

Doosan Infracore Construction Equipment

Aftermarket Sales Reference Book

Oil

DOOSAN Genuine Parts



Oil
Hydraulic Oil Analyzer &
Sampling Set

Oil

DOOSAN Genuine Parts

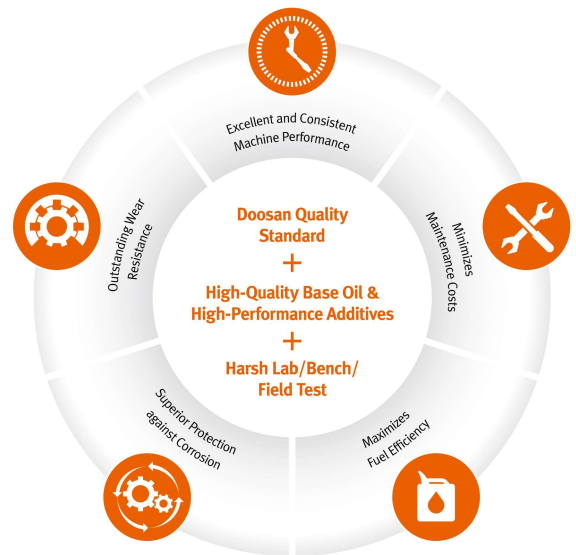
Doosan Genuine Oil offers the highest quality and reliability

Unlike general lubricants made by oil manufacturer, Doosan Genuine Oil Products are designed and developed differently through its certified Lab Test, Bench Test and Field Test from the initial manufacturing stage in order to deliver the very best level of performance and meet all the requirements of Doosan equipment.

RELIABLE SOLUTIONS



THE BEST CHOICE FOR PRODUCTIVITY AND PROFITABILITY



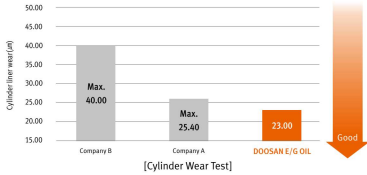
Oil

DOOSAN Genuine Parts

DOOSAN GENUINE ENGINE OIL

FEATURES

- Satisfies and even exceeds the API & ACEA Standard.
- Maintains stable viscosity within a wide temperature range.
- Reduces oil consumption and extends the oil's lifespan.
- Offers the best protection for wear of engines maximizing their power.
- Offers excellent dispersion, minimizes the formation of sludge and deposits.



DOOSAN DIESEL E/O
81,000Km Oil Drains

Company A
81,000Km Oil Drains

Company B
48,000Km Oil Drains

Good

Leader's Message
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SPECIFICATIONS & PART NOS. – ENGINE OIL

	Diesel Engine Oil	Tier-2 (API CH-4)		Tier-3 (API CH-4)		Tier-4F (API CH-4)	
		15W/40	5W/40	10W/40	15W/40	5W/40	15W/40
	SAE Viscosity Grade	15W/40	5W/40	10W/40	15W/40	5W/40	15W/40
	API Service Classification	CH-4, CG-4, CF-4	CH-4, CH-4, CG-4, CF-4	CH-4, CH-4, CG-4, CF-4	CH-4, CH-4, CG-4, CF-4	CH-4, CH-4, CG-4, CF-4	CH-4, CH-4, CG-4
	ACEA Service Classification	E5	E7	E7	E7	E7	E7
OEM Quality Classification	ACEA E5		VDS-3			VDS-4	
	VDS-2		CES20077	ACEA E7	ACEA E7	Mack EO-O Premium Plus	ACEA E9
	CES20076		MAN3275-1	VDS-3	VDS-3	MB228.31	VDS-4
	MAN271		Mack EO-N	CES20076	CES20076	CAT ECF-3	CES20081
	Mack EOM plus		MB228.3	MAN3275	MAN3275	MTU Cat.2.1	MAN3275
Specifications	MB228.1		CAT ECF-2	MB228.3	MB228.3	RVI RLD-3	MB228.31
			MTU Cat.2			DFS 93K218	
			RVI RLD-2			DQC III-10 LA	
Part No.	4 Liter (Plastic Can)	K9003568	500210-00229	K9003582		500210-00227	500210-00182
	6 Liter (Plastic Can)	K9003569		500210-00079			500210-00181
	18 Liter (Plastic Pail)	500210-00080					
	20 Liter (Steel Pail)	K9003570	500210-00230	K9003583	500210-00209	500210-00228	500210-00180
	200 Liter (Drum)	K9003571		11-1087	500210-00210		500210-00188

Oil

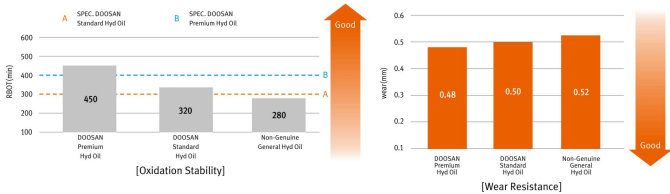
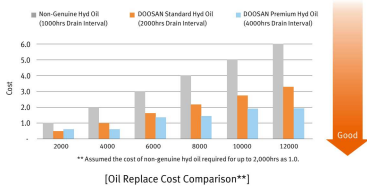
DOOSAN Genuine Parts

DOOSAN GENUINE HYDRAULIC OIL

FEATURES

- VHV(Very High Viscosity Index) base oil used for its excellent thermal and oxidation stability.
- Longer drain interval – *2000hrs(Standard)/4000hrs(Premium).
- Minimum cylinder discoloration and noise.
- High level of premium Zinc - very high anti-wear properties.
- Very low deposit formation.

* Foregoing drain intervals and contamination control is guaranteed only when Doosan Genuine Oil is used.
When non-genuine oil is used, the change interval is only 1,000hrs for Doosan equipment.



SPECIFICATIONS & PART NOS. – HYDRAULIC OIL

Hydraulic Oil		Standard (2,000Hrs)	Premium (4,000Hrs)	Ultra Premium (6,000Hrs)				
Specification	Viscosity Index	ISO VG46	ISO VG32	ISO VG46	ISO VG68	ISO VG46		
	Specific Gravity @ 15/4°C	ASTM D4052	0.8469	0.8431	0.8466	0.8551	0.8462	
	Oil Color(ASTM)	ASTM D1500	L0.5	L0.5	L0.5	L0.5	L0.5	
	Viscosity @ 40°C	ASTM D 445	46.06	32.1	44.69	67.76	48.12	
	(cSt) @ 100°C		7.959	6.211	7.798	10.74	8.37	
	Viscosity Index (VI)	ASTM D 2270	145	146	145	148	150	
	Total Acid Number (KOH/g)	ASTM D664	0.6	0.79	0.84	0.86	0.76	
	Flash Point (°C)	ASTM D92	240	216	252	257	240	
	Pour Point (°C)	ASTM D97	-48	-51	-48	-45	-45	
	Air Release (min)	ASTM D3427	3.3	1.9	2.7	3.73	3.5	
	Oxidation Stability (RPVOT)	ASTM D2272	320	419	450	422	606	
	Heat Stability	135°C, 500hrs	Appearance	Non Sludge	Non Sludge	Non Sludge	Non Sludge	Non Sludge
			Oil Color	L1.0	L1.5	L1.0	L1.0	L1.0
		150°C, 200hrs	Appearance	Non Sludge	Non Sludge	Non Sludge	Non Sludge	Non Sludge
			Oil Color	L1.0	L2.0	L1.0	L1.0	L1.0
Part No.	4L (Plastic Can)			500208-00032		500208-00098		
	18L (Plastic Pail)				500208-00044			
	20L (Steel Pail)	K9003579	500208-00036	K9003580	500208-00045	500208-00099		
	200L (Drum)	K9003563	500208-00035	500208-00001	500208-00046	500208-00100		

Oil

DOOSAN Genuine Parts

DOOSAN GENUINE GEAR/AXLE/TRANSMISSION OIL

FEATURES

- Suitable for a wide range of friction disc materials.
- Superior anti-noise and anti-stick-slip properties.
- Various types of Doosan Axle oil satisfy the requirements for axles with wet brakes, limited slip differentials and gearboxes of Doosan Loaders.



AXLE & TRANSMISSION OIL APPLICATION GUIDE

WEX				WLD			WLD						
Type	DX55W	DX140W	DX190W	DL200	DL200A	DL250	DL300	DL350	DL400	DL420	DL450	DL500	DL550
		DX160W	DX210W	MEGA200		DL250A	DL300A		MEGA400	DL420A		MEGA500	
						MEGA250	MEGA300						
Standard	•	•			•	•	•	•	•	•	•		•
LSD							•					•	
for Mini	•			•									

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SPECIFICATIONS & PART NOS. – GEAR/AXLE/TRANSMISSION OIL

	Gear Oil		Axle Oil				Transmission Oil
	for Reduction Gear	ADT & W/ Loader	LSD	Standard	for Mini		
Quality Specification	API GL-5	API GL-5	API GL-5	API GL-4	API GL-5	API CH-4	
	MIL-PRF-2105E	MIL-PRF-2105E	MIL-L-2105D		MIL-PRF-2105E	MB 228.1	
	KS M2127	KS M2127	KS M2127	KS M2127	KS M2127	VDS-2	
	MAack GO-H		ZF TE-ML-695	ZF TE-ML-695/106	MAack GO-H	CEC 200076	
Specification	SAE Viscosity Grade	80W/90	85W/140	80W/90	75W/80, 80W	80W/90	15W40
	Viscosity — cSt@40°C	ASTM D445	133.8	312.4	137.9	54.52	126.8
	Viscosity — cSt@100°C	ASTM D445	14.7	26.56	14.87	9.6	14.66
	Viscosity Index	ASTM D 2270	110	112	110	162	117
	Density, kg/L@15 °C	ASTM D1298	0.8766	0.8805	0.884	0.87	0.878
	Flash Point, °C	ASTM D92	222	228	223	232	224
	Flash Point, °C, C	ASTM D92	222	228	223	232	224
	Copper Corrosion, 3hr @100 °C	ASTM D130	1b	1a	1a	1a	1a
	Sulfur, mass%	ASTM D4294	1.28	1.28	1.41	(Max 0.5)	1.36
	Foam (seq) (Stab Seq. I), ml/ml	ASTM D892	5/0	5/0	5/0	15/0	5/0
	Seq. II, ml/ml		5/0	5/0	5/0	20/0	5/0
	Seq. III, ml/ml		5/0	5/0	5/0	10/0	5/0
	AL (Plastic Pail)	K9003572					K9003575
	18L (Plastic Pail)		500211-000155				
	20L (Steel Pail)	K9003573		500211-00011	500211-00081	500211-00010	
	200L (Drum)		500211-00116	500211-00008	500211-00007		

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DOOSAN GENUINE COOLANT AND GREASE

FEATURES

- Outstanding cooling performance.
- Excellent protection of the internal component against corrosion.
- Long lifetime, i.e. 6,000-hr drain interval.



		Long-Life Coolant (6000hrs)
Specification	Freezing Point(50v/v%)	-34℃
	pH (50v/v%)	7.0~9.0
	Boiling Point, °C	163
	Water Content (wt%), max	4.3
	Corrosivity 30v/v, Weight change mg/cm2	-0.3 ~ +0.3
	Reserve Alkalinity	11.0
	Corrosion of Cast Aluminium Alloys at Heat Rejecting Surface, mg/cm² (135 °C, week)	-0.3 ~ +0.3
P/N	3L (Plastic Can)	500201-00012
	20L (Steel Pail)	500204-00468

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FEATURES

- Formulated with high quality base oil and anti-wear additives.
- Ensures reliable protection against rust and corrosion.
- Delivers excellent performance in high-temperature environments (Hot weather type).



	Grease	Multi Purpose	Hot Weather	Premium	Ultra Premium
Specification	NLGI #	2	3	2	2
	Ambient Range	-30℃ ~ 40℃	-30℃ ~ 40℃	-30℃ ~ 40℃	-30℃ ~ 40℃
	Operating Range	-30℃ ~ 120℃	-30℃ ~ 150℃	-30℃ ~ 165℃	-30℃ ~ 170℃
	Base Oil Type	Mineral Oil	Mineral Oil	Mineral Oil	Mineral Oil
	Thickener Type	Lithium	Lithium	Lithium Complex	Calcium Sulfonate
	Color	Light Brown	Light Brown	Light Brown	Black
	Penetration,worked, mm/10	265	238	281	275
	Dropping Point, ℃	228	225	225	≥260
	Copper Corrosion, 100℃, 24h	1a	1a	1a	1a
	Evaporation Loss, 99℃ 22h, %	0.3	0.15	0.33	0.22
	Oil Separation, 100℃, 24h, %	2.8	4.4	1.3	1.5
	Water Washout, 38℃, 1h, %	2.9	1.4	Max. 2%	0.9
	Oxidation stability, 99℃,100h,kgf/℃	0.35	0.3	0.11	0.2
	Four Ball (EP) weld point	250	160	315	500
P/N	15KG	K9003576	500211-00059	500211-00154	500206-00134