

WHAT'S HAPPENED to the white in white sidewall tires? Today's tire buyers pay just as much extra for a set of original equipment whitewalls as they did five years ago, but they get less of the white stuff. Whitewalls have become so narrow they can barely be seen—and they may get thinner. Yet a set of five ordered with purchase of an automobile costs roughly \$40-\$50 extra. The set runs much higher in some cases. The larger size whitewalls on a 1966 Fairlane station wagon, for example, retail at \$70 over standard blackwalls. A set of super heavy-duty 8.55-14 whitewall tires on an Oldsmobile 98 lists at \$104. That's a lot to pay for a thin sliver of white.

Tire companies say there is just as much white rubber in the sidewall as there was years ago. True, it's there, but a hammer and chisel or powerful buffing machine are needed to find it because it's hidden under all that black. Though 1966 cars carry tires with visible whitewalls of only 0.6 in. width, there is up to 3 in. of white rubber underneath. Why keep a 3-in. strip of white rubber in the tire when only 0.6 in. shows?

"We must leave a half-inch of white covered with black on the bead and shoulder sides of the whitewall," explains a Firestone tire engineer. "That leaves us with a maximum whitewall of 2 in. wide, so it's much easier to leave the 3 in. of white rubber within the tire than keep changing the width for various customers. After a tire has been cured it goes through a buffing machine which removes the black outer rubber. The machine is set to buff a desired width. If a colored stripe is desired with the white, colored rubber is built into the tire along with the white. Then the buffing machine uncovers the stripe and the whitewall."

OKAY, NOW that the white is uncovered, why is the cost so high for that exposed 0.6 in.? Ironically, it's

YIPES! STRIPES!

Beneath That Black Lurks a Wide Wall

BY ED JANICKI

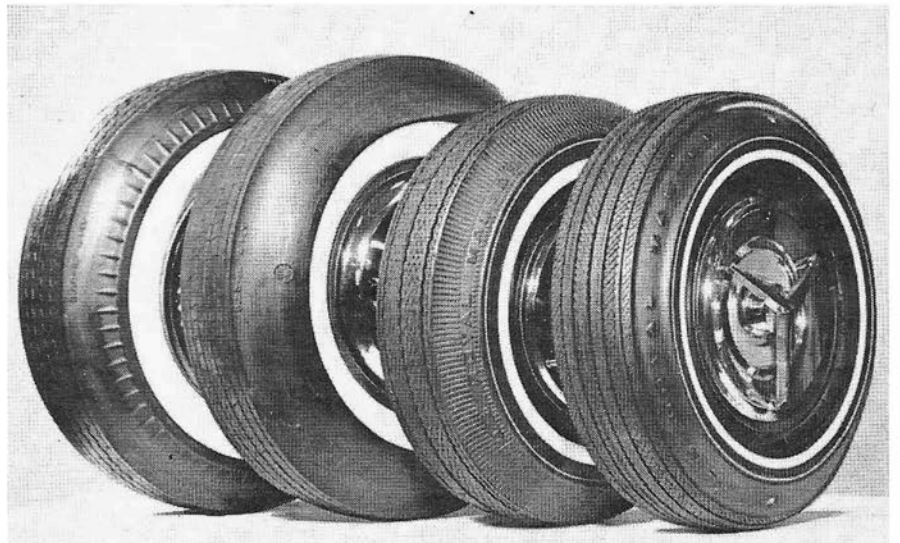
more expensive to produce a thinner whitewall than a wide one because tire manufacturers must use a special black material to cover the white. Confusing? R.F. Bogan, manager of passenger car tire development for U.S. Rubber Co., explains it this way:

"Actually, the increased cost of a whitewall tire is due to a combination of things. One is that whitewall stock itself is considerably more expensive, both in terms of basic material and

the delicate way it has to be handled in a plant. Around that white sidewall stock you must have a special black sidewall stock because the ordinary material used in making a solid black-wall tire contains what we call an antiozonant chemical. Although this chemical is blended into the tire to protect it against weathering and deterioration, it has a tendency to migrate throughout the rubber and it would stain a whitewall.

"The material most widely used for blackwalls on passenger cars is a standard synthetic stock. On the other hand, the black material that surrounds a whitewall tire is a blend of neoprene rubber and natural rubber. Neoprene has a terrific resistance to weathering and it doesn't require antiozonants, which would stain the white. But the neoprene-natural rubber blend is even more expensive than the whitewall material. So you can see that every time we make a whitewall tire narrower we have to use more of this expensive neoprene stock. So our basic material costs have gone up instead of

ONCE UPON a time, all tires were white, but introduction of carbon black made tires all black. Then came the ever-narrowing bands.



STRIPES!

down as we move to narrower whitewalls."

Goodyear Tire & Rubber Co. says: "The tread and both sidewalls of a black sidewall tire are made in one piece and are applied by the tire builder in one operation. A white sidewall tire, on the other hand, requires two additional steps in the forming process and a final extra step in the finishing stage. The white rubber stripe must be added, plus a black rubber stripe to cover it—which in turn is ground away to the currently popular width to expose the gleaming white rubber. White rubber costs more to make, with its titanium and zinc oxide formulas, but the biggest expense for the manufacturer comes from the greater time and labor to build the tire and special handling to keep it white, free from dirt and staining, from the time of its birth to active duty on a customer's car."

BUT WHY SHOULD today's whitewalls be as narrow as they are? As pointed out earlier, the whitewalls on most 1966 cars measure but a mere 0.6 in. compared with more than an inch on 1965 tires. A few special models have even narrower white bands. The whitewall on the Toronado is only 0.25 in. wide. Remember when whitewalls measured 4 in. and more? And remember when they were white on both sides?

When Detroit auto stylists say they want whitewalls narrow, the tire producers make them that way. Stylists believe the thin whitewalls engender a streamlined look and the pin stripe of white on black creates a pleasing optical effect. Says D. F. Kopka, executive stylist, Ford Studios: "Narrower band white sidewall tires are part of the trend to refinement in auto design. Prestige cars today are dressed down rather than up. They have less ornamentation and cleaner body sides, and rely on refinement of detail rather than mass. The narrower band of white is another means of understatement, a frequent factor in elegant design. There also is a suggestion of performance, with the narrower band of color breaking up and lending motion to the mass of black in a tire wall."

Then there's the fact that if it weren't for the discovery of carbon black around 1912 today's cars might be rolling on white tires with black sidewalls. General Tire & Rubber Co. recalls that zinc oxide was the prime reinforcing pigment in tires before 1912. "This pigment produced the white or gray tire or the light-colored sidewalls,"



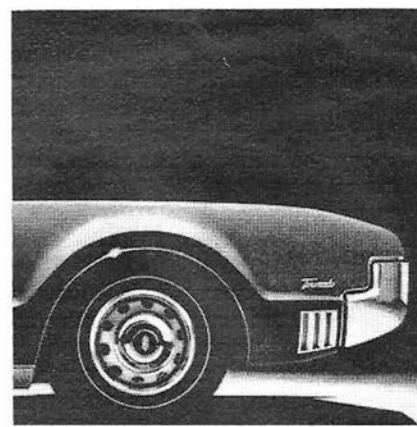
MULTIPLE stripes and a range of colors now are available.



STRIPES are 0.6 in. for 1966, were 2.5 in. five years ago.



CLIP-ON whitewall trim never has taken the public fancy.



TORONADOS are given a special 0.25-in. white accent stripe.

says General. "Then carbon black was introduced as a reinforcing pigment and the all-black tires became popular."

It is believed that white sidewalls can be traced to the first pneumatic tires for automobiles. And the first whitewall strip was merely lapped over the black sidewall sections or strips on the tires. The manufacture of whitewall tires ceased during the 1920s, but was resumed in the 1930s. Whitewalls, as we know them today, were introduced in December, 1929. All rubber companies which manufactured tires put whitewalls on the market at about the same time.

Today, whitewalls are so desired by the average car buyer that attempts have been made to create the effect with less expensive methods. There have been a number of whitewall substitutes on the market over past years—paint, detachable rubber and white

metal stripes, or "clip-ons." All of these simulated methods have been "slow movers" in retail stores, tire companies say, and whitewalls, as original equipment, continue to soar in popularity. Whitewalls currently are being installed on 70% of the cars built and account for 60% of all replacement sales. Some tire men predict all-black tires will be *passee* in 10 years.

THOUGH WHITE probably will continue to be popular for many years to come, other color blends—particularly red—probably will emerge in the near future. Tires will be produced with one, two and three stripes. Why is red, such as now is used on the Pontiac GTO, Mustang and others, desirable? "We wanted to choose a color that is compatible with car colors," explains U.S. Rubber's Bogan. "This particular red seems to go with everything." ■