

SOFTAIL  
MODELS



2000 HARLEY-DAVIDSON   
OWNER'S MANUAL

## IMPORTANT NOTICE! SAFETY DEFINITIONS

Statements in this manual preceded by the following words are of special significance:

### WARNING

**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

### CAUTION

**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

### CAUTION

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

### **NOTE:**

*Refers to important information, and is placed in italic type.*

*It is recommended that you take special notice of these items.*

### **HARLEY-DAVIDSON MOTORCYCLES ARE FOR ON-ROAD USE ONLY**

This motorcycle is not equipped with a spark arrester and is designed to be used only on the road. Operation of off-road usage in some areas may be illegal. Obey local laws and regulations. This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold.

**VISIT THE HARLEY- DAVIDSON WEB SITE**  
<http://www.harley-davidson.com>

# YOUR OWNER'S MANUAL

## WE CARE ABOUT YOU

Welcome to the Harley-Davidson Motorcycling Family! When enjoying your Harley-Davidson motorcycle, be sure to ride safely, defensively and within the limits of the law. Ride with your headlamp on, always wear a helmet, proper eyewear and protective clothing, and insist your passenger does too. Never ride while under the influence of alcohol or drugs. Know your Harley® and read your Owners Manual cover to cover. Enhance your ownership experience further by individualizing your motorcycle through the installation of tried and tested Harley-Davidson® Genuine Motor Parts™ and Genuine Motor Accessories™. When adding performance products to your Harley, be a good neighbor and choose products that comply with local noise and emissions regulations. Protect your privilege to ride by joining the American Motorcyclist Association.

Your new Harley-Davidson motorcycle is designed and manufactured to be the finest in its field. Your Harley-Davidson motorcycle conforms to all applicable U.S. Federal Motor Vehicle Safety Standards and U.S. Environmental Protection Agency regulations effective on the date of manufacture.

This manual has been prepared to acquaint you with the operation, care and maintenance of your motorcycle, and to provide you with important safety information. Follow these instructions carefully for maximum motorcycle performance and for your personal motorcycling safety and pleasure.

Your Owners Manual contains instructions for operation and minor maintenance. Major repairs are covered in the Harley-Davidson Service Manual. Such major repairs require the attention of a skilled technician and the use of special tools and equipment. Your Harley-Davidson dealer has the facilities, experience and Genuine™ Harley-Davidson parts necessary to properly render this valuable service. We recommend that any emission system maintenance be performed by an authorized Harley-Davidson dealer.

**Harley-Davidson Motor Company**

**CMI - 22.4M - 4/00**

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**Printed in the U.S.A.**

**PERSONAL INFORMATION**

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

**VEHICLE INFORMATION**

Vehicle Identification No. \_\_\_\_\_

Ignition Key No. \_\_\_\_\_

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## 2000 SOFTAIL MODELS

## NOTES

This Owner's Manual contains the vehicle specifications for the following Harley-Davidson models:

FLSTC .....	Heritage Softail Classic
FLSTF .....	Fat Boy
FLSTS .....	Heritage Springer
FXST .....	Softail Standard
FXSTB.....	Night Train
FXSTD .....	Deuce
FXSTS.....	Springer Softail

## **NOTES**

## SAFE OPERATING RULES

Before operating your new motorcycle *it is your responsibility* to read and follow operating and maintenance instructions in this manual, and follow these basic rules for your personal safety.

- See RULES OF THE ROAD section. Know and respect the rules of the road; also, read and observe the MOTORCYCLE SAFETY booklets that come with this Owner's Manual. You should also read and know the contents of the MOTORCYCLE HANDBOOK for your state.
- Before starting engine, check for proper operation of brake, clutch, shifter, throttle controls, correct fuel and oil supply.

### WARNING

**We caution you against the use of non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling. Removing or altering factory installed standard parts may also affect performance and could result in death or serious injury.**

- Use only Harley-Davidson approved parts and accessories. Use of certain other manufacturer's performance

parts will void your new motorcycle warranty. See your Harley-Davidson Dealer for details.

### WARNING

**Gasoline is extremely flammable and explosive under certain conditions. Use care when handling gasoline. Failure to do so could result in explosion, death or serious injury.**

- When refueling your motorcycle, the following rules should be observed:
  - a. Refuel in a well ventilated area with the engine turned off.
  - b. Remove fuel filler cap slowly.
  - c. Do not smoke or allow open flames or sparks when refueling or servicing the fuel system.
  - d. Always close the fuel supply valve when the engine is not running. This prevents flooding of the carburetor and the surrounding area with gasoline.
  - e. Do not fill fuel tank above the bottom of the filler neck insert.
  - f. Leave air space to allow for fuel expansion.

## SAFE OPERATING RULES (CONTINUED)

### WARNING

Motorcycle exhaust contains poisonous carbon monoxide gas. DO NOT inhale exhaust gases and never run the engine in a closed garage or confined area. Failure to do so could result in death or serious injury.

### WARNING

Your vehicle is equipped with a jiffy stand that locks when placed in the full forward (down) position and the vehicle weight is rested on it. Without vehicle weight resting on the jiffy stand, any movement of the vehicle could cause the jiffy stand to retract slightly from the full forward position. If the jiffy stand is not in the full forward (lock) position when vehicle weight is rested on it, the vehicle may fall over and could result in death or serious injury.

### WARNING

Be sure jiffy stand is fully retracted before riding the motorcycle. If jiffy stand is not fully retracted during vehicle operation, it could contact the road surface causing a momentary disturbance before retracting. This momentary disturbance could result in distracting the rider, loss of vehicle control, and death or serious injury.

- See BREAK-IN - THE FIRST 500 MILES (800 KM) section. A new motorcycle must be operated according to the special break-in procedure.
- Operate motorcycle only at moderate speed and out of traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions.

## SAFE OPERATING RULES (CONTINUED)

### NOTE:

*If you are an inexperienced rider we recommend that you obtain information and formal training in the correct motorcycle riding technique. The Motorcycle Safety Foundation® offers beginning and advanced rider safety courses. Call 1-800-447-4700 for information.*

### WARNING

**Avoid excessive speed and never travel at a speed faster than the posted speed limit. To do so could cause loss of control resulting in death or serious injury.**

- Do not exceed the legal speed limit or drive too fast for existing conditions. Always reduce speed when poor driving conditions exist. High speed increases the influence of any other condition affecting stability and increases the possibility of loss of control.
- Do not exceed 80 m.p.h. (130 km/h) when carrying a passenger or cargo.

- Pay strict attention to road surfaces and wind conditions. Any two wheeled vehicle may be subject to the following upsetting forces:
  - a. Wind blasts from passing trucks.
  - b. Holes in the pavement.
  - c. Rough road surfaces.
  - d. Rider control error, etc.,

These forces may influence the handling characteristics of your motorcycle. If this happens, reduce speed and guide the motorcycle with a relaxed grip to a controlled condition. Do not brake abruptly or force the handlebar; this may aggravate an unstable condition.

## SAFE OPERATING RULES (CONTINUED)

### NOTE:

*New riders should gain experience under various conditions while driving at moderate speeds.*

- Operate your motorcycle defensively. Remember, a motorcycle does not afford the same protection as an automobile in an accident. **One of the most common accident situations occurs when the driver of the other vehicle fails to see or recognize a motorcycle and turns left into the on-coming motorcyclist.** Operate only with headlamp on.
- Wear an approved helmet, clothing, and foot gear suited for motorcycle riding. Bright or light colors are best for greater visibility in traffic, especially at night. Avoid loose, flowing garments and scarves.
- When carrying passengers, **it is your responsibility** to instruct them on proper riding procedures. (See Riding Tips for Motorcyclists included in your Harley-Davidson Owner's Kit.)
- Do not allow others under any circumstances, to operate your motorcycle unless you know they are experienced, licensed riders and are familiar with the operation of your particular motorcycle.
- Protect your motorcycle against theft. After parking your motorcycle, lock the steering head and remove ignition key from switch.
- Safe motorcycle operation requires alert, mental judgment combined with a defensive driving attitude. Do not allow fatigue, alcohol or drugs to endanger your safety or that of others.
- Vehicles equipped with a sound system should have the volume adjusted to a nondistracting level before operating vehicle.

### WARNING

**We caution you against the use of non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling. Removing or altering factory installed standard parts may also affect performance and could result in death or serious injury.**



## SAFE OPERATING RULES (CONTINUED)

- See GENERAL MAINTENANCE AND LUBRICATION-section. Maintain your motorcycle in proper operating condition in accordance with the Maintenance Intervals chart in this Owner's Manual. Particularly important to motorcycle stability is proper tire inflation pressure, tread condition, and proper adjustment of steering head bearings.

### WARNING

For your personal welfare, all the listed service and maintenance recommendations should be performed. Lack of regular maintenance at the suggested intervals, may affect the safe operation of your motorcycle and could result in death or serious injury.

### WARNING

Use only Genuine Harley-Davidson replacement fasteners tightened to the proper torque (See your Harley-Davidson Service Manual). We caution you against the use of certain non-standard parts such as after-market and custom made fasteners which may not have specific strength, finish and type requirements to perform properly in the assembly and its environment. The use of any non-standard parts including fasteners may void your

warranty according to terms of the warranty. In addition, using non Harley-Davidson replacement fasteners could result in death or serious injury.

### CAUTION

1450cc Harley-Davidson Motorcycles DO NOT have a carburetor overflow fitting; the fuel supply valve on the vehicle should be turned off when the vehicle is not operating. Failure to do so may result in fuel drainage into the engine, dilution of the engine oil and engine damage.

### CAUTION

DO NOT tow a disabled motorcycle with another vehicle at the same time. The steering and handling of the disabled motorcycle will be impaired due to the force of the tow line. If a disabled motorcycle must be transported, use a truck or trailer. Failure to do so can cause loss of control and could result in death or serious injury.

## SAFE OPERATING RULES (CONTINUED)

### WARNING

**DO NOT** operate motorcycle with a loose, worn or damaged steering system; including the front and rear suspension system. Contact your dealer for repair of steering or suspension system wear or damage. Failure to do so will adversely affect handling and could result in death or serious injury.

- Be sure all equipment required by federal, state, and local law is installed and in good operating condition.

### WARNING

**Maintain proper tire pressure; including wheel and tire balance. Inspect your tires periodically and replace tires with approved tires only. (See your Harley-Davidson Dealer.) Failure to do so can lead to improper balance, abnormal tread wear, poor handling and could result in death or serious injury.**

### WARNING

**DO NOT** exceed the Gross Vehicle Weight Rating of your motorcycle. The Gross Vehicle Weight Rating (GVWR) is shown on the information plate, located on the frame steering head. (GVWR is the sum of the weight of the motorcycle, accessories and the maximum weight of the rider, passenger and cargo that may be safely carried.) Exceeding the GVWR can lead to instability of the motorcycle and could result in death or serious injury.

### WARNING

**DO NOT** pull a trailer behind a motorcycle. Towing a trailer may cause tire overload, unstable handling, reduced braking efficiency and could result in death or serious injury.

### WARNING

**Regularly inspect shock absorbers, front forks and look for leaks. Worn parts can affect stability. If you have questions as to how these should function, see your Harley-Davidson Dealer. Failure to do so could result in death or serious injury.**

** WARNING**

Keep hazardous substances such as fluids for brakes, batteries, and cleaning compounds away from eyes, mouth and skin. These hazardous substances must be out of the reach of children. Failure to do so could result in death or serious injury.

** WARNING**

Consult your Harley-Davidson Dealer regarding any questions or problems that occur in the operation of your motorcycle. Failure to do so may aggravate an initial problem, cause costly repairs, jeopardize your personal safety and could result in death or serious injury.

**NOTES:**

## RULES OF THE ROAD

- Keep to the right side of the road when riding toward oncoming traffic. Ride to left side of your lane if you suspect oily pavement ahead.
- Always sound your horn, use your turn signals, and pass on the left side when passing other vehicles going in the same direction. Never try to pass another vehicle going in the same direction at street intersections, on curves, or when going up and/or down a hill.
- When you are at street intersections, give the right-of-way to the vehicle on your right. Do not assume you have the right-of-way; the other driver may not know that it is your turn.
- Always use your signals when preparing to pass a vehicle, turn and/or stop.
- All traffic signs, including those used for the control of traffic at intersections, should be obeyed promptly. SLOW DOWN signs near schools and caution signs at railroad crossings should always be observed and your actions governed accordingly.
- When intending to turn to the left, signal at least 100 feet before reaching the turning point. Move over to the centerline of the street (unless local rules require otherwise), slow down, enter the intersection of the street and then turn carefully to the left.
- Never run through a yellow or red traffic light. When a change is indicated from GO to STOP (or vice versa), slow down and wait for the light to change.
- While turning either right or left, watch for pedestrians and animals; as well as vehicles.
- Do not leave the curb or parking area without signaling and being sure that your way is clear to enter moving traffic. Moving lines of traffic have the right-of-way.
- Be sure that your license plate is installed in the position specified by law and that it is clearly visible at all times. Keeping the plate clean will improve visibility for other drivers (especially at night).
- Ride at a safe speed, that is consistent with the type of highway you are on. Pay strict attention to whether the road is:
  - a. Dry
  - b. Oily
  - c. Icy
  - d. Wet
- Watch for debris such as leaves or loose gravel.
- Weather and traffic conditions on the highway dictate adjusting your speed and driving habits accordingly.

## ACCESSORIES AND CARGO

Harley-Davidson Motor Company cannot test and make specific recommendations concerning every accessory or combination of accessories sold; therefore, *the rider must be responsible for safe operation of the motorcycle* when installing accessories or carrying additional weight.

### WARNING

**DO NOT load weight or install accessories improperly on the motorcycle. Doing so may affect the motorcycle's stability, handling characteristics and safe operating speed and could result in death or serious injury.**

### WARNING

**DO NOT exceed the Gross Vehicle Weight Rating of your motorcycle. The Gross Vehicle Weight Rating (GVWR) is shown on the information plate, located on the frame steering head. (GVWR is the sum of the weight of the motorcycle, accessories and the maximum weight of the rider, passenger and cargo that may be safely carried.) Exceeding the GVWR can lead to instability of the motorcycle and could result in death or serious injury.**

### WARNING

**DO NOT pull a trailer behind a motorcycle. Towing a trailer may cause tire overload, unstable handling, reduced braking efficiency and could result in death or serious injury.**

- The following guidelines should be used when equipping a motorcycle, carrying passengers and/or cargo.

### WARNING

**Avoid excessive speed and never travel at a speed faster than the posted speed limit. To do so could cause loss of control resulting in death or serious injury.**

- Never exceed 80 MPH (130 km/h) when carrying a passenger or cargo.

## ACCESSORIES AND CARGO (CONTINUED)

- Keep cargo weight concentrated close to the motorcycle and as low as possible; this minimizes the change in the motorcycle's center of gravity.
  - a. Distribute weight evenly on both sides of the vehicle.
  - b. Do not load bulky items too far behind the rider or add weight to the handlebars or front forks.
  - c. Do not exceed 15 pounds maximum load in each saddlebag.
- Luggage racks are designed for lightweight items - do not overload racks.
- Be sure cargo is secure and will not shift while riding.
  - a. Recheck the cargo periodically.

Accessories that change the operator's riding position may increase reaction time and affect handling of the motorcycle.

- Additional electrical equipment may overload the motorcycle's electrical system possibly resulting in electrical system and/or component failure.

### WARNING

**The front and/or rear guard(s) may provide limited leg and cosmetic vehicle protection under unique circumstances. (Fall over while stopped, very slow speed slide). It is not made or intended to provide protection from bodily injury in a collision with another vehicle or any other object.**

- Large surfaces such as fairings, windshields, back rests, and luggage racks can adversely affect handling. Only genuine Harley-Davidson items designed specifically for the motorcycle model should be used with proper installation.

## ACCESSORIES AND CARGO (CONTINUED)

### WARNING

Touring models are special edition, custom motorcycles. They have been carefully designed and engineered to be ridden in their original configuration. **DO NOT** alter the handling characteristics of these motorcycles by:

- Changing or adding weight, such as fairings or radios.
- Attempting “custom” alterations such as extended front forks.

Doing so could result in death or serious injury.

### WARNING

We caution you against the use of non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling. Removing or altering factory installed standard parts may also affect performance and could result in death or serious injury.

### WARNING

**ONLY** FLT Harley-Davidson Motorcycles are suitable for sidecar use. Consult with your Harley-Davidson Dealer. Use of vehicles other than FLT models for this purpose could result in death or serious injury.

### WARNING

The front end components of the motorcycles and their design relationships to each other are very important. Altering these relationships by modifying the motorcycles front end could adversely affect the handling of the motorcycle and result in death or serious injury.

### WARNING

**DO NOT** ignore model/design specifications of your motorcycle. Doing so constitutes vehicle misuse and could adversely affect handling of the motorcycle which could result in motor vehicle damage, death and/or serious injury.



## VEHICLE IDENTIFICATION NUMBER (V.I.N.)

See Figure 1. The full 17 digit serial, or Vehicle Identification Number (V.I.N.) is stamped on the steering head and on a label located on the right front frame down tube. An abbreviated V.I.N. is stamped on the left side crankcase at the base of the rear cylinder.

### NOTE:

*Always give the full 17 digit Vehicle Identification Number when ordering parts or making any inquiry about your motorcycle.*

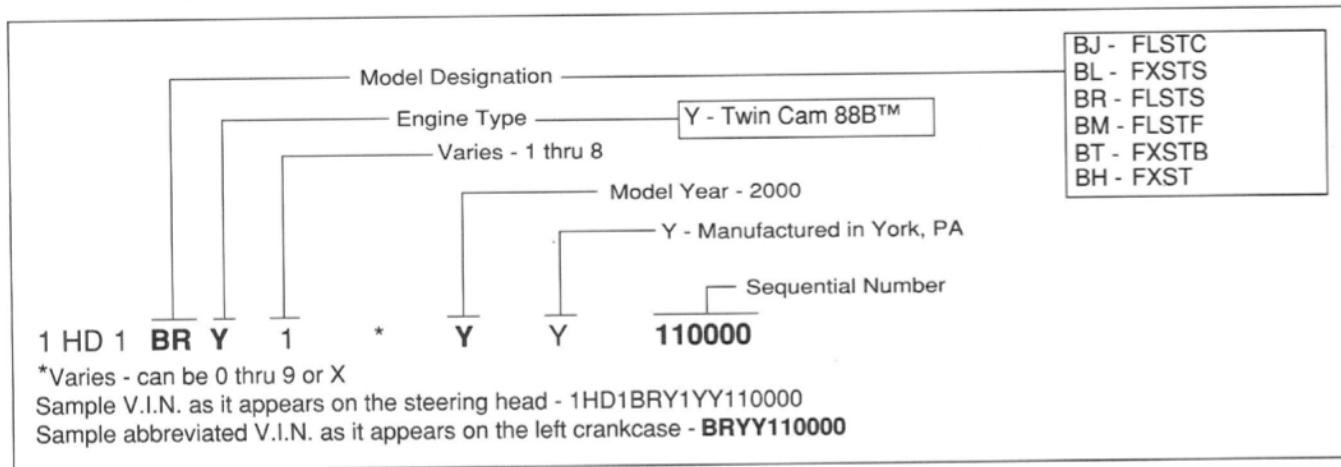


Figure 1. Vehicle Identification Number

## **BREAK-IN - THE FIRST 500 MILES (800 KM)**

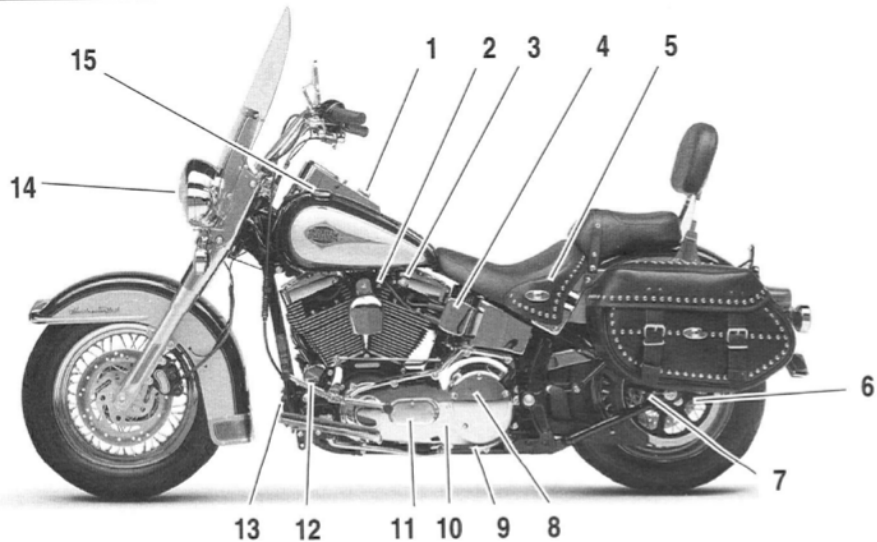
The sound design, quality materials, and workmanship that is built into your new Harley-Davidson will give you optimum performance right from the start.

However, for the first 500 miles (800 km) and to wear-in critical parts, observe the few simple riding rules below. This will assure future performance and durability.

1. During the first 50 miles (80 km), keep the engine speed below 2500 RPM in any gear; however, do not lug the engine.
  2. Up to 500 miles (800 km), vary the engine speed, avoiding any steady speed for long distances. Engine speed up to 3000 RPM is permissible in any gear.
  3. Avoid fast starts at wide open throttle. Drive slowly until engine warms up.
  4. Avoid running the engine at extremely low RPM in higher gears.
- *DO NOT exceed 50 MPH (80 km/h) for the first 50 miles (80 km).*
  - *DO NOT exceed 55 MPH (89 km/h) for the first 50 - 1000 miles (80-1600 km). This will assure future performance and durability.*

### **WARNING**

**Read the CONTROLS & INDICATORS section before riding your motorcycle. Failure to become familiar with the operation of your motorcycle could result in death or serious injury.**

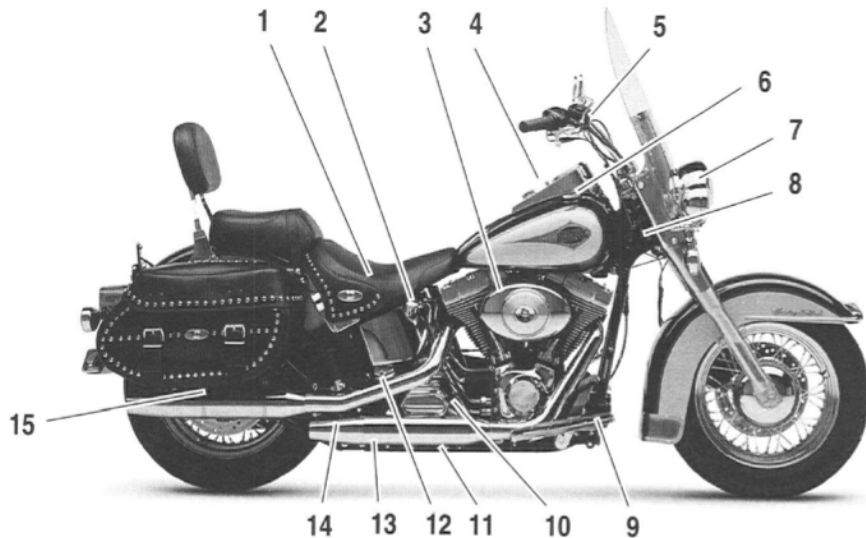


1. Ignition/light key switch
2. Carburetor enrichener knob
3. Fuel supply valve
4. Ignition coil
5. Ignition module (under seat)

6. Rear sprocket and drive
7. Rear axle adjuster
8. Clutch inspection cover
9. Primary drain plug
10. Primary chain cover

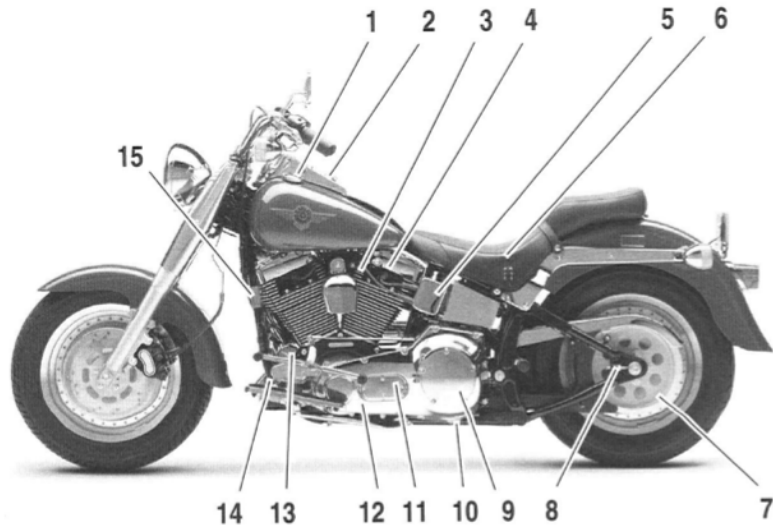
11. Primary chain inspection cover
12. Engine oil filter
13. Voltage regulator
14. Passing/Fog lamp
15. Fuel gauge

Figure 2. Heritage Softail Classic (FLSTC) - Left Side View



- |  |   |                             |
|--|---|-----------------------------|
| 1. Battery (under seat)                    | 6. Fuel filler cap                        | 11. Transmission drain plug |
| 2. Engine oil fill plug & dipstick         | 7. Passing/Fog lamp                       | 12. Electric starter motor  |
| 3. Carburetor/air cleaner                  | 8. Fork lock                              | 13. Shock absorber          |
| 4. Speedometer & indicators                | 9. Rear brake master cylinder & reservoir | 14. Engine oil tank drain   |
| 5. Front brake master cylinder & reservoir | 10. Transmission fill plug                | 15. Rear axle adjuster      |

Figure 3. Heritage Softail Classic (FLSTC) - Right Side View



1. Fuel gage
2. Ignition/light key switch
3. Carburetor enrichener knob
4. Fuel supply valve
5. Ignition coil

6. Ignition module (under seat)
7. Rear sprocket and drive
8. Rear axle adjuster
9. Clutch inspection cover
10. Primary drain plug

11. Primary chain inspection cover
12. Primary chain cover
13. Engine oil filter
14. Voltage regulator
15. Clutch cable adjuster

Figure 4. Fat Boy (FLSTF) - Left Side View

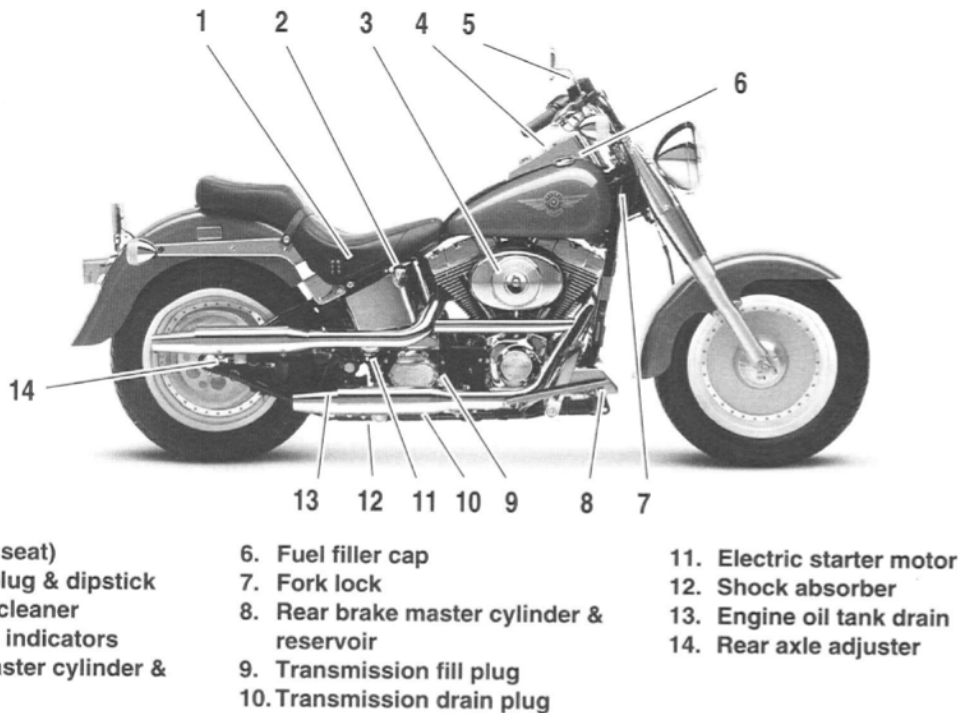


Figure 5. Fat Boy (FLSTF) - Right Side View

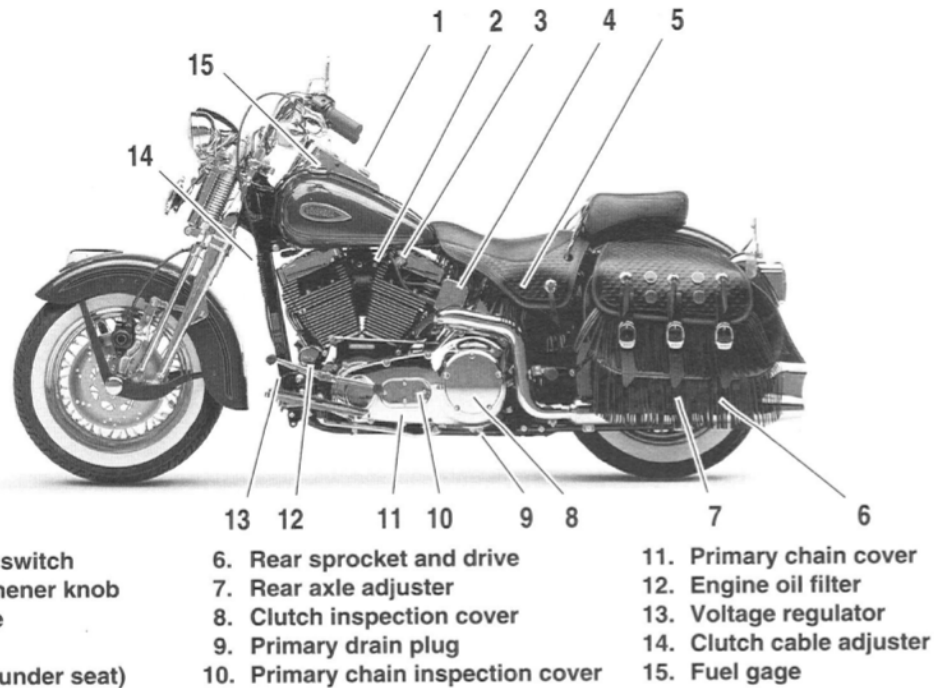
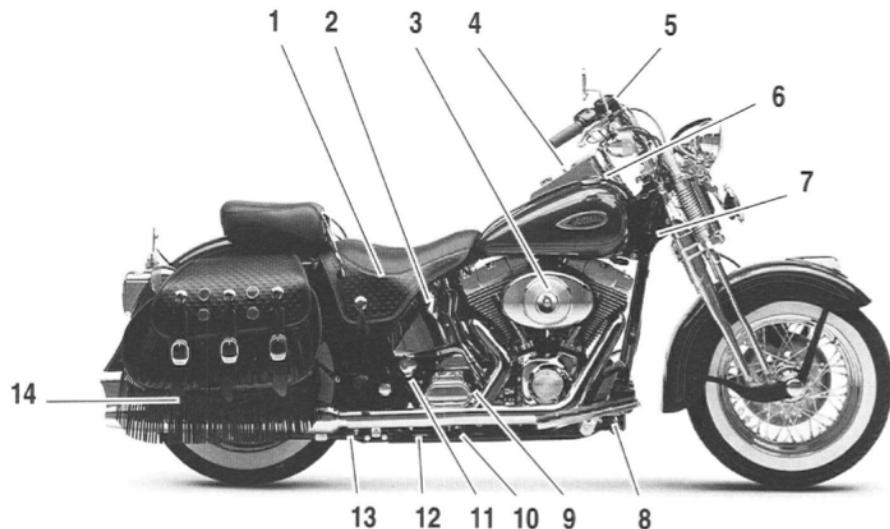


Figure 6. Heritage Springer (FLSTS) - Left Side View



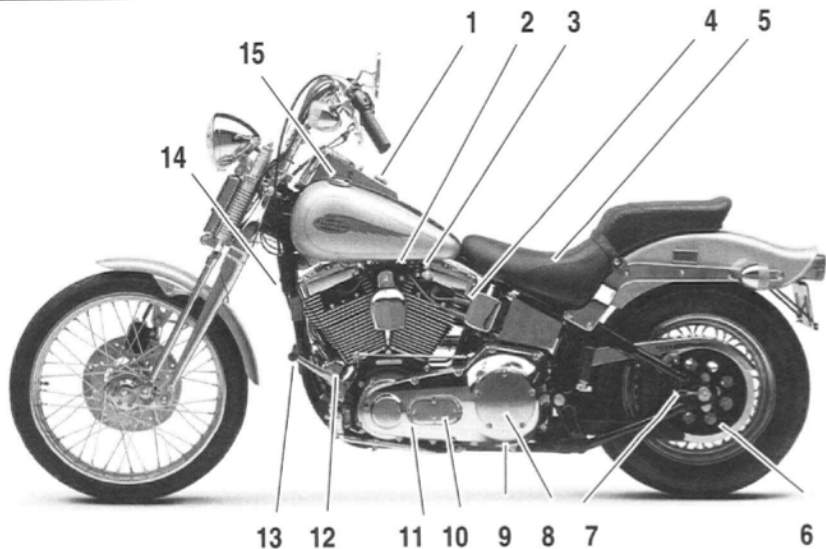
- 1. Battery (under seat)
- 2. Engine oil fill plug & dipstick
- 3. Carburetor/air cleaner
- 4. Speedometer & indicators
- 5. Front brake master cylinder & reservoir

- 6. Fuel filler cap
- 7. Fork lock
- 8. Rear brake master cylinder & reservoir
- 9. Transmission fill plug
- 10. Transmission drain plug

- 11. Electric starter motor
- 12. Shock absorber
- 13. Engine oil tank drain
- 14. Rear axle adjuster

Figure 7. Heritage Springer (FLSTS) - Right Side View



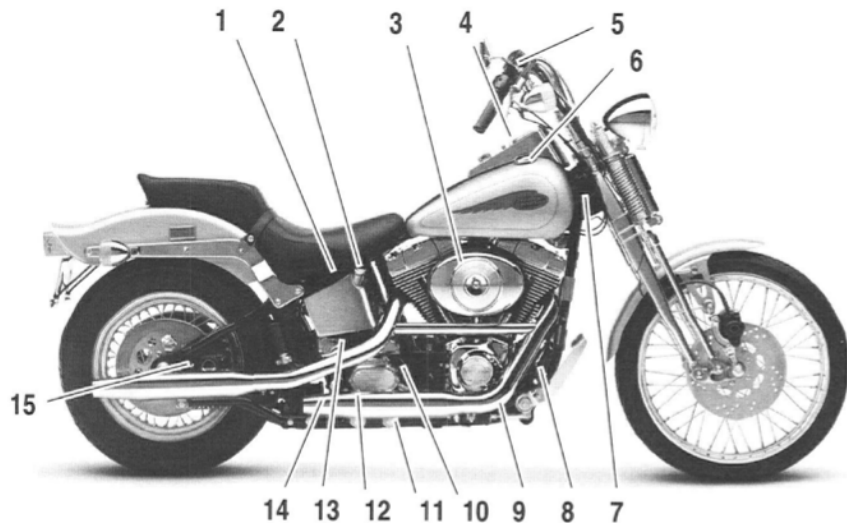


1. Ignition/light key switch
2. Carburetor enrichener knob
3. Fuel supply valve
4. Ignition coil
5. Ignition module (under seat)

6. Rear sprocket and drive
7. Rear axle adjuster
8. Clutch inspection cover
9. Primary drain plug
10. Primary chain inspection cover

11. Primary chain cover
12. Engine oil filter
13. Voltage regulator
14. Clutch cable adjuster
15. Fuel gage

Figure 8. Springer Softail (FXSTS) - Left Side View



1. Battery (under seat)
2. Engine oil fill plug & dipstick
3. Carburetor/air cleaner
4. Speedometer & indicators
5. Front brake master cylinder & reservoir

6. Fuel filler cap
7. Fork lock
8. Rear brake fluid reservoir
9. Rear brake master cylinder
10. Transmission fill plug
11. Transmission drain plug

12. Engine oil tank drain
13. Electric starter motor
14. Shock absorber
15. Rear axle adjuster

Figure 9. Springer Softail (FXSTS) - Right Side View

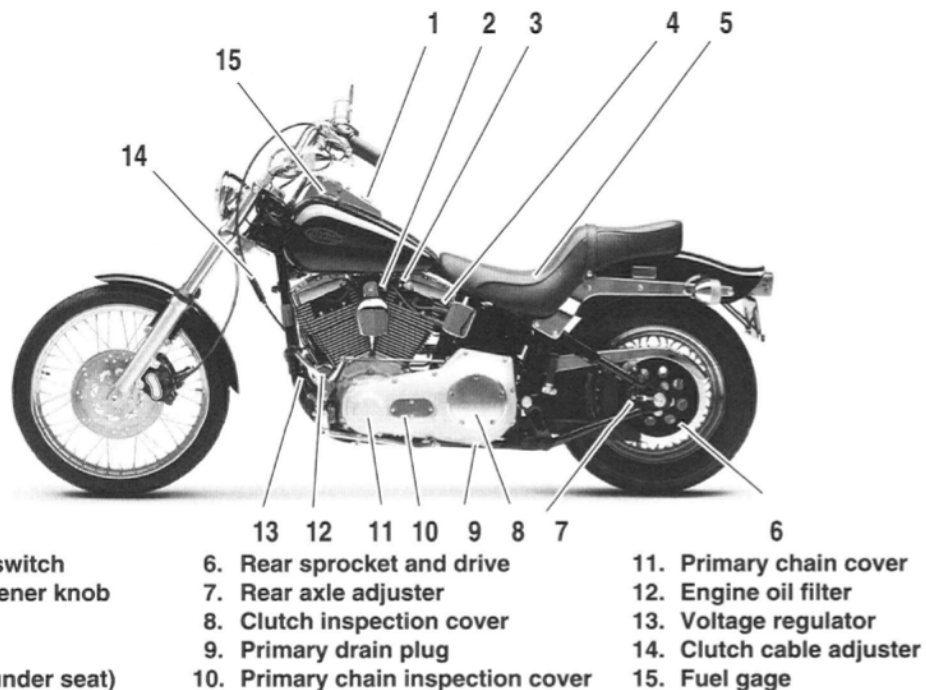
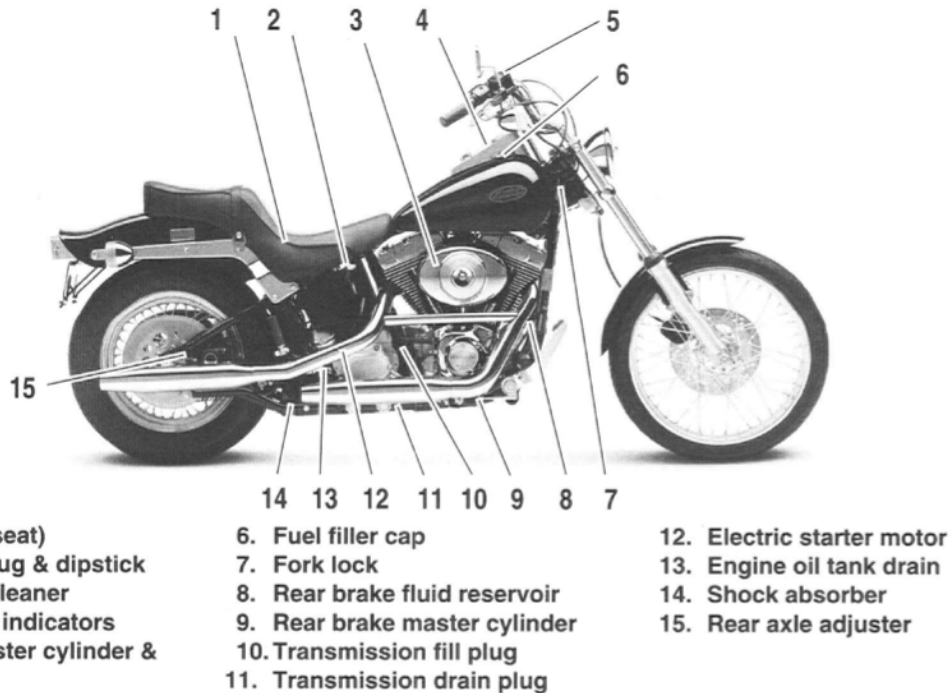


Figure 10. Softail Standard (FXST) - Left Side View



- |  |                               |                            |
|--|-------------------------------|----------------------------|
| 1. Battery (under seat)                    | 6. Fuel filler cap            | 12. Electric starter motor |
| 2. Engine oil fill plug & dipstick         | 7. Fork lock                  | 13. Engine oil tank drain  |
| 3. Carburetor/air cleaner                  | 8. Rear brake fluid reservoir | 14. Shock absorber         |
| 4. Speedometer & indicators                | 9. Rear brake master cylinder | 15. Rear axle adjuster     |
| 5. Front brake master cylinder & reservoir | 10. Transmission fill plug    |                            |
|  | 11. Transmission drain plug   |                            |

Figure 11. Softail Standard (FXST) - Right Side View

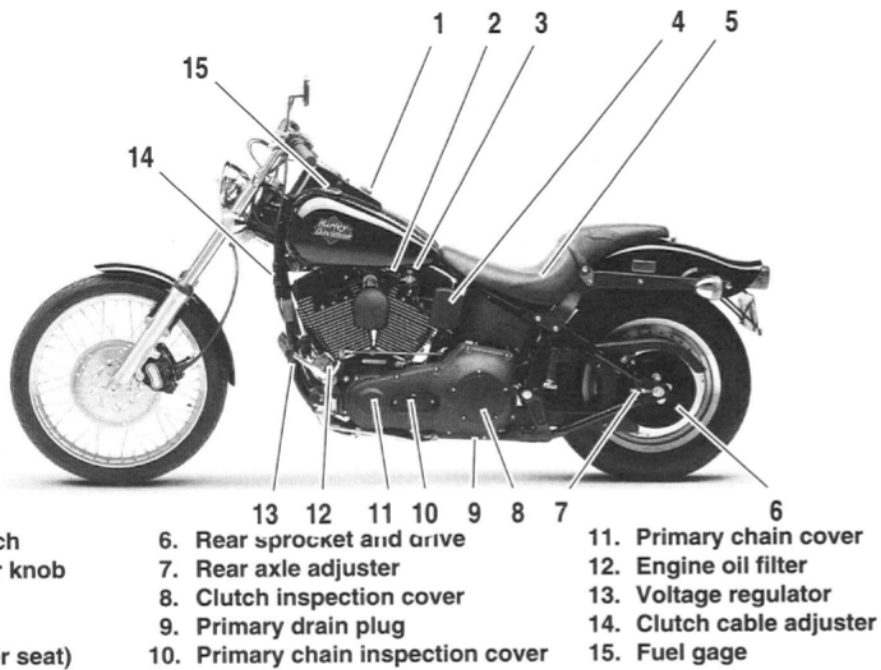
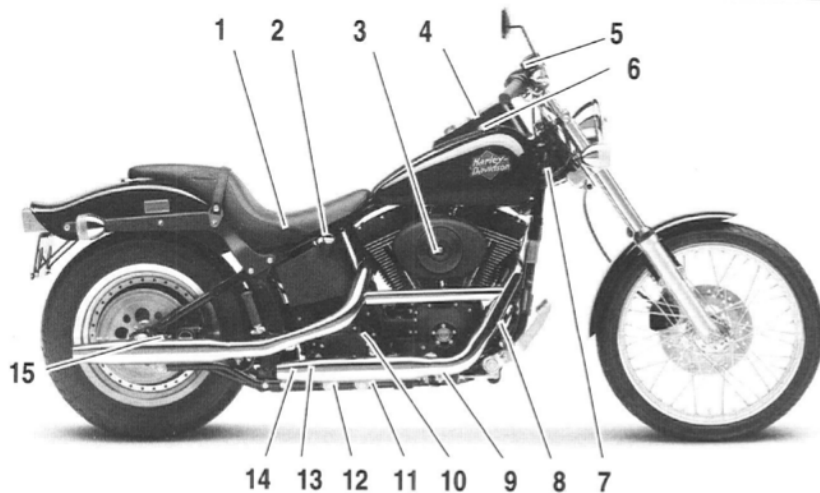


Figure 12. Night Train (FXSTB) - Left Side View



1. Battery (under seat)
2. Engine oil fill plug & dipstick
3. Carburetor/air cleaner
4. Speedometer & indicators
5. Front brake master cylinder & reservoir

6. Fuel filler cap
7. Fork lock
8. Rear brake fluid reservoir
9. Rear brake master cylinder
10. Transmission fill plug
11. Transmission drain plug

12. Electric starter motor
13. Engine oil tank drain
14. Shock absorber
15. Rear axle adjuster

Figure 13. Night Train (FXSTB) - Right Side View

## DIMENSIONS

Table 1. Model Dimensions

ITEM	FLSTC		FXSTS		FLSTF	
	in.	mm	in.	mm	in.	mm
Wheel Base	64.50	1638.30	65.40	1661.16	64.50	1638.30
Overall Length	94.50	2400.30	93.50	2374.90	94.30	2395.22
Overall Width	37.50	952.50	32.60	828.04	40.20	1021.08
Road Clearance	5.10	129.54	5.40	137.16	5.10	129.54
Overall Height	57.80	1468.12	47.30	1201.42	44.50	1130.30
Saddle Height	25.40	645.16	25.80	655.32	25.50	647.70
ITEM	FLSTS		FXSTB		FXST	
	in.	mm	in.	mm	in.	mm
Wheel Base	64.20	1630.68	66.90	1699.26	66.90	1699.26
Overall Length	94.10	2390.14	95.00	2413.00	95.00	2413.00
Overall Width	35.00	889.00	30.90	784.86	37.87	961.90
Road Clearance	4.90	124.46	5.60	142.24	5.60	142.24
Overall Height	46.00	1168.40	44.88	1139.95	46.38	1178.00
Saddle Height	25.90	657.86	25.20	640.08	26.10	662.94

## WEIGHT

**Table 2. Model Weights**

ITEM	FLSTC		FXSTS		FXST	
	lb.	kg	lb.	kg	lb.	kg
Dry Weight (as shipped from factory)	695.60	315.50	652.60	296	628.60	285.10
GVWR	1160	526.10	1125	510.30	1125	510.30
GAWR Front	430	195	415	188.20	415	188.20
GAWR Rear	730	331.10	710	322	710	322
ITEM	FXSTB		FLSTF		FLSTS	
	lb.	kg	lb.	kg	lb.	kg
Dry Weight (as shipped from factory)	629.60	285.58	665	301.60	716.60	325
GVWR	1125	510.30	1160	526.10	1175	532.09
GAWR Front	415	188.20	430	195	430	195
GAWR Rear	710	322.10	730	331.10	745	337.90

**NOTE:**

*Gross Vehicle Weight Rating (GVWR) (maximum allowable loaded vehicle weight) and corresponding Gross Axle Weight Ratings (GAWR) are given on a label located on the frame steering head.*



# CAPACITIES

**Table 3. Capacities**

ITEM	FLSTC/F		FXST/B		FXSTS/FLSTS	
	U.S. gals.	liters	U.S. gals.	liters	U.S. gals.	liters
Fuel Tank Total	5.0	18.92	5.2	19.68	4.2	15.89
Fuel Tank Reserve	0.5	1.89	0.6	2.27	0.4	1.51
	U.S. qt.	liters	U.S. qt.	liters	U.S. qt.	liters
Oil Tank w/filter	3.5	3.31	3.5	3.31	3.0	2.84
	U.S. oz.	liters	U.S. oz.	liters	U.S. oz.	liters
Transmission (Approximation)	24	.71	24	.71	24	.71
	U.S. oz.	liters	U.S. oz.	liters	U.S. oz.	liters
Each Front Fork	12.9	.38	12.0	.35	0	0
	U.S. oz.	liters	U.S. oz.	liters	U.S. oz.	liters
Primary Chain Case (Approximation)	26	.77	26	.77	26	.77

## IGNITION SYSTEM

Timing Setting.....	Not Adjustable
Battery.....	12 Volt, 19 amp/hr.

## SPARK PLUGS

Type.....	HD-6R12
Size.....	12 mm
Gap.....	0.038-0.043 in. (0.97-1.09 mm)
Torque.....	11-18 ft.- lbs. (15-24.4 NM)

## ENGINE

Number of Cylinders.....	2
Type.....	4-Cycle, 45 Degree V-Type, air cooled
Compression Ratio.....	9 to 1
Bore in. (mm).....	3.75 (95.25 mm)
Stroke in. (mm).....	4.00 (101.6 mm)
Displacement cu.in./cc.....	88/1450
Torque - ft.lbs.....	82.0 ft-lbs @ 3500 RPM

## TRANSMISSION

Type.....	Constant Mesh, Foot Shift
Speeds.....	5 Forward

## NUMBER OF SPROCKET TEETH (PRIMARY CHAIN)

Engine.....	25
Clutch.....	36

## NUMBER OF SPROCKET TEETH

Transmission.....	32
Rear Wheel.....	70

**Table 4. Overall Gear Ratios**

Softail Models	
Gear	Ratio
1st Gear	10.11
2nd Gear	6.96
3rd Gear	4.95
4th Gear	3.86
5th Gear	3.15

## TIRE DATA

### WARNING

For your personal safety, the tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson Dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting, allow tire slippage on the rim, cause tire failure, and could result in death or serious injury.

### WARNING

Using tires other than those specified may adversely affect motorcycle stability. Doing so could result in death or serious injury.

- Tubeless tires fitted with the correct size inner tubes may be used on all Harley-Davidson laced (wire spoked) wheels. Protective rubber rim strips must be used with tubeless tires (fitted with correct size inner tubes) when mounted on laced (wire spoked) wheels.

## TIRE DATA (CONTINUED)

### WARNING

Inner tubes must not be used in radial tires and radial tires must not be used on laced (wire spoked) wheels. Doing so could result in tire failure and death or serious injury.

- Tubeless tires are used on all Harley-Davidson cast and disc wheels.
- Tire sizes are molded on the tire sidewall. Inner tube sizes are printed on the tube.

### WARNING

Dunlop® front and rear tires for Harley-Davidson motorcycles are not the same; they are not interchangeable. Use the front tire **ONLY** for a front tire. **DO NOT** put a rear tire on the front of a vehicle. Failure to follow this warning could result in death or serious injury.

### WARNING

Do not inflate tire beyond its maximum inflation pressure, as specified on tire sidewall. If tires are overfilled they could blow out while vehicle is in operation causing vehicle damage and death or serious injury.

## Table 5. Tire Specifications

2000 VEHICLES DUNLOP TIRES ONLY	TIRE PRESSURE (Cold)			
	Front		Rear	
FLSTC/F/S	PSI	kPa	PSI	kPa
Solo Rider	36	248	36	248
Rider & One Passenger	36	248	40	275
FXST/S/B	PSI	kPa	PSI	kPa
Solo Rider	30	206	36	248
Rider & One Passenger	30	206	40	275

## FUEL INFORMATION

- Use a good quality unleaded gasoline.
- Use at least 91 pump octane (R + M)/2.
- Octane rating is usually found on the pump.

### WARNING

Remove fuel filler cap slowly and fill fuel tank slowly to prevent spillage; do not overfill or fill above the bottom of the filler neck insert. In addition, leave air space to allow for fuel expansion. Expansion can cause an over-filled tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened. Failure to do so may cause an explosion or fire which could result in death or serious injury.

### CAUTION

DO NOT spill gasohol onto the motorcycle when filling with fuel. Immediately wipe up gasohol spills on your Harley-Davidson. Failure to do so may result in equipment damage.

Today's service station pumps are increasingly of the higher capacity variety. With the high flow of gasoline into a motorcycle tank, air entrapment and pressurization is a possibility.

The pressurized air may force gasoline to escape through whatever opening is available within the filler tube; this may not only soil clothing, but may create a potential fire hazard.

### WARNING

Use care when filling up the gas tank with fuel; pressurized air may force gasoline to escape through whatever opening is available within the filler tube; therefore gasoline will leak out of the filler tube. Failure to do so could result in a potential fire hazard, soiled clothing, death or serious injury.

### CAUTION

DO NOT operate catalytic converter-equipped vehicle with engine misfire or a non-firing cylinder. If you operate the vehicle under these conditions, the exhaust will become abnormally hot, which can cause vehicle damage, including emission control loss.

### CAUTION

You must use ONLY unleaded fuel in California model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emission control system.

## GASOLINE BLENDS

Your motorcycle was designed to get the best performance and efficiency using unleaded gasoline. Most gasoline sold in the United States is blended with alcohol and/or ether, to create "oxygenated" blends. The type and amount of alcohol or ether added to the fuel *is important*.

### CAUTION

**DO NOT use gasoline that contains methanol. Doing so may result in fuel system component failure, engine damage and/or equipment malfunction.**

- Gasoline containing METHYL TERTIARY BUTYL ETHER (MTBE): Gasoline/MTBE blends are a mixture of gasoline and as much as 15% MTBE. Gasoline/ MTBE blends can be used in your motorcycle.
- ETHANOL is a mixture of 10% ethanol (Grain alcohol) and 90% unleaded gasoline. Gasoline/ethanol blends can be used in your motorcycle if the ethanol content does not exceed 10%.
- REFORMULATED OR OXYGENATED GASOLINES (RFG): "Reformulated gasoline" is a term used to describe gasoline blends that are specifically designed to burn cleaner than other types of gasoline, leaving fewer "tailpipe" emissions. They are also formulated to evaporate less when you are filling your tank. Reformu-

lated gasolines use additives to "oxygenate" the gas. Your motorcycle will run normally using this type of gas and Harley-Davidson recommends you use it when possible, as an aid to cleaner air in our environment.

You may find that some gasoline blends adversely affect the starting, drivability or fuel efficiency of your motorcycle. If you experience one or more of these problems, we recommend operate your motorcycle on straight unleaded gasoline.

## CATALYTIC CONVERTERS

California carbureted and all HDI motorcycles are equipped with catalytic converters.

# BULB CHART TABLE

Table 6. Bulb Chart

LAMP DESCRIPTION (ALL LAMPS 12 VOLT)	QUANTITY (REQUIRED)	CURRENT DRAW (AMPERAGE)		HARLEY-DAVIDSON PART NUMBER	
		FLSTC/F/ FXST/S/B	FXST/S/B FLSTC/F/	FLSTC/F/ FLSTS FXST/B/S	FLSTS FXST/B/S
<b>Head lamp</b>					
High Beam/Low Beam	1	4.7/4.3	4.7/4.3	67713-86	67697-81
Position Lamp (HDI)	1	0.32	0.32	53438-92	53438-92
<b>Tail and Stop Lamp</b>					
Tail Lamp	1	0.59		68168-89A	
Stop Lamp	1	2.25		68168-89A	
Tail Lamp (HDI)	1	0.42		68169-90A	
Stop Lamp (HDI)	1	1.75		68169-90A	
<b>Passing Lamp</b>					
FLSTC/FLSTS	2	2.50		68674-69	
Fog Lamp (HDI)	2	2.92		68847-98	

Table 6. Bulb Chart (continued)

LAMP DESCRIPTION (ALL LAMPS 12 VOLT)	QUANTITY (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
<b>Turn Signal Lamp</b>			
Front/Running	2	2.25/0.59	68168-89
Front (HDI)	2	1.75	68163-84
Rear	2	2.10	68572-64B
Rear (HDI)	2	1.75	68163-84
<b>License Plate Lamp</b>			
FLSTS	1	0.35	52441-95
FLSTS (HDI)	1	0.37	53436-97
<b>Fender Tip Lamps</b>			
FLSTC	2	0.10	68193-95
FLSTS	1	0.35	52441-95
<b>Instrument Panel Lamps - Illuminated with LEDs</b>			



## BATTERY LOCATION

## NOTES

The battery for the Softail model is located under the seat of the motorcycle. See SOFTAIL MAINTENANCE AND LUBRICATION in the following section to remove seat for battery inspection.

The battery installed in model year 2000 motorcycles are permanently sealed, maintenance-free, lead/calcium and contain sulfuric acid.

Clean connections and check tightness on all models every 2500 miles (4000 km) or monthly.

***Read SOFTAIL MAINTENANCE AND LUBRICATION section containing specific model maintenance and lubrication procedures for batteries first.***

**NOTES**

### NOTES:

*Refer to the side-view photographs in the front of the manual to locate the items discussed in this manual.*

*Refer to IGNITION/LIGHT KEY SWITCH section located under the SOFTAIL CONTROLS AND INDICATORS section first.*

## ELECTRIC STARTER SWITCH

### NOTE:

*Switch must be in RUN position to operate engine.*

See Figure 14. The electric starter switch (Item no. 11) is located on the right handlebar control group. See STARTING THE ENGINE for detailed operation procedures.

1. Put the engine stop run/switch (Item no. 6) in the RUN position and the transmission in neutral.
2. See Figure 22. See Figure 14. Turn ignition ON and push the START switch (Item no. 11) to operate starter motor.

## ENGINE STOP SWITCH

See Figure 14. Engine stop/run switch (Item no. 6) is located on the right handlebar control.

- The engine stop/run switch turns the ignition ON or OFF, and should be used at all times to stop the engine; especially in an emergency.

1. To stop engine, push the stop/run switch to position marked OFF.
2. See Figure 22. Turn the key to the OFF position.

## THROTTLE CONTROL GRIP

See Figure 14. The throttle control grip (Item no. 8) is located on the right handlebar control group.

1. Turn control grip clockwise to close the throttle.
2. Turn control grip counterclockwise to open the throttle.

To reduce rider fatigue on long trips, a spring loaded throttle friction adjustment screw is located at the bottom of the throttle grip clamp.

### NOTE:

*The ULTRA Model does not have a friction adjustment screw feature. See your Harley-Davidson Dealer for more details.*

### WARNING

**DO NOT** tighten throttle friction adjustment screw to the point where the engine will not return to idle automatically. This could lead to loss of control of motorcycle, resulting in death or serious injury.

## THROTTLE CONTROL GRIP (CONTINUED)

## NOTES

3. Unscrew the throttle friction adjustment screw (Item no. 9) so the throttle returns to the idle position when the hand is removed from the grip.
4. Screw the throttle adjustment screw in, to increase friction on grip to provide a damping effect on throttle motion.

### **NOTE:**

*The throttle friction adjustment screw should not be used under normal stop and go operating conditions.*

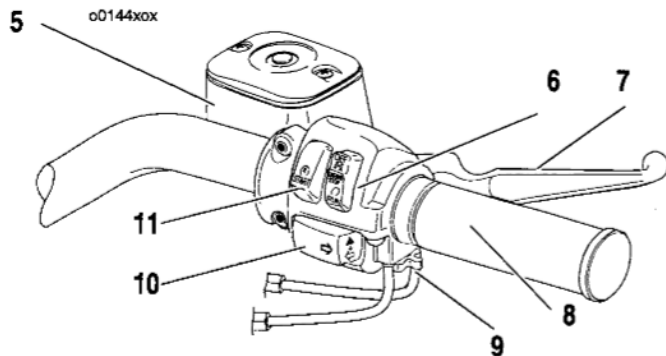
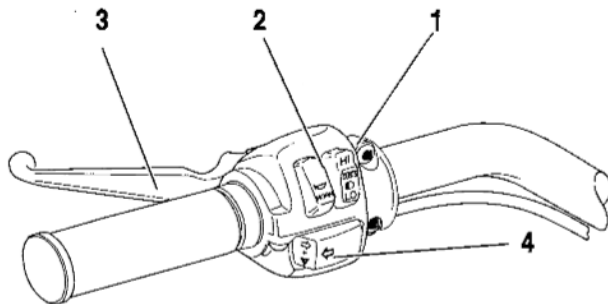
### **WARNING**

**DO NOT** tighten the throttle friction adjustment screw to the point where the engine will not return to idle automatically. This could lead to loss of control of motorcycle, resulting in death or serious injury.

## THROTTLE CONTROL GRIP (CONTINUED)

1. Headlamp dimmer switch
2. Horn switch
3. Clutch hand lever
4. Left turn signal switch

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5. Master cylinder
6. Engine stop/run switch
7. Brake hand lever
8. Throttle control grip
9. Throttle friction adjusting screw
10. Right turn signal switch
11. Electric starter switch

Figure 14. Hand Controls (Typical)

## ENRICHENER

### Constant Velocity (C.V.) Carburetor Enrichener

A constant velocity carburetor uses an "enrichener" instead of a "choke". An enrichener is operated almost the same way as a choke except there are two differences:

- When starting a cold engine, the throttle control **MUST BE CLOSED** for the enrichener to work properly.
- The enrichener does not have detents. The enrichener knob position can be adjusted from full in to full out.

See Figure 16. Engine speed increases as the enrichener knob is pulled out. By moving the enrichener knob, you adjust the air/fuel mixture to start a cold or warm engine.

1. Pull enrichener knob all the way out for cold engine starting.
2. Change the enrichener knob position between **FULL OUT**, or **FULL IN**, as the situation requires.

#### NOTE:

See **OPERATION** section for detailed starting procedures.

**Fuel injected models do not use an enrichener.**

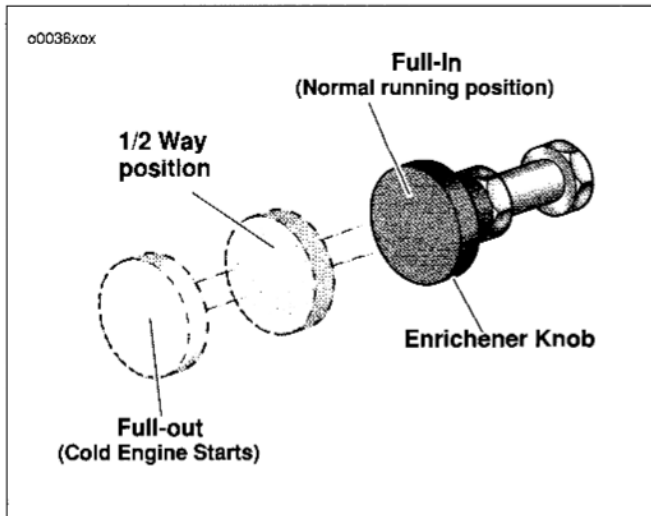


Figure 16. Setting the Enrichener

## CLUTCH HAND LEVER

### **WARNING**

Be sure fingers are not positioned between hand control levers and handlebar grips or operation of these controls could be impaired. This may cause loss of control of the motorcycle, and could result in death or serious injury.

See Figure 14. The clutch hand lever (Item no. 4) is located on the left handlebar where it is operated with the fingers of the left hand.

1. Pull clutch hand lever in against handlebar grip to fully disengage clutch.
2. Release the foot shifter lever slowly (while applying minimal pressure) to its outward position to engage clutch.

## GEAR SHIFTER

See IDENTIFICATION section. The gear shifter is located on the left side, where it is operated with the toe of the left foot.

### **NOTE:**

See Figure 16. Some motorcycles have a "heel-toe" shifter lever. With this shift lever, upshifts can be made with the heel of the left foot. Downshifts can be made with the toe.

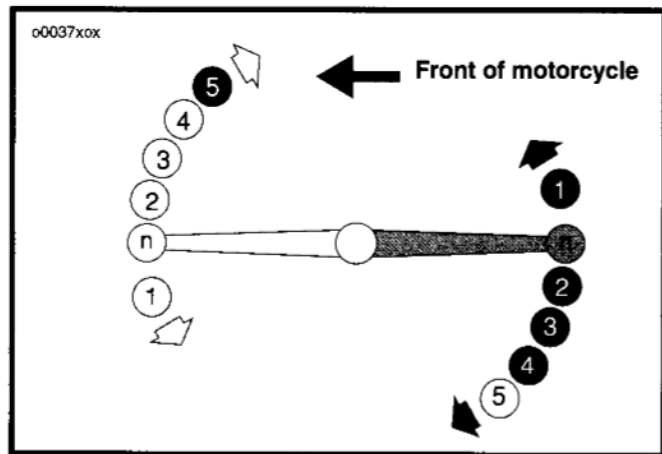


Figure 16. Heel-Toe Shift Lever

## GEAR SHIFTER (CONTINUED)

- See Figure 18. Pushing foot shift lever all the way down (full stroke) shifts the transmission to the next lower gear.
- Lifting the foot shift lever all the way up (full stroke) shifts the transmission into the next higher gear.

1. Release the foot shift lever after each gear change.

This allows the lever to return to its central position before another gear change can be made.

- The neutral position is between first (low), and second gear.
- First gear is the last gear position that can be found by pushing the foot shift lever full strokes downward.

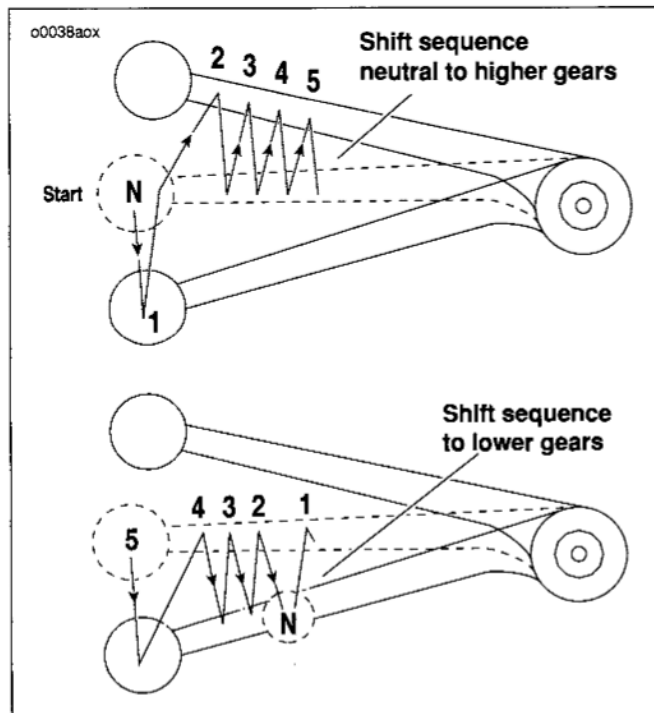


Figure 18. Foot Shifter Lever



## GEAR SHIFTER (CONTINUED)

### NOTES:

*By lifting the gear shifter lever up, a higher gear is engaged; by pushing the gear shifter lever down, a lower gear is engaged. When stopping, operate gear shift until you reach neutral. Neutral is 1/2 stroke up from first gear.*

Occasionally, it is necessary to roll the motorcycle to fully engage the gears.

To roll the motorcycle backward or forward:

1. Stand the motorcycle still and shut the engine off.
2. Disengage the clutch while maintaining a slight pressure on the foot shift lever to shift from one gear to another.

Even with the engine running and the motorcycle standing still, difficulty may be experienced in shifting gears. This difficulty arises when transmission gears are not turning and shifting parts; as a result, they are not lined up to permit engagement.

### CAUTION

When difficulty of shifting gears is experienced, **DO NOT** under any circumstances, attempt to force the shift. The results of such abuse will be a damaged or broken shifter mechanism.

If you cannot shift gears do the following:

1. Either roll the motorcycle as indicated above—

Or

2. If the engine is running, **lightly** engage the clutch while applying minimal pressure to the shifter lever to make the shift.

See OPERATION section. Both of these procedures set transmission gears in motion to enable ease of shifting.

## BRAKES

The brake pedal controls the rear wheel brake and is located on the motorcycle's right side. It is operated by the right foot.

See Figure 14. The brake hand lever (Item no. 7) controls the front wheel brake and is located on the right handlebar. It is operated by the fingers of the right hand.

### **NOTE:**

*Brakes should be applied uniformly and evenly to prevent wheels from locking up. A balance between rear and front braking is generally best.*

### **WARNING**

**Do not apply either brake strongly enough to lock the wheel. This may cause loss of control of the motorcycle, and could result in death or serious injury.**

## HORN SWITCH

See Figure 14. The horn is operated by pushing on the horn switch (Item No. 2) located on the left handlebar control group.

## HEADLAMP DIMMER SWITCH

See Figure 14. The headlamp dimmer switch (Item no. 1) is located on the left handlebar and controls the headlamp's high and low beams.

### **NOTE:**

*The beam (blue) indicator light remains lit when high beam is on.*

## TURN SIGNAL SWITCHES - GENERAL

See Figure 14. The right turn signal switch (Item no. 10) operates the right front and right rear flashing lamps.

The left turn signal switch (Item no. 4) operates the left front and left rear flashing lamps.

Front turn signal lamps also function as running lamps.

## TURN SIGNAL SWITCH OPERATION

The turn signal switches are controlled by a small microprocessor which gets its operational information from the speedometer and turn signal switches.

1. Momentarily depress the desired turn signal switch.

The turn signal lamps will begin and continue flashing until a movement signal is received from the speedometer. As long as the motorcycle is stationary, the signal will flash.

### TURN SIGNAL SWITCH OPERATION (CONTINUED)

#### NOTES:

- *If you want the turn signals on longer, hold the switch in. The turn signals will begin flashing immediately, but the microprocessor will not begin computing distance until you release the switch.*
- *If you are signaling to turn in one direction and you depress the switch for the opposite turn signal, the first signal is canceled and the opposite side begins flashing.*
- *If you want to stop the lamps from flashing, briefly depress the turn signal switch a second time. The turn signal lamps will stop flashing.*

## HAZARD WARNING 4-WAY FLASHER (TURN SIGNAL SWITCHES)

See Figure 14. The hazard warning 4-way flasher operates all four turn signal lamps at the same time. It is controlled by the turn signal switch microprocessor. The hazard warning flasher will operate when the ignition switch is in the ignition, lights or access position.

1. See Figure 14. Turn ON the hazard warning 4-way flasher by momentarily (1-1/2 seconds) depressing BOTH turn signal switches (Items no. 4 & 10) at once.
2. Turn OFF the 4-way flasher the same way.

## INDICATOR LIGHTS - GENERAL

See Figure 19. Five indicator lights are provided.

- The **green** TURN indicators will flash when turn signals are activated; therefore, flashing indicates the chosen turn direction. When the 4-way hazard flashers are operating, both turn indicators will flash simultaneously.
- The **blue** BEAM indicator light, when lit, signals high beam headlamp operation.
- The **green** NEUTRAL indicator light, when lit, signals the transmission is in neutral gear.
- The **red** OIL indicator light, when lit, signals that oil is not circulating through the engine.

### NOTE:

*The OIL indicator light will glow when the ignition is turned on prior to starting engine. With engine running, light should be off when engine speed is above idle.*

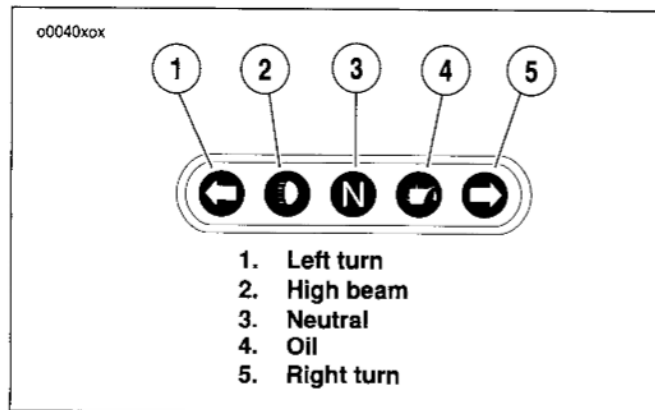


Figure 19. Indicator Lights

## INDICATOR LIGHTS (CONTINUED)

## NOTES

Several other circumstances that could cause the **red** Oil indicator light to signal, include the following:

- If the oil pressure indicator light does not go off at speeds above idling, it is usually because of an empty oil tank or diluted oil.
- In freezing weather the oil feed may clog with ice and sludge, preventing oil circulation.
- A grounded oil signal switch wire.
- A faulty signal switch.
- A damaged or improperly installed check valve.
- Trouble with the pump.

### CAUTION

**If the oil pressure indicator light fails to go off, always check the oil supply first. If oil supply is normal and the light still does not operate normally, stop the engine at once and do not ride further until the trouble is located and the necessary repairs are made. Failure to do so may result in engine damage.**

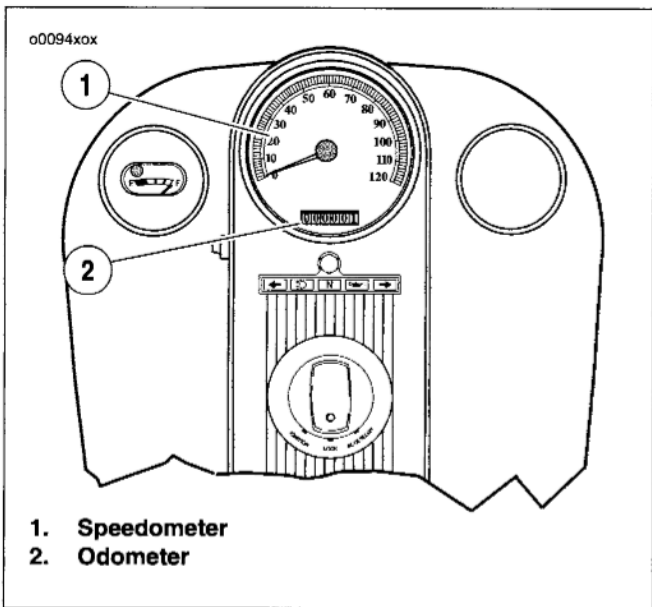


Figure 19. Model Indicator/Lamps

## SPEEDOMETER/ODOMETER

See Figure 19. The speedometer registers miles per hour of forward speed. The odometer registers the number of miles the vehicle has traveled.

### **⚠ WARNING**

**Avoid excessive speed and never travel at a speed faster than the posted speed limit. To do so could cause loss of control resulting in death or serious injury.**

### **CAUTION**

**Never attempt to tamper with or alter the vehicle odometer; this is illegal. Doing so may cause equipment damage.**

## ELECTRONIC SPEEDOMETER

See Figure 19. The electronic speedometer has a single display window for both the odometer and trip-odometer.

1. Press the speedometer control (rubber covered) button, to change the display window on the speedometer face to either odometer or trip-odometer.
2. To reset the trip-odometer to zero, press button to reset speedometer display to the ODOMETER mode and hold the button in for approximately 2 to 3 seconds.

The speedometer will switch to the trip-odometer mode and reset the display to zero.

## TRIP-ODOMETER

See Figure 19. Use the trip-odometer to register number of miles traveled on a trip or between refueling.

## MIRRORS (CONVEX)

Your vehicle is equipped with convex mirrors and have a curved surface. This type of mirror is designed to give a much wider view to the rear than a flat mirror; however, cars and other objects seen in this type of mirror will look smaller and farther away than when seen in a flat mirror. Use care when judging the size or distance of objects seen in these mirrors.

### WARNING

**Objects in mirrors are closer than they appear. Always use caution when judging distance of objects in mirrors. Failure to do so could result in death or serious injury.**

Adjust the mirrors to clearly reflect the area behind the motorcycle.

#### **NOTE:**

***Adjust mirrors so you can see a small portion of your shoulders in each mirror. This will help you establish the relative distance of vehicles to the rear of your motorcycle.***

## JIFFY STAND

See Figure 20. The jiffy stand is located on the left side of the motorcycle and swings outward to support the motorcycle for parking.

### **⚠ WARNING**

**Always park the motorcycle on a level, firm surface. An unbalanced motorcycle could result in result in death or serious injury.**

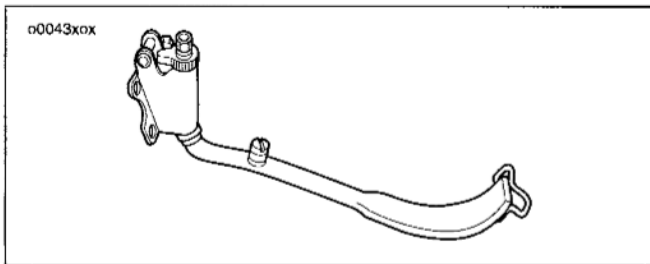


Figure 20. Jiffy stand (Typical)

### **⚠ WARNING**

**Your vehicle is equipped with a jiffy stand that locks when placed in the full forward (down) position and the vehicle weight is rested on it. Without vehicle weight resting on the jiffy stand, any movement of the vehicle could cause the jiffy stand to retract slightly from the full forward position. If the jiffy stand is not in the full forward (lock) position when vehicle weight is rested on it, the vehicle may fall over and could result in death or serious injury.**

### **⚠ WARNING**

**Be sure jiffy stand is fully retracted before riding the motorcycle. If jiffy stand is not fully retracted during vehicle operation, it could contact the road surface causing a momentary disturbance before retracting. This momentary disturbance could distract the rider, which could result in loss of vehicle control, and death or serious injury.**



## FUEL SUPPLY VALVE

The fuel supply valve is located under the fuel tank. The fuel supply is cut off to the engine when the valve handle is horizontal, and when the engine is turned OFF.

- See Figure 21. Turn the handle (Item no. 2) to the horizontal position to turn OFF main fuel supply.
- Turn the handle (Item no. 4) to the vertical position to turn ON main fuel supply.
- Turn the handle (Item no. 1) to the vertical position to turn ON reserve fuel supply.

Valve is vacuum-operated and will open and close when engine is turned ON or OFF.

### NOTE:

*The fuel supply valve on the vehicle should be turned OFF when the vehicle is not operating.*

### CAUTION

California vehicles, equipped with Evaporative Emission controls, have a plugged carburetor overflow fitting. The fuel supply valve on the vehicle should be turned off when the vehicle is not operating. Failure to do so may result in fuel drainage into the engine, dilution of the engine oil and engine damage.

### NOTES:

- *To always maintain a reserve supply, do not operate the motorcycle with the valve in the reserve (RES) position after refueling.*

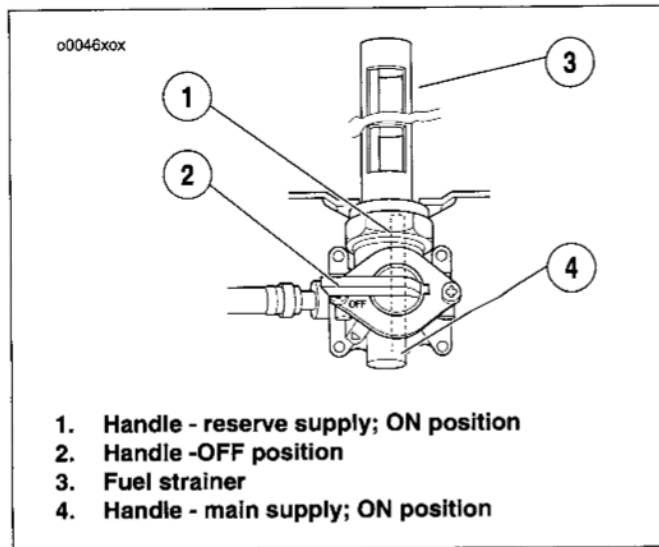


Figure 21. Fuel Supply Valve

**NOTES**

**NOTE:**

*This Owner's Manual covers model year 2000 Harley-Davidson motorcycles. Some features explained are unique to certain models. These features may be available as accessories for your Harley-Davidson motorcycle. See your Harley-Davidson Dealer for a complete list of accessories that will fit your model.*

*Refer to the side-view photographs in the front of the manual to locate the items discussed in this manual.*

*Refer to the GENERAL CONTROLS AND INDICATORS section for other controls and indicators located on your motorcycle.*

## IGNITION/LIGHT KEY SWITCH

**⚠ WARNING**

**DO NOT** modify the ignition/light switch wiring to circumvent the automatic-on headlight feature. High visibility is an important safety consideration for motorcycle riders. To reduce the risk of vehicle damage and personal injury, ensure the headlight is on at all times. Failure to do so could result in death or serious injury.

See YOUR OWNER'S MANUAL section. Be sure to record all your key numbers in the space provided at the front of this book.

See Figure 22. The ignition/light key switch controls electrical functions of the motorcycle.

**CAUTION**

Protect your motorcycle against theft. After parking your motorcycle, lock the steering head and remove ignition key from switch. Failure to do so may result in theft and/or equipment damage.

**CAUTION**

Do not lubricate barrel locks with petroleum based lubricants or graphite. Inoperative locks may result.

## IGNITION/LIGHT KEY SWITCH (CONTINUED)

1. See Figure 22. Verify switch is in Lock position.
2. Verify the ignition key is turned to the Lock position.
3. To remove the key from the ignition, push the key in and pull outward.
4. Always turn switch to Lock position and remove key before operation and when leaving bike parked.

### CAUTION

Turn the switch to the lock position and verify the ignition switch is locked before leaving the bike parked. Leaving the switch in the ACC. position will keep the instrument lights on and result in a discharged battery.

### NOTE:

*If switch is in the ACC. POSITION unattended, the instrument lights will discharge the battery.*

5. To remove the key from the ignition, push key in and turn it counterclockwise.
6. Remove the key.

### NOTES:

- **ACC.** - Accessories and hazard warning flasher can be turned on. Instrument lights are on. Brake light and horn can be activated. Key may be removed.

- **The lights work when the switch cover is in the IGNITION position, as required by law in some localities.**

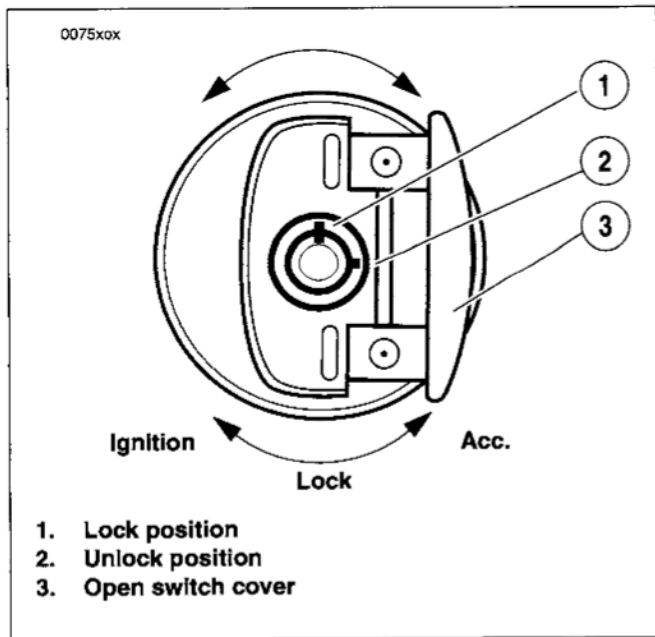


Figure 22. Ignition/Light Key Switch

## IGNITION/LIGHT KEY SWITCH (CONTINUED)

**Table 7. Ignition Information**

MODEL	LOCATION	SWITCH POSITIONS/FUNCTIONS
Softail	On fuel tank instrument panel.	Switch is locked or unlocked by lifting switch cover, inserting key and turning key counterclockwise to lock, clockwise to unlock. Key may be removed in any position.
		LOCK - Ignition, lights and accessories are off.
		ACC. - Accessories are on. Hazard warning flashers can be operated. Instrument lights are on. Brake light and horn can be activated.*
		LIGHTS and IGNITION - Ignition, lights and accessories are on.*
		<p><b>NOTE:</b></p> <p><i>Harley-Davidson recommends removing key from ignition lock before operating motorcycle. If you do not remove key, key can fall out during operation (except HDI).</i></p>

\* International models have an additional function; position lamp and tail lamp are also on.

## ACCESSORY SWITCH

See Figure 25. All Softail models, have an accessory switch for the owner's use. There is an accessory connector, located under the seat, that can be activated with the ACC. switch. This switch is located on the left side of the fairing or triple clamp shroud. See your Harley-Davidson Dealer for possible uses.

## PASSING/FOG LAMP SWITCH FLSTC & FLSTS MODELS

NOTES

See Figure 23. Use the passing lamp switch to turn on the passing lamps as required.

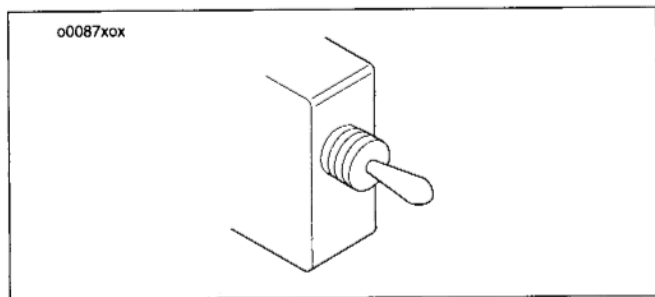


Figure 23. Passing/Fog Lamp Switch

### NOTES:

- *On the FLSTC, the passing/fog lamp switch is on the left, inside of the triple clamp shroud.*
- *On the FLSTS, the passing/fog lamp switch is under the left fuel tank next to the enrichener knob.*
- *The passing/fog lamps do not work when the head-lamp is on high beam.*

## FUEL FILLER CAP

See Figure 24. To open, turn cap counterclockwise and lift up. To close turn fuel filler cap clockwise until it clicks. The ratchet action of the fuel cap prevents overtightening.

### NOTES:

*Fuel filler cap turns approximately a 3/4 turn before it starts unscrewing.*

*See Figure 24. Softail model fuel filler caps are located on the right side of the fuel tank. The "cap" on the left side is the fuel gauge and is not removable.*

See SAFE OPERATING RULES and review safety procedures listed below.

### WARNING

Gasoline is extremely flammable and explosive under certain conditions. Use care when handling gasoline. DO NOT store motorcycle having gasoline in tank within the home or garage where open flames, pilot lights, sparks or electric motors are present. Failure to do so may cause an explosion or fire which could result in death or serious injury.

### WARNING

Remove fuel filler cap slowly and fill fuel tank slowly to prevent spillage; do not overfill or fill above the bottom of the filler neck insert. In addition, leave air space to allow for fuel expansion. Expansion can cause an over-filled tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened. Failure to do so may cause an explosion or fire which could result in death or serious injury.

## FUEL FILLER CAP (CONTINUED)

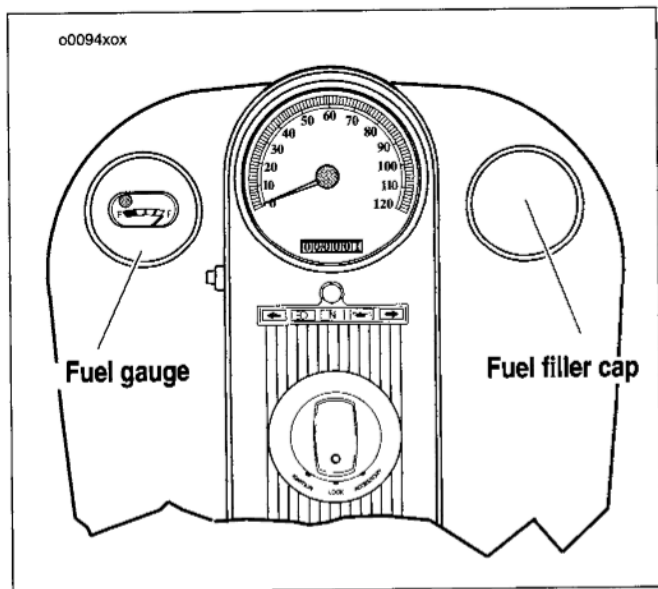


Figure 24. Fuel Gauge/Cap

### **WARNING**

**DO NOT** use decorative “spinner” or “bullet” type fuel cap covers, which may possibly cause the cap to loosen from the tank upon impact. Consult with your Harley-Davidson Dealer about the correct fuel cap to use. Failure to do so may cause an explosion or fire which could result in death or serious injury.

### **CAUTION**

**DO NOT** spill gasohol onto the motorcycle when filling with fuel. Immediately wipe up gasohol spills on your Harley-Davidson. Failure to do so may result in equipment damage.

### **CAUTION**

You must use **ONLY** unleaded fuel in California and HDI model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emission control system.



## FORK LOCK

### WARNING

Do not operate vehicle with forks locked. Doing so will restrict the vehicle's turning ability and could result in death or serious injury.

See Figure 25. The Softail models have the fork lock incorporated in the steering head on the right hand side.

### CAUTION

Protect your motorcycle against theft. After parking your motorcycle, lock the steering head and remove ignition key from switch. Failure to do so may result in theft and/or equipment damage.

Using the fork lock immediately after parking your motorcycle, will discourage unauthorized use or theft when parking your motorcycle.

1. Turn fork to full left position.
2. Insert ignition key into fork lock switch.
3. Push down on fork lock switch and turn to left position.
4. Remove ignition key.

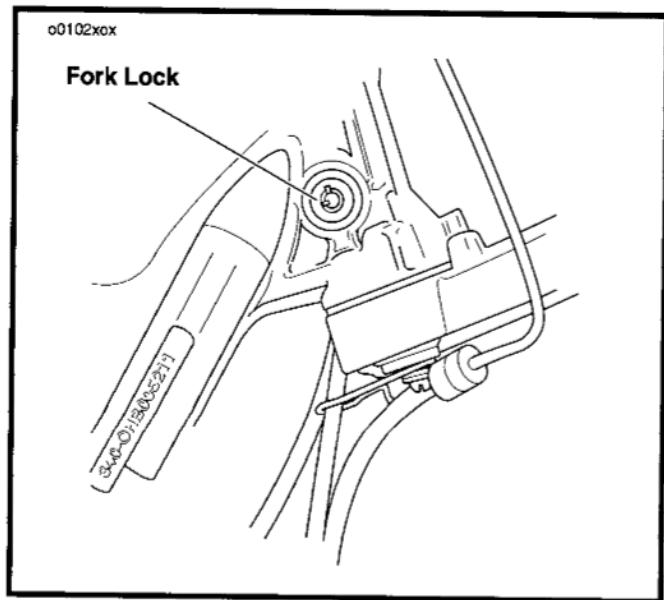


Figure 25. Softail Fork Lock

## REAR SHOCK ABSORBER ADJUSTMENT

### **WARNING**

Both shock absorbers must be adjusted to the same preload position. Shocks that are not adjusted to the same preload position could adversely affect handling. Failure to do so could result in loss of control of the motorcycle and death or serious injury.

See Figure 26. The Softail models feature rear shock absorbers that can be adjusted. Rear shock absorption may be varied to suit your own personal comfort.

- Use a spanner wrench to turn the spring adjuster plate to the desired position.
- For lighter loads the springs should be extended.
- For heavier loads the springs should be compressed.
- Rear shocks should be adjusted with the vehicle resting on the jiffy stand.

For removal and installation of the Softail rear shock absorbers see the appropriate service manual or contact your Harley-Davidson Dealer.

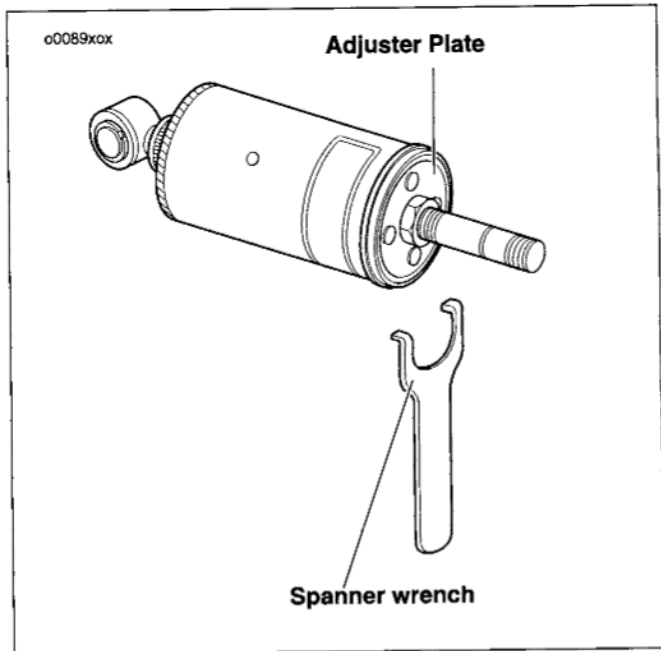


Figure 26. Softail Rear Shock Absorber

## FLSTC / FLSTS SADDLEBAG REMOVAL/INSTALLATION

### WARNING

**DO NOT** load weight or install accessories improperly on the motorcycle. Doing so may affect the motorcycle's stability, handling characteristics and safe operating speed and could result in death or serious injury.

### CAUTION

**Ensure saddlebag frame(s) are fully seated on mounting studs and knobbed screw(s) are securely tightened. Failure to do could result in the saddlebags becoming detached and/or damaged.**

See Figure 27. Unbuckle the saddlebag straps.

See Figure 27. The saddlebags are fastened to the bike at several points; each by an integral frame. Two saddlebags with attached brackets are mounted on each side of the rear fender. Each saddlebag is mounted to the fender brace and the frame of the motorcycle. Each saddlebag bracket supports the saddlebags and is mounted to the fender brace and the motorcycle frame.

## REMOVAL

1. See Figure 27. Use one hand to support the saddlebag and another hand to unscrew the flange locknuts from the saddlebag bracket.
2. Remove flange locknuts, bag hanger studs, washers, acorn nuts, and the saddle bag from the fender brace.

## INSTALLATION

1. See Figure 27. Place the saddlebag in position with the mounting holes on the fender brace.
2. Push the bag hanger studs, washers and flange locknuts through the saddlebag mounting holes, saddlebag frame and fender brace. as shown.
3. Tighten fasteners until they are snug.
4. Buckle saddlebag straps.

### WARNING

**DO NOT** allow saddlebags to be used as "grab handles." They are not intended to serve as "grab handles" for the passenger. When riding with passengers, ensure a grab strap, designed for passengers to hold onto is installed. Failure to do so could result in death or serious injury. For proper saddlebag maintenance, See ACCESSORIES MAINTENANCE.

## FLSTC / FLSTS REMOVAL/INSTALLATION (CONTINUED)

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1. Buckle
2. Saddlebag
3. Flange Locknuts
4. Bag hanger studs
5. Fender Brace
6. Saddlebag frame
7. Acorn nut

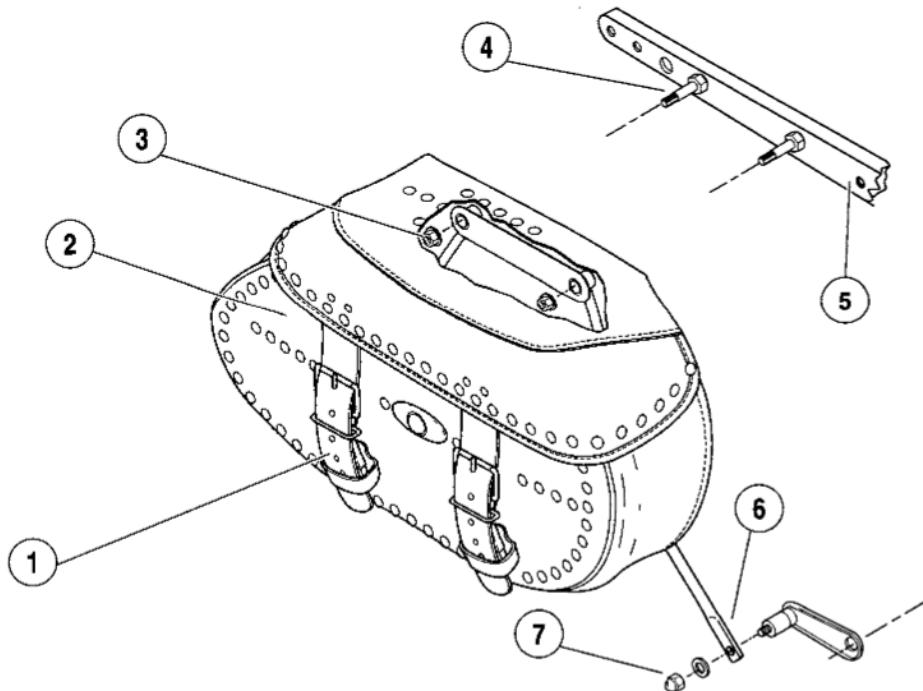


Figure 27. FLSTC / FLSTS Saddlebag Assembly (FLSTC shown)

## SADDLEBAG OPERATION

### OPENING

See Figure 28. Some saddlebags have a quick disconnect feature. To use the quick disconnect strap feature:

1. Lift up the strap end to expose the quick release buckle.
2. Press on the lock tabs as shown.

The straps may also be opened and closed using the buckle in a conventional manner.

### CLOSING

1. Insert the male strap end into the receptacle on the bag.
2. Push until a positive "click" is felt.

**NOTE:**

**Read ACCESSORIES AND MAINTENANCE section for proper saddlebags care.**

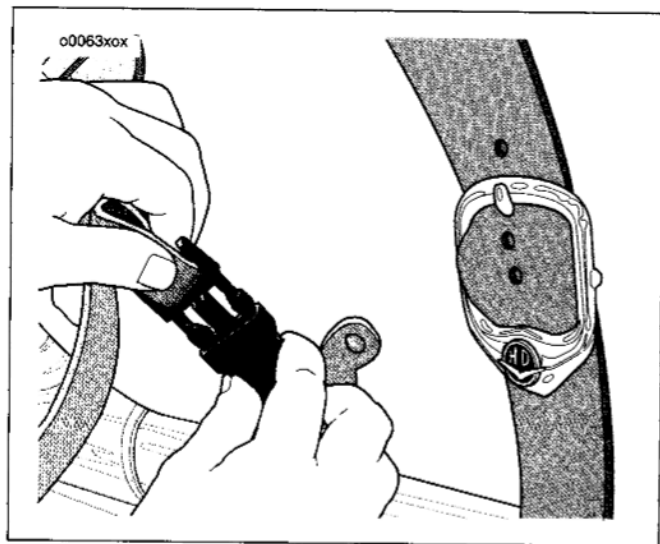


Figure 28. Heritage Classic Saddlebag Feature

## FLSTC WINDSHIELD

### REMOVAL

1. See Figure 29. Insert your fingers into the wireform latch springs at either side of the windshield and move the TOP of the windshield assembly forward, until the TOP bracket notches slide away from the grommets.
2. Carefully lift the windshield bracket BOTTOM notches off the bottom grommets. Remove windshield.

For proper windshield maintenance, See ACCESSORIES MAINTENANCE.

### INSTALLATION

#### CAUTION

Be sure you position the windshield bracket between the rubber grommets. Windshield may be damaged by incorrect installation.

1. See Figure 29. Insert your fingers into the wireform latch springs at either side of the windshield and slide the BOTTOM windshield bracket notches onto the bottom grommets.
2. Slide the TOP bracket notches onto the top grommets.

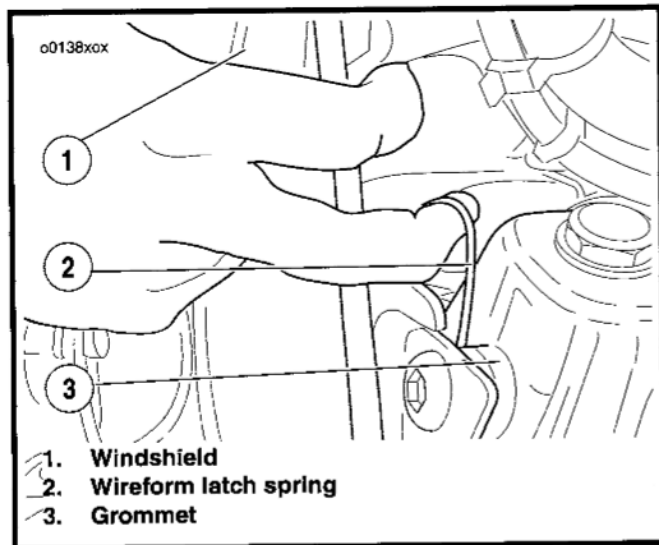


Figure 29. Softail Windshield Assembly

## OPERATING RECOMMENDATIONS

### CAUTION

**DO NOT** run the engine at extremely high RPM with clutch disengaged or transmission in neutral. Doing so may result in engine damage.

### CAUTION

**DO NOT** exceed the maximum safe RPM specified below under any conditions. To do so may result in equipment damage.

**IMPORTANT**— The maximum recommended Engine speed is 5000 RPM for the Softail Models.

### CAUTION

All Harley-Davidson engines are air-cooled and consequently require air movement over the cylinders and heads to maintain proper operating temperature. Extended periods of idling or parade duty may overheat the engine, resulting in serious engine damage.

### NOTE:

- *The ignition module has an ignition retard feature which will automatically begin to retard the spark advance if the engine exceeds 5000 RPM.*

An engine running long distances at high speed must be given closer than ordinary attention to avoid overheating and possible damage.

- Have the engine checked regularly and keep it well tuned.

This applies particularly to a motorcycle equipped with wind-shield, fairing and lowers.

### WARNING

**When riding on wet roads or under rainy conditions, keep in mind that braking efficiency is greatly reduced. Caution must be used when applying the brakes, accelerating and turning. This is especially true immediately after the rain begins and oil from the road surface combines with the water. Failure to observe these precautions could result in death or serious injury.**

## OPERATING RECOMMENDATIONS (CONTINUED)

When descending upon a long, steep grade, downshift and use engine compression together with intermittent application of both brakes to slow the motorcycle.

### WARNING

**Avoid continuous use of the brakes which may overheat them and cause reduced braking efficiency. Doing so could result in death or serious injury.**

### CAUTION

**DO NOT coast for long distances with the engine off; the transmission is properly lubricated only when the engine is running. Doing so may result in equipment damage.**

### WARNING

**DO NOT tow a disabled motorcycle with another vehicle at the same time. The steering and handling of the disabled motorcycle will be impaired due to the force of the tow line. If a disabled motorcycle must be transported, use a truck or trailer. Failure to do so could result in death or serious injury.**

## BREAK-IN - THE FIRST 500 MILES (800 KM)

The sound design, quality materials, and workmanship that is built into your new Harley-Davidson will give you optimum performance right from the start.

However, for the first 500 miles (800 km) and to wear-in critical parts, observe the few simple riding rules below. This will assure future performance and durability.

1. During the first 50 miles (80 km), keep the engine speed below 2500 RPM in any gear; however, do not lug the engine.
  2. Up to 500 miles (800 km), vary the engine speed, avoiding any steady speed for long distances. Engine speed up to 3000 RPM is permissible in any gear.
  3. Avoid fast starts at wide open throttle. Drive slowly until engine warms up.
  4. Avoid running the engine at extremely low RPM in higher gears.
- *DO NOT exceed 50 MPH (80 km/h) for the first 50 miles (80 km).*
  - *DO NOT exceed 55 MPH (89 km/h) for the first 50 - 1000 miles (80-1600 km). This will assure future performance and durability.*



## PRE-RIDING CHECKLIST

### WARNING

See **CONTROLS & INDICATORS** sections. Read the **CONTROLS & INDICATORS** sections before riding your motorcycle. Failure to do so could result in death or serious injury.

Before riding your motorcycle at any time, make a general inspection to be sure it is in safe riding condition.

1. Check amount of fuel in tank and add fuel if required.

### WARNING

Remove fuel filler cap slowly and fill fuel tank steadfast to prevent spillage; do not overfill or fill above the bottom of the filler neck insert. In addition, leave air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened. Failure to do so may cause an explosion or fire which could result in death or serious injury.

### WARNING

Gasoline is extremely flammable and explosive under certain conditions. Use care when handling gasoline. **DO NOT** store motorcycle having gasoline in tank within the home or garage where open flames, pilot lights, sparks or electric motors are present. Failure to do so may cause an explosion or fire which could result in death or serious injury.

2. Adjust mirrors to proper riding positions.
3. See **CHECKING OIL LEVEL** section. Check oil tank oil level.
4. Check controls to be sure they are operating properly; operate the front and rear brakes, throttle, clutch and shifter.
5. Check steering for smoothness by turning the handlebars through the full operating range.
6. See Tire Specifications section.

## PRE-RIDING CHECKLIST (CONTINUED)

### WARNING

Maintain proper tire pressure; including wheel and tire balance. Inspect your tires periodically and replace tires with approved tires only. (See your Harley-Davidson Dealer.) Failure to do so can lead to improper balance, abnormal tread wear, poor handling and could result in death or serious injury.

7. Check tire condition and pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability. Adhere to tire specifications for correct inflation pressures to use.
8. Check all electrical equipment and switches including the stop lamp, turn signals and horn, for proper operation.
9. Check for any fuel, oil or hydraulic fluid leaks.
10. Check rear belt adjustment.
11. Service your motorcycle as necessary.

## STARTING THE ENGINE

### GENERAL

### WARNING

Before starting engine, always shift transmission to neutral to prevent accidental movement. Failure to do so could result in death or serious injury.

### CAUTION

Never accelerate the engine above 2500 RPM immediately after a cold start. The engine should be allowed to run slowly for 15-30 seconds. This will allow the engine to warm up and let oil reach all surfaces needing lubrication. Extended idling with enrichener in the full out position for a period longer than 30 seconds is not recommended. Doing so may result in equipment damage.

### NOTE:

*Engine stop switch on the right handlebar control group must be in RUN (ignition ON) position to start engine.*

## STARTING THE ENGINE (CONTINUED)

1. See Table 8. Recommended Engine Oils in GENERAL MAINTENANCE AND LUBRICATION section. Use recommended oil for extended or expected temperatures.

If you read this section and still have questions about the correct operation of your motorcycle, talk to your authorized Harley-Davidson Dealer.

## CV CARBURETORS

### NOTES:

- *CV Carburetors have an enricher circuit that will cause the engine to idle at approximately 2000 RPM with the engine at normal operating temperature and the enricher knob pulled fully out.*
- *The increase in idle speed is intended to alert the rider that the engine is warmed up to normal operating temperature and the enricher knob should be pushed all the way in.*
- *Continuing to use the enricher when the engine is at full operating temperature WILL CAUSE FOULED SPARK PLUGS.*

### CAUTION

**You must pay close attention to the vehicle's warm-up time. Either excessive or insufficient use of the enricher may cause poor performance, erratic idle, poor fuel economy, spark plug fouling and equipment damage.**

### NOTE:

*The following starting and operating instructions for all Harley-Davidson motorcycles are recommendations. They may be modified for individual vehicles.*

## COOL ENGINE

### OUTSIDE TEMPERATURE COOLER THAN 60°F

1. See Figure 21. Turn the fuel valve to the ON position.
2. See Figure 14. **BE SURE THROTTLE IS CLOSED.**
3. See Figure 15. Pull enricher knob to full out position.
4. See Figure 22. Turn the ignition switch ON and press starter switch to operate the electric starter.

## CV CARBURETORS (CONTINUED)

5. Raise jiffy stand.
6. See Figure 15. After initial 15-30 second warm-up, ride for 3 minutes or 2 miles (3 km) with enrichener knob in full out position.
7. After 3 minutes or 2 miles (3 km), push the enrichener knob in to the 1/2 way position. Ride 2 minutes or 2 miles (3 km).
8. After 2 minutes or 2 miles (3 km), push the enrichener knob fully in.

### NOTE:

***If outside temperature is cooler than 20°F it may be necessary to pump the throttle 2 or 3 times.***

## OUTSIDE TEMPERATURE WARMER THAN 60° F

See Figure 21. Turn the fuel valve to the ON position. BE SURE THROTTLE IS CLOSED.

1. See Figure 15. Pull enrichener knob to full out position.
2. See Figure 22. Turn the ignition switch on and press starter switch to operate the electric starter.
3. Raise jiffy stand.
4. After initial 15-30 second warm-up, ride for 1 minute or 1/2 mile (1 km) with enrichener knob in full out position.

5. After 1 minute or 1/2 mile (1 km), push the enrichener knob in to the 1/2 way position. Ride 1 minute or a 1/2 mile.
6. After 1 minute or 1/2 mile (1 km), push the enrichener knob fully in.

## WARM OR HOT ENGINE

See Figure 21. Turn the fuel valve to the ON position.

1. See Figure 14. Open throttle 1/8 - 1/4 turn.
2. See Figure 22. Turn on ignition switch and operate electric starter. DO NOT USE ENRICHENER.
3. Raise jiffy stand.

### NOTE:

***If the engine does not start after a few turns or if one cylinder fires weakly but engine does not start, it is usually because of an over-rich (flooded) condition. This is especially true of a hot engine. If the engine is flooded, push enrichener knob in all the way, turn ignition on and operate starter with throttle wide open. DO NOT "pump" the throttle while turning the engine over.***

## CV CARBURETORS (CONTINUED)

### STOPPING THE ENGINE

1. See Figure 14. Stop the engine by turning OFF the engine stop switch on right handlebar.
2. See Figure 22. Turn OFF the ignition key switch. If the engine should be stalled or stopped in any way, turn off the key switch *at once* to prevent battery discharge.
3. See Figure 21. Turn the fuel valve to the OFF position.

### SHIFTING GEARS

#### CAUTION

The clutch must be fully disengaged before attempting a gear shift. Failure to do so may result in equipment damage.

#### NOTE:

*See Figure 30. Always start motorcycle engine in neutral. Always start motorcycle from first gear when the engine is running.*

1. Sit upright on the motorcycle and keep the engine idling.
2. See Figure 14. Pull the clutch hand lever in against handlebar grip to fully disengage clutch.

3. Push the foot shifter lever down firmly, but gently, to end of its travel and engage first gear.

To start moving with motorcycle upright and engine idling:

1. Release the clutch lever slowly to engage the clutch and at the same time, open throttle gradually.

Engage second gear after the motorcycle has run a few yards, as follows:

1. Close the throttle.
2. Disengage the clutch.
3. Lift the gear shifter pedal up to the end of its travel and release.

## SHIFTING GEARS (CONTINUED)

4. Engage the clutch and operate the throttle gradually.
  - Repeat the same operation to engage third, fourth, and fifth gears.
  - To shift to lower gears, reverse the movement of the gear shifter lever.
  - Disengage the clutch completely before each gear change.
  - Partially close the throttle so the engine will not drag when clutch is again engaged.

### NOTE:

*By lifting the gear shifter lever up, a higher gear is engaged; by pushing the gear shifter lever down, a lower gear is engaged. When stopping, operate gear shift until you reach neutral. Neutral is 1/2 stroke up from first gear.*

5. See Figure 30. Gear shift pattern is first gear down; next four gears up.

### WARNING

When shifting to lower gears with the motorcycle in motion, **DO NOT** downshift at speeds higher than those listed in the table. Shifting to lower gears when speed is too high may severely damage the transmission or cause the rear wheel to lose traction. This could also result in loss of vehicle control and death or serious injury.

### CAUTION

Shift to neutral before stopping engine. Shifting mechanism can be damaged by shifting gears while engine is stopped.

### NOTE:

*Always start motorcycle engine in neutral. Always start motorcycle from first gear when the engine is running.*

When engine speed decreases, as in climbing a hill or running at a reduced speed, shift to the next lower gear while partially closing the throttle so the engine accelerates as soon as the clutch lever is pulled.

## SHIFTING GEARS (CONTINUED)

- See Gear Shifter in the CONTROLS & INDICATORS section.
- See Table 8. The recommended shift points are as follows:

Table 8. Changing Gear Speeds

GEAR CHANGE	SPEED
<b>Acceleration (Upshift)</b>	
First to Second	15 MPH (25 km/h)
Second to Third	25 MPH (40 km/h)
Third to Fourth	35 MPH (55 km/h)
Fourth to Fifth	45 MPH (70 km/h)
<b>Deceleration (Downshift)</b>	
Fifth to Fourth	40 MPH (65 km/h)
Fourth to Third	30 MPH (50 km/h)
Third to Second	20 MPH (30 km/h)
Second to First	10 MPH (15 km/h)

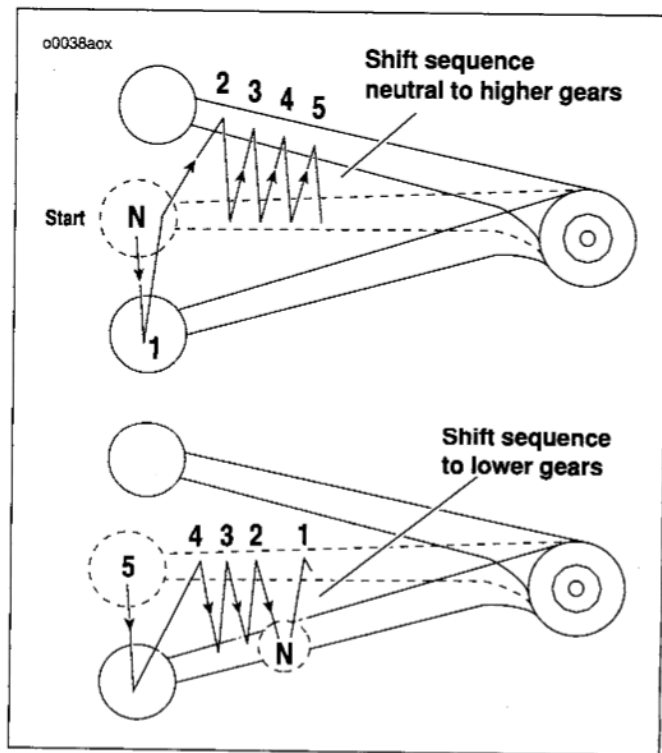


Figure 30. Speed Shifting Sequence

*NOTE*



## SAFE OPERATING MAINTENANCE

### NOTES:

*Refer to the side-view photographs in the front of the manual to locate the items discussed in this manual.*

*Refer to the SOFTAIL MAINTENANCE AND LUBRICATION section for specific model maintenance and lubrication procedures.*

### CAUTION

For your personal welfare and safety, all the listed service and maintenance recommendations should be performed. Lack of regular maintenance at the suggested intervals, may affect the safe operation of your motorcycle and could result in death or serious injury.

Good maintenance means a safe machine. A careful check of certain equipment must be made after periods of storage and frequently between the regular service intervals to determine if additional maintenance is necessary.

The following items should be checked:

1. Tires for correct pressure, abrasions or cuts.
2. Belt and primary chain for proper tension.
3. Brakes, steering and throttle for responsiveness.
4. Brake fluid level and condition. Hydraulic lines and fittings for leaks. Also, check brake pads and discs for wear.

5. Cables for fraying or crimping and free operation.
6. Engine oil, primary chain case and transmission fluid levels.
7. Wheel spoke tightness, if applicable.
8. Headlamp, tail lamp, brake lamp and directional lamp operation.

## BREAK-IN MAINTENANCE

### NOTES:

*The performance of new motorcycle initial service is required to keep your new motorcycle warranty in force, and to assure proper emissions system operation.*

*Because of their unique design features Springer models (FLSTS and FXSTS), require first scheduled maintenance at 500 miles.*

See MAINTENANCE SCHEDULING section. After a new motorcycle has been ridden its first 1000 miles (1600 km), it should be taken to the dealer from whom it was purchased for initial service operations. If it is impossible to take the motorcycle to a dealer at the mileage intervals noted, the owner should give the following checklist attention, or arrange to have it checked. In addition, take the motorcycle to your Harley-Davidson Dealer for more complete servicing as soon as it is convenient.

## ENGINE LUBRICATION

Engine oil is a major factor in the performance and service life of the engine. Always use the proper grade of oil for the lowest temperature expected before the next scheduled oil change.

See Table 8. Recommended Engine Oils section. If it is necessary to add oil and H-D oil is not available, use an oil certified for diesel engines.

Acceptable diesel engine oil designations include:

- CE
- CF
- CF-4
- CG-4

The preferred viscosities for the diesel engine oils, in descending order are:

- 20W-50
- 15W-40
- 10W-40

At the first opportunity, see a Harley-Davidson Dealer to change back to 100 percent Harley-Davidson oil.

**Table 8. Recommended Engine Oils**

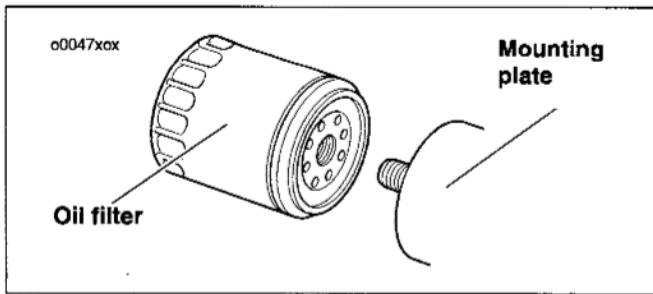
Harley-Davidson Type	Viscosity	Harley-Davidson Rating	Lowest Ambient Temperature	Cold Weather Starts Below 50°F (10°C)
HD Multi-grade	SAE 10W40	HD 360	Below 40°F (4°C)	Excellent
HD Multi-grade	SAE 20W50	HD 360	Above 40°F (4°C)	Good
HD Regular Heavy	SAE 50	HD 360	Above 60°F (16°C)	Poor
HD Extra Heavy	SAE 60	HD 360	Above 80°F (27°C)	Poor

## ENGINE OIL FILTER

See Figure 31. Oil filters are located on an oil filter mount in front of the engine.

### **⚠ WARNING**

**Ensure no lubrication is on rear tire, wheel or brakes when changing lubrication. Traction will be adversely affected. Failure to do so could result in loss of control of the motorcycle and death or serious injury.**



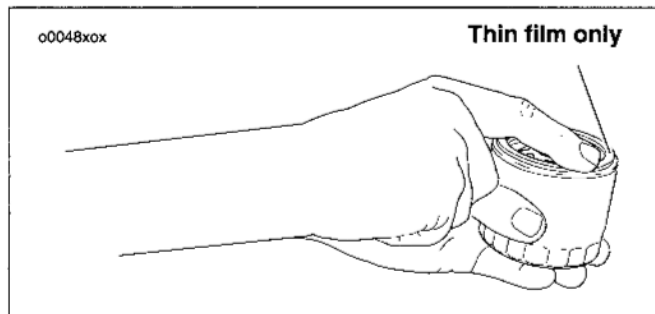
**Figure 31. Engine Oil Filter**

Twin Cam 88B equipped vehicles require the new premium oil filter (**63798-99** Chrome or **63731-99** Black).

1. Read the appropriate service manual or contact your Harley-Davidson Dealer for the appropriate procedure on draining the oil.
2. Completely drain the engine oil tank before removing oil filter.
3. Remove the oil filter.
4. Clean filter gasket contact surface on mounting plate (surface should be smooth and free of any debris or old gasket material).

## ENGINE OIL FILTER (CONTINUED)

5. See Figure 32. Apply a thin film of oil to gasket contact surface on mounting plate, gasket and new oil filter.



**Figure 32. Applying Thin Film**

6. Screw filter onto adapter until gasket contacts plate surface, then apply another 3/4 to 1 full turn.
7. For model specific information regarding the oil filter, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

## WINTER LUBRICATION

Combustion in any engine produces water vapor. When starting and warming up in cold weather, much of the vapor condenses to water on the relatively cool metal surfaces. If the engine is driven enough to get the crankcase thoroughly warmed up frequently, most of this water is again vaporized and blown out through the breather.

A moderately driven engine, making only short runs and seldom getting thoroughly warmed up, is likely to accumulate an increasing amount of water in the oil tank. In freezing weather this water will become slush or ice and if allowed to accumulate too long, may block the oil lines and cause damage to the engine.

Water mixed with oil for some time, forms sludge that is harmful to the engine and causes undue wear of various working parts.

### NOTES:

***During winter the oil change interval should be shorter than normal for all engines; any engine used only for short runs must have oil drained frequently along with a thorough tank flush-out before new oil is put in tank.***

***The further below freezing the temperature drops, the shorter the oil change interval should be.***

## TRANSMISSION LUBRICATION

See Figure 33. The transmission lubricant level should be checked monthly.

- When filling the transmission, use Harley-Davidson TRANSMISSION LUBRICANT, Part No. **99892-84** (qt.) or **99891-84** (gal.).

**NOTE:**

*When checking the transmission lubricant level, motorcycle should be standing STRAIGHT UP, not leaning on the jiffy stand. Keep motorcycle upright for a short period of time to equalize lubricant level in the transmission compartments.*

When the engine reaches normal operating temperature, turn the engine off and position motorcycle STRAIGHT UP and LEVEL.

1. See Figure 33. Remove the threaded filler plug.
2. Clean dipstick.
3. Put dipstick filler plug back into hole, but do not screw in.
4. Remove dipstick and take reading.

Lubricant level should be between the two marks on the dipstick.

5. Add lubricant if necessary.

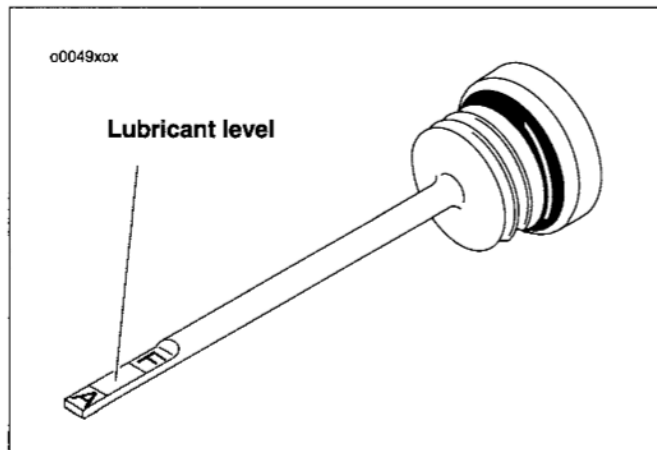


Figure 33. Transmission Lubricant Dipstick

**NOTE:**

*Do not overfill or leakage may occur. The transmission fluid capacity is approximately 24 ounces. When reinstalling the filler plug, tighten it to 25-75 in-lbs (2.8 - 8.5 Nm).*

## TRANSMISSION LUBRICATION (CONTINUED)

The transmission should be drained and refilled with fresh lubricant after the first 1000 (1600 km) miles and thereafter seasonally or every 5000 miles (8000 km), whichever comes first.

6. For model specific information regarding the transmission, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.
- When installing the drain plug—tighten to specified torque.
  - Remove foreign material from end of plug.

### CAUTION

**When draining and refilling the transmission, be careful that dirt and debris do not get into the case. Failure to do so may result in equipment damage.**

### WARNING

**Ensure no lubrication is on rear tire, wheel or brakes when changing lubrication. Traction will be adversely affected. Failure to do so could result in loss of control of the motorcycle and death or serious injury.**

## PRIMARY CHAIN CASE LUBRICATION

See PRIMARY CHAIN CASE LUBRICATION section. Lubrication is a major factor in the performance and service life of the clutch components. Use appropriate Harley-Davidson chain case lubricant for all operating temperatures. Chain case lubricant should be changed initially at 1000 miles and every 5000 (8000 km) miles thereafter.

- For model specific information regarding the primary chain case capacity, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

## PRIMARY CHAIN

Primary (front) chain adjustment should be checked initially at 1000 miles (1600 km), every 5000 miles (8000 km) thereafter and serviced as necessary. If the chain is allowed to run loose, it will cause the motorcycle to jerk when running at low speed, and chain and sprockets will wear excessively. If this happens, see your Harley-Davidson Dealer or Service Manual for adjustment procedure.

## REAR DRIVE BELT

The rear drive (secondary) belt inner tooth surface has a thin coating of polyethylene. During initial operation, this coating will wear as it is burnished into the belt fabric. This is a normal condition and not an indication of belt wear.

Belt tension should be checked after the first 1000 miles (1600 km) and every 2500 (4000 km) miles thereafter.

- For model specific information regarding the rear drive belt, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

If belt requires adjustment, see your Harley-Davidson Dealer, or follow instructions given in the applicable Service Manual.

Check rear brake caliper position on rear brake disc. Disc should run true within brake caliper.

### WARNING

**Align rear wheel and/or brake callpers when servicing motorcycle. A misaligned rear wheel and/or brake cali-per could cause the rear brake disc to bind, resulting in death or serious injury.**

## CHASSIS LUBRICATION

### GREASING

#### CAUTION

**DO NOT switch brands/greases indiscriminately because some oils interact chemically when mixed. Use of inferior oils or non-detergent oils can damage the engine.**

1. Use recommended special purpose grease for steering head bearings. Use a multipurpose chassis grease for other applications.

## CHASSIS LUBRICATION (CONTINUED)

2. Remove and lubricate handlebar throttle control grip sleeve with fresh graphite every 5000 miles (8000 km), once each year, or when operation indicates lubrication is necessary.
  3. Every 5000 miles (8000 km) lubricate throttle control cables, speedometer drive cable and clutch control cable. Lubricate front brake hand lever and clutch control hand lever only if necessary.
  4. Inspect rear swing arm pivot bushings.
  5. Pack the steering head bearings with fresh grease at 10,000 (16,000 km) mile intervals or every 2 years, whichever occurs first.
  6. Lubricate the jiffy stand mechanism with LOCTITE LUBRIPLATE® every 5000 miles (8000 km).
- For model specific information regarding the chassis lubrication, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

## OIL APPLICATIONS

All control connections and parts as indicated in the REGULAR MAINTENANCE INTERVALS CHART should be oiled regularly, particularly after washing motorcycle or driving in wet weather.

## FRONT FORK OIL

Drain front fork oil and refill every 20,000 miles (32,000 km) or annually. If fork does not appear to be working properly or an appreciable amount of oil leakage should develop, see your Harley-Davidson Dealer. If there is insufficient oil in either side of fork, the rebound action will be incorrect.

## FUEL STRAINER

See Figure 21. A screen type fuel strainer is located on top of the supply valve inside the fuel tank. Screen should be inspected/cleaned every 5000 miles (8000 km). Check the fuel valve, lines and fittings for leakage as part of the pre-ride inspection.



## CARBURETOR

The carburetor has been specifically designed for emissions control operation. All jets are fixed at the factory.

Carburetor controls include throttle, enricher and idle speed adjusting screw. Operation should be checked and adjusted after the first 1000 miles (1600 km) and every 5000 miles (8000 km) thereafter.

### CAUTION

**Operation at higher altitudes (approximately 4000 ft. elevation) may require carburetor modifications for best engine performance. See your Harley-Davidson Dealer for these adjustments. Failure to do so may result in equipment damage.**

We recommend that any carburetor service be performed by your Harley-Davidson Dealer.

## CLUTCH

### CAUTION

**The clutch control cable must be oiled and adjusted every 5000 miles (8000 km) to compensate for lining wear. Failure to do so may result in equipment damage.**

The need for attention to clutch and controls will be indicated

by the clutch slipping under load, or dragging when released. In this situation, the control cable adjustment should be the first thing to be checked. See your Harley-Davidson Dealer for proper service.

## HYDRAULIC LIFTERS

Lifters are self-adjusting, hydraulic type. They automatically adjust length to compensate for engine expansion and valve mechanism wear, keeping the valve mechanism free of lash when the engine is running.

When starting an engine which has been turned off even for a few minutes, the valve mechanism may be slightly noisy until the hydraulic units completely refill with oil. If at any time, other than for a short period immediately after engine is started, valve mechanism becomes abnormally noisy, it is an indication that one or more of the hydraulic units may not be functioning properly.

Always check the oil supply in the oil tank first, since normal circulation of oil through the engine is necessary for proper operation of the hydraulic units.

If there is oil in the tank, the units may not be functioning properly because of dirt in the oil supply passages leading to the lifter units. See your Harley-Davidson dealer for service.

## TIRES

See TIRE DATA section.

### WARNING

**Do not inflate tire beyond its maximum inflation pressure, as specified on tire sidewall. If tires are overfilled they could blow out while vehicle is in operation causing vehicle damage and death or serious injury.**

- Be sure to keep tires properly inflated.
- Follow tire data for correct cold tire inflation pressures.
- Check before riding when tires are cold.
- Do not over-inflate tires.

### WARNING

**For your personal safety, the tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson Dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting, allow tire slippage on the rim, cause tire failure, and could result in death or serious injury.**

- Check inflation pressure and inspect tread for punctures, cuts breaks, etc., at least weekly if in daily use; or before each trip, if used occasionally.

### WARNING

**Riding with excessively worn, unbalanced or improperly inflated tires is hazardous; this will adversely affect traction, steering and handling which could result in death or serious injury.**

- Same as original equipment tires should be used. Other tires may not fit correctly, could adversely affect handling, and may be hazardous to use.

### WARNING

**Use required tools, correct replacement parts and procedures when performing tire service. Since tires are a critical safety item, we recommend that you see your Harley-Davidson Dealer for these services. Failure to do so could result in death or serious injury.**

## TIRES (CONTINUED)

### WARNING

**DO NOT attempt to use damaged or punctured and repaired tire(s). Once a motorcycle tire has been damaged or punctured, it is unsafe to use. Doing so could result in death or serious injury.**

### WARNING

**A tire can be severely damaged and not show the damage externally. If you strike an object, such as a curb, at speed, internal damage may result which is not visible from the outside. Always remove and carefully inspect the inside as well as the outside of the tire for damage. Failure to do so could result in death or serious injury.**

## VEHICLE ALIGNMENT

### Isolation Mounted Engine Models

The stabilizer links and engine mounts should be checked for wear according to Service Manual procedures after the first 1000 miles (1600 km) and every 5000 miles (8000 km) thereafter.

Vehicle alignment is important. Vehicle stability is adversely affected if wheels are out of alignment. Major alignment of the

front and rear wheel is partially controlled by one or two stabilizer links. One at the top of the engine and one at the front of the engine.

### WARNING

**DO NOT change the adjustment of the link(s). Changing the adjustment as little as 1/3 turn could adversely affect motorcycle stability. Doing so could result in death or serious injury.**

See your Harley-Davidson Dealer for this service.

## All Models

Vehicle alignment should be checked every 5000 miles (8000 km) and whenever the rear wheel is removed and installed or when the rear drive belt is adjusted.

### WARNING

Major vehicle alignment should be performed only by your Harley-Davidson Dealer using Service Manual procedures. Improper vehicle alignment will adversely affect motorcycle handling, stability, and could result in death or serious injury.

## FRONT FORK BEARINGS

### WARNING

Adjustment of front fork bearings should be performed only by your Harley-Davidson Dealer using Service Manual procedures. Improperly adjusted bearings will adversely affect motorcycle handling, stability, and could result in death or serious injury.

Check front fork for proper bearing adjustment at 1000 miles (1600 km) and every 5000 miles (8000 km) thereafter. Bearings should be lubricated at 10,000 miles (16,000 km) intervals. With motorcycle front end raised off the floor, be sure front fork turns freely without any binding or interference and that there is no appreciable front to rear fork shake indicating excessive bearing looseness. Steering head bearings should be adjusted according to Service Manual procedure, if necessary.

## REAR FORK PIVOT SHAFT

The tightness of the rear fork pivot shaft fastener should be checked after the first 1000 miles and every 5000 miles thereafter.

- For model specific information regarding the rear fork pivot shaft, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

## SPARK PLUGS

Check the spark plugs every 5000 (8000 km) miles and replace if necessary. Replace the spark plugs every 10,000 miles (16,000 km) on all models.

Disconnect spark plug cables from plugs by pulling on the molded connector caps. Connection is the simple snap-on type.

### CAUTION

**DO NOT pull on any electrical wires; this may damage the internal conductor causing high resistance. Doing so may result in minor or moderate injury.**

Before installing spark plugs, the gap should be checked and adjusted if necessary to **0.038 - 0.043 in.** (.97 - 1.09 mm).

Be sure that your motorcycle has the correct spark plug:

- Use a **H-D 6R12** spark plug.

Spark plugs must be tightened to the torque specified for proper heat transfer.

- Use a torque of **11-18 ft-lbs** (15 - 24.4 Nm) per spark plug.

If a torque wrench is not available, tighten plugs finger tight; then tighten an additional one quarter turn with a spark plug wrench.

## CIRCUIT BREAKERS

All models have a main circuit breaker to protect the motorcycle wiring. Circuit breakers are self-resetting and automatically returns steady power to the circuit when an electrical fault that causes it to trip is found and corrected. If the electrical fault is not found and corrected, the breaker cycles on and off causing the motorcycle to operate erratically and eventually the battery will lose its charge.

For electrical problems, it is best to see your Harley-Davidson dealer who has necessary parts and equipment to perform electrical services.

## IGNITION TIMING

On XL models, ignition timing should be checked every 5000 miles (8000 km). If ignition timing is not correct, see your Harley-Davidson Dealer. 1450cc models are not adjustable.

The engines in these motorcycles have been designed specifically to achieve optimum fuel economy within exhaust emission controls. Ignition characteristics have been developed to provide maximum engine performance and drivability.

### **NOTE:**

- *The ignition control unit monitors engine load; in certain transient load conditions (as the throttle is opened) the timing changes from normal to fully advanced. At this point, the operator can sometimes hear a noise that is similar to pre-ignition detonation.*
- *This noise should not be confused with detonation, which can be stopped by the use of a higher grade fuel. It is caused by the instant pressure rise in the combustion chambers as the spark advances rapidly. This noise doesn't affect engine performance.*

## ALTERNATOR CHARGING RATE AND VOLTAGE REGULATOR

The alternator output is controlled and changed to direct current by the voltage regulator located at the front of the engine. The voltage regulator increases charging rate when battery is low or lamps are lit, decreases charging rate when no lamps are lighted and when battery charge is up.

### **NOTE:**

*This unit requires no interval attention. If any electrical system trouble is experienced that might be traceable to the alternator or voltage regulator, the motorcycle should be taken to your Harley-Davidson Dealer who has the necessary electrical testing equipment to give the required attention.*

- For model specific information regarding the voltage regulator, refer to the appropriate Service Manual or see your Harley-Davidson Dealer.

## BATTERY

*Refer to the SOFTAIL MAINTENANCE AND LUBRICATION section for removal of battery cover located on your motorcycle.*

### GENERAL

See Figure 34. All H-D batteries are permanently sealed, maintenance-free, lead/calcium and sulfuric acid batteries. The batteries are shipped pre-charged and ready to be put into service. Do not attempt to open these batteries for any reason.

The battery is located under the motorcycle seat.

### WARNING

**Always protect skin and eyes when working near a battery or acid; wear a protective face shield, rubberized gloves and protective clothing when working with batteries. All batteries contain electrolyte. Electrolyte is a sulfuric acid solution that is highly corrosive and can cause severe chemical burns. Avoid spillage and contact with skin, eyes, and clothing. KEEP BATTERIES AND ACID OUT OF THE REACH OF CHILDREN! Failure to do so could result in death or serious injury.**

See Figure 35. for battery poison antidote.

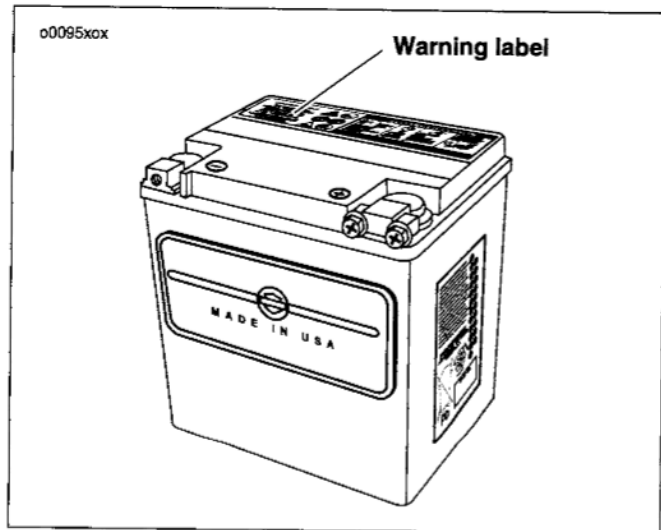


Figure 34. Battery

## BATTERY (CONTINUED)

### WARNING

Never remove warning attached to the top of the battery. Failure to read and understand all precautions contained in warning label on battery before performing any service, could result in death or serious injury.

#### ANTIDOTE

- External** - Flush with water.
- Internal** - Drink large quantities of milk or water, followed by milk of magnesia, vegetable oil or beaten eggs. Call doctor immediately.
- Eyes** - Flush with water, get immediate medical attention.

Figure 35. Poison Antidote

## BATTERY TESTING

### VOLTMETER TEST

Before you can test your battery you must read the section containing information about seat removal and inspection.

1. Follow steps for seat removal in the SOFTAIL MAINTENANCE AND LUBRICATION section first.

See The voltmeter test provides a general indicator of battery condition. Check the voltage of the battery to verify that it is in a 100% fully charged condition. If the open circuit (disconnected) voltage reading is below 12.6V, charge the battery and then re-check the voltage after the battery has set for one to two hours

Table 9. Voltmeter Test

BATTERY CHARGE CONDITIONS	
Voltage (OCV)	State of Charge
12.8	100%
12.6	75%
12.3	50%
12.0	25%
11.8	0%



## DISCONNECTION AND REMOVAL

Before you can inspect or disconnect your battery you must read the section containing information about seat removal and inspection.

1. Follow steps for seat removal in the SOFTAIL MAINTENANCE AND LUBRICATION section first.

### WARNING

**Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, it may cause sparks and explosion which could result in death or serious injury.**

2. Unthread bolt and remove battery negative cable (black) from battery negative (-) terminal.
3. Unthread bolt and remove battery positive cable (red) from battery positive (+) terminal.
4. Using a T-40 TORX drive head, loosen bolt to move lip of hold-down clamp off edge of battery. Remove battery from battery box.

## CLEANING AND INSPECTION

Battery top must be clean and dry. Dirt and electrolyte on top of the battery can cause battery to self-discharge.

1. Clean battery top with a solution of baking soda (sodium bicarbonate) and water (5 teaspoons baking soda per quart or liter of water).
2. When the solution stops bubbling, rinse off the battery with clean water.
3. Clean cable connectors and battery terminals using a wire brush or sandpaper; Remove any oxidation.
4. Inspect the battery screws, clamps and cables for breakage, loose connections and corrosion; Clean clamps.
5. Check the battery posts for melting or damage caused by overtightening.
6. Inspect the battery for discoloration, raised top or a warped or distorted case, which might indicate that the battery has been frozen, overheated or overcharged.
7. Inspect the battery case for cracks or leaks.

## **BATTERY CHARGING**

### **SAFETY PRECAUTIONS**

Never charge a battery without first reviewing the instructions for the charger being used. In addition to the manufacturer's instructions, follow these general safety precautions:

- **Always wear proper eye, face and hand protection.**
- **Always charge batteries in a well-ventilated area.**
- **Turn the charger "OFF" before connecting the leads to the battery to avoid dangerous sparks.**
- **Never try to charge a visibly damaged or frozen battery.**
- **Connect the charger leads to the battery; red positive (+) lead to the positive (+) terminal and black negative (-) lead to the negative (-) terminal. If the battery is still in the vehicle, connect the negative lead to the chassis ground. Be sure that the ignition and all electrical accessories are turned off.**
- **Make sure that the charger leads to the battery are not broken, frayed or loose.**
- **If the battery becomes hot, or if violent gassing or spewing of electrolyte occurs, reduce the charging rate or turn off the charger temporarily.**

- **Always turn the charger "OFF" before removing charger leads from the battery to avoid dangerous sparks.**

### **CHARGING BATTERY**

Charge the battery if any of the following conditions exist:

- **Vehicle lights appear dim.**
- **Electric starter sounds weak.**
- **Battery has not been used for an extended period of time.**

## CHARGING BATTERY (CONTINUED)

### WARNING

Always charge the battery in a well ventilated area. Explosive hydrogen gas escapes from the battery during charging. Keep open flames, electrical sparks and smoking materials away from the battery at all times. Failure to do so could result in death or serious injury.

### CAUTION

If the battery releases an excessive amount of gas during charging, decrease the charging rate. If the battery gets hotter than 110°F. (43°C) during charging, discontinue charger and allow the battery to cool. Overheating may result in plate distortion, internal shorting, drying out or other damage.

1. See BATTERY TESTING. Perform a voltmeter test to determine the state of charge. If battery needs to be charged, proceed to step 2.

### CAUTION

Always remove the battery from the motorcycle before charging. Accidental electrolyte leakage will damage motorcycle parts.

## CHARGING BATTERY (CONTINUED)

Table 11. Battery Charging Rates/Times

Battery Amp-Hour	State of Charge		3 Amp Charger	6 Amp Charger	10 Amp Charger	20 Amp Charger
	Voltage Reading	% of Charge				
SPORT 19	12.8 V	100%	-	-	-	-
	12.6 V	75%	1.75 hours	50 minutes	30 minutes	15 minutes
	12.3 V	50%	3.5 hours	1.75 hours	1 hour	30 minutes
	12.0 V	25%	5 hours	2.5 hours	1.5 hours	45 minutes
	11.8 V	0%	6 hours 40 minutes	3 hours 20 minutes	2 hours	1 hour

The figures listed above assume that the battery is charging at room temperature. If warmer than room temperature, use a slightly shorter charging time. If colder, use a slightly longer charging time.

The use of constant current chargers to charge sealed maintenance-free batteries is not recommended. Any overcharge will cause dry-out and premature battery failure. If a constant current charger is the only type available, do **not** exceed the charge times listed above and do **not** continue charging the battery if it gets hot. When charging, never exceed 15 volts for more than 30 minutes.

## CHARGING BATTERY (CONTINUED)

2. See DISCONNECTION AND REMOVAL.
3. Remove the battery from the motorcycle.
4. Place the battery on a level surface.

### WARNING

Always unplug or turn OFF the battery charger before connecting the charger clamps to the battery. Connecting clamps with the charger ON could cause a spark resulting in a battery explosion. A battery explosion may rupture the battery case causing a discharge or spray of sulfuric acid that could result in death or serious injury.

### CAUTION

Do not reverse the charger connections described in the following steps or the charging system of the motorcycle could be damaged.

5. Connect the red battery charger lead to the positive (+) terminal of the battery.
6. Connect the black battery charger lead to the negative (-) terminal of the battery.

### NOTE:

*If the battery is still in the vehicle, connect the negative lead to the chassis ground. Be sure that the ignition and all electrical accessories are turned off.*

7. See Table 10. Battery Charging Rates/Times. Step away from the battery and turn on the charger.

### WARNING

Always unplug or turn OFF the battery charger before disconnecting the charger clamps from the battery. Disconnecting clamps with the charger ON could cause a spark resulting in a battery explosion. A battery explosion may rupture the battery case causing a discharge or spray of sulfuric acid that could result in death or serious injury.

## CHARGING BATTERY (CONTINUED)

8. After the battery is fully charged, disconnect the black battery charger lead to the negative (-) terminal of the battery.
9. Disconnect the red battery charger lead to the positive (+) terminal of the battery.
10. Mark the charging date on the battery.

## BATTERY INSTALLATION AND CONNECTION

### WARNING

Always unplug or turn OFF the battery charger before connecting the charger clamps to the battery. Connecting clamps with the charger ON could cause a spark resulting in a battery explosion. A battery explosion may rupture the battery case causing a discharge or spray of sulfuric acid that could result in death or serious injury.

1. Place the fully charged battery into the battery box, terminal side forward.

### WARNING

When making connections, be sure the jumper cable clamps do not accidentally touch each other or anything else, except correct battery terminals or appropriate ground. Failure to do so could result in death or serious injury.

## BATTERY INSTALLATION AND CONNECTION (CONTINUED)

### CAUTION

Connect the cables to the correct battery terminals. Failure to do so may result in damage to the motorcycle electrical system.

### WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, it may cause sparks and explosion which could result in death or serious injury.

### CAUTION

DO NOT allow the positive cable to contact ground with the negative cable. Failure to do so may result in sparks, explosion and/or minor or moderate injury.

### CAUTION

Do not overtighten bolts on battery terminals. Use recommended torque values. Failure to do so may result in damage to battery terminals.

2. Insert bolt through battery positive cable (red) into threaded hole of battery positive (+) terminal.
3. Tighten bolt to 60-96 **in-lbs** (6.8-10.9 Nm).
4. Insert bolt through battery negative cable (black) into threaded hole of battery negative (-) terminal.
5. Tighten bolt to 60-96 **in-lbs** (6.8-10.9 Nm).

### CAUTION

Keep battery clean and lightly coat terminals with petroleum jelly to prevent corrosion. Failure to do so may result in damage to battery terminals.

6. Apply a light coat of petroleum jelly or corrosion retardant material to both battery terminals.
7. Rotate the hold-down clamp so that the lip (with rubber pad) rests on the edge of the battery.
8. Using a T-40 TORX drive head, tighten the clamp bolt to 15-20 ft-lbs (20-27 Nm).
9. See SOFTAIL MAINTENANCE AND LUBRICATION section for seat installation. Install seat.

## STORAGE

### WARNING

Always store the battery out of the reach of children. Inadequate safety precautions could result in death or serious injury.

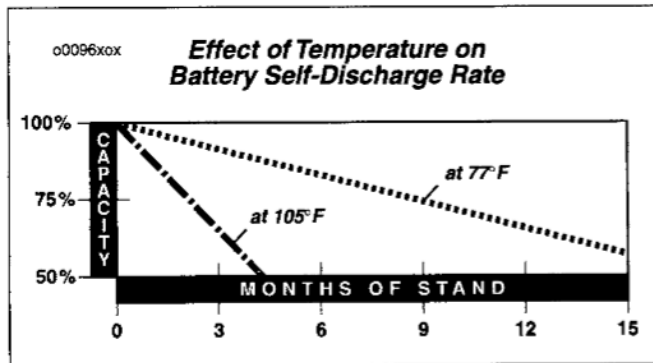
### CAUTION

**DO NOT** allow the battery to completely discharge power. The electrolyte in a discharged battery will freeze if exposed to freezing temperatures. The more discharged a battery is, the more easily it can freeze. Failure to do so may result in a cracked battery case and buckle battery plates.

See BATTERY CHARGING. If the motorcycle will not be operated for several months, such as during the winter season, remove the battery from the motorcycle and fully charge.

See Figure 36. Self-discharge is a normal condition and occurs continuously at a rate that depends on the ambient temperature and the battery's state of charge.

- Batteries discharge at a faster rate at higher ambient temperatures.



**Figure 36. Battery Self-Discharging Rate**

- To reduce the self-discharge rate, store battery in a cool (not freezing), dry place.
- Charge the battery every month if stored at temperatures below 60° F. (16° C).



## STORAGE (CONTINUED)

## NOTES

- Charge the battery more frequently if stored in a warm area above 60° F. (16° C).

### **NOTE:**

*The H-D Battery Tender Plus! Automatic Battery Charger (P/N 99863-93TA) may be used to maintain battery charge for extended periods of time without risk of overcharging or boiling.*

When returning a battery to service after storage, refer to the instructions under BATTERY CHARGING.

### **CAUTION**

**DO NOT** trickle charge battery more than 24 hours at a time. Charging more than 24 hours at a time may result in equipment damage.

### **CAUTION**

**DO NOT** add electrical accessories exceeding 13 amps draw. Damage to the electrical system and/or battery discharge may result. If you choose to exceed this limit, see your Harley-Davidson Dealer for necessary wiring changes.

## JUMP - STARTING PROCEDURE

Harley-Davidson does not recommend jump-starting a motorcycle; however we realize that there may be circumstances when it is done. Therefore, we suggest jump-starting be done as follows:

### WARNING

When making battery connections, be sure the jumper cable clamps do not accidentally touch each other or anything else, except battery terminals or appropriate ground. Improper connections may cause a spark and battery explosion which could result in death or serious injury.

### WARNING

DO NOT smoke or allow sparks while performing jumper cable procedures. Smoking or sparks could cause an explosion which could result in death or serious injury.

#### NOTE:

*This procedure presumes the BOOSTER battery is in another vehicle.*

### CAUTION

**All Harley-Davidson motorcycles have a 12 Volt battery and a 12 Volt electrical system. Be sure the booster vehicle has a 12 Volt system. Failure to do so may result in property damage.**

1. Turn off **ALL** unnecessary lights and accessories.

#### POSITIVE CABLE

2. See Figure 37. Connect one end of a jumper cable to the DISCHARGED battery positive (+) terminal.
3. Connect the other end of the same cable to the BOOSTER battery positive (+) terminal.

#### NEGATIVE CABLE

4. Connect one end of a jumper cable to the BOOSTER battery negative (-) terminal.

## JUMP STARTING (CONTINUED)

### **⚠ WARNING**

Do not connect negative cable to or near the discharged battery negative terminal. Doing so could may cause a spark and explosion, which could result in death or serious injury.

### **CAUTION**

**DO NOT** connect the negative cable to painted or chrome parts. Doing so may result in discoloration at the attachment point.

5. Connect other end of the same cable to a safe ground, (away from the DISCHARGED battery).
6. Start motorcycle.
7. Disconnect cables in reverse order of steps 2, 3, 4, 5. That is: steps 5, 4, 3, 2.

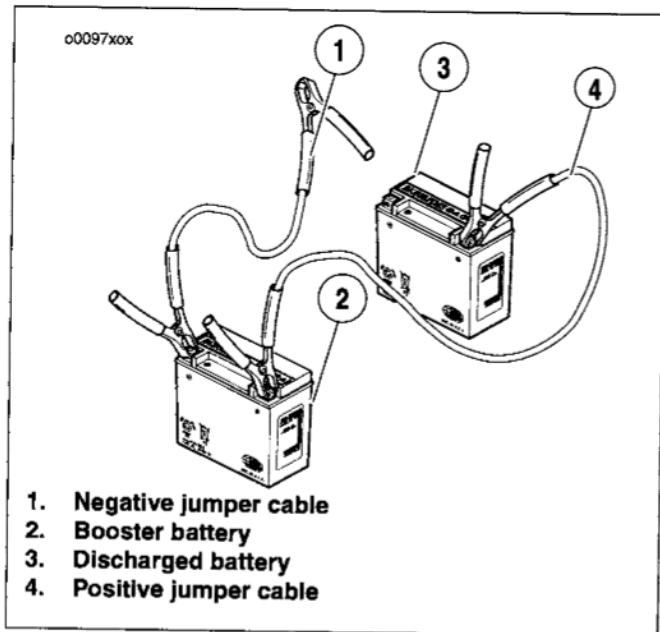


Figure 37. Jump Start Cable Connections

**NOTES**

### NOTES:

Refer to the side-view photographs in the front of the manual to locate the items discussed in this manual.

Read **GENERAL MAINTENANCE AND LUBRICATION** section containing general maintenance and lubrication procedures first.

## CHECKING OIL LEVEL

See Figure 38. Engine oil level should be checked *only* when engine is at normal operating temperature. The engine will require a longer warm up period in colder weather.

- The motorcycle should be upright and level when checking oil.
  - Pre-ride inspection - oil should register on dipstick of cold engine.
  - Do not add oil to full mark on a cold engine (cold check).
  - The motorcycle should be ridden to ensure oil is hot and is at normal operating pressure (hot check).
1. See Figure 39. To remove dipstick/oil plug, pull steadily on the plug while moving it back and forth.
  2. Wipe off dipstick and insert into tank with plug pushed completely into filler neck.

### CAUTION

DO NOT allow hot oil level to fall below lower mark on dipstick. Doing so may result in equipment damage and/or equipment malfunction.

### CAUTION

DO NOT overfill oil tank. Doing so may result in oil carry-over to the air cleaner leading to equipment damage and/or equipment malfunction.

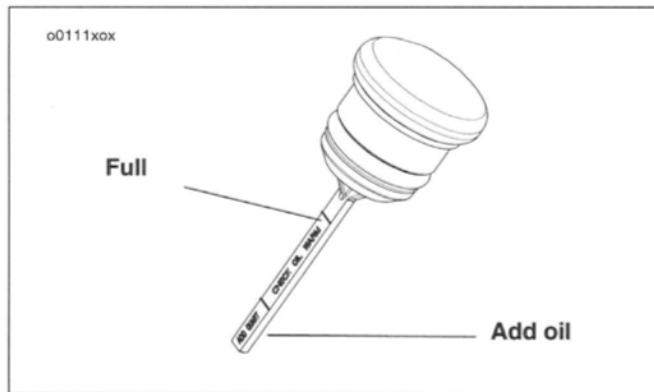


Figure 38. Engine Oil Level

## CHECKING OIL LEVEL (CONTINUED)

### CAUTION

Do not switch oil brands indiscriminately because some oils interact chemically when mixed. Use of inferior oils or non-detergent oils can damage the engine.

3. See Figure 38. Remove dipstick and note oil level.
  4. If oil level is down to or below lower "fill" mark on dipstick add only enough oil to bring level to upper mark on dipstick.
- See Table 8. Recommended Engine Oils Use only recommended oil specified.
  - Check engine oil supply at each complete fuel refill.
  - Oil should be changed after the first 1000 miles (1600 km) for a new engine, and thereafter at 5000 (8000 km) mile intervals in normal service at *warm or moderate* temperatures.
  - See Winter Lubrication. Oil change intervals should be shorter in cold weather. The same holds true if the motorcycle is ridden hard under dusty conditions.

### NOTE:

Read **GENERAL MAINTENANCE AND LUBRICATION** section containing information about the engine oil filter and winter lubrication.

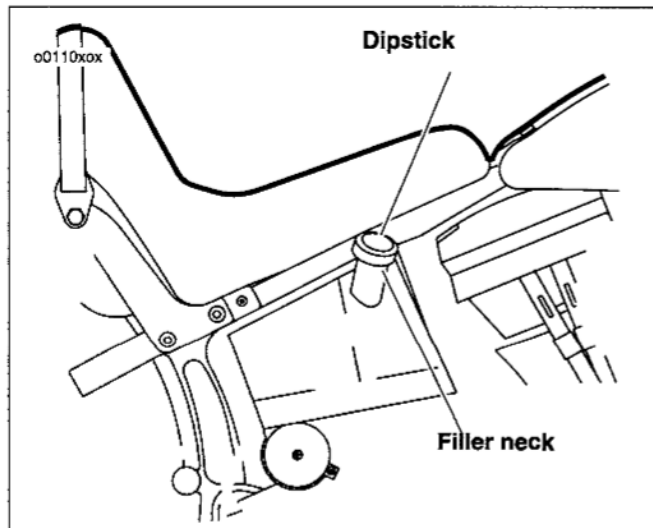


Figure 39. Dipstick Location

### Important Note

The motorcycle should be upright and level when checking oil.

## CHECKING CHAIN CASE LUBRICANT

### NOTE:

*Read GENERAL MAINTENANCE AND LUBRICATION section containing information about the primary chaincase lubrication first.*

1. Position motorcycle STRAIGHT UP and LEVEL.
  2. See Figure 40. Remove screws and washers that secure clutch inspection cover.
  3. Remove clutch inspection cover carefully to avoid damaging O-ring or finish on cover.
  4. See Figure 41. Primary chain case lubricant should be at the bottom of the clutch diaphragm spring.
- Use only PRIMARY CHAIN CASE LUBRICANT, Part No. **99887-84**.

### CAUTION

**Replace O-ring if damaged or not sealing properly to avoid lubricant leakage. Failure to do so may result in equipment damage.**

5. Replace clutch inspection cover and secure with screws.
6. Tighten clutch inspection cover to **50-70 in-lbs** (6-8 Nm).

### NOTE:

*Whenever draining chain case lubricant, inspect and clean chain case magnetic drain plug. See the appropriate service manual for more details.*

Check clutch adjustment every 5000 miles (8000 km). We recommend your Harley-Davidson Dealer perform these services for you.

### CAUTION

**When draining and refilling the transmission, be careful that dirt and debris do not get into the case. Failure to do so may result in equipment damage.**

## CHECKING CHAINCASE LUBRICANT (CONTINUED)

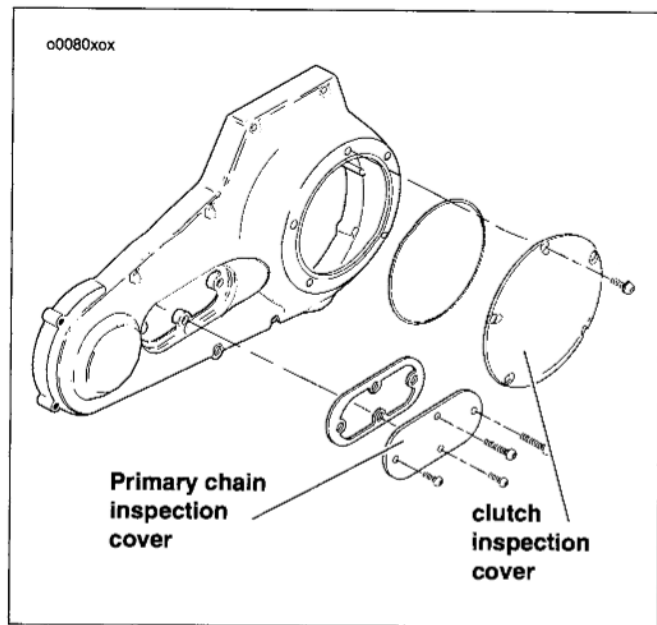


Figure 40. 1450cc Primary Chaincase

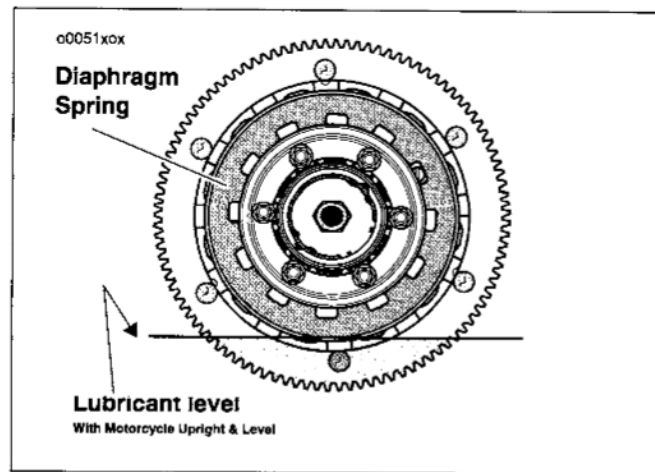


Figure 41. Lubricant Level



## AIR CLEANER

See Figure 42. The engine air cleaner is a paper/wire mesh air filter element.

Remove air cleaner cover and inspect filter element at least every 5000 miles (8000 km), or more often under dusty conditions.

The paper/wire mesh air filter element should be washed in luke warm water with a mild detergent.

### WARNING

Always wear eye protection or a face shield when using pressurized air. Low pressure air can blow debris into your face and eyes. Failure to do so could result in death or serious injury.

- Allow filter to either air dry or blow it dry, from the inside, with low pressure air.
- Do not use an air cleaner filter oil on the Harley-Davidson paper/wire mesh air filter element.

### CAUTION

Secure filter placement before running engine. Failure to do so could draw debris into the engine and may result in equipment damage.

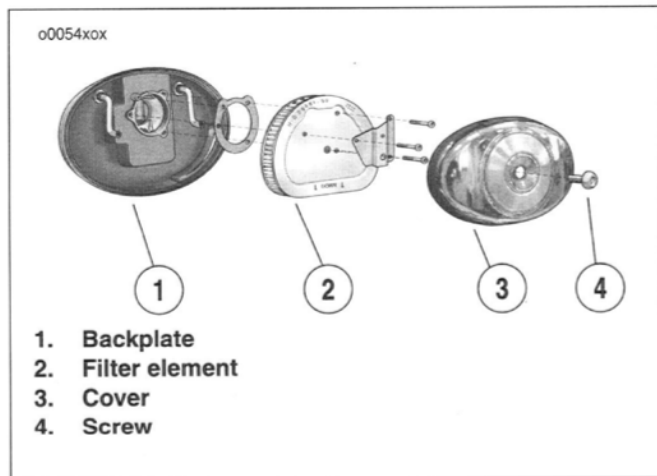


Figure 42. Air Cleaner

## BRAKES

### WARNING

Brake pads must be inspected for wear every 2500 miles (4000 km). If you ride under adverse conditions, (steep hills, heavy traffic, etc.) a more frequent inspection at 1000 miles (1600 km) or less, is required. Failure to do so could result in death or serious injury.

1. Every 2500 miles (4000 km), check brake pads and brake discs for wear.
  2. Every 5000 miles (8000 km), check the fluid level in the master cylinder reservoirs.
- Use only D.O.T. 5 SILICONE HYDRAULIC BRAKE FLUID (P/N 99902-77) approved for brake system use and available from your Harley-Davidson Dealer.

### WARNING

Use both brakes evenly. Use of one brake accelerates wear and affects braking efficiency. Operation with excessively worn brakes can lead to brake failure which could result in death or serious injury.

### WARNING

Use required tools, correct replacement parts and procedures when performing brake service. Since brakes are a critical safety item, we recommend that you see your Harley-Davidson Dealer for these services. Failure to do so could result in death or serious injury.

See Figure 43. Visual inspection of brake pads can be made without removing the caliper by viewing the lower area of each caliper with the aid of a flashlight.

#### NOTE:

*The Heritage Springer (FLSTS) and Springer Softail (FXSTS) have a "two piston" front brake. If the brake pad friction material is 1/16 in. thick or less (the thickness of a nickel), the pads must be replaced IMMEDIATELY.*

## BRAKES (CONTINUED)

### WARNING

Do not ignore routine maintenance schedules for brakes. Ignoring routine maintenance may cause loss in braking performance and/or brake system component damage, which could result in and death or serious injury.

- If the brake pad friction material is .04 in. (1.02 mm) thick or less, the pads must be replaced immediately.
- Always replace brake pads in pairs.

The rear brake outer pad on all models can be measured from the caliper bracket side using a thin plastic 6 in. rule.

1. Place the rule against the brake disc through the space alongside the caliper.
- The outer surface of the brake pad backing plate should measure .04 in. (1.02 mm) or more away from the brake disc.
  - If it measures less than .04 in. (1.02 mm), replace both brake pads immediately.

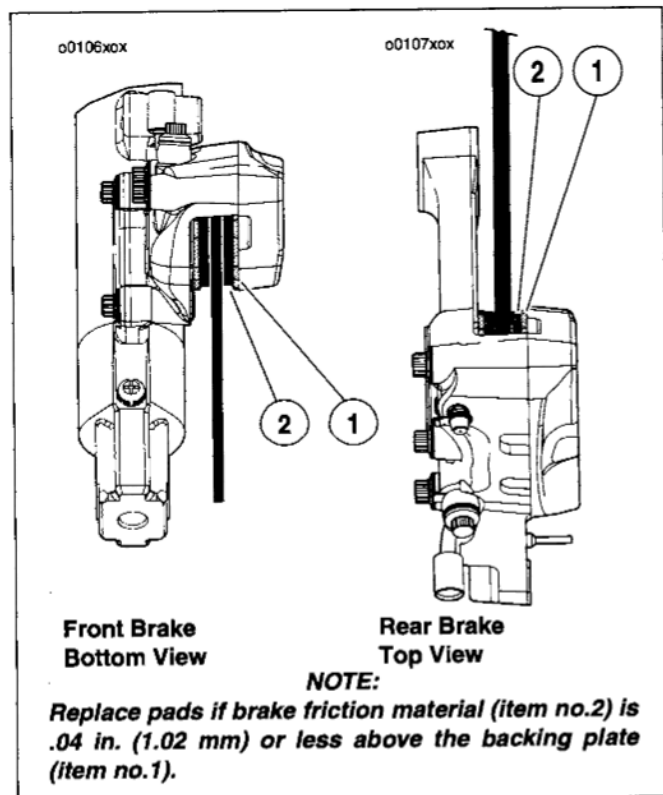


Figure 43. Brake Pads

## SHOCK ABSORBERS

See REAR SHOCK ABSORBERS section. Shock absorbers and rubber bushings should be inspected at 1000 miles (1600 km) and every 5000 miles (8000 km) thereafter for leaks and bushing deterioration.

## HEADLAMP

See Figure 44. The headlamps are either sealed beam or replaceable quartz halogen bulb type.

*See the appropriate service manual for more details.*

### CAUTION

When replacement is required, use only the specified sealed beam unit or bulb, available from your Harley-Davidson Dealer. An improperly wattage sealed beam or bulb, may cause charging system problems.

### CAUTION

Never touch the quartz bulb with your fingers; fingerprints will etch the glass and decrease bulb life. Always grab the bulb with paper or a clean dry cloth during handling. Failure to do so may result in equipment damage.

### CAUTION

The bulb contains Halogen gas under pressure. Handle bulb carefully and wear eye protection. Failure to do so could result in minor or moderate injury.

## HEADLAMP (CONTINUED)

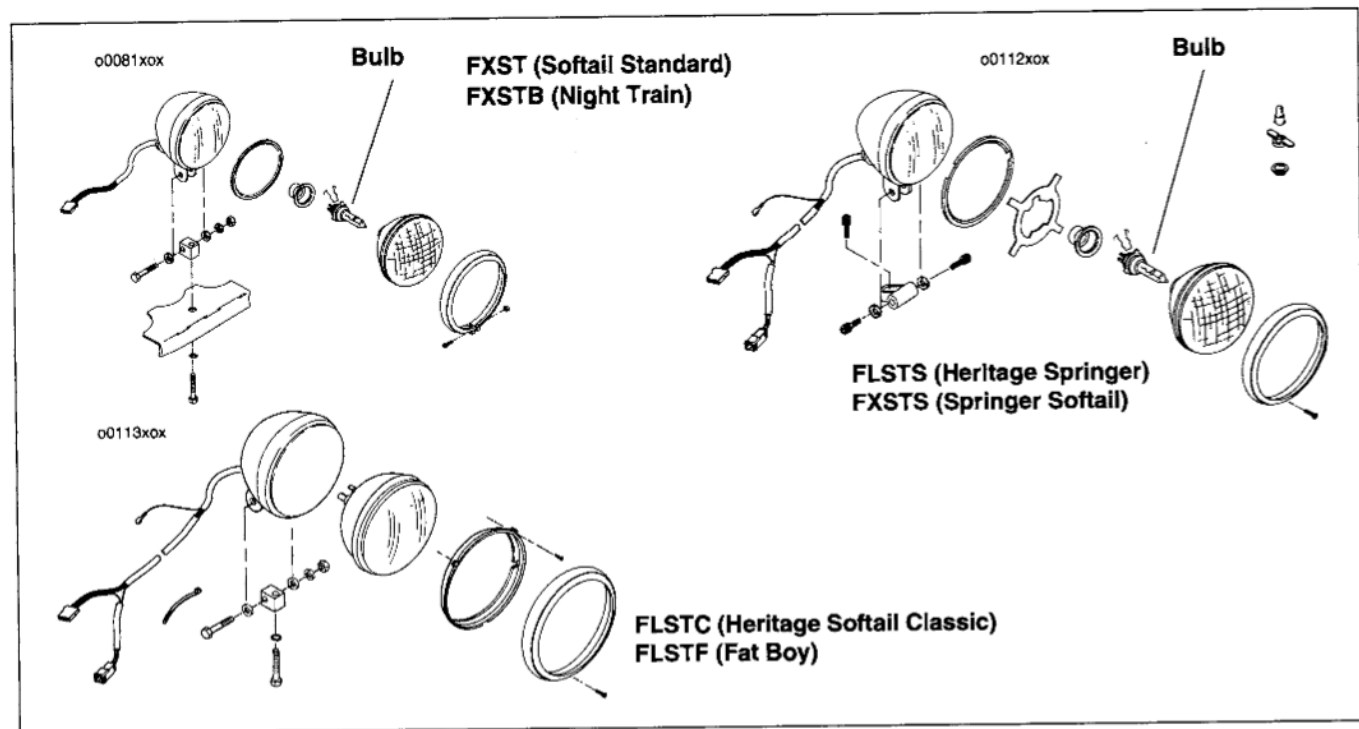


Figure 44. Softail Headlamps

## SEAT REMOVAL

### General

See Figure 45. See Figure 46. All Softail Harley-Davidson motorcycles have a tongue underneath the seat that slides into back end of frame.

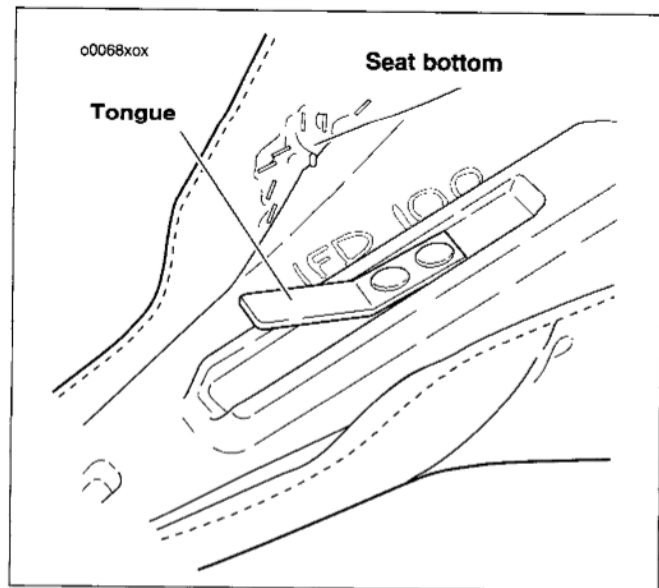


Figure 45. Seat Tongue

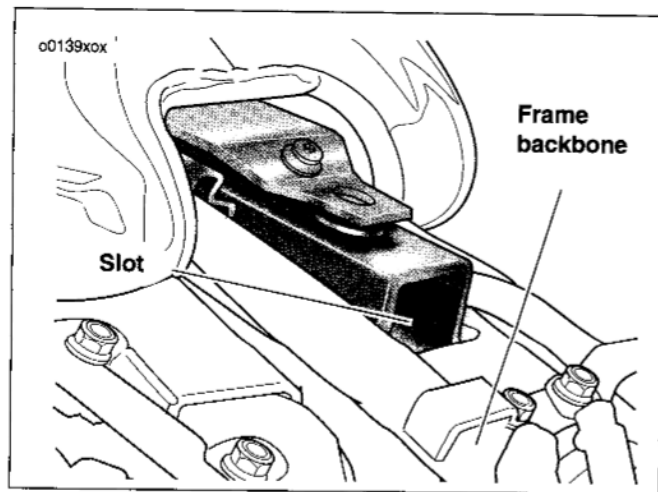


Figure 46. Frame Backbone

## FLSTS SEAT REMOVAL

### Pillion seat Removal

1. See Figure 47. Remove fender mounting screw from top of rear fender.
2. Remove pillion seat from frame.
3. Install fender mounting screw; secure until snug.

### Springer Seat Removal

1. See Figure 47. Detach fender mounting screws from top of rear fender.
2. See Figure 45. Push seat rearward to free tongue at front of seat from slot or bracket in frame backbone.
3. Remove springer seat from frame.
4. Install fender mounting screws to fender; secure until snug.

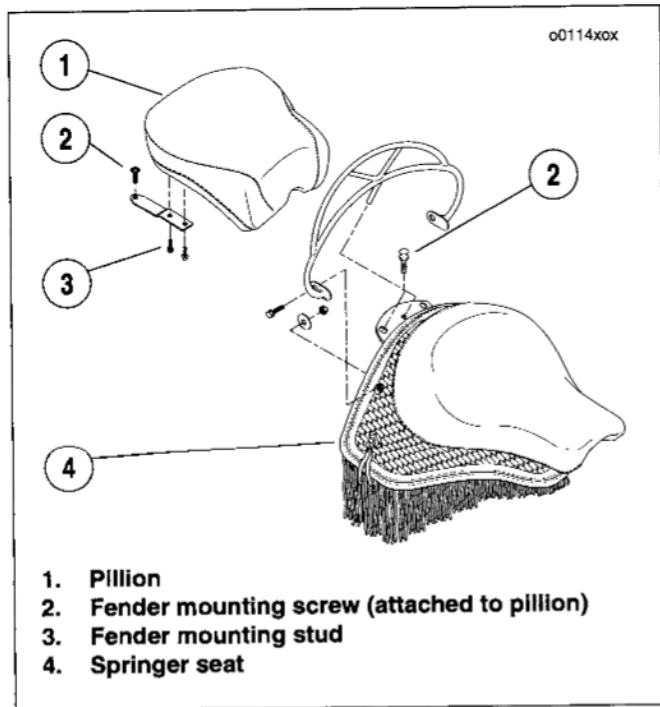


Figure 47. FLSTS Seat

## FLSTC/FLSTF SEAT REMOVAL

1. See Figure 47. Remove fender mounting fastener (Item no. 2) from top of rear fender.
2. Remove two mounting fasteners (Item no. 6) located on both sides of the seat.
3. See Figure 49. Locate the seat strap bracket (Item no. 7) on the LEFT side of the motorcycle.
4. See Figure 50. Loosen strap bracket by grasping and pressing down firmly.
5. See Figure 51. Pull out to free the left side of the strap-bracket.

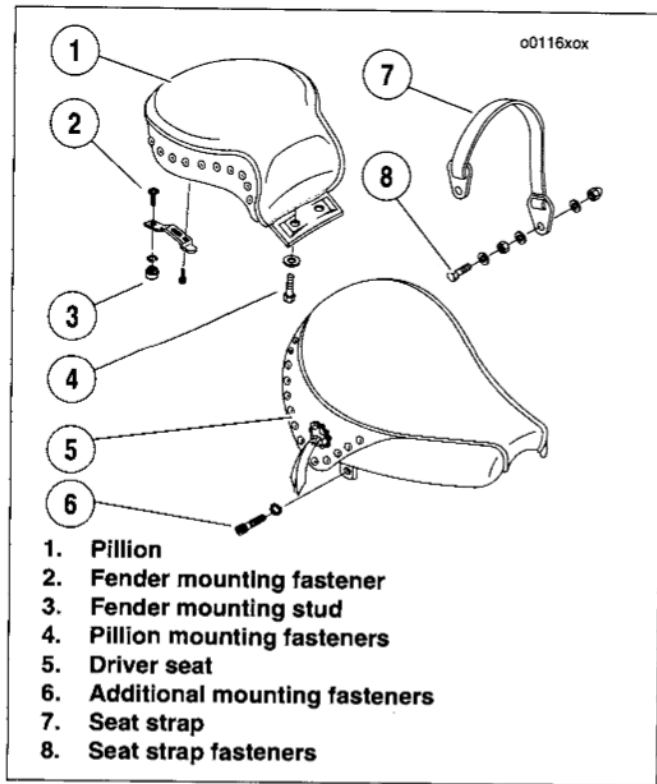


Figure 48. FLSTC/FLSTF Seat



## FLSTC/FLSTF SEAT REMOVAL (CONTINUED)

6. See Figure 45. Push seat rearward to free tongue at front of seat from slot or bracket located in frame backbone.

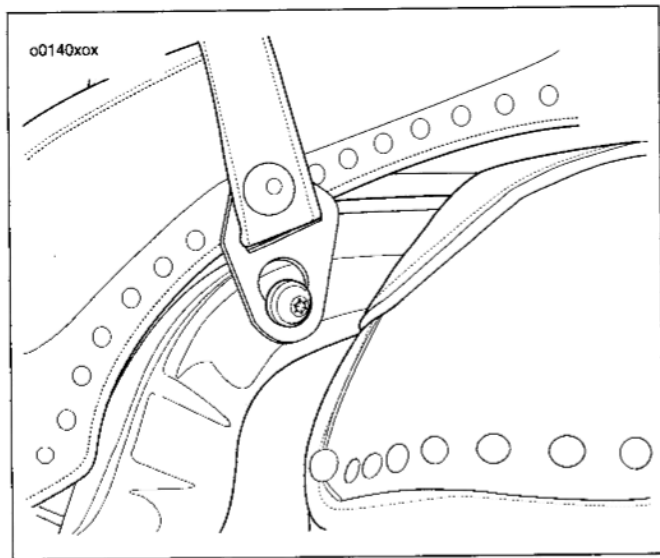
**NOTE:**

***For FLSTC models skip step 7 and proceed to step 9. For FLSTF models proceed to step 7.***

7. Turn seat over to reveal a looped snap on the seat strap.
8. Unsnap loop to loosen seat strap.
9. Slide seat through seat strap to remove.

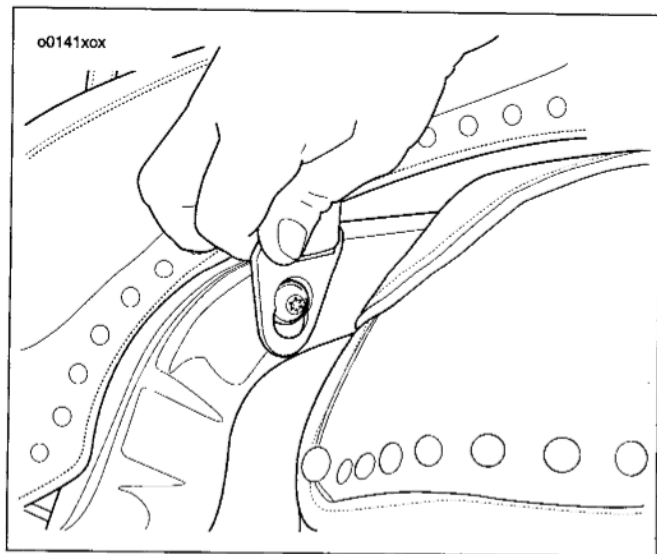
**NOTE:**

***To detach pillon seat from drivers seat, remove the pillion mounting fasteners.***

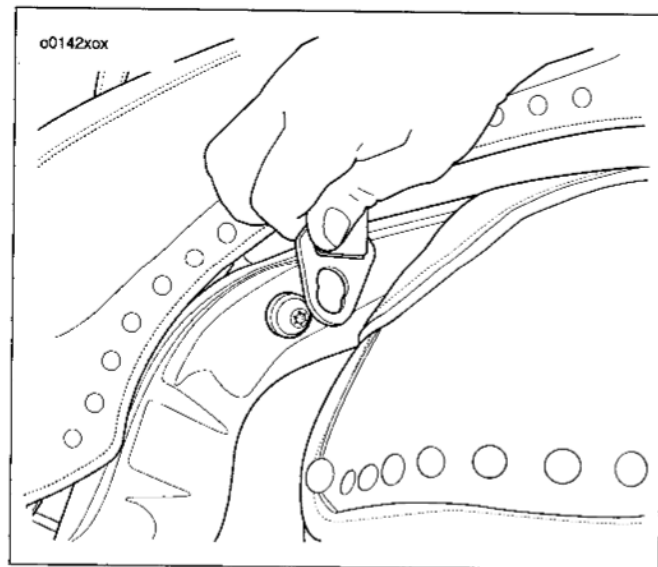


**Figure 49. Strap Bracket**

## FLSTC/FLSTF SEAT REMOVAL (CONTINUED)



**Figure 50. Pushing/Pulling Strap Bracket**



**Figure 51. Removing/Placing Strap Bracket**

## FXST, FXSTB, & FXSTS SEAT REMOVAL

1. See Figure 47. Remove fender mounting screws from top of rear fender.
2. See Figure 45. Push seat rearward to free tongue at front of seat from slot or bracket in frame backbone.
3. Remove seat from frame.
4. Install fender mounting screws to fender; secure until snug.

### **NOTE:**

*The FXSTB model does not have a removable seat bracket; it is riveted to the bottom of the seat.*

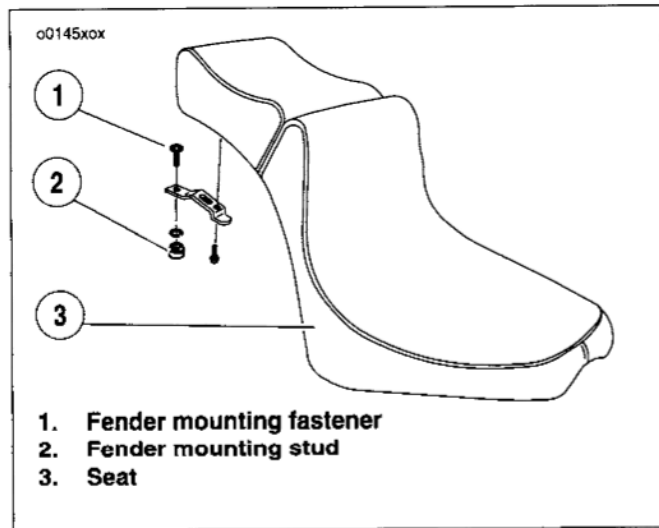


Figure 52. Seat

## FXST, FXSTB, & FXSTS SEAT INSTALLATION

1. See Figure 52. See Figure 45. See Figure 47. Place seat on frame backbone.
2. Slide seat toward front of motorcycle until the tongue locks into the bracket or slot in the frame backbone.
3. Push seat forward until rear fender seat retention nut is centered in hole of mounting bracket.
4. Install fender mounting fastener.

### WARNING

**After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, resulting in loss of control of vehicle and death or serious injury.**

5. Pull up on seat to verify that it is properly secured.

## FLSTC/FLSTF SEAT INSTALLATION

### NOTE:

*See Figure 48. To attach pillion seat to drivers seat, tighten the pillion mounting fasteners until snug.*

### NOTE:

*For FLSTC models skip step 1 and proceed to step 3. For FLSTF models proceed with step 1.*

1. Locate looped snap on seat strap.
2. See Figure 48. Place seat through the seat strap.
3. Snap loop together to tighten seat strap.
4. Slide seat toward front of motorcycle until the tongue locks into the open end of the frame backbone.
5. See Figure 48. Install the two seat (Item no. 6) mounting fasteners to the frame; secure until snug.
6. Install fender mounting fastener (Item no. 7) on fender; secure until snug.

## FLSTC/FLSTF SEAT INSTALLATION (CONTINUED)

7. See Figure 51. Place seat strap bracket end over mounting fasteners in frame.
8. See Figure 50. Pull up on strap bracket to ensure fit; secure until snug.

### WARNING

**After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, resulting in loss of control of vehicle and death or serious injury.**

9. See Figure 49. Pull up on seat to verify that it is properly secured.

## FLSTS SEAT INSTALLATION

### Pillion seat Installation

1. See Figure 47. Remove fender mounting screw from top of rear fender.
2. Install pillion seat from frame.
3. Install fender mounting screw; secure until snug.

## FLSTS SEAT INSTALLATION (CONTINUED)

## NOTES

### Springer Seat Installation

1. See Figure 47. Remove fender mounting screws from top of rear fender.
2. Slide seat toward front of motorcycle until the tongue locks into the bracket or slot in the frame backbone.
3. Install fender mounting screws to fender; secure until snug.

 **WARNING**

**After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation, resulting in loss of control of vehicle and death or serious injury.**

4. Pull up on seat to verify that it is properly secured.

## GENERAL MAINTENANCE

Chrome and aluminum parts must be maintained regularly to ensure that they retain their original shine and luster. Care should be taken to keep your new Harley-Davidson motorcycle cleaned and waxed as often as possible to inhibit rust and corrosion.

## CLEANING YOUR MOTORCYCLE

To aid you in keeping your motorcycle clean, see your Harley-Davidson Dealer for cleaning, polishing and waxing products.

### WARNING

Observe warnings and cautions given on labels of cleaning compounds. Failure to do so could result in death or serious injury.

### WARNING

**DO NOT** wash your brake discs with any cleaners that contain either chlorine or silicon; chlorine will cause rust, while silicon will make the brake discs slick and impair brake function. Failure to do so could result in death or serious injury.

### WARNING

When washing your motorcycle, be careful not to get the brakes, engine, mufflers or air cleaner too wet. Wet brake pads or a wet disc may affect braking, while a wet engine could start and run poorly until it dries. Start engine immediately after washing and be sure brakes and engine are operating properly before riding in traffic. Failure to do so could result in death or serious injury.

## ACCESSORIES MAINTENANCE

### NOTE:

- *Many Harley-Davidson accessories and seats are either made of leather or have leather inserts. Natural materials age differently and require different care than man-made materials. Seat covers and panels made of leather will gain "character", such as wrinkles, with age. Leather is porous and organic and each leather product will settle into its own distinct form with use. Your leather product will mature into its own custom shape and style from the sun, rain and the miles. This maturing is natural and will enhance the custom quality of your Harley-Davidson motorcycle.*

## LEATHER CARE

Leather must be periodically cleaned and treated to maintain its appearance and extend its life. Clean and treat leather once a season or more frequently under adverse conditions.

### CAUTION

**DO NOT use bleach or detergents containing bleach on saddlebags, seats or tank panels. Failure to do so may result in equipment damage.**

- Do not use ordinary soap to clean leather or fur. It could dry or remove the oils from the leather.
- Use **ONLY** a good quality saddle soap to clean leather. Be sure you rinse saddle soap off thoroughly before treating leather.
- Never try to dry leather quickly, using artificial means. Always let leather dry naturally, at room temperature.
  1. Vacuum or blow dust off.
  2. Thoroughly clean leather with a good quality saddle soap, following manufacturer's directions. Rinse thoroughly with clean sponge or cloth and water. Allow leather to dry.
  3. Once leather is dry, treat with a good quality leather treatment, such as **Harley-Davidson Leathercare®**.
  4. Always allow leather to dry completely before using.



## CLOTH CARE

1. Vacuum or blow dust off.
2. Use mild soap and warm water for more difficult stains on the cloth. Rinse thoroughly. Always allow cloth to dry completely before using.

## VINYL CARE

Wash with a good quality detergent or S100®. Treat with Mothers Preserves® or a quality vinyl treatment.

## WHEEL CARE

To maintain the original luster and appearance of the wheels on your Harley-Davidson motorcycle, care should be taken to keep them clean and polished as often as possible to inhibit rust and corrosion.

The spokes of our laced wheels are plated. This plating can be damaged by harsh chemicals, acid based wheel cleaners, brake dust and lack of maintenance. Regular washing and the use of a corrosion protectant will help to maintain their original appearance. Aluminum wheels (spoked and disc) do not have clear coat on any of the machined surfaces. For this reason it is imperative that the wheels are washed and waxed weekly to prevent pitting and corrosion. Harsh chemical washes, brake dust, road salts and lack of maintenance can quickly cause pitting and corrosion to appear.

The use of a corrosion protectant will also aid in preserving

the appearance of the aluminum wheel.

### **NOTE:**

***Corrosion of these components is not considered to be a defect in materials or workmanship.***

See your Harley-Davidson Dealer for cleaning, polishing and waxing products.

## WHITETALL TIRES

### **WARNING**

**When washing vehicle, be careful not to get the brakes wet. Wet brake system pads and/or discs might adversely affect braking performance and could result in death or serious injury.**

Use a good quality, commercial whitewall cleaner and follow the manufacturer's directions.

## WINDSHIELDS

### CAUTION

Harley-Davidson windshields are made of Lexan®. Lexan is a more durable and distortion-resistant material than other types of motorcycle windshield material, but still requires attention and care to maintain. Failure to do so may result in damage to the windshield.

### CAUTION

DO NOT use harsh chemicals including rain sheeting products on Harley-Davidson windshields. They may cause dulling or hazing and could result in minor or moderate injury. If you want to use a windshield protectant on your windshield, try Harley Glaze Polish and Sealant.®

### CAUTION

DO NOT use benzine, paint thinner, gasoline or any other types of harsh cleaner on the windshield. Doing so will damage the windshield surface.

### NOTES:

*To remove minor surface scratches use NOVUS® No. 2 Scratch Remover, P/N 99836-94T.*

*Covering the windshield with a clean, wet cloth for approximately 15-20 minutes before washing will make dried bug removal easier.*

1. Use mild soap and warm water to wash the windshield.
2. Wipe dry with a soft, clean towel.

**LUBRICATE - HINGES, LATCHES,  
SADDLEBAGS (IF APPLICABLE)**

Lubricate the rub points of latches and hinges using either Teflon Precision Lubricator<sup>®</sup> or Tri-flow<sup>®</sup> every 5000 miles (8046 km).

**NOTE:**

These lubricants resist attracting dust.

## STORAGE

### CAUTION

Proper long-term storage is important for the safe, trouble-free operation of your Harley-Davidson motorcycle. If you do not do these tasks yourself, contact your Harley-Davidson Dealer. Your dealer has the trained technicians who can complete the work according to Service Manual procedures using proper tools and equipment. Failure to do so may result in equipment damage.

### PLACING MOTORCYCLE IN STORAGE

If the motorcycle will not be operated for several months, such as during the winter season, there are several things which should be done to protect parts against corrosion, to preserve the battery and to prevent the buildup of gum and varnish in the fuel system.

### WARNING

Gasoline is extremely flammable and explosive under certain conditions. Use care when handling gasoline. DO NOT store motorcycle having gasoline in tank within the home or garage where open flames, pilot lights, sparks or electric motors are present. Failure to do so

may cause an explosion or fire which could result in death or serious injury.

### NOTE:

*Make a list of everything you do and fasten it to a hand-grip. When you take the motorcycle out of storage, this list will be your reference/checklist to get your motorcycle in operating condition.*

1. Warm motorcycle to operating temperature; change oil and turn engine over to circulate the new oil.
2. Fill fuel tank and add a gasoline stabilizer. Use one of the commercially available gasoline stabilizers, following the manufacturer's instructions.
3. Run the engine until the gasoline stabilizer has had a chance to reach the carburetor float bowl/fuel injectors.
4. Turn fuel supply valve OFF.

## PLACING MOTORCYCLE IN STORAGE (CONTINUED)

5. Adjust the belt.
6. Check tire inflation. Adjust to proper inflation pressure. Wash and wax painted and chrome surfaces.
7. See BATTERY section for proper battery care. Remove battery from the motorcycle and charge. Store the battery above freezing temperatures, trickle charge once a month.

### WARNING

**Always charge the battery in a well ventilated area. Explosive hydrogen gas escapes from the battery during charging. Keep open flames, electrical sparks and smoking materials away from the battery at all times. Failure to do so could result in death or serious injury.**

8. If motorcycle is to be covered, use a material such as light canvas, that will breathe. Plastic materials that do not breathe promote the formation of condensation.

## REMOVAL FROM STORAGE

### CAUTION

**After extended periods of storage and prior to starting vehicle, place transmission in gear, disengage clutch**

**and push vehicle back and forth a few times to ensure proper clutch disengagement. Failure to do so may result in minor or moderate injury.**

1. See BATTERY section for proper battery care. Charge and install it.
2. Remove and inspect the spark plugs. Replace if necessary.
3. Clean the air cleaner element.
4. Start the engine and run until it reaches normal operating temperature. Turn off engine.

## REMOVAL FROM STORAGE (CONTINUED)

5. Check amount of oil in the oil tank.
6. Check the transmission lubricant level.
7. Check controls to be sure they are operating properly. Operate the front and rear brakes, throttle, clutch and shifter.
8. Check steering for smoothness by turning the handlebars through the full operating range.

### WARNING

**Maintain proper tire pressure; including wheel and tire balance. Inspect your tires periodically and replace tires with approved tires only. (See your Harley-Davidson Dealer.) Failure to do so can lead to improper balance, abnormal tread wear, poor handling and could result in death or serious injury.**

9. Check tire pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability.
10. Check all electrical equipment and switches including the stop lamp, turn signals and horn for proper operation.
11. Check for any fuel, oil or brake fluid leaks.

### CAUTION

**Turn engine over a few times to be sure there is no oil in the crankcase and that all oil has been pumped back into the oil tank. Stop engine and re-check oil level. Failure to do so may result in equipment damage.**

## GENERAL

The following checklist of possible operating troubles and their probable causes will be helpful in keeping your motorcycle in good operating condition. More than one of these conditions may be causing trouble and should be carefully checked.

### WARNING

The troubleshooting section of this Owner's Manual is intended solely as a guide to diagnosing problems. Carefully read the appropriate sections of this manual before performing any work. Repair and maintenance operations not listed in this Owner's Manual are in the Service Manual and should be performed by your Harley-Davidson Dealer. Improper repair and/or maintenance could result in death or serious injury.

## ENGINE

### Starter Does Not Operate or Does Not Turn Engine Over

1. Engine run switch in "OFF" position.
2. Ignition switch not "ON."
3. Discharged battery or loose or corroded connections (solenoid chatters).

### Engine Turns Over But Does Not Start

1. Fuel tank empty.
2. Fuel valve turned "OFF."
3. Fuel valve vacuum line disconnected.
4. Fuel valve or filter clogged.
5. Discharged battery or loose or broken battery terminal connections.
6. Fouled spark plugs.
7. Spark plug cable connections loose or in bad condition and shorting.
8. Loose or corroded wire or cable connection(s) at coil or battery.
9. Engine flooded with fuel as a result of over-enrichening.
10. Engine oil too heavy (winter operation).
11. Throttle held open when enrichener is used.
12. Fuel pump inoperative (If applicable).

### **Starts Hard**

1. Spark plugs in bad condition, have improper gap, or are partially fouled.
2. Spark plug cables in bad condition and leaking.
3. Battery nearly discharged.
4. Loose wire or cable connection(s) at one of the battery terminals or at coil.
5. Carburetor not adjusted correctly.
6. Engine oil too heavy (winter operation).
7. Ignition not timed properly. See dealer.
8. Fuel tank vent plugged or fuel line closed off, restricting fuel flow.
9. Water or dirt in fuel system.

### **Starts But Runs Irregularly or Misses**

1. Spark plugs in bad condition or partially fouled.
2. Spark plug cables in bad condition and leaking.
3. Spark plug gap too close or too wide.
4. Battery nearly discharged.
5. Damaged wire or loose connection at battery terminals or coils.
6. Intermittent short circuit due to damaged wire insulation.
7. Water or dirt in fuel system.
8. Fuel vent system plugged. See dealer.

### **A Spark Plug Fouls Repeatedly**

1. Excessive enricher use.
2. Fuel mixture too rich.
3. Incorrect spark plug.

### **Pre-ignition or Detonation (Knocks or Pings)**

1. Incorrect fuel.
2. Incorrect spark plug for the kind of service.

### **Overheats**

1. Insufficient oil supply or oil not circulating.
2. Heavy carbon deposit from "lugging" engine. See dealer.
3. Ignition timing retarded. See dealer.



## **ENGINE (CONTINUED)**

### **Excessive Vibration**

1. Stabilizer links worn or loose. See dealer.
2. Engine isolation mounts loose. See dealer.
3. Rear fork pivot shaft nuts loose. See dealer.
4. Front engine mounting bolts loose. See dealer.
5. Engine to transmission mounting bolts loose. See dealer.
6. Broken frame. See dealer.
7. Belt badly worn.
8. Wheels and/or tires damaged. See dealer.
9. Vehicle not properly aligned. See dealer.

## **LUBRICATION SYSTEM**

### **Oil Does Not Return to Oil Tank**

1. Oil tank empty.
2. Restricted oil lines or fittings. See dealer.
3. Restricted oil filter. See dealer.

### **Engine Leaks Oil From Cases, Push Rods, Hoses**

1. Loose parts. See dealer.

2. Imperfect seal at gaskets, push rod cover, washers, etc. See dealer.
3. Restricted oil return line to tank. See dealer.

## **ELECTRICAL SYSTEM**

### **Alternator Does Not Charge**

1. Module not grounded. See dealer.
2. Engine ground wire loose or broken. See dealer.
3. Loose or broken wires in charging circuit. See dealer.

### **Alternator Charge Rate is Below Normal**

1. Weak battery.
2. Excessive use of add-on accessories.
3. Loose or corroded connections.
4. Extensive periods of idling or low speed riding.

## **CARBURETOR**

### **Carburetor Floods**

1. Excessive "pumping" of hand throttle grip.

## **TRANSMISSION**

### **Transmission Shifts Hard**

1. Bent shifter rod. See dealer.
2. Transmission shifting mechanism needs adjustment. See dealer.

### **Transmission Jumps Out of Gear**

1. Shifter rod improperly adjusted. See dealer.
2. Shifter forks (inside transmission) improperly adjusted. See dealer.
3. Worn shifter dogs in transmission. See dealer.

### **Clutch Slips**

1. Clutch controls improperly adjusted. See dealer.
2. Worn friction discs. See dealer.
3. Insufficient clutch spring tension. See dealer.

### **Clutch Drags or Does Not Release**

1. Clutch controls improperly adjusted. See dealer.
2. Insufficient clutch spring tension. See dealer.
3. Transmission case overfilled.

4. Clutch discs warped. See dealer.

### **Clutch Chatters**

1. Friction discs or steel discs worn or warped. See dealer.

## **BRAKES**

### **Brakes Do Not Hold Normally**

1. Master cylinder low on fluid. See dealer.
2. Brake line contains air bubbles. See dealer.
3. Master or wheel cylinder piston worn. See dealer.
4. Brake pads contaminated with grease or oil. See dealer.
5. Brake pads badly worn. See dealer.
6. Brake disc badly worn or warped. See dealer.
7. Brake fades because of heat build up. Excessive braking or brake pads dragging. See dealer.
8. Brake drags. Insufficient hand lever free play. See dealer.



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**NOTES**

## VEHICLE IDENTIFICATION NUMBER (V.I.N.)

See Figure 52. The full 17 digit serial, or Vehicle Identification Number (V.I.N.) is stamped on the steering head and on a label located on the right front frame down tube. An abbreviated V.I.N. is stamped on the left side crankcase at the base of the rear cylinder.

### NOTE:

*Always give the full 17 digit Vehicle Identification Number when ordering parts or making any inquiry about your motorcycle.*

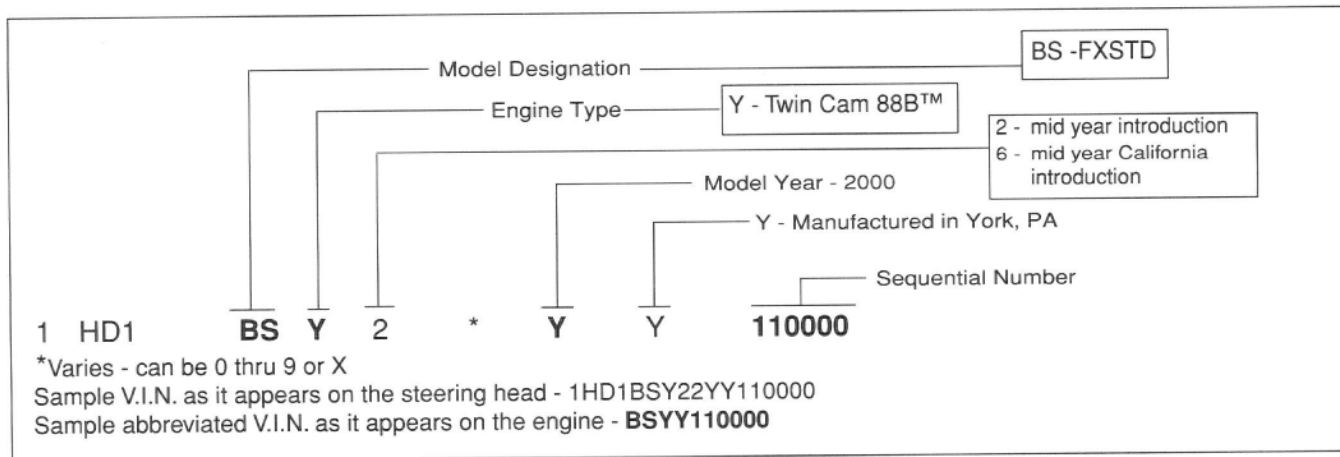


Figure 52. Vehicle Identification Number

## BREAK-IN - THE FIRST 500 MILES (800 KM)

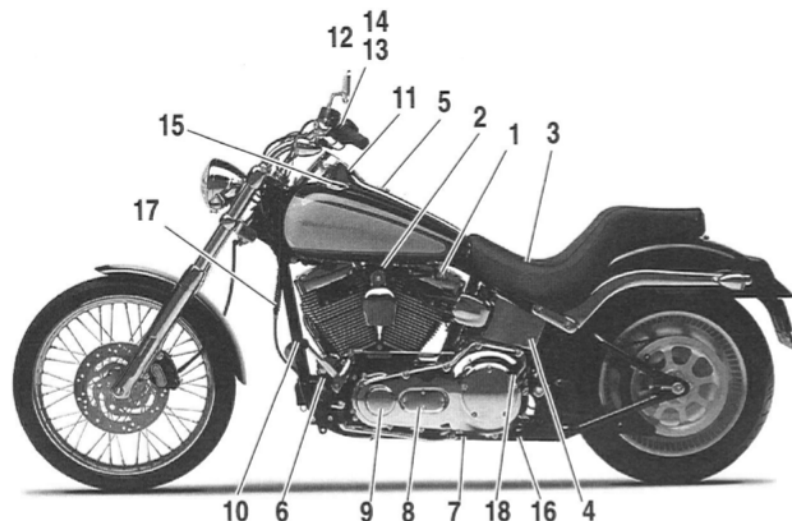
The sound design, quality materials, and workmanship that is built into your new Harley-Davidson will give you optimum performance right from the start.

However, for the first 500 miles (800 km) and to wear-in critical parts, observe the few simple riding rules below. This will assure future performance and durability.

1. During the first 50 miles (80 km), keep the engine speed below 2500 RPM in any gear; however, do not lug the engine.
  2. Up to 500 miles (800 km), vary the engine speed, avoiding any steady speed for long distances. Engine speed up to 3000 RPM is permissible in any gear.
  3. **Avoid** fast starts at wide open throttle. Drive slowly until engine warms up.
  4. Avoid running the engine at extremely low RPM in higher gears.
- *DO NOT exceed 50 MPH (80 km/h) for the first 50 miles (80 km).*
  - *DO NOT exceed 55 MPH (80 km/h) for the first 50 - 1000 miles (80-1600 km). This will assure future performance and durability.*

### WARNING

**Read the CONTROLS AND INDICATORS section before riding your motorcycle. Failure to become familiar with the operation of your motorcycle could result in death or serious injury.**

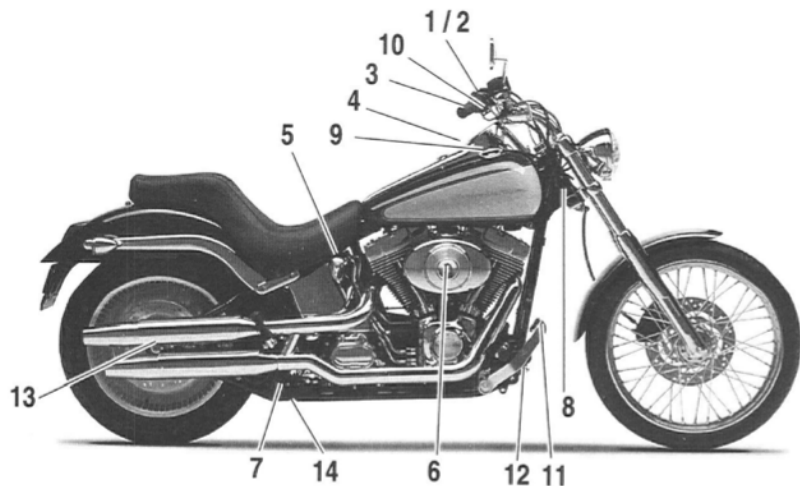


1. Fuel supply valve
2. Carburetor enrichener knob
3. Battery (under seat)
4. Circuit Breakers
5. Ignition/light key switch
6. Oil filter

7. Primary & transmission drain plug
8. Primary chain inspection cover
9. Primary chain cover
10. Gear shifter
11. Trip-odometer
12. Horn switch

13. Headlamp dimmer switch
14. Left turn signal switch
15. Fuel gauge
16. Jiffy stand
17. Clutch cable adjuster

Figure 53. FXSTD- Left Side View (Typical)



- |                                    |                             |                         |
|------------------------------------|-----------------------------|-------------------------|
| 1. Start/Stop switches             | 6. Carburetor & air cleaner | 11. Rear brake          |
| 2. Right turn signal switch        | 7. Rear shock absorber      | 12. Voltage regulator   |
| 3. Throttle control grip           | 8. Fork lock                | 13. Rear axle adjuster  |
| 4. Indicator lights                | 9. Fuel cap                 | 14. Oil Tank Drain Plug |
| 5. Engine oil fill plug & dipstick | 10. Front brake             |                         |

Figure 54. FXSTD - Right Side View (Typical)



## DIMENSIONS

Table 12. Model Dimensions

ITEM	FXSTD	
	in.	mm
Wheel Base	66.60	1691.64
Overall Length	95.40	2423.16
Overall Width	35.90	913.00
Road Clearance	5.60	142.24
Overall Height	46.40	1179.00
Saddle Height	26.00	660.40

## WEIGHT

Table 13. Model Weights

ITEM	FXSTD	
	lb.	kg
Dry Weight (as shipped from factory)	644.6	292.4
GVWR	1125	510.3
GAWR Front	415	188.2
GAWR Rear	710	322.0

**NOTE:**

*Gross Vehicle Weight Rating (GVWR) (maximum allowable loaded vehicle weight) and corresponding Gross Axle Weight Ratings (GAWR) are given on a label located on the frame steering head.*

## CAPACITIES

Table 14. Model Capacities

ITEM	FXSTD	
	U.S. gals.	liters
Fuel Tank (total)	4.9	18.55
Fuel Tank (reserve)	0.5	1.89
	U.S. qt.	liters
Oil Tank w/filter	3.5	3.31
	U.S. oz.	liters
Transmission (Approximate)	24	.71
	U.S. oz.	liters
Front Fork (each)	12.9	.38
	U.S. oz.	liters
Primary Chain Case (Approximate)	26	.77

## IGNITION SYSTEM

Timing Setting.....Not Adjustable

Battery (Sealed, Maintenance Free)..... 12 Volt 19 amp/hr.

## SPARK PLUGS

Type.....HD-6R12

Size..... 12 mm

Gap..... 0.038-0.043 in (0.97-1.09 mm)

Torque..... 11-18 ft-lbs (15-24.4 Nm)

## ENGINE

Number of Cylinders.....2

Type.....4-Cycle, 45 Degree V-Type, air cooled

Compression Ratio..... 9 to 1

Bore in. (mm).....3.75 in (95.25 mm)

Stroke in. (mm).....4.00 in (101.6 mm)

Displacement cu.in./cc..... 88/1450

Torque - ft-lbs..... 82.0 ft-lbs @ 3500 RPM

## TRANSMISSION

Type ..... Constant Mesh, Foot Shift  
Speeds ..... 5 Forward

## NUMBER OF SPROCKET TEETH (PRIMARY CHAIN)

Engine ..... 25  
Clutch ..... 36

## NUMBER OF SPROCKET TEETH

Transmission ..... 32  
Rear Wheel ..... 70

Table 15. Overall Gear Ratios

Deuce Models	
Gear	Ratio
1st Gear	10.11
2nd Gear	6.96
3rd Gear	4.95
4th Gear	3.86
5th Gear	3.15

## TIRE DATA

### WARNING

For your personal safety, the tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson Dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting, allow tire slippage on the rim, cause tire failure, and could result in death or serious injury.

### WARNING

Using tires other than those specified may adversely affect motorcycle stability, which could result in death or serious injury.

- Tubeless tires fitted with the correct size inner tubes may be used on all Harley-Davidson laced (wire spoked) wheels. Protective rubber rim strips must be used with tubeless tires (fitted with correct size inner tubes) when mounted on laced (wire spoked) wheels.

### WARNING

Inner tubes must not be used in radial tires and radial tires must not be used on laced (wire spoked) wheels. Doing so could result in tire failure, death or serious injury.

- Tubeless tires are used on all Harley-Davidson cast and disc wheels.
- Tire sizes are molded on the tire sidewall. Inner tube sizes are printed on the tube.

### WARNING

Dunlop® front and rear tires for Harley-Davidson motorcycles are not the same; they are not interchangeable. Use the front tire ONLY for a front tire. DO NOT put a rear tire on the front of a vehicle. Failure to follow this warning could result in death or serious injury.

**⚠ WARNING**

Do not inflate tire beyond its maximum inflation pressure, as specified on tire sidewall. If tires are overfilled they could blow out while vehicle is in operation causing vehicle damage, death or serious injury.

**Table 16. Tire Pressure Specifications**

2000 VEHICLES DUNLOP TIRES ONLY	TIRE PRESSURE (Cold)			
	Front		Rear	
FXSTD	PSI	kPa	PSI	kPa
Solo Rider	30	206	36	248
Rider & One Passenger	30	206	40	275

## BULB CHART (TABLE)

Table 17. Bulb Chart

LAMP DESCRIPTION (ALL LAMPS 12 VOLT)	QUANTITY (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
<b>Head lamp</b>		<b>FXSTD</b>	<b>FXSTD</b>
High Beam/Low Beam	1	4.7/4.3	67697-81
Position Lamp (HDI)	1	0.32	53438-92
<b>Tail and Stop Lamp</b>			
Tail Lamp	1	0.59	68168-89A
Stop Lamp	1	2.25	68168-89A
Tail Lamp (HDI)	1	0.42	68169-90A
Stop Lamp (HDI)	1	1.75	68169-90A

## SPEEDOMETER/ODOMETER

See Figure 55. The speedometer registers miles per hour of forward speed. The odometer registers the number of miles the vehicle has traveled.

### WARNING

Avoid excessive speed and never travel at a speed faster than the posted speed limit. To do so could cause loss of control resulting in death or serious injury.

### CAUTION

Never attempt to tamper with or alter the vehicle odometer; this is illegal. Doing so may cause equipment damage.

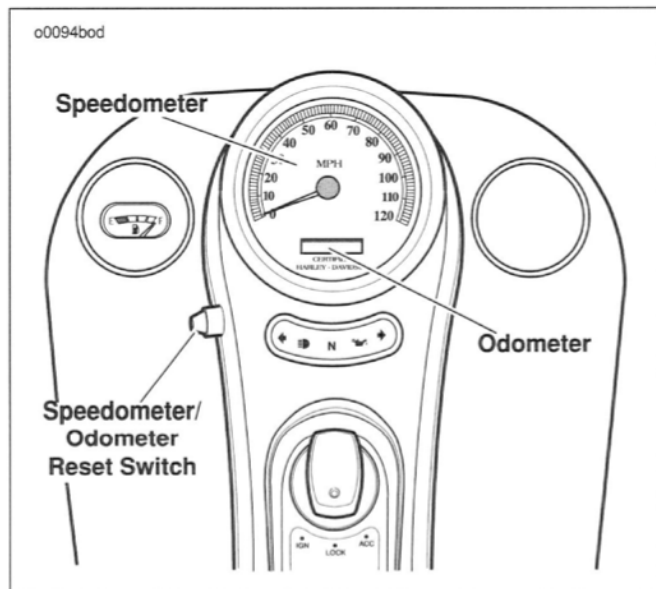


Figure 55. Model Indicator/Lamps

## **ELECTRONIC SPEEDOMETER**

## **NOTES**

See Figure 55. The electronic speedometer has a single display window for both the odometer and trip-odometer.

1. Press and release the speedometer reset switch (rubber covered) to change the display window on the speedometer face to either odometer or trip-odometer.
2. To reset the trip-odometer to zero, press and release the reset switch (rubber covered) to change the display to the ODOMETER mode.
3. Hold the switch in for approximately 2 to 3 seconds, and the display should read zero.

The speedometer will switch to the trip-odometer mode and reset the display to zero.

## **TRIP-ODOMETER**

See Figure 55. Use the trip-odometer to register number of miles traveled on a trip or between refueling.



## JIFFY STAND

See Figure 56. The jiffy stand is located on the left side of the motorcycle and swings outward to support the motorcycle for parking.

### WARNING

Always park the motorcycle on a level, firm surface. An unbalanced motorcycle could result in result in death or serious injury.

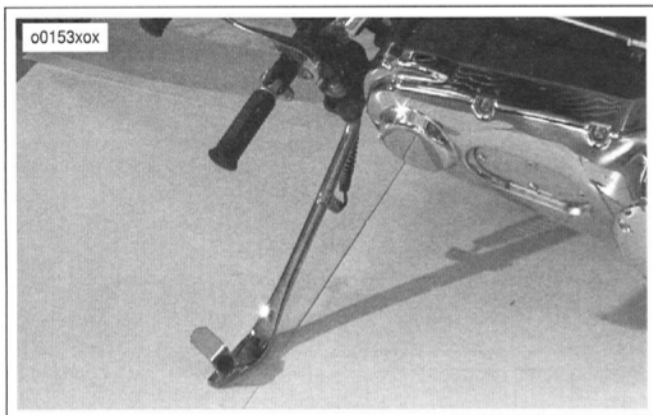


Figure 56. Jiffy Stand (Deuce)

### WARNING

Your vehicle is equipped with a jiffy stand that locks when placed in the full forward (down) position and the vehicle weight is rested on it. Without vehicle weight resting on the jiffy stand, any movement of the vehicle could cause the jiffy stand to retract slightly from the full forward position. If the jiffy stand is not in the full forward (lock) position when vehicle weight is rested on it, the vehicle may fall over and could result in death or serious injury.

### WARNING

Be sure jiffy stand is fully retracted before riding the motorcycle. If jiffy stand is not fully retracted during vehicle operation, it could contact the road surface causing a momentary disturbance before retracting. This momentary disturbance could distract the rider, which could result in loss of vehicle control, and death or serious injury.

**NOTES**

## TURN SIGNAL BULBS

### Lens Cap Access

1. See Figure 57. To access the front or rear turn signal bulbs for replacement, locate a notch on the yellow turn signal lens cap.
2. Insert a coin in the lens cap notch, and **carefully** twist until the lens cap pops out of the light housing.

### Bulb Removal and Installation

3. Push in and twist the light bulb counterclockwise (CCW) and pull light bulb out of the socket.
4. Orient index pins on **new** lamp bulb with pin guides inside bulb socket.
5. Push light bulb in and turn clockwise (CW) to lock in place.

### Lens Cap Replacement

1. Snap yellow lens cap back into the light holder.

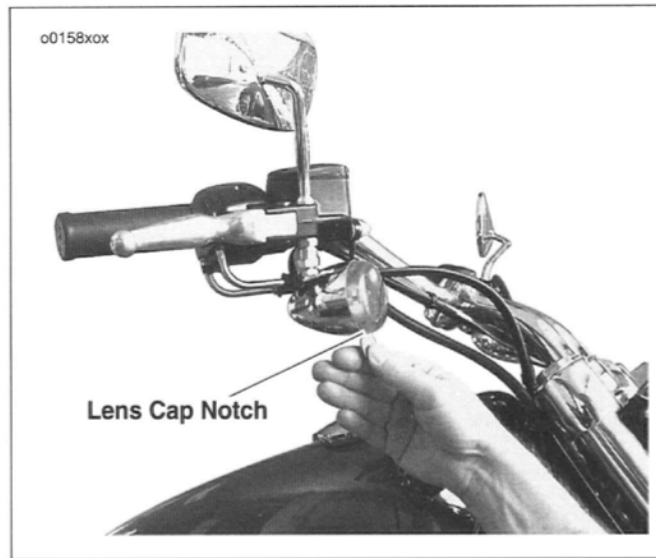


Figure 57. Turn Signal Housing

## TAIL LIGHT AND LICENSE PLATE BULBS

### Tail Light Access

1. See Figure 58. Insert a small screwdriver into the **middle** hole of the license plate light cover. Push forward to release the spring clip on the tail light assembly.

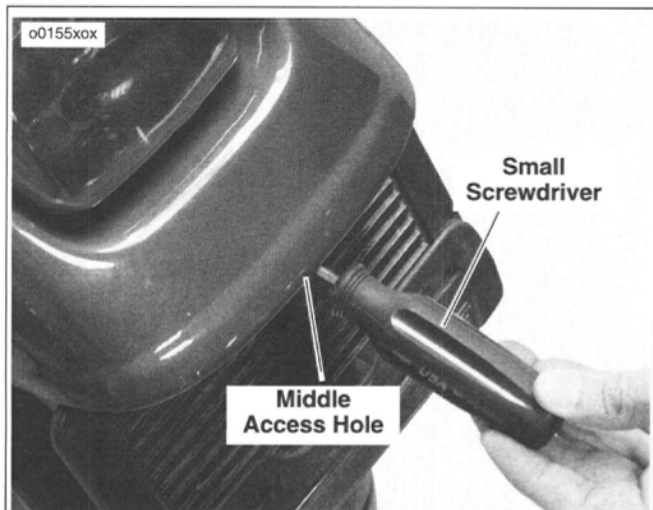


Figure 58. Tail Light Removal Access Hole

2. See Figure 59. Lift the tail light assembly upward exposing the electrical connectors, tail light lamp socket, and the two license plate lamp sockets

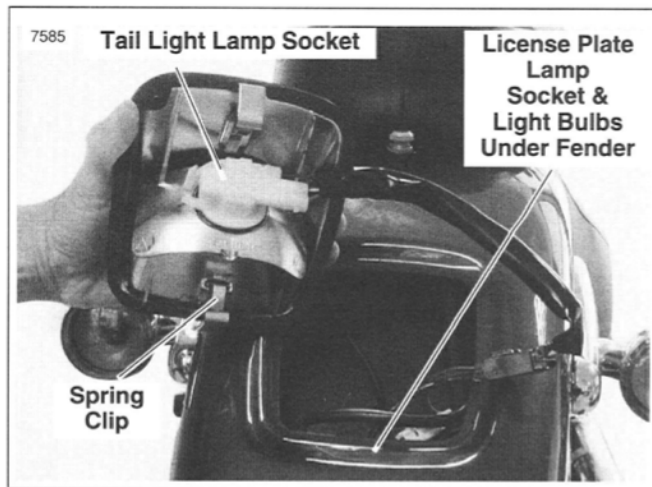


Figure 59. Tail Light Removed

## Tail Light Bulb Removal and Installation

1. See Figure 60. Remove the tail light bulb socket by turning the socket counterclockwise (CCW) and pulling outward away from the tail light housing.
2. Push in and twist the light bulb counterclockwise (CCW) and pull light bulb out of the socket.
3. Orient index pins on **new** light bulb with pin guides inside bulb socket.
4. Push light bulb into light bulb socket and turn clockwise (CW) to lock in place.

## Tail Light Assembly Installation

1. Orient the tail light bulb socket with the keyed indents in the tail light housing. Push in the tail light bulb socket and turn clockwise (CW) to lock in place.
2. Route electrical connectors and cables to either side of the fender light well, away from the tail light bulb socket.

### NOTE:

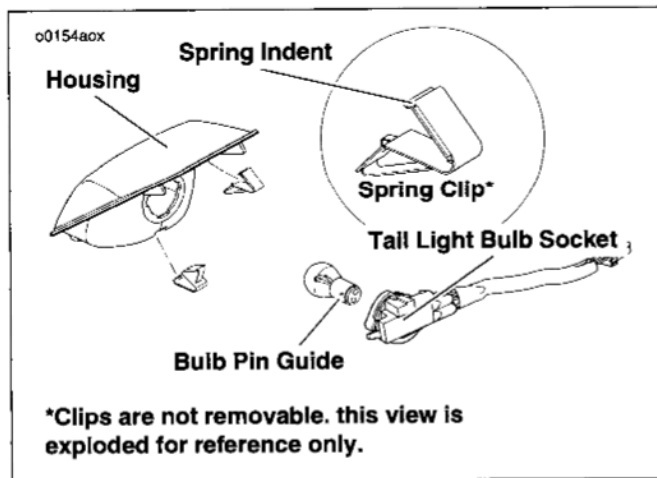
***When installing the tail light assembly, make sure the tail light bulb is pointed toward the rear of the vehicle.***

3. See Figure 60. Install the tail light assembly, **top first**, with the indent in the spring clip touching the fender to lock in place. Then push the tail light assembly toward the front of the vehicle. Engage the rear cup into the

opening in the fender light well and push down to lock in place. You will hear an audible click.

### NOTE:

***The spring clip indents must engage with the rear fender opening for the tail light to remain locked into position on the rear fender.***



**Figure 60. Tail Lamp Assembly**

## License Plate Light Bulb Removal and Installation

1. Remove tail light housing assembly from fender well.
2. See Figure 59. Remove the license plate light bulb socket by twisting the bulb socket out of the license plate bulb holder.
3. Pull light bulb out of the socket.
4. Install **new** license plate light bulb by pushing bulb into socket.
5. Install license plate light bulb socket back into the license plate bulb holder.
6. Reinstall tail light housing assembly.

## WARRANTY AND MAINTENANCE

See MAINTENANCE RECORDS section. This Owner's Manual contains your new motorcycle warranty and a number of tear-out service coupons.

Each coupon is a scheduled mileage interval that contains a specific maintenance checklist for upkeep of your motorcycle. It is the owner's responsibility to follow the scheduled mileage intervals as specified; all of the specified maintenance services must be performed to keep your warranty valid.

1. Make an appointment with your Harley-Davidson Dealer for inspection and service just before you have ridden 1000 miles (1600 km).
2. Bring this Owner's Manual with you when you visit your dealer to have your motorcycle inspected and serviced.
3. Have the owner record stubs dated and signed for required proof of service during the warranty period.

The dealer records should be retained by the dealer and owner, as proof of proper maintenance.

4. Keep receipts covering any parts, service or maintenance performed.

These records should be transferred to each subsequent owner.

### WARNING

**We caution you against the use of non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty. Removing or altering factory installed standard parts may also affect performance and could result in death or serious injury.**

Harley-Davidson Dealerships are independently owned and operated and may sell parts and accessories that are not manufactured or approved by Harley-Davidson. Therefore, you should understand that we are not and cannot be responsible for the quality, suitability, or safety of any non-Harley-Davidson part, accessory or design modification, including labor, which may be sold and/or installed by our dealers.

## OWNER'S IDENTIFICATION CARD

See Figure 54. A permanent Owner's Identification Card is issued to each Harley-Davidson new motorcycle owner when the completed warranty registration form is received at Harley-Davidson Motor Company.

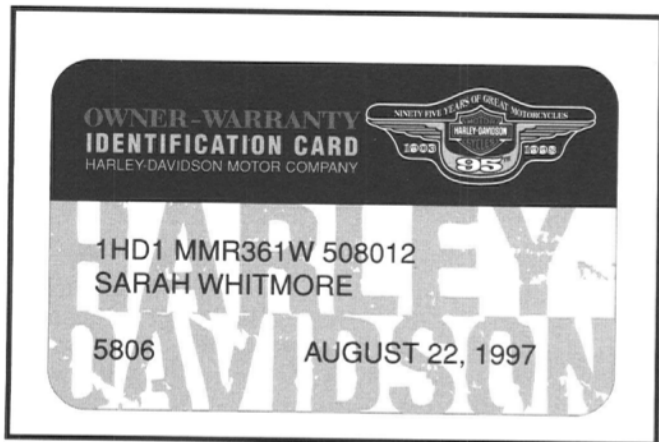


Figure 54. Owner's Warranty Identification Card

The Owner's Identification Card is a permanent record showing proof of ownership. It gives information necessary for you and your dealer to find information when obtaining parts and accessories, while expediting service.

- Keep this card in your possession; it is required by your Harley-Davidson Dealer for any warranty service performed on your motorcycle.
- If you have questions regarding service or warranty, we recommend that you contact your Harley-Davidson Dealer for service.

## KEEPING IT ALL HARLEY

1. Keep your Harley-Davidson completely Harley-Davidson.
2. Insist that your dealer uses only Genuine<sup>®</sup> replacement parts to keep your Harley-Davidson motorcycle and its warranty intact.

Exact design and stringent testing ensure performance and warranty coverage. Again, insist on Genuine parts for your genuine Harley-Davidson motorcycle.



## KEEPING IT ALL HARLEY (CONTINUED)

### NOTE:

*Installing off-road or competition parts to enhance performance may void your new motorcycle warranty. See your Harley-Davidson Dealer for details.*

### CAUTION

**It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. Ask your dealer for advice about the amount of current consumed by additional electrical accessories.**

## IMPORTANT MOVING INFORMATION

If you move from your present address, or sell your motorcycle, please fill out and mail the post card at the back of this manual. This is necessary in the event that the Company needs to contact the owner concerning information that could affect the safe operation of this motorcycle.

## CALIFORNIA EVAPORATIVE EMISSION CONTROL

All new model year 2000 Harley-Davidson motorcycles sold in the state of California are equipped with an evaporative emission control system. This system is designed to meet the CARB regulations in effect at the time of manufacture.

The system requires a small amount of maintenance. Periodic inspection is required to make sure hoses are properly routed, not kinked or blocked, and that all fittings are secure. Mounting hardware should also be checked periodically for tightness.

## EPA NOISE REGULATIONS

EPA noise regulations require that the following statements be included in the Owner's Manual.

**TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:** Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW.

1. Replacing the muffler(s) and/or the entire exhaust system with parts not certified to be noise legal for street use.
2. Removing or modifying the muffler internal baffles in any way.
3. Replacing the air intake/cleaner assembly with one not certified to be noise legal for street use.
4. Modifying the air intake/cleaner assembly in such a way as to make the vehicle no longer noise legal for street use.

Harley-Davidson recommends that any and all noise related maintenance be done by an authorized Harley-Davidson Dealer using genuine Harley-Davidson parts.

## WARRANTY/SERVICE INFORMATION

Any authorized Harley-Davidson Dealer is responsible for providing the warranty repair work on your motorcycle. If you have any questions regarding warranty obligations contact your selling dealer.

For normal service work or warranty work under the above conditions, you may obtain the name and location of your nearest U.S. Harley-Davidson Dealer by calling 1-800-490-9635 (toll free), in any state except Alaska and Hawaii.

### **NOTE:**

*The number shown above is accessible only with a touch-tone phone.*

## **REPORTING SAFETY DEFECTS**

**NOTES**

Safety defects must be reported to the National Highway Traffic Safety Administration (NHTSA) and Harley-Davidson.

### **NHTSA STATEMENT:**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Harley-Davidson.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Harley-Davidson.

To contact NHTSA, you may either call the Auto Safety Hot Line toll-free at 1-800/424-9393 (or 366-0123 in Washington D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the hot line.

# HARLEY-DAVIDSON LIMITED WARRANTY (12 MONTHS/UNLIMITED MILEAGE)

*Harley-Davidson Warrants to the first retail purchaser and authorized transferees of our new 2000 model motorcycles/sidecars that any authorized Harley-Davidson Dealer will repair or replace without charge any parts (except tires, maintenance items and battery under certain conditions) found under normal use in the U.S.A. or Canada to be defective in factory materials or workmanship, and upon the following terms and conditions:*

## DURATION AND TRANSFER

1. The duration of this limited warranty is twelve months, measured from the date of initial retail purchase from an authorized Harley-Davidson Dealer.
2. Any unexpired portion of this limited warranty may be transferred, with written authorization, upon the resale of the motorcycle/sidecar during the warranty period. To obtain authorization, a transfer application must be filed with Harley-Davidson and the motorcycle/sidecar must pass inspection by one of our authorized Dealers. The customer is responsible for any charge incurred for work performed by the Dealer beyond the inspection procedure itself. (See your Harley-Davidson Owner's Manual for complete details.)

## OWNER OBLIGATIONS

1. To qualify for warranty protection, you and the selling Dealer must complete the Warranty Registration Form and return it to us within 10 days after delivery. We will then send you an Owner-Warranty Identification Card.
2. To obtain warranty service, return your motorcycle/sidecar at your expense within the warranty period to any authorized Dealer. You must be able to present your Owner-Warranty Identification Card and/or Owner's Manual upon our Dealer's request. Our Dealer should be able to provide warranty service during normal business hours and as soon as possible,

depending upon the workload of the Dealer's service department and the availability of necessary parts.

## EXCLUSIONS

This warranty will not apply to any motorcycle/sidecar as follows:

1. Which has not been operated or maintained as specified in the Owner's Manual.
2. Which has been abused, altered outside of original factory specifications, improperly stored or used "off the highway", for racing or competition of any kind.
3. Which has had the odometer removed or tampered with.

## OTHER LIMITATIONS

This warranty does not cover:

1. Parts and labor for normal maintenance as recommended in the Owner's Manual, including such items as the following: lubrication, oil and filter change, fuel system cleaning, battery maintenance, engine tune-up, spark plugs, light bulbs, brake, clutch and chain/belt adjustment (including chain replacement).
2. Seats, saddlebags, paint, chrome, or trim deterioration caused by ordinary wear and tear, exposure or improper maintenance.

## IMPORTANT/READ CAREFULLY

1. Our Dealers are independently owned and operated and may sell other products. Because of this, HARLEY-DAVIDSON IS NOT RESPONSIBLE FOR THE SAFETY, QUALITY, OR SUITABILITY OF ANY NON-HARLEY-DAVIDSON PART, ACCESSORY OR DESIGN MODIFICATION INCLUDING LABOR WHICH MAY BE SOLD AND/OR INSTALLED BY OUR DEALERS.
2. THERE IS NO OTHER EXPRESS WARRANTY (OTHER THAN EMISSIONS AND NOISE WARRANTIES) ON THE MOTORCYCLE. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS LIMITED TO THE DURATION OF THIS WARRANTY.
3. TO THE FULLEST EXTENT ALLOWED BY LAW, HARLEY-DAVIDSON AND ITS DEALERS SHALL NOT BE LIABLE FOR LOSS OF USE, INCONVENIENCE, LOST TIME, COMMERCIAL LOSS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES.
4. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

**Harley-Davidson Motor Company ■ P.O. Box 653 ■ Milwaukee, Wisconsin 53201, U.S.A.**



## HARLEY-DAVIDSON EMISSION CONTROL SYSTEM WARRANTY

The following warranty applies to the emission control system and is in addition to the LIMITED WARRANTY, and NOISE CONTROL SYSTEM WARRANTY.

Harley-Davidson Motor Company warrants to the first owner and each subsequent owner that this vehicle is designed and built so as to conform at the time of sale with applicable regulations of the U.S. Federal Environmental Protection Agency at the time of manufacture and that it is free from defects in materials and workmanship which cause this motorcycle not to meet U.S. Environmental Protection Agency Standards within 5 years or 18,641 miles (30,000 kilometers) whichever occurs first.

The warranty period shall begin on the date the motorcycle is delivered to the first retail purchaser or, if the motorcycle is placed in service as a demonstrator or company vehicle prior to sale at retail, on the date it is first placed in service.

### THE FOLLOWING ITEMS ARE NOT COVERED BY THE EMISSION CONTROL SYSTEM WARRANTY

1. Failures which arise as a result of misuse, alterations, accident or non-performance of maintenance as specified in the Owner's Manual.
2. The replacement of parts (such as spark plugs, fuel and oil filters, etc.) used in required maintenance.
3. Loss of time, inconvenience, loss of motorcycle use or other consequential damages.
4. Any motorcycle on which the odometer mileage has been changed so that the mileage cannot be determined.

### RECOMMENDATIONS FOR REQUIRED MAINTENANCE

*IT IS RECOMMENDED THAT ANY EMISSION SYSTEM MAINTENANCE BE PERFORMED BY AN AUTHORIZED HARLEY-DAVIDSON DEALER USING GENUINE HARLEY-DAVIDSON REPLACEMENT PARTS. THE MAINTENANCE, REPLACEMENT OR REPAIR OF THE EMISSION CONTROL SYSTEM MAY BE PERFORMED BY ANY OTHER QUALIFIED SERVICE OUTLET OR INDIVIDUAL. NON-GENUINE PARTS MAY BE USED ONLY IF SUCH PARTS ARE CERTIFIED TO COMPLY WITH U.S. ENVIRONMENTAL PROTECTION AGENCY STANDARDS.*

Harley-Davidson Motor Company, P.O. Box 653 Milwaukee, Wisconsin 53201, U.S.A.

## HARLEY-DAVIDSON NOISE CONTROL SYSTEM WARRANTY

The following warranty applies to the noise control system and is in addition to the LIMITED WARRANTY, and EMISSION CONTROL SYSTEM WARRANTY.

Harley-Davidson Motor Company warrants to the first owner and each subsequent owner that this vehicle is designed and built so as to conform at the time of sale with applicable regulations of the U.S. Environmental Protection Agency (as tested following F-76 Drive-By test procedure) at the time of manufacture and that it is free from defects in materials and workmanship which cause this motorcycle not to meet U.S. Environmental Protection Agency Standards within 1 year or 3,730 miles (6,000 kilometers) whichever occurs first.

The warranty period shall begin on the date the motorcycle is delivered to the first retail purchaser or, if the motorcycle is placed in service as a demonstrator or company vehicle prior to sale at retail, on the date it is first placed in service.

### THE FOLLOWING ITEMS ARE NOT COVERED BY THE NOISE CONTROL SYSTEM WARRANTY

1. Failures which arise as a result of misuse, alterations, or accident as specified in the Owner's Manual.
2. Replacing, removing, or modifying any portion of the NOISE CONTROL SYSTEM (consisting of the exhaust system and air intake/cleaner assembly) with parts not certified to be noise legal for street use.
3. Loss of time, inconvenience, loss of motorcycle use or other consequential damages.
4. Any motorcycle on which the odometer mileage has been changed so that the mileage cannot be determined.

### RECOMMENDATIONS FOR REQUIRED MAINTENANCE

*IT IS RECOMMENDED THAT ANY NOISE SYSTEM MAINTENANCE BE PERFORMED BY AN AUTHORIZED HARLEY-DAVIDSON DEALER USING GENUINE HARLEY-DAVIDSON REPLACEMENT PARTS. THE MAINTENANCE, REPLACEMENT OR REPAIR OF THE NOISE CONTROL SYSTEM MAY BE PERFORMED BY ANY OTHER QUALIFIED SERVICE OUTLET OR INDIVIDUAL. NON-GENUINE PARTS MAY BE USED ONLY IF SUCH PARTS ARE CERTIFIED TO COMPLY WITH U.S. ENVIRONMENTAL PROTECTION AGENCY STANDARDS.*

Harley-Davidson Motor Company, P.O. Box 653 Milwaukee, Wisconsin 53201, U.S.A.

**NOTES**



## REGULAR SERVICE INTERVALS

Regular lubrication and maintenance will help keep your new Harley-Davidson operating at peak performance. Your Harley-Davidson Dealer knows best how to service your motorcycle with factory approved methods and equipment assuring you of thorough and competent workmanship.

### NOTE:

*See MAINTENANCE RECORDS. Regular maintenance interval operations are required to keep your new motorcycle warranty in force. The use of other than Harley-Davidson approved parts and service procedures may void the warranty. Any alterations to the emission system components, such as the carburetor and exhaust system, may be in violation of Federal and State laws.*

### WARNING

Follow regular maintenance intervals. The regular maintenance intervals given in this manual are intended to be used as guidelines for service. Failure to follow regular maintenance intervals, could result in death or serious injury.

### WARNING

Use care under adverse conditions (severe cold, extreme heat, very dusty environment, very bad roads, through standing water, etc.). If you operate your motorcycle under adverse conditions, you should perform the regular maintenance intervals more frequently to ensure the safe operation of your motorcycle. Failure to do so could result in death or serious injury.

**NOTES**

## FIRST SCHEDULED MAINTENANCE

Springer models (FLSTS and FXSTS), because of their unique design features, require first scheduled maintenance at 500 miles. All other Harley-Davidson models require First scheduled maintenance at 1000 miles (1600 km).

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mileage

\_\_\_\_\_  
Dealer (or other) Signature

OWNER RECORD

## FIRST SCHEDULED MAINTENANCE

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

DEALER RECORD

## FIRST SCHEDULED MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean magnetic drain plug.
- 7. Check and adjust rear drive belt.
- 8. Inspect brake pads and discs for wear.
- 9. Check brake fluid reservoir levels and condition.
- 10. Inspect oil lines and brake system for leaks.
- 11. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 12. Check, adjust operation of enrichener.
- 13. Inspect fuel valve, lines and fittings for leaks.
- 14. Check tire pressure and inspect tread.
- 15. Check and clean battery connections.
- 16. Check operation of all electrical equipment and switches.
- 17. Check stabilizer links and engine mounts.
- 18. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 19. Check rear fork pivot nut tightness. See dealer.
- 20. Check engine idle speed adjustment.
- 21. Check front fork bearing adjustment. See dealer.
- 22. Road test.

## FIRST SCHEDULED MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean magnetic drain plug.
- 7. Check and adjust rear drive belt.
- 8. Inspect brake pads and discs for wear.
- 9. Check brake fluid reservoir levels and condition.
- 10. Inspect oil lines and brake system for leaks.
- 11. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 12. Check, adjust operation of enrichener.
- 13. Inspect fuel valve, lines and fittings for leaks.
- 14. Check tire pressure and inspect tread.
- 15. Check and clean battery connections.
- 16. Check operation of all electrical equipment and switches.
- 17. Check stabilizer links and engine mounts.
- 18. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 19. Check rear fork pivot nut tightness. See dealer.
- 20. Check engine idle speed adjustment.
- 21. Check front fork bearing adjustment. See dealer.
- 22. Road test.

**2500 MILE  
(4000 KM)  
MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**2500 MILE  
(4000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 2500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 2500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**5000 MILE  
(8000 KM)  
MAINTENANCE**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mileage

\_\_\_\_\_  
Dealer (or other) Signature

**OWNER RECORD**

**5000 MILE  
(8000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

**DEALER RECORD**

## 5000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.

## 5000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.



**7500 MILE  
(12000 KM)  
MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**7500 MILE  
(12000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

---

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 7500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 7500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**10,000 MILE  
(16000 KM)  
MAINTENANCE**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mileage

\_\_\_\_\_  
Dealer (or other) Signature

**OWNER RECORD**

**10,000 MILE  
(16000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

**DEALER RECORD**

## 10,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

## 10,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

**12,500 MILE  
(20000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**12,500 MILE  
(20000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 12,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 12,500 MILE MAINTENANCE

- 1. inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**15,000 MILE  
(24000 KM)  
MAINTENANCE**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mileage

\_\_\_\_\_  
Dealer (or other) Signature

**OWNER RECORD**

**15,000 MILE  
(24000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

**DEALER RECORD**

## 15,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.

## 15,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.



**17,500 MILE  
(28000 KM)  
MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**17,500 MILE  
(28000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

---

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 17,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 17,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**20,000 MILE  
(32000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**20,000 MILE  
(32000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 20,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Change front fork oil.
- 23. Check stabilizer links and engine mounts.
- 24. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 25. Check ignition timing (XL only) and vacuum hose.
- 26. Road test.

## 20,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Change front fork oil.
- 23. Check stabilizer links and engine mounts.
- 24. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 25. Check ignition timing (XL only) and vacuum hose.
- 26. Road test.

**22,500 MILE  
(36000 KM)  
MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**22,500 MILE  
(36000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 22,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 22,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**25,000 MILE  
(40000 KM)  
MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**25,000 MILE  
(40000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 25,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.

## 25,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.



**27,500 MILE  
(44000 KM)  
MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**27,500 MILE  
(44000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

---

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 27,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 27,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**30,000 MILE  
(48000 KM)  
MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**30,000 MILE  
(48000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 30,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

## 30,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

**32,500 MILE  
(52000 KM)  
MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**32,500 MILE  
(52000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

---

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 32,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 32,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**35,000 MILE  
(56000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**35,000 MILE  
(56000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 35,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.

## 35,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enrichener.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.



**37,500 MILE  
(60000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**37,500 MILE  
(60000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 37,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 37,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**40,000 MILE  
(64000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**40,000 MILE  
(64000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 40,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Change front fork oil.
- 23. Check stabilizer links and engine mounts.
- 24. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 25. Check ignition timing (XL only) and vacuum hose.
- 26. Road test.

## 40,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Change front fork oil.
- 23. Check stabilizer links and engine mounts.
- 24. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 25. Check ignition timing (XL only) and vacuum hose.
- 26. Road test.

**42,500 MILE  
(68000 KM)  
MAINTENANCE**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mileage

\_\_\_\_\_  
Dealer (or other) Signature

**OWNER RECORD**

**42,500 MILE  
(68000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

**DEALER RECORD**

## 42,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 42,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**45,000 MILE  
(72,000 KM)  
MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**45,000 MILE  
(72,000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 45,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enricher.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.

## 45,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Check, adjust operation of enricher.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.
- 17. Check front fork bearing adjustment.
- 18. Check operation of all electrical equipment and switches.
- 19. Check and clean battery connections.
- 20. Inspect spark plugs.
- 21. Check ignition timing (XL only) and vacuum hose.
- 22. Check engine idle speed adjustment.
- 23. Road test.



**47,500 MILE  
(76,000 KM)  
MAINTENANCE**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Mileage**

\_\_\_\_\_  
**Dealer (or other) Signature**

**OWNER RECORD**

**47,500 MILE  
(76,000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_  
**Owner's Signature**

\_\_\_\_\_  
**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 47,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

## 47,500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant and clean magnetic drain plug.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery connections.
- 10. Inspect air cleaner and service as required.
- 11. Inspect oil lines and brake system for leaks
- 12. Road test.

**50,000 MILE  
(80,000 KM)  
MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**50,000 MILE  
(80,000 KM)  
MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 50,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check ignition timing (XL only) and vacuum hose.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

## 50,000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug.
- 4. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the speedometer cable.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- 13. Lubricate and adjust steering head bearings.
- 14. Check engine idle speed adjustment.
- 15. Check, adjust operation of enrichener.
- 16. Inspect fuel valve, lines and fittings for leaks.
- 17. Check operation of all electrical equipment and switches.
- 18. Check and clean battery connections.
- 19. Change spark plugs.
- 20. Check tire pressure and inspect tread.
- 21. Check wheel spoke tightness.
- 22. Check stabilizer links and engine mounts.
- 23. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- 24. Check ignition timing (XL only) and vacuum hose.
- 25. Road test.

## SERVICE LITERATURE

For more detailed and complete technical and parts information the following publications are available, through your Harley-Davidson dealer. Order by part numbers below.

### 2000 Touring Models

**Publication ..... Part No.**

#### Owner's Manuals

Touring Owner's Manual .....	99466-00
Dyna Owner's Manual .....	99467-00
Sportster Owner's Manual .....	99468-00
Softail Owner's Manual .....	99469-00A

#### Service Manuals

Dyna Service Manual .....	99481-00
Softail Service Manual .....	99482-00
Touring Service Manual .....	99483-00
Sportster Service Manual .....	99484-00

#### Parts Catalogs

Dyna Parts Catalog .....	99439-00
Sportster Parts Catalog .....	99451-00
Touring Parts Catalog .....	99456-00
Softail Parts Manual .....	99455-00A

## **NOTES**

## Symbols

(GVWR) Gross Vehicle Weight Rating	8, 30, S-7
(NHTSA) National Highway Traffic Safety Administration	141
(V.I.N.) Vehicle Identification Number	15, S-3

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