

**DIRECTOR GENERAL BORDER ROADS**  
**GENERAL MAINTENANCE INSTRUCTION NO. 183**  
**ON**

**STANDARDIZATION OF LUBRICANTS FOR ALL MAKES AND TYPE AND**  
**MODELS OF TATA DIESEL VEHS**

**INTRODUCTION:** Use of correct grade of lubricants is essential for the life of equipment, optimal utilization, and extension of reducing abnormal wear and tear of components.

**AIM :** This instruction lays down the various lubricants manufactured by different firms. It will help in procurement of equivalent lubricants when a particular grade oil of one firm is not available.

**ACTION BY UNITS :** Take action as per details given below :-

**DETAILS :** (i) Details of lubricants to be used as recommended by TATA ENGG & LOCOMOTIVE CO LTD.

(ii) Grade of lubricants marketed by the various firms used on all Tata Diesel Vehs are tabulated in Appendix 'A' to this GMI.

**Authority :** Service Information Tata Diesel Vehs No. 12 dt Aug '88.

**CONCLUSION :** Correct use of lubricants would increase the life of equipment and would reduce the risk of damages/down time and the following benefits will accrue to the Organization.

- (a) Low down time.
- (b) Low mean time between failure (MTBF)
- (c) Premature failures will be eliminated
- (d) Reduced cost of repairs, down time costs and extension of life cycle of the eqpt.

**RECOMMENDED OIL AND LUBRICANTS**

To be used for	Hindustan Petroleum	Indian Oil	Bharat Petroleum	Indrol formerly Castrol	Petroesil (Gulf)	Tide Weater	Applicability	Remarks
<b>ENGINE</b>								
a) Crank Case	Hylub HD X-30	Servo Super 30	Bharat Actuma Super T-30	Castrol CRB-30	Gulf Lub X HD-30	Veedol HDB-30	Engines 692 DI, 697 NA, 495 DI	These brands confirm to MIL-L-2104 B specification for tipping up purpose only, any of these brands can be used.
b) Air Filter Oil bath	-do-	-do-	-do-	-do-	-do-	-do-	-do-	
c) FIP (Separate Lubrication)	Hylub Miloy-30	Servo Pride 30	-do-	-	Gulf Super Duty meter oil 30	Veedol HDC 30	Engines 692 DI, 697 NA, 495 DI 697 Turbo 697 SP 497 SP	These brands conform to MIL-L-2104 C specification for tipping up purpose only. Any of these brands can be used.
Water Pump	HP Multi purpose grease	Servo grease MP	Bharat Universal A	Castrol ease LM Grease	Gulf Multi purpose G No 2	Veedol AP 2 Grease	All Models	
<u>Starter Motor</u> Drive End bush, pinion sleeve and helix mating inner race felt seal in trip plate	Hylub HDX-20	Servo Super 20	Bharat actuma T Oil 20/20W	Castrol CRB-20	Gulf Lub XHD-20	Veedol HDB-20	All models	
<u>Clutch</u> Release brg sleeve, Release fork, support bearing	-	Servo Horex Grease	-	-	-	-	All models	Imported Moly Kote BRZ is also recommended. Balmerol Moly ML Grease.

Starter Motor Return spring & plunger inner race fiter washer drive end shaft & pinion bore commutator end bush clutch plates	HP lithen-3	Servo GEM-3	Bharat MP Grease-3	Castrol case AP G No. 3	Gulf Multi purpose G No. 3	Veedol AP-3 Grease	All models	
(i) Suchromesh Gear Box	Gear HP Automatic Transmission fluid type A	Servo transmission Fluid A	Bharat Automatic transmission fluid type A	Castrol automatic transmission fluid type A	-	Veedol Multi gear SM Oil	Symehromesh gear boxes GBS-18, 22, 24, 40, 50 & ZF-power steering gear box	
(ii) ZF Power steering gear box								
1. Constoutmesh Gear 2. Rear Axle 3. Steering gear box. 4. Transfer case. 5. Live front axle.	HP Gear Oil XP- 90	SS Gear-90	Bharat spirol HD-90	Castrol Hypoy B	-	Veedol MG 90 HD	1. Constoutmesh Gear 2. Rear Axle All Models 3. Steering gear (AM) with normal steering 4. Transfer case and live front axle where fitted.	
Wheel Bearing	HP Multi purpose grease 2	SS MP	-	-	-	-	All Models	
Wheel Bearing	HP Multi grease 50	-	-	-	-	-	All Models	

Break Hydraulic System Clutch Hydraulic System	HP Heavy duty brake fluid or HP Super duty brake fluid	Servo brake fluid super HD	-	Castrol birling brake and clutch fluid (Crimson)	-	-	All models	For topping up purpose only. Any of these brands can be used. (Brakes India Girling Heavy duty brake end clutch fluid.
Telco Hydraulic tipping eqpt Hydraulic jack	Turbinol 46 or 68 Enkle 46 or 68	Servo system 46 or 68	Bharat hydraulic 46 to 68	Hyspin VG 46 or 68	Gulf Harmony 46 or 68	Aturbic 46 or 68	Where fitted.	
<u>Chassis</u> Spring shackles & pivets propeller shaft 'U' joints centre brg and dliding yoke steering linkages, king pin busher, pivets brushers of tipping gear  <u>Brakes system</u>  Servo brake valve, pressure regulator, tyringlator brake vacuum booster parking brake shaft bushes pedal bushes.	HP Multi purpose grease 2	Servo grease MP	Bharat Universal	Castrol case LM grease No 2	Gulf Multi purpose grease No. 2	Veedol AP2 Grease	All models	