

Police



**Protecting Those
Who Protect Us**

Raybestos®
The *best* in brakes®

HELPING YOU MAXIMIZE THE LIFE OF YOUR POLICE FLEET

The Raybestos® Police Brake System

Police work is about reaction. Officers don't calculate minutes and hours - they react in a blink of an eye. The last thing an officer needs to worry about in these situations is the brakes. Raybestos® provides police product that officers can trust. The engineering of the Raybestos® police-formulated line of brake pads, rotors and calipers delivers industry-leading performance. Created to reduce overall cost per mile while maintaining peak performance levels at high temperatures, we've spent years researching and testing this system so that, whether out on patrol or on a high-speed pursuit, police officers can react in an instant.

Raybestos® Police Brake System Products

Today's modern police brake systems do more than just stop vehicles. Safety features such as traction control, stability control and brake force distribution are electronically integrated. This technology demands application-specific brake components, such as Raybestos® Police Brake System products, that are designed to help keep vehicles operating at maximum performance.

Raybestos® Police products are manufactured to meet the demanding needs of law enforcement professionals, in both pursuit-rated and service vehicles.



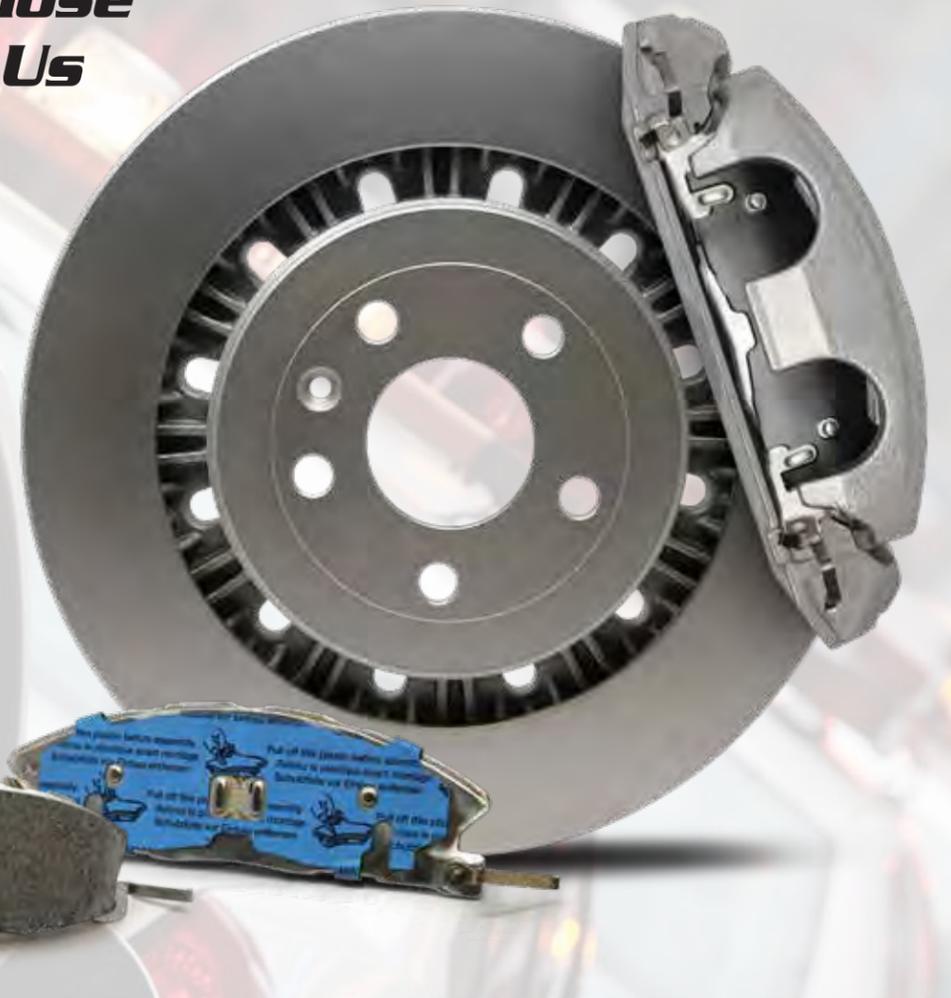
The Raybestos® Police line offers coverage for a wide range of Pursuit and Special Service vehicles.

Protecting Those Who Protect Us

Ensuring officer safety on the road while continuously exceeding performance expectations - no other brand of police brakes provides a higher level of professional confidence.



on all pursuit brake components protect and extend the life of your fleet.



RAYBESTOS® SPECIALTY POLICE DISC BRAKE PADS

- Pad compounds designed specifically for police applications
- Rubber-coated abutment clips for quiet braking
- Enhanced pad formulation reduces cost per mile
- 100% MRS zinc-plated mechanically attached backing plates provide exceptional corrosion and shear resistance
- New and improved double-sided adhesive shim provides improved noise damping and greater adhesion to the backing plate

RAYBESTOS® POLICE ROTORS

- Custom rotor design with unique police vane configurations to cool the brakes in pursuit situations
- Damped iron metallurgy reduces vibration and suppresses noise
- Specialized vane configuration increases air flow, cooling the rotor
- Specific weight for police use better dissipates heat
- Grey Fusion 4.0™ coating provides superior rust protection to the entire rotor against the harshest conditions

RAYBESTOS® POLICE LOADED CALIPERS

- High-temperature silicone boot helps prevent melting and overheating
- Silicone can withstand double the temperature of normal EPDM rubber for a sustained period of time
- Pre-loaded with Police formulated, application-specific friction
- Zinc-plated calipers with premium silicone boots provide outstanding performance in extreme situations and protect against the elements

LINE

POLICE LINE



POLICE LINE

POLICE

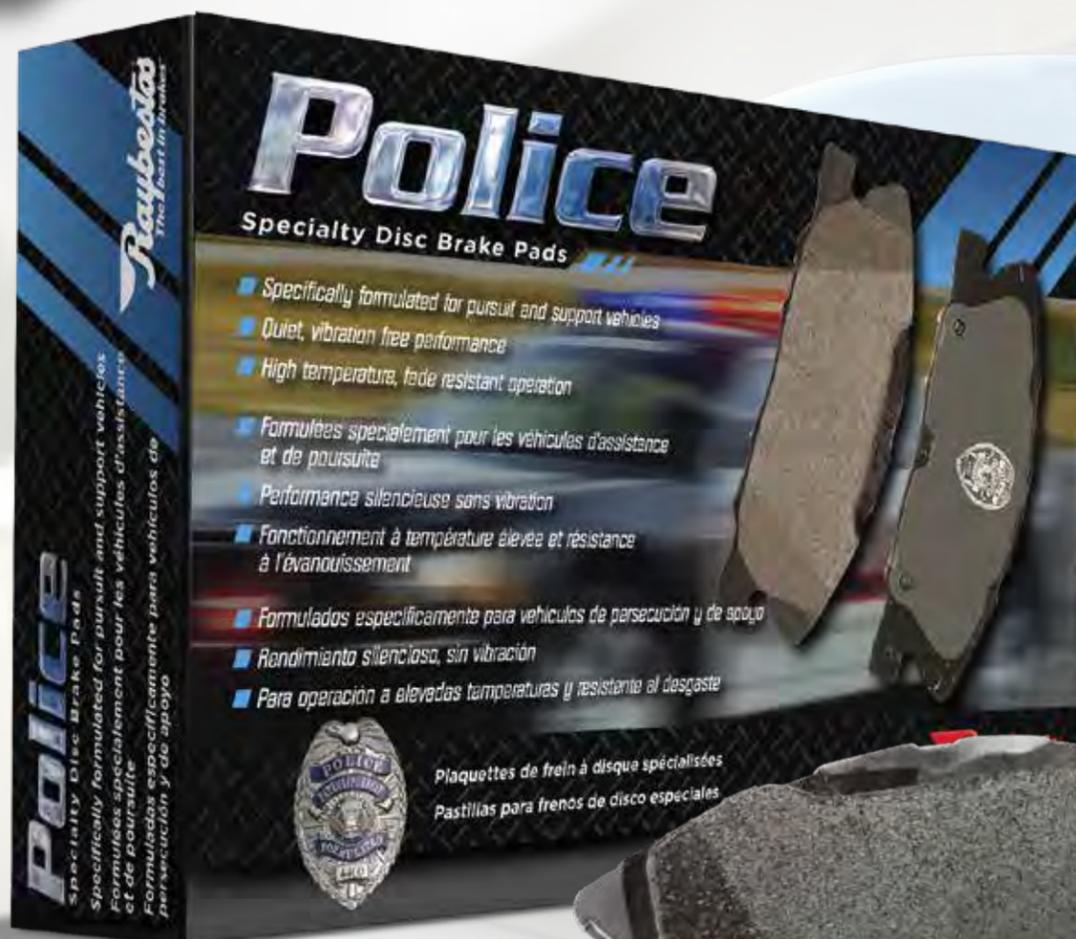


Specialty Police Disc Brake Pads

Raybestos® Specialty Police disc brake pads feature OE style shims, slots and chamfers that exceed OE designs.

Specific friction formulas for all vehicles classified as service vehicles

The Raybestos® Specialty Police brake pads are designed specifically for police patrol and pursuit applications. These police pads utilize specific pursuit-rated friction formulations for high-temperature, fade-resistant operation and stopping power during high-speed activity. This exceptional product is the brand of choice as specified by numerous police agencies throughout North America.



SHIMS

We select the best shim material and attachment method for each application to ensure the shims perform as intended, reducing noise, vibration and harshness for the life of the pads. Installed on all applications, they often improve on the OE design.

- A wide range of shim materials provides the best match for each application
- Orbital-riveted, spring-lock and attachment methods keep the shims in place for the service life of the friction
- New and improved double-sided adhesive shim for pursuit applications provides improved noise damping and greater adhesion to the backing plate

SLOTS

Allow for flexing of the friction material which can reduce noise and also allows for gas release. The slot style used on Raybestos® friction products follows or improves upon the OE design. Raybestos® friction application-specific slot configurations include:

- Single center slot
- Diagonal slot
- Dual slots
- Off-set slot



Developed Specifically for Police Applications.

Application-Specific

Semi-metallic and ceramic formulations
Industry-leading performance; minimal noise, wheel dusting and brake fade

Confident Pedal Feel from the First Stop

All pads are cured to eliminate break-in

Steel Plate Mechanical Attachment

Unmatched shear strength for severe duty and problem applications; helps prevent rust jacking on all pursuit applications

Shims, Slots and Chamfers

Comparable to OE fit, form, and function
Reduce noise, vibration and harshness; allow braking gases to escape like the original pad

Spring Lock Shims

Keep the shims in place for the service life of the friction

Nitrile-polymer Coated Hardware

Maximizes noise suppression and service life

Shaved Abutment Surfaces

Consistent flat surface at the points of contact between the brake pad and caliper assembly; tighter tolerances reduce noise

Integral Electronic Wear Sensor

Matched to OE design; included where applicable

Extensive Abutment Hardware Coverage

Critical to proper operation and quiet performance

CHAMFERS

Standard Chamfers

The edges of the chamfer at the friction face are parallel to each other

Compound Chamfers

Some applications require a compound chamfer. The type is angled on both the leading and trailing edge of the pad and is perpendicular to the rotor surface. Both chamfers are uniquely designed to assist in reducing brake vibration and overall noise

STEEL PLATES

Mechanical Attachment

- Unmatched shear strength for severe duty and problematic applications
- Up to ten times the shear strength versus traditional attachments
- Reduces potential flex and plate distortion of the pad. Helps avoid cracked friction material, and improves noise, vibration and harshness
- 100% MRS zinc-plated mechanically attached backing plates provide exceptional corrosion and shear resistance on all pursuit applications

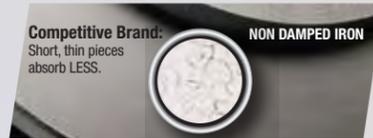
Shaved Abutment Surfaces

- Specified by OE manufacturers
- Consistent flat surface at the points of contact between the brake pad and caliper assembly
- Tighter tolerances promote free movement of the pads in the caliper assembly and reduce noise occurrences

Delivers Best in Class Performance and Durability.

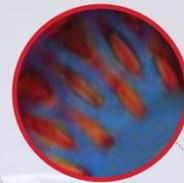
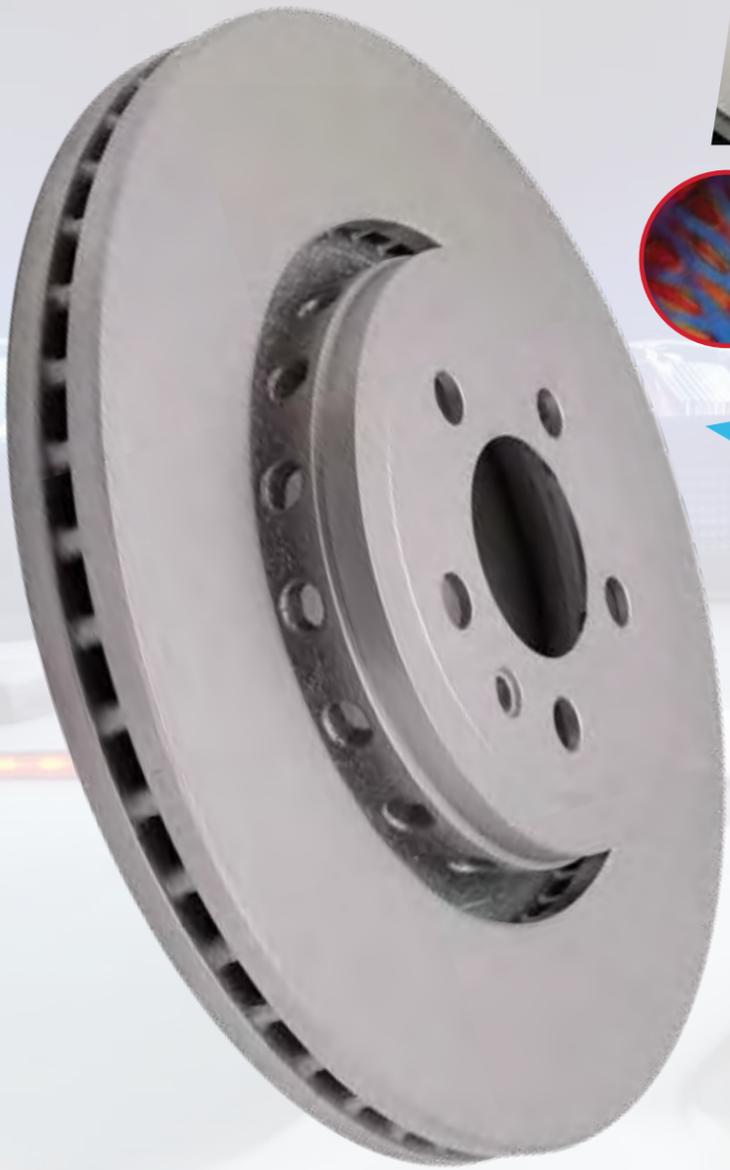
RAYBESTOS® Police Loaded Calipers

Law enforcement agencies demand performance, stealth and dependability in the patrol vehicles they operate on city streets. Raybestos® police rotors are engineered for superior performance and deliver unmatched stopping power, cooling properties and noise control that exceeds performance expectations.



Superior Metallurgy

Our dedicated engineers have improved upon the "one metallurgy fits all" theory. Raybestos® police rotors are cast from damped iron - an alloy that is metallurgically formulated to disrupt vibration and suppress noise, ensuring consistent and quiet arrivals every time.



Enhanced Vane Configuration

Specifically designed for increased air flow throughout the rotor, the rotor maintains lower temperatures with a vane configuration no other competitive rotor in the market can match. In hot police pursuit driving, they count on our specific vane configuration to enhance rotor cooling.

Optimized Weight

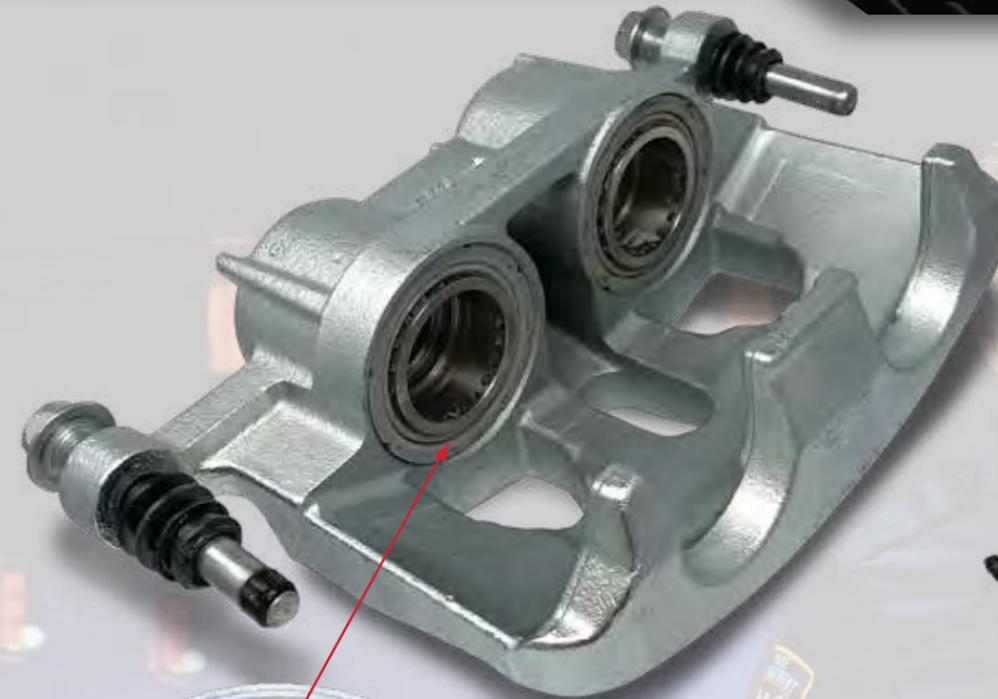
When police vehicles make sudden high-speed stops, weight distribution and temperature are inherently high on the front wheels. Recent fleet testing has revealed a replacement ratio

of 2:1 between front and rear rotors. Raybestos® police rotors used on both the front and the rear provide outstanding braking characteristics and performance whether on patrol or in pursuit.

RPT Rust Prevention Technology™

Subjected to environmental conditions such as heat, cold, ice, snow and rain, durability is a critical aspect of police rotors. This special polymer binding coating has armor-type shielding characteristics that provides significantly greater protection against the elements.

RAYBESTOS® Police Rotors



Raybestos® Police Loaded Calipers are remanufactured to satisfy the most critical braking situation, including high speed pursuits. Loaded with our premium Raybestos® police brake pads and high temperature silicone boots, our calipers deliver the reliable performance that officers can depend on day after day and stop after stop.



HIGH-TEMPERATURE SILICONE

The high-temperature silicone boot used in every Raybestos® Police caliper can withstand temperatures up to 600° F. Tested at 500° F for four hours.

RESULTS: Silicone boot remained flexible with no deterioration.

CONCLUSION: Sustained performance under pressure.



TRADITIONAL EPDM RUBBER TESTING

Tested at 500° F for four hours.

RESULTS: Melted EPDM rubber boot hardened and is ready to flake.

CONCLUSION: Replacement necessary.

Developed to save you time during the service process. Delivers everything you need for a safe, leak-free installation.

100% Pressure Tested

High pressure durability testing at extreme temperatures for reliable emergency braking during maneuvers

Materials Match OE

Vehicle specific designs, cast iron or aluminum depending on the OE specifications

Friction Comparable to OE

Pre-lubed and loaded with Police formulated friction

High-Temperature Silicone Components

Superior resistance to heat, corrosion and leakage; can withstand temperatures up to 600° F. Exceeds traditional EPDM rubber boot

Easy Installation

Fully assembled with new bleeder screws, copper sealing washers, hardware and mounting brackets

Smooth Operation

Critical areas are pre-lubricated with a high-temperature synthetic lubricant; new phenolic pistons (where OE is phenolic)

Testing - Dyno to Department

Raybestos® police friction is tested and validated to meet the highest police pursuit testing standards. Each set of brake pads must pass stringent safety and performance requirements along with achieving exceptional noise, vibration and harshness (NVH) control characteristics. High-pressure durability testing of calipers at extreme temperature ensures reliable emergency braking during maneuvers. Every formulation is audited monthly and subjected to additional quarterly testing to ensure that every Raybestos® brake pad performs consistently and as expected.

Meticulously researched and tested, the Raybestos® pursuit and special service vehicles brake systems lead the way with new formulations and products. Whether on patrol or in pursuit, our pads, rotors and calipers are designed to keep police vehicles operating safely and efficiently.

Global engineering expertise ensures that all testing requirements are consistently enforced, confirming the friction material is comparable to the fit, form and function of the original equipment counterpart.



Supplier's declaration of conformity*

In accordance to LINK's Police Laboratory Brake Evaluation Program with OE baseline

ISO/TS16949-2002 Accreditation

All Raybestos® friction manufacturing facilities have earned either ISO or TS16949-2002 accreditation. This quality validation and manufacturing superiority certification is required of every company who supplies an OE manufacturer.

3rd Party Testing Accreditation

- Link EVOC Dynamometer Performance Evaluation
- SAE J2784 Link CA Conformity Assessment
- SAE J2521 Noise Test
- SAE J2707 Wear Test

Systematic and Diagnostic Testing

Physical and Chemical Testing

Tests the strength and chemical properties of the materials used to ensure they can handle the stresses of a severe or sudden braking situation.

Testing includes:

- Gogan Hardness Test
- Shear Test
- Density Test
- Compressibility Machine

Dynamometer Testing

Tests for performance, noise and wear at various pressure, temperature and noise frequency levels; verifies the proper combination of front and rear braking for complete vehicle system.

On Car Performance Testing

Measures critical variables to evaluate performance, noise and wear. Anti-lock brake systems and individual brakes can be switched on and off to measure the effect on safety in the event of related system failures.

Fleet Testing

Several fleets around the country are used to measure real world performance in severe environments; new formulations have significant fleet testing before achieving production approval.



Contact your Raybestos® Brakes Sales Representative for more information.