



ENGINEERING

# Technical Bulletin

**TB550-003**

Sheet: 1 of 1

550 Trimmer

Issue: 23. 02. 2011

## LUBRICATION

### **CATEGORY:** Information for Factory Implementation

**Summary:** Some customers have experienced problems with the Lubrication requirements for the Trimming and Pusher Cams. It is important therefore that the following procedure is adopted. This may involve a change in existing procedures or reminder of the details. This bulletin must therefore be passed to the appropriate factory personnel.

The Trimmer and Pusher Cams **MUST** be Lubricated at least once every week by painting on the correct grease - Kluber - Structovis BHD.

Included with this Bulletin are the latest edition of Machine Lubrication Chart and Maintenance Schedule which should be added to the Trimmer machine manuals.

For further information regarding this Technical Bulletin please contact either of the contacts below quoting Technical Bulletin Number **TB550-003** and your machine Serial Number

Note: a complete Library of Technical Bulletins is accessible on the Company Web Site.

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# Lubrication Instruction

Chart No: Lub. 329 Sheet 1 of 1  
 Machine: 550 Trimmer  
 Machine Code: 420014

## Warning

Do not mix brands or mix grades.  
 Stop machine before lubricating.  
 Oil cans and grease guns must only be filled up by the storekeeper.

## Frequency

Lubricate weekly, monthly or every three months as indicated on the Chart

Number of points shown in brackets

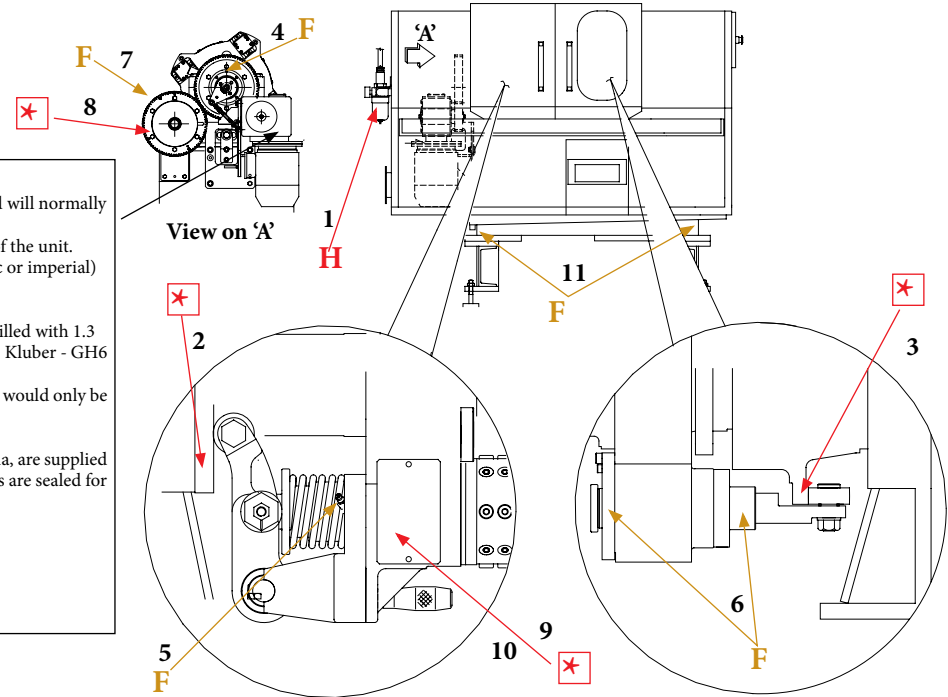
| CarnaudMetalbox Grade | Type   |
|-----------------------|--|
| <b>F</b>              | General Purpose Grease<br><i>Use Shell - Alvania R2, Mobil - Mobilux EP2 or equivalent</i> |
| <b>H</b>              | Hydraulic Oil<br><i>Shell - Tellus R37, Mobil - DTE Light or equivalent</i>                |
| <b>*</b>              | Special Purpose Grease<br><i>Use Kluber - Structovis BHD</i>                               |

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Note:-  
 The Gearbox is supplied filled with oil and will normally require no attention.  
 Oil in these units should last the lifetime of the unit.  
 Depending on the Gear Unit fitted (metric or imperial) the following will apply:

**Metric** Gear units, supplied by Rossi, are filled with 1.3 litres of synthetic Polyglycol oil, grade 220: Kluber - GH6 or Shell - Tivela S  
 Fill and drain plugs are fitted but attention would only be required at a major machine overhaul.

**Imperial** Gear units, supplied by Motovaria, are supplied filled with Shell - Spirax ST and these units are sealed for life.



### Lubricate Weekly:-

- H** 1. Air Lubricator  
*Use Shell - Tellus R37. Mobil DTE light or equivalent*

### Lubricate Weekly:-

- \*** 2. Trimmer Cam    3. Pusher Cam  
*Paint on Special Purpose Grease, Kluber - Structovis BHD*

### Lubricate every Three Months:-

- F** 4. Air Manifold Assembly (1)
- 5. Trimmer Slides (4)
- 6. Pusher Spindles (8)
- 7. Infeed Shaft (2)  
*Use Shell - Alvania R2, Mobil - Mobilux EP2 or equivalent*

- \*** 8. Turret Drive Gears
- 9. Trimmer Spindle Driven Gears
- 10. Spindle Drive Ring Gear (4)  
*Paint on Special Purpose Grease, Kluber - Structovi BHD*

### Lubricate every Six Months

- F** 11. Trimmer Sliding Base (2)  
*Use Shell - Alvania R2, Mobil - Mobilux EP2 or equivalent*

| Areas / Sub Assemblies      | Actions / Settings / Measurements   | Result / Comment | Sign | date |
|-----------------------------|---|------------------|------|------|
| Cleaning                    | Remove all scrap from the inside of the machine. Check that the scrap chute is clear.   |                  |      |      |
| Machine Lubrication         | Lubricate the machine as indicated on the Machine Lubrication Chart<br><i>Note: As indicated on the Lubrication Chart some lubrication is required on a more frequent basis than three monthly</i>  |                  |      |      |
| Main Shaft                  | Check for correct backlash between the Infeed Drive Shaft Gear and Gear on the Main Shaft. (0.005" Check and record)<br><br>Lubricate ( <b>Refer to the Lubrication Chart for frequency of lubrication and lubricant</b> )<br>Turret Drive Gears.<br>Pusher / Trimmer Cams<br>Ring Gear and Spindle Gears, located under covers on the Trimming Turret  |                  |      |      |
| Air Manifold                | Grease the Air Manifold Assembly<br><b>(Refer to the Lubrication Chart for frequency of lubrication and lubricant)</b>  |                  |      |      |
| Air System                  | Fill the Air Lubricator<br><b>(Refer to the Lubrication Chart for frequency of lubrication and lubricant)</b>   |                  |      |      |
| Trimming Spindle Assemblies | Remove the Tooling Head and check the Roller Spindle for wear on the Bearing and end float of Bearing.<br><br>Grease the Trimming Spindle Assy. ( <b>Refer to the Lubrication Chart for frequency of lubrication and lubricant</b> )  |                  |      |      |
| Pusher Spindle Assemblies   | Check 0.12mm / 0.20mm (0.005" / 0.008") gap between the Pusher Cam Followers and Cam Track (Check with Follower on top of Pusher Cam, Pusher will be fully out)<br><br>Check the Cam Followers for wear<br><br>Check the face of the Pusher Pads for wear (i.e. a groove may be worn in the Pads from the base of the cans over a period of time)<br><br>Clean out two Pusher Spindles Assemblies of grease and build up in vacuum holes and connecting slots.<br><br>Remove and re-fit two Stations each maintenance day or as necessary.<br>Re-set alignment of the Pushers to the Trimming Heads.<br><br>Grease the Pusher Spindle Assemblies ( <b>Refer to the Lubrication Chart for frequency of lubrication and lubricant</b> ) |                  |      |      |

| Areas / Sub Assemblies    | Actions / Settings / Measurements   | Result / Comment | Sign | date |
|---------------------------|---|------------------|------|------|
| Discharge Guides          | Check the correct operation of the Discharge Sensors  |                  |      |      |
| Pusher Trip Mechanism     | Check for correct operation of the trip mechanism. Pusher Follower to Trip Finger Gap 0.025mm/0.030mm   |                  |      |      |
| Gauge Settings            | Check the gauge Settings:<br>Main Air: 80psi<br>Trim Eject Air: 15psi<br>Bodymaker sample Air: 60psi<br>Main Vacuum: 23 "HG (with all Pushers covered)<br>Infeed Turret Vacuum 3" - 5"HG (with cans on Starwheel)   |                  |      |      |
| Cam Lever Assemblies      | Check for free movement of Rocker Lever at pivot point [Remove if necessary to do this, but ensure that the lever is returned to the correct Station]<br><br>Check the Cam Followers for wear and play.   |                  |      |      |
| Can Flow / Trim Take Away | Check for smooth transfer of cans from the Conveyor through the machine and into the Discharge Guides, and trim into the Trim Discharge Chute.  |                  |      |      |
| Vacuum Canstop            | Check for correct operation of the Vacuum Canstop (i.e. cans are held without fouling the Starwheel at Infeed)  |                  |      |      |
| Guards Integrity / Safety | Check fitting of all guards and check security of bolts and interlocks  |                  |      |      |
| Check Sample System       | Check that the first can comes from Station 1 and the machine gives four cans.  |                  |      |      |
| Tooling Heads             | Record the Station Number and Head serial number<br><br>Check that the Ejector Ring is not damaged and is free to move<br><br>Check the clearance between the Penetrator and Outside Knife.<br><br>Check clearance between the Penetrator Carrier and Housing.<br><br>Check that none of the Springs are broken.<br><br>Check that the Outside Knife cutting edge is not damaged.<br><br>Check alignment of the Pusher to the Trimming Head |                  |      |      |

| Areas /<br>Sub Assemblies | Actions / Settings / Measurements   | Result / Comment | Sign | date |
|---------------------------|---|------------------|------|------|
| Post Maintenance          | Inspect 5 cans from each Head and check for Burrs / Rough Edge / Slivers / Dents.<br><br>Check for correct can heights and record readings. |                  |      |      |