

# TOMEI Camshaft Spec Card

PART NAME PROCAM ENGINE 4G63 EVO 9 SOLID

PART NUMBER SET IN 146A290115 EX 146B290115

GRIND	IN	290° / 11.50mm	-	BACE	IN	Φ 30.0	ROCKER ARM RATIO*	-	VALVE CLEARANCE	IN	0.12
	EX	290° / 11.50mm	-		CIRCLE(Φ)	EX				Φ 30.0	WHEN COLD

LIFT	IN	@CAM 6.75mm	@VALVE 11.50mm	LOBE	IN	130.0
	EX	@CAM 6.75mm	@VALVE 11.50mm		CENTER(°)	EX

\* ALL LIFTS ARE BASED ON ZERO LASH AND THORETICAL ROCKER ARM RATIOS

CAM TIMING		OPENS(°)	CLOSES(°)	Actual Duration @ Opening(°)	
Actual Duration	IN	BTDC 10.0	ABDC 100.0	290.0	
	EX	BBDC 80.0	ATDC 30.0	290.0	

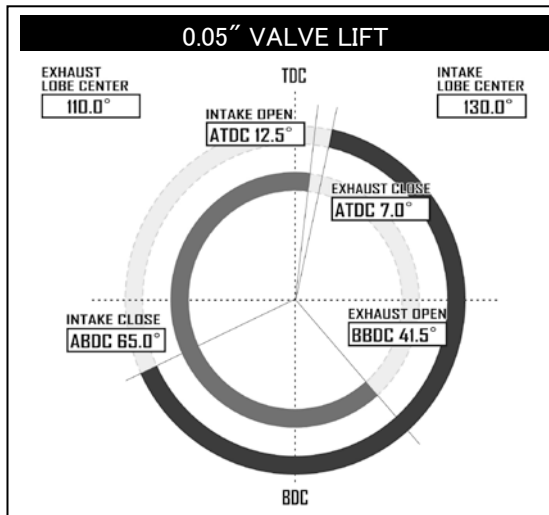
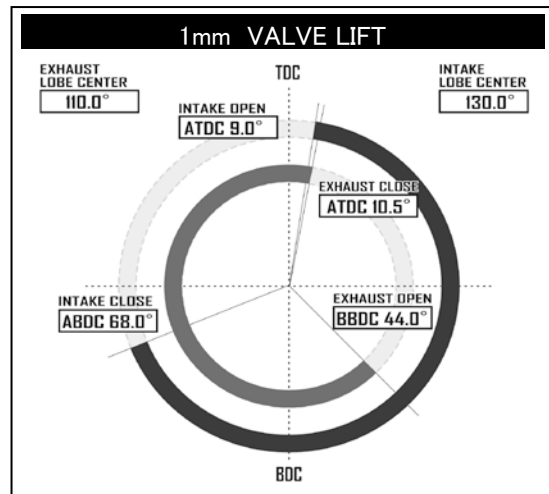
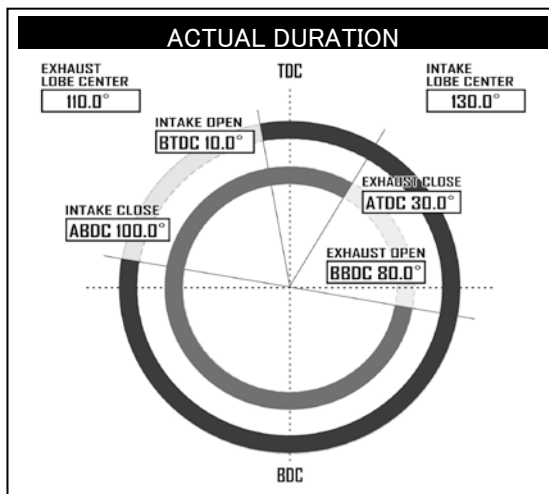
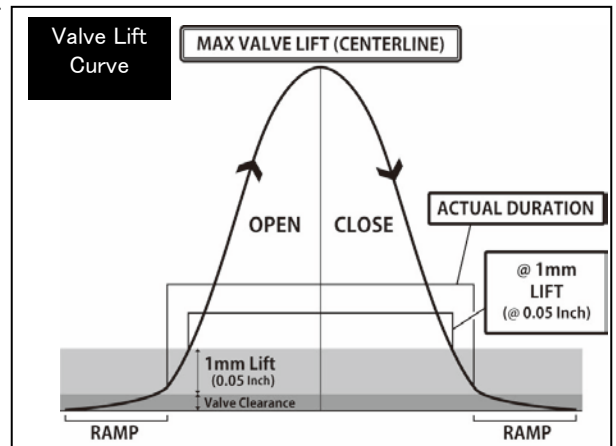
Values shown are, from start to the end of actual duration. (Excluding the ramp values)

CAM TIMING		OPENS(°)	CLOSES(°)	TOTAL DURATION(°)	
at 1mm Valve Lift	IN	ATDC 9.0	ABDC 68.0	239.0	
	EX	BBDC 44.0	ATDC 10.5	234.5	

Values are of actual duration from start to end of 1mm value points. (Excluding ramp values)

CAM TIMING		OPENS(°)	CLOSES(°)	TOTAL DURATION(°)	
at 0.05" Valve Lift	IN	ATDC 12.5	ABDC 65.0	232.5	
	EX	BBDC 41.5	ATDC 7.0	228.5	

Values are of actual duration from start to end of 0.05" value points. (Excluding ramp values)



REQUIRED VALVE SPRING SPEC	
NOMAL HEIGHT	50.8mm
SET LENGTH	39.6mm
LIFT LENGTH	28.1mm
COMPRESSED HEIGHT	27.1mm
SET LOAD	33.6kgf ± 5%
LIFT LOAD	81.7kgf ± 6%
TOMEI PART NUMBER	163034

REQUIRED PARTS	
PRODUCT NAME	TOMEI PART NUMBER
SOLID PIVOT	163039