When installing cams in a shovel engine, the valve spring collars and related parts shown above will make things go a lot easier. Our springs and collars are designed for easy installation and maximum reliability.

Camshaft Gears: Size Information For Evolution, Pan, and Shovel

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 two 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.

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Pan & Shovel Cam Gears (1948–1985) (Oversize, Undersize, and Standard)