

## Strength Equipment Linear Bearing Lubrication

### Applies to

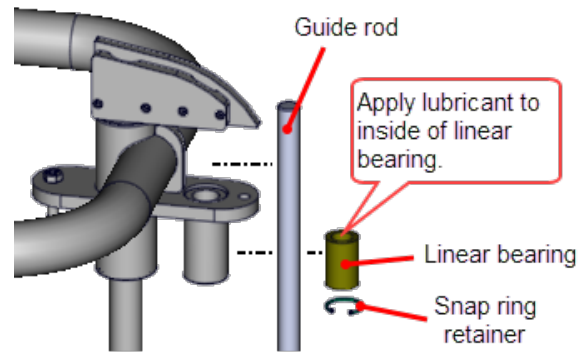
Strength products: DSL215, DSL623, DPL601. DPL603. DPL802. Icarian® 320, C-line CW33966.

### Issue/Symptoms

Failure to apply lubrication to the linear bearing will cause the linear bearings to become dry with use, seize, and damage the guide rods.

### Resolution

When replacing a linear bearing, it is necessary to apply lubrication to the linear bearing prior to installation onto the guide rod. Also the task of reapplying lubrication the linear bearing will be added to the yearly preventive maintenance schedule.



Example Linear Bearing Exploded View

### Tools required

- US hex key set
- US box end wrench set
- Internal snap ring retainer pliers, .070" 90 deg tip
- Nitrile or Latex disposable gloves
- Approved Lubricant: Bio-Food White Aluminum Complex Extreme Pressure Grease, 14 oz., NLGI Grade #2 (available at Grainger, PN 2VXN2)

### Affected strength product models/bearing parts

Refer to the following table for list of affected strength products and bearing part numbers.

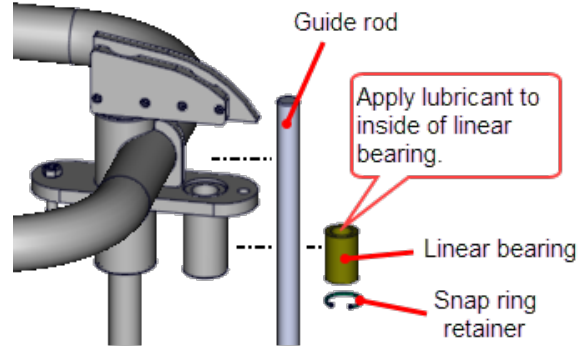
Strength Product	Bearing Part #
<ul style="list-style-type: none"> <li>• DSL 623 Seated Calf Extension</li> <li>• DSL 215 Seated Dip</li> <li>• Icarian® 320 Dip/Chin Assist</li> </ul>	CW12571-101
<ul style="list-style-type: none"> <li>• DPL 601 Angled Leg Press</li> <li>• DPL 603 Hack Squat</li> <li>• DSL 215 Seated Dip</li> </ul>	CW12571-102
<ul style="list-style-type: none"> <li>• C-Line Drop Down Weight (Weights CW33966-102/103)</li> <li>• DSL 623 Seated Calf Extension</li> </ul>	CW12571-103
<ul style="list-style-type: none"> <li>• DPL 802 Smith Machine</li> </ul>	CW12571-104

## Procedure

This document provides one procedure for linear bearing removal installation and one for preventative maintenance.

### Linear Bearing Lubrication replacement procedure

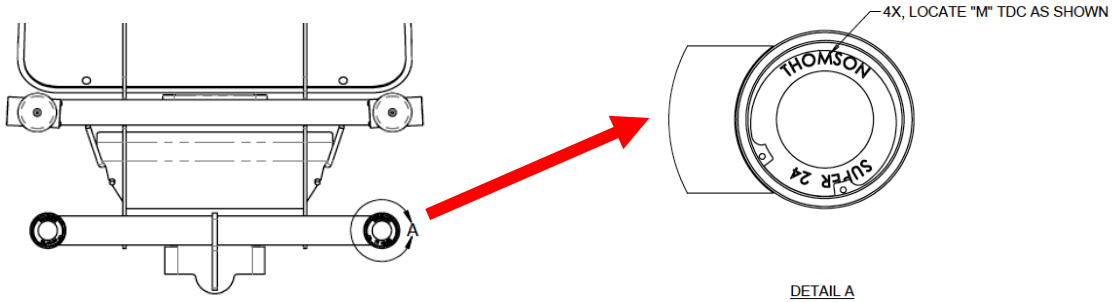
- 1 Use powder-free, Nitrile or Latex disposable gloves to apply the lubricant with your hands.
- 2 Apply the lubricant prior to installing the Linear Bearing onto the guide rod. Coat the inside diameter of Linear Bearing fully 360 degrees with an excessive amount of lubricant, approximately a ¼ inch thick. It is only necessary to apply the grease to the exposed ball bearings on the inside diameter of the Linear Bearing. Other non-exposed ball bearings within the Linear Bearing will be lubricated when the bearing is slid onto the Guide Rod.
- 3 After the lubricated Linear bearing is installed onto the Guide Rod, cycle the Linear Bearings several times up and down the guide rod, about 6 to 8 inches to complete the lubrication of the bearing.



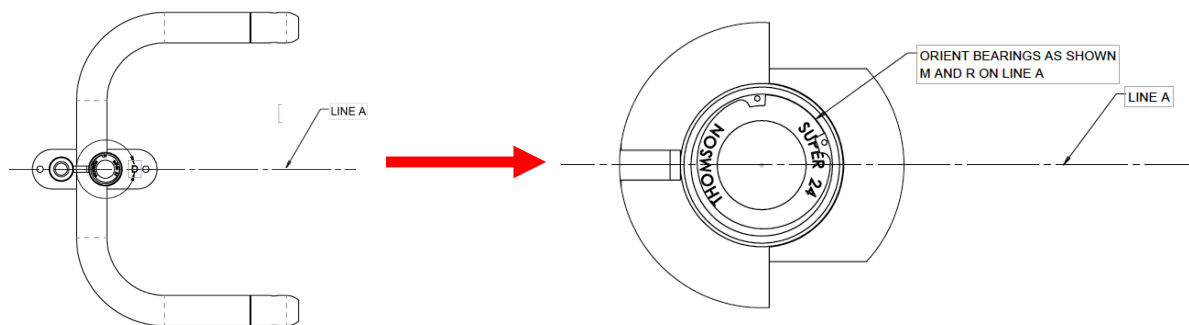
Example Linear Bearing Exploded View



**Note:** Linear Bearings must be oriented with the “M” in “Thompson” top dead center (TDC) as shown. The exception is the Seated Dip (see the **Note** below).



**Note:** The Seated Dip Linear Bearings must be oriented along Line A with the “M” in “Thompson” as shown.



- 4 After the up and down cycle, there will be a thin layer of lubrication on the Guide Rod. Remove the layer of lubricate from the Guide Rod with a soft rag to prevent contaminates from sticking to the Guide Rods.

**Preventative Maintenance Linear Bearing Lubrication Procedure:**

Perform linear bearing lubrication maintenance on a yearly scheduled basis.

- 1 Use powder-free, Nitrile or Latex disposable gloves to apply the lubricant with your hands.
- 2 Apply an excessive amount of lubricant, approximately a ¼ inch thick to the Guide Rod just in front of the movement path of the Linear Bearing.
- 3 After the lubrication has been applied to the Guide Rod, cycle the Linear Bearings several times up and down on the guide rod, about 6 to 8 inches to lubricate the bearing.
- 4 After the up and down cycle, remove the remaining layer of lubricate from the Guide Rod with a soft rag to prevent contaminates from sticking to the Guide Rods.
- 5 It is recommended that the Linear Bearings be lubricated every 12 months.