

TECHNICAL INFORMATION

JUKI SINGAPORE PTE.LTD.

LUBRICATING OIL FOR JUKI INDUSTRIAL SEWING MACHINE

17 NOV 2000

To prevent your JUKI industrial sewing machine from causing mechanical troubles through application of inadequate lubricating oil, we inform you of the details of the special oil designated and the substitute approved.

Please do not use any other oil for your JUKI industrial sewing machines.

1.Physical properties of JUKI NEW DEFRIX OIL

	NEW DEFRIX OIL NO.1	NEW DEFRIX OIL NO.2
Machines applied	JUKI all sewing machines except LK,MO,MF,MFC,LH and APW series	LK,MO,MF,MFC,LH and APW series
Application	High speed operation and Light loaded operation	High speed operation and Heavy loaded operation
Ph	Neutral	Neutral
Specific gravity(15/4°C)	0.838	0.872
Color	+25(Saybolt)	+23(Saybolt)
Flash point(°C)	152	202
Pour point(°C)	-5.0	-12.5
Viscosity @40°C CST	7.3	31.5
Viscosity @100°C CST	2.2	5.4
Viscosity index	100	105
Total acid number(mgKOH/g)	0.1	0.09
Shell four ball wear (mm) 1800 r.p.m.(15kg , 30 min.)	Max 0.5	Max 0.5
Foaming test	30 - 0	20 - 0
Copper corrosion test (100 °C 3 hour)	Max. 1	Max. 1
*Recommended oil	Mixture of 70% SPINESSO 5 and 30% of SPINESSO 10	teresso 32

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2.Oil to be substituted if unavailable

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If you are in immediate need of lubricating oil for JUKI industrial sewing machines and do not have time to wait for JUKI NEW DEFRIX OIL, we recommend you to use the oil in page 1/2 (Refer to * in table) and the oil mentioned in below table.

OIL MANUFACTURER	EQUIVALENT TO JUKI NEW DEFRIX OIL NO.1	IN BETWEEN JUKI NEW DEFRIX OIL NO.1 AND NO.2						EQUIVALENT TO JUKI NEW DEFRIX OIL NO.2	
	ISO VG7	ISO VG10	COLOR (ASTM)	ISO VG15	COLOR (ASTM)	ISO VG22	COLOR (ASTM)	ISO VG32	COLOR (ASTM)
AGIP		Agip Acer 10		Agip Acer 15		Agip Acer 22		Agip Acer 32	
BP	Energol HP7	Energol HP10		Energol HPL15		Energol HPL22		Energol HP32	
		Energol HPL10						Energol HPL32	
CALTEX		Spindura 10		Spindura 15		Rando 22		Rando 32	
CASTROL		Castrol Hyspin AWS 10		Castrol Hyspin AWS 15		Castrol Hyspin AWS 22		Castrol Hyspin AWS 32	
CHEVRON		Chevron Hydraulic Oil AW 10		Avitashion Hydraulic Fluid A		CP Oil 22		Hydraulic Oil AW 32	
		Spin Oil 10				Hydraulic Oil AW22		Hydraulic Oil AW MV 32	
						Machine Oil R&O 22		Machine Oil R&O 32	
						Machine Oil R&O LVI 22		Machine Oil R&O LVI 32	
								Machine Oil R&O Symbol 2075 THI 32	
								Turbine Oil GST 32	
ELF		Spinelf 10		Spinelf 15		Spinelf 22		Elf Polytelis 32	
FINA		Fina Hydran 10		Fina Hydran 15		Fina Hydran 22		Fina Hydran 32	
SUN				Sunvis 915		Sunvis 922		Sunvis 932	
TEXACO		Spindura 10		Rando HDZ 15		Sindura 22		Regal R&O 32	
						Rando HDZ 22		Rando HD32	
								Rando HD32	
								Rando HD Ashless 32	
							Rando HDZ 32		
TOTAL		Total Azoolla ZS 10		Total Azoolla ZS 15		Total Azoolla ZS 22		Total Drosera MS 32	
								Total Azoolla ZA 32	
wyn's							POL 32 N		
ESSO		Spinesso 10	L0.5	Nuto H 15		Spinesso 22	L0.5	Tresso 32	L1.0
		Nuto H 10				Nuto H 22		Nuto H 32	
MOBIL		Mobil Velocite Oil E	L0.5			Mobil Velocite Oil C	L0.5	Mobil DTE Oil Light	L0.5
		Mobil Velocite Oil No.6	L0.5			Mobil Velocite Oil E	L0.5	Hydraulic Oil Light	
		Mobil DTE 21				Mobil DTE 22			
SHELL	Shell Tellus Oil C 8	Shell Tellus Oil C 10	L0.5			Shell Tellus Oil 22		Shell Tellus Oil 32	
		Morlina 10				Tellus Oil C 22	L0.5	Shell Tellus Oil C 32	L1.0
		Tetra 10				Morlina 22		Morlina 32	
		Tetra 10 SP				Tetra 22		Tetra 32	