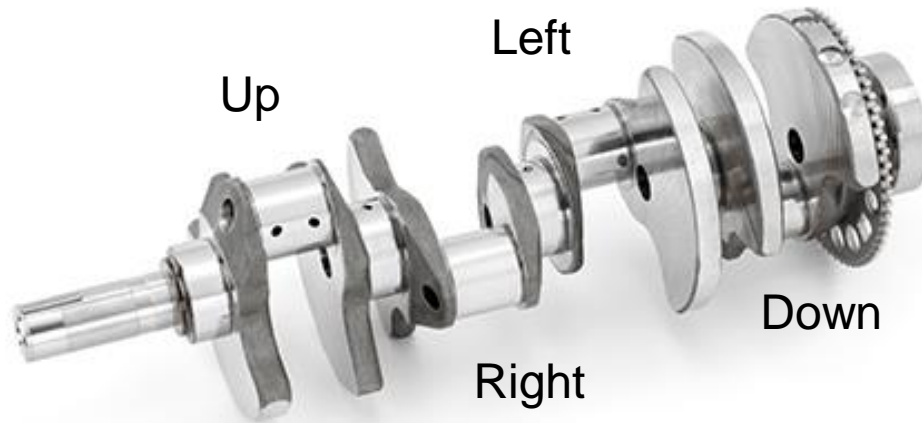


Corvette Talk

- Topic – **What Exactly is a Flat Plane Crank in the C8 Z06?**
 - Today's speaker: **David Foote**
- Future Topics
 - Are ceramic brakes better?
 - Are synthetic oil brands really different?
 - How to enter a locked Corvette with a dead battery
 - Is there a Carbon Fiber shortage?

Crank Pin Position Makes it a Flat Plane

Cross Plane or 90 degree crankshaft



Flat Plane or 180 degree crankshaft



Key Differences in the Z06 Flat Plane Design

- Shorter Stroke / Larger Bore
- Much higher Red Line as shorter stroke minimizes piston speed
- Still a V8 Configuration
- Total Engine Displacement is 5.5L Vs 6.2L in the LT2
- LT6 0-60 in 2.6 Sec. Vs LT2 0-60 in 2.9 Sec.

Model	Displacement	Name	Type	Hp	Torque	Redline (RPM)	Bore (in.)	Stroke (in.)
C8	6.2 L	LT2	V8	490	465@5150 RPM	6600	4.060	3.620
C8 - Z06	5.5L	LT6	V8	670	460@6300 RPM	8600	4.104	3.150

Key Design Information

- Almost Everything Changes with the Crankshaft Change
 - Forged Titanium Connecting Rods
 - Lighter weight crank
 - Cylinder heads redesigned
 - Higher fuel injection pressure
- Flat Plane “Challenges”
 - More engine vibration
 - Engine and Oil Cooling

Questions (but can't cover too much detail – time)

