

# Parts & Accessories Bulletin

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PAB #510

## GEAR UP FOR LONG-DISTANCE TOURING

This P&A Bulletin #510 is an update of P&A Bulletin #485. It is possible to reduce engine RPM at highway speeds by using original-equipment components which are actually standard equipment on many Harley-Davidson International (HDI) motorcycles. The chart on the reverse side of this page lists available final drive ratios and component part numbers for stock Domestic models and HDI models. In order to "gear up for long-distance touring," you will need to replace (unless otherwise stated in the chart) all the listed Domestic model components with the respective HDI model components for a specific final drive ratio.

It is important that you inform your customers of the following facts about changing the final drive ratio on their particular motorcycles before they perform the modification and operate the vehicle:

- If you intend to reduce your vehicle's final drive ratio (lower engine RPM at any given speed), you must install all the components (wheel sprocket, drive belt, belt guard, and debris deflector) for that particular final drive ratio listed on the chart on the reverse side of this page.
- Although reducing your vehicle's final drive ratio will reduce engine RPM at any given speed and gear, it may also slightly decrease your vehicle's maximum rate of acceleration in a given gear.
- The chart information on the reverse side of this page pertains only to the five-speed, belt-drive Harley-Davidson models listed.
- 1993 Domestic Softail models already have the "tallest" final drive ratio available for 1340cc models (1.91 : 1). Therefore, reducing a 1993 Domestic Softail model's final drive ratio is not possible.
- Do not alter the final drive ratio on models with electronic speedometers (e.g.--1994 FLHR Electra Glide Road King) since calibration error of the electronic speedometer will result.
- The primary drive ratio for 1993 and earlier 1340cc models is 1.54 : 1; whereas, the primary drive ratio for 1994 and later 1340cc models is 1.44 : 1. Therefore, overall drive ratio (primary drive ratio x final drive ratio) on a 1993 and earlier 1340cc model will be slightly different than that on a 1994 and later 1340cc model even if the final drive ratio of both is the same.

Once your customer is informed of the above information about changing final drive ratio, and he or she decides to proceed with the modification as defined above, you may want to suggest that this would be a good time to consider adding a chrome wheel sprocket cover to enhance the appearance of the new sprocket. Please refer to the new Genuine Parts & Accessories Catalog for additional information.



FILE IN ACCESSORY GUIDE FOR FUTURE REFERENCE

| Model<br>(Model Years)           | Final<br>Drive<br>Ratio | Wheel<br>Sprkt<br>Teeth | Wheel<br>Sprocket<br>Part Number        | Drive Belt<br>Part Number<br>(Drive Belt Teeth) | Belt<br>Guard<br>Part Number          | Debris<br>Deflector<br>Part Number | Comments                           |
|----------------------------------|-------------------------|-------------------------|---|---|---------------------------------------|------------------------------------|------------------------------------|
| XLH 883<br>(1991-1994)           | 2.26 : 1                | 61                      | 40213-91 (black) or 40227-93 (silver)   | 40022-91 (128 teeth)                            | 60381-91                              | 60435-91                           | stock Domestic drive ratio (short) |
|                                  | 2.04 : 1                | 55                      | 40252-91 (black)                        | 40038-91 (125 teeth)                            | same as stock                         | same as stock                      | HDI touring drive ratio (tall)     |
| XLH 1200<br>(1991-1994)          | 2.10 : 1                | 61                      | 40213-91 (black) or 40227-93 (silver)   | 40022-91 (128 teeth)                            | 60381-91                              | 60435-91                           | stock Domestic drive ratio (short) |
|                                  | 1.90 : 1                | 55                      | 40252-91 (black)                        | 40038-91 (125 teeth)                            | same as stock                         | same as stock                      | HDI touring drive ratio (tall)     |
| Softail<br>(1986-1992<br>& 1994) | 2.19 : 1                | 70                      | 40217-79A (black) or 40221-85A (silver) | 40023-86 (132 teeth)                            | 60533-86                              | 60362-86A                          | stock Domestic drive ratio (short) |
|                                  | 2.03 : 1                | 65                      | 40312-94 (black) or 40311-94 (silver)   | 40017-94 (130 teeth)                            | 60537-89                              | 60415-89B                          | HDI touring drive ratio (medium)   |
|                                  | 1.91 : 1                | 61                      | 40237-88A (black) or 40236-88A (silver) | 40012-90 (128 teeth)                            | 60537-89                              | 60415-89B                          | HDI touring drive ratio (tall)     |
| Softail* (1993)                  | 1.91 : 1                | 61                      | 40237-88A (black) or 40236-88A (silver) | 40012-90 (128 teeth)                            | 60537-89                              | 60415-89B                          | stock Domestic drive ratio (tall)  |
| FXD<br>(1991-1994)               | 2.19 : 1                | 70                      | 40217-79A (black) or 40221-85A (silver) | 40015-90 (133 teeth)                            | 60297-90 (black) or 60293-90 (chrome) | 60399-90A                          | stock Domestic drive ratio (short) |
|                                  | 2.03 : 1                | 65                      | 40312-94 (black) or 40311-94 (silver)   | 40017-94 (130 teeth)                            | 60294-90 (black) or 60427-90 (chrome) | 60403-90A                          | HDI touring drive ratio (medium)   |
|                                  | 1.91 : 1                | 61                      | 40237-88A (black) or 40236-88A (silver) | 40012-90 (128 teeth)                            | 60294-90 (black) or 60427-90 (chrome) | 60403-90A                          | HDI touring drive ratio (tall)     |
| FXR<br>(1985-1994)               | 2.19 : 1                | 70                      | 40217-79A (black) or 40221-85A (silver) | 40001-85 (136 teeth)                            | 60297-87A (FXRTs use 60299-85)        | 60397-85B                          | stock Domestic drive ratio (short) |
|                                  | 2.03 : 1                | 65                      | 40312-94 (black) or 40311-94 (silver)   | 40015-90 (133 teeth)                            | 60298-88 (FXRTs use 60296-88)         | same as stock                      | HDI touring drive ratio (medium)   |
|                                  | 1.91 : 1                | 61                      | 40237-88A (black) or 40236-88A (silver) | 40023-86 (132 teeth)                            | 60298-88 (FXRTs use 60296-88)         | same as stock                      | HDI touring drive ratio (tall)     |
| FLT**<br>(1985-1994)             | 2.19 : 1                | 70                      | 40217-79A (black) or 40221-85A (silver) | 40001-85 (136 teeth)                            | not applicable                        | 60397-85B                          | stock Domestic drive ratio (short) |
|                                  | 2.03 : 1                | 65                      | 40312-94 (black) or 40311-94 (silver)   | 40015-90 (133 teeth)                            | not applicable                        | same as stock                      | HDI touring drive ratio (medium)   |
|                                  | 1.91 : 1                | 61                      | 40237-88A (black) or 40236-88A (silver) | 40023-86 (132 teeth)                            | not applicable                        | same as stock                      | HDI touring drive ratio (tall)     |

\* 1993 Domestic Softail models already have the tallest final drive ratio available; no modification is possible.  
\*\* Do not alter final drive ratio on 1994 FLHR models due to the resulting calibration error of the electronic speedometer.