



KNOW YOUR HARLEY

Owner's Manuals

by Joe Minton

Your owner's manual is the one direct opportunity Harley-Davidson has to give you important and vital information about your motorcycle. It is also a convenient reference book where in Harley specifies things like recommended light bulbs, oil viscosities, tire pressures, maintenance intervals, and much more.

Harley-Davidson does a good enough job of it that following the advice and using the parts and services specified will definitely help ensure you and your Hogly-Davidson live long, happy, and safe lives. The specs and advice in that manual are based on very extensive testing by Harley and the field experience of those of us who ride and work on these things.

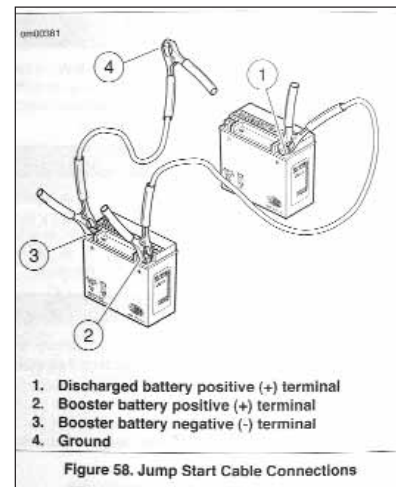
Harley takes the responsibility for the information they provide in their manuals very seriously, just as they do the quality and safety of their motorcycles. I have been around many of Harley's engineers and management folks during the past 25 years and, to a person, they have treated their motorcycles more as a service to their fellow riders than as a collection of parts to be sold. I have been reading, studying, and even writing owner's manuals for some 50 years and I am comfortable stating that Harley-Davidson publishes the most complete and useful ones I have seen. I urge you to carefully examine any advice you might get that counters the recommendations in them.

However (you knew this was coming didn't you?), these manuals could and should be more complete than they are. While Harley's manuals provide nearly all of the information needed to perform normal maintenance and some repairs, they do not fully explain or even talk about some of the more important aspects of owning a Harley-Davidson motorcycle.

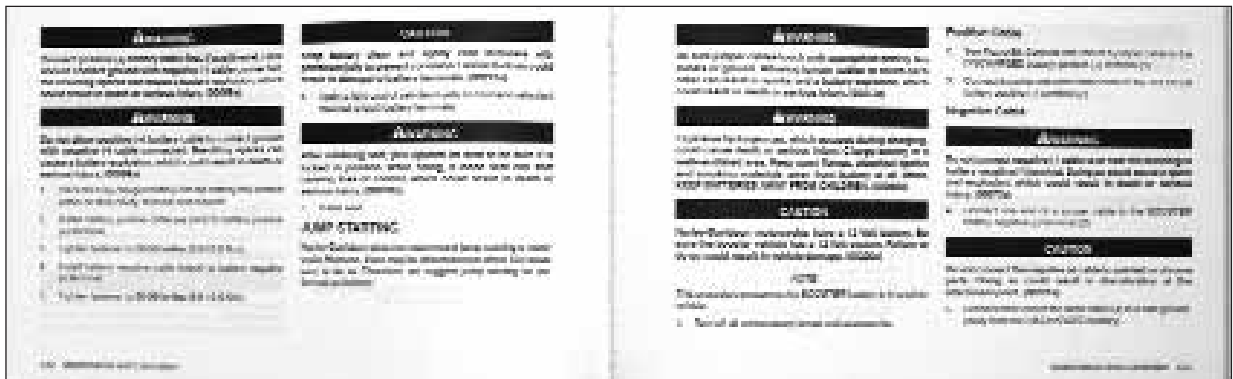
What is missing? I'll give you one example: None of the 20 manuals I inspected talked about adjusting the controls to fit the rider. Control adjustment is both a safety and comfort concern. They say nothing about adjusting for comfort, either. Nor do they raise the possibility that a new owner might need a different handlebar or seat to get the best fit. These things should be and often are done by the dealer.

However, most of us, including The Motor Company, understand that not all dealers are created equal. It would be better for Harley to give control and comfort information directly to their end users in the owner's manuals. I am sure that there are too many riders out there who believe that an all-day ride means living with pain for most of that day. This simply does not have to be so.

The manuals, all of them, should emphasize and more completely describe these maintenance items that are critical to safety and comfort. For instance, all the main-



A clear and useful illustration that addresses an all-too-common mistake.



Nine warnings on two pages. “Danger, Will Robinson! Danger! Danger!”

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tenance elements that relate to stability should be put in one place and their importance explained. How many new (or even old) Harley owners are going to know that tire design, tire pressure, spoke tension, steering-head and wheel-bearing adjustments, and weight distribution are each and all critical to straight-line stability? Did you? Do you know why? Wouldn’t you like to know? It is easier to explain all this in one place instead of scattering the information around in the manual. Experienced motorcyclists like me tend to know these things, yet most new Harley owners do not, and it is in all our interests to explain these concepts in one place.

I am very sure that Harley owners, new and old, would welcome such information. After all, The Motor Company is forced by the government and lawyers to say “...could result in death or serious injury” over 100 times in each of the manuals I have. This uncomfortable subject pounds at the reader in over half the pages of each manual with somewhat vague and ominous “Warning” and “Caution” labels. There are as many as five to a page. I urge Harley-Davidson to take the bull by the horns and explain precisely what may be behind these ominous and vague warnings. To do so would also increase the trust and loyalty they already enjoy.

In the 2007 Softail owner’s manual, lying here next to my keyboard, Harley used 10 of its 214 pages to tell us about

battery care. I’ve never seen better coverage of the subject. However, I suggest that they use as many pages to tell us about comfort. Or, about the importance of the proper fit of a rider on a Harley.

Adjusting or modifying a motorcycle to its rider’s physique is essential for all-day riding comfort. Simple adjustments to the handlebar and controls are usually all that are required. Sometimes a rider needs a differently shaped handlebar and maybe another seat; Harley cannot get it right for all of us. What new riders need is a short explanation of how to make their new Harleys comfortable—how to make them fit our personal needs. Ten pages are plenty of space to do this simple thing. I could and have done it in four.

If a control is adjustable then Harley needs to tell us about the importance of that adjustment and how to make it correctly. Proper handlebar and control adjustments are critical to safe operation. If the hand controls are too high, as they usually are when a bike is delivered, it takes longer to reach them. That extra time could be important when faced with a left-turning cage at an intersection.

Warnings

The justifiably famous Chuck Yeager finished his career in the Air Force as the general in charge of flight safety. He was stationed at Norton AFB in Cali-



Figure 95. Battery Warning Label

The battery warning label. There are no useful specs, just warnings. Oh yeah, they forgot to warn against drinking the acid.

fornia where my friend Professor Hurt gave short courses to flight-line safety officers. General Yeager would attend the first day of each class and state, “If everyone knew that you can’t push chain and that water doesn’t flow uphill, we wouldn’t have to be here.” He was being funny, but his statement does point to the fact that we are not born with all the knowledge we need.

There is a fair distance between being a newborn whose knowledge is pretty much limited to being sleepy, hungry, or dirty, and a grizzled biker who has seen it all. We must be taught, and there are many things we cannot afford to learn by personal experience. For instance, I would rather read about what battery acid can do to an eye than gain the knowledge first-hand.

Harley’s owner’s manuals must assume that its readers do not know enough about the subject at hand. The continuing series of explanations and warnings might get old to those of us who already know most of it, but it is good that they give that information and those warnings. It isn’t Harley’s fault that the presentation is so boring and clumsy to read through.

Harley has been forced to include an excess of warning labels by lawyers and the government. The government regulates the labels and those labels better be correct or there’ll be lawyers to pay.

Parts & Service

Plaintiffs' lawyers are known to exploit any opening or weakness in a document like a Harley owner's manual, never mind that their argument might be right or wrong. I found the same warnings about the same concerns in several places in the manuals. I am sure that this is to counter an argument that a warning is not present on the page that an injured rider's attorney may be trying to use against Harley.

Out of curiosity I surveyed the number of warning labels in two FLH owner's manuals, a 2000 and a 2007. The 2000 edition has 172 warnings in 210 pages. The 2007 contains 193 in 214 pages. Most of them include the words "...could result in death or serious injury." Somewhere around the tenth reading I became very weary with these words. Why are they there? Before you laugh out loud and spill your adult beverage, let me tell you why they might be important despite their wearying nature.

Like many of you, I have been around motorcycles for a long time. I've

Table 29, the maintenance schedule. Trust and use it.

Table 29: Regular Service Schedule: 2007 Model Harley

Service Item	Frequency	Oil	Filter	Spark	Valves	Chain	Brakes	Fluids	Light	Other
Check oil level	Every 1000 miles	X								
Change oil	Every 3000 miles	X								
Change oil filter	Every 3000 miles		X							
Check spark plug	Every 3000 miles			X						
Adjust valves	Every 3000 miles				X					
Check chain	Every 3000 miles					X				
Check brakes	Every 3000 miles						X			
Check fluid levels	Every 3000 miles							X		
Check lights	Every 3000 miles								X	
Check other	Every 3000 miles									X

learned much about the various parts of motorcycles and how they work together. Nothing in all those warnings was new to me. However, they are probably a good thing since a large percentage of Harley owners are new to the sport.

Parts and Service

I fully understand why Harley strongly recommends its parts (testing, testing, and more testing) and I congratulate them for providing part numbers in the owner's manuals. But would it hurt to also give generic light-bulb numbers

so an owner could find one at an auto-parts store when the Harley shop is closed or might be a hundred miles away? This little tidbit is good for a laugh but I stand by the criticism.

Just to be fair, Harley's light bulbs might be more resistant to vibration than those found at an auto-parts store or supermarket. If this is the case, and I think it is, they could provide the generic numbers and state why such bulbs shouldn't be used as normal replacement parts. Then it wouldn't appear that Harley just wants all the money, although they almost certainly do.

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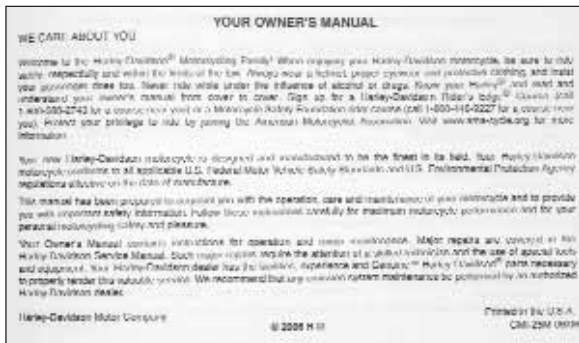
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"We care about you." They mean it and you can believe it.

complete mechanic (I prefer the term "mechanic" to "technician") training program in all of motorcycling. Harley subsidizes approved training courses at MMI (Motorcycle Mechanics Institute) for its dealers' mechanics. They also provide a wealth of written and video training information to their dealers together with incentives for the mechanics to use this information. They have been known to apply significant pressure on their dealers to make maximum use of these materials.

This excellent follow-through supports their manuals' exhortations to use an authorized dealer for maintenance and repair needs. However, there are about 10 times as many shops specializing in Harley-Davidson motorcycles as there are authorized dealers, and I have great respect for most of them. Many very talented and highly experienced mechanics are found in these shops. Still, these guys do not have access to all the tools and the latest information available to Harley dealers. I wish it were otherwise.

A Few More Things

I'd like to see more emphasis placed on internal powertrain cleanliness. It would have been easy enough to tell us that we should "thoroughly clean," and by "thoroughly" I mean wash the area around any dipstick before loosening said dipstick. I'd like Harley to emphasize the need to make sure that everything that might touch lubricants is clean, really clean—as clean as a paint booth must be to get a flawless finish. I have seen people working on the insides of engines while another person is using a grinder a few feet away. Sometimes ignorance sure does resemble dumb.

This is important because Harley engines use roller and ball bearings to support almost every moving part. These bearings are incredibly sensitive to dirt and other debris. Everything

owner's manuals.

Diesel truck engines now last up to a million miles. Much if not most of this remarkable life is due to improved internal cleanliness. The trucking industry is mainly responsible for the superior oil and air filters Harley now uses and recommends. I wish they'd say more about this in the owner's manuals so we'd better understand why they so strongly recommend their filters.

When I was a working mechanic and I had a loyal following of customers, they would insist that I perform all services and repairs. My work was not better than most of the other guys but I did one thing that made the difference: I lubricated everything that moved. I'd lube the cables, levers, fold-down foot-pegs, switches, etc. The bikes that left my care were easier to use, didn't squeak, and lasted longer. My customers could feel the difference before they got out of the parking lot. External Harley parts would be easier to use, last longer and not squeak if simply lubed. I recommend that you learn to appropriately lube all the moving parts on your Harley, and I recommend that the factory talk about the subject in their manuals.

Finally

I have been critical here of Harley's manuals but I hope you don't think that I am condemning them. It's just that they could easily be better and even more useful and informative than they are, and I think y'all should know it. As I said near the beginning of this article, Harley prints the most useful owner's manuals I have read. However, as one who has spent most of his working life learning about all aspects of motorcycles for motorcycle owners, and teaching those who become professional mechanics, I am sure that The Motor Company's owner's manuals could and should be more informative. ☺