PRACTITIONER'S MANUAL

DAW Industries

4010™ KD

Engineered with True-KD™ Biomechanics
Stock #: TK-4010

IMPORTANT:

Adjusting alignment beyond recommended limits described within will adversely affect patient's gait, and could cause premature wear.

HEADQUARTERS:

6610 Nancy Ridge Road San Diego, CA 92121-2252 Orders: (800) 252-2828 • (858) 622-4962 Fax: (800) 856-8563 www.daw-usa.com

Technical Support (800) 242-8669

CENTRAL/EASTERN DISTRIBUTION CENTER:

5579-B Chamblee Dunwoody Road

Suite 227

Atlanta, GA 30338-4154 Orders: (800) 824-7192 Fax: (800) 865-8563











4010™ KD

Engineered with True-KD™ Biomechanics

Stock #: TK-4010

True-KD™ Biomechanics:

not only serves your KD Amputee's unique cosmetic needs, True-KD Knees are also engineered to maximize stability & efficiency by exploiting your Patient's distinct biomechanical advantages! Learn more @ daw-usa.com/true-kd-biomechanics

Benefits:

- ✓ Highly stable, highly cosmetic True-KD Biomechanics
- ✓ Friction setting automatically readjusts with use (no need for readjustment). See pg.7.
- ✓ Adjustable Extension Assist
- ✓ Cost effective, durable Aluminum Alloy construction
- Proven durability & dependability
- ✓ Forever-smooth stainless ball bearing axes



IMPORTANT:

Read technical information thoroughly before using knee.

Popular Proximal Options



KD-Adapter, 3-Prong Stainless Steel (#: TSC-KDL) Provides Rotational Adjustment



Lo-Pro Rotator[™] (#: TKR-01) Provides Rotational Adjustment Attach any 4-Hole connector

Suggested L-Codes*: L5984

Browse our complete selection of Unique Components at daw-usa.com/all-connectors

Recommended K2 Foot



K2 Feather-Lite[™] Foot Engineered for the K2 Individual Requiring mobility & safety

Provides 2 Flexible Keel Options & Multi-Axial Ankle Motion with Rotation

Suggested L-Codes*: L5972 L5986

*Please refer to the complete reimbursement disclaimer at www.daw-usa.com



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	DAW Prosthetic Knee Limited Warranty

Recommended Order of Adjustments

- 1. Extension Stop (Geometric Stability)
- 2. Swing Phase Friction
- 3. Extension Assist



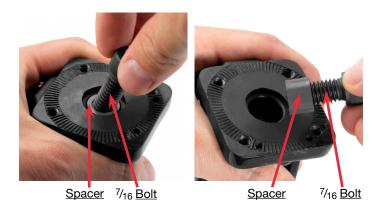


True-KD™ Series Knee Connection to KD Adapter (TSC-KDL)

The instructions below apply to True-KD $^{\!\scriptscriptstyle\mathsf{TM}}$ Series Knees, when using the KD Adapter (TSC-KDL):

After lamination of the KD Adapter (TSC-KDL) is complete,

A. Use the included $7/_{16}$ <u>Bolt to remove the black Spacer</u> from the center of the top of the knee.



- B. Remove the Kneecap.
- C. Flex the 4010 KD[™] True-KD Knee approx. 90-degrees.
- D. Select your desired degree of external knee rotation. Each notch of the KD Adapter and knee top is an adjustment of 2 degrees.
- E. Secure the knee to the KD Adapter using the included ⁷/₁₆ Bolt (8mm hex). **Torque the bolt to 9ft-lb (12.2Nm).**



Specifications

Patient profile:

Body weight	Under 220lb (100kg)
Functional level	K1 / K2
Amputation level	Knee Disarticulation

Knee Specifications:

Stock number	TK-4010
Max weight limit	220lb (100kg)
Knee weight	1.98lb (901g)
Swing Controls	Auto-readjusting Constant Friction, Extension Assist & Adjustable Swing Phase Trigger
Stability Control	Geometric Stability Adjustment
Proximal connection	M6 threaded 4-hole or, Unthreaded single hole
Distal connection	30mm tube clamp
Warranty	2 years, upgrade for additional 3 years





True-KD™ Series Knee Connection to Wire Basket Adapter (TSC-BX) with Lo-Pro Rotator™

Rubber

Plug

Button

M6 Buttonhead

Screw (4mm hex)

DAW Prosthetic Knee Limited Warranty

The knee comes with a Limited Warranty for 2-years. It covers manufacturer defects (excluding wear & tear). An additional 3 years of warranty coverage can be purchased for +15% of the original cost of the knee. See full warranty statement at: www.daw-usa.com/practitioner-resources/

Weight limit of this knee is 220lb (100kg)

Bumpers are not under warranty.

Tight screws and a straight cut of the tubing are a must. Not following recommended use of components, including weight limit and alignment, will void the warranty. Make sure to read all instructions enclosed with the knee unit.

All repairs on the knee module must be done by a factory-trained DAW technician. Any disassembly done on the knee during the warranty period(s) will void the warranty (excluding disassembly of the extension spring housing).

Service Under Warranty

For all component repairs call DAW Industries right away. We will ship a replacement knee the same day, which will become your patient's new knee. The replacement component is under warranty for the time remaining on the original component.

The overnight shipping charge will be credited upon receipt of the failed knee component.

Service Outside of Warranty

Knees not under warranty may be repaired by DAW. While any unwarranted knee is being serviced, DAW will provide a rental knee subject to availability. The DAW rental fee is listed in the price list under each knee. The rental fee covers the period DAW takes to complete the repair with ten (10) days allowed for shipping in both directions. The same rental fee will be charged every 30 days passed the initial rental fee period.

For any repair you must first contact our Technical Services at 1(800)242-8669. This will allow DAW to best understand the issue. Our Technical Support will immediately asses if the repair qualifies as a "minor" or "substantial" repair. A "minor" repair will be completed, as a courtesy, free of charge (you will just pay for return shipping). A "substantial" repair will be billed at a flat rate according to knee model. Upon return of your repaired knee, you will be invoiced for the repair charge, if any. When DAW receives the rental knee, your account will be credited for the value of the returned knee (Gold Preferred+ = FREE rental; Preferred = 33% off).

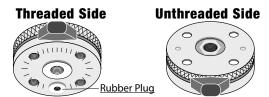
In the event your knee is unrepairable, you will be notified immediately. The rental must then be returned to DAW, 2nd day, within five (5) working days. The rental fee may be applied toward the purchase of a new DAW knee.

DAW[®]

The Lo-Pro Rotator attaches directly to the top of any DAW True-KD™ Series knee. It's low build height allows KD Amputees the convenience of knee rotation while still maintaining cosmetic appearance in the sitting position.

The Lo-Pro Rotator features an

Unthreaded Side (with an unthreaded 4-Hole pattern) and a **Threaded Side** (with a threaded 4-Hole pattern*Rubber Plug).



Connection of the Lo-Pro Rotator to the 4010 KD™: After lamination of the Wire Basket Adapter (TSC-BX) is complete,

- A. First, screw in the included <u>M4 Screw</u> (by hand) partially into the <u>Rubber Plug</u> and pull up to remove it.
- B. Push and hold down the <u>Button</u> and rotate until the <u>Plug's Hole</u> lines up with one of the unthreaded holes on the rotator's other side. If it is difficult to rotate, screw in 2 <u>M6 Button Head Screws</u> partially into the **Threaded Side** to use as leverage.
- C. With the **Unthreaded Side** against the adapter, insert one of the included <u>M6 Button Head Screws</u> (4mm hex) through the 2 holes into a threaded hole of the <u>Wire Basket</u>. Screw in, but do not tighten. It's recommended the button be positioned facing forward.
- D. Repeat steps B. & C. until all 4 M6 Button Head Screws are screwed in. Torque each screw to 7.4ft-lb (9.9Nm).
- E. Return the Rubber Plug to its hole.
- F. Now you may secure the knee to the bottom of the Lo-Pro Rotator using the included ⁷/₁₆ <u>Bolt</u> (8mm hex). **Torque the bolt to 9ft-lb (12.2Nm)**.





For Technical Support call (800)242-8669

BUILD HEIGHT

5/8 in (16 mm) Knee Center Sitting Position 11/8 in (28 mm) (28 mm) (157 mm) (114 mm) (13/4 in (43 mm))

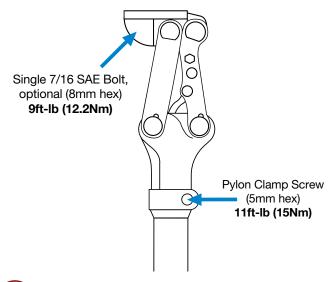
TORQUE SETTINGS

Important:

Use blue Loctite[™] 242 on all screws referenced here.

It is not recommended to use Ottobock Titanium Pylon. Do not use a spacer for height adjustment. Ensure pylon is cut straight.

It is recommended these torques be checked within 30 days and then 6 months after your delivery of this prothesis.





For Technical Support call (800)242-8669

Replacing or Trimming the Extension Assist Spring

To replace the Extension Assist Spring:

- A. Loosen the Pylon Clamp Screw (5mm hex).
- B. Remove the pylon.
- C. Completely remove the Extension Assist Control Screw (1) (5mm hex).
- D. Feed a 2.5mm hex key through the holes of the <u>Spring Housing</u> 2. Using the torque provided by the hex key, unscrew the housing.
- E. Pull the white <u>Piston</u> ③ out of the housing. The <u>Spring</u> ④ is pressed on the <u>Piston's</u> distal end.
- F. Unclip the <u>Piston</u> and <u>Force Plate</u> (5) from the <u>Spring</u>, transfer them to your new <u>Spring</u>.

 Return the <u>Spring Assembly</u>, <u>Force Plate</u> end down, to the housing.
- G. Re-screw the <u>Housing</u> into the knee, hand tighten.
- H. Re-screw the Extension Assist Control Screw back in until you feel it make contact with the Force Plate (this is your new minimum setting).









To trim the Extension Assist:

If your Amputee requires less Extension Assist than the lighter spring offers, trim the lighter spring:

Follow steps A. through E. above, then,

Unclip the Force Plate (5) & Piston (3) from the Spring.

Using a grinding wheel, trim one or two coils (maximum) off one end of the spring. Smooth the trimmed end. Press the <u>Force Plate</u> into the mouth of the housing. Press the <u>Piston</u> onto the uncut end of the <u>Spring</u>. Return the <u>Spring</u> & <u>Piston</u> to the housing, **trimmed end down**, pushing the <u>Force Plate</u> down into the housing.

Continue with steps G. and H. above.



RECOMMENDED BENCH & STATIC ALIGNMENT

Adjusting Extension Assist

To Adjust Extension Assist:

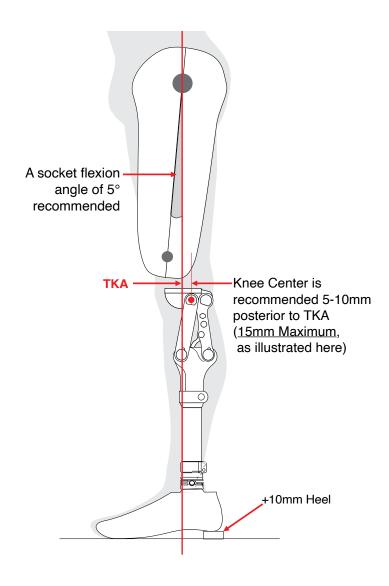
- A. Loosen the <u>Pylon Clamp Screw</u> (5mm hex) and remove the Pylon
- B. Loosen the Lock Nut (12mm wrench)
- C. Turn the Extension Assist Control Screw (5mm hex):

 Clockwise to increase extension assist

 Counter-clockwise to decrease extension assist
- D. Re-tighten the <u>Lock Nut</u>, **Hand Tighten** (12mm wrench). After returning the pylon, re-tighten <u>Pylon Clamp Screw</u> to 11ft-lb (15Nm).



Standard alignment procedure must be observed to obtain the maximum benefits offered by this knee. All alignment references should be taken from the center of the anterior superior knee axis (commonly referred to as the Knee Center).







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Extension Stop Bumper Adjustment

(Geometric Stability)

To customize Geometric Stabilitiy, adjust the Extension Stop Screw. Max adjustment is 2°.

Note: This adjustment will affect socket flexion slightly.

Turn the Extension Stop Screw (2.5mm hex):

Clockwise to decrease stance phase stability (& earlier swing-phase initiation)

Counter-clockwise to increase stance phase stability (& later swing-phase initiation)

Extension Stop Screw (2.5mm hex)



Adjusting Swing Phase Friction

This Knee's Friction Adjustment with Forever-Setting[™] eliminates the need to re-adjust your original friction setting in the future.

Two <u>Friction Adjustment Screws</u> apply pressure to a special friction plate against the knee's anterior superior axis.

To Adjust the Friction Setting:

Turn the Friction Adjustment Screws (4mm hex):

Clockwise to increase friction

Counter-clockwise to decrease friction

NOTE: Adjust both screws equally.



