

## User Instructions

### Female Joint Kit for Stationary Transducers

MAN 874 : Issue 9

Crane Electronics Ltd

#### UTA JOINT KITS FOR STATIONARY TORQUE TRANSDUCERS

Manufacturer: **Crane Electronics Limited**  
 Address: **Watling Drive, Sketchley Meadows**  
**Hinckley, Leicestershire, LE10 3EY,**  
**United Kingdom**

Tel: **+44 (0)1455 251488**



Declares that this UTA Female Joint Kit for Stationary Transducers has been assessed and complies with the requirements of the relevant CE Directives.

#### SUMMARY

This joint kit is designed as a convenient, repeatable, variable stiffness joint for assessing the performance of torque tools in a practical way. It can be used with the Crane Electronics range of female square drive stationary (static) transducers.

Each kit may be assembled in different ways to vary the stiffness of the joint. Reference should be made to TABLE 1 to select from the available options. Care should be taken to ensure that as well as choosing the most suitable stiffness, the maximum torque for the joint is not exceeded. Please note that the joint kit is not designed to provide an exact joint stiffness.

Torque tools are influenced by joint hardness. For a more accurate assessment of how your torque tool will perform in production use, Crane recommends the use of an in line transducer (such as CheckStar) to take joint variability into account. See back page for dimensions.

#### IMPORTANT

Grease the threads before fitting the nut.

Ensure that the threads are kept lubricated.

NOTE: For greasing the threads, a Moly based, high temperature, high impact K48 type grease should be used, and a suitable solvent for cleaning - i.e. a trichoethylene based solvent or substitute. (CEL recommends an industrial rapid drying spray cleaner.) Threads should be cleaned and greased every 50-100 cycles. Eventually the bolt and nut threads will wear and these will require replacement. Use only official CEL replacement parts.

#### NOTICE

ALL RIGHTS RESERVED. Reproduction of any part of this manual in any form whatsoever, without the prior permission in writing from Crane Electronics Ltd is forbidden.

Copyright © 2022 by Crane Electronics Ltd. The contents of this manual are subject to change without prior notice.

TABLE 1

NOMINAL JOINT STIFFNESS AVAILABLE						
	JOINT KIT	MAX TORQUE		1st Stack	2nd Stack	SPACER(S) mm
		Nm	lbin			
SOFT ↓ HARD	1/4"	5.6	50	3	3	17.1
		13.6	120	6	6	11.5
		21.5	190	12	12	-
		28.25	250	24	-	-
		28.25	250	-	-	11.5+12.3
SOFT ↓ HARD	3/8"		ft lb			
		67.8	50	5	5	15.5
		120	90	9	9	-
		135	100	16	-	5
		135	100	-	-	5+18.6+15.5
SOFT ↓ HARD	1/2"	135.6	100	5	5	19.5
		220	160	9	9	-
		271	200	9	-	23.3
		271	200	-	-	3.9+23.3+19.5
SOFT ↓ HARD	3/4"	460	340	5	5	39.5
		830	610	10	10	-
		775	570	10	-	41.3
		1017	750	-	-	39.2+41.3
SOFT ↓ HARD	1"	847	625	3	3	24
		1600	1180	5	5	-
		1400	1030	9	-	8
		1695	1250	-	-	8+24+32

**PACKING LIST**

Each Joint Kit contains the following Items;

- 1X THRUST PLATE
- 1X SPACER SET
- DISC SPRING WASHERS (See table below for quantity)
- 1X HARD WASHER
- 1X GUIDE BOLT
- 1 x NUT
- 1X SHROUD

Please check these items are all present. Notify Crane Electronics Ltd (CEL) immediately of any shortages. Use the diagrams overleaf to identify the arrangement of these items.

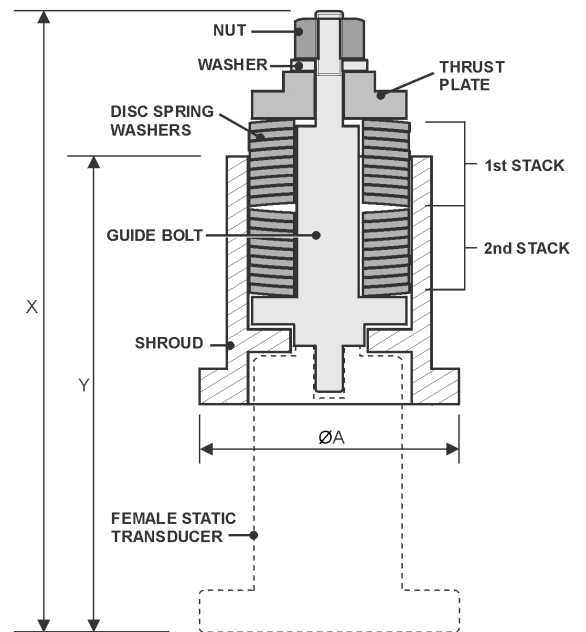
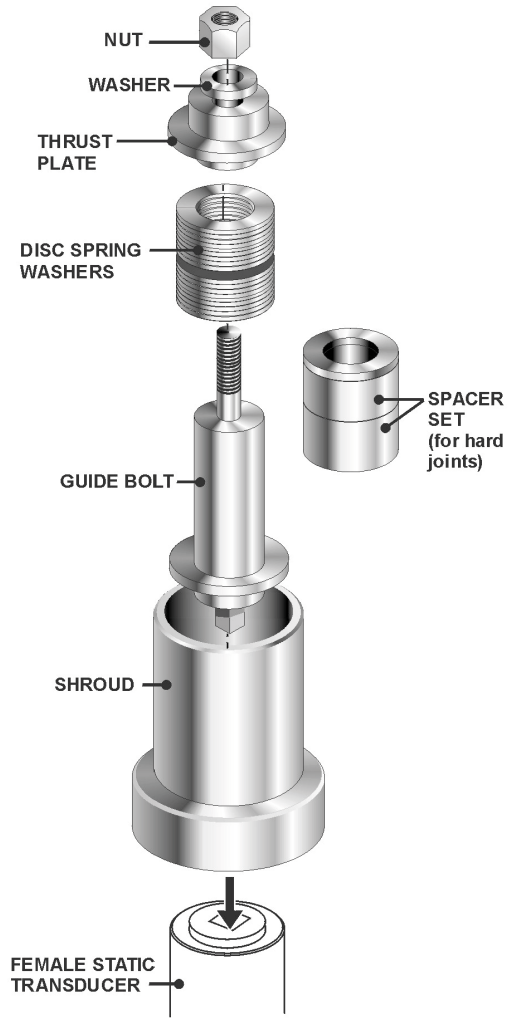
JOINT KIT PART NUMBERS			
Part No.	Size	Description	No. of Disc Spring Washers
JK-874-06CR-28-0	1/4"	FEMALE JOINT KIT	24
JK-874-07CR-135-0	3/8"	FEMALE JOINT KIT	18
JK-874-08CR-271-0	1/2"	FEMALE JOINT KIT	18
JK-874-09CR-1017-0	3/4"	FEMALE JOINT KIT	20
JK-874-10CR-1695-0	1"	FEMALE JOINT KIT	10

BOLT KIT PART NUMBERS (For female joint kits and table top joint kits)		
Part No.	Size	Description
JK-874-13CR-0-0	1/4"	FEMALE BOLT KIT
JK-874-14CR-0-0	3/8"	FEMALE BOLT KIT
JK-874-15CR-0-0	1/2"	FEMALE BOLT KIT
JK-874-16CR-0-0	3/4"	FEMALE BOLT KIT
JK-874-17CR-0-0	1"	FEMALE BOLT KIT

SPARES PARTS LIST					
SIZE	THRUST PLATE	SPACER SET	DISC SPRING WASHERS	HARD WASHER	SHROUD
1/4"	1401398	1401399	1401416 (x24)	1401505	1403808
3/8"	1401402	1401403	1401417 (x18)	1401506	1403809
1/2"	1401406	1401407	1401418 (x18)	1401507	1403810
3/4"	1401410	1401411	1400407 (x20)	1401508	1403811
1"	1401414	1401415	1401419 (x10)	1401509	1403812

**DIMENSIONS**

JOINT KIT	ØA	X	Y	NUT	BOLT A/F	PITCH Ømm
1/4"	100	137	119	13	M8	1.25
3/8"	100	166	143	19	M12	1.75
1/2"	100	197	165	24	M16	2.00
3/4"	150	268	229	36	M24	3.00
1"	150	281	230	46	M30	3.50



**Locations**

- UK - Watling Drive, Hinckley, Leicestershire LE10 3EY
- USA - 1260 11th Street West, Milan, Illinois 61264, USA
- Germany - Im Rank 5, 73655 Plüderhausen, Germany

