

DOC'S BLOCKS
AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

What kind of oil should be used in the system?

Answer:

As stated previously, mineral oil has been used with R-12 sense the beginning of automotive air conditioning. In the middle eighties, ester oil was introduced as a replacement for mineral oil and could also be used with R134a refrigerant. Pag oil was introduced as the oil to be used with R-134a only. Manufacturers recommended pag oil for their compressors. The ball has gone back and forth about which oil is the best. At present, the ball is with pag oil. The oil companies came up with the term, double end capped pag oil. Because of the double end cap, the oil can be used with either refrigerant.

The one thing that is certain, mineral oil and synthetic oils do not mix. If doing a retrofit, as much oil as possible should be removed from the system. If a trace amount is left behind, it will not harm the system. Put the new oil in as though it is a dry system.

Blend refrigerant manufacturers have their own set of rules for their usage of oil.

It is recommended that if the system was flushed and the refrigerant being used is R-12, use ester or double end capped pag oil. Not mineral oil or OEM pag oil. OEM pag oil is not to be used with R-12.

Follow the compressor manufacturers recommendation for system capacities and oil viscosities.