

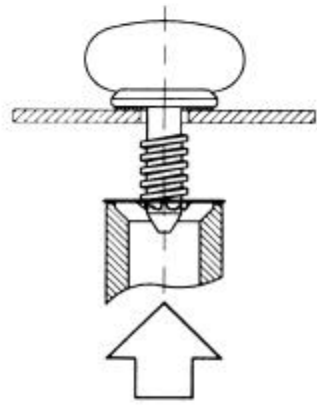
DRAWING NUMBER TD-09-2-J  
 SCALE  
 CHKD ACZ  
 DRAWN CLB  
 DATE 7-6-89

DRAWING NUMBER TD-09-2-J

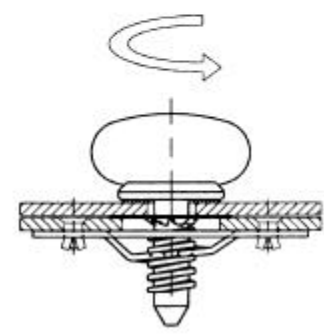
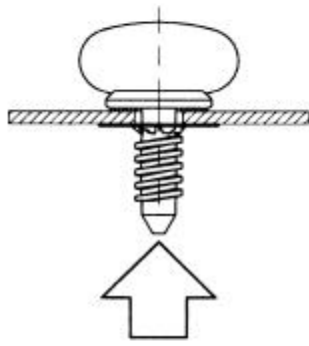
GENERAL PERFORMANCE GUIDELINES

The information shown on this page was determined under one set of test conditions. Since conditions vary with each application, it is supplied as a general guide only. No safety factor has been applied. We recommend testing the product under actual application conditions to determine its suitability for the intended use.

INSTALLATION FORCE



RETENTION FORCE



BACK OUT TORQUE

NOTE: Retainer shown is P/N 09-6-1.

PART NUMBER (DESCRIPTION)	AVERAGE INSTALLATION FORCE (N/lb) <sup>(A)</sup>	AVERAGE RETENTION FORCE (N/lb) <sup>(B)</sup>	AVERAGE BACK OUT TORQUE (N-m/in-lb) <sup>(C)</sup>
09-6-1 (S/S, PUSH-ON)	45.8/10.3	1045/235 <sup>(1)</sup>	0.56/5.0 <sup>(4)</sup>
09-49-101-12 (ALUM, THREAD-ON AND FLATTEN)	48.9/11.0	930/209 <sup>(2)</sup>	0.34/3.0 <sup>(4)</sup>
09-49-102-42 (NYLON, PUSH-ON)	14.2/3.2	311/70 <sup>(3)</sup>	0.17/1.5 <sup>(4)</sup>

<sup>(A)</sup> Installation force is the force required to:  
 1. push retainer P/N 09-6-1 or P/N 09-49-102-42 over the screw threads with installation tool No. 12-0-20980-11 as shown.  
 2. strike tool No. 09-50-101-11 in order to flatten retainer P/N 09-49-101-12.

<sup>(B)</sup> Retention force is the force required to push the screw out of the retainer as shown.

<sup>(C)</sup> Back out torque is the torque required to unthread the screw through the retainer when outer and inner panels are held adjacent to one another and a standard receptacle is used as shown.

FAILURE MODES:

- <sup>(1)</sup> Retainer teeth bent and broke off.
- <sup>(2)</sup> Retainer bent and cracked.
- <sup>(3)</sup> Retainer bent and ripped.
- <sup>(4)</sup> Retainer bent.

No. 09 RETAINERS southco®