



# TT398: Twin Cam Oil Leak Diagnostics

December 17, 2008



APPLIES TO	SYMPTOMS
All vehicles with Twin Cam engines.	• Fluid or Oil Leaks

## Twin Cam Oil Leak Diagnostics

It is always important to verify a leak and its source before making a repair on any system.

When diagnosing an oil leak, first clean and thoroughly dry the suspected area, then verify that the leak returns. In many cases, the seep or leak will not return because the oil was residual oil from assembly of a component.

A dye test would also indicate whether the oil present is coming from the vehicle oil system. If you dye the oil and the suspected area never shows signs of dye, then it is likely to be residual oil and not a leak. The dye and fluorescent light are available through the SPX special tool catalog, which can be found on h-dnet in the Service Toolbox.

Below is an example of what appears to be a leaking Softail oil line connector. The oil visible in the photo is actually residual oil from the assembly process.



**Figure 1. Softail Oil Line**

Looking at the cross section of a Softail oil line connector, you can see that oil could collect in the trough during service or assembly and appear to be leaking over time.



**Figure 2. Cross Section**



**Figure 3. Oil Absorbant Pad**

You may begin to notice a return to the use of an oil absorbent pad under the oil lines on some models. This is not an indication that there were any repairs or issues with any particular motorcycle, only an attempt to lessen spillage and make subsequent clean up easier. The pad should be removed and discarded prior to starting the engine for the first time at PDI.

Another area that could appear to be leaking but may just hold residual oil is the oil pressure switch or even cylinder base o-rings.

Before disassembling any of these parts, always clean and dry the suspected areas of residual oil, then verify that the leak returns

A new switch is not required due to leakage since there is a process for resealing the original switch:

If reusing oil pressure switch/sender, apply Loctite Pipe Sealant with Teflon 565 to threads.

Tighten oil pressure switch according to the appropriate service manual. Careful attention must be paid as this fitting is a pipe thread and prone to cracking if over tightened.



**Figure 4. Oil Pressure Switch**