



Harley-Davidson

SERVICE MANUAL

Early 1978

Electra Glide - FL/FLH - 1200

Super Glide - FX/FXE/FXS - 1200

1970 to

FOREWORD

This service and repair manual has been prepared with two purposes in mind. First, it will acquaint the reader with the construction of the Harley-Davidson product and assist him in performing basic maintenance and repair. Secondly, it will introduce to the professional Harley-Davidson mechanic the latest field-tested and factory-approved major repair methods. We sincerely believe that this manual will make your association with Harley-Davidson products more pleasant and profitable.

HOW TO USE YOUR SERVICE MANUAL

Your Service Manual is arranged for quick, easy reference. This manual is divided into numbered sections entitled "Chassis," "Engine" and "Transmission." Sections are then divided into sub-sections. The Engine Section, for example is comprised of "Cylinder" and "Crankcase" sub-sections.

Use this manual as follows:

1. Check the Table of Contents located in the front of each section to find subject desired.
2. Page number is listed across from subject.
3. Each section is printed with section number for quick general location of subject. Page number consists of section number and page number.
4. Information is presented in a definite order as follows:

- Minor adjustments
- Minor maintenance or repair
- Complete disassembly
- Cleaning
- Major maintenance or repair
- Assembly

In figure legends the number following a name of a part indicates the quantity necessary for one complete assembly.

All information for servicing a part should be read before repair work is started to avoid needless disassembly.

SERVICE BULLETINS

In addition to the information given in this Service Manual, Service Bulletins are issued to Harley-Davidson Dealers from time to time, which cover interim engineering changes and supplementary information. Service Bulletins should be consulted for complete information on the models covered by this manual.

USE GENUINE REPLACEMENT PARTS

To insure a satisfactory and lasting repair job, follow the manual instructions carefully and use only genuine Harley-Davidson replacement parts. Behind the emblem bearing the words "Genuine Harley-Davidson" is more than half a century of designing, research, manufacturing, testing and inspecting experience.

This is your insurance that the parts you are using will fit right, operate properly and last longer. When you use genuine Harley-Davidson parts, you use the best.

WARNING — Gasoline is extremely flammable and highly explosive under certain conditions. Always stop engine, and do not smoke or allow open flame or sparks when refueling or servicing the fuel system, or when using gasoline as a cleaning solvent where specified in this manual.

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1970 to Early 1978

**ELECTRA GLIDE
FL/FLH 1200**

**SUPER GLIDE
FX/FXE/FXS 1200**

**SERVICE
MANUAL**

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The maintenance and repair information in this manual applies to the 1970 through early 1978 (up to January 1, 1978 production) Electra Glide/Super Glide Models FL/FLH/FX/FXE/FXS-1200.

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PART NO. 99482-78

HG-5M 07/92

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GENERAL

SPECIFICATIONS

NOTE

Model FL specifications also apply to model FLP unless otherwise stated.

DIMENSIONS

	FL/FLH	FX	FXS
Wheel Base	61.0 in.	63.0 in.	63.5 in.
Overall Length	89.0 in.	92.0 in.	92.0 in.
Overall Width	39.0 in.	34.0 in.	29.0 in.
Overall Height	43.5 in.	45.75 in.	41.75 in.

CAPACITIES

		Total	Reserve
Fuel Tanks:	FL/FLH	5 or 3.5	1.2 or 1
(U.S. Gal.)	FX/FXE 1973-74	3.6	0.7
	FX/FXE 1975 & Later	3.6	0.6
	FXS	3.5	1.0

Oil Tank 4 Quarts (U.S.)
Transmission 1-1/2 Pints (U.S.)

ENGINE

Model Designation Letters	FL - FLH
Number of Cylinders	2
Type	4 Cycle, 45 Degree V Type
Horsepower	FLH - 62.0 hp at 5400 rpm
	FL - 57.0 hp at 5200 rpm
Taxable Horsepower	9.44
Bore	(87.3 mm) 3.438 in.
Stroke	(100.8 mm) 3.968 in.
Piston Displacement	(1207 cc) 73.66 cu in.
Torque	FLH - 70 lb-ft at 3900 rpm
	FL - 64 lb-ft at 3600 rpm
Compression Ratio	FLH - 8 to 1
	FL - 7.25 to 1

Spark Plug (Heat range for average use)	
1974 & Earlier	No. 3-4
1975 & 1976	No. 5-6
1977 & Later	No. 5A6 (Standard)
	No. 5R6 (Resistor)

NOTE

The Vehicle Identification Number (V.I.N.) is stamped on the right side of the engine crankcase and frame steering head. It consists of a model code, a serial number, a manufacturer's identification and model year as shown in the table.

Letters	Model No.	Serial No.	Mfr.	Year
FL or FLP	1A	10,000 and up (5 digits)	H	8
FLH	2A		Harley-Davidson	(1978)
FX	2C			
FXE	9D			
FXS	2F			

Always give this number when ordering parts or making an inquiry.

TRANSMISSION

Type Constant Mesh

Internal Ratios:

	4 Forward		3 Forward
	FX/FXE		1 Reverse
	1974 & Earlier	1975 & Later	
1st	3.00	3.00	2.71
2nd	1.82	1.82	1.50
3rd	1.23	1.23	1.00
4th or reverse	1.00	1.00	2.66

Engine Sprocket Teeth	24, 23, 22, 19
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	FX/FXE/FXS - 23
Rear Wheel Sprocket Teeth	51

SPROCKETS AND GEAR RATIOS

Overall Gear Ratios	Engine Sprocket											
	4 Speed						3 Speed					
	24		23		22		24	23	22	19		
	FL/FLH	FX	FL/FLH	FX	FL/FLH	FX	FLH	FL	FLH	FL		
1st (Low)	10.74	10.25 8.38	11.19	10.71 8.75	11.69	11.20 9.14	9.69	10.01	10.57	12.20		
2nd	6.50	6.24	6.79	6.51	7.09	6.80	5.36	5.60	5.84	6.75		
3rd	4.39	4.21	4.69	4.40	4.79	4.60	3.57	3.73	3.90	4.50		
4th or Reverse	3.57	3.42	3.73	3.57	3.90	3.73			10.37	11.97		

WARNING — Tires and tubes are correctly matched to wheel rims as specified below to provide a safe installation and must be used exclusively for replacement. The use of an incorrect tire or tube could cause damage resulting in tire deflation and/or affect motorcycle handling leading to an accident.

Tire identification numbers and size are given on the tire sidewall. Tube sizes are printed on the tube. Protective rubber rim strips must be used on spoked wheels.

Wheel	Wheel Description	Tube Size (Goodyear)	Tire Size (Goodyear)
16 inch	Cast, 7 Spoke	MT90-16CV*	MT90-16T
FL/FLH Front & Rear FX/FXE/ FXS Rear	Laced		5.00-16T
	Cast, 16 Spoke	G5.10-16	5.10-16T
	Cast, 9 Spoke		
19 inch	Laced	V18/19	3.75-19T MM90-19T
FX/FXE/ FXS Front	Cast, 7 Spoke	V18/19	MJ90-19
	Cast, 9 Spoke		

* MT90-16CV is a center valve tube.

The following tire inflation pressures are based on rider and passenger weights of approximately 150 lbs each. For each 50 lbs extra weight, increase pressure of rear tire 2 lbs, front tire 1 lb, and sidecar tire 1 lb.

		Tire Pressure — PSI (Cold)		
		Front	Rear	Sidecar
Solo rider	FL/FLH	20	24	
	FX/FXE/FXS	24	26	
Rider and one passenger	FL/FLH	20	26	
	FX/FXE/FXS	24	28	
Rider and one sidecar passenger or 150 lbs,	(FL/FLH Only)	22	26	20

WARNING — The maximum cold inflation pressure of these tires is 32 lbs.

SERVICE

SERVICING A NEW MOTORCYCLE

PRE-DELIVERY

Service operations to be performed before delivery to customer are specified in the Pre-delivery and Setting Up Instructions and Important Instructions included with new vehicle.

CHECK AT FIRST 500 MILES

1. Drain oil tank through drain plug, flush with kerosene and refill with fresh oil.
2. Replace oil filter. Clean overhead valve/tappet oil supply screen.
3. Drain transmission through drain plug and refill to level of filler opening with fresh oil. Use same grade oil used in engine.
4. Lubricate all points indicated for 1000 mile attention in the regular service intervals chart.
5. Aim headlight.
6. Inspect and service air cleaner if needed.
7. Check adjustment of chains and readjust if necessary.
8. Check lubrication of rear chain and readjust chain oiler (if provided).
9. Check wheel and brake disc mounting bolts and tighten if needed. These bolts must be tightened to specified torque.
10. Check level of solution in battery and add distilled water if needed. See that terminals are clean and connections tight.
11. Check tightness of all cylinder head bolts and all cylinder base nuts, and tighten where necessary to specified torque.
12. Check brake adjustment, hydraulic fluid level and hydraulic line connections for leakage.
13. Check tire pressure and inspect tread.
14. Check front and rear fork bearing adjustment.
15. Check carburetor controls and adjustment.
16. Inspect brake pad linings and brake disc.
17. Check oil lines and fittings for leaks.
18. Inspect and clean spark plugs.
19. Check ignition timing and circuit breaker point condition and gap.

20. Check all nuts, bolts and screws, and tighten any found loose to specified torque.
21. Check and tighten wheel spokes.
22. Check clutch adjustment.
23. Change Model FX 1200 front fork with recommended oil.
24. Road test.

CHECK AT FIRST 1000 MILES

1. Drain oil tank and refill with fresh oil.
2. Replace oil filter.
3. Check level of oil in transmission and add oil if needed. Use same grade of oil used in engine.
4. Service air cleaner.
5. Check adjustment of chains and adjust if necessary.
6. Check lubrication and condition of front chain, and check chaincase vacuum with gage, Part No. 96950-68.
7. Check lubrication and condition of rear chain and readjust chain oiler if necessary.
8. Check level of solution in battery, and add distilled water if needed. See that terminals are clean and connections tight.
9. Check circuit breaker point gap and condition and adjust if necessary.
10. Check brake adjustment and hydraulic fluid levels.
11. Check clutch adjustment.
12. Check tire pressure and inspect tread.
13. Check all nuts, bolts and screws, and tighten any found loose to specified torque.
14. Check and tighten spokes.
15. Check carburetor controls and adjustment.
16. Lubricate all controls and fittings.
17. Inspect brake linings and discs.
18. Road test.

Above operations are described fully in section pertaining to particular part of motorcycle. See table of contents for location.

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