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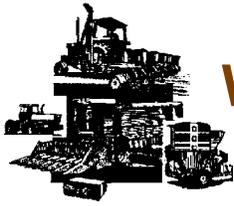
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WHAT YOU NEED TO KNOW ABOUT RETREADS

Farm Machinery Fact Sheet FM-32

By Dr. Von H. Jarrett, Extension Agricultural Engineer

A. *Who buys retreads?*

- Race car drivers
- Truck fleets
- Airlines

It's a fact that 98% of the world's major airlines use retreads on their jets and other aircraft.

A good quality retread has the same good looks, safety, performance and mileage as comparable new tires—at almost half the cost. The basis of a retread is a quality casing of a new tire. The casings are approximately 70% of the tire cost. Actually retreads are “worn out” only in the sense that the tread is no longer adequate. Not that the tire has been punctured, cut, blown out or otherwise damaged internally.

The retread depends on the process of bonding new rubber to the casing and the way the two ends meet. The tire is cured in a mold to vulcanize the rubber together without leaving a heavy spot where the ends meet and could separate.

The unconventional method is to apply a continuous ribbon of hot tacky tread rubber automatically wound around and around the cement-sprayed casing until a complete, splice-free tread is formed. This process reduces the possibility of human error in applying the proper tension and exact amount of rubber to every point on the casing. This provides a stronger bond and a more perfectly balanced tire.

When people see the highways littered with thrown rubber, the tendency is to say, “another retread.” Surveys show that most of this rubber doesn't come from retreads, but off new and partially worn second or third line tires.

B. *What do I look for in a retread?*

Good or bad retreads look pretty much the same. As a rule of thumb; if you don't know the product, know the dealer or retreader. Ask questions on the process used in retreading and the type of equipment used. What companies use the products and what quality control methods are used. Call some of the customers and see if they are satisfied with performance and mileage.

C. *Breaking in your new or retreaded tire properly usually isn't given much thought. A tire has thousands of moving parts and when the tire is on the car these parts should work together and not against each other as they adjust to the car pattern and road conditions.*

As a rule of thumb, try to keep speed at less than 60 miles per hour for the first 100 miles until the complex elements adjust and work as an integral unit.

Radial tires make excellent retreads, however they have been hard to come by. In the future you'll see more radial retreads as the casings are more available. A radial tire is more responsive to steering and provides better traction.

CAUTION—never use radial tires smaller than the size specified by your automobile manufacturer, and never mix radial and conventional tires.

D. *How to care for your tires.*

Even the very best tires are not indestructible. The following abuses can cause much damage:

1. Driving at fast speeds over rough roads.
2. Driving at excessive high speeds.
3. Fast turns when cruising or on curves.
4. Driving or backing over chuck holes, curbs, or other obstacles.
5. Riding on pavement edges.
6. "Shotgun" starts and "panic" stops.

Use the following precautions:

1. Inspect tires for cuts, cracks, uneven wear, cupping, inflation, rocks, nails and glass embedded within tire grooves.
2. Excessive tire wear is usually caused by faulty or uneven shock absorbers, wheel imbalance, improper wheel alignment, faulty or grabbing brakes.
3. Check your tire for flat sections, bumps, uneven wear patterns or edge tire wear. The tire will tell you the mechanical difficulty or adjustment needed in the automobile.

E. *The key to success, longer life, and safety in any tire is correct inflation. Over inflation can cause a harder ride, stress on rims, and vulnerability to impact damage such as rocks, curbs, chuck holes and excessive wear in the center of the tire.*

Under inflation is much more common. A soft tire flexes more and causes heat build-up. The heat will melt cords, cause plies and treads to separate and cause rapid wear on the outer tread ribs. Under inflation of 4 to 12 lbs. can cut tire life by 40%; also, an under inflated tire can cause a driver to lose control of the car.

The following care tips are suggested for greater life, mileage, and safety on both new and retread tires.

1. Check inflation at least once a month with your own dependable gauge.

2. Check tires when cool, not hot.
3. Refer to owner's manual in maintaining proper air pressure.
4. Check inflation pressure recommendations on the tire being used.
5. Don't wait, but make a mental note on the pounds needed and correct the difficulty.
6. Check inflation more frequently when seasons change, as atmospheric temperatures can make a big difference.
7. Rotate your tires every 5,000 miles.

F. Can you retread snow tires?

Yes. Retread snow tires give good service and cost about half the price of new ones. Nearly one-third of all cars on the road today have a least one tire too thin for highway safety. Tires with less than 1/16" of tread depth are 50 times more likely to have flats or blowouts. Check the depth with a penny and if Lincoln's head shows, you need a new retread.

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