

# Harper Oil Lubrication Recommendations

## Off-Highway / Construction Equipment Sample

Units	Engine	Transmission	Differential	Final Drive	Hydraulics	Pump Drive	Misc. Components
<b>GRADERS</b>							
CAT 12F, 12G, 12H, 14H	15W-40	TO-4 30W	TO-4 50W	TO-4 50W	Duron 10W		TO-4 50W in Tandem / Spindle
<b>DOZERS</b>							
CAT D3, D4B, D4CLGP, D4H, D5H, D6C, D6D, D6H, D6R, D6RLX, D6HLX, D8K, D8N, D8R, D6R, D6M	15W-40	TO-4 30W		TO-4 50W	Duron 10W		TO-4 30W on Pivot Shaft
<b>SCRAPERS - PANS</b>							
CAT 613B, 613C, 621B, 621E, 621F	15W-40	TO-4 30W	80W-90	80W-90	Duron 10W		Duratran in Elev. Gears / Rollers
John Deere 762B	15W-40	Duratran	Duratran	Duratran	Duratran		
<b>EXCAVATORS</b>							
CAT 225B, 325, 325L, 330L, 330LM, 315, 315L, 350L, 345, 345B, 330B	15W-40			TO-4 50W	Duron 10W	TO-4 30W	80W-90 in Swing Drives
John Deere 595D, 790D, 70D	15W-40			Duratran	Duratran	TO-4 30W	80W-90 in Swing Drives
Hitachi EX200LC, EX550BH, EX450LC5	15W-40			TO-4 50W	Duron 10W	TO-4 30W	80W-90 in Swing Drives
<b>LOADERS - TRACK</b>							
CAT 963, 953, 963B	15W-40	TO-4 10W	TO-4 50W	TO-4 50W	Duron 10W		TO-4 50W in pivot shaft
CAT 935C	15W-40	TO-4 30W	TO-4 50W	TO-4 50W	Duron 10W		
<b>LOADERS - WHEEL</b>							
CAT 950, 950E, 980	15W-40	TO-4 30W	TO-4 50W	TO-4 50W	Duron 10W		
<b>LOADERS - BACKHOE</b>							
CAT 426, 416, 426B	15W-40	TO-4 30W		80W-90 in front	Duron 10W		CAT Lubricant in rear
John Deere 410B, 410C	15W-40	Duratran		Duratran	Duratran		
<b>COMPACTOR - VIBRATORY</b>							
CAT CS433, CS563, CP563C	15W-40		80W-90	80W-90	Duron 10W		SHB 220 in Drum Bearings
<b>COMPACTORS - ROLLERS</b>							
CAT 815, 815A, 815B, 815F, 825C	15W-40	TO-4 30W	TO-4 50W	TO-4 50W	Duron 10W		
Hyster C610B, C350A, C610B	15W-40	Duratran			Duratran	80W-90	SHB 150 in Drum Bearings
<b>DUMP TRUCKS - ARTICULATED</b>							
Terex 2566C	15W-40	15W-40	80W-90	80W-90	Duron 10W		
Volvo A25C	15W-40	15W-40	85W-140		Duratran		85W-140 in Drop Box / Hub Reduction gear
CAT D250, D250E	15W-40	TO-4 30W	80W-90	80W-90	Duron 10W		
<b>INTEGRATED TOOLCARRIERS</b>							
CAT IT-28B, IT-38F	15W-40	TO-4 30W	TO-4 50W	TO-4 50W	Duron 10W		

### LUBRICANTS KEY and DESCRIPTION

<b>15W-40</b>	Duron 15W-40: High-performance Diesel Engine Oil	<b>SHB 150</b>	Synduro SHB 150: ISO 150 Synthetic multi-functional fluid
<b>Duron 10W</b>	Duron 10W: 10W Diesel Engine Oil	<b>SHB 220</b>	Synduro SHB 220: ISO 220 Synthetic multi-functional fluid
<b>Duratran</b>	Duratran: Tractor Transmission/Hydraulic Fluid		
<b>TO-4 30W</b>	Produro TO-4+ 30: 30W CATerpillar TO-4 TDTO Fluid	<b>CAT Lubricant</b>	Requires Caterpillar MTO #105-3335 Lubricant
<b>TO-4 50W</b>	Produro TO-4+ 50: 50WT CATerpillar TO-4 TDTO Fluid		
<b>80W-90</b>	Traxon 80W-90: GL-5 Gear Fluid		
<b>85W-140</b>	Traxon 85W-140: GL-5 Gear Fluid		
<b>TO-4 10W</b>	Produro TO-4+ 10W: 10W CATerpillar TO-4 TDTO Fluid		