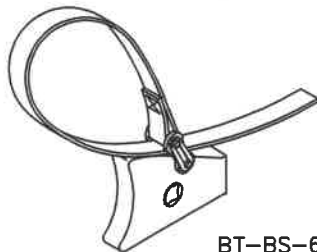


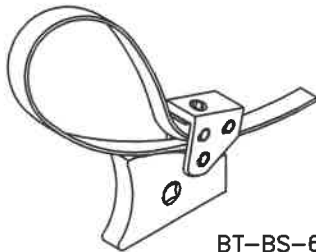
# HANDLE-LESS STRAP WRENCHES

**DMC** DANIELS  
MANUFACTURING  
CORPORATION  
**DATASHEET**

SEE PAGE 7 FOR IMPORTANT INFORMATION CONCERNING LIMITED WARRANTY, AND LIMITATION OF LIABILITY.



BT-BS-6xxxT



BT-BS-6xxxSST

## Operating Instructions

Please read before use

From 1/4" to 4"  
gripping diameter

From 1/2" to 1" width strap

3/8" drive hole in wrench  
body

**Exceptional Strap Wrenches for the  
assembly and disassembly of circular  
threaded parts and fittings.**

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BT-BS-6xxxT and BT-BS-6xxxST

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Daniels Manufacturing Corporation has an exceptional assortment of Handle-Less Strap Wrenches for the assembly and disassembly of threaded circular electrical connectors and fittings that cannot be tightened or loosened using conventional tooling without damage to the part. Daniels Handle-Less Strap Wrenches are safe and effective for tough and delicate jobs without scratching or marring of the part surface.

Daniels Handle-Less Strap Wrenches use a variety of strap widths and lengths to suit all common connector applications. The straps are made of high tensile strength materials which also have superior gripping qualities.

Daniels Handle-Less Strap Wrenches are equipped with a 3/8" drive hole in the wrench body making available the use of the Daniels Torque Wrench for more controlled, accurate tightening.

The uncommon wrench design allows it to fit in between tight shouldered areas easily for efficient assembly and disassembly.

The many features of the Daniels Strap Wrench make it an essential tool on the production line and in field service.

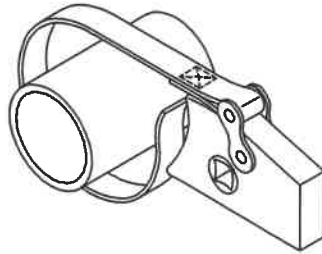
DANIELS MANUFACTURING CORP., 526 THORPE ROAD, ORLANDO, FLORIDA 32824 USA  
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## Operating Instructions for BT-BS-6xxxT

### Install and Loop Strap

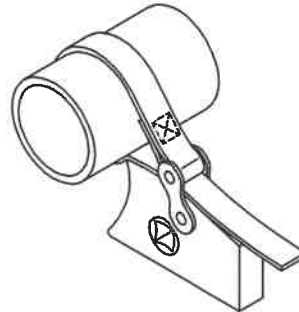
Install the belt, then loop the strap around the part to be tightened. Be sure the flat bottom of the wrench body is facing the direction in which the tightening force is to be applied.

NOTE: Always install straps with loop fold facing downwards against wrench body. It is important that the rubber surface is utilized to grip the part being tightened or loosened.



### Adjust Strap

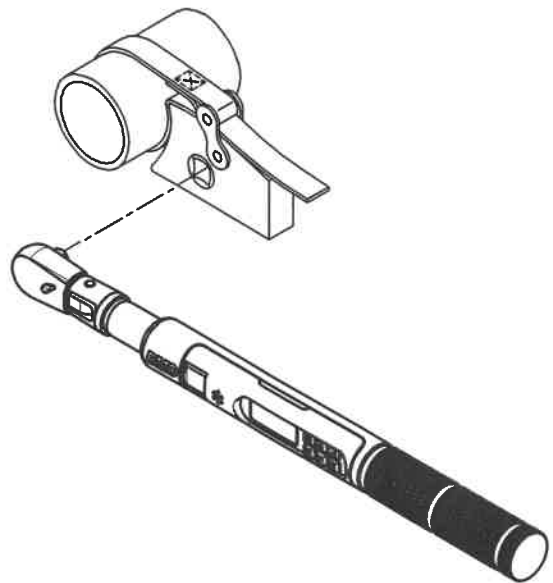
Insert the strap through the locking link on the top of the wrench, then pull the strap through until the nose of the wrench is close to the part to be tightened. For free movement of the strap, hold the locking link perpendicular to the wrench with thumb.



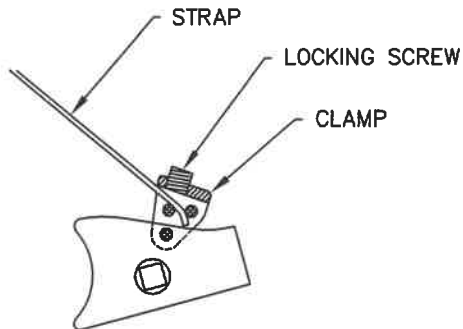
### Torque Controlled Tightening

For controlled accurate tightening simply engage Daniels Torque Wrench (BT-ST-751) with the square drive hole in the Strap Wrench body and tighten to the desired torque value.

See Page 5 for Torque Conversion Chart

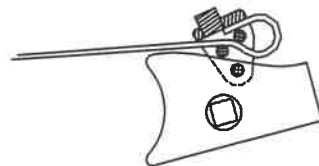


## Assembly Instructions for BT-BS-6xxxST



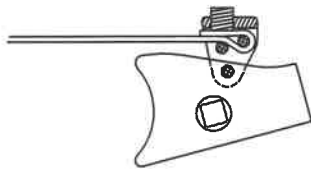
**STEP 1**

Rotate locking screw counter-clockwise until bottom is even with underside of clamp. Thread end of strap through end of clamp and between cross pins as shown.



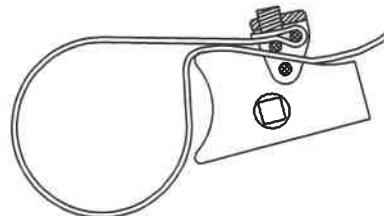
**STEP 2**

Push clamp forward and grasp end of strap from between cross pins. Pull through and form loop, pushing through the top until it is even with front of clamp.



**STEP 3**

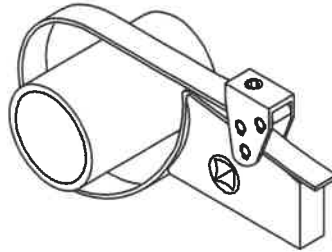
Pull working end of strap until slack is gone. Tighten locking screw firmly clockwise. DO NOT OVERTIGHTEN!



**STEP 4**

Loop strap as shown and feed end through clamp and under cross pins.

## Operating Instructions for BT-BS-6xxxST



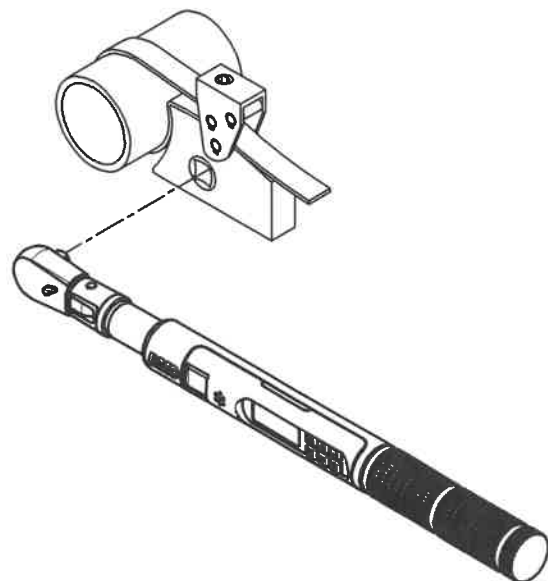
Assemble the strap, then loop it around the part to be tightened. Be sure the flat bottom of the wrench body is facing the direction in which the tightening force is to be applied.

**NOTE:**

It is important that the rubber surface is utilized to grip the part being tightened or loosened.

### **Torque Controlled Tightening**

For controlled accurate tightening, engage Daniels Torque Wrench (BT-ST-751) with the square drive hole in the Strap Wrench body and tighten to the desired torque value.



**See Page 5 for Torque Conversion Chart**

## Torque Conversion Chart for BT-BS-6xxxT and BT-BS-6xxxST

CONVERSION FACTOR (Intersection of 2 columns)		DESIRED TORQUE VALUE (in. lbs.)								
		40	60	80	100	120	140	160	180	200
DIAMETER OF PART BEING TIGHTENED (Inches)	.25	36	54	72	89	107	125	143	161	179
	.50	35	52	70	87	104	122	139	156	174
	.75	34	51	68	86	103	120	137	154	171
	1.00	34	51	67	84	101	118	135	152	169
	1.50	33	49	65	81	98	114	130	146	163
	1.75	31	47	63	78	94	110	125	141	157
	2.00	31	46	62	77	93	108	124	139	155
	2.25	31	46	61	76	92	107	122	137	153
	2.50	30	45	60	75	90	105	121	136	151
	2.75	28	42	56	70	84	97	111	125	139
	3.00	28	41	55	69	83	96	110	124	138
	3.25	27	41	54	68	82	95	109	122	136
	3.50	27	40	54	67	81	94	107	121	134
	3.75	27	40	53	66	80	93	106	119	133
4.00	26	39	52	66	79	92	105	118	131	

THESE FACTORS ARE CALCULATED USING A MATHEMATICAL FORMULA. SEVERAL VARIABLES  
 INFLUENCE THE ACTUAL VALUE AND THE FACTORS ARE PUBLISHED AS A GUIDE ONLY.

## Data and Reorder Chart for BT-BS-6xxxT and BT-BS-6xxxST

HANDLE-LESS STRAP WRENCHES FOR TORQUE WRENCHES			
WRENCH	STRAP	WIDTH (COLOR)	SUGGESTED GRIP $\phi$
HANDLE-LESS LOOPED STRAP WRENCHES			
BT-BS-610T	BT-A-6010	1/2" (BLACK)	1/4" to 1-1/2"
BT-BS-610BT	BT-A-6010B	1/2" (BLUE)	1/4" to 1-1/2"
BT-BS-610WT	BT-A-6010W	1/2" (WHITE)	1/4" to 1-1/2"
BT-BS-610RT	BT-A-6010R	1/2" (RED)	1/4" to 1-1/2"
BT-BS-609T	BT-A-6010	1/2" (BLACK)	1/2" to 2-1/2"
BT-BS-609BT	BT-A-6010B	1/2" (BLUE)	1/2" to 2-1/2"
BT-BS-609WT	BT-A-6010W	1/2" (WHITE)	1/2" to 2-1/2"
BT-BS-609RT	BT-A-6010R	1/2" (RED)	1/2" to 2-1/2"
BT-BS-611T	BT-A-6175	5/8" (BLACK)	1" to 4"
BT-BS-611BT	BT-A-6175B	5/8" (BLUE)	1" to 4"
BT-BS-611WT	BT-A-6175W	5/8" (WHITE)	1" to 4"
BT-BS-618T	BT-A-6185	1" (BLACK)	1" to 4"
BT-BS-618BT	BT-A-6185B	1" (BLUE)	1" to 4"
BT-BS-618WT	BT-A-6185W	1" (WHITE)	1" to 4"
HANDLE-LESS LOOP-LESS STRAP WRENCHES			
BT-BS-610SST	BT-A-6010-BK	1/2" (BLACK)	1/4" to 1-1/2"
BT-BS-610BSST	BT-A-6010B-BK	1/2" (BLUE)	1/4" to 1-1/2"
BT-BS-610RSST	BT-A-6010R-BK	1/2" (RED)	1/4" to 1-1/2"
BT-BS-609SST	BT-A-6010-BK	1/2" (BLACK)	1/2" to 2-1/2"
BT-BS-609BSST	BT-A-6010B-BK	1/2" (BLUE)	1/2" to 2-1/2"
BT-BS-609RSST	BT-A-6010R-BK	1/2" (RED)	1/2" to 2-1/2"
BT-BS-611SST	BT-A-6175-BK	5/8" (BLACK)	1" to 4"
BT-BS-611BSST	BT-A-6175B-BK	5/8" (BLUE)	1" to 4"
BT-BS-618SST	BT-A-6185-BK	1" (BLACK)	1" to 4"
BT-BS-618BSST	BT-A-6185B-BK	1" (BLUE)	1" to 4"

Daniels has a complete line of Strap Wrenches with varying gripping diameters for every application. Contact the factory for other sizes and straps available.

The above listed Strap Wrenches are normally supplied with black (soft) rubber straps. If white (hard) rubber straps are desired, add "W" after the part number. If blue (high strength) polyester straps are desired, add "B" after the part number.

Daniels Manufacturing Corporation offers complete refurbishing and recalibration services.

DMC specially engineers and manufactures complete tool kits to satisfy individual customer requirements, such as total aircraft support, general maintenance or production, on board ship and vehicle service, etc.

LIMITATION OF LIABILITY

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, OR MISUSE, OF ANY OF ITS PRODUCTS. OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

LIMITED WARRANTY

DMC (Daniels Manufacturing Corporation) warrants each new product sold by it to be free from defects in material and workmanship under normal use and service. DMC's obligation under this warranty is limited to the free correction or, at DMC's option, the refund of the purchase price of any such product which proves defective in normal service within ninety (90) days after delivery to the first user, provided that the product is returned to DMC with all transportation charges prepaid and which shall appear to DMC's satisfaction, after DMC's inspection, to have been defective in material or workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any product which, in the opinion of DMC, was caused by normal wear, misuse, improper operation, tampering, neglect or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation other than those herein set forth.