





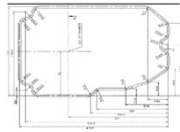


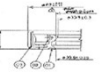
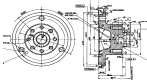
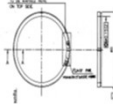





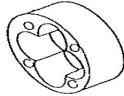
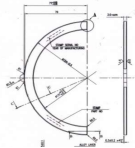
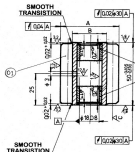
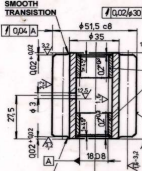
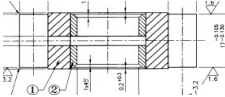
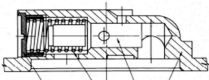

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqrmnt	UoM	Brief Specifications	Remarks	Photograph
982	ENGINE	6162631514	WATER SEAL	389	Nos	PACKING MATERIAL A: FR SERIES (EQUIV TO NOK.F422) PACKING MATERIAL B: NBR SERIES (EQUIV TO NOK.A834)		
983	ENGINE	6210611510	OIL SEAL	36	Nos	PACKING : 5708 (NOK), SPRING : SWP, RING : SPCC		
984	ENGINE	6210611520	OIL SEAL	213	Nos	PACKING : 5708 (NOK), SPRING : SWP, RING : SPCC		
985	ENGINE	6134515121	CATRIDGE	100	Nos	CARTRIDGE FOR HEAVY DUTY DIESEL ENGINES(105 BORE DIA.), FILTRATION AREA: 0.53m2, NORMAL FILTRATION RATING:20µ, FILT RATE: 95%, APPLICABLE TEMPERATURE: 30 - 120 DEG C. OD: 107.7mm, HEIGHT: 170.5mm, THREAD: 1 1/8-16UN, MATERIAL: BODY-SPCE, ELEMENT-FILTER PAPER, SEAT-SS41P SPG, PACKING-ACRYLIC RUBBER AND NBR, SPRING-SKS.		
986	ENGINE	6136298010	MAIN BRG,SET,U/S 0.25	70	Nos	105-Main Bearing Set consists of Upper & lower Std.Bearings (7 No's). Both bearings must have , Width = 30mm, Semi Outer Dia = 91mm, Thickness : 3.00 mm, Back metal : SPCC1, Intermediate Layer : KKJ4B, Surface Layer : Tin Lead P-77		
987	ENGINE	6137K19901	GASKET KIT	48	Nos	Contact R&D for technical details. Contact details enclosed at Annexure-3		
988	ENGINE	6151K19901	GASKET KIT	4	Nos	Contact R&D for technical details. Contact details enclosed at Annexure-3		
989	ENGINE	6162393042	METAL ASSY	517	Nos	170-series Engine Con-Rod Big end bearing : Under size 0.25mm. Width : 58mm, Semi Outer dia = 115.51, Std.Thickness : 4.00mm, Bearing is DIADO make. Back metal : ES1424, Alloy layer : LS17 and Kp-9 surface coated.		
990	ENGINE	6210118811	GASKET	348	Nos	140-series Rocker Cover Gasket (O-ring : Material SR-1, DIA-Ø3.7±0.1		
991	ENGINE	6210118820	GASKET	991	Nos	140-series Rocker Cover Gasket (O-ring : Material SR-1, DIA-Ø3.7±0.1		
992	ENGINE	6210373041	BEARING,PR PIN,1 PAIR,U/S	18	Nos	140-Conrod- upper & lower bearing set , Under size 0.75mm (Upper bearing : Width = 46mm, Semi Outer dia = 95mm, Std.thickness = 2.5mm, Back metal : ES 1425, alloy layer : LS17, Lower Bearing : Width = 46mm, Semi Outer =95mm Std.thickness =2.5mm, Back metal = SAE 1017, Alloy layer = KJ5A (F780), Flash platin g : ES1405)		



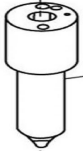


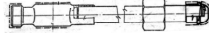

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqrmnt	UoM	Brief Specifications	Remarks	Photograph
993	ENGINE	6210383041	BEARING,PR PIN,1 PAIR,U/S	60	Nos	140-Conrod- upper & lower bearing set , Under size 0.50mm (Upper bearing : Width = 46mm, Semi Outer dia = 95mm, Std.thickness = 2.5mm, Back metal : ES 1425, alloy layer : LS17, Lower Bearing : Width = 46mm, Semi Outer =95mm Std.thickness =2.5mm, Back metal = SAE 1017, Alloy layer = KJ5A (F780), Flash platin g: ES1405)		
994	ENGINE	6210393041	METAL ASSY	42	Nos	140-Conrod- upper & lower bearing set , Under size 0.25mm (Upper bearing : Width = 46mm, Semi Outer dia = 95mm, Std.thickness = 2.5mm, Back metal : ES 1425, alloy layer : LS17, Lower Bearing : Width = 46mm, Semi Outer =95mm Std.thickness =2.5mm, Back metal = SAE 1017, Alloy layer = KJ5A (F780), Flash platin g: ES1405)		
995	ENGINE	6210616441	GASKET	85	Nos	material- GA-1C, thickness=0.8		
996	ENGINE	6211611533	SEAL	28	Nos	BSA6D140-Engine Water pump seal : Performance to conform to KESD 07012. Packing :5705 (NOK), SPRING : SWP, RING : SPCC		
997	ENGINE	2010200664	FRONT PIN	25	Nos	Ø178 X 86 FORGING TO SPEC 45C8		
998	ENGINE	326972012282	PISTON RING MINUTE TYPE 6-2282.01/4	25	Nos	Ø120 X 3 THICK STEEL RING FOR PISTON.		
999	ENGINE	990100849000	NOZZLE DOP 140 S 624-411666041-1B	25	Nos	DIESEL INJECTOR NOZZLE WITH SIDE FUEL ENTRY		
1000	ENGINE	442077400954	SET OF GASKET	25	Nos	CELLULOSE BASED 47 NUMBER OF GASKET WITH DIFFERENT SIZE		
1001	ENGINE	273111531555	SEALING RING (124.2X3.913.0157)	25	Nos	Ø125 X 3 SQUARE C/S RUBBER O-RING		
1002	ENGINE	278422408001	GASKET 625-4003	25	Nos	CELLULOSE BASED GASKET		



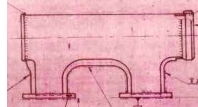
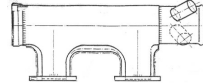
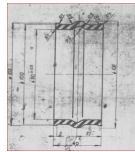
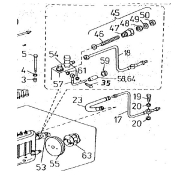
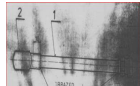
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqrmnt	UoM	Brief Specifications	Remarks	Photograph
1003	ENGINE	130010660094	PUMP BODY I	25	Nos	Ø154 x 3 THICK , SAE 1010 STEEL WITH SAE 48 SINTERED		
1004	ENGINE	323141371000	UPPER THRUST BEARING-6037-06/00 (111 141 371 000)	25	Nos	Ø52 X 50 FORGED SPUR GEAR WITH TWO COPPER BUSH PRESSED		
1005	ENGINE	2070170454	PUMP GEAR WHEEL	25	Nos	Ø52 X 55 FORGED SPUR GEAR WITH TWO COPPER BUSH PRESSED		
1006	ENGINE	2070170444	PUMP GEAR WHEEL	25	Nos	Ø52 X 17 FORGED SPUR GEAR WITH TWO COPPER BUSH PRESSED		
1007	ENGINE	2070170434	PUMP GEAR WHEEL	25	Nos	LUBRICATION PUMP COVER ASSY WITH CAST IRON HOUSING, SPRING, PLUG		
1008	ENGINE	442070480284	PUMP COVER	25	Nos	MATERIAL : FORGING TO SPECIFICATION 40Cr4Mo2 - IS:5517, TEETH TIP OD = Ø51.5c8, WIDTH = 50 mm, WEIGHT : 0.35 kg		
1009	ENGINE	2012270634	DRIVE GEAR WHEEL	25	Nos	MATERIAL : FORGING TO SPECIFICATION 40Cr4Mo2 - IS:5517, TEETH TIP OD = Ø51.5c8, WIDTH = 55 mm, WEIGHT : 0.38kg		

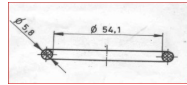
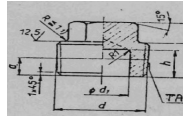
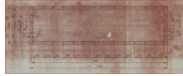


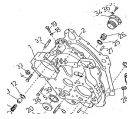
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1010	ENGINE	2012270624	PUMP GEAR WHEEL	25	Nos	MATERIAL : FORGING TO SPECIFICATION 42Cr4Mo2 - IS:5517, TEETH TIP OD = ϕ 51.5c8, WIDTH = 17 mm, WEIGHT : 0.15 kg		
1011	ENGINE	2012270614	PUMP GEAR WHEEL	25	Nos	PART OF FUEL INJECTOR		
1012	ENGINE	443713054000	NOZZLE	25	Nos	PART OF STARTER MOTOR		
1013	ENGINE	990115006000	PRESSURE MAGNET	25	Nos	ASSEMBLY OF 45 SUB-PARTS, MAX PRESSURES : BRAKE FLUID 120 BAR & COMPRESSED AIR 12.5 BAR, WEIGHT : 2.8 kg		
1014	ENGINE	443612223000	CLUTCH BOOSTER KNORR VG 3284	25	Nos	ASSEMBLY OF 4 SUB-PARTS, TUBE : OD ϕ 8 x 1mm WALL THICKNESS, WEIGHT : 0.204 kg		
1015	ENGINE	442076632424	OIL SUPPLY TUBE	25	Nos	MATERIAL : CSN 42 4331.01, CSN 42 1430.13, CSN 42 4331.71 MFG PROCESS : ALUMINIUM GRAVITY DIE CASTING, OUTER DIA : ϕ 225		
1016	ENGINE	130010800034	HOUSING COVER	25	Nos	ASSEMBLY OF 5 SUB-PARTS, PROCESS : BRAZING, MFG WEIGHT : 0.3 kg		

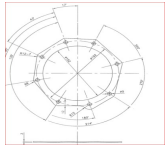
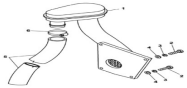


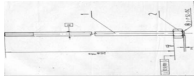
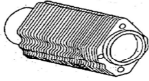
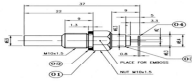

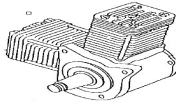
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1017	ENGINE	442073420094	CONNECTION	25	Nos	Ø70 X 40 CAST IRON		
1018	ENGINE	442075050334	LID TO CLUTCH	25	Nos	ASSEMBLY OF 4 SUB-PARTS, MFG PROCESS : WELDING		
1019	ENGINE	442070332084	INTAKE MANIFOLD FRONT	25	Nos	ASSEMBLY OF 7 SUB-PARTS, LENGTH : 386 mm, WEIGHT : 2.45 kg, MFG PROCESS : WELDING		
1020	ENGINE	442070332054	INTAKE MANIFOLD REAR	25	Nos	Material: Rubber Mixture 1456 OD:Ø103 mm ID: Ø90 mm		
1021	ENGINE	442054390034	INTAKE LINE RUBBER HOSE	25	Nos	PART OF FIP		
1022	ENGINE	443979651374	FUEL FEEDER ZS 46-1374	25	Nos	Assembly: 3 components Weight :0.162 Kg Material :CSN137972.02		
1023	ENGINE	442076631144	FUEL SUPPLY TUBE	25	Nos	1.Tube 3.Pipe Adaptor 2.Connector		






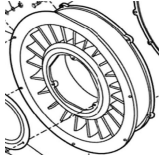
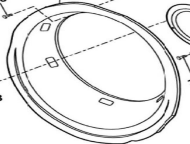
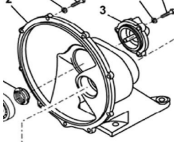
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1024	ENGINE			25	Nos	DRAWING NOT AVAILABLE		
1025	ENGINE	443972227480	NECK JS 6	25	Nos	Material: EEE 6233-2 ID:φ54.1 mm Weight:0.007 kg		PART OF FIP
1026	ENGINE	442054171764	O RING (SEALING RING)	25	Nos	SCREW PLUG WITH TAPER THREAD, MATERIAL : STEEL		
1027	ENGINE	311113166000	PLUG M18X1.5 ONA 1913.05	25	Nos	width:1132 mm height: 344 mm weight :0.05 kg Material:		
1028	ENGINE	442054032844	LOWER COVER GASKET	25	Nos	φ270 X 36 THICK TORSIONAL DAMPER FOR DIESEL ENGINE <small>REMARK: In 023-0110-013-01-000-000</small>		
1029	ENGINE	452330180008	TORSION DAMPER	25	Nos	φ154 x 3 THICK , SAE 1010 STEEL WITH SAE 48 SINTERED		
1030	ENGINE	323434181743	UPPER THRUST BEARING	25	Nos	φ154 x 3 THICK , SAE 1010 STEEL WITH SAE 48 SINTERED		
1031	ENGINE	323434181763	LOWER THRUST BEARING	25	Nos	600 X 450 X 125 ALUMINIUM CASTING		
1032	ENGINE	130010750374	FRONT COVER	25	Nos	Material: vulcanized rubber PCD:φ192 mm ID:φ162 mm		

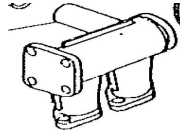
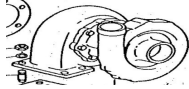
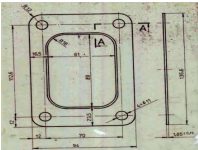

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1033	ENGINE	442054032734	GASKET 3mm	25	Nos	COMPLETE DEAEARATION CONTAINING 12 PARTS WEIGHT: 1.96KG		
1034	ENGINE	130076631274	DEARATION SYSTEM	25	Nos	OIL PRESSURE SWITCH FOR 8 BAR PRESSURE		
1035	ENGINE	443852042000	SWITCH	25	Nos	SUCTION TUBE ASSEMBLY CONTAINING 4 PARTS		
1036	ENGINE	442070211284	SUCTION TUBE (VVNV)	25	Nos	CONTAINING TWO PARTS MATERIAL : CSN 41 4331.9, CSN 4 1523.0 NUT:M10 SCREW:M8		
1037	ENGINE	442079940074	BOLT	25	Nos	MATERIAL : CSN 42 046312 INNER DIA : 124mm OUTER DIA : 149mm LENGTH : 260mm		
1038	ENGINE	442010010254	CYLINDER	25	Nos	MATERIAL :NYLON 66, FREE CUTTING BRASS,BRASS INNER DIA : 124mm OUTER DIA : 8.4mm LENGTH : 6.3mm WEIGHT: 160g		
1039	ENGINE	443429108989	SENSOR(380 060 360 010)	25	Nos	Ø120 X 5 THICK STEEL PISTON RING		
1040	ENGINE	327972522285	PISTON SCRAPPER RING 7-2285-52-0/3	25	Nos	TWIN CYLINDER COMPRESSOR (4102)		
1041	ENGINE	443614002800	COMPRESSOR 4102	25	Nos	PART OF COMPRESSOR		

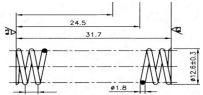

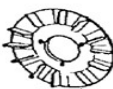







LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1042	ENGINE	443915930125	CRANKSHAFT	25	Nos	PART OF COMPRESSOR		
1043	ENGINE	443919810203	VALVE	25	Nos	PART OF COMPRESSOR		
1044	ENGINE	278432515035	GASKET/625 8901/	25	Nos	PART OF COMPRESSOR		
1045	ENGINE	443915660112	CYLINDER HEAD	25	Nos	WEIGHT; 3.10 Kgs , MATERIAL; CSN-42.4331.01 (ALLUMINIUM CASTING ALLOYS), DIMENSION; BLADE DIA. Ø370.09 mm, IMPELLER INNER DIA . Ø210 mm, IMPELLER OUTER DIA. Ø240.		
1046	ENGINE	130010680064	GUIDE WHEEL	25	Nos	ASSEMBLY 3 COMPONENTS; 1. BLADE WHEEL JACKET 2. BLADE WHEEL HUB C/W BLADES 3. GASKET , TOTAL WEIGHT; 9.4 Kgs MATERIAL; FOR BLADE WHEEL JACKET- CSN-42.4331.01 (ALLUMINIUM CASTING ALLOYS), FOR BLADE WHEEL HUB- SAME MATERIAL AND FOR GASKET- HEAT RESISTANT NEOPRINE RUBBER		
1047	ENGINE	442070720454	BLADE WHEEL ASSY.	25	Nos	ASSEMBLY 3 COMPONENTS; 1. AIR DUCT 2. HOLDER 3. STAY, WEIGHT; N/A , DIMENSION; DIAMETER Ø430 ±0.5, MATERIAL; IS:513-86, Gr.DD FOR ALL COMPONENTS		
1048	ENGINE	442070600124	AIR DUCT	25	Nos	WEIGHT; N/A, DIMENSION; TOTAL DIA. Ø225 , 6 THRU HOLES PITCH CIRCLE DIA. Ø220 mm AND 3 THREADED HOLES PITCH DIA. Ø230, MATERIALS; CSN-42 2420, CSN 1241.00		
1049	ENGINE	130028961804	FAN HOUSING BRACKET	25	Nos	Ø100 X 340 SHEET METAL FABRICATED TUBE		


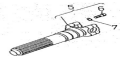



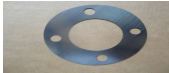





LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1050	ENGINE	442070332574	INTAKE MANIFOLD FRONT (LH)	25	Nos	K36 TURBO CHARGER		
1051	ENGINE	486512130518	TURBO BLOWER LH-K-36-006	25	Nos	ASSEMBLY COMPONENTS: 1. DUCTILE SHEET (MATERIAL; CSN 425 365), 2. INSERT JERIT É (MATERIAL; CSN 029021), 3. COVERING PLATE (MATERIAL; CSN 42 5365). TOTAL WEIGHT; 0.05 Kgs, DIMENSION; TOTAL LENGTH; 136.6 mm AND BREADTH; 94 mm, THIKNESS; 1.85 ± 0.15		
1052	ENGINE	442054280054	GASKET 2 MM (TURBINE)	25	Nos	PART OF MOTORPAL FIP FOR 12 CYLINDER ENGINE.		
1053	ENGINE	278432605113	GASSKET (CROSS- 43)	25	Nos			
1054	ENGINE	107560205063	PIN 5X63	25	Nos			
1055	ENGINE	443975801269	LIFTER	25	Nos			
1056	ENGINE	443971022604	ADJUSTING NUT	25	Nos			
1057	ENGINE	130035210484	REAR SHEET RH	25	Nos	DIMENSION- SPRING WIRE DIA; Ø1.8 mm, NO. OF ACTIVE TURNS; 9, TOTAL NO. OF TURNS; 11 mm, TOTAL LENGTH; 31.7 mm, WEIGHT; 0.08 Kgs, MATERIAL; Gr-DM, IS:4454 (PT-1)		






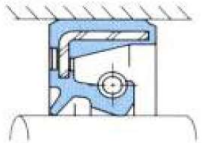
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1058	ENGINE	130050512154	SPRING	25	Nos	MATERIAL: CSN 41 1109.0, CSN426510 WEIGHT: 0.018KG OD: ϕ 9h11 MM LENGTH: 7 MM		
1059	ENGINE	130050780284	SPACER INSERT	25	Nos	MATERIAL: CSN 426312 32 WEIGHT: 0.65KG DIAMETER: ϕ 190 \pm 0.3 MM THICKNESS: 1.6 MM		
1060	ENGINE	443930131570	VENTILATOR FAN	25	Nos	MATERIAL: CSN 41 331.21, CSN 42 6312.22 WEIGHT: 0.010KG ID: ϕ 57 MM THICKNESS: 1 MM		
1061	ENGINE	130050953684	SPACER WASHER	25	Nos	PART OF ALTERNATOR		
1062	ENGINE	443936014910	SUPPORTING RING	25	Nos	PART OF ALTERNATOR		
1063	ENGINE	443930131710	REAR COVER	25	Nos	PART OF ALTERNATOR		
1064	ENGINE	443930132100	TERMINAL BOARD	25	Nos	MATERIAL: F33, GRADE A WIDTH: 8 MM THICKNESS: 1 MM		
1065	ENGINE	443936214310	PINION LUBRICATING FELT	25	Nos	PART OF ALTERNATOR		
1066	ENGINE	443938329100	SWITCH COIL	25	Nos	ϕ 530 X 320 ALUMINIUM CASTING		
1067	ENGINE	130016100224	CLUTCH HOUSING	25	Nos	ϕ 34 X 25 COPPER BEARING		




LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1068	ENGINE	111427150343	BUSH PS 2530 KU	25	Nos	ASSEMBLY: 3 PARTS WIDTH:159.5+0.1 MM WEIGHT: 6.5KG		
1069	ENGINE	442071080484	CLUTCH SHAFT	25	Nos	PART OF NON-EURO OIL COOLER		
1070	ENGINE	130070220344	TUBE	25	Nos	ASSEMBLY: 2 PARTS WIDTH:10-1 MM WEIGHT: 0.22KG		
1071	ENGINE	442070210984	INTAKE PIPE ADOPTER	25	Nos	MATERIAL: NITRILE RUBBER ID: ø22 MM COLOUR: BLACK LENGTH: 265±2 MM		
1072	ENGINE	442053111114	HOSE 22/30-265	25	Nos	PART NO NOT AVAILABLE IN PARTS BOOK		
1073	ENGINE	443933980170	OUTER PLATE	25	Nos			
1074	ENGINE	442013830054	Clutch plate of fan drive	516	Nos	Flex plate used in Fan Drive Shaft		
1075	ENGINE	323141377000	Thrust Bearing 6037-04/00	86	Nos	Axial Thrust Bearing for Crankshaft Assembly pertaining to Beml-Tatra Engine		
1076	ENGINE	323141371000	Thrust Bearing 6037-02/00	86	Nos	Axial Thrust Bearing for Crankshaft Assembly pertaining to Beml-Tatra Engine		
1077	ENGINE	323141373000	Thrust Bearing 6038-02/00	86	Nos	Axial Thrust Bearing for Crankshaft Assembly pertaining to Beml-Tatra Engine		
1078	ENGINE	323141375000	Thrust Bearing 6038-04/00	86	Nos	Axial Thrust Bearing for Crankshaft Assembly pertaining to Beml-Tatra Engine		
1079	ENGINE	442070060974	Part of Crank shaft	344	Nos	Part of Crankshaft. Hollow type casting. Fillet Rolling at journal corners to achive required hardness.		

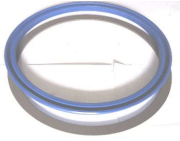

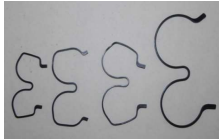

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqrmnt	UoM	Brief Specifications	Remarks	Photograph
1080	ENGINE	273110420000	Gasket 10x14/11 BTA-SK-2415 (Valve stem seal)	1376	Nos	Bonded Rubber seal used in cylinder head valve stem area of Beml-Tatra Engines		
1081	ENGINE	443900112000	Thermostatic	86	Nos	Thermostst used for oil supply regulation in Cooler Body sub assembly in Beml-Tatra Engine		
1082	ENGINE	443614029000	Compressor 4192	86	Nos	Diesel cooled air compressor		
1083	ENGINE	442053111904	Hose	516	Nos	Diesel Spill Hose		
1084	ENGINE	442053111944	Hose - 450 mm	86	Nos	Starter Motor Air vent hose		
1085	YDRAULIC & POWERLIN	125HM91483	OIL SEAL (Ø35 x Ø55 x 11)	286	Nos	This Oil Seal is used in the Hydraulic Pump Assemblies between the Drive Shaft and its Housing (Bracket) to prevent the leakage of hydraulic Oil from the Bearing Clearances between Rotating Drive Gear shaft and Housing. Structure: Metallic Backed Rubber O.D with Double lipped design Material:		
1086	YDRAULIC & POWERLIN	985HM91032	OIL SEAL (Ø39 x Ø62 x 11)	275	Nos	Seal Material: AR4 (Acrylic Rubber) or NBR, Spring: Piano Wire, Metal Casing: Cold Rolled or Hot Rolled Steel Sheet Conditions: Peripheral velocity: 0~4m/s Allowable Eccentricity while in setting oil temperature: Max. 100 deg.C Pressure: 1 bar (max)		

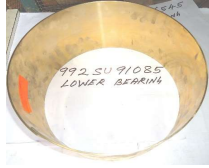
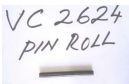




LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1087	YDRAULIC & POWERLIN	985HMB9051	PLANE BEARING	550	Nos	<p>Plain Bearing / Journal Bearings used for rotational motion in Hydraulic Pump Application driving Gear Shaft. Bushing provide outstanding dry bearing properties of Polytetrafluoroethylene (PTFE) and combines them with strength, stability and good wear resistance, excellent heat conductivity and low thermal expansion.</p> <p>Bushings consists of three bonded layers: The Bushes are loaded with PTFE based sliding layer, sintered tin bronze layer and Cold Rolled Carbon steel backing strip support. The PTFE impregnated sliding layer provides low co-efficient of friction, the bronze layer guarantees the coupling of self lubricating mixture and good loss of heat produced during operation.</p> <p>Material: Back Metal : JIS SPCD (Cold Rolled Carbon steel Strip/sheet Backing)(JIS G3141) Tensile Strength : 270 N/mm2 Min.(27.5 Kg/mm2 Min.) Elongation % : 40 Min. Bushing : Teflon Impregnated Bronze. Thickness-0.3 max Working Temperature : -200 to +280 deg.C, Maximum Sliding Speed : 10 m/sec, Maximum PU Value : 10 N/sq.mm x m/sec Co-efficient of Friction : 0.01 to 0.05</p>		
1088	YDRAULIC & POWERLIN	181HC11175	BUSHING	25	Nos	<p>Bushings are used in hydraulic cylinder rod or Suspension piston rod application. Bushing provide outstanding dry bearing properties of Polytetrafluoroethylene (PTFE) and combines them with strength, stability and good wear resistance, excellent heat conductivity and low thermal expansion.</p> <p>Bushings consists of three bonded layers: The Bushes are loaded with PTFE based sliding layer, sintered tin bronze layer and Cold Rolled Carbon steel backing strip support. The PTFE impregnated sliding layer provides low co-efficient of friction, the bronze layer guarantees the coupling of self lubricating mixture and good loss of heat produced during operation.</p> <p>Material: Back Metal : JIS SPCD (Cold Rolled Carbon steel Strip/sheet Backing)(JIS G3141) The back metal shall be subjected to a flash tin-plating Tensile Strength : 270 N/mm2 Min.(27.5 Kg/mm2 Min.) Elongation % : 40 Min. Bushing : Teflon Impregnated Bronze. Thickness-0.3 max</p>		
1089	YDRAULIC & POWERLIN	175HC91491	BUSHING	174	Nos	<p>Bushings are used in hydraulic cylinder rod or Suspension piston rod application. Bushing provide outstanding dry bearing properties of Polytetrafluoroethylene (PTFE) and combines them with strength, stability and good wear resistance, excellent heat conductivity and low thermal expansion.</p> <p>Bushings consists of three bonded layers: The Bushes are loaded with PTFE based sliding layer, sintered tin bronze layer and Cold Rolled Carbon steel backing strip support. The PTFE impregnated sliding layer provides low co-efficient of friction, the bronze layer guarantees the coupling of self lubricating mixture and good loss of heat produced during operation.</p> <p>Material: Back Metal : JIS SPCD (Cold Rolled Carbon steel Strip/sheet Backing)(JIS G3141) The back metal shall be subjected to a flash tin-plating Tensile Strength : 270 N/mm2 Min.(27.5 Kg/mm2 Min.) Elongation % : 40 Min. Bushing : Teflon Impregnated Bronze. Thickness-0.3 max</p>		

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1090	YDRAULIC & POWERLIN	821HC91162	PACKING ROD	10	Nos	<p>Size : $\phi 80 \times \phi 95 \times 12$ (9+3)</p> <p>Material:</p> <p>Base Seal Material: Lubrithane U-1029 Light Blue. Shore hardness: 95 Shore A.</p> <p>Backup Ring Material : PTFE with 40% Bronze Shore Hardness: 65 Shore D. Operating Pressure Range : 0~400 bar (5 800 psi). Max Speed : 1 m/s,(3.2 ft/s). Temperature Range : -30°C to +110°C</p>		
1091	YDRAULIC & POWERLIN	992SU91174	PISTON T SEAL (Bore $\phi 13.250'' \times \phi 12$	16	Nos	<p>The Unique Design Piston T-Seal provides a compact double acting seal for use in a new design for heavy duty applications where a more bulky type of seal had been required. This proven seal combines a tough, resilient, T-Shaped sealing ring with precisely dimensioned, pressure-actuated non-extrusion Rings for High Pressure Applications.</p> <p>Material:</p> <p>Base Seal Material: Nitrile Rubber (NBR) Shore hardness: 75 Shore A.</p> <p>Anti-extrusion Ring Material : Virgin TFE, Operating Pressure Range : 0~415 bar (6000 psi). Max Speed : 1 m/s,(3.2 ft/s). Temperature Range : -30°C to +120°C</p>		
1092	YDRAULIC & POWERLIN	992SU91352	PISTON T SEAL (Bore $\phi 13.780'' \times \phi 13$	16	Nos			
1093	YDRAULIC & POWERLIN	PB6327	PISTON T-SEAL (Bore $\phi 6.001'' \times \phi 5.5$	411	Nos			
1094	YDRAULIC & POWERLIN	985HM61079	SEAL RING (To be made as per dwg. I	550	Nos	<p>Seal Rings are fitted on the Static side of Thrust Plate/Side Plate on the Hydraulic Pump Assy to arrest the leakage of oil from High pressure delivery side to the Low pressure suction side. Material: Flourine Rubber FKM 1E, Working Temperature : -20 to +160 deg.C, Working Pressure : 140 Bar (min)</p>		
1095	YDRAULIC & POWERLIN	992SU91077	UPPER BEARING	16	Nos	<p>Application: Assembled with Piston in Front suspension for reducing the wear between Piston & Housing structure. Dimensions: O.D-$\phi 350$mm, Thk-2.5mm, Length-152.4mm Material: ASTM B 584 (SAE430B/UNS C86300) Chemical Composition: Cu-60~66, Sn-0.20, Pb-0.20, Zn-22~28, Ni-1, Fe:2~4, Al: 0.5~1.5, Mn:1~1.5 Mechanical Requirements: Tensile Strength: 821 MPa Yield Strength Min : 462MPa Elongation: 18%</p>		






LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1096	YDRAULIC & POWERLIN	992SU91085	LOWER BEARING	32	Nos	<p>Application: Placed in between the Gland and Rod structure in Front suspension for reducing the wear .</p> <p>Dimensions: O.D-φ304.7mm, Thk-2.5mm, Length-152.4mm</p> <p>Material: ASTM B 584 (SAE430B/UNS C86300)</p> <p>Chemical Composition: Cu-60~66, Sn-0.20, Pb-0.20, Zn-22~28, Ni-1, Fe:2~4, Al: 0.5~1.5, Mn:1~1.5</p> <p>Mechanical Requirements: Tensile Strength: 821 MPa Yield Strength Min : 462MPa Elongation: 18%</p>		
1097	YDRAULIC & POWERLIN	VC2624	PIN ROLL	274	Nos	<p>Application: To lock the castle nut.</p> <p>General: Pins Spring Type C Heavy Duty (Spirol) conform to SAE J 496 for dimensions and specifications for coiled spring pins series A</p> <p>Material: High Carbon Steel Black Oil Finish</p>		
1098	YDRAULIC & POWERLIN	171HM93112	PLANE BEARING	116	Nos	<p>Application: Used in Hydraulic pump assembly to support drive and driven gear</p> <p>Material: Lead Bronze Alloy conforming to JIS H 1251 (KLBC 6B).</p> <p>Equivalent Material: JISLBC6, SAE794, SAE799</p> <p>Chemical Composition: Sn-3.0~4.0, Pb-21.0~25.0, Zn-0.75Max, Ni-0.5Max, Sb-0.35Max, Fe-0.25Max, Cu-Remaining</p> <p>Mechanical properties: Hardness with Back Plate Hv (5kg) - 35~60 Tensile strength - 11.1 kg/mm² Shearing Strength - 10.0 kg/mm² Plate Inside with Pb-Sn Thickness: 0.01~0.03 (Pb 90% Sn 10%)</p>		
1099	YDRAULIC & POWERLIN	640000466700	LOWER BEARINGFRONT	116	Nos	<p>Application: Placed in between the Lower bearing retainer and Rod structure in Front suspension for reducing the wear .</p> <p>Material: Phenolic resin (PM-1)</p>		
1100	YDRAULIC & POWERLIN	640000466902	UPPER BEARING FRONT	116	Nos	<p>Application: Assembled with Upper bearing retainer in Front suspension for reducing the wear between retainer & Housing structure. Material: Turcite 225 Tubing with 8.575"OD & 8.025"ID</p>		
1101	YDRAULIC & POWERLIN	PC0455	O RING	56	Nos	<p>This O Ring is used in the Suspension Cylinder Application for Gland Sealing for sealing against External leakage between Gland and Tube.</p> <p>Material : NBR Material with Hardness 70 Shore A.</p>		







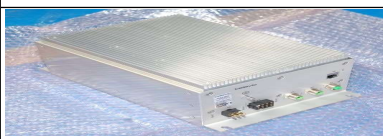
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1102	YDRAULIC & POWERLIN	640000479102	U CUP ROD SEAL	116	Nos	Rod Seals (Double Lip type) used in the Suspension Cylinder Application for sealing against external leakage during reciprocal movement of Piston Rod. Material: Polyurethane or Lubrethane or Urethane, - Operating Pressure: up to 6,000 psi -Dual Lip Design -Intermittent Pressure to 125% (7,500 psi) Material : Wear Resistant polyurethane Operating Temp Range : -40° to +120°C		
1103	YDRAULIC & POWERLIN	640000478800	WIPER SEAL	116	Nos	Also called as Dust SealsBase are used for protecting the Rod seals and internal components from entry of dust or foreign materials. Material: Lubrithane U-1003 E Red. Shore hardness: 95 Durometer. Operating Pressure Range : 0~400 bar (5 800 psi). Max Speed : 1 m/s,(3.2 ft/s). Temperature Range : -30°C to +100°C		
1104	YDRAULIC & POWERLIN	640000479201	WIPER SEAL	116	Nos			
1105	YDRAULIC & POWERLIN	992SU91141	DAMPER	16	Nos	Dampers are used in Suspensions as mechanical stopper and to observe the impact of the moving barrel structure. Material: Polyurthane with Hardness 90 Shore A		
1106	YDRAULIC & POWERLIN	116HC91205	PACKING ROD	142	Nos	i) a) Seal Material : Iron Rubber (U801) or Polyurethane Shore 90A, b) Retaining Ring Material : Steel ii) Operating Temperature : - 25 to +110 deg C iii) Operating Velocity : Upto 1 m/sec		
1107	YDRAULIC & POWERLIN	TY1503	SEAL	14	Nos	Material: Aluminium Bronze ASTM B-148 Alloy No. 954 (Gr.C) Tensile Strength : 75,000 PSI. Yield Strength : 30,000 PSI. Elongation: 12% , Hardness : 150 HB,		
1108	YDRAULIC & POWERLIN	PB6628	SNAP RING	30	Nos	Material : SAE1065 Oil Dipped, Hardness : 43~48 HRC		

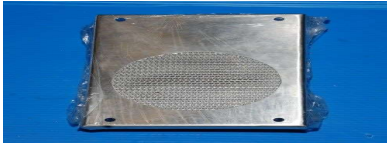





LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1109	YDRAULIC & POWERLIN	175HM61223	SEALING RING	116	Nos	Seal Rings are fitted on the Static side of Thrust Plate/Side Plate on the Hydraulic Pump Assy to arrest the leakage of oil from High pressure delivery side to the Low pressure suction side. Material: Flourine Rubber FKM- 1E, Working Temperature : -20 to +160 deg.C, Working Pressure : 140 Bar (min)		
1110	BANGALORE COMPLEX	94221155	DIGITAL VIDEO RECORDER	48	NO	DIGITAL VIDEO RECORDER, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1111	BANGALORE COMPLEX	94221156	SALOON CAMERA	576	NO	CCTV CAMERA SALOON, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1112	BANGALORE COMPLEX	94221157	EXTERIOR CAMERA, DM CAR_LEFT	48	NO	EXTERIOR CAMERA, DM CAR_LEFT, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1113	BANGALORE COMPLEX	94221158	EXTERIOR CAMERA, DM CAR_RIGHT	48	NO	EXTERIOR CAMERA, DM CAR_RIGHT, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1114	BANGALORE COMPLEX	94221159	EXTERIOR CAMERA, M CAR_LEFT	48	NO	EXTERIOR CAMERA, M CAR_LEFT, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1115	BANGALORE COMPLEX	94221160	EXTERIOR CAMERA, M CAR_RIGHT	48	NO	EXTERIOR CAMERA, M CAR_RIGHT, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		
1116	BANGALORE COMPLEX	94221161	CCTV HMI	48	NO	CCTV HMI, CCTV SYSTEM FOR KMRCL-RS(3R) PROJECT		





LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1117	BANGALORE COMPLEX	94221140	CCU WITH TCMS & RADIO INTERFACE	48	NO	CENTRAL CONTROL UNIT, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1118	BANGALORE COMPLEX	94221141	MAIN COMMUNICATION CONTROL PANEL	48	NO	MAIN COMMUNICATION CONTROL PANEL, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1119	BANGALORE COMPLEX	94221142	DIGITAL VIDEO ANNOUNCEMENT UNIT	48	NO	DIGITAL VIDEO ANNOUNCEMENT UNIT, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1120	BANGALORE COMPLEX	94221143	AUXILIARY COMMUNICATION CONTROL	48	NO	AUXILIARY COMMUNICATION CONTROL PANEL, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1121	BANGALORE COMPLEX	94221144	GOOSE NECK MICROPHONE + PTT BUTTON	48	NO	GOOSENECK MICROPHONE + PTT BUTTON, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1122	BANGALORE COMPLEX	94221145	CAB LOUDSPEAKER	48	NO	CAB LOUDSPEAKER, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT	SI No. 1110 to 1131 " PUBLIC ADDRESS & PUBLIC INFORMATION SYSTEM" to be developed from same source.	
1123	BANGALORE COMPLEX	94221146	AUDIO AMPLIFIER UNIT (AAU)	144	NO	AUDIO AMPLIFIER UNIT (AAU), PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		






LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1124	BANGALORE COMPLEX	94221147	INTERIOR LOUDSPEAKERS	1152	NO	INTERIOR LOUDSPEAKER, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		
1125	BANGALORE COMPLEX	94221148	EXTERNAL LOUD SPEAKER	576	NO	EXTERNAL LOUD SPEAKER, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		
1126	BANGALORE COMPLEX	94221149	PASSENGER EMERGENCY ALARM UNIT	576	NO	PASSENGER EMERGENCY ALARM UNIT, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		
1127	BANGALORE COMPLEX	94221150	PAD PUSH BUTTON	576	NO	PAD PUSH BUTTON, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		
1128	BANGALORE COMPLEX	94221151	TFT DISPLAY	864	NO	TFT DISPLAY, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		
1129	BANGALORE COMPLEX	94221152	FRONTAL DESTINATION INDICATOR (FDI/TNI)	48	NO	FRONTAL DESTINATION INDICATOR/TRAIN NUMBER INDICATOR, PAPIS SYSTEM FOR KMRCL-RS(3R) PROJECT		





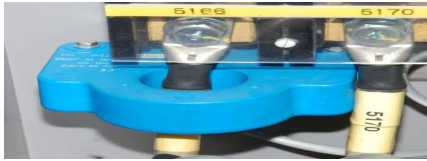
LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1130	BANGALORE COMPLEX	94221153	28 PORT ETHERNET SWITCH	96	NO	SWITCH 28 PORTS, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1131	BANGALORE COMPLEX	94221154	16 PORT ETHERNET SWITCH	48	NO	SWITCH 16 PORTS, PAPIS SYSTEM FOR KMRL-RS(3R) PROJECT		
1132	BANGALORE COMPLEX	94221086	VIDEO DISPLAY UNIT	48	NO	TMS DISPLAY UNIT TO DRG. NO. 94221086 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1133	BANGALORE COMPLEX	94221087	ANTENNA	48	NO	WIFI ANTENNA TO DRG. NO. 94221087 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1134	BANGALORE COMPLEX	94221088	SPEAKER	48	NO	SPEAKER TO MELCO PART NO. MS-A2031 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1135	BANGALORE COMPLEX	94221066	VVVF INVERETER BOX	96	NO	VVVF INVERTER TO MELCO PART NO. MAP-194-75VD307 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE		
1136	BANGALORE COMPLEX	94221067	TRACTION MOTOR	384	NO	TRACTION MOTOR TO MELCO PART NO. MB-5117-A AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE		
1137	BANGALORE COMPLEX	94221068	SIV BOX / APS	96	NO	AUXILIARY POWER SUPPLY TO MELCO PART NO. NC-EBT165C AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE <-&-> CONNECTORS.		




LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1138	BANGALORE COMPLEX	94221069	POWER EXTENSION BOX	48	NO	POWER EXTENSION BOX TO DRG. NO. 94221069 AND CONFORMING TO PTS DOC. NO.GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1139	BANGALORE COMPLEX	94221070	SHORE SUPPLY BOX	96	NO	SHORE SUPPLY BOX TO DRG. NO. 94221070 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1140	BANGALORE COMPLEX	94221071	BATTERY CONTROL PARTS	96	NO	BATTERY CONTROL PARTS TO DRG. NO. 94221071 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1141	BANGALORE COMPLEX	94221072	FILTER INDUCTOR	96	NO	FILTER INDUCTOR TO DRG. NO. 94221072 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS		
1142	BANGALORE COMPLEX	94221073	BRAKE RESISTOR	96	NO	BRAKE RESISTOR TO DRG. NO. 94221073 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1143	BANGALORE COMPLEX	94221074	MASTER CONTROLLER	48	NO	MASTER CONTROLLER TO DRG. NO. 94221074 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1144	BANGALORE COMPLEX	94221075	PWM GENERATOR	48	NO	PWM GENERATOR TO DRG. NO. 94221075 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1145	BANGALORE COMPLEX	94221076	HSCB BOX	96	NO	HSCB BOX TO DRG. NO. 94221076 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1146	BANGALORE COMPLEX	94221077	MS BOX	96	NO	MS BOX TO DRG. NO. 94221077 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1147	BANGALORE COMPLEX	94221078	MS2 BOX	96	NO	MS2 BOX TO DRG. NO. 94221078 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1148	BANGALORE COMPLEX	94221079	KEY BOX	48	NO	KEY BOX TO MELCO PART NO. MS-2438 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE.		
1149	BANGALORE COMPLEX	94221080	LIGHTNING ARRESTER	96	NO	LIGHTNING ARRESTER TO DRG. NO. 94221080 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1150	BANGALORE COMPLEX	94221081	TMS CONTROL CENTRAL UNIT	48	NO	CONTROL CENTRAL UNIT TO DRG. NO. 94221081 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1151	BANGALORE COMPLEX	94221202	CONNECTOR (PLUG)	336	NO	CONNECTOR(PLUG) TO MELCO PART NO. VGE1D28-21SN AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1152	BANGALORE COMPLEX	94221205	SOCKET CONTACT	23088	NO	SOCKET CONTACT TO MELCO PART NO. RCS16M-23D28 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1153	BANGALORE COMPLEX	94221206	CONNECTOR	384	NO	CONNECTOR TO MELCO PART NO. MYSN105T(6348200175) AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1154	BANGALORE COMPLEX	94221207	CT	96	NO	CT TO MELCO PART NO. HTV50-S/SP2 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		




LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative SI.No	Division	Part Number	Description	Approx. Annual Qty. Reqrmnt	UoM	Brief Specifications	Remarks	Photograph	
1155	BANGALORE COMPLEX	94221208	POWER SUPPLY	96	NO	POWER SUPPLY TO MELCO PART NO. NJD-8048 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.			
1156	BANGALORE COMPLEX	94221209	CONNECTOR	144	NO	CONNECTOR TO MELCO PART NO. QE4501A-50S AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.			
1157	BANGALORE COMPLEX	94221210	CONNECTOR	144	NO	CONNECTOR TO MELCO PART NO. QE4401-50P AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.			
1158	BANGALORE COMPLEX	94221211	PIN CONTACT	7200	NO	PIN CONTACT TO MELCO PART NO. 031-50565-002 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.			
1159	BANGALORE COMPLEX	94221213	CANNON PLUG	48	NO	CANNON PLUG TO MELCO PART NO. QE4501A-30S-F0 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1160	BANGALORE COMPLEX	94221216	CONNECTOR	96	NO	CONNECTOR TO MELCO PART NO SG102955R00002 AND CONFORMING TO PTS DOC.NO.GR/TD/3407 LATEST REVISION.			
1161	BANGALORE COMPLEX	94221218	SOCKET CONTACT	2304	NO	SOCKET CONTACT TO MELCO PART NO. SC201153 AND CONFORMING TO PTS DOC.NO.GR/TD/3407 LATEST REVISION.			
1162	BANGALORE COMPLEX	94221219	CONNECTOR	1728	NO	CONNECTOR TO MELCO PART NO. H60A353001 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1163	BANGALORE COMPLEX	94221220	MALE CONTACT	6912	NO	MALE CONTACT TO MELCO PART NO. H9N6901001 AND CONFORMING TO PTS DOC.NO.GR/TD/3407 LATEST REVISION.			
1164	BANGALORE COMPLEX	94221222	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H39B293G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1165	BANGALORE COMPLEX	94221223	SOCKET CONTACT	132864	NO	SOCKET CONTACT TO MELCO PART NO. H39B210001 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.	SI No. 1132 to 1230 " PROPULSION SYSTEM ITEMS" to be developed from same source.		
1166	BANGALORE COMPLEX	94221226	CONNECTOR ASSY	576	NO	CONNECTOR ASSY TO MELCO PART NO. H39B293G06 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1167	BANGALORE COMPLEX	94221227	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1168	BANGALORE COMPLEX	94221228	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1169	BANGALORE COMPLEX	94221229	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1170	BANGALORE COMPLEX	94221231	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1171	BANGALORE COMPLEX	94221232	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			
1172	BANGALORE COMPLEX	94221233	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6219G06 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.			


LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1173	BANGALORE COMPLEX	94221236	CONNECTOR ASSY	288	NO	CONNECTOR ASSY TO MELCO PART NO. H39B293G07 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1174	BANGALORE COMPLEX	94221237	CONNECTOR ASSY	96	NO	CONNECTOR ASSY TO MELCO PART NO. H39B294G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1175	BANGALORE COMPLEX	94221239	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1176	BANGALORE COMPLEX	94221240	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1177	BANGALORE COMPLEX	94221241	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1178	BANGALORE COMPLEX	94221242	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1179	BANGALORE COMPLEX	94221243	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1180	BANGALORE COMPLEX	94221244	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6221G06 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1181	BANGALORE COMPLEX	94221245	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6220G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1182	BANGALORE COMPLEX	94221246	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6222G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1183	BANGALORE COMPLEX	94221247	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6222G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1184	BANGALORE COMPLEX	94221248	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6222G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1185	BANGALORE COMPLEX	94221249	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6222G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1186	BANGALORE COMPLEX	94221250	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6222G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1187	BANGALORE COMPLEX	94221254	CONNECTOR ASSY	240	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1188	BANGALORE COMPLEX	94221255	CONNECTOR ASSY	240	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1189	BANGALORE COMPLEX	94221256	CONNECTOR ASSY	240	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1190	BANGALORE COMPLEX	94221257	CONNECTOR ASSY	240	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1191	BANGALORE COMPLEX	94221258	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1192	BANGALORE COMPLEX	94221259	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6223G06 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1193	BANGALORE COMPLEX	94221260	CONNECTOR ASSY	144	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6220G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1194	BANGALORE COMPLEX	94221261	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6240G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1195	BANGALORE COMPLEX	94221262	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6240G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1196	BANGALORE COMPLEX	94221263	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6240G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1197	BANGALORE COMPLEX	94221264	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6240G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1198	BANGALORE COMPLEX	94221265	CONNECTOR ASSY	48	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6240G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1199	BANGALORE COMPLEX	94221266	SOCKET CONTACT	1536	NO	SOCKET CONTACT TO MELCO PART NO. H39B210G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1200	BANGALORE COMPLEX	94221267	CONNECTOR ASSY	192	NO	CONNECTOR ASSY TO MELCO PART NO. H39B294003 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1201	BANGALORE COMPLEX	94221268	CONNECTOR ASSY	96	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6224G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1202	BANGALORE COMPLEX	94221269	CONNECTOR ASSY	96	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6224G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1203	BANGALORE COMPLEX	94221270	CONNECTOR ASSY	96	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6224G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1204	BANGALORE COMPLEX	94221271	CONNECTOR ASSY	96	NO	CONNECTOR ASSY TO MELCO PART NO. H7M6224G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1205	BANGALORE COMPLEX	94221273	SET OF CONNECTOR ASSY	48	NO	SET OF CONNECTOR ASSY TO MELCO PART NO. MS-A2031A AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1206	BANGALORE COMPLEX	94221274	CN(DM)2	48	NO	CN(DM)2 TO MELCO PART NO. MS-A1947 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1207	BANGALORE COMPLEX	94221082	CN(DM)1	48	NO	COMMUNICATION NODE1 (CN1:DMC) TO DRG. NO. 94221082 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1208	BANGALORE COMPLEX	94221275	CN(T/M)2	96	NO	CN(T/M)2 TO MELCO PART NO. MS-A1949 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1209	BANGALORE COMPLEX	94221083	CN(T/M)1	96	NO	COMMUNICATION NODE1 (CN1:TC/MC) TO DRG. NO. 94221083 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1210	BANGALORE COMPLEX	94221276	RIO(DM)2	48	NO	RIO(DM)2 TO MELCO PART NO. MS-A1947 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1211	BANGALORE COMPLEX	94221084	RIO(DM)1	48	NO	REMOTE IO UNIT (RIO:DMC) TO DRG. NO. 94221084 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1212	BANGALORE COMPLEX	94221277	RIO(T/M)2	96	NO	RIO(T/M)2 TO MELCO PART NO. MS-A1953 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1213	BANGALORE COMPLEX	94221085	RIO(T/M)1	96	NO	REMOTE IO UNIT (RIO:TC/MC) TO DRG. NO. 94221085 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION AND WITH REQUISITE MOUNTING HARDWARE & CONNECTORS.		
1214	BANGALORE COMPLEX	94221203	CONNECTOR(PLUG)	192	NO	CONNECTOR(PLUG) TO MELCO PART NO. VGE1D28-21SW AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1215	BANGALORE COMPLEX	94221204	CONNECTOR(PLUG)	96	NO	CONNECTOR(PLUG) TO MELCO PART NO. VGE1D28-21SX AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1216	BANGALORE COMPLEX	94221212	QE-POL-POST	288	NO	QE-POL-POST TO MELCO PART NO. QE-POL-POST AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1217	BANGALORE COMPLEX	94221214	SOCKET CONTACT	864	NO	SOCKET CONTACT TO MELCO PART NO. 031-50794-002 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1218	BANGALORE COMPLEX	94221215	SOCKET CONTACT	576	NO	SOCKET CONTACT TO MELCO PART NO. 031-50675-002 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1219	BANGALORE COMPLEX	94221217	SOCKET CONTACT	384	NO	SOCKET CONTACT TO MELCO PART NO. SC201186 AND CONFORMING TO PTS DOC.NO.GR/TD/3407 LATEST REVISION.		
1220	BANGALORE COMPLEX	94221221	RING MARK ASSY	48	NO	RING MARK ASSY TO MELCO PART NO. H7M6218G01 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1221	BANGALORE COMPLEX	94221224	NAME PLATE	288	NO	NAME PLATE TO MELCO PART NO. H39B247001 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1222	BANGALORE COMPLEX	94221225	RING MARK ASSY	144	NO	RING MARK ASSY TO MELCO PART NO. H7M6218G02 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1223	BANGALORE COMPLEX	94221230	RING MARK ASSY	144	NO	RING MARK ASSY TO MELCO PART NO. H7M6218G03 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1224	BANGALORE COMPLEX	94221234	NAME PLATE	240	NO	NAME PLATE TO MELCO PART NO. H60A376001 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1225	BANGALORE COMPLEX	94221235	RING MARK ASSY	240	NO	RING MARK ASSY TO MELCO PART NO. H7M6218G04 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1226	BANGALORE COMPLEX	94221238	PIN CONTACT	864	NO	PIN CONTACT TO MELCO PART NO. H39B210002 AND CONFORMING TO PTS DOC. NO. GR/TD/3407 LATEST REVISION.		
1227	BANGALORE COMPLEX	94221251	COVER	1152	NO	COVER TO MELCO PART NO. H9L7941001 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1228	BANGALORE COMPLEX	94221252	NAME PLATE	48	NO	NAME PLATE TO MELCO PART NO. H60A376002 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1229	BANGALORE COMPLEX	94221253	RING MARK ASSY	48	NO	RING MARK ASSY TO MELCO PART NO. H7M6218G05 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1230	BANGALORE COMPLEX	94221272	RING MARK ASSY	48	NO	RING MARK ASSY TO MELCO PART NO. H7N6218G06 AND CONFORMING TO PTS DOC.NO. GR/TD/3407 LATEST REVISION.		
1231	BANGALORE COMPLEX	R605812000	CLEANING AGENT, HY-SC # 2200	2880	L	CLEANING AGENT, HY-SC # 2200		
1232	BANGALORE COMPLEX	R605805000	CLEANING AGENT - SR - 600 (1 KG CAN)	1440	CAN	R605805000,CLEANING AGENT SR600 IN cans of 1kg each.		
1233	BANGALORE COMPLEX	R605803000	CLEANING AGENT - SEACLEAN - Z	720	L	R605803000,CLEANING AGENT SEACLEAN - Z	Sl No. 1231 to 1235 " CLEANING AGENTS" to be developed from same source	

LIST OF ITEMS FOR DEVELOPMENT UNDER MAKE-II PROCEDURE -(PHASE-III)

Cumulative Sl.No	Division	Part Number	Description	Approx. Annual Qty. Reqmnt	UoM	Brief Specifications	Remarks	Photograph
1234	BANGALORE COMPLEX	R605802000	CLEANING AGENT - SOLVENT - YUSOL	720	L	R605802000,CLEANING AGENT SOLVENT		
1235	BANGALORE COMPLEX	R607909000	MOL - 500S Gray (tube)- Spot sealer	216	NO	R607909000,MOL 500S Gray tube Spot sealer		