

PRODUCT: "Power-Grip" Self Cleaning Hot Line Connector SCH-636 DATE: May 25, 1993

TYPE TEST: Pull-out Mechanical Test

TEST FACILITY: Utilco

REVIEWED BY: [Signature] 5/25/93

TESTED BY: [Signature] 5-25-93

SUPERVISOR: [Signature] 5/25/93

PURPOSE:

The main connection of the "Power-Grip" Self Cleaning Hot Line Connector is attached to a continuous conductor and is unlikely to pull off of the conductor. The tap connection is subject to direct pull, so this side was tested at various torque levels to see how much pull was required to pull the conductor out of the connector.

DEVICE:

Utilco "Power-Grip" Self Cleaning Hot Line Connector SCH-636 is made from extruded 6061-T6 aluminum and is plated with Safety-Film 616 Protector Film. The eyebolt is manufactured from 6061-T6 aluminum and is gold anodized. The hexagon tap bolt is manufactured from 6262-T9 aluminum and is also gold anodized.

PROCEDURE:

636 MCM all aluminum "Orchid" bare conductor was used in this test. The tap hexagon bolt was torqued to four different torques: 240, 280, 300, and 350 inch pounds. At each torque the weight necessary to move the conductor in the tap connection was measured.

RESULTS:

See chart below:

	TORQUE IN INCH-POUNDS			
	240	280	300	350
Sample 1	1715	2450	2585	2875
Sample 2	1875	2525	2965	3115
Sample 3	1200	1635	2005	2200
Sample 4	1500	2335	2023	2975
Pull Out Weight In Pounds				

Now Tension Connector Pull out should be 5% of breaking strength of conductor.

Orchid: $11,400 \times .05 = 570 \text{ lbs}$

PRODUCT: "Power-Grip" Self Cleaning Hot Line Connector SCH-397 DATE: May 25, 1993

TYPE TEST: Pull-out Mechanical Test

TEST FACILITY: Utilco REVIEWED BY: *[Signature]* 5/25/93

TESTED BY: *[Signature]* 5-25-93 SUPERVISOR: *[Signature]* 5/25/93

PURPOSE:

The main connection of the "Power-Grip" Self Cleaning Hot Line Connector is attached to a continuous conductor and is unlikely to pull off of the conductor. The tap connection is subject to direct pull, so this side was tested at various torque levels to see how much pull was required to pull the conductor out of the connector.

DEVICE:

Utilco "Power-Grip" Self Cleaning Hot Line Connector SCH-397 is made from extruded 6061-T6 aluminum and is plated with Safety-Film 616 Protector Film. The eyebolt is manufactured from 6061-T6 aluminum and is gold anodized. The hexagon tap bolt is manufactured from 6262-T9 aluminum and is also gold anodized.

PROCEDURE:

397.5 MCM all aluminum "CANNA" bare conductor was used in this test. The tap hexagon bolt was torqued to four different torques: 240, 280, 300, and 350 inch-pounds. At each torque the weight necessary to move the conductor in the tap connection was measured.

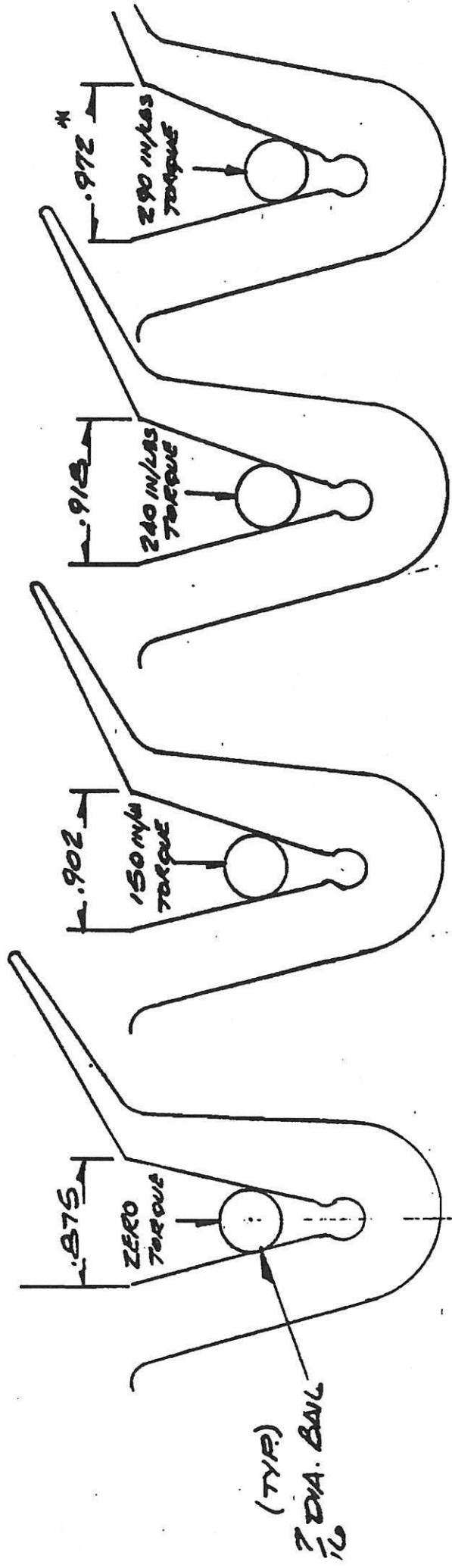
RESULTS:

See chart below:

	TORQUE IN INCH-POUNDS			
	240	280	300	350
Sample 1	2975	2825	3765	3765
Sample 2	2805	2850	3575	2760
Sample 3	2730	2955	3355	3420
Sample 4	2975	2815	3870	3335
Pull Out Weight In Pounds				

CANNA: $7110 \times .05 = 356 \text{ Lbs}$

SCH 397 (17964) TORQUE RESULTS



(TYP)
7/16 DIA. BAIL

FREE - NO TORQUE
(REF)
NOTE #1, 7/16 DIA EYE BOLT
HAND TIGHT + 2.5 TURN =
205

100% RETURN
TO .875

100% RETURN
TO .875

100% RETURN
TO .875

99% RETURN
TO .899

NOTE #2. 400 IN/LBS TORQUE ON 7/16 DIA. BAIL
 RESULTED IN 1.071 (OR .196) PERMANENT SET
 IN BODY PROFILE "V" GROOVE. NO VISUAL
 STRESS LINES @ WEAR ABOVE @ 400 IN/LBS TORQUE

BOB WALEY

