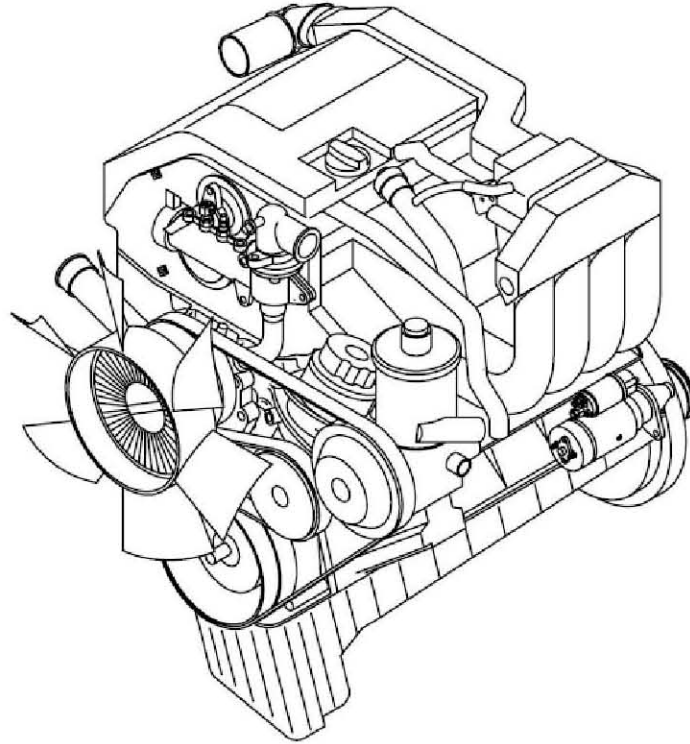


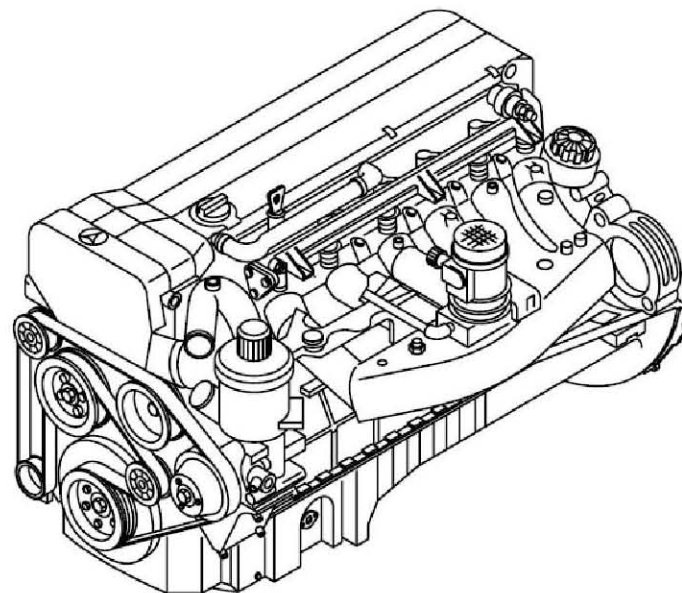
**1C - GASOLINE  
ENGINE MECHANICAL**

LAUNCH  
LAUNCH

E20,E23



E28,E32

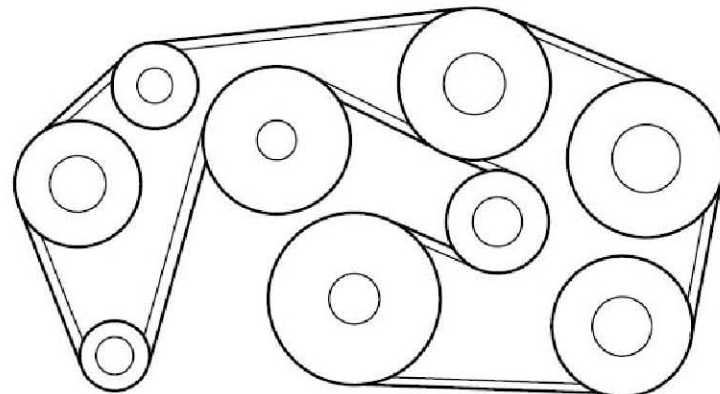


GASOLINE ENGINE MECH. - ENGINE UNIT (111)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	ENGINE ASSEMBLY (M/T) - OVERHAUL	1110100	-	-	24.2	27.0	24.2	26.0
	ENGINE ASSEMBLY (A/T) - OVERHAUL	1110300	21.0	23.5	23.2	26.0	23.2	26.0
2	ENGINE ASSEMBLY (M/T) - REPLACE	1110800	-	-	7.7	7.9	7.7	8.0
	ENGINE ASSEMBLY (A/T) - REPLACE	1110900	7.0	7.8	9.0	10.0	9.0	10.0

**CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON**

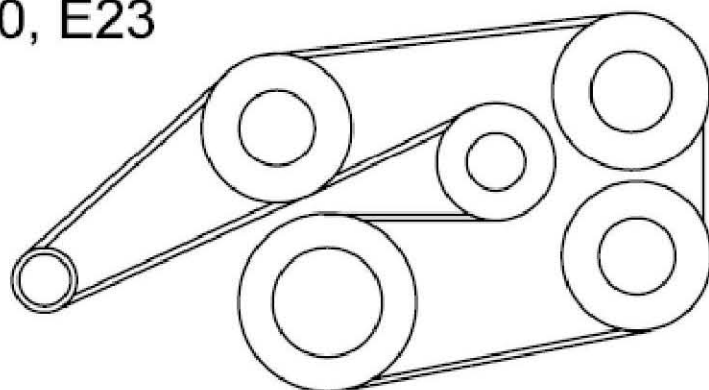
LAUNCH

E28, E32

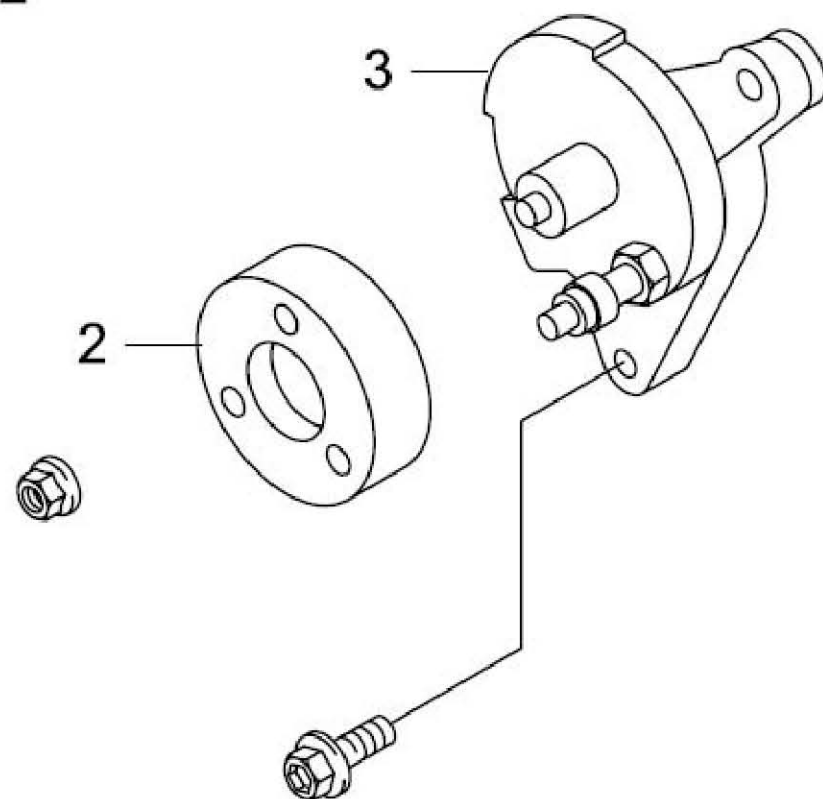


LAUNCH

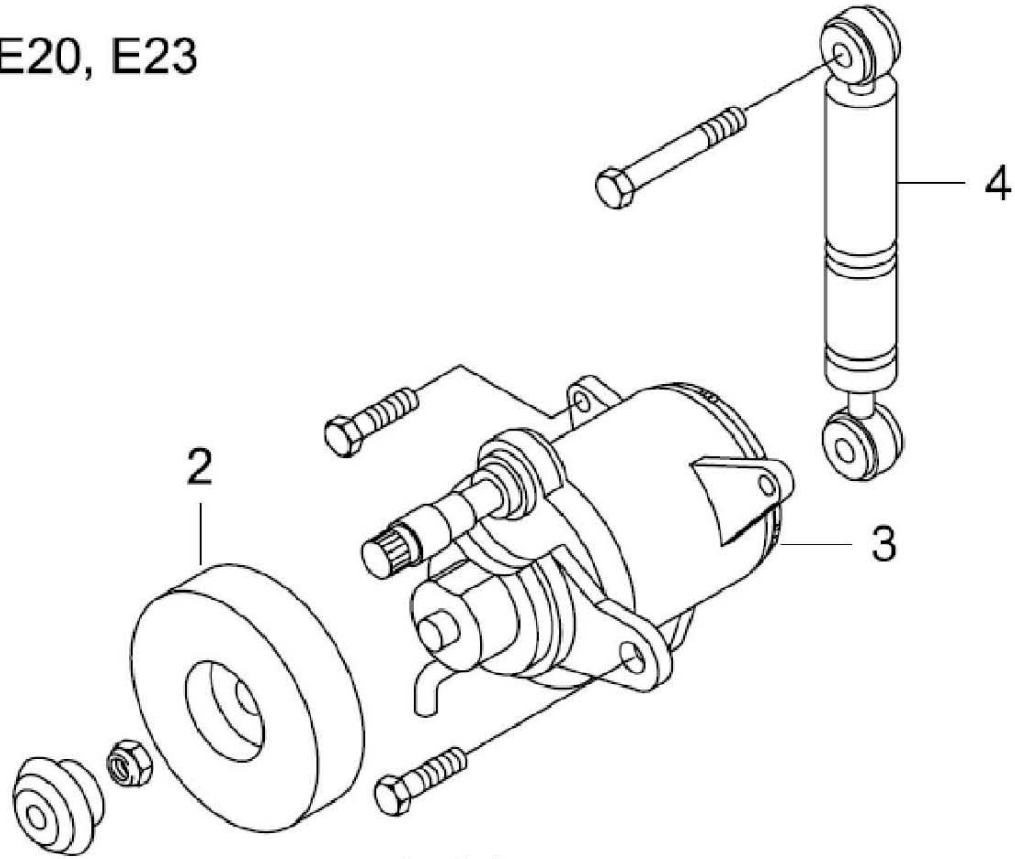
E20, E23



E28, E32



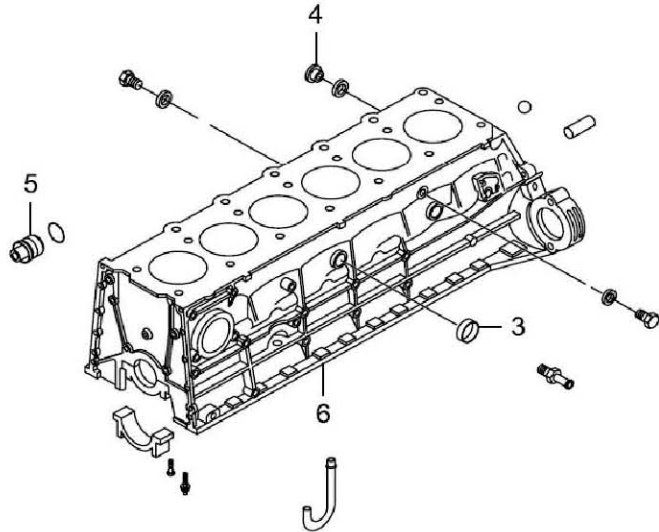
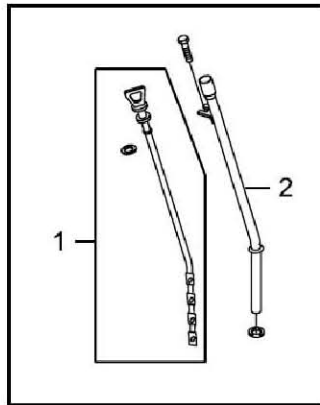
E20, E23



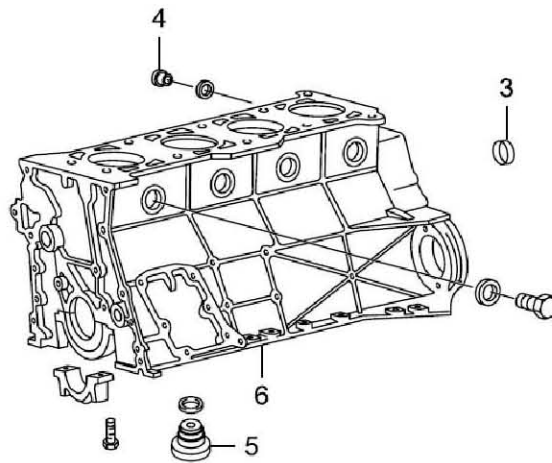
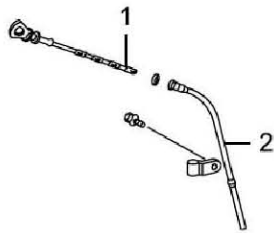
GASOLINE ENGINE MECH. - BELT SYSTEM (113)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	POLY-BELT - REPLACE	1132210	0.2	0.2	0.5	0.5	0.5	0.5
2	PULLEY, AUTO TENSIONER - REPLACE	1132410	1.2	1.2	0.5	0.5	0.5	0.5
3	TIGHTENER ASSEMBLY, BELT - REPLACE	1132550	1.2	1.2	0.5	0.5	0.5	0.5
4	SHOCK ABSORBER, TENSIONER - REPLACE	1132560	0.5	-	0.5	-	0.5	-

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON

E28, E32

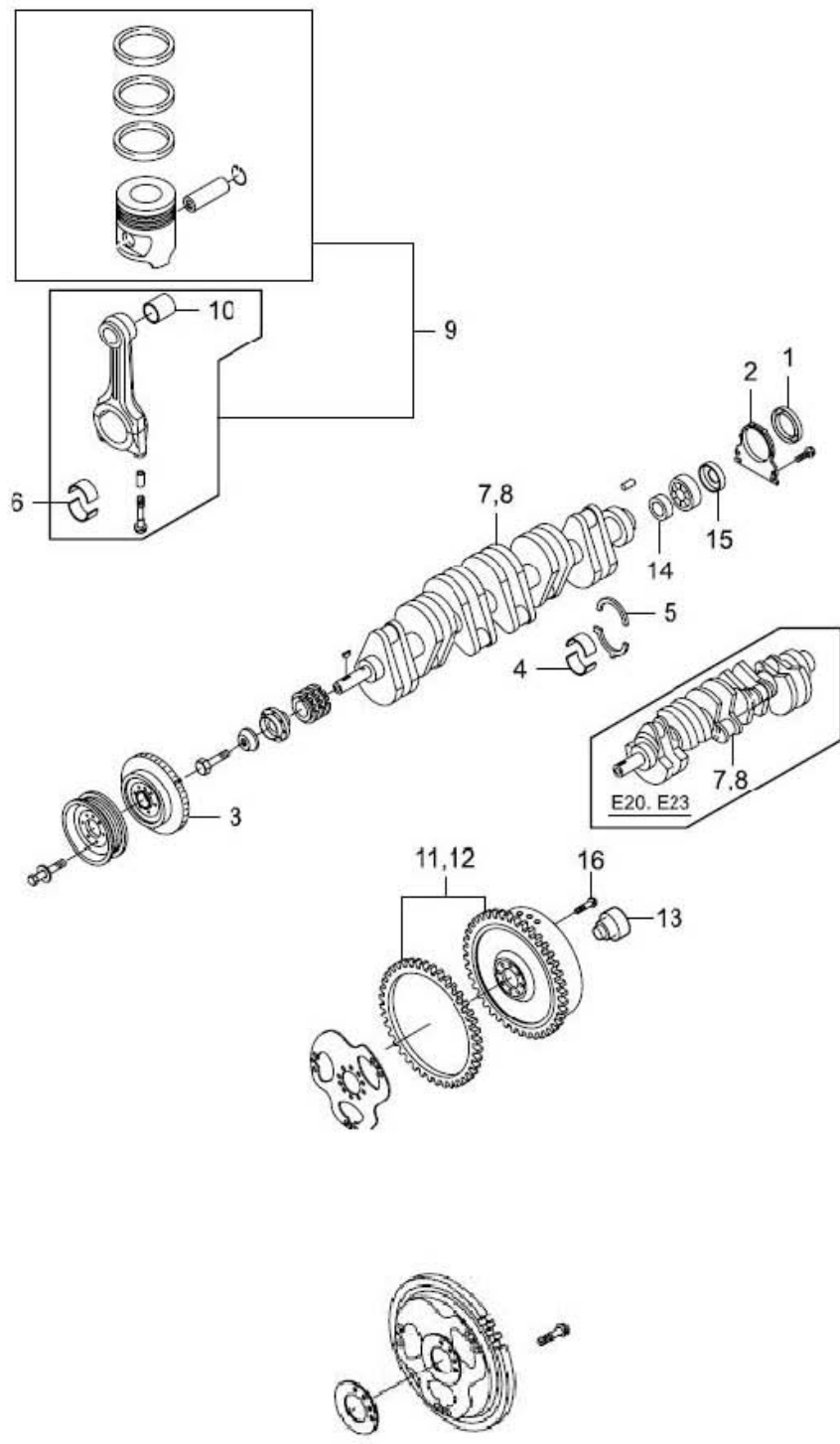


E20, E23



GASOLINE ENGINE MECH. - ENGINE BLOCK (121)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	OIL LEVEL INDICATOR AND/OR O-RING - REPLACE	1210200	0.2	0.2	0.2	0.2	0.2	0.2
2	TUBE, OIL LEVEL INDICATOR - REPLACE	1210300	0.3	0.3	0.3	0.3	0.3	0.3
3	PLUG, EXPANSION - REPLACE A - Replace each additional	1210700	7.6	7.6	4.1	4.4	4.1	4.4
		121070A	0.1	0.1	0.1	0.1	0.1	0.1
4	PLUG, CYLINDER BLOCK DRAIN - REPLACE	1210800	0.5	0.5	0.5	0.5	0.5	0.5
5	PLUG, OIL GALLERY - REPLACE	1210900	8.8	9.5	-	-	-	-
6	BLOCK, CYLINDER - REPLACE	1211100	21.5	23.5	23.2	26.0	23.2	26.0
7	SEMI BLOCK (SHORT BLOCK), CYLINDER - REPLACE	1211110	17.5	19.0	19.2	21.5	19.2	21.5

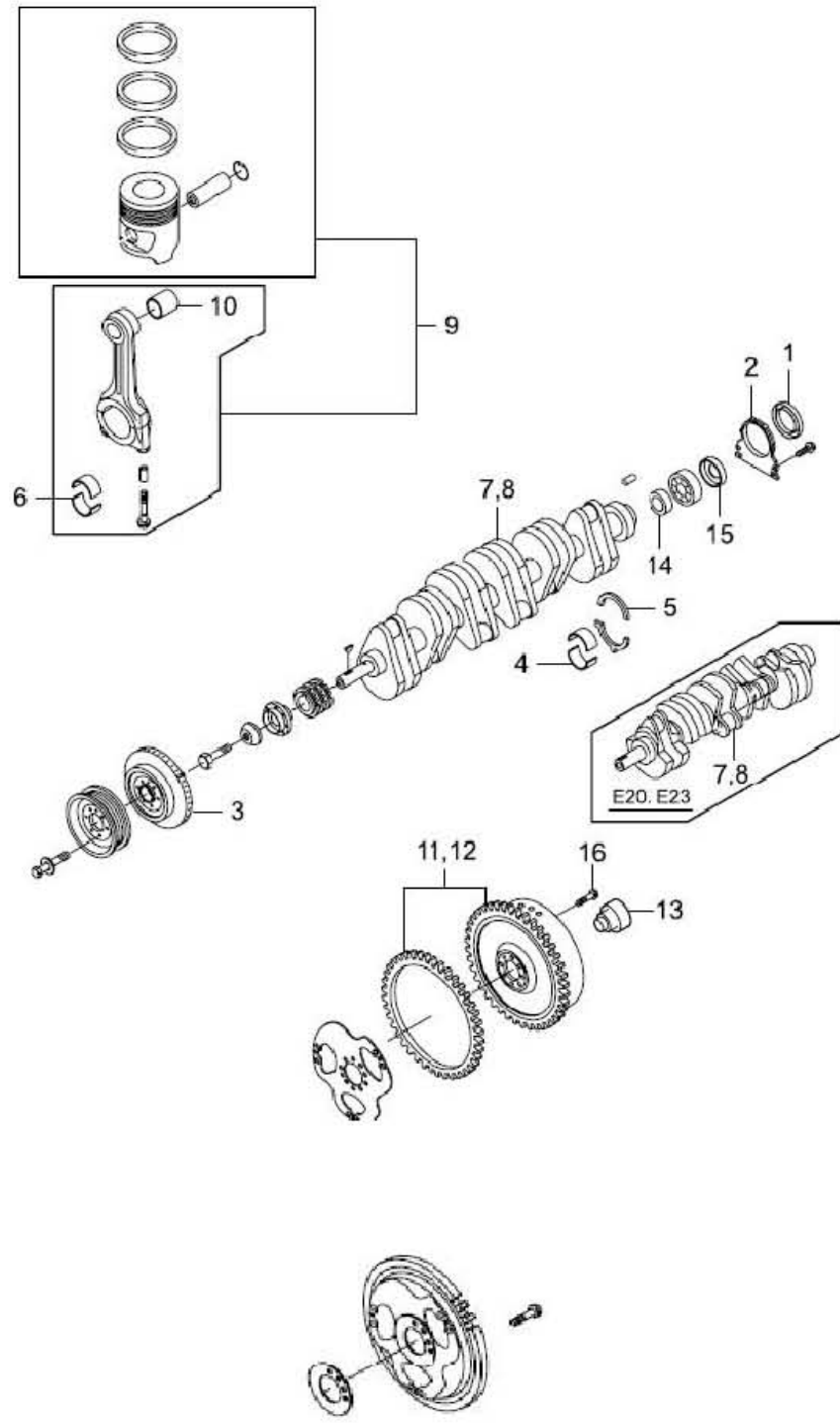
CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON





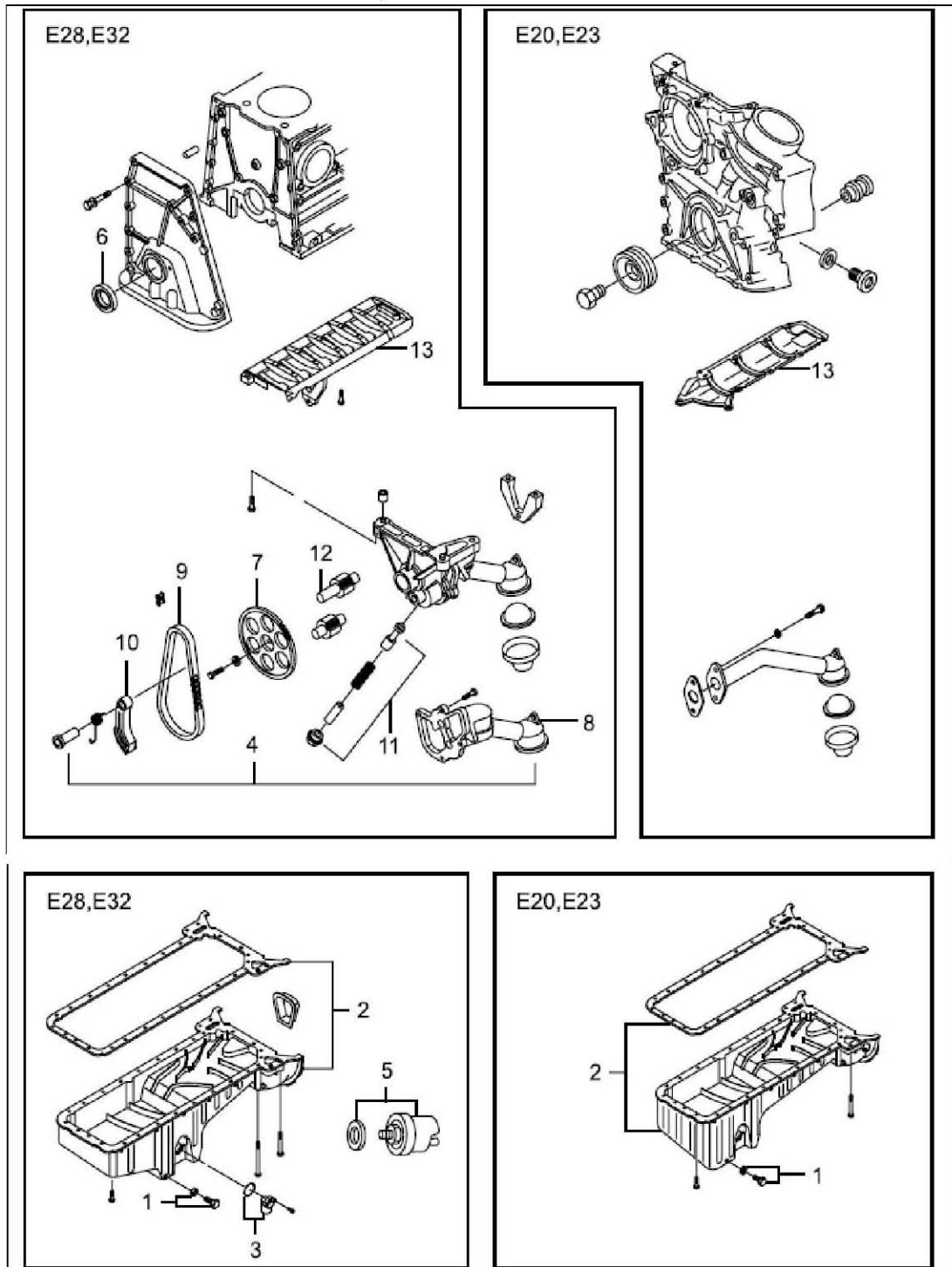
GASOLINE ENGINE MECH. - CRANKSHAFT & PISTON (122)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	SEAL (S), CRANKSHAFT REAR MAIN (A/T) - REPLACE	1220200	4.9	5.3	4.9	4.9	4.9	4.9
	SEAL (S), CRANKSHAFT REAR MAIN (M/T) - REPLACE	1220400	-	-	4.1	4.1	4.1	4.1
2	COVER, CRANKSHAFT SEALING (A/T) - REPLACE	1220410	5.3	5.7	5.3	5.3	5.3	5.3
	COVER, CRANKSHAFT SEALING (M/T) - REPLACE	1220420	-	-	4.5	4.5	4.5	4.5
3	DAMPER, CRANKSHAFT VIBRATION - REPLACE	1220500	2.8	2.8	2.8	2.8	2.8	2.8
4	BEARING, CRANKSHAFT MAIN (ONE) - REPLACE	1220600	9.7	10.7	9.7	9.7	9.7	9.7
	A - Replace each additional	122060A	0.1	0.1	0.1	0.1	0.1	0.1
5	BEARING, CRANKSHAFT THRUST - REPLACE	1220610	10.3	11.3	10.3	10.3	10.3	10.3
6	BEARING, CONNECTING ROD (ONE) - REPLACE	1220800	10.8	10.8	10.8	10.8	10.8	10.8
	A - Replace each additional	122080A	0.1	0.1	0.1	0.1	0.1	0.1
7	CRANKSHAFT (M/T) - REPLACE	1221100	-	-	13.8	13.8	13.8	13.8
	D - Replace one piston ring	122110D	-	-	0.4	0.4	0.4	0.4
	E - Replace all piston rings	122110E	-	-	1.2	1.2	1.2	1.2
	F - Replace one connecting rod	122110F	-	-	0.5	0.5	0.5	0.5
	G - Replace all connecting rods	122110G	-	-	1.2	1.2	1.2	1.2
8	CRANKSHAFT (A/T) - REPLACE	1221200	9.0	10.0	18.0	19.0	18.0	19.0
	D - Replace one piston ring	122120D	0.4	0.4	0.4	0.4	0.4	0.4
	E - Replace all piston rings	122120E	1.3	1.3	1.2	1.2	1.2	1.2
	F - Replace one connecting rod	122120F	0.5	0.6	0.5	0.6	0.5	0.6
	G - Replace all connecting rods	122120G	1.2	1.2	1.2	1.2	1.2	1.2
9	PISTON, ROD AND/OR RINGS (ONE) - REPLACE	1221500	13.7	16.0	19.5	19.5	19.5	19.5
	C - Replace each additional	122150C	0.1	0.1	0.1	0.1	0.1	0.1
10	BUSHING, CONNECTING ROD - REPLACE	1221540	14.2	16.5	19.5	19.5	19.5	19.5
	A - Replace each additional	122154A	0.1	0.1	0.1	0.1	0.1	0.1
11	FLYWHEEL (M/T) - REPLACE	1221700	-	-	5.3	5.3	5.3	5.3
	A - Flywheel ring gear	122170A	-	-	0.8	0.8	0.8	0.8

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON



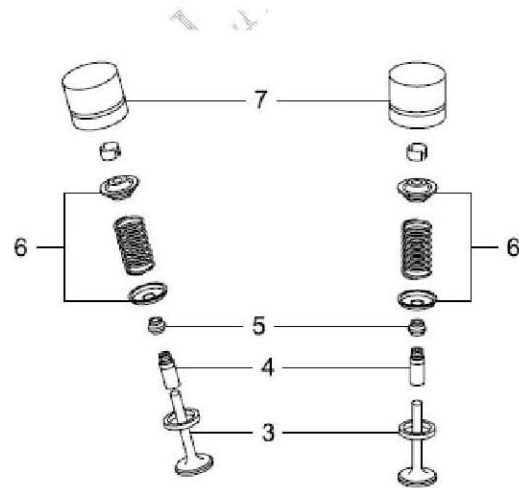
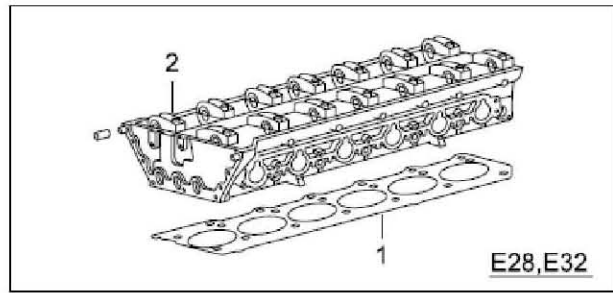
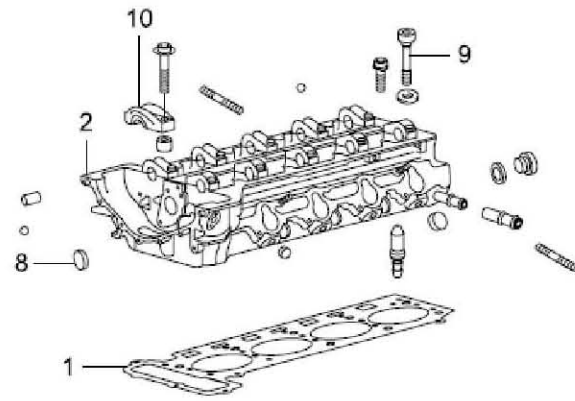
GASOLINE ENGINE MECH. - CRANKSHAFT & PISTON (122)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	C M		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
12	FLYWHEEL (A/T) - REPLACE A - Flywheel ring gear	1221900	4.8	5.2	6.3	6.3	6.3	6.3
		122190A	0.8	0.8	0.8	0.8	0.8	0.8
13	BEARING, PILOT - REPLACE	1222100	5.4	5.4	5.6	5.6	5.6	5.6

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON



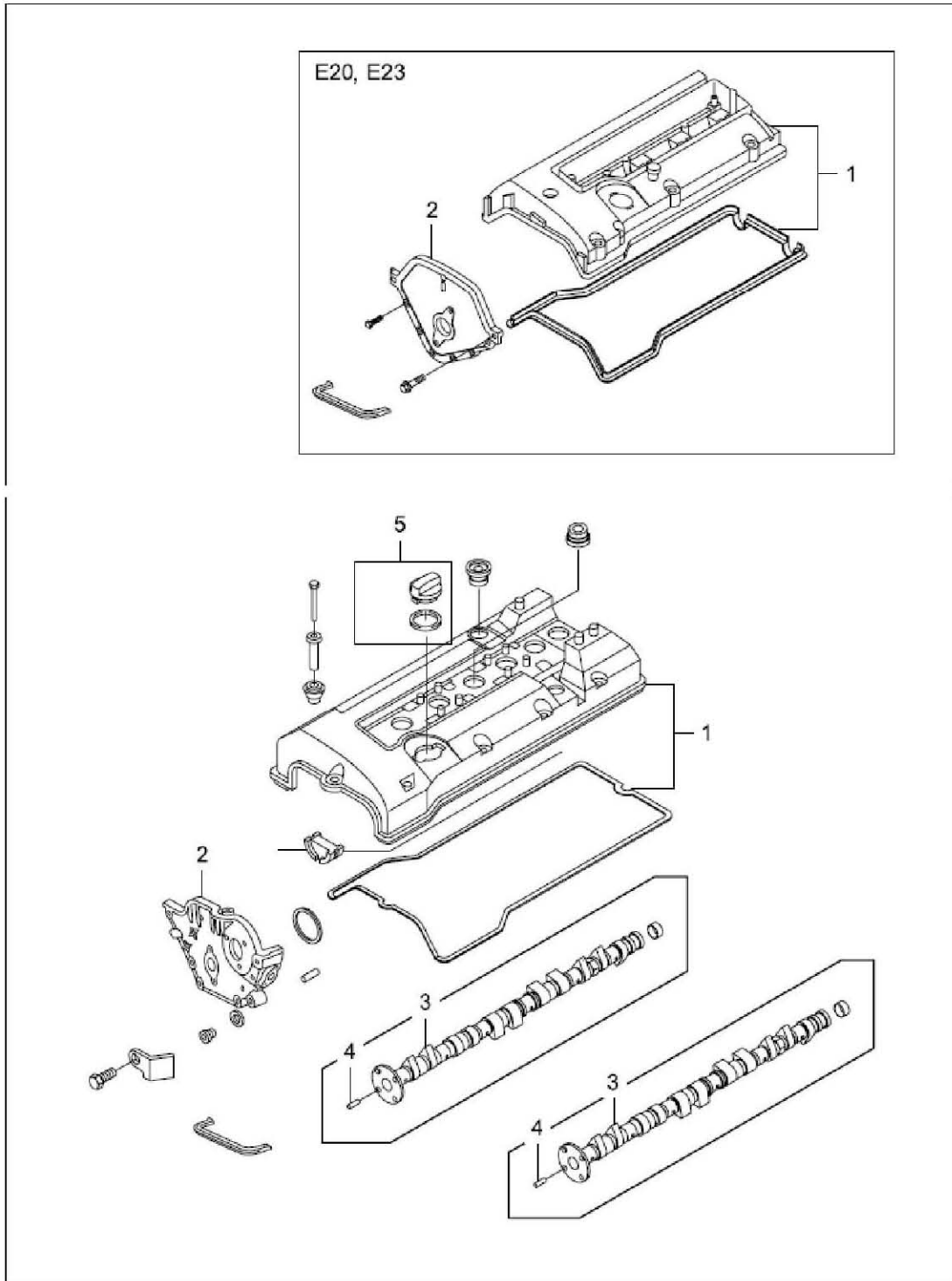
GASOLINE ENGINE MECH. - OIL PAN & PUMP (123)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	PLUG AND/OR GASKET, OIL PAN DRAIN - REPLACE	1231300	0.2	0.2	0.2	0.2	0.2	0.2
2	PAN AND/OR GASKET, OIL - REPLACE	1231500	9.1	9.8	5.0	5.0	5.0	5.0
	PAN AND/OR GASKET, OIL (AUTO) - REPLACE	1231510	7.9	8.6	5.0	5.0	5.0	5.0
3	SWITCH AND/OR GASKET, OIL LEVEL - REPLACE	1231600	0.3	0.3	0.3	0.3	0.3	0.3
4	PUMP, ENGINE OIL - REPLACE	1231700	9.0	9.0	4.0	4.0	4.0	4.0
	PUMP, ENGINE OIL - OVERHAUL	1231710	9.5	9.5	5.7	5.7	5.7	5.7
5	SWITCH, OIL PRESSURE GAUGE - REPLACE	1231900	0.7	0.7	0.4	0.4	0.4	0.4
6	OIL SEAL, CRANKSHAFT (FRONT) - REPLACE	1232300	7.7	9.2	3.7	3.9	3.7	3.9
7	SPROCKET, OIL PUMP - REPLACE	1232600	9.2	9.2	5.6	5.6	5.6	5.6
8	STRAINER ASSEMBLY, OIL - REPLACE	1232610	9.2	9.2	5.6	5.6	5.6	5.6
9	CHAIN, OIL PUMP ROLLER - REPLACE	1232670	9.2	9.2	5.6	5.6	5.6	5.6
10	TENSIONER, OIL PUMP ROLLER CHAIN - REPLACE	1232690	9.2	9.2	5.6	5.6	5.6	5.6
11	VALVE OIL PRESSURE RELIEF - REPLACE	1232700	9.2	9.2	5.6	5.6	5.6	5.6
12	SHAFT, OIL PUMP DRIVE - REPLACE	1232800	9.2	9.2	5.6	5.6	5.6	5.6
13	PLATE, OIL BAFFLE - REPLACE	1234100	8.7	8.7	5.6	5.6	5.6	5.6

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON



GASOLINE ENGINE MECH. - CYLINDER HEAD (131)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	C M		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	GASKET, CYLINDER HEAD - REPLACE	1312300	6.3	6.3	5.6	6.0	5.6	6.0
2	HEAD, CYLINDER - REPLACE	1312500	6.3	6.3	6.3	6.3	6.3	6.3
	HEAD, CYLINDER - OVERHAUL	1312600	8.4	8.6	8.4	8.6	8.4	8.6
3	VALVE (ONE CYLINDER) - REPLACE	1312700	6.8	7.0	8.4	8.6	8.4	8.6
	C - Valves (each additional)	131270C	0.1	0.1	0.1	0.1	0.1	0.1
4	GUIDE, VALVE - REPLACE	1312800	6.3	6.3	6.3	6.3	6.3	6.3
	C - Valves (each additional)	131280C	0.1	0.1	0.3	0.3	0.3	0.3
5	SEAL, VALVE GUIDE - REPLACE	1312810	2.2	2.2	6.6	6.6	6.6	6.6
	A - Replace each additional	131281A	0.1	0.1	0.1	0.1	0.1	0.1
6	SPRING CAP AND/OR SEAL, VALVE - REPLACE	1312900	6.8	7.0	6.6	6.6	6.6	6.6
7	LIFTER, VALVE - REPLACE	1313800	2.8	3.0	2.0	2.0	2.0	2.0
	C - Valves (each additional)	131380C	0.1	0.1	0.1	0.1	0.1	0.1
8	PLUG, CYLINDER HEAD CORE HOLE - REPLACE	1314700	1.5	1.5	0.9	1.4	0.9	1.4
	A - Replace each additional	131470A	0.1	0.1	0.1	0.1	0.1	0.1
9	BOLT, CYLINDER HEAD (ONE) - REPLACE	1314800	1.2	1.2	1.2	1.2	1.2	1.2
	A - Replace each additional	131480A	0.1	0.1	0.1	0.1	0.1	0.1
10	CAP, CAMSHAFT BEARING - REPLACE	1315600	0.9	0.9	1.2	1.2	1.2	1.2

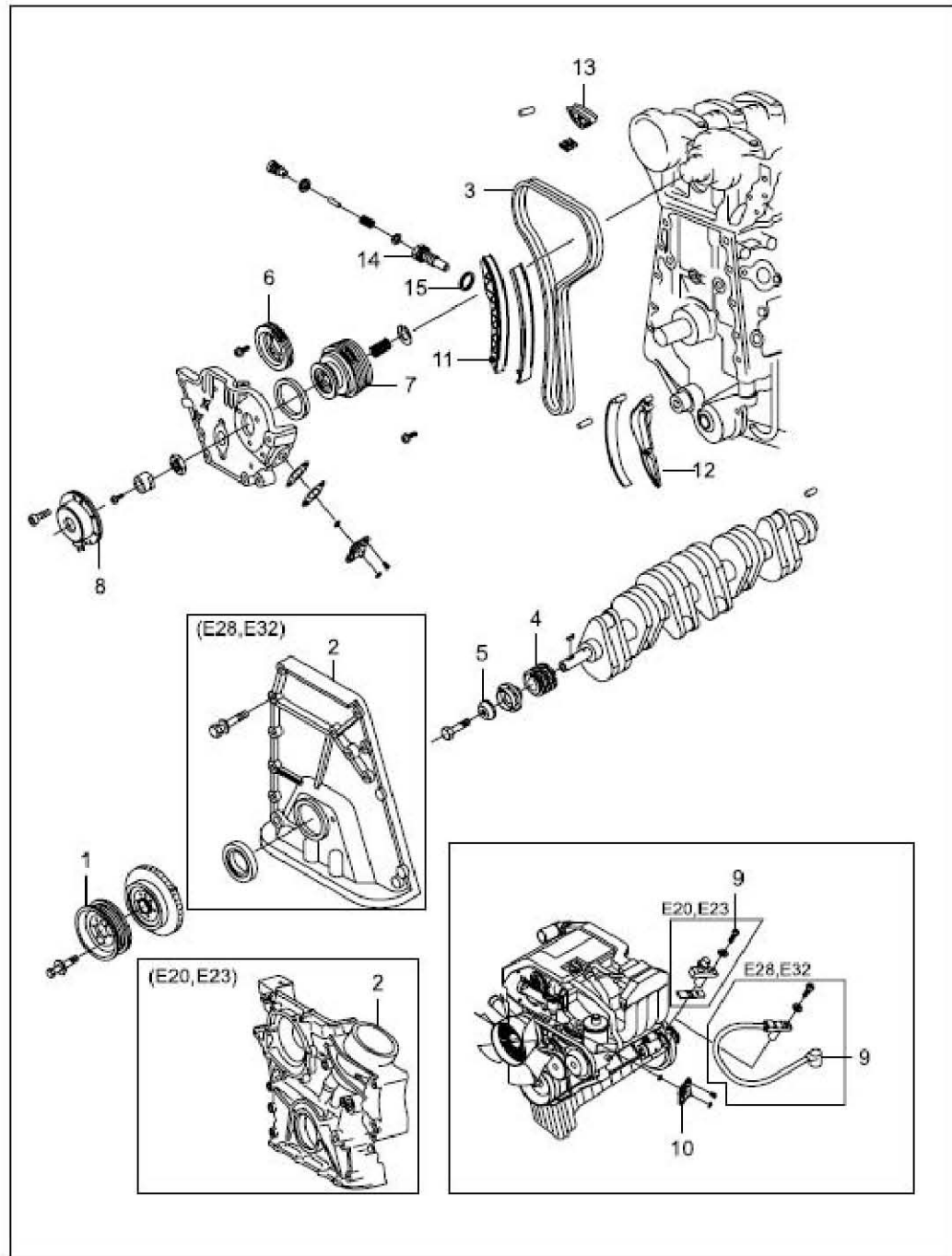
LAC



GASOLINE ENGINE MECH. - CAM SUPPORT & SHAFT (132)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	COVER AND/OR GASKET, CYLINDER HEAD - REPLACE	1322110	0.5	0.5	0.5	0.5	0.5	0.5
2	COVER, CYLINDER HEAD FRONT - REPLACE	1322210	4.1	4.1	4.1	4.1	4.1	4.1
3	CAMSHAFT - REPLACE	1322300	2.2	2.2	2.2	2.2	2.2	2.2
4	PIN, CAMSHAFT - REPLACE	1322610	0.7	0.7	0.7	0.7	0.7	0.7
5	CAP OR SEAL, OIL FILLER - REPLACE	1322700	0.2	0.2	0.2	0.2	0.2	0.2

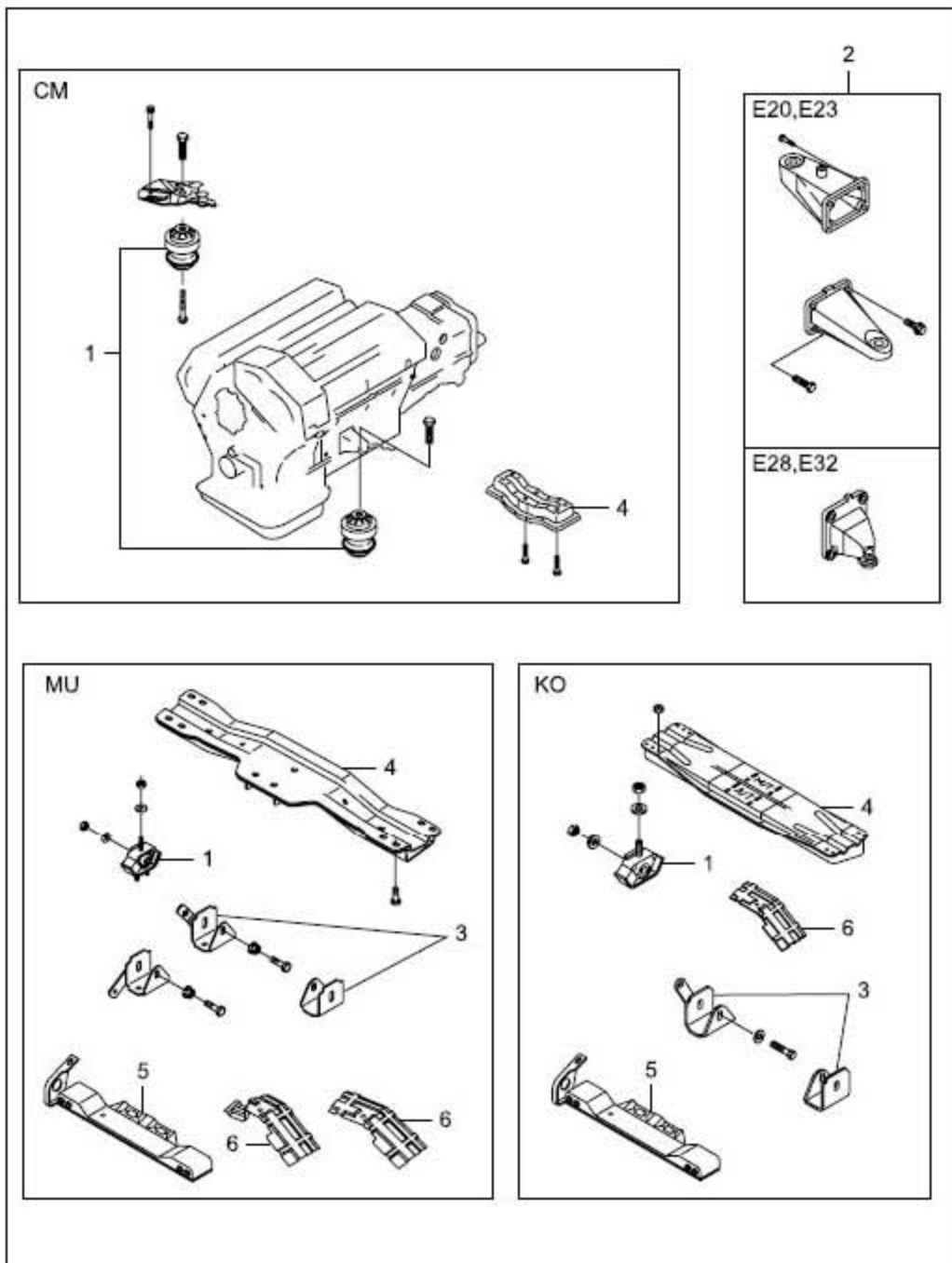
LAUNCH

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON



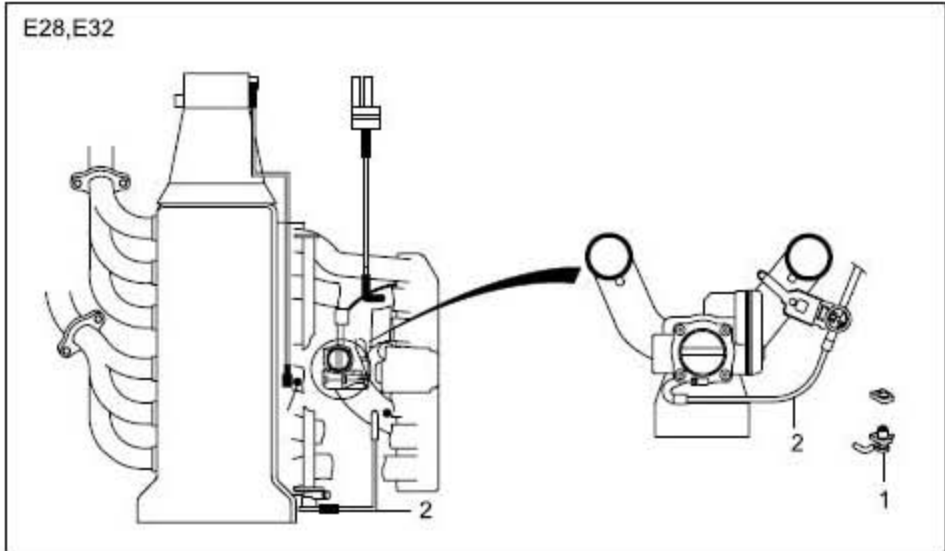
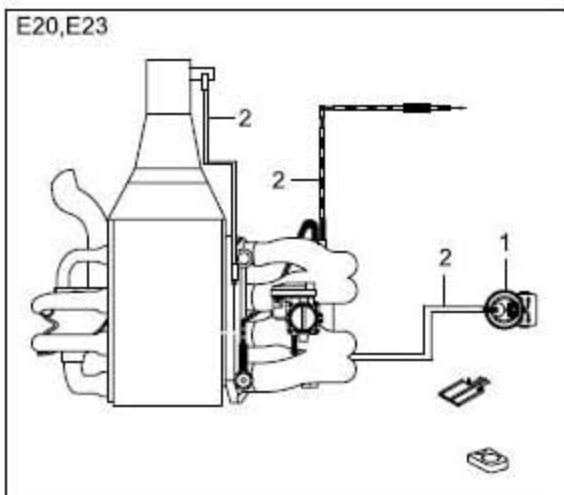


GASOLINE ENGINE MECH. - TIMING COVER & CHAINDRIVE (133)								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	PULLEY, CRANKSHAFT - REPLACE	1332100	2.8	2.8	2.0	4.0	2.0	4.0
2	COVER AND/OR GASKET, TIMING - REPLACE	1332200	8.8	9.5	5.8	5.8	5.8	5.8
3	BELT OR CHAIN, TIMING - REPLACE	1332500	5.2	5.6	5.2	5.6	5.2	5.6
4	SPROCKET, CRANKSHAFT TIMING - REPLACE	1333100	8.8	9.5	14.0	16.0	14.0	16.0
5	HUB OR VIBRATION DAMPER - REPLACE	1333140	3.4	3.4	3.4	3.4	3.4	3.4
6	SPROCKET, CAMSHAFT TIMING - REPLACE	1333300	2.7	2.7	2.7	2.7	2.7	2.7
7	ADJUST ASSEMBLY - REPLACE	1333400	3.0	3.0	3.0	3.0	3.0	3.0
8	MAGNET, CAMSHAFT ADJUST - REPLACE	1333430	0.2	0.2	0.2	0.2	0.2	0.2
9	SENSOR, CRANKSHAFT POSITION - REPLACE	1333700	0.7	0.7	0.6	0.6	0.6	0.6
10	SENSOR, CAMSHAFT POSITION - REPLACE	1333800	0.4	0.4	0.4	0.4	0.4	0.4
11	RAIL, CLAMPING SLIDING - REPLACE	1336500	9.4	9.4	1.5	1.5	1.5	1.5
12	RAIL, SLIDING - REPLACE	1336700	9.4	9.4	5.2	5.6	5.2	5.6
13	RAIL, UPPER SLIDING - REPLACE	1336900	1.5	1.5	1.2	1.2	1.2	1.2
14	CHAIN TIGHTENER - REPLACE	1337300	0.5	0.5	0.5	0.5	0.5	0.5
15	WASHER, CHAIN TIGHTENER - REPLACE	1337500	0.5	0.5	0.5	0.5	0.5	0.5



<b>GASOLINE ENGINE MECH. - ENGINE &amp; TRANSAXLE MOUNT (138)</b>								
NO.	OPERATION DESCRIPTION	OPERATION CODE	CM		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	MOUNT, ENGINE (FRONT) - REPLACE  Both	1380200	0.5	0.5	0.5	0.5	0.5	0.5
		1380210	0.8	0.8	0.8	1.0	0.8	1.0
2	BRACKET, ENGINE MOUNT (FRONT) - REPLACE  Both	1380400	0.5	0.5	0.5	0.5	0.5	0.5
		1380410	0.8	0.8	0.8	0.8	0.8	0.8
3	STOPPER ENGINE MOUNTING - REPLACE	1380420	0.5	0.5	0.5	0.5	0.5	0.5
4	CROSS MEMBER, ENGINE MOUNTING REAR - REPLACE	1380440	0.6	0.6	0.6	0.6	0.6	0.6
5	CROSS MEMBER, FRONT AXLE MOUNTING - REPLACE	1380600	-	-	0.6	0.6	0.6	0.6
6	INSULATOR, HEAT SHIELD - REPLACE	1384500	0.3	0.3	0.3	0.3	0.3	0.3

CM : CHAIRMAN, MU : MUSSO, KO : KORANDO, RX : REXTON



**GASOLINE ENGINE MECH. - VACUUM SYSTEM (139)**

NO.	OPERATION DESCRIPTION	OPERATION CODE	C M		MU/KO		RX	
			2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2	2.0/ 2.3	2.8/ 3.2
1	VALVE, PURGE CONTROL - REPLACE	1391300	0.3	0.3	0.5	0.5	0.5	0.5
2	VACUUM HOSE AND/OR TUBE - REPLACE	1391310	0.6	0.6	0.5	0.5	0.5	0.5