

1990-2006 6-SPEED BIG TWIN BUILDER'S KITS

	Fitment	Country of Origin	Rider Profile	80 MPH 5-Speed RPM Drop from Stock 5th Gear (28/36 for DD6 & 25/36 for OD6 with 32/70 Rear)	Machining (and Ease-of-Install Details)	Retail Price	Additional Parts Required	Warranty Yr./Mi.	Gear Ratio Options	Gear Comments	Shift System	Trap Door	Comments
H-D 5-Speed	1984-2006 Touring 1984-2006 Softail 1991-2005 Dyna	No longer available		N/A	None	No longer available	N/A	N/A	Internal/Effective: 3.21 (1st), 2.21 (2nd), 1.57 (3rd), 1.23 (4th), 1.00 (5th) Overall: 10.11 (1st), 6.96 (2nd), 4.95 (3rd), 3.88 (4th), 3.15 (5th)	All Spur Cut Gears	-4-degree dogs	-Black & Raw	-5th gear is 99% efficient -Tried and true design goes back to 1980 -3400 rpm @ 80 mph is hard on the engine and the rider -Clunky shift quality
	1990-2006 Softail 1991-2005 Dyna 1990-1994 FXR 1999 FXR 1990-2006 FLT-FLH	USA	Designed for touring riders who put on miles	363	Typically no clearance required-gearset designed to fit in OEM case. On occasion the case may require clearance due to OEM fluctuations in the case casting process	\$3,195.00	Recal unit on all electronic speedometer models	5-Year/50,000 Miles	Effective: 3.24 (1st), 2.20 (2nd), 1.61 (3rd), 1.24 (4th), 0.99 (5th), 0.86 (6th) Internal: 3.77 (1st), 2.56 (2nd), 1.87 (3rd), 1.44 (4th), 1.15 (5th), 1.00 (6th) Overall: 10.60 (1st), 7.19 (2nd), 5.25 (3rd), 4.05 (4th), 3.23 (5th), 2.81 (6th)	Spur Cut 1st-3rd Gear, Helical Cut 4th-6th	-CNC steel shift drum -Fixed spindle shift drum -Redundant neutral detent -1-degree dogs -Heavy-duty 2000-up ratchet pawl spring -BAKER Anti-Overshift Ratchet Pawl -Standard (1-N-2-3-4-5-6) or N1 (N-1-2-3-4-5-6) shift patterns offered	-Same width as OEM -Polished or Black -Billet 6061-T6 bearing door	-28 tooth comp sprocket supplied with kit to 'overdrive' the primary drive -14% more starter torque with 28 tooth comp sprocket -14% less torque into the transmission for less wear and tear with the 28 tooth comp sprocket -Direct drive in 6th gear is 99% efficient -Diamond cut gearset made out of 8620 steel -All transmission seals, gaskets and hardware included
	1990-2006 Softail 1991-2005 Dyna 1990-1994 FXR 1999 FXR 1990-2006 FLT-FLH	USA	Designed for speed freaks and custom bikes	475	Typically no clearance required-gearset designed to fit in OEM case. On occasion the case may require clearance due to OEM fluctuations in the case casting process	\$3,195.00	Recal unit on all electronic speedometer models	5-Year/50,000 Miles	Internal/Effective: 2.94 (1st), 2.21 (2nd), 1.60 (3rd), 1.23 (4th), 1.00 (5th), .86 (6th) Overall: 10.60 (1st), 6.96 (2nd), 5.04 (3rd), 3.87 (4th), 3.15 (5th), 2.71 (6th)	All Spur Cut Gears	-CNC steel shift drum -Fixed spindle shift drum -Redundant neutral detent -4-degree dogs -Heavy-duty 2000-up ratchet pawl spring -BAKER Anti-Overshift Ratchet Pawl -Standard (1-N-2-3-4-5-6) or N1 (N-1-2-3-4-5-6) shift patterns offered	-Polished, Black, with or without gear -Wider than stock-requires modification of exhaust brackets. -Billet 6061-T6 bearing door	-True overdrive in the transmission -Based on venerable 5-Speed -Diamond cut gearset made out of 8620 steel -All transmission seals, gaskets, and hardware are included

	Fitment	Country of Origin	Rider Profile	80 MPH 6-Speed RPM Drop from Stock 6th Gear (34/46 with 32/68 Rear)	Machining (and Ease-of-Install Details)	Retail Price	Additional Parts Required	Warranty Yr./Mi.	Gear Ratio Options	Gear Comments	Shift System	Trap Door	Comments
H-D Cruise Drive	2007-Later Touring 2007-Later Softail 2006-Later Dyna	USA		N/A	None	Consult dealer	N/A	2-year/ unlimited miles	Internal/Effective: 3.34 (1st), 2.30 (2nd), 1.71 (3rd), 1.41 (4th), 1.18 (5th), 1.00 (6th) Overall: 9.31 (1st), 6.42 (2nd), 4.77 (3rd), 3.93 (4th), 3.28 (5th), 2.79 (6th)	1st Gear Spur Cut, 2nd-6th Gears Helical Cut	-Cast steel shift drum -1-degree dogs	-Black & Raw	-6th Gear is 99% efficient -1-degree dogs -6th gear is 99% efficient -Experience of smooth, crisp, continuously pulling acceleration -No big drops in RPM from one gear to the next -No lugging the motorcycle off of a stop light -Stronger torque capacity than stock
BAKER DD7	2007-Later Touring 2007-Later Softail 2006-Later Dyna	USA	Designed for heavier, loaded down bikes or riding in hilly areas	N/A	Typically no clearance required-gearset designed to fit in OEM case. On occasion the case may require clearance due to OEM fluctuations in the case casting process	\$3,695.00	The DD7 has different gear ratios than the stock transmission (except DD7 7th gear is the same as stock 6th gear, 1:1). This changes the input to the ECM. The gear indicator and cruise control may only operate in 7th gear. To correct the gear indicator in all gears and enable cruise control, an ECM re-flash is required. Existing tuners must have an option to modify transmission gear ratios in order to re-flash the ECM.	5-Year/50,000 Miles	Internal/Effective: 3.76 (1st), 2.75 (2nd), 2.06 (3rd), 1.55 (4th), 1.27 (5th), 1.10 (6th), 1.00 (7th) Overall: 10.81 (1st), 7.91 (2nd), 5.92 (3rd), 4.46 (4th), 3.65 (5th), 3.16 (6th), 2.87 (7th)	Spur Cut 1st-3rd Gear, Helical Cut 4th-7th	-CNC steel shift drum -Frictionless linear detent system. 11/32" detent ball bearing riding on 60 micro ball bearings -Fixed spindle design for smooth, low inertia indexing -Easy to find neutral -Billet steel machined, hard chrome plated shift forks	-Same width as OEM -Polished, Black, or CVO Charcoal -Billet 6061-T6 bearing door	-Shorter first gear ratio (numerically higher) to help with the off the light get up and go, as well as slow speed maneuvering around the bar parking lot -Compatible with all types of aftermarket side covers, as well as the stock side cover -BAKER Direct Drive 7 Speed Stock Side Cover emblem included -Experience of smooth, crisp, continuously pulling acceleration -No big drops in RPM from one gear to the next -No lugging the motorcycle off of a stop light -Stronger torque capacity than stock
BAKER GrudgeBox	2007-Later Touring 2007-Later Softail 2006-Later Dyna	USA	Designed for everyday highway riders, speed freaks and race bikes	247	Typically no clearance required-gearset designed to fit in OEM case. On occasion the case may require clearance due to OEM fluctuations in the case casting process	\$3,695.00	The GrudgeBox has different gear ratios than the stock transmission (except GrudgeBox 5th gear is the same as stock 6th gear, 1:1). This changes the input to the ECM. The 42 tooth retractor ring in the GrudgeBox compensates to correct the speedometer within ± 2 mph with no re-flash to the ECM. However, the gear indicator and cruise control may only operate in 5th gear. To correct the gear indicator in all gears and enable cruise control in 3rd, 4th, and 6th, an ECM re-flash is required. Existing tuners must have an option to modify transmission gear ratios in order to re-flash the ECM.	5-Year/50,000 Miles	Internal/Effective: 3.15 (1st), 2.21 (2nd), 1.59 (3rd), 1.23 (4th), 1.00 (5th), 0.92 (6th) Overall: 9.06 (1st), 6.35 (2nd), 4.57 (3rd), 3.54 (4th), 2.87 (5th), 2.65 (6th)	All Spur Cut Gears	-CNC steel shift drum -Frictionless linear detent system. 11/32" detent ball bearing riding on 60 micro ball bearings -Fixed spindle design for smooth, low inertia indexing -Easy to find neutral -Low effort single-axis/linear motion shifter pawl rotates from one central pivot point, allowing continuous motion throughout the shift -4-degree dogs -Standard (1-N-2-3-4-5-6), N1 (N-1-2-3-4-5-6), or Reverse N1 with Ignition Kill (6-5-4-3-2-N-1) shift patterns offered	-Same width as OEM -Polished, Black, or CVO Charcoal -Billet 6061-T6 bearing door	-Strongest overdrive 6-speed on the market -All gears are straight cut for negligible parasitic power loss, providing maximum power transfer to the rear wheel -250 RPM drop at higher highway speeds (approx. 80mph) -Gears up to 40% wider than stock -Positive dog tooth engagement in gear with pie-shaped shift dogs -Compatible with all types of aftermarket side covers, as well as the stock side cover -BAKER Overdrive 6 Speed Stock Side Cover emblem included

Spur Gear is straight cut and has a lower contact pattern so it creates more gear noise.

Internal Gear Ratio is the physical number derived by dividing two gears by themselves.

Effective Gear Ratio is the overall outcome of a gear with an "effector" example a primary sprocket change. The overall output of the transmission has been affected by this primary gearing change.

Overall Gear Ratio is the Primary Ratio x Internal Ratio x Final Drive Ratio. This reading is what Harley-Davidson uses as a standard measure.