

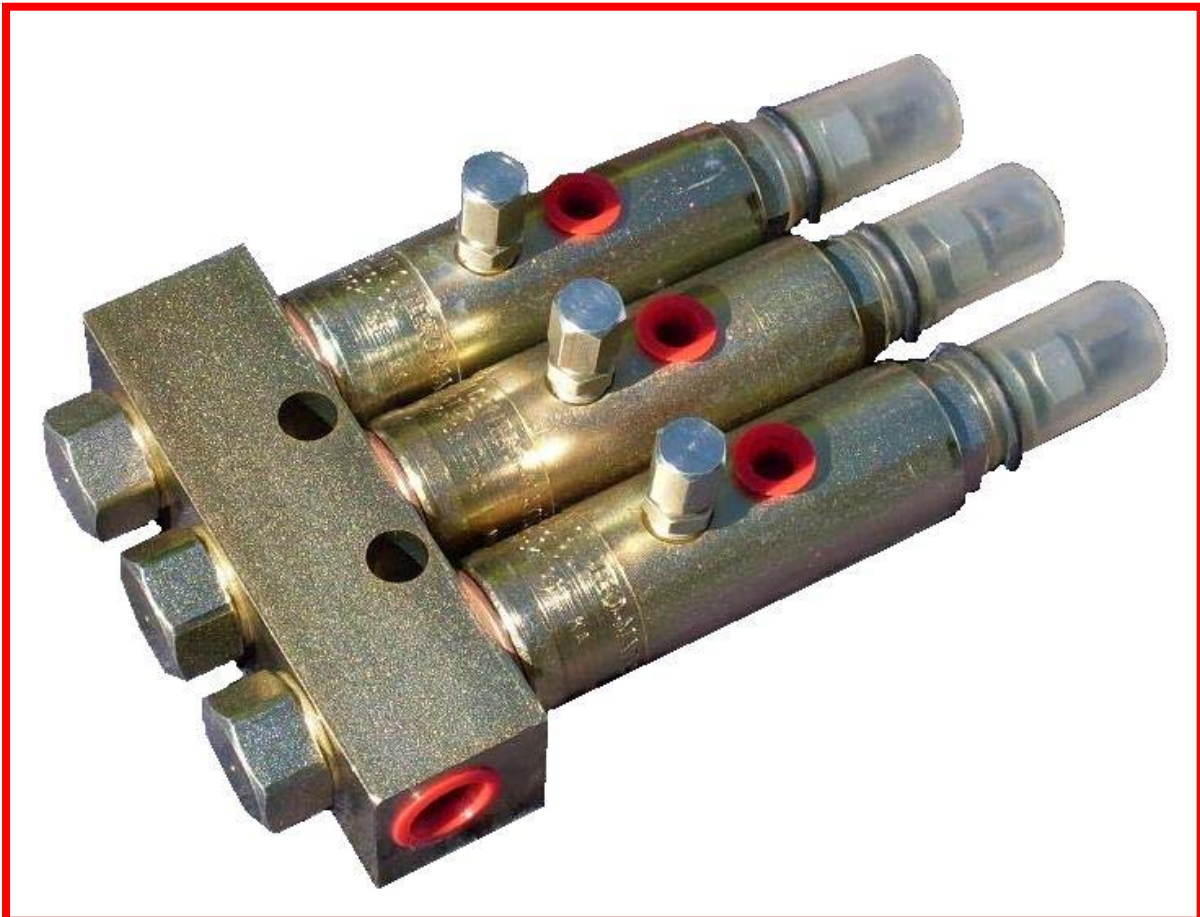
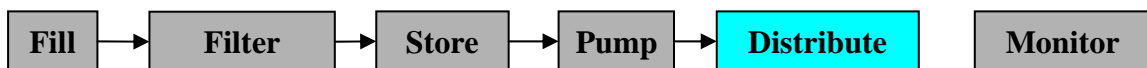
## Easilube Product Manual

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# EASILUBE®

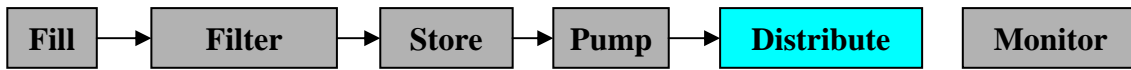
## HYDEN199 Grease Injector



# Contents

Reference Number	Topic	Page Number
1	<b>The HYDEN199 Grease Injector</b>	3
1.1	General Description	3
1.2	Options	4
1.3	Ordering Code	4
2	<b>Product Details</b>	5
2.1	Assembly and Part Numbers	5
2.2	Operation	6
2.3	Adjustment	7
2.4	Mounting Details	8

For further system information, please refer to 'Easilube Background, Installation and Commissioning' and 'Easilube Diagnostics' manuals



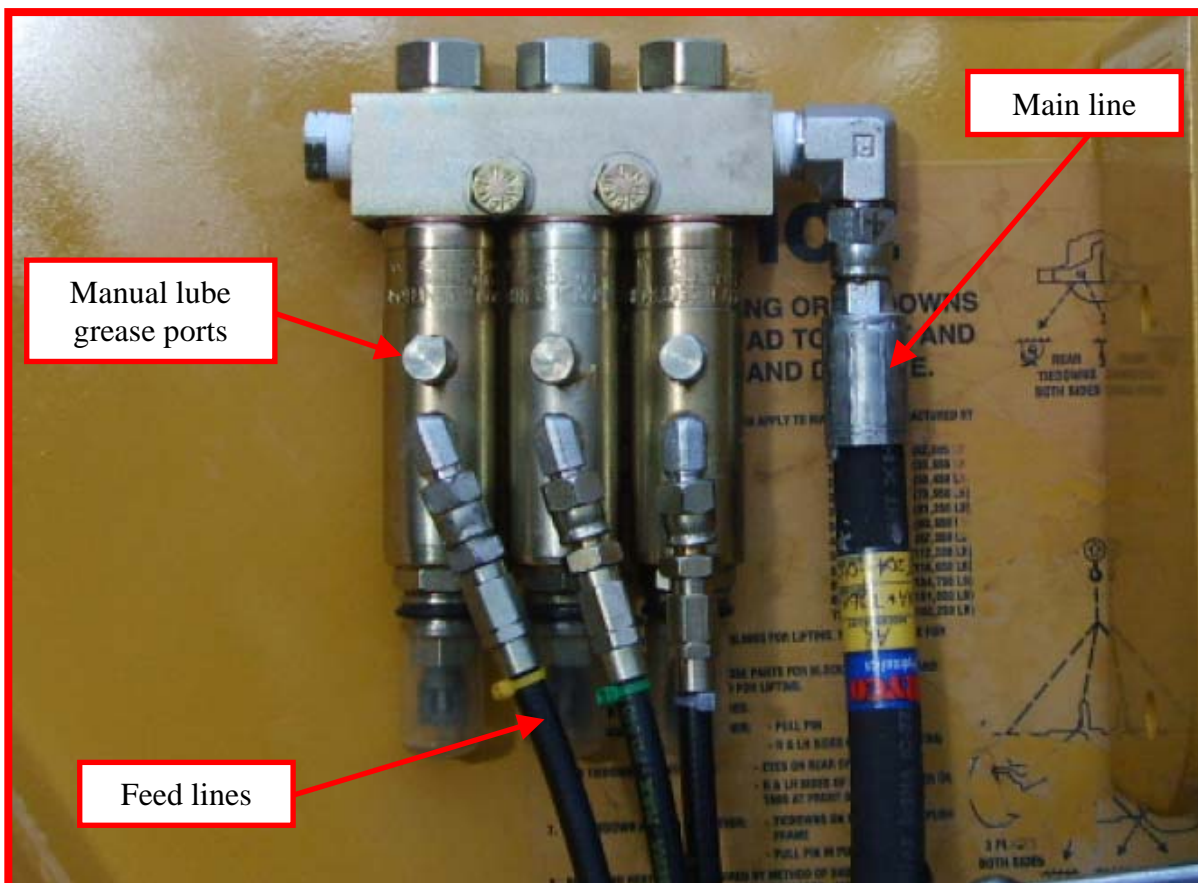
## 1. The HYDEN199 Grease Injector

### 1.1 General Description

The HYDEN199 is a grease injector for use in an Easilube automatic lubrication system. Available in banks of up to six, they operate on the rise and fall of main line pressure (created by a 'single-shot' pump such as the HYDEN500) and distribute individually set quantities of grease to each bearing feed line.

The HYDEN199 Grease Injector benefits from the following features:

- Accurate grease distribution to bearing points.
- Grease output between **0.131cc** and **1.31cc** per shot, individually adjustable at the each injector for each bearing output line.
- Operation between **1850-psi** and **3500-psi** supply pressure.
- High reset pressure of **600-psi**.
- Availability of individual units and banks of up to six units.
- Manual lubrication provision.



## 1.2 Options

- Single replacement injector, 1, 2, 3, 4, 5 and 6 injector banks

## 1.3 Ordering Code

<b>HYDEN199-</b>		<b>0</b>	<b>-XXX</b>
<b>Product No</b>			
<b>Bank Size</b>			
Single Replacement Injector		<b>0</b>	
1 Bank		<b>1</b>	
2 Bank		<b>2</b>	
3 Bank		<b>3</b>	
4 Bank		<b>4</b>	
5 Bank		<b>5</b>	
6 Bank		<b>6</b>	
<b>Design Code</b>			
Design One			<b>XXX</b>



## 2.2 Operation

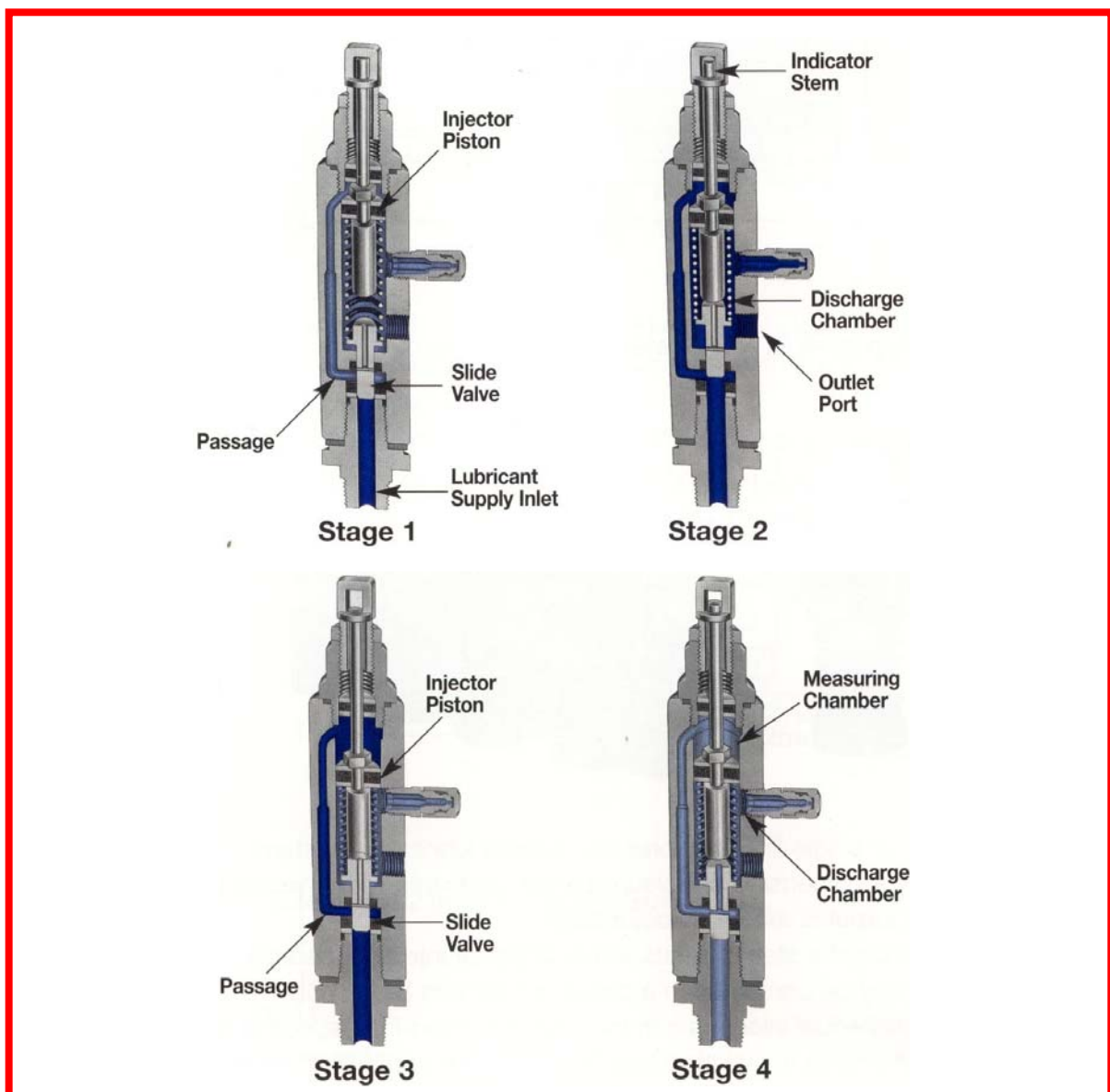
Stage 1) Grease pressure from the main line enters the injector via the *lubricant supply inlet* forcing the *slide valve* to seat on the *ported spring seat*.

Stage 2) As the *slide valve* and *ported spring seat* lift incoming grease flows through the *passage* to the top side of the *injector piston*.

Stage 3) As the incoming grease pressure forces the *injector piston* down in the *measuring chamber* the pre-charge of lubricant in the *discharge chamber* is displaced to the feed line via the *outlet port*.

Stage 4) When the grease main line pressure is vented (pump reset) the spring will force the *ported spring seat* and *slide valve* to lower and the *injector piston* to rise. Once the *slide valve* is unseated, the rising *injector piston* will cause the grease contained in the *measuring chamber* to move down through the *passage* and up into the *discharge chamber*. The injector is now fully reset ready for the next cycle.

Note: Injector operation may be checked by removing the dust cap and observing movement of the *indicator stem* whilst the grease pump is actuated.



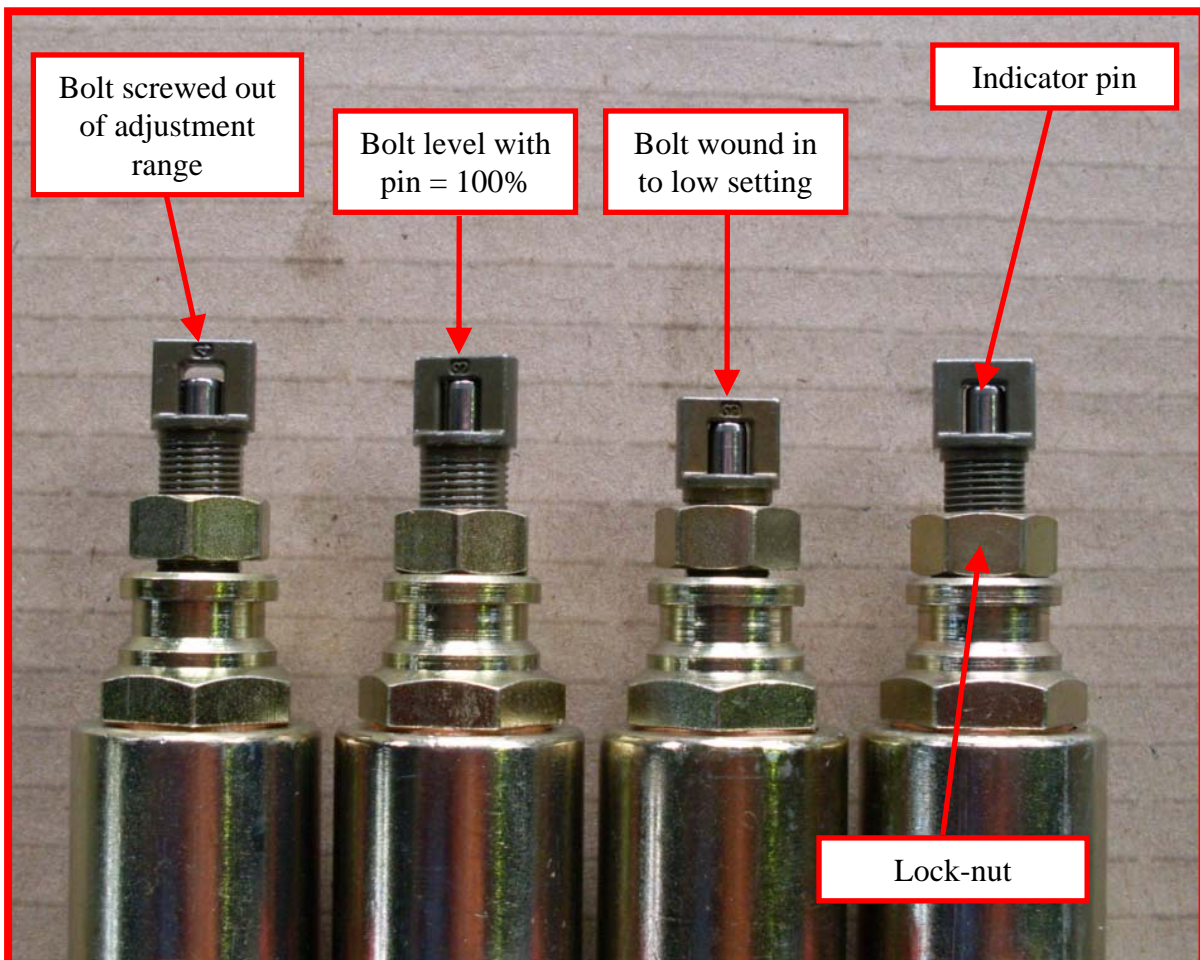
## 2.3 Adjustment

The injectors may be adjusted by turning the indicator bolt clockwise from level with the indicator pin or to a position measured with an adjustment tool.

Number of turns from level and corresponding setting:

- Level = 100%
- 2 Full turns = 75%
- 3.5 Full turns = 60%
- 4 Full turns = 50%
- 6 Full turns = 25%

The following figure illustrates the adjusting nuts wound up to be level ('flush') with the top of the indicator pins.



## 2.4 Mounting Details

➤	1 Bank	One Hole	B = 63-mm
➤	2 Bank	One Hole	B = 76-mm
➤	3 Bank	A = 32-mm	B = 108-mm
➤	4 Bank	A = 63-mm	B = 140-mm
➤	5 Bank	A = 95-mm	B = 171-mm

