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1) Radio's are not a joy if they turn themselves on and off or switch channels at will. How about not being able to turn it off? Volume fades, numbers on the display disappear, then the next minute it's a honey. Sounds like my wife playing with the car radio.....

Before you lose it altogether, check the engine to frame braided ground strap under the tranny.

WHY????

They've been loose and not completing ground. If the ground is not good, the radio will do some pretty strange things.

Should this prove not to be the case, take a long look at the radio's ground.

Note: The radio's case is not grounded, don't bother trying to ground it. It does zero! Where is the ground? It is attached to the Anti Dive mounting block through a terminal block pin connector. You might want to check these pin connectors and grounds with your Ohm meter. When checking the Radio's ground with a multimeter, you should see less than 1 ohm to insure a good ground.

2) Regulator Voltage draw test at the pin connector done the easy way.

A Battery can lose it's charge in any number of ways. Lets list some.

A) Customer listening to his favorite tape while washing his eighteen wheeler or the next door neighbors' D-9 Cat.

B) Excessive milliamp draw on the system: Maybe the timer circuit is not doing its job, (refer to the service manual for diagnostic procedure).

C) A regulator allowing excessive voltage to pass by the diode, draining the Battery through the Regulators' ground.

Quick Trick

Pull the regulator plug, using a trouble light grounded to the frame, touch the probe to one of the regulators plug pins then the other. If the bulb lights, the regulator is kaput! It requires replacement.

3) You call the Service Department and begin by saying, "I was talking to someone up there the other day regarding a noise in an 86 FLHTC and he said check this, that and the other thing."

The Technician you're talking with is going to ask, "Who were you talking to?" Answer. "Oh, I think it was Steve, Steve Peters?" "I'm sorry sir but we don't have a Steve Peters in this Dept." NOW WHAT??? START OVER??? It's important to know who you talked with. He has started to formulate a diagnostic approach to solving your problem. What's the old saying, "Too many cooks spoil the broth."?

Recipe for success.....

- A) On your claim or repair order, at the top, note who you talked with, their extension, and include the date.
- B) If, when you call, he is on the phone, leave a message for him to return your call.
- C) If he's gone for the day or week and the problem requires immediate attention, you may have to deal with a new person, (repeat section "A" above).

Look guys, if you've got to fill out a warranty claim and the vehicle was a problem child, you may need documentation from the technician saying it was. If you don't know who you talked to, what position should you assume?

4) The technical authorities were stumped, their skills were being stretched to the limit. No one could stop.....
....JACK THE RADIO RIPPER

Case number 57: Yet unsolved. It was a cool morning and the suspect, still fuzzy with sleep, stumbles into his garage. His mind filled with thoughts of that first cup of coffee. The thumb of his right hand fumbles for the starter button and the motor responds with a mellow note. The thought of tunes enter his mind and the radio issues forth. " -W-Z the NOW news and weather station. Next the Weather." The suspect thinks, in his not so clear mind, I'd rather listen to a tape. Now were did I put

that Willie Nelson tape? Then it happens. He places the tape in the door and finds the radio already has a tape engaged. His finger pushes the eject button, NOTHING HAPPENS!!!!. Again and again he tries. Panic fills his sleep filled mind. The Ripper is about to strike! The snap retaining his Buck Knife pops free. The tip of the blade is inserted, ever so gently, but the tape tray resists. It becomes a matter of pride. I'll get that tape out if it's the last thing I do!!! Screaming, followed by wild laughter, then heavy breathing and the deed is done. Can we stop Jack the Radio Ripper? Yes!!! By reminding the owner that the Radio MUST BE IN THE "TAPE MODE" TO EJECT THE TAPE!

- 5) Do me a favor. Get your Service Bulletins out, specifically M-950. Let's go over this Bulletin to really understand what it says.

Bulletin purpose: To inform the Technician of a problem involving a limited number of 1987 XL vehicles and Harley-Davidsons' recommended method of repair.

Problem: The oil passage in the oil filter mount was undersized. The brown check ball was not the problem. (Use M-950 VIN list for affected units.)


Action : Rather than changing the the oil filter mount, we chose to reduce the diameter of the check ball. To solve the immediate problem, we suggested installation of the earlier brass check valve. The smaller black check ball, discussed in Service Bulletin M-950, was never provided to the Dealers, so this made the brass check valve the only way of repairing this limited number of affected vehicles.

Update Info: The black ball is now authorized and will soon be made available to the dealer network through P&A. This should happen sometime in August of this year. We understand that it will also replace the current brown check ball used in production around that same time.


IMPORTANT: The part number for the Black check ball is in Service Bulletin M-950.
(Some people like to get the bulletin at the end.)

DID YOU EVER SEE ANYTHING LIKE THIS BEFORE ?

Keep this form attached to the Dealers copy of the repair order. Do not send to Harley Davidson.



IMPORTANT NOTIFICATION



This part is designed for off-road application only. Installation of this part may adversely affect the emissions and/or noise control systems of your motorcycle. It should not be installed on a motorcycle used on any public roads. Use of this part in an on-road application may be illegal and could adversely affect Limited Warranty coverage.

I have read and understand the above statement and accept responsibility for proper use of this part.

Customer Signature _____

99523-84

PART NUMBER

Customer Name _____

Part No. _____

Description _____

Dealer Imprint: _____

Authorized Signature (dealer) _____ Date _____

HARLEY-DAVIDSON, INC.
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MECHANIC'S NOTES

When installing the custom Derby Covers (Page 43 of the 88 Accessories guide) on 1340's "remember" the derby covers fasteners may be too long and may contact the clutch. Change or modify the fasteners.

Are you look, look, look'in for a complete 4 spd. Transmission from Harley Davidson? Look no more, we don't have any. Its a parts only situation. Make a note in your parts book. Thanks!

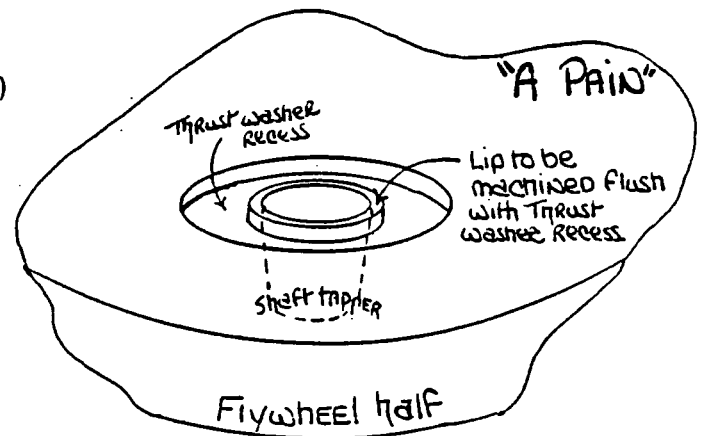
Let me ask you a question. How are we storing the belts? Are you hanging them from a single nail or cramming them back in the black hole of Calcutta. Could it be that we're taking short cuts during installation which cause the belt to be twisted into place. Hard as it may be, fight this urge. They are not "V" belts and require more care in the way they are handled.

MECHANIC'S NOTES CONTINUED

Earlier Connecting Rod assemblies for the XL vehicles are now using the F.A.G. bearings. As you already know the new bearings require a stepped Flywheel Thrust washer to provide clearance for the wider bearing cages. When you receive your connecting rod assembly (24275-57A) you'll notice several stepped thrust washers of various size (I.D. and O.D.) You will select the correct thrust washer for your particular assembly. Easy, right! No not that simple. See figure "A pain" below.

The story the way it was and is:
Some early flywheels have a raised lip in the area of the flywheel thrust washers' I.D. (Inside Diameter)
This lip must be machined off or you will crush the bearing cage as you assemble and torque the crankpin nuts.

Important: When removing this lip, be careful not to damage the flywheel crankpin taper. Remove only enough material so the lip is flush with the bottom of the thrust washer recess.



S.W.R. Meter, what is it, where can you get it, why should you have it? (Standing Wave Ratio Meter) It helps you fine tune the antenna's sending ability by modifying its height. How about Radio Shack. This will improve your customers long range broadcast ability and short term personality. Watch for the next Tech Tips for more info.

Just to keep you informed. The recent Tire Service Bulletin M-962 under the heading Rim Size and Contour. Find 16" Cast wheel, you'll notice 16 X 3.00 D please note that it can also be a TL rim profile.

MOTORCYCLE MECHANICS INSTITUTE

Vintage Harley Davidson Program

The Harley Davidson Service School operated by Motorcycle Mechanics Institute in Phoenix, Az is going to offer an Early Model Course beginning December of this year. This course will cover 1969 and Earlier Models.

M.M.I. is presently interested in purchasing components and entire motorcycles of this vintage, as training aids. If you have vintage Harley Davidson parts and/or Motorcycles or know of their location please contact Mr. Dave Koshollek at 1-800-528-7995.

Thank You