

# Installation, Tensioning & Maintenance Manual

4G Series - 4G-6 to 4G-12 (including T2).

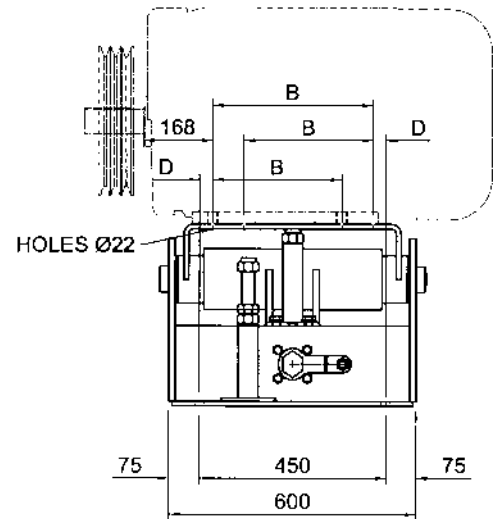
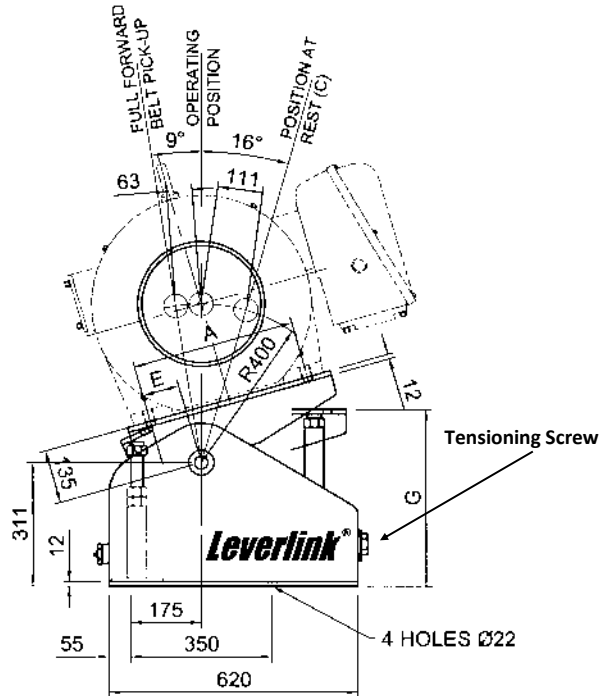


sales @ leverlink.com.au

LLE-006-519

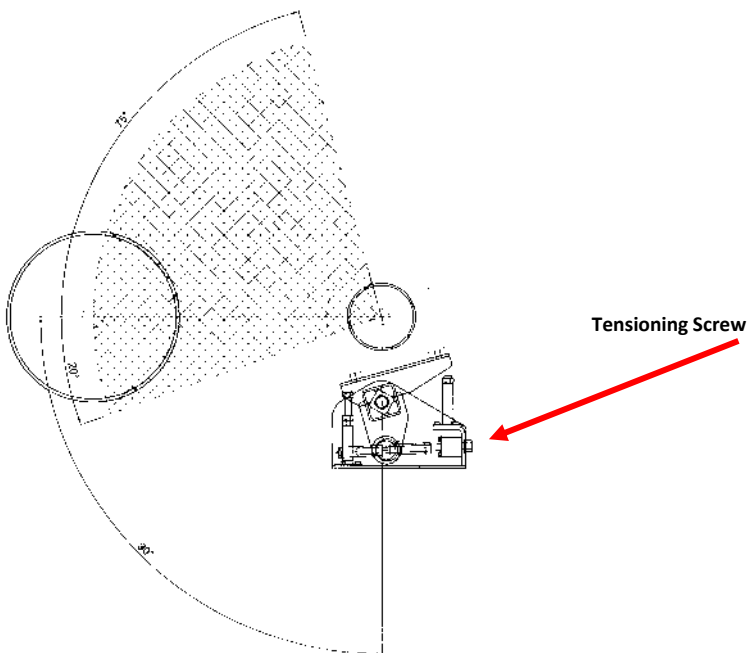
## Model 4G-6 & 7

Note: Motor can be mounted right or left handed



Mass	Model	Motor Information					Leverlink Dimensions		
		Frame Size	6 Pole kW	4 Pole kW	A	B	G	D	E
170kg	4G-6	D250S	37	55	406	311	450	32	93
200kg	4G-7	D250M	37-45	55-75	406	349	450	32	93

\*We have attempted to cover all variations offered by motor manufacturers

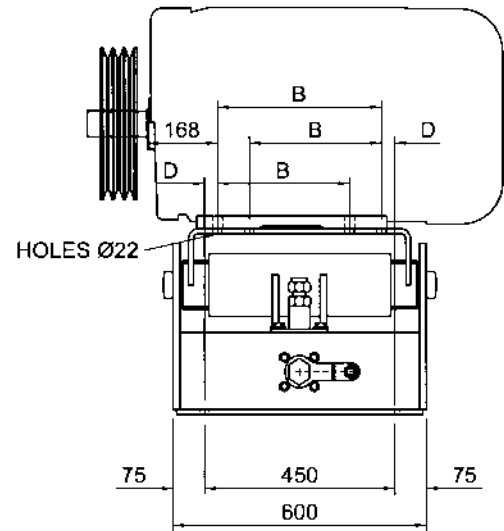
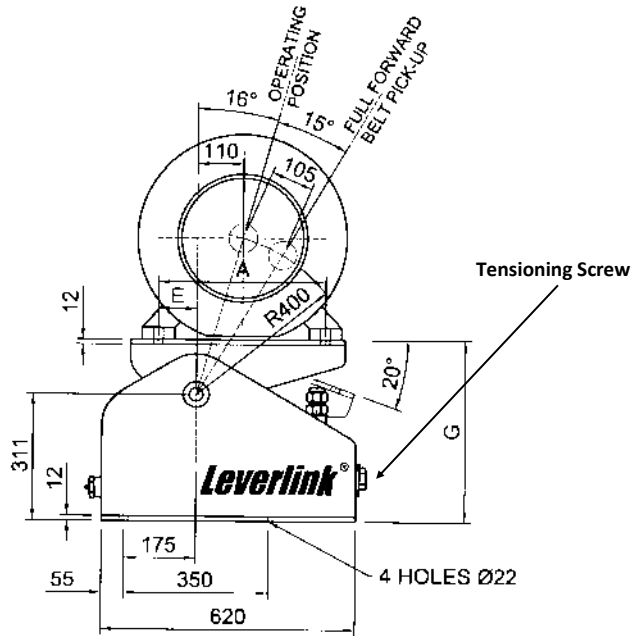


## Installation Position



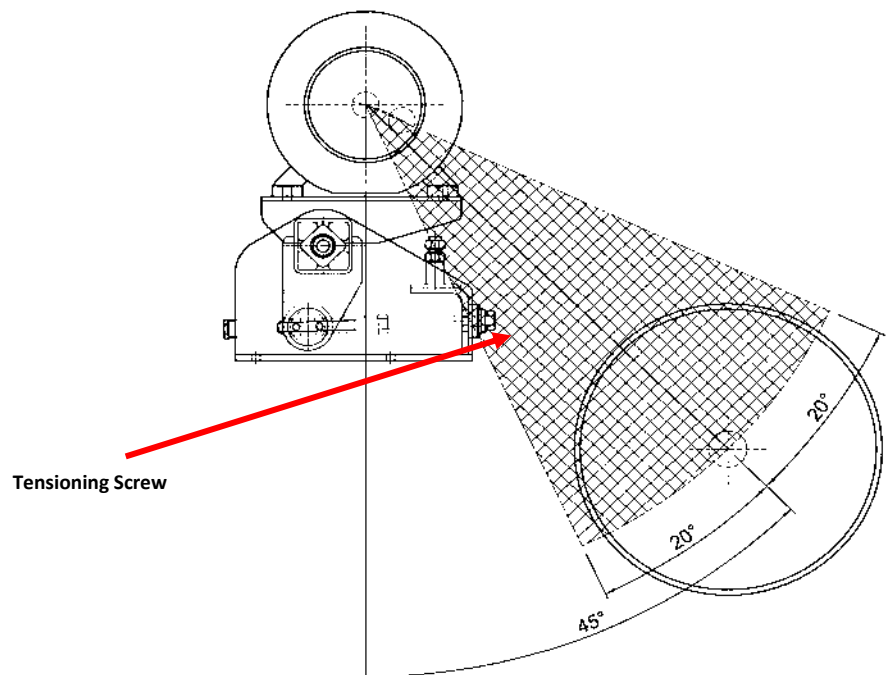
## Model 4G-6 & 7—Type 2

Note: Motor can be mounted right or left handed



Mass	Model	Motor Information					Leverlink Dimensions		
		Frame Size	6 Pole kW	4 Pole kW	A	B	G	D	E
170kg	4G-6 Type 2	D250S	37	55	406	311	450	32	93
200kg	4G-7 Type 2	D250M	37-45	55-75	406	349	450	32	93

## Installation Position

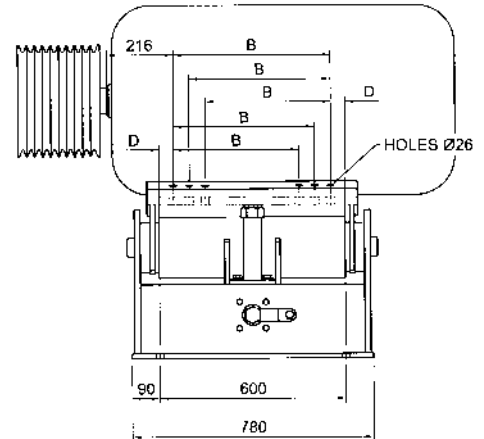
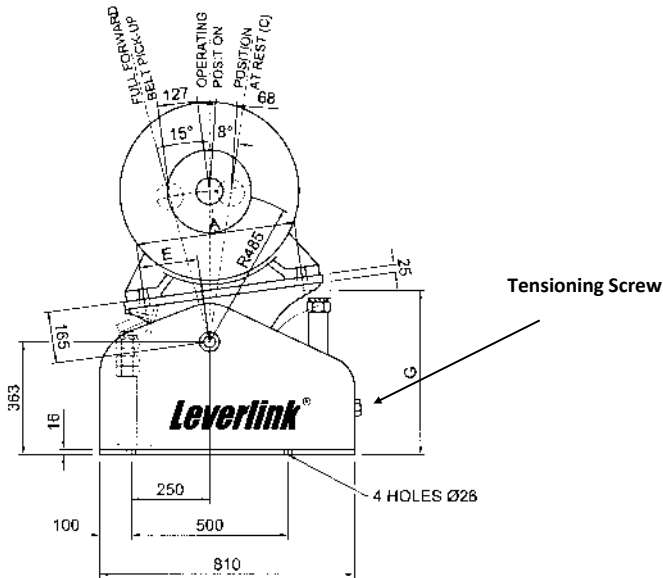




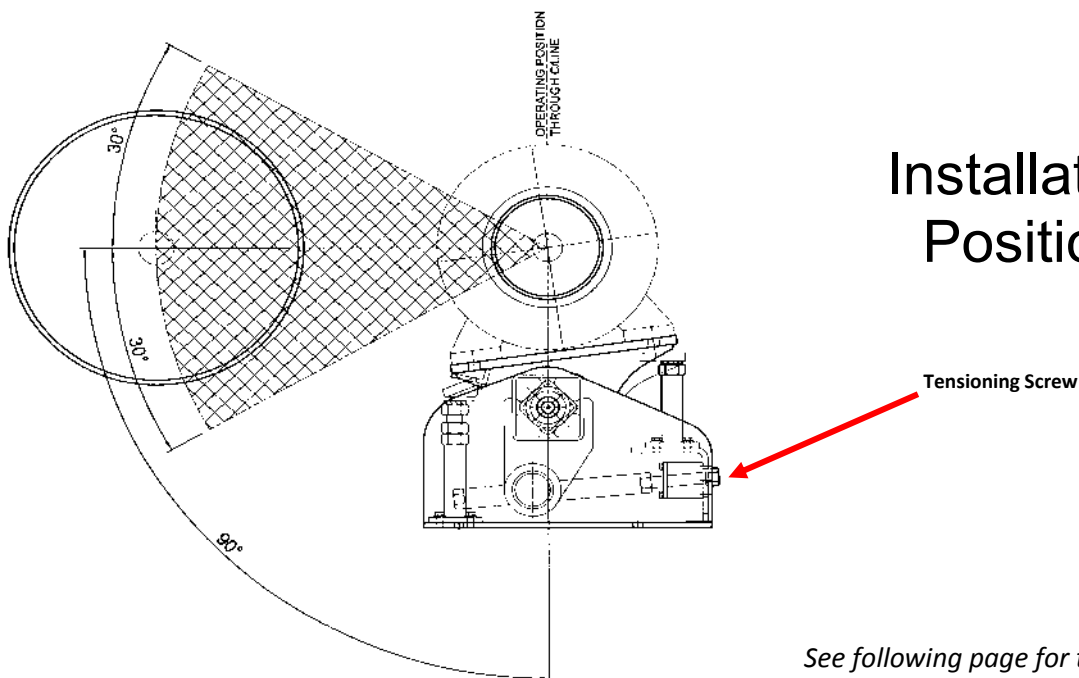


## Model 4G-10, 11 & 12

Note: Motor can be mounted right or left handed



Mass	Model	Motor Information					Leverlink Dimensions		
		Frame Size	6 Pole kW	4 Pole kW	A	B	G	D	E
275kg	4G-10	D315S	75-90	110-132	508	406	528	46	185
400kg	4G-11	D315M	90-110	132-160	508	457	528	46	185
410kg	4G-12	D315M	132-160	185-200	508	457	528	46	185
		D315L	110-132	160-200	508	508	528	46	185

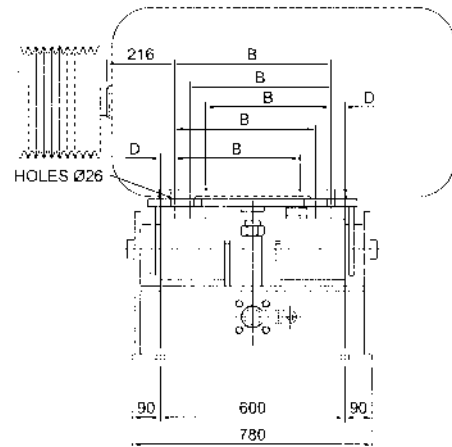
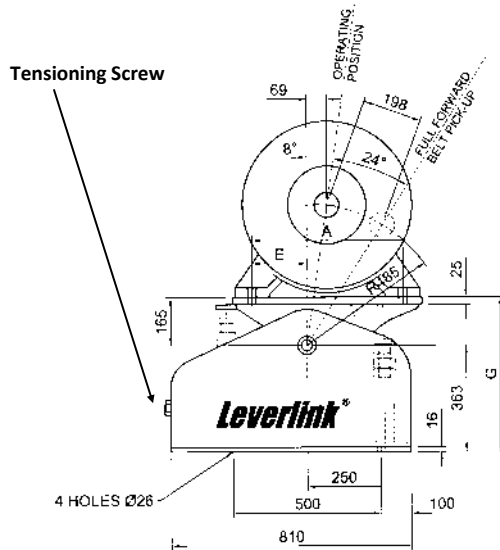


## Installation Position

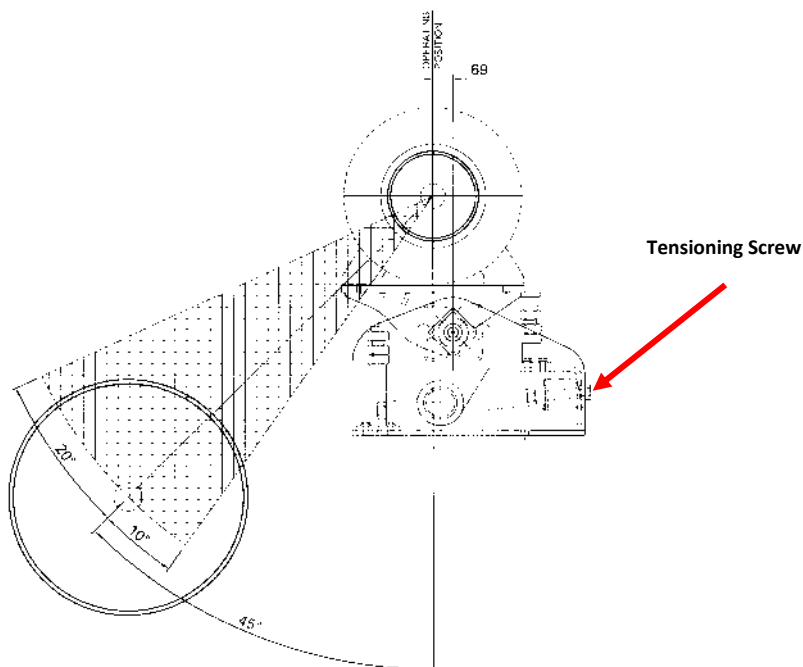
See following page for type 2.

## Model 4G-10, 11 & 12 - Type 2

Note: Motor can be mounted right or left handed



Mass	Model	Motor Information					Leverlink Dimensions		
		Frame Size	6 Pole kW	4 Pole kW	A	B	G	D	E
	4G-10 Type 2	D315S	75-90	110-132	508	406	528	46	185
	4G-11 Type 2	D315M	90-110	132-160	508	457	528	46	185
	4G-12 Type 2	D315M	132-160	185-200	508	457	528	46	185
		D315L	110-132	160-200	508	508	528	46	185



### Installation Position

# Installation and Tensioning

**Safety First - Isolate Equipment as per site procedure.**

Leverlinks have been developed to simplify the changing and re-tensioning of Vee Belts. We recommend the use of a Ratchet which will allow the Vee Belts to be adjusted or changed quickly and efficiently.

## Installation

1. Bolt the Leverlink to the support structure in the predetermined position to suit the length of the drive belt(s). Refer to installation positions.
2. Bolt the motor to the base plate.
3. Check that the pulley faces are aligned before tightening all fixing bolts. This will ensure that the motor shaft axis is parallel to the driven shaft axis in all planes.
4. Remove the locking spanner. Using a 46mm socket, turn the Adjusting Screw in order to tilt the motor in the appropriate direction to allow the the drive belt(s) to be fitted.
5. Once again, using the Rattle Gun or ratchet, turn the Adjusting Screw in the opposite direction to tension the belt(s), noting that in doing so, torque is being applied to the Motor Base rubber torsional spring. Tension the belts to the maximum tension recommended by the belt manufacturer.
6. Refit The locking Cap.
7. Test run and inspect belt(s).  
\*Belts may stretch and settle in during test run.  
\*\*If belt tension is too low, remove locking spanner before repeating step numbers 5 & 6.
8. Fit Belt Guards.

## Special Notes

Always fit locking cap after tensioning or re-tensioning.

Do not cut belts while tensioned as motor will spring back and may cause injury.

Avoid injury to hands, when new belts are being fitted.

Screen drives differ from pump, fan and other fixed centre drives

**\*Over tensioning will pull screen on end or skew it sideways.**

**\*\*Under tensioning will cause belt slippage.**

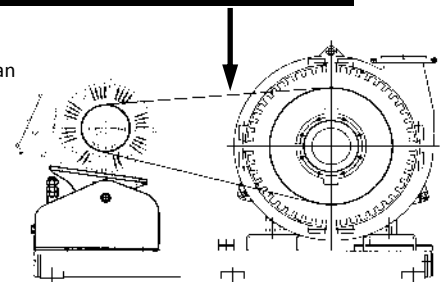
Static drives with fixed centres should be tensioned to belt manufacturer specifications using the force deflection method.

Refer to table below or contact your belt manufacturer or supplier.

## Tensioning Forces

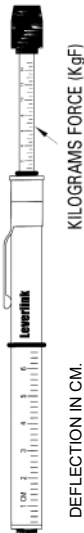
Belt	Force Required to Deflect Belt 16mm. per metre of span		
	Small Pulley	Newton	Kilogram
SPZ	56 to 71 75 to 90 95 to 125	16 to 20 18 to 22 20 to 25	1.6 to 2.0 1.8 to 2.2 2.0 to 2.5
SPA	80 to 100 106 to 140 150 to 200	22 to 28 30 to 38 36 to 45	2.2 to 2.8 3.0 to 3.9 3.7 to 4.6
SPB	112 to 160 170 to 224 236 to 355	40 to 50 50 to 62 62 to 77	4.0 to 5.1 5.1 to 6.3 6.3 to 7.9
SPC & QXPC	224 to 250 265 to 355	70 to 87 92 to 115	7.1 to 8.9 9.4 to 12.0
8V	335 & above	150 to 190	15.0 to 19.0
Z	56 to 100	5 to 7.5	0.5 to 0.8
A (& HA banded)	80 to 140	10 to 15	1.0 to 1.5
B	125 to 200	20 to 30	2.0 to 3.1
C	200 to 400	40 to 60	4.1 to 6.1
D	355 to 600	70 to 105	7.1 to 10.7

16mm per metre of span

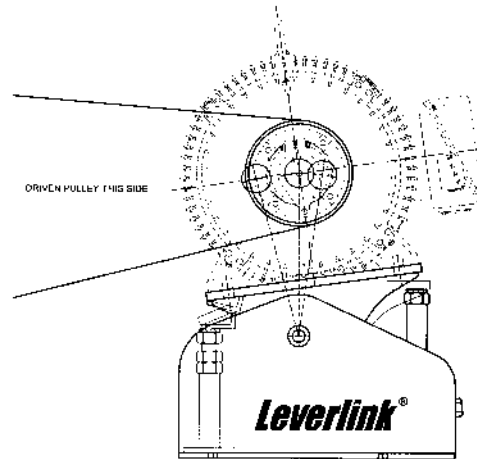




## All Vee Belt Drives



Always use a  
Leverlink® Vee Belt  
Tension Indicator.  
(Instructions are available in  
another publication—contact  
sales@leverlink.com.au ).



← Adjusting Screw  
& Locking Cap

Leverlinks have been developed to simplify the  
changing and retensioning of Vee Belts.  
We recommend the use of a Ratchet, which will allow  
the Vee Belts to be adjusted or changed quickly and  
efficiently.

## Safety First - Isolate Equipment as per site procedure.

### Re-tensioning

New belts should be checked and if necessary,  
re-tensioned after initial stretch has occurred.

1. Check Belt Tension via window in guard or remove guard.
2. Remove Locking spanner.
3. Turn the Adjusting Screw to tension the belt(s).  
Tension the belts to the maximum tension recommended  
by the belt manufacturer.
4. Refit the locking spanner.
5. Test run and inspect belt(s).
6. Fit belt guards.

### Changing - Drive Belts

1. Remove belt guard.
2. Remove Locking spanner.
3. Turn the Adjusting Screw in order to tilt the motor in the  
appropriate direction to allow the drive belts to be removed.
4. Fit the drive belt(s) to the pulleys, ensuring they are matching  
brand and length.
5. Turn the Adjusting Screw in the opposite direction to tension the  
belt(s), noting that in doing so, torque is being applied to the  
Motor Base rubber torsional spring. Tension the belts to the  
maximum tension recommended by the belt manufacturer.
6. Fit the Locking spanner.
7. Test run and inspect belt(s).  
\*Belts may stretch and settle in during test run.  
\*\*If belt tension is too low, remove locking spanner before  
repeating step numbers 5 & 6.
8. Refit Locking spanner.
9. Fit belt guards.

## Maintenance & Lubrication

**Safety First - Isolate Equipment as per site procedure.**

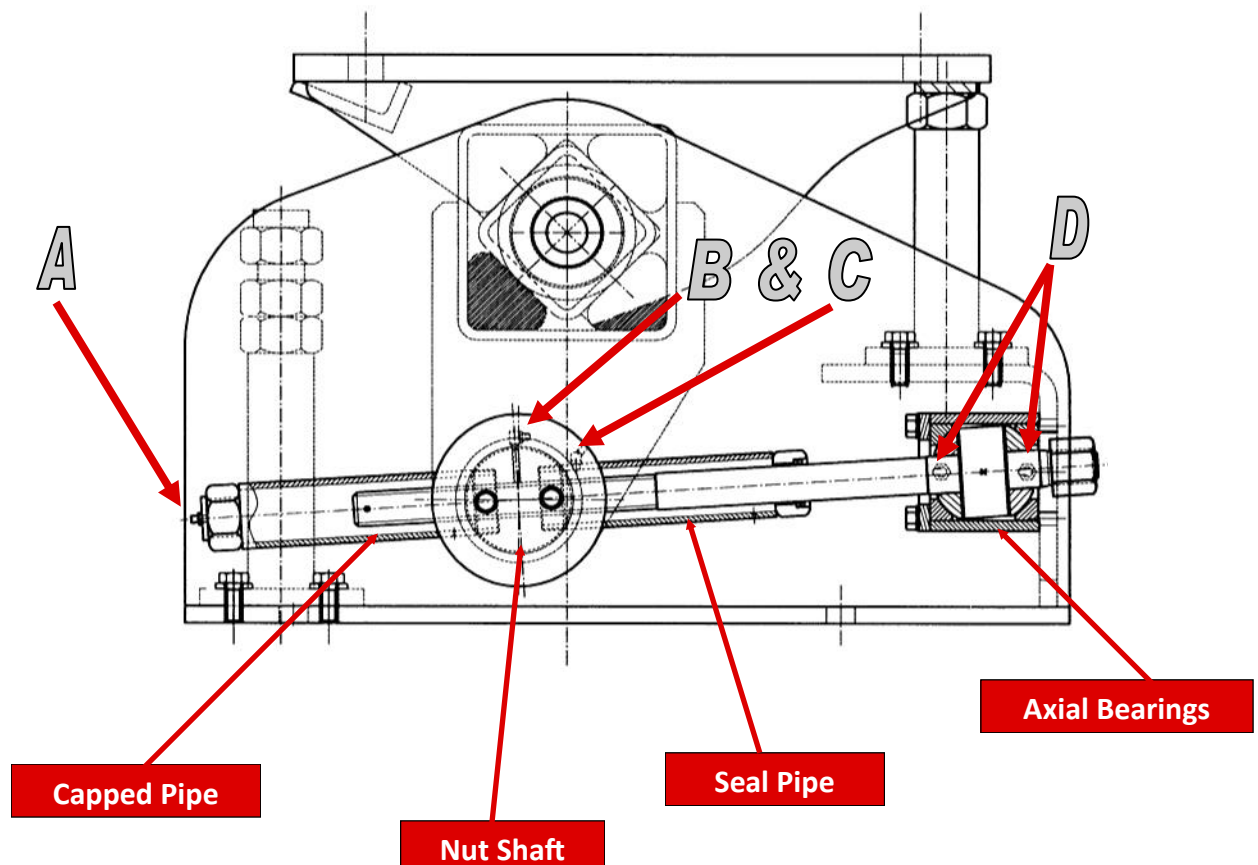
### MAINTENANCE

Leverlink's require very little maintenance. However the following should be carried out to maximise the life of the product.

- **Protective Coating.** Should the protective coating barrier be damaged or broken exposing raw metal this should be immediately repaired.
- **Locking Spanner Fixing Bolt:** Apply lubricate to thread (anti-seize) when removed.

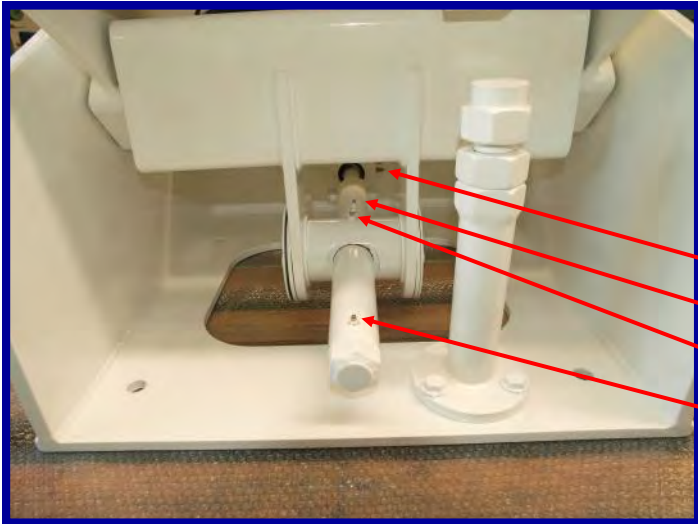
### LUBRICATION

Lubrication is required to **prevent seizure of threads and ease of operation.** The following page sets out these requirements.



## Maintenance & Lubrication

View from behind



Grease Nipples D ( Axial Bearings). Bearing cassette is located behind the strongback.

Grease Nipple C (Seal Pipe)

Grease Nipple B (Nut Shaft)

Grease Nipple A (Capped pipe)

Grease nipples A, B, & C should be lubricated every 6 months until grease flows freely from **BLEED HOLES** in pipes.

### LUBRICATION

Regular greasing with “EP” Type grease should be carried out to ensure free movement of the adjusting screw and the axial bearing located at **D**.

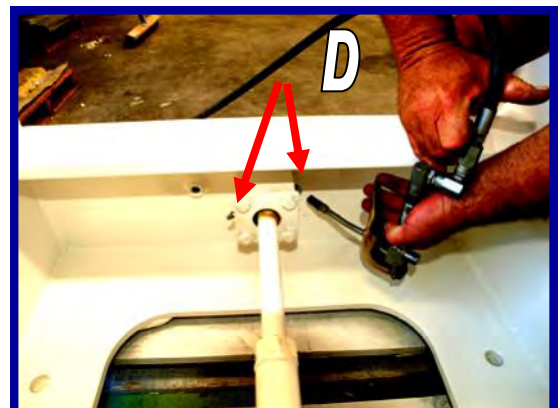
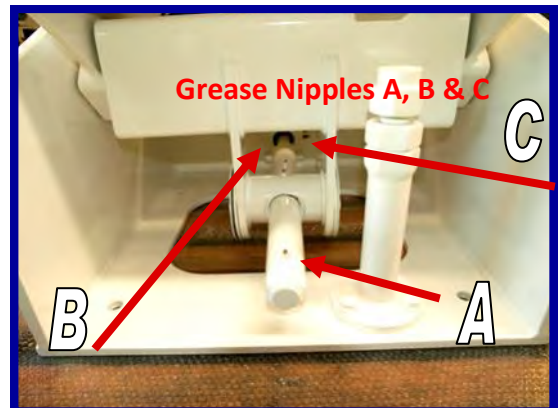
### NIPPLES A, B & C

Must be greased until the grease purges from the bleed holes in the cover pipes known as **Cap Pipe** and **Seal Pipe**.

**It is recommended this is carried out every 6 months.**

### AXIAL BEARING - NIPPLE D

The axial bearing is exposed to the elements and required greasing every time adjustment takes place. This will apply lubricate to the bearing surfaces and reduce friction and the effort required to rotate the adjusting screw.



# Reducing Operating Costs

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