

# TOMEI Camshaft Spec Card

PART NAME **PROCAM** ENGINE **4B11**

PART NUMBER SET **-** IN **146C 280115** EX **146D 280110**

GRIND IN **280° / 11.50mm SOLID** BACE IN **Φ34.4** ROCKER ARM RATIO \* **-** VALVE CLEARANCE IN **0.20**  
 EX **280° / 11.00mm SOLID** CIRCLE(Φ) EX **Φ36.4** WHEN COLD EX **0.30**

LIFT IN **@CAM 11.50mm @VALVE 11.30mm** LOBE IN **120.0**  
 EX **@CAM 11.00mm @VALVE 10.70mm** CENTER(°) EX **120.0**

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

CAM TIMING		OPENS(°)		CLOSES(°)		Actual Duration @ opening(°)
Actual Duration	IN	BTDC	16.0	ABDC	84.0	280.0
Valve Lift	EX	BBDC	80.0	ATDC	20.0	280.0

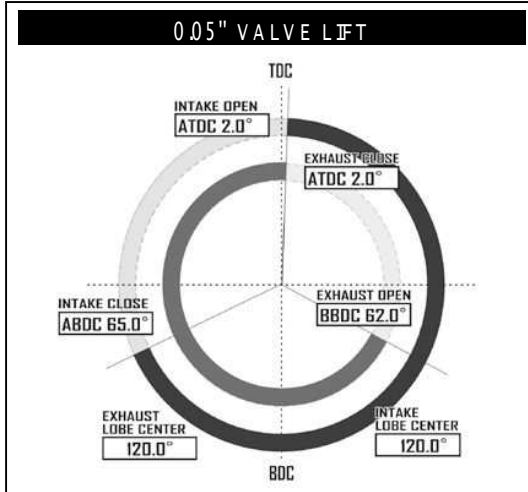
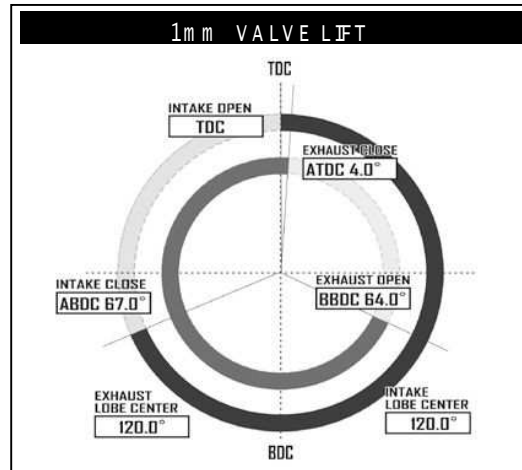
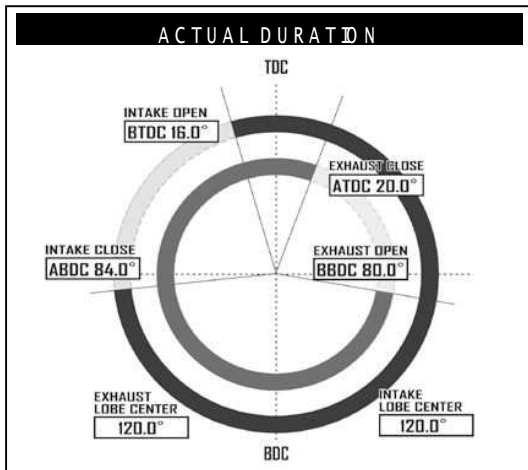
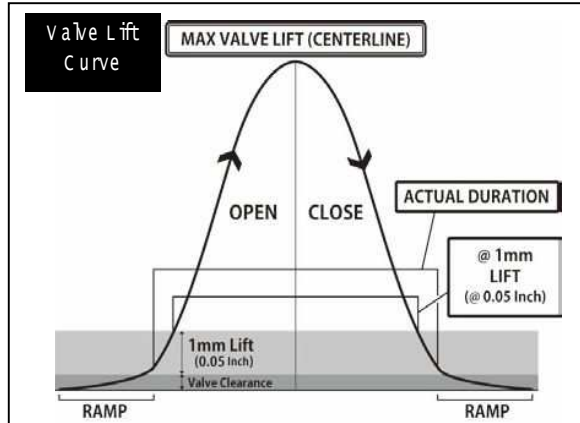
Values shown are, from start to the end of actual duration. (Excluding the ramp values)

CAM TIMING		OPENS(°)		CLOSES(°)		TOTAL DURATION(°)
at 1mm	IN	TDC	0.0	ABDC	67.0	247.0
Valve Lift	EX	BBDC	64.0	ATDC	4.0	248.0

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"	IN	ATDC	2.0	ABDC	65.0	243.0
Valve Lift	EX	BBDC	62.0	ATDC	2.0	244.0

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



REQUIRED VALVE SPRING SPEC	
NOMAL HEIGHT	41.6mm
SET LENGTH	35.0mm
LIFT LENGTH	23.0mm
COMPRESSED HEIGHT	21.5mm
SET LOAD	27.0kgf± 7%
LIFT LOAD	85.0kgf± 7%
TOMEI PART NUMBER	163051

REQUIRED PARTS	
PRODUCT NAME	TOMEI PART NUMBER