



ENGINEERING

Technical Bulletin

TB550-002

Sheet: 1 of 1

550 Trimmer

Issue: 14. 06. 2010

LUBRICATION

CATEGORY: Information for Factory Implementation

Summary: Some customers have experienced problems with understanding 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 month 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 **TB550-002** and your machine Serial Number

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

CarnaudMetalbox Engineering Limited,
Dockfield Road, Shipley,
West Yorkshire, BD17 7AY, UK
Tel: +44 1274 846200, Fax: +44 1274 846201
email: sales@CMBEcanmaking.com

CarnaudMetalbox Engineering Limited,
79 Rockland Road, Norwalk,
Connecticut 06854, USA
Tel: +1 203 853 7325, Fax: + 1 203 866 7627
email: sales@CMBEcanmaking.com

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

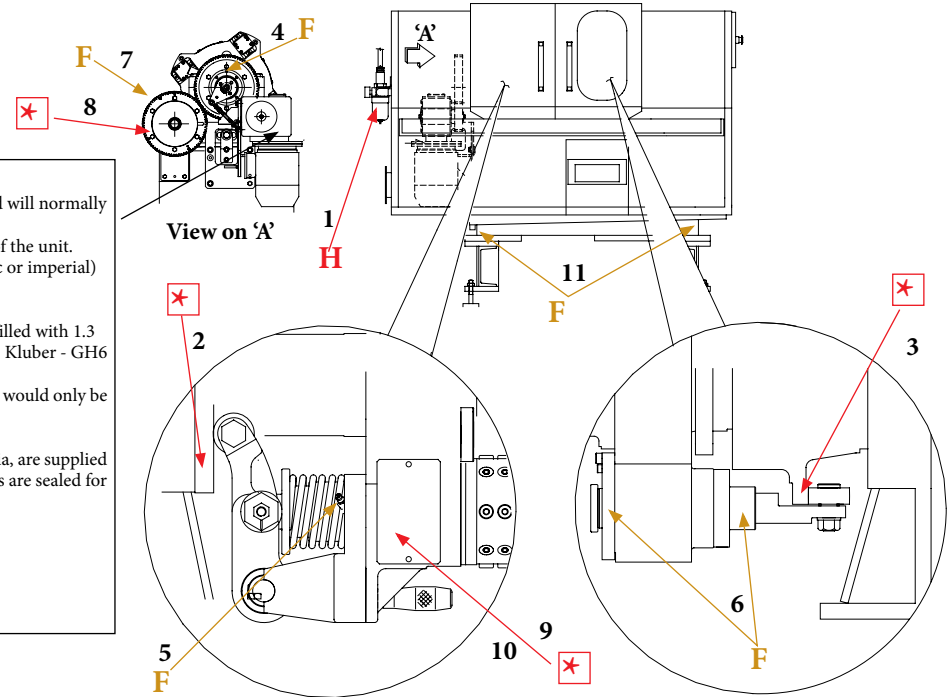
CarnaudMetalbox Grade	Type
F	General Purpose Grease <i>Use Shell - Alvania R2, Mobil - Mobilux EP2 or equivalent</i>
H	Hydraulic Oil <i>Shell - Tellus R37, Mobil - DTE Light or equivalent</i>
☒	Special Purpose Grease <i>Use Kluber - Structovis BHD</i>

Issue	Date	Drawn
10	Nov. 2008	S.H.

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 Monthly:-

- ☒ 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

Recommended Lubricants for Customers

SUPPLIERS

REFER TO INDIVIDUAL MACHINE LUBRICATION CHARTS FOR RECOMMENDED LUBRICATION GRADE LETTERS

CMB GRADE	NOTES	BP	CASTROL	ESSO	GULF	TEXACO	SHELL	MOBIL	KLUBER
A	SPINDLE OIL	ENERGOL HPL 10	HYSPIN AWS 10	NUTO H 10	HYDRASIL 10	RANDO HD 10	TELLUS R 10	VELOCITE No. 6	CRUCOLAN 10
B	LIGHT GEAR OIL	ENERGOL CS 68	HYSPIN AWS 68	NURAY 68	SECURITY 68	REGAL R & O 68	VITREA 68	DTE HEAVY MEDIUM	KLUBEROIL GEM 1-68
C	CONSTANT LOSS OIL	ENERGOL CS 100	MAGNA 100	NURAY 100	SECURITY 100	OMNIS 100	VITREA M 100	VACTRA EXTRA HEAVY	CRUCOLAN 100
D	MEDIUM GEAR OIL	ENERGOL GR-XP 150	ALPHA SP 150	SPARTAN EP 150	EP LUBE HD 150	MEROPA 150	OMALA 150	MOBILGEAR 600 XP 150	KLUBEROIL GEM 1-150
E	HEAVY GEAR OIL	ENERGOL GR-XP 320	ALPHA SP 320	SPARTAN EP 320	EP LUBE HD 320	MEROPA 320	OMALA 320	MOBILGEAR 632	KLUBEROIL GEM 1-320
F	GENERAL PURPOSE GREASE	ENERGREASE LS 2	SPHEEROL MP 2	BEACON 2	GULFCROWN GREASE No. 2	MULTIFAX AFB 2	ALVANIA R 2	MOBILUX EP 2	CENTOPLEX 2
G	OPEN GEAR GREASE	ENERGREASE OG	IMPERVIA MDX	CAZAR K2	LUBCOTE 1	CRATER 2	MALLIUS GL 95	MOBITAC 81	GRAFLOSCON GSG ULTRA
H	HYD/OIL & AIR MIST LUBRICATORS	ENERGOL HLP 32	HYSPIN VG 32	* NUTO H 32	* HYDRASIL 32	* REGAL R & O 32	TELLUS R 37	DTE LIGHT	CRUCOLAN 32
K	WHITE OIL (FOOD USE)	ENERGOL WM 2	WHITEMOR WOM 14	MACOL 82	NO GRADE	WHITE OIL SPECIAL 15	ONDINA EL	WHITEREX 408	PARALIQ P 40
P	SLIDEWAY OIL	MACCURAT D 68	MAGNA BD 68	FEBIS K 68	SLIDEWAY 68	WAYLUBE X 68	TONNA TX 68	VACTRA No. 2	LAMORA D 68
S	GREASE (SOFT)	ENERGREASE CA	IMPERVIA TR LIGHT	BEACON EP 0	GULFCROWN GREASE No. 0 EP	NOVATEX EP 1	ALVANIA EP (LF) 0	MOBILUX EP0	CENTOPLEX 1 DL
T	GREASE (MEDIUM)	ENERGREASE LS 3	SPHEEROL MP3	BEACON 3	GULFCROWN GREASE No. 3	MULTIFAK PREMIUM 3	ALVANIA R3	MOBILUX EP 3	CENTOPLEX 3

Issue	Date	Approved
5	4.86	G Rance
6	10.97	

*** NOTE:-**

ESSO NUTO H 32, GULF HYDRASIL 32 & TEXACO REGAL R & O 32 products are advised as suitable for silver plated components present in some Lucas and Vickers Hydraulic Pumps. Any customer wishing to use any of these grades should obtain assurances from these companies before using them.

550 Trimmer Machine Serial No..... Preventative Maintenance - Every Three Months and Lubrication (Sheet 1 of 3)

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 <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) Lubricate (Refer to the Lubrication Chart for frequency of lubrication and lubricant) Turret Drive Gears. Pusher / Trimmer Cams Ring Gear and Spindle Gears, located under covers on the Trimming Turret			
Air Manifold	Grease the Air Manifold Assembly (Refer to the Lubrication Chart for frequency of lubrication and lubricant)			
Air System	Fill the Air Lubricator (Refer to the Lubrication Chart for frequency of lubrication and lubricant)			
Trimming Spindle Assemblies	Remove the Tooling Head and check the Roller Spindle for wear on the Bearing and end float of Bearing. Grease the Trimming Spindle Assy. (Refer to the Lubrication Chart for frequency of lubrication and lubricant)			
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) Check the Cam Followers for wear 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) Clean out two Pusher Spindles Assemblies of grease and build up in vacuum holes and connecting slots. Remove and re-fit two Stations each maintenance day or as necessary. Re-set alignment of the Pushers to the Trimming Heads. Grease the Pusher Spindle Assemblies (Refer to the Lubrication Chart for frequency of lubrication and lubricant)			

550 Trimmer Machine Serial No..... Preventative Maintenance - Every Three Months and Lubrication (Continued) (Sheet 2)

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: Main Air: 80psi Trim Eject Air: 15psi Bodymaker sample Air: 60psi Main Vacuum: 23 "HG (with all Pushers covered) 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] 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 Check that the Ejector Ring is not damaged and is free to move Check the clearance between the Penetrator and Outside Knife. Check clearance between the Penetrator Carrier and Housing. Check that none of the Springs are broken. Check that the Outside Knife cutting edge is not damaged. Check alignment of the Pusher to the Trimming Head			

550 Trimmer Machine Serial No.....**Preventative Maintenance - Every Three Months and Lubrication** (Continued) (Sheet 3)

Areas / 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. Check for correct can heights and record readings.			