



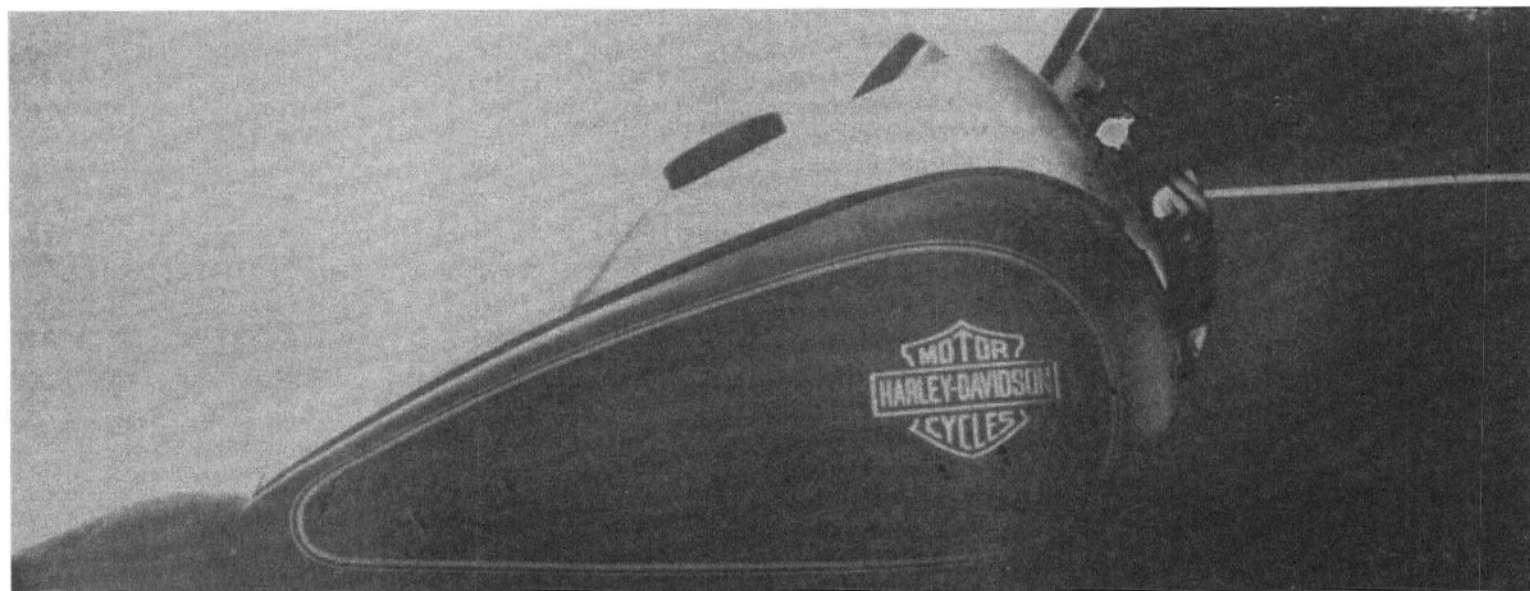
Harley-Davidson Motor Co., Inc.

OWNER'S MANUAL

FLT/FXR Models 1340cc 5-Speed

1985

Part No. 99465-85



IMPORTANT NOTICE!

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

WARNING

Means there is the possibility of personal injury to yourself or others.

CAUTION

Means there is possibility of damage to the vehicle.

Other information of particular importance has been placed in italic type.

We recommend you take special notice of these items.

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

Harley-Davidson Motor Co., Inc.

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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.

- Know and respect the Rules of the Road (see RULES OF THE ROAD). Also read and observe the MOTORCYCLE SAFETY booklet that comes with this Owner's Manual.
- Use only Harley-Davidson approved parts and accessories.
- Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with the engine stopped. Do not smoke or allow open flames or sparks when refueling or servicing the fuel system. Always close the fuel supply valve when the engine is not running to prevent flooding of the carburetor. Do not overfill fuel tank. Leave at least one inch air space to allow for fuel expansion.
- Motorcycle exhaust contains poisonous carbon monoxide gas. Do not inhale exhaust gases and

never run the engine in a closed garage or confined area.

- Before starting engine, check for proper operation of brake, clutch, shifter, throttle controls, correct fuel and oil supply.
- A new motorcycle must be operated according to a special break-in procedure. (See BREAK-IN — THE FIRST 500 MILES.)
- 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. If you are an inexperienced rider we recommend that you obtain information and training in correct motorcycle riding technique.
- 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 the possibility of loss of control.
- Pay strict attention to road surfaces and wind conditions. Any two wheeled vehicle may be subject to

upsetting forces. Wind blasts from passing trucks, holes in the pavement, rough road surfaces, rider control error, etc., may influence the handling characteristics of your motorcycle. Should this happen, reduce speed and guide the motorcycle with a relaxed grip to a straight-away position. Do not brake abruptly or force the handlebars as this may aggravate an unstable condition. New riders should gain experience under various conditions while driving at moderate speeds.

- Wear an approved helmet, clothing and footgear suited to motorcycle riding. Bright or light colors are best for greater visibility in traffic especially at night. Avoid loose flowing garments and scarves.
- The exhaust pipes and mufflers get very hot when the engine is running and remain too hot to touch for some time after the engine is shut off. Wear clothing that will completely cover the legs when riding and avoid contact with the exhaust system.
- Do not allow others under any circumstances to operate your motorcycle unless you are certain

that they are experienced, licensed riders and are familiar with the operation of your particular motorcycle.

- When leaving motorcycle unattended, lock steering head and remove ignition key from switch. Protect your motorcycle against theft.
- Safe motorcycle operation requires mental awareness and good judgment combined with a defensive driving attitude. Don't allow fatigue, alcohol or drugs to endanger your safety or the safety of others.
- Maintain your motorcycle in proper operating condition in accordance with the Maintenance Schedules in this Owner's Manual. Particularly important to motorcycle stability is the tire inflation pressure, tread condition, and proper adjustment of wheel bearings and steering head bearings. Do not operate motorcycle with a loose, worn or damaged steering system or front or rear suspension system as handling will be adversely affected. Contact your dealer for repair of steering or suspension system wear or damage.

- Be sure all equipment required by federal, state, and local law is installed and in good operating condition.
- Maintain proper tire pressure and wheel and tire balance. Improper tire and wheel balance and abnormal tread wear can cause poor handling. Inspect your tires periodically. Look for excessive flat or pointed tread cross section. Replace only with approved tires. (See your Harley-Davidson dealer).
- Do not exceed the Gross Vehicle Weight Rating of your motorcycle. Maximum allowable vehicle weights with rider and passenger are specified on the Identification Label affixed to your vehicle. Overloading, particularly at the rear of a motorcycle, can cause instability.
- Do not tow a trailer.
- Regularly inspect shock absorbers and front forks. Worn parts can affect stability. If you have questions as to how these should function, see your Harley-Davidson dealer.
- Keep hazardous substances, such as brake and

battery fluids and cleaning compounds away from eyes and skin and out of mouth.

- Consult your dealer regarding any questions you may have about your motorcycle. Should any abnormality occur in the operation of your motorcycle, immediately contact your Harley-Davidson dealer for correction of the problem. Continued operation of a misperforming motorcycle most likely will aggravate an initial problem, cause repairs to be more costly, and perhaps affect your personal safety.

RULES OF THE ROAD

- Keep on the right side of the road centerline when meeting other vehicles coming in the opposite direction. Ride to the left of center of your lane to avoid possible oily pavement.
- Always sound your horn, actuate 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 or down a hill.

- At street intersections, give the right-of-way to the vehicle on your right. Do not presume too much when you have the right-of-way; the other driver may not know you have it.
- Always signal when preparing to stop, or turn.
- All traffic signs, including those used for the control of traffic at intersections, should be obeyed promptly and to the letter. SLOW DOWN signs near schools and CAUTION signs at railroad crossings should always be observed and your actions governed accordingly.
- Never anticipate a traffic light. When a change is indicated from GO to STOP (or vice versa) in the traffic control systems at intersections, await the change.
- When intending to turn to the left, give 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 passing the intersection of the street and then turn carefully to the left.
- In turning either right or left, watch for pedestrians as well as vehicles.
- Do not leave the curb or parking area without signaling and seeing that your way is clear to drive into moving traffic. A moving line of traffic has the right-of-way.
- See that your license tags are installed in the position specified by law and that they are clearly visible under all conditions. Keep them clean.
- Ride at a safe speed — a speed consistent with the type of highway you are on, and always note whether the road is dry, oily, icy or wet. Each varying condition on the highway means adjusting your speed accordingly.

ACCESSORIES AND CARGO

WARNING

The addition of accessories and additional weight to this motorcycle can affect the motorcycle's stability, handling characteristics, and safe operating speed. Because Harley-Davidson cannot test every accessory or combination of accessories to make specific recommendations about their use, the rider must be responsible for the safe operation of the motorcycle when installing accessories or hauling additional weight. The following guidelines should be used when equipping a motorcycle and carrying passengers and cargo.

1. The Gross Vehicle Weight Rating (GVWR) is shown on the information plate located on the lower portion of the front frame tube. 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.

Do not tow a trailer with this motorcycle. Do not exceed the Gross Vehicle Weight Rating as indicated on the frame label.

Overloading the motorcycle or towing a trailer will result in unstable handling and reduced braking efficiency which could cause an accident with personal injury.

2. Keep cargo weight concentrated close to the motorcycle and as low as possible to minimize the change in the motorcycle's center of gravity. Distribute weight evenly on both sides of the vehicle and do not load bulky items too far behind the rider or add weight to the handlebars or front forks. Do not exceed 15 pounds maximum load on each saddlebag or 25 pounds maximum in Tour Pak.
3. Luggage racks are designed for lightweight items — do not overload racks.
4. Be sure cargo is secure and will not shift while riding. Recheck load periodically.
5. Accessories that change the operator's riding position may increase reaction time and affect handling.
6. Additional electrical equipment may overload the motorcycle's electrical system and cause an unsafe operating condition.

7. Large surfaces such as fairings, windshields, backrests and luggage racks can adversely affect handling. These items should be designed and approved by Harley-Davidson specifically for the motorcycle model and be properly installed.

PRE-RIDING CHECK LIST

Read sections on OPERATION and CONTROLS before riding this motorcycle.

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

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

WARNING

Do not overfill. Leave at least one inch air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap vent onto surrounding areas. After refueling, make sure filler cap is securely tightened.

2. Check oil tank oil level. See ENGINE LUBRICATION.
3. Check controls to make 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. Check tire pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability. See TIRE DATA for correct inflation pressures to use.
6. Check all electrical equipment and switches including the stoplamp, turn signals and horn for proper operation.
7. Check for any fuel, oil or hydraulic fluid leaks.
8. Check the rear belt adjustment. Service as necessary.
9. Check to make sure all fasteners are tight.

BREAK-IN — THE FIRST 500 MILES

The sound design, quality materials, and workmanship that is built into your new Harley-Davidson will give you high performance right from the start. However, for the first 500 miles, to wear-in critical parts, observe the few simple driving rules below. This will guarantee future performance and durability.

1. During the first 50 miles, keep the engine speed below 2500 rpm in any gear.
2. Up to 500 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.

STARTING THE ENGINE

Use recommended oil in relation to expected temperatures. See engine lubrication chart in the MAINTENANCE AND LUBRICATION section.

WARNING

Before starting the engine, shift the transmission to neutral or fully disengage clutch to prevent accidental movement which could cause possible damage to motorcycle and personal injury.

The carburetor choke control knob is located under the gas tank on the left side of the motorcycle.

1. To start a cool engine at temperatures above 50°F, open throttle twice, then fully release. Pull choke knob to first detent (fast idle) position (above 65°F, fast idle may not be required). Turn the ignition switch on and press starter button to operate the electric starter.
2. To start a cold engine at temperatures below 50°F, open throttle twice, then fully release. Pull the choke knob outward to the fully closed (choke) position; turn the ignition switch on and press starter button to operate the electric starter.

NOTE

Engine Stop Switch on right handlebar must be in RUN (ignition on) position to start engine.

As soon as engine starts, open choke to fast idle position (2nd detent). See Figure 18.

3. To start a warm or hot engine, set throttle 1/4 open, turn on ignition switch and operate the electric starter. (DO NOT CHOKE.)

NOTE

When 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 choke knob completely in, turn ignition on and operate starter with throttle wide open. When engine starts, reduce throttle immediately to idle speed.

SHIFTING GEARS

CAUTION

Never accelerate the engine above 2500 rpm after a cold start. The engine should be allowed to run slowly for a few minutes during warm weather and for a longer time in cold weather. This will allow the engine to warm up and let oil reach all surfaces needing lubrication.

1. To start moving with motorcycle upright and

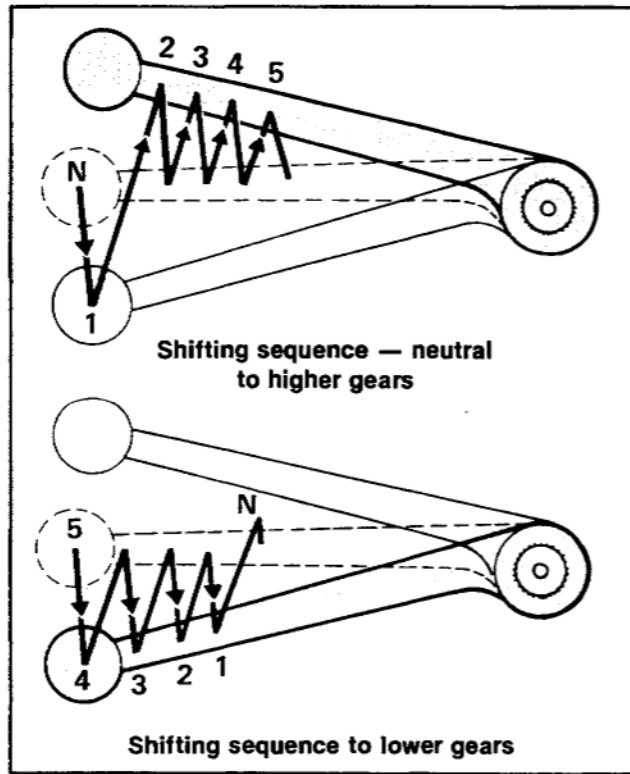


Figure 1. Shifting

engine idling, pull the clutch lever (located on left handlebar) to fully disengage clutch. Push shifter lever down firmly but gently to end of its travel to engage first gear (see Figure 1). 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: close the throttle, disengage the clutch and lift the gear shifter pedal up to the end of its travel. Then release the clutch lever and operate the throttle gradually. Repeat the same operation to engage third, fourth and fifth gears.

To shift to lower gears, reverse the shifting of the gear shifter pedal, disengaging the clutch completely before each gear change and only partially closing the throttle so that the engine will not drag when clutch is again engaged. Keep in mind that by lifting the gear shifter lever up, a high gear is engaged; by pushing the gear shifter lever down, a lower gear is engaged. When stopping, operate gear shift until neutral is reached. Note that neutral is 1/2 stroke up from first gear.

CAUTION

Do not shift gears without fully disengaging the clutch.

For correct operation of your motorcycle under average conditions, the following shifting points are recommended:

Gear Change	Speed
Acceleration (Upshift)	
First to Second	15 mph (25 kph)
Second to Third	25 mph (40 kph)
Third to Fourth	40 mph (65 kph)
Fourth to Fifth	50 mph (80 kph)
Deceleration (Downshift)	
Fifth to Fourth	40 mph (64 kph) or less
Fourth to Third	30 mph (50 kph) or less
Third to Second	20 mph (30 kph) or less
Second to First	10 mph (15 kph) or less

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 engine and cause the rear wheel to lose traction.

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

NOTE

Always start motorcycle in motion in first gear.

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

STOPPING THE ENGINE

Stop the engine by turning off engine stop switch on the right handlebar and then turn off the ignition key switch. If the engine should be stalled or stopped in any way, turn off the ignition key switch at once to prevent battery discharge.

OPERATING RECOMMENDATIONS

CAUTION

Do not run the engine at extremely high RPM with clutch disengaged or transmission in neutral. Maximum recommended engine RPM is 5200. Do not exceed 5400 maximum RPM under any conditions! Do not idle the engine unnecessarily for more than a few minutes with motorcycle standing still.

An engine run long distances at high speed must be given closer than ordinary attention to avoid overheating and possible consequent damage. Have the engine checked regularly and keep it well tuned. Valve seating and good compression is particularly important. This applies particularly to a motorcycle equipped with windshield and splash shields due to reduced airflow for engine cooling.

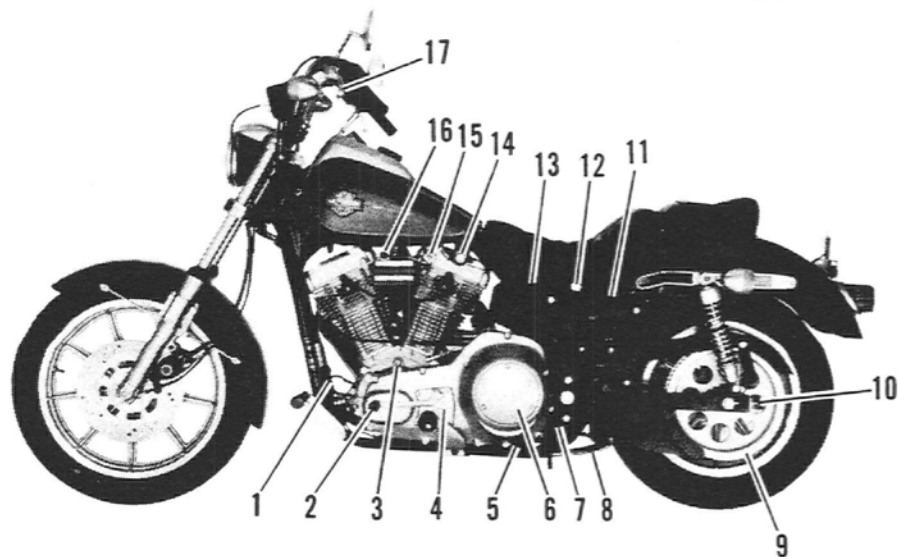
WARNING

When riding on wet roads or under rainy conditions, cornering and braking efficiency is greatly reduced and caution should be used when applying the brakes, accelerating, and turning. This is especially true immediately after the rain begins and the oil from the road surface combines with the water.

When descending a long, steep grade, downshift and use engine compression together with intermittent application of both brakes to slow the motorcycle. Avoid continuous use of brakes which may cause overheating of the brakes and reduced efficiency.

Do not coast for a long distance with the engine off because the transmission is properly lubricated only when the engine is running. Also to prevent transmission damage, do not tow the motorcycle.

NOTES



1. Voltage regulator

2. Shift lever

3. Timing inspection hole plug

4. Primary chain inspection cover

5. Chain case drain plug

6. Clutch inspection cover

7. Oil filter

8. Jiffy stand

9. Rear sprocket & drive belt

10. Rear belt adjuster

11. Battery

12. Seat release lever

13. Oil tank fill plug
& dipstick

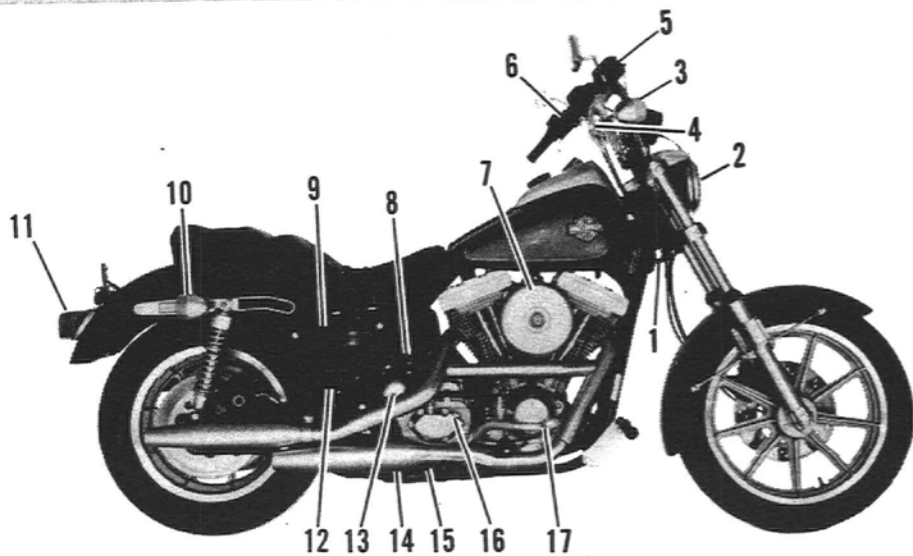
14. Ignition/light switch

15. Fuel supply valve

16. Choke knob

17. Clutch hand lever

Figure 2. FXRS Left Side View

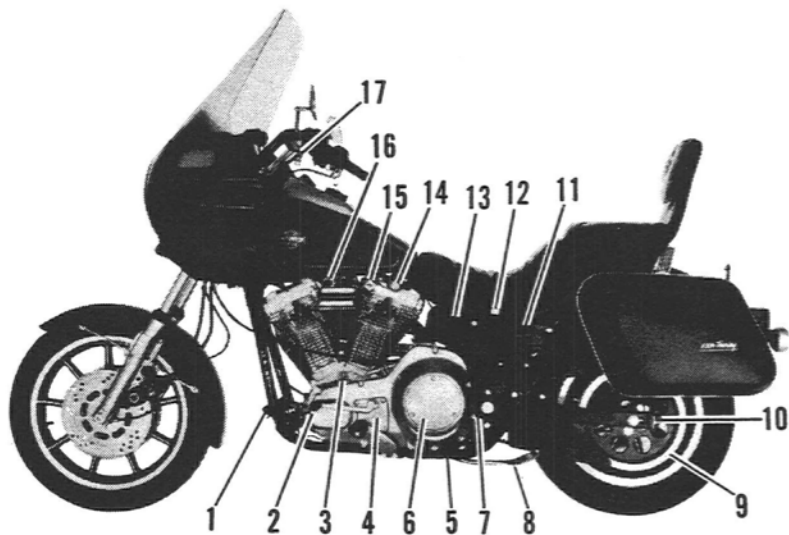


1. Steering lock
2. Headlamp
3. Front turn signal lamp
4. Front brake hand lever
5. Front brake master cylinder

6. Throttle control grip
7. Carburetor air cleaner
8. Oil tank drain plug
9. Ignition module
10. Rear turn signal lamp
11. Tail/stop lamp

12. Rear brake fluid reservoir
13. Electric starter motor
14. Rear brake master cylinder
15. Transmission drain plug
16. Transmission filler plug
17. Rear brake pedal

Figure 3. FXRS Right Side View

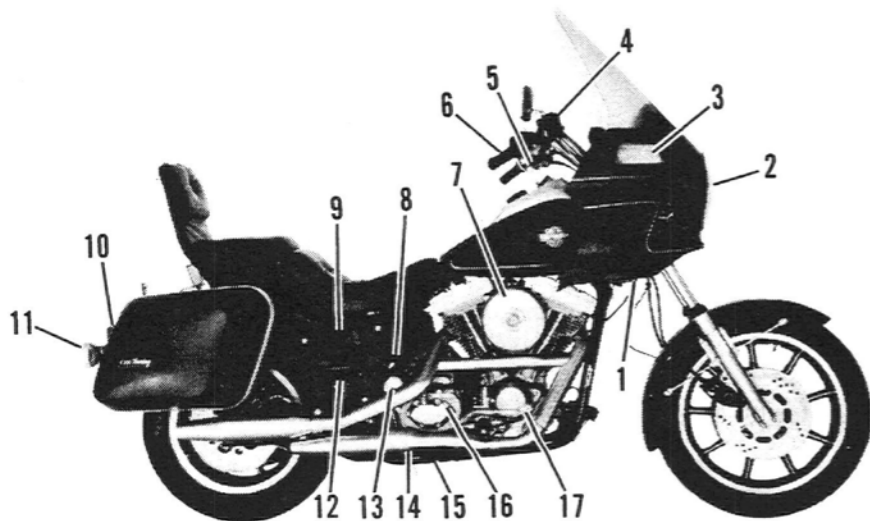


- 1. Voltage regulator
- 2. Shift lever
- 3. Timing inspection hole plug
- 4. Primary chain inspection cover
- 5. Chain case drain plug
- 6. Clutch inspection cover

- 7. Oil filter
- 8. Jiffy stand
- 9. Rear sprocket & drive belt
- 10. Rear belt adjuster
- 11. Battery
- 12. Seat release lever

- 13. Oil tank fill plug
& dipstick
- 14. Ignition/light switch
- 15. Fuel supply valve
- 16. Choke knob
- 17. Clutch hand lever

Figure 4. FXRT Left Side View



1. Steering lock

2. Headlamp

3. Front turn signal &
running lamp

4. Front brake master cylinder

5. Front brake hand lever

6. Throttle control grip

7. Carburetor air cleaner

8. Oil tank drain plug

9. Ignition module

10. Tail/stop lamp

11. Rear turn signal lamp

12. Rear brake fluid reservoir

13. Electric starter motor

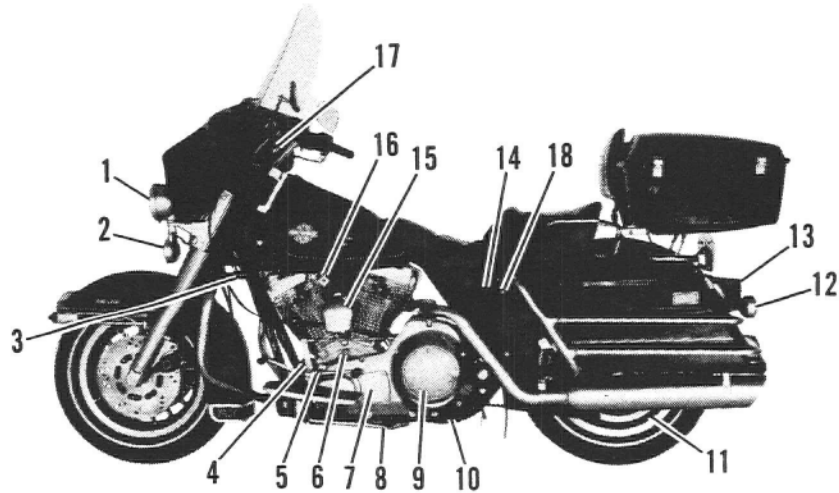
14. Rear brake master cylinder

15. Transmission drain plug

16. Transmission filler plug

17. Rear brake pedal

Figure 5. FXRT Right Side View

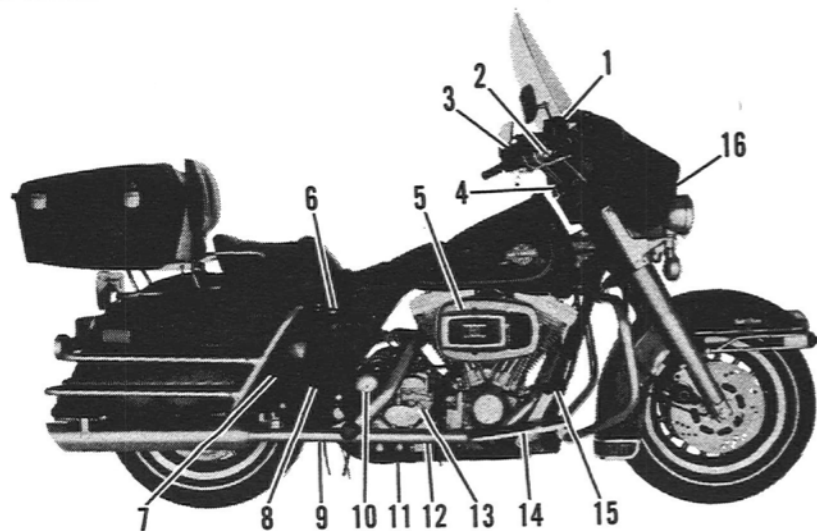


1. Spotlamp
2. Front turn signal lamp
3. Front air suspension adjustment valve
4. Voltage regulator
5. Shift lever
6. Timing inspection hole plug

7. Primary chain inspection cover
8. Jiffy stand
9. Clutch inspection cover
10. Chain case drain plug
11. Rear sprocket & drive belt
12. Rear turn signal lamp
13. Tail/stop lamp

14. Rear brake fluid reservoir (under sidecover)
15. Horn
16. Fuel supply valve
17. Clutch hand lever
18. Rear air suspension adjustment valve

Figure 6. FLHTC Left Side View

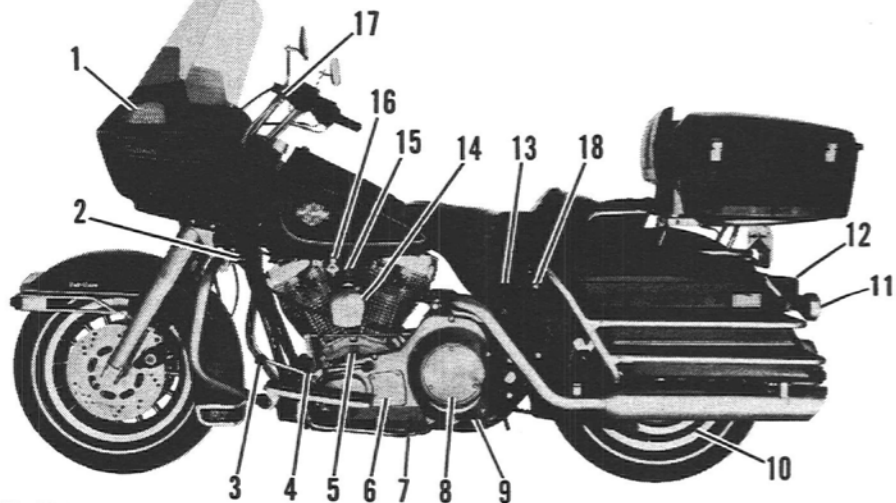


1. Front brake master cylinder
2. Front brake hand lever
3. Throttle control grip
4. Ignition/light switch
5. Carburetor air cleaner
6. Oil tank fill plug & dipstick

7. Battery (under sidecover)
8. Oil tank drain plug
(under sidecover)
9. Oil filter
10. Electric starter motor
11. Transmission drain plug

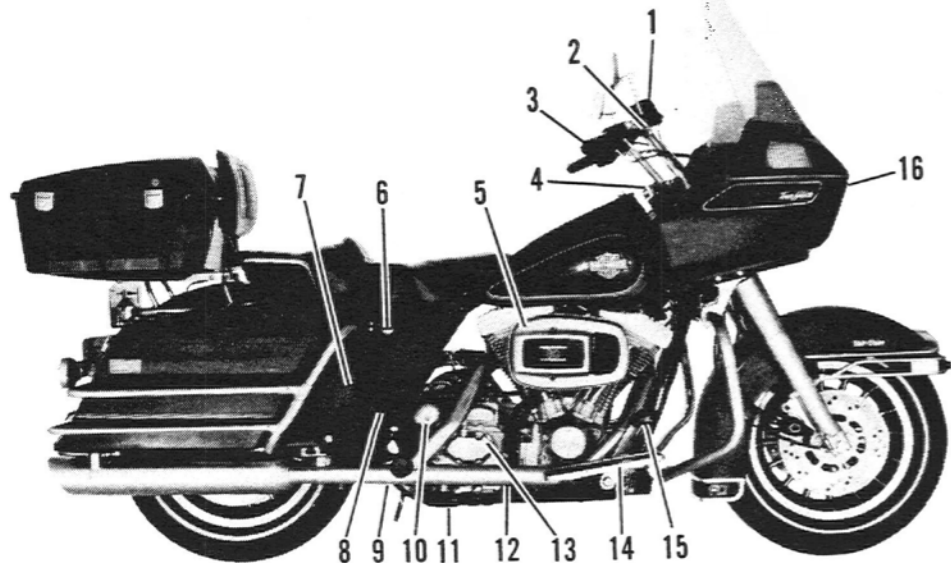
12. Rear brake master cylinder
13. Transmission filler plug
14. Adjustable footboard
15. Rear brake pedal
16. Headlamp

Figure 7. FLHTC Right Side View



- | | | |
|-------------------------------------|--|--|
| 1. Front turn signal & running lamp | 8. Clutch inspection cover | 14. Horn |
| 2. Air suspension adjustment valve | 9. Chaincase drain plug | 15. Choke knob |
| 3. Shift lever | 10. Rear sprocket & drive belt | 16. Fuel supply valve |
| 4. Voltage regulator | 11. Rear turn signal lamp | 17. Clutch hand lever |
| 5. Timing inspection hole plug | 12. Tail/stop lamp | 18. Rear air suspension adjustment valve |
| 6. Primary chain inspection cover | 13. Rear brake fluid reservoir (under sidecover) | |
| 7. Jiffy stand | | |

Figure 8. FLTC Left Side View



- 1. Front brake master cylinder
- 2. Front brake hand lever
- 3. Throttle control grip
- 4. Ignition/light switch
- 5. Carburetor air cleaner
- 6. Oil tank fill plug & dipstick

- 7. Battery (under sidecover)
- 8. Oil tank drain plug
(under sidecover)
- 9. Oil filter
- 10. Electric starter motor
- 11. Transmission drain plug

- 12. Rear brake master cylinder
- 13. Transmission filler plug
- 14. Adjustable footboard
- 15. Rear brake pedal
- 16. Headlamp

Figure 9. FLTC Right Side View

GASOLINE SUPPLY VALVE (See Figure 10)

The gasoline supply valve is located under the gas tank. Gasoline to carburetor is shut off when handle is in horizontal position. Turning the handle down to vertical position turns on main gasoline supply; turning handle up to vertical position turns on reserve supply.

WARNING

Valve should always be closed when engine is not running to ensure against accidentally flooding engine or surroundings with gasoline.

NOTE

To maintain a reserve supply, do not operate the motorcycle with the valve in the RESERVE position after refueling.

WARNING

Do not overfill. Leave at least one inch air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap vent on to surrounding areas. After refueling, make sure filler cap is securely tightened.

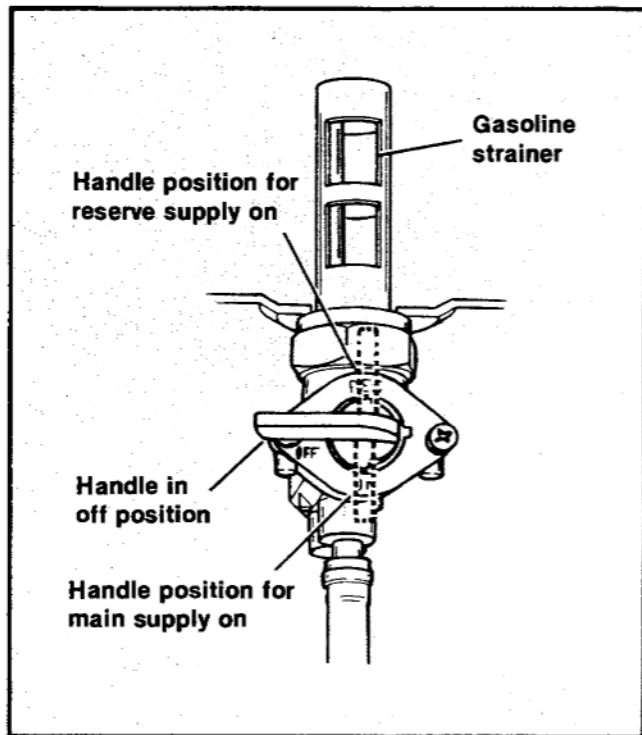


Figure 10. Gasoline Supply Valve

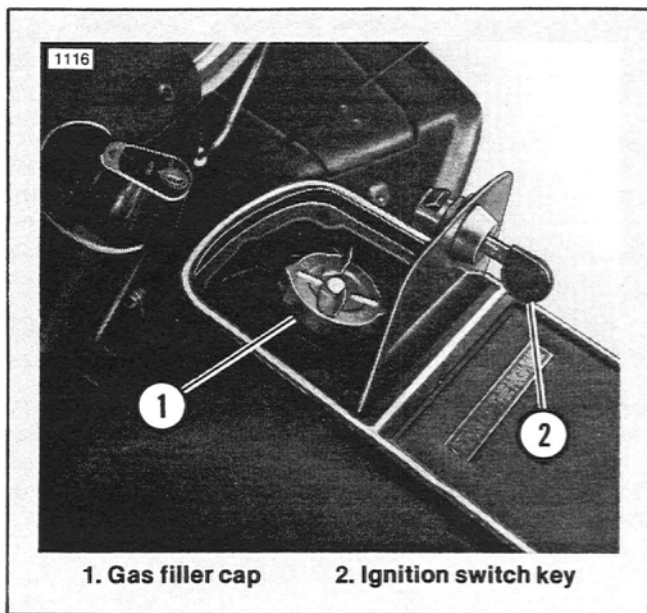


Figure 11. Gas Filler Cap — FLT, FLHT

GASOLINE FILLER CAP

FLT, FLHT
(See Figure 11)

On FLT and FLHT models the gasoline filler cap is located underneath the door in the center of the gas tank. To open it, insert the ignition switch key in the lock, turn it to the left and then lift up. To remove the gas cap, turn counterclockwise.

The gas filler cap compartment has an overflow drain. The hose from the drain exits behind the transmission.

After gas filler cap is fully close, close door, turn key to the right and remove it.

WARNING

Do not overfill. Leave at least one inch air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap vent onto surrounding areas. After refueling, make sure filler cap is securely tightened.

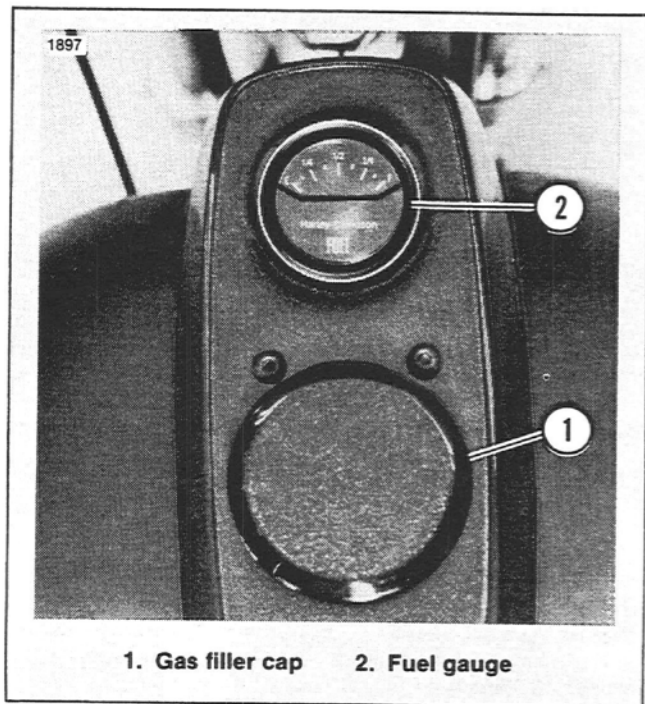


Figure 12. Gas Filler Cap — FXRS, FXRT

FXRS, FXRT (See Figure 12)

On FXRS and FXRT models, the gasoline filler cap is located in the center of the gas tank, directly below the fuel gauge. To open, turn cap counterclockwise and lift up. To close, turn clockwise until the cap clicks. The ratchet action of the gas cap prevents overtightening.

WARNING

Do not overfill. Leave at least one inch air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap vent on to surrounding areas. After refueling, make sure filler cap is securely tightened.

IGNITION/LIGHT SWITCH

FLT, FLHT (See Figure 13)

The ignition-light switch is located below the instrument panel. To unlock the switch and the front fork, insert the key and turn it counterclockwise. Turn lever to the OFF position. Remove the key after the switch is unlocked.

Both the ignition and lights operate when the switch is in the IGNITION and LIGHTS position as required by law in some localities. The ACCESS position operates accessories only.

A front fork lock is incorporated in the ignition switch. To lock the ignition and the front fork proceed as follows:

1. Make sure motorcycle and engine are stopped.
2. Make sure that the jiffy stand is down and that the motorcycle is on a level, firm surface.
3. Insert key in switch.
4. Push down on lever and turn it to the left to the FORK LOCK position. Turn the key to the right to the LOCK position.
5. Turn handlebars to the left until lock clicks and remove the key.

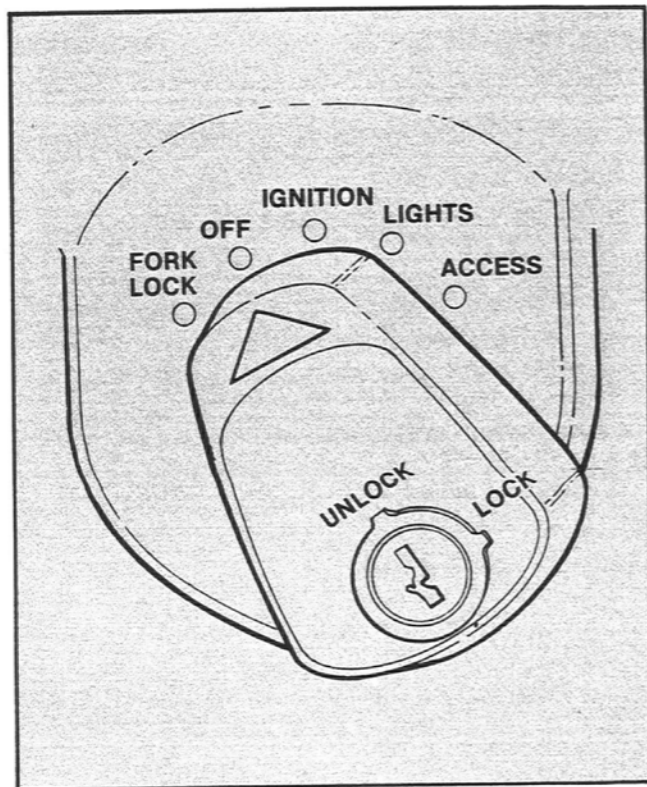


Figure 13. Ignition/Light Switch — FLT, FLHT

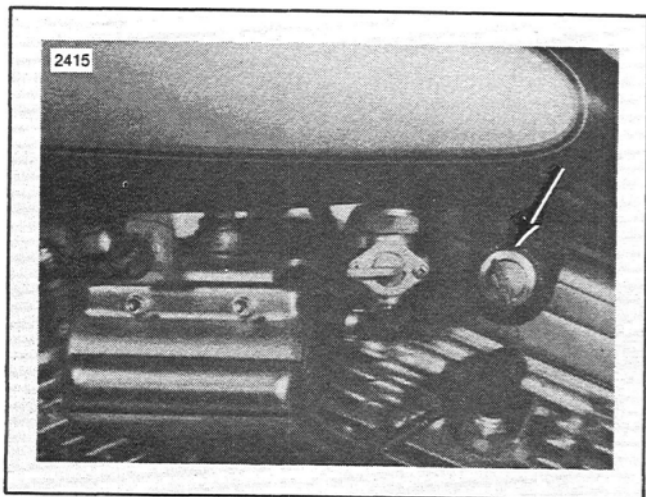


Figure 14. Ignition/Light Switch — FXRS, FXRT

WARNING

Do not attempt to operate locking mechanism while motorcycle is in motion.

To protect yourself, always lock the forks and remove the key when the motorcycle is left unattended. Make a record of the key number so that it can be replaced in case of loss.

FXRS, FXRT (Figure 14)

The ignition/light switch is located below the gas tank on the left side of the motorcycle. From OFF vertical position, there are two positions to the right for ignition and lights. For U.S.A. operation, both positions operate ignition and lights, with standard wiring, as required by law. Key can be removed to lock switch in OFF position.

HEADLAMP DIMMER SWITCH AND HIGH BEAM INDICATOR LIGHT

The headlamp dimmer switch on the left handlebar controls the headlamp high and low beams. Indicator light (9, Figure 15 and 2, Figure 16) remains lit when high beam is on.

TURN SIGNAL SWITCHES

Right turn switch button (6, Figure 17) on right handlebar operates the right front and right rear flashing turn indicator lamps. Left turn switch button (2, Figure 17) on left handlebar operates the left front and left rear flashing turn indicator lamps.

Operation of the turn lamps is indicated by amber colored arrows (4, Figure 15) on the instrument panel of FLT and FLHT models.

On FXRT models, operation of the turn signal lamps is indicated by round amber indicator lights located on the fairing above the instruments.

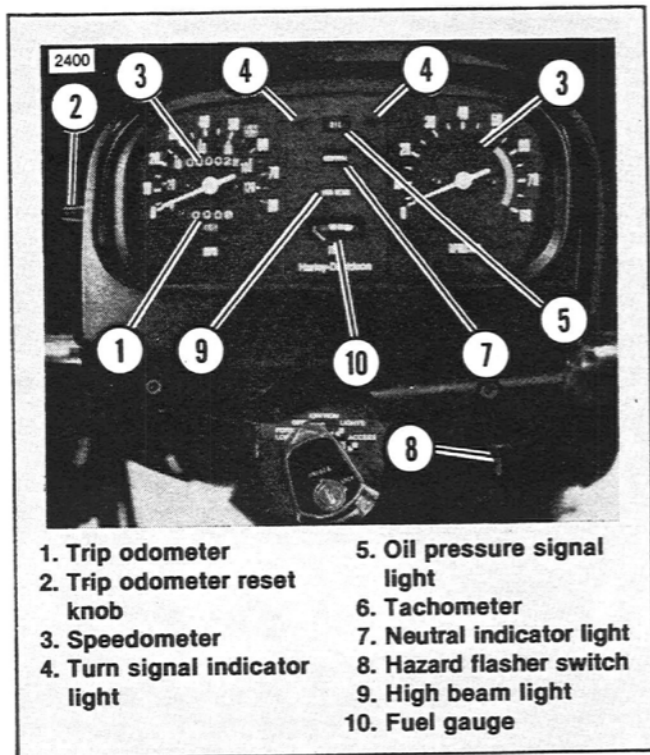
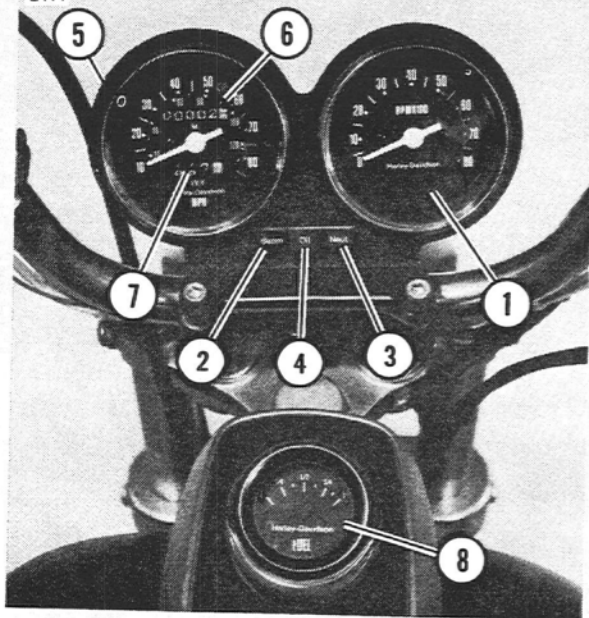


Figure 15. Instrument Panel — FLT, FLHT



- | | |
|------------------------------|---|
| 1. Tachometer | 5. Trip odometer reset knob (back side) |
| 2. High beam indicator light | 6. Speedometer |
| 3. Neutral indicator light | 7. Trip odometer |
| 4. Oil pressure light | 8. Fuel gauge |

Figure 16. Instruments — FXRS, FXRT

HAZARD WARNING FLASHER — FLT, FLHT

The hazard warning flasher switch (8, Figure 15) is located below the instrument panel. Flipping the switch up operates all four flashing turn signal lamps at the same time. The hazard warning flasher will operate when the ignition switch is in the IGNITION, LIGHTS or ACCESS position.

HORN

The horn is operated by the horn button (3, Figure 17) on the left handlebar. The horn is located beneath the battery on FXR models.

ELECTRIC STARTER

The starter button (4, Figure 17) is located on the right handlebar. With ignition on, engine stop switch (5, Figure 17) in run position and transmission in neutral, push button to operate starting motor.

CAUTION

Do not operate starter motor continuously for more than 15 seconds to avoid damage to components.

ENGINE STOP SWITCH

Rocker switch (5, Figure 17) on right handlebar turns ignition on or off and can be used to stop the engine, especially in an emergency. To stop engine, push switch to position marked OFF. Turn ignition/light switch to position marked OFF before parking or leaving vehicle.

Engine stop switch must be in RUN position to operate engine.

THROTTLE CONTROL GRIP

The throttle control grip (9, Figure 17) is located on the right handlebar. Turn control grip outward (clockwise) to close throttle; turn control grip inward (counterclockwise) to open throttle.

A spring loaded friction adjusting screw is located at the bottom of the throttle grip clamp. Turn this knurled screw outward to provide a self-closing throttle, which should return to idle position when hand is removed from throttle grip. Turn the screw inward to increase friction on grip as desired. The throttle friction screw **should not** be used under normal stop and go operating conditions.

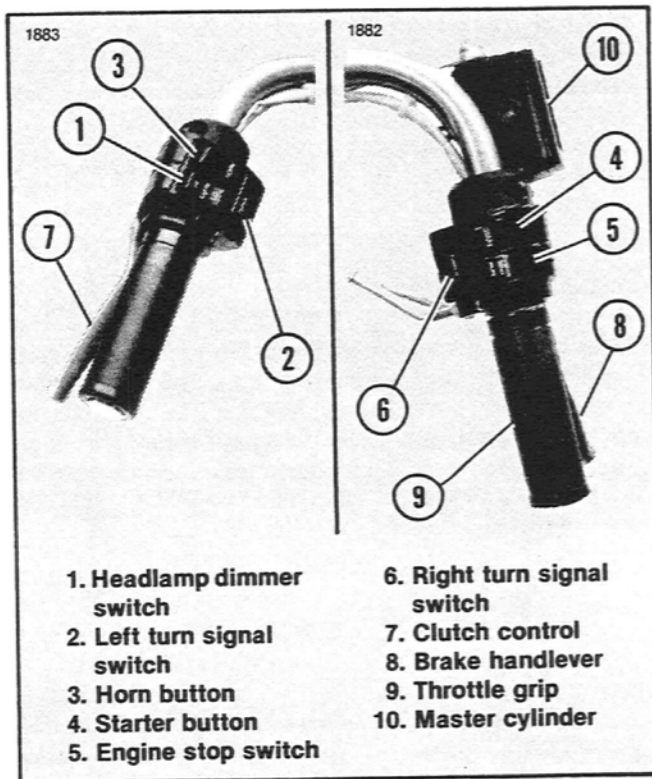


Figure 17. Handlebar Controls

WARNING

Do not overtighten the friction screw. Operation with the friction screw overtightened is not recommended because of the possible hazard involved when the engine will not return to idle automatically in an emergency.

CHOKE

The carburetor choke control knob (Figure 18) is located just under the gas tank on the left side of the motorcycle. Pull knob out to close choke; push knob in to open choke. As knob is pulled out to each position, the high idle cam progressively increases engine idle speed for cold engine operation. Choke knob should be in running position during normal operation.

CLUTCH HAND LEVER

The clutch hand lever (7, Figure 17) is located on the left handlebar where it may be operated easily with the fingers of the left hand. Pull lever in against handlebar grip to disengage clutch; release the lever slowly to its outward position to engage clutch.

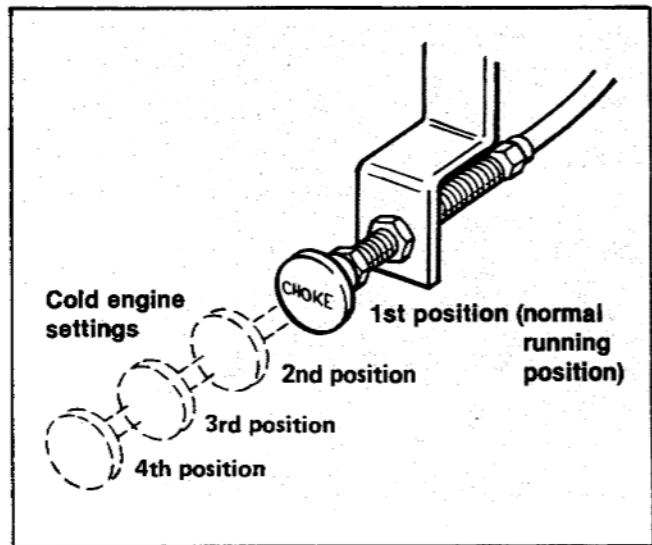


Figure 18. Setting the Choke

WARNING

Before starting engine, always shift transmission to neutral or fully disengage clutch to prevent accidental movement which could cause possible damage to motorcycle and personal injury.

WARNING

Make sure fingers are not positioned between hand control levers and handlebar grips or operation of vehicle could be impaired.

GEAR SHIFTER

The gear shifter is located on left side, where it may be operated conveniently with the toe of the left foot. Pushing lever all the way down (full stroke) shifts transmission to the next lower gear, while lifting lever all the way up (full stroke) shifts transmission into the next higher gear. The operator must release lever after each gear change to allow lever to return to its central position before another gear change can be made.

FLT models are equipped with a “heel-toe” shifter. Upshifting can be accomplished with the heel of the left foot while downshifting can be done with the toe.

Neutral position is between first (low) and second gears. The neutral indicator light (7, Figure 15, 16) will light when transmission is in neutral. First gear is the last gear position that can be found by pushing lever full strokes downward. To shift first gear to neutral, lift lever half its full stroke.

While recommended, it is not necessary to shift transmission to neutral before attempting to start the engine. By disengaging the clutch with the clutch hand lever and holding in the disengaged position, engine may be started regardless of the gear in which the transmission might be engaged. However, it is better whenever possible to start the engine with transmission in the neutral position.

With the motorcycle standing still and the engine not running, it usually will be necessary to move the motorcycle backward and forward with the clutch fully disengaged while maintaining a slight pressure on the foot shift lever before a shift from one gear to another can be made. 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 are not lined up to permit engagement. When this difficulty is experienced, do not under any circumstances, attempt to force the shift by “roughing” the shifter lever; the results of such abuse will be a damaged or broken shifter mechanism. Either roll the motorcycle as indicated above, or if the engine is running, engage the clutch very slightly at the same time applying light pressure to the shifter lever to make the shift. Both of these procedures set transmission gears in motion and then the shift can be made easily. See OPERATION.

BRAKES

The brake pedal controls the rear wheel brake and is located on the right side where it is operated by the right foot. The brake hand lever (8, Figure 17) controls the front wheel brake and is located on the right handlebar, where it is operated by the fingers of the right hand.

Brakes should be applied uniformly and gradually to prevent wheels from locking. A balance between rear and front braking is generally best. Begin braking with the rear brake and then apply the front brake slightly later as more braking force is needed.

WARNING

Do not apply either brake strongly enough to lock the wheel because this may cause possible loss of control of the motorcycle.

REAR BRAKE PEDAL ADJUSTMENT — FXRS, FXRT (Figure 19 and 20)

There are two important adjustments relating to proper

rear brake operation. Brake pedal height and push rod free play should both be adjusted together.

WARNING

An improperly adjusted rear brake pedal could contact the exhaust system and interfere with proper rear brake operation. An improperly adjusted rear brake push rod could cause dragging brakes or interference between brake pedal and exhaust system. Either condition could cause improper rear brake operation.

The top of the rear brake pedal should be 4-1/8 in. to 4-3/8 in. above the centerline of the pivot shaft as shown in Figure 19. Measure from the floor to the top of the brake pedal. The difference should be 4-1/8 in. to 4-3/8 in. Adjust as follows:

1. Make sure pedal arm does not contact footrest bracket. Center of footrest rubber should be 7/8 in. to 1-3/16 in. ABOVE centerline of pivot shaft. Adjust if necessary.
2. See Figure 20. Loosen locknut (4) and turn brake pedal stop bolt (3) in or out to achieve proper pedal height.
3. Tighten locknut (4) while holding brake pedal stop bolt (3) in place.

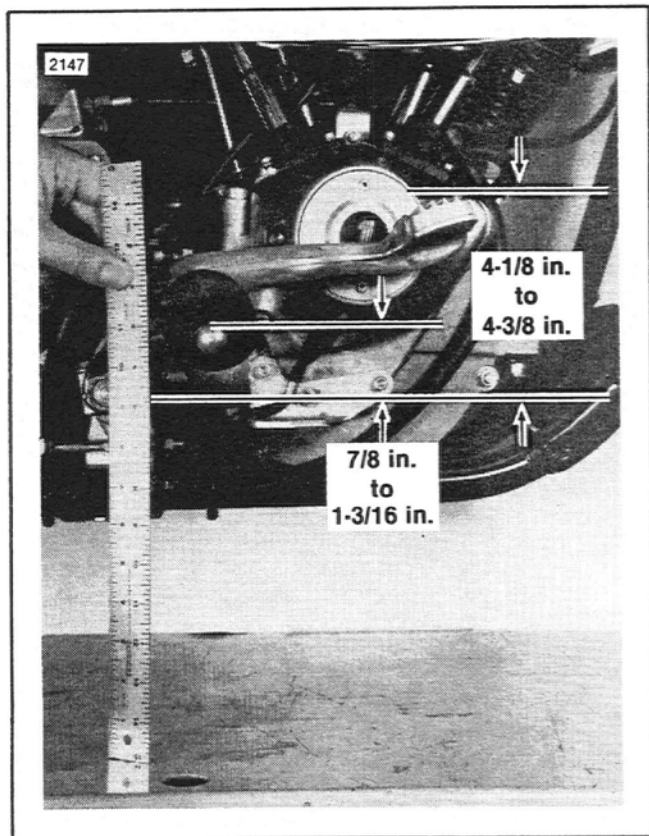


Figure 19. Measuring Footrest and Brake Pedal Height — FXRS, FXRT

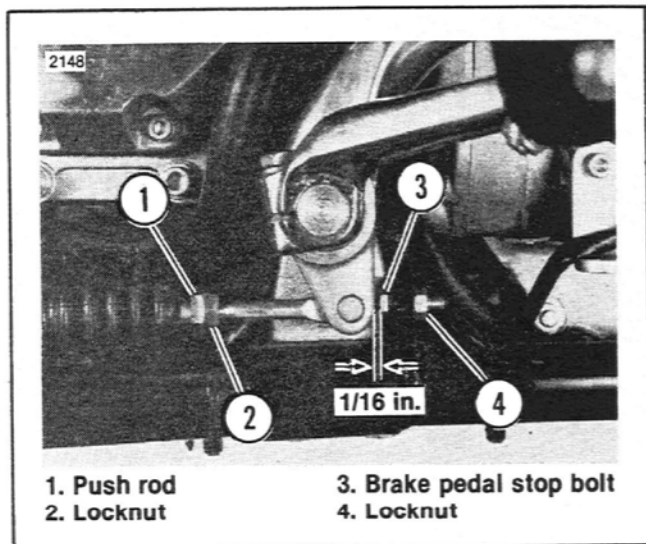


Figure 20. Adjusting Brake Pedal Height and Free Play — FXRS, FXRT

4. Push rod (1) must have 1/16 in. free play before activating master cylinder piston. Measure free play between brake pedal arm and brake pedal stop bolt (3). Loosen push rod locknut (2) and turn push rod in or out to achieve proper free play.
5. Tighten locknut (2) while holding push rod (1) in place.

FOOTBOARDS — FLT, FLHT (Figure 21)

FLT and FLHT models are equipped with adjustable footboards. Remove the bolts and washers as shown, and move the footboard to the desired position. Reinstall the bolts and washers. Tighten the bolts to 50 ft-lbs torque.

WARNING

After adjusting right footboard and/or brake pedal height, check for minimum clearance of 2.25 in. between bottom of brake pedal and footboard. Brake pedal free play must be set to .09 - .12 in. clearance. See your Harley-Davidson dealer for these adjustments.

JIFFY STAND

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

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

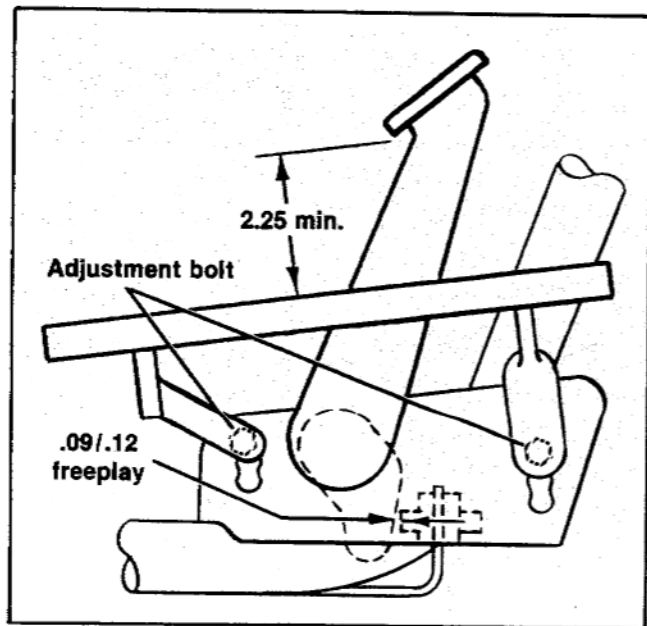


Figure 21. Footboard Adjustment — FLT, FLHT

causing a momentary disturbance before retracting. This momentary disturbance could distract the rider, possibly leading to loss of vehicle control.

TRIP ODOMETER

The trip odometer (1, Figure 15 and 17, Figure 6) may be used to record distances on trips or mileage between service intervals. To reset the trip odometer to zero, turn the reset knob located at the left side of the FLT and FLHT speedometer, and on the back of the FXRS and FXRT speedometer (2, Figure 15 and 5, Figure 16) counterclockwise.

OIL PRESSURE SIGNAL LIGHT

The oil pressure signal light for FLT and FLHT models is located on the instrument panel. The light on FXRS and FXRT models is located on the instrument bracket and is marked OIL (Figure 15 and 16). Light will go on when ignition/light switch is turned on before starting the engine. After the engine has started, light should go off. If the oil signal light fails to go off at speeds above idling, it is usually due to a low level or a diluted oil supply. In freezing weather, the oil feedline may clog with ice and sludge, thus preventing circulation of the oil. A grounded oil signal switch wire, faulty signal switch, or trouble with the oil pump will also cause the light to stay on. Then, if the oil supply is normal and the light still does not go off, see your Harley-Davidson dealer for service prior to operation.

REAR SHOCK ABSORBER SPRING ADJUSTMENT — FXRS (Figure 22)

The rear shock absorber springs can be adjusted to five positions for the weight the motorcycle is to carry. The

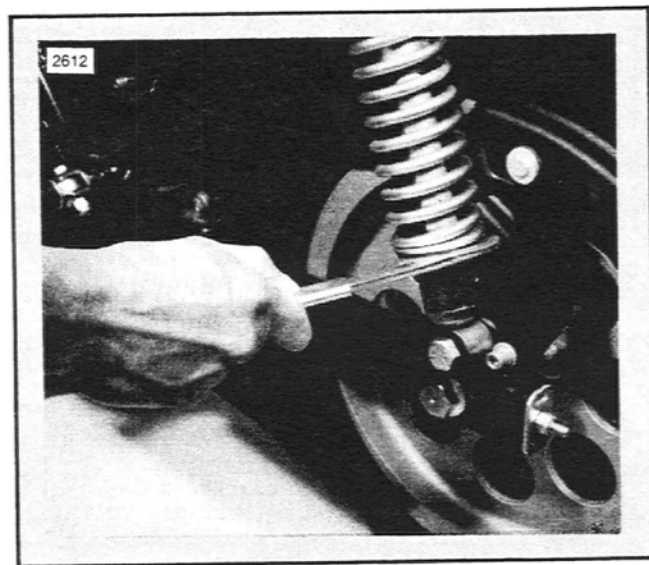


Figure 22. Rear Shock Absorber Spring Adjustment

average weight solo rider would use the extended spring position (off cam or first cam step). A heavy solo rider might require the position with springs slightly compressed (second cam step); two riders (driver and passenger) require the fully compressed spring position (third or fourth cam step).

To adjust the rear shock absorber turn spring adjusting cam (Figure 22) to desired position with spanner wrench. Both spring adjusting cams must be adjusted to the same position. When returning to off-cam position, cams should be backed off in opposite direction.

ADJUSTABLE AIR SUSPENSION

FLT and FLHT

The FLT and FLHT models feature front and rear air adjustable suspension. Air pressure may be varied to suit your own personal riding comfort. Lower pressure gives a softer ride and higher pressure give a firmer ride.

This front air suspension features Harley-Davidson's unique Anti-Dive System (patent pending). The purpose of this system is to reduce the amount of front fork deflection while braking. The amount of anti-dive is

automatically set as the air pressure in the system is adjusted. Higher pressure allows less front fork deflection (more anti-dive). Lower pressure allows more front fork deflection (less anti-dive).

The front air pressure is adjusted by adding or removing air from the air valve located at the back of the engine guard on the left side (Figure 23).

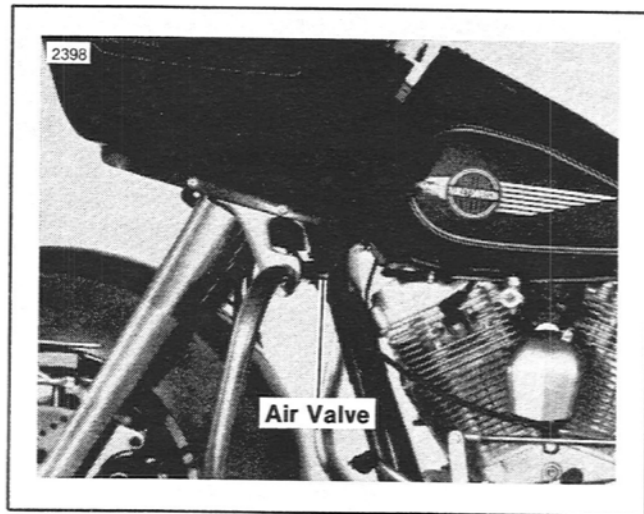


Figure 23. Front Air Suspension Adjustment — FLT, FLHT

The chart below shows recommended pressures for your riding comfort:

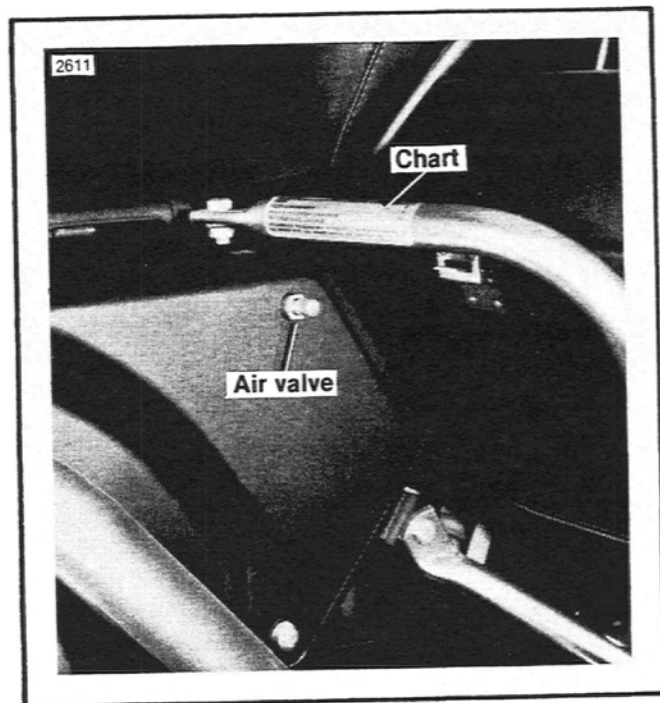
FLT/FLHT

<u>TYPE OF RIDE</u>	<u>AMOUNT OF ANTI-DIVE</u>	<u>psi</u>
Firm	Stiff	25
Normal	Normal	20
Soft	Soft	15

The rear air suspension is adjusted by adding or removing air from the air valve located on the left sidecover below the passenger seat (Figure 24). Refer to the chart for the correct air pressure. The following information is on this chart:

<u>LOADING</u>	<u>FLT/FLHT AIR SHOCK ABSORBER RECOMMENDED PRESSURE (PSI)</u>
RIDER	0
RIDER & PASSENGER	5
RIDER & PASSENGER & MAXIMUM RECOMMENDED LUGGAGE	10

RECOMMENDED PRESSURES MAY BE ADJUSTED FOR RIDER PREFERENCE. DO NOT EXCEED 20 PSI.



**Figure 24. Rear Air Suspension Adjustment
— FLT, FLHT**

CAUTION

Maximum air pressure of this system is 40 psi. Air components fill rapidly. To avoid possible damage to components use low air line pressure.

NOTE

A no-loss air gauge should be used to accurately measure air pressure. Use low line air pressure or a hand air pump to add air. An Air Suspension Gauge with a hand air pump attached is available at your Harley-Davidson dealer.

FXRT

The FXRT features air adjustable suspension front and split shock rear air adjustable suspension. A chart showing recommended pressures is located on the rear fender directly underneath the operator's seat. The following information is on this chart:

FXRT SPLIT SHOCK AIR SUSPENSION

LOADING	RECOMMENDED PRESSURES (PSI)		
	SHOCK	FORKS	ACCUMULATOR
Rider weight up to 150 lbs:	0 - 5	4 - 8	25 - 30
For each extra 25 lbs., add:	5	2	— —
Passenger weight for each 50 lbs., add:	10	1	— —
Luggage weight for each 10 lbs., add:	3	— —	— —
Maximum Pressures:	60	20	30

The right rear air suspension is adjusted by adding or removing air from the air valve located underneath the front of the right saddlebag (See Figure 25). Refer to the

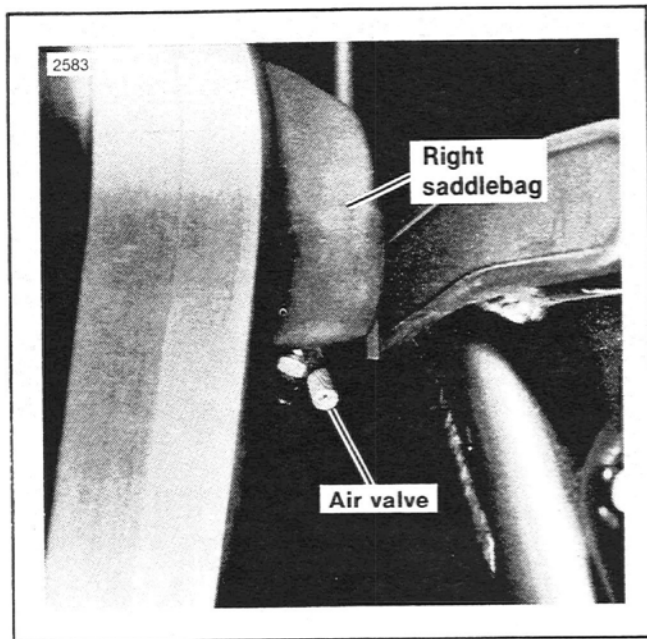


Figure 25. Rear Air Suspension Adjustment — FXRT

chart underneath the operator's seat for the correct air pressure.

The left shock absorber does not require adjustment.

The front suspension air pressure is adjusted by adding

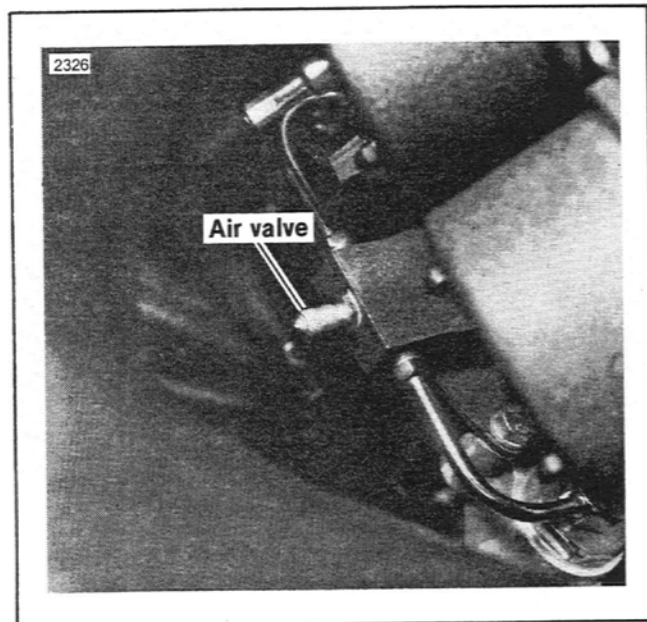


Figure 26. Front Air Suspension Adjustment — FXRT

or removing air from the air valve located directly below the speedometer and tachometer gauges (Figure 26). Refer to the chart for the correct air pressure.

The accumulator has a limited range of pressure adjustment and should not need to be adjusted for varying

loads. The air valve on the accumulator is located directly underneath the fairing between the front forks (Figure 27). Maximum pressure is 30 psi.

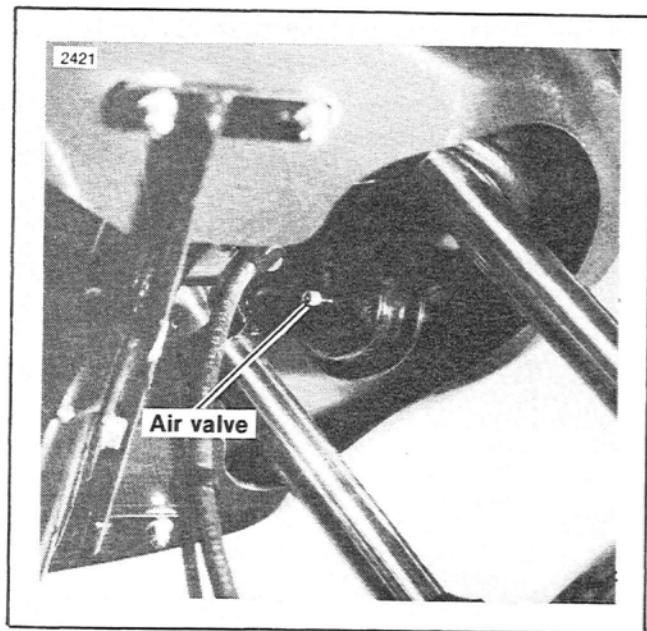


Figure 27. Accumulator

The preferred pressure for your personal riding comfort can be selected from the charts. Lower pressure gives a softer ride and higher pressure gives a firmer ride. Setting the pressure outside of the recommended range for your loading will result in a reduction of available suspension travel and reduced ride comfort. Pressures should be adjusted with the vehicle on the jiffy stand.

WARNING

Maximum air pressure should not be exceeded. All air components fill rapidly and we recommend low air line pressure be used to avoid damage to air components.

NOTE

A no-loss air gauge should be used to accurately measure air pressure. Use low line air pressure or a hand air pump to add air. An Air Suspension Gauge with a hand air pump attached is available from your Harley-Davidson dealer.

This Air Suspension System features Harley-Davidson's unique Anti-Dive System (patent pending). The purpose of this system is to reduce the amount of front fork deflection while braking. The amount of anti-dive is automatically set as the air pressure in the system is adjusted. Higher pressure allows less front fork deflection (more anti-dive). Lower pressure allows more front fork deflection (less anti-dive).

SADDLEBAGS — FXRT (Figure 28)

The FXRT saddlebags open with a lock and a drawcatch. Drawcatch may be unlocked by inserting key in lock and turning key to horizontal position. Lift drawcatch up and saddlebag outer will fall open.

To close saddlebag, make sure the drawcatch is in the open position, lift up and in on the saddlebag outer until it seats onto the saddlebag inner and snap the drawcatch closed. To lock the bag, turn the key to vertical position and remove for security.

The saddlebags are provided with travel bags that can be removed, packed and set down into the open saddlebag outer. The saddlebag can then be closed and locked as described above.

NOTE

Saddlebags should be locked whenever motorcycle is in operation.

WARNING

Maximum recommended load for each saddlebag is 15

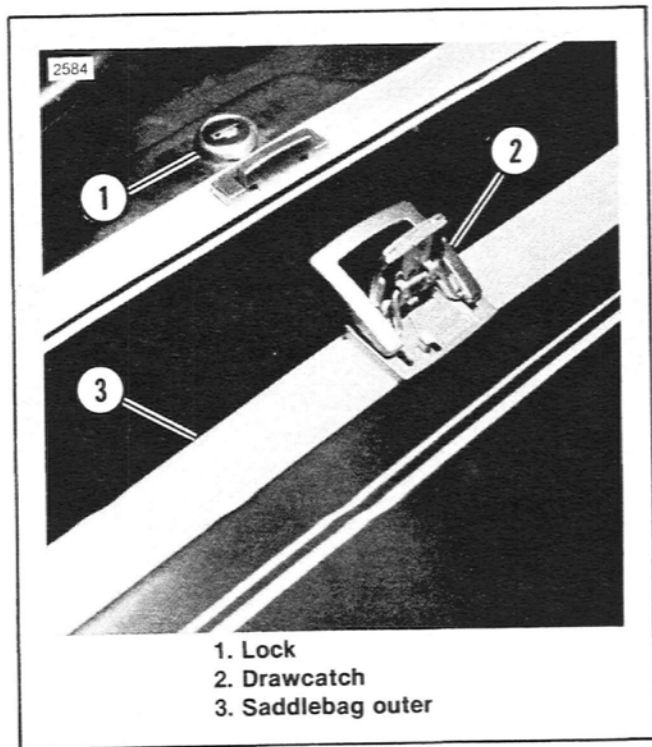


Figure 28. Saddlebag Lock — FXRT

lbs. with maximum inflation pressure in rear tire.

SADDLEBAGS — FLT, FLHT (Figure 29)

The saddlebags must be removed from the motorcycle when performing operations such as adjusting the rear belt. To remove saddlebags:

1. With key slot in horizontal (unlocked) position, lift drawcatch up. Lift the cover off.
2. Lift wire loop and turn the 1/4 turn fasteners counterclockwise until they release. Lift the saddlebag free of motorcycle.

NOTE

Saddlebags should be locked whenever motorcycle is in operation.

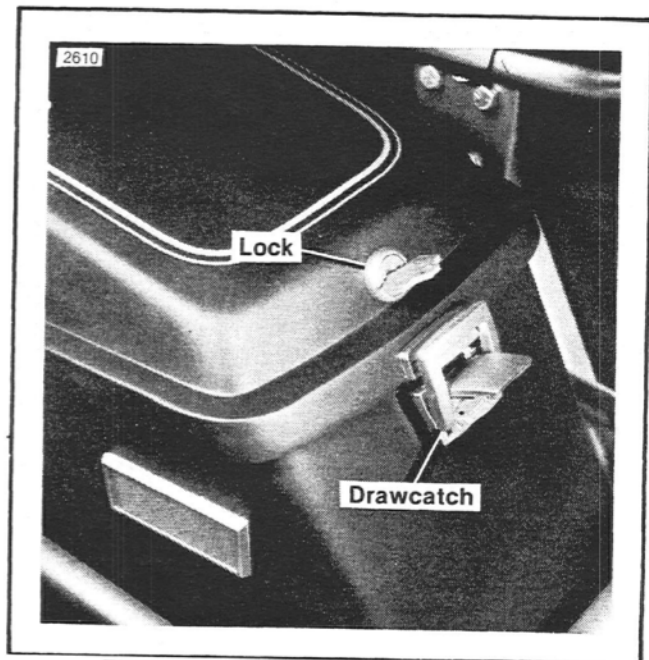


Figure 29. Saddlebag Lock — FLT, FLHT

KING TOUR PAK — FLT, FLHT (See Figure 30)

The King Tour-Pak with sidelights is standard on FLT and FLHT models

Tour-Pak Removal

1. Unplug the wiring harness leading from the Tour-Pak to the motorcycle. Firmly grasp both ends of the molded rubber connector and pull apart.

CAUTION

Do not pull on the wires since this may cause them to break.

2. Lift open Tour-Pak cover and remove mat at bottom of Tour-Pak exposing 1/4 turn fasteners.
3. Lift wire loop and turn the 1/4 turn fasteners counterclockwise until they release. Lift Tour-Pak free of motorcycle.

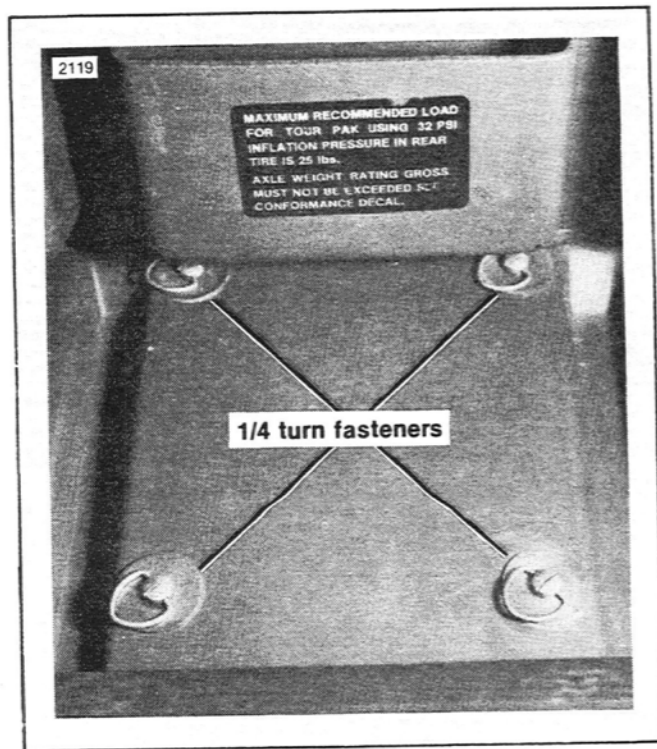


Figure 30. Tour-Pak Installation — FLT, FLHT

NOTE

When reinstalling King Tour-Pak reconnect lights at the rubber connectors.

Tour-Pak should be locked whenever motorcycle is in operation.

SEAT — FXRS, FXRT

The seat release lever is located on the left side of the motorcycle at the base of the seat. Lift up on the lever to tilt the seat up exposing the battery and oil tank.

NOTES

WARNING

For your personal welfare, all the listed service and maintenance recommendations should be followed because they may affect the safe operation of your motorcycle.

BREAK-IN MAINTENANCE

NOTE

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

After a new motorcycle has been driven its first 500 miles, the motorcycle 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 mentioned, the owner should at least perform the following outlined service or arrange to have it done. Take the motorcycle to the dealer for more complete servicing when convenient to do so.

WARNING

Stop the engine and support the motorcycle securely before performing all service procedures. Service should be performed in an adequately lighted and ventilated work area using proper tools. When working on motorcycle, do not support motorcycle by placing supports under brake pedal. Damage to the brake system could occur causing possible malfunction and personal injury.

CHECK AT FIRST 500 MILES

1. Change engine oil.
2. Replace oil filter.
3. Clean tappet oil screen.
4. Change primary chaincase oil and clean magnetic drain plug.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
7. Check battery electrolyte level; check and clean connections.
8. Check rear brake pedal height adjustment and freeplay.
9. Inspect brake pad linings and discs for wear.

10. Check brake fluid level and condition.
11. Check clutch adjustment.
12. Inspect fuel valve, lines and fittings for leaks.
13. Inspect oil lines and brake system for leaks.
14. Lubricate the following: front brake handlever, throttle control cables, clutch control cable and handlever.
15. Check tightness of all fasteners.
16. Check stabilizer links and engine mounts.
17. Check tire pressure and inspect tread.
18. Check engine low and fast idle speed adjustment.
19. Check operation of throttle and choke controls.
20. Check operation of all electrical equipment and switches.
21. Check wheel alignment.
22. Check wheel spoke tightness.*
23. Check and adjust rear drive belt.
24. Change transmission oil and clean magnetic drain plug.
25. Clean fuel tank filter screen.
26. Check rear fork pivot nut tightness.
27. Check front fork bearing adjustment.
28. Check and adjust air suspension system.
29. Road test.

* If applicable to equipment.

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 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, transmission, and primary chaincase fluid levels.
7. Wheel spoke tightness if applicable.
8. Headlight, taillight, brake light, and directional light operation.

REGULAR SERVICE INTERVALS

Regular lubrication and maintenance will help keep your new Harley-Davidson operating at peak performance. Your Harley-Davidson dealer knows best how to

Regular Maintenance Intervals — FLT, FLHT, FXRS, FXRT

SERVICE TO BE PERFORMED	MILEAGE INTERVALS						
	Every 300	First 500	Every 2500	Every 5000	Every 7500	Every 10,000	Every Spring or Fall
Change engine oil		X	X	X	X	X	X
Replace oil filter		X	X	X	X	X	X
Check tappet oil screen		X	X	X	X	X	X
Change primary chaincase oil and clean magnetic drain plug		X		X		X	X
Inspect air cleaner and service as required		X	X	X	X	X	X
Check and adjust rear drive belt		X	X	X	X	X	X
Check battery electrolyte level; check and clean connections		X	X	X	X	X	X
Check rear brake pedal adjustment and free play		X	X	X	X	X	
Check brake pad linings and discs for wear		X	X	X	X	X	
Check brake fluid level and condition		X	X	X	X	X	X
Check clutch adjustment		X	X	X	X	X	
Inspect fuel valve, lines and fittings for leaks		X	X	X	X	X	
Check and adjust primary chain		X	X	X	X	X	
Lubricate the following: front brake handle lever, throttle control cables, choke control cable, clutch control cable and handle lever		X	X	X	X	X	X
Check tightness of all fasteners (except cyl. hd. bolts)		X	X	X	X	X	X
Check stabilizer links and engine mounts		X	X	X	X	X	
Check tire pressure and inspect tread		X	X	X	X	X	X
Check engine low and fast idle speed adjustment		X	X	X	X	X	
Check operation of throttle and choke controls		X	X	X	X	X	
Check operation of all electrical equipment and switches		X	X	X	X	X	

Regular Maintenance Intervals — FLT, FLHT, FXRS, FXRT(Cont'd)

SERVICE TO BE PERFORMED	MILEAGE INTERVALS						
	Every 300	First 500	Every 2500	Every 5000	Every 7500	Every 10,000	Every Spring or Fall
Check wheel alignment		X	X	X	X	X	
Check wheel spoke tightness*		X	X	X	X	X	
Check ignition timing			X	X	X	X	
Check condition of spark plugs and replace if necessary			X		X		
Replace spark plugs				X		X	
Check transmission lubricant level			X		X		X
Change transmission lubricant		X		X		X	X
Check primary chaincase oil level			X		X		
Clean fuel tank filter screen		X		X		X	X
Check rear fork pivot nut tightness (45 ft-lbs)		X		X		X	
Check front bearing adjustment		X		X		X	
Check condition of rear shock absorber rubber bushing				X		X	X
Lubricate the following: throttle control grip sleeve, speedometer cable, rear brake pedal bushing, shift lever shaft				X		X	
Check condition of rear and front brake caliper mounting pins and lubricate						X	
Repack wheel bearings with grease						X	
Change front fork oil				X		X	X
Check air suspension pressure	X	X	X	X	X	X	X
Road test		X	X	X	X	X	
Date Completed:							

*If applicable to equipment

service your motorcycle with factory approved methods and equipment assuring you of thorough and competent workmanship.

NOTE

The performance of regular service interval operations is 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. Also, any alterations to the emission system components, such as the carburetor and exhaust system, may be in violation of federal and state laws.

STORAGE

If your 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, preserve the battery and to prevent the build-up of gum and varnish in the carburetor.

This information is in the OWNER'S MAINTENANCE GUIDE available through your local Harley-Davidson dealer.

WARNING

After extended periods of storage and prior to starting vehicle, place transmission in gear, disengage the clutch and push vehicle back and forth a few times to ensure proper clutch disengagement.

ENGINE LUBRICATION

Engine oil is a major factor in the performance and service life of the engine. Use the proper grade of oil for the lowest temperature expected before the next oil change as shown below. Your Harley-Davidson dealer has the proper grade oil to suit your requirements.

Use Harley-Davidson POWER BLEND SUPER PREMIUM OIL for normal and severe usage in air temperatures between 10° F and 100° F. plus. For other conditions, or if POWER BLEND SUPER PREMIUM is not available, use oils as shown in the chart below.

Air Temperature (Cold Engine Starting Conditions)	Use Harley-Davidson Oil Grade
10° to 100° F. plus Normal & severe operating conditions	Power Blend Super Premium
Below 40° F. Above 40° F. Above 60° F. Severe operating conditions at air temperatures Above 80° F.	Special Light Medium Heavy Regular Heavy Extra Heavy Grade 60

CHECKING OIL LEVEL

Engine oil level should be checked only when engine is at normal operating temperature. The engine will require a longer warm up period in colder weather. The motorcycle should be driven for a few minutes to ensure oil is hot and normal operating oil pressure is achieved. When the above conditions are met, turn the engine off. Position motorcycle STRAIGHT UP and completely level for FLT and FLHT models. For FXRS and FXRT models, position motorcycle on jiffy stand. The oil tank fill plug is located on the right side of FLT, FLHT models (Figure 31) and under the seat of the FXRS and FXRT models (Figure 32). It is a friction fit in the filler neck. Remove it by pulling straight out with a rocking or twisting motion. The plug has a dipstick attached to indicate oil level in the tank (Figure 33).

Wipe off dipstick and insert into tank with plug pushed completely into filler neck. Remove and note oil level. If oil level is down to or below lower mark on dipstick add only enough oil to bring level to upper mark on dipstick. Do not fill above upper mark on dipstick.

Remove oil tank fill plug and CHECK OIL SUPPLY AT EACH COMPLETE REFILL.

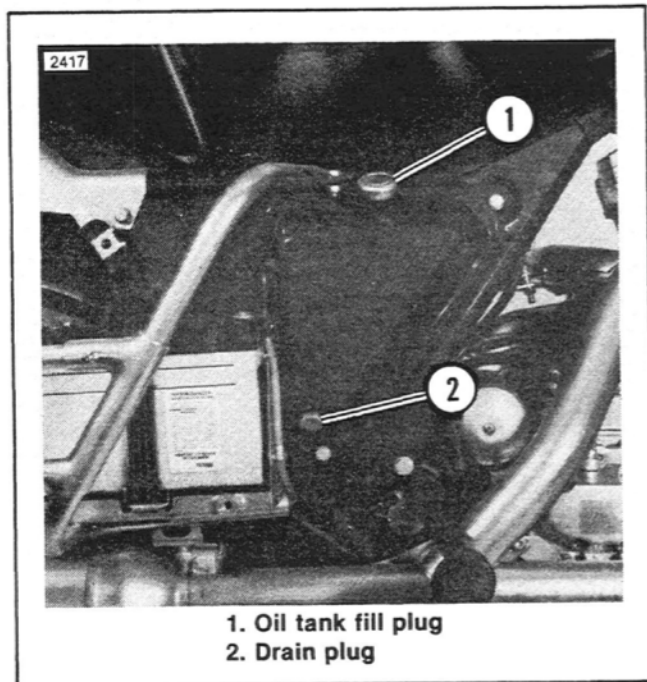
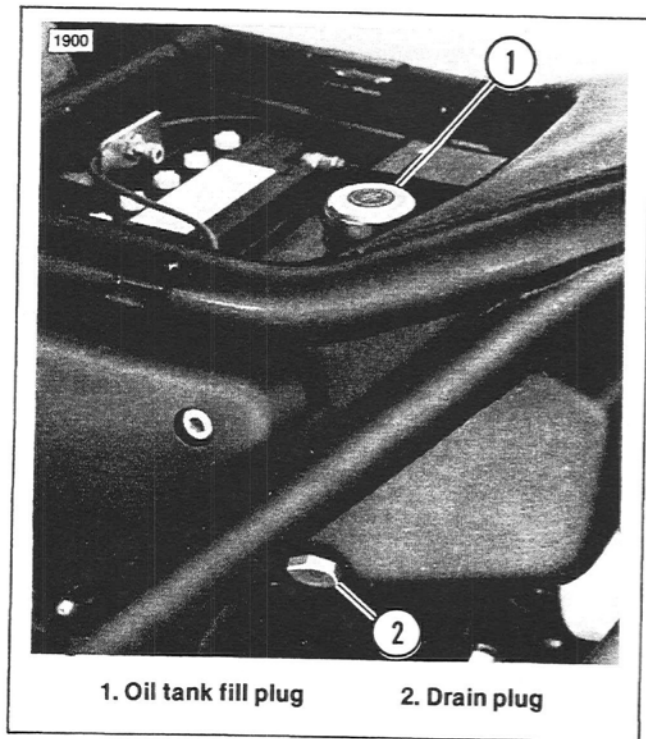


Figure 31. Oil Tank — FLT, FLHT



1. Oil tank fill plug

2. Drain plug

Figure 32. Oil Tank — FXRS, FXRT

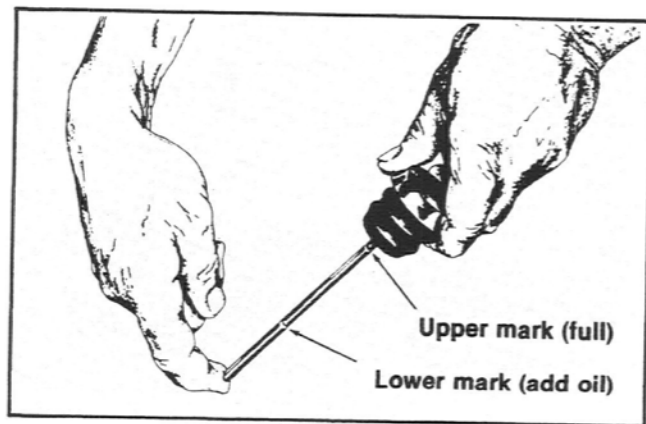


Figure 33. Oil Level Dipstick

CAUTION

Do not allow oil level to fall below lower mark on dipstick. Do not overfill oil tank. Overfilling may cause oil carryover to the air cleaner.

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

Oil should be changed after the first 500 miles for a new engine, and thereafter at about 2500 mile intervals in normal service at warm or moderate temperatures. Oil change intervals should be shorter in cold weather — see WINTER LUBRICATION. Completely drain oil tank of used oil and refill with fresh oil. 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 hot. It is not necessary to drain the crankcase as it does not accumulate used oil. At the time of the first 500 mile oil change, and at least every second oil change thereafter, thoroughly flush and clean out tank to remove any sediment and sludge that may have accumulated. Your dealer has facilities for quick flushing and cleaning of oil tank. The oil filter should be replaced every time the oil is changed.

CAUTION

When draining and refilling the oil tank or transmission, be careful that dirt and debris does not get into case or oil tank. Do not allow draining oil to get on rear wheel, tire, or brake components.

Oil Filter

Oil filter is located underneath the motorcycle, behind the transmission.

Completely drain oil tank before removing oil filter. Clean filter gasket contact surface on mounting plate. Surface should be smooth and free of any debris or old gasket material. Apply a thin film of oil to gasket contact surface on mounting plate and to gasket on new oil filter.

Screw filter onto adapter until gasket contacts plate surface. Apply another 1/2 to 3/4 of a turn by hand.

CAUTION

Do not overtighten. Overtightening will cause leakage at the gasket surface.

WARNING

Make sure no oil gets on rear tire when changing the filter.

Tappet Oil Filter Screen

The tappet oil filter screen (1, Figure 34) is located in the crankcase above the oil pump. Unscrew the slotted plug, remove and clean or replace the screen initially at 500 miles and every 2500 miles thereafter. Oil screen is installed with closed end up.

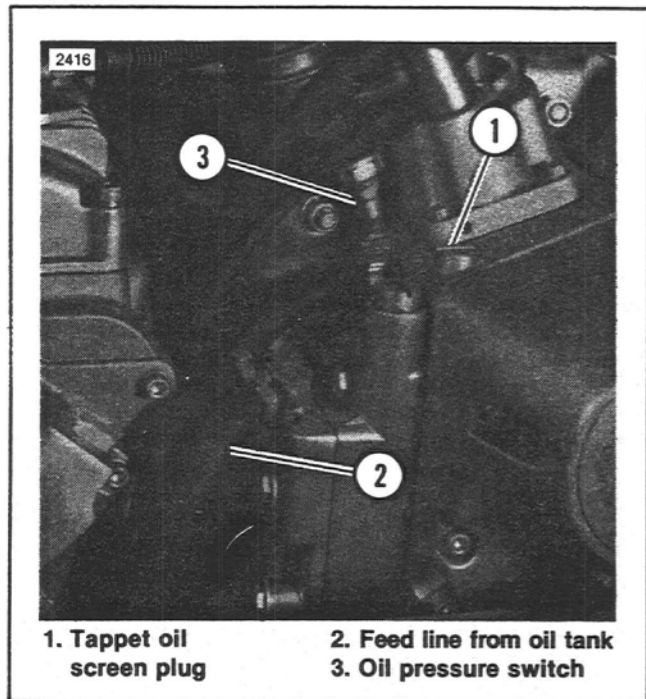


Figure 34. Tappet Filter Screen

If oil pressure light comes on at idle speed, check tappet screen first.

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 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. However, a moderately driven engine, making only short runs now and then, and seldom getting thoroughly warmed up, is likely to accumulate an increasing amount of water in the oil tank. This water will, in freezing weather, become slush or ice, and if allowed to accumulate too long, may block the oil lines and cause damage to the engine. Also, water mixed with oil for some time forms sludge that is harmful to the engine and causes undue wear of the various working parts. Therefore, in winter, the oil change interval should be shorter than normal for all engines, and 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 farther below freezing the temperature drops, the shorter the oil change interval should be.

TRANSMISSION LUBRICATION

The transmission lubricant level should be checked monthly. When filling the transmission, use Harley-Davidson TRANSMISSION LUBRICANT, Part No. 99892-84.

NOTE

When checking the transmission lubricant level, motorcycle should be standing STRAIGHT UP, not leaning on the jiffy stand.

When normal operating temperature is achieved, turn the engine off and position motorcycle STRAIGHT UP and completely level.

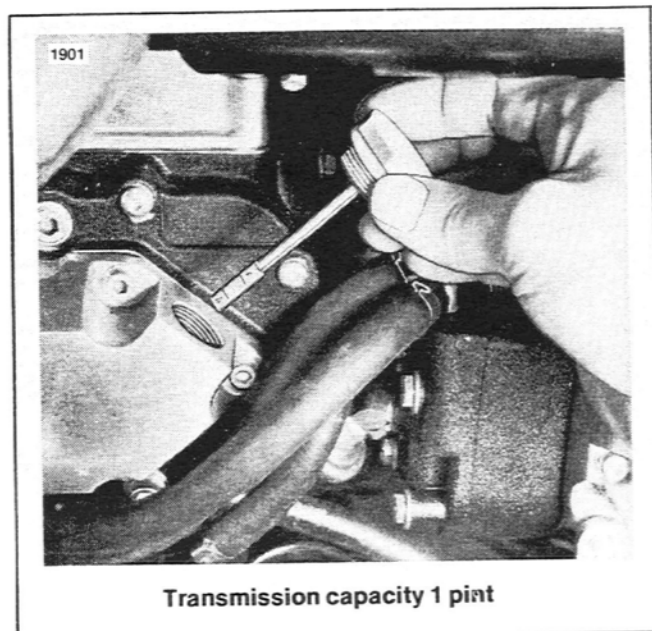
Remove the threaded filler plug. Clean dipstick and reinstall all the way. Remove dipstick and take reading. (See Figure 35). Lubricant level should be between the two marks on the dipstick. Add lubricant if necessary. Do not overfill or leakage may occur. The transmission capacity is approximately 1 pint. When reinstalling the filler plug, tighten it finger tight.

The transmission should be drained and refilled with fresh lubricant after the first 500 miles and thereafter seasonally or every 5000 miles, whichever comes first.

The transmission drain plug is located underneath the transmission, in the middle of the case. When reinstalling the drain plug, tighten it to 7 ft-lbs torque.

CAUTION

Do not overtighten drain plug. When draining and refill-



Transmission capacity 1 pint

Figure 35. Transmission Filler Cap

ing the transmission, be careful that dirt and debris do not get into the case. Do not allow draining lubricant to get on rear wheel, tire or brakes.

PRIMARY CHAINCASE LUBRICATION

The 1340cc models feature a wet type "Diaphragm-Spring Clutch". This new clutch design incorporates easier hand lever pull along with improved performance and durability.

The primary chaincase is now totally enclosed and has its own oil bath.

Lubrication is a major factor in the performance and service life of the new clutch components. Use Harley-Davidson PRIMARY CHAINCASE LUBRICANT, Part No. 99887-84 for all operating temperatures.

Chaincase oil should be changed initially at 500 miles and every 5000 miles thereafter. Chaincase capacity is 1-1/2 quarts.

CHECKING CHAINCASE OIL LEVEL

1. Position motorcycle STRAIGHT UP and level.
2. Remove screws and nylon washers that secure clutch inspection cover.
3. Remove clutch inspection cover carefully, to avoid damaging o-ring or finish on cover.
4. Primary chaincase oil should be level with bottom of clutch spring slot openings or level with bottom of clutch inspection opening.

CAUTION

Replace o-ring if damaged or not seating properly to avoid oil leakage.

5. Replace clutch inspection cover and secure with screws and new nylon washers. Tighten to 4-6 ft-lbs torque. Do not overtighten.

CAUTION

When draining or refilling with oil do not allow dirt or debris to enter chaincase. Do not allow draining oil on rear wheel, tire, or brake components.

NOTE

Whenever draining chaincase oil, inspect and clean chaincase magnetic drain plug.

Check primary chaincase oil level and clutch adjustment every 2500 miles. We recommend your Harley-Davidson dealer perform these services for you.

PRIMARY CHAIN

The front chain adjustment should be checked every 2500 miles 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 both chain and sprocket will wear excessively.

Inspect chain occasionally for links in bad condition. If any are found, replacement of entire chain is recommended.

GENERAL MAINTENANCE

Chrome and aluminum parts must be maintained regularly to ensure that they retain their original shine and luster. Several of these service procedures are outlined in the OWNER'S MAINTENANCE GUIDE. Care should be taken to keep your new Harley-Davidson motorcycle waxed and clean as often as possible to inhibit rust and corrosion.

SECONDARY DRIVE BELT

The secondary belt inner tooth surface has a thin coating of polyethylene lubricant. During initial operation this coating will wear off 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 500 miles and every 2500 miles thereafter.

See Figure 36. When 10 lbs. of force is applied at the mid-point of the belt's bottom strand, deflection should equal 5/16 in. to 3/8 in. with rear wheel on the ground and one rider sitting on the motorcycle.

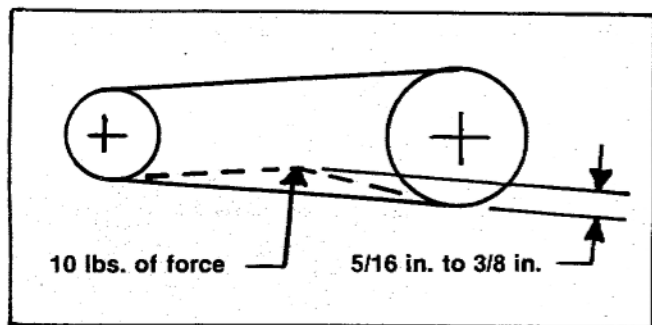


Figure 36. Belt Tension

Rear Belt Adjustment

A properly adjusted belt should have 5/16 in. to 3/8 in. total free up and down movement midway between the transmission sprocket and the rear wheel sprocket.

1. On FLT and FLHT models, loosen locknut on rear brake caliper bracket and anchor bolt. Loosen axle nut on right side.
2. With the motorcycle upright and one rider sitting on it, turn the axle adjuster nuts on both sides of the rear wheel an equal amount of turns to keep the rear wheel in alignment. See Service Manual for correct REAR WHEEL ALIGNMENT.

CAUTION

Check rear wheel alignment. Wheel must run centrally in the swing arm.

3. With 5/16 in. to 3/8 in. total free up and down movement established in belt midway between sprockets, tighten axle nut at 60-65 ft-lbs torque.
4. Check rear brake caliper position on rear brake disc. Disc should run true within brake caliper.

WARNING

Misalignment of rear wheel and/or brake caliper could cause rear brake disc to bind-up resulting in severe damage and/or personal injury.

5. On FLT and FLHT models, tighten the rear brake anchor bolt to a point where the rubber plug in the center of the bolt is just starting to compress. Tighten the locknut to 20 ft-lbs torque.

CHASSIS LUBRICATION

Greasing

1. Use wheel bearing grease for steering head bearings and wheel bearings. Use a multi-purpose chassis grease for other applications.
2. Repack front and rear wheel bearings every 10,000 miles, or yearly if operated under winter conditions.

3. Remove and lubricate handlebar throttle control grip sleeve with graphite every 5000 miles, once each year, or when operation indicates lubrication is necessary.
4. Remove and lubricate speedometer drive cable every 5000 miles.
5. Grease the rear brake pedal pivot every 5000 miles at the fitting. The bushing should be cleaned and inspected for wear before applying fresh grease.
6. Apply grease to shifter shaft pivot every 5000 miles at the fitting.

Oil Applications

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

Front Fork Oil

The hydraulic front fork requires little maintenance or attention. Drain and refill annually. If fork does not appear to be working properly or an appreciable amount of oil leakage should develop, attention should be given by

a Harley-Davidson dealer. Incorrect recoil action will result if there is insufficient oil in either side of fork.

SPARK PLUGS

Check the spark plugs every 2500 miles and replace if necessary. Replace the spark plugs every 5000 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 wires since this may damage the internal conductor causing high resistance and reduction in firing voltage.

Before installing spark plugs, the gap should be checked and adjusted if necessary to 0.038 to 0.043 in. Be sure that your motorcycle has the correct spark plug, which is the Harley-Davidson 5R6A.

Spark plugs must be tightened to 18-22 ft-lbs torque in the cylinder heads for proper heat transfer. If a torque wrench is not available, tighten plugs finger tight and tighten an additional one quarter turn with a spark plug wrench.

CARBURETOR

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

Carburetor controls include throttle, choke and low/high idle speed adjusting screws. Operation should be checked and adjusted after the first 500 miles and every 2500 miles thereafter.

CAUTION

Operation at higher altitudes (approximately 4000 ft. elevation) may require carburetor modifications for best engine performance. A high altitude carburetor kit, which provides leaner fuel/air mixtures, is available from your Harley-Davidson dealer.

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

AIR CLEANER

Carburetor air cleaner is equipped with a plastic foam air filter element which is oil saturated.

Remove air cleaner cover and inspect filter element at least every 2500 miles, or more often under dusty condi-

tions. The need for servicing is indicated by the appearance of the outside surface of the filter. Filter should be cleaned and re-oiled if a film of dirt has built up covering the surface pores, or if light spots show on the surface which means that dust is drying out the oil. A dark appearance is normal, as long as pores in the filter remain open and covered with an oil film.

1. To clean filter, remove it from screen and wash it in a non-flammable petroleum solvent or detergent and water. Allow to dry thoroughly.
2. Evenly apply 1 to 1½ tablespoons of engine oil to the filter element with an atomizer or work that amount of oil into the filter element by hand. There should be no excess.
3. Replace element on screen so that the grooves are toward screen, and re-install on engine.

CAUTION

Do not run engine without filter element in place.

GASOLINE STRAINER

A screen type gasoline strainer is located on top of the gasoline supply valve inside the gasoline tank (see Figure 10). Check the fuel valve, lines and fittings for

leakage as part of the pre-ride inspection. Screen should be cleaned after the first 500 miles and every 5000 miles thereafter.

IGNITION TIMING

Ignition timing is preset at the factory. Spark timing is advanced electronically as engine speed increases to suit starting, low speed and high speed requirements.

Ignition timing should be checked every 2500 miles. If ignition timing is not correct, see your Harley-Davidson dealer.

HYDRAULIC TAPPETS

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

When starting an engine which has been shut off even for a few minutes, the valve mechanism may tend to be slightly noisy until the hydraulic units completely refill with oil. If at any time, other than for a short period im-

mediately after engine is started, valve mechanism becomes abnormally noisy, it is an indication that one or more of the hydraulic units may not be functioning properly. Always check the lubricating 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 due to dirt in the oil supply passages leading to the lifter units. Inspect and clean tappet oil supply filter screen (1, Figure 31). See your Harley-Davidson dealer for service.

CLUTCH

Periodic adjustment of the clutch and oiling of the clutch control cable is required every 2500 miles to compensate for lining wear. The need for attention to clutch and controls will also be indicated by the clutch slipping under load, or dragging in released position. In any case, the first thing to be checked is the adjustment of the control cable. See your Harley-Davidson dealer for proper service.

WHEEL BEARINGS

Bearings should be repacked at 10,000 mile intervals, or yearly if operated in winter weather. Use wheel bearing grease and new seals. Excessive play or roughness indicates worn bearings and they will require replacement.

Front wheel bearing end play should be .004-.018 with axle nut tightened to 50 ft-lbs torque.

FXRS and FXRT rear wheel bearing end play should be .004-.018 with axle nut tightened to 60-65 ft-lbs torque.

FLT and FLHT rear wheel bearing end play should be .002 to .006 with axle nut tightened to 60-65 ft-lbs torque.

BRAKES

Every 2500 miles, check the fluid level in the master cylinder reservoir and check brake pad lining and brake discs for wear. Use only D.O.T. 5 HYDRAULIC BRAKE FLUID that is approved for brake system use which is available from your Harley-Davidson dealer.

WARNING

Because brake performance is a critical safety item, brake system servicing requires special tools, correct replacement parts and procedures. We recommend that you see your Harley-Davidson dealer for these services.

Brake pads must be inspected for wear every 2500 miles. If the brake pad friction material is 1/16 in. thick or less (the thickness of a nickel) the pads must be replaced immediately. See Figure 37. Failure to replace pads when necessary could result in brake malfunction and personal injury. However, if you ride under adverse

conditions, steep hills, heavy traffic, etc., or if you tend to use the rear brake only, more frequent inspection, 1000 miles or less, will be necessary. We do not recommend using the rear brake only.

Visual inspection of brake pads can be made without removing the caliper by viewing the lower rear area of each caliper with the aid of a flashlight. Always replace brake pads in pairs. If this routine maintenance is ignored, loss in braking performance and brake system component damage could occur.

The rear brake outer pad on all models except FLT models can be measured from the caliper bracket side using a 6 in. rule. Place the rule against the brake disc through the notch in the bracket. See Figure 38. 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.

The rear outer brake pad on FLT models is easily visible.

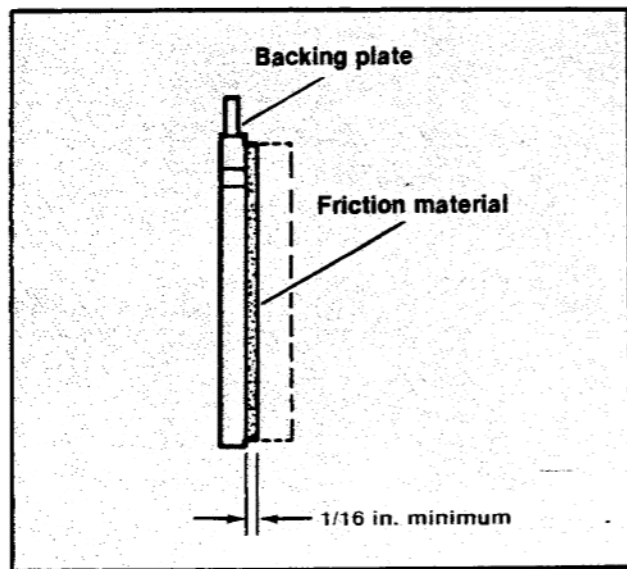


Figure 37. Brake Pad Side View

WHEEL ALIGNMENT

The stabilizer links and engine mounts should be

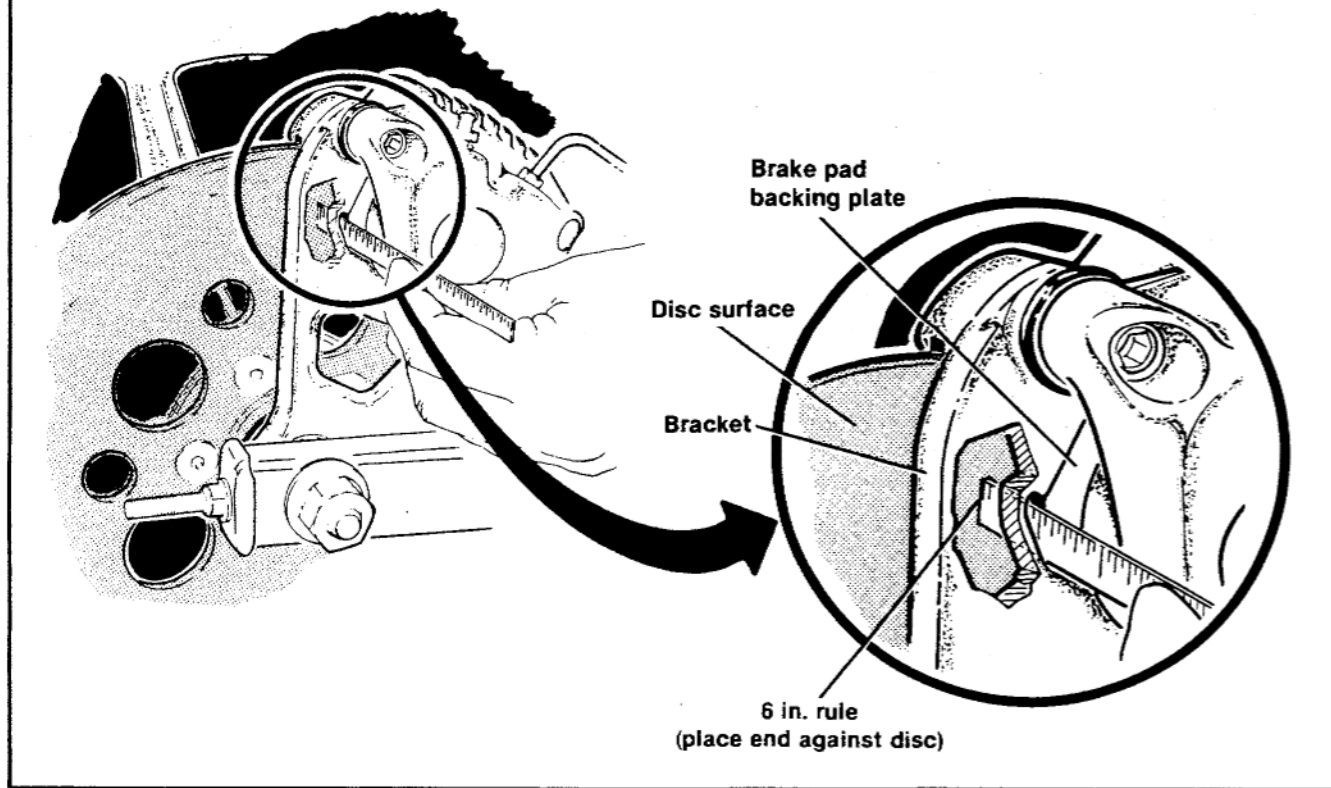


Figure 38. Measuring Rear Brake Outer Pad

checked for wear according to Service Manual procedures after the first 500 miles and every 2500 miles thereafter. Stabilizer links should be replaced if they have 0.025 in. or more end play. See your Harley-Davidson dealer for this service.

Alignment of the wheel in the rear fork should be checked after the first 500 miles, every 2500 miles thereafter and whenever the rear wheel is removed and reinstalled or when the chain is adjusted.

WARNING

The alignment of the rear wheel is important. Vehicle stability is adversely affected if wheels are out of alignment. Major alignment of the front and rear wheel is controlled by two stabilizer links, one at the front of the engine and one at the top of the engine. Do not change the adjustment of the links. Changing the adjustment as little as 1/3 turn will adversely affect motorcycle stability.

Major alignment should only be performed by your Harley-Davidson dealer using Service Manual procedures.

REAR WHEEL REMOVAL FOR FLAT TIRE REPAIR — FLT, FLHT

1. Support motorcycle under the frame with the rear wheel raised off the ground at least 4 to 4-1/2 in.
2. Remove both saddlebags and left muffler.
3. Loosen and remove axle nut, flat washer and lockwasher.
4. Remove rear axle.
5. Remove belt from rear belt sprocket.
6. Drop wheel down and to rear so brake disc is disengaged from caliper.

NOTE

It may be necessary to slide brake caliper forward on swingarm to gain extra clearance for removing the wheel.

7. Remove wheel from left side, sliding the bottom of the wheel out first.

RE-INSTALLING REAR WHEEL — FLT, FLHT

1. Place wheel in position under fender.
2. Align brake disc so it slips between the brake pads.

NOTE

Additional clearance between brake caliper and tire may be obtained by deflating tire.

3. Reinstall belt on rear sprocket.
4. Reinstall rear axle, making sure belt adjusters and brake caliper bracket are in position.

5. Tighten axle nut to 60-65 ft-lbs torque.

NOTE

Vehicle realignment will not be required unless, belt adjusters were loosened or not kept in their original positions.

REMOVAL AND INSTALLATION OF REAR WHEEL — FXRS, FXRT

To remove rear wheel follow procedure previously given for FLT except, skip Step 2. Installation is identical to that given for FLT.

CAUTION

Do not operate the rear brake pedal when the rear wheel is removed because the brake caliper piston may be forced out of the caliper bore. The brake system will require disassembly to reseal the piston.

WARNING

Misalignment of rear wheel and/or brake caliper could cause rear brake disc to bind-up resulting in severe damage and/or personal injury.

TIRES

Care should be taken to keep tires properly inflated. See TIRE DATA, for correct cold tire inflation pressures. Check before riding when tires are cold. Do not over-inflate tires.

WARNING

Improper tire inflation will cause abnormal tread wear and could result in unstable handling. Under-inflation could result in the tire slipping on the rim.

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

WARNING

Riding with excessively worn, unbalanced or improperly inflated tires is hazardous and will adversely affect traction, steering and handling.

Same as original equipment tires must be used. Other tires will not fit correctly and may be hazardous to use.

Because tires, tubes, wheels, and air valves are critical safety items, and servicing of these items requires special tools and skills, we recommend you see your dealer for these services.

SHOCK ABSORBERS

Shock absorbers and rubber bushings should be inspected every 5000 miles for leaks and bushing deterioration.

FRONT FORK BEARINGS

Check front fork for proper bearing adjustment at 500

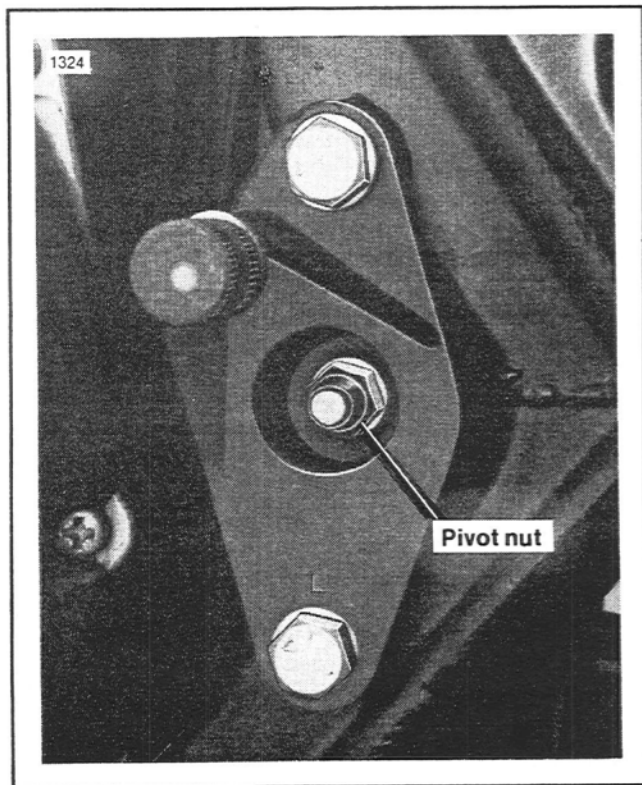


Figure 39. Rear Fork Pivot Nut

miles and every 5000 miles thereafter. With front end of motorcycle raised off the floor, make 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 if necessary according to Service Manual procedure.

WARNING

Adjustment of front fork bearings is critical. Improperly adjusted bearings will adversely affect motorcycle handling and stability. It is recommended that fork bearing adjustments be performed by your Harley-Davidson dealer.

REAR FORK PIVOT SHAFT (See Figure 39)

The rear fork is isolated from the motorcycle frame by a system of rubber mounts. The tightness of the rear fork pivot nuts should be checked after the first 500 miles and every 5000 miles thereafter.

To check pivot nut tightness, proceed as follows:

1. Remove the chrome caps beneath the right and left

passenger footpegs. The caps are a friction fit and may be pried out with a screwdriver.

2. Loosen right side nut so it is flush with the end of shaft.
3. Tighten the left side nut, so the washer bottoms on the shoulder of shaft, to 45 ft-lbs torque.
4. Tighten right side nut to 45 ft-lbs torque.
5. Reinstall the chrome caps.

If nut cannot be tightened properly, see your Harley-Davidson dealer.

HEADLAMP

The headlamps are the sealed beam type. When replacement is required, use only the specified sealed beam unit available from your Harley-Davidson dealer. Improper wattage sealed beam may cause charging system problems.

BATTERY

The FLT battery is located on the right side of the motorcycle under the side cover. To check and service the bat-

tery, remove the right saddlebag and side cover. The FXR battery is located under the seat.

It is the care given a battery, rather than the time and miles of service, which is most important in determining its life.

Inspect the level of the battery solution at least once a month during motorcycle operation, 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 solution level before placing in service.

Remove the battery filler plugs. With a hydrometer or syringe, add 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 every 2500 miles or monthly. Check battery hold down at same intervals.

WARNING

Batteries contain sulfuric acid which can cause severe burns. Avoid contact with skin, eyes or clothing.

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

Batteries produce explosive hydrogen gas at all times — especially when being charged. Keep cigarettes, open flame, and sparks away from battery at all times. Ventilate area when charging battery. Always protect hands and protect eyes with shield or goggles when working near a battery or acid. KEEP BATTERIES AND ACID OUT OF THE REACH OF CHILDREN!

CAUTION

If battery is filled 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. Keep battery clean and lightly coat terminals with petroleum jelly to prevent corrosion. Do not overtighten terminal connections. To prevent battery case damage caused by pressure build-up, be sure vent tube is properly routed and not kinked or obstructed.

ALTERNATOR CHARGING RATE AND REGULATOR

The alternator output is controlled and changed to direct current by the regulator located at the front of the engine. The regulator functions to increase charging rate when battery is low or lamps are lighted and to decrease charging rate when no lamps are lighted and when battery is up. This unit requires no interval attention. Should any electrical system trouble be experienced that might be traceable to the alternator or regulator, the motorcycle should be taken to your Harley-Davidson dealer who has the necessary electrical testing equipment to give required attention.

CIRCUIT BREAKERS

To protect the motorcycle wiring, there are four circuit breakers: main, lighting, accessory, 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.

BULB CHART — FXRT

The chart below gives the light bulb locations and requirements for FXRT models.

LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp High Beam Low Beam	1	4.69 Amps/60 Watts 4.29 Amps/55 Watts	67697-81
Tail and Stop Lamp Tail Lamp Stop Lamp	1	.59 Amps/3 C.P. 2.1 Amps/32 C.P.	68165-64
Turn Signal Lamps Front — Turn Signal — Running Rear — Turn Signal	2 2	2.1 Amps/32 C.P. .59 Amps/3 C.P. 2.1 Amps/32 C.P.	68165-64 68572-64A
Instrument Lamps Turn Signal Indicator High Beam Indicator Neutral Indicator Oil Pressure Indicator Speedometer Tachometer Fuel Gauge	2 1 1 1 1 1 1	.27 Amps/2 C.P. .27 Amps/2 C.P. .80 Amps/4 C.P. .80 Amps/4 C.P. .27 Amps/2 C.P. .27 Amps/2 C.P. .12 Amps/1 C.P.	68465-83 70021-83 68574-83 68489-83 71090-64 71090-64 71099-74

BULB CHART — FXRS

The chart below gives the light bulb locations and requirements for FXRS models.

LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp High Beam Low Beam	1	3.9 Amps/50 Watts 2.73 Amps/35 Watts	67697-81A
Tail and Stop Lamp Tail Lamp Stop Lamp	1	.59 Amps/3 C.P. 2.1 Amps/32 C.P.	68165-64
Turn Signal Lamps	4	2.1 Amps/32 C.P.	68572-64A
Instrument Lights			
Fuel Gauge	1	.27 Amps/2 C.P.	68462-64
Speedometer	1	.12 Amps/1 C.P.	71099-74
Tachometer	1	.12 Amps/1 C.P.	71099-74
High Beam Indicator	1	.12 Amps/1 C.P.	71099-74
Neutral Indicator	1	.12 Amps/1 C.P.	67852-75
Oil Pressure Signal	1	.12 Amps/1 C.P.	67792-75

BULB CHART — FLT

The chart below gives the light bulb locations and requirements for FLT models.

LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp High Beam Low Beam	2	3.9 Amps/50 Watts 2.73 Amps/35 Watts	67717-65A
Tail and Stop Lamp Tail Lamp Stop Lamp	1	.59 Amps/3 C.P. 2.1 Amps/32 C.P.	68165-64
Turn Signal Lamps Front — Turn Signal	2	2.1 Amps/32 C.P.	68165-64
— Running		.59 Amps/3 C.P.	
Rear — Turn Signal	2	2.1 Amps/32 C.P.	68572-64A
Tour-Pak Side Lights	4	.27 Amps/2 C.P.	53439-79
Fender Tip Lamps	2	.27 Amps/2 C.P.	53439-79
Instrument Panel Lamps	9	.12 Amps/1 C.P.	71099-74

BULB CHART — FLHT

The chart below gives the light bulb locations and requirements for FLHT models.

LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp High Beam Low Beam	1	3.9 Amps/50 Watts 2.73 Amps/35 Watts	67697-81
Tail and Stop Lamp Tail Lamp Stop Lamp	1	.59 Amps/3 C.P. 2.1 Amps/32 C.P.	68165-64
Turn Signal Lamps Front Turn Signal Lamp Passing Lamp Rear	2 2 2	2.1 Amps/32 C.P. 2.73 Amps/35 Watts 2.1 Amps/32 C.P.	68572-64A 68624-83 68572-64A
Tour-Pak Side Lights	4	.27 Amps/2 C.P.	53439-79
Fender Tip Lamps	2	.27 Amps/2 C.P.	53439-79
Instrument Panel Lamps	9	.12 Amps/1 C.P.	71099-74

DIMENSIONS (in.)

	FXRT	FLT	FLHT	FXRS
Wheel Base	64.7	62.9	62.9	63.13
Overall Length	94.2	94.2	94.2	91.65
Overall Width	34.5	37.0	37.0	31.0
Road Clearance	6.0	5.1	5.1	5.25
Overall Height	59.5	59.0	60.5	48.0
Saddle Height	28.0	29.6	28.0	28.10

WEIGHT (lbs.)

	FXRT	FLT	FLHT	FXRS
DRY WEIGHT (as shipped from the factory)	621	741	712	575
GVWR	1085	1180	1180	1085
GAWR — Front	390	410	410	390
GAWR — Rear	695	770	770	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 front frame downtube.

CAPACITIES (U.S.)

	FXRT	FLT	FLHT	FXRS
Fuel Tank (gallons)				
Total	3.8	5	5	3.8
Reserve4	0.7	0.7	0.4
Oil Tank (Quarts) w/filter	3.0	4	4	3.0
Transmission (Pints)	1	1	1	1
Front Fork — Each (Ounces)	7.2	6	6	6
Primary Chaincase (Quarts)	1.5	1.5	1.5	1.5

ENGINE — FXRS, FXRT

Number of Cylinders	2
Type	4-Cycle, 45 Degree V-Type
Compression Ratio	8.5 to 1

Horse power — rpm	Bore in. (mm)	Stroke in. (mm)	Displacement cu. in. (cc)	Torque lb-ft — rpm
69/5000	3.498 (88,8)	4.25 (108,0)	81.6 (1338,6)	82/3800

ENGINE — FLT, FLHT

Number of Cylinders	2
Type	4-Cycle, 45 Degree V-Type
Compression Ratio	8.5 to 1

Horse power — rpm	Bore in. (mm)	Stroke in. (mm)	Displacement cu. in. (cc)	Torque lb-ft — rpm
72/5000	3.498 (88,8)	4.25 (108,0)	81.6 (1338,6)	82/3600

IGNITION SYSTEM

Spark Plugs	
Type	Harley-Davidson, No. 5R6A
Size	14 mm x 3/4 in. reach
Gap	0.038 to 0.043 in.

TRANSMISSION

Type	Constant Mesh, Foot Shift
Speeds	5 Forward

NUMBER OF SPROCKET TEETH

Engine	24
Clutch	37
Transmission	33
Rear Wheel	70

OVERALL GEAR RATIOS

First (Low) Gear	10.93	Third Gear	5.40
Second Gear	7.45	Fourth Gear	4.16
		Fifth Gear	3.37

TIRE DATA

WARNING

For your own 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 or may allow the tire to slip on the rim, possibly causing tire failure. In addition, using tires other than those specified may adversely affect motorcycle stability. Use only tubeless tires on all Harley-Davidson laced (wire spoke) wheels and tubeless type

tires on all Harley-Davidson cast and disc wheels. Protective rubber rim strips must be used with tube type tires when mounted on laced (wire spoked) wheels. Tire sizes are molded on the tire sidewall. Tube sizes are printed on the tube.

DUNLOP TIRES ONLY		TIRE PRESSURE PSI (COLD)	
		FRONT	REAR
Solo Rider	FLT, FLHT-K101A	28	36
	FXRS-K181	26	30
	FXRT-K291T	26	36
Rider & one passenger	FLT, FLHT	28	36
	FXRS	26	32
	FXRT	28	40
	FLT Sidecar	28	40

WARNING

Maximum inflation pressure must not exceed specification on tire sidewall.

GASOLINE

Use a good quality leaded or unleaded gasoline (89 pump octane or higher).

PUMP OCTANE is the octane number usually shown on the gas pump.

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

The ignition control unit uses a two-stage curve, and in certain transient light load conditions, as the throttle is opened, the initiation of the spark changes from normal to fully advanced. At this point, the operator may detect a slight noise which is caused by the rapid pressure rise within the combustion chamber as the spark advances rapidly. This noise should not be confused with detonation, which can be relieved by the use of a higher grade of fuel, but is simply a mechanical response to the instantaneous rapid pressure rise. This noise is not detrimental to the performance of the engine.

VEHICLE IDENTIFICATION NUMBER (V.I.N.)

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 downtube. An abbreviated V.I.N. is stamped on the left side crankcase at the base of the front cylinder.

NOTE

Always give one of these numbers when ordering parts or making any inquiry about your motorcycle.

1 HD 1 **DB** **L** 1 * **F** Y **010000**

Model Designation
Engine Type
1 - Regular Introduction
Model Year — 1985
Sequential Number

DB	—	FLTC
DD	—	FLHTC
DF	—	FLHT — Police
DG	—	FLHT — Shrine
EB	—	FXRS
EC	—	FXRT
ED	—	FXR — Police

Large letters and numbers indicate V.I.N. on engine.

*Varies - can be 0 thru 9 or X (Check digit for factory use)

Sample V.I.N. as it appears on the steering head - 1 HD1DBL11 FY010000

Sample abbreviated V.I.N. as it appears on the engine - DBLF 010000

STOPPING DISTANCE

Description of vehicle: Harley-Davidson 1985 FLT, FLHT and FXRS, FXRT models.

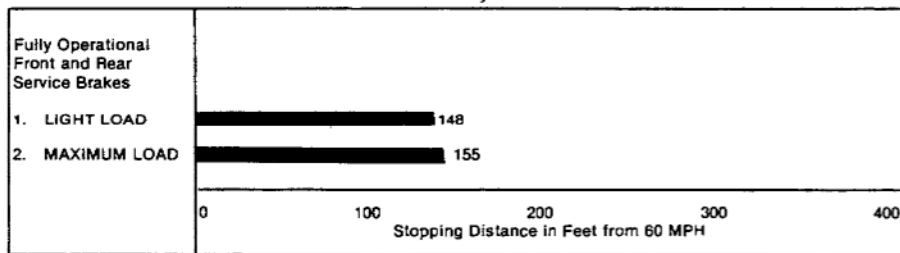
Required by Federal Consumer Information Regulations.

These figures indicate braking performance that can be

met or exceeded by the vehicle to which it applies, without locking the wheels, under different conditions of loading.

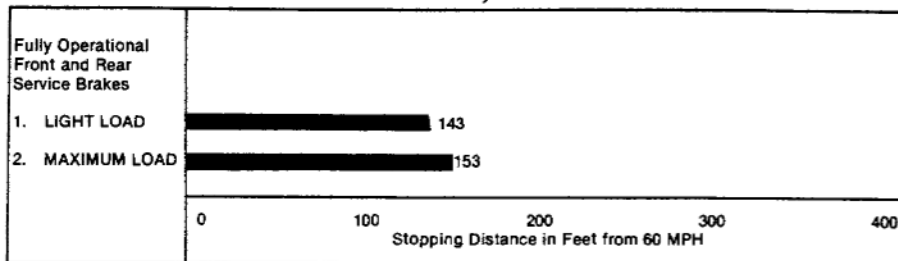
Notice: The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

1985 FLT, FLHT



1. Light Load Vehicle Weightincludes
200 lb. driver - no accessories.
2. Maximum Loaded Vehicle Weightincludes
300 lb. driver and passenger
load plus full accessory equipment.

1985 FXRS, FXRT



1. Light Load Vehicle Weight includes
200 lb. driver - no accessories.
2. Maximum Loaded Vehicle Weight includes
300 lb. driver and passenger
load plus full accessory equipment.

CALIFORNIA EVAPORATIVE EMISSION CONTROL

All new 1985 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 fit-

tings are secure. Mounting hardware should also be checked periodically for tightness.

Kits are available through authorized Harley-Davidson dealers to convert non-California vehicles to California specifications. If this need should arise, see your local California Harley-Davidson dealer for details.

WARNING

Do not overfill fuel tank. Leave at least one inch air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline.

OWNER'S IDENTIFICATION CARD

A permanent Owner's Identification Card is issued to each Harley-Davidson new motorcycle owner when we receive the completed warranty registration form.

The Owner's Identification Card is a permanent record showing proof of your ownership and gives all of the information necessary for you and your dealer to simplify and expedite service and obtain parts and accessories.

Keep this card in your possession, since it is required by your Harley-Davidson dealer for any warranty service performed on your motorcycle.

If you have any questions regarding service or warranty, we recommend that you contact your Harley-Davidson dealer for assistance.

WARRANTY AND MAINTENANCE

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

The approved service and maintenance procedures on each coupon and the mileage intervals cover items which are the owner's responsibility to have serviced.

Starting with the 500 and 2500 mile maintenance intervals, all of the specified maintenance services must be performed to keep your warranty in force. Dealer charges for the recommended service procedures are nominal.

Bring this Owner's Manual along when you visit your dealer at the specified mileages to have your motorcycle inspected and serviced. 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 or owner as a record of proper maintenance. Also keep other receipts covering any 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, and could cause an accident with possible injury to yourself or others. Also, removing factory installed standard parts may affect performance and cause an injury. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty.

EPA NOISE REGULATIONS

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

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

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE FACTS 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.

IMPORTANT

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.

WARRANTY/SERVICE INFORMATION

Your selling dealer is responsible for providing the warranty repair work on your motorcycle. Should you move from your present address, tour a long distance or require emergency warranty repair work, the warranty repair work may be performed by any authorized Harley-Davidson dealer. (Consult your Limited Warranty for complete details.)

For normal service work or warranty work under the above conditions, you may obtain the name and location of your nearest Harley-Davidson dealer by calling 1-800-558-2001 (toll free) in any state except Wisconsin, Alaska, and Hawaii. In Wisconsin call 1-800-242-3102 (toll free). Service is 24 hours a day, 365 days per year.

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

Harley-Davidson warrants to the first retail purchaser and his authorized transferees of our new 1985 model motorcycles/sidecars that our Selling 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 Selling Dealer, with no mileage limitation.
2. Any unexpired portion of this limited warranty may be transferred, with written authorization, upon the resale of the motorcycle/sidecar during the first 12 months of ownership. To obtain authorization, a transfer application must be filed with Harley-Davidson together with a fee of \$25.00 to cover administrative costs, and the motorcycle/sidecar must pass inspection by one of our participating Dealers. The customer is responsible for any charge incurred for work performed by the Dealer beyond the inspection procedure itself. (See your 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 the Selling Dealer, or to any other authorized Dealer if you have moved a long distance, are touring a long distance, or need emergency service. 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 his normal business hours and as soon as possible, depending upon his service department's workload 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 other 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, 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.
3. Motorcycle battery after the first 6 months following the date of original retail motorcycle purchase, however, if your battery is found to be defective, within the terms of this limited warranty, between

the seventh through twelfth months, you will be charged for the full cost of our dealer's installation labor and for the cost of the battery's replacement, on a pro-rated basis. (See your dealer for complete details.)

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.

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 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 Co., Inc., warrants to the first owner and each subsequent owner that his 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 his 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 CO., INC., Milwaukee, Wisconsin 53201 U.S.A.

HARLEY-DAVIDSON NOISE CONTROL SYSTEM WARRANTY

(APPLIES TO VEHICLES MANUFACTURED JAN. 1, 1983 AND LATER)

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 Co., Inc., warrants to the first owner and each subsequent owner that his 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 his 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 CO., INC., P.O. Box 653 Milwaukee, Wisconsin 53201 U.S.A.

500 MILE
(800 km)
MAINTENANCE

Date

Mileage

Dealer (or other) Signature

OWNER RECORD

500 MILE
(800 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

500 MILE MAINTENANCE

1. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
4. Change primary chaincase oil and clean magnetic drain plug.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
7. Check battery electrolyte level; check and clean battery connections.
8. Check rear brake pedal height adjustment and freeplay.
9. Inspect brake pad linings and discs for wear.
10. Check brake fluid level and condition.
11. Check clutch adjustment.
12. Inspect fuel valve, lines and fittings for leaks.
13. Inspect oil lines and brake system for leaks.
14. Check and adjust rear drive belt.
15. Lubricate the following: front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever.
16. Check tightness of all fasteners.
17. Check stabilizer links and engine mounts.*
18. Check tire pressure and inspect tread.
19. Check engine low and fast idle speed adjustment.
20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Change transmission oil.
25. Clean fuel tank filter screen.
26. Check rear fork pivot nut tightness.
27. Check front fork bearing adjustment.
28. Check air suspension pressure.
29. Road test.

*If applicable to equipment.

500 MILE MAINTENANCE

1. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
4. Change primary chaincase oil and clean magnetic drain plug.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
7. Check battery electrolyte level; check and clean battery connections.
8. Check rear brake pedal height adjustment and freeplay.
9. Inspect brake pad linings and discs for wear.
10. Check brake fluid level and condition.
11. Check clutch adjustment.
12. Inspect fuel valve, lines and fittings for leaks.
13. Inspect oil lines and brake system for leaks.
14. Check and adjust rear drive belt.
15. Lubricate the following: front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever.
16. Check tightness of all fasteners.
17. Check stabilizer links and engine mounts.*
18. Check tire pressure and inspect tread.
19. Check engine low and fast idle speed adjustment.
20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Change transmission oil.
25. Clean fuel tank filter screen.
26. Check rear fork pivot nut tightness.
27. Check front fork bearing adjustment.
28. Check air suspension pressure.
29. Road test.

*If applicable to equipment.

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

2500 MILE MAINTENANCE

1. Change engine oil.
 2. Replace oil filter.
 3. Check tappet oil screen.
 4. Check primary chaincase oil level.
 5. Inspect air cleaner and service as required.
 6. Check and adjust primary chain.
 7. Check battery electrolyte level; check and clean battery connections.
 8. Check rear brake pedal height adjustment and freeplay.
 9. Inspect brake pad linings and discs for wear.
 10. Check brake fluid level and condition.
 11. Check clutch adjustment.
 12. Inspect fuel valve, lines and fittings for leaks.
 13. Inspect oil lines and brake system for leaks.
 14. Check and adjust rear drive belt.
 15. Lubricate the following: front brake handlever, throttle control cable, choke control cable, clutch control cable and handlever.
 16. Check tightness of all fasteners.
 17. Check stabilizer links and engine mounts.
 18. Check tire pressure and inspect tread.
 19. Check engine low and fast idle speed adjustment.
 20. Check operation of throttle and choke controls.
 21. Check operation of all electrical equipment and switches.
 22. Check wheel alignment.
 23. Check wheel spoke tightness.
 24. Check ignition timing and vacuum hose.
 25. Check transmission oil level.
 26. Check condition of spark plugs and replace if necessary
 27. Check air suspension pressure.
 28. Road test.
- *If applicable to equipment.

1. Change engine oil.
 2. Replace oil filter.
 3. Check tappet oil screen.
 4. Check primary chaincase oil level.
 5. Inspect air cleaner and service as required.
 6. Check and adjust primary chain.
 7. Check battery electrolyte level; check and clean battery connections.
 8. Check rear brake pedal height adjustment and freeplay.
 9. Inspect brake pad linings and discs for wear.
 10. Check brake fluid level and condition.
 11. Check clutch adjustment.
 12. Inspect fuel valve, lines and fittings for leaks.
 13. Inspect oil lines and brake system for leaks.
 14. Check and adjust rear drive belt.
 15. Lubricate the following: front brake handlever, throttle control cable, choke control cable, clutch control cable and handlever.
 16. Check tightness of all fasteners.
 17. Check stabilizer links and engine mounts.
 18. Check tire pressure and inspect tread.
 19. Check engine low and fast idle speed adjustment.
 20. Check operation of throttle and choke controls.
 21. Check operation of all electrical equipment and switches.
 22. Check wheel alignment.
 23. Check wheel spoke tightness.
 24. Check ignition timing and vacuum hose.
 25. Check transmission oil level.
 26. Check condition of spark plugs and replace if necessary
 27. Check air suspension pressure.
 28. Road test.
- *If applicable to equipment.

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

5000 MILE MAINTENANCE

1. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
4. Change primary chaincase oil and clean magnetic drain plug.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
7. Check battery electrolyte level; check and clean battery connections.
8. Check rear brake pedal height adjustment and freeplay.
9. Inspect brake pad linings and discs for wear.
10. Check brake fluid level and condition.
11. Check clutch adjustment.
12. Inspect fuel valve, lines and fittings for leaks.
13. Inspect oil lines and brake system for leaks.
14. Check and adjust rear drive belt.
15. Oil the following: front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever.
16. Check tightness of all fasteners.
17. Check stabilizer links and engine mounts.
18. Check tire pressure and inspect tread.
19. Check engine low and fast idle speed adjustment.
20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Check ignition timing and vacuum hose.
25. Change transmission oil.
26. Replace spark plugs.
27. Clean fuel tank filter screen.
28. Lubricate the following: throttle control grip sleeve, speedometer cable, rear brake pedal bushing.
29. Check condition of rear shock absorber rubber bushing.
30. Check rear fork pivot nut tightness.
31. Check front fork bearing adjustment.
32. Check condition of brake caliper mounting pins and lubricate.
33. Check air suspension pressure.
34. Road test.

*If applicable to equipment.

1. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
4. Change primary chaincase oil and clean magnetic drain plug.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
7. Check battery electrolyte level; check and clean battery connections.
8. Check rear brake pedal height adjustment and freeplay.
9. Inspect brake pad linings and discs for wear.
10. Check brake fluid level and condition.
11. Check clutch adjustment.
12. Inspect fuel valve, lines and fittings for leaks.
13. Inspect oil lines and brake system for leaks.
14. Check and adjust rear drive belt.
15. Lubricate the following: front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever.
16. Check tightness of all fasteners.
17. Check stabilizer links and engine mounts.
18. Check tire pressure and inspect tread.
19. Check engine low and fast idle speed adjustment.
20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Check ignition timing and vacuum hose.
25. Change transmission oil.
26. Replace spark plugs.
27. Clean fuel tank filter screen.
28. Lubricate the following: throttle control grip sleeve, speedometer cable, rear brake pedal bushing.
29. Check condition of rear shock absorber rubber bushing.
30. Check rear fork pivot nut tightness.
31. Check front fork bearing adjustment.
32. Check condition of brake caliper mounting pins and lubricate.
33. Check air suspension pressure.
34. Road test.

*If applicable to equipment.

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. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
4. Check primary chaincase oil level.
5. Inspect air cleaner and service as required.
6. Check and adjust primary chain.
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20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Check ignition timing and vacuum hose.
25. Check transmission oil level.
26. Check condition of spark plugs and replace if necessary.
27. Check air suspension pressure.
28. Road test.

*If applicable to equipment.

7500 MILE MAINTENANCE

1. Change engine oil.
2. Replace oil filter.
3. Check tappet oil screen.
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20. Check operation of throttle and choke controls.
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22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Check ignition timing and vacuum hose.
25. Check transmission oil level.
26. Check condition of spark plugs and replace if necessary.
27. Check air suspension pressure.
28. Road test.

*If applicable to equipment.

10,000 MILE
(16,000 km)
MAINTENANCE

Date

Mileage

Dealer (or other) Signature

OWNER RECORD

10,000 MILE
(16,000 km)
MAINTENANCE

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Owner's Signature

VIN

Date _____ Mileage _____

DEALER RECORD

10,000 MILE MAINTENANCE

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13. Inspect oil lines and brake system for leaks.
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17. Check stabilizer links and engine mounts.
18. Check tire pressure and inspect tread.
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20. Check operation of throttle and choke controls.
21. Check operation of all electrical equipment and switches.
22. Check wheel alignment.
23. Check wheel spoke tightness.*
24. Check ignition timing and vacuum hose.
25. Change transmission oil.
26. Replace spark plugs.
27. Clean fuel tank filter screen.
28. Lubricate the following: throttle control grip sleeve, speedometer cable, rear brake pedal bushing.
29. Check condition of rear shock absorber rubber bushing.
30. Check rear fork pivot nut tightness.
31. Check front fork bearing adjustment.
32. Check condition of brake caliper mounting pins and lubricate.
33. Repack wheel bearings with grease.
34. Check air suspension pressure.
35. Road test.

*If applicable to equipment.

10,000 MILE MAINTENANCE

1. Change engine oil.
2. Replace oil filter.
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31. Check front fork bearing adjustment.
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33. Repack wheel bearings with grease.
34. Check air suspension pressure.
35. Road test.

*If applicable to equipment.

SERVICE LITERATURE

For further maintenance and service information, refer to the publications listed below. Each is available through your Harley-Davidson dealer.

Publication	Part Number
Owner's Maintenance Guide	99952-85
FLT/FXR Service Manual	99483-85
FLT Parts Catalog	99438-85
FXR Parts Catalog	99439-85

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PATENT NOTICE

Harley-Davidson products are manufactured under one or more of the following patents: U.S. Patents – 2986162, 2987934, 2998809, 3116089, 3144631, 3144860, 3226994, 3229792, 3434887, 3559773, 8673359, 3709317, Des. 225,626.

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HARLEY-DAVIDSON MOTOR CO., INC.



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