Camshaft Characteristics

Ford published the camshaft characteristics in many of its shop manuals and service bulletins. These are listed in this section. The characteristics for C2OZ-6250-A and C3AZ-6250-E were not published but were presumably the same as, or close to, their replacements. See "General Notes" on the facing page for definition of terms used in the following tables.

		Lobe Lift		Theoretical Valve Lift		Duration			
Part Number	Engine	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Overlap	Notes
C3OZ-6250-B	221, 260	.2375	.2375	.380	.381	252	252	36	
C3AZ-6250-V	289	.2303	.2375	.368	.381	266	256	30	
C7AZ-6250-C	289	.2663	.2657	.4261	.4251	250	254	34	
C3OZ-6250-C	289 HiPo	.2983	.2983	.477	.477	310	310	82	1
C9OZ-6250-C	All	.298	.298	.477	.477	290	290	62	2
C7FE-6250-A	Race	.330	.330	.528	.528	318	304	94	3

		Intake Events				Exhaust Events				
		Open		Close		Open		Close		
Part Number	Engine	BTDC	Lift	ABDC	Lift	BBDC	Lift	ATDC	Lift	Notes
C3OZ-6250-B	221, 260	21		51		57		15		
C3AZ-6250-V	289	16	.004	70	.006	52	.002	24	.005	
C7AZ-6250-C	289	15	.004	61	.006	55	.004	19	.006	
C3OZ-6250-C	289 HiPo	46	.008	84	.010	94	.008	36	.010	
C9OZ-6250-C	All	36		74		84		26		4
C7FE-6250-A	Race	52		86		82		42		

Notes

1. The .2983" lobe lift for the C3OZ-6250-C camshaft was taken from the *1965 Comet, Falcon, Fairlane & Mustang Shop Manual*. The 1966 and 1967 shop manuals also agreed. All other sources agreed with this value though may have rounded off the number to .298". The difference between sources was in the valve lift. Theoretical lift was .477" (.2983" × 1.60 = .477"). However, with a .020" valve lash adjustment, the rocker arm tip above the valve stem had to move .020" before the valve was lifted off its seat. This effectively reduced total valve lift to .457" (.477" – .020" = .457"). This value was stated in Akton O. (Ak) Miller's *High Performance Guide* published in 1966. Ak Miller was a Performance Advisor to the Ford Motor Company. Another value given in other sources for valve lift was .460".
2. The C9OZ-6250-C camshaft lobe lift value of .298" was taken from the C9OZ-6250-C instruction sheet (IS-4285) provided with the camshaft. This equates to a theoretical lift of .477" (.298" × 1.60 = .477"). However, the same instruction sheet also listed the valve lift as .470". This value was repeated in other sources as well.
3. Valve lash on the C7FE-6250-A cam was .020" on the intake valves and .025" on the exhaust valves. Though theoretical lift was .528", the advertised lift at the valve was .510".
4. C9OZ-6250-C intake and exhaust events are theortical. (Recorded at the first perceptable valve lift).