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**– FEBRUARY 1994 –  
#38**

# **TECH TIPS #38**

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# TECHNICAL TIPS #38

*FEBRUARY 1994*

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**\*\* FL MODELS \*\***

## *RSI RADIO REPAIR COSTS*

The repair charges for **OUT-OF-WARRANTY** repairs have changed. The chart below summarizes the current prices for Radio Sound Factory repair servicing.

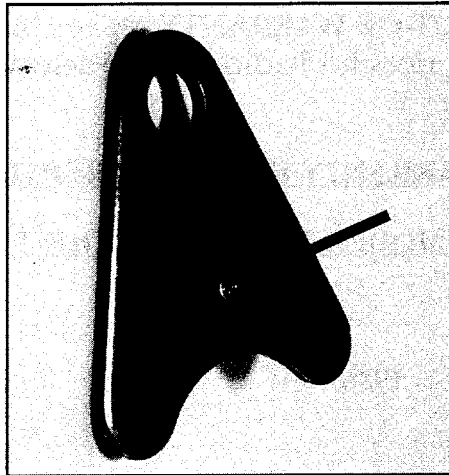
### NON-WARRANTY FLAT RATE REPAIR CHARGES

	<u>MODEL YEAR</u>	<u>AMOUNT IN U.S. DOLLARS</u>
<u>RADIO</u>		
	1986-1994	\$75.00
<u>CONSOLE</u>		
	1988-1992	\$90.00
	1993-1994	\$80.00
<u>CB CHASSIS</u>		
	1989-93	\$70.00
<u>SIDECAR, REAR SPEAKER AMPLIFIER</u>		
	1989-94	\$50.00
<u>MICROPHONES</u>		
	P & A	\$25.00
<u>HEADSETS</u>		
77147-91	1991-94	\$30.00

## **\*\* XL MODELS \*\***

### *SHIFT DRUM PLATE*

Beginning in early December 1993, a running production change was made to the location of the transmission shifter drum plate pin, part number,600.

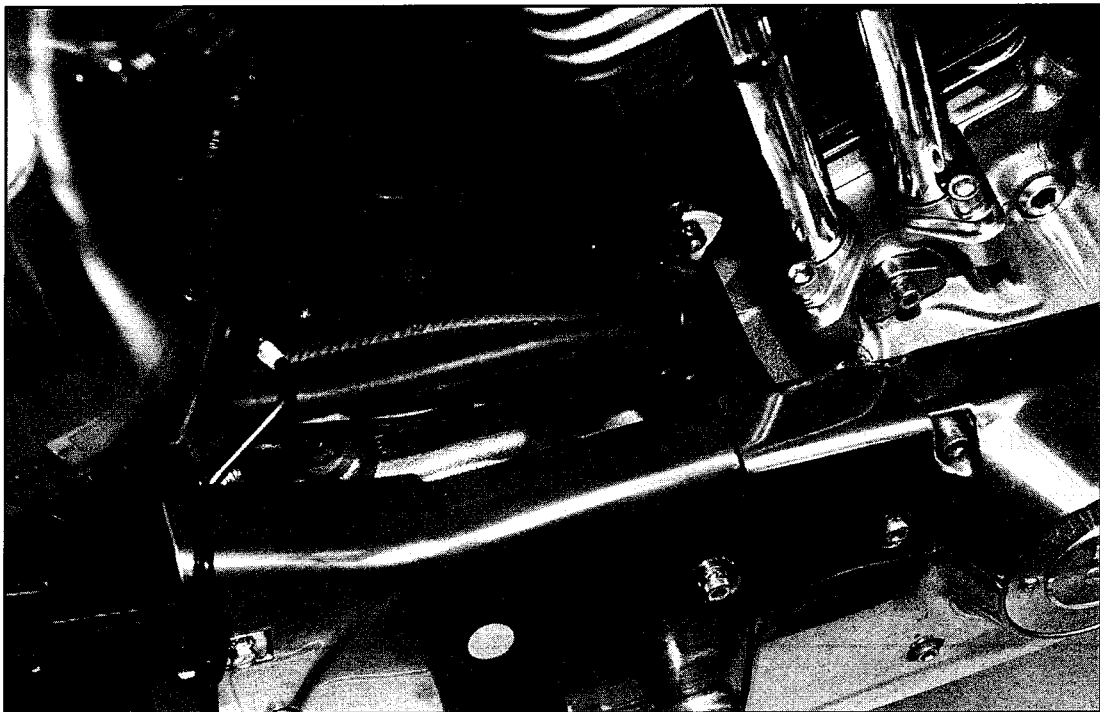


This pin is used to locate the shift drum retaining plate. The pin was press fit into the transmission access door. It is now a part of the plate assembly. The new pin/plate assembly part number is 33178-90A. It can be retrofit to all earlier five speed XL models (1991 to early 1994) by removing the existing pin from the access door.

## *STARTER MOTOR/ OIL HOSE ROUTINGS*

Beginning in late February, ALL XL vehicles will be equipped with 1200cc style starter motors. This will be done as a running production change.

In conjunction with this change, a simplified routing of the oil return and vent lines will also be made. Both hoses will now be routed above the sprocket cover on their way to the oil tank. This will eliminate the earlier routing underneath the engine (return hose) and underneath the starter motor (vent hose). The hoses will be secured to the starter motor with a new clamp, part number 31532-94, as part of the new routing.

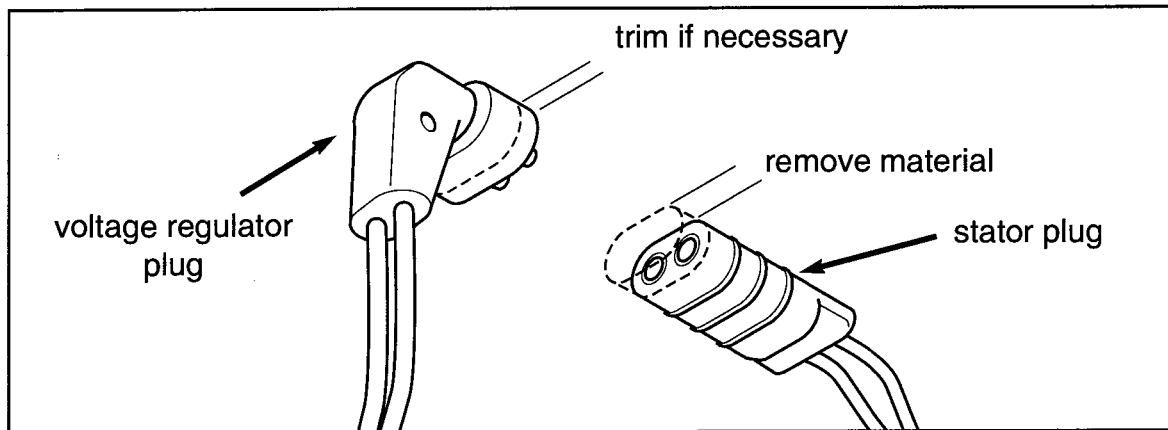


## **\*\* FIELD TIPS \*\***

### *STATOR PLUG IMPROVEMENT*

**Norm (Wink) Winkler** from Ukiah, CA. had a really excellent suggestion for increasing the pin/socket engagement of the stator and voltage regulator plugs. This greatly reduces the likelihood of plug separation and all the other bad things that come along with it.

Norm trims the stator plug rubber material until it is flush with the top of the stator's sockets. Engagement is increased by approximately .050" (1.27mm). You can really feel the difference and these connectors aren't going to fall apart!!! When you do this modification, make certain that the voltage regulator plug doesn't touch the crankcase. If it does, just trim it back slightly.



### *SHIFTER RATTLE CURE*

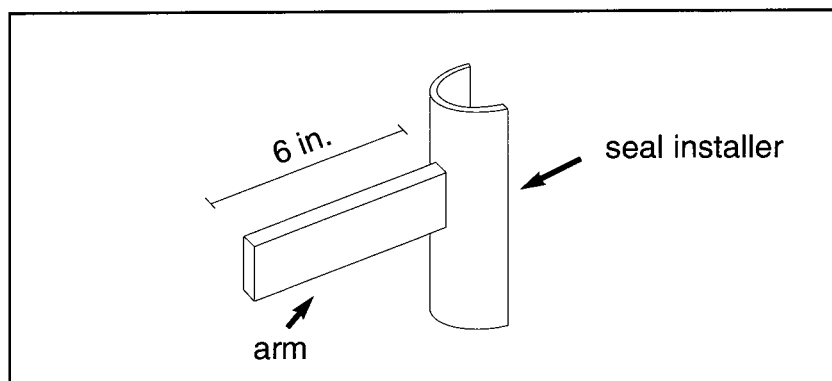
Shifter shaft rattling on your customer's FL models? **Ray Texter** from **Lancaster Harley-Davidson** suggests using a pushrod cover spring, part number 17947-36, to eliminate the vibration and wear to the casting's bore. Ray removes the shifter and installs the spring over the spacer. Simple fix and a happy customer.

## *EXHAUST PIPE REMOVAL*

**Jack Harper**, Service Manager at **Van's Harley-Davidson in Gloversville, NY**, took a moment to share his usage of a Snap-On tool. Jack says that the swivel ball flexible extension, PFSX916, is in his words, "absolutely great" for removing and installing exhaust flange nuts. Even the difficult front cylinder left nut can be accessed. In some cases, the heat shields don't even have to be disturbed. Great tip and a limited edition Customer Service shirt to Jack at Van's Harley.

## *TOOL MODIFICATION*

**Russ Loy**, technician at **Neidengard's Cycle Center in Wintersville, Ohio**, has modified a Kent-Moore Tool (HD-36583) reducing the time to install replacement fork seals. Russ has cut the existing tool in half and welded a 6" (15.24cm) arm to the tool's side. Russ taps the seal into place using the arm itself. This is especially useful when dealing with models that have decorative chrome covers and space is limited.



## *WHEEL SERVICING SIMPLIFIED*

**Al Hantsbarger**, at **Van Nuys Harley-Davidson, CA.**, has found an easy way to simplify wheel servicing. After removing the front axle, Al lifts the motorcycle just enough to take the weight off of the front wheel. The wheel can now be positioned to access the wheel bearings. Doing this eliminates the need to pull the brake calipers.

## **\*\* MISCELLANEOUS \*\***

### *PAINT REPAIR KIT*

Individual pieces of the paint repair kit are available through Kent-Moore Tool. The following listing gives the part number breakdown of this popular kit. Go forth and fix!!

HD-39994	-4	Hookit 3" Soft Disc Pad	1
"	-5	Reversible Buffing Pad	1
"	-6	Hand Sanding Pad	1
"	-7	1200 Grit Micro Fine Disc	10
"	-8	Cleaning/Polishing Cloth	75
"	-9	Finishing Material 12oz.	1
"	-10	Final Finish 12oz.	1
"	-11	Ebony Compound 12oz.	1

### *FLYWHEEL PINION SHAFT RACE REFURBISHING PROGRAM*

The flyer and ordering form for this internal service has been added to this issue of Tech Tips. Please remember to make several **extra** copies of the order form.