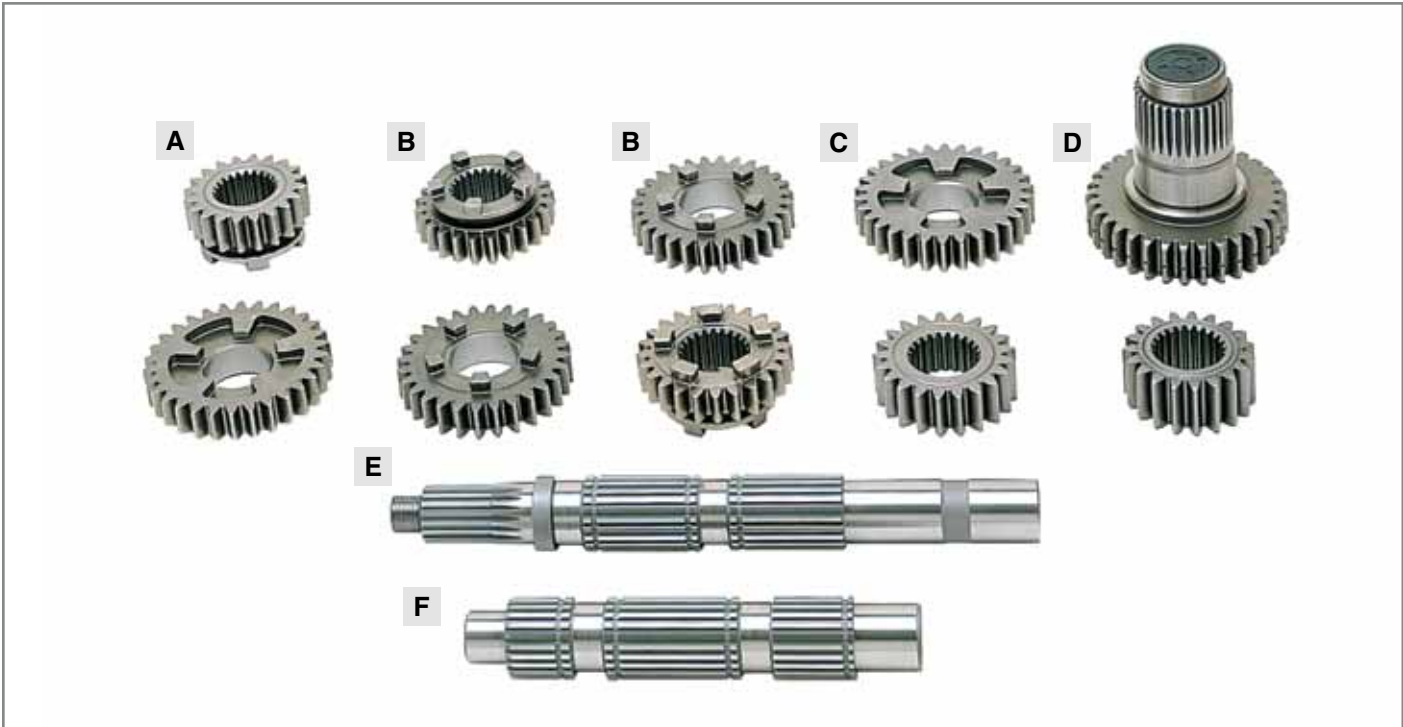


**SPORTSTER GEARS (EV 5 SPEED) ('91-2003 for complete sets)**



All 5 speed Sportster gears are made from high nickel alloy steel. Gears are then heat treated and shot-peened to give maximum durability and strength. Also, where applicable, drive

dogs have milled lead-in ramps to improve shifting and reduce wear on drive dogs and slots.

**(A) 2.61 CLOSE RATIO 1ST GEAR SET**

**Part# 299110** (2 pieces) 2.61 1st gears provide true close ratio shifting into 2nd. Plus 7 mph of usable 1st gear. (20T & 30T)

**(B) STOCK 2ND AND 3RD GEARS**

**Part #299102** (2nd main and 3rd counter) (H/D #35771-89) (24T)

**Part #299103** (3rd main and 2nd counter) (H/D #35772-89) (28T)

**(C) STOCK 4TH GEARS**

**Part #299104** (4th main gear) (H/D #35773-89) (30T)

**Part #299144** (4th counter gear) (H/D #35775-89) (21T)

**(D) STOCK MAIN DRIVE GEARS**

**Part #299105** (main drive) (H/D #35034-89) (33T)

**Part #299155** (counter drive gear) (H/D #35633-89) (19T)

**(E) TRANSMISSION MAINSHAFT**

**Part #299180** (mainshaft) (H/D #35640-89)

**(F) TRANSMISSION COUNTERSHAFT**

**Part #299170** (countershaft) (H/D #35641-89)

**EV SPORTSTER 5 SPEED GEAR SETS**

**Part #299900** (1991-2003) (*later years have some differences*)

2004 and later Sportsters cannot use many of the earlier gears.

5 speed EV Sportster transmission gear sets are available as complete kits. Each kit includes the parts as pictured: 1st, 2nd, 3rd, 4th, 5th gears, mainshaft and countershaft.

Internal transmission ratios are listed below.

Gear	Close First	% Change	Stock First	% Change
1st	2.605	22%	2.779	27%
2nd	2.026	27%	2.026	27%
3rd	1.489	18%	1.489	18%
4th	1.216	18%	1.216	18%
5th	1.000		1.000	

**Special Ratio Sportster 5 Speed Racing Gears:**

**S Ratio Gears (1st and 2nd)**

**Part# 299816** (2 gears) 2.368 1st gears. (22T & 30T)

**Part# 299724** (2 gears) 1.876 2nd gears. (25T & 27T)

**Y Ratio Gears (1st, 2nd, 3rd, 4th)**

**Part# 299717** (2 gears) 2.026 1st gears. (24T & 28T)

**Part# 299727** (2 gears) 1.670 2nd gears. (25T & 26T)

**Part# 299737** (2 gears) 1.364 3rd gears. (22T & 28T)

**Part# 299747** (2 gears) 1.158 4th gears. (20T & 30T)

Internal transmission ratios are listed below.

Gear	S Ratio	% Change	Y Ratio	% Change
1st	2.368	21%	2.026	17%
2nd	1.876	21%	1.670	18%
3rd	1.489	18%	1.364	15%
4th	1.216	18%	1.158	14%
5th	1.000		1.000	

Ratio "S" includes 1st and 2nd gears (4 piece set).  
Ratio "Y" includes 1st, 2nd, 3rd and 4th (8 piece set).