

# CAMSHAFT SPECIFICATIONS

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
Opens	Closes	Duration	Opens	Closes	Duration							
C-10-P	INT. EXH.											
C-400-P	INT. EXH.											
C-410-P	INT. EXH.											
CASC-2	INT. EXH.	-12 BTC 30 BBC	35 ABC -7 ATC	203 203	-12 BTC 70 BBC	84 ABC 42 ATC	292 292	.273 .273	.450 .450	111 111	1.65	HYD HYD
CASC-3	INT. EXH.	-17 BTC 38 BBC	31 ABC -8 ATC	194 210	21 BTC 76 BBC	83 ABC 44 ATC	284 300	.258 .282	.425 .465	113 113		HYD HYD
CASC-4	INT. EXH.	-17 BTC 35 BBC	36 ABC -12 ATC	199 203	12 BTC 64 BBC	94 ABC 38 ATC	286 282	.266 .274	.458 .471	115 115	1.72	HYD HYD
CASC-5	INT. EXH.	-10 BTC 34 BBC	25 ABC -16 ATC	195 198	21 BTC 63 BBC	71 ABC 26 ATC	272 269	.240 .246	.360 .369	111 111	1.6	HYD HYD
CCS-1	INT. EXH.	-10 BTC 34 BBC	25 ABC -16 ATC	168 170	21 BTC 63 BBC	71 ABC 26 ATC	286 344	.210 .224	.315 .336	108 108	1.5	0.015 0.008
CCS-2	INT. EXH.	-11 BTC 37 BBC	-25 ABC -14 ATC	194 203	14 BTC 62 BBC	66 ABC 29 ATC	260 271	.260 .273	.390 .410	108 116		HYD HYD
CCS-3	INT. EXH.	-22 BTC 12 BBC	14 ABC -20 ATC	172 172	13 BTC 12 BBC	70 ABC 30 ATC	263 262	.222 .222	.333 .333	107 107		HYD HYD
CCS-4	INT. EXH.	-14 BTC 35 BBC	24 ABC -17 ATC	190 198	18 BTC 68 BBC	73 ABC 31 ATC	272 280	.229 .235	.400 .412	116 109	1.75	HYD HYD
CCS-5	INT. EXH.	17 BTC 22 BBC	21 ABC 16 ATC	185 185			270 270	.271 .271	.406 .406	109 109	1.5	HYD HYD
CCS-6	INT. EXH.	20 BTC 12 BBC	10 ABC 18 ATC	172 172			244 244	.222 .222	.333 .333	105 105		HYD HYD
CCS-9	INT. EXH.	-19 BTC 24 BBC	27 ABC -16 ATC	188 188	25 BTC 68 BBC	71 ABC 28 ATC	276 276	.232 .232	.406 .406	113 110	1.75	HYD HYD
CCS-12	INT. EXH.	23 BTC 13 BBC	12 ABC 24 ATC	168 170			288 344	.210 .224	.309 .320	108 108	1.5	0.016 0.006
CCS-16	INT. EXH.	-5 BTC 29 BBC	19 ABC -15 ATC	194 194	25 BTC 59 BBC	63 ABC 29 ATC	268 268	.257 .257	.351 .351	102 112	1.3	HYD HYD
CCS-18	INT. EXH.	-20 BTC 10 BBC	12 ABC -18 ATC	172 172	29 BTC 59 BBC	61 ABC 30 ATC	270 270	.221 .221	.387 .387	106 104	1.75	HYD HYD
CCS-20	INT. EXH.	-14 BTC 33 BBC	30 ABC -17 ATC	196 196	16 BTC 63 BBC	74 ABC 27 ATC	270 270	.234 .234	.412 .412	107 119		HYD HYD
CCS-21	INT. EXH.	-20 BTC 20 BBC	33 ABC -7 ATC	193 193	11 BTC 51 BBC	78 ABC 38 ATC	269 269	.234 .234	.408 .408	104 116		HYD HYD
CCS-22	INT. EXH.	-5 BTC 43 BBC	35 ABC -10 ATC	210 213	28 BTC 77 BBC	80 ABC 37 ATC	285 297	.259 .259	.453 .453	109 117		HYD HYD
CCS-23	INT. EXH.	-18 BTC 28 BBC	14 ABC -14 ATC	176 194	16 BTC 48 BBC	54 ABC 25 ATC	244 259	.234 .257	.351 .385	106 112	1.5	HYD HYD
CCS-24	INT. EXH.	-9 BTC 36 BBC	18 ABC -14 ATC	189 202	14 BTC 63 BBC	56 ABC 26 ATC	250 269	.248 .273	.372 .409	102 116		HYD HYD
CCS-25	INT. EXH.	-12 BTC 36 BBC	25 ABC -13 ATC	193 203	19 BTC 66 BBC	69 ABC 34 ATC	268 280	.234 .253	.409 .442	104 116	1.75	HYD HYD
CCS-26	INT. EXH.	-20 BTC 13 BBC	12 ABC -3 ATC	172 190	29 BTC 56 BBC	61 ABC 40 ATC	270 276	.222 .232	.388 .406	106 98		HYD HYD
CCS-27	INT. EXH.	-20 BTC 28 BBC	16 ABC -14 ATC	176 194	14 BTC 54 BBC	50 ABC 25 ATC	244 259	.234 .257	.351 .385	108 112	1.5	HYD HYD
CCS-29	INT. EXH.	-12 BTC 30 BBC	21 ABC -17 ATC	189 193			244 244	.274 .280	.411 .420	111 111		.006 .018
CCS-30	INT. EXH.	-16 BTC 27 BBC	15 ABC -11 ATC	179 196	7 BTC 51 BBC	51 ABC 25 ATC	238 256	.231 .262	.346 .394	105 109		HYD HYD
CCS-31	INT. EXH.	-6 BTC 19 BBC	19 ABC -6 ATC	193 193	24 BTC 50 BBC	63 ABC 37 ATC	268 268	.234 .234	.411 .411	96 109	1.75	HYD HYD
CCS-32	INT. EXH.	21 BTC 27 BBC	25 ABC 20 ATC	204 205			284 284	.241 .241	.386 .386	112 114	1.6	HYD HYD
CCS-33	INT.	-10 BTC	26 ABC	194	14 BTC	62 ABC	256	.263	.394	108	1.5	HYD

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		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
	EXH.	Opens	Closes	Duration	Opens	Closes	Duration					
CCS-34	EXH.	29 BBC	-13 ATC	196	53 BBC	23 ATC	256	.263	.394	111		HYD
	INT.	-10 BTC	26 ABC	196	14 BTC	62 ABC	256	.263	.394	108		HYD
CCS-35	EXH.	29 BBC	-13 ATC	196	53 BBC	23 ATC	256	.263	.394	111		HYD
	INT.	-20 BTC	16 ABC	176	14 BTC	50 ABC	244	.234	.351	108		HYD
CCS-36	EXH.	28 BBC	-15 ATC	193	54 BBC	24 ATC	258	.257	.384	112		HYD
	INT.	-13 BTC	11 AB	178			260	.280	.448	100	1.6	HYD
CCS-37	EXH.	39 BBC	-17 AT	202			300	.280	.448	120		HYD
	INT.	-14 BTC	36 ABC	202	12 BTC	77 ABC	259	.269	.403	115	1.5	HYD
CCS-38	EXH.	37 BBC	-10 ATC	207	63 BBC	28 ATC	271	.276	.414	114		HYD
	INT.	-12 BTC	18 ABC	179	14 BTC	58 ABC	252	.234	.351	108		HYD
CCS-39	EXH.	29 BBC	-14 ATC	195	57 BBC	25 ATC	282	.256	.386	112		HYD
	INT.	-17 BTC	16 ABC	179	16 BTC	56 ABC	252	.234	.350	106		HYD
CCS-40	EXH.	28 BBC	14 ATC	194	56 BBC	24 ATC	260	.257	.385	112		HYD
	INT.	-14 BTC	41 ABC	207	14 BTC	77 ABC	271	.274	.410	117		HYD
CCS-41	EXH.	43 BBC	-9 ATC	214	74 BBC	26 ATC	280	.285	.427	117		HYD
	INT.	-27 BTC	13 ABC	189	10 BTC	60 ABC	250	.248	.372	106		HYD
CCS-42	EXH.	22 BBC	37 ATC	203	63 BBC	26 ATC	269	.273	.410	116		HYD
	INT.	-12 BTC	26 ABC	194	14 BTC	64 ABC	258	.260	.390	108		HYD
CFC-1	EXH.	27 BBC	-13 ATC	194	50 BBC	28 ATC	258	.260	.390	111		HYD
	INT.	-13 BTC	17 ABC	184	6 BTC	43 ABC	229	.240	.360	103		0.016
CFC-3	EXH.	17 BBC	-13 ATC	184	36 BBC	9 ATC	225	.239	.358	105		0.016
	INT.	-22 BTC	20 ABC	178	3 BTC	57 ABC	240	.232	.348	102		HYD
CLT-1	EXH.	11 BBC	-13 ATC	178	36 BBC	24 ATC	240	.232	.348	111		HYD
	INT.			208			264	.273	.409		1.45	0.006
CLT-2	EXH.			208				.273	.409			
	INT.			204			254	.231	.346		1.5	0.01
FCC-2	EXH.			204				.230	.345			
	INT.			213			244	.276				0.012
FOV-9	EXH.			213			239	.275				0.012
	INT.	-17 BTC	29 ABC	184	20 BTC	90 ABC	254	.245	.367	112		HYD
HSC-3	EXH.	23 BBC	-11 ATC	185	60 BBC	50 ATC	255	.245	.367	108		HYD
	INT.			218			271	.270				0.008
HSC-4	EXH.			222			298	.271				0.006
	INT.			218			271	.270				MECH
HSC-5	EXH.			222			298	.271				MECH
	INT.			208				.256				0.008
HSC-8	EXH.			214				.258				0.006
	INT.			208				.226				0.01
HSC-9	EXH.			210				.226				0.008
	INT.			208				.226				0.01
HSC-11	EXH.			210				.226				0.008
	INT.			218				.267				0.011
HSC-12	EXH.			225				.262				0.006
	INT.			218				.267				0.011
MC762	EXH.			225				.262				0.006
	INT.	-20 BTC	31 ABC	191	12 BTC	79 ABC	271	.259	.390	115		HYD
MC769	EXH.	30 BBC	-19 ATC	191	62 BBC	29 ATC	271	.259	.390	115		HYD
	INT.			232				.292		101		0.008
MC794	EXH.			232				.292		101		
	INT.			224				.259				MECH
MC797	EXH.			224				.259				MECH
	INT.	17 ATC	29 ABC	192			276	.230	.403	113	1.75	HYD
MC803	EXH.	26 BBC	14 BTC	192			276	.230	.403	110		HYD
	INT.			189				.250		109		MECH
MC809	EXH.			193				.256		109		
	INT.	-12 BTC	29 ABC	197	17 BTC	73 ABC	270	.265	.397	112	1.5	HYD
MC810	EXH.	32 BBC	-15 ATC	197	61 BBC	29 ATC	270	.265	.397	112		HYD
	INT.			230				.293		100		HYD
	EXH.			230				.293		100		HYD

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Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration					
MC814	INT.	-4 BTC	20 ABC	196	31 BTC	64 ABC	276	.246	.369	102		HYD
	EXH.	37 BBC	-17 ATC	200	61 BBC	35 ATC	294	.254	.381	117		HYD
MC816	INT.			222				.281				0.006
	EXH.			223				.283				0.006
MC817	INT.			220				.278				HYD
	EXH.			219				.279				HYD
MC820	INT.			220				.276				HYD
	EXH.			220				.276				HYD
MC821	INT.			202			240	.235	.390	120	1.7	HYD
	EXH.			216			234	.250	.416	120		HYD
MC822	INT.			220				.276				HYD
	EXH.			220				.276				HYD
MC830	INT.			164				.212				HYD
	EXH.			166				.214				HYD
MC831	INT.			200			241					HYD
	EXH.											HYD
MC832	INT.											HYD
	EXH.			200			241		.350			HYD
MC835	INT.	23 BTC	22 ABC	188			254	.216	.356	108	1.6	HYD
	EXH.	29 BBC	14 ATC	188			254	.216	.355	116		HYD
MC836	INT.	19 BTC	24 ABC	193			276	.245	.392	107		HYD
	EXH.	32 BBC	19 ATC	193			276	.245	.392	116		HYD
MC839	INT.			204				.225				MECH
	EXH.			203				.225				MECH
MC840	INT.			206				.220		122		0.012
	EXH.			206				.220		122		
MC841	INT.			205				.237				HYD
	EXH.			205				.237				HYD
MC1200	INT.											
	EXH.											
MC1210	INT.			194				.260				HYD
	EXH.			194				.260				HYD
MC1220	INT.			194				.260				HYD
	EXH.			194				.260				HYD
MC1230	INT.	-15 BTC	28 ABC	193	15 BTC	80 ABC	275	.272	.435	111		HYD
	EXH.	31 BBC	-18 ATC	193	61 BBC	34 ATC	275	.272	.435	115		HYD
MC1231	INT.	-14 BTC	18 ABC	184			254	.245	.424	106		HYD
	EXH.	35 BBC	-14 ATC	201			270	.259	.448	114		HYD
MC1232	INT.	12 BTC	25 ABC	193				.257	.445	108		HYD
	EXH.	38 BBC	-20 ATC	198				.264	.457	119		HYD
MC1234	INT.											
	EXH.											
MC1235	INT.			212					.410			
	EXH.										1.1	
MC1236	INT.											
	EXH.							.410				
MC1237	INT.			192				.239				HYD
	EXH.			192				.239				HYD
MC1238	INT.			210				.265				HYD
	EXH.			210				.265				HYD
MC1239	INT.			217				.230				.013
	EXH.			219				.230				.008
MC1240	INT.	-20 BTC	21 ABC	181	12 BTC	72 ABC	248	.248	.372	108	1.5	HYD
	EXH.	24 BBC	-12 ATC	192	57 BBC	38 ATC	250	.267	.401	110		HYD
MC1241	INT.	-14 BTC	19 ABC	185	14 BTC	72 ABC	250	.240	.415	106	1.75	HYD
	EXH.	34 BBC	-13 ATC	201	70 BBC	25 ATC	264	.241	.417	114		HYD
MC1242	INT.	-12 BTC	27 ABC	195	19 BTC	74 ABC	273	.260	.455	109		HYD
	EXH.	30 BBC	-15 ATC	195	61 BBC	31 ATC	273	.260	.455	113		HYD
MC1243	INT.			182				.246	.394	97	1.6	HYD

## CAMSHAFT SPECIFICATIONS (Cont. )

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
	EXH.	Opens	Closes	Duration	Opens	Closes	Duration					
MC1244	INT.			182				.246	.394	97		HYD
	EXH.			182				.246	.394	123		HYD
MC1245	INT.			197				.210				HYD
	EXH.			208				.230				HYD
MC1246	INT.			229				.291				HYD
	EXH.			229				.291				HYD
MC1247	INT.											
	EXH.											
MC1248	INT.											
	EXH.											
MC1249	INT.	-17 BTC	25 ABC	188	20 BTC	93 ABC	294	.252	.453	111	1.8	HYD
	EXH.	33 BBC	-22 ATC	191	73 BBC	51 ATC	304	.255	.459	117		HYD
MC1250	INT.	-16 BBC	22 ABC	188	21 BTC	92 ABC	293	.250	.400	109	1.6	HYD
	EXH.	32 BBC	-21 ATC	191	70 BBC	49 ATC	299	.255	.408	117		HYD
MC1251	INT.	-24 BTC	25 ABC	181	110 BTC	92 ABC	284	.252	.403	115		HYD
	EXH.	26 BBC	-15 ATC	191	70 BBC	52 ATC	301	.255	.408	109		HYD
MC1252	INT.			191				.267				HYD
	EXH.			191				.267				HYD
MC1253	INT.	-22 BTC	26 ABC	184	8 BTC	66 ABC	254	.258	.413	114		HYD
	EXH.	27 BBC	-14 ATC	193	58 BBC	29 ATC	267	.269	.430	110		HYD
MC1254	INT.			186				.245				HYD
	EXH.			186				.245				HYD
MC1255	INT.			192				.248				HYD
	EXH.			190				.239				HYD
MC1256	INT.	-25 BTC	45 ABC	200	8 BTC	99 ABC	287	.260	.416	124		HYD
	EXH.	37 BBC	-17 ATC	200	70 BBC	37 ATC	287	.260	.416	118		HYD
MC1257	INT.	-11 BTC	31 ABC	200	22 BTC	85 ABC	287	.260	.416	110		HYD
	EXH.	37 BBC	-17 ATC	200	70 BBC	37 ATC	287	.260	.416	118		HYD
MC1258	INT.	-15 BTC	26 ABC	191	16 BTC	76 ABC	272	.261	.392	110	1.5	HYD
	EXH.	25 BBC	-14 ATC	191	25 BBC	36 ATC	272	.261	.392	110		HYD
MC1259	INT.			189				.263	.394	107		HYD
	EXH.			206				.276	.414	117		HYD
MC1260	INT.			185				.275	.412	106		HYD
	EXH.			202				.275	.412	110		HYD
MC1261	INT.	-15BTC	26 ABC	191	15 BTC	75 ABC	270	.260	.417	110	1.6	HYD
	EXH.	25 BBC	-14 ATC	191	55 BBC	35 ATC	270	.260	.417	110		HYD
MC1262	INT.	-13 BTC	18 ABC	205	15 BTC	75 ABC	270	.265	.420	112		HYD
	EXH.	33 BBC	-17 ATC	196	61 BBC	18 ATC	259	.265	.420	116		HYD
MC1263	INT.											
	EXH.											
MC1265	INT.			184				.256				HYD
	EXH.			185				.256				HYD
MC1266	INT.											
	EXH.											
MC1267	INT.											
	EXH.											
MC1268	INT.	-14 BTC	26 ABC	192	25 BTC	66 ABC	271	.248	.434	109	1.75	HYD
	EXH.	30 BBC	-18 ATC	192	69 BBC	22 ATC	271	.248	.434	115		HYD
MC1269	INT.	-18 BTC	27 ABC	191	19 BTC	67 ABC	266	.248	.434	109		HYD
	EXH.	28 BBC	-17 ATC	191	63 BBC	23 ATC	266	.248	.434	115		HYD
MC1270	INT.	-15 BTC	23 ABC	188	58 BTC	111 ABC	349	.248	.438	109		HYD
	EXH.	29 BBC	-21 ATC	188	102 BBC	67 ATC	349	.248	.438	115		HYD
MC1271	INT.			216			250	.401	.401	105	1.0	HYD
	EXH.			216			250	.401	.401	115		HYD
MC1272	INT.			196				.273				-
	EXH.			-				-				.009
MC1273	INT.			-				-				.013
	EXH.			209				.299				-

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration					
MC1274	INT.	17 BTC	20 ABC	183	16 BTC	58 ABC	254	.251	.376	108	1.5	HYD
	EXH.	30 BBC	-17 ATC	193	62 BBC	22 ATC	264	.268	.402	114		HYD
MC1275	INT.	-17 BTC	45 ABC	208	13 BTC	84 ABC	277	.288	.432	121		HYD
	EXH.	39 BBC	-11 ATC	208	70 BBC	24 ATC	274	.293	.439	115		HYD
MC1276	INT.			204				.297				N/A
	EXH.			N/A				.297				0.008
MC1277	INT.			N/A				.297				0.01
	EXH.			204				.297				N/A
MC1278	INT.	-18 BTC	29 ABC	191	16 BTC	87 ABC	282	.252	.403	114	1.6	HYD
	EXH.	40 BBC	-20 ATC	200	73 BBC	35 ATC	288	.260	.416	120		HYD
MC1279	INT.			188				.259				HYD
	EXH.			196				.259				HYD
MC1280	INT.			188				.259				HYD
	EXH.			196				.259				HYD
MC1281	INT.			230				.293				0.01
	EXH.			230				.293				N/A
MC1283	INT.			196				.267				HYD
	EXH.			196				.267				HYD
MC1284	INT.			232				.293		101		0.008
	EXH.			232				.293		101		
MC1285	INT.			232				.293		101		0.008
	EXH.			232				.293		101		
MC1286	INT.			230				.293		100		HYD
	EXH.			230				.293		100		
MC1287	INT.	-10 BTC	26 ABC	196	26 BTC	68 ABC	274	.275	.440	108		HYD
	EXH.	36 BBC	-8 ATC	208	74 BBC	42 ATC	296	.275	.440	112		HYD
MC1288	INT.	-25 BTC	31 ABC	185	10 BTC	83 ABC	273	.263	.421	115		HYD
	EXH.	32 BBC	-15 ATC	197	65 BBC	37 ATC	263	.279	.446	115		HYD
MC1289	INT.											
	EXH.											
MC1290	INT.	-13 BTC	27 ABC	194	13 BTC	65 ABC	268	.260		109		HYD
	EXH.	29 BBC	-7 ATC	202	57 BBC			.273		109		
MC1291	INT.	-14 BTC	34 ABC	200	15 BTC	75 ABC	270	.248	.421	114	1.7	HYD
	EXH.	37 BBC	-11 ATC	206	64 BBC	29 ATC	273	.253	.430	114		HYD
MC1292	INT.											
	EXH.											
MC1293	INT.											
	EXH.											
MC1294	INT.											
	EXH.											
MC1295	INT.											
	EXH.											
MC1296	INT.											
	EXH.											
MC1297	INT.	-6 BTC	14 ABC	188	24	52	256	.255	.407	107.5	1.6	HYD
	EXH.	30 BBC	-18 ATC	192	61	19	260	.259	.415	107.5		HYD
MC1298	INT.											
	EXH.											
MC1299	INT.											
	EXH.											
MC1300	INT.			201				.334				
	EXH.			201				.334				
MC1301	INT.			188				.259				HYD
	EXH.			196				.259				HYD
MC1302	INT.			188				.259				HYD
	EXH.			196				.259				HYD
MC1303	INT.			198				.287	.430	116	1.5-1	Hyd
	EXH.			198				.287	.430	110		Hyd
MC1304	INT.			197				.272	.408	113		Hyd

## CAMSHAFT SPECIFICATIONS (Cont. )

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
Opens	Closes	Duration	Opens	Closes	Duration							
	EXH.			197				.272	.408	111		Hyd
MC1309	INT.											
	EXH.											
MC1310	INT.											
	EXH.											
MC1311	INT.											
	EXH.											
MC1312	INT.											
	EXH.											
MC1315	INT.			191				.276	.415	106		Hyd
	EXH.			195				.286	.429	116		Hyd
MC1316	INT.			204				.282	.480	118	1.7-1	Hyd
	EXH.			209				.284	.483	118		Hyd
MC1317	INT.			197				.292	.496	123		Hyd
	EXH.			209				.292	.496	116		Hyd
MC1318	INT.											
	EXH.											
MC1319	INT.											
	EXH.											
MC1320	INT.			191				.276	.414	106	1.5-1	Hyd
	EXH.			194				.285	.428	116		Hyd
MC1328	INT.											
	EXH.											
MC1329	INT.											
	EXH.											
MC1330	INT.											
	EXH.											
MC1331	INT.											
	EXH.											
MC1334	INT.			188				.274	.411	116		Hyd.
	EXH.			194				.278	.417	107		
MC1335	INT.			202				.299	.449	116		Hyd.
	EXH.			208				.306	.460	117		
MC1336	INT.			201				.297	.446	117		Hyd.
	EXH.			208				.306	.459	117		
MC1337	INT.			191				.276	.414	106		Hyd.
	EXH.			195				.285	.428	116		
MC1338	INT.											
	EXH.											
MC1339	INT.											
	EXH.											
MC1344	INT.											
	EXH.											
MC1345	INT.											
	EXH.											
MC1351	INT.											
	EXH.											
MC1352	INT.			193				.259				
	EXH.			188				.295				
MC1353	INT.			188				.259				
	EXH.			193				.259				
MC1360	INT.			214				.267				
	EXH.			267				.221				
MC1361	INT.			214				.267				
	EXH.			210				.221				
MTA-1	INT.	3o ATC	27o ABC	204	30o BTC	70o ABC	280	.280	.448	105o	1.6	HYD.
	EXH.	42o BBC	8o BTC	214	75o BBC	35o ATC	290	.295	.472	115o		HYD.
MTB-1	INT.	5o ATC	29o ABC	204	28o BTC	72o ABC	280	.280	.448	107		HYD.
	EXH.	44o BBC	10o BTC	214	77o BBC	33o ATC	290	.295	.472	117		HYD.

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@											Valve Clearance
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio)			Cam Lift	Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	
		Opens	Closes	Duration	Opens	Closes	Duration						
MTB-2	INT.	12o ATC	26o ABC	194	21o BTC	69o ABC	270	.265	.424	109			HYD.
	EXH.	41o BBC	17o BTC	204	74o BBC	26o ATC	280	.280	.448	119			HYD.
MTC-1	INT.	5o ATC	29o ABC	204	27o BTC	71o ABC	278	.280	.420	107	1.5		HYD.
	EXH.			214			288	.295	.433	117			HYD.
MTC-5	INT.	5o ATC	29o ABC	204	27o BTC	71o ABC	278	.280	.420	107			HYD.
	EXH.	44o BBC	10o BTC	214	76o BBC	32o ATC	288	.295	.443	117			HYD.
MTC-6	INT.	6o ATC	30o ABC	204	36o BTC	72o ABC	288	.270	.459	108	1.7		HYD.
	EXH.	40o BBC	12o BTC	208	86o BBC	32o ATC	298	.270	.459	116			HYD.
MTD-1	INT.	5o ATC	29o ABC	204	27o BTC	71o ABC	278	.280	.420	107	1.5		HYD.
	EXH.	44o BBC	10o BTC	214	76o BBC	32o ATC	288	.295	.443	117			HYD.
MTD-2	INT.	5o ATC	29o ABC	204	27o BTC	71o ABC	278	.280	.420	107			HYD.
	EXH.	44o BBC	10o BTC	214	76o BBC	32o ATC	288	.295	.443	117			HYD.
MTF-1	INT.	5o ATC	29o ABC	204	28o BTC	72o ABC	280	.280	.448	107	1.6		HYD.
	EXH.	44o BBC	10o BTC	214	77o BBC	33o ATC	290	.295	.472	117			HYD.
MTF-2	INT.	5o ATC	29o ABC	204	29o BTC	73o ABC	282	.280	.484	107	1.73		HYD.
	EXH.	44o BBC	10o BTC	214	78o BBC	34o ATC	292	.295	.510	117			HYD.
MTF-3	INT.	5o ATC	29o ABC	204	29o BTC	73o ABC	282	.280	.490	107	1.75		HYD.
	EXH.	44o BBC	10o BTC	214	78o BBC	34o ATC	292	.295	.416	117			HYD.
MTF-4	INT.	5o ATC	29o ABC	204	29o BTC	73o ABC	282	.280	.484	107	1.73		HYD.
	EXH.	44o BBC	10o BTC	214	78o BBC	34o ATC	292	.295	.510	117			HYD.
MTF-5	INT.	5o ATC	29o ABC	204	28o BTC	72o ABC	280	.280	.448	107	1.6		HYD.
	EXH.	44o BBC	10o BTC	214	77o BBC	33o ATC	290	.295	.472	117			HYD.
MTF-6	INT.	5o ATC	29o ABC	204	28o BTC	72o ABC	280	.281	.451	106			HYD.
	EXH.	44o BBC	10o BTC	214	77o BBC	33o ATC	290	.296	.475	114			HYD.
MTO-1	INT.	5o ATC	29o ABC	204	28o BTC	72o ABC	280	.280	.448	107			HYD.
	EXH.	44o BBC	10o BTC	214	77o BBC	33o ATC	290	.295	.472	117			HYD.
MTP-1	INT.	3o ATC	27o ABC	204	29o BTC	69o ABC	278	.280	.420	105	1.5		HYD.
	EXH.			214			288	.295	.443	115			HYD.
MTP-2	INT.	5o ATC	29o ABC	204	29o BTC	73o ABC	282	.280	.490	107	1.75		HYD.
	EXH.	44o BBC	10o BTC	214	78o BBC	34o ATC	292	.295	.516	117			HYD.
ROC-10	INT.	9 BTC	43 ABC	232	4 BTC	101 ABC	329	.296	.474	107	1.6		HYD
	EXH.	55 BBC	-3 ATC	232	94 BBC	55 ATC	329	.296	.474	119			HYD
RVO-D	INT.												
	EXH.												
SBC-3	INT.	-9 BTC	36 ABC	207	23 BTC	81 ABC	284	.269	.430	112			HYD
	EXH.	39 BBC	-12 ATC	207	71 BBC	33 ATC	284	.269	.430	116			HYD
SBC-4	INT.	-18 BTC	32 ABC	194	11 BTC	91 ABC	282	.244	.388	114			HYD
	EXH.	52 BBC	-7 ATC	225	95 BBC	53 ATC	328	.285	.453	120			HYD
SBC-5	INT.	12 BTC	24 ABC	189			276	.242	.363	109	1.5		HYD
	EXH.	40 BBC	15 ATC	208			297	.252	.378	116			HYD
SBC-8	INT.	-15 BTC	29 ABC	194	18 BTC	74 ABC	272	.251	.391	112	1.6		HYD
	EXH.	31 BBC	-12 ATC	194	66 BBC	37 ATC	283	.244	.401	112			HYD
SBC-11	INT.	-19 BTC	12 ABC	173	14 BTC	52 ABC	242	.207	.310	105	1.5		HYD
	EXH.	16 BBC	-14 ATC	182	54 BBC	34 ATC	262	.216	.324	106			HYD
SBC-12	INT.	-14 BTC	14 ABC	180	17 BTC	54 ABC	251	.224	.359	104	1.6		HYD
	EXH.	28 BBC	-14 ATC	194	69 BBC	31 ATC	280	.240	.384	110			HYD
SBC-13	INT.	-15 BTC	29 ABC	194	19 BTC	74 ABC	272	.251	.401	112			HYD
	EXH.	28 BBC	-14 ATC	194	69 BBC	31 ATC	280	.240	.384	110			HYD
SBC-14	INT.	-8 BTC	21 ABC	193	30 BTC	72 ABC	282	.250	.400	104			HYD
	EXH.	28 BBC	-12 ATC	196	66 BBC	30 ATC	276	.264	.422	110			HYD
SBC-15	INT.	-14 BTC	14 ABC	180	17 BTC	54 ABC	251	.224	.358	104			HYD
	EXH.	28 BBC	-14 ATC	194	68 BBC	31 ATC	280	.240	.384	110			HYD
SBC-16	INT.	-14 BTC	14 ABC	180	17 BTC	54 ABC	251	.224	.358	104			HYD
	EXH.	28 BBC	-14 ATC	194	66 BBC	31 ATC	280	.240	.384	110			HYD
SBOT-1	INT.			196			276	.251	.401	106			HYD
	EXH.			196			276	.251	.401	112			HYD
SDC-1	INT.			181			285	.276					.012
	EXH.			200			285	.276					.010
SDC-3	INT.			219				.289					MECH

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
Opens	Closes	Duration	Opens	Closes	Duration							
	EXH.			219				.289				MECH
SDC-4	INT.			171				.222				0.014
	EXH.			175				.232				0.014
SDC-5	INT.											
	EXH.											
SDC-6	INT.			206				.233				0.011
	EXH.			205				.223				0.011
SDC-7	INT.			226				.269				0.012
	EXH.			226				.269				0.012
SDC-8	INT.			227				.280				0.012
	EXH.			227				.280				0.012
SFP-2	INT.	-41 BTC	57 ABC	196	-13 BTC	10 ABC	268	.244	.390	129		HYD
	EXH.	38 BBC	-22 ATC	196	7 BBC	17 ATC	268	.244	.390	111		HYD
SFP-4	INT.	-7 BTC	29 ABC	202	13 BTC	65 ABC	258	.256	.384	108	1.5	HYD
	EXH.	35 BBC	-13 ATC	202	53 BBC	14 ATC	247	.256	.384	114		HYD
SFP-5	INT.	12 BTC	28 ABC	192			202	.236	.340	107		0.017
	EXH.	38 BBC	6 ATC	206			206	.232	.341	115		0.01
SGM-1	INT.	18 BTC	24 ABC	186			252	.279	.419	111		0.02
	EXH.	33 BBC	8 ATC	205			277	.278	.407	112		0.012
SIH-1	INT.	21 BTC	25 ABC	188			260	.262	.445	111	1.7	HYD
	EXH.	19 BBC	17 ATC	198			252	.236	.428	110		HYD
SIH-3	INT.	-12 BTC	14 ABC	182	19 BTC	45 ABC	244	.265	.440	103		0.025
	EXH.	29 BBC	-11 ATC	198	62 BBC	22 ATC	264	.265	.440	110		0.025
SIH-5	INT.	-21 BTC	35 ABC	194	19 BBC	75 ABC	274	.272	.435	118	1.6	HYD
	EXH.	24 BBC	-10 ATC	194	64 BBC	30 ATC	274	.272	.435	107		HYD
SIH-6	INT.	-15 BTC	11 ABC	176			174	.254	.406	103		HYD
	EXH.	17 BBC	-13 ATC	184			210	.253	.405	105		HYD
SOC-9	INT.	-13 BTC	20 ABC	187	25 BTC	72 ABC	277	.250	.400	106		HYD
	EXH.	34 BBC	-14 ATC	200	73 BBC	38 ATC	291	.251	.401	112		HYD
SOC-10	INT.	-16 BTC	16 ABC	180	18 BTC	58 ABC	256	.247	.395	106		HYD
	EXH.	25 BBC	-18 ATC	187	63 BBC	34 ATC	277	.250	.400	112		HYD
SOC-12	INT.	-14 BTC	6 ABC	172	20 BTC	48 ABC	248	.235	.376	100		HYD
	EXH.	30 BBC	-18 ATC	192	67 BBC	27 ATC	274	.235	.376	114		HYD
SOC-14	INT.	-22 BTC	11 ABC	178	17 BTC	52 ABC	249	.247	.395	102		HYD
	EXH.	29 BBC	-13 ATC	187	60 BBC	16 ATC	256	.251	.401	116		HYD
SPC-2	INT.	-15 BTC	29 ABC	190	18 BTC	74 ABC	280	.251	.402	112		HYD
	EXH.	28 BBC	-14 ATC	190	69 BBC	31 ATC	280	.240	.384	110		HYD
SPC-3	INT.	0 BTC	44 ABC	224	29 BTC	88 ABC	297	.270	.406	112	1.5	HYD
	EXH.	57 BBC	-1 ATC	236	86 BBC	44 ATC	310	.271	.407	119		HYD
SPC-4	INT.	-7 BTC	25 BBC	198	21 BTC	70 ABC	271	.270	.404	106		HYD
	EXH.	40 BBC	-12 ATC	208	68 BBC	32 ATC	280	.272	.408	116		HYD
SPC-5	INT.	-6 BTC	26 ABC	200	26 BTC	78 ABC	284	.271	.407	106		HYD
	EXH.	41 BBC	-11 ATC	210	73 BBC	40 ATC	293	.274	.411	116		HYD
SPC-7	INT.	-7 BTC	39 ABC	212	21 BTC	84 ABC	285	.272	.408	113		HYD
	EXH.	50 BBC	-5 ATC	225	80 BBC	38 ATC	298	.271	.406	118		HYD
SPC-8	INT.	3 BTC	48ABC	231	32 BTC	92 ABC	304	.313	.469	112		HYD
	EXH.	54 BBC	6 ATC	240	84 BBC	51 ATC	315	.313	.469	115		HYD
SPC-9	INT.	-11 BTC	20 ABC	189	17 BTC	67 ABC	264	.243	.364	105		HYD
	EXH.	24 BBC	-15 ATC	189	52 BBC	32 ATC	264	.243	.364	110		HYD
SPC-10	INT.	-18 BTC	28 ABC	190	25 BTC	71 ABC	276	.232	.406	113	1.75	HYD
	EXH.	25 BBC	-15 ATC	190	68 BBC	28 ATC	276	.232	.406	110		HYD
SPC-11	INT.	-18 BTC	19 ABC	181	8 BTC	68 ABC	256	.233	.349	108	1.5	HYD
	EXH.	14 BBC	-13 ATC	181	40 BBC	36 ATC	256	.233	.349	104		HYD
SPC-12	INT.	-11 BTC	40 ABC	209	19 BTC	93 ABC	292	.252	.378	115		HYD
	EXH.	26 BBC	-17 ATC	189	54 BBC	30 ATC	264	.243	.364	112		HYD
SPC-13	INT.	-18 BTC	28 ABC	190	25 BTC	71 ABC	276	.232	.405	113	1.75	HYD
	EXH.	25 BBC	-13 ATC	190	69 BBC	28 ATC	276	.232	.405	110		HYD
SPC-15	INT.			202			247	.240	.408		1.7	HYD
	EXH.			201				.239	.406			

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration					
SPC-16	INT.	-14 BTC	14 ABC	223	17 BTC	54 ABC	270	.251	.417	123		.009
	EXH.	28 BBC	-14 ATC	223	68 BBC	31 ATC	265	.253	.421	123		.009
SPC-17	INT.	-19 BTC	27 ABC	188	23 BTC	67 ABC	270	.231	.404	113	1.75	HYD
	EXH.	24 BBC	-16 ATC	188	66 BBC	24 ATC	270	.231	.404	110		HYD
SPC-18	INT.	-19 BTC	27 ABC	188	23 BTC	67 ABC	270	.231	.404	113		HYD
	EXH.	24 BBC	-16 ATC	188	66 BBC	24 ATC	270	.231	.404	110		HYD
SPC-19	INT.			214			252	.262			1.7	HYD
	EXH.			214				.262				
SPD-3	INT.	-8 BTC	26 ABC	198	21 BTC	70 ABC	271	.270	.405	106	1.5	0.012
	EXH.	33 BBC	-10 ATC	203	56 BBC	24 ATC	260	.275	.412	112		0.01
SPD-11	INT.	-7 BTC	33 ABC	206	22 BTC	74 BBC	284	.289	.434	110		HYD
	EXH.	40 BBC	-11 ATC	209	74 BBC	39 ATC	293	.287	.431	116		HYD
SPD-16	INT.	-10 BTC	23 ABC	193	21 BTC	68 ABC	269	.238	.357	106		HYD
	EXH.	27 BBC	-13 ATC	194	64 BBC	28 ATC	272	.238	.357	110		HYD
SPD-20	INT.	-20 BTC	20 ABC	180	12 BTC	72 ABC	264	.248	.372	110		HYD
	EXH.	24 BBC	-12 ATC	192	57 BBC	38 ATC	275	.266	.399	108		HYD
SPD-22	INT.	-8 BTC	37 ABC	209	20 BTC	79 ABC	279	.286	.429	112		HYD
	EXH.	46 BTC	-6 ATC	220	79 BBC	30 ATC	289	.296	.444	116		HYD
SPD-24	INT.	-10 BTC	23 ABC	193	21 BTC	68 ABC	269	.240	.360	106	15	HYD
	EXH.	27 BBC	-13 ATC	194	64 BBC	28 ATC	272	.240	.360	110		HYD
SPD-25	INT.	-7 BTC	29 ABC	203	22 BTC	76 ABC	278	.273	.409	108	1.5	HYD
	EXH.	31 BBC	-9 ATC	203	61 BBC	37 ATC	278	.273	.409	111		HYD
SPD-27	INT.	-15 BTC	22 ABC	187	10 BTC	64 ABC	254	.252	.378	108		HYD
	EXH.	15 BBC	-8 ATC	187	40 BBC	34 ATC	254	.252	.378	102		HYD
SPD-28	INT.	5 BTC	32 ABC	217	27 BTC	68 ABC	274	.243	.437	112	1.8	HYD
	EXH.	41 BBC	-4 ATC	217	63 BBC	30 ATC	274	.243	.437	104		HYD
SPD-29	INT.	5 BTC	32 ABC	217	27 BTC	66 ABC	273	.243	.437	112		HYD
	EXH.	41 BBC	-4 ATC	217	63 BBC	30 ATC	273	.243	.437	104		HYD
SPD-30	INT.	5 BTC	28 ABC	213	29 BTC	59 ABC	268	.243	.437			HYD
	EXH.	45 BBC	-12 ATC	213	69 BBC			.243	.437			
SPD-31	INT.	-6 BTC	39 ABC	213	26 BTC	96 ABC	302	.298	.447	111	1.5	HYD
	EXH.	50 BBC	-5 ATC	225	83 BBC	61 ATC	324	.306	.459	115		HYD
SPD-32	INT.			232				.293		101		.008
	EXH.			232				.293		101		
SPD-33	INT.	5 BTC	28 ABC	213			268	.243	.437	110	1.8	HYD
	EXH.	45 BBC	12 BTC	213			268	.243	.437	110		HYD
SPD-34	INT.			194			267	.245	.433	113		HYD
	EXH.			190			264	.245	.433	113		HYD
SPD-35	INT.			194			267	.245	.441			HYD
	EXH.			190				.245	.441			
SRC-5	INT.	-11 BTC	27ABC	196	14 BTC	68 ABC	263	.266	.425	109	1.6	HYD
	EXH.	30 BBC	-14 ATC	196	56 BBC	26 ATC	263	.266	.425	112		HYD
SRC-6	INT.	-17 BTC	22 ABC	185	12 BTC	66 ABC	259	.254	.406	109		HYD
	EXH.	23 BBC	-18 ATC	185	53 BBC	25 ATC	259	.254	.406	111		HYD
SRC-8	INT.	-19 BTC	29 ABC	190	9 BTC	73 ABC	262	.252	.403	113		HYD
	EXH.	29 BBC	-19 ATC	190	57 BBC	25 ATC	262	.252	.443	115		HYD
SRC-9	INT.	-17 BTC	33 ABC	196	12 BTC	78 ABC	270	.265	.424	114		HYD
	EXH.	27 BBC	-11 ATC	196	56 BBC	34 ATC	270	.265	.424	110		HYD
SVO-A	INT.	-8 BTC	25 ABC	197	18 BTC	55 ABC	253	.240	.360	109	1.5	0.018
	EXH.	34 BBC	-17 ATC	197	57 BBC	10 ATC	247	.240	.360	113		0.016
SVW-1	INT.			224			298	.405	.405	110	1.0	MECH
	EXH.			224			310	.405	.405	110		MECH
SWC-1	INT.			198			346	.220				0.012
	EXH.			204			350	.371				0.018
SYB-2	INT.	-12 BTC	29 ABC	197			254	.262	.366	110	1.4	0.018
	EXH.	34 BBC	-18 ATC	196			244	.262	.366	116		0.018
SYB-8	INT.	-15 BTC	21 ABC	186	19 BTC	71 ABC	270	.232	.394	108	1.7	HYD
	EXH.	26 BBC	-20 ATC	186	60 BBC	30 ATC	270	.232	.394	113		HYD
SYB-9	INT.	-10 BTC	17 ABC	187	18 BTC	63 ABC	261	.238	.380	103	1.6	HYD

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
	EXH.	Opens	Closes	Duration	Opens	Closes	Duration					
SYB-13	EXH.	26 BBC	-19 ATC	187	54 BBC	27 ATC	261	.238	.380	113		HYD
	INT.	-19 BTC	25 ABC	186	16 BTC	75 ABC	271	.232	.406	112	1.75	HYD
SYB-16	EXH.	27 BBC	-21 ATC	186	62 BBC	29 ATC	271	.232	.406	114		HYD
	INT.	-10 BTC	22 ABC	192	24 BTC	73 ABC	277	.244	.414	106	1.7	HYD
SYB-19	EXH.	30 BBC	-18 ATC	192	64 BBC	33 ATC	277	.244	.414	114		HYD
	INT.	-14 BTC	27 ABC	193	18 BTC	75 ABC	273	.253	.442	110	1.75	HYD
SYB-21	EXH.	39 BBC	-13 ATC	206	72 BBC	35 ATC	287	.277	.485	116		HYD
	INT.	-13 BTC	25 ABC	192	19 BTC	73 ABC	272	.247	.419	109	1.7	HYD
SYB-22	EXH.	29 BBC	-11 ATC	198	65 BBC	43 ATC	291	.250	.425	111		HYD
	INT.	-11 BTC	24 ABC	200	70 BTC	73 ABC	273	.252	.428	108		HYD
SYB-23	EXH.	28 BBC	-15 ATC	200	59 BBC	34 ATC	273	.252	.428	111		HYD
	INT.	-17 BTC	29 ABC	192	15 BTC	78 ABC	273	.247	.432	113	1.75	HYD
SYB-24	EXH.	31 BBC	-12 ATC	199	65 BBC	38 ATC	281	.249	.435	111		HYD
	INT.	-6 BTC	21 ABC	194	24 BTC	66 ABC	270	.260	.416	103	1.6	HYD
SYB-25	EXH.	29 BBC	-5 ATC	194	59 BBC	31 ATC	270	.260	.416	112		HYD
	INT.	-22 BTC	26 ABC	184	22 BTC	70 ABC	272	.230	.368	114		HYD
SYB-26	EXH.	12 BBC	-8 ATC	189	45 BBC	40 ATC	265	.238	.380	104		HYD
	INT.	-13 BTC	16 ABC	183	17 BTC	60 ABC	257	.237	.379	104		HYD
SYB-27	EXH.	27 BBC	-15 ATC	192	58 BBC	31 ATC	269	.247	.395	111		HYD
	INT.											
SYB-29	EXH.											
	INT.	-17 BTC	43 ABC	206	16 BTC	91 ABC	287	.278	.472	120	1.7	HYD
SYB-30	EXH.	44 BBC	-3 ABC	221	81 BBC	48 ATC	307	.283	.481	110		HYD
	INT.	-15 BTC	32 ABC	197	18 BTC	82 ABC	280	.260	.416	114	1.6	HYD
SYB-31	EXH.	38 BBC	-9 ATC	209	71 BBC	42 ATC	293	.278	.443	114		HYD
	INT.	25 BTC	71 ABC	185	21 BTC	70 ABC	259	.225	.382	106	1.7	HYD
SYB-32	EXH.	69 BBC	27 ATC	193	64 BBC	27 ATC	275	.229	.389	117		HYD
	INT.	-14 BTC	19 ABC	185	14 BTC	72 ABC	266	.240	.408	106		HYD
SYB-33	EXH.	34 BBC	-13 ATC	201	70 BBC	25 ATC	275	.241	.409	114		HYD
	INT.	-14 BTC	19 ABC	185	14 BTC	72 ABC	266	.240	.408	106		HYD
SYB-35	EXH.	34 BBC	-13 ATC	201	70 BBC	25 ATC	275	.241	.409	114		HYD
	INT.	-14 BTC	40 ABC	206	18 BTC	85 ABC	283	.278	.445	117	1.6	HYD
SYB-36	EXH.	47 BBC	-6 ATC	221	82 BBC	42 ATC	304	.283	.453	113		HYD
	INT.	-5 BTC	32 ABC	207			274	.264	.396	108	1.5	0.016
SYB-37	EXH.	35 BBC	-8 ATC	207			274	.264	.396	112		0.014
	INT.	-23 BTC	30 ABC	187	4 BTC	64 ABC	248	.237	.379	106	1.6	HYD
SYB-38	EXH.	40 BTC	-31 ATC	189	70 BBC	-1 ATC	249	.238	.380	116		HYD
	INT.	-12 BTC	24 ABC	192	20 BTC	70 ABC	274	.265	.424	108		HYD
SYB-39	EXH.	30 BBC	-18 ATC	192	62 BBC	28 ATC	288	.265	.424	114		HYD
	INT.	-8 BTC	28 ABC	200	21 BTC	68 ABC	269	.239	.382	108		HYD
SYB-40	EXH.	34 BBC	-14 ATC	200	63 BBC	26 ATC	269	.239	.382	114		HYD
	INT.											
SYB-41	EXH.											
	INT.							.225			1.7	HYD
SYB-43	EXH.							.229				
	INT.	-12 BTC	16 ABC	184	20 BTC	64 ABC	264	.237	.402	104		HYD
SYB-44	EXH.	27 BBC	-15 ATC	192	61 BBC	33 ATC	274	.247	.419	111		HYD
	INT.	16 BTC	36 ABC	208			275	.265	.424	111	1.6	HYD
SYB-45	EXH.	45 BBC	7 ATC	208			275	.265	.424	121		HYD
	INT.	19 BTC	25 ABC	190			244	.240	.398	108		HYD
SYB-46	EXH.	30 BBC	14 ATC	190			244	.240	.398	116		HYD
	INT.	14 BTC	30 ABC	190			191	.240	.398	113		HYD
SYB-47	EXH.	25 BBC	19 ATC	190			191	.240	.398	111		HYD
	INT.	14 BTC	30 ABC	190			258	.240	.384	113		HYD
SYB-48	EXH.	25 BBC	19 ATC	190			258	.240	.384	111		HYD
	INT.			202				.250	.392	113	1.57	HYD
SYB-49	EXH.			190				.239	.375	113		HYD
	INT.	12 BTC	32 ABC	203			270	.263	.423	111	1.6	HYD
	EXH.	35 BBC	9 ATC	203			270	.263	.423	111		HYD

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
Opens	Closes	Duration	Opens	Closes	Duration							
SYB-50	INT.	18 BTC	30 ABC	199			272	.260	.419	110		HYD
	EXH.	37 BBC	11 ATC	199			272	.260	.419	118		HYD
SYB-51	INT.	10 BTC	40 ABC	210			279	.278	.445	115		HYD
	EXH.	40 BBC	10 ATC	210			279	.278	.445	115		HYD
TSC-1	INT.			212			244	.262	.393		1.5	0.014
	EXH.			224				.264	.396			
TSC-5	INT.											
	EXH.											
TSC-6	INT.			191				.197				0.012
	EXH.			191				.197				0.008
TSC-7	INT.											
	EXH.											
TSC-8	INT.											
	EXH.											
20402	INT.	10 BTC	44 ABC	234	42 BTC	84 ABC	306	.325	.520	107	1.6	HYD.
	EXH.	59 BBC	5 ATC	244	91 BBC	45 ATC	316	.339	.542	117		HYD.
21206	INT.	5 TDC	39 ABC	224	38 BTC	82 ABC	300	.310	.496	107		HYD.
	EXH.	49 BBC	5 BTC	224	82 BBC	38 ATC	300	.310	.496	117		HYD.
21300	INT.	10 BTC	44 ABC	234	42 BTC	84 ABC	306	.325	.520	107		HYD.
	EXH.	59 BBC	5 ATC	244	91 BBC	45 ATC	316	.339	.542	117		HYD.
22100	INT.	11 ATC	23 ABC	192	25 ATC	20 ABC	268	.234	.398	107	1.7	HYD.
	EXH.	37 BBC	14 BTC	203	68 BBC	69 ATC	278	.253	.430	117		HYD.
22107	INT.			208			280	.272	.408	107	1.5	HYD.
	EXH.			208			280	.272	.408	113		HYD.
22108	INT.			184			260	.245	.388	104		HYD.
	EXH.			194			270	.265	.398	104		HYD.
22109	INT.	7 ATC	21 ABC	194	26 BTC	64 ABC	270	.265	.398	104		HYD.
	EXH.			204			278	.280	.420	104		HYD.
22110	INT.	8 ATC	32 ABC	204	24 BTC	74 ABC	278	.280	.420	110		HYD.
	EXH.			214			288	.295	.443	110		HYD.
22111	INT.			194			270	.265	.398	107		HYD.
	EXH.			204			278	.281	.422	117		HYD.
22113	INT.	7 ATC	21 ABC	194	26 BTC	64 ABC	270	.265	.398	104		HYD.
	EXH.			204			278	.288	.420	117		HYD.
22114	INT.			208			280	.280	.420	106		HYD.
	EXH.			208			280	.280	.420	116		HYD.
22115	INT.			210			283	.290	.435	107		HYD.
	EXH.			216			286	.303	.455	117		HYD.
22116	INT.	18 ATC	28 ABC	190	26 BTC	71 ABC	277	.232	.406	113	1.75	HYD
	EXH.	25 BBC	15 BTC	190	69 BBC	28 ATC	277	.232	.406	110		HYD
22117	INT.	8 ATC	32 ABC	204	24 BTC	76 ABC	280	.253	.443	109		HYD.
	EXH.	36 BBC	12 BTC	204	68 BBC	32 ATC	280	.253	.443	115		HYD.
22118	INT.	17 ATC	29 ABC	192	32 BTC	78 ABC	290	.230	.403	113		HYD.
	EXH.	26 BBC	14 BTC	192	75 BBC	35 ATC	290	.230	.403	110		HYD.
22119	INT.	7 ATC	29 ABC	202	21 BTC	70 ABC	271	.269	.404	108	1.5	HYD.
	EXH.	41 BBC	8 BTC	213	70 BBC	34 ATC	284	.276	.414	116		HYD.
22120	INT.	7 ATC	29 ABC	202	21 BTC	70 ABC	271	.269	.404	108		HYD.
	EXH.	41 BBC	8 BTC	213	70 BBC	34 ATC	284	.276	.414	116		HYD.
22121	INT.	9 ATC	31 ABC	202	17 BTC	72 ABC	269	.269	.404	110		HYD.
	EXH.	37 BBC	10 BTC	207	63 BBC	28 ATC	271	.276	.414	114		HYD.
22123	INT.	10 ATC	33 ABC	203	18 BTC	73 ABC	271	.273	.410	111		HYD.
	EXH.	41 BBC	7 BTC	214	69 BBC	36 ATC	285	.273	.410	115		HYD.
22124	INT.	7 ATC	29 ABC	202	20 BTC	71 ABC	271	.267	.401	108		HYD.
	EXH.	37 BBC	4 BTC	213	65 BBC	38 ATC	283	.273	.410	112		HYD.
22125	INT.	7 ATC	29 ABC	202	20 BTC	71 ABC	271	.267	.401	108		HYD.
	EXH.	37 BBC	4 BTC	213	65 BBC	38 ATC	283	.273	.410	112		HYD.
22126	INT.			194			268	.265	.398	107		HYD.
	EXH.			214			288	.294	.441	117		HYD.
22127	INT.			190			261	.258	.439	106	1.7	HYD.

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.	EXH.	Specs @ 0.50 Cam Lift			SAE Specs@ (0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration					
22128	EXH.			202			272	.273	.464	114		HYD.
	INT.			210			273	.319	.478	107		HYD.
	EXH.			214			277	.325	.487	117		HYD.
22200	INT.	1 BTC	41 ABC	222	30 BTC	80 ABC	290	.298	.447	110	1.5	HYD.
	EXH.	49 BBC	7 BTC	222	78 BBC	32 ATC	290	.298	.447	118		HYD.
22201	INT.			223			291	.333	.566	110	1.7	HYD.
	EXH.			223			291	.333	.566	118		HYD.
22203	INT.	0 TDC	34 ABC	214	32 BTC	76 ABC	288	.295	.443	107	1.5	HYD.
	EXH.			224			298	.310	.465	117		HYD.
22204	INT.	0 TDC	34 ABC	214	34 BTC	78 ABC	292	.295	.502	107	1.7	HYD.
	EXH.	49 BBC	5 BTC	224	83 BBC	39 ATC	302	.310	.527	117		HYD.
22210	INT.	3 ATC	47 ABC	224	27 BTC	84 ABC	291	.300	.450	114	1.5	HYD.
	EXH.	46 BBC	2 BTC	224	75 BBC	32 ATC	287	.307	.461	114		HYD.
22213	INT.			214			288	.295	.443	107		HYD.
	EXH.			214			288	.295	.443	117		HYD.
22214	INT.	2 ATC	36 ABC	214	32 BTC	80 ABC	292	.295	.502	109	1.7	HYD.
	EXH.	46 BBC	12 BTC	214	80 BBC	32 ATC	292	.295	.502	119		HYD.
22215	INT.	2 BTC	38 ATC	220	32 BTC	83 ABC	295	.286	.429	108	1.5	HYD.
	EXH.			220			295	.286	.429	112		HYD.
22216	INT.	4 ATC	38 ABC	214	29 BTC	81 ABC	289	.271	.461	110	1.7	HYD.
	EXH.	49 BBC	11 BTC	218	86 BBC	37 ATC	302	.282	.480	120		HYD.
22217	INT.	4 ATC	39 ABC	215	28 BTC	81 ABC	289	.272	.462	110		HYD.
	EXH.	49 BBC	10 BTC	219	86 BBC	36 ATC	301	.283	.481	120		HYD.
22218	INT.	4 ATC	39 ABC	215	28 BTC	81 ABC	289	.272	.462	110		HYD.
	EXH.	49 BBC	10 BTC	219	86 BBC	36 ATC	301	.283	.481	120		HYD.
22219	INT.	3 ATC	47 ABC	224	29 BTC	85 ABC	293	.300	.510	114		HYD.
	EXH.	48 BBC	4 BTC	224	80 BBC	34 ATC	293	.300	.510	117		HYD.
22220	INT.	3 ATC	47 ABC	224	29 BTC	85 ABC	293	.300	.510	114		HYD.
	EXH.	48 BBC	4 BTC	224	80 BBC	34 ATC	293	.300	.510	117		HYD.
22221	INT.			197			261	.289	.433	105	1.5	HYD.
	EXH.	36BBC	-10ATC	206	64BBC	62ABC	276	.300	.450	114		HYD.
22222	INT.	-7 BTC	29 ABC	202	22 BTC	70 ABC	272	.269	.403	108		HYD.
	EXH.	41 BBC	-8 ATC	213	70 BBC	36 ATC	286	.273	.409	116		HYD.
22223	INT.			224				.284	.483	113	1.7-1	Hyd
	EXH.			224				.284	.483	118		Hyd
22230	INT.			214			287	.296	.444	105	1.5	HYD.
	EXH.			214			287	.296	.444	115		HYD.
22232	INT.			220			304	.312	.468	106		HYD.
	EXH.			231			287	.320	.480	114		HYD.
22233	INT.			224			300	.291	.437	107		HYD.
	EXH.			224			300	.291	.437	109		HYD.
22234	INT.			224			283	.320	.480	107		HYD.
	EXH.			230			291	.324	.486	113		HYD.
22280	INT.			220			283	.330	.495	107		HYD.
	EXH.			224			287	.335	.502	113		HYD.
22296	INT.	0 TDC	42 ABC	222	33 BTC	93 ABC	306	.294	.500	110	1.7	HYD.
	EXH.	57 BBC	2 BTC	235	95 BBC	47 ATC	322	.297	.505	120		HYD.
22301	INT.	8 BTC	42 ABC	230	34 BTC	73 ABC	287	.320	.480	107	1.5	HYD.
	EXH.	46 BBC	4 ATC	230	72 BBC	35 ATC	287	.320	.480	111		HYD.
22302	INT.	9 BTC	41 ABC	230	42 BTC	87 ABC	309	.302	.513	106	1.7	HYD.
	EXH.	49 BBC	9 BTC	230	82 BBC	47 ATC	309	.302	.513	114		HYD.
22303	INT.	5 BTC	39 ABC	224	37 BTC	81 ABC	298	.310	.465	107	1.5	HYD.
	EXH.	54 BBC	0 TDC	234	85 BBC	39 ATC	304	.325	.488	117		HYD.
22304	INT.			232			308	.325	.487	106		HYD.
	EXH.			234			308	.325	.487	110		HYD.
22305	INT.	10 BTC	44 ABC	234	41 BTC	82 ABC	303	.325	.488	107		HYD.
	EXH.	59 BBC	5 ATC	244	90 BBC	43 ATC	316	.339	.509	117		HYD.
22306	INT.	9 BTC	41 ABC	230	36 BTC	86 ABC	302	.311	.529	110	1.7	HYD.
	EXH.	49 BBC	1 ATC	230	87 BBC	40 ATC	307	.325	.553	118		HYD.

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.		SAE Specs@										
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration					
22320	INT.	3 BTC	47 ABC	230	34 BTC	90 ABC	304	.302	.453	112	1.5	HYD.
	EXH.	51 BBC	1 ATC	230	82 BBC	42 ATC	304	.302	.453	116		HYD.
22380	INT.	9 BTC	50 ABC	239	29 BTC	74 ABC	283	.297	.446	109		.018
	EXH.	56 BBC	3 ATC	239	76 BBC	27 ATC	283	.297	.446	118		.018
22385	INT.			237				.368	.625	109	1.7	HYD.
	EXH.			245				.376	.639	115		HYD.
22396	INT.	12 BTC	50 ABC	242	41 BTC	88 ABC	309	.306	.520	108		.020
	EXH.	60 BBC	2 ATC	242	83 BBC	32 ATC	295	.306	.520	120		.024
22400	INT.	19 BTC	58 ABC	257	40 BTC	84 ABC	304	.329	.494	108	1.5	.022
	EXH.	70 BBC	20 ATC	270	88 BBC	44 ATC	312	.341	.512	116		.024
22401	INT.	15 BTC	49 ABC	244	46 BTC	88 ABC	314	.340	.510	107		HYD.
	EXH.	63 BBC	11 ATC	254	95 BBC	53 ATC	328	.355	.533	117		HYD.
22402	INT.	14 BTC	46 ABC	240	32 BTC	68 ABC	280	.347	.520	106		.026
	EXH.	52 BBC	18 ATC	250	70 BBC	42 ATC	290	.347	.520	106		.026
22404	INT.	29 BTC	47 ABC	258	44 BTC	63 ABC	290	.360	.540	99		.026
	EXH.	63 BBC	21 ATC	266	78 BBC	37 ATC	298	.372	.558	111		.026
22407	INT.	16 BTC	54 ABC	250	39 BTC	82 ABC	294	.356	.576	108	1.7	.022
	EXH.	64 BBC	16 ATC	260	82 BBC	42 ATC	306	.376	.639	116		.026
22408	INT.	24 ATC	64 ABC	268	52 BTC	93 ABC	325	.382	.649	112		.022
	EXH.	72 BBC	24 ATC	276	96 BBC	49 ATC	325	.394	.670	108		.026
22410	INT.	16 BTC	58 ABC	254	36 BTC	79 ABC	295	.323	.485	110	1.5	.030
	EXH.	64 BBC	10 ATC	254	84 BBC	31 ATC	295	.394	.485	118		.030
22415	INT.	10 BTC	52 ABC	242	33 BTC	82 ABC	295	.305	.458	110		.020
	EXH.	68 BBC	6 ATC	254	94 BBC	34 ATC	308	.322	.484	122		.025
22427	INT.	22 BTC	62 ABC	264	46 BTC	96 ABC	322	.329	.559	108	1.7	.022
	EXH.	70 BBC	20 ATC	270	91 BBC	49 ATC	320	.341	.580	116		.026
22450	INT.	21 BTC	61 ABC	262	42 BTC	87 ABC	309	.341	.512	108	1.5	.022
	EXH.	71 BBC	22 ATC	273	90 BBC	48 ATC	318	.357	.536	116		.024
22460	INT.			246			302	.339	.509	106		HYD.
	EXH.			246			302	.339	.509	112		HYD.
22470	INT.			255			287					
	EXH.			266			297					
22471	INT.			240			305	.329	.559	110		HYD.
	EXH.			246			311	.337	.572	114		HYD.
22480	INT.			241			305	.329	.559	110	1.7	HYD.
	EXH.			246			310	.336	.572	114		HYD.
23103	INT.	15 ATC	33 ABC	198	16 BTC	82 ABC	278	.273	.410	114	1.5	HYD.
	EXH.	27 BBC	8 BTC	199	61 BBC	41 ATC	282	.274	.411	108		HYD.
23104	INT.	15 ATC	33 ABC	198	16 BTC	82 ABC	278	.273	.410	114		HYD.
	EXH.	27 BBC	8 BTC	199	61 BBC	41 ATC	282	.274	.411	108		HYD.
23123	INT.	4 ATC	28 ABC	204	28 BTC	70 ABC	278	.280	.420	106		HYD.
	EXH.	36 BBC	12 BTC	204	68 BBC	30 ATC	278	.280	.420	114		HYD.
23203	INT.	0 TDC	34 ABC	214	32 BTC	76 ABC	288	.295	.443	107		HYD.
	EXH.	49 BBC	5 BTC	224	81 BBC	37 ATC	298	.310	.465	117		HYD.
23204	INT.	0 TDC	34 ABC	214	32 BTC	76 ATC	288	.295	.443	107		HYD.
	EXH.	49 BBC	5 BTC	224	81 BBC	37 ATC	298	.310	.465	117		HYD.
23301	INT.	8 BTC	43 ABC	231	32 BTC	75 ABC	287	.320	.480	107		HYD.
	EXH.	46 BBC	5 ATC	231	70 BBC	37 ATC	287	.320	.480	111		HYD.
23302	INT.	7 BTC	43 ABC	230	37 BTC	83 BTC	300	.320	.480	107		HYD.
	EXH.	45 BBC	5 ATC	230	75 BBC	45 ATC	300	.320	.480	111		HYD.
23401	INT.	12 BTC	50 ABC	242	42 BTC	90 ABC	312	.347	.520	108		HYD.
	EXH.	54 BBC	18 ATC	252	84 BBC	56 ATC	320	.367	.550	110		HYD.
24106	INT.	12 ATC	16 ABC	184	18 BTC	61 ABC	258	.238	.381	103	1.6	HYD.
	EXH.	28 BBC	16 BTC	192	59 BBC	32 ATC	270	.247	.395	111		HYD.
24107	INT.	14 ATC	32 ABC	198	18 BTC	82 ABC	280	.260	.416	114		HYD.
	EXH.	38 BBC	9 BTC	209	70 BBC	42 ATC	292	.278	.445	114		HYD.
24108	INT.			190				0.257	0.412	106		HYD.
	EXH.											
24111	INT.			208			284	.280	.484	107	1.73	HYD.

## CAMSHAFT SPECIFICATIONS (Cont.)

Part No.	EXH.	SAE Specs@											
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio)			Cam Lift	Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance
		Opens	Closes	Duration	Opens	Closes	Duration						
	EXH.			208			284	.280	.484	115			HYD
24203	INT.	0 TDC	34 ABC	214	33 BTC	77 ABC	290	.295	.472	107	1.6		HYD.
	EXH.			224			300	.310	.496	117			HYD.
24204	INT.	0 TDC	34 ABC	214	34 BTC	78 ABC	292	.295	.510	107	1.73		HYD.
	EXH.	49 BBC	5 BTC	224	83 BBC	39 ATC	302	.310	.536	117			HYD.
24205	INT.	0 TDC	34 ABC	214	34 BTC	78 ABC	292	.295	.510	107			HYD.
	EXH.	49 BBC	5 BTC	224	83 BBC	39 ATCC	302	.310	.536	117			HYD.
24206	INT.	0 TDC	34 ABC	214	34 BTC	79 ABC	293	.296	.518	107	1.75		HYD.
	EXH.	49 BBC	5 BTC	224	83 BBC	40 ATC	303	.311	.544	117			HYD.
24207	INT.	5 BTC	39 ABC	224	39 BTC	84 ABC	303	.311	.544	107			HYD.
	EXH.	54 BBC	0 TDC	234	87 BBC	41 ATC	308	.325	.569	117			HYD.
24209	INT.	13 ATC	40 ABC	207	17 BTC	85 ABC	282	.278	.445	117	1.6		HYD.
	EXH.	47 BBC	6 BTC	221	83 BBC	41 ATC	304	.283	.453	113			HYD.
24210	INT.			224			300	.311	.498	107			HYD
	EXH.			234			305	.325	.520	117			HYD
24211	INT.	5 BTC	39 ABC	224	37 BTC	81 ABC	298	.310	.496	107			HYD.
	EXH.	54 BBC	0 TDC	234	85 BBC	39 ATCC	304	.325	.520	117			HYD.
24212	INT.	3 BTC	35 ABC	218	38 BTC	80 ABC	298	.288	.461	107			HYD.
	EXH.			218			298	.288	.461	119			HYD
24213	INT.	1 ATC	37 ABC	216	37 BTC	89 ABC	306	.285	.493	109	1.73		HYD.
	EXH.	50 BBC	10 BTC	220	88 BBC	42 ATC	310	.290	.502	120			HYD.
24218	INT.	0 TDC	43 ABC	223	36 BTC	91 ABC	307	.292	.514	110	1.76		HYD.
	EXH.	44 BBC	1 BTC	223	80 BBC	47 ATC	307	.292	.514	114			HYD.
24224	INT.	1 BTC	38 ABC	219	39 BTC	89 ABC	308	.292	.505	108	1.73		HYD.
	EXH.	49 BBC	10 BTC	219	87 BBC	41 ATC	308	.292	.505	120			HYD.
24225	INT.	3 BTC	35 ABC	218	38 BTC	84 ABC	298	.288	.461	107	1.6		HYD.
	EXH.	49 BBC	11 BTC	218	80 ABC	34 ATC	298	.288	.461	119			HYD.
24226	INT.			212			289	.307	.491	107			HYD
	EXH.			222			300	.318	.509	117			HYD
24227	INT.			222			300	.318	.509	107			HYD
	EXH.			232			309	.332	.532	117			HYD
24280	INT.			220			286	.320	.512	109			HYD
	EXH.			223			292	.320	.512	115			HYD
24301	INT.			230			288	.320	.512	107			HYD
	EXH.			230			288	.320	.512	111			HYD
24302	INT.	7 BTC	43 ABC	230	39 BTC	85 ABC	304	.320	.554	107	1.73		HYD.
	EXH.	45 BBC	5 ATC	230	77 BBC	47 ATC	304	.320	.554	111			HYD.
24303	INT.	5 BTC	39 ABC	224	39 BTC	82 ABC	307	.311	.538	107			HYD.
	EXH.	54 BBC	0 TDC	234	86 BBC	41 ATC	307	.325	.562	117			HYD.
24305	INT.			227			298	.325	.520	107	1.6		HYD
	EXH.			234			302	.325	.520	117			HYD
24401	INT.	17 BTC	47 ABC	244	38 BTC	72 ABC	290	.329	.569	104	1.73		.026
	EXH.	54 BBC	20 ATC	254	79 BBC	41 ATC	300	.341	.590	108			.026
24406	INT.	15 BTC	49 ABC	244	47 BTC	90 ABC	317	.340	.595	107	1.75		.026
	EXH.	63 BBC	11 ATC	254	95 BBC	53 ATC	328	.355	.621	117			.026
25211	INT.	0 TDC	34 ABC	214	33 BTC	77 ABC	290	.295	.472	107	1.6		HYD.
	EXH.	49 BBC	5 BTC	224	82 BBC	38 ATC	300	.310	.496	117			HYD.
25309	INT.			244			314	0.297		110			HYD.
	EXH.			244			314			110			HYD.
25310	INT.			232			329		.474	112			
	EXH.			232			329		.474	114			
26204	INT.			214			288		.443	107			
	EXH.			224			298		.465	117			
26303	INT.			224			297		.407	112			
	EXH.			236			310		.407	119			
26308	INT.			231			304		.470	112			
	EXH.			240			315		.470	115			
27101	INT.			214			N/A	.267	.416	105	1.56		.012
	EXH.			224			N/A	.275	.429	115			.012

## CAMSHAFT SPECIFICATIONS (Cont. )

Part No.		SAE Specs@											
		Specs @ 0.50 Cam Lift			(0.06/Rocker Arm Ratio) Cam Lift			Cam Lift	Gross Valve Lift	Center Line C/L	Rocker Arm Ratio	Valve Lash Clearance	
		Opens	Closes	Duration	Opens	Closes	Duration						
27201	INT.			224				N/A	.275	.429	105		.012
	EXH.			234				N/A	.283	.442	115		.012
MC1362	INT.	-15.5 BTC	32.5 ABC	197	15.5 BTC	75.5 ABC	271	.272	.409	113.75	1.5		HYD
	EXH.	30 BBC	-13 ATC	197	61 BBC	30 ATC	271	.272	.409	112			HYD