Head (SQ103335) using the Rear Head Removal Kit (SLN.HR.180) and a wrench.

CAUTION!
The **Micro 180®** gas spring inside is preloaded 1 mm.



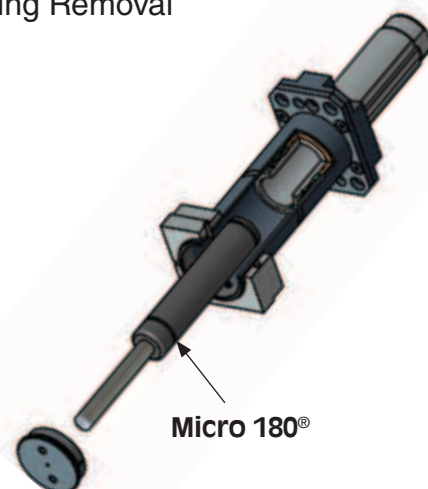
2. Remove the **Micro 180®** gas spring. If replacing the **Micro 180®** gas spring only, proceed to step 3. To continue maintenance of the SLN.180.B Basic Model with replacement parts from the repair kit, proceed to "II. Rod Key Removal" step 1.

For further maintenance on the SLN.180.S Slotted Model, contact DADCO.



3. To verify **Micro 180®** gas spring force before installation, refer to the Micro Load Cell Bulletin, B07108. Lightly oil the body of the **Micro 180®** gas spring and install it into the Tube. Add 2-3 drops of serviceable threadlocker to the threads of the rear head. Replace the rear head. Tighten using the Rear Head Removal Kit (SLN.HR.180) to **180 lb_f-in / 20 N-m.**

Micro 180® Gas Spring Removal



See the Parts List drawing on the reverse side for replacement part information.

II. Rod Key Removal

SLN.180.B Model Only



1. Remove the two screws from the bottom of the mount using a 3.0 mm allen wrench.



2. Slide the Upper Mount (SQ553335) off the Body Tube. The two Rod Keys are located in the Upper Mount.



3. Remove the two Rod Keys (SQ853340) from the Upper Mount (SQ553335) and inspect for wear. If they show signs of wear, they must be replaced.



4. Remove Rod Wiper (SQ463336).



1. Pull the Guide Rod out of the Body Tube. Slide the Lower Mount (SQ553336) off the Body Tube.



2. Slide the Bearing (SQ403335) off Guide Rod and discard. Retain the rod for inspection and reuse. *NOTE: Bearing appearance may differ slightly.*

NOTE: Before starting the reassembly process, be sure the repair area is clean. It is imperative that the gas lifter be free of all contaminants upon reassembly. If this precaution is not taken it may lead to contamination and premature gas lifter failure.

IV. Piston Rider Removal

SLN.180.B Model Only



1. Remove the Piston Rider (BQ419335) from the Piston and discard.



2. Remove the Cushion Ring (SQ453335) and discard.



1. Clean the Guide Rod surface and inspect for deformation in the retaining groove area. If the Guide Rod is damaged it must be replaced.



2. Inspect the Body Tube for any damage, especially around the mouth of the Tube. Lightly polish out any scratches. If damage to the tube is severe it must be replaced. Wash, clean and dry the inside thoroughly.



1. Snap the new Piston Rider (BQ419335) onto the Piston. Be careful not to deform the Piston Rider.



2. Use Bearing to install the Cushion Ring. The Cushion Ring should seat on top of Piston Retainer. Slide bearing off guide rod when complete.

VI. Reassembly (Continued)

SLN.180.B Model Only



3. Install the Bearing (SQ403335) into the Body Tube.



4. Install new Rod Wiper followed by the Rod Keys. Line up Rod Keys before torquing mount into place. Install and tighten Upper and Lower mounts. Install the two mount screws into the Lower Mount with a 3.0 mm allen wrench to **60 lb_f-in / 6.8 N-m.**



5. Lightly coat the inside of the Body Tube, Piston Rider and Cushion Ring with the DADCO assembly grease included in the repair kit.



6. Place the Guide Rod into the Body Tube. Make sure the Guide Rod is properly aligned to the Rod Keys.

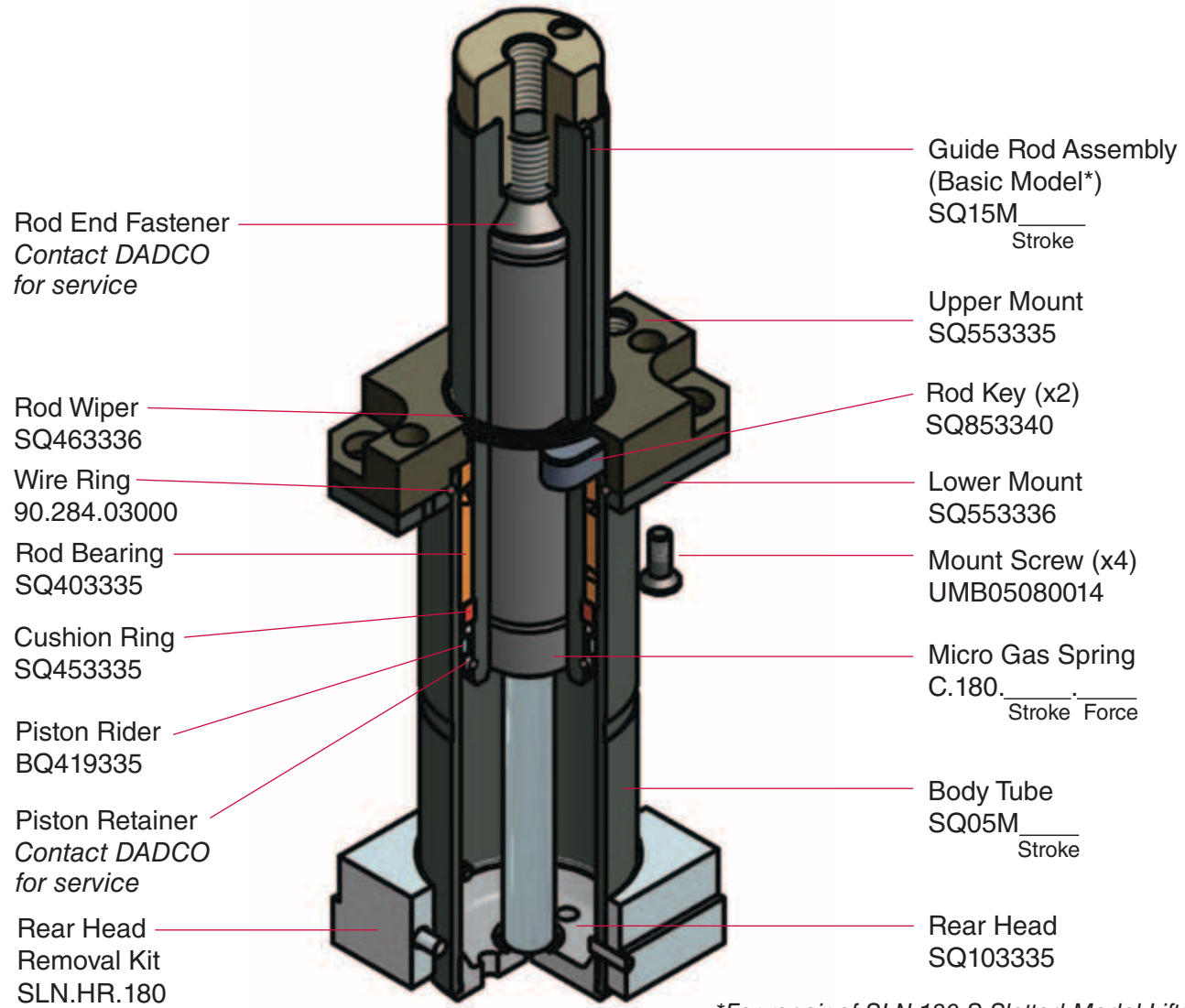


7. To verify **Micro 180®** gas spring force before installation, refer to the Micro Load cell Bulletin, B07108. Lightly oil the body of the **Micro 180®** gas spring and install it into the Tube.



8. Add 2-3 drops of serviceable threadlocker to the threads of the rear head. Replace the rear head. Tighten using the Rear Head Removal Kit (SLN.HR.180) to **180 lb_f-in / 20 N-m.**

SLN.180 Parts List



*For repair of SLN.180.S Slotted Model Lifters, contact DADCO.

SLN.180 Repair Kit SLN.RK.180

Repair kit includes bearing, non-rotation keys (2), piston rider, cushion ring, rod wiper, assembly grease, threadlocker capsule and a maintenance manual.

Valve Bleed Tool 90.360.4

Use the DADCO Valve Bleed Tool to slowly discharge the **Micro 180**[®] gas spring to the desired pressure.



Rear Head Removal Kit SLN.HR.180

For removal or installation of the rear head of the SLN.180 Micro Nitrogen Gas Lifter. **Max. Torque = 180 lb_f-in / 20 N·m.**



Bulletin No. B09154A

Quick and Easy Repair!

The SLN.180 Micro Nitrogen Gas Lifter is designed with DADCO's **Micro 180**[®] gas spring inverted in the guide rod for adjustable lifting force and easy repair. The **Micro 180**[®] may be replaced in just three simple steps!

A repair kit including bearing, piston rider, cushion ring, rod wiper and rod keys, provides replacement parts needed to maintain the lifter. DADCO recommends all replacement parts provided in the repair kit be installed at the same time. Replacement **Micro 180**[®] gas springs are sold separately.

Comprehensive Guide for SLN.180.B (Basic Model)

This service manual is a step-by-step maintenance guide for DADCO's SLN.180 Micro Nitrogen Gas Lifter. Repair instructions in this guide apply to the SLN.180.B (Basic Model).

NOTE: The gas spring in SLN.180.S (Slotted Model) Nitrogen Gas Lifters may be replaced, but factory service is recommended. For more information, please contact DADCO.

Proper repair requires careful examination of all component parts and replacement of any that are worn or damaged. All DADCO replacement parts are available from factory stock.

After reviewing this maintenance guide, if you require any additional training or have any questions please contact DADCO for assistance.

Note: The SLN.180 Micro Nitrogen Gas Lifter is permanently marked with model number, serial number, gas spring part number and repair kit number. Please refer to these when ordering replacement parts.

All DADCO bulletins and catalogs are available for download from our web site, www.dadco.net.



Micro Nitrogen Gas Lifter Maintenance Instructions SLN.180

