MORE BITE FOR OLD SHARKS

How to Fit Wider Tires On '68-82 Corvettes, on a Budget.

By Bob Wallace

One of those topics that can really stir up a lot of questions is, "What's the biggest tire I can fit on '63-67 or a '68-82 Corvette?" On mid-years, a major limiting factor is the fender openings. We'll look into just how big a tire and wheel combo can be fitted into uncut mid-year fenders at another time. Sharks, with their fully radiused wheel openings, offer room for a lot broader range of tire and wheel widths.

Taking advantage of both the capacious fender openings and the then-new trend to wide tires, Chevrolet went to a 7x15-inch wheel in 1968, then upped the width by an additional inch in 1969. While an 8-inch wide wheel sounds rather modest by today's standards, in the context of the era those were seriously wide rims. GM really didn't use the potential of the rim width or the size and shape of the fender openings, and never fitted anything larger than a relatively small 225/70-15 tire on the Sharks.

When you look into fitting wider tires onto stock-width wheels on a Shark—or any Corvette, for that matter—you need to take several factors into consideration. These include the section width (the maximum width) of the tire, the overall diameter of the tire (so the speedometer calibration is not thrown way off), the recommended rim width for specific tire sizes, and the tread width. Various tire manufacturers' specs vary slightly, but not enough to make a huge difference. For the sake of consistency, we'll use BFGoodrich's data book for all our dimensions.

The OEM size, 225/70-15, is designed to fit on 6- to 8-inch wide wheels. On BFG's recommended 6.5-inch wide rim, it has a 9.0-inch section width, 6.7 inches of tread, and a diameter of 27.4 inches. Take a look at any '69-82 Vette with stock wheels and stock-size tires and it's readily apparent that the tire looks way too narrow for the rim.

A natural for a modest upgrade is to step up to a 255/60-15 tire. Again using BFG's data book, a 255/60-15 is designed to fit on 6.5 to 10.0-inch wide wheels. On BFG's recommended 7.5-inch wide rim, its section width measures 10.2 inches, the tread width is 8.2 inches, and the overall diameter is 27.1 inches. Overall, it's a real close match-up, with a slightly wider carcass (the body of the tire), an extra 1.5 inches of tread width, and an overall diameter that's an insignificant 0.3-inch less than the OEM size.

Want a little bit more, without going crazy? (Remember, we're going through this entire

exercise on the basis of using stock, 8-inch wide wheels, and not going too far off the stock-size tire's overall diameter. We'll get nuts—like trying 17- and 18-inch diameter tire and wheel combos—in another article.)

The next logical step is to a 275/60-15. According to BFG, this tire will work on 7.0- to 11.0-inch wide wheels. On an 8.0-inch width wheel, it has a section width of 11.0 inches, the tread is a healthy-looking 8.9 inches wide, and its overall diameter is 28.0 inches.

There are several concerns when fitting wider tires onto any car. On a Shark, with stock width (and offset) wheels, they include fender clearance at both ends, interference with suspension and steering components on the front end (with the wheels and tires both aimed straight ahead and turned to full left and right lock), and suspension component clearance on the aft end. A 255/60-15 tire, mounted on a stock (or stock specification) wheel, will fit on the front of a '68-82 Corvette without hitting the fenders or any suspension or steering componentry, at least if the car is at stock ride height. And it should fit on the rear without any problems.

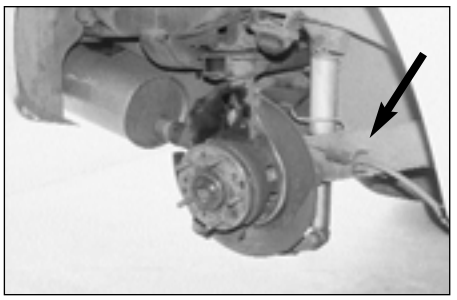
Stepping up to the 275/60-15 presents a few problems. I would not recommend trying these tires on the front unless you have a hankering to cut the leading edges of both front fender openings, and there's a strong probability that these big wienies will cause problems with some of the chassis and steering bits. There's only one possible problem at the rear: clearance between the wide tires and the trailing or control arms.

Actually, the potential clearance problem at the rear is limited to the parking brake cable bracket that's welded onto the outside of each trailing arm. It sticks out almost a full inch—right where the tire's inside sidewall is. Assuming that a given third-gen Corvette has never been damaged, 255 cross section tires will usually fit with no problem. The extra width of the 275 cross section is just enough to put the welfare and structural integrity of the tire's inside sidewall at risk.

The standard solution is to replace the stock trailing arms with "offset" custom arms like those offered by Vette Brakes & Products. These are very high quality parts and will give an extra 2 inches of clearance. The downside, particularly if you're on a budget and just want to put a little more tire on that old Shark, is that a pair of offset trailing arms cost around $400. They're well worth the price, but for those of us who have to watch our outlays, there is a low-bucks alternative, which is what we've been leading up to. Incidentally, this can be done on any '63-82 Corvette, and in any case you'll gain an extra inch or so of clearance on each side at the rear of your car.

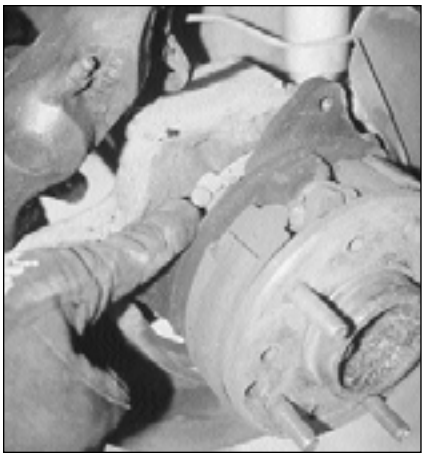
Our low-bucks approach requires one "special" piece of equipment—a MIG welder—but the rest of this procedure can be done with basic handtools. We used our '76 Stingray, the (not so) Great White, as the guinea pig for the job.

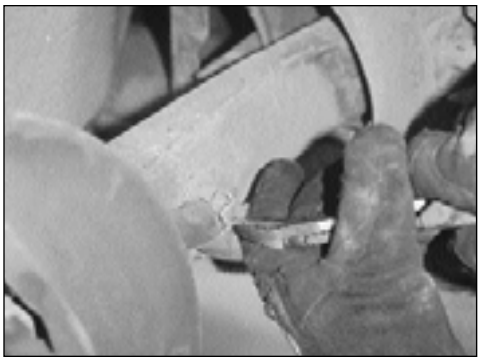
There's an old cliché that says a picture is worth a thousand words. So let's cut to the chase and let the pictures tell the story. From start to finish, the entire job took less than one hour, and as can be seen, our '76—even in primer—looks a lot better with the wider 255 and 275/60s than it did on the stock-size tires.



Here's the reason that fitting wider-than-stock tires on the rear of a third-generation ('68-82) can be an iffy proposition. The parking brake cable's rear mounting brackets are factory-welded on the outside of the trailing arms—right in the way of wide tires. Note how the cable is also routed along the outside of (and hangs down from) the trailing arm, where the sidewall of a meaty tire would go. There's no functional reason the cable can't be relocated.

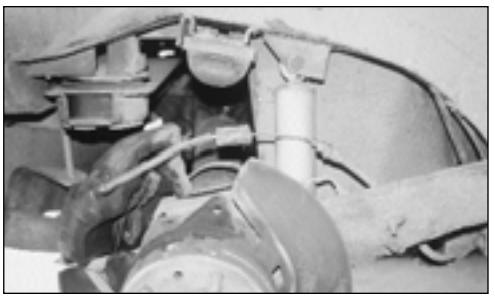
The rear brakes must be partially disassembled in order to relocate the parking brake cable brackets. After unbolting the caliper and suspending it out of the way, the rotor is pulled off the rear hub. This gives access to the ball on the end of the cable, which (with the parking brake released) must be popped out of its retainer to free the end of cable.

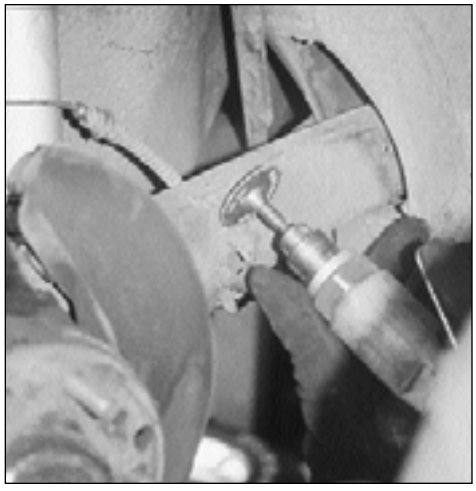




With the cable freed, the retaining clip that holds the cable in position along the trailing arm is extracted...

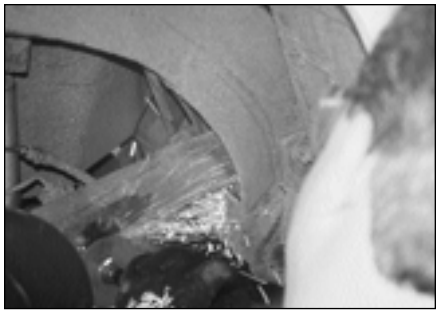
...and routed to the inside of the trailing arm.



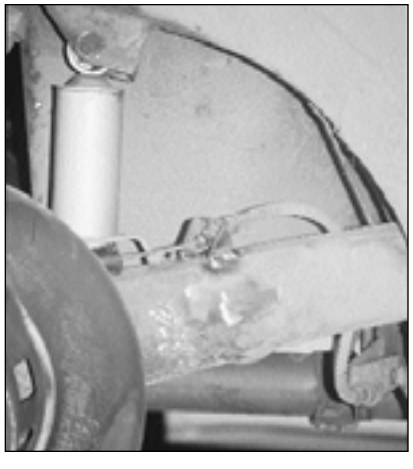


Next, the bracket is carefully (it will be re-used) cut off the trailing arm. A cut-off wheel makes the chore an easy one, but a hacksaw will suffice—it's just going to be a little more labor intensive.

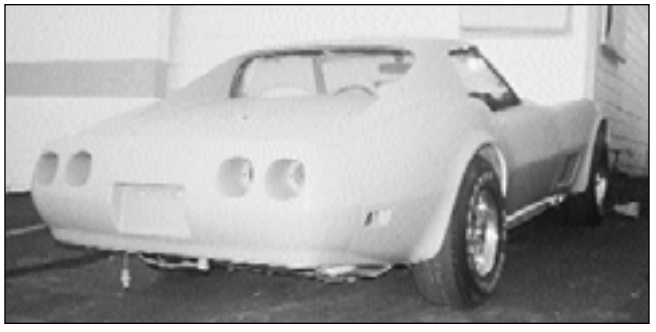
Grind or file the side of the trailing arm, where the parking brake cable bracket used to reside, so it's smooth. Do the same on the top of the trailing arm (straight up from where it was attached on the side) so there'll be a clean surface to weld the bracket onto.



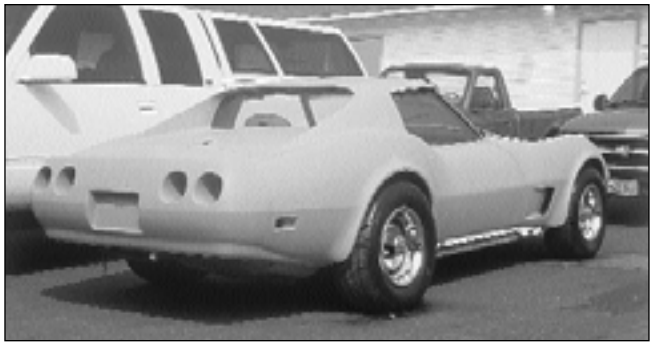
The bracket needs to be repositioned so it has about the same tension on the cable as original. After rerouting the cable to the inside of the trailing arm, it (the cable) is temporarily hooked into the bracket and held in place while tack-welding the bracket in position. After pulling the cable out of the way, weld the bracket solidly to the top of the control arm.



Before reattaching the cable and reassembling the rear brakes, spray the side and top of the trailing arm, where the bracket was removed and repositioned, with a rust-inhibiting paint or aerosol undercoating to prevent rust. This is how the relocated parking brake cable and bracket (before we painted the worked-over areas) should look. And there's now plenty of room for a lot wider tire than before.



Before, the (not so) Great White with stock size 225/70-15s.



After, with 255/60-15s (front) and 275/60-15s (rear). Looks a lot beefier, doesn't it? Best of all, there are absolutely no clearance problems, front or rear! Along with the new tires, we replaced the dinged-up original trim rings with "repops" from Corvette Central.

Here's an extreme example, and not necessarily a combo we'd recommend: 265/50-15s on the front and 295/50-15s on the rear. Tires this big have minimal (at best!) clearance, but they do fit on this '72 Stingray. This car is using stock rear trailing arms that were modified exactly like what we've just shown you how to do. These huge rear tires (295/50) have a diameter that's 0.7-inch less than the stock 225/70-15 (26.7 inches vs. 27.4 inches), enough to throw the speedometer calibration way off, and 8-inch wide rims are marginally too narrow for the tires. Optimum rim width for a tire this wide is 9.5 inches, and to fit a third-gen Vette, it should have a 4.5 to 4.75-inch backspace. No, this is not an off-road chassis setup; the engine and transmission were out of the car at the time this picture was taken.

SOURCES

BFGoodrich Tires
P.O. Box 19001, Dept. VM
Greenville, SC 29602
(864) 458-4737
www.bfgoodrichtires.com

CORVETTE CENTRAL
(reproduction trim rings)
P.O. Box 16, Dept. VM
Sawyer, MI 49125
(800) 345-4122
www.corvettecentral.com