



Advanced Fastening and Sealing Technologies

PRE-APPLIED  
**ND PATCH®**

ND Patch is a pre-applied process which fuses a nylon threadlocking coating to internal or external threads of fasteners making them self-locking and self-sealing (also known as prevailing torque generating type fasteners). ND Patch fasteners are dry to the touch, ready for immediate use and unlike reactive thread lockers, require no cure time after installation.



**PRE-APPLIED PROCESS INFORMATION**

**How It Works**

*During the ND Patch pre-applied process, fasteners are heated and sprayed with a custom nylon powder which adheres to the threads. When assembled with a mating part, the engineered plastic nylon patch is compressed. Due to the elastic memory it resists this compression and acts like a wedge, increasing the metal to metal contact 180° opposite the material. This mechanical force creates a strong, yet fully adjustable lock which will not weaken, even under extreme vibration.*

 **Reusable**

ND Patch pre-applied fasteners can be repeatedly installed and removed without damage to threads. ND Patch fasteners are particularly resistant to deformation, which makes it ideal for reuse.

 **Resists Chemicals**

The nylon applied in ND Patch processing will not dry, shrink, or lose resiliency when exposed to commercial solvents, alcohol, gasoline, oil, caustic soda, jet fuel, etc.

 **Resists Heat & Cold**

Meets and exceeds IFI Specifications 124 & 524 as well as Military specification MIL-DTL-18240F, Type P, for temperatures from -70°F (-56°C) to +250°F (121°C).

 **Retains Full Strength**

The ND Patch process involves no drilling or milling, so there is no loss of fastener strength or hardness and no troublesome burrs or chips.

 **Improved Sealing**

Nylon is typically applied 90° which helps prevent gas and fluid leakage along the thread helix. However sealing functionality can be increased by completely coating the fastener 360°.

 **Proven Performance**

ND Patch is one of the oldest and most popular pre-applied threadlocking processes on the market. When female fasteners are coated, they function as an excellent alternative to nylon insert lock nuts.

**CONTACT US**

ND Industries, Inc.  
Corporate Offices  
1000 North Crooks Road,  
Clawson, MI 48017

Phone: 248-288-0000  
Fax: 248-288-0022  
Toll Free: 800-471-5000  
Email: [info@ndindustries.com](mailto:info@ndindustries.com)  
[www.ndindustries.com](http://www.ndindustries.com)

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# ND PATCH®



## ND PATCH APPLICATIONS

Steering Columns, Engine Applications, Brakes, Rear-End, Transmissions, Areas of Vibration, Areas of Heat, Military Fasteners, Snowboard / Ski binding mounting screws.

## APPROVED SPECIFICATIONS

Meets or exceeds the performance requirements of the following specifications and/or standards:

- Chrysler: PF-4730, PF-5077, PF-5144, PF-5461, PF-5683, PF-6157, PF-6158
- Ford: ES-21002-S100, ES-21002-S100, ES-382101-S100, ES-N800688-S100, WA 970
- General Motors: GM 6189P
- Industrial: DIN 267 Part 28, IFI 100/107, IFI 124, IFI 155, IFI 524, IFI 555

## PROCESSING NOTES

- Nylon material normally positioned one to three threads back from the end of the fastener to assure ease of starting.
- The normal coating length of the nylon patch is four to six threads. Special location and coating length can be specified for specific applications.
- Indefinite on part life under ideal storage conditions [+40°F (+4°C) to +90°F (+32°C)], but re-certification must occur once a year.
- All fasteners should be from the same lot to insure consistent induction heating during the application process.

## PRE-APPLIED BENEFITS

**Saves Time:** Pre-Applied ND Patch fasteners can be automatically fed through standard feeding devices and require no cure time after installation.

**Saves Money:** Eliminates the need for costly lock washers, cotter pins, or castellated nuts. Moreover, ND Patch processing is less expensive than applying bottled threadlockers at the point of assembly.

**Quality Control:** Pre-Applied parts are coated to specification, insuring consistent performance unlike bottled products. ND Patch application area and torque can be customized to meet specific needs.

**Operator Friendly:** ND Patch reduces fatigue by greatly reduces the need for re-tightening. Is also non-toxic and safe to handle.

**Easy to use:** Works on a wide range of material finishes.

## PRE-APPLIED SERVICE

**Step 1 - Process Selection:** Our sales and R&D staff will help you find the right process to meet your performance specifications.

**Step 2 - Shipping:** Once a selection has been made, have your fasteners shipped to one of our worldwide processing centers.

**Step 3 - Processing:** Utilizing custom, high-speed equipment, we apply the necessary materials to your exact specification.

**Step 4 - Delivery:** Once processing is complete, parts are shipped back ready for distribution or assembly.