NewsStand - Connect the Dots

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I loved my ninth grade geometry class, and it wasn't just because I liked the teacher. In fact, I cannot even remember my geometry teacher. There were actually two reasons I liked geometry. First, because it was logical. There were rules and the rules made sense. Second, because it was visual. I have an artist's nature and enjoy drawing three dimensional images on two dimensional surfaces.

I will never forget a very real "Aha!" moment that overcame me in that geometry class. We were learning how to calculate the area of a sphere. The teacher drew a circle on the board which represented a sphere. To help us see it more spherically, she drew a dotted line to represent the equator. For some reason, some kids couldn't see that the circle was a sphere, and no matter how hard the teacher tried there was one girl who seemed on the verge of tears about it.

The "Aha!" was that what appears obvious to some people is abstract, vague, opaque to other people. Those other people are not stupid. This girl was in all the honors programs, very bright. Her brain was probably just wired too literally, making it impossible for her to see the sphere.

Remember the old *Highlights* magazines that were in dentist's offices? They always had those jumbled picture puzzles where you had to find a shovel and a baseball glove and a pencil and a fishing hook, etc. They also had Connect the Dots puzzles. There would be dots with little numbers next to them so that you connected them in a sequence. Slowly the image would emerge and what had formerly been disguised was now revealed.

What's funny is how as parents we can sometimes look at those connect-the-dots puzzles and not even need to draw the lines. The clown, airplane or daffodil is self-evident. Some puzzles are a little more complex, so the little numbers are helpful.

For the next few moments I would like draw a few dots which, when connected, will make a picture.

Dot 1: Overheated automatic transmission fluid has been associated with forest fires when vehicles go off road in tall grass during dry seasons. (Source: National Assn. of State Foresters)

Dot 2: People are busier than ever and simply do not want to take time to change their oil.

Dot 3: CAFE regulations lead to increasingly stringent fuel economy requirements.

Dot 4: Landfills are filling up and in many areas laws prevent the building of new landfills.

Dot 5: Returning from a business trip in the States, William Finch was surprised by the severity of a cold snap that gripped the Edmonton airport. He wished his car would have started like the car in the next row.

Dot 6: Factory fill with conventional oil cost Mercedes-Benz 32 million dollars.
(Source: Lube Report: Volume 3 Issue 17, April 30, 2003)
http://www.lubereport.com/e_article000146166.cfm

Dot 7: As gear and bearing loads increase, oil temperature rises. As oil temperature rises, the oil becomes thinner. When the oil becomes thinner, wear protection is reduced and friction increases. As friction and wear increase, the oil

temperature rises further, the oil becomes even thinner, and the friction and wear increase again. This cycle, called thermal runaway, can ultimately lead to gear failure.

Dot 8: Vehicles that are known to have been taken care of have better resale value (less wear).

Dot 9: Most drivers, especially young ones, dislike checking their oil levels and many neglect it altogether (volatility).

Connecting the Dots

I'm sure most of you have already connected the dots, but like that girl in the front row who couldn't see the sphere, I will not assume the picture is clear for everyone.

Dot 1 is a reminder that drivetrains today can run very hot. I'm not sure what research there is about synthetic fluids and reduced forest fires, but I do know transmissions and gear boxes run cooler with synthetic oil.

Dots 2 and 4 deal with extended drain intervals. Premium synthetic motor oils offer worry-free protection over extended time frames, providing convenience for consumers and a reduced footprint on our environment.

Dot 3 speaks to the documented fuel economy benefits of synthetic motor oils and drivetrain fluids.

Dot 5. While at the iFLEX Show in April I spoke with a quick lube owner who flew in to Edmonton while it was 50 below and was happy to find his car started right up because he had a premium synthetic oil in his vehicle. There were as many as 20 other people with hoods open waiting for tow trucks to help get them up and running in this brutally cold Alberta Clipper.

Dot 6. The Mercedes-Benz story is especially interesting because it cost them 32 million dollars by not having synthetic oils as factory fill while recommending longer drain intervals. The OEM may have been penny wise and pound foolish, like many motorists who feel synthetics are too expensive.

The problem of thermal runaway as explained in Dot 7 is resolved when motorists resolve to use synthetic lubricants in the transmissions and differentials.

Dot 8. If you read "for sale" car ads, you will fairly regular find reference to the fact that the car is using a premium synthetic oil and, by implication, is in better shape on the inside where the eye can't see.

Dot 9. The NOACK Volatility Test measures the evaporation loss of lubricants in high temperature. A high percentage of conventional oils experience significant "boil off", thus explaining the necessity of topping off between oil changes. Synthetic oils won't eliminate the importance of checking the oil now and then, but the risks are less.

The Big Picture

When we're up too close, or caught up in our day-to-day stuff-n-junk, we don't always see how things fit together. Getting the big picture involves stepping back in order to see the overall view. When I step back, I can't help but see that the answer to most of our vehicle's lubrication needs is a synthetic solution.