# **Body Basics** Premier Products



Who knows better which body finishing tools and products work best than the manufacturer of the vehicle? Nissan thoroughly researches and tests the products used in the manufacture of its Nissan and Infiniti vehicles. The same scrutiny goes into deciding what tools and products should be used in Nissan and Infiniti dealers for repairing and servicing vehicles. These same tools and products are available to independent aftermarket body service and collision facilities.

It makes sense to use these Nissan-approved tools and products to return the vehicle to its factory-new condition. The vehicle will not only look and perform the way it was designed, but the customer will be satisfied that the vehicle still maintains its original beauty and integrity.

# **Body Alignment Equipment**

The best end results begin with properly straightening and aligning the body. The body is the structure that holds the rest of the vehicle together. If it's not properly straightened, the components attached to it will not be correctly aligned. To achieve the best results, a high-quality, full-function body straightening and alignment system must be used. Nissan has thoroughly tested the best alignment systems available on the market today and mandates them for Nissan and Infiniti dealerships. These same systems are also available to independent aftermarket collision facilities. Nissan recommends the use of a modern threedimensional electronic measuring, and/or fixture system with an anchoring and straightening rack or bench to allow 360° pulling. Additionally, of course, the use of Nissan body dimension data for damage analysis and repair is the very best way to go.



In this installment, we'll look at the benefits of using Nissan-approved body alignment equipment and associated tools, bonding and mating products, surface prep, paint and finish products and tools.

#### **Frame Racks**

#### Among the Nissan-approved frame racks are:

• The BenchRack Series, the Mark 6 Series Bench Systems and the SPEED Plus Frame & Lift from the CAR-O-LINER Company.

The BenchRack Series offers several models and optional component packages to tailor the system to your own needs.

The Mark 6 Bench System is a movable system with an incorporated lift and improved lifting capacity.

The SPEED Plus Frame & Lift is ideal for light duty sheet metal pulling and pulls from both ends to keep your full-size alignment bench free for structural repair.

• The EZ Liner Express Portable Structural Repair System and the Impulse System from Chief Automotive Technologies.

The EZ Liner features five tons of power in a smaller, high-quality collision pulling system.

The Impulse System offers power and performance, versatility and options in one affordable package.

• The Power-Pro Series Collision Repair Rack from Blackhawk.

The Power-Pro SL series of racks feature an extended-height lifting capability for ergonomic working heights, an open front and rear for greater accessibility to the vehicle for repairs, a faster pinch-weld anchoring system with fewer bolts to secure it to the rack platform and 60% more chain tie-downs for efficient vehicle tie backs.

Each of these alignment systems has unique qualities and offers a range of purpose, sophistication, accessories and value. All are available through the Nissan Tech-Mate website at www.nissantechmate.com.



The SPEED Plus Frame & Lift from the CAR-O-LINER Company.



The Impulse System from Chief Automotive Technologies



The Power-Pro series repair rack from Blackhawk.



A good assortment of accessory pulling tools and devices helps make the work go quicker and easier.



Use accessory pulling tools to save time and get the proper measurements.



The Velocity measuring system from Chief Automotive Technologies.

Using accessory pulling tools and devices makes the work go quicker, smoother and more completely, resulting in the best alignment and body straightness. The components will fit better and the finished repair will look more professional. When selecting a rack system, make sure you can procure and use a variety of add-on tools for optimal results and quicker labor time for the highest profit margin and customer satisfaction.

# **Computer Measuring Systems**

Using a computerized measuring system is the quickest, most accurate way to effect body straightening and alignment. Many good systems are on the market. Nissan offers the Velocity system from Chief Automotive Technologies through the Nissan Tech-Mate website at www.nissantechmate.com. The Velocity system is highly sophisticated, yet simple to learn and operate. It features a fast and easy set-up with full-color one-page reports on the exact condition of the vehicle's frame before, during, and after repairs have been made, thus offering indisputable evidence of damage severity and quality repairs.

# **Bonding and Mating Products**

The importance of using the correct bonding and mating products for each procedure cannot be overemphasized. One "glue" does not work for all applications. Various adhesives are required for different applications. The best adhesive for metals, plastics or composites to components of the same or different type will ensure a strong bond while offering flexibility where needed. Be sure to research the best choice before making a mistake that could jeopardize the entire repair. Nissan has approved 3M bonding and mating materials for use on the company's vehicles. Other companies may offer bonding and mating products that may also meet Nissan approval.

# Surface Prep

Surface prep is a critical step in producing a smooth, durable and handsome repair. No amount of paint and polish is going to hide a poorly prepped surface. Always use the proper body fillers, surface prep, buffing and polishing products that meet the manufacturer's specifications. Nissan approves 3M surface prep tools and products. Other companies may offer surface prep tools and products that also meet Nissan approval.

# **Paint & Finish Products**

If the paint and finish process isn't correct, it may not matter how strong the repair is or whether or not the body alignment is accurate. The first thing the customer – and anyone else who looks at the vehicle – is going to see is the finish. Always use the best and correct products in the finish process.

Nissan has approved several manufacturers for refinishing materials, including the Dupont family of products:

- Dupont
- Spies Hecker
- Standox

There may be other companies who offer paint finish products that meet Nissan's specifications. Please contact your local Nissan and Infiniti dealer to procure these products or further information.

As pointed out in the "All About Waterborne Paint" article in the March 2011 issue of Nissan & Infiniti Tech News, waterborne paint is the new industry standard. The Environmental Protection Agency (EPA) mandated by federal law that all facilities should comply by switching over to waterborne paint and application equipment earlier this year. Please see that article for more information.



Preparing the surface properly will give the best results.



Dupont paints and finish products are approved for use on Nissan and Infiniti vehicles.

#### Resources

The best source for obtaining many of these Nissanapproved products is the Nissan Tech-mate website at www.nissantechmate.com. The Tech-Mate website can also be accessed through the Nissan and Infiniti Technical Information websites at www.nissan-techinfo.com and www.infiniti-techinfo.com, without having to purchase a subscription or logging on.

Using the Nissan and Infiniti technical information websites ensures getting the proper information to get the job done right, the first time and quickly.

Here's a list of Nissan-approved suppliers. Many more companies also offer excellent products for body and collision service:

#### **Aligning Systems**

Blackhawk Equipment www.blackhawkequipment.com CAR-O-LINER Company www.car-o-liner.com Chief Automotive Technologies Inc. www.chiefautomotive.com

# **Paint & Finish Products**

Dupont http://pc.dupont.com

Bonding & Mating Products and Surface Prep Products 3M http://3mcollision.com