

# Keysight N1060A Accessories Kit

# Notices

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### CAUTION

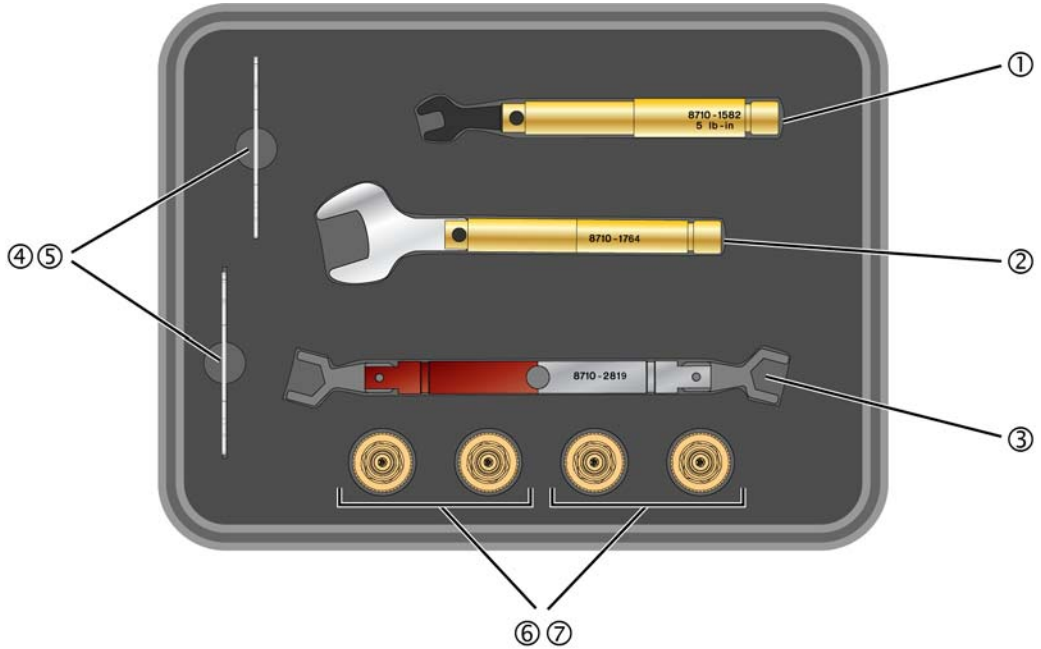
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# Accessory Kit

The N1060A accessory kit includes the required torque wrenches, open-end wrenches, and adapters to make connections to the N1060A's front-panel RF connectors. To prevent expensive repairs and repair downtime, take a few minutes to study the information in the following pages.



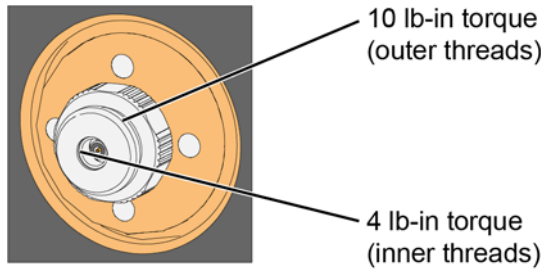
**Figure 1** Items in Accessory Case

**Table 1** Items in Kit

Item	Description	Qty	Part Number
①	Torque wrench, 5/16-in open end, 5 lb-in (0.57 Nm)	1	8710-1582
②	Torque wrench, 20 mm open end, 8 lb-in (0.9 Nm)	1	8710-1764
③	Dual Torque wrench, 14 mm open end, 4 lb-in (0.45 Nm) and 10 lb-in (1.13 Nm)	1	8710-2819
④	Open end wrench, 8 mm	1	N1060-20009
⑤	Open end wrench, 7 mm	1	8710-1761
⑥	Channel Input Y1901B adapter, 1 mm (f) to 1.85 mm (f)	2	Y1901B
⑦	Channel Input Y1903B adapter, 1 mm (f) to 2.92 mm (f)	2	Y1903B

## Channel Input Connector

The following picture shows the torque specification for the two connection threads on the N1060A front-panel Channel Input connectors.



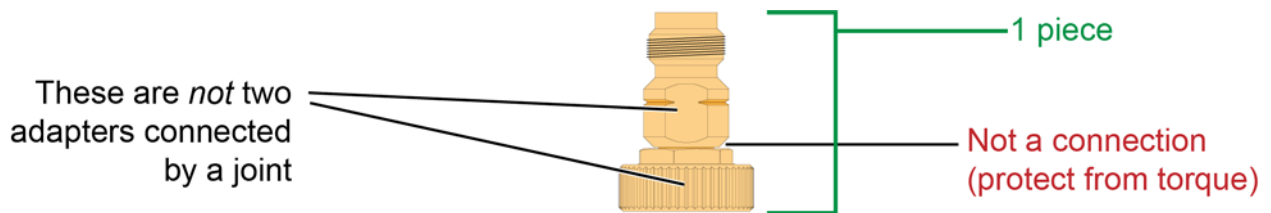
**Figure 2** Torque Specification for Channel Input Threads (Y1901/3B adapters not shown)

## Channel Input Y1901/3B Adapters

**Figure 3** shows the kit's two types of ruggedized adapters (kit items ⑥ ⑦):

- 1 mm to 1.85 mm Y1901B adapter (quantity 2)
- 1 mm to 2.92 mm Y1903B adapter (quantity 2)

These adapters are designed to be installed on the N1060A's two front-panel channel inputs. It is recommended that you always use them. Due to the physical requirements needed to obtain high performance, the geometry of these, as well as all, 1 mm connectors, demands special care to avoid expensive damage as explained in this document.



**Figure 3** Y1901/3B Ruggedized Adapters

### NOTE

Although not supplied in the kit, a 1 mm-to-1 mm Y1900B adapter is available to purchase from Keysight Technologies.

## Making RF Connections

- 1 Work at a static-safe workstation.
- 2 Visually inspect the connectors. If necessary, clean the connectors. Carefully align the connectors. The male connector center pin must slip concentrically into the contact fingers of the female connector.
- 3 Push the connectors straight together.
- 4 Tighten lightly using only your fingers as, at this point, all you want is a connection in which the outer conductors make gentle contact at all points on both mating surfaces. Very light finger pressure (no more than 2 pound-inches of torque) is enough.

### CAUTION

Do not twist one connector into the other (like inserting a light bulb). This happens if you turn the device body rather than the connector nut. Major damage to the center conductor can occur if the device body is twisted.

- 5 Use a torque wrench to make the final connection. This guarantees perfectly tight, consistent connections that prevents connector damage.
  - See [Figure 4](#) and [Figure 5](#) for the proper handling of the wrenches.
  - To view the correct connector “flats” on which to position the wrenches:
    - See [Figure 6](#), [Figure 7](#), and [Figure 8](#) for Channel Input connectors
    - See [Figure 9](#) for Recovered Clock output and Precision Timebase input connectors

### CAUTION

This maximum torque setting is 4 in-lb (0.45 Nm) for 1.0 mm connectors.

### CAUTION

Rotate only the connector nut when you make the connection. Do not rotate the cable or adapter.

### CAUTION

Hold the torque wrench lightly at the groove located at the end of the handle.

### CAUTION

Apply force perpendicular to the wrench handle. This applies torque to the connection through the wrench. Do not hold the wrench so tightly that you push the handle straight down along its length rather than pivoting it, otherwise you apply an unlimited amount of torque.

### CAUTION

Tighten the connection just to the torque wrench “break” point as shown in [Figure 4](#) and [Figure 5](#). Do not tighten the connection further.

## Applying Torque

For the 1 mm Channel Input connectors, use dual torque wrench (kit item ③). For the N1060A's front-panel Precision Timebase and Recovered Clock 2.92 mm connectors use the 8 lb-in torque wrench (kit item ④).

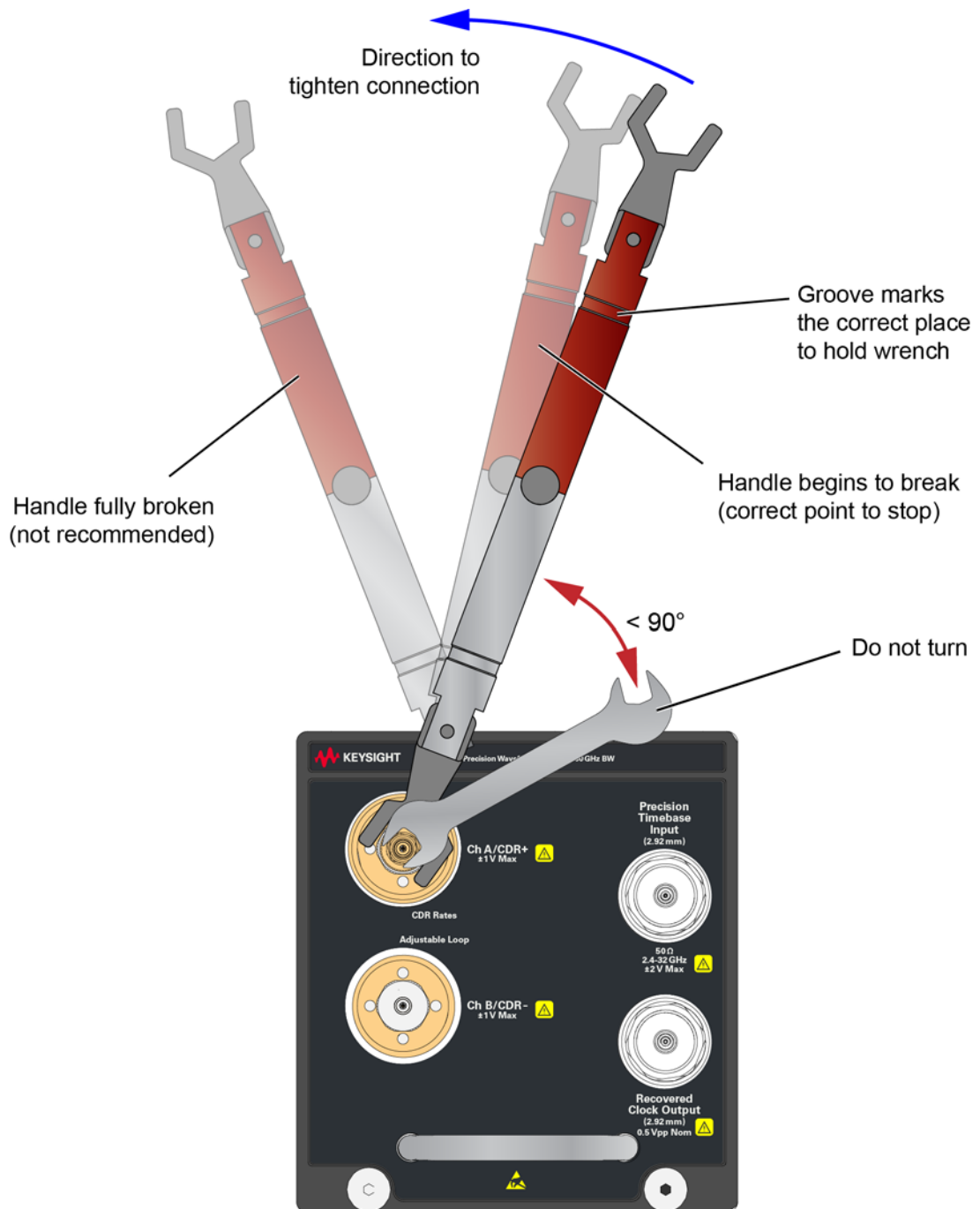
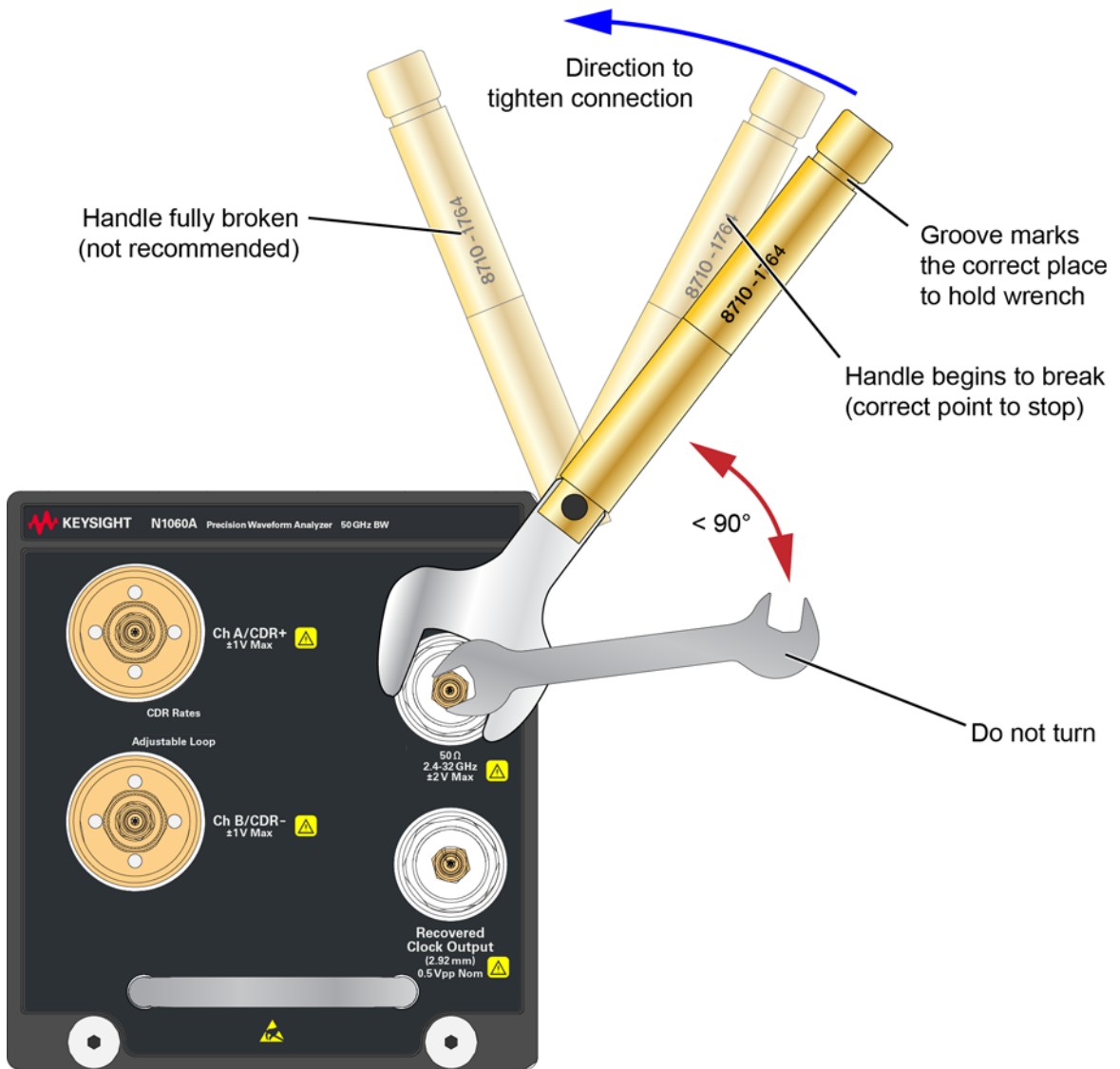


Figure 4 Wrenches on Channel Input

**CAUTION**

The silver end of the dual torque wrench (kit item ③) is 4 lb-in. The red end of the torque wrench is 10 lb-in.



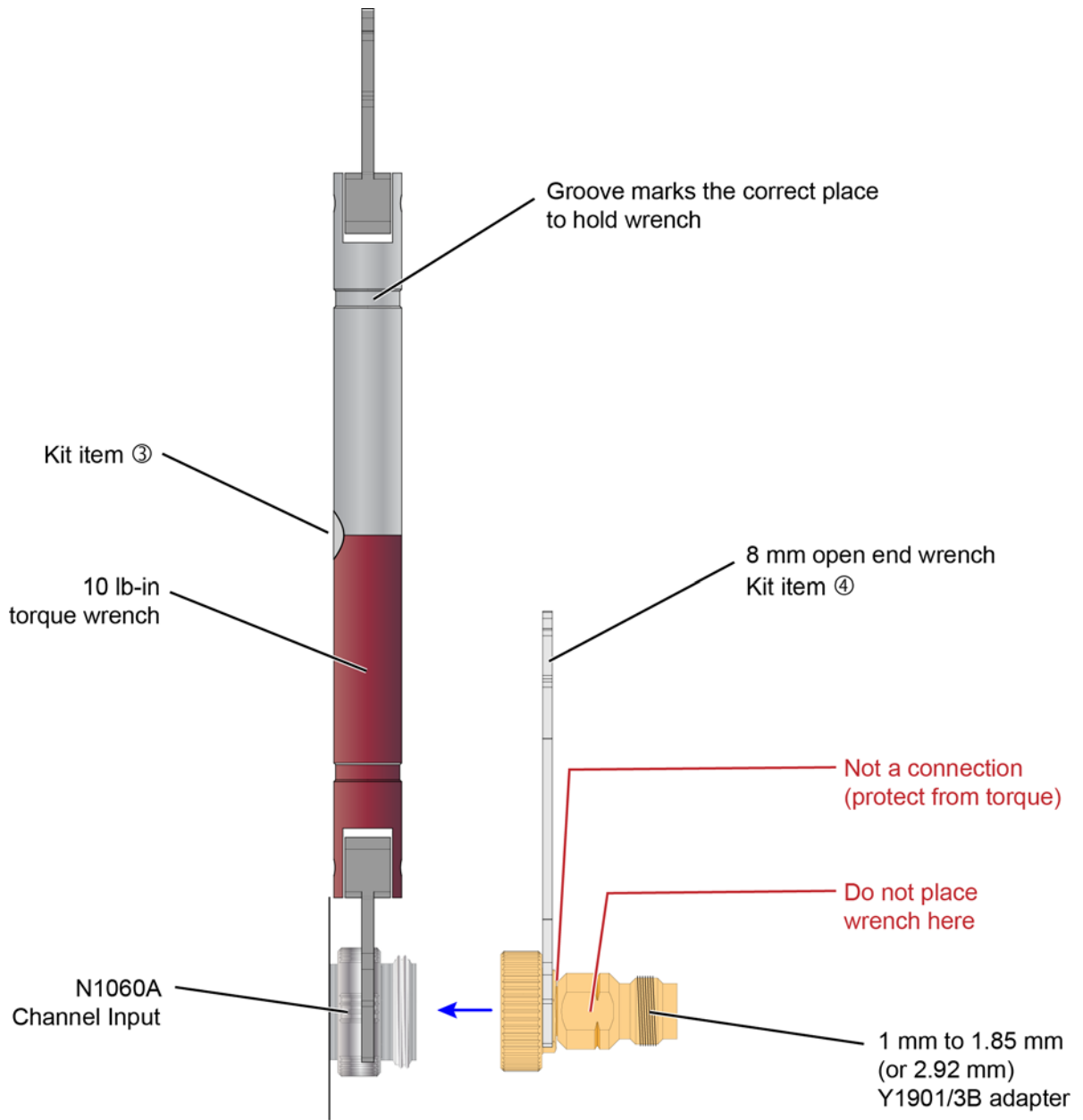
**Figure 5** Wrenches on Precision Timebase Input (or Recovered Clock Output)

# Selecting and Positioning the Wrenches

For several possible connections, the following figures show the proper “flats” on which to place the wrenches.

Y1901/3B  
Adapter to  
Channel Input

This figure show the correct placement of the 10 lb-in torque wrench (the red end) and the 8 mm open end wrench. On the Y1901/3B adapter, connect the 8 mm wrench on the flats that are adjacent to the knurled ring.



**Figure 6** Wrenches Positioned on Correct Flats



Cable or  
Adapter to  
Y1901/3B  
Adapter

This figure show the correct placement of the 5 lb-in torque wrench and the 7 mm open end wrench for connecting a cable, adapter, or other item to the N1060A Y1901/3B adapter.

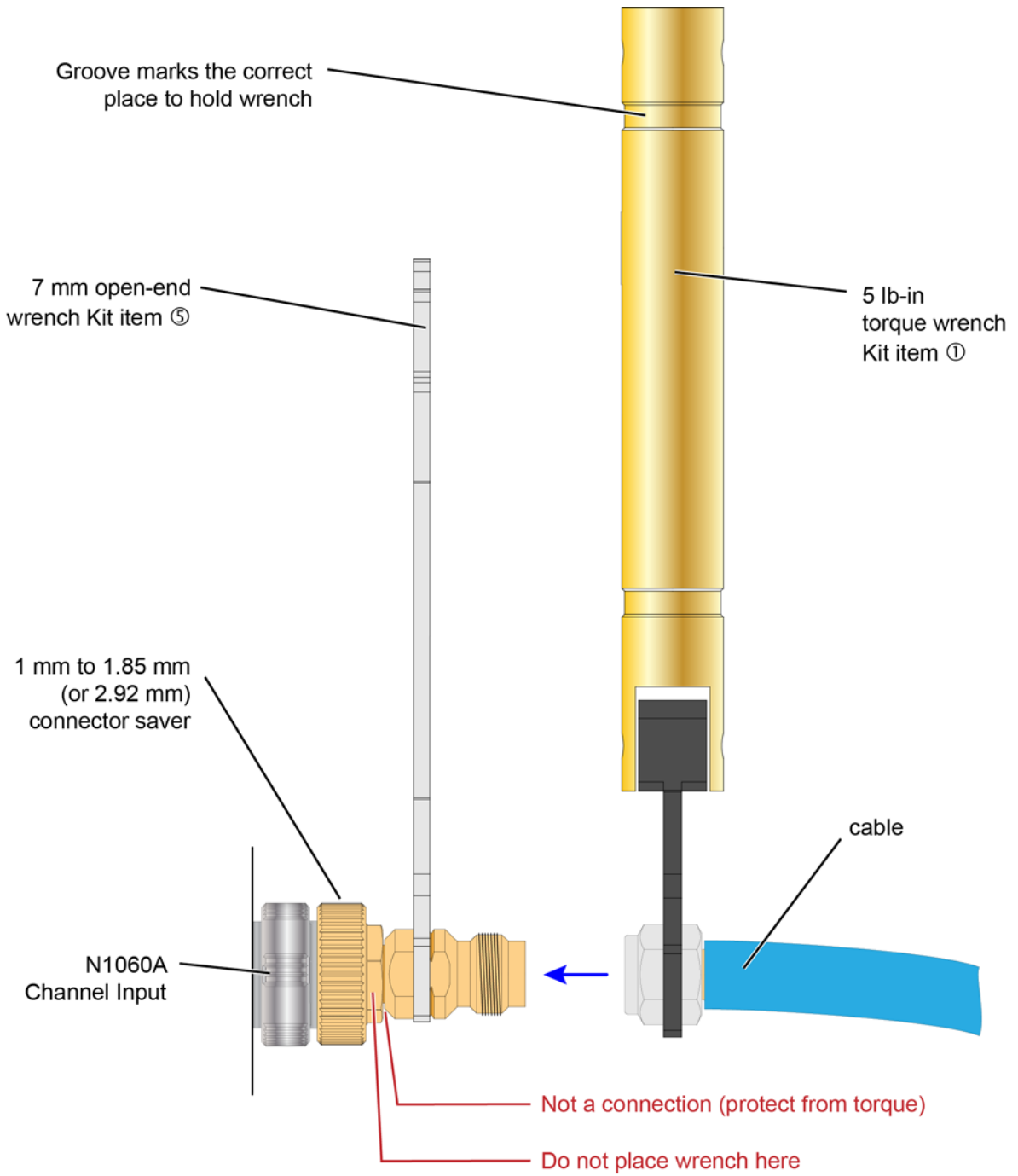


Figure 7 Wrenches Positioned on Correct Flats

Adapter to  
Channel Input  
(without  
Y1901/3B)

It is recommended that you always connect the kit's Y1901/3B adapter to the N1060A channel inputs. However, if you want to connect an adapter or cable *directly* to a channel input connector, use the 4 lb-in end of the dual torque wrench (*silver end* of the dual torque wrench). *Do not use the red end of the dual torque wrench which is only used when connecting the stronger outside channel-input connector threads to the kits Y1901/3B connector.*

Never apply in excess of 4 lb-in of torque to the N1060A channel input's inner threads. Confirm also that your adapter or channel connector can withstand 4 lb-in.

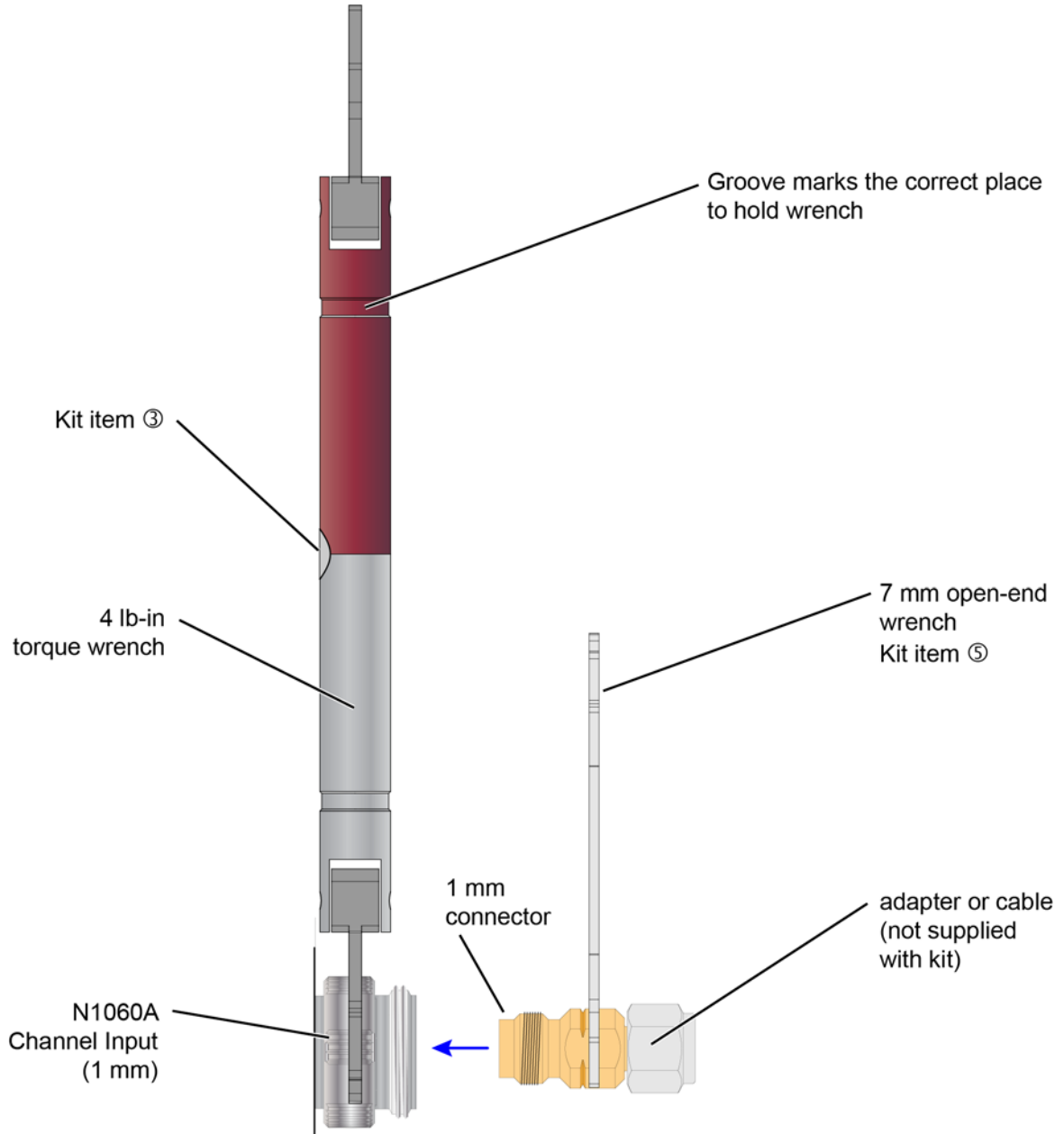


Figure 8 Wrenches Positioned on Correct Flats

Adapter to  
2.92 mm  
Connectors

This picture shows connecting a 2.92 mm-to-2.92 mm adapter to either the front-panel Recovered Clock output or Precision Timebase input. Both of these N1060A connectors are 2.92 mm.

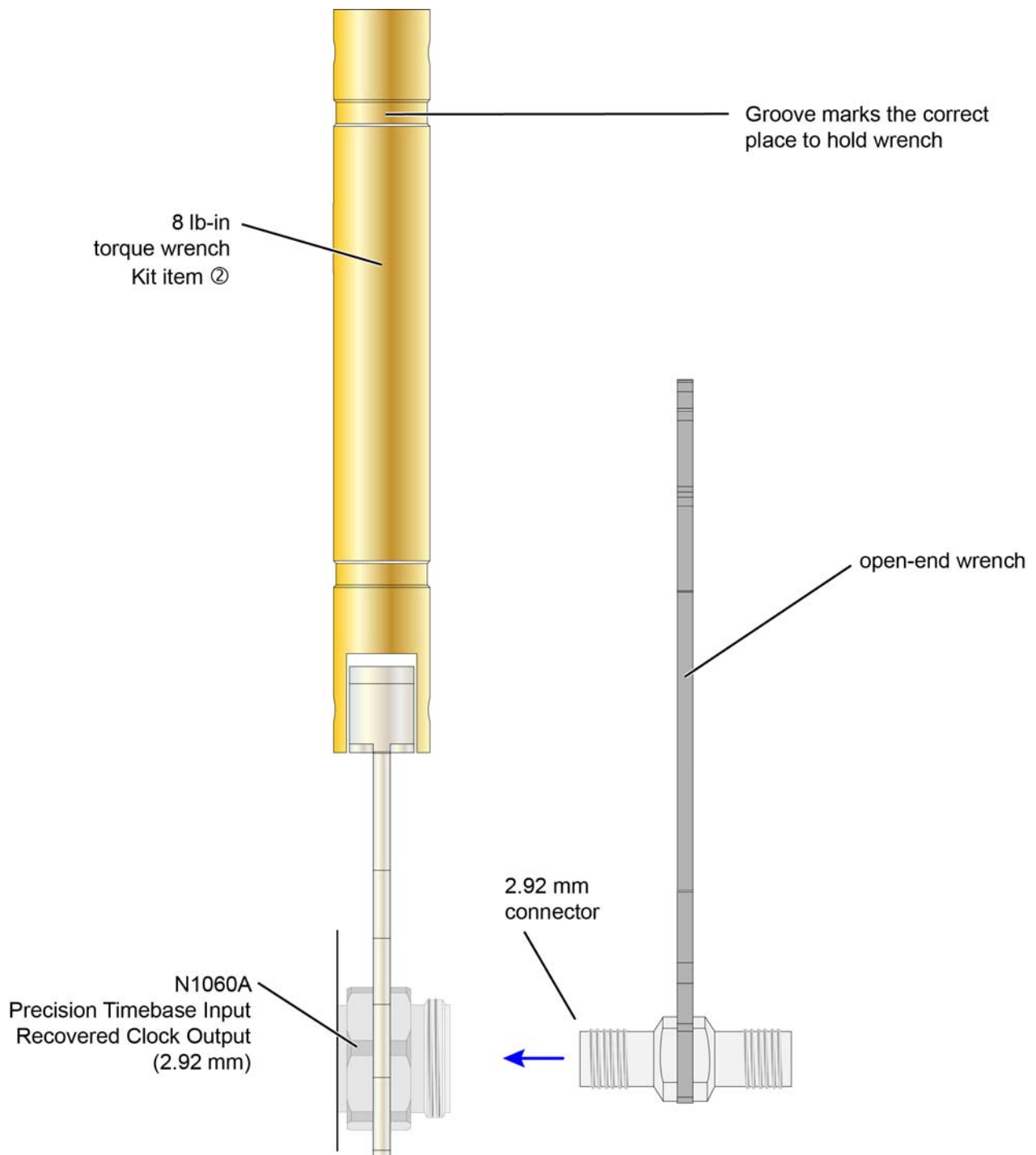


Figure 9 Wrenches Positioned on Correct Flats



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