



SURFACE VEHICLE RECOMMENDED PRACTICE

J174M™

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Cancelled 2017-01

Superseding J174M APR2013

Torque-Tension Test Procedure for Steel Threaded Fasteners - Metric Series

RATIONALE

To advance the goal of harmonization, SAE J174M is cancelled and superseded by ISO 16047, Fasteners – Torque/clamp force testing.

CANCELLATION NOTICE

This Technical Report has been declared “CANCELLED” as of January 2017 and has been superseded by ISO 16047. By the action, this document will remain listed in the respective index, if applicable. Cancelled Technical Reports are available from SAE.

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FOREWORD

On some applications of threaded fasteners, it is desirable to control the amount of developed tension when a specific range of torque has been applied or the torque required to develop a specific range of tension. Accurate torque-tension relationships can be achieved only by uniquely defining and controlling the many related test parameters, such as: materials, their hardness and finish coatings, mating part interference fit, lubrication between both mated parts, the presence of foreign materials as rust, dust, and burrs, temperature and humidity, and whether the tightening is by hand or power tool turn nut or bolt wrenching.

1. SCOPE

This test procedure is intended to provide a quality control method for checking torque-tension characteristics of non-prevailing torque-type threaded steel fasteners 6 through 24 mm nominal diameters. Realistically, torque-tension relationships for specific individual fastener assembly joints will vary due to the different joint parameters. Tests using actual joint components will be required to determine accurate torque-tension values for those conditions. For the inch series version, see SAE J174.