

# LINGENFELTER

## PERFORMANCE ENGINEERING

### Camshaft:

LPE-74220

LPE part #: L210045087

Engine(s): 1992-1997 LT1, LT4 Gen II GM small block engines & hydraulic roller 305 & 350 L98/Vortec engines (Gen I SBC).  
 Firing order: 1-8-4-3-6-5-7-2 (per standard GM V8 cylinder numbering)

	Intake	Exhaust	
Valve adjustment:	HYD	HYD	
Lobe lift (inches):	0.334	0.342	
Valve lift (inches):	0.501	0.513	with 1.5 rocker ratio
Valve lift (inches):	0.534	0.547	with 1.6 rocker ratio
Valve lift (inches):	0.568	0.581	with 1.7 rocker ratio
Duration @ 0.006":	271	276	
Duration @ 0.050":	215	220	

Lobe Separation Angle (LSA): 114.0  
 Degrees of advance: 0.0

Valve timing @ 0.050" tappet lift:

	Intake	Opening	Closing
		-6.5 BTDC	41.5 ABDC
	Exhaust	44.0 BBDC	-4.0 ATDC
	Intake	114.0 intake center line	114.0 exhaust center line
		114 (intake center line angle)	

These specs are with cam installed at:

Recommended installation angle: 114 (intake center line angle)

Recommended valve springs: Comp Cams 977-16 (1.900" installed height with LPE L98/LT1 valves) 1.5 or 1.6:1 rocker applications

Recommended spring seats: 10185066 (GM)

Recommended spring retainer: LN0025-16 (titanium)/Comp Cams 730-16 (titanium)/Comp Cams 740-16 (steel)

Recommended valve locks: 611-16 (for applications with lash caps) / 613-16 (for applications without lash caps) - 10 deg square cut for 11/32 valves

**Notes:** **WARNING - CHECK YOUR EXISTING CAMSHAFT PIN LENGTH. 1995 to 1997 LT1/LT4 engines have a roughly 0.620" long cam pin while L98, Vortec and other Gen I SBC V8 and earlier L T1 engines have a 0.280" to 0.300" long cam pin.**

- If your stock/existing cam has a 0.61"-0.62" long pin (protruding from the cam), leave the pin the length as supplied by LPE (0.62").
- If the cam pin is 0.28"-.30" long on your existing camshaft, you will need to press or hammer the pin to the same length.

LPE recommends thoroughly cleaning the camshaft and liberally applying engine assembly lube prior to installation.

LPE recommends checking for proper pushrod length when installing any new camshaft.

When installing non self aligning rockers and guide plates, check to be sure your factory pushrods are hardened or pushrod failure will occur.

- 1995 and newer LT1/LT4 engines do not have hardened pushrods from the factory.

The valve guides may need to be machined down to provide proper valve spring retainer to valve guide clearance (LPE-74216 should not require this). On cast iron cylinder heads be sure to check for proper pushrod to head clearance.

On cast iron cylinder head applications LPE also recommends changing the pressed-in rocker studs to threaded rocker studs.

Aftermarket rockers may require valve cover modifications for clearance. This is especially true on the aluminum valve covers (L98 and early LT1).

This camshaft is ground with 0.0 degree of retard. If you want to install it at a different angle, offset bushings or adjustable timing gears are available.

LPE recommends always checking the actual position of the camshaft during installation with a degree wheel or similar device.