

1999 HARLEY-DAVIDSON® FXR² OWNER'S MANUAL



THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT YOUR NEW HARLEY-DAVIDSON MOTORCYCLE

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.

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.

YOUR OWNER'S MANUAL

Welcome to the Harley-Davidson Motorcycling Family! 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.

WE CARE ABOUT YOU

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. Protect your privilege to ride by joining the American Motorcyclist Association.

Harley-Davidson Motor Company

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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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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 certain non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling, with possible injury to yourself or others. Removing or altering factory installed standard parts may also affect performance and cause injury. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty.

- Use only Genuine Harley-Davidson approved parts and accessories. Use of certain Screamin' Eagle® or 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. 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 momen-

tary disturbance could distract the rider, possibly causing loss of vehicle control, and could result in death or serious injury.

- See BREAK-IN - THE FIRST 1000 MILES 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.

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.

CAUTION

Avoid any contact with the exhaust system and wear clothing that will completely cover the legs when riding. The exhaust pipes and mufflers get very hot when the engine is running and remain too hot to touch, even after the engine is turned off. Failure to do so, may result in minor or moderate injury.

- When carrying passengers, ***it is your responsibility*** to instruct them on proper riding procedures. (See Riding

Tips for Motorcyclist 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.

SAFE OPERATING RULES (CONTINUED)

- See MAINTENANCE SCHEDULING 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 wheel bearings and 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. Failure to do so, could result in death or serious injury.

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.

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, 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.) To exceed GVWR an 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.

SAFE OPERATING RULES (CONTINUED)

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 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
- Weather and traffic conditions on the highway dictate adjusting your speed and driving habits accordingly.

ACCESSORIES AND CARGO

Harley-Davidson 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

Unbalanced motorcycle. Do not load weight or install accessories improperly on the motorcycle. Failure to do so, can affect the motorcycle's stability, handling characteristics, 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 and accessories and the maximum weight of the rider, passenger and cargo that may be safely carried.) Failure to do so, can lead to instability 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. Failure 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

FXR² 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 certain non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling, with possible injury to yourself or others. Removing or altering factory installed standard parts may also affect performance and cause injury. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty.

WARNING

Do not add a sidecar to the FXR² motorcycle. The FXR² motorcycle was **NOT** designed for sidecar use. Use of the vehicle for this purpose could result in death or personal injury.

WARNING

The front end components of the FXR² and their design relationships to each other are very important. Altering these relationships by modifying the FXR² front end could adversely affect the handling of the motorcycle and result in personal injury.

WARNING

DO NOT ignore model/design specifications. Doing so constitutes vehicle misuse and could adversely affect handling of the motorcycle. As a result, motor vehicle damage and/or personal injury can occur.

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.

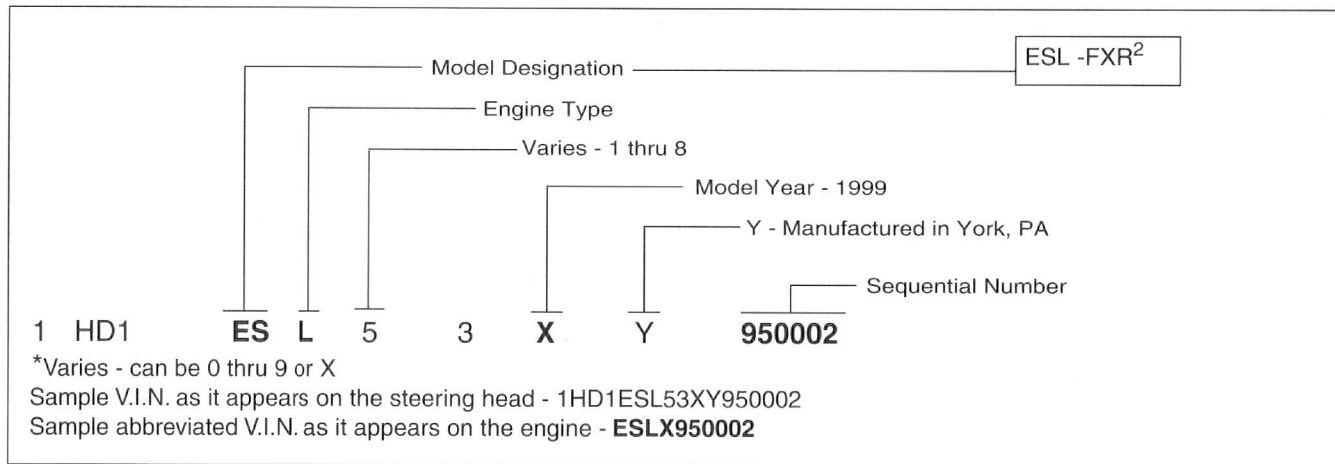


Figure 1. Vehicle Identification Number

BREAK-IN - THE FIRST 1000 MILES

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 1000 miles 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, keep the engine speed below 2500 RPM in any gear; however, do not lug the engine.
 2. Up to 1000 miles, 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 for the first 50 miles.*
 - *DO NOT exceed 55 MPH for the first 50 - 1000 miles. This will assure future performance and durability.*

WARNING

See CONTROLS & INDICATORS section. Read the CONTROLS AND INDICATORS section before riding your motorcycle. Failure to do so, may result in death or serious injury.

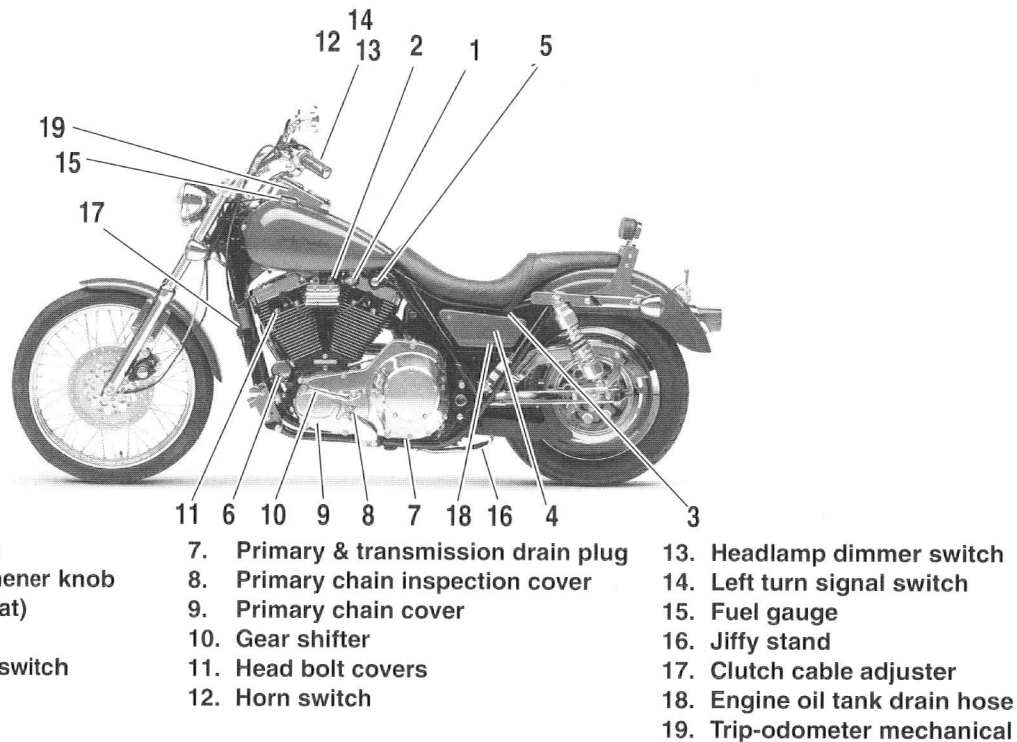


Figure 2. FXR²- Left Side View (Typical)

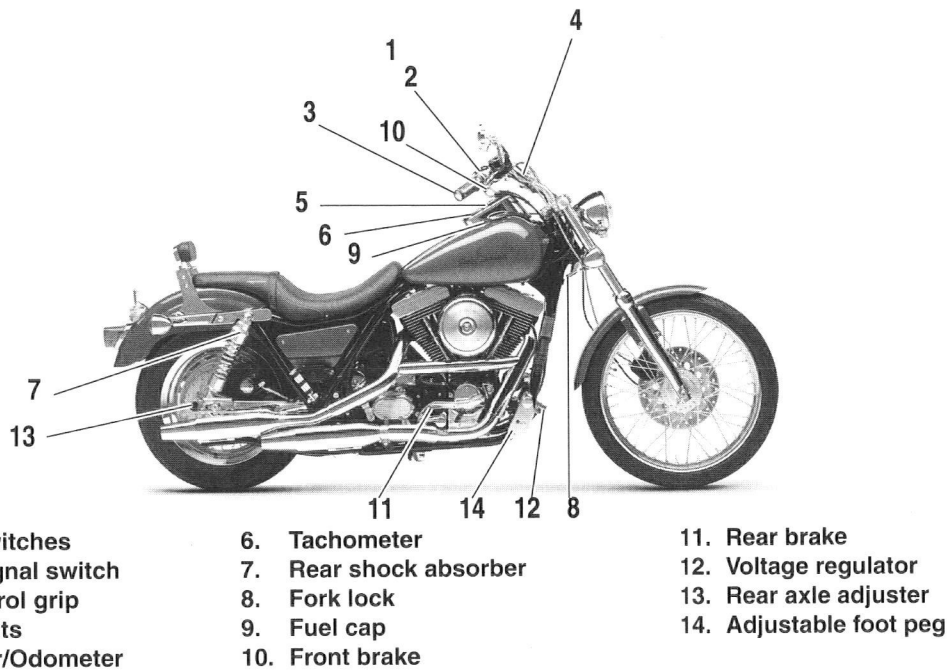


Figure 3. FXR² - Right Side View (Typical)

NOTE:

This Owner's Manual covers 1999 FXR² 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.

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. Be sure to record all your key numbers in the space provided at the front of this book.

See Figure 4. 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 4. Turn switch to OFF position and remove key before locking bike. If you leave the ignition in the ACC. POSITION, the instrument lights will discharge the battery.
2. To remove the key from the ignition, push the key in and turn it counterclockwise.
3. 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 not be removed.**
- **The lights work when the switch is in the IGNITION position, as required by law in some localities.**

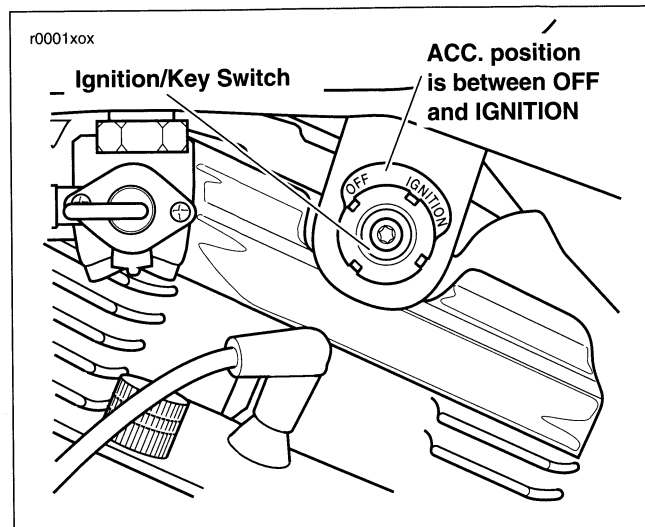


Figure 4. Ignition/Light Key Switch

IGNITION/LIGHT KEY SWITCH (CONTINUED)

ELECTRIC STARTER SWITCH

NOTE:

Switch must be in RUN position to operate engine.

See Figure 5. The electric starter switch (Item no. 6) is located on the right handlebar control group.

1. Put the engine stop run/switch (Item no. 7) in the RUN position and the transmission in neutral.
2. Turn ignition ON and push the START switch to operate starter motor.

ENGINE STOP SWITCH

See Figure 5. Engine stop/run switch (Item no. 7) 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. Turn the key to the OFF position.

THROTTLE CONTROL GRIP

See Figure 5. 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.

3. Screw the knob in, to increase friction on grip to provide a damping effect on throttle motion.

NOTE:

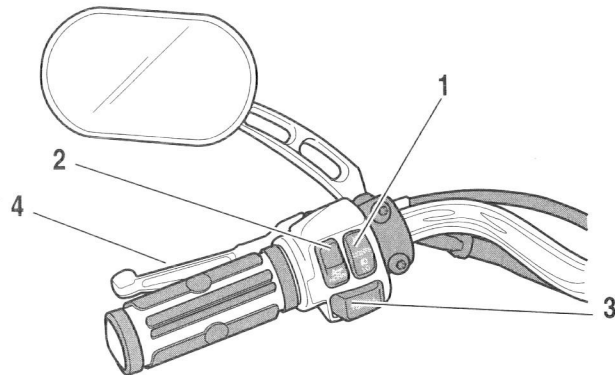
The throttle friction adjustment screw should not be used under normal stop and go operating conditions.

WARNING

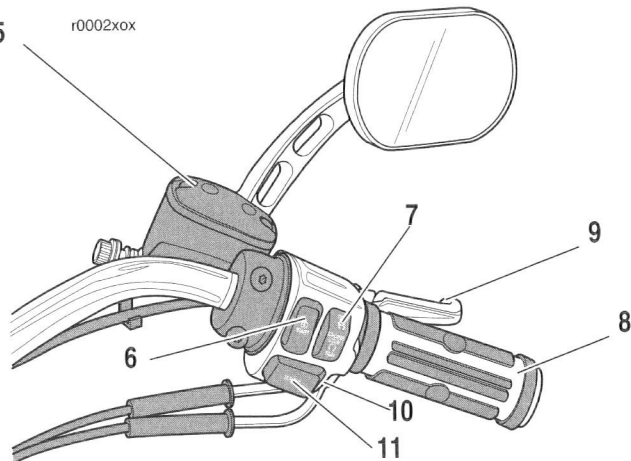
Do not tighten the throttle friction adjustment screw to the point where the engine will not return to idle automatically. This could lead to loss of control of motorcycle, resulting in death or serious injury.

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

r0003xox



5 r0002xox



5. Master cylinder
6. Electric starter switch
7. Engine stop/run switch
8. Throttle control grip
9. Brake hand lever
10. Throttle friction adjusting screw
(Not shown)
11. Right turn signal switch

Figure 5. Handlebar Controls

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 6. 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.

NOTES:

See OPERATION section for detailed starting procedures.

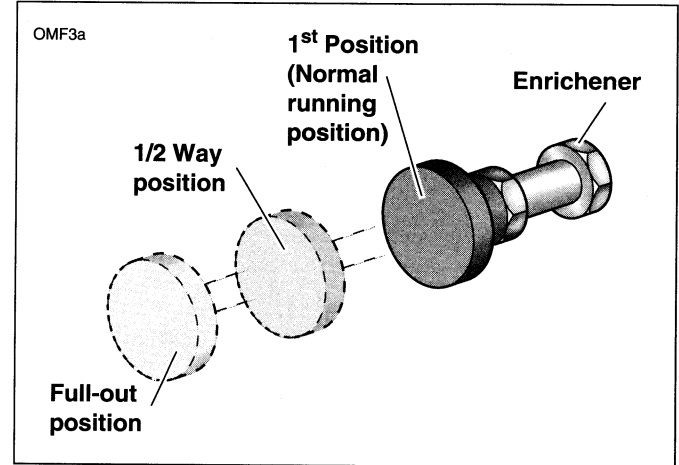


Figure 6. Setting the Enrichener

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 5. 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 Figure 7. The gear shifter is located on the left side, where it is operated with the toe of the left foot.

- 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.

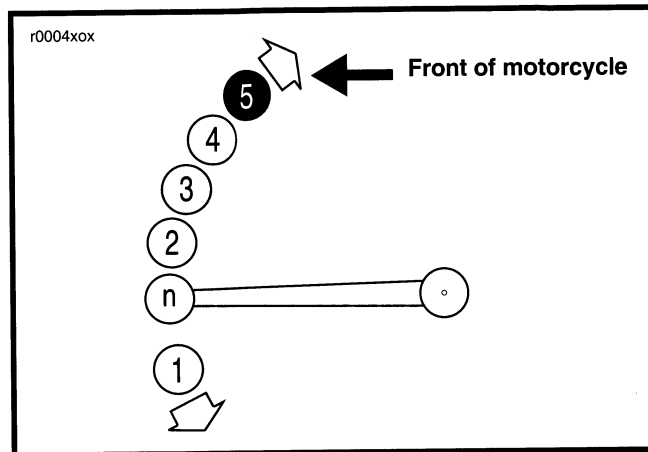


Figure 7. Foot Shift Lever

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.

GEAR SHIFTER (CONTINUED)

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.

NOTE:

The gear shifter mechanism on 1340cc—5-speed motorcycles does not permit shifting the transmission to neutral from second gear. Neutral can only be engaged from first gear.

Rolling 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

NOTE:

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

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 5. The brake hand lever (Item no. 9) controls the front wheel brake and is located on the right handlebar. It is operated by the fingers of the right hand.

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 5. 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 5. 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 5. The right handlebar turn signal switch (Item no. 11) operates the right front and right rear flashing lamps.

The left handlebar turn signal switch (Item no. 3) 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

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 5. 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 5. Turn ON the hazard warning 4-way flasher by momentarily (1-1/2 seconds) depressing BOTH turn signal switches at once.
2. Turn OFF the 4-way flasher the same way.

INDICATOR LIGHTS

See Figure 8. 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 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.

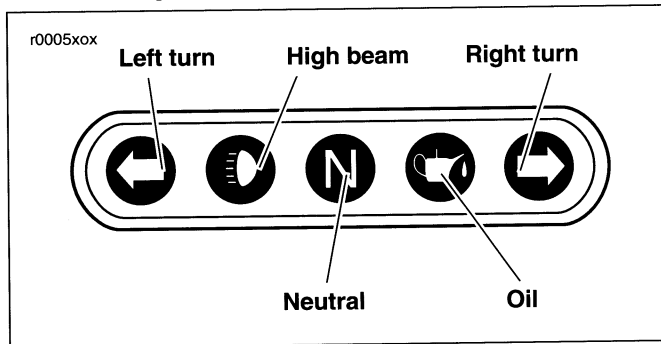


Figure 8. Indicator Lights

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.

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.

FUEL GAUGE

See Figure 9. The fuel gauge indicates the approximate amount of fuel in the fuel tank(s) and is located to the left of the speedometer.

TACHOMETER

See Figure 9. The tachometer registers the engine speed in revolutions per minute (RPM).

CAUTION

See OPERATING RECOMMENDATIONS section. Do not operate the engine above maximum safe RPM as shown under OPERATION (red zone on tachometer). Lower the RPM by upshifting to a higher gear or reducing the amount of throttle. Failure to do so, may cause equipment damage.

SPEEDOMETER/ODOMETER

See Figure 9. 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. Failure to do so, could result

in loss of control of the motorcycle, death or serious injury.

CAUTION

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

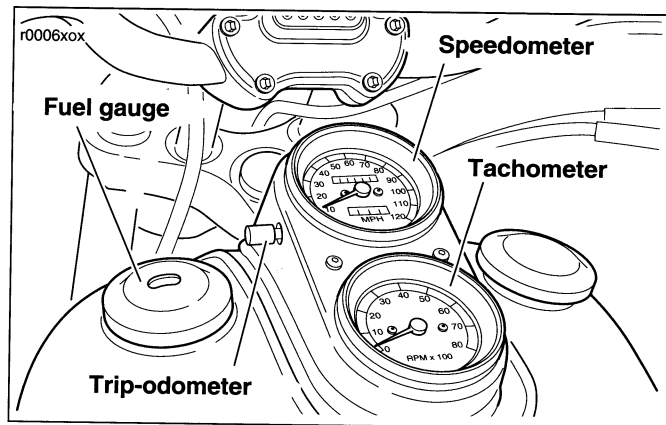


Figure 9. Speedometer/Tachometer

TRIP-ODOMETER (MECHANICAL)

Use the trip/odometer to register number of miles traveled on a trip or between refueling. Use the knurled knob on the dash panel to reset the trip odometer to zero.

MIRRORS (CONVEX)

See Figure 10. Your vehicle is equipped with convex mirrors and are referred to as Aluminator™ Billet Style Mirrors. A convex mirror has 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.



Objects in mirrors are closer than they appear. Always use caution when judging distance of objects in mirrors. Failure to do so, may result in minor or moderate 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.

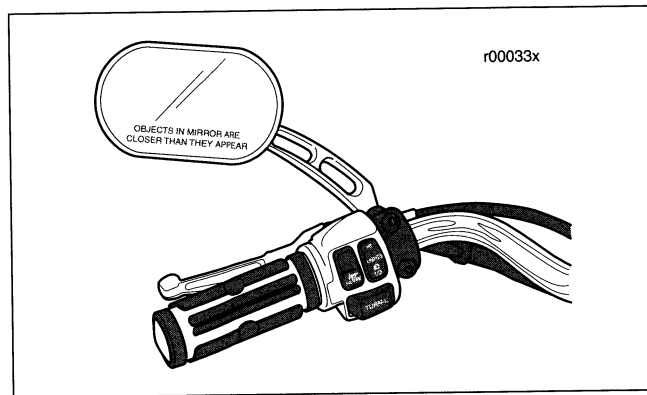


Figure 10. Aluminator™ Billet Style Mirrors

JIFFY STAND

See Figure 11. The jiffy stand is located on the left side of the motorcycle and swings outward to support the motorcycle for parking.

⚠ CAUTION

Always park the motorcycle on a level, firm surface. An unlevel motorcycle may result in minor or moderate injury.

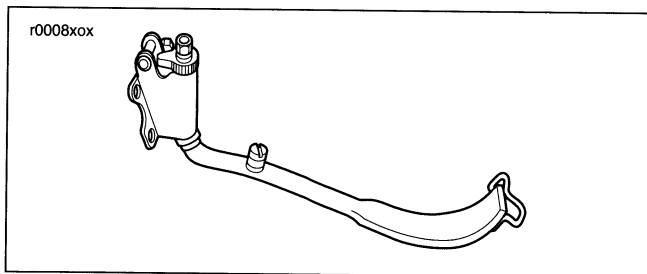


Figure 11. Jiffy Stand (Typical)

⚠ 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, possibly causing loss of vehicle control, and could result in death or serious injury.

FORK LOCK



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

See Figure 12. The FXR² fork lock is located on the center of the lower front fork bracket. Turning fork to the left aligns hole in bracket with hole in steering head. A high strength padlock is available from your dealer to lock the fork in this position. Order Part No. 45737-72A.

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

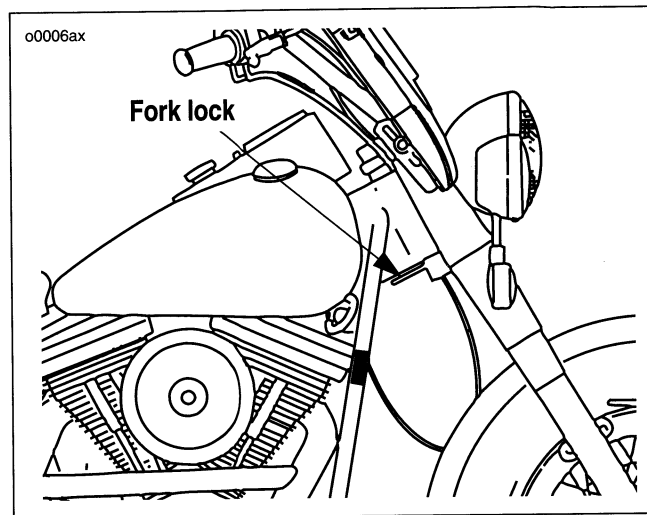


Figure 12. Fork Lock - FXR²

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 13. Turn the handle down horizontally to turn OFF main fuel supply.
- Turn the handle down horizontally to turn OFF reserve fuel supply.

FUEL SUPPLY VALVE

CARBURETED-MODELS (CONTINUED))

- See Figure 13. Turn the handle down vertically to turn ON main fuel supply.
- Turn the handle up vertically 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.*

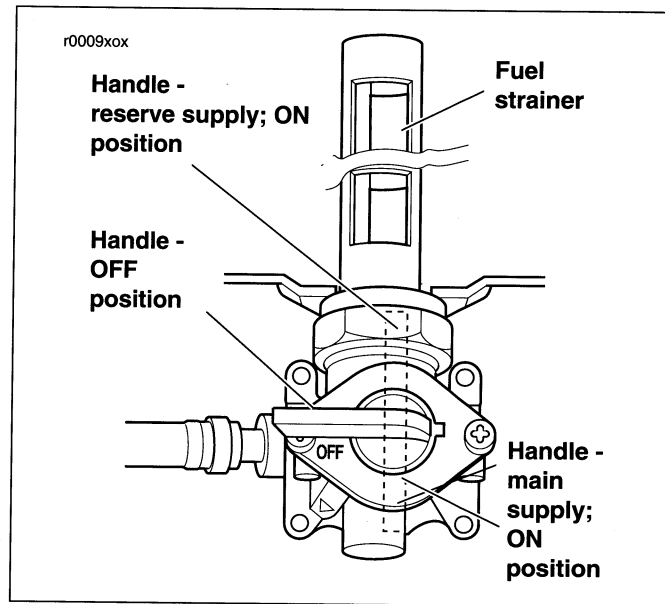


Figure 13. Fuel Supply Valve

FUEL FILLER CAP

See Figure 14. To open, turn cap counterclockwise and lift up. To close turn cap clockwise until it clicks. The ratchet action of the fuel cap prevents overtightening.

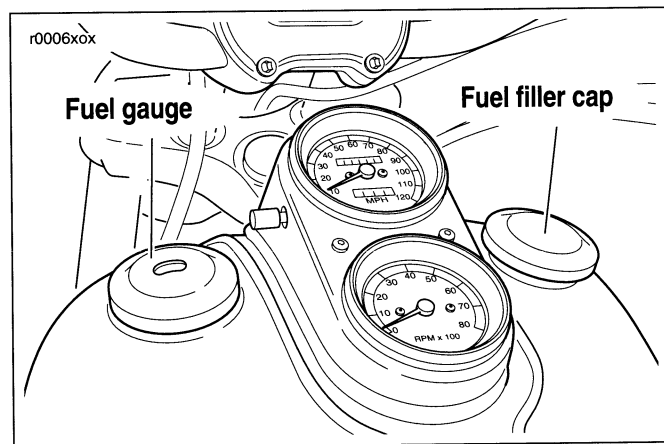


Figure 14. FXR² Model Fuel Cap

NOTE:

FUEL FILLER CAP TURNS APPROXIMATELY A 3/4 TURN BEFORE IT STARTS UNSCREWING.

See page 1 and review safety procedures under the warning listed below.

WARNING

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

WARNING

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. 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, could result in an explosion, fire, death or serious injury.

FUEL FILLER CAP (CONTINUED)

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, could result in an explosion, fire, 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 model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emissions control system.

PROCEDURE - REAR SHOCK ABSORBER ADJUSTMENT

See Figure 15. The rear shock absorber spring preload can be adjusted for the weight the motorcycle is to carry. The FXR² has five preload graduations. Notice the adjustment marks as you turn the collar.

The average weight solo rider might use the extended spring preload position (One or two adjustment marks).

1. Place your hand around the upper collar of the shock.
 2. Turn the collar clockwise to increase the preload or pressure.
- Use the adjustment marks as a reference for equal adjustment of shocks on both the right side and the left side of the motorcycle. A heavy solo rider might require additional preload or pressure (Third adjustment mark).

REAR SHOCK ABSORBER (CONTINUED)

CAUTION

Do not turn the collar of the shock counterclockwise below the fifth adjustment mark. Doing so, may result in equipment damage.

Adding a passenger may require maximum preload (Fifth adjustment mark).

Turn the collar counterclockwise to decrease the preload or pressure.

! 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, death or serious injury.

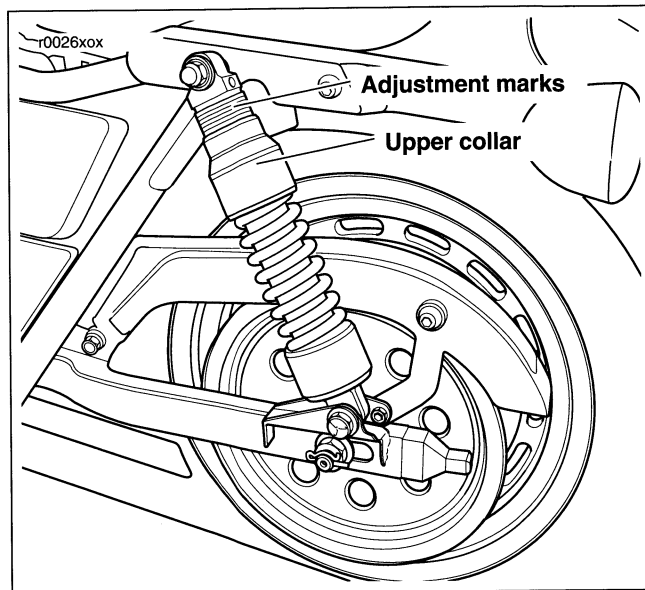


Figure 15. Rear Shock Adjustment

FOOTREST ADJUSTMENT

1. See Figure 3. Locate the footrests on your motorcycle.
2. See Figure 16. Locate the fasteners and washers on the footrest.
3. Loosen the fastener that is closest to the footrest.
4. Remove the fastener and washers from the motorcycle frame and the footrest.
5. Loosen the fastener that is the farthest away from the footrest.
6. Pivot the footrest until the hole selected lines up with the hole in the frame.
7. Insert the washers and fastener into the footrest and motorcycle frame.
8. Tighten the fastener to 17-21 in-lbs (1.92-2.37 Nm) that is closest to the footrest.
9. Tighten the fastener to 17-21 in-lbs (1.92-2.37 Nm) that is farthest away from the footrest.
10. Repeat the above steps for the opposite footrest.

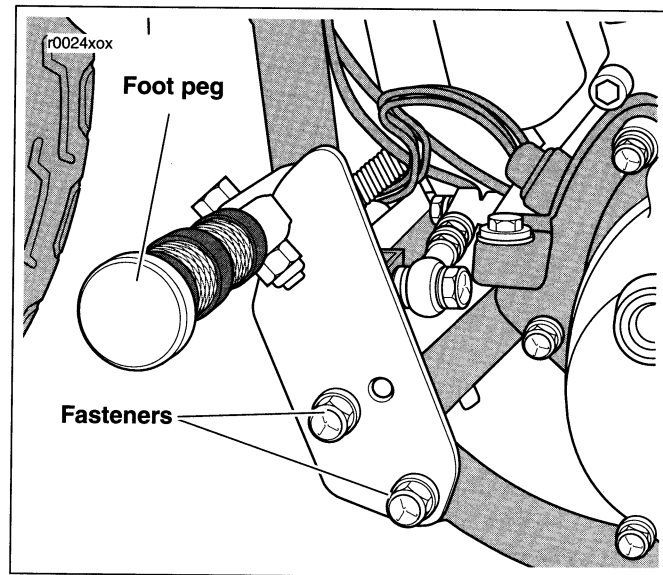


Figure 16. Footrest Adjustment

NOTES

OPERATING RECOMMENDATIONS

CAUTION

Do not run the engine at extremely high RPM with clutch disengaged or transmission in neutral. 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 FXR² Model.

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, 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 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, can cause loss of control and could result in death or serious injury.

BREAK-IN - THE FIRST 1000 MILES

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

We ask that for the first 1000 miles and to wear-in critical parts, please observe the simple riding rules below. This will assure future performance and durability.

1. During the first 50 miles, keep the engine speed below 2500 RPM in any gear; however, do not lug the engine.
 2. Up to 1000 miles, vary the engine speed and avoid 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 for the first 50 miles.*
 - *DO NOT exceed 55 MPH for the first 50 - 1000 miles.*

PRE-RIDING CHECKLIST

WARNING

See **CONTROLS & INDICATORS** section. Read **CONTROLS AND INDICATORS** section 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. Fill fuel tank slowly to prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. 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, could result in an explosion, fire, death or serious injury.

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.

2. See section. Check oil tank oil level.
3. Check controls to be sure they are operating properly; operate the front and rear brakes, throttle, clutch and shifter.
4. Check steering for smoothness by turning the handlebars through the full operating range.
5. 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.

6. 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.
7. Check all electrical equipment and switches including the stoplamp, turn signals and horn, for proper operation.
8. Check for any fuel, oil or hydraulic fluid leaks.
9. Check rear belt adjustment.
10. 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 cause equipment damage.

NOTE:

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

See Recommended Engine Oils in MAINTENANCE/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:

- ***H-D CV Carburetors have an enrichener circuit that will cause the engine to idle at approximately 2000 RPM with the engine at normal operating temperature and the enrichener 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 enrichener knob should be pushed all the way in.***
- ***Continuing to use the enrichener 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 enrichener 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 5. Turn the fuel valve to the ON position. BE SURE THROTTLE IS CLOSED.
2. Pull enrichener knob to full out position.
3. Turn the ignition switch ON and press starter switch to operate the electric starter.

CV CARBURETORS (CONTINUED)

4. See Figure 6. After initial 15-30 second warm-up, ride for 3 minutes or 2 miles with enrichener knob in full out position.
5. After 3 minutes or 2 miles, push the enrichener knob in to the 1/2 way position. Ride 2 minutes or 2 miles.
6. After 2 minutes or 2 miles, 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.

COOL ENGINE

Outside Temperature Warmer than 60°F

1. See Figure 13. Turn the fuel valve to the ON position. BE SURE THROTTLE IS CLOSED.
2. Pull enrichener knob to full out position.
3. Turn the ignition switch on and press starter switch to operate the electric starter.
4. See Figure 6. After initial 15-30 second warm-up, ride for 1 minute or 1/2 mile with enrichener knob in full out position.
5. After 1 minute or 1/2 mile, 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, push the enrichener knob fully in.

WARM OR HOT ENGINE

1. Turn the fuel valve to the ON position.
2. Open throttle 1/8 - 1/4 turn. Turn on ignition switch and operate electric starter. DO NOT USE ENRICHENER.

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.

STOPPING THE ENGINE

1. See Figure 5. Stop the engine by turning OFF the engine stop switch on right handlebar.
2. 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. 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 7. 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 5. 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,

See Figure 17. Then 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.
 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.

SHIFTING GEARS (CONTINUED)

See Figure 17. 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, 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.

See Gear Shifter in the CONTROLS AND INDICATORS sec-

tion. The recommended shift points are as follows:

Table 1. Changing Gear Speeds

GEAR CHANGE	SPEED
Acceleration (Upshift)	
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)
Deceleration (Downshift)	
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)

SHIFTING GEARS (CONTINUED)

NOTE:

- *The gear shifter mechanism on 5-speed motorcycles does not permit shifting the transmission to neutral from second gear. Neutral can only be engaged from first gear.*

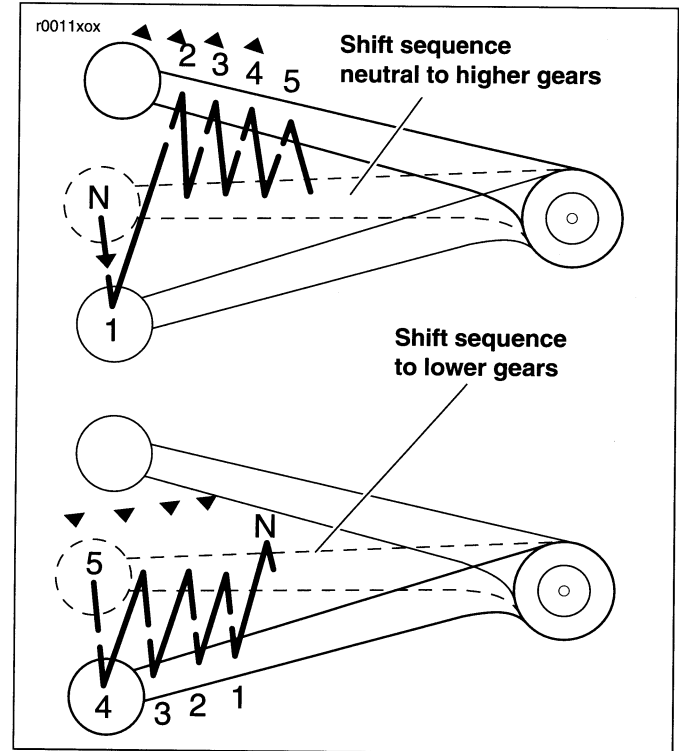


Figure 17. Speed Shifting Sequence

NOTES

SAFE OPERATING MAINTENANCE

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.

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.

BREAK-IN MAINTENANCE

NOTE:

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

See CHECK AT FIRST 1000 MILES section. After a new motorcycle has been ridden its first 1000 miles, 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.

BREAK-IN MAINTENANCE (CONTINUED)

We recommend the following maintenance procedures be performed by your Harley-Davidson Dealer.

WARNING

Stop the engine and support the motorcycle securely before performing all service procedures. Failure to do so, could result in death or serious injury.

WARNING

Service should be performed using proper tools, in an adequately lighted and ventilated work area. Failure to do so, could result in death or serious injury.

WARNING

When working on the motorcycle, do not support motorcycle by placing supports under the brake pedal. To do so, could result in damage to the brake system, death or serious injury.

CHECK AT FIRST 1000 MILES

NOTE:

- See **MAINTENANCE SCHEDULING** section for a complete listing. The following is an overview.
 - The **FXR²** model requires first scheduled maintenance at 1000 miles.
1. Change the engine oil.
 2. Replace the oil filter.
 3. Inspect air cleaner and service as required.
 4. Change primary chain case lubricant and clean magnetic drain plug. See Dealer.
 5. Check/adjust primary chain. See Dealer.
 6. Check clutch adjustment. See Dealer.
 7. Inspect brake pad linings and discs for wear.
 8. Check brake fluid level and condition. See Dealer.
 9. Inspect oil lines and brake system for leaks.

CHECK AT FIRST 1000 MILES (CONTINUED)

CAUTION

DO NOT lubricate the enrichener cable on C.V. Carburetors; the cable must have sliding resistance to work properly. Doing so may result in equipment damage.

10. Lubricate the following:
 - a. Front brake hand lever.
 - b. Throttle control cables.
 - c. Clutch control cable (and hand lever).
 - d. Jiffy Stand.
11. Check operation of throttle and enrichener controls.
12. Check engine idle speed adjustment.
13. Check battery electrolyte level; check and clean connections.
14. Check operation of all electrical equipment and switches.
15. See CHECK AT FIRST 1000 MILES. Check tightness of all critical fasteners. See Service Manual.
16. Check stabilizer links and engine mounts.
17. Check tire pressure and inspect tread.
18. Check rear fork pivot nut tightness. See Dealer.
19. Check/adjust rear drive belt.
20. Change transmission lubricant and clean magnetic drain plug.
21. Inspect fuel valve, lines and fittings for leaks.
22. Check front fork bearing adjustment. See Dealer.
23. Road test.

Table 2. Lubrication Summary

Service Operation	Pre-ride	1000	5000	10,000
1. Wheel bearings				X
2. Steering head bearings				X
3. Speedometer cable				X
4. Throttle control cables		X	X	X
5. Front brake hand lever		X	X	X
6. Throttle grip sleeve		X	X	X
7. Engine oil (pre-ride check and located under seat)	X	X	X	X
8. Transmission lubricant	X	X	X	X
9. Primary chain case lubricant		X	X	X
10. Jiffy Stand		X	X	X
11. Clutch control cable (and hand lever, if necessary)		X	X	X
12. Oil filter		X	X	X
13. Front fork oil				X

r0012xox

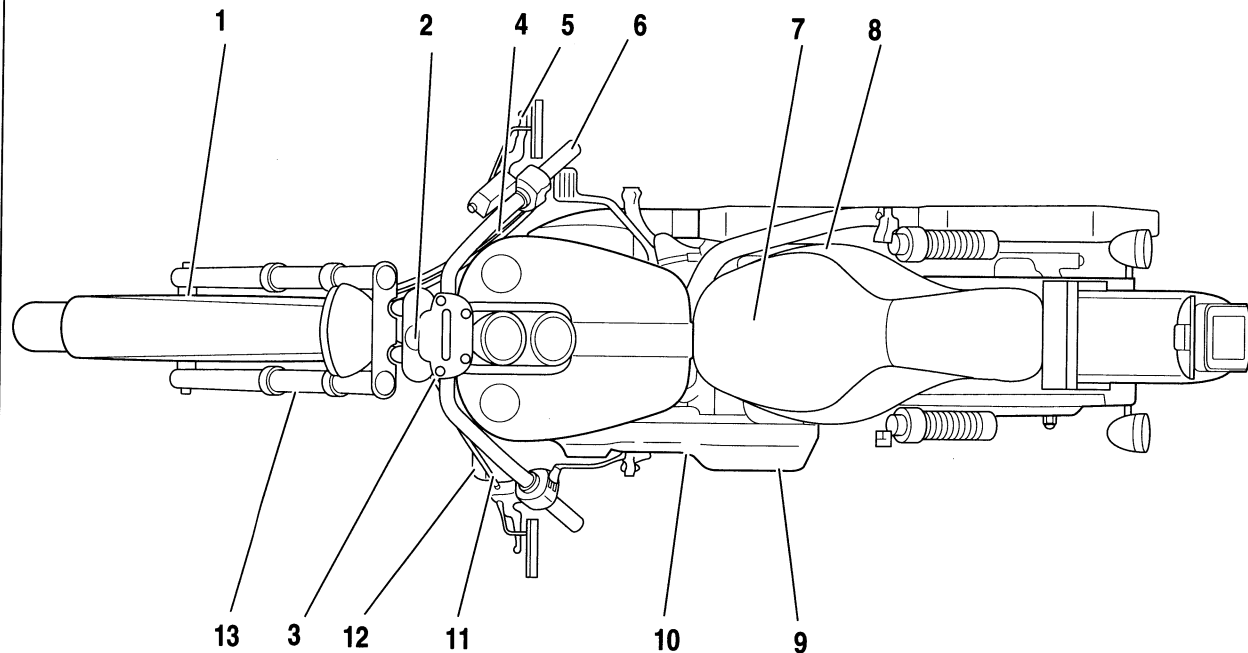


Figure 18. Lubrication Points

REGULAR SERVICE INTERVALS

See Lubrication Points section. 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 REGULAR MAINTENANCE INTERVALS. 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.

NOTE:

See Table 3. The following codes are for the REGULAR MAINTENANCE INTERVALS Table:

- I - Inspect & if necessary correct, clean or replace.
- A - Adjust.
- R - Replace or change.
- T - Tighten to proper torque
- L - Lubricated with specified lubricant
- X - Perform

Table 3. REGULAR MAINTENANCE INTERVALS

<u>ODOMETER READING</u> <u>SERVICE OPERATIONS</u> (see chart code below)	1 0 0 0 mi	2 5 0 0 mi	5 0 0 0 mi	7 5 0 0 mi	1 0 0 0 mi	1 2 5 0 mi	1 5 0 0 mi	1 7 0 0 mi	2 0 5 0 mi	2 2 5 0 mi	2 5 0 0 mi	2 7 5 0 mi	3 0 0 0 mi	3 2 5 0 mi	3 5 0 0 mi	3 7 5 0 mi	4 0 0 0 mi	4 2 5 0 mi	4 5 0 0 mi	4 7 5 0 mi	5 0 0 0 mi
Change engine oil and filter	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
Inspect air cleaner, service as required	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Hydraulic lifter oil screen	I		I		I		I		I		I		I		I		I		I		I
Change primary chain case lube and clean drain plug	RI		RI		RI		RI		RI		RI		RI		RI		RI		RI		RI
Check and adjust rear belt	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Clutch adjustment	I		I		I		I		I		I		I		I		I		I		I
Change transmission lubricant and clean drain plug	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
Lube speedometer cable	L		L		L		L		L		L		L		L		L		L		L
Inspect brake pad linings and discs for wear	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Check brake fluid reservoir levels and condition	I		I		I		I		I		I		I		I		I		I		I
Inspect oil lines and brake system for leaks	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Lubricate front brake hand lever, throttle control cables, clutch control cables (and hand lever)	L		L		L		L		L		L		L		L		L		L		L
Lubricate and adjust steering head bearings	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 3. REGULAR MAINTENANCE INTERVALS

<u>ODOMETER READING</u> <u>SERVICE OPERATIONS</u> (see chart code below)	1 0 0 0 mi	2 5 0 0 mi	5 0 0 0 mi	7 5 0 0 mi	1 0 0 0 mi	1 2 5 0 mi	1 5 0 0 mi	1 7 5 0 mi	2 0 0 0 mi	2 2 5 0 mi	2 5 0 0 mi	2 7 5 0 mi	3 0 0 0 mi	3 2 5 0 mi	3 5 0 0 mi	3 7 5 0 mi	4 0 0 0 mi	4 2 5 0 mi	4 5 0 0 mi	4 7 5 0 mi	5 0 0 0 mi
Check front fork bearing adjustment			I				I			I				I					I		
Check, adjust operation of enrichener, throttle control	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Inspect fuel valve, lines and fittings for leaks	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Clean fuel tank filter screen									X								X				
Check operation of all electrical equipment & switches	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Check battery electrolyte level and clean connections	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Change spark plugs	I		I		R		I		R		I		R		I		R		I		R
Check tire pressure and inspect tread	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Check wheel spoke tightness			I		I		I		I		I		I		I		I		I		I
Repack wheel bearings					X				X				X				X				X
Change front fork oil					X				X				X				X				X
Repack rear fork bearings					X				X				X				X				X
Check stabilizer links and engine mounts					I				I				I			I	I				I
Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners	T				T				T				T				T				T

Table 3. REGULAR MAINTENANCE INTERVALS

<u>ODOMETER READING</u> <u>SERVICE OPERATIONS</u> (see chart code below)	1 0 0 0 mi	2 5 0 0 mi	5 0 0 0 mi	7 5 0 0 mi	1 0 0 0 mi	1 5 0 0 mi	1 0 0 0 mi	1 5 0 0 mi	2 0 0 0 mi	2 5 0 0 mi	2 0 0 0 mi	2 5 0 0 mi	3 0 0 0 mi	3 5 0 0 mi	3 0 0 0 mi	3 5 0 0 mi	4 0 0 0 mi	4 5 0 0 mi	4 0 0 0 mi	4 5 0 0 mi	5 0 0 0 mi
Check ignition timing and vacuum hose			I		I		I		I		I		I		I		I		I		I
Check engine idle speed	I		I		I		I		I		I		I		I		I		I		I
Road test	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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 Recommended Engine Oils section. If it is necessary to add oil and Harley-Davidson 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 4. 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

CHECKING OIL LEVEL

See Figure 19. 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.

Pre-ride inspection - oil should register on dipstick of cold engine. Do not add oil to full mark on a cold engine.

The motorcycle should be ridden to ensure oil is hot and is at normal operating oil pressure.

When the above conditions are met, turn the engine off.

1. 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. To do 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, equipment damage and/or equipment malfunction.

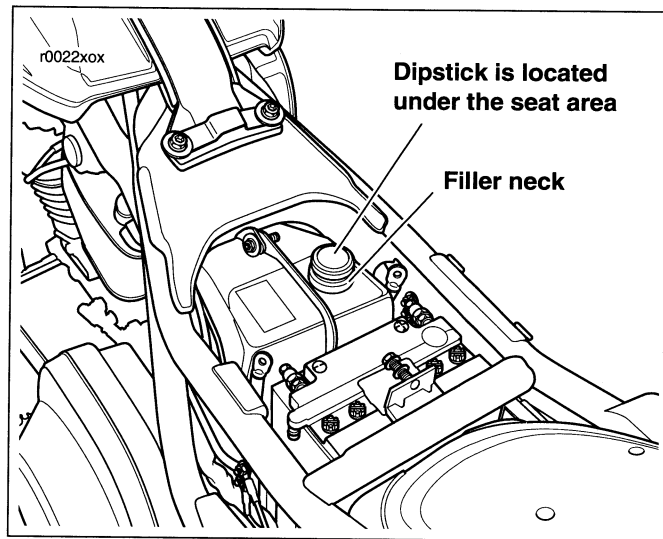


Figure 19. Dipstick Location

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.

1. See Figure 20. Remove dipstick and note oil level.
 2. 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.
- Check engine oil supply at each complete fuel refill.
 - Oil should be changed after the first 1000 miles for a new engine, and thereafter at 5000 mile intervals in normal service at *warm or moderate* temperatures.
 - Oil change intervals should be shorter in cold weather - see Winter Lubrication.

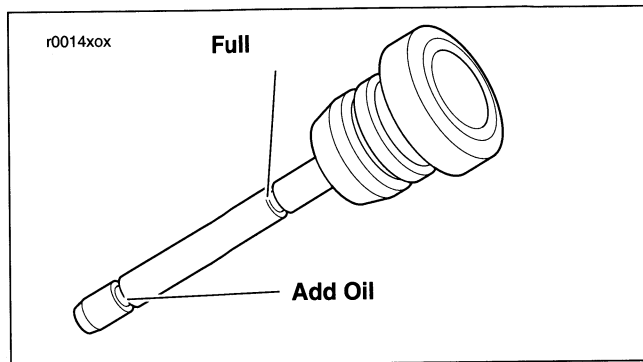


Figure 20. Engine Oil Level

DRAINING THE OIL

CAUTION

See Table 4. Do not switch oil brands indiscriminately; some oils interact chemically when mixed. Use of inferior oils or non-detergent oils can damage the engine.

1. See Figure 38. Loosen the fasteners to remove the FXR² Side Cover located on the left side of the motorcycle.
2. See Figure 21. Locate the engine oil tank drain hose inside the FXR² Side Cover.
3. Place a drain pan directly underneath the engine oil tank drain hose.
4. Loosen the spring clamp to release the engine oil tank drain hose.
5. Pry the engine oil tank drain hose loose from the hose fixture.
6. Completely drain oil tank of used oil.
7. Place the engine oil tank drain hose back on the hose fixture.
8. Tighten the spring clamp on the engine oil tank drain hose.
9. See Figure 20. See Table 4. Refill with fresh oil.
10. Place the FXR² Side Cover over the engine oil tank drain hose area.

11. Tighten the fasteners to secure the FXR² Side Cover.

- If service is extremely hard or on dusty roads, drain and refill at shorter intervals.
- Draining should be done after a ride while oil is very warm.
- It is not necessary to drain the crankcase because it does not accumulate used oil.
- The oil filter should be replaced every time the oil is changed.

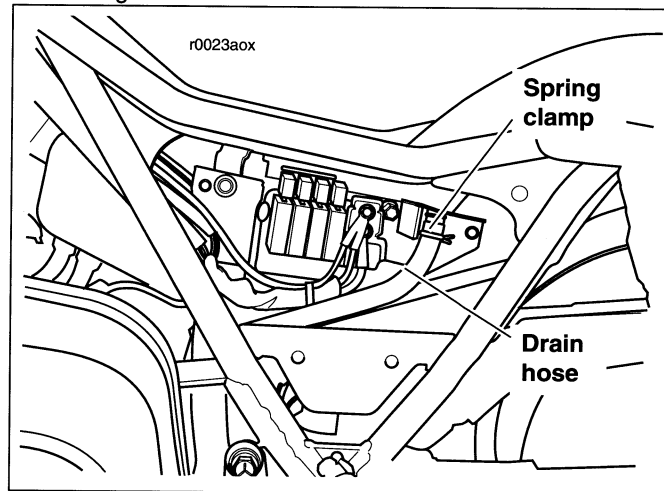


Figure 21. Oil Tank Drain Hose

ENGINE OIL FILTER

See Figure 22. Oil filters are located on an oil filter mount in front of the engine.

The FXR² Model uses the Chrome (63798-99) filter.

1. See DRAINING The OIL. Completely drain the engine oil tank before removing oil filter.
2. Remove the oil filter.
3. Clean filter gasket contact surface on mounting plate (surface should be smooth and free of any debris or old gasket material).
4. Apply a thin film of oil to gasket contact surface on mounting plate, gasket and new oil filter.
5. Screw filter onto adapter until gasket contacts plate surface, then apply another 3/4 to 1 full turn.

WARNING

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

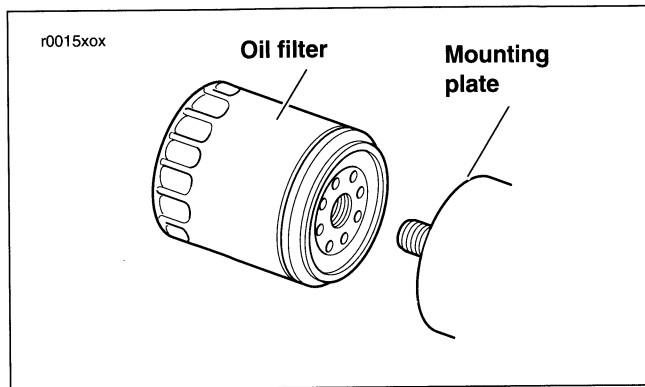


Figure 22. Engine Oil Filter

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.

WINTER LUBRICATION (CONTINUED)

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.

HYDRAULIC LIFTER OIL FILTER SCREEN

See Figure 23. The hydraulic lifter oil filter screen is located in the crankcase above the oil pump. Your dealer will inspect the screen every 5000 miles. Oil screen is installed with closed end up.

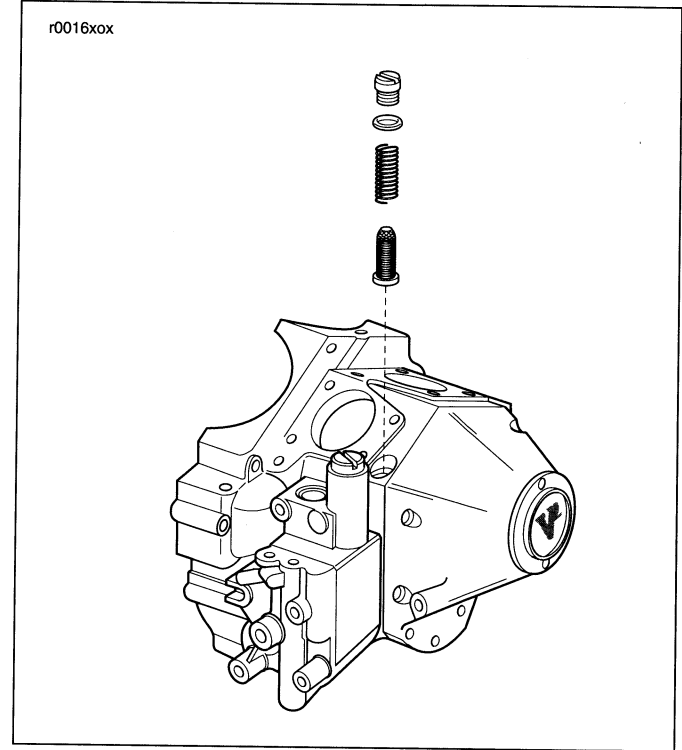


Figure 23. Hydraulic Lifter Oil Filter Screen

TRANSMISSION LUBRICATION

See Figure 24. The transmission lubricant level should be checked monthly.

- When filling the transmission, use Harley-Davidson TRANSMISSION LUBRICANT, Part No. 99903-93 (qt.), 99904-93 (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 24. 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.

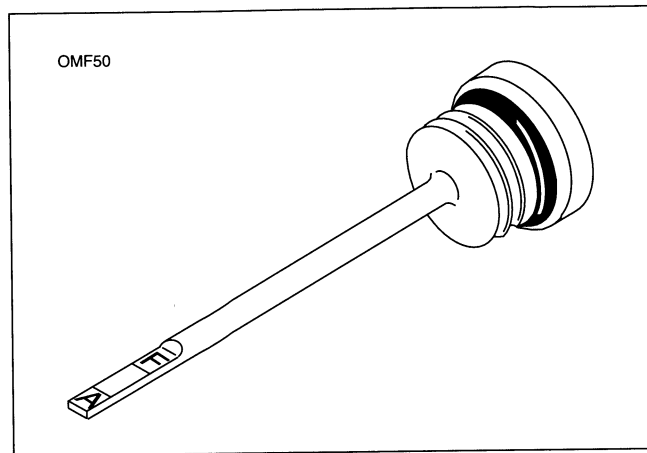


Figure 24. Transmission Lubricant Dipstick

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 miles and thereafter seasonally or every 5000 miles, whichever comes first.

On FXR² models, the transmission magnetic drain plug is located underneath the transmission, on right side of vehicle.

- When installing the drain plug, tighten to 84 - 108 in-lbs (10 -12 Nm) 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, death or serious injury.

PRIMARY CHAIN CASE LUBRICATION - GENERAL

See Figure 25. 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 miles thereafter. Chain case capacity is 32 ounces (946 ml.) on all FXR² models.

CHECKING CHAIN CASE LUBRICANT

1. Position motorcycle STRAIGHT UP and LEVEL.
 2. See Figure 25. 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. 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.

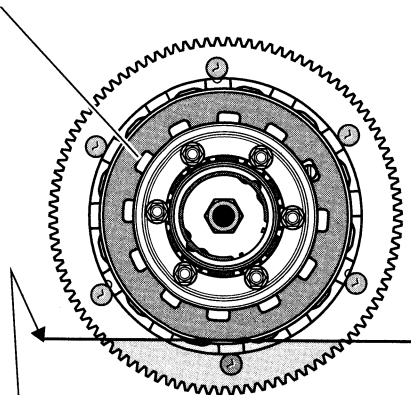
5. Replace clutch inspection cover and secure with screws.
6. Tighten clutch inspection cover to 50-70 in-lbs (6-8 Nm).

NOTE:

Whenever draining chain case lubricant, inspect and clean chain case magnetic drain plug.

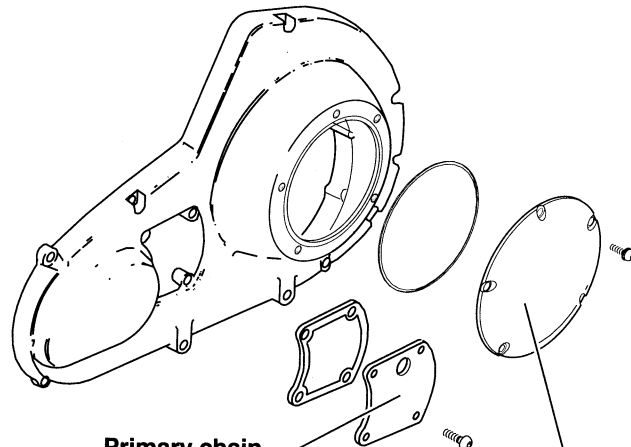
Check clutch adjustment every 5000 miles. We recommend your Harley-Davidson Dealer perform these services for you.

Diaphragm Spring



Lubricant level

With Motorcycle Upright & Level



**Primary chain
inspection
cover**

**clutch
inspection
cover**

Figure 25. Primary Chain case

PRIMARY CHAIN

Primary (front) chain adjustment should be checked initially at 1000 miles, every 5000 miles 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 and every 2500 miles thereafter.

NOTE:

Perform belt tension check BEFORE operating vehicle. Vehicle should be at room temperature and dry, or you may not get a correct measurement.

- The rear wheel must be on the ground with one rider sitting on the motorcycle.

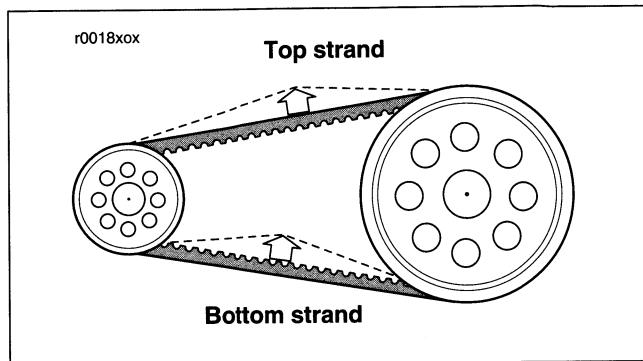


Figure 26. Belt Deflection

- Deflection (measured with 10 lbs. of Force) for the FXR² model is 5/16" - 3/8" at the bottom strand.
1. See Figure 26. Apply 10 lbs of force at the midpoint of the belt's appropriate strand. The deflection should be upward as shown.
- Use BELT TENSION GAUGE, Part No. HD-35381 to check belt tension.

REAR DRIVE BELT (CONTINUED)

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 calipers when servicing motorcycle. A misaligned rear wheel and/or brake caliper could cause the rear brake disc to bind, resulting in death or serious injury.

CHASSIS LUBRICATION

Greasing

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

CAUTION

Do not switch brands/greases indiscriminately because some greases interact chemically when mixed. This can significantly decrease the life of the bearing/bushing. and may result in equipment damage.

2. Repack front and rear wheel bearings every 10,000 miles (more often in adverse conditions), or yearly if operated under winter conditions or prior to storage. Replace seals and axle spacers if they show any wear or distortion.
3. Remove and lubricate handlebar throttle control grip sleeve with fresh graphite every 5000 miles, once each year, or when operation indicates lubrication is necessary.
4. Every 5000 miles lubricate throttle control cables, speedometer drive cable and clutch control cable. Lubricate front brake hand lever and clutch control hand lever only if necessary.
5. Inspect rear swing arm pivot bushings.
6. Pack the steering head bearings with fresh grease at 10,000 mile intervals or every 2 years, whichever occurs first.
7. Lubricate the jiffy stand mechanism with LOCTITE LUBRIPLATE® every 5000 miles.

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 10,000 miles 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 13. 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. 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, enrichener and idle speed adjusting screw. Operation should be checked and adjusted after the first 1000 miles and every 5000 miles 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.

AIR CLEANER

See Figure 27. 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, or more often under dusty conditions.

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

CAUTION

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, may result in minor or moderate 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.

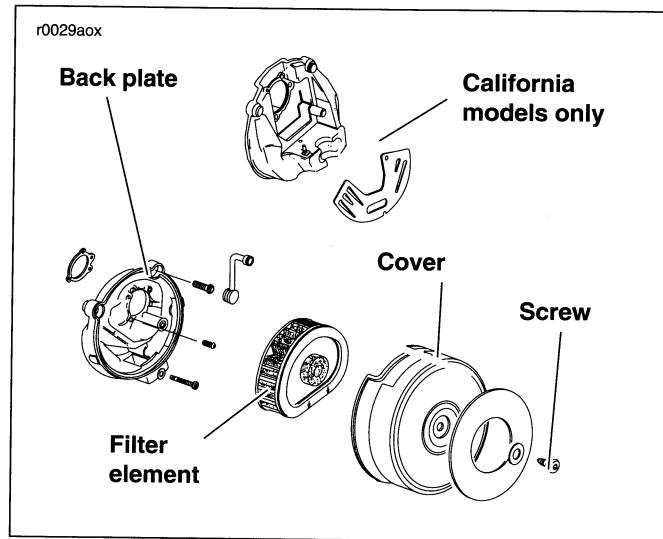


Figure 27. Air Cleaner

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, the 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 Figure 23. Inspect and clean Hydraulic Lifter filter screen. See your Harley-Davidson Dealer for service.

CLUTCH

CAUTION

The clutch control cable must be oiled and adjusted every 5000 miles 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.

BRAKES

CAUTION

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

1. Every 2500 miles, check brake pads and brake discs for wear.
 2. Every 5000 miles, 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 that is available from your Harley-Davidson Dealer.

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.

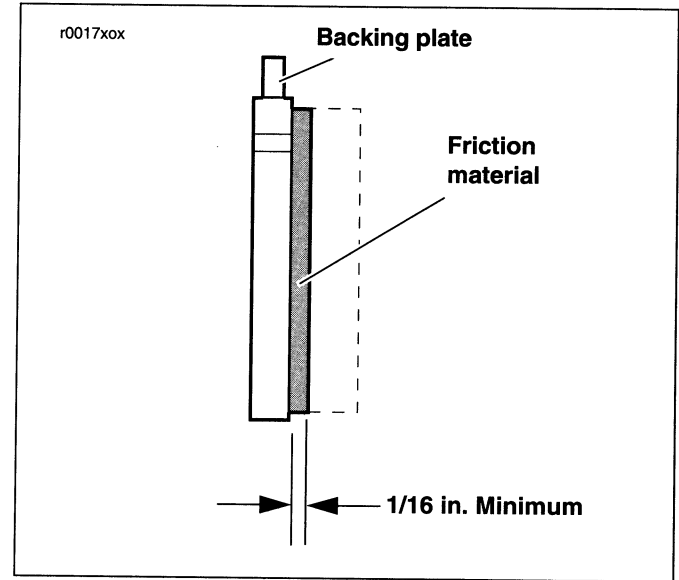


Figure 28. Brake Pad - Side View

BRAKES (CONTINUED)

See Figure 29. 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.

WARNING

Do not ignore routine maintenance schedules for brakes. If this routine maintenance is ignored, loss in braking performance, brake system component damage and death or serious injury could occur.

- If the brake pad friction material is 1/16 in. thick or less (the thickness of a nickel), the pads must be replaced immediately.
- Always replace brake pads in pairs.

See Figure 29. 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 1/4 in. or more away from the brake disc.
 - If it measures less than 1/4 in., replace both brake pads immediately.

NOTE:

This 1/4 in. dimension includes the thickness of the backing plate plus minimum 1/16 in. for friction material.

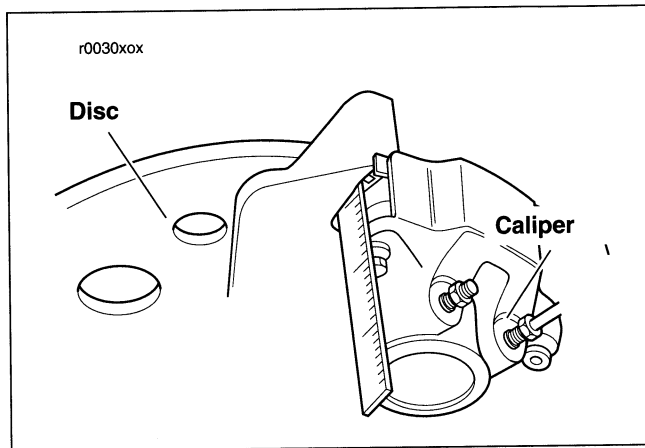


Figure 29. Measuring Rear Brake Outer Pad

TIRES

See TIRES section.

WARNING

Do not exceed maximum tire pressure specification located on tire sidewall. Doing so, could result in tire failure, 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, tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson Dealer. Mismatching tires, tubes, rims and air valves could result in damage to the tire bead during mounting, tire slippage on the rim, tire failure, 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 and will adversely affect traction, steering and handling, possibly leading to personal 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. Failure to do 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

SHOCK ABSORBERS

See SHOCK ABSORBERS. Shock absorbers and rubber bushings should be inspected at 1000 miles and every 5000 miles thereafter for leaks and bushing deterioration.

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 and every 5000 miles thereafter. See your Harley-Davidson Dealer for this service.

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.

ALL MODELS

Vehicle alignment should be checked every 5000 miles 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.

WHEEL BEARINGS

- Bearings should be repacked at 10,000 mile intervals, once a year, prior to storage or during tire replacement.
- Use proper wheel bearing grease and new seals.
- Excessive play or roughness indicates worn bearings that will require replacement.
- Check each time wheel is removed.

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 and every 5000 miles thereafter. Bearings should be lubricated at 10,000 mile 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.

SPARK PLUGS

Check the spark plugs every 5000 miles and replace if necessary. Replace the spark plugs every 10,000 miles 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 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 Harley-Davidson 5R6A spark plug.

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

- Use a torque of 18-22 ft-lbs (24.4-30Nm) 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.

IGNITION TIMING

Ignition timing should be checked every 5000 miles. If ignition timing is not correct, see your Harley-Davidson Dealer.

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 on FXR² models use a two-stage curve. 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.*

NOTES

HEADLAMP

See Figure 30. The headlamps are either sealed beam or replaceable quartz halogen bulb type.

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. Always grab the bulb with paper or a clean dry cloth during handling. Failure to do so, may result in minor or moderate injury.

⚠ CAUTION

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

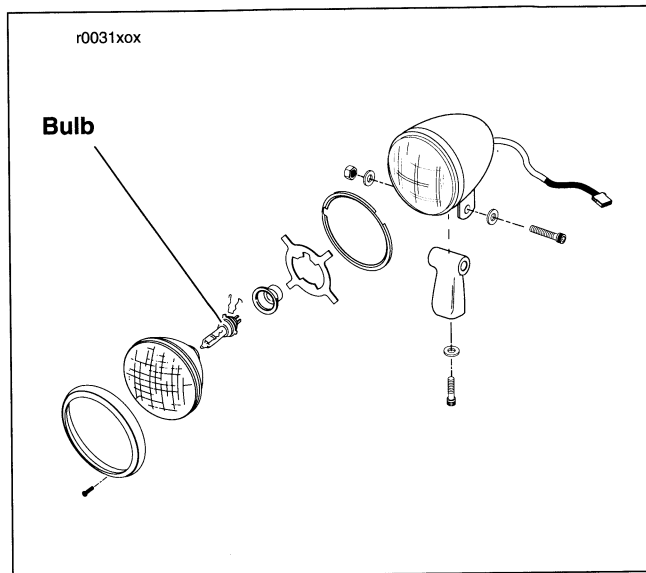


Figure 30. Headlamp

ALTERNATOR CHARGING RATE AND VOLTAGE REGULATOR

See Figure 31. 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.

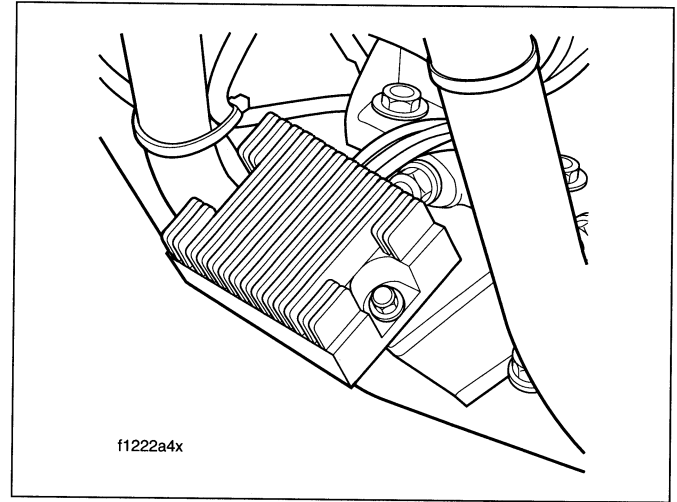


Figure 31. Voltage Regulator

CLASSIC CHROME HEADBOLT COVERS

See MAINTENANCE SCHEDULING. Your FXR² motorcycle is equipped with Classic Chrome Headbolt Covers located on your V-Twin engine near the spark plugs.

1. See Figure 32. Locate the set screw on the headbolt cover.
2. Check the set screw every 1000 miles by using an Allen-wrench.

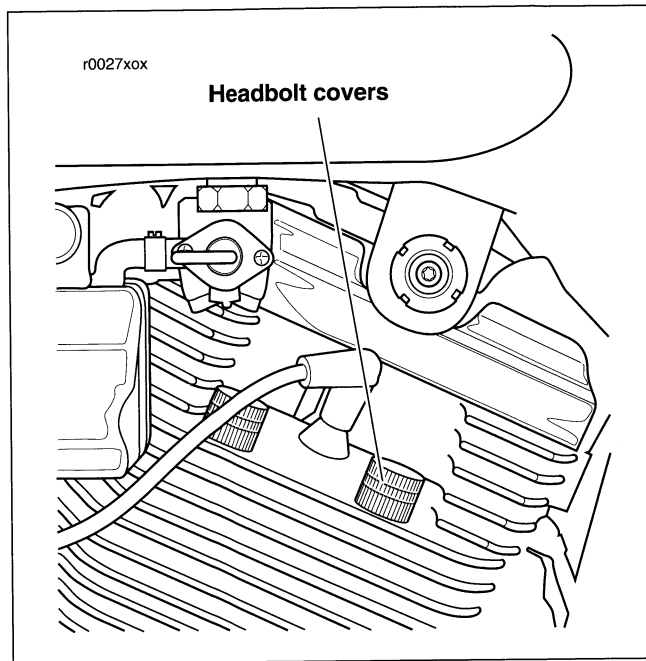


Figure 32. Headbolt Covers

SEAT REMOVAL

This is a general procedure. It applies to all motorcycles with batteries under the seat and slight variations will apply to particular motorcycles.

1. See Figure 33. Remove seat nut from rear fender.
2. Push seat forward while flexing the rear section of the seat upward (the mounting plate under the seat nut must clear the sissy bar back rest).
3. Slide seat to the rear of the motorcycle to loosen (the bracket is located underneath) it from the motorcycle frame.
4. Slightly lift and turn the seat.
5. Pull the seat out from under the grab strap.

SEAT INSTALLATION

1. Slide the seat under the grab strap toward the rear of the motorcycle.
2. Slightly lift down the front of the seat and tilt the back side of the seat up.
3. Slide the front of the seat into the bracket located on the frame.
4. Secure seat nut through into the rear fender.



WARNING

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

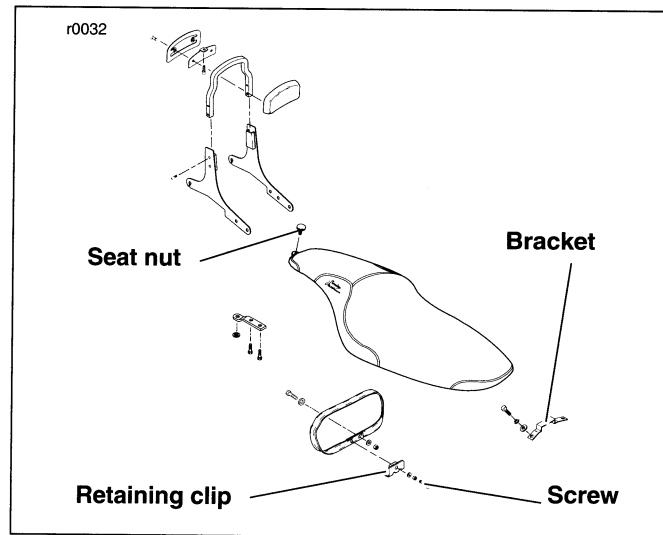


Figure 33. Seat and Mounting Hardware (Typical)

BATTERY

The battery for the FXR² model is located under the motorcycle seat.

CAUTION

Always protect skin and eyes when working near a battery or acid. Batteries contain sulfuric acid which can cause severe burns. Failure to do so, may result in minor or moderate injury.

WARNING

KEEP BATTERIES AND ACID OUT OF THE REACH OF CHILDREN! Batteries contain sulfuric acid which can cause severe burns and is poisonous. Failure to do so, could result in death or serious injury.

ANTIDOTE

External—Flush with water.

Internal —Drink large quantities of water followed by milk of magnesia, vegetable oil, or beaten eggs. Call doctor immediately.

WARNING

Ventilate area when charging battery and keep cigarettes, open flame, and sparks away from battery at all times. Batteries produce explosive hydrogen gas at all times - especially when being charged. Failure to do so, could result in explosion, death or serious injury.

Before Inspection

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

1. Follow steps for seat removal.
2. Loosen the fastener of the retaining clip.
3. See Figure 34. Push in the battery retaining clip and slide it in the left direction to loosen.

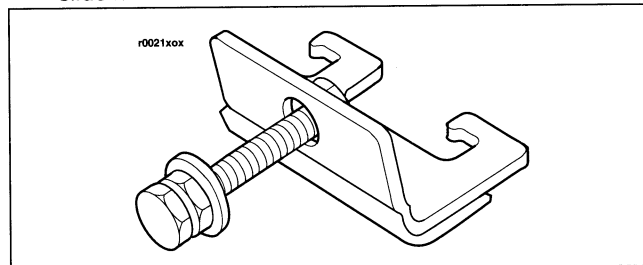


Figure 34. Retaining Clip

BATTERY (CONTINUED)

Battery Inspection

Inspect the battery electrolyte level at least once a month, adding pure distilled water as often as necessary to keep the solution above the plates.

If the motorcycle is not used for an extended period of time, check battery solution level before placing in service.

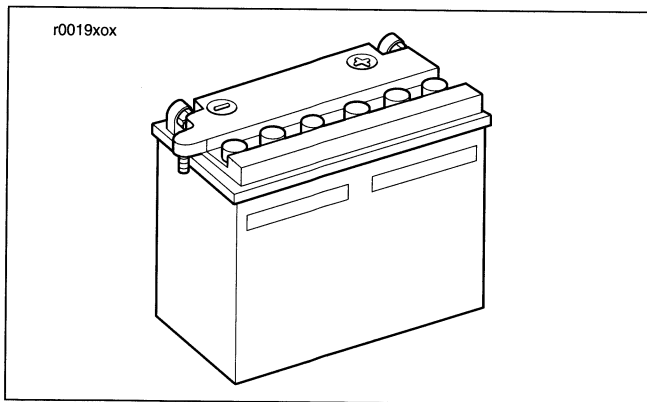


Figure 35. FXR² Battery

Remove the battery filler plugs. With a hydrometer or syringe, add distilled water to each cell to raise level of solution

between upper and lower level limits shown on battery. Motorcycle should be in an upright position to check the solution level.

Clean connections and check tightness on all models every 2500 miles or monthly.

CAUTION

Do not overfill the battery solution level. If battery is overfilled to a higher level than specified, some of the solution will be forced out through the vent tube when battery is charging. This will not only weaken the solution, but also may damage parts near the battery.

CAUTION

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

CAUTION

To prevent battery case damage caused by pressure buildup, be sure vent tube is properly routed and not kinked or obstructed. Failure to do so, may result in equipment damage.

BATTERY SULFATION

See Figure 36. Battery sulfation is the usual reason batteries stop holding an electrical charge.

Sulfation occurs when a battery stands in a discharged condition (low specific gravity of electrolyte) over a period of time or when the battery plates are exposed to the air because of low electrolyte level.

This causes the active lead materials to crystallize, permanently damaging the affected area. When this happens the battery will not hold a charge, and it cannot be restored to full capacity.

It is not true that the battery is no longer discharging when the motorcycle is parked and the ignition is turned off. There are two possible ways for the battery to discharge itself.

1. Self Discharge: This is normal and occurs because the battery discharges internally. Batteries discharge continuously at a rate depending on the ambient temperature and the battery's state of charge.
2. Current Drain: This occurs through electrical accessories that require continuous electricity, such as radio memories, clocks, etc. The current drain of each motorcycle is different depending on the model, model year and what electrical accessories it has.

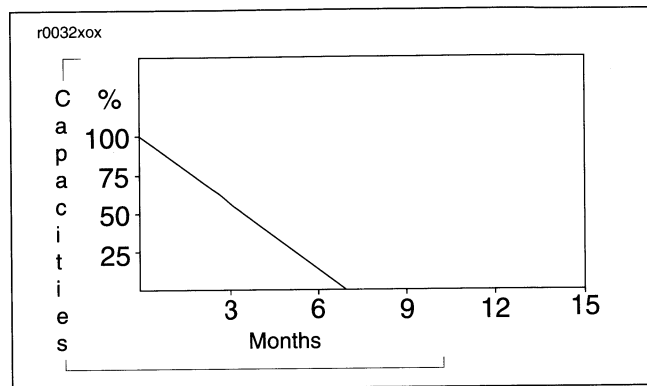


Figure 36. Battery Self Discharge at 77° C

- To reduce battery self discharge, remove and store the battery in a cool, (not freezing) dry place when the motorcycle is being stored.

BATTERY SULFATION (CONTINUED)

CAUTION

Do not allow the battery to completely discharge power. The more discharged a battery is, the more easily it can freeze. Failure to do so, may result in equipment failure.

CAUTION

Keep electrolyte level above the plates. Before charging, be sure the electrolyte level is above the plates. Failure to do so, may result in equipment failure and/or damage.

CAUTION

You should use ONLY a trickle charger to charge a battery. Using any other type of charger may result in equipment damage.

Use a 1 amp 12 Volt trickle charger (P/N 96800-77C or equivalent), and trickle charge stored battery once a month.

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.

H-D Battery Tender Automatic Battery Charger (P/N 99863-93T) may also be used to maintain a battery for extended periods of time with no risk of overcharging or boiling.

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

WARNING

Do not smoke or allow sparks while performing this procedure. Smoking or sparks could cause an explosion, 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

1. 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. Failure to do so, could result in a spark, explosion, death or serious injury.

WARNING

Be sure you do not connect the negative cable near the battery vent tube. Failure to do so, could result in a spark, explosion, death or serious injury.

CAUTION

Do not connect the negative cable to painted or chrome parts. Failure to do so, may result in discoloration at the attachment point.

- Suggested spot for ground cable connection is the engine case bolts.
- 2. Connect other end of the same cable to a safe ground, (away from the DISCHARGED battery).
- 3. Start motorcycle.
- 4. Disconnect cables in reverse order of steps 2, 3, 4, 5. That is: steps 5, 4, 3, 2.

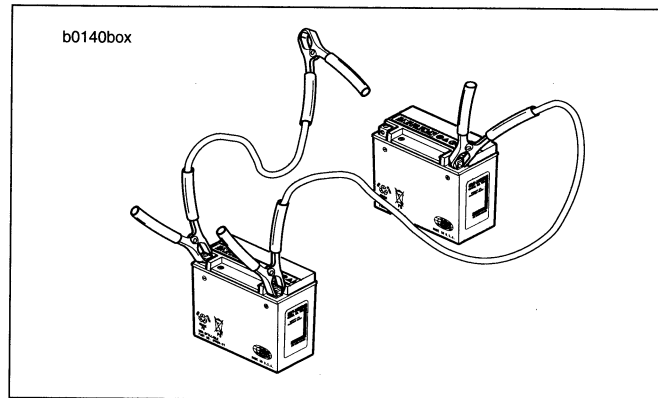


Figure 37. Jump Start Cable Connections

CIRCUIT BREAKERS

FXR² models have several circuit breakers to protect the motorcycle wiring. They are: main, lighting, accessory, instruments and ignition. Each of these breakers is 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.

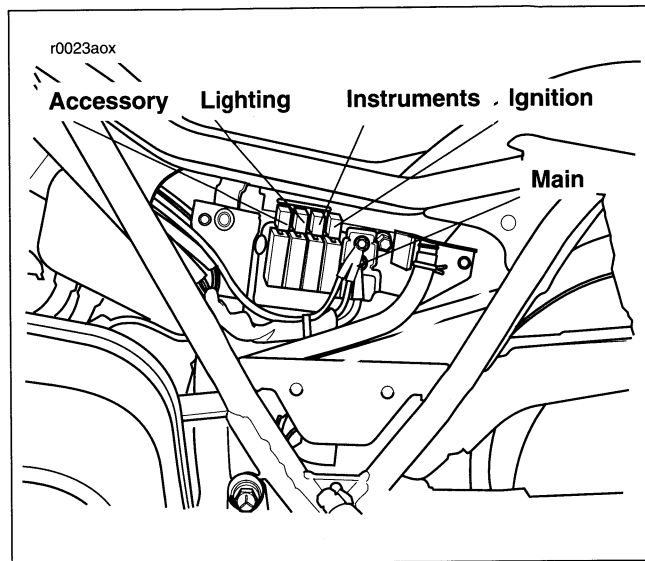


Figure 38. FXR² Left Side Cover

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 and 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, and 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.

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

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, can result in explosion, 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.
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 and keep the electrolyte level above the plates.

NOTE:

See Service Manual. Disconnect the battery vent tube from battery before removing battery; or take note of vent tube routing so it is installed in the proper place when you remove vehicle from storage.

WARNING

Ventilate area when charging battery and keep cigarettes, open flame, and sparks away from battery at all times. Batteries produce explosive hydrogen gas at all times - especially when being charged. Failure to do so, could result in explosion, 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. Be sure plates are covered by electrolyte before charging. Install vent tube and route according to Service Manual. Fill the battery with distilled water to the proper level. 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.
5. Check amount of oil in the oil tank. Check the transmission lubricant level.
6. Check controls to be sure they are operating properly. Operate the front and rear brakes, throttle, clutch and shifter.

7. 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.

8. Check tire pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability.
9. Check all electrical equipment and switches including the stoplamp, turn signals and horn for proper operation.
10. 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.

NOTES

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.

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 enrichener 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 (1/16 in. minimum lining thickness). 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.

DIMENSIONS (IN.)

Table 5. FXR² Dimensions

FXR ² Model	
Wheel Base	63.13
Overall Length	92.75
Overall Width	33.50
Road Clearance	4.56
Overall Height	49.63
Saddle Height	25.50

WEIGHT (LBS.)

Table 6. FXR² Weights

FXR ² Model	
Dry Weight	564.3
GVWR	1085
GAWR Front	390
GAWR Rear	695

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 (U.S.)

Fuel Tank - All Models

(Gallons) Total..... 4.20

Reserve..... 0.40

Oil Tank

(Quarts) w/filter.....3.00

Transmission

(Ounces, approx.).....24.0

Front Fork Each (Ounces, wet).....9.2

Primary ChainCase.....38.0-44.0

IGNITION SYSTEM

Timing Setting

1050-1500 RPM.....20° BTDC

Battery —12 Volt, 19 amp/hr.

SPARK PLUGS

Type.....HD-5R6A

Size.....14mm

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

Torque.....8-22 ft.- lbs. (24-30 NM)

ENGINE

Number of Cylinders.....2

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

Compression Ratio.....8.5 to 1

Bore x Stroke.....3.50 x 4.25

Displacement cu.in./cc.....80.0 / 1340

Torque - ft.lbs.....76 @ 3500

TRANSMISSION

Type.....Constant Mesh, Foot Shift

Speeds.....5 Forward

NUMBER OF SPROCKET TEETH (PRIMARY CHAIN)

Engine.....25

Clutch (37846-99A).....36

NUMBER OF SPROCKET TEETH

Transmission.....32

Rear Wheel.....65

OVERALL GEAR RATIOS

First
(Low).....10.208

Second.....6.959

Third.....5.05

Fourth.....3.883

Fifth.....3.15

TIRE DATA

WARNING

For your personal safety, 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.

CAUTION

Using tires other than those specified may adversely affect motorcycle stability. Doing so, may result in minor or moderate 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. To do 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

Do not exceed maximum tire pressure specification located on tire sidewall. Doing so, could result in tire failure, death or serious injury.

Table 7. Tire Specifications

1999 VEHICLES DUNLOP TIRES ONLY	TIRE PRESSURE PSI (COLD)	
	Front	Rear
Solo Rider FXR ²	30	36
Rider & One Passenger FXR ²	30	40

FUEL INFORMATION

- Use a good quality unleaded gasoline.
- Use at least 87 pump octane.

WARNING

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. 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, could result in an explosion, fire, 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.

WARNING

Use care when filling up the gas tank with fuel. The 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.

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 BLENDS (CONTINUED)

NOTES

- 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. Reformulated 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 bike. If you experience one or more of these problems, we recommend you try a different brand of gasoline or higher octane rating.

Table 8. BULB CHART

LAMP DESCRIPTION ALL LAMPS 12 VOLT	NUMBER OF BULBS (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
Headlamp			
High Beam	1	5.0	67697-81
Low Beam	1	4.58	
Tail and Stop Lamp			
Tail Lamp		0.59	68168-89
Stop Lamp		2.25	
Turn Signal Lamp			
Front/Running	2	2.25/0.59	68168-89
Rear	2	2.25	68572-64B
Instrument Panel Lamps			
High Beam Indicator	1	0.08	68023-92A
Neutral Indicator	1	0.08	68024-92A
Turn Signal Indicator	2	0.08	68021-92A
Speedometer	2	0.30	53439-79
Oil Pressure Indicator	1	0.08	68020-92A
Fuel Gage	1	0.19	67136-85
Tachometer	1	0.35	52441-94

WARRANTY AND MAINTENANCE

See MAINTENANCE SCHEDULING 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.
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 certain non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling, with possible injury to yourself or others. Removing or altering factory installed standard parts may also affect performance and cause injury. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty.

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 39. 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.

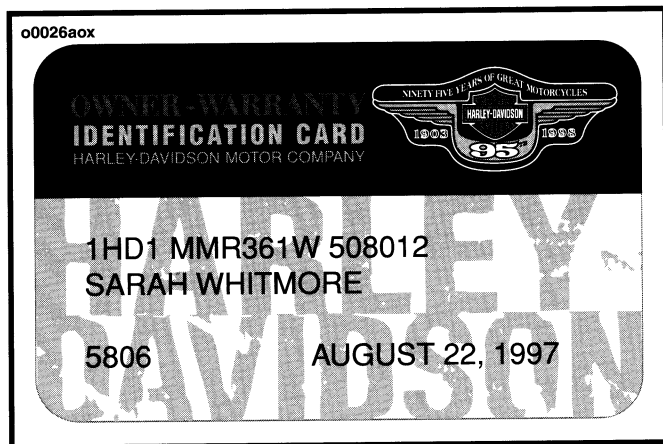


Figure 39. Owner's Warranty Identification Card

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® replacement parts to keep your Harley-Davidson motorcycle and its warranty intact.

Exacting 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 1999 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.

EPA NOISE REGULATIONS (CONTINUED)

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

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 1-800-443-2153 (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 1999 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 MOTOR COMPANY*
LIMITED WARRANTY TRANSFER FORM
 EFFECTIVE AS OF 8-1-97

NAME:			
FIRST	INITIAL	LAST	
ADDRESS			
CITY		STATE	ZIP

THE WARRANTY EXPIRATION DATE IS 12 MONTHS FROM THE DATE OF THE FIRST
RETAIL SALE TO THE ORIGINAL OWNER. NO WARRANTY TRANSFER WILL BE
AUTHORIZED AFTER THE WARRANTY EXPIRATION DATE.

To validate the warranty transfer, the following conditions must be complied with:

1. The prior owner must provide proof that required maintenance services have been performed. In the event they have not, it is the responsibility of the customer to have the next scheduled maintenance service performed, or any other required work performed at his/her expense. No warranty transfer shall not be effective until and until such required work is performed.
2. The vehicle must be inspected by an authorized Harley-Davidson dealer to determine its condition. If any of the conditions listed under Exclusions in the Limited Warranty exist, the warranty is NOT transferable.
3. The Limited Warranty Transfer Form must be completed and forwarded to Harley-Davidson Motor Company, by the authorized dealer, along with an individual check for each \$100.00 Transfer Fee, within 30 days of the date of sale (to the above referenced purchaser). A copy of the bill of sale must also accompany the transfer form indicating the date of purchase, from which the vehicle was purchased, and the vehicle identification number. No warranty repairs will be covered until all the transfer information has been completely received and processed. Once this information has been received, the purchaser will be mailed an Owner-Warranty Identification Card.

Note: Transfers received after the 30-day transfer period will not be accepted.

--

PURCHASER SIGNATURE _____

DATE _____

DEALER NUMBER

NAME

ADDRESS

CITY STATE ZIP

DATE OF INSPECTION _____ VEHICLE MILEAGE AT TIME OF INSPECTION _____
 M D YR _____

Is vehicle visually stock?

7

□

Y

N

If vehicle is not visually stock, what is different?

NOTE: ATTACH THE \$100.00 TRANSFER FEE TO THIS FORM.

TRANSFER
FEE RECEIVED

TRANSFER

FEE RECEIVED

DEALER SIGNATURE _____

DATE _____

Copy Distribution: WHITE - Harley-Davidson Motor Company YELLOW - Customer PINK - Dealer

Warranty Transfer Applications
are available from your Harley-
Davidson Dealer

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

FIRST SCHEDULED MAINTENANCE

The FXR² models require First Scheduled maintenance at 1000 miles.

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

5000 MILE MAINTENANCE

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

10,000 MILE MAINTENANCE

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

15,000 MILE MAINTENANCE

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

20,000 MILE MAINTENANCE

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

25,000 MILE MAINTENANCE

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

30,000 MILE MAINTENANCE

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

35,000 MILE MAINTENANCE

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

40,000 MILE MAINTENANCE

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

**45,000 MILE
(72000 KM)
MAINTENANCE**

Date

Mileage

Dealer (or other) Signature

OWNER RECORD

**45,000 MILE
(72000 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. Clean tappet oil screen.
- ☐4. Change primary chaincase lubricant and clean magnetic drain plug.
- ☐5. Check/adjust primary chain.
- ☐6. Check clutch adjustment.
- ☐7. Change transmission lubricant and clean the magnetic drain plug.
- ☐8. Check and adjust belt.
- ☐9. Lube the speedometer cable.
- ☐10. Inspect brake pads and discs for wear.
- ☐11. Check brake fluid reservoir levels and condition.
- ☐12. Inspect oil lines and brake system for leaks.
- ☐13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- ☐14. Check, adjust operation of enricher.
- ☐15. Inspect fuel valve, lines and fittings for leaks.
- ☐16. Check tire pressure and inspect tread.
- ☐17. Check wheel spoke tightness.
- ☐18. Check front fork bearing adjustment.
- ☐19. Check operation of all electrical equipment and switches.
- ☐20. Check battery electrolyte level and clean battery connections.
- ☐21. Inspect spark plugs.
- ☐22. Check ignition timing and vacuum hose.
- ☐23. Check engine idle speed adjustment.
- ☐24. Road test.

45,000 MILE MAINTENANCE

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

**47,500 MILE
(76000 KM)
MAINTENANCE**

Date

Mileage

Dealer (or other) Signature

OWNER RECORD

**47,500 MILE
(76000 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 enrichener controls.
- ☐8. Inspect operation of all electrical equipment and switches.
- ☐9. Inspect battery fluid level and 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 enrichener controls.
- ☐8. Inspect operation of all electrical equipment and switches.
- ☐9. Inspect battery fluid level and connections.
- ☐10. Inspect air cleaner and service as required.
- ☐11. Inspect oil lines and brake system for leaks
- ☐12. Road test.

**50,000 MILE
(80000 KM)
MAINTENANCE**

Date

Mileage

Dealer (or other) Signature

OWNER RECORD

**50,000 MILE
(80000 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. Clean tappet oil screen.
- ☐4. Change primary chaincase lubricant and clean magnetic drain plug.
- ☐5. Check/adjust primary chain.
- ☐6. Check clutch adjustment.
- ☐7. Change transmission lubricant and clean the magnetic drain plug.
- ☐8. Check and adjust belt.
- ☐9. Lube the speedometer cable.
- ☐10. Inspect brake pads and discs for wear.
- ☐11. Check brake fluid reservoir levels and condition.
- ☐12. Inspect oil lines and brake system for leaks.
- ☐13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable/hand lever and jiffy stand.
- ☐14. Lubricate and adjust steering head bearings.
- ☐15. Check engine idle speed adjustment.
- ☐16. Check, adjust operation of enricher.
- ☐17. Inspect fuel valve, lines and fittings for leaks.
- ☐18. Check operation of all electrical equipment and switches.
- ☐19. Check battery electrolyte level and clean battery connections.
- ☐20. Change spark plugs.
- ☐21. Check tire pressure and inspect tread.
- ☐22. Check wheel spoke tightness.
- ☐23. Repack wheel bearings with grease.
- ☐24. Change front fork oil.
- ☐25. Check stabilizer links and engine mounts.
- ☐26. Check tightness of all critical fasteners: hand controls, brake system, axle nuts, front fork components, riser and handle bar fasteners.
- ☐27. Check ignition timing and vacuum hose.
- ☐28. Road test.

50,000 MILE MAINTENANCE

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

SERVICE LITERATURE

For more detailed and complete technical and parts information the following publications are available (early 1999), through your Harley-Davidson dealer. Order by part numbers below.

FXR²

Publication.....	Part No.
Owner's Manual.....	99479-99
Service Manual.....	99480-99
Parts Catalog.....	99426-99

NOTES

Numerics

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NOTES:

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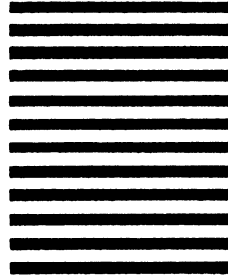
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