

Halla

**THE
K218**

TDS 500 SERIES
INSTRUMENT
CART

Instructions

Instrument Serial Numbers

Each instrument manufactured by Tektronix has a serial number on a panel insert or tag, or stamped on the chassis. The first letter in the serial number designates the country of manufacture. The last five digits of the serial number are assigned sequentially and are unique to each instrument. Those manufactured in the United States have six unique digits. The country of manufacture is identified as follows:

B010000	Tektronix, Inc., Beaverton, Oregon, USA
E200000	Tektronix United Kingdom, Ltd., London
J300000	Sony/Tektronix, Japan
H700000	Tektronix Holland, NV, Heerenveen, The Netherlands

Instruments manufactured for Tektronix by external vendors outside the United States are assigned a two digit alpha code to identify the country of manufacture (e.g., JP for Japan, HK for Hong Kong, etc.).

Tektronix, Inc., P.O. Box 500, Beaverton, OR 97077

Printed in U.S.A.

Copyright © Tektronix, Inc., 1991. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. The following are registered trademarks: TEKTRONIX, TEK, and SCOPEMOBILE.

Introduction

This instruction sheet provides information about the assembly, use, and maintenance of the K218 TDS 500 Series Instrument Cart. The topics are presented in the following order:

- Description of the K218, its features, and its accessories
- Assembly instructions
- Loading and safety recommendations
- Adjustment and maintenance information
- Specification
- Replaceable parts information

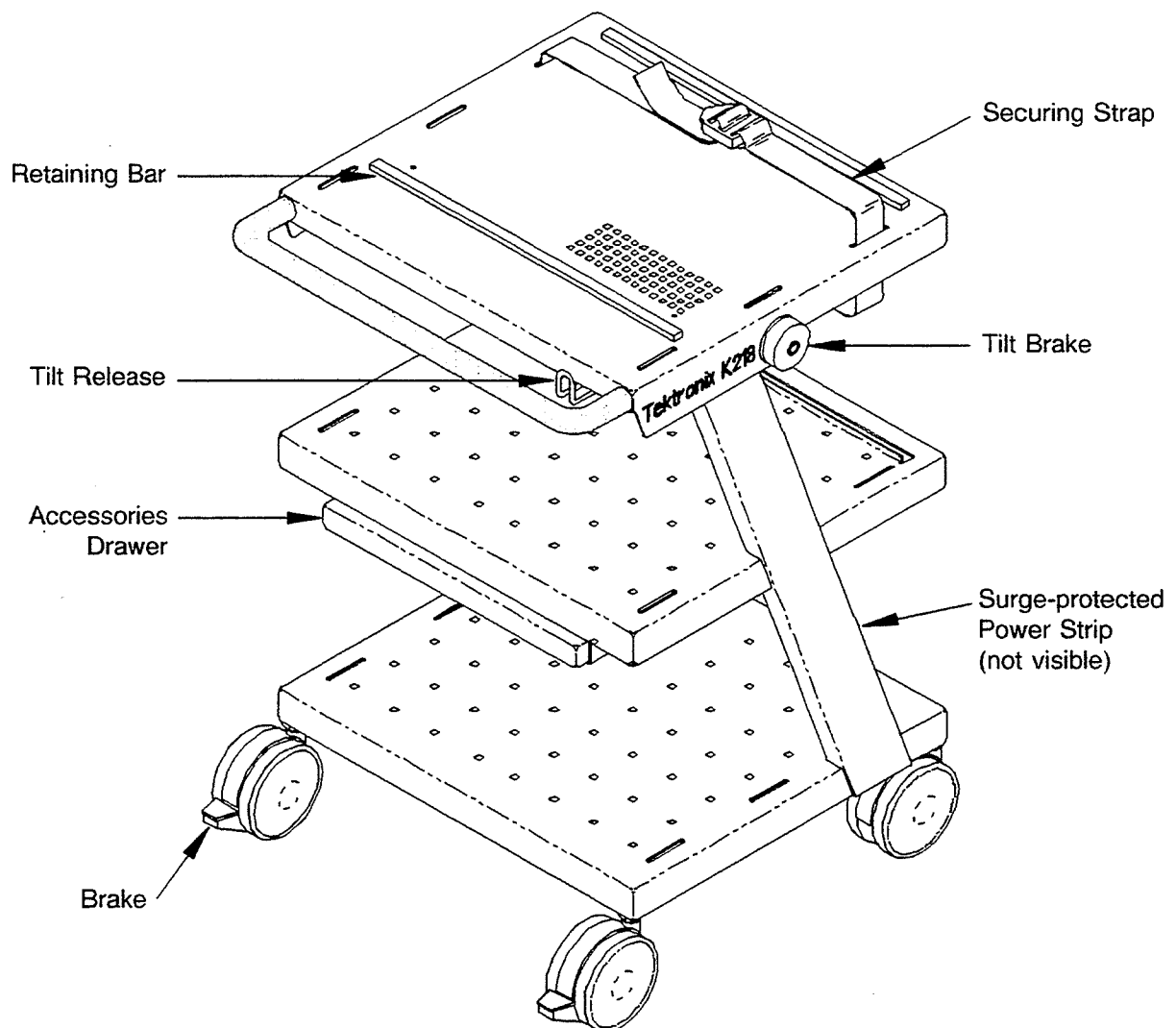


Figure 1: The K218 TDS 500 Series Instrument Cart

Description

The TEKTRONIX K218 TDS 500 Series Instrument Cart is designed to transport TDS 500 Series Digitizing Oscilloscopes and related instruments. Each of the three shelves can accommodate instruments weighing up to 100 pounds (45 kg).

Features

Figure 1 identifies the following K218 features:

Tiltable Top Shelf—The top shelf tilts so that you can use your instrument conveniently. A positive locking mechanism allows you to select one of four positions from horizontal to 25°. Ventilation holes match the pattern in the bottom of the TDS 500 Series.



Never use the top shelf as a seat. Doing so could result in serious injury to you and serious damage to the cart and instruments.

The top shelf is connected to the frame using two friction brakes, which can be adjusted to accommodate the weight of your particular instrument (refer to "Adjustment and Maintenance").

Retaining Bars—Two retaining bars on the top shelf are prepositioned to match TDS 500 Series Digitizing Oscilloscopes. The bars can be adjusted to accommodate a variety of instrument sizes and configurations.

Locking Casters—The front casters include brakes to prevent the wheels from turning. Press down on the brake lever to lock the caster, and raise the lever to release the caster.

Accessories Drawer—A drawer under the middle shelf can be used to store instrument accessories, manuals, and so forth.

Power Strip—A four-outlet, surge-protected power strip is mounted at the rear of the cart. The strip is rated at a maximum of 15 amps at 125 Volts (117 Volts nominal). Brackets for wrapping excess power cord are part of the bottom shelf.

Options and Accessories

Option 05—Deletes the power strip when not required.

Securing Straps—Four straps are provided for securing instruments to shelves.

Probe Holders—Two adhesive-backed probe holders can retain probes when they are not in use. Each holder accepts two probes.

Assembly

The K218 is shipped with the handle, casters, and accessories to be installed. This section tells you how to assemble the cart. Refer to Figure 2 while following these procedures.

Packing List

Verify the contents of the shipping container against the following list:

- 1 Frame and shelf assembly
- 2 Casters with brakes
- 2 Casters without brakes
- 4 Lock washers (for casters)
- 1 Handle
- 2 Set screws (for handle)
- 1 1/8-inch hex key (for the set screws)
- 1 5/16-inch hex key (for adjusting the tilt brakes)
- 1 Holder for 5/16-inch hex key
- 4 Securing straps
- 2 Probe holders

Additional Tools Required

You will need the following additional tool during assembly:

- 3/4-inch wrench

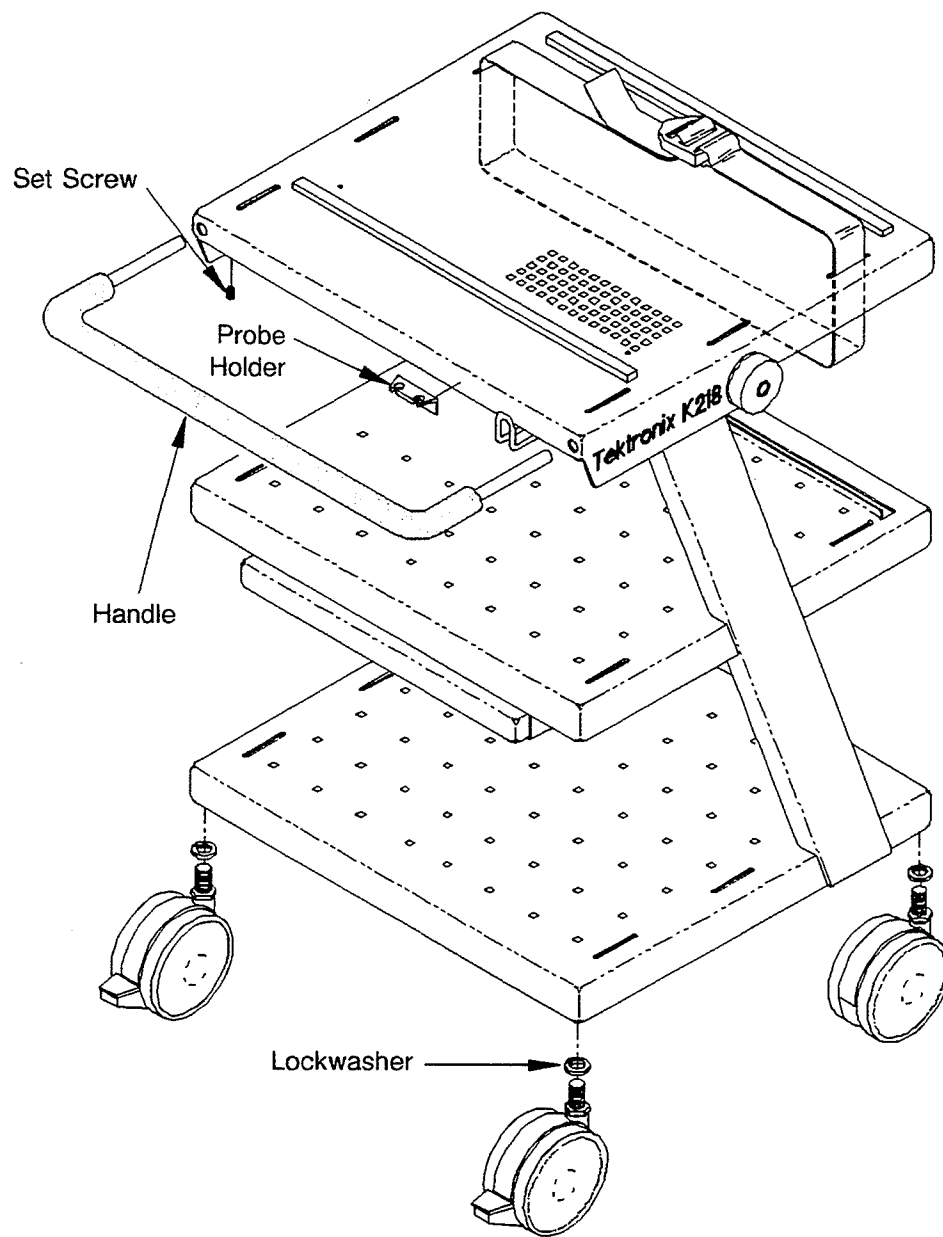


Figure 2: Assembling the K218

Casters

1. Make sure the top shelf is latched in the horizontal position.
2. Remove the accessories drawer and set it aside.
3. Turn the cart upside down on a nonabrasive surface, such as carpet.

NOTE

The cart comes with two types of casters. Place the locking casters at the front corners (nearest the handle).

4. Place a lock washer on the stem of one of the casters, then screw the stem into the base. Use a 3/4-inch wrench to tighten the stem.
5. Repeat Step 4 for the other corners.

Handle

1. Turn the cart onto its back (with holes for the handle facing up).
2. Slip the handle into the holes in the front lip of the shelf, making sure that the edge of the foam is flush with the lip. Secure the handle using one set screw on each side.
3. Turn the cart upright.
4. Replace the accessories drawer.

Securing Straps

Always use securing straps when transporting instruments. Install the straps in positions appropriate for your instruments.

CAUTION

If you are installing a strap at the front of the top shelf, run the strap against the underside of the shelf and above the tilt-release mechanism. Do not run the strap around the mechanism.

Probe and Hex Key Holders

The probe holders have adhesive backing and can be mounted in convenient locations, such as the side of a shelf or instrument. You can put the hex key holder in an out of the way spot, such as underneath the top shelf.

Loading and Safety Precautions

For maximum cart stability, always locate as much of the load as low on the cart as possible, or place an additional weight on the bottom shelf.

CAUTION

To avoid tipping, do not stand the cart on a surface with more than a 10° incline. For maximum safety and reliability, always remain within the limitations given in Table 1.

Table 1. Maximum Loadings

Surface	Maximum Load
Top Shelf	100 lb (45 kg)
Center Shelf	100 lb (45 kg)
Drawer	10 lb (4.5 kg)
Bottom Shelf	100 lb (45 kg)
Total Cart Load	300 lb (136 kg)

Retaining Bars

Five pairs of holes (two in the front and three at the rear) provide adjustable mounting of the retaining bars, which are fastened by wing nuts. The bars are prepositioned to match TDS 500 Series Digitizing Oscilloscopes — simply position the digitizing oscilloscope so that its feet straddle the bars. However, you can configure the bars to accommodate other instruments, in which case you should consider these factors:

- the location of the instrument's front and rear feet — position at least one retaining bar *behind* the instrument's feet
- the instrument's weight distribution (see Table 1)
- the location of the instrument's controls and connectors

Adjustment and Maintenance

The K218 does not require lubrication or maintenance except for an occasional cleaning or for adjustment of the brakes on the top shelf to accommodate a specific load.

Top-Shelf Brake Adjustment

Adjusting the top-shelf friction brakes for more or less tension is done easily and quickly:

1. Using the 5/16-inch hex key, turn the set screw clockwise to increase the resistance or counterclockwise to reduce it. See Figure 3.
2. Repeat the adjustment on the other side.
3. Test the shelf brakes with your instrument strapped in place.

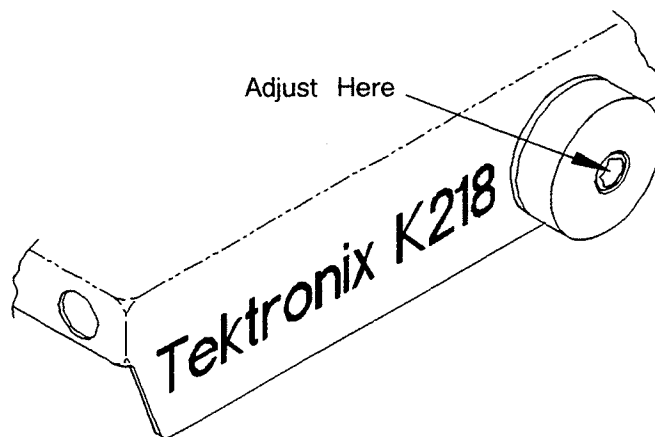


Figure 3: Adjusting the tilt brake

Cleaning

Clean the cart using a cloth dampened with water or a mixture of water and a small amount of household detergent.

CAUTION

Do not use harsh or abrasive cleaning agents. Avoid chemical cleaning agents that may harm the plastics or finishes used on this cart or instruments thereon. Particularly avoid strong acids or alkalis, ketones, and solvents.

Power Strip Removal/Replacement

To remove the power strip, work from the rear of the cart and insert the tip of a screwdriver between the bottom of the strip and the top of one of the aluminum clips that hold the strip in place. Twist the screwdriver until the strip pops out of the clip. Repeat for the other clip.

To replace the strip, place one of the strip's feet into the clips, then snap the other foot down into place.

Repackaging for Shipment

When shipping the cart to a Tektronix Service Center for repair, attach a tag listing the following information: owner, address, serial number, a description of the problem, and the name and phone number of a contact. Use the original shipping carton or obtain a carton with a test strength of 200 lb (90.7 kg) that is large enough to allow 3.2 in. (8.1 cm) of cushioning on all sides.

NOTE

The packaging material is designed to be recycled when it is no longer needed.

Specifications

Figure 4 gives the dimensions of the K218, and Table 2 gives the specification for the power strip.

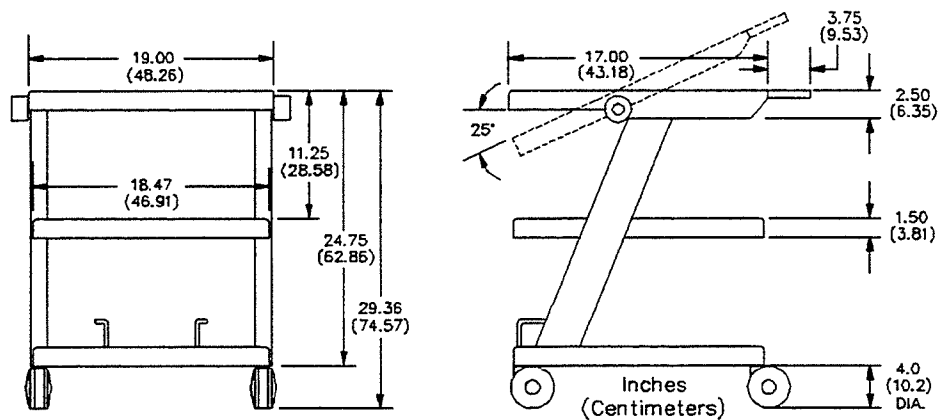


Figure 4: K218 Dimensions

Weight: 65 lbs. (29.3 kg)

Table 2. Power Strip Electrical Specification

Characteristic	Information
Normal and common mode	Yes
Maximum rating	15 A, 125 V
Maximum surge dissipation	70 joules repeated usage, self-restoring
UL surge classification	400 V
Clamping level	325 V
Clamping response time	≤5 ns
Operating temperature	-40°C to 70°C (-40°F to 158°F)
Noise Filter	
Frequency range	100 kHz to 300 MHz
Attenuation voltage ratio	10 to 40 dB

Replaceable Parts

Additional accessories and replaceable parts for your cart can be ordered through the Tektronix National Marketing Center toll-free number (1-800-426-2200). To make ordering of parts easier, find the correct number from the Replaceable Parts list and the serial number of your cart, which is located on the rear of the left drawer glide.

Items in this section are referenced to the illustrations by figure and index numbers.

REPLACEABLE PARTS LIST

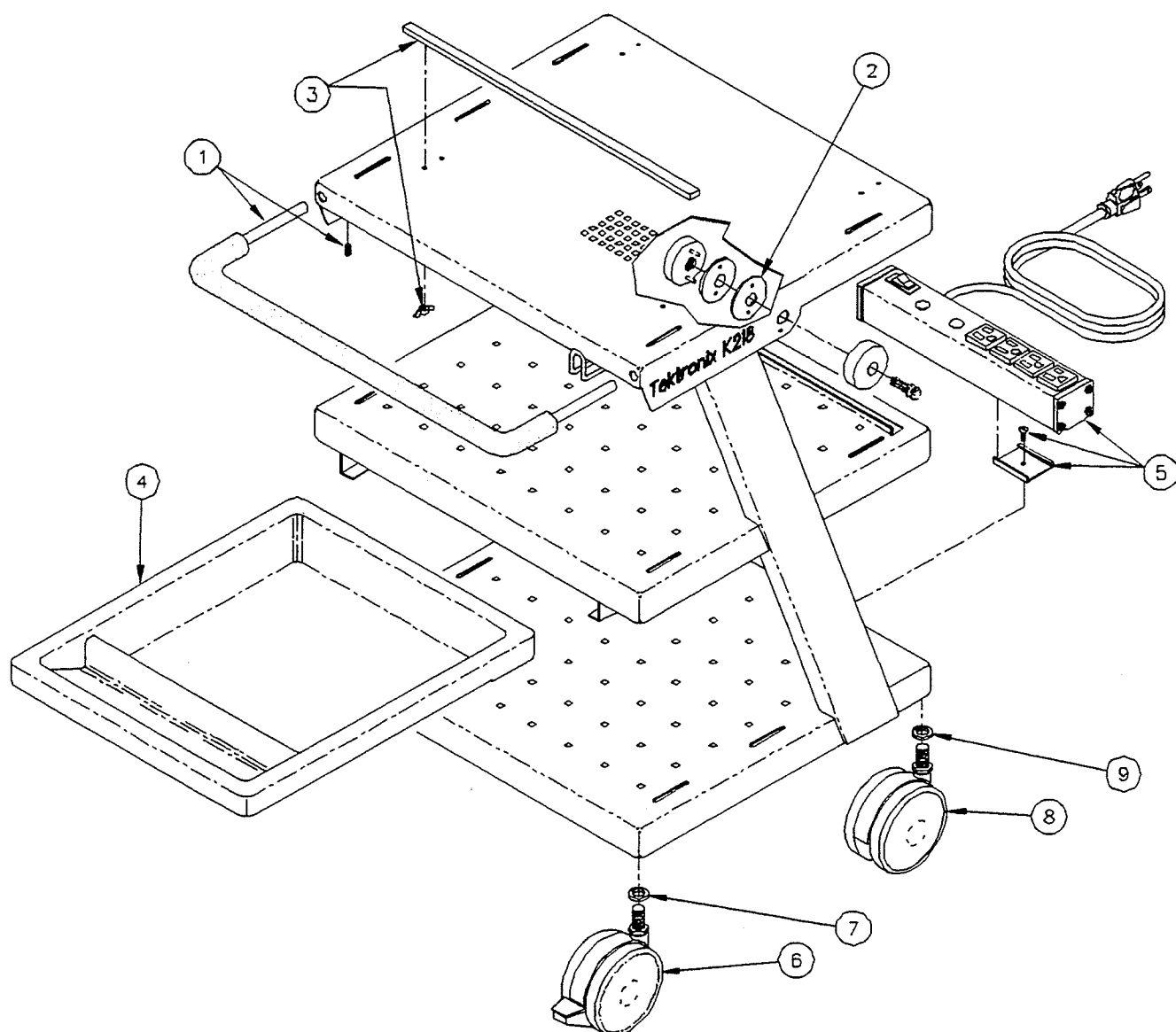


Figure 5: Exploded View

Fig. & Index No.	Tektronix Part No.	Serial/Assembly No Effective	Discont	Qty	12345 Name & Description	Mfr. Code	Mfr. Part No.
5-1	367-0440-00			1	HANDLE,CART:18.19,OCARS,W/FOAM COVER & 2 SET SCREWS	80009	367-0440-00
-2	107-0055-00			2	LINING, FRICTION:0.38 ID X 2-0 OD X 0.062 THK, PKG OF 2	80009	107-0055-00
-3	381-0490-00			2	BAR,SUPPORT:W/2 WINGNUTS,16.3 L	80009	381-0494-00
-4	436-0242-00			1	DRAWER:9.8X13.5 PLASTIC	80009	436-0242-00
-5	131-5342-00			1	CONN,ASSY,ELEC:POWER STRIP,125V,15AMPS, SURGE SUPPRESSOR	80009	131-5342-00
-6	401-0691-00			2	CASTER,SWIVEL:4.0 INCHES DIAMETER W/BRAKE (ATTACHING PARTS)	80009	401-0691-00
-7	-----			2	SPLIT LOCKWASHER:1/2 INCH (END ATTACHING PARTS)		
-8	401-0690-00			2	CASTER,SWIVEL:4.0 INCHES DIAMETER (ATTACHING PARTS)	80009	401-0690-00
-9	-----			2	SPLIT LOCKWASHER:1/2 INCH (END ATTACHING PARTS)		

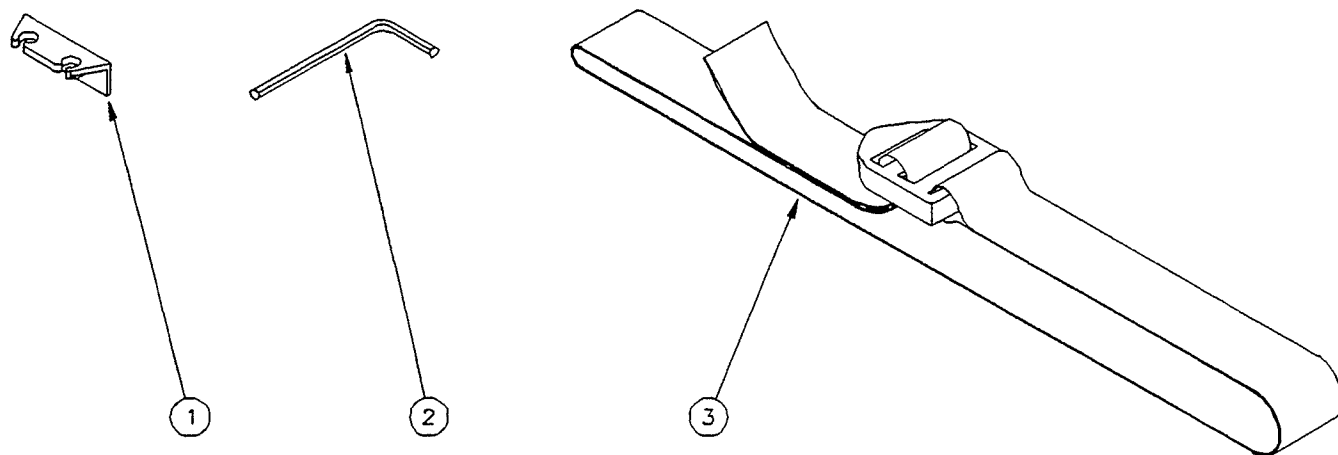


Figure 6: Accessories

Fig. & Index No.	Tektronix Part No.	Serial/Assembly No. Effective Dscont	Qty	12345 Name & Description	Mfr. Code	Mfr. Part No.
6-				STANDARD ACCESSORIES		
-1	352-0351-00		2	HOLDER, PROBE: BLACK ABS	80009	352-0351-00
-2	-----		1	HEX KEY: 1/8 INCH		
	-----		1	HEX KEY: 5/16 INCH		
-3	346-0261-00		4	STRAP, ASSEMBLY: 1.5 INCHES WIDE W/BUCKLE, 6 FT LONG	80009	346-0261-00
	070-8371-00		1	SHEET, TECHNICAL: INSTRUCTION, K218	80009	070-8371-00

CROSS INDEX - MFR. CODE NUMBER TO MANUFACTURER

Mfr. Code	Manufacturer	Address	City, State ZIP Code
80009	TEKTRONIX, INC	14150 SW KARL BRAUN DR PO BOX 500	BEAVERTON, OR 97077-0001

