

DIRECTORATE GENERAL BORDER ROADS
GENERAL MAINTENANCE INSTRUCTION NO.150
ON

STANDARDIZATION OF LUBRICANTS IN RESPECT ON VEH/EQPT ON THE
PRODUCTS OF INDIAN OIL CORPORATION

Introduction

1. BRO is holding a large number of vehicles/equipment of different make and types, both imported and indigeiour.
2. There are a large number of lubricants manufactured by various firm, which are currently being used by the Projects in the vehs/eqpt. Holdings of various types of lubricants manufactured by different firms present difficulties in the storage, preservation, identification and accounting, by the projects.
3. In order to overcome the above difficulties and to reduce the varieties of lubricating of lubricating oils held, the lubricants required for vehs/eqpts of this organization have been standardized on the products manufactured by Indian Oil Corporation.

Action

4. The lubricants to be used in vehs and equipment at various temperature ranges have been standardized and are attached to this instruction as follows :-

Construction equipment - Appendix 'A'
'B' Vehicles - Appendix 'B'
5. The various SAE grades of lubricants to be used for various temperatures ranges have also been indicated.
6. Projects will demand the lubricants, as recommended in this instruction, for use in the vehs/eqpts held in the organization, for their future requirements.

LUBRICATION CHART FOR CONSTRUCTION EQPT STANDARDIZED ON IOC PRODUCTS

No. 1 IH TRACTORS

(TD-25, TD-20 (200 Series), TD-20 (201 Series). TD-20 (B Series) TD-9 (92 Series) & TD-9 (B Series)

S/No	Assembly	Recommended Lubricants AT TEMP Rnages						Remarks
		Above 90 deg F	SAE Grade	90 deg F to 32 Deg F	SAE Grade	32 deg F to (-) 25 deg F	SAE Grade	
a)	Crank Case (Super Charged)	Servo Ultra 30	SAE 30	Servo ultra 30	SAE 30	Servo ultra 10	SAE 10W	
b)	Hydraulic system	Servo Ultra 10	SAE 10W	Servo ultra 10	SAE 10W	Servo ultra 10	SAE 10W	
c)	Transmission & Differential Main & Auxilliary (Gear Box)	Servo Gear HP 140	SAE 140	Servo Gear HP 90	SAE 90	Servo Gear 80	SAE 10W	
d)	Final Drive (Sprocket drive husing)	Servo Gear HP 140	SAE 140	Servo Gear HP 90	SAE 90	Servo Gear 80	SAE 10W	
e)	Track Roller	-do-	-do-	-do-	-do-	-do-	-do-	
f)	Track Idler	-do-	-do-	-do-	-do-	-do-	-do-	
g)	Front Idler	-do-	-do-	-do-	-do-	-do-	-do-	
h)	Crank Case (Normally aspirated)	Servo Super 30	SAE 30	Servo Super 30	SAE 30	Servo Super 10	SAE 10 W	

S/No	Assembly	(-) 10 deg F to 30 deg F	SAE Grade	30 deg F to 60 deg F	SAE Grade	Above 60 deg F	SAe Grade
No.2	: TIGAR TRACTORS						
a)	Engine & Air cleaner	Servo Super 10	SAE 10W	Servo Super 20	SAE 20	Servo Super 30	SAE 30
b)	Hydraulic tank	----- All Temperature Servo System 31 4 -----					
c)	Converter	----- All Temperature Servo Ultra 10 -----					
d)	Transmission	----- All Temperature Servo Gear HP 90 -----					
e)	Grease	----- All Temperature Servo Grease HP -----					
No.3	: D-50-A-15 Tractors						
a)	Engine	Servo Super 10	SAE 10W	Servo Super 20	SAE 20	Servo Super 30	SAE 30
b)	Hydraulic System Dozer Group	----- All Te,[ratire Servo Ultra 10 -----					
c)	Main clutch case transmission case steering clutch case & coil spring case	Servo Ultra 10	SAE 10W	Servo Super 20	SAE 20	Servo Ultra 10	SAE 10 W
d)	Greasing point	----- All Temperature Servo System MP -----					

DIRECTORATE GENERAL BORDER ROADS
AMENDMENT NO.01
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Appendix 'A' Page – 3

	S/No	Assembly	(-) 10 deg F to 30 deg F	SAE Grade	30 deg F to 60 deg F	SAE Grade	60 deg F & above	SAE Grade
FOR	4C	Main clutch case, transmission case, steering clutch case and coil spring case	Servo Ultra-10	SAE 10W	Servo Ultra-10	SAE 10W	Servo Ultra-10	SAE 10W
READ	4C	-do-	-do-	-do-	Servo Ultra-20	SAE 20	Servo Ultra-30	SAE 30

No.67721/DGBR/E4/TECH

DIRECTORATE GENERAL BORDER ROADS
KASHMIR HOUSE
DHQ PO NEW DELHI-11
15 Apr 78

All Projects/Base Wksp/Store Division
GMI No.150 : AMENDMENT NO.01 FORWARDING OF

Amendment No.01 to GMI No.150 is forwarded herewith for your further necessary action.

2. Please acknowledge.

Sd/-xxx
(K M Agarwala)
Major
SO-2 E4 Tech
For Director General Border Roads

DIRECTORATE GENERAL BORDER ROADS
AMENDMENT NO.02
GENERAL MAINTENANCE INSTRUCTION NO.150
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APPENDIX 'A' PAGE – 2 AND APPENDIX 'B' PAGE 1

Appendix 'A' Page 2 Tigar Tractor

S/No	Assembly	(-) 10 DEGF to 30 DEGF	SAE Grade	30 DEGF to 60 DEGF	SAE Grade	Above 60 DEGF	SAE Grade
For b	Hydraulic Tank	-	All temperature	-	Servo system 314	-	-
Read	Hydraulic Tank	-	All temperature	-	Servo ultra 10	-	SAE 10 W
S/No	Assembly	Loc Lubrication Recommended above 20 DEGC (68 DEGF)		Below 20 DEGC (68 DEGF)			
For f	Hydraulic Tpr	Servo system 311	All temperature				
Read	Hydraulic Tpr	Servo system 314	All temperature				

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DIRECTOROATE GENERAL BORDER ROADS
KASHMIR HOUSE
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01 Jan 79

No.67721/DGBR/E4 Tech

All projects/Base Wksps/Store Divs

GMI NO.150 : AMENDMENT NO.2 FORWARDING OF

Amendment No.2 of GMI No.150 is forwarded herewith for your further necessary action.

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(SY ALI)

EE (MECH)

SO-1/E4 TECH

FOR DIRECTOR GENERAL BORDER ROADS