

**DIRECTORATE GENERAL BORDER ROADS**  
**GENERAL MAINTENANCE INSTRUCTION NO 61**

**ON**

**DETAILS OF GREASE NIPPLES IN VARIOUS MODELS OF**  
**KOMATSU TRACTORS AND KOMATSU MOTOR GRADERS**

**Aim :-**

1. This instruction lays down the details of Greasing points and Grease Nipples provided in the KOMATSU TRACTORS and KOMATSU MOTOR GRADERS (GD-37 Model), Komatsu various models.

**Action :-**

2. (a) **User Units** :- All projects and units holding these EQUIPMENTS will check up the deficiencies of the Grease Nipples, if any to avoid premature wear/failure of the affected assemblies and components.
- (a) **Field Workshops**:- To check during their inspection and repairs of these equipments if all the Grease Nipples are intact and greased properly by the Operators. User unit will be advised, if any discrepancy is noticed.

**Grease Nipples – Location and Periodicity of Greasing**

3. Details of Greasing points and Grease Nipples alongwith the periodicity of their greasing as recommended by M/S KOMATSU JAPAN, have been tabulated in Appendices to this instruction as under :-

- (a) KOMATSU TRACTORS (D-50-8, D-50-10, D-80 AND D-120 Models) as Appendix 'A'.  
(b) KOMATSU MOTOR GRADER (GS-37) as Appendix 'B'.

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Dated 22 Feb 1972

END

Appendix 'A' to HQ DGBR GMI – 61 Dated 22 Feb 1972

**DETAILS OF LOCATION OF GREASE NIPPLES – KOMATSU TRACTORS  
(VARIOUS MODELS)**

S/No	Location of Grease Nipples	No of Greasing points				Periodicity for greasing the grease nipples in hours (Recommended by Makers)			
		D-50-8	D50-10	D-80	D-120	D-50-8	D50-10	D-80	D-120
a	b	c	d	e	f	g	h	j	k
<b>ENGINE</b>									
1	Water Pump	2	2	-	-	60	60	-	-
2	Hourmeter	1	1	1	1	250	250	250	250
3	Bevel Gear starting handle	1	1	1	1	250	250	-	-
4	Idle Gear bearing (Self Starter)	-	1	1	1	-	60	60	60
5	Main engine cooling fan shaft	-	-	1	1	-	-	60	60
6	Main engine front support	-	-	1	1	-	-	500	500
7	Cooling Water pump starting engine	-	-	1	1	-	-	60	60
8	Universal joint Hyd pump drive	-	-	2	3	-	-	60	1000
9	Starting axle shaft bearing	-	-	-	2	-	-	-	60
10	Starting engine clutch lever	-	-	1	1	-	-	-	250
11	Gear shaft lever	-	-	1	1	-	-	-	250
<b>CHASSIS, STEERING &amp; TRANSMISSION</b>									
12	Main clutch shaft bearing	1	1		-	10	60	-	-
13	Idler wheel shaft	2	2	2	2	60	60	10	60
14	Track roller shaft	10	10	10	14	60	60	60	60
15	Carrier roller shaft	4	4	4	4	60	60	60	60
16	Track adjusting rod/bolt	2	2	2	2	60	60	60	60
17	Steering clutch lever shaft yoke	2	2	-	-	60	60	-	-

18	Brake pedal shaft	1	1	-	-	60	60	-	-
19	Main clutch pedal shaft	1	1	-	-	10	60	-	-
20	Diagonal brace bearing	2	2	2	2	60	60	60	60
21	Sprocket wheel shaft/bearing shaft	2	2	2	2	60	60	60	60
22	Steering lever shaft	1	-	-	-	10	-	-	-
23	Steering clutch release bearing	2	-	-	-	10	-	-	-

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a	b	c	d	e	f	g	h	j	k
24	Main clutch release bearing/Yoke	1	1	1	-	10	60	10	-
25	Main clutch fork/yoke shaft	1	2	-	-	10	60	-	-
26	Steering clutch booster spring shaft	-	2	-	-	-	60	-	-
27	Blade control lever shaft	-	2	-	-	-	60	-	-
28	Yoke of steering clutch	-	-	2	-	-	-	10	-
29	Yoke of main clutch	-	-	1	-	-	-	10	-
30	Coller	-	-	1	-	-	-	10	-
31	Cage	-	-	1	-	-	-	10	-
32	Universal joint	-	-	-	2	-	-	-	60
33	Steering clutch release bearing cage	-	-	-	2	-	-	-	60
34	Main clutch control valve lever shaft	-	-	-	1	-	-	-	60
DOZER									
35	Hyd cylinder piston rod	2	2	-	-	10	60	-	-
36	Blade suspension arm	4	6	-	-	10	10	-	-
37	Tilt brake part threaded part	-	4	-	-	-	60	-	-
38	Eye bolt angle dozer	-	-	2	2	-	-	250	250
39	Adjusting rod	-	-	2	2	-	-	250	250
40	Hydraulic cylinder bearing	-	4	2	2	-	60	60	60
	<b>Total</b>	<b>42</b>	<b>55</b>	<b>41</b>	<b>49</b>				

**Appendix 'B' to HQ DGBR GMI – 61 Dated 22 Feb 1972**

**DETAILS OF LOCATION OF GREASE NIPPLES – MOTOR GRADER (GD-37) KOMATSU**

S/No	Location of the Grease Nipples	No of Greasing points	Periodicity for greasing the grease nipples in hours (Recommended by the Makers)
<b>ENGINE</b>			
1	Water pump baring	1	30
<b>CHASSIS, STEERING AND TRANSMISSION</b>			
2	Bushing (Tanden Case)	2	5
3	Bushing clutch shifter and operating mechanism	5	5
4	Shaft and universal joint bushing fuel pedal	5	5
5	Shaft (Steering handle) Bushing operating control	10	5
6	Pin and link (Front axle)	10	5
7	Bearing (front wheel)	2	30
8	Pin front axle	2	5
9	Steering gear	2	5
10	Bushing leaving cylinder	2	5
11	Shaft steering	3	5
12	Universal joint	2	5
13	Case reverse gear	1	5
<b>SCARIFIER</b>			
14	Bushing Scarifier	2	5
15	Link Scarifier	4	5
16	Busing (Scarifier cylinder)	2	5
<b>BLADE ASSEMBLY</b>			
17	Ball joint blade lift and side shift	4	5
18	Ball joint circle center shift	2	5
19	Ball joint (Circle drew bar)	2	5
20	Bushing blade lift	6	5
	<b>Total</b>	<b>69</b>	

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21	Case Speedometer	Apply Grease	30
22	Pin Roller (Blade Circle)	Apply Grease	30
23	Rail (Circle center shift) Guider bar (blade)	Apply Grease	30