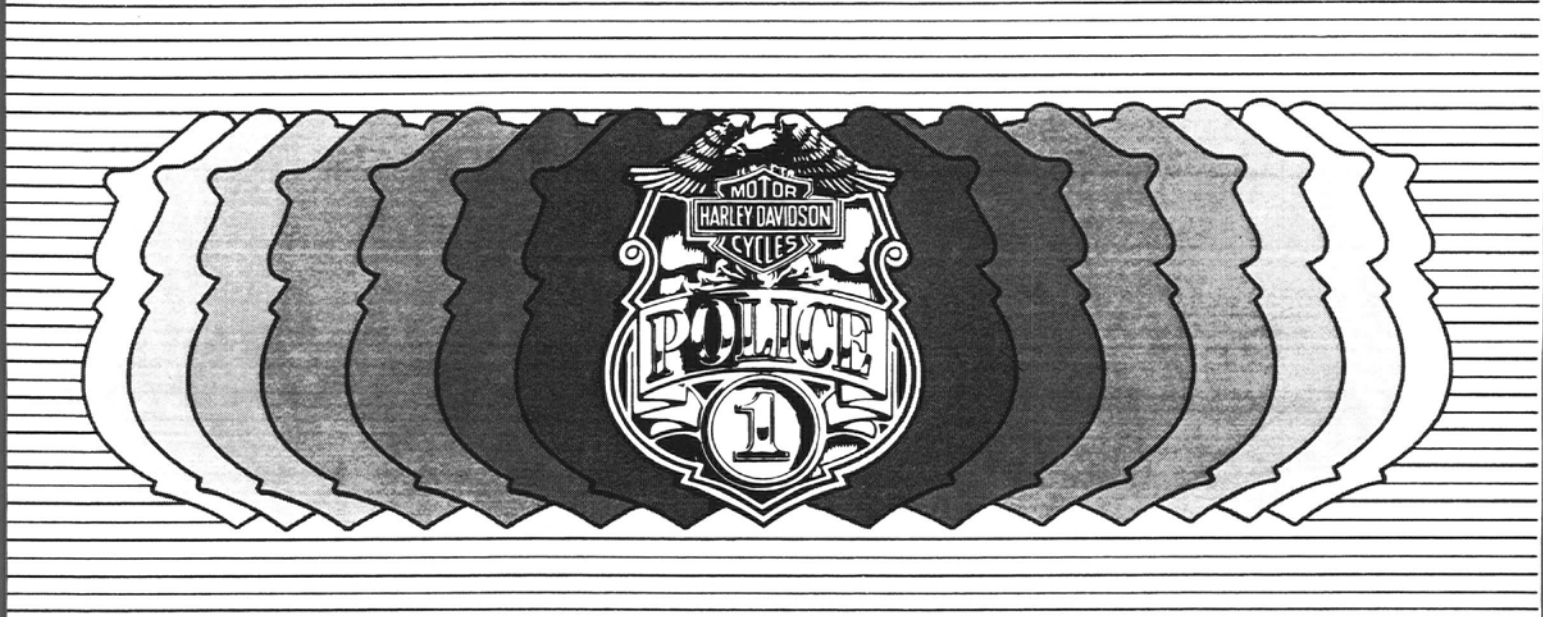
Harley-Davidson Motor Co., Inc.

OWNER'S MANUAL
FXRP MODELS 1340cc 5-SPEED

1985

Part No. 99478-85



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 the 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 OPERATOR'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 Operator's Manual contains instructions for operation and maintenance. Major repairs are covered in the Harley-Davidson Service Manual and Supplements. 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.

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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.

- 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, lamps, horn, siren, 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.

- After motorcycle has been used in a high speed pursuit, check engine oil level and add oil if required. Also check for components and fasteners that may have loosened. Tighten fasteners to proper torque values given in the Service Manual Supplement.

- 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 or service center 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 or service center).

- Do not exceed the Gross Vehicle Weight Rating of your motorcycle. Maximum allowable vehicle weights with rider 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 or service center.

- Keep hazardous substances, such as brake and battery fluids and cleaning compounds away from eyes and skin and out of mouth.

- If motorcycle is "dropped" while parked or while being driven, inspect thoroughly for damage. Especially check shifter and brake pedals for damage. Damaged items must be repaired or replaced before riding the cycle.

- 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 be alert for left turning vehicles and be prepared to move away from such vehicles.

- 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 in both directions to drive into moving traffic.

- 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, accessories, weight of the rider 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 in each saddlebag.**

3. **The recommended mounting or storage locations for the following law enforcement equipment are:**

EQUIPMENT	LOCATION
Flashlight and ticket book	In right saddlebag
Baton	Mounted on right saddle bag with 2 rubber clips
Radar gun and battery pack	In left saddlebag

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.**

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, horn, pursuit lamps, siren (in both modes) radio for proper operation, and cycle signal (if equipped).

7. Check for any fuel, oil or hydraulic fluid leaks.

8. 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 ignition switch is located on the right side of the fuel tank console.

The engine stop switch is located on the right handlebar.

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

1. Put engine stop switch in 'RUN' position.

2. 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 to 'IGN' and press starter button to operate the electric starter.

3. 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 to 'IGN' and press starter button to operate the electric starter.

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

4. To start a warm or hot engine, set throttle 1/4 open, turn ignition switch to 'IGN' 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, open choke all the way, turn ignition switch to 'IGN' and operate starter with choke and throttle wide open. When engine starts, reduce throttle immediately to idle speed.

SHIFTING GEARS

CAUTION

Never accelerate the engine above 1/3 throttle 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,sidestand retracted and engine idling, pull the clutch lever (located on left handlebar) to fully disengage clutch. Push toe end of 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.

2. Engage second gear after the motorcycle has run a few yards as follows: close the throttle, disengage the clutch and push heel down on the gear shifter pedal 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.

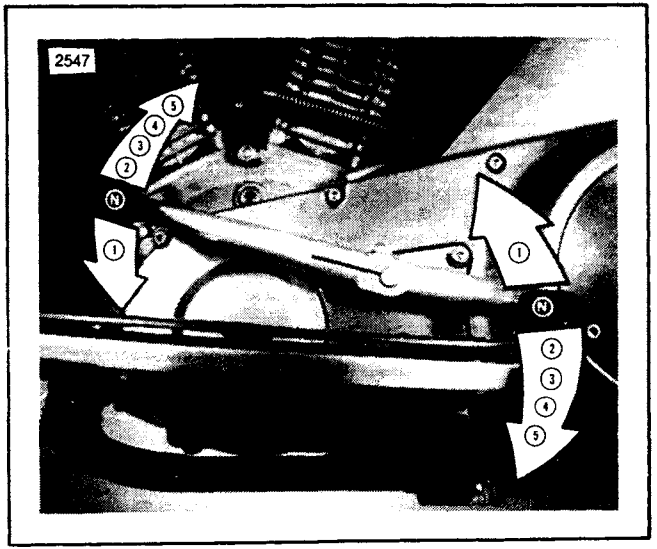


Figure 1. Heel and Toe Shifter

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 pushing heel down on the gear shifter lever, a higher gear is engaged; by pushing the toe down on the gear shifter lever, 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

To obtain maximum acceleration during a pursuit condition, the following maximum speed in each gear may be used.

Gear	Maximum Speed
First	37 mph
Second	54 mph
Third	75 mph
Fourth	98 mph
Fifth	Varies with conditions

WARNING

When shifting to lower gears with the motorcycle in motion, do not downshift at speeds higher than those listed in the table. Shifting to lower gears when speed is too high may severely damage the transmission or cause the rear wheel to lose traction.

Shift to neutral before stopping engine. Neutral can only be reached from first gear. 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 the ignition key switch to off. 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. Do not

idle the engine unnecessarily for more than a few minutes with motorcycle standing still.

CAUTION

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 fairing due to reduced airflow for engine cooling.

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.

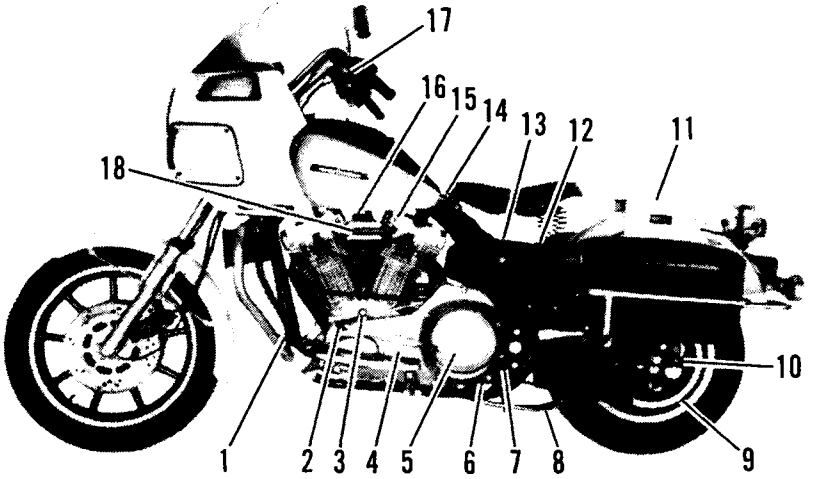
Do not coast for a long distance with the engine off because the transmission is properly lubricated only when the engine is running. Also to prevent transmission damage, do not tow the motorcycle.

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.

NOTES

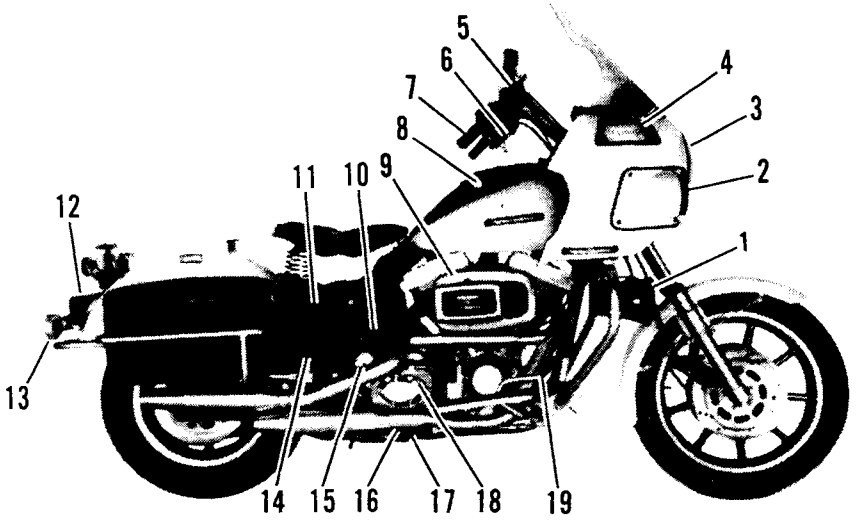
2669



1. Voltage regulator
2. Shift lever
3. Timing inspection hole plug
4. Primary chain inspection cover
5. Clutch inspection cover
6. Chaincase drain plug
7. Oil filter
8. Jiffy stand
9. Rear sprocket & drive belt
10. Rear belt adjuster
11. Radio carrier
12. Battery
13. Oil tank fill plug & dipstick
14. Seat release
15. Fuel supply valve
16. Choke control knob
17. Clutch hand lever
18. Ignition coil

Figure 2. FXRP (Fairing) — Left Side View

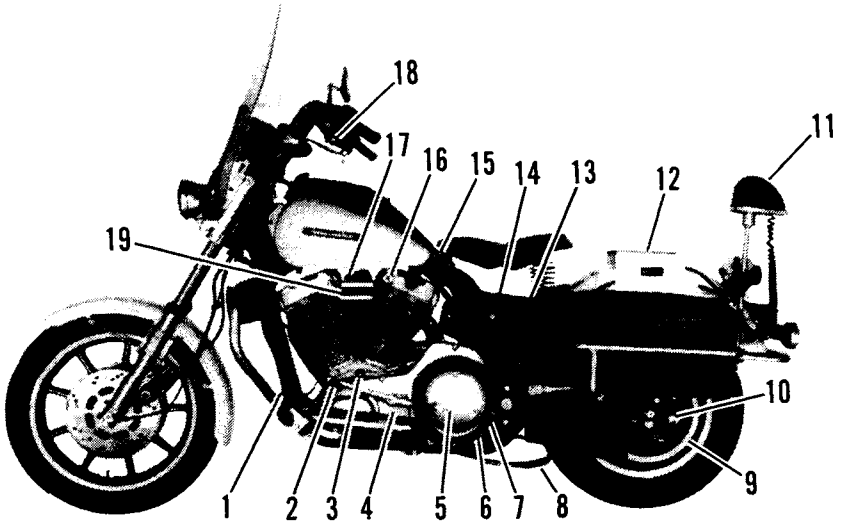
2670



1. Siren speaker
2. Pursuit lamp
3. Headlamp
4. Front turn signal & running lamp
5. Front brake master cylinder
6. Front brake hand lever
7. Throttle control grip
8. Ignition/light switch
9. Carburetor air cleaner
10. Oil tank drain plug
11. Ignition module
12. Tail/stop lamp
13. Rear turn signal lamp
14. Rear brake fluid reservoir
15. Electric starter motor
16. Rear brake master cylinder
17. Transmission drain plug
18. Transmission filler plug
19. Rear brake pedal

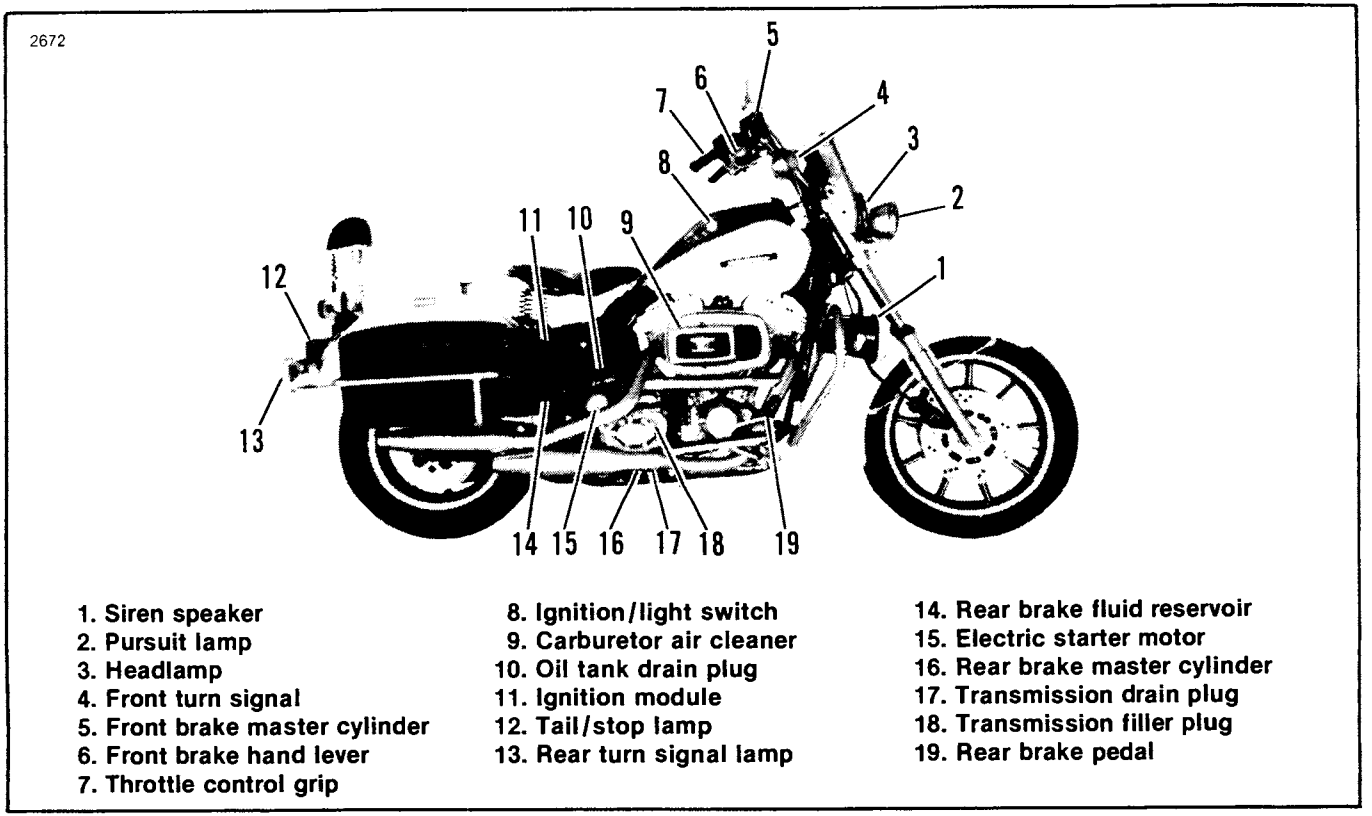
Figure 3. FXRP (Fairing) — Right Side View

2671



1. Voltage regulator
2. Shift lever
3. Timing inspection hole plug
4. Primary chain inspection cover
5. Clutch inspection cover
6. Chaincase drain plug
7. Oil filter
8. Jiffy stand
9. Rear sprocket & drive belt
10. Rear belt adjuster
11. Police cycle signal lamp (optional)
12. Radio carrier
13. Battery
14. Oil tank fill plug & dipstick
15. Seat release
16. Fuel supply valve
17. Choke control knob
18. Clutch hand lever
19. Ignition coil

Figure 4. FXRP (Windshield) — Left Side View



1. Siren speaker
2. Pursuit lamp
3. Headlamp
4. Front turn signal
5. Front brake master cylinder
6. Front brake hand lever
7. Throttle control grip
8. Ignition/light switch
9. Carburetor air cleaner
10. Oil tank drain plug
11. Ignition module
12. Tail/stop lamp
13. Rear turn signal lamp
14. Rear brake fluid reservoir
15. Electric starter motor
16. Rear brake master cylinder
17. Transmission drain plug
18. Transmission filler plug
19. Rear brake pedal

Figure 5. FXRP (Windshield) — Right Side View

GASOLINE SUPPLY VALVE (See Figure 6)

WARNING

Gasoline is extremely flammable and highly explosive under certain conditions. Do not smoke or allow open flame or sparks anywhere in the area when refueling or servicing the fuel system.

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.

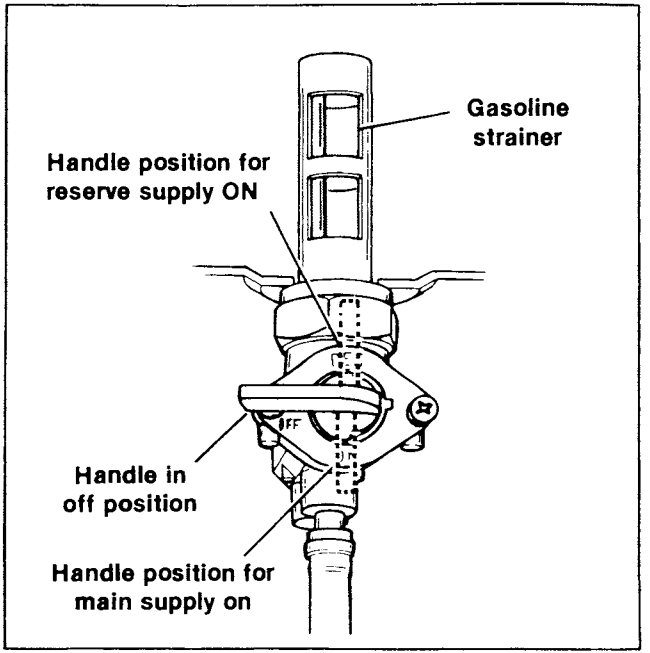


Figure 6. Gasoline Supply Valve

GASOLINE FILLER CAP (See Figure 7)

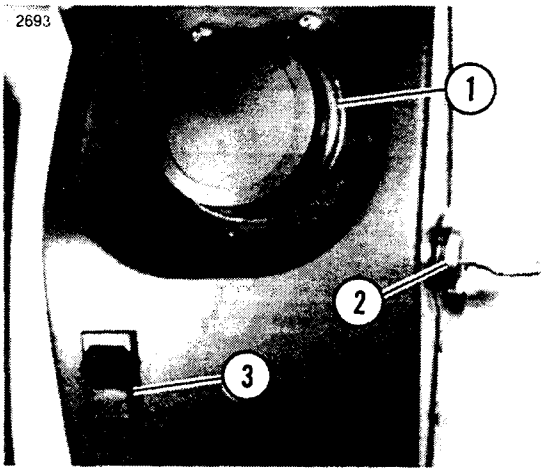
The gasoline filler cap is located in the center of the gas tank console. To open, turn cap counterclockwise and lift up. To close, turn clockwise until the cap clicks. The ratchet action of the gas cap prevents overtightening.

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 onto surrounding areas. After refueling, make sure filler cap is securely tightened.

HAZARD WARNING FLASHER (See Figure 7)

The hazard warning flasher switch is located on the lower left top surface of the fuel tank console. Flipping the switch operates all four flashing turn signal lamps at the same time. Directional turn signal switches are not operational with hazard warning flasher in the "ON" position.



1. Gasoline filler cap
2. Ignition/light switch
3. Hazard warning flasher

Figure 7. Gasoline Filler Cap

NOTE

Hazard warning flasher will operate with ignition/light switch in the "OFF" position.

IGNITION/LIGHT SWITCH (See Figure 7)

The ignition/light switch is located on the right side of the fuel tank console. From OFF vertical position, there are two positions forward for ignition and lights. All devices are operational in both positions. 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.

NOTE

The hazard warning flasher and horn (normal mode) are operational with the ignition/light switch in the OFF position.

MICROPHONE INPUT JACK

The input jack for a microphone is located at the top of the fuel tank console, facing forward. A microphone and audio amplifier can provide an effective mobile Public Address System. Both devices are optional equipment.

Audio gain must be checked and adjusted to eliminate feedback prior to installing the microphone in service.

NOTE

Microphone will interrupt siren operation in any mode.

SIREN SWITCH (See Figure 8)

The siren switch (4) is located on the left handlebar as shown in Figure 8. The siren switch is used in combination with the horn switch (3) to activate the siren. The three procedures for operating the siren are as follows:

1st Procedure: With the siren switch in the OFF position, depress the forward side of the horn switch labeled SIREN to produce intermittent bursts of the "yelp" mode.

2nd Procedure: The siren switch in the ON position will produce the continuous "wail" mode.

3rd Procedure: With the siren switch in the ON position producing the continuous "wail" mode, depress the horn switch to intermittently change to the "yelp" mode.

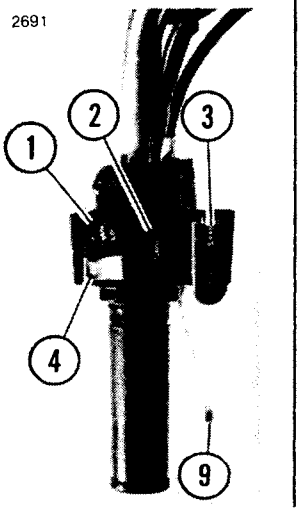
SIREN ACTIVATION				
Procedure	**Switch**	**Position**	**Operation**	**Mode**
1	SIREN HORN	OFF ON	CONTINUOUS INTERMITTENT	YELP
2	SIREN HORN	ON OFF	CONTINUOUS CONTINUOUS	WAIL
3	SIREN HORN	ON ON	CONTINUOUS INTERMITTENT	WAIL YELP

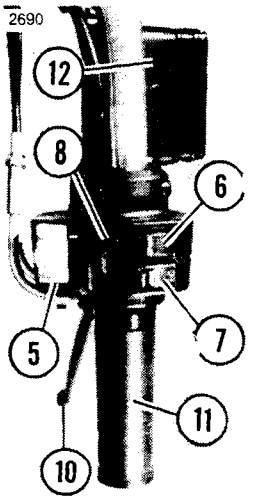
CYCLE SIGNAL AND PURSUIT LAMP SWITCH (See Figure 8)

The cycle signal and pursuit lamps switch (5) is located on the right handlebar as shown in Figure 8. The two procedures for operating this switch are as follows:

1st Procedure: The first position forward labeled AUX will operate the cycle signal lamp (if the vehicle is so equipped).

2nd Procedure: The second position forward labeled PURS will operate both the cycle signal lamp and the alternate flashing pursuit lamps.





1. **Headlamp dimmer switch**
2. **Left turn signal switch**
3. **Horn switch**
4. **Siren switch**
5. **Pursuit lights**
6. **Starter switch**
7. **Engine stop switch**
8. **Right turn signal switch**
9. **Clutch hand lever**
10. **Front brake hand lever**
11. **Throttle grip**
12. **Front brake master cylinder**

Figure 8. Handlebar Controls

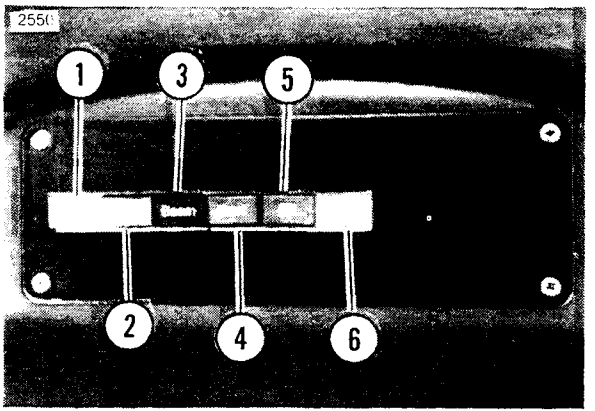
CYCLE SIGNAL AND PURSUIT LAMPS ACTIVATION			
Procedure	**Switch**	**Position**	**Mode**
1	AUX PURS	ON OFF	Cycle signal (1st Detent)
2	AUX PURS	ON ON	Cycle Signal Pursuit Lamps (2nd Detent)

HORN

The horn is operated by the horn button (3, Figure 8) on the left handlebar. Refer to the SIREN SWITCH previously covered for the siren modes contolled by the horn button.

WARNING

The horn (normal mode) is only operational when the siren switch is in the "OFF" position.

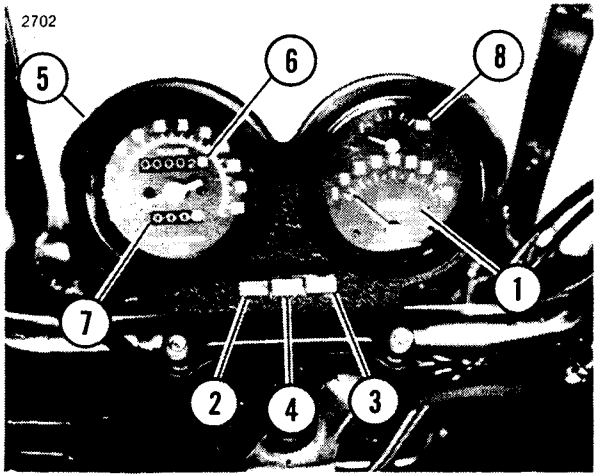


1. Left turn
2. Pursuit
3. High Beam
4. Neutral
5. Oil
6. Right turn

Figure 9. Indicator Lights — FXRP (Fairing)

TURN SIGNAL SWITCHES (Figures 8, 9 and 10)

Right and left turn signal swtiches are shown in Figure 8. Depressing the "TURN" side of the left turn signal switch will cause left front and rear signal lights to flash. Depressing the "TURN" side of the right turn signal switch will cause right front and rear signal lights to flash.



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

Figure 10. Indicator Lights and Gauges — FXRP (Windshield)

WARNING

The hazard warning flasher must be in the "OFF" position for the turn signals to be operational.

HEADLAMP DIMMER SWITCH AND HIGH BEAM INDICATOR LIGHT (Figures 8, 9 and 10)

The headlamp dimmer switch (1, Figure 8) on the left handlbar controls the headlamp high and low beams. Indicator light "BEAM" (Figures 9 and 10) remains lit when high beam is on.

ELECTRIC STARTER

The starter button (6, Figure 8) is located on the right handlebar. With ignition on, engine stop switch (7, Figure 8) in "RUN" position and transmission in neutral, push button to operate starter motor.

CAUTION

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

ENGINE STOP SWITCH

Rocker switch (7, Figure 8) 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 and remove key before parking or leaving vhicle.

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

THROTTLE CONTROL GRIP

The throttle control grip 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 screw outward to provide a self-closing throttle, which should return to the 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.

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.

CLUTCH HAND LEVER

The clutch hand lever (9, Figure 8) 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.

WARNING

Before starting engine, always shift transmission to neutral or fully disengage clutch to pevent accidental movement which could cause possible damage to motorcycle and personal injury. Make sure fingers are not positioned between hand control levers and handlebar grips while operating levers or operation of vehicle could be impaired.

CHOKE

The carburetor choke control knob (Figure 11) is located just under the gas tnak ont he left side of the motorcycle. Pull knob out ot 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.

GEAR SHIFTER (Figure 1)

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

Neutral position is between first (low) and second gears. The green neutral indicator light 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, use heel to push another half a stroke. Neutral can be reached from first gear easier than from second gear.

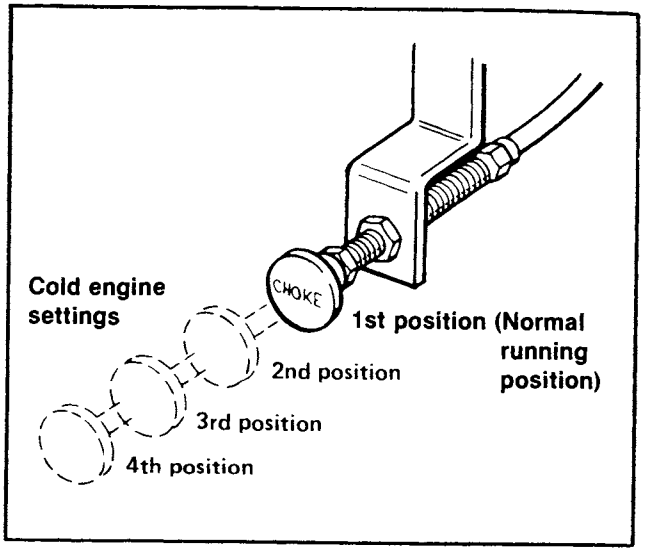


Figure 11. Setting the Choke

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.

CAUTION

Do not, under any circumstances, attempt to force shifter lever into gear or the shifter mechanism may be damaged or broken.

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.

BRAKE CONTROLS

The rear brake pedal controls the rear wheel brake and is located on the right side where it is operated by the right foot. The front brake hand lever (10, Figure 8) controls the front wheel brakes 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 brakes 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

WARNING

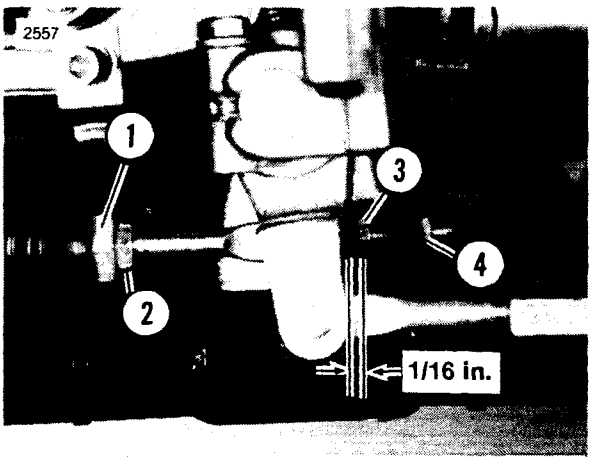
When adjusting brake pedal position, the 1/16 in. free play shown in Figure 12 must be maintained. Free play of less than 1/16 in. could result in a "locked" brake. Brake pedal adjustment should be checked by a Harley-Davidson dealer or the Service Center.

The brake pedal may be positioned to suit the leg reach of the individual rider. By sitting on the vehicle and applying the brake at different pedal positions, it can be quickly established which position is most comfortable and effective for the individual. Adjust the pedal position and free play as follows:

1. See Figure 12. Loosen locknut (4) and turn brake pedal stop bolt (3) in or out to achieve proper pedal position.

2. Tighten locknut (4) while holding brake pedal stop bolt (3) in place.

3. 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.



1. Push rod
2. Locknut
3. Brake pedal stop bolt
4. Locknut

Figure 12. Adjusting Rear Brake Pedal

4. Tighten locknut (2) while holding push rod (1) in place.

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

TRIP ODOMETER (Figure 10)

The trip odometer 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 on the back side of the speedometer, counterclockwise.

OIL PRESSURE SIGNAL LIGHT (Figures 9 and 10)

The oil pressure signal light is marked OIL. Light will go on when the 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 oil level or a diluted oil supply. In freezing weather the oil feed line 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. If the oil light fails to go off, check the oil supply. Then, if oil supply is normal and the light still does not go out, see your Harley-Davidson dealer or service center prior to operation.

REAR SHOCK ABSORBER SPRING ADJUSTMENT (Figure 13)

The rear shock absorber springs can be adjusted to five positions for the weight the motorcycle is to carry. The 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); or, the fully compressed spring position (third or fourth cam step).

To adjust the rear shock absorber, turn spring adjusting cam to desired position with spanner wrench. When returning to off-cam position, cams should be backed off in opposite direction.

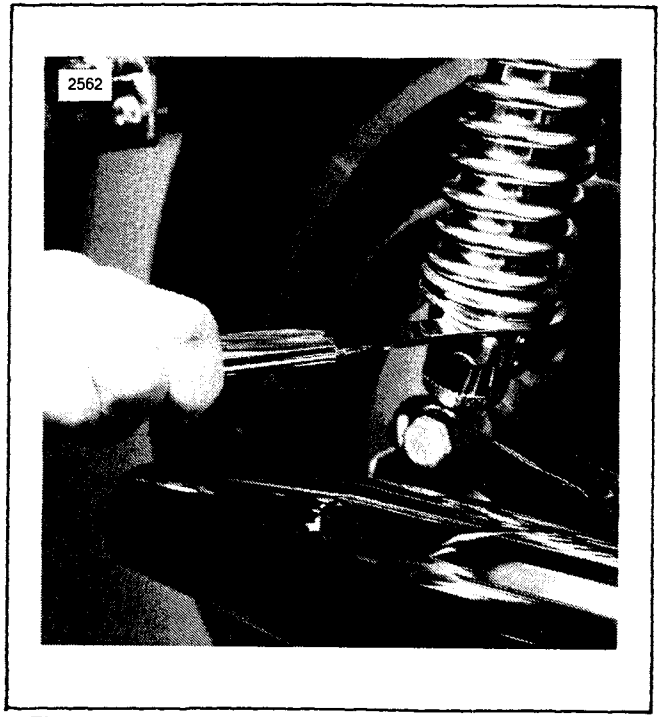


Figure 13. Rear Shock Absorber Spring Adjustment

WARNING

Both spring adjusting cams must be adjusted to the same position or handling may be degraded.

SADDLEBAGS (Figure 14)

The saddlebag covers have locks at the front and rear. To open the saddlebag covers do the following:

1. Unlock both locks with a full turn of the key.
2. Lift up on the outside edge of both drawcatches to unlatch locks.
3. Lift upward on inner edge of cover (cover is hinged on outside edge).

To close saddlebags, make sure drawcatches are both in open position, close cover and press drawcatches down. To lock, turn key one full turn.

WARNING

Maximum recommended load for each saddlebag is 15 lbs.

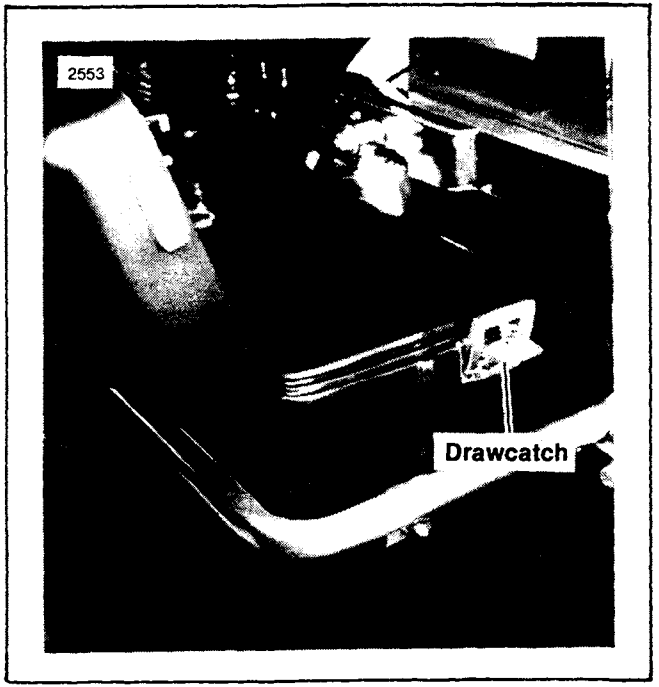


Figure 14. Saddlebag Locks

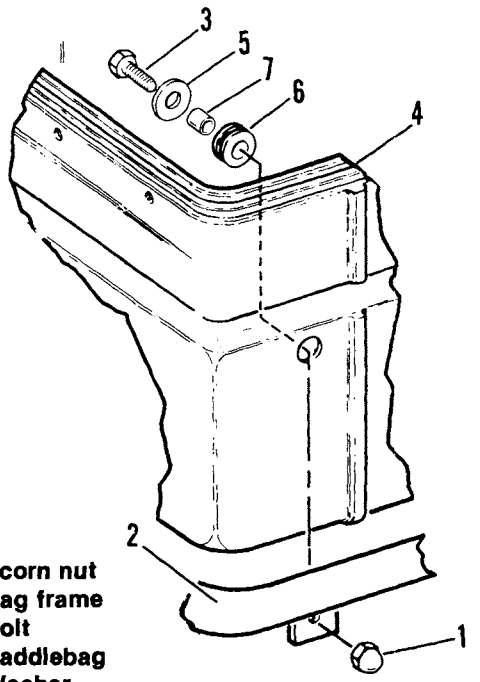
Removing Saddlebags (Figure 15)

The saddlebags are removed by first removing the three bolts that attach each bag to the bag frame. See Figure 15 for proper location of bolts and associated hardware. At the lefthand saddlebag, the amplifier will have to be disconnected prior to removing the saddlebag.

1. Open saddlebag cover.

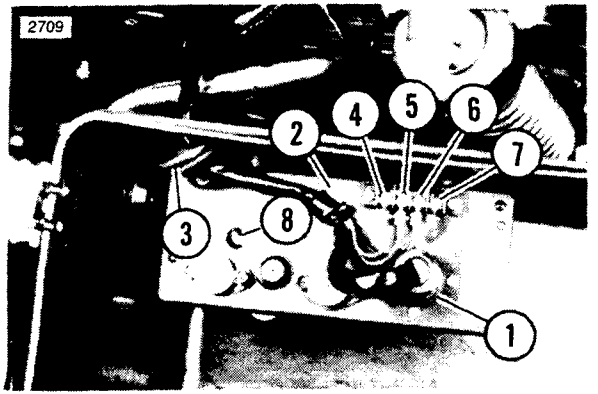
2. Remove the three bolts (3) at front, back and bottom of saddlebag. The bolt head is at the inside of the saddlebag and the acorn nut (1) is at the outboard side of the bag frame. Do not misplace the spacers (7) or washers (5) which are under the bolt heads. The righthand saddlebag is now free to be removed. If removing the lefthand bag, proceed to Step 3.

3. See Figure 16. At the lefthand saddlebag, disconnect main socket connector and the four wire terminal connectors from the amplifier. Remove cable clip. Feed wiring harness with grommet



1. Acorn nut
2. Bag frame
3. Bolt
4. Saddlebag
5. Washer
6. Grommet
7. Spacer

Figure 15. Saddlebag Mounting



1. Main plug connector nut
2. Cable clip screw
3. Grommet
4. Brown wire terminal
5. Brown wire terminal
6. Black wire terminal
7. Orange wire terminal
8. Audio gain adjuster

Figure 16. Audio Amplifier Connections

through access hole. Left saddlebag can now be removed along with the amplifier.

Installing Saddlebags (Figure 15)

1. Place saddlebags into carrier with hinges to the outside.

2. Place a flat washer (5) on each bolt (3) and insert the bolts through spacer (7), grommet (6) and through the mating hole in the bag frame (2). Turn an acorn nut (1) onto each bolt (3) and tighten securely.

3. Feed wiring harness and grommet through saddlebag access hole. Reconnect main socket connector and four wire terminal connectors in sequence as shown in Figure 16. Install cable clip and insert grommet in access hole.

SOLO SEAT (Figure 17)

The solo seat may be adjusted as follows:

1. Remove the self locking pin at the front bracket by twisting and pulling.

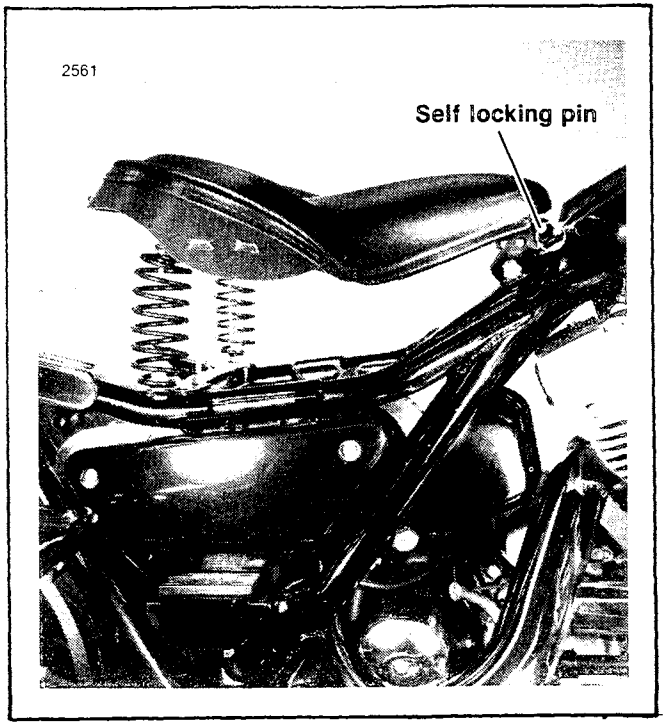


Figure 17. Solo Seat

2. Position the seat to the hole desired and insert the pin through the holes in the seat and front bracket. Having the pin in the rear hole will move the seat backward and tilt the front of the seat slightly downward. Having the pin in the forward hole will position the seat forward and raise the front of the seat to a level position.

The seat may be removed by removing the pin and then sliding the bottom of both springs forward while lifting upward.

BREAK-IN MAINTENANCE

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.

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 a Harley-Davidson dealer or the Service Center for initial service operation.

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 sytsem could occur causing possible malfunction and personal injury.

CHECK AT FIRST 500 MILES

1. Change engine oil.
2. Replace oil filter.
3. Inspect air cleaner and service if needed.
4. Clean tappet oil screen.
5. Adjust rear belt.
6. Adjust primary chain.
7. Change primary chaincase oil.
8. Check battery electrolyte level, clean and tighten terminals.
9. Check rear brake pedal height adjustment and free play.
10. Check brake pad linings and discs for wear.
11. Check brake fluid level and condition.
12. Check clutch adjustment.
13. Inspect fuel valve, lines and fittings for leaks.
14. Lubricate front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever.
15. Tighten all fasteners.
16. Check tire pressure and inspect tire for wear/damage.
17. Check engine low and fast idle speed adjustment.
18. Check operation of throttle and choke controls.
19. Check operation of all electrical equipment and switches.
20. Check ignition timing and vacuum operated electrical switch (V.O.E.S)

21. Change transmission oil.
22. Check rear fork pivot nut and engine mounts.
23. Check front fork bearing adjustment.
24. Check condition of rear shock absorbers and rubber bushings.
25. Road test.

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. Hydraulic brake 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 and transmission lubricant levels.
7. Headlight, taillight, brake light, and directional light operaton.

REGULAR SERVICE INTERVALS

Regular lubrication and maintenance will help keep your new Harley-Davidson operating at peak performance. Your Harley-Davidson dealer knows best how to service your motorcycle with factory approved methods and equipment.

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

REGULAR MAINTENANCE INTERVALS — FXRP

ODOMETER READING (miles) / SERVICE OPERATIONS	500	2,500	5,000	7,500	10,000	12,500	15,000	17,500	20,000	22,500	25,000	27,500	30,000	32,500	35,000	37,500	40,000	42,500	45,000	47,500	50,000
Engine oil (see chart code & note below)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Air cleaner	IL		IL		IL		IL		R		IL		IL		IL		R		IL		IL
Tappet oil screen	I		I		I		I		I		I		I		I		I		I		I
Rear drive belt	A	I	A	I	A	I	A	I	A	I	A	I	A	I	A	I	A	I	A	I	A
Primary chain	A		A		A		A		A		A		R		A		A		A		A
Primary chain case oil	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
Battery	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Rear brake pedal height adjustment and free play	I		I		I		I		I		I		I		I		I		I		I
Brake pad linings and discs for wear	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake fluid level and condition	I		I		I		R		I		I		R		I		I		R		I
Clutch adjustment	I		I		I		I		I		I		I		I		I		I		I
Fuel valve, lines and fittings for leaks	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Front brake handlever, throttle control cables, choke control cable, clutch control cable and handlever	L		L		L		L		L		L		L		L		L		L		L
All fasteners	T		T		T		T		T		T		T		T		T		T		T
Stabilizer links									R								R				
Tire pressure and inspect tire for wear/damage	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

Chart Code:

- **I** — Inspect, and if necessary correct, clean or replace.
- **A** — Adjust.
- **R** — Replace or change.
- **T** — Tighten to proper torque.
- **L** — Lubricate with specific lubricant recommended herein.
- **X** — Perform.

REGULAR MAINTENANCE INTERVALS — FXRP (CONT'D)

ODOMETER READING (miles) / SERVICE OPERATIONS	500	2,500	5,000	7,500	10,000	12,500	15,000	17,500	20,000	22,500	25,000	27,500	30,000	32,500	35,000	37,500	40,000	42,500	45,000	47,500	50,000
Engine low and fast idle speed adjustment	I		I		I		I		I		I		I		I		I		I		I
Operation of throttle and choke controls	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Operation of all electrical equipment and switches	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ignition timing and vacuum operated electric switch (V.O.E.S.)	I		I		I		I		I		I		I		I		I		I		I
Spark plugs			R		R		R		R		R		R		R		R		R		R
Transmission oil	R	I	I	I	R	I	I	I	R	I	I	I	R	I	I	I	R	I	I	I	R
Rear fork pivot nut and engine mounts	I		I		I		I		I		I		I		I		I		I		I
Front fork bearing adjustment	I		I		IL		I		IL		I		IL		I		IL		I		IL
Condition of rear shock absorber and rubber bushings	I		I		I		I		R		I		I		I		R		I		I
Throttle control grip sleeve, speedometer cable			L		L		L		L		L		L		L		L		L		L
Rear brake linkage grease fittings (2)			L		L		L		L		L		L		L		L		L		L
Condition of rear brake caliper mounting pins and boots			IL		IL		IL		IL		IL		IL		IL		IL		IL		IL
Wheel bearings					L				R				L				R				L
Front fork oil			R				R				R				R				R		
Seat pin					L				L				L				L				L
Road test	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Chart Code:

I — Inspect, and if necessary correct, clean or replace.
A — Adjust.
R — Replace or change.
T — Tighten to proper torque.
L — Lubricate with specific lubricant recommended herein.
X — Perform.

WARNING

Fuel is flammable. Do not store motorcycle having gasoline in tank within a garage where open flames, pilot lights, sparks or electric motors are present.

1. Drain all fuel from the gas tank and carburetor float bowl and coat the inside of the float bowl with light oil. Spray the inside of the gas tank with one of the commercially available rust preventatives. Follow the manufacturer's instructions.

2. Remove the spark plugs, injuect a few squirts of engine oil in to each cylinder and crank the engine 5 or 6 revolutions. Reinstall spark plugs.

3. Fill the oil tank and pinch off or remove and plug the line leading from the bottom of the tank to the feed fitting (marked F) on the oil pump. This will eliminate the possibility of oil seeping past the check ball into the oil pump and filling the engine crankcase with oil.

4. Adjust the primary chain and inspect rear drive belt.
5. Check tire inflation. If the motorcycle will be stored for an extended period of time, securely support the motorcycle under the frame so that all weight is off the tires.
6. Wax painted and chrome surfaces and apply a light film of oil to exposed unpainted surfaces.

WARNING

Do not apply any oil or wax to brake discs or brake pads.

7. Remove battery from the motorcycle and fully charge. Store the battery above freezing temperatures, trickle charge once a month and keep the electrolyte level above the plates.

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

REMOVAL FROM STORAGE

WARNING

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

1. Fill the battery with water to the proper level, charge, and install it.

2. Remove and inspect the spark plugs. Replace if necessary.

3. Clean and oil the air cleaner element.

4. Remove the carburetor float bowl, clean it and check the float level.

5. Fill fuel tank with fresh gasoline.

6. If oil feed line was pinched off or plugged, unplug it and reconnect.

7. Start the engine and run until it reaches normal operating temperature.

8. Stop the engine. Drain and flush the oil tank. Install a new oil filter and fill oil tank with the proper grade oil. Check the transmission oil level and the primary chaincase oil level.
9. Check controls to make sure they are operating properly; operate the front and rear brakes, throttle, clutch and shifter.

10. Check steering for smoothness by turning the handlebars through the full operating range.

11. Check tire pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability.

12. Check all electrical equipment and switches including the stoplampk turn signals, pursuit lamps, siren and horn for proper operation.

13. Check for any fuel, oil or hydraulic fluid leaks.

14. Check fluid levels in both brake reservoirs.

CLEANING YOUR MOTORCYCLE

General

To aid you in keeping your motorcycle clean, see your Harley-Davidson dealer for the following products:

WARNING

Observe warnings and cautions given on labels of cleaning compounds to prevent personal injury or damage to your motorcycle.

Harley-Davidson GUNK Cleaner

Harley-Davidson GUNK will quickly and efficiently remove grease and oil from the metal parts of your motorcycle leaving a clean, bright finish. For unpainted metal surfaces, use full strength. For enameled surfaces dilute according to instructions on can.

CAUTION

Do not allow GUNK cleaner to come in contact with any plastic parts such as windshield, trim strips, seat or saddlebags, since it will discolor the surface or cause deterioration. Use Harley-Davidson PLASTIC CLEANER, VINYL DRESSING or mild soap and water to clean these materials.

CAUTION

Before washing your motorcycle, place plastic bags over the right and left handlebar grips and switches. Rubber bands may be used to hold bags in place.

If a high pressure water supply or power washer is used, do not spray directly at the following:

1. **Front and rear axle seals.**
2. **Brake calipers.**
3. **Air cleaner.**
4. **Ignition switch and indicator lights on fairing.**
5. **Seat and battery case.**
6. **Timing cover.**

After washing, remove plastic bags from handlebar grips and start engine. Check that engine and brakes are operating properly before riding in traffic.

Harley-Davidson CHROME CLEANER

Use Harley-Davidson CHROME CLEANER to clean the chrome parts of your motorcycle.

Harley-Davidson CYCLE POLISH

Harley-Davidson CYCLE POLISH is made to clean and polish the enamel parts to maintain or restore these parts as close as possible to their original luster.

Harley-Davidson VINYL DRESSING

Harley-Davidson VINYL DRESSING is specially formulated for seats, pegs, grips, tires and all other vinyl, rubber, leather and plastic surfaces. It also restores full rich colors leaving a soft natural appearance. Full instructions appear on the container.

Harley-Davidson PLASTIC CLEANER

Use Harley-Davidson PLASTIC CLEANER to clean and remove fine scratches from most flexible or rigid plastic surfaces. Flush with water first to soften and remove excessive dirt. Follow instructions on the container.

FLUIDS AND LUBRICANTS

Engine Oil

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 temperature between 10° F and 100° F plus. For other conditions, or if POWER BLEND SUPER PREMIUM is not available, use Harley-Davidson 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

Transmission Oil

Use Harley-Davidson TRANSMISSION LUBRICANT, Part No. 99892-84 quart, 99891-84 gallon.

Primary Chaincase Oil

Use Harley-Davidson PRIMARY CHAINCASE LUBRICANT, Part No. 99887-84.

Fork Oil

Use Harley-Davidsoin HYDRAULIC FORK OIL TYPE E, Part No. 99884-80.

Brake Fluid

Use Harley-Davidson D.O.T. 5 BRAKE FLUID, Part No. 99901-77 gallon.

CHECKING OIL LEVEL (Figure 18)

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 on jiffy stand. The oil tank fill plug is located under the seat. 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 19).

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.

Refill capacity with filter change is 3 quarts.

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.

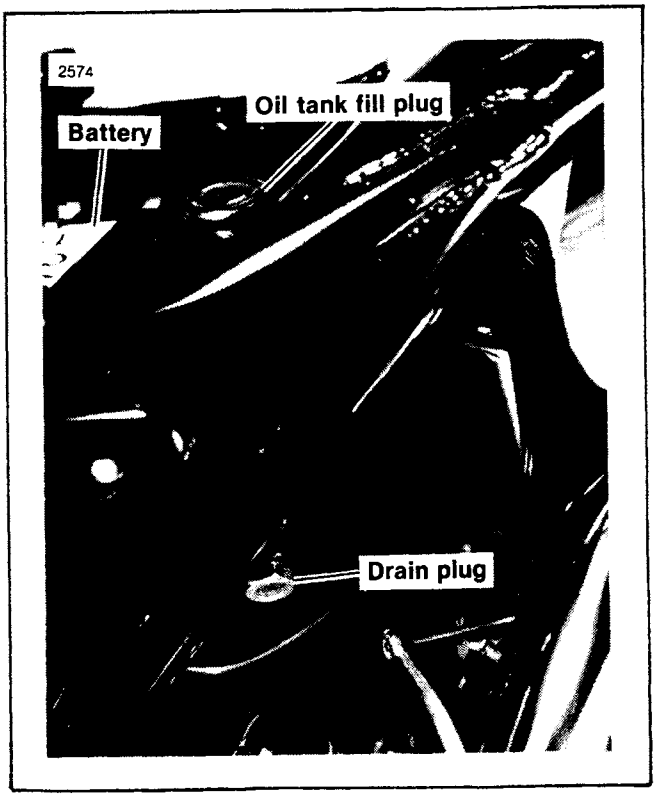


Figure 18. Oil Tank

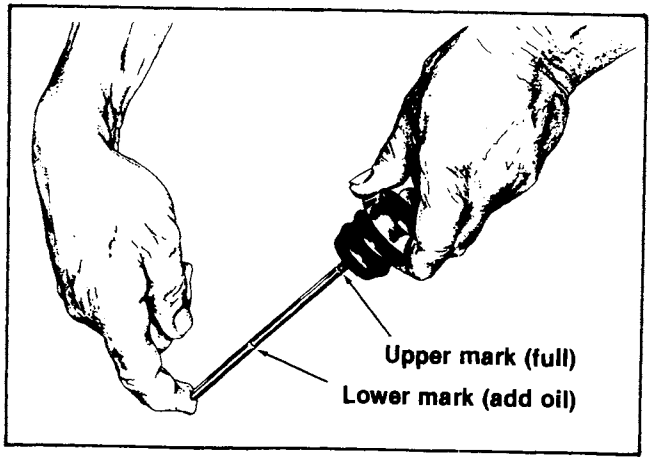


Figure 19. Engine Oil Level Dipstick

Oil should be changed after the first 500 miles for a new engine, and thereafter at the intervals shown in the Regular Maintenance Intervals chart 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 at the intervals shown in the the Regular Maintenance Intervals chart.

CAUTION

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

Oil Filter

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

After 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 into adaper until gasket contacts plate surface. Apply another 1/2 to 3/4 of a turn by hand. Run

engine, check for oil leaks and add oil as required. DO NOT OVERFILL.

CAUTION

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

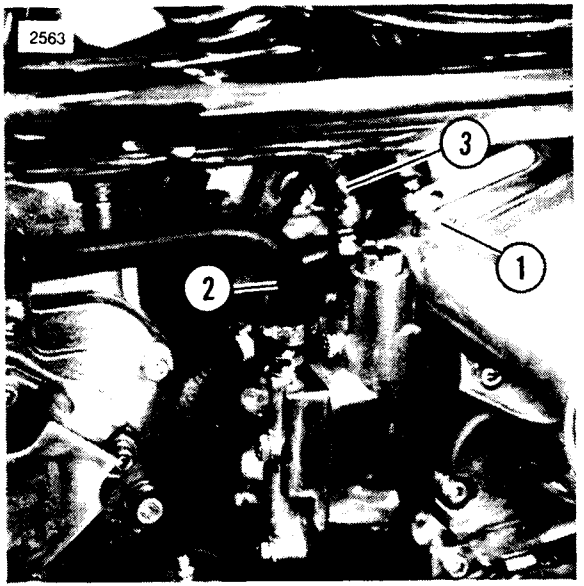
WARNING

Allow no oil on rear tire when changing the filter.

Tappet Oil Filter Screen

The tappet oil filter screen (1 Figure 20) 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 5,000 miles thereafter. Oil screen is installed with closed end up.

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



1. Tappet oil screen plug
2. Feed line from oil tank
3. Oil pressure switch

Figure 20. Tappet Filter Screen

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

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

Remove the threaded fill plug. Clean dipstick and reinstall all the way. Remove dipstick and take reading.



Transmission capacity — 1 pint

Figure 21. Transmission Filler Plug

(See Figure 21). 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..

The transmission should be drained and refilled with fresh lubricant after the first 500 miles and thereafter every 10,000 miles.

The transmission lubricant should be checked every 2500 miles. Use Harley-Davidson TRANSMISSION LUBRICANT. If the transmission should be submerged in water, drain it as soon as possible and refill to proper level.

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 refilling the transmission, be careful that dirt and debris do not enter the case. Do not allow lubricant on rear wheel, tire or brakes.

PRIMARY CHAINCASE LUBRICATION

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

Lubrication is a major factor in the performance and service life of the front chain and 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. Also replace nylon washers.

PRIMARY CHAIN

Check the adjustment of the primary (front) chain after the first 500 miles and every 5000 miles thereafter. Readjust 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 sprockets will wear excessively.

Adjust the front chain so it has the correct amount of total free movement up and down, midway between sprockets.

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

PRIMARY CHAIN ADJUSTMENT

NOTE

Drain the oil from the primary chaincase before removing the inspection or adjustment cover. The shift lever must also be removed before removing the adjustment cover.

Front chain tension is adjusted by means of a shoe which is raised or lowered underneath the chain to tighten or loosen it. The shoe support bracket moves up or down in slotted backplate after loosening center bolt. Adjust shoe support as necessary to obtain specified up and down free movement in upper strand of chain, midway between sprockets. Install a new nut and tighten securely.

The specification for proper front chain adjustment is:

5/8 to 7/8 inch with a cold engine
3/8 to 5/8 inch with a hot engine

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 22. 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.

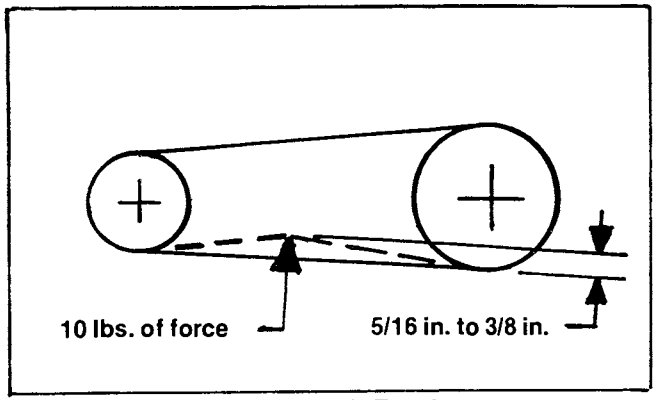


Figure 22. Belt Tension

REAR BELT ADJUSTMENT (Figures 22 and 23)

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. Also this adjustment affects vehicle alignment. Because of the critical nature of this adjustment, it should be checked by a Harley-Davidson dealer or the service center.

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. Loosen axle nut on right side.

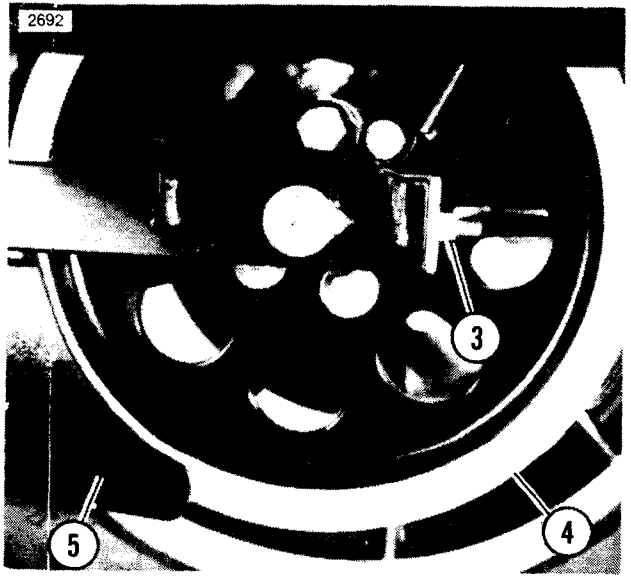
2. With the motorcycle upright and one rider sitting on it, turn the axle adjuster nuts on both sides of the rear wheel an equal amount of turns to keep the rear wheel in alignment. See Service Manual for correct REAR WHEEL ALIGNMENT.

CAUTION

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

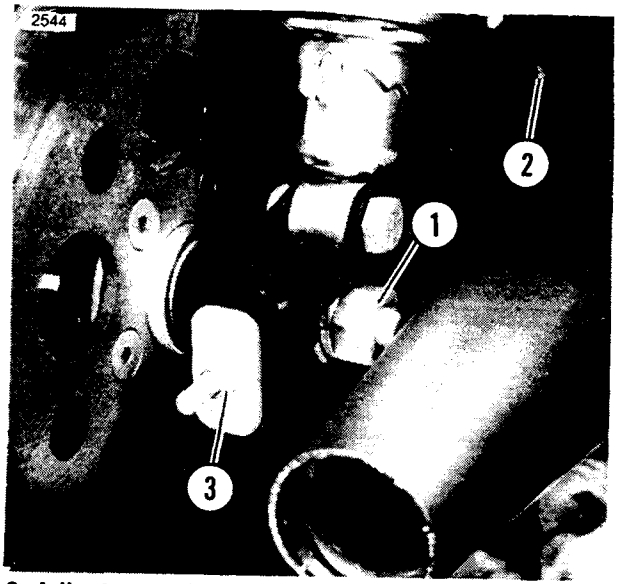
3. With 5/16 in. to 3/8 in. total free up and down movement established in belt midway between sprockets, tighten axle nut to 60-65 ft-lbs torque.

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



Left Side

1. Axle nut
2. Brake line clamp screw



3. Adjuster nut (2)
4. Rear sprocket & drive belt
5. Debris deflector

Right Side

Figure 23. Rear Drive Belt Adjustment

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. Check bearings for adequate lubrication any time wheel is removed and replace seals.

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 linkage every 5000 miles. There is one grease fitting at the pedal pivot and another fitting at the push rod pivot ahead of the rear master cylinder.

Oil Applications

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

Front Fork Oil

The hydraulic front fork requires little maintenance or attention. Drain and refill as indicated in the REGULAR MAINTENANCE INTERVALS chart. 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 or the service center. Incorrect recoil action will result if there is insufficient oil in either side of fork.

SPARK PLUGS

Replace the spark plugs every 5000 miles. 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 of the throttle and choke controls should be checked after the first 500 miles and every 2500 miles thereafter. Low and fast idle speed should be checked at 500 miles and every 5000 miles thereafter.

CAUTION

Operation at higher altitudes (approximately 4000 ft. elevation) may require carburetor modifications for best engine performance. 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. The element traps dust and dirt to keep it from entering the carburetor and engine.

Remove the air cleaner cover and service the element every 5000 miles, or more often if the motorcycle is run in a dusty environment.

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 filer element in place.

GASOLINE STRAINER

A screen type gasoline strainer is located on top of the gasoline supply valve inside the gasoline tank. 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 5000 miles. If ignition timing is not correct, see your Harley-Davidson dealer or service center.

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 immediately after engine is started, valve mechanism becomes abnormally noisy, it is an indication that one or more of the hydraulic units may not be functioning properly. Always check the 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. See your Harley-Davidson dealer or service center for service.

CLUTCH

Periodic adjustment of the clutch and lubricating of the clutch control cable is required every 5000 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 or service center for proper service.

WHEEL BEARINGS

Bearings should be repacked at 10,000 mile intervals, or yearly. 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 in. with axle nut tightened to 50 ft-lbs torque.

Rear wheel bearing end play should be .004 - .018 in. with axle nut tightened to 60-65 ft-lbs torque.

BRAKES

Every 5000 miles, check the fluid level in both master cylinder reservoirs. Use only D.O.T. 5 HYDRAULIC BRAKE FLUID, that is approved for brake system use which is available from your Harley-Davidson dealer. Brake pads and discs must be checked for wear every 2500 miles.

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 or service center for these services.

Brake pads must be inspected for wear at least every 2500 miles. However, if you ride under adverse conditions, steep hills, heavy traffic, etc., or if you tend to use only the rear brake, more frequent inspection, 1000 miles or less, will be necessary. We do not recommend using only the rear brake.

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. If the brake pads friction material is 1/16 in. thick or less (the thickness of a nickel), **the pads must be replaced immediately.** See Figure 24. 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 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 25. The outer surface of the brake pad backing plate should measure 1/4 in. or more away from the brake disc. **If it measures less than 1/4 in., replace both brake pads immediately.**

NOTE

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

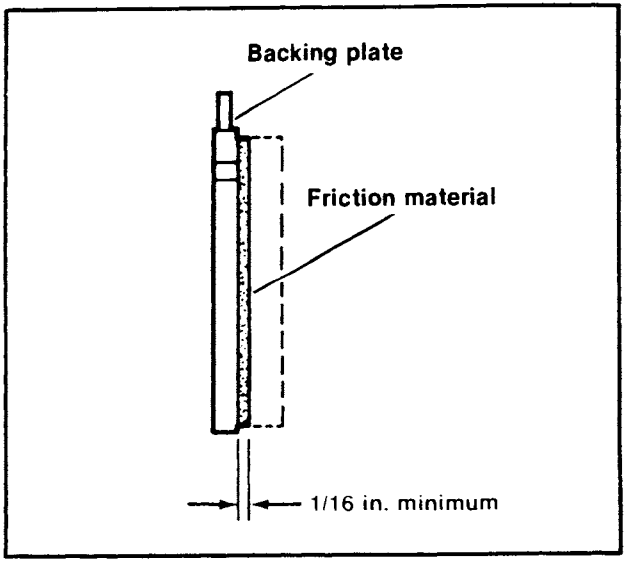


Figure 24. Brake Pad Side View

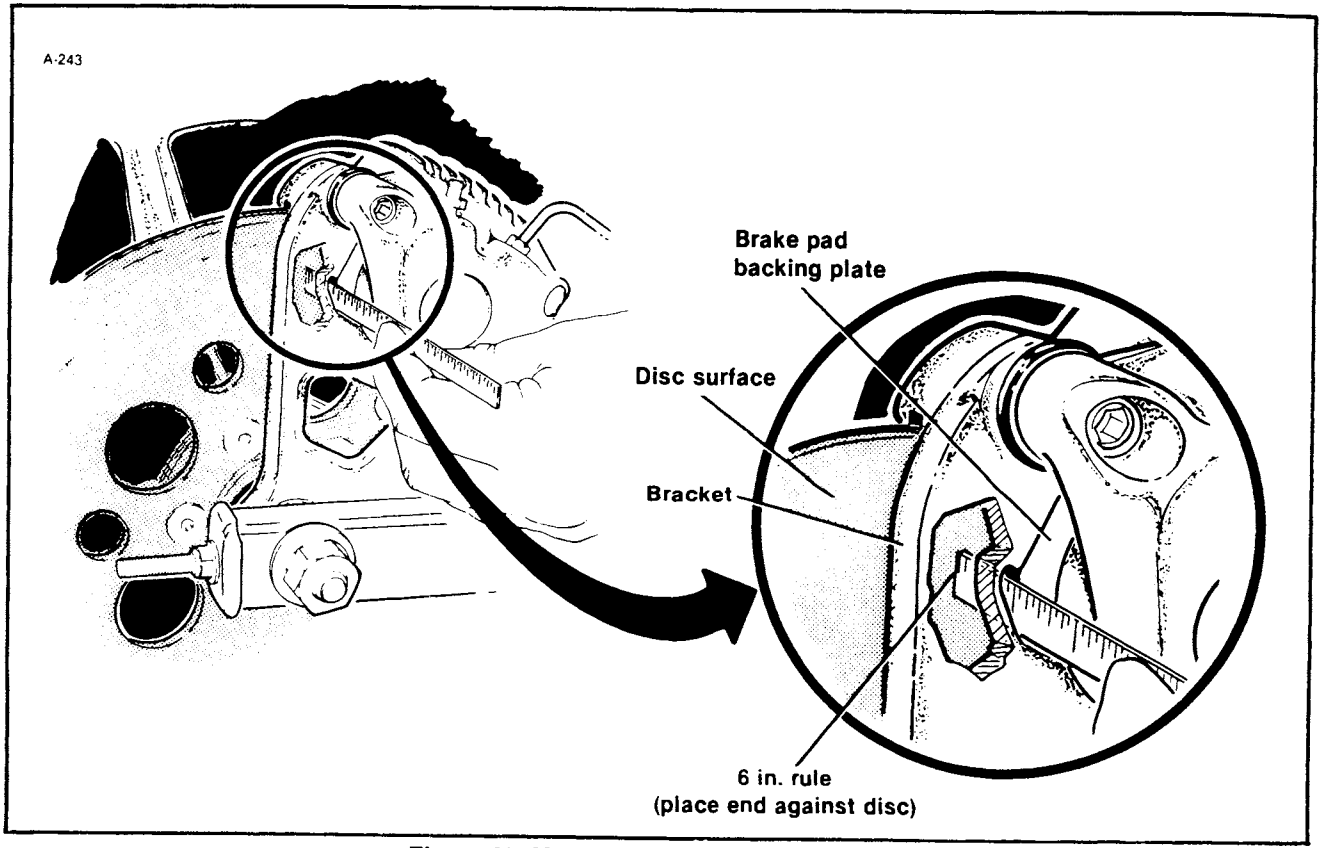


Figure 25. Measuring Rear Brake Outer Pad

WHEEL ALIGNMENT

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 or service center using Service Manual procedures.

The stabilizer links must be replaced at 20,000 mile intervals. The engine mounts should be checked for wear or damage according to Service Manual procedures after the first 500 miles and every 5,000 miles thereafter. See your Harley-Davidson dealer or the service center for these services.

Alignment of the wheel in the rear fork should be checked whenever the rear wheel is removed and reinstalled or when the drive belt is replaced or adjusted.

TIRES

The FXRP has special tires designed to remain on the rim at moderate speeds with tires depressurized. This is made possible by a special rim flange or sidewall lip that overlaps the rim perimeter.

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 overinflate 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, handling, and braking.

WARNING

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

Because tires, wheels and air valves are critical safety items, and servicing of these items requires special tools and skills, we recommend you see your Harley-Davidson dealer or service center for these services.

Always check both tire sidewalls for arrows indicating proper forward tire rotation. Some tires require different tire rotation depending on whether tire is used on front or rear wheel. The colored dot on the sidewall is a balance mark and should be located next to the tire valve.

Flat Tire Repair

WARNING

Tire repair or replacement must be performed by a Harley-Davidson dealer or the service center following Service Manual Supplement procedures because of the following critical elements:

1. Special mounting procedure.

2. Limited clearances at rear drive belt guard and fender braces.

3. Vehicle alignment.

SHOCK ABSORBERS

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

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 and lubrication be performed by your Harley-Davidson dealer or service center.

FRONT FORK BEARINGS

Check front fork for proper bearing adjustment at 500 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 in-

dicating excessive bearing looseness. Steering head bearings should be adjusted if necessary according to Service Manual procedure.

REAR FORK PIVOT SHAFT

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.

CAUTION

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

HEADLAMP

The FXRP fairing version headlamp is a replaceable bulb type, not a sealed beam unit. The bulb is made of quartz glass filled with halogen gas. This quartz halogen bulb is very delicate and must be handled with care.

CAUTION

Never touch the quartz glass bulb with your fingers. Finger prints will etch the glass and cause the bulb to fail. Always wrap the bulb in paper or a clean dry cloth during handling.

WARNING

The bulb contains Halogen gas under pressure. Handle bulb carefully and wear eye protection to avoid possible personal injury.

To replace the headlamp bulb, do the following:

1. From the rear of the fairing, unplug the connector.

2. Remove rubber foot, press wire clip together and remove bulb.

3. Install new bulb into housing and secure with wire clip.

4. Replace rubber boot and plug in the connector.

The FXRP windshield version headlamp is the sealed beam type and easily replaced from the front of the motorcycle. 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 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.

CAUTION

Electrical functions such as the hazard warning flasher, is operational without the motorcycle being started (Ignition switch "OFF"). Continual use may drain the battery.

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. Do not overfill

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 or service center who have the necessary electrical testing equipment to give required attention.

CIRCUIT BREAKERS

To protect the motorcycle wiring, there are five circuit breakers: main, lighting, accessory, ignition, and auxiliary.

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, see your Harley-Davidson dealer or service center. They have necessary parts and equipment to perform electrical services.

BULB CHART — FXRP WITH FAIRING

LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp	1		67697-81
High Beam		4.69 Amps/60 Watts	
Low Beam		4.29 Amps/55 Watts	
Tail and Stop Lamp	1		68165-64
Tail Lamp		.59 Amps/3 C.P.	
Stop Lamp		2.1 Amps/32 C.P.	
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
Instrument Lamps			
Turn Signal Indicator	2	.27 Amps/2 C.P.	68468-84
High Beam Indicator	1	.27 Amps/2 C.P.	68597-83
Neutral Indicator	1	.80 Amps/4 C.P.	68574-83
Oil Pressure Indicator	1	.80 Amps/4 C.P.	68489-83
Pursuit Lamp Indicator	1	.80 Amps/4 C.P.	68429-84
Speedometer	1	.27 Amps/2 C.P.	71090-64
Fuel Gauge/Tachometer	2	.12 Amps/1 C.P.	67136-85
Pursuit Lamps	2	2.34 Amps/30 Watts	68727-64A
License Plate Lamps	2	.19 Amps/1 C.P.	59989-84

BULB CHART — FXRP WITH WINDSHIELD

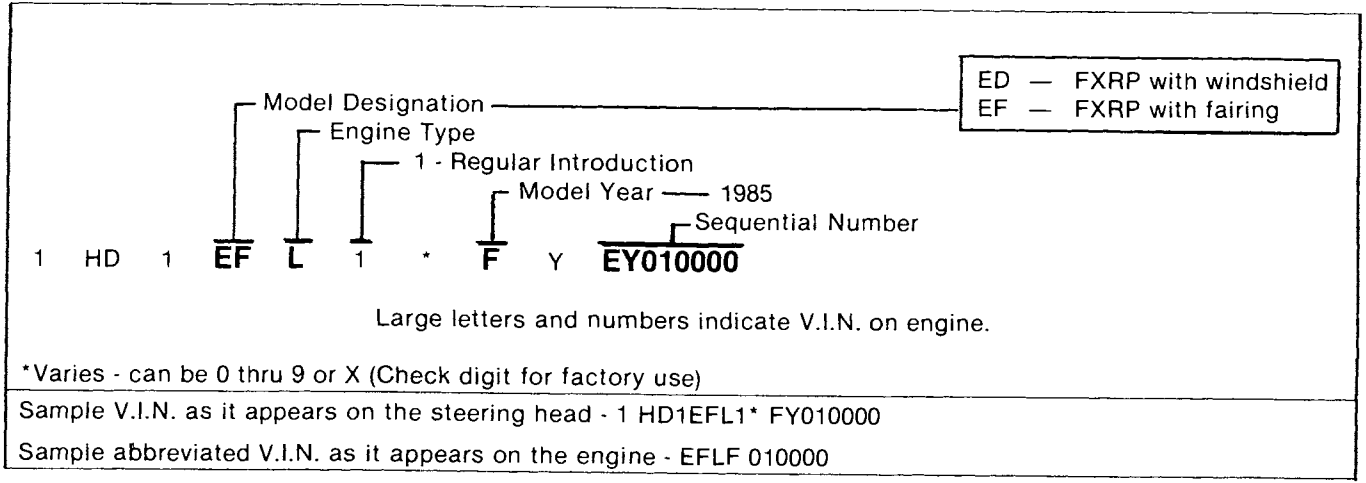
LAMP DESCRIPTION (ALL LAMPS 12 V)	NUMBER OF BULBS REQUIRED	CURRENT DRAW	HARLEY DAVIDSON PART NUMBER
Headlamp	1		
High Beam		4.69 Amps/60 Watts	67698-81A
Low Beam		4.29 Amps/55 Watts	
Tail and Stop Lamp	1		68165-64
Tail Lamp		.59 Amps/3 C.P.	
Stop Lamp		2.1 Amps/32 C.P.	
Turn Signal Lamps			
Front — Turn Signal	2	2.1 Amps/32 C.P.	68572-64A
Rear — Turn Signal	2	2.1 Amps/32 C.P.	68572-64A
Instrument Lamps			
Turn Signal Indicator	2	.27 Amps/2 C.P.	68468-84
High Beam Indicator	1	.27 Amps/2 C.P.	68597-83
Neutral Indicator	1	.80 Amps/4 C.P.	68574-83
Oil Pressure Indicator	1	.80 Amps/4 C.P.	68489-83
Pursuit Lamp Indicator	1	.80 Amps/4 C.P.	68429-84
Speedometer	1	.27 Amps/2 C.P.	71090-64
Fuel Gauge/Tachometer	2	.12 Amps/1 C.P.	67136-85
Pursuit Lamps	2	2.34 Amps/30 Watts	68727-64A
License Plate Lamps	2	.19 Amps/1 C.P.	59989-84

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.



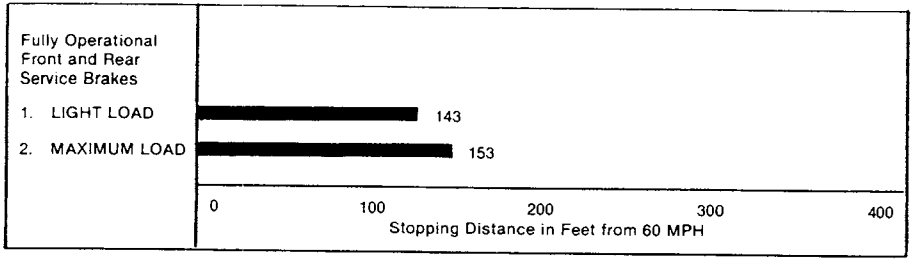
STOPPING DISTANCE

Description of vehicle: Harley-Davidson FXRP model.

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.



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

DIMENSIONS (in.)

	WND	FRG
Wheel Base	64.7	64.7
Overall Length	94.2	94.2
Overall Width	35.5	35.5
Road Clearance	6.0	6.0
Overall Height	59.0	59.0
Saddle Height	30.0	30.0

WEIGHT (lbs.)

	WND	FRG
DRY WEIGHT (as shipped from the factory)	630	650
GVWR	1085	1085
GAWR — Front	390	390
GAWR — Rear	695	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.)

Fuel Tank (gallons)	
Total	4.2
Reserve	.4
Oil Tank (Quarts) w/filter	3.0
Transmission (Pints)	1
Front Fork — Each (Ounces)	6
Primary Chaincase (Quarts)	1.5

ENGINE

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
max./5000	3.498 (88,8)	4.25 (108,0)	81.6 (1338,6)	max./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 11.42
Second Gear 7.79
Third Gear 5.64
Fourth Gear 4.33
Fifth Gear 3.52

TIRE DATA

Tire size, manufacturer's description and inflation pressure are listed below:

TIRE LOCATION	SIZE	MANUFACTURER'S DESIGNATION	TIRE PRESSURE PSI (Cold)
Front	MM90S-19	Dunlop K181 PT	30
Rear	MT90S-16	Dunlop K181 PT	32

WARNING

Maximum inflation pressure is 32 psi cold for both the above tires. Only the above tires shall be used as replacement tire. Using tires other than those specified above may adversely affect motorcycle stability.

GASOLINE

Use a good quality premium gasoline.

The engines 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.

The ignition control unit also contains a limiter to prevent excessive engine speed.

WARRANTY AND MAINTENANCE

This Operator's Manual contains your new motorcycle warranty.

Starting with the 500 and 2500 mile maintenance intervals, all of the specified maintenance services must be performed to keep your warranty in force.

Bring this Operator's Manual along when you visit your dealer or service center, at the specified mileages, to have your motorcyle inspected and serviced. Have the maintenance checklist completed at each service interval.

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 Operator'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 or service center using genuine Harley-Davidson parts.

WARRANTY/SERVICE INFORMATION

Your selling dealer is responsible for providing the warranty repair work on your motorcycle.

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

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.

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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.

To the best knowledge of Harley-Davidson Motor Co., Inc. the material contained herein is accurate as of the date this publication was approved for printing. Harley-Davidson Motor Co., Inc., reserves the right to change specifications, equipment, or designs at any time without notice and without incurring obligation.

HARLEY-DAVIDSON MOTOR CO., INC.



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Technical Communications Dept.
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