



TechNews

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INFINITI®

| **Steering Pull**

| **Tire Repair**

| **Nissan Tools**

| **Dealer Listing**



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SHARE THE SAME NAME
ARE NOT THE SAME AT ALL.**



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Caution: Vehicle servicing performed by untrained persons could result in serious injury to those persons or others. Information contained in this publication is intended for use by trained, professional auto repair technicians ONLY. This information is provided to inform these technicians of conditions which may occur in some vehicles or to provide information which could assist them in proper servicing of these vehicles.

Properly trained technicians have the equipment, tools, safety instructions, and know-how to perform repairs correctly and safely. If a condition is described, DO NOT assume that a topic covered in these pages automatically applies to your vehicle or that your vehicle has that condition.

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Pull Doesn't Always End With An Alignment



Misalignment as the cause of drift or pull is often the first problem that springs to mind for vehicle owners and service professionals alike, but it's not the only possible cause.

Nothing can take the fun out of a highway trip more thoroughly than a car that pulls to one side, or wanders from a straight course so that you have to continually make directional corrections to stay on the pavement. Of course, no Nissan or Infiniti was ever designed to do that, but was intended to go down the road as if on rails. What happened?

After misalignment, tires and wheels are the most common causes of pull and drift. Uneven brake application and torque steer can also cause tracking problems. You may suspect that these issues are at play after behind-the-wheel testing. A brake malfunction, such as a sticking caliper, will make itself obvious when you apply the pedal, and torque steer will be noticeable only on acceleration. Unfortunately however, tire problems can also be accentuated by braking or accelerating. So, it makes sense to focus on tires first when you get these complaints.

Explain yourself

A car that continues to pull after an alignment can frustrate everyone involved: the vehicle's owner, the service writer and the technician. If the owner does not understand that an alignment may not be all that's needed to correct a pull, he or she may incorrectly deduce that the technician didn't perform the alignment correctly. If a service writer is not aware, or fails to explain that an alignment is not the only possible cause of pull or drift, the writer may be forced to give up work in order to keep the vehicle's owner satisfied. If a technician is unaware of the possible causes of pull and drift, he may needlessly repeat alignments, or order unneeded alignment-machine service.

To avoid dissatisfaction, educate the customer during the sign-in process and develop a shop policy for addressing pull and drift complaints. There is more than one correct way to do it. Some shops start with a basic steering and suspension inspection, followed by an alignment, after discussing the possible causes of pull with the customer. If there is still a pull or drift after alignment, additional diagnosis is sold. Other shops may offer a package that will address all possible causes of pull, including inspections, alignment and tire testing.

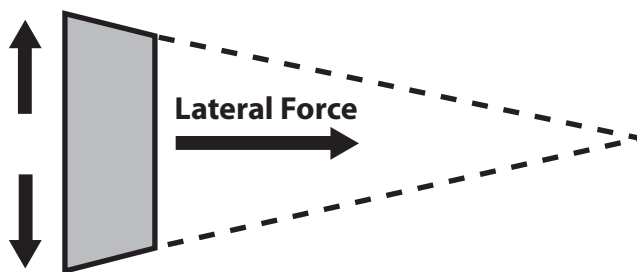
Why wheels can cause pull

One could argue wheel-related pull and drift are caused by conicity. If you were to roll a cone on a flat surface, it would not roll in a straight line. The cone would track in the direction of the small end.

The same is true on a car. If one tire is cone-shaped, then it will cause a pull to the smaller-diameter side. If two wheels on one axle are of unequal diameters, they create a cone shape and may cause a pull.

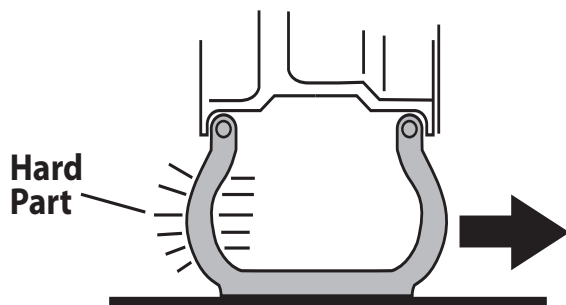
We should mention here that the very first thing to check in this regard is also the simplest: tire pressure. A tire with lower psi in it will have a smaller actual rolling diameter than one with higher pressure, creating a side-to-side cone. Some suspension designs are more sensitive to this than others, but the effect exists regardless. Another factor operating here is that inadequate inflation increases rolling resistance, which naturally causes the vehicle to lead to that side.

Sometimes, a cone-shaped tire can be found with a visual inspection, as is the case with a tire showing uneven tread wear. If the tread depth on the outer edge of the tire is 7 millimeters and the inner edge is almost bald, the tire will push the car toward the worn side because it has a smaller circumference.



Size, make, and model match

Reading the sidewall is important when addressing a pull or drift. Unequally sized tires installed on one axle will tend to cause a pull to the side with the smaller tire, not to mention the unnecessary stress on the differential when installed on a driving axle, and possible ABS malfunctions.



There is a great deal of variation in tire characteristics from one manufacturer to another, even from model to model. You might be able to see a size difference just by looking at the tires side by side, or they may be different only when loaded.

Most often, there is no way to diagnose conicity with a visual inspection. As we said, conicity can be caused by variations in sidewall stiffness (which we will get to next), air pressure, make and model (even if the sidewall says they are the same size), or a bent rim. Much of the time these defects can't be seen, no matter how closely you look.

Sidewall stiffness, tire pressure, and rims

All tires have some variation in sidewall stiffness. If the sidewall is significantly stiffer on one side than on the other, the stiffer side will compress less than the softer side. This will result in a cone-shaped tire and tire pull. Usually, the stiff side is not uniformly stiff; there may be only one spot that is hard. When the hard spot touches the road, there will be lateral force exerted in the direction of the soft side. You also may notice a steering-wheel vibration at low speeds in addition to a pull.

There is a connection to inflation pressure here. Does the steering wheel wobble and pull? This may indicate low tire pressure. The weight of the vehicle is supported by a combination of the sidewall and tire pressure. Low pressure will amplify variations in sidewall stiffness. Often, all that is needed to fix a pull and wobble is to correct the tire pressure.

A bent rim also can cause pull. If the bead seat on one side is bent, it can reduce the diameter on that

side, causing conicity when that portion of the wheel is in contact with the road. Sometimes, a bent rim can be found during a visual inspection, although it can be difficult to determine whether only the flange is bent or whether the bead surface is bent, too.

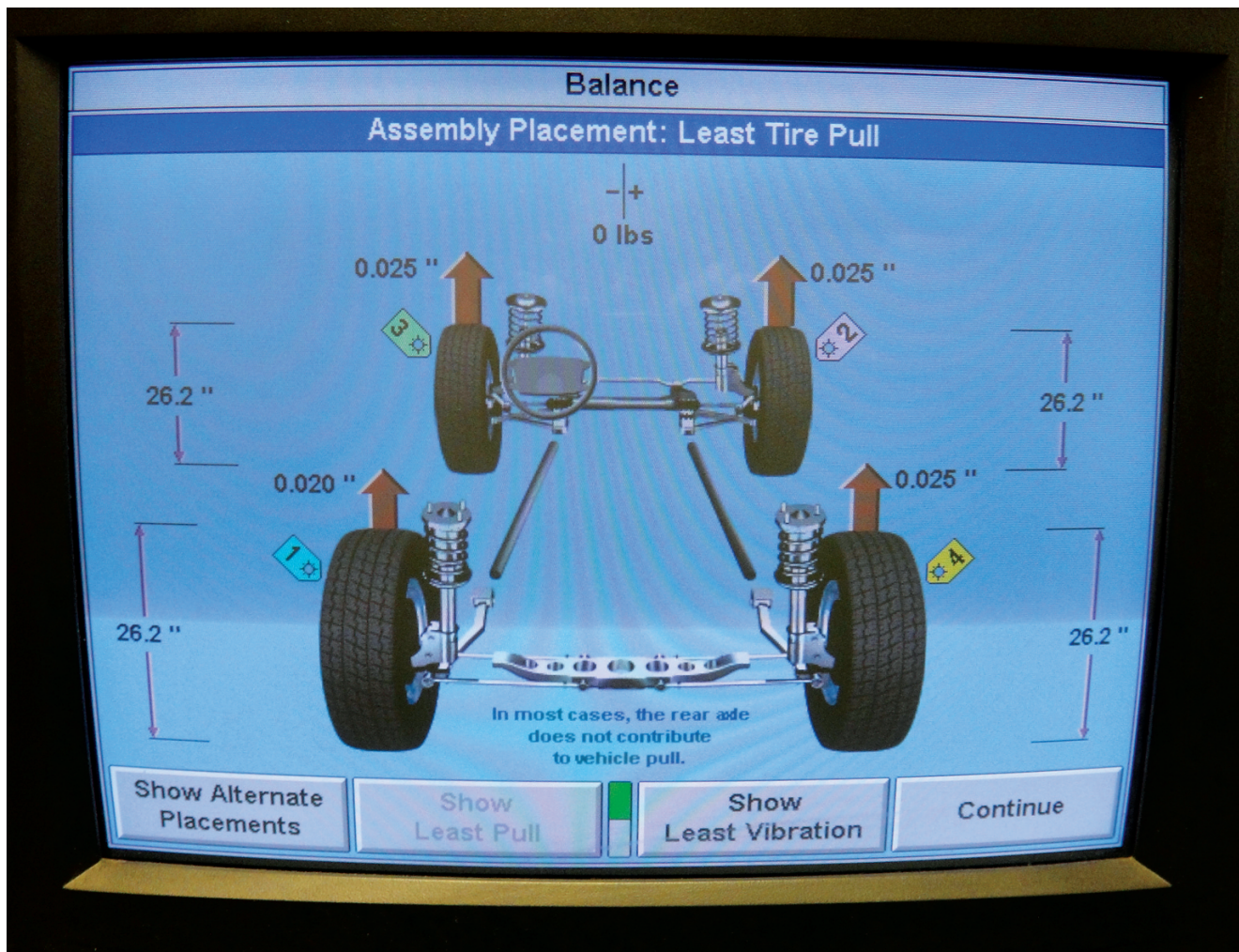
A pushing match

Total pull is the sum of the lateral force generated by alignment and the lateral force generated by the wheels. If they are in opposite directions, they will tend to cancel other out. If they are the same, they will increase the total force of the pull. This is why pull can sometimes intensify after an alignment or tire replacement.

As an example, let's say the right front tire has very uneven tread wear. The outer edge of the tire is almost new and the inner edge is nearly bald. If toe-out



Hunter GSP9700



The GSP9700 can optimize wheel placement for either “least pull” or “least vibration.”

caused the inner edge wear, the toe may be pushing the car to the right, but the tire's conicity may be pushing the car to the left. The two forces may cancel one another, and the car may drive more or less straight. On the other hand, if excessive negative camber caused the inner edge wear, the car may have a strong pull to the left.

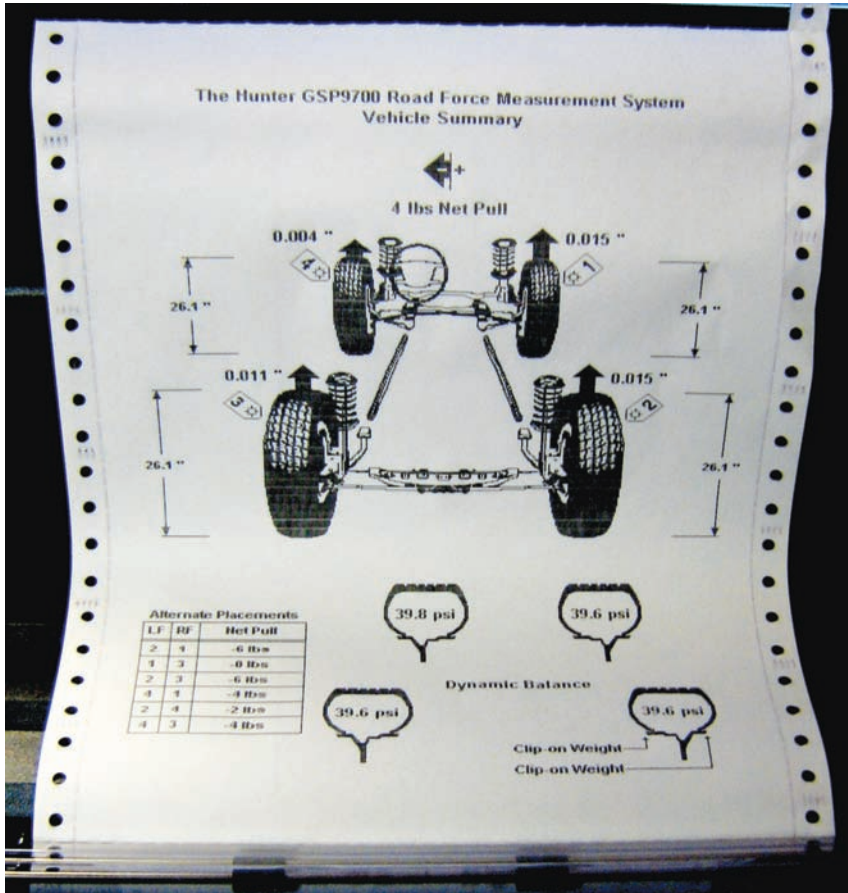
Diagnosing with a Hunter GSP9700

The GSP9700 is a diagnostic platform capable of measuring the lateral force generated by all four wheel

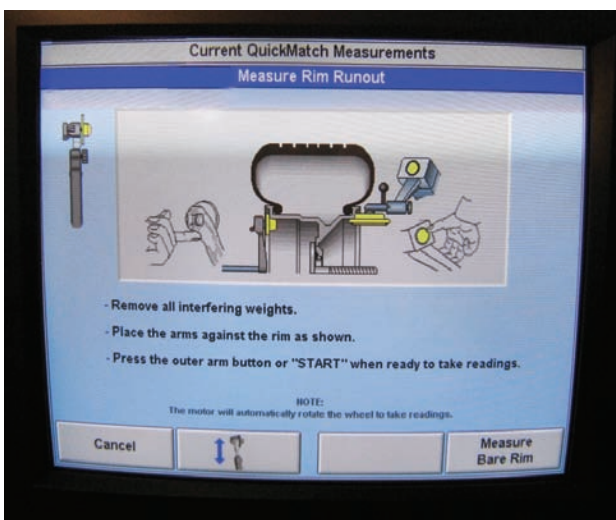
assemblies, then allowing analysis of the effect of changing wheel position on pull and vibration.

This piece of equipment uses a pneumatic roller to apply pressure to the tire, just as if the car is being driven on the road. A sensor in the spindle measures the amount of lateral force generated by the wheel assembly. Each wheel assembly measurement is saved, and each wheel is tagged for identification during placement on the car.

Using the GSP9700 is simple. Remove all four wheels from the car, measure and tag each wheel, then use the software in the unit to simulate the amount of pull that would be generated by the wheels



When you decide on the best placement, the GSP9700 can provide a printout to aid in positioning the wheels on the car and to keep with the vehicle's service history.



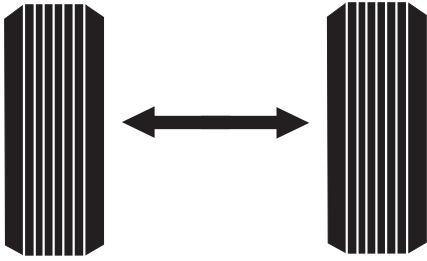
Measuring rim runout is quick and easy using the measurement arms.

in all possible positions on the vehicle. The GSP9700 can inform you automatically of the wheel placement combination that will cause the least amount of pull, or you can cycle through all possible combinations to see how the vehicle will respond to each. The GSP9700 also provides an easy way to determine how much of the stiffness variation is caused by the tire and how much is caused by the rim.

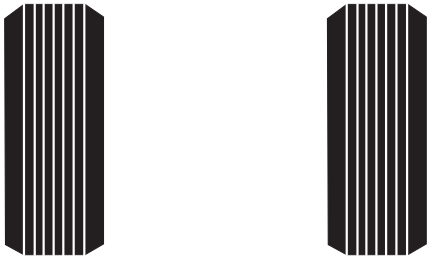
Not so well-equipped?

Not every shop has a GSP9700, but it's still possible to diagnose and correct pull using only an alignment machine and tire swapping -- it just takes longer. This diagnostic technique is based on the fact that a wheel is more likely to cause pull when it is on the front axle.

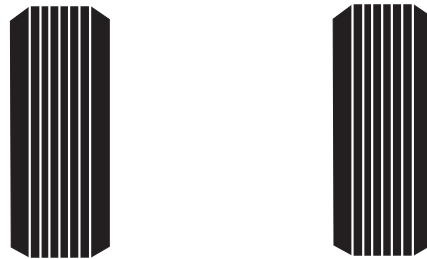
Start by verifying the pull. When test driving, always be aware of road crown or slope (roads are shaped this way to facilitate drainage). The angle of the road



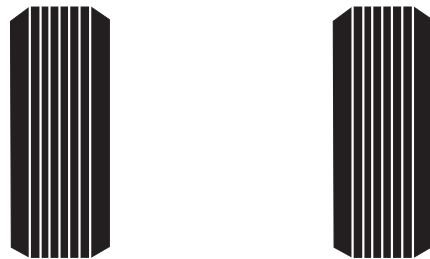
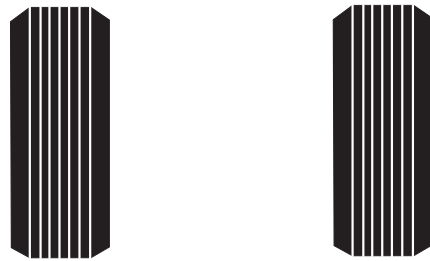
Left to right swap of the front tires.



Front to rear tire swap on one side only.



Front to rear tire swap on both sides.



will have an effect on the vehicle. So, you'll need to scout roads in your area that allow for safe and level test drives.

Once you've verified the direction and intensity of the pull, bring the car back to the shop to check the tire pressure. If it is not correct for any wheel, check for leaks (might as well look at the stems first), correct the tire pressure and test drive again. If the car now drives straight, you're done. If not, move to the next step.

If tire pressure was not off or did not correct the pull, swap the front tires left to right (Note: Some tires are directional, so be sure to return them to their original positions if this is the case.). Test-drive the car to see if the pull has changed direction, intensity, or both. If the pull is caused entirely by a wheel assembly, the direction will reverse and the intensity will stay the same. If the pull is caused by a combination of alignment and wheel placement, the pull may change direction and intensity, or intensity only. The pull may disappear entirely if the lateral force generated by the wheel and the lateral force generated by misalignment are equal and opposite. If the pull remains unchanged, the problem is likely caused entirely by misalignment of the wheels or other mechanical problem.



If there was a change in the pull after the left-to-right swap, swap one of the front tires to the rear and drive again, noting changes in the direction and intensity of the pull. If the pull improves, the tire that was just swapped to the rear probably is contributing to the pull.

If the pull remains the same, reverse the previous front-to-rear swap, then swap front to rear on the opposite side. Test drive again and note changes in the direction and intensity of the pull.

The problem with this method is you never get the whole picture. Although you should be able to eliminate the customer's complaint, eventually, you could spend hours swapping tires and never determine the particular effect of each one. If you're being paid by the hour and enjoy logic puzzles, you may have fun

with it. If not, it may make sense to sublet to a shop with a GSP9700.

Like new!

When a Nissan or Infiniti vehicle is new, it does not pull or drift. It's mechanically perfect. All alignment angles are in center spec, and the wheel assemblies have been tested and optimized for minimal vibration and pull. Returning your customer's vehicle to like-new performance is simply a matter of making sure the car is mechanically sound, performing a careful and accurate alignment, and testing the wheel assemblies. If you follow those steps, everyone will be happy with the results. |

Parts News

Nissan North America Launches National Wholesale Parts Rewards Loyalty Program

Nissan North America, Inc. (NNA) has launched a national wholesale parts loyalty program on behalf of its Nissan and Infiniti dealer networks. Designed to increase Original Equipment Manufacturer (OEM) collision and mechanical parts sales, the Rewards Loyalty program allows independent body shops and repair facilities to earn points that can be redeemed for more than 3,000 premiums selected from an online catalog. Advantage DataSystems Corporation has been selected to administer the program.

“Encouraging independent shop owners to purchase genuine OEM parts through their local Nissan and Infiniti dealers is a win-win-win,” said Ron Stukenberg, senior manager, Wholesale & Collision Parts, NNA. ***“Our dealers benefit from increased parts sales and a closer relationship with their local business community, our Nissan and Infiniti owners benefit through the assurance that approved factory parts have been used in their repairs, and the shop owners know they are getting quality parts plus an added reward.”***

Once Nissan and Infiniti dealers enroll in the Rewards Loyalty program, they select the wholesale mechanical program and collision repair network facilities they wish to include (participation is free for the shops). Each shop is then sent an I.D. number and instructions for online enrollment. Points are earned with purchases, with rewards available from just 20 points.

Advantage DataSystems Corporation was chosen by NNA after an extensive review.

The company's unique multi-brand loyalty platform allows shops to accumulate points from multiple OEMs and suppliers, thereby earning more meaningful rewards.

“We like the fact that shops can earn points quickly and from multiple sources, providing real value to the participants and encouraging them to sign up with our dealers,” added Stukenberg.


Participating shops receive a monthly Nissan/Infiniti Parts Reward e-mail statement with their points balance, points activity and participating dealer promotions.

“We are thrilled to be supporting Nissan North America’s marketing efforts to increase their OEM parts sales through its dealer network,” said Bob Kirstiuk, president, Advantage DataSystems. ***“We’re excited to have Nissan as the first vehicle manufacturer to take this progressive step and look forward to more manufacturers moving in this same direction.”***

About Advantage DataSystems Corporation

On behalf of over 2,000 dealer parts department and related services supplier clients, Advantage provides intelligent parts sales and marketing services directly to the automotive repair industry. Advantage corporate offices are located in Vancouver, BC, Canada and serve as operations center for its Canadian, US and UK businesses. www.AdvantageDS.com

Rubber Rules: **Safe Tire Repairs**



An improperly-repaired tire can lead to more than just customer inconvenience -- it can result in a sudden failure with life-threatening consequences, not only for the vehicle's occupants, but also for everyone sharing the road.



Automobile collisions are the leading cause of accidental death in the United States. This is why professionals auto repair technicians must be willing to spend the time to educate their customers about proper tire repair and insist that the repair be done correctly, even if it means losing a sale to the guy down the street.

In a 2006 National Highway Traffic Safety Administration (NHTSA) and Rubber Manufacturers Association (RMA) study of 14,000 scrap tires, 88 percent had been improperly repaired. Either a lack of knowledge of proper tire-repair techniques or consumer pressure for a less-expensive repair could be to blame for this high percentage. Regardless of the reason, the resolution lies with professional technicians like you. If technicians become aware of proper tire-repair guidelines and refuse to perform substandard repairs, the roads will be safer.

Can it be fixed?

If a tire is not in repairable condition, no attempt should be made to fix it. Simple enough, but what constitutes a repairable injury?

The first consideration is the location of the damage. Most technicians know injuries to the sidewall cannot be repaired; however, there often is confusion about how close to the edge a nail or screw can be before it becomes irreparable. According to the RMA, injuries on the shoulder or sidewall should not be repaired. The shoulder of a tire begins after the outermost vertical treads. If the nail enters in the tread area, but angles toward the shoulder, the tire should not be repaired.

The shape and size of the hole also must be considered. Punctures up to 1/4 inch can be repaired, but larger holes, gashes, star-shaped injuries, etc. relegate the carcass to the scrap pile.

If there are any pre-existing repairs, evaluate whether they were performed properly. If you find an improper repair, correct it, if possible, or scrap the tire. When in doubt, scrap it. No attempt should be made to fix tires that have less than 2/32 inch of tread depth remaining.

Consider the speed rating and application. According to some sources, a tire will drop one speed rating after a repair; however, not all tire manufacturers use the same rule of thumb. When in doubt, and especially when working with cars that may double as weekend race cars, contact the tire manufacturer before repairing a speed-rated tire.

Last but not least, always remove the tire from the rim and inspect the inside for damage. Look for rubber powder in the tire. If you can grab a handful of powder, the tire should go to the scrap pile. Even if you don't find the tell-tale rubber powder, use a bright flashlight and carefully probe with your fingers to find any deterioration on the inside the tire. Most often, this can be found in the sidewall area where the tire flexes when driven under low pressure.

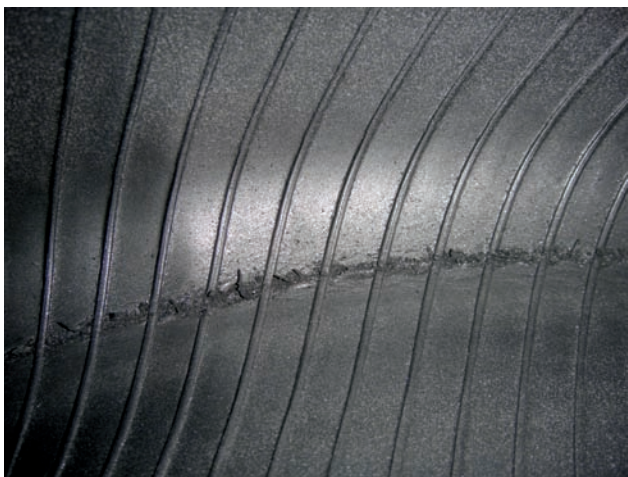
Improper methods

Aerosol or liquid sealant usually is installed by the customer, not a technician, but it deserves mention as the most improper of all repair methods. Any sealing compound is intended as a temporary emergency repair, but you may have found it while balancing tires, or noticed it oozing onto your tire machine when demounting. Sealants will ruin expensive TPMS sensors, so it is a good practice to warn customers of the costs associated with their use. Encourage maintenance and the use of the spare, instead.

The most common improper repair is a plug. They are quick, easy and inexpensive to install. They make the



Rubber powder is a sign of tire damage.



Check for damage on the inside of the sidewall. Under-inflation can cause excessive flex and damage in this area.

shop a profit and make customers happy. But, this is not a win-win situation. The biggest problem with plugs is that the tire is not removed from the rim for inspection. A tire that may have severe internal damage may hold air after the repair, but could disintegrate suddenly on the road. This could result in serious injuries for your customer and a legal battle for your shop.

An internal patch by itself is not a proper repair, either. The problem with internal patches is that they only seal the inside of the injury. Water can enter the hole from the outside and cause the belts to rust and disintegrate over time, leading to ply separation.

Do the right thing

To reiterate what we said above, if you're tempted to use a plug and get that distraught motorist out of your face ASAP, resist. Not only would you be taking on a big liability, but you won't be able to charge nearly as much for the job.

The only proper tire-repair methods are a two-piece plug-and-patch, or a one-piece plug-and-patch. If the hole is at an angle of 25 degrees or greater, a two-piece repair should be used. If the angle of the hole is less than 25 degrees, either a one-piece or two-piece repair can be used.



Mark the source of the leak before removing the tire from the rim. Some injuries can be hard to find again once the tire has been removed and there is no way to add air.

A good tire repair starts with a thorough inspection. Check that the tread depth is adequate and there are no sidewall bubbles or other tire defects. Find and mark the source of the leak using a dunk tank or leak-finder spray solution. If the damage looks repairable, remove the tire from the rim.



Mark the area to be repaired to avoid “losing” the injury.

Once the tire is off and you've confirmed that there is no sidewall damage or suspect prior repairs, mark the puncture with a large cross and circle the area you plan on patching. This step is necessary to avoid losing the hole after buffing.

It is difficult to get a patch to stick unless the surface is properly prepared. The inside of a tire is coated with a mold-release agent that serves a purpose similar to that of oil on a waffle iron: the mold-release agent is designed to keep rubber from sticking to the mold during manufacture. Since patch adhesion is important for successful repair, remove this anti-stick coating before trying to patch the tire.

Start by cleaning the area with pre-buff cleaner, an inner liner scraper, and a clean rag. An inner liner scraper is a hoe-like tool used to remove silicone from the liner. This will eliminate most of the slippery stuff, and prevent it from getting rubbed into the rubber during buffing.

Next, buff an area slightly larger than the size of the plug and patch. Buff just enough to create a velvet-like texture and remove protruding mold marks to create a flat surface. The inner liner should be about 1/16 inch thick, so be careful not to dig too deep. If the inner liner is breached, air may leak between the layers and cause sidewall bubbles.

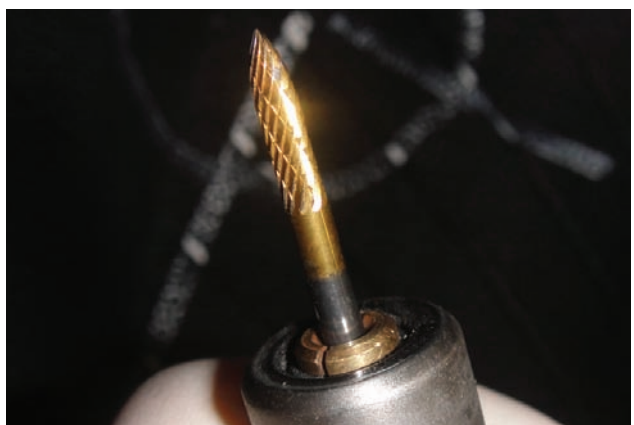
If you buff a little too much and expose the steel belts, the tire will need to be replaced, or sent to a full-service tire shop for a section repair. Prep the injury channel with a low-speed rotary file (under 1,200 rpm). Do a minimum of three passes, starting with a pass



Use a tire buffer for a velvet-like finish.



Use pre-buff cleaner and a liner scraper to remove mold release agent from the inner liner before buffing.



Use an appropriately-sized carbide bit to clean the channel.

Nissan & Infiniti Tire Repair

from the inside to outside, then outside to inside, then inside to outside. Follow the path of the original injury. When in doubt, use a dull awl or similar tool to find the correct angle before using the rotary file.

Once the channel and inner liner have been prepped, use an awl or similar tool to insert vulcanizing cement into the injury channel, then work a thin, even layer of cement into the buffed area of the inner liner. Avoid using too much cement. More is not better. Wipe off



Apply a thin coat of vulcanizing cement to the buffed area of the inner liner.



Use an awl to work vulcanizing cement into the channel.

the excess, leaving no standing puddles.

Read the instructions on the vulcanizing cement. It needs to dry to the point where it is tacky before the patch and plug are installed. The necessary time can vary depending on the weather. It will take less time on warm, dry days and more time on cold, humid days. About three to five minutes of drying time is average, but check the cement instead of relying only on time.

Once the cement is tacky, apply a thin coating of



Apply just a thin coat to avoid puddling.

vulcanizing cement to the plug-and-patch stem. Avoid using too much cement in this step because it can leave a puddle in the center of the patch that will prevent proper curing. A thin coat is all that is needed to aid in installation. Peel the protective cover from the patch just before installation. Avoid touching or otherwise contaminating the sealing surface.

Once the repair is complete, mount the tire with a new valve stem or tire-pressure monitoring system



Peel the protective cover from the patch before installing.



Insert the patch stem into the cleaned and cemented injury channel.



Once the stem is through, pull it from the tread side. This is easier than trying to push it through because the stem will tend to get thinner when it is pulled and thicker when pushed.



Cut the stem flush with the tread.



Put some work into stitching. This is an important step to ensure a good bond with the tire. Start from the center of the patch and work towards the outer edges. Continue to stitch until the clear plastic on top of the patch falls off easily.




Once the patch is stitched into place, repair sealer can offer some extra insurance against repair failure due to over-buffing.

reseal kit, then balance the wheel, and check for leaks, paying particular attention to the area that was repaired.

Your price is not unfair

A properly-repaired tire has value: It will be more reliable and safer to use. If you explain how proper repairs are performed and why they are important, you may be surprised at how many customers choose a proper repair; however, if the only information you give them is the price, they probably will opt for a plug. Yes, it takes time to educate your clientele, but you only need to do it once per customer. |



Get better performance from a cleaner engine with Nissan Fuel System Cleaner.

Lower quality gasolines are formulated with less effective and less expensive detergent additives. Over time, even occasional use of these gasolines can rob your engine of its power, performance and fuel economy.

To get the most performance, fuel economy - and fun - from every mile, and for optimum cleaning of fuel injectors, intake valves, and combustion chambers, use one (20 fl. oz.) bottle of Nissan System Cleaner every 3,000 miles when refueling.

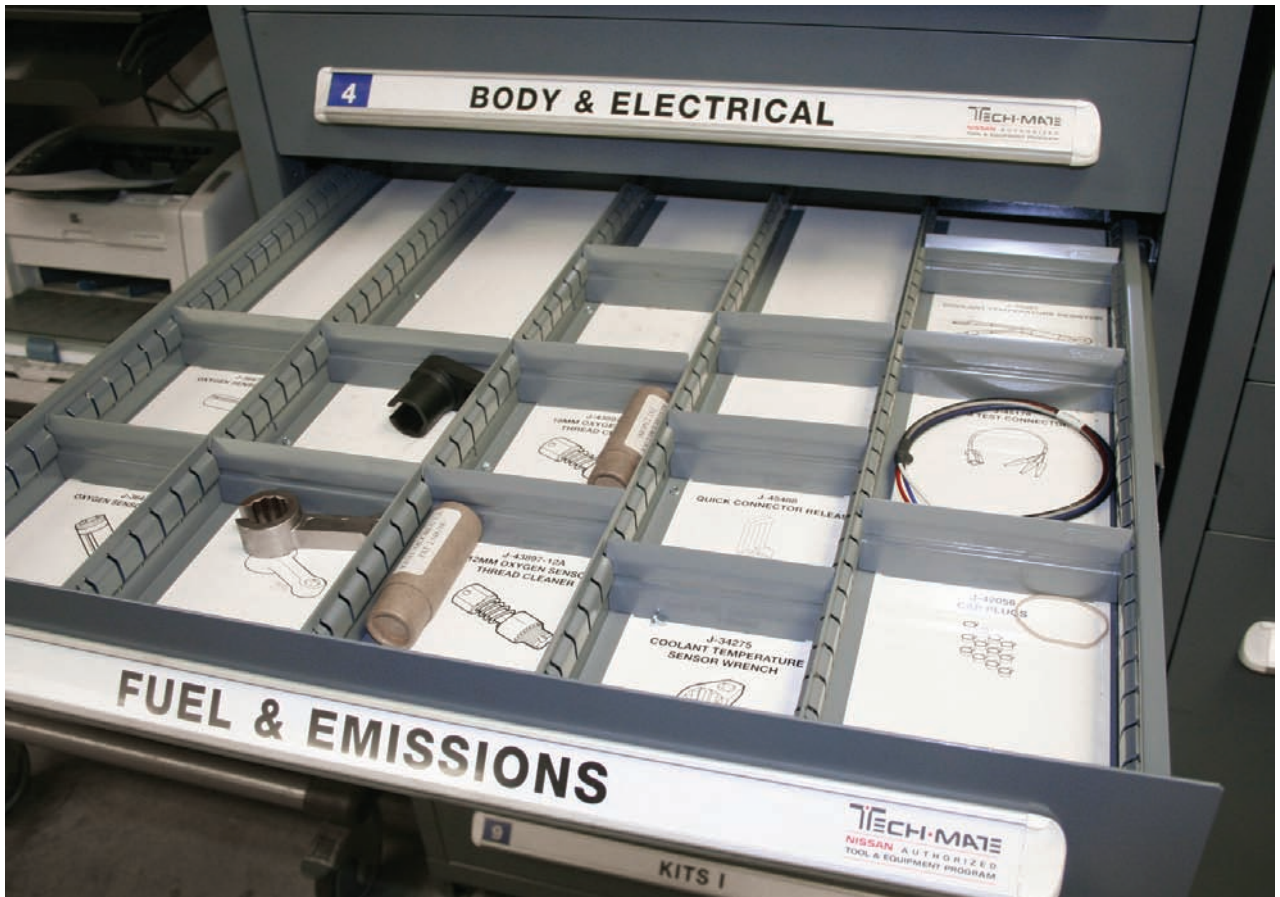
One tankful treatment can help:

- Clean fuel injectors, intake valves and combustion chambers
- Restore lost power and performance
- Maximize fuel economy*
- Lower harmful emissions

*Restores lost fuel economy by removing harmful fuel injector deposits



Nissan Special Service Tools



Every tool available to Nissan and Infiniti dealers is available to independent repair shops through Tech-Mate. You may find the price of these tools is far less than the cost of not having them.



Have you ever looked at a flat rate manual and thought to yourself that there's no way someone could do the job that quickly? Well, that may be true if you need to stop half way through the job to weld a butter knife to an old socket to create a poor approximation of the special tool pictured in the service manual. If, on the other hand, you have the proper tool on hand, you may find that not only does the job go a lot faster, but the quality of the repair is better as well – reducing the chance of a come back.

The debate of whether or not to purchase and use genuine OE tools and equipment has always been a popular topic among independent shop owners and technicians. While the return on investment for purchasing OE tools is dependent on how many times you will use them, the fact that you have the tools on hand can be marketed to your existing customer base, advertised to prospective customers and save money in the long run.

Market your Nissan Special Service Tools

If you have Nissan Special Service tools, you can market that fact in direct mailers, e-mail blasts, on your business stationery, invoices and write-up orders and the like, to let your customers know you are serious about servicing their vehicles properly and that you have purchased these tools so they can have peace of mind.

You can also reach out to prospective customers via newspaper and phone directory ads. And don't forget to include your Nissan Special Service Tools in signage and point-of-sale information. You may very well increase the amount of service on Nissan and Infiniti vehicles.

Time is money

Having the right tools on hand will save time and that directly relates to money – and that's profit. If you have to call to order a tool or wait until your local tool truck rep stops by, the job will be idle until the tool arrives. Efficiency, it's been said, is the best results in the least amount of time.

More profit

While a generic tool, perhaps from your local tool truck vendor, may be cheaper, the assurance that they will work is reduced, especially if that tool is designed to cover a broad range of vehicle brands. Generic tools give generic results.

Home made tools

This is a steep slope that could lead to disaster. You are directly responsible for the failure of a home made tool to perform the job. It's just not worth the risk! Besides, tool purchases are tax deductible so there is no good reason to be “undertooled.”

Nissan Special Service Tools you should consider

Here are a few Nissan Special Service tools to consider. These tools offer a rapid return on your investment when servicing Nissan and Infiniti vehicles.

Harness Service Kit

This handy assortment of replacement terminals and connectors with 6" wire pigtails (J-48817) is invaluable for repairing a worn or damaged electrical harness on Nissan and Infiniti vehicles. You'll never again have to “patch up” a harness or wait for the right part to arrive.

The assortment of electrical goodies includes wire strippers, a terminal release tool and two spread terminal gauges and more – all stored in marked and illustrated plastic boxes in a metal cabinet. When you use one part, just reorder a replacement from the Tech-Mate website and you'll have it on hand the next time you need one.

Note: When performing any electrical harness repairs or service, be sure to follow the latest Nissan electrical procedures guidelines, available online at <http://nissantechmate.com/PDF/HRK.PDF>

Rear Wheel Drive Manual Transmission Jack Adapter

This adapter (J-50023) allows the stable and safe removal of rounded case, rear wheel drive transmissions used in Nissan and Infiniti vehicles. It includes two nylon straps, retaining hooks and four universal adapter brackets to adapt to commercially-available transmission jacks.

Signal Tech II Diagnostic Tool

The Signal Tech II (J-50190) is far more than a basic TPMS signal activation tool. It can also be used to diagnose TPMS and RKE problems.

It will activate and display TPMS sensor IDs, display tire pressure reported by the sensors, read DTCs and register IDs. Plus, it will check intelligent key and

remote keyless entry key/fob relative signal strength; and confirm vehicle intelligent key antenna relative signal strength output.

The unique feature of this tool is that it can be used with a PC or laptop computer and comes with an updatable SD card. With the advent of federally-mandated TPMS standards for all vehicles, the Signal Tech II can become one of your most valuable tools.

7-Speed Transmission Fill Pump

This bottle, pump, hose and adapter unit (J-49829) is used to properly check and fill the automatic transmission fluid on 2008-2010 seven-speed Nissan trannies. These transmissions use only Matic S, so you wouldn't want to contaminate the unit with other fluids, which



The J-48817 Harness Service Kit contains all the parts you may need stored in marked boxes.



Activating TPMS sensors is quick and easy with the Signal Tech II.



The Rear Wheel Drive Manual Transmission Jack Adapter ensures a secure hold of rear wheel drive transmissions with rounded cases found on Nissan & Infiniti vehicles.

would render the tool useless for its specifically-designed purpose.

It's safe to use Matic S in most transmissions that call for Matic J, which it supersedes, but always check the specs for the vehicle you are servicing. Always fill with clean Matic S only.

Tubing Repair Kit

If you come across a vehicle with a section of heater coolant or A/C hard metal tubing that needs to be replaced, the Tubing Repair Kit (J-41425) may be the answer. This kit allows you to cut out the damaged section, using the included tubing cutter, and splice in a new section of tubing, using the tools and parts in the kit.

This method of tubing repair, rather than replacing the entire tube, is more convenient in cases where installing the entire part would require major



The Signal Tech II can also be used for checking RKE key fob signal strength.

Nissan Special Service Tools

disassembly of the vehicle's components. It's a real time-saver. Several sizes of tubing splice adapters and fitting tools are included.

On-Car Brake Lathe

While you might say, "We have our old bench lathe and it's been here forever." Right, and you're probably still having lateral run-out problems. Or, you're still spending a lot of time getting the rotors off and back on – and properly seated to properly align with the calipers.

In case you are not familiar with the advantages of on-car brake lathes: they mount right to the wheel hub

and resurface the rotor so it perfectly matches with the hub on which it's mounted. The rotor runs true and wears evenly, which increases pad and rotor life and eliminates brake shudder or pulsation. This unit (38-PFM90.5) also features a fully-automatic lateral run-out compensation system. You get a perfect brake job every time!

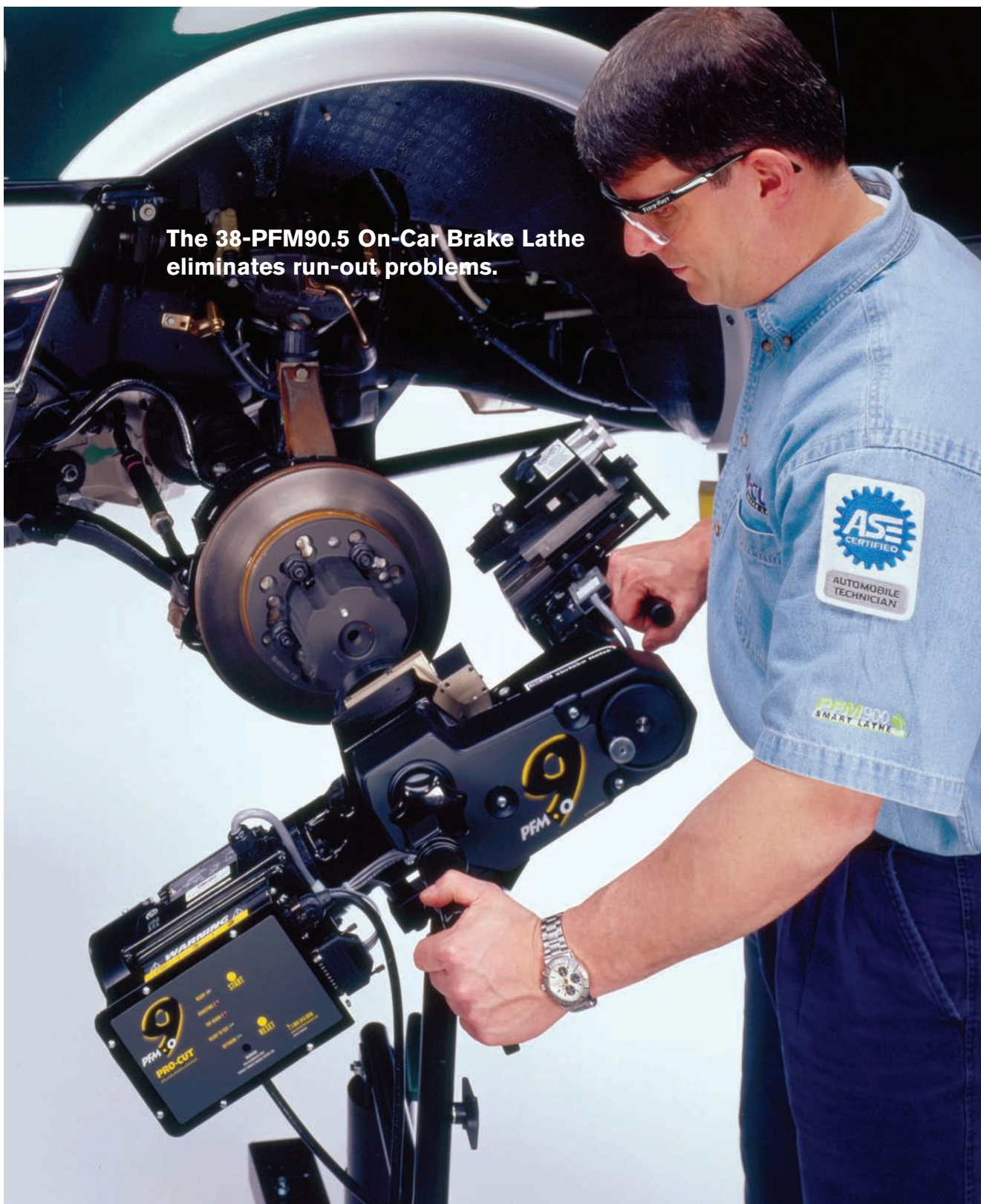
This is a tool that can be successfully marketed to the driving public as an advanced piece of equipment that ensures a top-quality, safe and dependable brake job. The intangible factor with an on-car brake lathe is not just the revenue it generates, but the absence of comebacks, which result in lost time and perhaps wasted parts.



The 7-Speed Transmission Fill Pump facilitates the fluid filling and level checking on 2008-2010 seven-speed Nissan transmissions.



The Tubing Repair Kit contains everything you need to repair a damaged section of tubing in a location that's hard to access.



The 38-PFM90.5 On-Car Brake Lathe eliminates run-out problems.

Nissan Special Service Tools

This is a great addition to any shop as it can be used for any vehicle – increasing its usage and raising the profit level. On-car brake lathes have been proven to give the best, most consistent results and save time. This one is the best of the best.

Get the best tools to do the best job

You can obtain Nissan Special Service Tools by logging onto the Tech-Mate website at www.nissantechmate.com or by calling 800-662-2001.

Nissan and Infiniti Service information is also at your fingertips at <http://www.nissan-techinfo.com> and <http://www.infiniti-techinfo.com>. On these sites, training is also available on a variety of subjects.

Remember, the best results come from using the genuine OE tools, service information and training. Nissan offers everything you need to correctly service Nissan and Infiniti vehicles. |



Everything needed to cut rotors on the vehicle is stored with the lathe.

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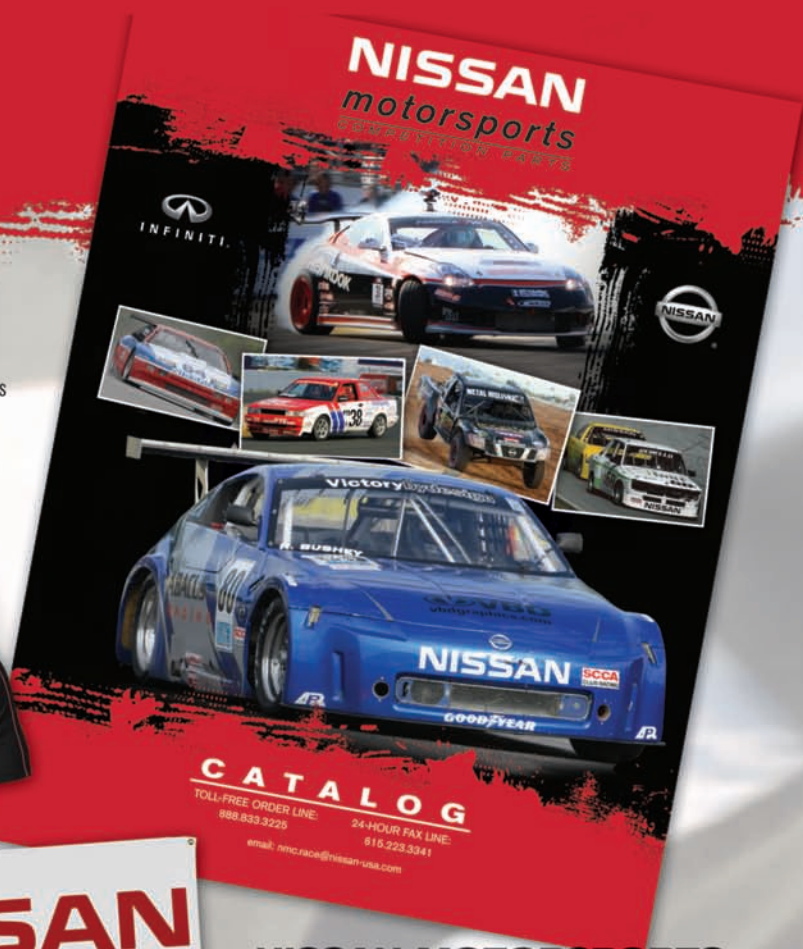
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