TECHNICAL

The following was reprinted from the Midwest Antique and Classic Motorcycle Club News, they in turn borrowed the article from the Canadian Vintage Motorcycle Group. It is all a part of efforts on the part of all motorcyclists to help each other in every way we can, whether it is in form of helping a fellow member on the road or sharing information that is to the benefit of all. If any of you are deeply involved in restoring or enjoy reading about antique motorcycles these are two fine clubs to know about. I don't have the address at this printing of the Canadian club but I do have that of MACMC, which is MACMC c/o Dennis C. Ryan, 2S 251 Harter Road, Elburn, Ill. 60119.

PREMIUM GONE, BUT WE RIDE ON!

As many of you have noticed, super leaded gasoline is no longer easily available. It will soon be gone altogether. This means many motorcycles and cars will become obsolete. To keep your car or bike running, here are a few options.

SUPER UNLEADED GASOLINE The oil companies claim you can use this gas in older cars. It is not advisable, as lead was used to lubricate the valves and reduce wear on valve seats, as well as being one of the best anti-knock additives. If your bike is in the 8:1 9:1 range you can run unleaded super provided you run a tankful of leaded regular every few tankfuls.

MODIFYING YOUR ENGINE - If you are about to do a rebuild you can install lower compression pistons if they are available. Compression ratios of *:1 or lower are recommended for safe running on regular leaded gasoline.

A cheap way of lowering compression is to use a stroke plate (spacer between cylinder and crankcase) or a thicker head gasket, but the disadvantage here is that the power loss will be greater than that experienced by must lowering compression; this is because of the reduction in the 'squish' effect at the edge of the combustion chamber.

Changing to iron valve guides and stellite valve seats will allow safe use of unleaded super and this may be the only way to go if they stop making leaded regular. The disadvantage here is the cost; an over the phone estimate of about $200 for the stellite valve seats in an alloy cylinder head gives you some idea of the cost, with no guarantee that the seat wouldn't come loose.

ADDITIVES- The cheapest way to go, No rebuilds, STP or the oil companies will probably put out commercial additives soon. The peapest way to go now is to make your own additive.

A mixture of 8 ounces denatured alcohol, 4oz of benzine, and one tablespoon hydrogen peroxide works well. Use one teaspoon of the mix to 2.5 gallons of regular leaded gasoline and you should be O.K. up to 11:1 compression. This mix is used in some racing gas, except in larger quantities. If you use greater than the recommended amount there will be a slight power gain with an even greater strain put on your bearings and big ends. CAUTION: THIS MIX IS VERY FLAMMABLE. HYDROGEN PEROXIDE CAN INJURE EYES AND SKIN KEEP IN A TIGHTLY SEALED CONTAINER AND USE IN A WELL VENTILATED AREA.

Other additives obtainable now are nitromethane and gas line antifreeze. Nitromethane can be bought at some cycle shops. Klotz makes a nitromethane mix with directions on the can for touring use. There is a temptation to use a bit more because of the power increase. Don't cry if your top end blows up or your bearings go south every 2000 miles. Gas line antifreeze can be used in a pinch, and is easily obtained at any gas station.

The chemicals to make the alcohol-benzene-peroxide mix should be available at drug stores. Hobby shops and science suppliers might also have the stuff, and a measure that will allow you to measure out 50c (one teaspoon).

OCTANE NUMBERS - AN EXPLANATION - Octane is a measure of fuel energy; it is a number describing the anti-knock properties of a particular gasoline in relation to the pure hydrocarbon iso-octane which has nominal rating of 100. Any gas can be described by several different octanes:

1) Research octane number - derived from the "F1 Test" where the fuel is lab tested in an engine under easy running, low stress conditions.

2) Motor octane number - derived from the "F2 Test" where the fuel is lab tested under average highway fuel stress conditions.

3) Anti-Knock Index- or AK1, which is the average of the above two numbers. This is the number which US law says must be on gas pumps. Example: In February Chevron Supreme in Vancouver had a research number of 98.7, a motor number of 89.2, and an AL1 or 94.0.

4) Road octane number- a new, more sophisticated test using special drivers in special cars actually driven at maximum acceleration.

NOTE: Aviation gas uses an entirely different system of extablishing octane numbers using two tests entirely different from any of the above tests.

DUCATI RACING T-SHIRT BREAKS SALES RECORDS

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