

CONFIDENTIAL

SERVICE MANUALS

This Service Bulletin will explain the Harley-Davidson Service Manual program.

Manuals have been published covering the complete model line for the 1959 season as listed below, and can be ordered from the factory in the regular way by all dealers.



Manual	Part No.	Net	List
Master Service Manual	99480-59	\$15.00	*
1959 Duo-Glide Model Manual	99482-59	4.00	5.00
1959 Sportster Model Manual	99484-59	4.00	5.00
1959 Servi-Car Model Manual	99486-59	4.00	5.00
1959 Model 165 and Hummer	99488-59	3.00	4.00

POLICY

* The Master Service Manual has no list price - its sale and use is restricted to Harley-Davidson dealers because it contains confidential information.

Manuals for individual models are available to anyone through the Harley-Davidson dealer. The sale of Model Manuals to interested customers such as police departments, commercial fleet owners, etc., should be taken care of by the area dealer. Inquiries regarding Manuals which come to the factory from other than dealers will be referred to the area dealer as is now done with Rider Handbooks.

Normally, Model Service Manuals should be sold only by Harley-Davidson dealers. But in cases where certain dealers do not have the desired Manual in stock, or customer is remote from dealer's store, direct order from the customer will be accepted at the factory.

MANUAL ORGANIZATION

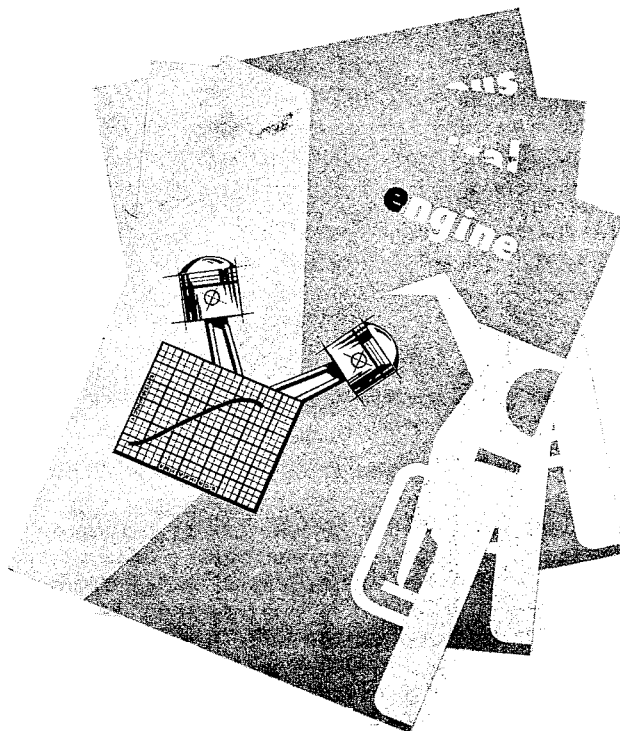
Each Service Manual contains maintenance and repair information for the models covered. Pages are loose leaf bound so that material can be added or taken out. Each Manual is divided into numbered sections and each major section is divided into lettered sub-sections where desired information is easily found.

Two types of MANUALS are available as follows:

MASTER SERVICE MANUAL (For Harley-Davidson Dealers Only)

The Master Manual is divided into 7 sections as follows:

Section 0	.....	Dealer Information
Section 1	.....	Product
Section 2	.....	Chassis
Section 3	.....	Engine
Section 4	.....	Transmission
Section 5	.....	Electrical
Section 6	.....	Miscellaneous



Each section is headed by a card separator. The first section is for dealer "Service Bulletins" which are issued during the year to relay important information involving design changes, new tools, etc. The remaining six sections cover maintenance and repair. Each section contains information for all models which is indexed on the first page in each section according to subject.

Example: In the Master Manual Engine Section under Sub-Section "Cylinder", all cylinders are covered. All you do is turn to the index back of the Engine Section Separator to find the section page number on which the information can be found.

SERVICE
SECTION 3C

MANUAL
CYLINDER

SPORTSTER
CYLINDER C

ENGINE 3
CYLINDER C

CYLINDER

CYLINDER AND PISTON

REMOVING CYLINDER AND PISTON (Fig. 3C-16)

See "Stripping Motorcycle For Engine Repair," Section 3A, steps 1-5, 7, 24-27 and "Removing Cylinder Head Assembly From Engine," Section 3B.

See Fig. 3C-16, and proceed as follows: Clean crankcase around cylinder base to prevent dirt from falling into crankcase when lifting cylinders. Remove cylinder base stud out (1). Raise cylinder and piston just high enough to permit placing a rag over crankcase opening; this will prevent dirt and possibly pieces of broken ring from falling into crankcase. With piston at bottom of stroke, remove cylinder (2), discard cylinder base gasket (3). Spring piston rings (4) outward until they clear grooves in piston (7) and lift off. Pry piston pin lock rings (5) from piston (7) groove using two sharp pointed instruments such as awls. Support piston and tap out piston pin (6) with a suitable drill.

Remove piston pin bushing (8) if necessary (see "Cleaning and Inspection") using Piston Pin Bushing Tool, Part No. 95970-32. Do not drive bushing out with a drift unless rod (9) is disconnected and well supported around piston pin hole.

CLEANING AND INSPECTION

Place piston and cylinder in "Dunk Hydro-Seal" or other carbon and gum dissolving agent until deposits are soft. Then thoroughly scrub piston and cylinder in gasoline or solvent to remove deposits. Where carbon deposit is thick or hard, it is advisable to scrape carbon before cleaning. Use a putty knife-type scraper or a ground tip from an old file. Use extreme care to avoid scraping into aluminum of pistons.

After parts are thoroughly washed, blow dry with compressed air. Force air through oil holes in cylinder. Clean piston ring grooves with a tool for cleaning ring grooves; if not available, sharpen end of a broken ring to a chisel edge. Avoid scratching or damaging sides of ring grooves.

Examine piston pin to see that it is not loose in connecting rod, grooved, pitted or scored. If necessary, remove bushing as described in "Disassembling Cylinder and Piston."

A piston pin, properly fitted, is a light hand press fit in piston and has .001 in. clearance in connecting rod upper bearing.

If difference in diameter of hole in piston pin bushing and diameter of piston pin exceeds .002 in. (i), replace worn parts.

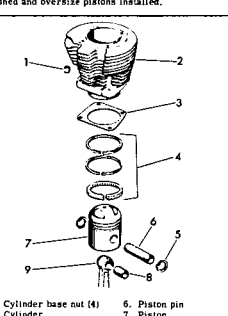
Replace piston pin lock ring whenever it is removed from piston groove. If opposite side ring has not been removed and is undamaged, it is not necessary to disturb it.

Examine piston and cylinder for cracks, burrs, burned spots on piston dome, grooves and gouges.

Check rods for up-and-down play and upper end side shake (see Fig. 3C-17). To make this check with accuracy, pistons should first be removed. When appreciable up-and-down play is found and either or both rods have 3/32 in. or more side shake at extreme upper end, lower bearing should be refitted. This requires removing and disassembling engine crankcase. See "Crankcase," Section 3E.

REFINISHING CYLINDERS

Pistons and cylinders must be gauged to see if they are worn to the point where cylinders must be refinished and oversize pistons installed.

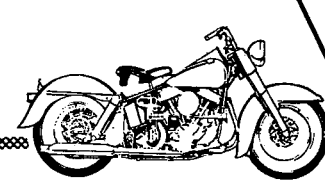


1. Cylinder base out (4)
2. Cylinder
3. Cylinder base gasket
4. Set piston rings
5. Piston pin lock ring (2)
6. Piston pin
7. Piston
8. Piston pin bushing
9. Connecting rod

Figure following name of part indicates quantity necessary for one complete assembly.

3C-7

HARLEY-DAVIDSON MOTOR CO.



SERVICE MANUAL

1959

DUO-GLIDE 74 OHV

The maintenance and repair information in this manual applies directly to the 1959 Harley-Davidson 74 OHV Duo-Glide Model Motorcycle. Except for minor differences, it also applies to the 1958 Duo-Glide 74 OHV model.

In general, this manual will also be useful in maintaining and repairing earlier 61 and 74 OHV Models.

\$5.00

SERVICE BULLETINS

As in the past, Service Bulletins (like this one) will be issued when necessary to pass on important information from the factory to our dealer organization. Service Bulletins should be filed in the "Dealer Information" (O) Section of the Master Manual - in order according to subject denoted by letters in upper right index block as follows:

OA. General	OC. Product
OB. Procedures	OD. Service Tools

Old "Shop Dope Bulletins", which still apply, will be re-issued from time to time so that they will fit into this new system.

Important: Any Service Bulletin page marked **CONFIDENTIAL** contains confidential dealer information and should not be seen by anyone but the Harley-Davidson dealer and his employees.

Distribution of Service Bulletins **NOT MARKED CONFIDENTIAL** may be made by the dealer to interested police departments, fleet owners and others who do their own maintenance work.

RECOMMENDATIONS TO DEALERS

Every Harley-Davidson dealer should have at least one Master Service Manual in his shop, kept up to date with the latest Service Bulletins, so that he can provide complete, efficient service to his customers.

In addition to the Master Service Manual, individual Model Manuals should be used by the service shop mechanic, for quick reference when any unfamiliar service or repair problem comes up. Using the Service Manual as a reference will eliminate mistakes and delay caused by trial and error service procedures, and will save time - which means profit from service operations.

HARLEY-DAVIDSON MOTOR CO.
Milwaukee, Wisconsin, U.S.A.

You will find that all cylinders are covered separately in this part of the Master Manual. The index block in the upper right hand corner of the sub-section title sheet will identify the subject and the model, making the Manual easy to use.

Supplements will be published in each succeeding model season to take care of any new or changed service procedures. Supplements will also be published for entirely new models for insertion in the Master Service Manual.

MODEL SERVICE MANUAL

Each individual Model Manual covers maintenance and repair information for one model. It is divided into Sections like the Master Manual, except that there is no Dealer Information Section for Service Bulletins. If desired, the user will be able to bring his Model Manual up to date by adding a Supplement published separately each new model season. The sales policy for distributing supplements will be the same as for the individual Model Manuals.