

PROPRIETARY ITEM - EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS PATENT AND OTHERWISE ARE RESERVED BY SOUTHCO, INC.

DESCRIPTION

No. 56 SPRING LOADED PLUNGER ASSEMBLY PRESS-IN STYLE

DATE 29APR1L2003

DRAWN CHKD SCALE

DRAWING NUMBER

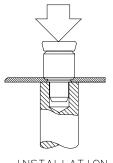
LL NTS TD-56-6X-J

THIRD ANGLE PROJECTION

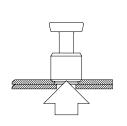
PAPER SIZE

SOUTHCO PERFORMANCE GUIDELINES

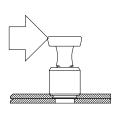
THE PERFORMANCE GUIDELINES SHOWN ON THIS PAGE ARE SUPPLIED AS A GENERAL GUIDE ONLY, AS CONDITIONS VARY WITH EACH APPLICATION AND METHOD OF INSTALLATION. STRENGTH DATA GIVEN IS FOR FAILURE OF THE PRODUCT OR FOR SUFFICIENT DEFORMATION TO MAKE PRODUCT INOPERABLE. NO SAFETY FACTOR HAS BEEN APPLIED IT IS RECOMMENDED THAT THE USER REQUEST A PRODUCT SAMPLE FOR TESTING TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURPOSE INTENDED AND USER'S PARTICULAR APPLICATION.



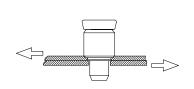




PUSH-OUT



SIDE LOAD (Assembly shown: 56-61-15)



SHEAR

ASSEMBLY PART NUMBERS	PANEL MATERIAL	OPTIMUM Installation force		MINIMUM PUSH-OUT FORCE HELD			MINIMUM SIDE FORCE HELD			MINIMUM ULTIMATE SHEAR LOAD		
		N	lbf.	N	lbf.	Failure Mode	Ν	lbf.	Failure Mode	N	lbf.	Failure Mode
56-6X-XX	(1)	6,700	1,506	1,500	337	А	530	119	А	N/A	N/A	N/A
	(2)	13,400	3,012	1,780	400	А	290	65	А	N/A	N/A	N/A
	(3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5,600	1,258	В

Salt Spray Test Data: Parts passed 500 hours of salt spray testing exposure per ASTM B-117.

No visual rust observed; no loss of function.

- 1. Assemblies were installed and tested in 1.6mm (.060 inches) thick 5052-H32 Aluminum panels.
- 2. Assemblies were installed and tested in 1.6mm (.060 inches) thick ASTM A109 TEMPER 2 Steel panels (55-70 HRB).
- 3. Assemblies were installed and tested in 1.7mm (.065 inches) thick hardened steel panels (61 RB). FAILURE MODES OBSERVED IN TESTING:
- A. Ferrule push out of panel or the ferrule flange broke away from the main part of the ferrule.
- B. Excessive panel deformation and stud broken.

RFF: 56-40