



# D-50 LUBRICATION/FLUID MAINTENANCE CHART

4/4/2017

DIEDRICH DRILL

Component	Lube/ Fluid Type	Capacity	Daily	Weekly	Monthly	Twice Anually	Other
<b>Power Engine Unit 115HP (DEERE 4045)</b>	John Deere PLUS-50 or (ACEA-E7/E6) or equivalent SAE 15W-40 Diesel Engine Oil	15.2 Liter - (16.1 QT)			Check all Hoses, Filters, Belts		Per Engine Manual- CHANGE AFTER BREAK-IN 100 HRS- Then Every 500 Hours Min for Oil and Filter
<b>Engine Coolant</b>	John Deere COOL-GARD	8.5 Liter/ 9 Quart			Test Coolant		Change an Flush Coolant every 2 years (3000 hours)
<b>Transmission (T-18 4 speed)</b>	80W-90 Gear Oil	1 US gallon (4 quarts) (Approx) Fill to 2-1/4" down from side plug level	Check For Leaks	Check Oil Level		Replace With Clean Oil	
<b>Rotary Box</b>	80W-90 Gear Oil	2-1/2 US Gallon (10 Quarts) (Approx)- Check level by hanging vertically and Removing Pipe Plug	Check For Leaks	Check Oil Level		Replace With Clean Oil	
<b>Main Right Angle Drive</b>	80W-90 Gear Oil	2-3/4 Quarts (Approx)- Fill to side plug level	Check For Leaks			Replace With Clean Oil	
<b>Cat-Head Right Angle Drive</b>	80W-90 Gear Oil	2-1/4 Cup (Approx)	Check For Leaks			Replace With Clean Oil	
<b>U-Joint Shafts</b>	Grease (Heavy Duty Multi)			Grease			
<b>Hydraulic System and Filter</b>	AW-32 Hydraulic Oil (Not Bio-Degradable)	Tank- 33 gallons- Track Rig Tank- 18 Gallons -All Other Mounts - Use Sight Gauges	Check For Leaks	Check Oil Level		Drain, Flush and Replace w/ Clean Oil	<b>Hydraulic Filter: Use Color coded Pressure or Suction gauge on filter head: Recommended- Change filter every 300 Hours</b>

<b>Component</b>	<b>Lube/ Fluid Type</b>	<b>Capacity</b>	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Twice Anually</b>	<b>Other</b>
<b>Winches</b>	Bloom Synthetic Gear Oil or 80W-90 Gear Oil	Varies- Check Winch Manual or Body Stamping	Check For Leaks	Check Oil Level		Change Winch Body Gear Oil	
<b>Water Pumps</b>	Grease- (SAE-30 Oil for Piston Pump CranK Case)	See Specific Water Pump Manual	Grease		Inspect Packing Adjustment	Re-lubricate ball bearings with EP Lithium Soap Base Grease (Moyno)	Keep Passages free and drained from water in cold weather
<b>Slide Base</b>	Lightweight Lubricant JB-80 Recommended			Lubricate			
<b>Kelly Bar</b>	Lightweight Lubricant JB-80 Recommended		Inspect/ Lubricate As Needed	Inspect/ Lubricate As Needed			Keep Clean and Lightly Greased/ Lubricated
<b>Feed Cylinder Guide Tubes</b>	Lightweight Lubricant JB-80 Recommended		Inspect/ Lubricate As Needed	Inspect/ Lubricate As Needed			Keep Clean and Lightly Greased/ Lubricated
<b>Tower Sheaves</b>	Grease (Heavy Duty Multi)						Grease every 150 hours
<b>Cylinder Pivot Pins</b>	Grease (Heavy Duty Multi)						Grease Every 100 Hours
<b>Jacks</b>	Grease (Heavy Duty Multi)		Check for Leaks (Hydraulic)				Keep Clean and Lightly Greased