

Product Description

ND Patch[®] is pre-applied at ND Industries' Processing Centers producing a completely dry, ready-to-use, securely bonded inert self-locking fastener. Application of ND Patch is a highly engineered process creating precise placement of the polyamide based threadlocking compound. Generally, the placement of the ND Patch material is two to three threads from the end of the fastener to allow for trouble-free starting of the assembly.

ND Patch is completely adjustable, repositionable, and reusable up to 5 times.

ND Patch can be applied to internally and externally threaded fasteners of all configurations.

Once fused to the fastener, ND Patch is highly resistant to most commercially available solvents, alcohol, gasoline, oil caustic soda, jet fuel, diesel fuel, etc.

Applications:

ND Patch is used in a wide range of industries. Examples are included (but not limited) in the list below:

- Seat Belts
- Seat Track to Floor
- Steering Columns
- Seat Assemblies
- Door Assemblies
- Military and Defense
- Set Screws
- Large Appliances
- Off Road Equipment
- Farm Equipment
- Construction Equipment
- Electronics
- Aerospace
- Agricultural Equipment
- Many more

How ND Patch Works:

When assembled with a mating part, ND Patch is compressed. The compressed material provides locking in the thread due to the wedge that is formed.

This wedge creates a strong but fully adjustable lock within the bolted joint.

ND Patch Torque Specifications

Fastener Size	Max Install Torque (Nm)	First Removal Min (Nm)	Fifth Removal Min (Nm)
M4-0.7	1.2	0.26	0.16
M5-0.8	2.3	0.36	0.23
M6-1.0	3.0	0.45	0.30
M8-1.25	10	0.90	0.58
M10-1.5	14	1.8	1.1
M12-1.75	21	2.6	1.5
M14-2.0	30	3.6	2.3
M16-2.0	40	5.0	3.4
M20-2.5	60	8.0	5.5

The values in the table above are typical values. However, ND Patch can be customizable to a desired prevailing on torque.

Typical Properties

Primary Usage	Lock and Seal
Reusability	Up to 15 on-off cycles
Color	Yellow (other colors available upon request**)
Hardness	Shore D (ASTM D2240) 70-80 Durometer
Salt Spray	(ASTM B117) 1000+ Hours Resistant
Taber Abrasion	(ASTM D4060) 10-18 mg loss CS-10 wheel, 1000g load, 1000 cycles
Dielectric Strength	(ASTM D149) 800-1200 volts/mil @ 10.0 mils
K-Factor	(SAE/USCAR-11) typical value—0.16
Temperature Range	(MIL-DTL-18240F, Type P) -57°C to +121°C
Shelf-Life	Indefinite under ideal storage conditions (+4°C to +32°C and <50% relative humidity)

**QPL-18240 & MIL-DTL-18240F requires yellow nylon

Shelf life: Minimum 4 years when stored <30°C and < 65% relative humidity

Note:

The data are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.