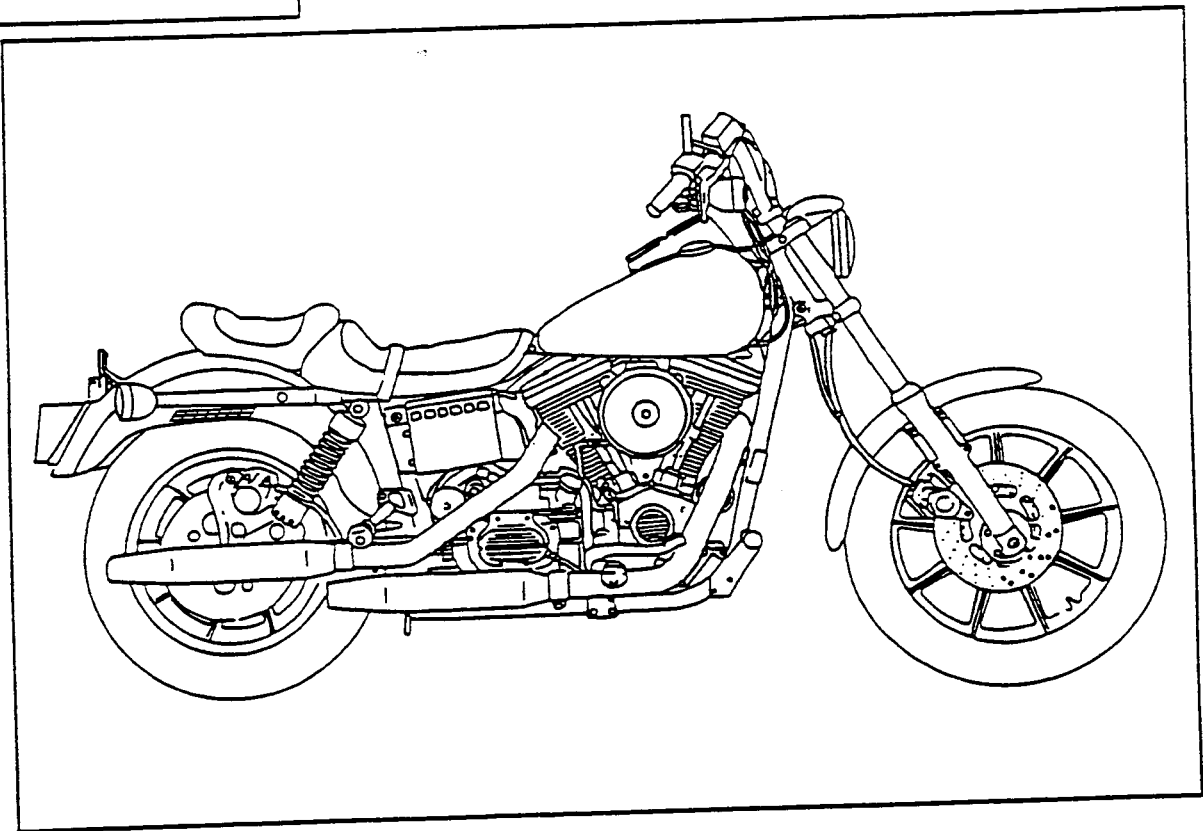


TECHNICAL

TIPS

January 1996
TT#44



TECH TIPS #44

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TECHNICAL TIPS #44

JANUARY 1996

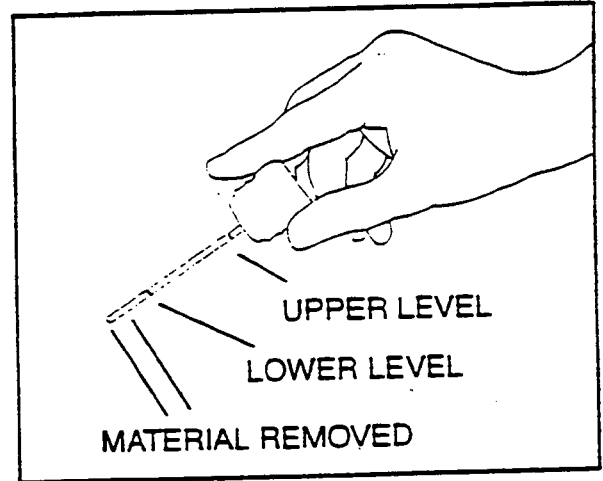
**** ALL MODELS ****

DIPSTICK COMMONIZATION - FX/XL

An upcoming production change will be the commonization of oil tank dipsticks between Sportster and Softail models.

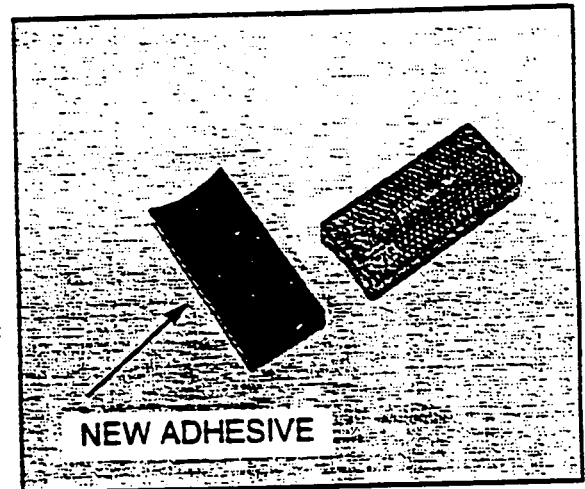
Shortening the dipstick will allow it to fit in both model's oil tanks. The location of the lower level mark is the same. The upper fill mark, which Softails previously didn't have, is applicable to all dels.

The new part number, 62634-84A, retrofits to Softail models - 1984 and later and Sportster models - 1982 and later.



NEW REFLECTORS

The adhesive material used to retain the front frame reflectors has been changed on all models. The improved adhesive will change the color of the adhesive material from white to black. This will also eliminate the cable straps which technicians had to remove during predelivery and set-up.



HANDLEBAR HOUSING FASTENERS

Have difficulty removing stubborn Allen fasteners from the clutch and brake levers housings? No problem for Matt Linde, Service Technician at Latus Motors, Portland, OR. A 4mm Allen wrench is a slightly tighter fit than a 5/32 Allen. Matt has found that the tighter fit makes it less likely to strip the head during removal. A Customer Service shirt goes out to Matt for his Tech Tips suggestion.

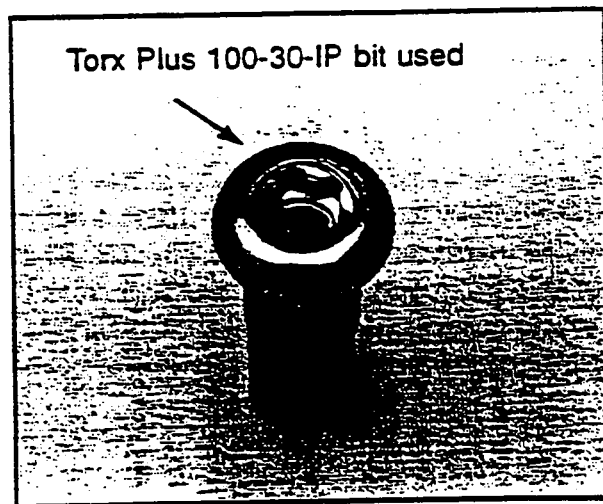
TURN SIGNAL MODULES

The latest turn signal module, part number 68537-89F, DOES NOT incorporate the 10 second delay feature found in earlier modules. This feature is required for 1990 and earlier vehicles equipped with the self-cancelling turn signal kit, part number 91860-88B. Turn signal kits in your inventory, with a package date of August 1st 1995 or later, should NOT be sold unless they include a -89E turn signal module. Kits having -89F modules should be claimed on a warranty form. Obviously, motorcycles equipped with the turn signal kit should not be serviced with -89F modules. An updated turn signal module for these kits is under investigation at this time.

SPOKED WHEEL CHANGE

An important 1996 model year running change will be occurring soon on laced wheel assemblies. The spoke nipple is a new style which requires a special Torx Plus driver for installation. The Torx Plus driver, 100-30-IP, should be used to start or remove stubborn spoke nipples. A conventional spoke wrench will still be used to do final wheel truing. We are going to make the tool available through Kent-Moore as you can't purchase this from a vendor like Snap-On or Mac etc. The part number will be HD-42135.

A future Tech Tips will advise you of the dates and specific models when this change occurs.



LOW FUEL MODULE CHECKS

The 1995-96 FL Service Manual, page 2-64, the Low Fuel Lamp, the FLHT voltage checks are made at the low fuel module connector 106. Checks for Road King models should be made at the gauge. Orange is 12 volts DC. Pink is the sender. Black is ground. Pink to Black readings are:

	<u>Key on</u>	<u>Key off (sender disconnected)</u>
Full	3 volts	35 ohms
1/4	6.4 volts	153 ohms (Low light on)
Empty	7.3 volts	215 ohms

When checking the LOW fuel light operation on either gauge remember to allow up to 30 seconds for the delay feature.

SPEEDOMETER CHECKS

The speedometer test frequency values for the 1994 Road King are:

mph at kph at	20 30	40 60	60 100	80 130
Domestic	356	710	1060	1407
Swiss	402	801	1328	1719
Japan/ Canada	332	663	1098	1421
HDI	433	863	1431	1851

Great Britain test values are the same as 1995/96 Service Manual specifications.

INTERNATIONAL FLHT IGNITION SWITCHES

Ignition switches on HDI FLHT models built after February 1, 1996 will have different switch function positions. The IGNITION and OFF positions will be switched. The key will be removable in the OFF position and NOT removable in the IGNITION position. The new part number is 71530-95A. It will include the new switch label, 71537-95.

FL RADIOS ANTENNAS

There have been some reports of high SWR readings on late Ultras that have the loading coil in the bottom of the Tour-Pak. A corrective change can be made to the loading coil wire length. The vendor is planning a corrective fix, but this has not been implemented yet.

If you have a motorcycle that needs a repair, try this. Remove the ring terminal at the antenna and clean the coating from the wire end. Obtain approximately 7 inches (178mm) of #14 copper household wire (bare wire such as the ground wire). Tin one end of both wires. Overlapping the wire about 1/4 inch (6.4mm), solder the 7 inch wire to the end of the wire coming out of the loading coil. Attach the proper size ring terminal, part number 9857, to the wire and antenna. Begin the SWR checks. When the bare wire is short enough to give you a good SWR, route the wire against the back of the Tour-Pak.

FL RADIO SPEAKERS

If you encounter an intermittent or inoperative rear speaker condition on a 1994 or later Ultra try this shortcut to determine if the pod is at fault.

First, plug in a known good headset. Turn the radio ON and the front speakers OFF. If you have sound in the headset, check and record the battery voltage. Next, go to the rear speaker connectors [41 & 42] and unplug them. With the negative lead of your voltmeter connected to the ground on the motorcycle, ignition switch ON, radio ON, and front speakers OFF. Touch each of the pins in the two speaker connectors with the positive lead of your voltmeter. That's four pins total! You should see 1/2 the battery voltage plus or minus .15 volts. If you do not, remove the pod from the console. Note the Harley-Davidson part number on the pod and call Radio Sound for a replacement pod. Radio Sound's phone number is (502) 267-6768 or FAX at (502) 267-6794.

If the voltage readings are 1/2 of battery voltage, turn to Chart A-2 in your Service Manual and proceed with the normal checks.

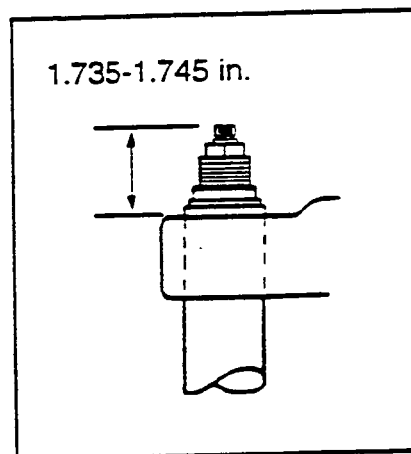
This procedure will work on pre-1994 Ultras, but the rear speaker connectors have a different number.

**** XL MODELS ****

XL SPORT FORK HEIGHT

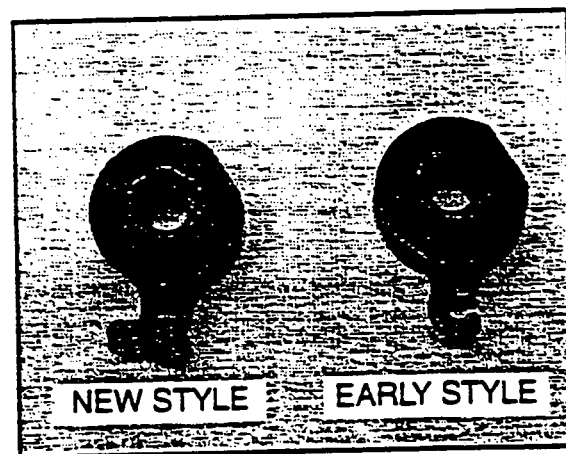
The 1996 Predelivery & Set-up Manual indicates the fork tube height for XL Sport model is 0.735-0.745 in., it should be 1.735-1.745 in. (44.1-44.3mm) with the adjuster knob fully bottomed. Please make note of this.

The 1995/96 XL Service Manual lists the correct height.



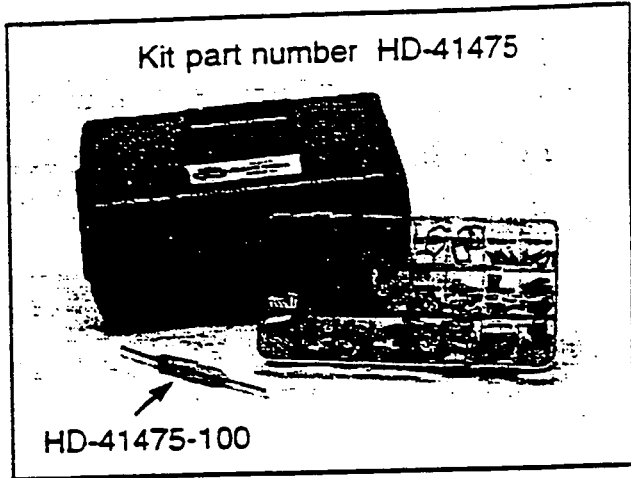
CLUTCH RELEASE RAMP CHANGE

Beginning with vehicles built in early January, the outer clutch release ramp has been changed. The new ramp, part number 25409-94A, has the coupler on the inside of the ramp. The clutch adjustment procedure and lever freeplay remain the same. The change was made to prevent any possible contact between the coupler and primary cover.



DEUTSCH TERMINAL KIT

An electrical terminal kit is now available through Kent-Moore Tool. The kit contains a selection of Deutsch secondary locks, sealing bands, terminals and pins. The electrical pick, HD-41475-100, is also included. The kit includes a convenient compartmented storage box. The kit, HD-41475, retails for \$65.00.



FAX ON DEMAND

Has your dealership taken advantage of the new, easy, electronic method to obtain Service bulletins and instruction sheets copies? We're talking about "Fax On Demand". The 24 hour a day system was introduced at the Dealer Show in San Diego. Fax On Demand is free and can be available to your dealership by filling out and returning the attached form.

LITERATURE UPDATES

1995/96 Dyna Glide Service Manual, Page 3-5

Under "Changing Oil and Filter," the filter should be tightened an additional 3/4-1 full turn after the filter gasket contacts the crankcase base, NOT the 1/4-1/2 listed. Engine oil level should be checked with the vehicle on the jiffy stand rather than upright.

1995/96 FX Softail Service Manual, Page 3-5

The filter should also be tightened an additional 1/2-3/4 full turn after the filter gasket contacts the crankcase base, NOT the 1/4-1/2 listed.

1995/96 FL Service Manual, Page 8-78

Delete the words "including orange backlight" in both tables in regards to radio constant Amp fuses.

Please note these changes to your Service Manuals.

P.S. It's been a pleasure being your Tech Tips Editor for the the last 5 years, but it's time to move on to new assignments! See ya on the road!
Ed.