

## CAMSHAFT GEARS: SIZE INFORMATION

Andrews Products standard sized cam gears (with one groove) will be correct size for most engines. For a small number of engines made with oversized drive gears (green or black color codes), large size Andrews cam gears (part # 212077) may be needed for quiet operation. There are four basic differences in late cam gears (1990-1999) and early cam gears (1989-earlier):

1. Starting in 1990 stock H/D 42 tooth drive gears have 2 grooves on face of gear while 1978-'89 have one groove. Andrews drive gears (one groove) are designed to work with all EV-80 type engines '84-'89 and '90-'99.

2. For 1990, the difference between the largest and smallest gears was reduced from .006 to .003 inches. The largest gears for all years are the same (green or black color codes).

3. Measuring pin diameters in H/D service books were changed in 1990 from .105 to .108 inches. Measuring the same gear with .108 pins will show a .012 larger measurement than a measurement with .105 pins.

4. Beginning in 1992, stock cam gear outer diameters were reduced by .025 inches. Andrews cam gears as well as earlier stock cam gears are interchangeable with later gears.

## EVOLUTION CAM GEARS (1984 - 1999) (Oversize, Undersize & Standard)

Gear	Size*	Size**	Color	Part#
Oversize	2.7384	2.7502	BLACK	212077
	2.7394	2.7506		
Undersize	2.7324	2.7472	ORANGE	212033
	2.7334	2.7476		
Andrews Std.	2.7354	2.7487	RED	212055
H/D Stock	2.7364	2.7491		-----

Gage pins: Part #212116 (set of two .108 dia. pins)

Gage pins: Part #212105 (set of two .105 dia. pins)

\*using .105" dia. pins

\*\*using .108" dia. pins



Illustration of gears measured over pins

## PAN & SHOVEL CAM GEARS (1948 - 1985) (Oversize, Undersize & Standard)

Gear	Cam Gear Sizes: (Measured over .105 pins)					
	Late (1978-84)			Early (1948-77)		
	Size	Color	Part#	Size	Color	Part#
Oversize	2.7384	BLACK	212077	2.7700	YELLOW	212088
	2.7394			2.7705		
Undersize	2.7324	ORANGE	212033	2.7670	BLACK	212044
	2.7334			2.7675		
Andrews Std.	2.7365	RED	212055	2.7690	GREEN	212066
H/D Stock	2.7364		-----	2.7695		-----

Gage pins: Part #212105 (set of two .105 dia. pins)

