

# HARLEY® SPEAK

**Designation  
ELECTRA GLIDES**

**Model Name**

FLT	Tour Glide
FLH	Electra-Glide
FLHR	Road King
FLHS	Electra-Glide Sport
FLHT	Electra-Glide Standard
FLHTC	Electra-Glide Classic
FLHTCU	Electra-Glide Ultra Classic
FLTR	Road Glide
FLHR	Road King
FLHRC	Road King Classic
FLHRS	Road King Custom
FLTC	Tour Glide Classic
FLTCU	Tour Glide Ultra Classic
FLTRSEI	Screamin' Eagle Classic

**SOFTAILS**

FXST	Softail Standard
FXSTC	Softail Custom
FXSTS	Springer Softail
FXSTD	Softail Deuce
FXSTB	Night Train
FXSTSB	Bad Boy
FLST	Heritage Softail
FLSTF	Fat Boy
FLSTC	Heritage Softail Classic
FLSTS	Heritage Springer Softail
FLSTN	Heritage Softail Special - Nostalgia

**LOW RIDERS**

FXS	Low Rider Shovelhead
FXSB	Low Rider - Belt
FXB	Sturgis - Belt
FXD	Dyna Super Glide
FXDB	Dyna Glide
FXDB-D	Dyna Glide Daytona - Belt
FXDB-S	Dyna Glide Sturgis - Belt
FXDC	Dyna Glide Custom
FXDG	Dyna Glide Sturgis
FXDX	Dyna Super Glide Sport
FXDS-CONV	Dyna Glide Convertible
FXDXT	Dyna Super Glide T Sport
FXDL	Dyna Low Rider
FXDX	Super Glide Sport
FXDWG	Dyna Wide Glide
FXEF	Fat Bob
FXR	Super Glide Rubber Mount
FXRP	Super Glide Police
FXRS	FXR Sport - Low Glide
FXRS-SP	Low Rider Sport
FXRS-CONV	Low Rider Sport Convertible

**Designation  
LOW RIDERS Continued**

**Model Name**

FXRC	Low Glide Custom
FXRD	Sport Glide Grand Touring
FXRDG	Disc Glide
FXRT	FXR Touring - Sport Glide
FXRT/P	Sport Glide Police
FXLR	Low Rider Custom
FXLR-FX	Lower Rider - Evolution
FXWG	Wide Glide

**SPORTSTERS**

XL	4-Speed 883 Sportster
XL883	883 Hugger
XL883C	883 Custom
XL1100	1100
XL1200	1200
XL1200C	1200 Custom
XL1200S	1200 Sport
XLCH	4-Speed 883 Kick Start
XLCR	Café Racer 1000
XLH	4-Speed 883 Electric Start
XLH883	883 Hugger
XLH1200	1200
XLH1200S	Sport
XLS	4-Speed Roadster
XLX	4-Speed 1000
XR1000	1000 with Competition Heads

**V - RODS**

VRSCA	V-Rod with more options
VRSCB	Basic V-Rod

**THE BASICS FROM THE PAST**

E	Basic version of the Big Twin
EL	E with more power
F	Basic Big Twin enlarged from 61 to 74 c.i.
FL	F with more power
FLH	Pan, Shovel, Evolution more power
K	Sidevalve (flathead) middleweight
KK	K with more power
KH	K enlarged from 45 to 54 c.i.
KHK	KH with more power
XL	Basic Sportster
XLC	Stripped Competition Sportster
XLH	XL with more power - Electric start
XLCH	XL with more power - Kick start
FX	Original Super Glide - Kick start
FXE	Original Super Glide - Electric start

NOTE: Any Big Twin model designation with the letter "I" at the end indicates a fuel injected model.

## TIPS

### JIMS® TIPS

Pushrod adjustment. For reference only.

Note: Use instructions that came with your tappets. This chart is for information only; It is not an adjustment guide.

Threads Per In.	Wrench Flats	Total Travel Distance	Distance Per Turn	Distance Per Flat	Pushrod Mfg/N	Threads Per In.	Pushrod Mfg/N	Threads Per In.
24	15	.1042"	.01417"	.0069"	JIMS Pro Lite	24	Crane	32
28	17	.1011"	.0357"	.0059"	Slim JIMS	32	H-D	32
32	18	.0937"	.0313"	.0052"	Andrews	28	S&S	32
36	21	.0965"	.0275"	.0045"	Andrews	32	Screamin Eagle	32
40	24	.100"	.025"	.0042"	Crane	28	Rivera	40
52	30	.0962"	.0192"	.0032"	Crane	24	Rev Tech	36

### S&S TIPS

#### CALCULATING HEAD BOLT LENGTH

Add: A - cylinder length (gasket surface to gasket surface measurement)

+ B - base gasket thickness

+ C - head gasket thickness

+ D or E - cylinder head thickness (gasket surface to head bolt washer pad

measurement: D (short side) for S&S & L85-90 H-D = 1.207",

91-99 H-D = 1.405"; E (long side) for S&S & all H-D = 2.700")

+ F - desired thread engagement (.563" - usually 1 1/2 times diameter;

stock studs are 3/8")

Subtract: G - cylinder stud install height (crankcase deck to top of stud measurement)

#### STOCK CYLINDER LENGTH

Engine Style	Year	Length
Knucklehead 61"	36-47	5.405"
Knucklehead 74"	36-47	5.530"
Panhead 61"	48-52	5.205"
Panhead 74"	48-65	5.330"
Shovelhead 74" & 80"	66-84	5.330"
Evolution 80"	84-99	5.550"
Twin Cam 88"	99-03	4.937"
Ironhead Sportster 900cc & 1000cc	57-85	5.330"
Evolution Sportster & Buell	86-03	4.650"

### FLYWHEEL IDENTIFICATION CHART

Stroke code	Year Stroke	Engine Code	Year	Sprocket Shaft	Pinion Shaft	Crankpin Type	Dia. Code	Flywheel Dia.
1	4-3/8"	E	36-54	Stock	Stock	41-81	-	8-1/2" stock
2	4-1/2"	L	55-71	Stock	Stock	41-81	A	8-3/8"
3	4-3/4"	AL	72-E81	Stock	Stock	41-81	X	8-1/4"
4	5"	SE	55-E81	S&S	Stock	41-81	-	-
5	4-1/4" (stock 80")	BL	L81-99	Stock	Stock	81-99	-	-
6	4-5/8"	SL	L81-99	S&S	Stock	81-99	-	-
9	Special Order	Y	74"/80" in dia.	Stock	Stock	Stock	-	-
12	5-1/4"	-	-	-	-	-	-	-
13	3-1/2" (stock 61")	-	-	-	-	-	-	-
14	3-31/32" (stock 74")	-	-	-	-	-	-	-
16	5-1/8"	-	-	-	-	-	-	-
17	4"	-	-	-	-	-	-	-

### SPORTSTER

Stroke Code	Stroke	Year Code	Engine Year	Sprocket Shaft	Pinion Shaft	Crankpin Type	Rod Bearing Type	Dia. Code	Flywheel Dia.
1	4-1/16"	None	57-76	Stock	Stock	Stock	Stock	None	7-7/8"
2	4-3/16"	B	57-E81	Stock	Stock	Stock	Stock	A	7-3/4"
3	4-5/16"	SB	57-E81	S&S	Stock	Stock	Stock	X	7-5/8"
4	4-7/16"	BD <sup>1</sup>	57-E81	Stock	-	Stock	Stock	-	-
6	4-5/8"	SBD <sup>1</sup>	57-E81	S&S	-	Stock	Stock	-	-
7	4-13/16"	C	L81-85	Stock	Stock	Stock	Stock	-	-
8	5"	SC	L81-85	S&S	Stock	Stock	Stock	-	-
9	Special Order	SCD <sup>1</sup>	L81-85	S&S	-	Stock	Stock	-	-
11	4-1/2"	SCR	L81-85	S&S	Stock	Stock	87-02	-	-
12	5-1/4"	SCDR <sup>1</sup>	L81-85	S&S	Stock	Stock	87-02	-	-
15	3-13/16" (stock)	D <sup>1</sup>	L86-02	S&S	S&S	S&S	S&S	-	-
16	5-1/8"	DR <sup>1</sup>	L86-02	S&S	S&S	S&S	87-02	-	-
17	4"	-	-	-	-	-	-	-	-
-	-	KRS	45" WR/KR	Stock	Stock	Stock	57-81XL	-	-
-	-	YS	45" Indian	Stock	Stock	Stock	Stock	-	-

<sup>1</sup> Sportster-style flywheel machined to work with either 77-86 or 87-02 style pinion main bearing assembly.

### ANDREWS TIPS

#### Cam Gear Changing

Remove the stock cam gear and press it onto the new camshaft. Stock gears will work with Andrews Products camshafts. To press a new gear onto camshaft the center of the 1/4" keyway (in the camshaft) must be exactly 180° (21 teeth) from the pinion timing mark on the drive gear.

#### Measuring Cam Gears

1. Measure the stock cam gear and pinion gear (over the pins). Write down the measurements.
2. Now measure the new gear (over the pins) and write down that number also.
3. Subtract the new gear size from the stock gear size.
4. If the new cam gear is smaller than the stock gear (for clicking), add the difference (from 3) to the size of the pinion gear to obtain a new (larger) pinion gear size.
5. If the new cam gear is larger than the stock gear (for whining), subtract the difference (from 3) from the size of the pinion gear to obtain a new (smaller) pinion gear size.
6. Match new size to a new pinion gear part number in the H-D manual and install it.
7. Remember to use the same size pins as the manual lists for measuring your gears (.108" or .105" dia.).

# TIPS

## How To Check For Possible Valve To Valve Interference

1. You must know what TDC (Top Dead Center) is; It should be listed on the instruction sheets of all cams. Write down the number for the cam you are using. For example, for an EV51 cam, the TDC lift = .223"
2. Minimum valve to valve clearance should be .060".
3. Calculate the minimum valve separation distance as follows: Minimum Valve Separation Distance = TDC lift + clearance.
4. For EV51 cams, Minimum Valve Separation Distance = .233" + .060" = .293".
5. Measure the separation between the two valves when they are seated. If actual measurement is not at least .293", modifications will be necessary to avoid valve to valve interference. (Cut seats deeper or back cut valves.)
6. Remember, this technique is not for piston to valve clearance.

## How To Figure Out What The Installed Spring Height Should Be

1. Using both top and bottom collars, place spring assembly in a small vise and close vise until the outer spring is compressed solid. Be careful when compressing springs in a vise.
2. Now measure the distance between spring lands and write down the number for later use. This is the Solid Height.
3. Calculate INSTALLED SPRING HEIGHT (minimum) as follows: INSTALLED SPRING HEIGHT = SOLID HEIGHT + .060" + MAXIMUM VALVE LIFT.
5. For an EV51 cam using Andrews Products springs and collars, INSTALLED SPRING HEIGHT = 1.190" + .060" + .510" = 1.760".
6. This technique will work for any cam and spring system as long as measurements are carefully made.
7. At time of installation, make sure that .050" (minimum) clearance is present between top of valve and bottom of upper spring collar at maximum cam lift.
8. Solid height + .560" refers to spring forces when the valve is seated (.560" is assumed spring travel).

## Big Twin 4-Speed Mainshaft Lengths

Year	Length
37-64	11.730"
65-69	11.985"
70-85 (chain)	12.470"
84-86 (belt)	13.725"

## BDL TECH TIP

Final Drive Ratio and Belt Lengths

Pulleys	Ratio	Belts	Cen-Cen	Belt	Cen-Cen	Belt	Cen-Cen	Belt	Cen-Cen	Belt	Cen-Cen	Belt	Cen-Cen	Belt	Cen-Cen
70-34	2.05 To 1	136	22.932	135	22.654	133	22.097	132	21.819	130	21.261	128	20.704	126	20.146
70-33	2.12 To 1	136	23.059	135	22.780	133	22.223	132	21.945	130	21.388	128	20.829	126	20.200
70-32	2.18 To 1	136	23.186	135	22.907	133	22.350	132	22.071	130	21.515	128	20.955	126	20.397
70-31	2.25 To 1	136	23.312	135	23.033	133	22.476	132	22.197	130	21.641	128	21.080	126	20.521
70-30	2.33 To 1	136	23.438	135	23.159	133	22.601	132	23.323	130	21.767	128	21.205	126	20.646
70-29	2.41 To 1	136	23.564	135	23.285	133	22.727	132	22.448	130	22.350	128	21.330	126	20.771
65-34	1.91 To 1	136	23.683	135	23.405	133	22.850	132	22.572	130	22.017	128	21.462	126	20.905
65-33	1.96 To 1	136	23.811	135	23.534	133	22.978	132	22.701	130	22.145	128	21.589	126	21.033
65-32	2.03 To 1	136	23.939	135	23.661	133	23.106	132	22.829	130	22.272	128	21.716	126	21.160
65-31	2.09 To 1	136	24.067	135	23.789	133	23.234	132	22.956	130	22.400	128	21.848	126	21.287
65-30	2.16 To 1	136	24.195	135	23.917	133	23.361	132	23.083	130	22.527	128	21.970	126	21.692
65-29	2.24 To 1	136	24.323	135	24.044	133	23.488	132	23.311	130	22.654	128	22.097	126	21.819

## HANDY FORMULAS

### To Convert C.I. To C.C.:

C.I. ÷ .061 = C.C.

### To Convert C.C. To C.I.:

C.C. x .061 = C.I.

### To Figure Displacement:

0.7854 x bore x bore x stroke x  
number of cylinders

### To Figure Compression Ratio:

(Cylinder volume + chamber volume)/chamber volume

Cylinder volume = 0.7854 x bore x bore x stroke

Measure chamber volume with piston at top dead center in C.C. and convert to C.I.

## H-D ENGINE SPECIFICATIONS

Note: These O.E.M. specifications apply to stock applications only.

### 1200CC Evolution Sportster 1986-2003

Bore 3.498"

Stroke 3.8125"

Piston to cylinder clearance See HD manual

Piston to side clearance

Top ring and second ring .0065"

Oil ring .0094"

Piston ring gap

Top ring and second ring .032"

Oil ring .065"

Piston pin fit-piston .001"

Piston pin fit-connecting rod .00125-.00175"

### 883CC Evolution Sportster 1986-2003

Bore 3.00"

Stroke 3.8125"

Piston to cylinder clearance See HD manual

Piston ring side clearance

Top ring and second ring .0020-.0045"

Oil Ring .0014-.0074"

Piston ring gap

Top ring and second ring .010-.023"

Oil Ring .010-.053"

Piston pin fit-piston .00005-.00045"

Piston pin fit connecting rod .00125-.00175"

### 1100CC Evolution Sportster

Bore 3.350"

Stroke 3.8125"

Piston to cylinder clearance See HD manual

Piston ring side clearance

Top ring .0020-.0045"

Second ring .0016-.0041"

Oil ring .0016-.0076"

Piston ring gap

Top ring and second .007-.020"

Oil ring .009-.052"

Piston pin fit-piston .00005-.00045"

Piston pin fit-connecting rod .00125-.00175"

### 61" Sportster 1979-1985

Bore 3.188"

Stroke 3.8125"

Piston to cylinder clearance

1979-E85 .003-.004"

L85 .0025-.0035"

Piston ring side clearance 79-82

Top ring and second ring .0035-.005"

Oil ring .003-.005"

Piston ring gap 79-82 .010-.020"

Piston ring side clearance 83-85

Top ring and second ring .005-.006"

Oil ring .003-.004"

Piston ring gap 83-85

Top ring and second ring .008-.009"

Oil ring .015-.002"

Piston pin-fit connecting rod .0008-.001"

### 61" Sportster 1972-1978

Bore 3.188"

Stroke 3.8125"

Piston to cylinder clearance .003-.004"

Piston ring side clearance

Top ring and second ring .0025-.004"

Oil ring .003-.005"

Piston ring gap .015-.025"

Piston pin-fit connecting rod .0008-.001"

### 55" Sportster

Bore 3.000"

Stroke 3.8125"

Piston to cylinder clearance .0025-.003"

Piston ring side clearance

Top ring and second ring .0025-.004"

Oil ring .003-.005"

Piston ring gap .010-.020"

Piston pin-fit connecting rod .0008-.001"

### 88" Twin Cam A & B

Bore 3.750"

Stroke 4.000"

Piston to cylinder clearance .0006-.0016"

Piston ring side clearance

Top ring .002-.0045"

Second ring .0016-.0041"

Oil ring .0016-.0076"

Piston ring gap

Top ring and second ring .007-.020"

Oil ring .009-.052"

Piston pin-fit connecting rod .0001-.0004"

### 80" Evolution

Bore 3.500"

Stroke 4.250"

Piston to cylinder clearance .00055-.00165"

Piston ring side clearance

Top ring .002-.0045"

Second ring .0016-.0041"

Oil ring .0016-.0076"

Piston ring gap

Top ring and second ring .007-.020"

Oil ring .009-.052"

Piston pin-fit connecting rod .002-.0006"

### 80" Shovelhead

Bore 3.500"

Stroke 4.250"

Piston to cylinder clearance .0020-.0025"

Piston ring side clearance

Top ring and second ring .004-.005"

Oil ring .003-.005"

Piston ring gap to E83 .008-.015"

Piston ring gap to L83-84 .010-.020"

Piston pin-connecting rod to E83 .0008-.001"

Piston pin-connecting rod to L83-84 .00015-.00065"

### 74" Panhead & Shovelhead

Bore 3.4375"

Stroke 3.96875"

Piston to cylinder clearance .001-.002"

Piston ring side clearance

Top ring and second ring .004-.005"

Oil ring .003-.005"

Piston ring gap .010-.020"

Piston pin fit-connecting rod .0008-.0012"

### 61" Knucklehead & Panhead

Bore 3.4375"

Stroke 3.500"

Piston to cylinder clearance .001-.002"

Piston ring and ring groove .004"

Piston ring gap .010-.020"

Piston pin fit-connecting rod .001"

### 80" Flathead

Bore 3.4375"

Stroke 4.28125"

Piston to cylinder clearance .001-.002"

Piston ring and ring groove .004"

Piston ring gap .010-.020"

Piston pin fit-connecting rod .001"

### 74" Flathead

Bore 3.3125"

Stroke 4.28125"

Piston to cylinder clearance .001-.002"

Piston ring and ring groove .004"

Piston ring gap .010-.020"

Piston pin fit-connecting rod .0001"

### 45" Flathead

Bore 2.750"

Stroke 3.8125"

Piston to cylinder clearance .001-.002"

Piston ring and ring groove .004"

Piston ring gap .010-.020"

Piston pin fit-connecting rod .001"

# QUICK REFERENCE FOR BIG TWIN

Model	Year	BATTERIES		SPARK PLUGS					CHAIN/BELT		SPROCKET		OIL FILTER		TIRE	
		Yuasa	Twin Power	Accel	Champion	NGK	Autolite	Autolite Platinum	Chain/Belt	Front	Rear	Perf-Form	Twin Power	Front	Rear	
FLH	66-74	YHD-12	N/A	Y2401P	J12YC	R5670-5	4275	MP4275	530X102	22T	51T	HD-1	48-9786	130/90-16	130/90-16	
FLH/C	74-82	YHD-12	N/A	Y2401P	RN12YC	BPR5E-11	4265	MP4265	530X102	22T	51T	HD-1	48-9786	130/90-16	130/90-16	
	82-84	YHD-12	N/A	Y2401P	RN12YC	BPR5E-11	4265	MP4265	126T	32T	70T	HD-3	49-2674	130/90-16	130/90-16	
FLI/C/U	80-84	Y50-N18L	49-9078	Y2401P	RN12YC	BPR5E-11	4265	MP4265	530X110	22T	51T	HD-3	49-2674	130/90-16	130/90-16	
	85-96	Y50-N18L	49-9078	Y2401P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-3	49-2676	130/90-16	130/90-16	
FLHT/C/U	83-94	Y50-N18L	49-9078	Y2401P	RN12YC	BPR5E-11	4265	MP4265	530X110	22T	51T	HD-2	49-2676	130/90-16	130/90-16	
	85-96	Y50-N18L	49-9078	Y2401P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	97-98	YB-30LB	49-9079	Y2401P	RN12YC	BPR5E-11	4265	MP4265	139T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	99-03	YB-30LB	49-9079	Y2418P	RA8HC	DCPR7E	4164	MP4164	139T	32T	70T	HD-2L	49-0667	130/90-16	130/90-16	
FLTR/I	1998	YB-30LB	49-9079	Y2410P	RN12YC	BPR5E-11	4265	MP4265	139T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	99-03	YB-30LB	49-9079	Y2418P	RA8HC	DCPR7E	4164	MP4164	139T	32T	70T	HD-2L	49-0667	130/90-16	130/90-16	
FLHS	87-94	Y50-N18L-A	49-9078	Y2410P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
FLHR	94-96	Y50-N18L-A	49-9078	Y2410P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	97-98	YB-30LB	49-9079	Y2410P	RN12YC	BPR5E-11	4265	MP4265	139T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	99-03	YB-30LB	49-9079	Y2418P	RA8HC	DCPR7E	4164	MP4164	139T	32T	70T	HD-2L	49-2676	130/90-16	130/90-16	
FLHR/I, FLHRS/I, FLHR/C, FLTRI, FLHT/I, FLHTC/I, FLHTCU/I	2004	Y1X30L	49-9079	Y2418P	RA8HC	DCPR7E	4164	MP4164	139T	32T	70T	HD-2L	49-2676	MT90B16	MU58B16	
FXST/C	84-85	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-2	49-2676	MH90-21	130/90-16	
	86-90	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	MH90-21	130/90-16	
	91-92,94	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	MH90-21	130/90-16	
	1993	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	128T	32T	61T	HD-2	49-2676	MH90-21	130/90-16	
	95-96	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	MH90-21	130/90-16	
	97-99	YTX20L-BS	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	MH90-21	130/90-16	
	00-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MH90-21	130/90-16	
FXSTD	00-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MH90-21	160/70-17	
FXSTD/I	2004	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MH90-21	160/70B17	
FXSTS	88-90	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	MH90-21	130/90-16	
	91-82,94	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	MH90-21	130/90-16	
	1993	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	128T	32T	61T	HD-2	49-2676	MH90-21	130/90-16	
	95-96	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	MH90-21	130/90-16	
	97-99	YTX20L-BS	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	MH90-21	130/90-16	
	00-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MH90-21	130/90-16	
FXST/I, FXSTS/I, FXSTB/I	2004	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MH90-21	150/80B16	
FLST/C/F/N/S	86-90	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	91-91,94	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	132T	32T	70T	HD-2	49-2676	130/90-16	130/90-16	
	1993	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	128T	32T	61T	HD-2	49-2676	130/90-16	130/90-16	
	95-96	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	130/90-16	130/90-16	
	97-99	YTX20L-BS	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	130T	32T	65T	HD-2	49-2676	130/90-16	130/90-16	
	00-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	130/90-16	130/90-16	
FLSTC/I, FLSTF/I	2004	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	135T	32T	70T	HD-2L	49-0667	MT90B16	150/80B16	
FX	71-74	YB7-A	N/A	Y2401P	J12YC	R5670-5	4275	MP4275	530X102	23T	51T	HD-1	48-9786	100/90-16	130/90-16	
	75-78	YB7-A	N/A	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-1	48-9786	100/90-16	130/90-16	
FXE	73-74	YB16-B-CX	49-9076	Y2410P	J12YC	R5670-5	4275	MP4275	530X102	23T	51T	HD-1	48-9786	100/90-16	130/90-16	
	75-84	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-1/HD-348-9786	100/90-16	130/90-16		
FXB	80-82	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	126T	32T	70T	HD-1	48-9786	100/90-16	130/90-16	
FXEF	79-82	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-1	48-9786	100/90-16	130/90-16	
FXS	77-82	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-1	48-9786	100/90-16	130/90-16	
FXSB	83-85	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	126T	32T	70T	HD-3	49-2674	100/90-16	130/90-16	
FXWG	80-83	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X102	23T	51T	HD-3	48-9786	MH90-21	130/90-16	
	84-86	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	126T	32T	70T	HD-3	49-2674	MH90-21	130/90-16	
FXR/S	82-84	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X110	23T	51T	HD-2L	49-2676	100/90-16	130/90-16	
	85-94	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2L	49-2676	100/90-16	130/90-16	
	1999	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	133T	32T	65T	HD-2	49-2676	MH90-21	130/90-16	
FXLR	87-94	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2	49-2676	MH90-21	130/90-16	
FXRT	83-84	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	530X110	23T	51T	HD-2	49-2676	100/90-19	130/90-16	
	85-92	YB16-B-CX	49-9076	Y2410P	RN12YC	BPR5E-11	4265	MP4265	136T	32T	70T	HD-2	49-2676	100/90-19	130/90-16	
FXD/L	91-96	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-4	49-2676	100/90-19	130/90-16	
	97-98	YTX20L-BS	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-4	49-2676	100/90-19	130/90-16	
	99-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	133T	32T	70T	HD-2L	49-0667	100/90-19	130/90-16	
FXD/I, FXDL/I	2004	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	133T	32T	70T	HD-2L	49-0667	100/90-19	150/80B16	
FXDX/FXDXT	00-03	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	133T	32T	70T	HD-2L	49-0667	100/90-19	150/80-16	
FXDWG	93-96	YB16HLA-CX	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-4	49-2676	MH90-21	130/90-16	
	97-98	YTX20L-BS	49-9077	Y2410P	RN12YC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-4	49-2676	MH90-21	130/90-16	
	99-03	YTX20L-BS	49-9077	Y2418P	RA8HC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-2L	49-0667	MH90-21	130/90-16	
FXDWG/I	2004	YTX20L-BS	49-9077	Y2418P	RA8HC	DCPR7E	4164	MP4164	133T	32T	70T	HD-2L	49-0667	MH90-21	150/80B16	
FXDS	95-96	YB16HLA-CX	49-9077	Y2418P	RA8HC	BPR5E-11	4265	MP4265	133T	32T	70T	HD-4	49-0060	100/90-19	130/90-16	
CONV	97-98	YTX20L-BS	49-90													

## QUICK REFERENCE FOR SPORTSTER

Model	Year	BATTERIES		SPARK PLUGS					Chain/ Belt	SPROCKET		OIL FILTER		TIRE	
		Yuasa	Twin Power	Accel	Champion	NGK	Autolite	Autolite Platinum		Front	Rear	Perf-Form	Twin Power	Front	Rear
XLH	71-78	YHD-12	N/A	Y2402P	RH8C	B6L	4316	MP4316	530X110	21T	51T	HD-1	48-9786	100/90-19	4.50-18
XLCH	71-78	YB7-A	N/A	Y2402P	RH8C	B6L	4316	MP4316	530X110	21T	51T	HD-1	48-9786	100/90-19	4.50-18
XLH	79-85	YB16-B-CX	49-9076	Y2413P	RL82YC	BPR6HS-10	4123		530X110	21T	51T	HD-3	49-2674	100/90-19	130/90-16
XR1000	83-85	YB16-B-CX	49-9076	Y2412P	RN7YC	BPR6ES-11	4252		530X110	21T	51T	HD-3	49-2674	100/90-19	130/90-16
XL883	86-91	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	530X106	21T	48T	HD-2	49-2676	100/90-19	130/90-16
XL883	92-96	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	27T	61T	HD-2	49-2676	100/90-19	130/90-16
XL883	97-03	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	27T	61T	HD-2	49-2676	100/90-19	130/90-16
XL883C	99-03	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	27T	61T	HD-2	49-2676	MH90-21	130/90-16
XL1100	86-87	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	530X106	21T	48T	HD-2	49-2676	100/90-19	130/90-16
XL1200	88-90	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	530X106	21T	48T	HD-2	49-2676	100/90-19	130/90-16
XL1200	91-96	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2	49-2676	100/90-19	130/90-16
XL1200C	1996	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2	49-2676	MH90-21	130/90-16
XL1200	97-03	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2	49-2676	100/90-19	130/90-16
XL1200C	97-03	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2	49-2676	MH90-21	130/90-16
XL1200C, XL1200R	2004			Y2418P	RABHC	DCPR7E	4164	MP4164	137T	29T	68T	HD-2	49-2676	100/90-19	150/80B16

## QUICK REFERENCE FOR BUELL

Blast	00-04	YTX14-BS	49-9073			DCPR8E	4162			139T		80T			100/80-16	120/80-16
S2 Thunderbolt	1995	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
S2T Thunderbolt	1996	YB16-B-CX	49-9076	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	29T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
M2 Cyclone	97-02	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	27T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
S1 Lightning	96-98	N/A	N/A	Y2418P	RABHC	DCPR7E	4164	MP4164	128T	27T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
S3 Thunderbolt	97-02	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR8E	4162		128T	27T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
S3T Thunderbolt	97-98	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR7E	4162		128T	27T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
X1 Lightning	99-02	YTX20L-BS	49-9077	Y2418P	RABHC	DCPR8E	4162		128T	27T	61T	HD-2L	49-2676		120/70ZR17	170/60ZR17
XB9R Firebolt	02-03	YTX14-BS	49-9073			DCPR8E	4162								120/70ZR17	180/55ZR17
XB9R/S	03-04	YTX14-BS	49-9073			DCPR8E	4162				30T	65T			120/70ZR17	180/55ZR17
XB12R/S	2004	YTX14-BS	49-9073			DCPR8E	4162				27T	65T			120/70ZR17	180/55ZR17

## TIRE CONVERSION INFORMATION

### ASPECT RATIO

The aspect ratio of a tire is the relationship of the tire cross section height to the cross section width. In a tire with an aspect ratio of 85, for example, height is about 85% of the tire width. "Low profile" tires have an aspect ratio of less than 80. The aspect ratio of a tire is often contained in the size marking, e.g., 130/90 x 16, etc.

### SPEED RATINGS (SUSTAINED SPEED)

R = 106 mph  
 S = 112 mph  
 T = 118 mph  
 H = 130 mph  
 V = 150 mph  
 W = 168 mph  
 Z = 150 + (Contact Manufacturer)

### TIRE SIZE MARKINGS

Motorcycle tires are manufactured in a number of different countries with differing requirements in terms of load, dimensions and speed ratings. This has resulted in various size markings. The following chart gives a guide to the relationship between various size markings.

THIS CHART DOES NOT IMPLY EXACT COMPARISONS.

### MOTORCYCLE STREET TIRE SIZE CONVERSION CHART

Front Tires			Rear Tires		
Metric	Alpha	Inch	Metric	Alpha	Inch
80/90	MH	2.50/2.75	110/90	MP85	4.00/4.25
90/90	MJ90	2.75/3.00	120/90	MR90	4.50/4.75
100/90	MM90	3.25/3.50	130/80		5.00/5.10
110/90	MN90	3.75/4.00	130/90	MT90	5.00/5.10
120/80		4.25/4.50	140/80		5.50/6.00
120/90	MR90	4.25/4.50	140/90	MU90	5.50/6.00
130/90	MT90	5.00/5.10	150/80	MV85	6.00/6.25
			150/90	MV85	6.00/6.25

### WARNING: Dealers: Convey this important information to customers and tire fitters:

The above are size marking conversion charts only and do not imply interchangeability.

Consult motorcycle manufacturer for correct replacements for original equipment tires.

Critical clearances, motorcycle compatibility and stability, load bearing capacity, speed rating, radial versus non-radial, pattern and tread compound requirements, inflation recommendations, and front to rear matching will all vary with tire selection. Wrong selection can result in tire failure, loss of control with serious injury or death.