



Since 1978

# 2018

**Water pump / Fan Clutch / Diesel Primer Pump**

ウォーターポンプ / ファンクラッチ / ディーゼルポンプ

Bomba de aqua / Ventilador de Radiador / Bomba de Cebado Diesel

**For Truck / Tractor / Forklift / Excavator  
Heavy Duty machinery**

## WATER PUMP OPERATION FUNCTION

The perfect temperature in a water cooled engine is provided by a system that circulates coolant through the engine block water jacket and radiator. The water pump is the mechanism that maintains the constant flow of coolant. In most cases, the water pump is driven by a belt pulley system, where the pulley receives power from engine's drive belt, timing belt, fan belt.

### MECHANISM STRUCTURE AND COMPONENTS

The mechanism structure is comprised of the following components :

- HUB
- SHAFT BEARING
- BODY
- MECHANICAL SEAL
- IMPELER



The rotation of the engine is transmitted through the pulley which is attached to the hub, it makes the impeller rotate through the bearing and the mechanical seal. The role of the impeller is to drive coolant into the water jacket using centrifugal force which makes coolant circulate.



The body of water pump is equipped with a vapor hole and weep hole. The vapor hole relieves excess gas pressure seeping through the mechanical seal. The weep hole bleeds off excess coolant seeping through the mechanical seal. This two holes function as a safety mechanism to protect the shaft and the bearing from contamination.

## WATER PUMP OPERATION FUNCTION

### HANDLING INSTRUCTION

Before installation do not DRY turn the water pump pulley manually, it will cause in the mechanical seal soft carbon block may create residue on the ceramic block and generate abnormal noises during operation.

It is recommended that water pump lower level is submerged in coolant for 3 minutes before the installation. This will prevent the abnormal noises from being generated.



### INSTALLATION INSTRUCTIONS

1. Flush the radiator with clean water approximately 2~3 minutes while the engine idle, this step will remove scale, rust residue and sludge form the coolant system and protect new water pump mechanical seal from contaminating.
2. After engine is cooled drain the water and remove old water pump, gasket and other materials left on the mounting surface. This step will prevent leakage from the surface.
3. When installation need sealant , apply with even amount around the water pump, clean off the excess sealant and prevents the sealant intrude into the water pump channel. This step will prevent the sealant for damage the mechanical seal.
4. Install the fan belt, timing belt, coolant and other parts specified by manufacturer specification, prevents other abnormal noises , leakage and failure of incorrect installation.

## WATER PUMP TROUBLESHOOTING

### WEEP HOLE LEAKAGE

The weep hole function is to protect bearing from contamination damage into the water pump. In normal operation around weep hole will appear small dried coolant residue, If coolant leakage it will appear bigger dried coolant traces and coolant level will decrease within a month.



*Abnormal coolant leakage*

### Cause

The mechanical seal already damaged by contamination as sludge reducing sealing performance.

### Prevention

1. Flush the cooling system with clean water 2~3 minutes with idle engine.
2. Replace new coolant with manufacture specifications and replace coolant regularly.
3. Use correct coolant mixture and fluid level.
4. Avoid to use sealant when gaskets supplied.

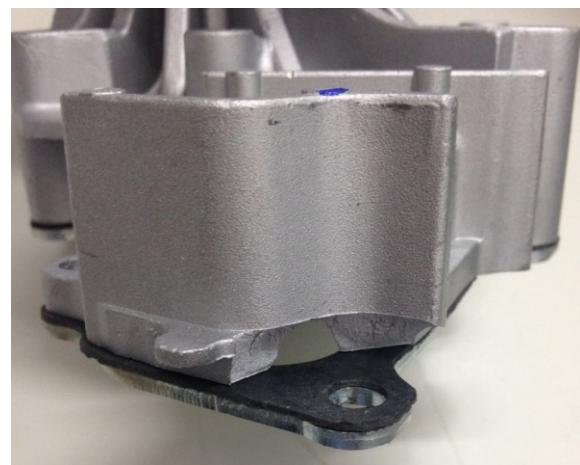
## WATER PUMP TROUBLESHOOTING

### OTHER ABNORMAL PROBLEM CAUSING LEAKAGE

There have other several factor also will caused water pump leakage ,such as corrosion of coolant, unevenly tightened bolts, excess sealant, etc.



*Corrosion of coolant*



*Unevenly tightened bolts*

#### Cause

1. Excess sealant will intrude into water pump channel and damage the mechanical seal.
2. Over tightened unevenly on mounting bolt , it will cause fracture on the body crack and leakage.
3. Installation gasket with over sealant, it will cause gasket performance degraded.
4. Unclean / contamination on mounting surface.
5. Coolant pH value 7.5 causing corrosion effect.

#### Prevention

1. Use only manufacturer specified sealant and coolant.
2. Do not use over sealant when gasket supplied.
3. When installation apply with specified by manufacturer instructions.
4. Clean surface contaminations before installation.
5. Do not re use old gaskets.

## WATER PUMP TROUBLESHOOTING

### OVERHEATING

Overheating will cause impeller corrosion, fracture of bearing and internal corrosion of the body.



*Coolant degradation / Corrosion*

#### Cause

1. Using recycle coolant or un-identified coolant composition.
2. Corrosion due to coolant deterioration.
3. Internal flushing the radiator.
4. pH value bellow 7.5 turn into formic acid.
5. Weather condition cause coolant frozen.

#### Prevention

1. Do not use recycle coolant or other composition.
2. Replace coolant regularly according manufacturer specs.
3. Fully flush with clean water 2~3 minutes with idle engine.
4. Replace coolant with specified mixture and fluid level.
5. Use coolant with specific type for cold area climate.
6. Maintain coolant pH level around 7.5~9.0.

## WATER PUMP TROUBLESHOOTING

### ***ABNORMAL NOISES BY INCORRECTLY INSTALLATION***

#### **DAMAGED FAN COUPLING**

- Rumbling sound when manually turning the pulley.
- Contamination of the pulley seat.
- Scratches and flecks found around the bearing during disassembly.
- Strike shaft when installation.
- Fracture on the water pump body casing or bearing.



#### **Cause**

1. Bearing fracture caused by excess belt tension or due to excess vibrations caused by misalignment of parts.
2. Unevenly over tightened bolts caused bearing failure.
3. Incorrect installation by un-experience mechanic.
4. Damaged fan coupling or fan coupling is not installed correctly.
5. Excessive vibration from unbalance installation.

#### **Prevention**

1. When installation tightened bolt according manufacturer specification.
2. Reused fan coupling pulley need run out with dial indicator.
3. Old ages vehicle or high mileage replace fan coupling pulley before Installation.
4. Check the bearing is lubed and free of any contamination.
5. Replace new fan coupling when installation.

## ENGINE'S COOLANT PH VALUE

The most popular choice of coolant type has always been a mixture of ethylene glycol and water, with the ethylene glycol containing selected and specific inhibitors. While coolant is needed to remove heat in all internal combustion engines regardless of the type of fuel used, a regular control of the coolant solution is required to prevent the engine from severe damage.

Frequent engine repair and failure can be traced to improper or non-existent engine cooling water treatment. Rust, scale and deterioration of seals are the result of improper or no treatment in the cooling system.

From the time the coolant is introduced into any type of engine it starts a gradual degradation process into corrosive acids. This degradation is a function of time, temperature and the types of metals used in the engine and components construction. Once the coolant turns acidic all engine metals start to dissolve. The results are leaking water pump and overheat.

Most automotive manufactures provide in the vehicle manual information about the suggested mileage or time to change the coolant. However it is important, because of the different climate and operative conditions, to measure the pH of the coolant every time the vehicle is at a scheduled service.

Extensive testing has shown that a coolant pH below 7.5 pH is not acceptable for use in engines due the its corrosive nature. The correct pH value should be maintained between 7.5~9.0 ph. Below 7.5 pH it is advisable to flush the cooling system and refill with a new coolant solution.

PPM Nitrite (end pad)	Freeze Point °F      °C	pH (pad nearest handle)
<<200	32°    0°	6.5
<200	4°    -16°	7.0
800	-10°    -23°	8.0
1200	-34°    -37°	9.5
4000	-60°    -51°	above 11

**TRUCK / FORKLIFT / EXCAVATOR / TRACTOR / BUS / HEAVY DUTY**

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**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	Engine 3066 S6KT E200B E320B  EXCAVATOR	KCA-01W	34345-10010 517693 1252989	
	Engine 3064, 3066 C4.2, C6, C6.4 Excavator 311C, 311D LRR, 312C, 312CL, 312D E320C	KCA-02W	1786633	
	Engine 3116DI Backhoe loader 446 Asphalt paver AP-1000, AP-1000B, AP-1050B, AP-1055B, AP-900B, BG-240C, BG-2455C, BG-260C	KCA-03W	7C4508	
	Engine 3204T	KCA-04W	2W1223	
	Engine 3304, 3306T Earthmoving 816, 815 Generator SR4 Excavator 225, 235	KCA-05W	2P0661	
	Engine 3304, 3306T Earthmoving 816, 815 Generator SR4 Excavator 215, 225, 235	KCA-06W	2P0662	

**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	Engine 3306T Paving compactor CB-534, CP-643, CP-653, CS-643, CS-653	KCA-07W	2W8001	
	Engine 3306T, 3304 Earthmoving 816B, 815B Dump truck D250B, D25C, D300B, D30C, D350C, D35C	KCA-08W	2W8002	
	3406E C15 SERIES C18 SERIES  Straight tooth gear	KCA-09W	10R2776 10R3326 10R6225 2243238 3362213	
	3306 3304	KCA-10W	2W8003	
	3306 3304 SR4	KCA-11W	2W8004	
	3116 3126  Pulley 3.75"	KCA-12W	1208402 4P3682 0R1013 7E7398	

**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3116 3126  Pulley 4.37"	KCA-13W	0R1013 0R3007 4W0253 4P3683 9V4879	
	3126 3126B 3126E C7 Excavator 320D, 330D, 336D	KCA-14W	3522139 2634413 2194452	
	3126 3126B 3126E C9  Excavator	KCA-15W		
	3406B 3406C  Dished gear	KCA-16W	613890 10R0483 0R4120	
	3406B 3406C  Flat gear	KCA-17W	0R8217 10R0482 7C4957 7W7019	
	3126	KCA-19W	2243255	

**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3208T	KCA-20W	2W1225	
	3306T	KCA-22W	1727776	
	3306T	KCA-23W	1727775	
	3306T	KCA-24W	1727766	
	3306T	KCA-25W	1727767	
	E315C 318DL C4.4	KCA-26W	4131A068	

**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	E323DL C6.6	KCA-27W	322-9662	
	C6.6	KCA-28W	2274299	
	C6.6	KCA-29W	352-2080	
	336D 336DL (166mm) C9	KCA-30W	202-7676	
	E330D (170mm) C9	KCA-31W	219-4452	
	349D C10 C12	KCA-32W	176-7000	

**CATERPILLAR**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	345D 345DL C13	KCA-33W	293-0818	
	3406 347DL C15 C16	KCA-34W	161-5719	
	3408 3412 D9R	KCA-35W	137-1339	
	C7.1	KCA-36W	322-9662	

**CUMMINS**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	FD 1060 4LE1 DIESEL  TRUCK BUS	KCU-01W	3802970 3802358 3802004 3903749 3282677	
	90-97 FD 1460 DIESEL	KCU-02W	3802081 3804883 3806180 3913430	
	6C 6CT 6CTA 8.3 PC300-7	KCU-03W	5RK121005A 3357458 3285323 3800974	
	B3.3	KCU-04W	3800883	
	NH220 BM76506 D85	KCU-05W	6685-61-1024	
	N14	KCU-06W	3803605 3803361 3803605RX	

**CUMMINS**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	NT855	KCU-07W	3022474 3027174 3801788	
	ISX Series 15.0L	KCU-08W	4089910 4025097 4024845 3800495 4089908	
	Big Cam IV 300,350,400	KCU-09W	3801708 3045943 AR45217	
	L10 Series 10.0L M11 Series 10.8L	KCU-11W	3803403 3800737 4955705 4972862	
	ISX Series 15.0L 912 with 10Rib Groove Pulley	KCU-12W	4089908NX 4089158RX 4025097RX 4026702	

**CHINA TRUCK**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	FOTON TRUCK Engine ISF 2.8 3.5T	KFO-02W	5269784 5269879 5333148	
	FOTON TRUCK Engine ISF 3.8 6.5T	KFO-03W	5288908	

**DAEWOO/DOOSAN**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	DH280-3 DH330 DB6114T D2366  EXCAVATOR	KDA-09W		
	DH220-3 DH300-7 D1146(OLD)	KDA-10W	65.06500-6139C	
	DH220-5 DB58T	KDA-11W	65.06500-6402A	
	DH300-5 DH220-3 D1146T	KDA-12W	65.06500-6138C	
	DB33  FORKLIFT	KDA-13W	A213847 65.06500-6114	
	DH225-7	KDA-17W	65.06500-6402BD B85TIS	



**DAEWOO/DOOSAN**

**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	DH370-7 DH420-7	KDA-18W	65.06500-6142DD E12TI	

**DETROIT**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	60 Series 14.0L, EGR	KDE-01W	AW2129 23532542 (R)23530427 (R)23531257 (R)23535017	
	60 Series 12.7L, EGR	KDE-02W	AW2130 23532543 (R)23531258 (R)23535018	
	60 Series Rear Mount, Gear Driven, Fits 12-90 & later, W/ Weep Chamber	KDE-03W	AW2131 23526039 3517027 23505895 23518215 23522707 23523904 23539601 23539602	

**FORD**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	7.3L V8 F250/F350/E550 Excursion	KF-106W	AW4114	
	Truck V10 6.8L 415	KF-138W	AW4109 4C3Z8501B 4C3E8501AA F7UZ8501DA F81Z8501DA YC3Z8501AB	
	Truck L6 6.6L 401, 7.8L 476 Diesel, W/O WP Mounted Fan	KF-145W	AW4071 F1HA8501C F1HZ8501CMR FOHN8508AA	
	Truck L6 6.6L 401, 7.8L 476 Diesel	KF-149W	AW4062 ETHZ8501B E8HZ8501B E8HZ8501C E8HZ8501CRM	
	Truck L6 6.6L 401, 7.8L 476 Diesel, W/ WP Mounted Fan	KF-152W	AW4072 E1HZ8501DRM E8HN8508AH F1HZ8501DMR	
	6.0L Power Stroke Diesel 03-05	KF-171W	AW4133	



## FORD

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	F650 F750 6.0L DIESEL NAVISTAR VT365 6.0L DIESEL	KF-177W	4C3Z8501AA 5C4Z8501AA	
	FORD5000 TRACTOR	KWP-01		

## GENERAL MOTORS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	V8 6.6L 400 Duramax Diesel	KG-118W	AW6053 97372515 98031233	
	Chev 01-05 Silverado & GMC Sierra 2500HD & 3500, 6.6L, 400 Diesel	KG-119W	AW5098 8972161367 19168888 251-723	
	CHEVROLET C4500 V8 6.6L 06	KG-121W	12637105 WP-9414	

**HINO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	H07D 7400cc 89-92	KHI-01W	16100-2970 16100-2971 16100-2972 16100-2973 16100-2980 16100-2981 16100-2982 16100-2983 16100-2973	
	H07D 94~	KHI-01W-1	16100-3171 16100-3070	
	H07D	KHI-01WA	16100-2973 16100-2980 16100-3172	
	W04D 4000cc 83-96	KHI-02W	16100-2341 16100-2342 16100-2343	
	W06D W06E	KHI-03W	16100-2532 16100-2531 16100-2530	
	EH700 H06CT EX220-1/2/3	KHI-04W	16100-1441 16100-1170 16100-1171 16100-2371	

**HINO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	J05C	KHI-05W	16100-3475	
	J07C 5700cc J08C 8000cc	KHI-06W	16100-3464 16100-3465 16100-3466 16100-3467 16100-2393 16100-3580	
	H07CT 6700cc 86-90	KHI-07W	16100-2640 16100-2641	
	EF750	KHI-08W	16100-2393 16100-2955 16100-2587	
	K13C	KHI-10W	16100-3112	
	EK100 EK100-87Y K13D	KHI-11W	16100-3122 16100-3123	

**HINO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	P11C BUS	KHI-12W	16100-3910	
	F20C	KHI-13W	16100-3302 16100-3305 16100-3301	
	W06E	KHI-14W	16100-2384 16100-3860 J3610013C	
	EM100	KHI-21W	16100-3622 16100-2753	
	E13C-TK	KHI-22W	16100-4170 16100-E0451	
	K13C-TE	KHI-23W	16100-3320	

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	P11C-TK LFR-2P  Gear : 22T	KHI-24W	16100-3781	
	P11C-TK  Gear :23T	KHI-24W-1		
	P11C Without heat inlet	KHI-25W	16100-E0490	
	K13C	KHI-26W	16100-3820	
	J08E	KHI-27W	16100-E0022 16100-E0021	
	J05E W/extra output SK200/210 SK250/260-8 KOBELCO C210	KHI-28W	16100-E0373	

**HINO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	J05E	KHI-28W-1	16100-E0373	
	M10C	KHI-29W	16100-2864	
	P11C with heat inlet	KHI-30W	16100-4120	
	EL100	KHI-31W	16100-3632	
	P11C-TJ  Gear : 22 T	KHI-32W Gear : 22 T  KHI-32W-1 Gear : 23 T		
	H07C	KHI-33W	16100-3592	

**HINO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	F17C	KHI-34W	16100-3032	
	300 N04C 3.5-8.5	KHI-35W	16100-78170 16100-E0040 16100-4080	
	J08E	KHI-36W	16100-4290	
	P09C EP100	KHI-38W	16100-1313	
	H06C	KHI-39W	16100-2370	
	DUTRO W04DT	KHI-40W	16100-E0341	

**HINO**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	K13C	KHI-41W		
		KHI-42W	16100-E0521	
	K13C	KHI-43W	16100-3086	

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	R200-3 R200-5 D6BR(OLD) small pulley  EXCAVATOR	KHY-25W	25100-93G00	
	R210 D6BT(NEW) big pulley  EXCAVATOR	KHY-26W	25100-93C00	

**INTERNATIONAL**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	DT408 DT466C 7.6L	KIN-01W	AW3713 1817687C92-C94- C95-C96-C97 1830606C94 1821935C3 1817686C94 1817967C96 1830606C95	
	L6 7.6 DT466	KIN-07W	AW3710 685155C91-C92-C 94-C95 735327C91	
	DT360 DT466 7.6L Left	KIN-08W	AW3712 1815538C91 735445C91 SGA735327	
	DT466W 7.6L	KIN-10W	AW3717 1830607C4 1841764C2 1842664C92 1842665C93	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	2500cc 4JR1 2800cc 4JA1 SK60  EXCAVATOR	KI-07W Pulley mounting bold 5 mm  KI-07W-1 Pulley mounting bold 8 mm	8-94140-341-2 8-94310-251-0 8-94376-844-0 8-97376-851-0 8-94419-461-2 8-94461-173-0 8-97018-560-0 8-97123-330-0 8-94379-422-0 8-97062-796-0	
	2800cc 4BA1 3300cc 4BC2 3600cc 4BE1 4300cc 4BG1 4BD1 4BD1T  FORKLIFT	KI-15W	8-94129-554-Z 8-94376-853-Z 8-94372-119-Z/0 8-94379-924-Z/0 8-97018-556-Z/0 8-97021-171-Z/0/1 8-94439-850-Z/0 8-97021-171	
	2000cc G201 2200cc C221 2400cc C240 G240 67-	KI-17W	5-13610-038-1 5-13610-179-0 8-94376-832-0 9-13610-323-0 9-13610-417-0 9-13617-605-0 9-13617-635-0	
	ELF 250 2800cc 4BA1 4BC1 3300cc 4BC2 DIESEL	KI-18W	5-13610184 8-94379924 8-94439850 8-97018556 8-97021171	
	4300cc 4HF1 4600cc 4HG1 4800cc 4HE1T 5000cc 4HJ1	KI-20W	8-97073-951-Z 8-97109-676-Z 8-944939-850-0 8-944939-850-2	
	2800cc 4BA1 3300cc 4BC1 4VC2 79-	KI-22W	5-13610-187-0 5-13610-150-0 8-94176-989-0 8-94376-843-0	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	2800cc 4BA1 3600cc 4BB1 73-79	KI-23W	5-13610-009-0 5-13610-027-0 5-13610-041-3 8-94376-865-0 9-13617-636-2 9-13617-801-1	
	FOWARD 6BG1 81- 6BG1T 5800cc 6BD1	KI-25W	1-13610-819-0 1-13610-602-1 1-13610-428-0 1-13650-018-0 1-13610-017-1	
	HOMBRE V-6 262(4.3L) 97-99 NPR TRUCK V- 8 350(5.7L) 96-99 GMC TRUCK V-6,V-8	KG-48W (KI-29W)	8-12532-528-0 12528917 12532528 12532526 12561392 88896225 89017748 89060527	
	PICK UP PRODE TROOPERII V-6 (2.8L) V-6(3.1L) 89-94	KG-44W (KI-30W)	8-10120-943-0 10048950 10120943 12482690 14092941	
	KS22 4BD1 3900CC DIESEL	KI-34W	5-13610-171-1 5-13610-171-2 5-13610-171-3 8-94469-852-0 8-94439-852-1 8-94439-582-2 8-94376-855-0	
	FOWARD 6HE1 7100cc 6HH1 8200cc RK195 2PULLEY	KI-35W	8-94393-447-3 8-97602-781	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6HE1 (FRR/FTR) ALUMINUM 2 PULLEY	KI-35W-1	8-97602-773-0	
	RK195 3 PULLEY	KI-35W-2	8-94393-447-3	
	RK195 DECA230 4 PULLEY	KI-35W-3	8-97602781-0	
	ELF 250/350 JOURNEY 4BB1 2800cc 4BA1 3600cc KS21	KI-36W	5-13610-027-2 5-13610-012 5-13610-041 8-94376-865 9-13617-636 8-13617-801	
	4JB1T 2800cc 4JG2 3100cc	KI-37W	8-97105-012-0	
	RODEO D-MAX 4JH1 3000cc 4JA1 2500cc	KI-39W	8-97942972-0 8-97942-209-0	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6BB1	KI-40W	1-13610-016-0	
	6SA1 R/K210	KI-41W	1-13610-842-1 1-13610-603-3	
	6BB1 5.4cc 6BD1 5.8cc 6BF1 6.1cc 76-78 78- TRUCK (6-6.5 ton)	KI-42W	5-13610-144-0 5-13610-026-2	
	5400cc 6BB1	KI-42W-1	1-13610-877-0	
	6BG1T EX200-5  EXCAVATOR	KI-42W-3	1-13650017-1	
	C240 2400cc SD10 SD12 SD15  TCM/KOMATSU FORKLIFT	KI-43W	8-94376-862-0 9-13610-394-Z 9-13610-325-Z 8-97028-595-Z 8-94483-167-Z 8-94376-862-Z 5-13610-163-Z/0 5-13610-077-Z/2 5-13610-057-Z/0 5-13610-047-Z/0	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	10PE1	KI-44W	1-13650-179-0 1-13610-789-0 1-16350-140-2	
	6WA1 360/370	KI-46W	1-13650-057-0	
	6HE1	KI-48W	8-94395-656-3	
	6SD1T	KI-49W	1-13610-944-0	
	6SD1 R/K240	KI-49W-1	1-13650-008-1 1-13610-676-1	
	6SD1TC	KI-57W	1-13650-002-0	

**ISUZU/HITACHI****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	ELF 4BE2 3600cc 4BD1T ELF250  TRUCK	KI-58W	8-97022-859-1 8-97014-078 8-97184-867 8-97022-859	
	FOWARDO 6BD1 5800cc 6BG1 6500cc  FORKLIFT	KI-62W	1-13650-159-1	
	4JG2 EX60  FORKLIFT	KI-64W	8-97028-590-0	
	4BG1 EX120-5  EXCAVATOR	KI-65W	8-97125051-1	
	6HK1	KI-69W	1-136501330-0	

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	4HK1 SH200-5  EXCAVATOR	KI-70W	8-98038845-0 8-98022872-1	
	4HK1  TRUCK	KI-72W	8-97363478-0	
	6HK1-TC (cast iron)	KI-73W	1-87310835-0 8-98042-848-2	
	6UZ 360 hp	KI-74W	8-98236219-0 J210-1250B	
	4BD1T SH120 EX120-3  EXCAVATOR	KI-75W	8-94376865-0	
	4JG1 ZAX70	KI-76W	8-97123330-0	

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6SD1T EX350 EX300-5	KI-77W	1-13650068-1	
	DA210 DA220 6.1L	KI-79W	9-13610-069-0	
	DA120	KI-80W	9-13610-450-0	

**KOMATSU**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	S4D95S  FORKLIFT (ALUMINUM)	KKO-01W	6202-63-1200 6202-63-1201	
	S6D95 PC200-5  EXCAVATOR	KKO-03W	6206-61-1100 6206-61-1104 J3510008C	
	S6D125 PC300-3 PC400-5	KKO-04W	6151-62-1104 6151-61-1101 6151-61-1121	
	S6D102 S6D102E PC200-6  FORKLIFT	KKO-05W	6736-61-1200 6735-61-1102 6735-61-1101 3286277	
	S4D95 PC60-5	KKO-06W	6204-61-1204	
	S6D105 PC200-3	KKO-07W	6136-62-1100	

**KOMATSU**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	S6D108 PC300-6 (8V)槽	KKO-08W	6222-63-1200	
	S6D105 6D105 PC200  EXCAVATOR FORKLIFT	KKO-09W	6136-61-1102	
	S6D108 (4V)槽	KKO-10W	6221-61-1102	
	S4D94E S4D94LE  FORKLIFT	KKO-11W	12990-42055 12990-42054 12990-42053 12990-42050	
	S6D125E PC400-6 PC450	KKO-12W	6151-62-1102 6151-62-1101 6154-61-1102	
	S6D95L  FORKLIFT	KKO-13W	6206-61-1505	

**KOMATSU**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3D83 3D84 PC20 PC30	KKO-14W	19327-42100	
	3D94-2A	KKO-15W	6144-61-1301	
	S4D95L	KKO-16W	6204-61-1304	
	4D105-3 D50-17/18	KKO-17W	6140-60-1110 6131-62-1240	
	4D105-5	KKO-18W	6130-62-1110	
	S4D120	KKO-19W	6110-63-1110	

**KOMATSU**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	S6D95 PC200-6	KKO-20W	6209-61-1100	
	6D107 PC200-8	KKO-21W	6754-61-1100	
	6D110 PC400-1 WA350-1	KKO-22W	6138-61-1860	
	6D110 WA380-1 WA420-3	KKO-23W	6222-61-1500 6222-61-1600	
		KKO-24W	6150-61-1101	
	S6D140 small	KKO-25W	6212-61-1203	

**KOMATSU**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	S6D140 big	KKO-26W	6212-61-1305	
	S6D140E	KKO-27W	6211-61-1400	
	S6D155 D155A1	KKO-28W	6124-61-1004	
	SA6D155 D355C1	KKO-29W	6127-61-1008	
	S6D170	KKO-30W	6162-63-1012 6162-63-1015	

**KUBOTA****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	M105SDT V3300 V3800  TRACTOR FORKLIFT	KKU-01W	1C010-73032 1C010-73030	
Impeller height 8mm  	Z482/D722/D902 K008/K008-3 G1800/G1900 TG1860-48 B7300HSD B7400HSD EXCAVATOR TRACTOR	KKU-02W	15881-73033 15881-73030 19883-73030 7509-10102	
Impeller D:69mm  	V1505  TRACTOR	KKU-03W	16259-73032	
	V2203 V1702 V1903 D1302 D1402 D1403 D1703 BOBCAT 753/763/773	KKU-04W	7509-10103 15521-73030 15521-73033 15521-73034 15521-73035 15521-73039 A-6653941 A-503180	
	V2403  EXCAVATOR	KKU-05W	1K321-3030	
	CT3-69 D1105  TRACTOR	KKU-06W	25-33024-00-SV	

**KUBOTA****TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
 Impeller height 14mm	D722  TRACTOR	KKU-07W	R25-15366-00 1E051-730341	
	V2403 BOBCAT AL275 S205	KKU-08W-G  KKU-08W-1 w/pipe	1G730-7303-2 17509-10103	
	L175 L255(DT) L245(DT) L345(DT)	KKU-09W	15321-73032	
	L2500 L3000 M4800SU M5700  TRACTOR	KKU-10W	1A021-73030 1A021-73033 16412-73030	

**MERCEDES BENZ**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	MBE904 4.3L	KMB-49W	9042002001 9042001901 9042000701 9042000201	
	OM366	KMB-80W	3762000601	
	OM355 OM356	KMB-81W	3452000801	
	OM457	KMB-82W	4602000001	
	OM477A OM447L OM449A OM449L	KMB-83W	4752000101	
		KMB-84W	3532000301 3532003701 3532003601 3522007401 3522008401 3532000401	

**MERCEDES BENZ**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	OM355 OM356	KMB-85W	3452000201	
		KMB-86W	31420000601 31420000604 31420000801 31420001901 31420002101 31420002401 31420002901 31420003701 31420003901	
		KMB-87W	3622006801	
		KMB-88W	5422002101	
	OM352	KMB-90W	3522003801	
	OM906	KMB-110W	A9062001301	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	4G33 1400cc 4G32 1800cc 4G36 1200cc  FORKLIFT	KM-01W	MD997610 MD997077 MD009000 MD009019 MD041050	
	4G15 4G13 1300cc  FORKLIFT	KM-05W	MD974649 MD997609 MD997076 MD030863 25100-25010 25100-22650 25100-22010/12 25100-24040/60	
	4DR51 2700cc 4D30 3300cc 4D30A 4D31A 4D31T DIESEL	KM-07W	MD015020 ME015005 ME015020 ME015010 ME015030	
	4G63 4G64  FORKLIFT	KM-09W	MD970338 MD997615 MD997613 MD997612 MD997465 MD997080 MD997079 MD312740 MD041050	
	4D30(T) 3300cc 4D31(T) 4D31A 4D33 4D32 4D30 3600cc	KM-13W	ME013406 ME013864 ME015030 ME015040 ME015045 ME996863 ME996861 ME015050 ME013169 ME013868	
	4D55 2300cc 82-	KM-17W	MD997150 MD664616 MD997618 MD997170 MD997150 MD997084 MD942001 MD166048 MD050405	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6G72 3000cc 6G71 2000cc	KM-18W	MD972003	
	4DR5 4DR7 95- 89-93 2800cc	KM-29W	ME005183 ME966781 ME005212 ME001551 CW605169	
	4M40	KM-30W	ME996792	
	4G52 2000cc 4G53 2400cc  FORKLIFT	KM-39W	MD972502 MD997410 MD997083 MD025475	
	2500cc 4D56 4G15  FORKLIFT	KM-49W	MD972002 MD997686 MD974999 25100-42540 AJ0315010G	
	2000cc 4D68	KM-51W	MD971539 MD972006 MD972054 MD972972	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3600cc 4D36 3900cc 4D34 4200cc 4D34T 4600cc 4D33 4D35	KM-52W	ME015217 ME995424 ME996868 ME215082	
	4M40 4M41 CAT E307B Sumitomo SH60  EXCAVATOR	KM-56W	ME993473	
	3900cc 4D34T 4200cc 4D34 D433  DIESEL (CAST IRON)	KM-57W	ME013410 ME993515 ME996865	
	3900cc 4D34 4200cc 4D33  (ALUMINUM)	KM-57W-1	ME013410 ME993515 ME996865	
	2800cc 4DR70  TRUCK	KM-61W	ME005213 ME996786	
	6900cc 6D14A 6D15A 80-82  TRUCK (ALUMINUM)	KM-62W	ME035211 ME035212 ME035168 ME035171 ME996928	



## MITSUBISHI (FUSO)

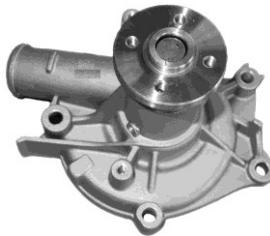
TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	690cc 6D14A 80-82  TRUCK (CAST IRON)	KM-62W-1	ME035211 ME035212 ME035768 ME035171 ME996928	
	2800cc 4DR-70 89-93	KM-66W	ME005212 ME001551	
	6D16T W/ OIL CIRCULATION	KM-65W	ME075218	
	6D16T W/O OIL CIRCULATION	KM-65W-1	ME996811 ME993839 ME993455 ME075132	
	6D16T	KM-65W-2	ME075293	
	6D16T (CRANE) FN527	KM-71W	MC075156	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6D16 6D15A FK417	KM-72W	ME075049	
	4G63 4G64  FORKLIFT	KM-74W	MD972457	
	6D22T W/OIL CIRCULATION	KM-76W	ME995716 ME152528	
	6D22 W/O OIL CIRCULATION W/ LUBRICATING OIL	KM-77W	ME995584	
	8DC82A 84-	KM-78W	ME091142	
	6D14	KM-79W	ME996801 ME996804	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6D17 6D17T W/O OIL CIRCULATION	KM-80W	ME995290	
	6D15A 6D16T	KM-81W	ME995223 ME995303	
	6D31T 6D34T SK200-3 SK200-5 KOBELCO  EXCAVATOR	KM-82W	ME088301	
	6D31 SK200 KOBELCO HD700  KATO EXCAVATOR	KM-83W	ME391343	
	8DC11A 8DC9	KM-84W	ME995645 ME095657	
	S4F S4E S4E2 S6E S6E2  FORKLIFT	KM-85W	34545-00013 34545-10010 34745-11010	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6D14A 6.6L FK-115,116,215,216 6D15A 6.9L FM-215,216,315,316	KM-86W	MD787131	
	S4S  FORKLIFT	KM-88W (Aluminum)  KM-88W-1 (Cast Iron)	32A45-00022 32A45-10010	
	S4Q2  FORKLIFT	KM-89W	32C45-00022 32C45-00023	
	4D56 L200 2006~	KM-90W	1300-A045	
	6D16	KM-91W	ME996800	
	6D16 FN528 FN627 TURBO	KM-96W	ME075258 ME995288	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6D24T W/OIL CIRCULATION	KM-98W	ME995058	
	S6S	KM-99W	32B45-10031	
	FUSOTRUCK FK71D CANTER 4M50 4.9L 4M51 5.2L	KM-100W Pulley 114mm	ME995072	
	ROSA 4M50 4.9L  BUS	KM-100W-1 Pulley 104mm	ME993965	
	6D16A	KM-102W		
	8DC11A FP519 FV380	KM-104W	ME995649 ME995125	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	8M20	KM-105W	ME995663	
	4M50 4M51 Pulley 97mm  TRUCK	KM-106W	ME993965 ME994506	
	4D32 HD450  EXCAVATOR	KM-107W	ME993517	
	4D34 3.9L 2005~08	KM-109W	ME993928	
	6M70 W/O OIL CIRCULATION	KM-114W	ME994508 ME994508 ME350733	
	K4E K3E K4C K4F S4L S3L  TRACTOR	KM-115W	MM433424 MM409301 MM409302 MM409303 MM407405	



## MITSUBISHI (FUSO)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	6M60-EUR4 HUB22mm	KM-116W	ME996795 ME993933	
	6D22TC	KM-117W	ME158624	
	FEA51 3.5	KM-118W	MK667228	
	6M70 W/O oil circulation	KM-119W	ME994277	
	8DC91A FV320 86-	KM-120W	ME996877	
	K4M K4N  TRACTOR	KM-122W		



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	66-81 A15  TRUCK FORKLIFT	KN-01W	21010-13200 -13201 -13202 -13225 -13226 -18810 -18811 -18812	
	H50-2  FORKLIFT	KN-04W	21010-50K26 21010-Y7025 21010-R8485 21010-R8425 21010-J2025 21010-Y7025 21010-W3694 21010-W3686 21010-W3626	
	H20(OLD) 802  FORKLIFT	KN-05W	21010-78225 21010-78226 21010-V4425 21010-J5125 21010-J5025 21010-78202 21010-78203 21010-78200 21010-66028	
	2000cc SD23 2200cc SD22 2300cc SD23 69- TRUCK FORKLIFT	KN-08W	21010-37501 -37502 -37503 -37504 -37526 -37528 -37529 -37585	
	2200cc SD22 79-	KN-10W	21010-09W25 -31W25 -31W26	
	TD23 2300cc TD25 2500cc TD27 2300cc 86-  TRUCK	KN-27WF	21010-43G25 -43G26 -43G27 -43G28 -43G29 -35V25 -35V26 -43G86	



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	TD23 2300cc TD26 TD27 2700cc BD30 3000cc 86-	KN-28WF	21010-02N25 21010-02N85 -22T26 -22T25 -02N90 -02N91 -02N89 -02N88 -02N86	
	P40	KN-42W	21010-C6526	
	TB42	KN-49W	21010-03J25 21010-03J26	
	ED33 3300cc FD33T 3500cc FD35 FD35T ED35  HITACHI EX60 EXCAVATOR	KN-53W	21010-S9025/6/7 -S9425 -T9028/6/7 -T9085/6/7 -T9088/9 -01T27/5/6 -01T85/7/8	
	2300cc SD23 85-	KN-57W	21010-10G25 21010-10G26	
	3300cc SD-33 78-87	KN-58W	21010-61504/5 21010-61526/7/8 -61528/9 21010-61585 21010-61594	



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	2700cc TD27 DIESEL  FORKLIFT	KN-59W	21010-40K26 21010-40K28 21010-20K29 21010-40K30 21010-40K05 21010-40K31	
	2500cc TD25 2700cc TD27 TD42 88-	KN-61W	21010-44G25 21010-44G26 21010-44G27	
	2000cc H20 H-20-1  FORKLIFT	KN-62W	21010-L1100 21010-L1125 21010-L1126 21010-21100 21010-B8525	
	2700cc TD27 2700cc TD27T(I) 87-	KN-64WF	21010-21N25 21010-21N28 21010-21N29 21010-21N85 21010-21N86	
	2000cc LD-20 81-84  TRUCK	KN-65WF	21010-W1727 21010-W1786 21010-G3625 21010-G3626	
	K21 K25  FORKLIFT	KN-73W	21010-FU425	



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	RE8 CW53	KN-74W	21010-97266	
	RF8 CW520  Single Ditches	KN-75W	21010-97402 21010-97228 21010-97325 21010-97415 21010-97572 21010-97226 21010-97366	
	RG8 CW530  Multi Ditches	KN-75W-1	21010-97361 21010-97573 21010-97403 21010-97400 21010-97326 21010-97229	
	PD6 PE6	KN-76W	21008-96107	
	PD6 PE6 PE6T	KN-76W-1		
	PD6 PE6 PE6T	KN-76WA	21010-96172 21010-96264	



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	PF6T CK450	KN-77W	21010-96211 21010-96125	
	CK450 PF6T	KN-77WA	21008-96072 21010-96266	
	FE6T	KN-78W	21010-Z5607 21010-Z5426 21010-Z5518 21010-Z5029 21010-Z5027	
	RD8	KN-79W	21010-97110	
	PF8	KN-93W		
	FE6T	KN-99W	21010-Z5429 21010-Z5572 21010-Z5574 21010-Z5600 21010-Z5603 21010-Z5613 21010-Z5700	



## NISSAN (UD)

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	FE6T BUS	KN-100W	21010-Z5525 21010-Z5326 21010-Z5328 21010-Z5611 21010-Z5661 21010-Z5666 21010-Z5707	
	FD42 FD46	KN-101W	21010-0T025	
	D13000 GE13T	KN-105W	21010-00Z0B 21010-00Z08	
	H15 H20-II H25  FORKLIFT	KN-106W	21010-FF225	
	MD92 MK260  TRUCK	KN-108W	21010-Z6017	

**PERKINS**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	PERKINS L4(3.9/4.1L) 236/248	KPK-07W	41312143 41312915 41312551 41312143 70991175 70991096	
	PERKINS 700 series Hyster H2.00-3.20XM	KPK-18W	3771F15C/2 U5MW0175 4131A052 U4131A052 U5MW0176	
		KPK-13W	41312167 U5MW0061	
		KPK-19W	41313201 3641832M91	
		KPK-20W	37773799 4222071M91 U5MW0106	
		KPK-21W	4131A113 10000-47142	

**PERKINS**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
		KPK-22W	4131A068 U5MW0206	
		KPK-23W	4131A131	
	18 gear	KPK-24W	4131E103 4131E011 4131E012 U5MW0092 U5MW0160	
		KPK-25W	4131E018 U5MW0193	



SCANIA

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	DTC11	KSC-01W	1575100 1571059 575100 571059	
	DCS11 DSC12 Series 124  Height:16.5mm	KSC-03W	1508533 1570951 1353072 570955 570952	
	DSC14 Series 144  Height:22mm	KSC-03W-1	1365841 1508534 1570956 570956	
	DSC9	KSC-04W	1510490 1486098 1380897 570957 570953	
	DSC16	KSC-05W	570958 570954 549481 510404 10570954 1549482 1433792 1549481 1510404 1570954	
	DC9 DC11	KSC-06W	570964 10570959 10570964 1546188 1570959 1789522 546188 570959 570965	



TOYOTA

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	4200cc 2F 75-79  TRUCK	KT-04WW	16100-61041 16100-61040	
	4P  FORKLIFT	KT-09W	16120-78007-71 16210-34090 16120-34140 16120-34101 16120-34100 16110-88251 16110-39296 16110-39295	
	3200cc 2B 80-82	KT-19W	16100-59085	
	4000cc 3F 84-87	KT-37W	16100-69155 -69156 -69255 16110-61180	
	4000cc 3F 84-	KT-38W	16100-69115 16100-69245	
	4200cc 2F 75-80  TRUCK	KT-55W	16100-61010 -61011 -61012 -61013 -61020 -61030	



TOYOTA

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3200cc 2B 74-80	KT-57W	16100-59015 -59016 -59017	
	1UZFE 4000cc INZFE 89-	KT-59W	16100-50020 -50021 -50022 -59275 -59276	
	3500cc 1PZ 4200cc 1HD,1HZ	KT-62W	16100-19235	
	3900cc 2F 67-75	KT-75W	16100-60090	
	1FZ  FORKLIFT	KT-78W	16100-69325 16110-76035-71	
	3000cc B/3B/11B 3700cc 14B 4100cc 15B	KT-84W	16100-59165 16100-59166 16100-59245	



TOYOTA

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3400cc 3B 3200cc 2B DIESEL 80-	KT-88W	16100-59065 16100-59075 16100-59076	
	4200cc 2F	KT-92W	16100-61081 16100-61130	
	1Z 13Z  FORKLIFT	KT-104W	16100-78300 16100-78300-71	
	4P  FORKLIFT	KT-110W	16120-23010	
	7F4Y  FORKLIFT	KT-111W	16110-10110 16110-10110-71 16110-78156 16110-78156-71 16100-78171	
	2J	KT-113W	040780-0090	



TOYOTA

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	2J Big Pulley  FORKLIFT	KT-114W	16100-00705 16100-10941 16120-10940-71	
	2J small Pulley  FORKLIFT	KT-115W	16100-22060 16100-22071 16120-32082-71	
	6F1DZ  FORKLIFT	KT-116W	16100-72800 16100-78202-71	
	1DZ  FORKLIFT	KT-117W	16120-78201-71	
	6FG 5K big pulley  FORKLIFT	KT-127W	16120-96120 16120-78120-71	
	7F1DZ 2Z 3D FORKLIFT 7FDF 20/25/30 8FD 25/30  TRUCK	KT-131W	16100-78206-71 16110-78206-71 16110-78703-71 16110-78701-71	

**TOYOTA**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	7F1DZ FORKLIFT	KT-131WA	16100-78203-71	
	6F4Y FORKLIFT	KT-132W	16120-78151-71	
	2FG 3FG 7FG 8G 5K small pulley TRUCK/FORLIFT	KT-133W	16110-78121-71 16120-78121-71	
	V8 5.7L TRUCK	KT-136W	16100-09490 16100-39495	
	4.5 cc 1VD V8	KT-137W	16100-59365	
	2H FORKLIFT	KT-147W	16120-69025	

**TOYOTA**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	2J FORKLIFT	KT-148W	16210-32082-71 16210-78102-71 16210-96102	
	2J FORKLIFT	KT-149W	16120-23040-71	
	1DZ 2Z FORKLIFT	KT-150W	16100-78703-71	

**VOLVO**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	Engine TD101, TD102 TD103, TD121 TD122 Excavator EC360B EC330B	KVO-15W	8149937 20431484	
	Engine TD61, TD63 TD71, TD73 Excavator EC300, EC280 EW200, EC200 TRUCK	KVO-16W	8192050 8113522 8112185 20575653	
	Engine FH12, FM12 NH12, D12C Excavator EC460B, EC360B EC330B  TRUCK, BUS	KVO-17W	8170305 20431135 20734268	
	Excavator EC160B, EC180B, EC135B, EC140B, EC290B, EC240B, EC210B, EW145B D6D, D6E DEUTZ	KVO-20W	20459004 20502535 21404502 4299142	
	TD101	KVO-21W	1545248 1698618 1699788 467907 467686	
	D7D EC210 EC290	KVO-24W	2937441	

**VOLVO**
**TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	D9 D13 D16 EC380 EC480	KVO-25W	20744939 22197705	
		KVO-26W	0425-9546 1012	
		KVO-27W	0425-9547 1013	
		KVO-28W	J4260082 1015	
		KVO-29W	J4260083 1015	

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	FE 1600cc F6 1800cc F8 2000cc  YALE FORKLIFT	KMZ-07W	FE79-15-010 FE79-15-010B FE79-15-010C FE79-15-010E 8AG1-15-010A/B 8AG3-15-010/A F801-15-010B/C/D OFEIH-15-010G 9013028-02	
	F8 1800cc F2 2000cc  YALE FORKLIFT	KMZ-10W	8AK1-15-010 8AK2-15-010 8AH2-15-010 8AH4-15-010 FE1H-15-010A F02Z-8501A E92Z-8501A 9015798-01	
	XA 2500cc HA 3000cc  YALE FORKLIFT	KMZ-31W	8AW3-15-100/A 8AW1-15-100/A SE01-15-100 SEA1-15-100/B 9010968-72	

**YANMAR**

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	4TNE84	KYA-01W	129100-42004 729428-42003	
	4TNE88 4D84	KYA-02W  KYA-02W-1 W/PIPE	129001-42004 729428-42003  129001-42001	
	4E4P	KYA-03W		
	4TNE94L 4TNV94 R60-5  FORKLIFT	KYA-05W  KYA-05W-1 W/PIPE	129900-42002	
	4TNE98	KYA-06W	129470-42003	
	S4D94E S4D94L  FORKLIFT	KYA-07W	12990-42055 12990-42054 12990-42053 12990-42050	



YANMAR

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	4TNE92	KYA-08W	129917-42010	
	3D84 PC20-5 PC20-6 PC30-5 PC30-6	KYA-09W	129327-42100	
	3D82 3TNE82 PC27-MR	KYA-10W	06051966 119810-42001	
	Thermo King Engine TK244 TK249 TK366 TK374	KYA-11W	13-0506 1E33464G01 11-6090 11-8649 11-9452 11-9496 811-9496 813-506	
	Thermo King Engine TK395 37NA68  EXCAVATOR	KYA-12W	13-0507 1E33466G01 11-9450 11-9497 811-9497 11-8804 813-507 119660-42009	
	3TNA72	KYA-13W		

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	3TNE75	KYA-14W		
	3TNV76	KYA-15W		
	Thermo King Engine TK486 3TNE88 4TNE88	KYA-16W	13-509 813-506 129001-142002 129001-142003	

## OTHERS

TRUCK/TRACTOR/FORKLIFT/EXCAVATOR/BUS

2D IMAGE	YEAR/MODEL	NUK #	OEM #	360° SPIN
	JOHN DEERE 9550,9560,9970 Cotton Picker 4630,4700,4710 TRACTOR 6510,6610 6320,6620,6820, 6920,6920S,5070M	KJD-02W	RE500734 RE505980 RE546906 SE501609 RE70687 RE70985	
	MAGNUM MACK EE9 530/560 16.0L MAGNUM MIDR 06.24.65 A/42 12.0L	KR-58W	316GC1184BX 316GC1211AX 316GCA1211 5010284179 5010438102 5200537899 7485003149	
	MACK RB 11.0L,11.9L RD 11.9L,12.0L RM 11.9L,12.0L RW 11.9L,12.0L MR 11.9L,12.0L MH 11.9L,12.0L LE 11.98L,12.0L FDM 11.9L,12.0L DMM 11.9L,12.0L DM 11.9L,12.0L CX 11.9L,12.0L CL 11.9L,12.0L CH 11.9L,12.0L	KR-59W	3161GC1219 316GC1219A 316GC1210AX 316GC1210A 360GB443 360GB443A 252535 316GC552M2X	
	MACK TRUCK L6	KMAC-01W	316GCA1211A 316GC1211A 316GC1205 316GC1184	

**CHRYSLER****FAN CLUTCH**

2D IMAGE	YEAR/MODEL	NUK #	OEM #	MAKER #
	ASKAM AS	KC-13F	27565T	FM130



## DAF

## FAN CLUTCH

2D IMAGE	YEAR/MODEL	NUK #	OEM #	MAKER #
	DAF95 FT 95 380 DAF95 XF FA 95 XF380/480 DAF95 XF FAD 95 XF380/480 DAF95 XF FAC 95 XF 380/430/480 DAF95 XF FAR 95 XF 380/430/480 DAF95 XF FAT 95 XF 380/430/480	KDAF-01F	1236096 1334257 1334259 1349834 1349835 1426402 1436105 1436125	6400492 298260N 4082601 8MV 376 731-341
	F2300/3300/3600 F75/85	KDAF-02F	1229554 1304249 1305179 1309649 1311271 1317003 1330723 1363378	7043126
	CF 430-480	KDAF-03F	1441774 1666157 1680937	298270N DFC047 7043402 5.41452 8MV 376 731-401
	DAF F3300	KDAF-04F	0284248	
	XF85 CF430	KDAF-05F	1449676 1449677	
	XF95 480	KDAF-06F	1236096 1334257 1334259 1349834 1349835 1426402 1436105 1436125 1319780	298260N 8MV376731-341 7043138 5.41451 V66-04-001

**FORD**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	E-250 CLUB WGN E-250 SUPER WGN E-350 (SUPER) E-350 HD CLUB WGN F-150 F-250 (SUPER CAB) F-350 (SUPER CAB) V8 6.8d / 7.3d	KF-15F	E5TZ8A616C E5TZ8A616G F2UZ8A616A E8TZ8A616D	22601 2830TA 7136963 77256 A5573 FC88 36963 216001
	E-350 ECONOLINE F-250 PICKUP F-350 PICKUP F-450 SUPERDUTY PICKUP F-59 STRIPPED CHASSIS V8 7.3d	KF-22F	F2TZ8A616C F4TZ8A616B	22607 2833TA 77299 2833
	FORD - TRANSIT	KF-26F	1C428A616BA 1C4Z8A616BA	
	FORD - CARGO 431 CUMMINS - 6CTAA VW - CAMION 17/12/23/26.310	KF-27F	4C458A616AA	22056 12.020002850F.A
	FORD - CARGO 1730-2625 97-02  CUMMINS - 6CTA	KF-28F	TMX121431X	
	FORD - CARGO 1722-1730-2631 -03  CUMMINS - 6C	KF-29F	4C458A616CA	

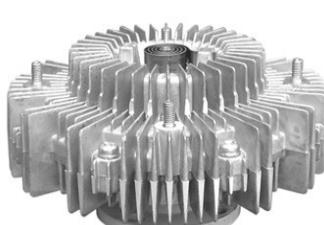
**FORD**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	FORD - CARGO 32.30	KF-30F	3C468A616AA	258005N
	FORD - CARGO 25.20 26.21	KF-31F	91CT8A616BA	258003N
	FORD - CARGO 25.21	KF-32F	3C468A616BA	258004N
	FORD V8 7.3 - E SUPER DUTY - E-350 SUPER DUTY - F SUPER DUTY - F-250 - F-350	KF-47F	F5TZ8A616-KB  22609 2835TA 77310 15-80217 22609 A73392 FFC5835T 36750 2835 273392	

**GENERAL MOTORS**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	CHEVROLET BLAZER V8 6.2d - C10/20/30/K10/20/30 PICKUP - C10/20 SUBURBAN - K10/20/30 PICKUP - K10/20 SUBURBAN GMC V8 6.2d -C15/C1500/C25/C2500 SUBURBAN - K15/25/35/K1500/2500 SUBURBAN - K15/25/35/K1500/2500 SUBURBAN JIMMY	KG-18F	14032392	22602 2828TA 7136962 77255 FC116 36962 2828 216002 116002
	AM GENERAL V8 6.5d - HUMMER CHEVROLET BLAZER V8 6.5d - C1500 PICKUP/SUBURBAN - C2500 PICKUP /G20, G30 VAN - EXPRESS 2500/3500, TAHOE GMC V8 6.5d - C1500 PICKUP/SUBURBAN - C2500 PICKUP/G25,G2500 VAN - SHAVANA 2500/3500, YUKON	KG-21F	06007274 06003082 15991496 15969543	22605 21831TA 77297 15-4522 2831
	CHEVROLET V8 6.5d - C2500 PICKUP GMC V8 6.5d - C2500 PICKUP - C3500 PICKUP	KG-22F	15671935	22606 2832TA 77298 15-4507 2832
	GMC - KODIAK 90-98 - TOP KICK 90-98 - V8	KG-23F		2834 22608 216008
	GMC - TOP KICK 02-01 - CHEVY KODIAK 8.1 L 02-01 - V6 8.1	KG-24F		2846 77707 15-40018 46035 271637
	CHEVROLET B7 SERIES 00-99 SCHOOL BUSES	KG-35F		271636 77706 15-40022 15-40031 46034 2844 22631

**HINO**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	HINO	KHI-02F	16250-E0280	
	HINO - NO4C TRUCK	KHI-03F	16250-E0251 16250-E0250 16250-1750	
	HINO - NO4C BUS	KHI-04F	16250-78110 S1625-01850 16250-78190	
	HINO - 700	KHI-05F	16250-1730	
	HINO - K13D/P11C/FE750/P09C/E13C V26C/F17D	KHI-06F	16250-1180A 16250-1181A 16250-E0150 16250-1340 16250-1341 16250-1413 16250-1470 16250-1471 16250-E0060	
	HINO - J08C	KHI-07F	16250-1441A	

**HINO**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	HINO - 700 E13CT	KHI-09F	16250-E0321	
	HINO - M700 P11C	KHI-10F	16250-E0330	
	HINO - H07D - H07C	KHI-11F	16250-1160C 16250-1330 16250-1311A	

**ISUZU**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	ISUZU - GIGA CXM 4WF1	KI-45F	1-21650-204-0 1-21650-204-1	
	ISUZU - ELF 4JJ1 NLR85/NMR85	KI-46F	8-98024-684-0	
	ISUZU - 6WF1/6WA1/10PE1	KI-47F	8-98119-742-0 8-98071-042-0	
		KI-48F	8-97430-634-0	

**IVECO**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	EUROCARGO - 100E/130E/140E/150E/160E - 180E/320E - Eng 5880	KIV-01F	504029738	8MV 376 757-631 4180071
	EURO TECH EUROTAKKER	KIV-02F	99487209 98112213 99450014	8MV 376 727 161 408190N 70531007 60801
	EUROSTAR - LD 240/260/400/440 EUROTAKKER - MP 190/340/400/410	KIV-03F	93190926	8MV 376 728-151 408003N 7053101 60803
	IVECO	KIV-04F	500395009	7053121 IVC109 8MV376731-241 4180041 D51V001TT

**MAN**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	F2000	KMA-01F	51066300060 3.15220 268270N 26205 12142340001	
	E2000	KMA-02F	51066300055 51066300061 51066300068	31001
	L2000	KMA-03F	51066300037	268028N 0720002021
	M90	KMA-04F	51066300067 51066300050	268280N 0720002031 3782801



## MERCEDES BENZ

## TRUCK

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	ACTROS MP2/MP3 MK1431 SK2638S	KMB-35F	0002008222 0002007422	8MV376730-061 138015N 4.62118 0480151 2100031237
	ATEGO Eng. 6370/6374 - 1023/L, 1223/L, 1225F/AF, 1228/L - 1323KO/LKO, 1325F/AF/LS/L - 1523A/AK/K/KO/L, 1525AF - 1528AF/F/L, 923/K/L, 925AF - 815K, 823/L/K, 2523L, 2528L - 1823AK/K/LS/L, 2628 B/K - 1828A/AK/K/LS/L AXOR - 1823/K, 2523/K, 2528, 2623L, 2628L UNIMOG U400/U500 UGN NA	KMB-36F	9062001822 9062000822	8MV376732-351
	AXOR - 1835LS, 1840LS, 1843LS	KMB-37F	0002006722	8MV376730-101 128077N
	ACTROS 521831, 1831L MK SK	KMB-38F	0002003023 0002003223 0002003323 0002003522 0002003523 0002004222 0002004322 0002004422 0002004722 0002007022	8MV376728-401 138560N 0720002055 4.62120 11650 0142340000 2100025031 V30041661
		KMB-39F	0002004622 0002003923	8MV376731-421 138014N 0480141
		KMB-40F	0002003122	128054N 0380541

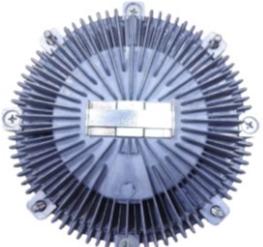


## MERCEDES BENZ

## TRUCK

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
		KMB-41F	0012054006 0012059506 0022056206 6111206600 6119806600	
	LK/LN2 MK NG	KMB-42F	3662004223 3662002423	8MV376730-261 138150N 62738 7031195
	ACTROS	KMB-43F	5412000022 5412000122 5412000222 5412000322 5412000422 5412000622	
	ACTROS MK SK	KMB-44F	0002008322 0002007222 0002006422	
	MBO 1219 PLUS/MBO 1419	KMB-53F	3902000022 A3902000022	

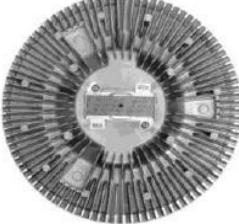
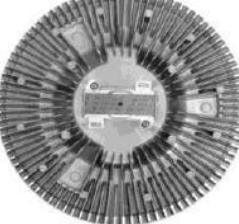
**MITSUBISHI**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	6D22 8DC11	KM-45F	ME417486 ME065702	
	6D24T 6D22T 6D20T	KM-46F	ME065702	
	4M51 FE73EC	KM-47F	ME240908	
	CANTER 3.5 (Euro 5)	KM-48F	ME441337	
	FV458 5/ 1992-1995 6D22 V8	KM-51F	ME065700	
		KM-52F		

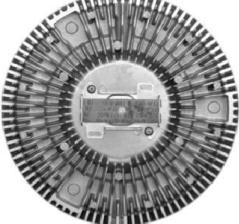
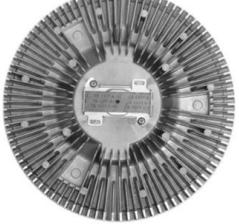
**NISSAN (UD)****TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	UD	KN-108F	21058-00Z03	
	UD	KN-109F	21058-97062	

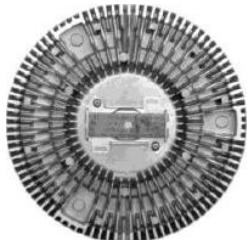
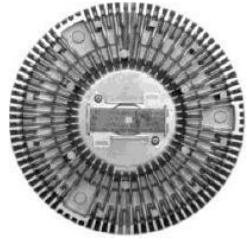
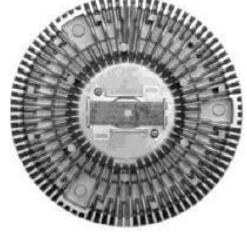
**RENAULT****TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	KERAX	KR-01F	5010269869 5010269871 5430128268	8MV 372 729-351 398003N 7023124 6.35025
	MAJOR R 340ti, 380, 385ti	KR-02F	5000670880 5010140853 5010140893	398044N 58620 REC105 7023115 35032 079.287

**SCANIA**
**TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	SCANIA 4 Series 124C/360 SCANIA 4 Series 124C/400 SCANIA 4 Series 124G/360 SCANIA 4 Series 124G/400 SCANIA 4 Series 124L/360 SCANIA 4 Series 124L/400 SCANIA 4 Series 124C/420 SCANIA 4 Series 124L/440 SCANIA 4 Series 124L/470 SCANIA 4 Series T114C/340 SCANIA 4 Series T114G/340 SCANIA 4 Series T114L/340	KSC-03F	1393424 1392261	610179 25926 19.550.015 35551 58574 041.406 SCC031 278090N SCC031
	SCANIA	KSC-04F	1480770 1480769 1321877	571089 374706 106400
	SCANIA	KSC-05F	1459683 1354978	106410

**VOLVO****TRUCK**

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	FH12	KVO-01F	1674189 1675048 1675910 20364981 20397619 3979918 8112552 8112950 8112952 8149394	288060N 8MV376731-451 7085106 2.15505
	FM9 FM12	KVO-02F	20397618 85000021 5003480	8MV376731-461 288004N 7085101 2.15511
	FM12	KVO-03F	20466633 20517745 20805992 20981224 85000097 85000281 85000587 85000738 7420547526	8MV376730-131 228018N 7085414 2.15513

## OTHERS

## TRUCK

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
		KFC-01F		1230
	INTERNATIONAL - 4700, 4700LP 97-01 - DT466, DT466	KFC-07F	9802005 166054 2001023C1 2100060031	
		KFC-08F	52RS006544	827-321 PRO
		KFC-09F	F2HT-FA	K08GA
	DONG FENG TIAN LONG (CHINA TRUCK) ENGINE DFL4251	KFC-10F	1308060-T0500	
	DONG FENG TIAN LONG (CHINA TRUCK)	KFC-11F	1308060-T3100	

## OTHERS

## TRUCK

PICTURE	YEAR/MODEL	NUK #	OEM #	MAKER #
	FAW J6	KFC-12F	1313010-73A	

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
		84133010 4988747 4944710	CUMMINS - 6BT - 6CT
	KDF-101	<u>TOYOTA:</u> 22301-54460	TOYOTA
	KDF-101-1  Sensor KDF-101-1S	<u>TOYOTA:</u> K672-B850	TOYOTA
	KDF-102-1  Sensor KDF-102-1S	<u>MAZDA:</u> 31970-44500	MAZDA
	KDF-102-2  Sensor KDF-102-2S	<u>MITSUBISHI:</u> MB504637	MITSUBISHI - DELICA 2.5L

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-103	<u>MITSUBISHI:</u> MD129677 MB220990 MB554592 MB129677	MAZDA MITSUBISHI - CYCLONE TOYOTA -S4S FORKLIFT
	KDF-104	<u>MERCEDES BENZ:</u> 4023	MERCEDES BENZ
	KDF-105	<u>MERCEDES BENZ:</u> 0450126	MERCEDES BENZ
	KDF-107	<u>MITSUBISHI:</u> MR244238	MITSUBISHI - L200
	KDF-107-2	<u>MITSUBISHI:</u> MB554314	MITSUBISHI



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
A photograph of a Diesel Feed Pump & Filter assembly. It consists of a cylindrical filter housing with a black cap on top, connected to a pump body with various hoses and fittings. Two red arrows point to the filter housing with the text "30°".	KDF-107-4		KIA - KAON TRUCK
A photograph of a Diesel Feed Pump assembly. It is a rectangular metal housing with two vertical handles on top and a central outlet port.	KDF-108	16401-44G71	MAZDA - DH3008
A photograph of a Diesel Feed Pump assembly. It is a rectangular metal housing with a large circular filter element attached to the side. A blue arrow points to the filter with the text "30°".	KDF-109	<u>TOYOTA:</u> 23301-54410	TOYOTA
A photograph of a Diesel Feed Pump & Filter assembly. It includes a cylindrical filter housing with a black cap, a pump body, and a smaller component. A black diagonal line crosses the filter housing.	KDF-109-1	<u>TOYOTA:</u> 23300-64430 22301-6410A-K	TOYOTA - 1C - 2C
A photograph of a Diesel Feed Pump assembly. It is a rectangular metal housing with a circular filter element attached to the side.	KDF-110	<u>MAZDA:</u> K759-13-850K 1501-K67013	MAZDA

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-110-1</b>  <b>Sensor KDF-110-1S</b>	<u>MAZDA:</u> K759-13-850K	MAZDA
	<b>KDF-110-2</b>	<u>MAZDA:</u> DH024	MAZDA
  <b>SCREW for Filter: UNF 3/4 X 16</b>	<b>KDF-111</b>	<u>TOYOTA:</u> 213-T64060 23303-64060	TOYOTA
  <b>SCREW for Filter: UNF 3/4 X 16</b>	<b>KDF-112</b>	<u>TOYOTA:</u> 63303-64060	TOYOTA - LN85
  <b>SCREW for Filter: UNF 3/4 X 16</b>	<b>KDF-113</b>	<u>MAZDA:</u> WL01-12-130A WL81-13-480	FORD - RANGER  MAZDA

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
 Link x 2	<b>KDF-116</b>	<u>TOYOTA:</u> 23303-64010S	TOYOTA
	<b>KDF-117</b>		ISUZU - TFR
	<b>KDF-117-1</b>		ISUZU - TFR
 Link x 2	<b>KDF-117-2</b>  <b>Sensor</b> <b>KDF-117-2S</b>		FORD ECONOVAN
 30°	<b>KDF-118</b>	<u>TOYOTA:</u> 23300-64320 23301-64320 23301-17130 23301-64213	TOYOTA

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-118-2	TOYOTA: 23301-64320	TOYOTA
	KDF-119	TOYOTA: 23300-64010	TOYOTA
	KDF-120		FORD - MTX 2002  TOYOTA - LN105
	KDF-122		
	KDF-123		HYUNDAI

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
 SCREW for Filter: UNF 3/4 X 16	KDF-124	<u>NISSAN:</u> 16400-44G10 16400-DH010	NISSAN
 SCREW for Filter: UNF 3/4 X 16	KDF-125	<u>ISUZU:</u> 8-97638-783-2	ISUZU
 Link x 2	KDF-126	<u>MAZDA:</u> 4-47300-215-0 <u>ISUZU</u>	MAZDA ISUZU
 Link x 2	KDF-126-1  Sensor KDF-126-1S	<u>ISUZU</u> 5-13200-220-7 8-97081-814-0 I6-13200-220-2	ISUZU - NKR - NHR
 Inlet & Outlet Pipe D:10mm	KDF-126-2 Pipe D:10mm  Sensor KDF-126-2S	<u>ISUZU:</u> 8-94144-933-2 8-97207-734-1 8-97081-814-A 8-97081-814-2 I6-97081-814-4	ISUZU

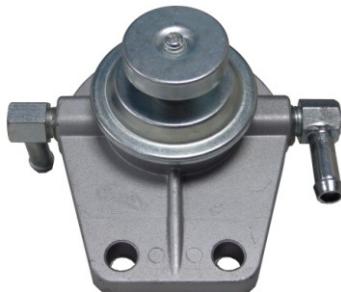
## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-126-3 With sensor</b>  <b>KDF-126-4 Without sensor</b>	<u>ISUZU:</u> 8-97081-814-B	ISUZU
	<b>KDF-126-6 Pipe D:10mm</b>  <b>KDF-126-7 Pipe D:12mm</b>	<u>ISUZU:</u> 8-98319-898-0(10mm)  8-98019-898-0(12mm)	ISUZU - NPR - Panther Touring
	<b>KDF-127</b>	<u>TOYOTA:</u> 23300-56110	TOYOTA
	<b>KDF-127-1</b>  <b>Sensor KDF-127-1S</b>	<u>TOYOTA:</u> 14B	TOYOTA
	<b>KDF-127-2</b>  <b>Sensor KDF-127-2S</b>	<u>TOYOTA:</u> 15B	TOYOTA

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-129	<u>TOYOTA:</u> 23301-58160	TOYOTA - S2
	KDF-129-1	<u>TOYOTA:</u> 23302-23040	TOYOTA - 11Z~15Z - 1 DZ - 1Z, 2Z
	KDF-131		MAZDA - R2
	KDF-132		TOYOTA
	KDF-136		
<b>SCREW for Filter: UNF 3/4 X 16</b>			

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-137</b> Pipe D:10 mm	<u>ISUZU:</u> 8-97287-518-1	ISUZU - D-MAX 3.0L
	<b>KDF-137-1</b> Pipe D:12 mm		ISUZU - D-MAX 3.0L
	<b>KDF-138</b>		TOYOTA VIGO - D4D
	<b>KDF-139</b> Pipe D:10 mm	<u>NISSAN:</u> 16402-VC105	NISSAN - ZD30
	<b>KDF-139-1</b> Pipe D:10 mm		NISSAN - ZD30

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-140</b>	<u>TOYOTA:</u> 23301-17150	TOYOTA
	<b>KDF-141</b>	<u>FORD:</u> R2N5-13480-A	FORD ECOVOAN
	<b>KDF-141-1</b>  <b>Sensor</b> <b>KDF-141-1S</b>	<u>FORD:</u> R2N5-13480-A	FORD
	<b>KDF-142</b>	<u>NISSAN:</u> 16400-11T00	NISSAN - CABSTAR
	<b>KDF-142-1</b>  <b>Sensor</b> <b>KDF-142-1S</b>	<u>NISSAN:</u> 16400-11T00	NISSAN

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
 SCREW for Filter: UNF 3/4 X 16	KDF-143	NISSAN: 16400-10T00	NISSAN
	KDF-143-1  Sensor KDF-143-1S	NISSAN: 16040-T2610	NISSAN
	KDF-144	NISSAN: 16400-6T300	NISSAN
	KDF-144-1  Sensor KDF-144-1S	NISSAN: 16400-6T300	NISSAN
	KDF-145		TOYOTA - D4D  KOMATSU - 255 FORKLIFT - 4D95



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-146	<u>KOMATSU:</u> 129901-55810	KOMATSU FORKLIFT - 4D94E
	KDF-147		NISSAN - J02 FORKLIFT
  SCREW for Filter: UNF 3/4 X 16	KDF-148	<u>NISSAN:</u> 16401-41K00	ISUZU - C240 FORKLIFT  NISSAN - TD27
  SCREW for Filter: UNF 3/4 X 16	KDF-149	<u>ISUZU:</u> 8-94367-293-0	ISUZU - C240 FORKLIFT
	KDF-149-1		ISUZU - C240 FORKLIFT

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-150</b>	23302-23440-71	TOYOTA FORKLIFT -7-8FD10-30/1DZ,2Z,3Z -7FD35-50/13Z,14Z
	<b>KDF-151</b>		
	<b>KDF-152</b>		ISUZU
	<b>KDF-152-1</b> <b>Sensor</b> <b>KDF-152-1S</b>		ISUZU
	<b>KDF-153</b>		ISUZU - D-MAX 2.5L



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-154		FORD ECONOVAN
	KDF-154-1		FORD ECONOVAN - 2.2 DIESEL
	KDF-154-2		FORD ECONOVAN - 2.2 DIESEL
	KDF-155		FC11
	KDF-155-1  Sensor KDF-155-1S		FC11

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-156</b>	23301-56030	TOYOTA
	<b>KDF-157</b>	WL81-13ZAO	MAZDA - 5FD25
	<b>KDF-158</b>	16401-EB30A	NISSAN - NAVARA D40
	<b>KDF-159</b> Pipe D:12 mm	1770A011	MITSUBISHI - TRITON
	<b>KFD-159-1</b> Pipe D:8 mm	1770A010	MITSUBISHI - TRITON



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-160</b>	8-97941108-4 897916993 97302015	ISUZU - D-MAX 4JH
	<b>KDF-162</b>	129901-55811	YANMAR
	<b>KDF-163</b>		TOYOTA - 7F FORKLIFT
	<b>KDF-164A</b>  <b>Sensor</b> <b>KDF-006S</b>	ME194923	MITSUBISHI
	<b>KDF-165</b>	23380-5B140	TOYOTA - HILUX 1KZTE



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-169</b> Pipe D:10 mm	23301-17010	TOYOTA
	<b>KDF-177A</b> (assembly)  <b>KDF-177</b> (head)  <b>KDF-177F</b> (filter)	8-98162904-3	ISUZU - TRUCK GIGA
	<b>KDF-178A</b>	5-4473-2150	ISUZU
	<b>KDF-179</b>	23300-87318	TOYOTA - 14B DAIHATSU
	<b>KDF-180</b>	KIA: K-670-13-850	KIA



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-181	<b>KIA:</b> OK71E-25-570 OK72E-13-480	KIA
	KDF-182	1770A051	MITSUBISHI - TRITON 2.5
	KDF-183	<b>TOYOTA:</b> 23301-56250	TOYOTA
	KDF-184	<b>TOYOTA:</b> 23380-17411	TOYOTA
	KDF-185	<b>TOYOTA:</b> 23380-5B151	TOYOTA



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-186	<u>TOYOTA:</u> 23380-17530 23380-17531	TOYOTA
	KDF-187	<u>TOYOTA:</u> 23380-17451	TOYOTA
	KDF-188	<u>HYUNDAI:</u> OK62W-13-850	HYUNDAI
	KDF-189	<u>HYUNDAI:</u> 31972-44002 31972-44000	HYUNDAI
	KDF-190		



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-191		TATA
	KDF-192		TATA
	KDF-193	<b>NISSAN:</b> 16401-VK511	NISSAN
	KDF-194		ISUZU
	KDF-196 KDF-196A	<b>ISUZU:</b> 8-97916993-0	ISUZU - DMAX

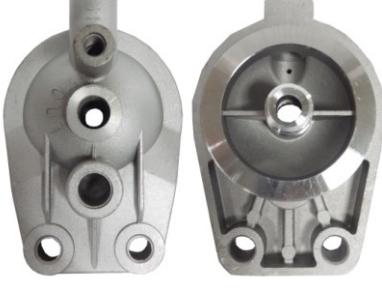


## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-197	<u>ISUZU:</u> 8-94168520-PT	ISUZU - NKR
	KDF-198	<u>ISUZU:</u> CX071084	ISUZU - NPR
	KDF-200	<u>TOYOTA:</u> 23380-51020, 23380-51031	TOYOTA - VDJ79R 1VD
	KDF-203	<u>ISUZU:</u> - 8-97234932-1	ISUZU - D-MAX 2004
	KDF-204	<u>TOYOTA:</u> 23380-51041 23380-51042	TOYOTA - VDJ200 1VD



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-205	<u>KOMATSU:</u> ND086100-1400	KOMATSU -6D102
	KDF-206	<u>MITSUBISHI:</u> ME006065	MITSUBISHI - CANTER
	KDF-207	<u>ISUZU:</u> 8-97172-543-PT	ISUZU - NPR 4HF1/G1/E1
	KDF-208	<u>HINO:</u> - 23310-1660	HINO



## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
 <b>SCREW for Filter: UNF 3/4 X 16</b>	KT-129	<u>TOYOTA:</u> 23301-17060 23301-54460 23301-54470 23303-54460 23302-23660	TOYOTA - 1DZ FORKLIFT - 2Z FORKLIFT
	KT-129-2  Sensor KT-129-2S	<u>TOYOTA:</u> 23301-54460	TOYOTA - 13B
 <b>SCREW for Filter: UNF 3/4 X 16</b>	KT-129-TS	<u>TOYOTA:</u> 23301-17060 23301-54460 23301-54470	TOYOTA
	KT-130	<u>TOYOTA:</u> 23303-64010	TOYOTA - RN
	KT-131	<u>TOYOTA:</u> 23303-87001 23303-87309	TOYOTA

## DIESEL FEED PUMP & FILTER

2D IMAGE	NUK #	OEM #	APPLICATION
	KT-131-1	<u>TOYOTA:</u> 23303-87309	TOYOTA
  SCREW for Filter: UNF 3/4 X 16	KT-135	<u>TOYOTA:</u> 23301-17010 23301-54410	TOYOTA - MTX-LN80
  40°	KT-135-1	<u>TOYOTA:</u> 23301-17010 23301-54410	TOYOTA - MTX-LN80



## FUEL WATER SEPARATOR

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-2001A	23500-1010	HINO - EF750 - F17C - H07C
	KDF-2002A	ME039811	FUSO FV330/317 - 8DC91 - 6D22T - 6D16T - 6D15T
	KDF-2003A	ME121646	FUSO FV515/517 - 6M70 - FP380 - 6D22T - 6D24T
	KDF-2004A	1-14200-468-2	NISSAN - CW520
	KDF-2005A	23330-E0030	HINO - J08E - GH8J



## FUEL WATER SEPARATOR

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-2006A</b>	23330-E0020	HINO - J05D - N04C
	<b>KDF-2007A</b>	23300-E0260	HINO - Marine engine
	<b>KDF-2008A</b>	44803-1080	HINO - EF750 - F17C - K13C
	<b>KDF-2005C</b>	2336-01080	HINO - J08E - FG8J - GH8J
	<b>KDF-2009C</b>	23311-1390 1-13212176	HINO - F20C - K13C - J05C  ISUZU -6WA1

## FUEL WATER SEPARATOR

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-2010A</b>	1-13201-015-1 ME300350	FUSO - FVR/FSR/FM65 - 6M60 - 6WA1
	<b>KDF-2011A</b>	8-94144933-RA	ISUZU - NPR 4BE1/4HF1/ - NPR 58



## FUEL FILTER ASSY

2D IMAGE	NUK #	OEM #	APPLICATION
	<b>KDF-201A</b>	TOYOTA: - 23300-0L042	TOYOTA - HILUX 1KD, 2KD
	<b>KDF-202A</b>	FORD: - U212-13-480A/B - AB39-9155-DD - 522462	FORD - RANGER 2.2
	<b>KDF-3003A</b>	TOYOTA: - 23300-30211	TOYOTA - HIACE
	<b>KDF-3004A</b>	ISUZU: - 8-98184213-0	ISUZU - DMAX
	<b>KDF-3005A</b>	ISUZU: - 8-98184212-1	ISUZU - DMAX



## FUEL FILTER ASSY

2D IMAGE	NUK #	OEM #	APPLICATION
	KDF-3006A	ISUZU: - 8-98067761-3	ISUZU - DMAX
	KDF-3007A	<u>ISUZU:</u> - 8-97172543-1	ISUZU - NPR 4HF1

