

NORWOLF[®]

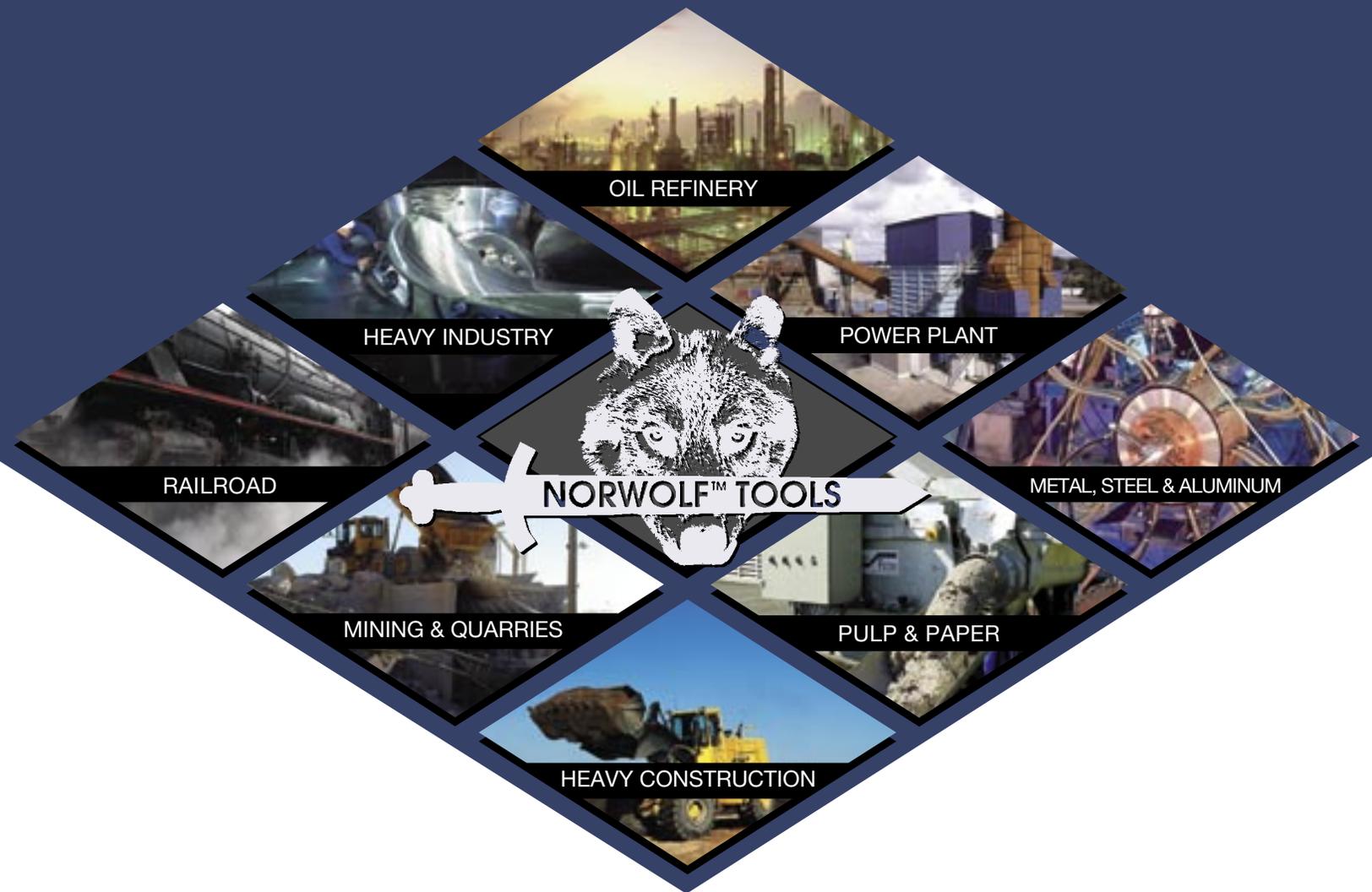
TOOL WORKS

“Creating the Industry Standard”[™]

NORWOLF[™] TOOLS



“All fits one and one fits all”



NORWOLF QUALITY STANDARD AQ-2020

All tools and products in this catalog conform to the rigid requirements of Norwolf Quality Standard AQ-2020

Our Mission Statement

Since its beginning in 1995, Norwolf has reinvented such basic tools as the prybar, bolt tensioner, hydraulic wrench, torque multiplier, and stud remover. By reinventing the wheel, so to speak, we choose not to make tools that are considered gimmicks, but instead tools that offer such versatility and durability that they are considered to be the finest tools available anywhere—bar none!

We build tools for all industries. If you don't see what you need in this catalog—ask us, and we will make it for you.

Our Pledge to You

- To provide innovation—not duplication.
- To manufacture tools you wish you had, but could not get.
- To service our customers, not just sell to them.
- To use only the highest quality aircraft, alloys...thus our motto—Aircraft quality tools®
- To create the industry standard—not conform to it.



We are experts at building custom tools for specialized needs.

Z46[®] SERIES

U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

Z460[®]

Z600[®]

NORWOLF

3/4" Drive Output



Totally Enclosed Aircraft Aluminum Housing

Optional Reaction Arm



1/2" Drive Input



Z460 at work using standard ratchet wrench.



Z46 using the optional reaction arm.



Z46 fitting in tight spot.

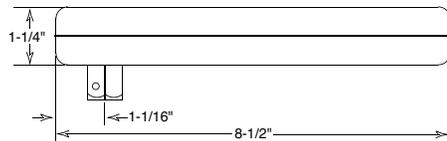
Norwolf Tool Works introduces the world's first true torque multipliers—the **Z46, Z460 and the Z600**.

This Norwolf innovation, with its thin, sleek design abandons conventional torque multiplier shortcomings.

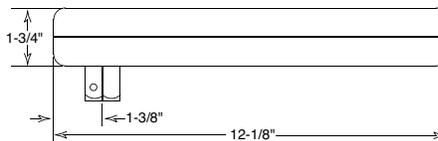
FEATURES AND BENEFITS OF THE NORWOLF Z46, Z460 & Z600

- **Accurate—operates using levers, not gears**
- **No overload pins to break—creates safer working environment**
- **Uses ratchet or non-ratchet wrenches**
- **Optional reaction arm** permits operator to react on the same plane
- **Input force is same direction as reaction force** for maximum operator convenience

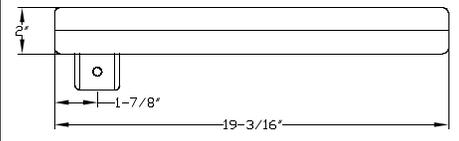
NORWOLF Z46



NORWOLF Z460



NORWOLF Z600



TOOL	INPUT DRIVE	OUTPUT DRIVE	MAX INPUT	MAX OUTPUT	EFFECTIVE MULTIPLIC.	ACCURACY	WEIGHT
NORWOLF Z46	1/2"	3/4"	300	1200 ft/lbs.	3.9:1	± 5½%	2.5 lbs.
NORWOLF Z460	3/4"	1"	600	2400 ft/lbs.	3.85:1	± 5%	9.5 lbs.
NORWOLF Z600	3/4"	1 1/2"	1000	6000 ft/lbs	6:1	± 7%	17 lbs.

TOOL DESCRIPTION	PART NO.
Z46 1,200 lb. Capacity Multiplier	Z46-001-0
Z46 Adjustable Reaction Arm	Z46-0RA-0
Z46 Set with above plus Fitted Case, (15) Impact Sockets 1 1/8"-2"x 1/16"	Z46-SET-0
1/2" Drive 250 ft/lbs. Torque Wrench	
1/2" Drive 24" Flex Wrench	

TOOL DESCRIPTION	PART NO.
Z460 2400 lb. Capacity Multiplier	Z460-001-0
Z460 Adjustable Reaction Arm	Z460-0RA-0
Z460 Set with above plus Fitted Case, (21) Impact Sockets 1 13/16"-3 1/8"	Z460-SET-0
3/4" Drive 24" Flex Wrench	
3/4" Drive 24" Ratchet	

TOOL DESCRIPTION	PART NO.
Z600 6000 ft./lb. Capacity Multiplier	Z600-001-0
Z600 Adjustable Reaction Arm	Z600-0RA-0

Norwolf Tool Works presents the
MISSING-LINK™

US AND INTERNATIONAL PATENTS APPROVED AND PENDING

Norwolf Tool Works is proud to introduce the most unique, efficient, economic, and dynamic bolting tool of the twenty-first century—the MISSING-LINK!

Industry has yearned for a tool to fit into tightly confined areas where sockets will not fit, but can be driven by any ratcheting or non-ratcheting hand wrench.

The Missing-Link is exactly what its name implies... Industry's connection from archaic bolting methods to the future!

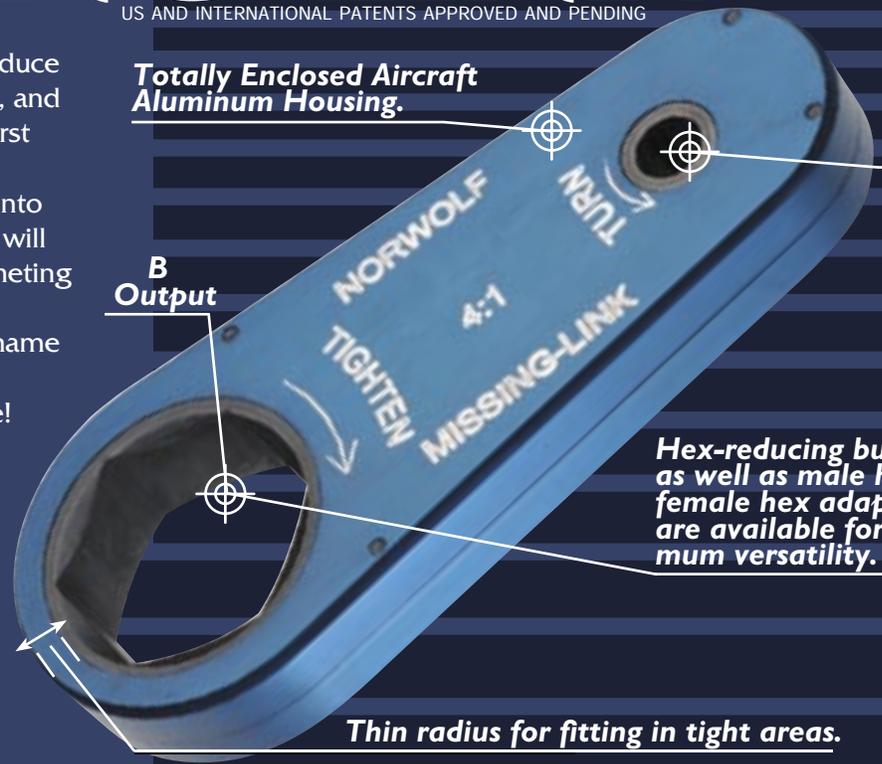
Totally Enclosed Aircraft Aluminum Housing.

A Input

B Output

Hex-reducing bushings, as well as male hex to female hex adapters, are available for maximum versatility.

Thin radius for fitting in tight areas.



WE CAN CUSTOM BUILD FOR ANY SIZE BOLT!



Use the MISSING-LINK with any bolting tool for limited clearance applications.

The MISSING LINK's Basic Concept

The Missing-Link is essentially a torque converter that permits a very **ACCURATE** transmission of torque from point A to point B as shown above **without any gears**.

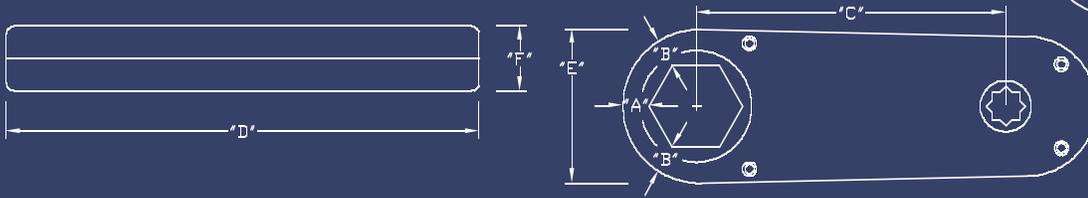
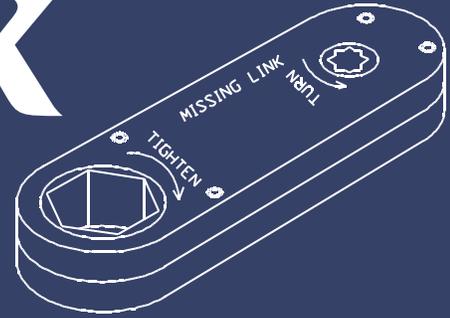
With ratios of 4:1 and 6:1 the Missing-Link multiplies torque as well.



*Special double sided missing-links available upon request.



MISSING-LINK DATA



1/2" DRIVE, 4:1 RATIO							
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"
TC-050-4-1-087-S	7/8"	.347"	.377"	5.96"	8.57"	2.11"	1.25"
TC-050-4-1-106-S	1-1/16"	.347"	.377"	5.96"	8.68"	2.32"	1.25"
TC-050-4-1-125-S	1-1/4"	.347"	.377"	5.96"	8.79"	2.54"	1.25"
TC-050-4-1-143-S	1-7/16"	.347"	.377"	5.96"	8.89"	2.76"	1.25"
TC-050-4-1-162-S	1-5/8"	.347"	.377"	5.96"	9.00"	2.97"	1.25"
TC-050-4-1-181-S	1-13/16"	.347"	.377"	5.96"	9.11"	3.19"	1.25"
TC-050-4-1-200-S	2"	.347"	.377"	5.96"	9.22"	3.41"	1.25"
TC-050-4-1-218-S	2-3/16"	.347"	.377"	5.96"	9.33"	3.62"	1.25"
TC-050-4-1-237-S	2-3/8"	.347"	.377"	5.96"	9.44"	3.84"	1.25"

3/4" DRIVE, 4:1 RATIO							
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"
TC-075-4-1-087-S	7/8"	.549"	.686"	8.34"	11.83"	2.11"	1.75"
TC-075-4-1-106-S	1-1/16"	.549"	.686"	8.34"	11.94"	2.32"	1.75"
TC-075-4-1-125-S	1-1/4"	.549"	.686"	8.34"	12.05"	2.54"	1.75"
TC-075-4-1-143-S	1-7/16"	.549"	.686"	8.34"	12.16"	2.76"	1.75"
TC-075-4-1-162-S	1-5/8"	.549"	.686"	8.34"	12.27"	2.97"	1.75"
TC-075-4-1-181-S	1-13/16"	.549"	.686"	8.34"	12.38"	3.19"	1.75"
TC-075-4-1-200-S	2"	.549"	.686"	8.34"	12.48"	3.41"	1.75"
TC-075-4-1-218-S	2-3/16"	.549"	.686"	8.34"	12.59"	3.62"	1.75"
TC-075-4-1-237-S	2-3/8"	.549"	.686"	8.34"	12.70"	3.84"	1.75"
TC-075-4-1-256-S	2-9/16"	.549"	.686"	8.34"	12.81"	4.06"	1.75"
TC-075-4-1-275-S	2-3/4"	.549"	.686"	8.34"	12.92"	4.27"	1.75"
TC-075-4-1-293-S	2-15/16"	.549"	.686"	8.34"	13.02"	4.49"	1.75"
TC-075-4-1-312-S	3-1/8"	.549"	.686"	8.34"	13.13"	4.70"	1.75"

3/4" DRIVE, 6:1 RATIO							
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"
TC-075-6-1-087-S	7/8"	.732"	.915"	13.98"	18.54"	2.47"	2"
TC-075-6-1-106-S	1-1/16"	.732"	.915"	13.98"	18.65"	2.69"	2"
TC-075-6-1-125-S	1-1/4"	.732"	.915"	13.98"	18.76"	2.91"	2"
TC-075-6-1-143-S	1-7/16"	.732"	.915"	13.98"	18.87"	3.12"	2"
TC-075-6-1-162-S	1-5/8"	.732"	.915"	13.98"	18.97"	3.34"	2"
TC-075-6-1-181-S	1-13/16"	.732"	.915"	13.98"	19.08"	3.56"	2"
TC-075-6-1-200-S	2"	.732"	.915"	13.98"	19.19"	3.77"	2"
TC-075-6-1-218-S	2-3/16"	.732"	.915"	13.98"	19.30"	3.99"	2"
TC-075-6-1-237-S	2-3/8"	.732"	.915"	13.98"	19.41"	4.20"	2"
TC-075-6-1-256-S	2-9/16"	.732"	.915"	13.98"	19.52"	4.42"	2"
TC-075-6-1-275-S	2-3/4"	.732"	.915"	13.98"	19.62"	4.64"	2"
TC-075-6-1-293-S	2-15/16"	.732"	.915"	13.98"	19.73"	4.85"	2"
TC-075-6-1-312-S	3-1/8"	.732"	.915"	13.98"	19.84"	5.07"	2"



If a size is needed which is not shown on this page, just add hex size.

For example, if a 2-1/2" hex, 4:1, 3/4" drive is needed, part number is TC-075-4-1-250. Also available in metric size and part number would match accordingly. For example, if a 60mm hex is needed, part number would be TC-075-4-1-60MM-S.

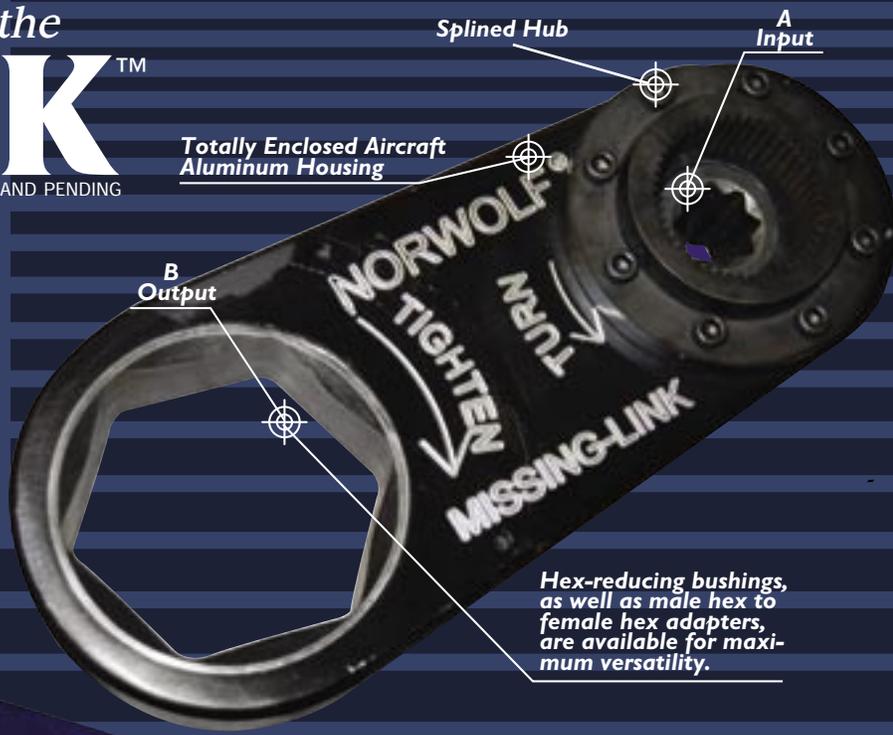
ALSO AVAILABLE:

- Double sided Missing Links
- Missing-Link sets
- Different configurations
- 1" and 1 1/2" drives

Norwolf Tool Works presents the
XCELINK™
 U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

The Norwolf Xcelink is the ultimate answer for gaining access where standard pneumatic multipliers are too tall or bulky to fit application. The Norwolf Xcelink is essentially a Missing Link with the ability to turn continuously.

There are two available styles. The standard style has a sliding pin with which to react with any standard pneumatic torque wrench. The hub style has a specific splined hub to match the input tool of choice. All hubs can be interchanged for added versatility.



Hex-reducing bushings, as well as male hex to female hex adapters, are available for maximum versatility.



- ALSO AVAILABLE:**
- Special Configurations
 - Special Reaction Arms Available
 - Box sockets and hex reducing bushings



Norwolf Xcelink with Hub shown in use with an air multiplier on a coal pulverizer application.



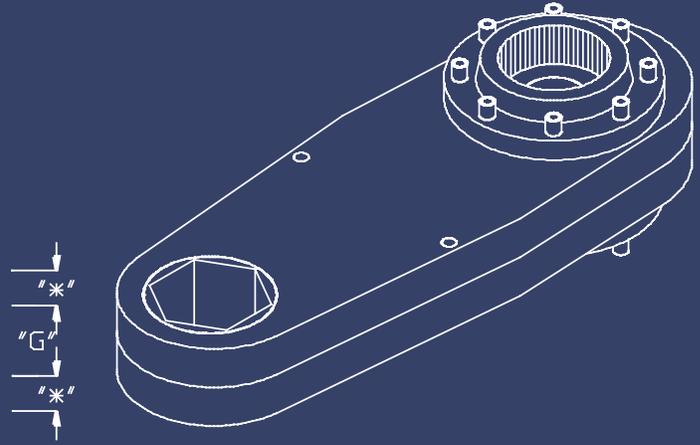
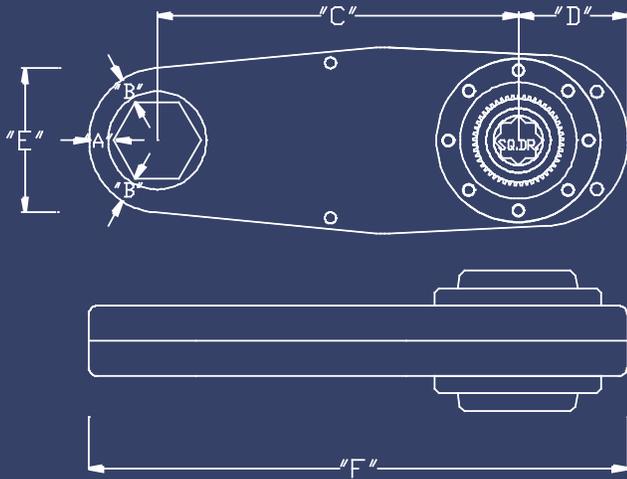
Pneumatic nut runner used with Pin style Xcelink.



Side view of Xcelink for coal pulverizer.

XCELINK DATA

Missing Link, Constant Rotation, Splined Hub Reaction



1/2" DRIVE, 3:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-050-3-1-087-H	7/8"	.307"	.336"	4.08"	1.56"	1.62"	6.46"	1"
CTC-050-3-1-106-H	1-1/8"	.307"	.336"	4.08"	1.56"	1.84"	6.57"	1"
CTC-050-3-1-125-H	1-1/4"	.307"	.336"	4.08"	1.56"	2.06"	6.68"	1"
CTC-050-3-1-143-H	1-7/16"	.307"	.336"	4.08"	1.56"	2.27"	6.79"	1"
CTC-050-3-1-162-H	1-5/8"	.307"	.336"	4.08"	1.56"	2.49"	6.89"	1"
CTC-050-3-1-181-H	1-13/16"	.307"	.336"	4.08"	1.56"	2.71"	7.00"	1"
CTC-050-3-1-200-H	2"	.307"	.336"	4.08"	1.56"	2.92"	7.11"	1"
CTC-050-3-1-218-H	2-3/16"	.307"	.336"	4.08"	1.56"	3.14"	7.22"	1"
CTC-050-3-1-237-H	2-3/8"	.307"	.336"	4.08"	1.56"	3.36"	7.33"	1"

1/2" DRIVE, 4:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-050-4-1-087-H	7/8"	.347"	.377"	5.15"	1.56"	1.70"	7.57"	1"
CTC-050-4-1-106-H	1-1/8"	.347"	.377"	5.15"	1.56"	1.92"	7.68"	1"
CTC-050-4-1-125-H	1-1/4"	.347"	.377"	5.15"	1.56"	2.14"	7.79"	1"
CTC-050-4-1-143-H	1-7/16"	.347"	.377"	5.15"	1.56"	2.35"	7.89"	1"
CTC-050-4-1-162-H	1-5/8"	.347"	.377"	5.15"	1.56"	2.57"	8"	1"
CTC-050-4-1-181-H	1-13/16"	.347"	.377"	5.15"	1.56"	2.79"	8.11"	1"
CTC-050-4-1-200-H	2"	.347"	.377"	5.15"	1.56"	3"	8.22"	1"
CTC-050-4-1-218-H	2-3/16"	.347"	.377"	5.15"	1.56"	3.22"	8.33"	1"
CTC-050-4-1-237-H	2-3/8"	.347"	.377"	5.15"	1.56"	3.43"	8.43"	1"

3/4" DRIVE, 3:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-075-3-1-087-H	7/8"	.461"	.505"	6.13"	2.35"	1.93"	9.44"	1.5"
CTC-075-3-1-106-H	1-1/16"	.461"	.505"	6.13"	2.35"	2.15"	9.55"	1.5"
CTC-075-3-1-125-H	1-1/4"	.461"	.505"	6.13"	2.35"	2.36"	9.66"	1.5"
CTC-075-3-1-143-H	1-7/16"	.461"	.505"	6.13"	2.35"	2.58"	9.77"	1.5"
CTC-075-3-1-162-H	1-5/8"	.461"	.505"	6.13"	2.35"	2.80"	9.88"	1.5"
CTC-075-3-1-181-H	1-13/16"	.461"	.505"	6.13"	2.35"	3.01"	9.98"	1.5"
CTC-075-3-1-200-H	2"	.461"	.505"	6.13"	2.35"	3.23"	10.09"	1.5"
CTC-075-3-1-218-H	2-3/16"	.461"	.505"	6.13"	2.35"	3.45"	10.20"	1.5"
CTC-075-3-1-237-H	2-3/8"	.461"	.505"	6.13"	2.35"	3.66"	10.31"	1.5"
CTC-075-3-1-256-H	2-9/16"	.461"	.505"	6.13"	2.35"	3.88"	10.42"	1.5"
CTC-075-3-1-275-H	2-3/4"	.461"	.505"	6.13"	2.35"	4.10"	10.52"	1.5"
CTC-075-3-1-293-H	2-15/16"	.461"	.505"	6.13"	2.35"	4.31"	10.63"	1.5"
CTC-075-3-1-312-H	3-1/8"	.461"	.505"	6.13"	2.35"	4.53"	10.74"	1.5"

3/4" DRIVE, 4:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-075-4-1-087-H	7/8"	.521"	.566"	7.73"	2.35"	2.05"	11.10"	1.5"
CTC-075-4-1-106-H	1-1/16"	.521"	.566"	7.73"	2.35"	2.27"	11.21"	1.5"
CTC-075-4-1-125-H	1-1/4"	.521"	.566"	7.73"	2.35"	2.48"	11.32"	1.5"
CTC-075-4-1-143-H	1-7/16"	.521"	.566"	7.73"	2.35"	2.70"	11.43"	1.5"
CTC-075-4-1-162-H	1-5/8"	.521"	.566"	7.73"	2.35"	2.92"	11.54"	1.5"
CTC-075-4-1-181-H	1-13/16"	.521"	.566"	7.73"	2.35"	3.13"	11.64"	1.5"
CTC-075-4-1-200-H	2"	.521"	.566"	7.73"	2.35"	3.35"	11.75"	1.5"
CTC-075-4-1-218-H	2-3/16"	.521"	.566"	7.73"	2.35"	3.57"	11.86"	1.5"
CTC-075-4-1-237-H	2-3/8"	.521"	.566"	7.73"	2.35"	3.78"	11.97"	1.5"
CTC-075-4-1-256-H	2-9/16"	.521"	.566"	7.73"	2.35"	4"	12.08"	1.5"
CTC-075-4-1-275-H	2-3/4"	.521"	.566"	7.73"	2.35"	4.22"	12.18"	1.5"
CTC-075-4-1-293-H	2-15/16"	.521"	.566"	7.73"	2.35"	4.43"	12.29"	1.5"
CTC-075-4-1-312-S	3-1/8"	.521"	.566"	7.73"	2.35"	4.65"	12.40"	1.5"

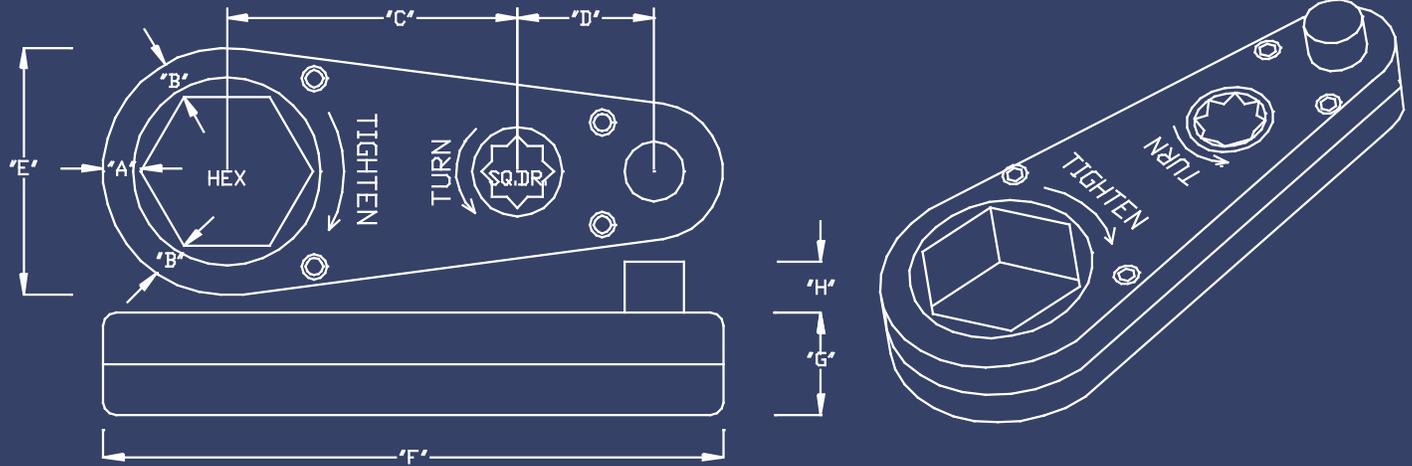
1" DRIVE, 3:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-100-3-1-200-H	2"	.614"	.673"	8.17"	3.13"	3.54"	13.07"	2"
CTC-100-3-1-218-H	2-3/16"	.614"	.673"	8.17"	3.13"	3.75"	13.18"	2"
CTC-100-3-1-237-H	2-3/8"	.614"	.673"	8.17"	3.13"	3.97"	13.28"	2"
CTC-100-3-1-256-H	2-9/16"	.614"	.673"	8.17"	3.13"	4.19"	13.39"	2"
CTC-100-3-1-275-H	2-3/4"	.614"	.673"	8.17"	3.13"	4.40"	13.50"	2"
CTC-100-3-1-293-H	2-15/16"	.614"	.673"	8.17"	3.13"	4.62"	13.61"	2"
CTC-100-3-1-312-H	3-1/8"	.614"	.673"	8.17"	3.13"	4.84"	13.72"	2"
CTC-100-3-1-350-H	3-1/2"	.614"	.673"	8.17"	3.13"	5.27"	13.93"	2"
CTC-100-3-1-387-H	3-7/8"	.614"	.673"	8.17"	3.13"	5.70"	14.15"	2"
CTC-100-3-1-425-H	4-1/4"	.614"	.673"	8.17"	3.13"	6.13"	14.37"	2"
CTC-100-3-1-462-H	4-5/8"	.614"	.673"	8.17"	3.13"	6.57"	14.58"	2"

1" DRIVE, 4:1 RATIO, SPLINED HUB								
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"
CTC-100-4-1-200-H	2"	.694"	.754"	10.30"	3.13"	3.70"	15.28"	2"
CTC-100-4-1-218-H	2-3/16"	.694"	.754"	10.30"	3.13"	3.91"	15.39"	2"
CTC-100-4-1-237-H	2-3/8"	.694"	.754"	10.30"	3.13"	4.13"	15.50"	2"
CTC-100-4-1-256-H	2-9/16"	.694"	.754"	10.30"	3.13"	4.35"	15.60"	2"
CTC-100-4-1-275-H	2-3/4"	.694"	.754"	10.30"	3.13"	4.56"	15.71"	2"
CTC-100-4-1-293-H	2-15/16"	.694"	.754"	10.30"	3.13"	4.78"	15.82"	2"
CTC-100-4-1-312-H	3-1/8"	.694"	.754"	10.30"	3.13"	4.99"	15.93"	2"
CTC-100-4-1-350-H	3-1/2"	.694"	.754"	10.30"	3.13"	5.43"	16.15"	2"
CTC-100-4-1-387-H	3-7/8"	.694"	.754"	10.30"	3.13"	5.86"	16.36"	2"
CTC-100-4-1-425-H	4-1/4"	.694"	.754"	10.30"	3.13"	6.29"	16.58"	2"
CTC-100-4-1-462-H	4-5/8"	.694"	.754"	10.30"	3.13"	6.73"	16.79"	2"

"*" This thickness is determined by the input drive

XCELINK DATA

Missing Link, Constant Rotation, Standard Pin Reaction



1/2" DRIVE, 3:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-050-3-1-087-S	7/8"	.366"	.458"	2.72"	1.33"	1.75"	5.59"	1.25"	.50"
CTC-050-3-1-106-S	1-1/16"	.366"	.458"	2.72"	1.33"	1.96"	5.70"	1.25"	.50"
CTC-050-3-1-125-S	1-1/4"	.366"	.458"	2.72"	1.33"	2.18"	5.80"	1.25"	.50"
CTC-050-3-1-143-S	1-7/16"	.366"	.458"	2.72"	1.33"	2.39"	5.91"	1.25"	.50"
CTC-050-3-1-162-S	1-5/8"	.366"	.458"	2.72"	1.33"	2.61"	6.01"	1.25"	.50"
CTC-050-3-1-181-S	1-13/16"	.366"	.458"	2.72"	1.33"	2.82"	6.13"	1.25"	.50"
CTC-050-3-1-200-S	2"	.366"	.458"	2.72"	1.33"	3.04"	6.24"	1.25"	.50"
CTC-050-3-1-218-S	2-3/16"	.366"	.458"	2.72"	1.33"	3.25"	6.34"	1.25"	.50"
CTC-050-3-1-237-S	2-3/8"	.366"	.458"	2.72"	1.33"	3.47"	6.45"	1.25"	.50"

1/2" DRIVE, 4:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-050-4-1-087-S	7/8"	.366"	.458"	3.43"	1.33"	1.75"	6.30"	1.25"	.50"
CTC-050-4-1-106-S	1-1/16"	.366"	.458"	3.43"	1.33"	1.96"	6.41"	1.25"	.50"
CTC-050-4-1-125-S	1-1/4"	.366"	.458"	3.43"	1.33"	2.18"	6.51"	1.25"	.50"
CTC-050-4-1-143-S	1-7/16"	.366"	.458"	3.43"	1.33"	2.39"	6.62"	1.25"	.50"
CTC-050-4-1-162-S	1-5/8"	.366"	.458"	3.43"	1.33"	2.61"	6.73"	1.25"	.50"
CTC-050-4-1-181-S	1-13/16"	.366"	.458"	3.43"	1.33"	2.82"	6.84"	1.25"	.50"
CTC-050-4-1-200-S	2"	.366"	.458"	3.43"	1.33"	3.04"	6.95"	1.25"	.50"
CTC-050-4-1-218-S	2-3/16"	.366"	.458"	3.43"	1.33"	3.25"	7.05"	1.25"	.50"
CTC-050-4-1-237-S	2-3/8"	.366"	.458"	3.43"	1.33"	3.47"	7.16"	1.25"	.50"

3/4" DRIVE, 3:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-075-3-1-087-S	7/8"	.549"	.686"	4.08"	2"	2.11"	8.13"	1.5"	.75"
CTC-075-3-1-106-S	1-1/16"	.549"	.686"	4.08"	2"	2.32"	8.24"	1.5"	.75"
CTC-075-3-1-125-S	1-1/4"	.549"	.686"	4.08"	2"	2.54"	8.35"	1.5"	.75"
CTC-075-3-1-143-S	1-7/16"	.549"	.686"	4.08"	2"	2.75"	8.46"	1.5"	.75"
CTC-075-3-1-162-S	1-5/8"	.549"	.686"	4.08"	2"	2.97"	8.57"	1.5"	.75"
CTC-075-3-1-181-S	1-13/16"	.549"	.686"	4.08"	2"	3.19"	8.67"	1.5"	.75"
CTC-075-3-1-200-S	2"	.549"	.686"	4.08"	2"	3.41"	8.78"	1.5"	.75"
CTC-075-3-1-218-S	2-3/16"	.549"	.686"	4.08"	2"	3.62"	8.89"	1.5"	.75"
CTC-075-3-1-237-S	2-3/8"	.549"	.686"	4.08"	2"	3.84"	9"	1.5"	.75"
CTC-075-3-1-256-S	2-9/16"	.549"	.686"	4.08"	2"	4.06"	9.11"	1.5"	.75"
CTC-075-3-1-275-S	2-3/4"	.549"	.686"	4.08"	2"	4.27"	9.22"	1.5"	.75"
CTC-075-3-1-293-S	2-15/16"	.549"	.686"	4.08"	2"	4.49"	9.32"	1.5"	.75"
CTC-075-3-1-312-S	3-1/8"	.549"	.686"	4.08"	2"	4.71"	9.43"	1.5"	.75"

3/4" DRIVE, 4:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-075-4-1-087-S	7/8"	.549"	.686"	5.14"	2"	2.11"	9.19"	1.5"	.75"
CTC-075-4-1-106-S	1-1/16"	.549"	.686"	5.14"	2"	2.32"	9.30"	1.5"	.75"
CTC-075-4-1-125-S	1-1/4"	.549"	.686"	5.14"	2"	2.54"	9.41"	1.5"	.75"
CTC-075-4-1-143-S	1-7/16"	.549"	.686"	5.14"	2"	2.75"	9.52"	1.5"	.75"
CTC-075-4-1-162-S	1-5/8"	.549"	.686"	5.14"	2"	2.97"	9.62"	1.5"	.75"
CTC-075-4-1-181-S	1-13/16"	.549"	.686"	5.14"	2"	3.19"	9.73"	1.5"	.75"
CTC-075-4-1-200-S	2"	.549"	.686"	5.14"	2"	3.41"	9.84"	1.5"	.75"
CTC-075-4-1-218-S	2-3/16"	.549"	.686"	5.14"	2"	3.62"	9.95"	1.5"	.75"
CTC-075-4-1-237-S	2-3/8"	.549"	.686"	5.14"	2"	3.84"	10.05"	1.5"	.75"
CTC-075-4-1-256-S	2-9/16"	.549"	.686"	5.14"	2"	4.06"	10.16"	1.5"	.75"
CTC-075-4-1-275-S	2-3/4"	.549"	.686"	5.14"	2"	4.27"	10.27"	1.5"	.75"
CTC-075-4-1-293-S	2-15/16"	.549"	.686"	5.14"	2"	4.49"	10.37"	1.5"	.75"
CTC-075-4-1-312-S	3-1/8"	.549"	.686"	5.14"	2"	4.71"	10.49"	1.5"	.75"

1" DRIVE, 3:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-100-3-1-200-S	2"	.732"	.915"	5.44"	2.66"	3.77"	11.32"	2"	1"
CTC-100-3-1-218-S	2-3/16"	.732"	.915"	5.44"	2.66"	3.99"	11.43"	2"	1"
CTC-100-3-1-237-S	2-3/8"	.732"	.915"	5.44"	2.66"	4.21"	11.54"	2"	1"
CTC-100-3-1-256-S	2-9/16"	.732"	.915"	5.44"	2.66"	4.42"	11.64"	2"	1"
CTC-100-3-1-275-S	2-3/4"	.732"	.915"	5.44"	2.66"	4.64"	11.75"	2"	1"
CTC-100-3-1-293-S	2-15/16"	.732"	.915"	5.44"	2.66"	4.85"	11.86"	2"	1"
CTC-100-3-1-312-S	3-1/8"	.732"	.915"	5.44"	2.66"	5.07"	11.97"	2"	1"
CTC-100-3-1-350-S	3-1/2"	.732"	.915"	5.44"	2.66"	5.50"	12.18"	2"	1"
CTC-100-3-1-387-S	3-7/8"	.732"	.915"	5.44"	2.66"	5.94"	12.40"	2"	1"
CTC-100-3-1-425-S	4-1/4"	.732"	.915"	5.44"	2.66"	6.37"	12.62"	2"	1"
CTC-100-3-1-462-S	4-5/8"	.732"	.915"	5.44"	2.66"	6.80"	12.83"	2"	1"

1" DRIVE, 4:1 RATIO, STANDARD PIN									
PART NO.	HEX	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
CTC-100-4-1-200-S	2"	.732"	.915"	6.85"	2.66"	3.77"	12.73"	2"	1"
CTC-100-4-1-218-S	2-3/16"	.732"	.915"	6.85"	2.66"	3.99"	12.84"	2"	1"
CTC-100-4-1-237-S	2-3/8"	.732"	.915"	6.85"	2.66"	4.21"	12.95"	2"	1"
CTC-100-4-1-256-S	2-9/16"	.732"	.915"	6.85"	2.66"	4.42"	13.05"	2"	1"
CTC-100-4-1-275-S	2-3/4"	.732"	.915"	6.85"	2.66"	4.64"	13.16"	2"	1"
CTC-100-4-1-293-S	2-15/16"	.732"	.915"	6.85"	2.66"	4.85"	13.27"	2"	1"
CTC-100-4-1-312-S	3-1/8"	.732"	.915"	6.85"	2.66"	5.07"	13.38"	2"	1"
CTC-100-4-1-350-S	3-1/2"	.732"	.915"	6.85"	2.66"	5.50"	13.59"	2"	1"
CTC-100-4-1-387-S	3-7/8"	.732"	.915"	6.85"	2.66"	5.94"	13.81"	2"	1"
CTC-100-4-1-425-S	4-1/4"	.732"	.915"	6.85"	2.66"	6.37"	14.03"	2"	1"
CTC-100-4-1-462-S	4-5/8"	.732"	.915"	6.85"	2.66"	6.80"	14.24"	2"	1"

The "Hydraulic Missing Link"

TRIBECA[®] SERIES

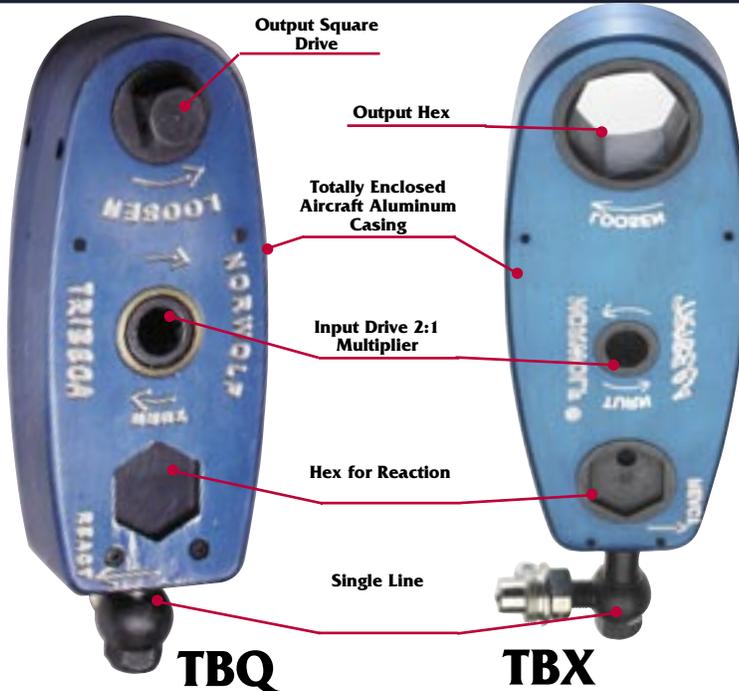
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TBQ
TBX

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Norwulf[®] Tool Works is proud to announce the world's first true hydraulic torque multiplier™—the TRIBECA[®]. Finally, industry has a tool that can handle virtually any bolt, any time, any place via remote control or with standard torque wrenches!

TRIBECAs are not to be confused with other complex "uni-purpose" "L" shaped hydraulic bolting tools that are used for specific applications at specific times in specific conditions.



TBQ-6 with special reaction arm on compressor nut.



TBX working in confined area.



- FEATURES AND BENEFITS OF THE NORWOLF TRIBECA[®]**
- **MULTI-PURPOSE:** Works with an impact, torque wrenches, or any hydraulic pump, including the popular portapower.
 - **REACTION:** Can use standard "knocker" wrenches for 360° reaction capabilities.
 - **ACCURACY:** Built in multiplier 2:1 ratio, hydraulic accuracy plus or minus 5%.
 - **SPLIT CASING DESIGN:** Design permits reaction off of body. No torsional strain as with other "L" shaped tools.



TBQ fitting where no other hydraulic tool can.

MODEL	OUTPUT DRIVE	INPUT DRIVE	MAX OUTPUT	EFFECTIVE MULTI.	REACTION ARM HEX	ACCURACY	RADIUS	WEIGHT (lbs.)
TBQ - 4	1/2"	3/8"	380 ft/lbs.	2:1	7/8"	± 5%	11/16"	3.0
TBQ - 6	3/4"	1/2"	1360 ft/lbs.	2:1	1-1/4"	± 5%	1-1/16"	6.0
TBQ - 20	1"	3/4"	3100 ft/lbs.	2:1	1-5/8"	± 5%	1-3/8"	16.0
TBQ - 60	1-1/2"	1"	6150 ft/lbs.	2:1	2"	± 5%	1-5/8"	23.0
TBQ - 80	1-1/2"	1"	10300 ft/lbs.	2:1	2-1/2"	± 5%	2-1/8"	46.0
TBQ - 200	2-1/2"	1-1/2"	25500 ft/lbs.	2:1	3-1/4"	± 5%	2-3/4"	94.0
TBQ - 400	2-1/2"	1-1/2"	50800 ft/lbs.	2:1	4"	± 5%	3-1/4"	129.0

MODEL	OUTPUT HEX	INPUT DRIVE	MAX OUTPUT	EFFECTIVE MULTI.	REACTION ARM HEX	ACCURACY	THICKNESS	WEIGHT (lbs.)
TBX - 50	3/4"- 2-3/8"	1/2"	1480 ft/lbs.	2:1	1-1/4"	± 5%	1-1/2"	8.0
TBX - 75	1-1/4"- 3-1/8"	3/4"	3550 ft/lbs.	2:1	1-5/8"	± 5%	2"	19.0
TBX - 12	1-7/8"- 4-1/4"	1"	6800 ft/lbs.	2:1	2"	± 5%	2-1/2"	26.0
TBX - 10	2-3/8"- 5"	1"	13450 ft/lbs.	2:1	2-1/2"	± 5%	3"	53.0

LARGER SIZES AVAILABLE UPON REQUEST.

Norwolf Tool Works presents the

THE UNI-

Torsion
Release
Mechanism

Only two moving parts for
the highest accuracy ($\pm 3\%$
on all models)

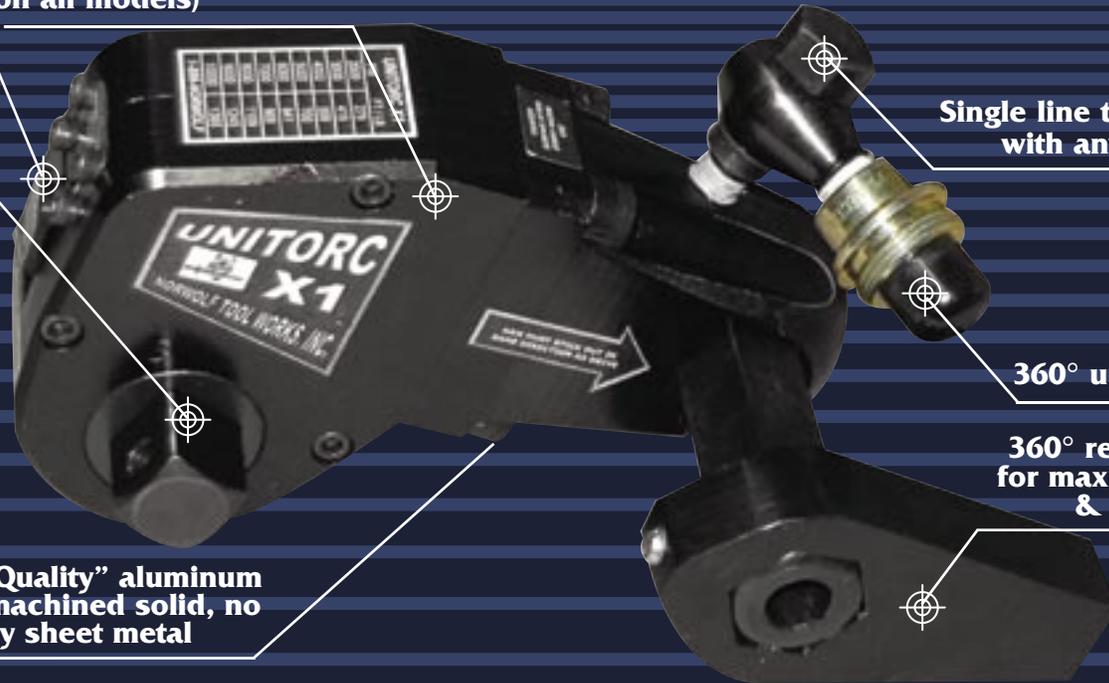
Push thru
square drive

Single line tool can be used
with any 10K pump

360° universal fitting

360° reaction arm
for maximum reach
& height

"Aircraft Quality" aluminum
housing machined solid, no
flimsy sheet metal



- Has only 1 hose, which for smaller tools cuts the overall weight in half compared to double line tools of the same torque range
- Only 1 o'ring
- 360° swivel (see page 17 for added versatility)
- Most versatile reaction arm available on market – bar none
- Double pawl system

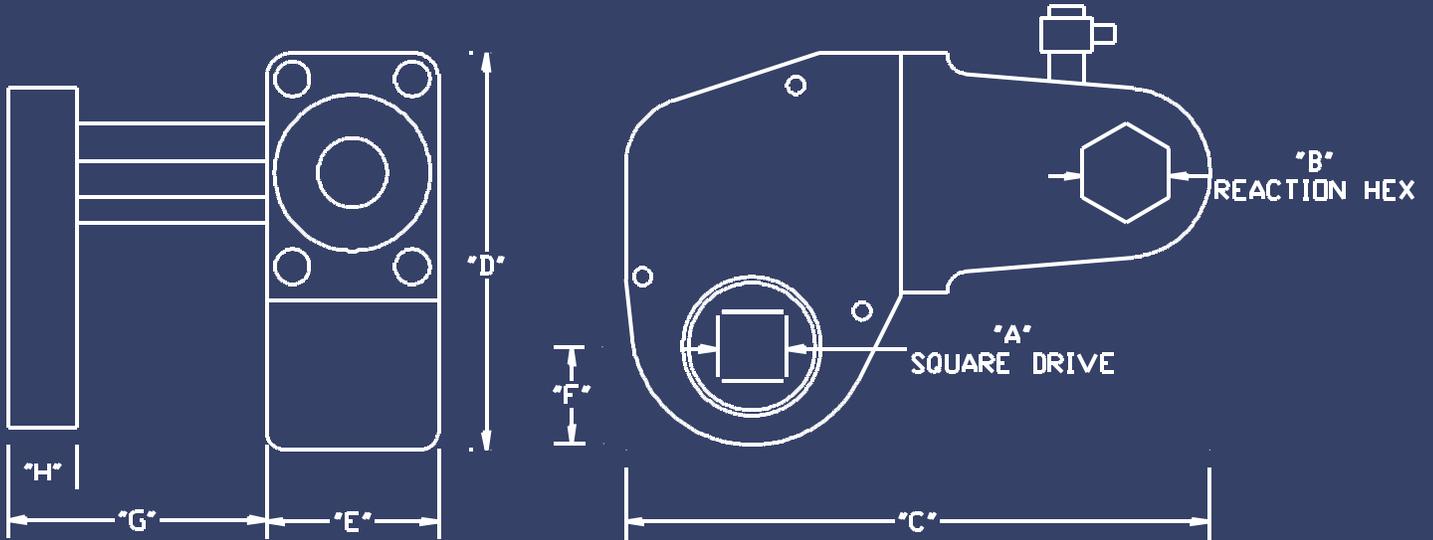


UNI-TORC using standard "knocker" wrench for added reaction length.

UNI-TORC

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TOOL MODEL	MAX. TORQUE	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	WEIGHT
UNITORC X - 1	1,385 FT. LBS.	3/4"	1"	6.35"	4.23"	1.875	1.07"	2-9/16"	3/4"	4-1/2 lbs.
UNITORC X - 3	3,179 FT. LBS.	1"	1-1/4"	8.47"	5.64"	2.500	1.42"	3-3/8"	1"	8 lbs.
UNITORC X - 6	6,424 FT. LBS.	1-1/2"	1-1/2"	10.59"	7.05"	3.125	1.77"	4-15/16"	1-1/4"	17 lbs.
UNITORC X - 10	11,050 FT. LBS.	1-1/2"	2"	12.70"	8.46"	3.750	2.13"	5-1/8"	1-1/2"	34 lbs.
UNITORC X - 25	25,375 FT. LBS.	2-1/2"	2-1/2"	16.94"	11.29"	5.000	2.84"	6-3/4"	2"	70 lbs.
UNITORC X - 50	51,392 FT. LBS.	2-1/2"	3"	21.17"	14.11"	6.250	3.54"	8-5/8"	2-1/2"	144 lbs.



Powerful "Loosening" of corroded fasteners



Precise flange make-up

UNI-TORC ACCESSORIES



- Knocker Wrenches
- Impact Sockets
- Solid Male Hex Drivers
- Custom Sockets

The Convertible Torque Wrench that "Connects with a Hex"

CONEX™

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Optional square drivers, inserts, reaction arms & box sockets



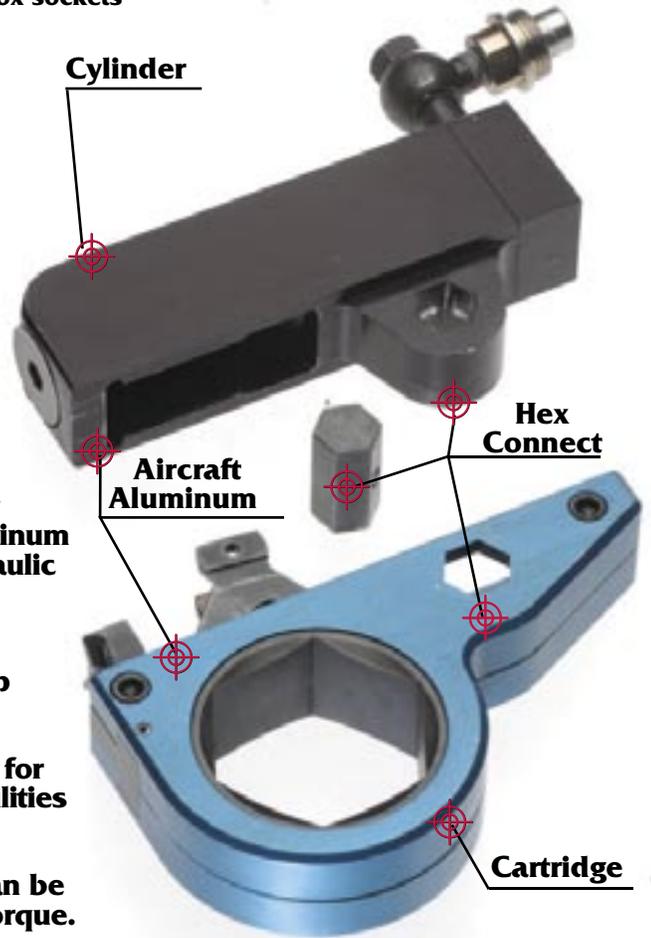
Tightening standard flange



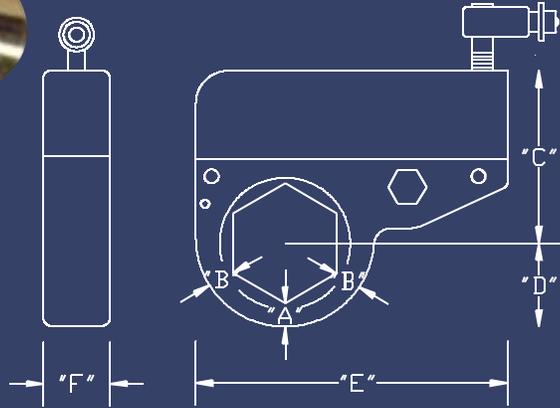
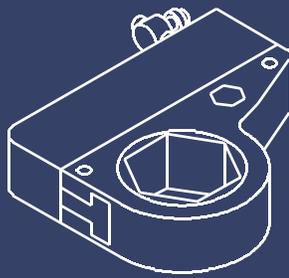
"Norwulf extended cartridge fitting in restricted area"

The world's first totally enclosed, aircraft aluminum limited clearance hydraulic torque wrench.

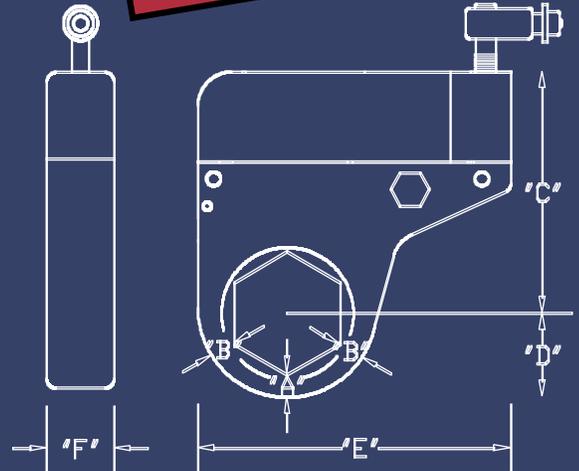
- Fastest
- Easiest to operate
- Works with any pump
- Safest
- Hex bits and knocker wrenches can be used for greater reaction capabilities
- No pinch points
- Totally flat
- Extended cartridge can be added for 50% more torque. See / series



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Standard Series



Extended Cartridge Series

CONEX 2 SERIES - MAX. TORQUE: 1550 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 2 with 1-1/16" hex	.42"	.48"	3.90"	1.03"	7.00"	1.50"
Conex 2 with 1-1/4" hex	.42"	.48"	3.90"	1.14"	7.00"	1.50"
Conex 2 with 1-7/16" hex	.42"	.48"	3.90"	1.25"	7.00"	1.50"
Conex 2 with 1-5/8" hex	.42"	.48"	3.90"	1.36"	7.00"	1.50"
Conex 2 with 1-13/16" hex	.42"	.48"	3.90"	1.47"	7.00"	1.50"
Conex 2 with 2" hex	.42"	.48"	3.90"	1.57"	7.00"	1.50"
Conex 2 with 2-3/16" hex	.42"	.48"	3.90"	1.68"	7.00"	1.50"
Conex 2 with 2-3/8" hex	.42"	.48"	3.90"	1.79"	7.00"	1.50"

CONEX 2/3 SERIES - MAX. TORQUE: 2325 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 2/3 with 1-13/16" hex	.42"	.48"	5.35"	1.03"	7.00"	1.50"
Conex 2/3 with 2" hex	.42"	.48"	5.35"	1.14"	7.00"	1.50"
Conex 2/3 with 2-3/16" hex	.42"	.48"	5.35"	1.25"	7.00"	1.50"
Conex 2/3 with 2-3/8" hex	.42"	.48"	5.35"	1.36"	7.00"	1.50"
Conex 2/3 with 2-9/16" hex	.42"	.48"	5.35"	1.47"	7.00"	1.50"
Conex 2/3 with 2-3/4" hex	.42"	.48"	5.35"	1.57"	7.00"	1.50"
Conex 2/3 with 2-15/16" hex	.42"	.48"	5.35"	1.68"	7.00"	1.50"
Conex 2/3 with 3-1/8" hex	.42"	.48"	5.35"	1.79"	7.00"	1.50"

CONEX 4 SERIES - MAX. TORQUE: 3671 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 4 with 1-13/16" hex	.56"	.64"	5.20"	1.61"	9.33"	2"
Conex 4 with 2" hex	.56"	.64"	5.20"	1.71"	9.33"	2"
Conex 4 with 2-3/16" hex	.56"	.64"	5.20"	1.82"	9.33"	2"
Conex 4 with 2-3/8" hex	.56"	.64"	5.20"	1.93"	9.33"	2"
Conex 4 with 2-9/16" hex	.56"	.64"	5.20"	2.04"	9.33"	2"
Conex 4 with 2-3/4" hex	.56"	.64"	5.20"	2.15"	9.33"	2"
Conex 4 with 2-15/16" hex	.56"	.64"	5.20"	2.25"	9.33"	2"
Conex 4 with 3-1/8" hex	.56"	.64"	5.20"	2.36"	9.33"	2"

CONEX 4/6 SERIES - MAX. TORQUE: 5507 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 4/6 with 1-13/16" hex	.56"	.64"	7.12"	1.61"	9.33"	2"
Conex 4/6 with 2" hex	.56"	.64"	7.12"	1.71"	9.33"	2"
Conex 4/6 with 2-3/16" hex	.56"	.64"	7.12"	1.82"	9.33"	2"
Conex 4/6 with 2-3/8" hex	.56"	.64"	7.12"	1.93"	9.33"	2"
Conex 4/6 with 2-9/16" hex	.56"	.64"	7.12"	2.04"	9.33"	2"
Conex 4/6 with 2-3/4" hex	.56"	.64"	7.12"	2.15"	9.33"	2"
Conex 4/6 with 2-15/16" hex	.56"	.64"	7.12"	2.25"	9.33"	2"
Conex 4/6 with 3-1/8" hex	.56"	.64"	7.12"	2.36"	9.33"	2"

CONEX 8 SERIES - MAX. TORQUE: 7170 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 8 with 2-3/16" hex	.70"	.80"	6.50"	1.96"	11.66"	2.50"
Conex 8 with 2-3/8" hex	.70"	.80"	6.50"	2.07"	11.66"	2.50"
Conex 8 with 2-9/16" hex	.70"	.80"	6.50"	2.18"	11.66"	2.50"
Conex 8 with 2-3/4" hex	.70"	.80"	6.50"	2.29"	11.66"	2.50"
Conex 8 with 2-15/16" hex	.70"	.80"	6.50"	2.39"	11.66"	2.50"
Conex 8 with 3-1/8" hex	.70"	.80"	6.50"	2.50"	11.66"	2.50"
Conex 8 with 3-1/2" hex	.70"	.80"	6.50"	2.72"	11.66"	2.50"
Conex 8 with 3-7/8" hex	.70"	.80"	6.50"	2.94"	11.66"	2.50"

CONEX 8/12 SERIES - MAX. TORQUE: 10755 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 8/12 with 2-9/16" hex	.70"	.80"	8.90"	1.96"	11.66"	2.50"
Conex 8/12 with 2-3/4" hex	.70"	.80"	8.90"	2.07"	11.66"	2.50"
Conex 8/12 with 2-15/16" hex	.70"	.80"	8.90"	2.18"	11.66"	2.50"
Conex 8/12 with 3-1/8" hex	.70"	.80"	8.90"	2.29"	11.66"	2.50"
Conex 8/12 with 3-1/2" hex	.70"	.80"	8.90"	2.39"	11.66"	2.50"
Conex 8/12 with 3-7/8" hex	.70"	.80"	8.90"	2.50"	11.66"	2.50"
Conex 8/12 with 4-1/4" hex	.70"	.80"	8.90"	2.72"	11.66"	2.50"
Conex 8/12 with 4-5/8" hex	.70"	.80"	8.90"	2.94"	11.66"	2.50"

CONEX 16 SERIES - MAX. TORQUE: 12400 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 16 with 2-3/4" hex	.84"	.96"	7.80"	2.43"	14.00"	3"
Conex 16 with 2-15/16" hex	.84"	.96"	7.80"	2.53"	14.00"	3"
Conex 16 with 3-1/8" hex	.84"	.96"	7.80"	2.64"	14.00"	3"
Conex 16 with 3-1/2" hex	.84"	.96"	7.80"	2.86"	14.00"	3"
Conex 16 with 3-7/8" hex	.84"	.96"	7.80"	3.08"	14.00"	3"
Conex 16 with 4-1/4" hex	.84"	.96"	7.80"	3.29"	14.00"	3"
Conex 16 with 4-5/8" hex	.84"	.96"	7.80"	3.51"	14.00"	3"
Conex 16 with 5" hex	.84"	.96"	7.80"	3.73"	14.00"	3"

CONEX 16/24 SERIES - MAX. TORQUE: 18600 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 16/24 with 3-1/2" hex	.84"	.96"	10.70"	2.43"	14.00"	3"
Conex 16/24 with 3-7/8" hex	.84"	.96"	10.70"	2.53"	14.00"	3"
Conex 16/24 with 4-1/4" hex	.84"	.96"	10.70"	2.64"	14.00"	3"
Conex 16/24 with 4-5/8" hex	.84"	.96"	10.70"	2.86"	14.00"	3"
Conex 16/24 with 5" hex	.84"	.96"	10.70"	3.08"	14.00"	3"
Conex 16/24 with 5-3/8" hex	.84"	.96"	10.70"	3.29"	14.00"	3"
Conex 16/24 with 5-3/4" hex	.84"	.96"	10.70"	3.51"	14.00"	3"
Conex 16/24 with 6-1/8" hex	.84"	.96"	10.70"	3.73"	14.00"	3"

CONEX 32 SERIES - MAX. TORQUE: 29368 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 32 with 3-1/2" hex	1.12"	1.28"	10.40"	3.14"	18.66"	4"
Conex 32 with 3-7/8" hex	1.12"	1.28"	10.40"	3.36"	18.66"	4"
Conex 32 with 4-1/4" hex	1.12"	1.28"	10.40"	3.57"	18.66"	4"
Conex 32 with 4-5/8" hex	1.12"	1.28"	10.40"	3.79"	18.66"	4"
Conex 32 with 5" hex	1.12"	1.28"	10.40"	4.01"	18.66"	4"
Conex 32 with 5-3/8" hex	1.12"	1.28"	10.40"	4.22"	18.66"	4"
Conex 32 with 5-3/4" hex	1.12"	1.28"	10.40"	4.44"	18.66"	4"
Conex 32 with 6-1/8" hex	1.12"	1.28"	10.40"	4.65"	18.66"	4"

CONEX 32/48 SERIES - MAX. TORQUE: 44052 FT. LBS.						
Description	"A"	"B"	"C"	"D"	"E"	"F"
Conex 32/48 with 4-1/4" hex	1.12"	1.28"	14.24"	3.14"	18.66"	4"
Conex 32/48 with 4-5/8" hex	1.12"	1.28"	14.24"	3.36"	18.66"	4"
Conex 32/48 with 5" hex	1.12"	1.28"	14.24"	3.57"	18.66"	4"
Conex 32/48 with 5-3/8" hex	1.12"	1.28"	14.24"	3.79"	18.66"	4"
Conex 32/48 with 5-3/4" hex	1.12"	1.28"	14.24"	4.01"	18.66"	4"
Conex 32/48 with 6-1/8" hex	1.12"	1.28"	14.24"	4.22"	18.66"	4"
Conex 32/48 with 6-1/2" hex	1.12"	1.28"	14.24"	4.44"	18.66"	4"
Conex 32/48 with 6-7/8" hex	1.12"	1.28"	14.24"	4.65"	18.66"	4"

Norwolf Tool Works presents the

T-CON™

U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

Hydraulic Bolt Tensioner



Built in safety cap eliminates strain and potential injury

Operates at only 10000 psi – single line action permits use with any 10K pump

Automatic spring return built in

Unique & patented cylinder is rodless which requires only one seal and adds more effective square inches to the piston area

Available Sizes:
1" thru 6"
19MM thru
150MM

Puller is integrated to eliminate strain

Choice of pin type or lever driven nut tightening mechanism

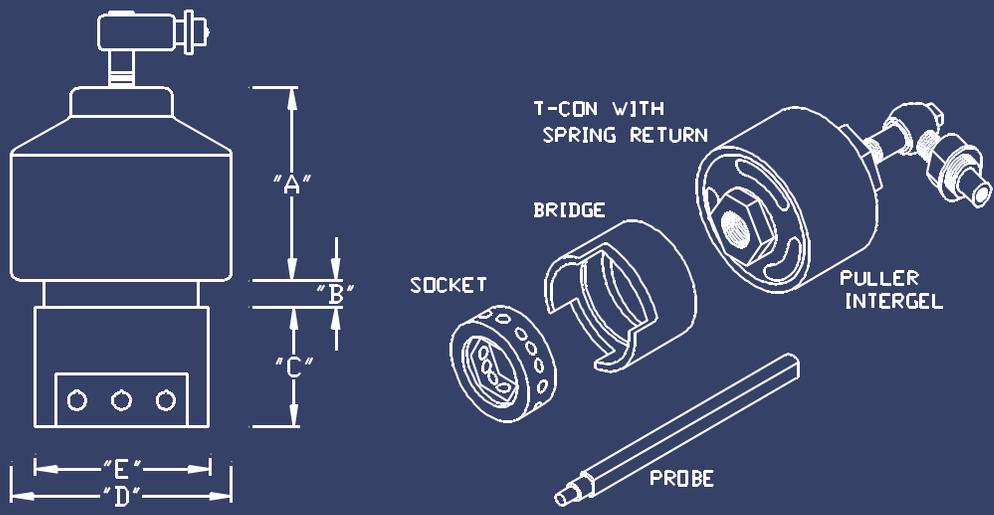


Special T-Con with extended bridge for windmill base applications



T-Con shown in multiple use for API flange

**RENT TO OWN!!!
CALL NOW
1-888-NORWOLF
FOR DETAILS**



T-CON HYDRAULIC BOLT TENSIONER							
PART NO.	BOLT DIAMETER	"A"	"B" Stroke	"C"	"D"	"E"	"MAX. LBS." (KIPS)
T-CON-100	1.000	2.72	3/8"	1.69	3.12	2.45	42000
T-CON-112	1.125	3.06	3/8"	1.90	3.51	2.75	60800
T-CON-125	1.250	3.40	3/8"	2.12	3.90	3.06	75000
T-CON-137	1.375	3.74	3/8"	2.33	4.28	3.36	90900
T-CON-150	1.500	4.08	1/2"	2.54	4.67	3.67	112100
T-CON-162	1.625	4.42	1/2"	2.75	5.06	3.98	126800
T-CON-175	1.750	4.76	1/2"	2.96	5.45	4.28	144900
T-CON-187	1.875	5.10	1/2"	3.17	5.84	4.59	172700
T-CON-200	2.000	5.44	1/2"	3.38	6.23	4.89	205600
T-CON-225	2.250	6.12	3/4"	3.81	7.01	5.51	258900
T-CON-250	2.500	6.80	3/4"	4.23	7.79	6.12	314500
T-CON-275	2.750	7.47	3/4"	4.65	8.57	6.73	380400
T-CON-300	3.000	8.15	3/4"	5.08	9.35	7.34	451800
T-CON-325	3.250	8.83	3/4"	5.50	10.13	7.95	534100
T-CON-350	3.500	9.51	3/4"	5.92	10.91	8.56	628600
T-CON-375	3.750	10.19	1"	6.35	11.69	9.18	721000
T-CON-400	4.000	10.87	1"	6.77	12.46	9.79	826700

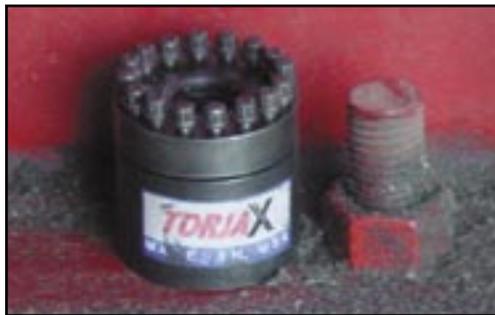
TORJAX™

U.S. AND INTERNATIONAL PATENTS PENDING

Use Norwulf Torjax when hydraulic power is not available...

Simply put jack screw puller on top of bridge and with criss-cross pattern tighten jack screws to achieve desired tension. The Torjax serves as a ready to use, inexpensive accessory to back-up the hydraulic T-Con.

TJAX-100-162	TORJAX Tensioner 1"
TJAX-112-181	TORJAX Tensioner 1-1/8"
TJAX-125-200	TORJAX Tensioner 1-1/4"
TJAX-137-218	TORJAX Tensioner 1-3/8"
TJAX-150-237	TORJAX Tensioner 1-1/2"
TJAX-162-256	TORJAX Tensioner 1-5/8"
TJAX-175-275	TORJAX Tensioner 1-3/4"
TJAX-187-293	TORJAX Tensioner 1-7/8"
TJAX-200-312	TORJAX Tensioner 2"
TJAX-225-350	TORJAX Tensioner 2-1/4"
TJAX-250-387	TORJAX Tensioner 2-1/2"
TJAX-275-425	TORJAX Tensioner 2-3/4"
TJAX-300-462	TORJAX Tensioner 3"
TJAX-325-500	TORJAX Tensioner 3-1/4"
TJAX-350-537	TORJAX Tensioner 3-1/2"
TJAX-375-575	TORJAX Tensioner 3-3/4"
TJAX-400-612	TORJAX Tensioner 4"

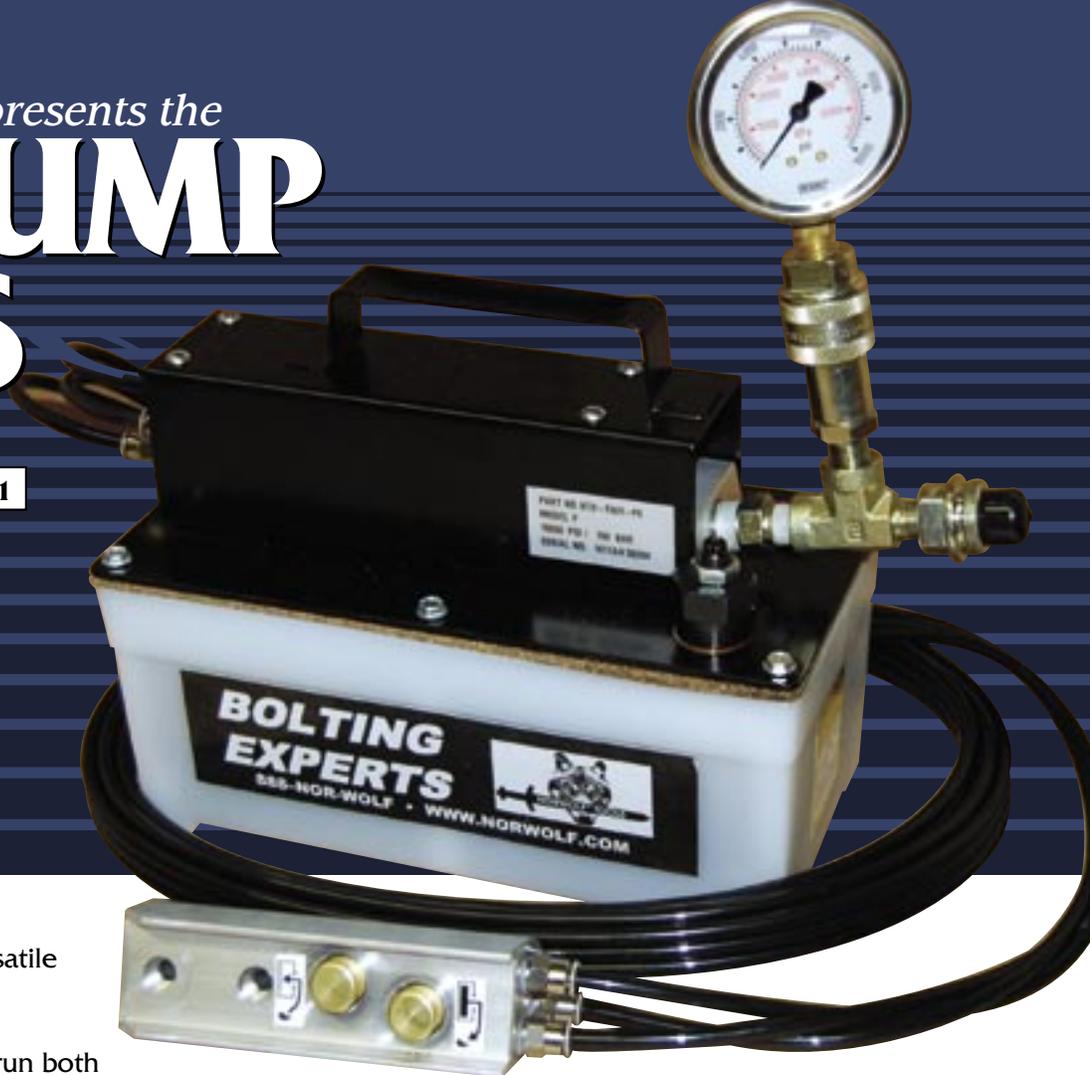


TORJAX TENSIONER PULLER

Norwolf Tool Works presents the

10K PUMP SERIES

NTW-ARC-01



Norwolf Hydraulic pumps are as versatile as Norwolf bolting tools.

Our large air and electric pump can run both single and double acting hydraulic tools as well as rams and cylinders.

The beauty of our hydraulic pump is the fact that it is compatible with every torque tool manufactured by Norwolf.

Even our small and light portable NTW-ARC-01 pneumatic pump (single acting) can operate all Norwolf hydraulic bolting tools.

Manifolds

Norwolf manufactures its own precision manifolds so multiple torque tools can be used at once. Our manifold screws right into the advance port of ours or any other 10,000 psi pump.

PART NO.	DESCRIPTION
NTW-MANI-4PT	4 port manifold
NTW-MANI-6PT	6 port manifold
NTW-MANI-12PT	12 port manifold



12 port and 4 port manifolds include fittings but not gauge.

PART NO.	DESCRIPTION
NTW-ARC-01	Small air over hydraulic pump features adj. relief valve, 10000 psi, remote control, uses shop air. Includes hose, gauge, fitting & oil - ready to use
NTW-ARC-02	Large air over hydraulic pump features adj. relief valve, 10000 psi, remote control, uses shop air. Includes hose, gauge, fitting & oil - ready to use
NTW-ERC-02	Electric over hydraulic pump 115V, 1-1/8 HP, Dual HZ 60/50, 24 Volt, remote control. Includes hose, gauge, fitting and oil - ready to use

Swivels



Swivels can be combined as shown on Conex powerhead to create 360° by 360° swivel compatibilities.

Norwolf manufactures its own 360° swivel.

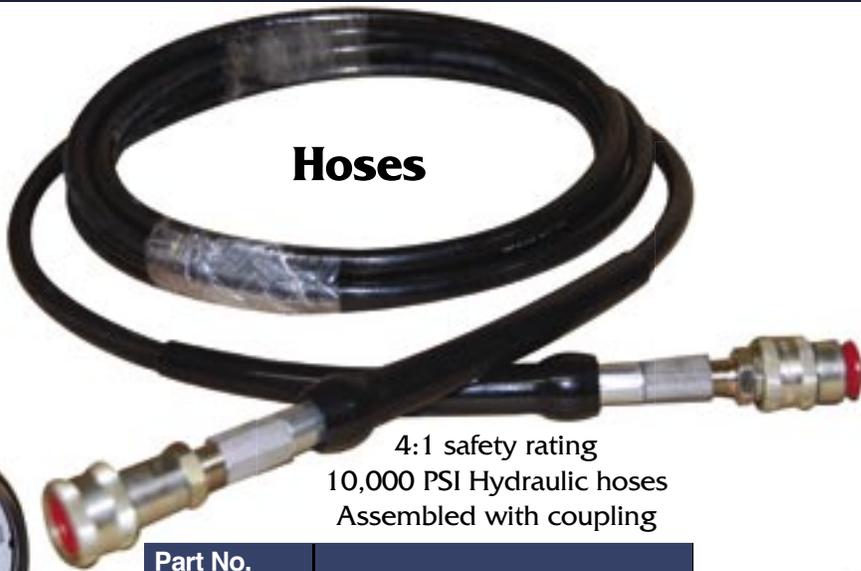
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CALL NOW
1-888-NORWOLF
FOR DETAILS**



NTW-ARC-02 shown with optional 12 port manifold as well as optional 5 gallon reservoir.

PART NO.	DESCRIPTION
NTW-180-090	1/8" female swivel fitting
NTW-190-090	1/4" female swivel fitting

Hoses



4:1 safety rating
10,000 PSI Hydraulic hoses
Assembled with coupling

Part No.	Description
NTW-S15H	15' single line hydraulic hose
NTW-S20H	20' single line hydraulic hose
NTW-S25H	25' single line hydraulic hose
NTW-S30H	30' single line hydraulic hose
NTW-S40H	40' single line hydraulic hose
NTW-S50H	50' single line hydraulic hose
NTW-S100H	100' single line hydraulic hose

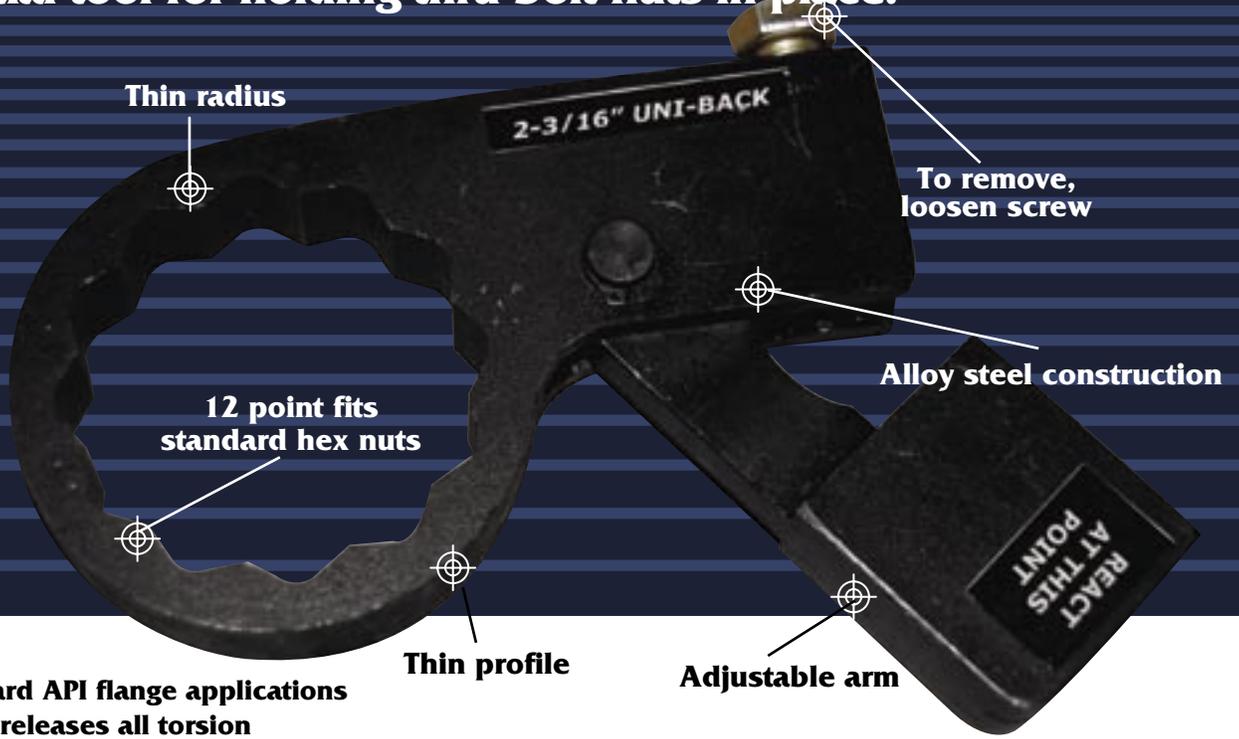


NTW-ERC-02 shown with optional 12 port manifold.

Norwolf Tool Works presents the
UNI-BACK™

U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

The essential tool for holding thru bolt nuts in place.

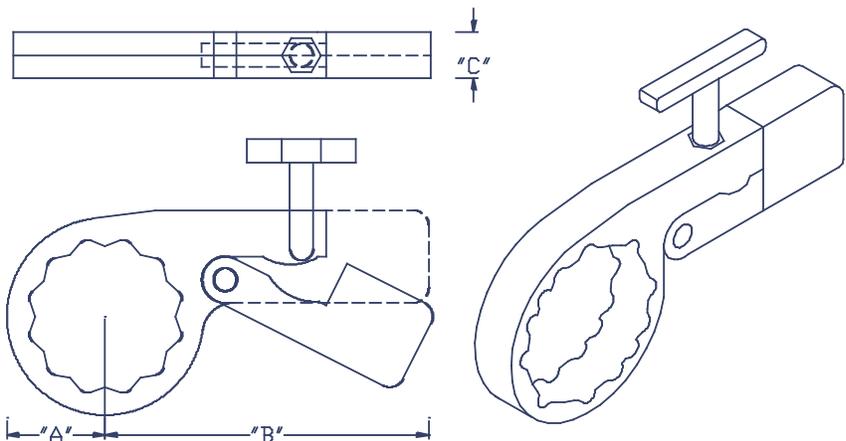


- Fits on all standard API flange applications
- ½ turn of screw releases all torsion
- No more hammering off of knocker wrenches
- Custom configuration available

UNI-BACK					UNI-BACK				
PART NO.	HEX SIZE	"A"	"B"	"C"	PART NO.	HEX SIZE	"A"	"B"	"C"
BK-143	1-7/16"	1.13"	5.25"	.75"	BK-256	2-9/16"	1.88"	7.00"	1.00"
BK-150	1-1/2"	1.17"	5.25"	.75"	BK-275	2-3/4"	1.99"	7.00"	1.00"
BK-156	1-9/16"	1.20"	5.25"	.75"	BK-293	2-15/16"	2.09"	7.00"	1.00"
BK-162	1-5/8"	1.24"	5.25"	.75"	BK-312	3-1/8"	2.20"	7.00"	1.00"
BK-168	1-11/16"	1.27"	5.25"	.75"	BK-350	3-1/2"	2.62"	10.50"	1.50"
BK-175	1-3/4"	1.31"	5.25"	.75"	BK-387	3-7/8"	2.84"	10.50"	1.50"
BK-181	1-13/16"	1.35"	5.25"	.75"	BK-425	4-1/4"	3.05"	10.50"	1.50"
BK-187	1-7/8"	1.38"	5.25"	.75"	BK-462	4-5/8"	3.27"	10.50"	1.50"
BK-193	1-15/16"	1.42"	5.25"	.75"	BK-500	5"	3.69"	14.00"	2.00"
BK-200	2"	1.45"	5.25"	.75"	BK-537	5-3/8"	3.90"	14.00"	2.00"
BK-218	2-3/16"	1.56"	5.25"	.75"	BK-575	5-3/4"	4.12"	14.00"	2.00"
BK-237	2-3/8"	1.67"	5.25"	.75"	BK-612	6-1/8"	4.33"	14.00"	2.00"



Uniback on standard API flange.



Norwolf Tool Works presents the

BACKHOLD™

U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

Norwolf Tool Works Backhold for holding back smaller nuts normally between 5/8" and 1-1/2"



Backhold™ with Torque Link



Standard 1/2" Drive Socket



Standard 1/2" Drive Crowfoot (open)



Norwolf Torque Link

Adjustable Reaction Block

1/2" Square Drive

Aircraft Aluminum Housing

Release Lever Adjusts 360°

TOOL DESCRIPTION	PART NO.
Backhold 1/2" Drive	HB-001-0
TOOL DESCRIPTION	PART NO.
Backhold Set with 15 Impact Sockets 5/8"-1 1/2" x 1/16"	HB-SS-0
TOOL DESCRIPTION	PART NO.
Backhold Master Set with 15 Impact Sockets and 15 Norwolf Torque Links 3/4"-1 5/8" x 1/16"	HB-SMS-0

For heavy use, we recommend Norwolf Torque Links

Specialty Sockets & Drives

Norwolf Tool Works manufactures custom sockets and drives in an expedited time frame to suit your requirements. Some are shown below for quick reference.



12 point to 6 point insert

Custom 12 point socket

Custom aircraft aluminum impact socket.

Square Reducer

Custom reaction arm

Box Socket

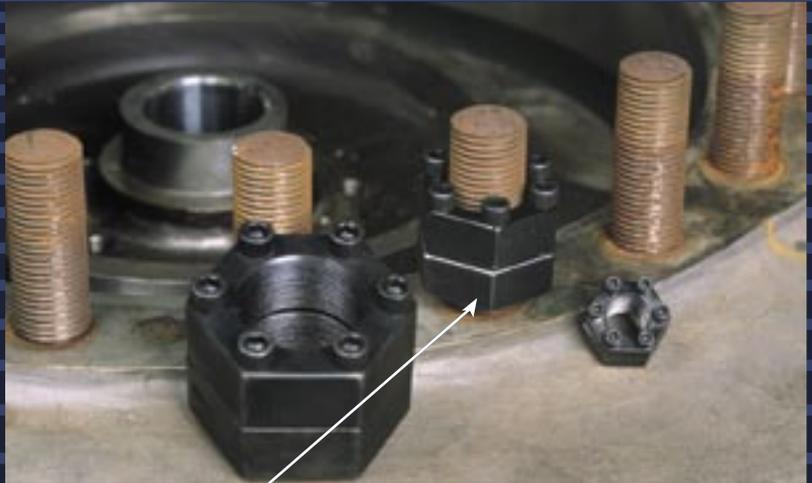
Norwolf Tool Works presents the

STUDMATE™

U.S. AND INTERNATIONAL PATENTS APPROVED AND PENDING

This clever tool threads onto your frozen studs in seconds like a normal hex nut. After simply tightening the six cap screws securely, the **STUDMATE** loosens the frozen stud with any standard socket or wrench.

Unlike conventional stud removers that are not only costly but bulky and require special removal tools, the Studmate hex style stud removers are the same dimension as the nut you removed...therefore, it not only fits where your nut fits, it requires the same tools you already have!



Threads on close to base reducing side load when removing stud.

All common bolting tools can be used with **STUDMATE**.

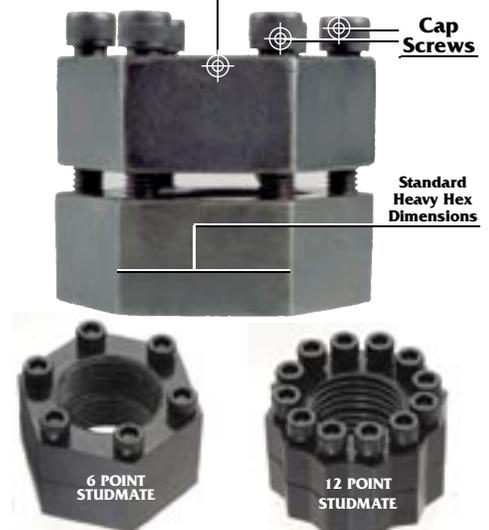


Norwolf Set 1 in custom fitted box

Threads

Cap Screws

Standard Heavy Hex Dimensions



For extra heavy duty use, we strongly recommend the Norwolf Studmate 12pt. design.

GROUP 1

PART NO.	THREAD	HEX SIZE
SM-50-13	1/2"-13	7/8
SM-50-20	1/2"-20	7/8
SM-56-12	9/16"-12	15/16
SM-56-18	9/16"-18	15/16
SM-62-11	5/8"-11	1-1/16
SM-62-18	5/8"-18	1-1/16
SM-75-10	3/4"-10	1-1/4
SM-75-16	3/4"-16	1-1/4
SM-87-9	7/8"-9	1-7/16
SM-87-14	7/8"-14	1-7/16
SM-10-12	1"-12	1-5/8
SM-10-14	1"-14	1-5/8

AVAILABLE IN BOTH 6 AND 12 POINTS

Listed part numbers denote 6 point Studmates. Add -12PT to Part No. for 12 point Studmate.

GROUP 2

PART NO.	THREAD	HEX SIZE
SM-112-7	1-1/8"-7	1-13/16
SM-112-8	1-1/8"-8	1-13/16
SM-112-12	1-1/8"-12	1-13/16
SM-125-7	1-1/4"-7	2
SM-125-8	1-1/4"-8	2
SM-125-12	1-1/4"-12	2
SM-137-6	1-3/8"-6	2-3/16
SM-137-8	1-3/8"-8	2-3/16
SM-137-12	1-3/8"-12	2-3/16
SM-150-6	1-1/2"-6	2-3/8
SM-150-8	1-1/2"-8	2-3/8
SM-150-12	1-1/2"-12	2-3/8
SM-175-5	1-3/4"-5	2-3/4
SM-175-8	1-3/4"-8	2-3/4
SM-175-12	1-3/4"-12	2-3/4
SM-20-450	2"- 4-1/2	3-1/8
SM-20-8	2"-8	3-1/8
SM-20-12	2"-12	3-1/8

GROUP 3

PART NO.	THREAD	HEX SIZE
SM-10-8	1"-8	1-5/8
SM-112-8	1-1/8"-8	1-13/16
SM-125-8	1-1/4"-8	2
SM-137-8	1-3/8"-8	2-3/16
SM-150-8	1-1/2"-8	2-3/8
SM-162-8	1-5/8"-8	2-9/16
SM-175-8	1-3/4"-8	2-3/4
SM-187-8	1-7/8"-8	2-15/16
SM-20-8	2"-8	3-1/8
SM-225-8	2-1/4"-8	3-1/2
SM-250-8	2-1/2"-8	3-7/8
SM-275-8	2-3/4"-8	4-1/4
SM-30-8	3"-8	4-5/8
SM-325-8	3-1/4"-8	5
SM-350-8	3-1/2"-8	5-3/8
SM-375-8	3-3/4"-8	5-3/4
SM-40-8	4"-8	6-1/8

The Norwolf STUDMATE is also available in metric sizes.

SET 1 SM-S50-10

12-Piece set in fitted case consisting of sizes 1/2" - 1" coarse and fine thread from Group 1.

SET 2 SM-S112-200

18-Piece set in fitted case consisting of sizes 1-1/8" - 2" coarse and fine thread from Group 2.

SET 3 SM-SP10-40

17 Piece set for power plants and refineries consisting of 8 TPI nuts (1/4") from Group 3.

SET 4 SM-MS-50-20

Master set groups 1 and 2 in fitted case.

SET 5 SM-MS-5-20

Master set groups 1 and 3 in fitted case.

Norwolf Tool Works presents the
XCELIFT™

The World's Most Unique Spreader!

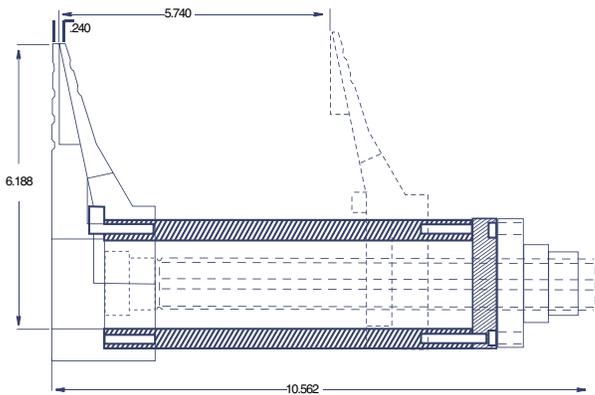
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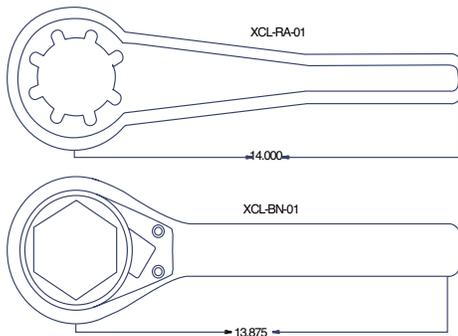
XCELIFT™ in position to spread a 20" flange



Xcelift shown in use with optional accessories



Serrated Lifting Toe



Holding Wrench



Box Wrench

Capable of Lifting 25 tons without the use of hydraulics!

- Patented auxiliary jack screw system
- Lightweight – only 8 lbs.!!
- Able to fit in the most restricted areas
- Use two or more xcelifts for even spreading of critical flanges
- Optional box and holding wrenches available

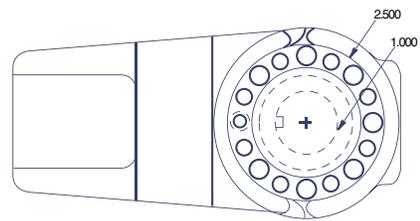


Main Driving Nut generates 10 tons of force

Auxiliary Jack Screws able to generate 25 tons of force

Aircraft Aluminum Body

Large Striking Area for Hammering

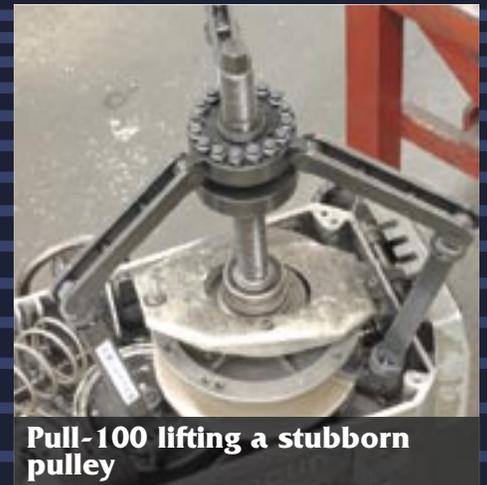


XCL01	25 Ton Flange Spreader
XCL-BN-01	Box Wrench
XCL-RA-01	Auxiliary Holding Wrench

PULLITEN™

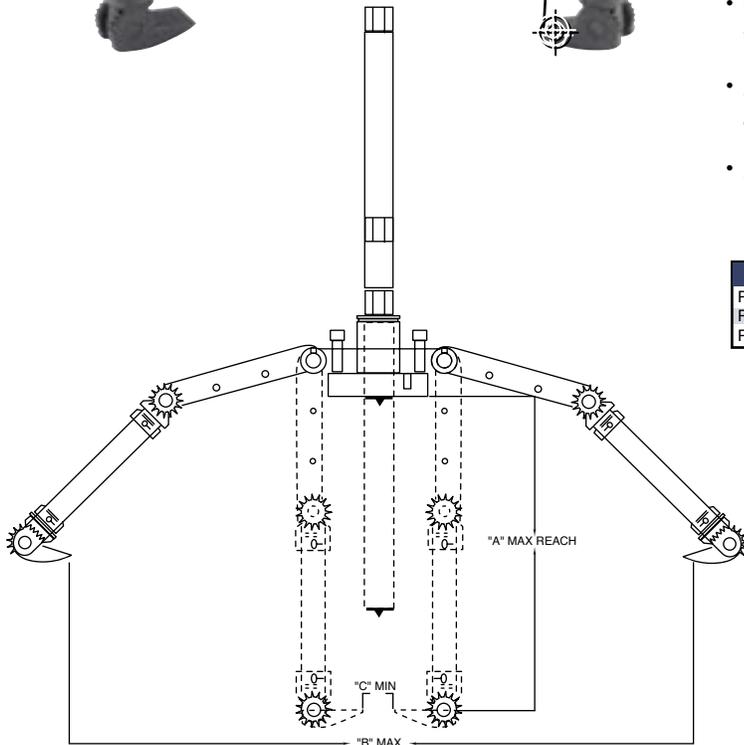
U.S. AND INTERNATIONAL PATENTS PENDING

The World's Most Powerful Gear Puller!

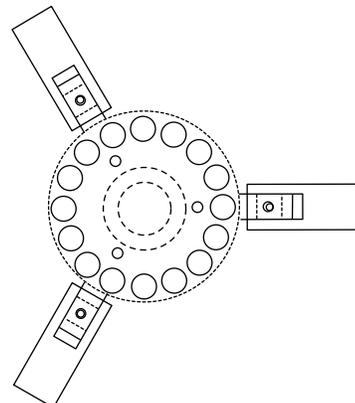


This revolutionary tool features the following benefits:

- Alloy steel center screw for fast and powerful adjustment-12 pt jackscrews for the ultimate in power-without the need for hydraulics.
- Patented adjustable legs and hooks for easy access to tight areas.
- Reversible hooks for internal applications.
- Accessories include bearing attachments as well as modified legs and hooks.
- Available in 3 sizes.



MODEL	MAX.	"A"	"B"	"C"
PULL-050	50	12.500	25.000	1.500
PULL-100	100	18.750	37.500	2.250
PULL-200	200	25.000	50.000	3.000



Visit Norwolf.com to see our quality industrial grade striking tools.

The screenshot shows a web browser window with the address bar displaying <http://www.NORWOLF.com/>. The browser's navigation bar includes buttons for Back, Forward, Stop, Refresh, Home, AutoFill, Print, and Mail. The website's header features a logo with a wolf's head and the text "NORWOLF TOOLS", along with navigation links for COMPANY, PRODUCTS, CONTACT, and LITERATURE. The main content area displays several tools with their names in bold blue text:

- The UNI-BAR™**: A large, curved, black metal tool with a blue handle.
- SWIVEL HAMMER™**: A hammer with a blue handle and a black head.
- GLIDE HAMMER™**: A hammer with a blue handle and a black head.
- A-HAMMER™**: A hammer with a blue handle and a black head.
- E-HAMMER™**: A hammer with a blue handle and a black head.
- D-HAMMER™**: A hammer with a blue handle and a black head.
- DOWEL POUNDER™**: A hammer with a blue handle and a black head.
- B-HAMMER™**: A hammer with a blue handle and a black head.

With Norwolf Tool Works all tools work off of any 10,000 psi hydraulic pump and can be used as single units or in tandem.

“All fits one and one fits all”

Conversely all Norwolf pumps can operate any hydraulic tool.



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NORWOLF QUALITY STANDARD AQ-2020

All tools and products in this catalog conform to the rigid requirements of Norwolf Quality Standard AQ-2020.