



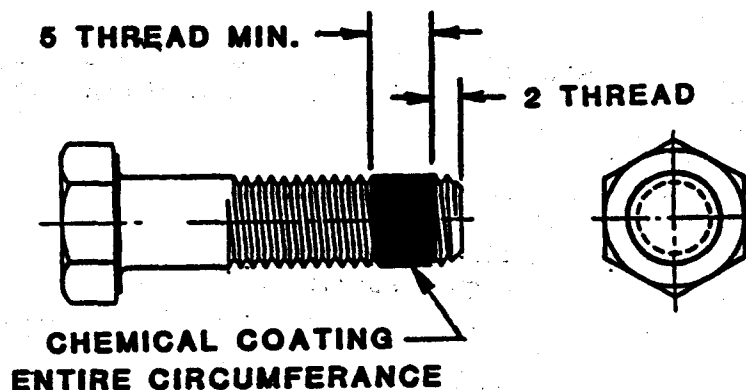
Engineering Non-Preferred Parts

Number:	B-018
Date issued:	DEC 1989

LOCKING TYPE HEXAGON HEAD BOLTS (SUPERSEDED)

A-DEC05

GENERAL SPECIFICATIONS



GENERAL: The threaded fasteners covered by this standard are locking type hexagon head bolts with a chemical coated patch bonded to a specified portion of the threads to provide a locking feature. These bolts are for applications where temperatures will not exceed 105°C (220°F).

BASIC BOLT: The bolt must comply in all respects with the General Specifications for Hexagon Head Bolts, Section B-001.

LOCKING TYPE FEATURE: The location and size of the chemical coating must comply with the illustration shown above. Bolts shall assemble a minimum of one full turn by hand into any mating internally threaded component that is accepted by a properly selected GO thread plug gage.

The locking type feature shall be free from visible porosity, voids and cracks, and shall be uniform in color without streaks, dark areas or other indicators of contamination or degradation. It shall be firmly attached to the bolt and shall not loosen under normal handling. It shall be chemically inert to the following fluids:

FLUID

CASE IH MATERIAL SPEC

Diesel Engine Lubricating Oil, Multi-Viscosity	MS 1120-1
Combination Hydraulic, Transmission Wet Brake Fluid	MS 1207
Transmission, Converter and Hydraulic Fluid (TCH)	MS 1210
Gear Oil, SAE 85W-140, EP	MS 1316
Anti-Freeze, Single Phase, Ethylene Glycol Base, Low Silicate	MS 1710

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LOCKING ABILITY PERFORMANCE REQUIREMENTS: Volume of chemical coating material must be sufficient to meet the following prevailing-torque requirements when tested in accordance with IFI-125 standard.

The prevailing torque of lock bolts occurring during the first installation shall not exceed the maximum prevailing on torque specified. In addition, the breakaway torque and maximum prevailing off torque occurring during the first removal shall not be less than the minimum torques specified.

Class 2A UNC and UNF Series Threads Lock Screws with Preapplied Chemical Coatings

Nominal Screw Size UNC	Prevailing On Torque In.Lbs. Max	Breakaway Torque In.Lbs. Min	Prevailing Off Torque In.Lbs. Min
1/4	15	12	9
5/16	24	24	12
3/8	48	60	36
7/16	60	96	48
1/2	72	140	90
9/16	96	192	120
5/8	120	252	150
3/4	180	324	200

Note: Values are based on nut engagement in chemical area for a distance of one nominal screw diameter.

SOURCE APPROVAL: Source approval by Materials Engineering is required for this coating.

Approved Coating: 3M Blue Scotch Grip #2353