Camshafts

352-390-406-410-427-428

Camshaft I.D. and Application (Service Parts Only)

Part Number	Application		Lifter	Lash	Intake Events		Exhaust Events		Duration		Lift		Overlap	Identification	
	Engine	Year			Open	Close	Open	Close	Intake	Exhaust	Lobe	Valve		Mark	Location
C8AZ-6250-A	352-390	66-67	HYD		26° BTC	64° ABC	67° BBC	23° ATC	270°	270°	.232	.404	49°	AA	Between distr. gear and front front journal
					27° ATC	5° ABC	105° BBC	36° BTC							
C3SZ-6256-A	390 4V	67-68	HYD		28°30' BTC	17°30' ABC	107°30' BBC	28°30' ATC	284°	284°	.256	.446	56°	Pink Stripe	
					40°30' ATC	149°30' ABC	184°30' BBC	107°30' BTC							
C3AZ-6250-D	390-406 4V 5V 6V 428 PJC	63 68	Mech	.025"	40°30' BTC	80°30' ABC	88°30' BBC	17°30' ATC	304°	304°	.288	.500	78°	YB	Between last lobe and last journal
					144°30' ATC	264°30' ABC	17°30' BBC	134°30' BTC							
C3AZ-6250-T	390 PJC	63-66	Mech	.025"	28°30' BTC	73°30' ABC	76°30' BBC	25°30' ATC	282°	282°	.264	.440	54°	YAA	
					99°30' ATC	147°30' ABC	13°30' BBC	31°30' BTC							
C3AZ-6250-U	352-390 2v	66-up	HYD		22° BTC	68° ABC	68° BBC	22° ATC	270°	270°	.232	.401	44°	YA	
					90° ATC	0° ABC	91° BBC	23° BTC							
C3AZ-6250-AA	421 4V/pol 8V/cyl	63-67	Mech	.025"	40°30' BTC	80°30' ABC	88°30' BBC	17°30' ATC	304°	304°	.288	.500	78°	YBA	
					144°30' ATC	264°30' ABC	17°30' BBC	134°30' BTC							
C3EZ-6250-A	390 4V SPL	63	HYD		22° BTC	68° ABC	68° BBC	22° ATC	270°	270°	.232	.401	44°	YA	Between distr.-motor gear and first journal
					90° ATC	0° ABC	91° BBC	23° BTC							
C4AE-6250-B	427	63-67	Mech	.025"	60° BTC	88° ABC	89° BBC	39° ATC	324°	324°	.348	.500	112°	YM	
					9 ATC	269° ABC	271° BBC	7° BTC							
C8AZ-6250-A	390/428 390 CJ	67 69	HYD		16° BTC	68° ABC	55° BBC	11° ATC	264°	264°	.263	.438	27°	YU	
					124° ATC	6° ABC	7° BBC	21° BTC							
C8EZ-6256-B	390 GT 428 CJ	66-68 68-70	HYD		10° BTC	77° ABC	31° BBC	28° ATC	270°	290°	.216 .263	.401 I .490 E	40°	Light Blue	Both sides of No. 3 journal
					80° ATC	27° ABC	79° BBC	34° BTC							
C7AZ-6250-A	390 2V	67	HYD		13° BTC	63° ABC	62° BBC	23° ATC	256°	256°	.241 .249	.423 I .631 E	30°	YX	Between last lobe and last front journal
					50° ATC	10° ABC	14° BBC	29° BTC							
C8AZ-6250-A	427 (semi)	68	HYD		10° BTC	72° ABC	62° BBC	26° ATC	270°	290°	.216 .263	.401 I .490 E	46°	ABAB	
					124° ATC	10° ABC	10° BBC	44° BTC							
C8AX-6256-D @	427	63-67	Mech	.025"	60° BTC	90° ABC	94° BBC	30° ATC	330°	330°	.384	.600	110°	C8AX-D	On End of Cam Journal
					120° ATC	10° ABC	10° BBC	10° BTC							
C8AX-6256-C	427	63-67	HYD		24° BTC	16° ABC	62° BBC	34° ATC	282°	296°	.288	.500	58°	C8AX-C	
					114° ATC	34° ABC	34° BBC	14° BTC							

See page 3 for explanation of color code.

Valve lift shown is for stock rocker arm ratios for noted engine and cam type (1.73:1 for HYD or 1.76:1 for MECH)

Two sets of lift figures denotes different lifts for (1) intake and (2) exhaust lobes.

* Has grooves in 2nd & 4th journals.

@ Requires 0.100" milled off valve guide bosses and special non-Ford lightweight valve springs, retainers and push rods because of 0.600" valve lift. (Available from Holman, Moody, etc.)

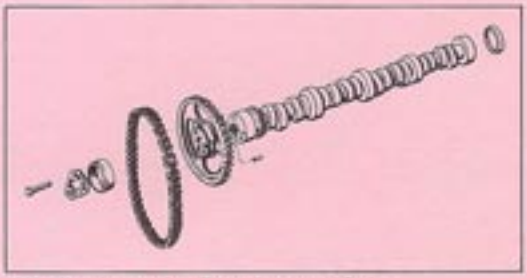
Special Instructions

1. – See page 3 for general tips on cam interchange. Specific information on valve springs, retainers, push rods, rocker arms, etc. are shown in the "FE" section for 427 and 428 engines. This can also be applied to 332-352-406-410 engines by checking spring height and load specifications.

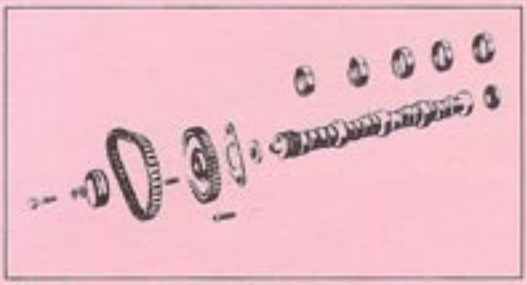
2 – Only use cams with oil grooves in the 2nd and 4th journals in side oiler 427 blocks as explained on page 7 of "FE" section.

3. – Mid 1963 and earlier 332-352-390-406 engines used a thrust button and spring between the cam and front cover. 1963 1/2 and later engines use a thrust plate that bolts to the front of the block. 1963 and later cams can be installed on these early engines by removing the soft oil gallery plugs on each side of the cam bearing. Then, thread the holes with a 7/16 inch standard tap. Install later model front end pieces; Thrust Plate C3AZ-6269-A, Spacer C3AZ-6265-A, Crank Sprocket Gear C4AZ-6306-A, narrower Cam Sprocket gear C8AZ-6256-A, narrower Timing Chain D0AZ-6268-A, Timing Gear Pin 73357-S and two Bolts 3800041-S.

4. – Since all FE engines use shaft-mounted rocker arms with a 1.73 ratio for hydraulics and 1.76 ratio for mechanical cams, their is little to say about the valve train, except . . . that 427 high riser heads require a shorter rocker stand than other FE engines because of higher pads to accomodate the higher intake ports.



1963 1/2 and earlier Cam Thrust Button and Spring



1963 1/2 and Later Cam Thrust Plate Assembly

Glazier/Nolan Mustang Barn