



# CV. HALUAN TEKNIK UTAMA

Marine Sparepart, Service & Repair

Gedung Senatama Lt. 2, R. 202A  
Jl. Kwitang Raya No. 8, Jakarta Pusat 10420  
Ph. 021-4402091 ; HP/WA: 0812-1331-0490

A0070115

Ignore, Pyml

Under Dispute

Cancel

Ignorc.JE

09/13/23

## I N V O I C E

INVOICE TO:

**PT. ANDHIKA SAMUDERA INTERNUSA**  
Attn. Bpk. Defandra / Ibu Linda  
E032/ANKA/2022  
MV. ANDHIKA KANISHKA

NO	: 0108 - INV - HTU23
CUSTOMER ID	: 001
DATE	: Wed, 8 Mar 2023
PAGE	: 1
LOCATION	: PLTU Suralaya

REFERENCE	CUSTOMER PO	TERMS (calender days)	DUE DATE
1103A2.R1-PH-HTU22		30	Fri, 7 Apr 2023

No	CODE	Description	Quantity	Unit Price	Amount
		AUXILIARY ENGINE TYPE: 6N 18L UN RPM: 720, CYL.BORE: 180MM, STROKE: 280MM MAKER: YANMAR DIESEL CO.LTD			
A		FIG. 1-2, CYLINDER HEAD ASSY			
1	146673-11110	EXHAUST VALVE NIMONIC	8	PCS	2.240.000 17.920.000
2	146673-11720	SUCTION VALVE	8	PCS	640.000 5.120.000
3	146673-11090	VALVE SEAT EXHAUST	12	PCS	360.000 4.320.000
4	146673-11710	VALVE SEAT SUCTION	12	PCS	110.000 1.320.000
5	146613-11160	GUIDE VALVE	12	PCS	195.000 2.340.000
6	146603-11810	O-RING EXHAUST VALVE SEAT	12	PCS	8.000 96.000
7	146673-11810	O-RING EXHAUST VALVE SEAT	12	PCS	8.000 96.000
8	146673-11370	STUD	2	PCS	80.000 160.000
9	26732-160002	HEXAGON NUT M16	2	PCS	5.500 11.000
10	24316-000240	O-RING COOLING WATER	24	PCS	2.000 48.000
11	152673-01810	O-RING	6	PCS	2.500 15.000
12	24311-000350	O-RING PUSH ROD	12	PCS	2.500 30.000
13	146673-11230	ADJUSTING SCREW	12	PCS	125.000 1.500.000
14	137600-53090	GASKET	6	PCS	8.000 48.000
15	141616-13710	EXPANSION PIPE JOINT	1	PCS	1.170.000 1.170.000
16	150623-13202	GASKET	4	PCS	110.000 440.000
17	141616-11750	SEAL, VALVE STEM	24	PCS	33.500 804.000
18	28572-500115	THERMOMETER EXHAUST GAS	6	PCS	530.000 3.180.000
19	146673-13200	GASKET	6	PCS	84.000 504.000
20	146673-11280	GASKET, HEAD	6	PCS	110.000 660.000
21	137676-11351	CONTACT PIECE, VALVE ROCKER ARM	1	PC	33.000 33.000
22	27326-140560	STEEL BALL	56	PCS	2.500 140.000
23	746673-15100	INDICATOR COCK	4	PCS	1.260.000 5.040.000
24	146673-11851	SLEEVE, NOZZLE	1	PCS	550.000 550.000
25	24326-000400	O-RING G40	8	PCS	2.500 20.000

26	137600-53090	GASKET	4	PCS	8.000	32.000
<b>B FIG. 6, CYLINDER LINER</b>						
1	146673-01150	CYLINDER LINER	1	PCS	6.575.000	6.575.000
2	146673-01130	ANTI - POLISHING RING	1	PCS	300.000	300.000
3	146644-01340	CLYNDER HEAD GASKET	6	PCS	64.000	384.000
4	146673-01291	RUBBER GASKET	12	PCS	50.000	600.000
<b>C FIG. 19, PISTON &amp; CONNECTING ROD ASSY</b>						
1	146673-22451C	PISTON	1	PCS	7.800.000	7.800.000
2	146673-22501	PISTON RING SETS	6	SETS	1.540.000	9.240.000
3	146673-22300	PISTON PIN	1	PCS	1.680.000	1.680.000
4	146673-23220	CON ROD BOLT	12	PCS	305.000	3.660.000
5	146673-23360	CRANK PIN BEARING, UPPER	6	SETS	1.960.000	11.760.000
6	146673-23370	CRANK PIN BEARING, LOWER	}	PCS	700.000	1.400.000
7	146673-23130	PISTON PIN BUSH				
<b>D FIG. 21, OIL COOLER</b>						
1	24311-001800	O-RING	2	PCS	14.000	28.000
2	24311-000550	O-RING	2	PCS	5.500	11.000
<b>E FIG. 34, FUEL INJECTION PUMP</b>						
1	146673-51260	PROTECTOR	2	PCS	89.500	179.000
2	159646-51270	O-RING	12	PCS	2.500	30.000
3	146673-51810	O-RING	6	PCS	2.500	15.000
4	146673-51830	O-RING	6	PCS	2.500	15.000
5	146673-51820	O-RING	6	PCS	2.500	15.000
6	146673-51800	SQUARE RING	6	PCS	16.500	99.000
7	146673-51100	PLUNGER ASSY	4	PCS	3.920.000	15.680.000
8	146673-51300	ISOVARIC VALVE ASSY	6	SETS	1.050.000	6.300.000
<b>F FIG. 36, FUEL INJECTION VALVE</b>						
1	146673-53040	NOZZLE ASSY	4	PCS	1.690.000	6.760.000
2	146673-53230	STOPPER, VALVE	4	PCS	125.000	500.000
3	146673-53900	O RING	6	PCS	2.500	15.000
4	128633-11880	O RING	6	PCS	2.500	15.000
5	151673-01291	O RING	6	PCS	50.000	300.000
<b>G FIG. 37, FUEL INJECTION PIPE</b>						
1	546673-59250	GASKET	6	PCS	14.000	84.000

J

2	546673-59020	GASKET		6	PCS	14.000	84.000
3	546673-59220	GASKET		6	PCS	14.000	84.000
4	546673-59230	FUEL INJECTION PIPE		1	PCS	225.000	225.000
<b>L FIG. 7 MAIN BEARING ASSY</b>							
1	746673-02010	MAIN BEARING ASSY		5	SETS	1.960.000	9.800.000
2	146673-02150	THUST BEARING LOWER	]	2	SETS	1.960.000	3.920.000
3	146773-02160	THUST BEARING UPPER					
<b>J FIG. 8, TURNING DEVICE</b>							
1	74673-08101	TURNING DEVICE		1	SETS	N/A	N/A
<b>K FIG. 17, EXHAUST MANIFOLD ASSY</b>							
1	141616-13710	EXPANSION PIPE JOINT		1	PCS	1.175.000	1.175.000
2	150623-13202	GASKET		3	PCS	112.000	336.000
3	146673-13200	GASKET		4	PCS	84.000	336.000
<b>L FIG. 24-1, OIL FILTER</b>							
1	146673-35150	FILTER ELEMENT		1	PCS	1.540.000	1.540.000
<b>N FIG. 29-3, TURBOCHARGER LUBRICATING OIL LINE &amp; OIL FILTER</b>							
1	433654-35540	ELEMENT NOTCH WIRE		8	PCS	265.000	2.120.000

BANK NEGARA INDONESIA  
A/C NO. : 0266 - 630 - 610  
A/C NAME : IRFAN

Sub Total :	138.662.000
Discount :	-3.662.000
TOTAL INVOICE MUST BE PAID (IDR) :	135.000.000

CV. HALUAN TEKNIK UTAMA





PT. ANDHIKA SAMUDRA INTERNUSA

**PURCHASE ORDER**

Head Office : Menara Kadin Indonesia (20th Floor),  
Jl. H.R. Rasuna Said Blok X-5 Kav. 2 & 3  
Kuningan, Jakarta 12950, Indonesia

Phone : (62-21) 5227220 Fax : (62-21) 5227221 - 5274770 E-mail : [enquiries@andhika.com](mailto:enquiries@andhika.com)

<b>ORDER TO:</b>	<b>SHIP TO:</b>	<b>PO DATE</b>	<b>PO NO</b>
CV. HALUAN TEKNIK UTAMA Mr. IRFAN	PT. ANDHIKA SAMUDRA INTERNUSA MV. ANDHIKA KANISHKA	28 Des 2022	417-B/KA/CO/ASI/1222
<b>SUBJECT:</b> A/E YANMAR 6N18AL UN_1			

No	P/N	Description	QTY	Unit Price	Amount
B		<b>FIG. 6, CYLINDER LINER</b>			
1	146673-01150	CYLINDER LINER	1	PC	6.575.000
2	146673-01130	ANTI - POLISHING RING	1	PC	300.000
3	146644-01340	CLYNDER HEAD GASKET	6	PCS	64.000
4	146673-01291	RUBBER GASKET	12	PCS	50.000
C		<b>FIG. 19, PISTON &amp; CONNECTING ROD ASSY</b>			
1	146673-22451C	PISTON	1	PC	7.800.000
2	146673-22501	PISTON RING SETS	6	SET	1.540.000
3	146673-22300	PISTON PIN	1	PC	1.680.000
4	146673-23220	CON ROD BOLT	12	PCS	305.000
5	146673-23360	CRANK PIN BEARING, UPPER	6	SET	1.960.000
6	146673-23370	CRANK PIN BEARING, LOWER			11.760.000
7	146673-23130	PISTON PIN BUSH	2	PCS	700.000
D		<b>FIG. 21, OIL COOLER</b>			
1	24311-001800	O-RING	2	PCS	14.000
2	24311-000550	O-RING	2	PCS	5.500
E		<b>FIG. 34, FUEL INJECTION PUMP</b>			
1	146673-51260	PROTECTOR	2	PCS	89.500
2	159646-51270	O-RING	12	PCS	2.500
3	146673-51810	O-RING	6	PCS	2.500
4	146673-51830	O-RING	6	PCS	2.500
5	146673-51820	O-RING	6	PCS	2.500
6	146673-51800	SQUARE RING	6	PCS	16.500
7	146673-51100	PLUNGER ASSY	4	PCS	3.920.000
8	146673-51300	ISOVARIC VALVE ASSY	6	SETS	1.050.000
F		<b>FIG. 36, FUEL INJECTION VALVE</b>			
1	146673-53040	NOZZLE ASSY	4	PCS	1.690.000
2	146673-53230	STOPPER, VALVE	4	PCS	125.000
3	146673-53900	O-RING	6	PCS	2.500
4	128633-11880	O-RING	6	PCS	2.500
5	151673-01291	O-RING	6	PCS	50.000
					300.000



PT. ANDHIKA SAMUDRA INTERNUSA

PURCHASE ORDER

Head Office : Menara Kadin Indonesia (20th Floor),  
Jl. H.R. Rasuna Said Blok X-5 Kav. 2 & 3  
Kuningan, Jakarta 12950, Indonesia

Phone : (62-21) 5227220 Fax : (62-21) 5227221 - 5274770 E-mail : enquiries@andhika.com

<u>ORDER TO:</u>	<u>SHIP TO:</u>	<u>PO DATE</u>	<u>PO NO</u>
CV. HALUAN TEKNIK UTAMA Mr. IRFAN	PT. ANDHIKA SAMUDRA INTERNUSA MV. ANDHIKA KANISHKA	28 Des 2022	417-B/KA/CO/ASI/1222
<u>SUBJECT:</u> A/E YANMAR 6N18AL UN_1			

No	P/N	Description	QTY	Unit Price	Amount
G		<b>FIG. 37, FUEL INJECTION PIPE</b>			
1	546673-59250	GASKET	6	PCS	14.000
2	546673-59020	GASKET	6	PCS	14.000
3	546673-59220	GASKET	6	PCS	14.000
4	546673-59230	FUEL INJECTION PIPE	1	PC	225.000
i		<b>FIG. 7 MAIN BEARING ASSY</b>			
1	746673-02010	MAIN BEARING ASSY	5	SET	1.960.000
2	146673-02150	THUST BEARING LOWER	2	SET	1.960.000
3	146773-02160	THUST BEARING UPPER			
J		<b>FIG. 8, TURNING DEVICE</b>			
1	74673-08101	TURNING DEVICE	1	SET	<b>N/A</b>
K		<b>FIG. 17, EXHAUST MANIFOLD ASSY</b>			
1	141616-13710	EXPANSION PIPE JOINT	1	PCS	1.175.000
2	150623-13202	GASKET	3	PCS	112.000
3	146673-13200	GASKET	4	PCS	84.000
		<b>FIG. 24-1, OIL FILTER</b>			
1	146673-35150	FILTER ELEMENT	1	PC	1.540.000
		<b>FIG. 29-3, TURBOCHARGER LUBRICATING OIL LINE &amp; OIL</b>			
1	33654-35540	ELEMENT NOTCH WIRE	8	PC	265.000

Approved by,

Hari Joko Purnomo

Defandra Putra

Sub Total :	<b>138.662.000</b>
Discount :	3.662.000
Total after Discount :	<b>135.000.000</b>
PPn:	-
Delivery Cost :	-
<b>TOTAL:</b>	<b>135.000.000</b>



## CV. HALUAN TEKNIK UTAMA

Marine Sparepart, Service & Repair

Gedung Senatama Lt. 2, R. 202A  
Jl. Kvitang Raya No. 8, Jakarta Pusat 10420  
Ph. 021-4402091 ; HP/WA: 0812-1331-0490

### TANDA TERIMA BARANG

Dikirimkan ke:  
PT. ANDHIKA SAMUDERA INTERNUSA  
Cilegon  
E032/ANKA/2022  
MV. ANDHIKA KANISHKA

Tanggal	No.
Wed, 25 Jan 2023	0108 - TTB - HTU22

No	Code	Uraian	Jumlah	Catatan
		AUXILIARY ENGINE TYPE: GM 18L UN RPM: 720, CYL.BORE: 180MM, STROKE: 280MM MAKER: YANMAR DIESEL CO.LTD		Ref. PO. No. E032/ANKA/2022
A		FIG. 1-2, CYLINDER HEAD ASSY		
1	146673-11110	EXHAUST VALVE NIMONIC	8 PCS	
2	146673-11720	SUCTION VALVE	8 PCS	
3	146673-11090	VALVE SEAT EXHAUST	12 PCS	
4	146673-11710	VALVE SEAT SUCTION	12 PCS	
5	146613-11160	GUIDE VALVE	12 PCS	
6	146603-11810	O-RING EXHAUST VALVE SEAT	12 PCS	
7	146673-11810	O-RING EXHAUST VALVE SEAT	12 PCS	
8	146673-11370	STUD	2 PCS	
9	26732-160002	HEXAGON NUT M16	2 PCS	
14	137600-53090	GASKET	6 PCS	
15	141616-13710	EXPANSION PIPE JOINT	1 PCS	
16	150623-13202	GASKET	4 PCS	
17	141616-11750	SEAL, VALVE STEM	24 PCS	
18	28572-500115	THERMOMETER EXHAUST GAS	6 PCS	
19	146673-13200	GASKET	2 PCS	
20	146673-11280	GASKET, HEAD	6 PCS	
24	146673-11851	SLEEVE, NOZZLE	1 PCS	
25	24326-000400	G-RING G40	8 PCS	
26	137600-53090	GASKET	4 PCS	
B		FIG. 6, CYLINDER LINER		
1	146673-01150	CYLINDER LINER	1 PCS	
2	146673-01130	ANTI - POLISHING RING	1 PCS	
3	146644-01340	CLYNDER HEAD GASKET	6 PCS	
4	146673-01291	RUBBER GASKET	12 PCS	
C		FIG. 19, PISTON & CONNECTING ROD ASSY		
2	146673-22501	PISTON RING SETS	6 SETS	
3	146673-22300	PISTON PIN	1 PCS	
4	146673-23220	CON ROD BOLT	12 PCS	
5	146673-23360	CRANK PIN BEARING, UPPER	6 SETS	
6	146673-23370	CRANK PIN BEARING, LOWER		
D		FIG. 21, OIL COOLER		
1	24311-001800	O-RING	2 PCS	
2	24311-000550	O-RING	2 PCS	
E		FIG. 34, FUEL INJECTION PUMP		

1	146673-51260	PROTECTOR		2	PCS
3	146673-51810	O-RING		6	PCS
4	146673-51830	O-RING		6	PCS
5	146673-51820	O-RING		6	PCS
6	146673-51800	SQUARE RING		6	PCS
F		FIG. 36, FUEL INJECTION VALVE			
1	146673-53040	NOZZLE ASSY		4	PCS
3	146673-53900	O RING		6	PCS
5	151673-01291	O RING		6	PCS
G		FIG. 37, FUEL INJECTION PIPE			
1	546673-59250	GASKET		6	PCS
2	546673-59020	GASKET		6	PCS
3	546673-59220	GASKET		6	PCS
Z		FIG. 7 MAIN BEARING ASSY			
1	746673-02010	MAIN BEARING ASSY		5	SETS
2	146673-02150	THUST BEARING LOWER		2	SETS
3	146773-02160	THUST BEARING UPPER			
H		FIG. 17, EXHAUST MANIFOLD ASSY			
I	141616-13710	EXPANSION PIPE JOINT		1	PCS
L		FIG. 24-1, OIL FILTER			
1	146673-35150	FILTER ELEMENT		1	PCS





# CV. HALUAN TEKNIK UTAMA

Marine Sparepart, Service & Repair

Gedung Sentraima Lt. 2, R. 200A  
Jl. Kertapati Raya No. 8, Jakarta Pusat 10420  
Ph. 021-4100001 ; HP/WA: 0812-1234-1230

## TANDA TERIMA BARANG

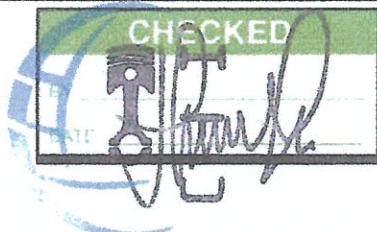
Dikirimkan ke:  
**PT. ANDHIKA SAMUDERA INTERNUSA**  
 Cilegon  
 E032/ANNA/2023  
 K/W. ANDHIKA KARISHRA

Tanggal	No.
FRI, 3 Mar 2023	E032 A - TTB - HTJ23

No	Code	Uraian	Jumlah	Catatan
		AUXILIARY ENGINE TYPE: GM 18L UN RPM: 720, CYL.BORE: 180MM, STROKE: 280MM MAKER: YANMAR DIESEL CO.LTD		Ref. PG. No. E032/ANNA/2023
A		FIG. 1-2, CYLINDER HEAD ASSY		
11	15-673-01010	O-RING	9	PCS
12	14-611-00090	O-RING PUSH ROD	12	PCS
13	14-673-11130	ADJUSTING SCREW	12	PCS
21	13-767-11350	CONTACT PIECE, VALVE ROCKER ARM	1	PC
22	17-326-140560	STEEL BALD	56	PCS
23	14-673-15107	INDICATOR COCK	4	PCS
C		FIG. 19, PISTON & CONNECTING ROD ASSY		
1	14-673-204517	PISTON	1	PCS
7	14-670-23130	PISTON PIN BRUSH	2	PCS
E		FIG. 34, FUEL INJECTION PUMP		
2	16-676-51270	O-RING	12	PCS
7	14-673-01100	PLUNGER ASSY	4	PCS
8	14-673-61300	ISOVARIS VALVE ASSY	9	SETS
F		FIG. 36, FUEL INJECTION VALVE		
2	14-673-53030	STOPPER, VALVE	4	PCS
4	10-9633-11890	O RING	6	PCS
G		FIG. 37, FUEL INJECTION PIPE		
4	14-673-50130	FUEL INJECTION PIPE	1	PCS
K		FIG. 17, EXHAUST MANIFOLD ASSY		
2	16-623-13132	GASKET	3	PCS
M		FIG. 29-3, TURBOCHARGER LUBRICATING OIL LINE & OIL FILTER		
1	43-8634-20540	ELEMENT NOTCH WIRE	6	PCS
		BOX 2 & BOX 3		

Diterima oleh,

Quality Control





## PT. ANDHIKA SAMUDRA INTERNUSA

PURCHASE ORDER

Head Office : Menara Kadin Indonesia (20th Floor),  
Jl. H.R. Rasuna Said Blok X-5 Kav. 2 & 3  
Kuningan, Jakarta 12950, Indonesia

Phone : (62-21) 5227220 Fax : (62-21) 5227221 - 5274770 E-mail : [enquiries@andhika.com](mailto:enquiries@andhika.com)

ORDER TO:	SHIP TO:	PO DATE	PO NO
CV. HALUAN TEKNIK UTAMA Mr. IRFAN	PT. ANDHIKA SAMUDRA INTERNUSA MV. ANDHIKA KANISHKA	28 Des 2022	417-B/KA/CO/ASI/1222
<b>SUBJECT:</b> A/E YANMAR 6N18AL UN_1			

No	P/N	Description	QTY	Unit Price	Amount
		<b>AUXILARY ENGINE TYPE: 6N 18L UN RPM: 720, CYL.BORE: 180MM, STROKE: 280MM MAKER: YANMAR DIESEL CO.LTD</b>		<b>RP</b>	<b>RP</b>
A		<b>FIG. 1-2, CYLINDER HEAD ASSY</b>			
1	146673-11110	EXHAUST VALVE NIMONIC	8 PCS	2.240.000	17.920.000
2	146673-11720	SUCTION VALVE	8 PCS	640.000	5.120.000
3	146673-11090	VALVE SEAT EXHAUST	12 PCS	360.000	4.320.000
4	146673-11710	VALVE SEAT SUCTION	12 PCS	110.000	1.320.000
5	146613-11160	GUIDE VALVE	12 PCS	195.000	2.340.000
6	146603-11810	O - RING EXHAUST VALVE SEAT	12 PCS	8.000	96.000
7	146673-11810	O - RING EXHAUST VALVE SEAT	12 PCS	8.000	96.000
8	146673-11370	STUD	2 PCS	80.000	160.000
9	26732-160002	HEXAGON NUT M16	2 PCS	5.500	11.000
10	24316-000240	O-RING COOLING WATER	24 PCS	2.000	48.000
11	152673-01810	O-RING	6 PCS	2.500	15.000
12	24311-000350	O-RING PUSH ROD	12 PCS	2.500	30.000
13	146673-11230	ADJUSTING SCREW	12 PCS	125.000	1.500.000
14	137600-53090	GASKET	6 PCS	8.000	48.000
15	141616-13710	EXPANSION PIPE JOINT	1 PCS	1.170.000	1.170.000
16	150623-13202	GASKET	4 PCS	110.000	440.000
17	141616-11750	SEAL, VALVE STEM	24 PCS	33.500	804.000
18	28572-500115	THERMOMETER EXHAUST GAS	6 PCS	530.000	3.180.000
19	146673-13200	GASKET	6 PCS	84.000	504.000
20	146673-11280	GASKET, HEAD	6 PCS	110.000	660.000
21	137676-11351	CONTACT PIECE, VALVE ROCKER ARM	1 PC	33.000	33.000
22	27326-140560	STEEL BALL	56 PCS	2.500	140.000
23	746673-15100	INDICATOR COCK	4 PCS	1.260.000	5.040.000
24	1466/3-11851	SLEEVE, NOZZLE	1 PC	550.000	550.000
25	24326-000400	O-RING G40	8 PCS	2.500	20.000
26	137600-53090	GASKET	4 PCS	8.000	32.000



# CV. HALUAN TEKNIK UTAMA

Marine Sparepart, Service & Repair

Gedung Senatama Lt. 2, R. 202A  
Jl. Kxitang Raya No. 8, Jakarta Pusat 10420  
Ph. 021-4102091 ; HP/WA: 0812-1331-0490

## QUOTATION

QUOTE TO:

PT. ANDHIKA SAMUDERA INTERNUSA  
Attn. Bpk. Defandra / Ibu Linda  
E032/ANIK/2022  
MV. ANDHIKA KANISHKA

NO : 1103A2.R1-PH-HTU22  
CUSTOMER ID : 001  
DATE : Wed, 28 Dec 2022  
PAGE : 1  
SUBJECT : Aux. Engine  
SUPPLY LOCATION : Surabaya

No	P/N	Description	QTY	Unit Price	Amount
		AUXILIARY ENGINE TYPE: 6N 18L UN RPM: 720, CYL.BORE: 180MM, STROKE: 280MM MAKER: YANMAR DIESEL CO.LTD			
A		FIG. 1-2, CYLINDER HEAD ASSY			
1	146673-11110	EXHAUST VALVE NIMONIC	8	PCS	2.240.000 17.920.000
2	146673-11720	SUCTION VALVE	8	PCS	640.000 5.120.000
3	146673-11090	VALVE SEAT EXHAUST	12	PCS	360.000 4.320.000
4	146673-11710	VALVE SEAT SUCTION	12	PCS	110.000 1.320.000
5	146613-11160	GUIDE VALVE	12	PCS	195.000 2.340.000
6	146603-11810	O-RING EXHAUST VALVE SEAT	12	PCS	8.000 96.000
7	146673-11810	O-RING EXHAUST VALVE SEAT	12	PCS	8.000 96.000
8	146673-11370	STUD	2	PCS	80.000 160.000
9	26732-160002	HEXAGON NUT M16	2	PCS	5.500 11.000
10	24316-000240	O-RING COOLING WATER	24	PCS	2.000 48.000
11	152673-01610	O-RING	6	PCS	2.500 15.000
12	24311-000350	O-RING PUSH ROD	12	PCS	2.500 30.000
13	146673-11230	ADJUSTING SCREW	12	PCS	125.000 1.500.000
14	137600-53090	GASKET	6	PCS	8.000 48.000
15	141616-13710	EXPANSION PIPE JOINT	1	PCS	1.170.000 1.170.000
16	150623-13202	GASKET	4	PCS	110.000 440.000
17	141616-11750	SEAL, VALVE STEM	24	PCS	33.500 804.000
18	28572-500115	THERMOMETER EXHAUST GAS	6	PCS	530.000 3.180.000
19	146673-13200	GASKET	6	PCS	84.000 504.000
20	146673-11280	GASKET, HEAD	6	PCS	110.000 660.000
21	137676-11351	CONTACT PIECE, VALVE ROCKER ARM	1	PC	33.000 33.000
22	27326-140560	STEEL BALL	56	PCS	2.500 140.000
23	746673-15100	INDICATOR COCK	4	PCS	1.260.000 5.040.000
24	146673-11851	SLEEVE, NOZZLE	1	PCS	550.000 550.000
25	24326-000400	O-RING G40	8	PCS	2.500 20.000
26	137600-53090	GASKET	4	PCS	8.000 32.000

No	P/N	Description	QTY	Unit Price	Amount
B		<b>FIG. 6, CYLINDER LINER</b>			
1	146673-01150	CYLINDER LINER	1	PCS	6.575.000
2	146673-01130	ANTI - POLISHING RING	1	PCS	300.000
3	146644-01340	CLYINDER HEAD GASKET	6	PCS	64.000
4	146673-01291	RUBBER GASKET	12	PCS	50.000
C		<b>FIG. 19, PISTON &amp; CONNECTING ROD ASSY</b>			
1	146673-22451C	PISTON	1	PCS	7.800.000
2	146673-22501	PISTON RING SETS	6	SETS	1.540.000
3	146673-22300	PISTON PIN	1	PCS	1.680.000
4	146673-23220	CON ROD BOLT	12	PCS	305.000
5	146673-23360	CRANK PIN BEARING, UPPER	6	SETS	1.960.000
6	146673-23370	CRANK PIN BEARING, LOWER			
7	146673-23130	PISTON PIN BUSH	2	PCS	700.000
D		<b>FIG. 21, OIL COOLER</b>			
1	24311-001800	O-RING	2	PCS	14.000
2	24311-000550	O-RING	2	PCS	5.500
E		<b>FIG. 34, FUEL INJECTION PUMP</b>			
1	146673-51260	PROTECTOR	2	PCS	89.500
2	159646-51270	O-RING	12	PCS	2.500
3	146673-51810	O-RING	6	PCS	2.500
4	146673-51830	O-RING	6	PCS	2.500
5	146673-51820	O-RING	6	PCS	2.500
6	146673-51800	SQUARE RING	6	PCS	16.500
7	146673-51100	PLUNGER ASSY	4	PCS	3.920.000
8	146673-51300	ISOVARIC VALVE ASSY	6	SETS	1.050.000
F		<b>FIG. 36, FUEL INJECTION VALVE</b>			
1	146673-53040	NOZZLE ASSY	4	PCS	1.690.000
2	146673-53230	STOPPER, VALVE	4	PCS	125.000
3	146673-53900	O RING	6	PCS	2.500
4	128633-11880	O RING	6	PCS	2.500
5	151673-01291	O RING	6	PCS	50.000
G		<b>FIG. 37, FUEL INJECTION PIPE</b>			
1	546673-59250	GASKET	6	PCS	14.000
2	546673-59020	GASKET	6	PCS	14.000
3	546673-59220	GASKET	6	PCS	14.000

No	P/N	Description	QTY	Unit Price	Amount
4	546673-59230	FUEL INJECTION PIPE	1	PCS	225.000
L		FIG. 7 MAIN BEARING ASSY			
1	746673-02010	MAIN BEARING ASSY	5	SETS	1.960.000
2	146673-02150	THUST BEARING LOWER }	2	SETS	1.960.000
3	146773-02160	THUST BEARING UPPER }			3.920.000
J		FIG. 8, TURNING DEVICE			
1	74673-08101	TURNING DEVICE	1	SETS	N/A
K		FIG. 17, EXHAUST MANIFOLD ASSY			
1	141616-13710	EXPANSION PIPE JOINT	1	PCS	1.175.000
2	150623-13202	GASKET	3	PCS	112.000
3	146673-13200	GASKET	4	PCS	84.000
L		FIG. 24-1, OIL FILTER			
1	146673-35150	FILTER ELEMENT	1	PCS	1.540.000
N		FIG. 29-3, TURBOCHARGER LUBRICATING OIL LINE & OIL FILTER			
1	433654-35540	ELEMENT NOTCH WIRE	8	PCS	265.000
		Note:			
		a. OEM Parts (Korea)			
		b. Weight est.: 1750-200 kgs			
		c. Price only for full order			
a. Delivery		: 45 working days after confirmation order (by Sea)			
b. Price		: Surabaya excl. service boat and port permit			
c. Payment		: 30 calendar days after delivery			
d. Stock Validity		: Not binding			
e. Price Validity		: 3 calendar days			
<b>Sub - Total</b>					<b>136.562.000</b>
<b>Discount</b>					<b>-3.662.000</b>
<b>TOTAL [IDR]</b>					<b>135.000.000</b>

CV. Haluan Teknik Utama

T r f a n



## PT. UNTAIAN MUTIARA JAYA

KOMPLEKS PERGUDANGAN INKOPAU BLOK B-15  
JALAN R.E. MARTADINATA NO. 100, 14310  
JAKARTA UTARA, INDONESIA  
PHONE : 62-21-2606-3637

### QUOTATION

Quotation No. : UMJ-322  
Your Reference :  
To ( Messrs ) : PT. ANDHIKA LINES  
Attention : BPK. Marjianto

Date : November 15, 2022  
Sender : Fauzan  
Page : 1/1

Approved by :



Fauzan Alatas

In compliance with your kind inquiry of : MV. ANDHIKA KANISHKA  
We have pleasure in quoting as follows :  
Delivery terms : FRANCO JAKARTA  
Payment terms : 30 DAYS TERMIN  
Validity : 15 DAYS

Item	Description	Part No.	Quantity	Unit Price	Amount	Del time ( Days )
	AUXILIARY ENGINE YANMAR TYPE 6N 18L UN					
1	EXHAUST VALVE (NIMOIC)	146673-11110	24 PCS	1,990,000	47,760,000	35 WORKING DAY
2	SUCTION VALVE (S)	146673-11720	24 PCS	590,000	14,160,000	35 WORKING DAY
3	VALVE SEAT EXHAUST (S+CO)	146673-11090	36 PCS	320,000	11,520,000	35 WORKING DAY
4	VALVE SEAT SUCTION	146673-11710	36 PCS	100,000	3,600,000	35 WORKING DAY
5	GUIDE VALVE	146673-11160	36 PCS	180,000	6,480,000	35 WORKING DAY
6	O-RING EXH VALVE SEAT	146673-11810	36 PCS	30,000	1,080,000	35 WORKING DAY
7	O-RING EXH VALVE SEAT	146673-11810	36 PCS	30,000	1,080,000	35 WORKING DAY
8	STUD	146673-11370	6 PCS	80,000	480,000	35 WORKING DAY
9	HEXAGON NUT M16	26732-160002	6 PCS	20,000	120,000	35 WORKING DAY
10	O-RING	24316-000240	72 PCS	10,000	720,000	35 WORKING DAY
11	O-RING	152673-01810	18 PCS	10,000	180,000	35 WORKING DAY
12	O-RING	24311-000350	36 PCS	10,000	360,000	35 WORKING DAY
13	ADJUSTING SCREW	146673-11230	36 PCS	110,000	3,960,000	35 WORKING DAY
14	GASKET	137600-53090	18 PCS	10,000	180,000	35 WORKING DAY
15	EXPANSION PIPE JOINT	141616-13710	3 PCS	960,000	2,880,000	35 WORKING DAY
16	GASKET	150623-13202	12 PCS	100,000	1,200,000	35 WORKING DAY
17	VALVE STEM SEAL	141616-11750	72 PCS	40,000	2,880,000	35 WORKING DAY
18	THERMOMETER EXHAUST GAS	28572-500115	18 PCS	650,000	11,700,000	35 WORKING DAY
19	GASKET	146673-13200	18 PCS	80,000	1,440,000	35 WORKING DAY
20	GASKET HEAD	146673-11280	18 PCS	80,000	1,440,000	35 WORKING DAY
21	CONTACT PIECE VALVE ROCKER ARM	137676-11351	2 PCS	80,000	160,000	35 WORKING DAY
22	STEEL BALL	27326-140560	168 PCS	10,000	1,680,000	35 WORKING DAY
23	INDICATOR COCK	146673-15100	12 PCS	1,080,000	12,960,000	35 WORKING DAY
24	SLEEVE, NOZZLE	146673-11851	4 PCS	370,000	1,480,000	35 WORKING DAY
25	O-RING G40 (V)	24326-000400	24 PCS	20,000	480,000	35 WORKING DAY
26	GASKET	137600-53090	12 PCS	20,000	240,000	35 WORKING DAY
27	CYLINDER LINER ONLY	146673-01150	3 PCS	5,100,000	15,300,000	35 WORKING DAY
28	ANTI-POLISHING RING	146673-01130	3 PCS	290,000	870,000	35 WORKING DAY
29	CYLINDER HEAD GASKET	146644-01340	18 PCS	50,000	900,000	35 WORKING DAY
30	RUBBER GASKET	146673-01291	36 PCS	50,000	1,800,000	35 WORKING DAY
31	PISTON ONLY (FCD)	146673-22451	3 PCS	5,980,000	17,940,000	35 WORKING DAY
32	PISTON RING SET	746673-22501	18 PCS	1,520,000	27,360,000	35 WORKING DAY
33	PISTON PIN	146673-22300	3 PCS	1,320,000	3,960,000	35 WORKING DAY



SINGAPORE OFFICE  
NO. 54 PANDAN LOOP,  
SINGAPORE 128269  
TEL: 65 6779 6776  
FAX: 65 6776 1824

# PORT ENTERPRISE CO., LTD.

HEAD OFFICE  
NO. 1-28, 2-CHOME, CHIKKO, MINATO-KU, OSAKA, JAPAN 552-0021  
TEL: 81-6-6573-5391  
FAX: 81-6-6575-3036  
E-MAIL: PENTERJ@PENTERJ.CO.JP  
HTTP://WWW.PORTENTERPRISE.COM

YOKOHAMA OFFICE  
TEL: (045) 823-0301  
FAX: (045) 823-0301

MESSRS : PT ANDHIKA SAMUDERA INTERNUSA  
K/ATTN : MR. DEFANDRA  
  
SUBJECT: - YANMAR 6N18L-UN A/KANISHKA

DATE : 11TH NOV, 2022  
YOUR REF NO. : E/032/ANK/2022  
OUR REF NO. : E/22K/0175  
CONTACT : KAWAKAMI

## QUOTATION

MANY TKS FR YR KIND INQ BY FAX. WITE PLEASURE, WE HEREBY QTE OUR BEST PRICES IN  
J. YEN AS FLWS.

DESCRIPTION	QUANTITY	(JPY) UNIT PRICE	(JPY) TOTAL
SPARE PARTS FOR AUX ENGINE			
TYPE: YANMAR 6N18L-UN			
E/N. 2043 2044 2045			
1. 146673-11120 EXHAUST VALVE, NIMONIC 146673-11120	12 PCS	55,800.-	669,600.-
2. 146673-11721 VALVE SUCTION	12 PCS	22,350.-	268,200.-
3. 146673-11090 EXH VALVE SEAT	12 PCS	16,600.-	199,200.-
4. 146673-11701 SUCTION VALVE SEAT	12 PCS	11,450.-	137,400.-
5. 141616-11171 VALVE GUIDE SUC/EXH	12 PCS	8,670.-	104,040.-
6. 146603-11810 O-RING, UPPER, EXHAUST VALVE SEAT	12 PCS	480.-	5,760.-
7. 146673-11810 O-RING, LOWER, EXHAUST VALVE SEAT	12 PCS	330.-	3,960.-
8. 146673-11370 STUD BOLT 146673-11370			
@ DEL. TIME : 60-DAYS	6 PCS	840.-	5,040.-
9. 26732-160002 NUT, M16			
10PCS/PKT			
10. 24316-000240 O-RING, 4D P24	1 PKT	740.-	740.-
10PCS/PKT			
11. 152673-01810 O-RING	1 PKT	2,500.-	2,500.-
12. 24311-000350 O-RING, 1A P35, DRY BUSH	12 PCS	360.-	4,320.-
10PCS/PKT			
13. 146673-11480 ADJ SCREW, ROCKER ARM	2 PKTS	930.-	1,860.-
@ DEL. TIME : 60-DAYS			
14. 137600-53091 GASKET	12 PCS	3,880.-	46,560.-
15. 147673-13900 EXPANSION JOINT, EXH	12 PCS	360.-	4,320.-
16. 147673-13250 GASKET, EXHAUST JOINT	12 PCS	31,360.-	376,320.-
17. 141616-11751 VALVE STEM SEAL, SUC/EXH	141616-11751	12 PCS	1,480.-
18. 147883-91337 DIGITAL THERMOMETER W/O BATTERY		12 PCS	1,570.-
19. 146673-13210 GASKET, HEAD OUT		12 PCS	27,500.-
20. 146673-11280 GASKET, BONNET		12 PCS	1,480.-
21. 137676-11351 RETAINER		12 PCS	2,490.-
@ DEL. TIME : 60-DAYS			
22. 27326-140560 STEEL BALL, VALVE ROTATOR	12 PCS	1,200.-	14,400.-
10PCS/PKT			
INDICATOR COOK ASSY	2 PKTS	2,030.-	4,060.-
REFER TO NO. 23 - NO. 26			
23. 146623-15201 INDICATOR CMP	12 PCS	40,770.-	489,240.-
24. 26216-120352 STUD BOLT, M12X35	24 PCS	110.-	2,640.-

CONTINUED ON PAGE NO. 2

MESSRS : PT ANDHIKA SAMUDERA INTERNUSA  
K/ATTN : MR. DEFANDRA

SUBJECT: - YANMAR 6N18L-UN A/KANISHKA

DATE : 11TH NOV, 2022  
YOUR REF NO. : E/032/ANK/2022  
OUR REF NO. : E/22K/0175  
CONTACT : KAWAKAMI

	DESCRIPTION	QUANTITY	(JPY) UNIT PRICE	(JPY) TOTAL	
25.	26706-120002 NUT, M12 10PCS/PKT	3 PKTS	560.-	1,680.-	
26.	146623-13950 INSULATOR FOR INDICTOR	12 PCS	10,200.-	122,400.-	
27.	146673-11851 NOZZLE SLEEVE	12 PCS	12,650.-	151,800.-	
28.	24326-000400 O-RING, 4D G40 10PCS/PKT	2 PKTS	2,310.-	4,620.-	
29.	137600-53091 GASKET	12 PCS	360.-	4,320.-	
✓30.	746673-01850-C CYLINDER LINER ASSY	12 PCS	322,000.-	3,864,000.-	
31.	146673-01131 PNTI-POLISHING RING	12 PCS	27,210.-	326,520.-	
32.	146644-01340 GASKET CYL HEAD	12 PCS	3,050.-	36,600.-	
33.	146673-01291 PACKING	12 PCS	3,050.-	36,600.-	
34.	146613-01301 RUBBER PACKING	12 PCS	610.-	7,320.-	
✓35.	146673-22451-C PISTON	12 PCS	379,000.-	4,548,000.-	
✓36.	746673-22501 PISTON RING SET	12 PCS	14,940.-	179,280.-	
✓37.	146673-22310 PISTON PIN	12 PCS	45,400.-	544,800.-	
✓38.	146673-23220 CONN ROD BOLT @ DEL. TIME 60-DAYS	12 PCS	9,500.-	114,000.-	
✓39.	146673-23380 CRANK PIN METAL ASSY @ DEL. TIME 60-DAYS	12 PCS	49,650.-	595,800.-	
✓40.	146673-23120 PISTON PIN METAL	12 PCS	30,160.-	361,920.-	
41.	24311-001800 O-RING,	12 PCS	240.-	2,880.-	
42.	24311-000500 O-RING 1A P-50.0 (142613-51660) 10PCS/PKT	2 PKTS	1,020.-	2,040.-	
43.	146673-51262 DEFLECTOR	12 PCS	1,950.-	23,400.-	
44.	159646-51271 O-RING	12 PCS	110.-	1,320.-	
45.	146673-51812 O-RING	12 PCS	1,020.-	12,240.-	
46.	146673-51831 O-RING,	12 PCS	930.-	11,160.-	
47.	146673-51821 O-RING	12 PCS	930.-	11,160.-	
48.	146673-51801 SQUARE RING	12 PCS	490.-	5,880.-	
✓49.	146673-51103 PLUNGER AND BARREL	12 PCS	53,900.-	646,800.-	
50.	146673-51300 DEL VALVE @ DEL. TIME 60-DAYS	12 PCS	44,600.-	535,200.-	
51.	146673-53040 NOZZLE,	12 PCS	9,700.-	116,400.-	
52.	146673-53230 SPACER, VALVE STOP @ DEL. TIME 60-DAYS	146673-53230	11,550.-	138,600.-	
53.	146673-53900 O-RING, 4D P42, FI VALVE	12 PCS	630.-	7,560.-	
54.	128633-11880 O-RING	12 PCS	520.-	6,240.-	
55.	151673-51381 O-RING, FI VALVE	12 PCS	1,110.-	13,320.-	
56.	146673-59250 PACKING,	6 PCS	1,300.-	7,800.-	
57.	146673-59020 PACKING,	6 PCS	490.-	2,940.-	
58.	146673-59220 PACKING	6 PCS	250.-	1,500.-	
59.	146673-59230 FI PIPE @ DEL. TIME 60-DAYS	6 PCS	24,900.-	149,400.-	
✓60.	146673-02352 MAIN METAL ASSY	12 PCS	61,350.-	736,200.-	
✓61.	146673-02371 THRUST METAL	12 PCS	53,250.-	639,000.-	
62.	146673-08300 TURNING SHAFT	6 PCS	53,250.-	319,500.-	
63.	146673-08310 TURNING GEAR	6 PCS	8,300.-	49,800.-	
64.	22512-050120 KEY, 5X12	6 PCS	80.-	480.-	
65.	26356-160002 U-NUT M16	6 PCS	230.-	1,380.-	
66.	146673-08320 STOPPER	6 PCS	1,570.-	9,420.-	
67.	26116-100122 BOLT 10PCS/PKT	2 PKTS	560.-	1,120.-	
68.	146673-08330 LOCK BAR	6 PCS	1,110.-	6,660.-	
69.	147673-13900 EXPANSION JOINT, EXH	6 PCS	31,360.-	188,160.-	
70.	147673-13250 GASKET, EXHAUST JOINT	147673-13250	12 PCS	1,480.-	17,760.-

CONTINUED ON PAGE NO. 3

MESSRS : PT ANDHIKA SAMUDERA INTERNUSA  
K/ATTN : MR. DEFANDRA

SUBJECT: - YANMAR 6N18L-UN A/KANISHKA

DATE : 11TH NOV, 2022  
YOUR REF NO. : E/032/ANK/2022  
OUR REF NO. : E/22K/0175  
CONTACT : KAWAKAMI

DESCRIPTION	QUANTITY	(JPY) UNIT PRICE	(JPY) TOTAL
71. 146673-13210 GASKET, CYL HEAD OUTLET	12 PCS	1,480.-	17,760.-
72. 146673-35140 LO FILTER ELEMENT	6 PCS	18,400.-	110,400.-
73. 133654-35520 FILTER ELEMENT (PAPER TYPE)	6 PCS	4,900.-	29,400.-
//////////		G. TOTAL	(JPY) 17,476,940.-

PLACE OF DELIVERY EX-WORK OSAKA JAPAN  
TIME OF DELIVERY ABT 10-DAYS EXCEPT ABOVE @ MARK ITEMS  
TERM OF PAYMENT ADVNACE PAYMENT UPON ORDER  
PERIOD OF VALIDITY 07-DAYS  
REMARKS @ QUOTED BY GENUINE PARTS AT MAKER JAPAN  
LOOKING FORWARD TO RECEIVE YR KIND CONFIRMATION BY RETURN AS  
MANY TKS N BEST RGDS / CC PENTER SINGAPORE



03-Nov-22  
E032AIIKA/2022  
MV. ANDHIKA KANISHKA  
ENGINE

APPLICATION FOR SUPPLY, SPARE PARTS

No	Name of Article	Code / Part No	Unit	Working On Board	Stock On Board	Apply for	Approved Order	Mark Reference	Remark
<b>AUXILIARY ENGINE TYPE : 6N 4BL UN</b>									
<b>REPM : 720. CYL. BORE : 130 mm. STROKE : 280 mm</b>									
<b>MAKER : YANMAR DIESEL CO., LTD</b>									
<b>Fig. 1-2. Cylinder Head Assy.</b>									
1	Exhaust valves return c.	146673-1130	pc	36	4	24	12	12	
2	Suction Valve	146673-1120	pc	36	5	24	12	12	
3	Valve seat exhaust	146673-1100	pc	36	NH	36	12	12	
4	Valve seat suction	146673-1110	pc	36	NH	36	12	12	
5	Guide valve	146673-1160	pc	72	NH	36	18	18	
6	O ring exhaust valve seat	146503-1810	pc	35	NH	26	12	12	
7	O ring exhaust valve seat	146573-1810	pc	36	NH	26	12	12	
8	Should	146673-11370	pc	16	NH	6	6	6	
9	Piston Pin Nut M16	26732-16302	pc	16	NH	3	6	6	
10	O ring cooling water	24318-001240	pc	72	NH	72	24	24	
11	O ring	182672-0-310	pc	18	NH	18	6	6	
12	O ring bush 22	24311-016350	pc	36	NH	36	18	18	
13	Adjuster screw	146673-11230	set	36	M4	36	12	12	
14	Gasket	137600-55050	pc	18	NH	10	6	6	
15	Expansion gasket	41616-13710	pc	6	NH	3	2	2	
16	Gasket	150520-13202	pc	12	NH	12	12	12	
17	Seal valve steam	14616-11750	pc	72	NH	72	24	24	
18	The nameplate exhaust gas	2872-530116	pc	18	NH	16	6	6	
19	Gasket	146673-11200	pc	18	NH	16	6	6	
20	Gasket head	146673-11290	pc	18	NH	18	6	6	
21	Covered seats valve rocker arm	137676-11351	pc	6	NH	2	2	2	
22	Sheet ball	2-326-16050	pc	68	NH	168	68	68	
23	Indicator cock	74573-16100	pc	19	NH	12	6	6	
24	Steering nozzle	140573-1851	pc	18	NH	4	4	4	
25	O ring G40	24326-0-30400	pc	35	NH	24	24	24	
26	Gasket	134600-55290	pc	18	NH	12	12	12	
27	<b>Fig. 6. Cylinder Liner</b>								
1	Cylinder liner	146673-0-1150	pc	18	NH	3	3	3	
2	Ring - Piston Ring	146673-01130	pc	18	NH	3	3	3	
3	Cylinder Head Gasket	146644-01340	pc	18	B61	16	16	16	
4	Rubber Gaskets	146673-561280	pc	35	NH	35	12	12	

No	Name of Article	Code / Part No	Unit	Working On Board	Stock On Board	Apply for Borrow	Approved Order	Mark	Reference	Remark
C	Fig. 19. Piston & Connecting Rod Assy	146673-2245C 746673-22501	pc set	16 1	Nil 13	3 6	3 6	A		
1	Piston	146673-2245C	pc	16	Nil	3	3	A		
2	Piston Rings	746673-22501	set	1						
3	Piston Pin	146673-22500	pc	16	Nil	3	3	A		
4	Crank Pin Bolt	146673-23230	pc	26	4	36	12	A		
5	Crank Pin Bearing, upper	146673-23360	pc	16	Nil	18	6	A		
6	Crank Pin Bearing, lower	146673-23370	pc	16	Nil	10	6	A		
7	Piston Pin Bush	146673-23130	pc	16	Nil	6	6	A		
D	Fig. 21. Oil Cooler	243-1-001890 243-1-003850	pc pc	6 6	Nil Nil	6 6	6 6	A		
1	O ring	243-1-001890	pc	6	Nil	6	6	A		
2	O ring	243-1-003850	pc	6	Nil	6	6	A		
E	Fig. 34. Fuel Injection Pump	146673-51280 146673-51270 146673-51810 146673-51820 146673-51830 146673-51840 146673-51850 146673-51100	pc pc pc pc pc pc pc pc set	36 36 16 16 16 16 16 16 18	Nil Nil Nil Nil Nil Nil Nil Nil Nil	6 36 18 18 18 18 18 18 18	6 36 6 6 6 6 6 6 6	A A A A A A A A A		
1	Plunger	146673-51280	pc	36	Nil	6	6	A		
2	O Ring	146673-51270	pc	36	Nil	36	36	A		
3	O Ring	146673-51810	pc	16	Nil	18	18	A		
4	O Ring	146673-51820	pc	16	Nil	18	18	A		
5	O Ring	146673-51830	pc	16	Nil	18	18	A		
6	Square Ring	146673-51840	pc	16	Nil	18	18	A		
7	Plunger Assy	146673-51100	pc	16	Nil	12	12	A		
8	Isolant Valve Assy	146673-51200	set	18	Nil	18	18	A		
F	Fig. 36. Fuel Injection Valve	146673-55300 146673-53230 146673-56300 128853-41390 151873-01291	pc pc pc pc pc	18 18 18 18 18	Nil Nil Nil Nil Nil	4 12 12 18 16	6 6 6 6 6	A A A A A		
1	Nozzle Assy	146673-55300	pc	18	Nil	18	12	A		
2	Stopper Valve	146673-53230	pc	18	Nil	12	6	A		
3	O ring	146673-56300	pc	18	Nil	18	6	A		
4	O ring	128853-41390	pc	18	Nil	18	6	A		
5	O ring	151873-01291	pc	18	Nil	16	6	A		
G	Fig. 37. Fuel Infection Pipe	546673-58282 546673-58020 546673-56220 546673-59220	pc pc pc pc	18 18 18 18	Nil Nil Nil Nil	18 18 18 18	12 12 12 12	A A A A		
1	Gasket	546673-58282	pc	18	Nil	18	12	A		
2	Gasket	546673-58020	pc	18	Nil	18	12	A		
3	Gasket	546673-56220	pc	18	Nil	18	12	A		
4	Fuel injection Pipe	546673-59220	pc	18	Nil	3	3	A		
I	Fig. 7. MAIN BEARING ASSY	746673-02010 146673-02150 146673-02110	set pc pc	21 6 6	Nil Nil Nil	14 6 6	14 6 6	A A A		
1	Main Bearing assy	746673-02010	set	21	Nil	14	14	A		
2	Thrust Bearing Cover	146673-02150	pc	6	Nil	6	6	A		
3	Thrust Bearing Upper	146673-02110	pc	6	Nil	6	6	A		
J	Fig. 8.1 TURNING DEVICE	746673-06191	set	3	Nil	1	1	A		
1	Turning Device	746673-06191	set	3	Nil	1	1	A		

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for Change Of No 2