

SPARE PARTS

Spare parts are generally available from stock for immediate shipment from our manufacturing facility in Bohemia, New York. The parts listings in this section are for customers who may wish to maintain a stock of spares at their facility for several years of operation. This may be of particular interest to overseas customers. Suggested quantities are in parentheses ().

Please note: The parts listed in this section are for current equipment models at the time of printing. When ordering spare parts for new equipment from this catalog, substitutions may be made by Koehler to reflect engineering changes. Koehler will provide written notification of any changes before processing your order. When ordering spare parts for existing equipment, please specify the model number and serial number of your equipment. This will insure that the correct parts are supplied.

K10020 Powertrol Heater, 115VPage 43

225-115-002 Heater 1000W (1)
010-115-005 Wattstat, 115V

K10029 Powertrol Heater, 220-240VPage 43

225-230-002 Heater, 1000W (1)
010-230-005 Wattstat, 230V

K10090 U-Tube Aniline Apparatus, 115VPage 43

K10050 Belt (1)
K10060 Pyrex U-Tube (1)
279-063-002 Bulb (1)
288-115-001 Motor (1)
289-002-001 Bearings (4)

K10091 U-Tube Aniline Apparatus, 220-240VPage 43

K10050 Belt (1)
K10060 Pyrex U-Tube (1)
279-063-002 Bulb (1)
K10091-09000 Motor, Modification (1)
289-002-001 Bearings (4)

K10190 Thin Film Aniline Apparatus, 115VPage 43

K10050 Belt (1)
K10120 Pyrex Pump Body (1)
K10130 Thin Film Tube (1)
279-063-002 Bulb (1)
288-115-001 Motor (1)
289-002-001 Bearings (2)

K10191 Thin Film Aniline Apparatus, 220-240VPage 43

K10050 Belt (1)
K10120 Pyrex Pump Body (1)
K10130 Thin Film Tube (1)
279-063-002 Bulb (1)
289-002-001 Bearings (2)
K10091-09000 Motor, Modification (1)

K10200 Automatic Aniline Apparatus, 115VPage 42

K10220 Heating & Cooling Tube (1)
K102-5S Flexible Drive Shaft (1)
280-115-001 Powerstat (1)
288-115-001 Motor (1)
279-115-001 Indicator Light Bulb (2)
278-010-001 Fuse, 10A (1)
K102-20 Heater Coil (1)
289-001-001 Bearings (2)

K10290 Automatic Aniline Apparatus, 220-240VPage 42

K10220 Heating & Cooling Tube (1)
K102-5S Flexible Drive Shaft (1)
280-115-001 Powerstat (1)
288-115-001 Motor (1)
279-115-001 Indicator Light Bulb (2)
278-010-001 Fuse, 10A (1)
K102-20 Heater Coil (1)
289-001-001 Bearings (2)
240-230-001 Transformer (1)

K10400 Oxidation Stability Bath, 2-Unit, 115VPages 81, 82

K10400-11001 Heater, 2000W
379-001-001 Liquid Level Switch

K10401 Oxidation Stability Bath, 2 Unit, 115VPages 81, 82

220-120-007 Cartridge Heater, 250W (6)
265-122-002 RTD Temperature Probe, 3 in., 2 Wire
265-122-003 RTD Temperature Probe, 3 in., 3 Wire
278-020-004 Fuse, 20A
278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A

K10402 Oxidation Stability Bath, 2-Unit, 220-240VPages 81, 82

K10402-11001 Heater, 2000W
379-001-001 Liquid Level Switch

K10403 Oxidation Stability Bath, 4-Unit, 115VPages 81, 82

220-120-007 Cartridge Heater, 250W (10)
265-122-002 RTD Temperature Probe, 3 in., 2 Wire
265-122-003 RTD Temperature Probe, 3 in., 3 Wire
278-030-002 Fuse, 30A
278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A

K10404 Oxidation Stability Bath, 6 Unit, 220-240VPages 81, 82

K70519 RTD Temperature Probe, 12 in.
265-600-001 RTD Temperature Probe, 4 in.
278-020-004 Fuse, 20A
278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A

K10491 Oxidation Stability Bath, 2-Unit, 220-240VPages 81, 82

220-240-006 Cartridge Heater, 250W (6)
265-122-002 RTD Temperature Probe, 3 in., 2 Wire
265-122-003 RTD Temperature Probe, 3 in., 3 Wire
278-020-004 Fuse, 20A
278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A

K10493 Oxidation Stability Bath, 4-Unit, 220-240VPages 81, 82

220-240-006 Cartridge Heater, 250W (10)
265-122-002 RTD Temperature Probe, 3 in., 2 Wire
265-122-003 RTD Temperature Probe, 3 in., 3 Wire
278-020-004 Fuse, 20A
278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A
091-032-001 Relay, Solid State, 4-32 V DC, 20A
275-103-024 Temperature Controller, 100-240V, 1 out

SPARE PARTS (CONTINUED)

K10500 Oxidation Pressure VesselPage 80	K12190 Oxidation Stability Bath, 220-240VPage 123
K10510 Composition Gaskets	K121A-0-17 Heater, 750W, 230V (1)
K105-0-12 Relief Tube	288-230-002 Motor, 230V, 50/60Hz (1)
260-102-005 Rupture Disc, Alum with Liner	K70519 RTD Temperature Probe, 12 in.
260-104-015 Burst Disc Holder	265-600-001 RTD Temperature Probe, 4 in.
461-001-001 Silicone Vacuum Grease	278-020-004 Fuse, 20A
	278-001-002 Fuse, 1A
	278-104-002 Fuse, 0.25A
	275-103-024 Temperature Controller, 100-240V, 1 out
K10901 Oxidation Bath, 115VPage 152-153	K12200 Oxidation Stability Bath, 8-Unit, 115VPage 120
K70519 RTD Temperature Probe, 12 in.	K122-2-15B Heater, 750W, Inner, 115V (1)
265-600-001 RTD Temperature Probe, 4 in.	K122-2-15C Heater, 750W, Outer, 115V (1)
278-030-002 Fuse, 30A	K23700-03013A Motor, 115V 60Hz (1)
278-001-002 Fuse, 1A	K70519 RTD Temperature Probe, 12 in.
278-104-002 Fuse, 0.25A	265-600-001 RTD Temperature Probe, 4 in.
275-103-024 Temperature Controller, 100-240V, 1 out	278-020-004 Fuse, 20A
	278-001-002 Fuse, 1A
	278-104-002 Fuse, 0.25A
	275-103-024 Temperature Controller, 100-240V, 1 out
K10991 Oxidation Bath, 220-240VPage 152-153	K12201 Solid Block Oxidation Bath, 220-240VPage 121
K70519 RTD Temperature Probe, 12 in.	091-240-003 Relay, 120/240V, 25A
265-600-001 RTD Temperature Probe, 4 in.	265-400-004 RTD Probe, 10 in.
278-020-004 Fuse, 20A	220-240-009 Heater, 750W, 220V (6)
278-001-002 Fuse, 1A	
278-104-002 Fuse, 0.25A	
275-103-024 Temperature Controller, 100-240V, 1 out	
K11201 Reid Vapor Pressure Bomb for LPGPage 92	K12212 Oxidation Stability Bath, 12-Unit, 115VPage 120
AS568-210 O-ring (1)	K122-12-2-22A Heater, 1500W, back, 115V (1)
AS568-113 O-ring (1)	K122-12-2-22B Heater, 1500W, middle, 115V (1)
	K122-12-2-22C Heater, 750W, front, 115V (1)
	K70519 RTD Temperature Probe, 12 in.
	265-600-001 RTD Temperature Probe, 4 in.
	K23700-03013A Motor, 115V 60Hz (1)
	K23300-03009 Stirrer Shaft
	091-032-004 Relay, Solid State, 32 V DC
	278-040-001 Fuse, 40A, Time Delay CLSG
	275-103-027 Temperature Controller, 100-240V
K11415/K11416 Reid Vapor Pressure Bath, 21-Unit, 220-240V, 50Hz and 60HzPage 93	K12219 Oxidation Stability Bath, 12-Unit, 220-240VPage 120
235-240-005 Heater, 6000W (1)	K122-12A-2-22A Heater, 1500W, back, 220V (1)
265-400-002 RTD Temperature Probe (1)	K122-12A-2-22B Heater, 1500W, middle, 220V (1)
	K122-12A-2-22C Heater, 750W, front, 220V (1)
	K70519 RTD Temperature Probe, 12 in.
	265-600-001 RTD Temperature Probe, 4 in.
	278-030-002 Fuse, 30A
	278-001-002 Fuse, 1A
	278-104-002 Fuse, 0.25A
	K23700-03014A Motor, 230V 50/60Hz (1)
	275-103-024 Temperature Controller, 100-240V, 1 out
K11450 Reid Vapor Pressure Bath, 4-Unit, 115VPage 93	K12290 Oxidation Stability Bath, 8-Unit, 220-240VPage 120
K11450-0-1 Heater, 2000W, 115V	K122A-2-15B Heater, 750W, Inner, 230V (1)
K70519 RTD Temperature Probe, 12 in.	K122A-2-15C Heater, 750W, Outer, 230V (1)
278-020-004 Fuse, 20A	K70519 RTD Temperature Probe, 12 in.
278-001-002 Fuse, 1A	265-600-001 RTD Temperature Probe, 4 in.
K23700-03013A Motor, 115V 60Hz	278-020-004 Fuse, 20A
275-103-020 Temperature Controller, 100-240V, 2 out	278-001-002 Fuse, 1A
	278-104-002 Fuse, 0.25A
	K23700-03014A Motor, 230V 50/60Hz (1)
	275-103-024 Temperature Controller, 100-240V, 1 out
K11459 Vapor Pressure Bath, 4-Unit, 220-240VPage 93	
K11459-0-1 Heater, 2000W, 230V	
K70519 RTD Temperature Probe, 12 in.	
278-020-004 Fuse, 20A	
278-001-002 Fuse, 1A	
K23700-03014A Motor, 230V 50/60Hz	
275-103-020 Temperature Controller, 100-240V, 2 out	
K12100 Oxidation Stability Bath, 115VPage 123	
K121-0-17 Heater, 750W, 115V (1)	
K70519 RTD Temperature Probe, 12 in.	
265-600-001 RTD Temperature Probe, 4 in.	
278-020-004 Fuse, 20A	
278-001-002 Fuse, 1A	
278-104-002 Fuse, 0.25A	
K23700-03013A Motor, 115V, 60Hz (1)	
275-103-024 Temperature Controller, 100-240V, 1 out	

SPARE PARTS (CONTINUED)

<p>K12300 Series Oxidation Stability Bath, 220-240V, 50 and 60Hz.....Page 121 Model Numbers K12330, K12339, K12300, K12395 235-240-005 Heater, 6000W, 240V 265-400-002 RTD Temperature Probe, 12 in.</p>	<p>K16000 Pensky-Martens Flash Tester, Gas.....Page 34 K160-9 Flexible Stirrer Shaft (1) K16220-0-6 Drive Belt for Stirrer Motor</p>
<p>K13009 Saybolt ChromometerPage 44 K13018 Gasket (pkg. of 12) K13020 Color Standard (Full) (2) K13029 Color Standard (Half) (1) K13032 Glass Set, Turret & Draincock Assembly K13061 Glassware Set with Connections K13090 Frosted Mirror without Base (1) K13012 Graduated Tube Gasket</p>	<p>K16200 Pensky-Martens Flash Tester, 115VPage 34 225-115-002 Brick Heater, 1000W (1) K160-9 Flexible Stirrer Shaft (1) K16220-0-6 Drive Belt for Stirrer Motor</p>
<p>K13100 Saybolt Wax Chromometer, 115V.....Page 44 K13018 Gasket (pkg. of 12) K13020 Color Standard (Full) (1) K13029 Color Standard (Half) (1) K13033 Glass Set, Turret and Graduated Tube K13090 Frosted Mirror without Base (1) K131-0-26 Cartridge Heater, 115V (1) K131-0-28 Strip Heater, 200W, 115V (1) AS568-211 O-ring (2)</p>	<p>K16270 Pensky-Martens Flash Tester, 220-240V.....Page 34 225-230-002 Brick Heater, 1000W (1) K160-9 Flexible Stirrer Shaft (1) K16220-0-6 Drive Belt for Stirrer Motor</p>
<p>K13190 Saybolt Wax Chromometer, 220-240VPage 44 K13018 Gasket (pkg. of 12) K13020 Color Standard (Full) (1) K13029 Color Standard (Half) (1) K13033 Glass Set, Turret and Graduated Tube K13090 Frosted Mirror without Base (1) K131A-0-26 Cartridge Heater, 50W, 230V (1) K131A-0-28 Strip Heater, 200W, 230V (1) AS568-211 O-ring (2)</p>	<p>K17100 Wax Coating Device, 115VPage 177 190-120-009 Ring Heater, 200W (1) K171-0-12 Doctor Rod Assembly 280-115-004 Variable Transformer</p>
<p>K13900 Cleveland Flash Tester, 115VPage 36 K138-1-17 Insulation Plate (1) 225-115-002 Brick Heater, 1000W, 115V (1) AS568-008 O-ring (1) 010-115-005 Wattstat, 115V (1)</p>	<p>K17190 Wax Coating Device, 220-240VPage 177 190-120-009 Ring Heater, 200W (1) K171-0-12 Doctor Rod Assembly 240-230-001 Stepdown Transformer (1)</p>
<p>K13990 Cleveland Flash Tester, 220-240VPage 36 K138-1-17 Insulation Plate (1) 225-230-002 Brick Heater, 1000W, 230V (1) AS568-008 O-ring (1) 010-230-004 Wattstat, 230V (1)</p>	<p>K17200 Type A Blocking Plate, 115VPage 177 236-115-001 Strip Heater, 250W (1)</p>
<p>K14600 Tag Electric Closed Tester, 115VPage 35 190-120-001 Ring Heater, 200W (1) 010-115-005 Wattstat, 115V (1)</p>	<p>K17290 Type A Blocking Plate, 220-240V.....Page 177 236-230-001 Strip Heater, 250W (1)</p>
<p>K14670 Tag Electric Closed Tester, 220-240VPage 35 190-240-009 Ring Heater, 150W (1) 010-230-004 Wattstat, 230V (1)</p>	<p>K17300 Type B Blocking Plate, 115VPage 177 K173-0-11A Heater, 100W (1) K173-0-11C Heater, 300W (1) 288-115-001 Motor (1)</p>
<p>K15600 Tag Electric Open Cup Flash Tester, 115VPage 37 190-120-001 Ring Heater, 200W (1) K138-0-11 Valve Stem (2) K156-0-1A Flame Test Burner and Pilot Assembly (1)</p>	<p>K17390 Type B Blocking Plate, 220-240V.....Page 177 K173-0-11B Heater, 100W (1) K173-0-11D Heater, 300W (1) 288-230-002 Motor (1)</p>
<p>K15670 Tag Electric Open Cup Flash Tester, 220-240VPage 37 190-240-009 Ring Heater, 150W (1) K138-0-11 Valve Stem (2) K156-0-1A Flame Test Burner and Pilot Assembly (1)</p>	<p>K17500 Wax Melting Point Apparatus.....Page 178 K175-0-5 Cork, Sample Thermometer (1) K175-0-6 Cork, Bath Thermometer (1) 285-000-006 Cork without hole (1) K175-0-8 Sample Tube (1)</p>
	<p>K17600 Oil Solvent Extractables Content Apparatus, 115VPage 179 K176-1-0-26 Glass Manifold (1) 279-115-006 Lamp, 100W, 115V (1) 332-003-004 15mL Weighing Bottle (4)</p>
	<p>K17690 Oil Solvent of Extractables Content Apparatus, 220-240V.....Page 179 K176-1-0-26 Glass Manifold (1) 279-230-004 Lamp, 100W, 230V (1) 332-003-004 15mL Weighing Bottle (4)</p>
	<p>K17970/K17979 Corrosion Preventive Properties Apparatus, 115V and 220-240V.....Page 154 K17910 Test Bearings (3) K17930 Containers/Lids (3) K179-0-6 Spring K179-0-8 Lockscrew 288-115-036 Motor, 115/230V, 60Hz</p>

SPARE PARTS (CONTINUED)

**K17980/K17989 Corrosion Preventive Properties Apparatus,
115V and 220-240V**Page 154

AS568-224 O-ring (3)
 AS568-329 O-ring (3)
 360-115-015 Motor Speed Control
 289-004-002 Outboard Bearing Set (3)
 288-115-053 Motor, 1/4 hp, 130 V DC and Resistor

K18000 Manual Grease Working MachinePage 28
 22H-308-20C Wing Screws (6)

**K18100 Series Mechanical Grease Workers, Single-Unit,
115V and 220-240V**Pages 26, 28

Model Numbers K18100, K18110, K18119

289-001-002 Ball Bearing (1)
 320-115-001 Counter
 050-001-006 Start/Stop Switch
 050-001-007 Proximity Switch
 K180-1-0-11 Clamp Spring (2)
 271-015-001 Thermal Circuit Breaker, 15A

**K18190 Series Mechanical Grease Workers, Double-Unit,
115V and 220-240V**Page 28

Model Numbers K18190, K18191, K18192

289-001-002 Ball Bearing (2)
 320-115-001 Counter
 050-001-006 Start/Stop Switch
 050-001-007 Proximity Switch
 K180-1-0-11 Clamp Spring (4)
 271-015-001 Thermal Circuit Breaker, 15A

K18200 Water Spray Apparatus, 115V, 60HzPage 163

301-002-006 Timing Belt (1)
 K182-0-10 Heater, 750W (1)
 K18210 Stainless Steel Test Panel
 275-250-003 Electronic Temperature Controller
 356-001-005 Gear Pump
 039-104-00B Snubber, Brass
 165-308-001 Leveling Foot (4)
 288-115-015 Motor 115V, 60Hz, 1/3 hp

**K18290/K18295 Water Spray Apparatus,
220-240V, 50Hz and 60Hz**Page 163

301-002-006 Timing Belt (1)
 K182A-0-10 Heater, 750W (1)
 K18210 Stainless Steel Test Panel
 275-250-003 Electronic Temperature Controller
 356-001-005 Gear Pump
 039-104-00B Snubber, Brass
 165-308-001 Leveling Foot (4)
 288-115-012 Motor 115/230V, 60Hz, 1/3 hp
 288-115-010 Motor, 220-240V, 50Hz

**K18300/K18320 Roll Stability Tester,
Single/Double Unit, 115V**Pages 27, 156

325-000-025 #25 Chain (30")
 237-115-002 Heater, Finned, Strip, 600W, 115V (2)
 265-600-001 RTD Temperature Probe, 4 in. (1)
 289-001-012 Ball Bearing (7)
 AS568A-117-V01 Viton O-Ring
 AS568A-154-V01 Viton O-Ring
 278-020-004 Fuse, 20A
 278-001-002 Fuse, 1A
 091-032-001 Relay, Solid State, 4-32V DC, 20A
 275-103-020 Temperature Controller, 100-240V, 2 out

**K18305 Series Roll Stability Tester, Single/Double-Unit,
220-240V, 50Hz**Page 156

Model Numbers K18305, K18306, K18325, K18326

325-000-025 #25 Chain (30")
 237-240-004 Heater, Finned, Strip, 600W, 240V (2)
 265-600-001 RTD Temperature Probe, 4 in. (1)
 091-032-001 Relay, Solid State, 4-32VDC, 20A
 275-103-020 Temperature Controller, 100-240V, 2 out
 278-020-004 Fuse, 20A
 278-001-002 Fuse, 1A
 K18348-13000 Motor Fan
 AS589A-117-V01 Viton O-Ring
 AS568A-154-V01 Viton O-Ring

K18340 Roll Stability Tester, 4-Unit, 115V, 60HzPage 156

237-115-001 Heater, Finned, Strip, 1000W, 115V (2)
 265-600-001 RTD Temperature Probe, 4 in. (1)
 289-001-012 Ball Bearing (17)
 289-001-022 Ball Bearing (17)
 091-032-001 Relay, Solid State, 4-32VDC, 20A
 288-115-035 Motor, Gear, 115V, 60Hz, 83rpm
 278-020-004 Fuse, 20A
 278-001-002 Fuse, 1A
 AS589A-117-V01 Viton O-Ring
 AS568A-154-V01 Viton O-Ring
 275-103-020 Temperature Controller, 100-240V, 2 out

**K18345/K18346 Roll Stability Tester, 4-Unit,
220-240V, 50Hz and 60Hz**Page 156

275-103-020 Temperature Controller, 100-240V, 2 out
 265-600-001 RTD Temperature Probe, 4 in. (1)
 K18348-13000 Motor, Fan
 278-020-004 Fuse, 20A
 278-001-002 Fuse, 1A
 AS589A-117-V01 Viton O-Ring
 AS568A-154-V01 Viton O-Ring
 288-230-009 Motor, Gear, 230V, 50Hz, 70rpm

K18500 High Temperature Wheel Bearing Tester, 115V, 60HzPage 161

215-115-001 Heater, 1200W, 115V (1)
 288-115-004 Fan Motor (1)
 K185-0-42 Cabinet Thermocouple (1)
 288-018-021 Spindle Thermocouple (1)
 289-004-001 Inboard Bearing Set
 289-004-002 Outboard Bearing Set
 K185-1-66 Motor, modification

**K18590/K18595 High Temperature Wheel Bearing Tester,
220-240V, 50Hz and 60Hz**Page 161

215-230-001 Heater, 1200W, 230V (1)
 288-115-004 Fan Motor (1)
 278-010-001 Fuse, 10A (5)
 278-015-001 Fuse, 15A (5)
 278-020-003 Fuse, 20A (5)
 K185-0-42 Cabinet Thermocouple (1)
 288-018-021 Spindle Thermocouple (1)
 289-004-001 Inboard Bearing Set
 289-004-002 Outboard Bearing Set

SPARE PARTS (CONTINUED)

K18700 Leakage Tendencies of Automotive Wheel Bearing Greases, 115V, 60Hz.....Page 160

275-103-020	Temperature Controller, 100-240V, 2 out
200-115-006	Coil Heater, 1000W (2)
301-004-002	Vee Belt (60Hz) (1)
288-115-027	Motor
265-122-002	RTD Temperature Probe, 3 in. (1)

K18790 Leakage Tendencies of Automotive Wheel Bearing Greases, 220-240V, 60Hz.....Page 160

200-230-006	Coil Heater, 1000W (2)
301-004-002	Vee Belt (60Hz) (1)
265-122-002	RTD Temperature Probe, 3 in. (1)
288-115-027	Motor
275-103-020	Temperature Controller, 100-240V, 2 out

K18795 Leakage Tendencies of Automotive Wheel Bearing Greases, 220-240V, 50Hz.....Page 160

200-230-006	Coil Heater, 1000W (2)
301-004-005	Vee Belt (50Hz) (1)
265-122-002	RTD Temperature Probe, 3 in. (1)
288-230-005	Motor, 50Hz

K18850 Series Low Temperature Torque Apparatus, 220-240V, 50Hz and 60Hz.....Page 159

Model Numbers K18850, K18851, K18852, K18853, K18854, K18855, K18860, K18861, K18862, K18863, K18864, K18865

301-002-007	Timing Belt (2)
265-000-002	Spindle Thermocouple (2) For all D4693 models
289-007-001	Boston 5F x 3/8 Flanged Bearing (4)
360-108-001	Strain Gauge (2)
K18860-0-16	Small Bearing Set (2) For all D4693 models
K18860-0-24	Large Bearing Set (2) For all D4693 models
288-230-007	Motor, 230V, 50/60Hz, 1/15 hp, 1.4A (1)

K18910 Constant Temperature Air Cabinet, 115V.....Page 165

K23700-03013A	Motor, 115V, 60Hz
K189-1-0-17	Heater, 115V, 50W
283-120-002	Solenoid Valve, 115V (2)
265-400-002	RTD Temperature Probe
275-103-023	Temperature Controller, 100-240V
278-001-002	Fuse, 1A, Slo-blo

K18919 Constant Temperature Air Cabinet, 220-240V.....Page 165

288-230-002	Motor, 230V
K189-1A-0-17	Heater, 230V, 100W
283-240-001	Solenoid Valve, 230V (2)
265-400-002	RTD Temperature Probe
275-103-023	Temperature Controller, 100-240V
278-001-002	Fuse, 1A, Slo-blo

K19200 Water Washout Tester, 115V, 60Hz.....Page 162

K192-4-4	Heater, 380 W, 115V (1)
301-004-008	Vee Belt, 22"
301-004-007	Vee Belt, 37"
289-001-009	Ball Bearing (2)
289-001-006	Test Bearing (3)
K192-4-3	Thermoregulator
K192-2-5	Flowmeter
288-115-027	Motor
AS568-214	O-ring (2)
356-001-005	Water Pump
K192-1-8	Bearing Housing Gasket

K19290 Water Washout Tester, 220-240V, 60Hz.....Page 162

K192A-4-4	Heater, 380W, 220V (1)
301-004-008	Vee Belt, 22"
301-004-007	Vee Belt, 37"
289-001-009	Ball Bearing (2)
289-001-006	Test Bearing (3)
AS568-214	O-ring (2)
K192-1-8	Bearing Housing Gasket
K192-4-3	Thermoregulator
K192-2-5	Flowmeter
288-115-027	Motor
356-001-005	Water Pump

K19295 Water Washout Tester, 220-240V, 50Hz.....Page 162

K192A-4-4	Heater, 380W, 220V (1)
301-004-003	Vee Belt, 37", 50 Hz (1)
288-230-005	Motor, 110/220V, 50Hz

K19400 High Temperature Dropping Point Apparatus, 115V.....Page 151

220-120-001	Heater (cartridge), 750W, 120V (1)
279-115-002	Lamp (1)
278-001-002	Fuse, 1A
265-203-001	Temperature Probe, Type "K", 3/8 dia x 4"
K194EB	Test Tube 13x100mm (10)
K194EC	Cup Support (10)
275-103-023	Temperature Controller, 100-240V
091-240-002	Solid State Relay, 25A, 90-240V

K19410 High Temperature Dropping Point Apparatus, 220-240V.....Page 151

220-240-001	Heater (cartridge), 750W, 240V (1)
279-115-002	Lamp (1)
278-001-002	Fuse, 1A
265-203-001	Temperature Probe, Type "K" (1)
K194EB	Test Tube 13x100mm (10)
K194EC	Cup Support (10)
275-103-023	Temperature Controller
091-240-002	Solid State Relay, 25A, 90-240V

K19490 Dropping Point Apparatus, 115V.....Page 150

K19492	Test Tube with Indentations
K19493	Thermometer Cork
K194A-0-7	Bath Thermometer Cork
332-002-005	400mL Beaker
010-115-005	Wattstat, 115V
225-115-002	Heater Element, 1000W, 115V
288-115-001	Motor

K19491 Dropping Point Apparatus, 220-240V.....Page 150

K19492	Test Tube with Indentation
K19493	Thermometer Cork
K194A-0-7	Bath Thermometer Cork
332-002-005	400mL Beaker
010-230-004	Wattstat, 230V
225-230-002	Heater Element, 1000W, 230V
K19491-0-12	Motor, 230V, 50/60Hz, 1/40 hp

K19500 Penetrometer.....Page 24

332-005-008	5" diameter Watch Glass (1)
K195-11	Plunger Drop Cushion
K195-23	Plunger Release Spacer
K195-24	Plunger Release Lever (1)
K195-29	Teflon Inserts

SPARE PARTS (CONTINUED)

K21404/K21494 Automatic Saybolt Viscosity Timing SensorPage 16	K22752/K22754 Digital Refrigerated Kinematic Viscosity Bath, 220-240VPage 7
K21404-03009 Sensor Assembly	091-032-001 Solid State Relay
K21404-23000 Cabinet Power Supply	288-230-020 Motor, 230V, 50/60Hz
K21404-03013 Flask Holder Assembly	335-230-001 Condenser Fan Motor, 230V
K21410 Saybolt Viscometer Bath, 115VPage 16	220-240-013 Heater, 500W, 230V (2)
K21410-0-15 Heater, 1200W, 115V (2)	265-500-001 RTD Temperature Probe
K23700-03013A Motor, 115V, 60Hz (1)	279-115-009 Fluorescent Lamp, 50W, 120V
265-500-001 RTD Temperature Probe, 12 in.	278-020-004 Fuse, 20A
265-600-001 RTD Temperature Probe, 4 in.	278-001-002 Fuse, 1A
278-020-004 Fuse, 20A	278-104-002 Fuse, 0.25A
278-001-002 Fuse, 1A	271-030-005 Switch, Circuit Breaker, 30A
278-104-002 Fuse, 0.25A	K22753 Digital Refrigerated Kinematic Viscosity Bath, 115VPage 7
K21420 Saybolt Viscometer Bath, 220-240VPage 16	091-032-001 Solid State Relay
K21420-0-15 Heater, 1200W, 230V (2)	288-115-058 Motor, 115V, 60Hz
K23700-03014A Motor, 230V, 50/60Hz (1)	335-115-004 Condenser Fan Motor, 115V
265-500-001 RTD Temperature Probe, 12 in.	220-120-009 Heater, 500W, 115V (2)
265-600-001 RTD Temperature Probe, 4 in.	265-500-001 RTD Temperature Probe
278-020-004 Fuse, 20A	279-115-009 Fluorescent Lamp, 50W, 120V
278-001-002 Fuse, 1A	278-020-004 Fuse, 20A
278-104-002 Fuse, 0.25A	278-001-002 Fuse, 1A
K22600/K22610 Pressure Viscometer, 115V and 220-240VPage 157	278-104-002 Fuse, 0.25A
K226-0-20 Cylinder Gasket (6)	271-025-001 Switch, Circuit Breaker, 25A
K226-0-21 Capillary Gasket (8)	K23700/K23800 Series Kinematic Viscosity Baths, 115V, 60HzPages 4-5
265-000-001 Thermocouple (3)	Model Numbers K23700, K23702, K23706, K23708, K23800, K23802
288-115-014 Motor, 115/230V 60Hz (1)	K23700-02003 RTD Temperature Probe
349-000-009 Coupling Spider (1)	278-104-002 Fuse, 0.25A
K22615 Pressure Viscometer, 220-240V, 50HzPage 157	279-115-009 Fluorescent Lamp, 50W, 120V
K226-0-20 Cylinder Gasket (6)	335-115-005 Fan, 115V, 50/60Hz, 53CFM
K226-0-21 Capillary Gasket (8)	332-001-001 Borosilicate Glass Jar, 12"x12"
265-000-001 Thermocouple (3)	332-001-003 Borosilicate Glass Jar, 12"x18"
288-230-005 Motor, 115/230V, 50Hz (1)	K23700-03006 Heater, 1250W, 115V, For Standard Temperature Models
349-000-009 Coupling Spider (1)	K23800-03006 Heater, 1700W, 115V, For High Temperature Models
K22680 Series Grease Mobility Tester, 115V and 220-240VPage 158	K23700-03013A Motor, 115V 60Hz
Model Numbers K22680, K22685, K22686	275-103-027 Temperature Controller, 100-240V
K226-0-20 Cylinder Gasket (2)	K23700/K23800 Series Kinematic Viscosity Baths, 220-240V, 50Hz/60HzPages 4-5
K226-0-21 Capillary Gasket (1)	Model Numbers K23790, K23792, K23796, K23798, K23890, K23892
K22690 Series Low Temperature Pressure Viscometer, 115V and 220-240V, 50Hz and 60HzPage 157	K23700-02003 RTD Temperature Probe
Model Numbers K22690, K22695, K22696	278-104-002 Fuse, 0.25A, Slo-blo
320-000-003 Counter	278-101-002 Fuse, 1A
288-115-014 Motor, 115/230V, 60Hz	278-101-004 Fuse, 20A
288-230-005 Motor, 115/230V, 50Hz	279-115-009 Fluorescent Lamp, 50W, 120V
K226-0-22 Capillary Set, No. 1-8	335-230-005 Fan, 230V, 50/60Hz, 53CFM
265-000-001 Thermocouple (3)	332-001-001 Borosilicate Glass Jar, 12"x12"
AS568-231 O-ring	332-001-003 Borosilicate Glass Jar, 12"x18"
K22751 Digital Refrigerated Kinematic Viscosity Bath, 115VPage 7	K23700-03015 Heater, 1250W, 230V, For Standard Temperature Models
091-032-001 Solid State Relay, 4-32VDC, 20A	K23800-03015 Heater, 1700W, 230V, For High Temperature Models
288-115-058 Stirrer Motor, 115V, 60Hz	K23700-03014A Motor, 230V 50/60Hz
335-115-004 Condenser Fan Motor, 115V	K23702-OS, K23792-OS, K23708-OS, K23798-OS Kinematic Viscosity BathPages 5
220-120-009 Heater (Cartridge), 500W, 115V	360-030-001 Amplifier, 110-30 VDC, blue led
279-115-009 Fluorescent Lamp, 50W, 120V	275-600-007 Touch Screen Interface, PLC
278-020-004 Fuse, 20A	275-600-005 Controller, PLC, 100-240 VAC
278-001-002 Fuse, 1A	K23702OS-03038 Holder, Reflector
278-104-002 Fuse, 0.25A	K25310/K25320 Copper Strip Corrosion Test Bath, 4-Unit and 8-Unit, 115VPages 90, 91, 99
265-500-001 RTD Temperature Probe	K253-1-0-8 Heater, 750W (K25310) (1)
271-030-005 Switch, Circuit Breaker, 30A	K253-2-0-8 Heater, 750W (K25320) (1)
	191 RTD Probe Assembly
	275-250-003 Electronic Temperature Control

SPARE PARTS (CONTINUED)

K25319/K25329 Copper Strip Corrosion Test Bath, 4-Unit and 8-Unit, 220-240VPages 90, 91, 99	K26490 Constant Temperature Hydrometer Bath, 220-240VPage 50
K253-1A-0-8 Heater, 750W (K25319) (1)	K26490-1-5 Heater, 1500W (1)
K253-2A-0-8 Heater, 750W (K25329) (1)	K70519 RTD Temperature Probe, 12 in.
191 RTD Probe Assembly	265-600-001 RTD Temperature Probe, 4 in.
275-250-003 Electronic Temperature Control	091-032-001 Relay, Solid State, 4-32 V DC, 20A
	275-103-024 Temperature Controller, 100-240V, 1 out
K25330 Test Tube Bath, 115VPages 90, 91, 131, 155	K26500 Thermometer Calibration Bath, 115VPage 63
K346-0-3 Heater, 750W, 115V (1)	K26500-0-15 Heater, 750W (1)
K23700-03013A Motor, 115V 60Hz	265-500-001 RTD Temperature Probe (1)
K70519 RTD Temperature Probe, 12 in.	288-115-001 Motor (1)
278-020-004 Fuse, 20A	091-032-001 Relay, Solid State, 4-32V DC, 20A
278-001-002 Fuse, 1A	275-103-025 Temperature Controller, 100-240V
091-032-001 Relay, Solid State, 4-32V DC, 20A	
275-103-020 Temperature Controller, 100-240V, 2 out	K26590 Thermometer Calibration Bath, 220-240VPage 63
K25339 Test Tube Bath, 220-240VPages 90, 91, 131, 155	K26500-0-15A Heater, 750W (1)
K346A-0-3 Heater, 750W, 230V (1)	265-500-001 RTD Temperature Probe (1)
K70519 RTD Temperature Probe, 12 in.	288-230-010 Motor 230V 50/60Hz (1)
278-020-004 Fuse, 20A	275-103-025 Temperature Controller, 100-240V
278-001-002 Fuse, 1A	
K23700-03014A Motor, 230V 50/60Hz	K27000 Smoke Point LampPage 95
091-032-001 Relay, Solid State, 4-32V DC, 20A	K27040 Replacement Window (1)
275-103-020 Temperature Controller, 100-240V, 2 out	K270-0-22 Scale (1)
K25900 Constant Temperature Water Bath, 115V 60HzPage 103	K27100 Ramsbottom Carbon Residue Apparatus, 115VPage 59
K25900-0-15 Heater, 750W (1)	230-115-001 Heater, 2400W (1)
010-500-003 Temperature Probe, 500Ω (1)	265-203-001 Temperature Probe, Type "K", 3/8 dia x 4"
K23700-03013A Motor, 115V 60Hz	278-030-002 Fuse, 30A
010-115-002 Type "B" Controller	278-001-002 Fuse, 1A
010-010-002 Potentiometer	278-104-002 Fuse, 0.25A
356-115-001 Pump	091-032-002 Relay, Solid State, 4-32V DC, 30A
	275-103-024 Temperature Controller, 100-240V, 1 out
K25990/K25995 Constant Temperature Water Bath, 220-240V, 50Hz and 60HzPage 103	K27190 Ramsbottom Carbon Residue Apparatus, 220-240VPage 59
K25990-0-15 Heater, 1000W (1)	230-230-002 Heater, 2400W (1)
010-500-003 Temperature Probe 500Ω (1)	265-203-001 Temperature Probe, Type "K", 3/8 dia x 4"
K23700-03014A Motor, 230V 50/60Hz	278-020-004 Fuse, 20A
010-115-002 Type "B" Controller	278-001-002 Fuse, 1A
010-010-002 Potentiometer	278-104-002 Fuse, 0.25A
356-115-001 Pump	091-032-001 Relay, Solid State, 4-32V DC, 20A
	275-103-024 Temperature Controller, 100-240V, 1 out
K26150 Pressure Hydrometer CylinderPage 103	K28300 Bending ApparatusPage 173
AS568-032 O-Ring, Buna 'N' (2)	K283-0-14 Test Panel (12)
K26015 Lucite Cylinder	
260-104-001 Pressure Relief Valve, 1/4"	K28310 Cooling ApparatusPage 173
K26150-0-6 Neoprene Cushion (2)	K28310-0-1 Large Stopper
	K28310-0-2 Small Stopper
K26200 Constant Temperature Hydrometer Bath, 115VPage 50	K28310-0-3 Inner Flask
K262-0-10 Heater, 500W (1)	K297-0-1 Vacuum Flask
354-001-002 Rheostat (1)	332-014-001 Funnel
K26290 Constant Temperature Hydrometer Bath, 220-240VPage 50	K29300 High Temperature Evaporation Loss ApparatusPage 149
K262A-0-10 Heater, 500W (1)	190-240-003 Ring Heater, 500W, 240V (2)
354-001-002 Rheostat (1)	220-240-002 Cartridge Heater, 650W (2)
	265-203-001 Temperature Probe, Type "K", 4 in., (2)
K26400 Constant Temperature Hydrometer Bath, 115VPage 50	278-020-004 Fuse, 20A
K26400-1-5 Heater, 1500W (1)	278-001-002 Fuse, 1A
K26400-1-5A Heater, 1000W (1)	278-104-002 Fuse, 0.25A
K70519 RTD Temperature Probe, 12 in.	010-230-004 Wattstat (2)
265-600-001 RTD Temperature Probe, 4 in.	K293-0-12 Thermocouple (2)
091-032-002 Relay, Solid State, 4-32 V DC, 30A	K293-0-20 Flowmeter (2)
275-103-024 Temperature Controller, 100-240V, 1 out	

SPARE PARTS (CONTINUED)

K29400 Evaporation Loss Bath, 115VPage 148	K30165/K30167 Rust Preventing Characteristics Oil Bath, 220-240V, 50HzPage 98, 128
K294-0-1 Heater, 1000W (1)	301-005-001 Belt (1)
K23700-03013A Motor, 115V 60Hz	K301A-1-0-5 Heater, 1500W (1)
K70519 RTD Temperature Probe, 12 in.	288-230-001 Motor, 230V 50Hz (1)
265-600-001 RTD Temperature Probe, 4 in.	265-600-001 RTD Temperature Probe, 4 in., 600F
278-020-004 Fuse, 20A	278-020-004 Fuse, 20A
278-001-002 Fuse, 1A	278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A	278-104-002 Fuse, 0.25A
091-032-001 Relay, Solid State, 4-32V DC, 20A	091-032-001 Relay, Solid State, 4-32 V DC, 20A
275-103-024 Temperature Controller, 100-240V, 1 out	275-103-024 Temperature Controller, 100-240V, 1 out
K29490 Evaporation Loss Test Bath, 220-240VPage 148	K30166/K30168 Rust Preventing Characteristics Oil Bath, 220-240V, 60HzPage 98, 128
K294A-0-1 Heater, 1000W (1)	301-005-001 Belt (1)
K23700-03014A Motor, 230V 50/60Hz	K301A-1-0-5 Heater, 1500W (1)
K70519 RTD Temperature Probe, 12 in.	288-230-003 Motor, 230V 60Hz (1)
265-600-001 RTD Temperature Probe, 4 in.	265-600-001 RTD Temperature Probe, 4 in.
278-020-004 Fuse, 20A	278-020-004 Fuse, 20A
278-001-002 Fuse, 1A	278-001-002 Fuse, 1A
278-104-002 Fuse, 0.25A	278-104-002 Fuse, 0.25A
091-032-001 Relay, Solid State, 4-32V DC, 20A	091-032-001 Relay, Solid State, 4-32V DC, 20A
275-103-024 Temperature Controller, 100-240V, 1 out	275-103-024 Temperature Controller, 100-240V, 1 out
K29700 Freezing Point ApparatusPage 96	K31956 Connection ApparatusPage 176
K297-0-1 Vacuum Flask (1)	K319-0-6 Condenser
K297-0-2 Sample Tube (Jacketed) (1)	363-102-003 ½ ID Latex Tubing, 2"
K297-0-8 Cork Strip (1)	K319-0-9 Tube Connecting Cork
K297-0-5 #2 Neoprene Stopper	K319-0-10 Thermometer Cork (2)
K29750/K29758/K29759 Freezing Point Apparatus (ASTM D1177), 115V and 220-240VPage 68	K319-0-7 End Tube
K29750-1-1 200mL Tube (1)	K319-0-8 Borosilicate Glass Tube
332-003-012 2 quart Dewar Flask (1)	K33700 Existent Gum Evaporation Bath, 6-Unit, 220-240VPage 86
K29760/K29768/K29769 Wax Appearance Point Apparatus, 115V and 220-240VPage 94	220-240-008 Cartridge Heater, 500W (6)
K297-0-1 Vacuum Flask (1)	265-203-001 Temperature Probe, Type "K", 3/16 dia x 4"
K29760-0-2 Sample Tube (1)	278-020-004 Fuse, 20A
K29900/K29990 Lead Corrosion Apparatus, 220-240V, 50Hz and 60HzPage 130	278-001-002 Fuse, 1A
K23700-03014A Bath Motor, 230V 50/60Hz (1)	K337-2-14 Flowmeter
K299-0-45A Outer Heater, 500W (1)	091-032-001 Relay, Solid State, 4-32V DC, 20A
K299-0-45B Middle Heater, 500W (1)	275-103-020 Temperature Controller, 100-240V, 2 out
K299-0-45C Inner Heater, 2000W (1)	K33780 Existent Gum Evaporation Bath, 3-Unit, 115VPage 86
265-600-001 RTD Temperature Probe, 4 in.	190-120-005 Heater, Ring, 500W, 120V (3)
K70519 RTD Temperature Probe, 12 in.	265-122-002 RTD Temperature Probe
278-020-004 Fuse, 20A	090-120-014 Relay, SPDT, 120V, 20A
278-001-002 Fuse, 1A	K337-2-14 Flowmeter
278-104-002 Fuse, 0.25A	275-103-020 Temperature Controller, 100-240V, 2 out
091-032-001 Relay, Solid State, 4-32 V DC, 20A	278-020-004 Fuse, 20A
275-103-024 Temperature Controller, 100-240V, 1 out	278-001-002 Fuse, 1A
K30160/K30161 Rust Preventing Characteristics Oil Bath, 115V, 60HzPages 98, 128	091-032-001 Relay, Solid State, 4-32V DC, 20A
K301A-0-5 Heater, 1500W (1)	K33781 Existent Gum Evaporation Bath, 3-Unit, 220-240VPage 86
301-005-001 Belt (1)	190-240-003 Heater, Ring, 500W, 240V (3)
288-115-056 Motor, 115V 60Hz (1)	265-122-002 RTD Temperature Probe
265-600-001 RTD Temperature Probe, 4 in.	091-032-001 Relay, Solid State, 4-32V DC, 20A
278-020-004 Fuse, 20A	K337-2-14 Flowmeter
278-001-002 Fuse, 1A	275-103-020 Temperature Controller, 100-240V, 2 out
278-104-002 Fuse, 0.25A	278-020-004 Fuse, 20A
275-103-024 Temperature Controller, 100-240V, 1 out	278-001-002 Fuse, 1A

SPARE PARTS (CONTINUED)

K33800 Existent Gum Evaporation Bath w/Superheater, 220-240V	Pages 86, 87	K39179 Conditioning Bath	Page 112
278-002-001	2A Fuse (2)	K26490-1-5	Control Heater, 1500W (2)
220-240-008	Cartridge Heater, 500W (6)	K70519	RTD Temperature Probe, 12 in.
220-240-003	Superheater Cartridge Heater, 1500W (1)	288-230-002	Motor
265-203-001	Temperature Probe, Type "K", 3/8 dia x 4"	278-020-004	Fuse, 20A
275-103-032	Temperature Controller, 100-240V	278-001-002	Fuse, 1A
K337-2-14	Flowmeter	278-104-002	Fuse, 0.25A
275-550-001	Superheater Temperature Controller	091-032-001	Relay, Solid State, 4-32V DC, 20A
265-550-002	RTD Temperature Probe	271-025-004	Circuit Breaker, 25A
091-032-001	Relay, Solid State, 90-240V, 20A		
K33810 Steam Superheater, 220-240V	Page 87	K39190/K39199 Digital Demulsibility Characteristics Bath, 115V and 220-240V	Page 112
220-240-003	Cartridge Heater, 1500W (1)	265-500-001	RTD Temperature Probe
265-550-002	RTD Temperature Probe (1)	279-115-002	Lamp
K34000/K34010 Viscometer Cleaning & Drying Apparatus	Page 9	K39180-0-10	Heater, 1000W, 115V
261-104-001	Filter (1)	K39189-0-10	Heater, 1000W, 230V
AS568-015	O-ring (1)	332-001-003	Borosilicate Glass Jar, 12"x18"
K35000 Corrosion and Oxidation Stability Apparatus, 220-240V	Page 124	K23700-03013A	Stirrer Motor, 115V 60Hz
220-240-006	Cartridge Heater, 250W (14)	K23700-03014A	Motor, 230V 50/60Hz
265-203-001	Temperature Probe, Type "K", 3/8 dia x 4" (2)		
K350-0-23	Test Tube (6)	K39900 LPG Copper Corrosion Water Bath, 115V	Page 89
K350-0-24	Air Tube (6)	K253-1-0-8	Heater, 750W (1)
K350-0-25	Condenser (6)	275-250-003	Electronic Temperature Controller
278-020-004	Fuse, 20A	191	RTD Probe Assembly
278-001-002	Fuse, 1A	K39990 LPG Copper Corrosion Water Bath, 220-240V	Page 89
278-104-002	Fuse, 0.25A	K253-1A-0-8	Heater, 750W (1)
091-032-001	Relay, Solid State, 4-32 V DC, 20A	275-250-003	Electronic Temperature Controller
275-103-024	Temperature Controller, 100-240V, 1 out	191	RTD Probe Assembly
K34700 Brookfield Viscosity Air Bath, 115V 60Hz	Page 14	K40000 LPG Corrosion Test Cylinder	Page 89
278-001-002	Fuse, 1A	AS568-218	O-ring (1)
278-020-004	Fuse, 20A	K42000/K42090 Powertrol Heater, 115V/230V	Pages 61, 72, 172
278-104-002	Fuse, 0.25A	225-115-002	Heater, 1000W, 115V
288-115-059	Motor 115V	225-230-002	Heater, 1000W, 230V
091-032-001	Relay, Solid State, 4-32V DC, 20A	010-115-005	Wattstat, 115V
271-040-002	Circuit Breaker, 40A	010-230-004	Wattstat, 230V
K34701/K34702 Brookfield Viscosity Air Bath, 230V 50/60Hz	Page 14	K43002 Dual Twin Foaming Characteristics Apparatus, 115V	Page 109
278-001-002	Fuse, 1A	K43012	Cylinder and Holder Assembly (4)
278-020-004	Fuse, 20A	265-400-002	RTD Temperature Probe (2)
278-104-002	Fuse, 0.25A	K43002-0-9	Heater, Outer, 750W (1)
288-230-020	Motor, 230V 50/60Hz	K43002-0-11	Heater, Inner, 750W (1)
091-032-001	Relay, Solid State, 4-32V DC, 20A	K23700-03013A	Motor, 115V 60Hz (2)
K35200 Humidity Cabinet for Rust Protection, 115V, 60Hz	Page 65	275-103-029	Temperature Controller, 100-240V (2)
K352-0-22	Heater, 750W (2)	091-120-001	Relay, Solid State, 120V (2)
191	RTD Probe Assembly	K430-0-13	Air Outlet Elbow (4)
K35295/K35296 Humidity Cabinet for Rust Protection, 220-240V, 50Hz and 60Hz	Page 65	K430-0-8	Rubber Stopper (4)
K352A-0-22	Heater, 750W (2)	278-001-002	Fuse, 1A
191	RTD Probe Assembly	K43003 Automatic Time Sequence Foaming Characteristics, 115V	Page 109
K39103 Stirrer	Page 112	K430-0-8	Rubber Stopper (4)
289-002-015	Flange Bearing (2)	275-103-029	Temperature Controller, 100-240V (2)
289-002-014	Bearing (1)	265-400-002	RTD Temperature Probe (2)
K39100-23021	Stirrer Motor	K23700-03013A	Motor, 115V 60Hz (2)
		050-002-001	Line Switch (2)
		K430-0-13	Air Outlet Elbow (4)
		K43002-0-9	Heater, Outer, 750W (1)
		K43002-0-11	Heater, Inner, 750W (1)
		K43012	Cylinder and Holder Assembly (4)
		092-240-001	Timer (3)
		278-001-002	Fuse, 1A
		091-120-001	Relay, Solid State, 120 V

SPARE PARTS (CONTINUED)

<p>K43025 Diffuser Stone Tester.....Page 110</p> <p>332-003-011 Flask 500mL</p> <p>K43025-0-5 Stopper</p> <p>338-000-001 Clamp Holder (2)</p> <p>337-000-008 Clamp Extension (2)</p> <p>332-002-016 Graduated Cylinder, 250mL</p>	<p>K45090 Front View Distillation Apparatus, Right-Hand, 220-240VPage 55</p> <p>225-230-003 Brick Heater, 1250W (1)</p>
<p>K43041 Sequence IV Foaming Characteristics Apparatus, 115V.....Page 109</p> <p>K43012 Cylinder and Holder Assembly (2)</p> <p>K43002-0-9 Heater, Outer, 750W (1)</p> <p>K43002-0-11 Heater, Inner, 750W (1)</p> <p>265-400-002 RTD Temperature Probe (1)</p> <p>K430-0-8 Rubber Stopper (2)</p> <p>275-103-023 Temperature Controller, 100-240V</p> <p>K23700-03013A Motor, 115V 60Hz</p> <p>091-240-002 Relay, Solid State, 90-240V, 25A</p> <p>090-120-010 Relay, 120V</p> <p>278-001-002 Fuse, 1A</p>	<p>K45100 Front View Distillation Apparatus, Left-Hand, 115V.....Page 55</p> <p>225-115-003 Brick Heater, 1250W (1)</p>
<p>K43049 Sequence IV Foaming Characteristics Apparatus, 220-240V.....Page 109</p> <p>K43012 Cylinder and Holder Assembly (2)</p> <p>K43092-0-9 Heater, Outer, 750W (1)</p> <p>K43092-0-11 Heater, Inner, 750W (1)</p> <p>K430-0-8 Rubber Stopper (2)</p> <p>275-103-023 Temperature Controller, 100-240V</p> <p>265-400-002 RTD Temperature Probe</p> <p>K23700-03014A Motor, 230V 50/60Hz</p> <p>090-240-012 Relay, 240V</p> <p>091-240-004 Relay, Solid State, 240V</p> <p>278-001-002 Fuse, 1A</p>	<p>K45190 Front View Distillation Apparatus, Left-Hand, 220-240V....Page 55</p> <p>225-230-003 Brick Heater, 1250W (1)</p>
<p>K43092 Dual Twin Foaming Characteristics Apparatus, 220-240V.....Page 109</p> <p>K43012 Cylinder and Holder Assembly (4)</p> <p>265-400-002 RTD Temperature Probe (2)</p> <p>K43092-0-9 Heater, Outer, 750W (1)</p> <p>K43092-0-11 Heater, Inner, 750W (1)</p> <p>K23700-03014A Motor, 230V 50/60Hz (2)</p> <p>275-103-029 Temperature Controller, 100-240V (2)</p> <p>090-240-012 Relay, 240V (2)</p> <p>K430-0-13 Air Outlet Elbow (4)</p> <p>091-240-004 Relay, Solid State, 240V</p> <p>K430-0-8 Rubber Stopper (4)</p>	<p>K45200 Group 4 Distillation Apparatus, Right-Hand, 115V.....Page 55</p> <p>K452-0-3 Heater (condenser), 300W (1)</p> <p>225-115-003 Brick Heater, 1250W (1)</p> <p>265-550-004 RTD Probe 0.25 OD x 90 deg. bend</p>
<p>K43093 Automatic Time Sequence Foaming Characteristics, 220-240V.....Page 109</p> <p>K430-0-8 Rubber Stopper (4)</p> <p>265-400-002 RTD Temperature Probe (2)</p> <p>K23700-03014A Motor, 230V 50/60Hz</p> <p>091-240-004 Relay, Solid State, 240V (2)</p> <p>050-002-001 Line Switch (2)</p> <p>K430-0-13 Air Outlet Elbow (4)</p> <p>K43092-0-11 Heater, Inner, 750W (1)</p> <p>K43092-0-9 Heater, Outer, 750W (1)</p> <p>K43012 Cylinder and Holder Assembly (4)</p>	<p>K45290 Group 4 Distillation Apparatus, Right-Hand, 220-240V.....Page 55</p> <p>K452A-0-3 Heater (condenser), 300W (1)</p> <p>225-230-003 Brick Heater, 1250W (1)</p> <p>265-550-004 RTD Probe 0.25 OD x 90 deg. bend</p>
<p>K45000 Front View Distillation Apparatus, Right-Hand, 115V.....Page 55</p> <p>225-115-003 Brick Heater, 1250W (1)</p>	<p>K45300 Group 4 Distillation Apparatus, Left-Hand, 115V.....Page 55</p> <p>K452-0-3 Heater (condenser), 300W (1)</p> <p>225-115-003 Brick Heater, 1250W (1)</p> <p>265-550-004 RTD Probe 0.25 OD x 90 deg. bend</p>
	<p>K45390 Group 4 Distillation Apparatus, Left-Hand, 220-240V.....Page 55</p> <p>K452A-0-3 Heater (condenser), 300W (1)</p> <p>225-230-003 Brick Heater, 1250W (1)</p> <p>265-550-004 RTD Probe 0.25 OD x 90 deg. bend</p>
	<p>Main Part: K45603, K45604, K45703-TS, K45704-TS Automatic Distillation Analyzer.....Page 57</p> <p>090-240-022 Relay, 230 Vac 10A plug in power</p> <p>354-040-003 Triac, 40 amp, 600V</p> <p>220-240-016 Cartridge Heater 300W, 240V</p> <p>K45658 Heating Element</p> <p>K45658-A Ceramic Coil Support, set 4pc.</p> <p>K45662-A Fuse, 6.3A Time Lag F220-Pk 10</p>
	<p>K45900 Cold Filter Plugging Point Apparatus.....Page 100</p> <p>K459-0-7 Pipette (1)</p> <p>K459-0-13B Filter (1)</p> <p>AS568-008 O-ring (2)</p>
	<p>K46000 Cloud and Pour Point Chamber.....Page 132</p> <p>K460-1-6 Cover (1)</p> <p>K460-1-7B Copper Cup (4)</p> <p>K460-0-8 Thermometer Holder (4)</p> <p>K46120 Disc (Cork) Bottom (4)</p> <p>AS568-219 O-ring (4)</p> <p>AS568-131 O-ring (4)</p>

SPARE PARTS (CONTINUED)

K46100 Series Refrigerated Cloud and Pour Point, 115V and 220-240V, 50Hz and 60Hz.....Page 132

Model Numbers K46100, K46195, K46196

K46100-03002	Foam Covers
K46100-03030	Copper Test Jacket
091-032-003	Relay
265-400-005	RTD Temperature Probe
275-103-030	Temperature Controller, 1 out
283-120-006	Solenoid Coil, 120-208-240V
283-308-002	Solenoid Valve
278-001-002	Fuse, 1A

K46300 Series Refrigerated Cloud and Pour Point, 115V and 220-240V, 50Hz and 60Hz.....Page 132

Model Numbers K46300, K46395, K46396

K46300-03002	Foam Covers
K46100-03030	Copper Test Jacket
091-032-003	Relay
265-400-005	RTD Temperature Probe
275-103-031	Temperature Controller, 1 out
283-120-006	Solenoid Coil, 120-208-240V
283-308-002	Solenoid Valve
278-001-002	Fuse, 1A

K46600/K46690 Dual Extraction Apparatus, 115V and 220-240V.....Page 60

354-001-003	Rheostat (1)
-------------	--------------

K47000 Autoignition Apparatus, 220-240V.....Page 39

K470-0-1-10	Thermocouple (1)
K470-0-1-15	Thermocouple (3)
332-003-007	500mL Flask (1)

K47500 Wickbold Apparatus, 115V.....Page 58

311-015-003	Pressure Gauge (1)
290-010-001	Pressure Regulator (1)
037-108-00B	Toggle Valve (1)
261-104-001	Filter (1)

K47590 Wickbold Apparatus, 220-240V.....Page 58

311-015-003	Pressure Gauge (1)
290-010-001	Pressure Regulator (1)
037-108-00B	Toggle Valve (1)
261-104-001	Filter (1)
240-230-001	Stepdown Transformer (1)

K50100/K50190 Panel Coking Test Apparatus.....Page 135

275-103-029	Temperature Controller, 100-240V
360-115-014	Motor Control
360-115-009	Tachometer
360-000-002	Digital Pick Up
K299-4-52	Flowmeter
K185-0-66	Motor
381-115-002	Electronic Timer, 115V
381-240-001	Electronic Timer, 240V
265-203-002	Thermocouple
236-115-003	Strip Heater, 400W, 115V
236-230-003	Strip Heater, 400W, 240V
332-017-001	Separatory Funnel, 500mL
220-240-010	Cartridge Heater, 300W, 240V
220-120-008	Cartridge Heater, 300W, 115V
091-240-002	Relay, Solid State, 90-240V, 25A
278-104-003	Fuse, 6A (1)
278-003-001	Fuse, 3.15A
278-002-001	Fuse, 2A (1)
278-001-002	Fuse, 2A (2)

K56100 Cigre Bath, 115V.....Page 126

190-120-009	Ring Heater, 200W (4)
230-115-002	Band Heater, 600W (1)
AS568-213	O-ring (24)
K56110	Oxidation Tubes and Absorption Tubes 12 Sets (2 per set)
265-122-002	RTD Temperature Probe, 3 in., 2 Wire
265-122-003	RTD Temperature Probe, 3 in., 3 Wire
278-020-004	Fuse, 20A
278-001-002	Fuse, 1A
278-104-002	Fuse, 0.25A

K56190 Cigre Bath, 220-240V.....Page 126

190-240-008	Ring Heater, 200W (4)
230-230-003	Band Heater, 600W (1)
AS568-213	O-ring (24)
K56110	Oxidation Tubes and Absorption Tubes 12 Sets (2 per set)
265-122-002	RTD Temperature Probe, 3 in., 2 Wire
265-122-003	RTD Temperature Probe, 3 in., 3 Wire
278-020-004	Fuse, 20A
278-001-002	Fuse, 1A
278-104-002	Fuse, 0.25A

K70000 Oxidation Bomb.....Page 114

K70050-00000	Silicone O-ring (qty. depends on usage)
K70060	Valve (1)

K70200/K70290 2-Unit RBOT Bath, 220-240V, 50Hz and 60Hz.....Page 116

K702-0-8	Control Heater, 1000W (1)
K702-0-8A	Continuous Heater, 1000W (1)
K702-0-8B	Control Heater, 750W (1)
AS568-345-V14	O-Ring, Viton (2)
K700B-0-41	Drive Shaft Seal (8)
K702-CHAIN	Chain Kit (1)
050-230-002	Switch
K700B-0-43	Ball Bearing (2)
K70519	RTD Temperature Probe, 12 in.
265-600-001	RTD Temperature Probe, 4 in.
278-020-004	Fuse, 20A
278-001-002	Fuse, 1A
278-104-002	Fuse, 0.25A

K70300/K70390 3-Unit RBOT Bath, 220-240V, 50Hz and 60Hz.....Page 116

K703-0-8	Heater, 1000W (2)
K703-0-8A	Control Heater, 750W (1)
301-004-001	Vee Belt (1)
AS568-345-V14	O-Ring, Viton (3)
K700B-0-41	Drive Shaft Seal (12)
K703-CHAIN	Chain Kit (1)
K700B-0-43	Ball Bearing (3)
288-115-009	Motor, 1/2 hp
050-230-002	Switch
K70519	RTD Temperature Probe, 12 in.
265-600-001	RTD Temperature Probe, 4 in.
278-020-004	Fuse, 20A
278-001-002	Fuse, 1A
278-104-002	Fuse, 0.25A

SPARE PARTS (CONTINUED)

K70400/K70490 4-Unit RBOT Bath, 220-240V, 50Hz and 60HzPage 116	KLA-4-TS Automatic Cold Filter Plugging Point SystemPages 101
K704-0-8 Heater, 1000W (4)	KLA-4S-008-04 CFPP calibrated glass cell
301-004-001 Vee Belt (1)	KLA-4S-008-041 "O" ring for CFPP test jar
AS568-345-V14 O-Ring, Viton (4)	KLA-4S-008-12 PT100 product w/ connector
K700B-0-43 Ball Bearing (4)	KLA-4S-008-13 Calibrated aspiration pipette
K700B-0-41 Drive Shaft Seal (16)	KLA-4S-013-01 Filter assembly
K704-CHAIN Chain Kit (1)	KLA-4S-013-02 Filter
288-115-009 Motor, 1/2 hp	KLA-4S-1232 "O" ring (small) for CFPP filter
050-230-002 Switch	KLA-4S-1288 "O" ring for CFPP filter
K70519 RTD Temperature Probe, 12 in.	
265-600-001 RTD Temperature Probe, 4 in.	KLA-5-TS Automatic Freezing Point SystemPages 97
278-020-004 Fuse, 20A	KLA-5S-008-07 Fiber optic for Freezing point
278-001-002 Fuse, 1A	KLA-5S-008-12A Removable freezing glass cell
278-104-002 Fuse, 0.25A	
K87100/K87190 Automatic Pensky-Martens Closed Cup Flash Point TesterPages 33	
K87100-5 Stirring Connection Cable	
K87100-6 Detection Cable	
K87100-7 PT 100 Probe	
K87100-8 Electric Ignitor (consumable)	
K87100-9 Roll of Printer Paper (consumable)	
K87400/K87490 Automatic Cleveland Open Cup Flash Point TesterPages 33	
K87400-3 Heating Element 1000W	
K87400-4 Electric Ignitor (consumable)	
K87400-5 Roll of Printer Paper (consumable)	
K87400-8 Insulated Plate-Mobile	
K87400-9 PT 100 Probe	
K88600 Portable Octane AnalyzerPages 102	
K88603 Sample Holder	
K88615 Serial to USB adapter	
K88608 Sample holder covers, 12	
K95500/K95590 Digital PenetrometerPages 24, 25, 27	
277-001-001 Fuse Holder and Cap	
278-004-001 Fuse, 4A	
459-012-001 Battery, 12V (1)	
K95500-02001 Light Assembly	
KLA-1-TS Automatic Cloud Point SystemPage 133	
KLA-1S-008-04 Calibrated glass cell for cloud (silver bottom)	
KLA-1S-008-041 "O" ring for CP test jar	
KLA-1S-008-06 Fiber optic for cloud point	
KLA-1S-008-12 PT100 product w/ connector (white)	
KLA-2-TS Automatic Pour Point SystemPages 133	
KLA-2S-008-04 Pour Point glass cell	
KLA-2S-008-041 "O" ring for PP test jar	
KLA-2S-008-12 PT100 product w/ connector (white)	
KLA-2S-008-13 PT100 detection w/ connector (brown)	
KLA-3-TS Automatic Cloud/Pour Point SystemPages 133	
KLA-3S-008-06 Fiber optic for Cloud Point	
KLA-3S-008-12A PT100 product w/ connector (blue)	
KLA-2S-008-13 PT100 detector w/ connector (brown)	
KLA-1S-008-04 Calibrated Glass Cell for Cloud Point (silver bottom)	