

PRODUCTS PARTS

2013-14



YOUR LANES | OUR PASSION

Lane Conditioners

WICK-PAD CONDITIONER



Physical Properties:

- Viscosity: 24.1 cps.
- Surface Tension: 23.6 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8105

WICK-PAD & SANCTION® CONDITIONERS



Physical Properties:

- Viscosity: 31.2 cps.
- Surface Tension: 23.7 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8095



Physical Properties:

- Viscosity: 31.3 cps.
- Surface Tension: 23.5 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8125

SANCTION® CONDITIONERS



Physical Properties:

- Viscosity: 36.5 cps.
- Surface Tension: 23.1 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8115



Physical Properties:

- Viscosity: 47.3 cps.
- Surface Tension: 22.7 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8025



Physical Properties:

- Viscosity: 50.3 cps.
- Surface Tension: 23.9 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8075

NEW! Why Compromise? You can have it all.

When choosing a lane conditioner, you used to have to decide which you wanted more:

1. A durable lane conditioner that could withstand aggressive high tech balls or
2. A lane conditioner that was pinsetter and house ball friendly

With Fire and Ice, you no longer have to compromise. You can have it all. Fire and Ice are more durable than any of our existing lane conditioner, but are also pinsetter and house ball friendly. Now the only choice you have to make is whether you want Fire...or Ice.



FIRE™

For more hook or slick lane surfaces



ICE™

For more hold area or high friction lane surfaces



For Sanction® Technology Lane Machines

Fire Physical Properties:

- Viscosity: 45.1 cps.
- Surface Tension: 23.6 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8135

For Sanction® Technology Lane Machines

Ice Physical Properties:

- Viscosity: 40.9 cps.
- Surface Tension: 23.2 dyn/cm.
- Shipping Weight: 40 lbs.
- Packaging: 1.25 gallon containers for easy use
(4 containers per case = 5 gallons)

Part Number: 156-8130

Lane Cleaners



Physical Properties:

- Designed for low friction surfaces and stronger backend reaction
- pH: 11.5
- Shipping Weight: Only 10 lbs.
- Packaging: 3.29 liters (1 US Gallon)

Part Number: 156-8435



Physical Properties:

- Designed for high friction surfaces
- pH: 12.8
- Shipping Weight: Only 13 lbs.
- Packaging: 2 liter bottles for easy use (2 bottles per case = 4 liters)

Part Number: 156-8425



Physical Properties:

- pH: 7.8
- Appearance: White Tablet with Citrus Scent
- Tablet Weight: 42 g
- Shipping Weight: 12 lbs. per case (4 bags/case)
- Packaging: 24 tablets/bag (4 bags/case = 96 tablets total)

Part Number: 156-8500B



Physical Properties:

- pH: 12.6
- Shipping Weight: 46 lbs.
- Packaging: 2.5 gallon containers (2 containers per case = 5 gallons)

Part Number: 156-8405

Note: All Kegel cleaners meet European compliance requirements.

Other Chemicals & Supplies



EZ Core Technology makes changing cloth "Quick & EZ"! Stop handling dirty cloth and get ultimate cleaning results.

Physical Properties:

- Color: White
- Roll Dimensions: 43" wide x 60' long
- Shipping Weight: Under 12 lbs.
- Packaging: 4 rolls per case

Part Number:

K2 Select (Reusable PVC Core): 153-0047EZ

K2 Kloth (Cardboard Core): 153-0047P



NPS™ (NO PIN SLIDE)

NPS (No Pin Slide) creates a textured surface which helps the pins grip and fall down rather than slide out of range. Apply it to the pin deck and the problem is solved.

Physical Properties:

- Weight per container: 9 lbs.
- Shipping Weight: 37 lbs.
- Packaging: 1 gallon bottle for easy use (4 gallons per case)
- Concentrated Solution

Part Number: K-99C

Conditioner Comparison

SANCTION TECHNOLOGY							
PROPERTIES	FIRE	ICE	NAVIGATE	INFINITY	PRODIGY	DEFENSE-S	OFFENSE HV
VISCOSITY	45.1	40.9	31.3	36.5	31.2	47.3	50.3
DURABILITY							
High League Lineage	4.5	5	4.5	4.5	3.5	4.5	3
High Open Play Lineage	5	4.5	4	3	4.5	3	4
Reduced Pinsetter Calls	5	5	4.5	4	4.5	3	4
Easy Cleaning	5	5	4	3	4	2	4.5
Limits Carry Down	5	5	4.5	4	4.5	4	3
LANE SURFACES							
Pro Lane™	5	4.5	4.5	3	4.5	3	3
Anvilane™	4.5	5	4	4.5	4	4	4
AMF HPL™	4.5	5	4	4.5	4	4.5	4
AMF SPL™	4.5	5	4	4.5	4	4	4
Laneshield®	5	4.5	4	4	4	4	4.5
Guardian®	4.5	5	4	4	4	4.5	4
MAD Lanes®	4.5	5	4.5	4.5	4	4	4
WOOD FINISHES							
Water Base	4.5	5	3	4	3	4.5	3
100% Solids	4.5	5	3	4	3	4.5	4

WICK/PAD TECHNOLOGY			
PROPERTIES	NAVIGATE	CROSSFIRE	PRODIGY
VISCOSITY	31.3	24.1	31.2
WICKING TIME	13 minutes	10 minutes	14 minutes
DURABILITY			
High League Lineage	4.5	4	3.5
High Open Play Lineage	4.5	4	4.5
Reduced Pinsetter Calls	4.5	4	4.5
Easy Cleaning	4	4.5	4
Limits Carry Down	4.5	4.5	4.5
LANE SURFACES			
Pro Lane™	5	4	4.5
Anvilane™	4	5	4
AMF HPL™	4	4	4
AMF SPL™	3	4	3
Laneshield®	4	5	4
Guardian®	4	4	3
MAD Lanes®	3	5	4.5
WOOD FINISHES			
Water Base	3	5	3
100% Solids	3	5	3

Cleaning

LEGEND

SUFFIX	MACHINE
KW	KUSTODIAN WALKER
ION	KUSTODIAN ION
XF	CROSSFIRE
KP	KUSTODIAN PLUS
KK	KUSTODIAN
EP	ELITE PLUS
ELT	ELITE
STD	STANDARD
	BRUNSWICK ECHO
PXS	SANCTION MACHINE II
	PHOENIX S
PX	PHOENIX
DT	DART
XL	EXCEL
LCM	LANEWALKER CLEANING MACHINE
LW	LANEWALKER

Suffix represents all model variations unless model type is specifically indicated (i.e. KP-A). Parts do not apply to original Sanction Machines.



Recovery Tank - 153-8841 - XF | PXS-A,B | PX-A,B

Recovery Tank Filter (for tank 153-8841)
153-8844 - XF | PXS-A,B | PX-A,B

Recovery Tank - 154-8683

ION-A | KP-A | KK | ELT | STD | PXS-C | PX-C

Folded Recovery Tank Filter (for tank 154-8683)
154-8684

Recovery Tank - 158-8434 - ION-B | KP-B

Recovery Tank - 158-8617 - KW | ION-C,D

Recovery Tank Filter (for tanks 158-8434 & 158-8617)
158-0406

Recovery Tank Gasket (for tanks 158-8434 & 158-8617)
158-0405



Vacuum Motor - See Motors on pages 18-19

Following Items are Not Pictured

Vacuum Housing - 153-0204H

Fan Blade - 153-0204F

Flexible Hose (Sold By The Inch) - 154-0260

Cleaner Pump Drive Motor

154-8874 (115VAC)

154-8875 (230VAC)

158-8404 (24VDC)

Peristaltic Cleaner Pump - 158-8404D

Norprene® Tubing - 154-0861B

Cleaner Volume Control Valve - 154-1855

Cleaner Tip & Hose Assembly - 154-8852

5" Cleaner Tank Filter - 154-0212B

½" O-Ring - 154-0287C

Universal In-Line Filter Assembly - 154-8867A

In-Line Filter Assembly - 154-8887 - KW | ION | KP | EP

Cleaner Supply Tank Only - 154-8840 - XF | KK | PX-C

Complete Cleaner Tank Assembly - 154-8680 - EP | ELT | STD | PXS-C

Complete Cleaner Tank Assembly - 158-8433C - KW | ION-B,C,D | KP-B

Cleaner Supply Tank Only - 158-8433 - KW | ION-B,C,D | KP-B

Cleaner Supply Tank Only - 154-8894 - ION-A | KP-A

Expandable Supply Tank Plug (1-½") - 153-0246A

Rubber Insert and Plug for Supply Tank - 153-0247

Potentiometer for Cleaner Control

154-8846 - KP

158-8413 - KW | ION

Complete Cleaner Pump Assembly

154-8859 (115VAC) - KP-A | EP

154-8859E (230VAC) - KP-A | EP

Complete Cleaner Pump Assembly

158-8404C (24VDC) - KW | ION

154-8847 (24VDC) - KP

Solenoid Valve (3-Way)

154-1851 (115VAC) - KP-A Only | EP

154-1852 (230VAC) - KP-A Only | EP

Kustodian PLUS

(Model A Only)

24VDC Cleaner Pump

Conversion Kit

154-8844 (115V)

154-8845 (230V)



Tubing Tip

Kegel recommends to change your Norprene® tubing at least once a year to ensure consistent cleaner volume.



Cushion Roller With Cloth Cover - 153-8839

Compatible with KW | ION | XF | KP | EP

Contact Tech Support for use on these models: KK | ELT | STD | PXS | PX

Cloth Cover Size

Size A - 154-8889A

Size B - 154-8889B

Size C - 154-8889C

Size D - 154-8889D

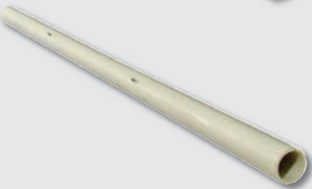
Size E - 154-8889E



Cushion Roller - 153-8838 - KK | ELT | STD | PXS | PX

Cushion Roller - 153-8026 - LW

Cushion Roller - 153-8238B - LCM



PVC Take-Up Reel - 153-8824

(Not required with K2 Select EZ Core Cloth)

PVC Take-Up Reel Clamp - 154-6248 (Not Pictured)

Complete Squeegee Assembly (Blue) - 153-0202D

KW | KW-D | ION | ION-D | XF | KP | KK | EP | ELT | STD | PXS-C

Complete Squeegee Assembly Kit (Brown) - 153-0202A - PXS | PX

Complete Squeegee Assembly (Blue) - 153-0202 - LCM



Replacement Squeegee Blades - Blue pair - 153-8204E

Replacement Squeegee Blade - Individual - 153-0202E



Replacement Squeegee Blades - Brown pair - 153-8834

Replacement Squeegee Blade - Individual - 153-0202C



Spray Jet Cup Assembly Upgrade

154-8692



Spray Pressure Regulator Upgrade

154-8268

Cleaner Pump Repair Kit Valve/Diaphragm Kit for Kegel Pump

158-8212K

Spray Jet Cleaner Pumps

Kegel Cleaner Spray Pumps

158-8212 (115V AC)

158-8213 (230V AC)

For older Standard AC and SE Machines with Pump Mounted Over Buffer Motor.

154-8651A (115V AC)

154-8652A (230V AC)

This pump replaces SHURflo® & FLOJET® pumps.



Spray Jet Assembly

Tip Retainer - 153-0218

Spray Jet Body - 153-6252

Nylon Body - 153-0217



Screen Check Valve - 153-0220

Outside Spray Tip (1501) - 154-0007

Inside Spray Tip (8003) - 153-0207

Inside Spray Tip (11003) - 153-0207A

Cleaner Tip Check Valve (Pkg of 5)

154-0862K - KW | ION | KP | EP



Cleaner Funnels

Cleaner Funnel - Long Stem

158-8252

Cleaner Funnel - Short Stem

154-8647

Cleaner Funnel - No Stem

153-0252



Conditioning



Conditioner Transfer System

Conditioner Transfer Brush Assembly - 154-0866 - KW | ION | KP | EP

Buffer Brush - 154-8641 - KW | ION | XF | KP | KK | EP | ELT | STD | PXS-C | PX-C

Buffer Brush - 153-8407 - PXS-A,B | PX-A,B | DT | XL

Buffer Brush - 153-8017 - LW

Transfer Roller - 153-8408 - PX-A,B | DT | XL

Transfer Roller - 154-8338 - PX-C

Transfer Roller (2.25 diameter) - 154-8207 - PXS-A,B

Transfer Roller (1.75 diameter) - 154-8208 - PXS-A,B

Transfer Roller - 154-8608 - KK | ELT | STD | PXS-C

Transfer Roller - 158-8204 - XF

Buffer Belt - 154-9615 - ION-A,B | KP | KK | EP | ELT | STD | PXS-C

Buffer Belt - 153-9015 - PXS-A,B | PX-A,B | LW

Buffer Belt - 153-9817 - PX-C

Buffer Belt - 158-9201 - XF

Buffer Belt - 158-9026 - KW | ION-D

Head Drive Belt - 154-9201 Compatible with all applications.

Wicks



Glueless Wick Plate Assembly

3" - 153-8103A Replacement for glued wicks

3.125" - 153-8123 Only Compatible with PX-C

3.125" - 158-8223 Only Compatible with XF



5" - 153-8105A Replacement for glued wicks

5.125" - 153-8125 Only Compatible with PX-C

5.125" - 158-8225 Only Compatible with XF



7" - 153-8107A Replacement for glued wicks

7.125" - 153-8127 Only Compatible with PX-C

7.125" - 158-8227 Only Compatible with XF

10" - 153-8110A Replacement for glued wicks

10.125" - 158-8230 Only compatible with XF

Not Pictured

45" Felt Material for Glued Wicks - 153-0005 (4")

45" Felt Material for No-Glue Wicks - 153-0005B (5")

Felt Material Stock for No-Glue Wicks - 153-0005D

(Custom cut to be purchased by the inch)



Wick Spring (0.438 OD x 2.75) - 153-2095

Wick Spring (XF Only) - 153-2740

Pattern Smoothing Pads

Pattern Smoothing

Assembly - 154-8617

Velcro for Smoothing Pad

154-8617V (10 per pack)

Smoothing Pad Spring

153-2540A



Solenoid (115V) - 153-1027

Solenoid (220V) - 153-1627

Solenoid Cable Assembly 7.625"
153-8812 (PX-A,B)

Solenoid Cable Assembly 8.25"
153-8812A (PX-C)

Fluid Metering Components

1. Pulse Suppression Assembly

154-8660 - EP | ELT | STD | PXS-C

154-8216K - PXS-A,B

154-8816 - KW | ION | KP | KK

2. Pressure Gauge (60 psi) - 158-1613 (Replaces 154-1225)

3. Oil Control Valve (24V DC) - 154-1209

Oil Control Valve (24V DC) - 154-8298 (Extended Wires with Fittings)

Calibration Valve (115V AC) - 154-1210 - PXS-A,B (Not Pictured)

4. Vent Valve - 154-8817 (Electrical Vent Valve Discontinued)

5. Oil Tank Assembly with Fittings/Float

154-8682 - KW | ION | KP | EP | ELT | STD | PXS-C

Oil Tank Assembly with Fittings

154-8842 - KK

6. Oil Tank Filter - 154-0212

7. Float Switch Assembly

154-1203 - XF

154-8693 - KW | ION | KP | EP | ELT | PXS-C | PX-C

154-8203 - PXS-A,B (3" Vertical for tank 154-8201C)

154-8203A - STD | ELT (7" Vertical for tank 154-8615C)

8. Belt for Conditioner Pump Motor

154-9202A (60Hz) 154-9215 (50Hz)

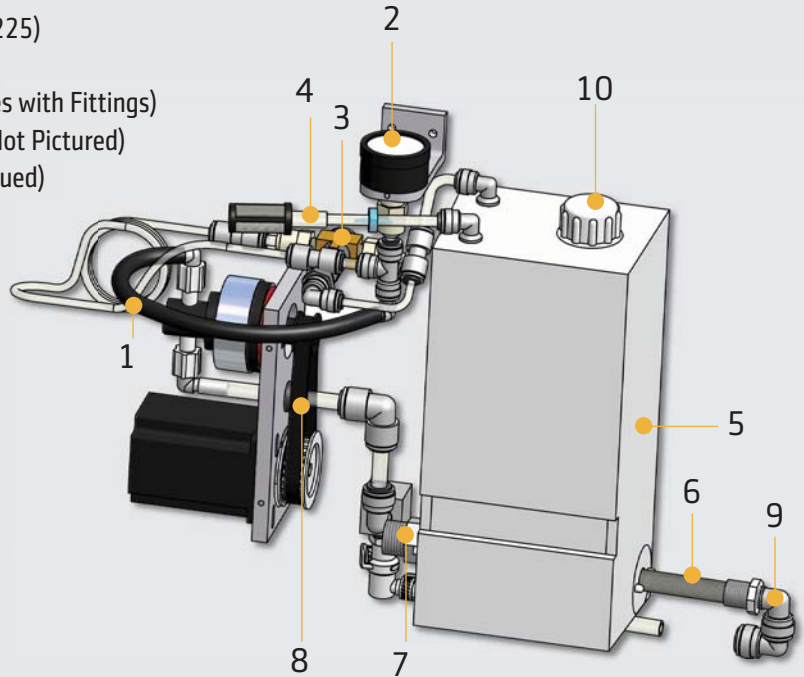
9. Elbow 3/8" Tube x 1/4" NPT - 154-0225

10. Oil Tank Cap Assembly

154-0832 - Complete

154-0832C - Cap only

154-0832G - Gasket only



Miscellaneous

Conditioner Head Tip & Hose Holder Assembly (includes tubing)

1- 1/4" Tip Holder (PXS only) - 154-8285

3- 1/2" Tip Holder (Painted Machines with Transfer Roller) - 154-8883

4- 1/2" Tip Holder (Painted Machines with Transfer Brush) - 154-8851

5- 1/4" Tip Holder (Upgraded Transfer Brush Models) - 154-8896

Retaining Spring for Head - 153-2713

Replacement Felt

Felt (1/8" x 3") - 154-0228S- Sold by the inch

Felt Strip on Splash Guard Tank - 154-8333 - PX-C Only

Felt Kit for Transfer and Spray Jet Wall

154-8669 - KK | ELT | STD | PXS-C

Felt for LDS Splash Guard

154-8690 - All painted Sanction Technology Machines

Felt Strip for Transfer Wall - 154-8669A - KW | ION | KP | EP

Graduated Cylinder (25ml) - 154-0215

Felt for Graduated Cylinder (25ml) - 154-0210

Graduated Cylinder (50ml) - 154-0215A

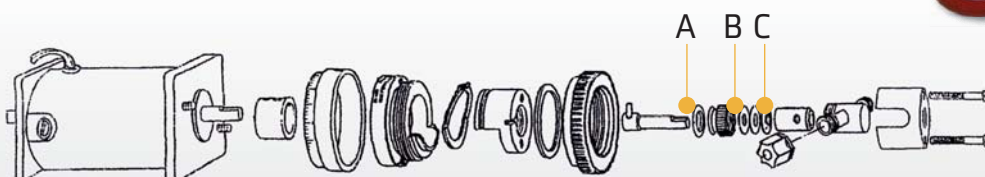
Felt for Graduated Cylinder (50ml) - 154-0210A

Oil Funnel with 3" Hose - 153-0052A

Funnel with Connecting Stem for Conditioner Tank (Small) - 154-8648

Oil Pencil Tip (Molded) - 154-6832

Fluid Metering Oil Pump
154-1214



A. O-Ring for Fluid Metering Pump
(Orange) - 154-1214E

B. Gland Seal for Fluid Metering Pump
(White) - 154-1214D

C. Lip Seal for Fluid Metering Pump
(Red) - 154-1214A

PLC - KOSI

Programmable Logic Controllers (PLC)



CPM2A PLC

154-1801 (115VAC / 230VAC)
158-1423 (24VDC)

Not Pictured

154-1801M - PX-C Expansion Module

Omron® PLC Battery

153-1001C - C28H | C200H
154-1804 - CPM2A

Keypad

154-8806 - ION | KP | KK
154-8806C - XF (Omron®)
154-8807 - PX-C
154-8808 - Firebird

Keypad Overlay Decal

154-0801 - ION | KP | KK
154-0251 - ELT | STD | PXS
158-0204 - XF (Twido®)
154-0801K - XF (Omron®)
153-0844 - PX-C
153-0844F - Firebird
158-0802 - KW-B
153-0801 - PX
153-0025 - LCM | LW

Keypad Cable - 154-1803



1 2 3 4

C200HS Components

1. **Input Module ID212** - 153-1816
2. **Output Module OC221** - 153-1814
3. **Output Module OC222** - 153-1815
4. **Mounting Rack C200H** - 153-1811

Not Pictured

Keypad with Cable - 153-1002C

PLCs No Longer Available:

SP-16 PLC
C28H PLC
C200HS PLC

Call 863-734-0200 for more information.



Sport Edition Components

Touchscreen Display - 158-8671
Touchscreen Protector - 158-1612
CP1HX PLC - 158-1610P
Converter for CP1 - 158-1610C
Communication Cable - 158-1610CC



1 2 3

C200HG Items

1. **Input Module ID212** - 153-1816
2. **Output Module OC222** - 154-8231 (With 24VDC Relay)
3. **Mounting Rack C200HW** - 154-1201B



C200HG PLC
154-1201



Power Supply C200HG - 154-1201P

Twido® PLCs (Crossfire Only)

Programmable Logic Controller

Please contact KEGEL for correct part number for your model.

Real Time Clock - 158-1201C
Connector (RS485 Mini-DIN) - 158-1201D
Output Module - 158-1202
Keypad Cable - 158-1203C
Keypad Assembly - 158-8209
Twido® PLC Battery - 155-1246



KOSI PRO Software

Kegel Online Support Interface

For All Sanction Technology Lane Machines!
Quick and Easy to Use.

KOSI PRO & CABLE (7.x) - 154-8771

KOSI PRO, CONVERTER & CABLE (7.x) - 154-8771A

KOSI PRO UPDATE (7.x) - 154-8771U

KOSI PRO UPGRADE (5.x/6.x to 7.x) - 154-8771C

Data Cables

KOSI Serial to Serial Port Cable - 154-8724

RS232 Converter Module for KOSI Cable

(for Omron® C200HG & C200HS) - 154-1614

USB to Serial Converter & KOSI Cable (32 or 64 bit) - 154-8771B

Electrical Components

Omron® Brand Relays



- **LY2 Relay** - 153-1016D (24V DC Coil)
- **LY2 Relay** - 153-1016 (115V) 153-1616 (230V)



- **LY3 Relay** - 153-1018 (115V) 153-1618 (230V)



- **LY4 Relay** - 153-1406 (115V) 154-1611 (230V)

- **MY4 Relay** (24V DC) - 158-1427



- **PLC Output Relay (Short)** - 153-1032 (for Output Module OC221/OC222)
- **PLC Output Relay (Tall)** - 154-1215 (24V DC Coil - for Output Module OC222 only)



Omron® Relays for Sport Edition

- **24VDC DPDT** - 158-1458



- **Solid State** - 158-1460



- **DPDT 10A** - 158-1462



- **Super MY4 24V DC** - 158-1463



Phoenix® Brand Relays

- **Secondary Relay Assembly** (24V DC) 154-1835 - KP | KK



- **2 Pole** (10A - 24V DC) - 158-1420G



Automation Direct® Relays

- **2 Pole** (15A - 24V DC) - 158-1413



Other Electrical Components

- **Duster Switch** (Large) - 154-1603 - KW | ION | KP | KK | EP | ELT | PXS-C | PX-C



- **Duster Switch** (Small) - 153-1202 - for XF | PXS-A,B | PX-A,B



- **Brush Switch** - 153-1203 - for All Machines



- **Squeeze Switch** (Small) - 153-1203 - KW | ION | XF | KP | EP | PXS-A,B | PX-A,B



- **Squeeze Switch** (Large) - 154-1015 - KK | ELT | STD | PXS-C | PX-C



- **Pass-Through Sensor** - 153-1031A



- **Sensor Plug and Cable** - 153-1031B



- **Proximity Sensor** - 154-1220



- **Proximity Sensor** (XF-A) - 158-1208



- **Red Push Button** (Normally Open) - 153-1408



- **Horsepower Resistor 0.025 Ω** - 153-1015A



- **Horsepower Resistor 0.050 Ω** - 153-1015



- **Arc Suppressor** - 158-1438



- **Contactor 24V DC** - 158-1465
(Used for Sport Edition Vacuum & Auto Shutdown Relay)



VOLTMETER TIPS

VOLTMETER SYMBOLS



Alternating Current V AC

All 115V and 230V machines that utilize a power cord



Direct Current V DC

All Battery operated machines / also used to drive AC powered machines.



Continuity Check

Used to inspect fuses and circuitry. A beep will sound when fuse or circuit is closed.

BASIC VOLTMETER OPERATIONS

To check voltage:

1. Turn dial on the voltmeter to desired test.
2. Place each probe into the wire connector of the component you are testing and turn component on.

To check continuity:

1. Touch both probes together to inspect the voltmeter for proper function.
2. Place the test probes at each end of the circuit to be tested.
3. Voltmeter will sound if circuit is not broken. No sound if there is a break in the line.

TECH TIP:

Always inspect power cord ends and battery connections when electrical problems occur.

Power Cord Components

Description	115V AC	230V AC
Power Cord PX-A,B	153-8810	153-8811A
Power Cord PXS-A,B	154-8229A	154-8230
Power Cord EP ELT STD PXS-C	154-8629	154-8630
Power Cord ION XF KP KK PX-C	154-8829	154-8830
Male Plug End (15A)	153-1025	153-1625
Male Plug End (20A)	153-1825	N/A
Female Twistlock Plug (15A)	153-1024	153-1624
Female Twistlock Plug (20A)	153-1822	153-1824
25' Charging Cord Assembly KW ION-A,B	158-8425	158-8425E
Velcro Strap For Cord	154-0242	154-0242

Push Button Replacements

Handle Wire without Connector - 153-8424A
Handle Wire with Kill Plugs PXS-A,B | PX-A,B - 153-8424C
Handle Wire ION | KP - 154-8893B
Handle Wire ELT | STD | PXS-C - 154-8624

Head Motor 6.0µF Capacitor
 154-1208 - KP | KK | EP | ELT | STD | PXS

Oil Pump Motor 1.5µF Capacitor
 154-1208B - KP | KK | EP | ELT | STD | PXS

Blade Type Fuses

Fuse 25A - 158-1439 for Voltage Regulator - KW | ION
Fuse 40A - 158-1440 for IOTA® Battery Chargers
Maxi-Fuse 40A (for Fuse Link) - 158-1454 for ION
Fuse Link Assembly - 158-8421



Circuit Breaker 8A - 153-1810
Circuit Breaker 10A - 153-1030
Circuit Breaker 20A (24V DC) - 158-1451



Rocker Breaker 15A - 154-1610
Rocker Breaker 10A - 154-1272



Breaker for E-Stop (Prior to 2008) - 154-1251
Breaker for E-Stop (2008 and later) - 154-1251A



2008 E-Stop - 154-1250A
 (2-Hole Pattern)

Lid & Component Assemblies



Middle Slide Latch
 154-0005



Flush Mount Lid Latch
 (without lock) - 153-2232A



Straight Quarter-turn Lid Latch
 (with slot) - 154-0804



Push Latch with Key
 154-0881



Flush Mount Lid Latch
 (with lock) - 153-2232L



Flange Quarter-turn Lid Latch
 154-0805

Rubber Bumper - 154-0006A

Foam (sold by inch) - 153-0036

Batteries & Chargers



Kegel K2 Energy® Lithium Batteries

158-1634C (51.2 Ah)

158-1634B (38.4 Ah)

158-1634 (25.6 Ah)



**ProNautic®
Chargers**



**ProTech®
Chargers**

Chargers		
Machine Type	115V	230V
ION-A,B (AGM)	158-8470	158-8470
ION-A,B XL (Lithium)	158-8472	158-8472
ION Sport	164-8471P	164-8471PE
KW All Models	164-8471	164-8471E

Charger Replacement DC Cables	Description
158-8474	ProTech DC power cord assembly - 1FT Internal
158-8475	ProTech DC power cord assembly - 6FT External
164-8475	ProNautic DC power cord assembly - 6FT External
158-1407	Battery Disconnect Housing - Red
158-1408	Battery Disconnect Housing - Blue

Batteries				
Machine Type	# of Lanes Per Day	KEGEL Charger Being Used	Battery Available	Kit Needed
ION-A,B	Up to 32	Any	158-8651 (AGM)	None
	Up to 48	ProTech	158-1634 (Lith)	158-8654
	Up to 92	Any	158-1634B (Lith)	158-8654
KW-A,B	Up to 32	Any	158-8651/158-8651C (AGM)	None
	Up to 48	ProTech/ProNautic	158-1634 (Lith)	158-8655
	Up to 92	Any	158-1634B (Lith)	158-8655
KW, ION Sport	Up to 32	Any	158-8651 (AGM)	None
	Up to 48	ProTech/ProNautic	158-1634 (Lith)	158-8655
	Up to 60	Any	158-8652 (AGM)	None
	Up to 92	Any	158-1634B (Lith)	158-8655
	Up to 144	Any	158-1634C (Lith)	158-8655

Replacement Batteries & Chargers



Odyssey® PC680 Batteries

(Sold in Pairs) - 158-8650

Odyssey® PC925 Batteries

(Sold in Pairs) - 158-8651

Odyssey® PC1200 Batteries

(Sold in Pairs) - 158-8652

DC Voltage Regulator - 158-8417

Smart Charger (IQ-4) - 158-1452 for ION XL

LCD Amp Gauge Assembly - 158-8410 KW | ION

NOTE: Battery voltage must be closely matched on both batteries for best performance.

Please contact Kegel for Conversion Kit from Valence® to Odyssey® Batteries.

Upgrades



Handle Reinforcement Kit

154-8284 - for all machines except KW | LW | LCM

Upgrades for Crossfire

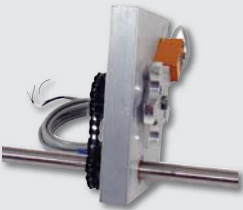
Complete Upgrade - Includes 8 Wicks with Cam

Roller and Large Conditioner Supply Tank
158-8241 (115V) | 158-8241E (230V)

Conditioner Tank Upgrade

158-8215 (115V) | 158-8215E (230V)

8 Pad Wick & Cam Kit - 158-8214



Proximity Upgrades

Lane Distance Sensor (LDS)

Upgrade with Proximity Sensor

LDS (Right)	PXS-A,B	154-8291
LDS (Center)	PXS-A,B PX-A,B	154-8292
LDS (Center)	STD	154-8672

Tach (Internal) PXS-A,B 154-8289

Tach (External) STD | PXS-A,B 154-8290

Head Timing STD | PXS-A,B 154-8673

Kustodian Proximity and Relay Upgrades

Kustodian Model A to C Upgrade Kit - 154-8870

Serial Number: KK-0600 through KK-0810

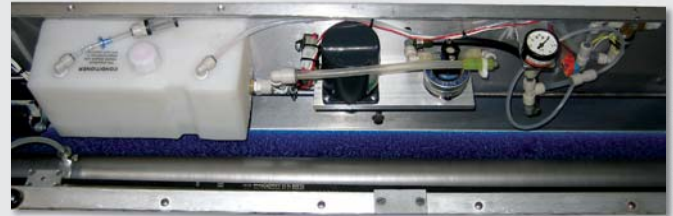
Kustodian Model B to C Upgrade Kit - 154-8871

Serial Number: KK-0811 through KK-0987

Oil Tank Upgrade Kit for Phoenix-S Models A & B

Move the Oil Pump to the "TOP" of your priorities!

With the wide variety of conditioning programs and pump settings, this "must have" upgrade moves the oil pump to the top side of the machine, allowing the operator to change the microliter per board setting without the hassle of lifting the machine. Best of all, the new durable plastic molded tank is "see through" so it is easy to check the oil level and perform preventive maintenance.



Oil Tank Upgrade Kit for PXS-A,B - 154-8841

Wheel Upgrades



6" Front Wheel Upgrade

Large 6" front wheel helps the lane machine transition on and off the lane with ease.

158-8733 ION-A,B | KP-B

3" Caster Upgrade

Dual 3" rear casters allow for better machine transition on and off the lane.

158-8731 KW | ION-C,D

158-8732 ION-A,B | KP-B

Transport Caster Upgrade - 154-8281 PXS-A,B | PX

LED Light Upgrade Kit for Supply Tanks

Easily monitor the level of supplies on any machine with plastic molded tanks with this light that automatically illuminates when the splash guard is opened.

158-8672 KW-A,B | ION-A,B | KP-A,B | KK-C,D



Power Button Relocation Kit

Relocate the power button to the splash guard allowing for easy access to turn the unit on.

158-8673 KW-D | ION-D



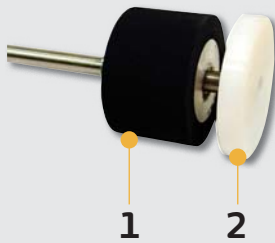
BEFORE



AFTER

Miscellaneous

LDS Shaft Assembly



1. **Wheel** - 153-7002AA
2. **Kick Up Wheel** - 153-7401

Lane Edge Guide Rollers



Guide Roller - 153-8410

All except KW-D | ION-D | LCM | LW

Guide Roller - 153-8310 - LCM | LW

Guide Roller Shoulder Bolt - 153-2407

Guide Roller Mounting Bar - 153-6417

Guide Roller Spring - 153-2401

SHCS 1/4-20 x 2-3/4 - 153-2211

Momentary Wheel Assembly



Wheel - 153-7005R

Shaft - 153-6006

Housing - 153-6029

Tune Up Kits



PX-B (115V) - 153-8888

PXS-A,B (115V) - 154-8288

KP | EP (115V) - 154-8686

KP | EP (230V) - 154-8687

STD (115V) - 154-8688

KK | ELT | PXS-C | PX-C (115V)

154-8888

ION - 158-8428

KW - 158-8628

Adjustable Guide Rollers

Introduced on the KW-D and ION-D



Complete Front Assembly - 158-8643

Front Wheel Only - 158-8637

Complete Rear Assembly - 158-8642

Rear Wheel Only - 158-8636

Compression Spring - 153-2978

Transport Wheels



Lane to Lane Caster 2"

153-0812 (Heavy Duty)

Transport Caster

3" Dual Wheel - 153-0001

2" Single Wheel - 153-0002

Walker Whisker

Spring - 153-2946

Black Vinyl Cap - 153-2941

Complete Assembly - 158-8623



DROP & MOP®

Drop & Mop is an all-purpose tablet floor cleaner designed for bowling centers. Its formula was created to leave NO sticky residue so your bowlers' shoes stay clean both on and off the lanes.



- Mixes up fresh every time you mop for maximum power
- Cuts through dirt & grease with ease
- Easily lifts set-in grout stains
- Includes mild bleaching action
- Concentrated product reduces waste & pollution
- Pre-measured tablet controls cost

Part Number: 156-8565

Lane Machine Assist

One person can quickly and easily raise and lower their lane machine safely.



Physical Properties:

- Color: Black
- Dimensions: Width: 60" | Height: 8" | Depth: 8"
- Lifting Capacity: Any Kegel Lane Machine
- Packaging: Assembled and ready to mount

Part Number: 154-8510

(Must be installed by a qualified contractor.)



Physical Properties:

- pH: 8.4
- Easy to use - spray on, wipe off
- Gentle on the skin
- Can be used on all bowling balls
- Approved for use in USBC competition

Part Number:
156-8768 - 8oz. bottle
156-8768C - Case (12 - 8oz. bottles)
156-8762 - 32oz. bottle



PIN CLEANING MACHINE & CLEANER SOLUTION

Physical Properties:

- Cleans ALL types of bowling pins
- Includes attachment to sand pins
- Weight: 37 pounds

Part Number:
17-0040 - 115V 60 Hz
17-0040E - 230V 50 Hz



Physical Properties:

- Keep your hands moisture-free
- Not sticky - No odor
- No white powder residue
- Lasts all day
- Cleans off with soap and water

Part Number:
156-8773 - 3oz. bottle
156-8773C - Case (10 - 3oz. bottles)



Physical Properties:

- Cleans ALL types of bowling pins
- Not harmful to skin
- For use in ALL pin cleaning machines
- Weight: 1 gallon is approximately 8.7 pounds
- Packaging: 1 gallon bottle/box
- Concentrated cleaner
- pH: 8.75

Part Number: 156-8800

Fittings



Elbow
1/4" Tube x 1/4" Tube -154-0243



Elbow
3/8" x 3/8" - 154-0256



Elbow
3/8" NPT x 1/4" Tube - 154-0412
3/8" NPT x 3/8" Tube - 154-0803



Elbow
3/8" Tube x 1/4" NPT - 154-0225
1/4" Tube x 1/4" NPT - 154-0223



Elbow
1/4" Stem x 1/4" Hose Barb
154-0226



Elbow
1/4" Stem to 5/16" Hose Barb
154-0227



Elbow
3/8" Stem to 5/16" Hose Barb
154-0239



Elbow
3/8" Stem x 3/8" Tube - 154-0258
3/8" Stem x 1/4" Tube - 158-1214



Elbow
1/4" Stem x 1/4" Tube
154-0222



Elbow
1/8" NPT x 3/16" Tube
154-0613



Male Swivel Elbow
1/4" Tube x 1/4" NPT - 153-0818



Compression Fitting
1/4" x 3/8" MPT - 153-0212



Reducing Union
1/4" x 3/16" - 154-0248



Bulkhead Union
3/8" x 3/8" - 154-0285



Union
1/4" x 1/4" 154-0241



Union Tee
1/4" Tube - 153-0815



Reducing Union
3/8" to 1/4" - 154-0244



Male Connector
1/4" Tube x 1/8" NPT - 154-0224



Female Connector
1/4" Tube x 1/8" FPT - 154-0257



Union Tee
3/8" Tube - 154-0815



Male Connector
1/2" Tube x 1/2" NPT (Drilled)
154-0232D
1/4" x 1/4" MPT - 153-0209



In-line Coupler
1/8" - 154-0230



Stem Adapter
1/4" NPT x 1/4" Stem
154-0243S



Male Luer
1/8" Hose Barb -154-0863



Tank Plug
1/4" - 154-0245
3/8" - 153-1054
1/2" - 154-0231



O-Ring for Fitting
1/4" - 154-0287A
3/8" - 154-0287B
1/2" - 154-0287C



Oil Fill Stem - PX
3/8" x 3/8" - 153-1055

Tubing Stock Chart
All Tubing Sold By The Inch
Tygon® (Yellow) - 154-0204STK
Cleaning System
1/4" - 153-0208S
Conditioning System
3/16" - 154-0202B
1/4" - 154-0202A
3/8" - 154-0202
3/8" Viton® - 154-0201A

Motors & Speed Controls

COMPONENTS	PXS-A,B	PXS-C STD AC	KK KP	KW-A,B ION-A,B	KW-C,D ION-C,D	STD SE ELT EP
Blower Motor (115V AC)	153-8801	N/A	N/A	N/A	N/A	N/A
Blower Motor (230V AC)	153-8802	N/A	N/A	N/A	N/A	N/A
Buffer Motor (115V AC)	153-8016A	154-8616A	154-8616A	N/A	N/A	154-8616B
Buffer Motor (230V AC)	153-8616	154-8616E	154-8616E	N/A	N/A	154-8616E
Buffer Motor (24V DC)	N/A	N/A	N/A	158-8414	158-8414	N/A
Buffer Motor Brushes	N/A	N/A	N/A	158-1406B	158-1406B	N/A
Buffer Motor Contactor (115V AC)	153-1004	153-1004A	153-1004A	N/A	N/A	153-1004A
Buffer Motor Contactor (230V AC)	153-1604	153-1604A	153-1604A	N/A	N/A	153-1604A
Circuit Board w/Speed Relays (115V AC)	154-8210	154-8312	154-8810	N/A	N/A	N/A
Circuit Board w/Speed Relays (230V AC)	154-8210	154-8644	154-8811	N/A	N/A	N/A
Circuit Board w/Speed Relays (24V DC)	N/A	N/A	N/A	158-8409	N/A	N/A
Conditioner Pump Motor (115V AC)	154-8234	154-8604	154-8604	N/A	N/A	154-8604
Conditioner Pump Motor (230V AC)	154-8234	154-8604E	154-8604E	N/A	N/A	154-8604E
Conditioner Pump Motor (24V DC)	N/A	N/A	N/A	158-8401A	158-8632	N/A
Cond. Pump Motor Brushes (24V DC) BISON	N/A	N/A	N/A	158-1422B	N/A	N/A
Cond. Pump Motor Brushes (24V DC) GROSCHOPP	N/A	N/A	N/A	158-1422G	N/A	N/A
Drive Motor (90V DC)	153-8065	153-8065 - STD	154-8865	N/A	N/A	153-8065 - STD
Drive Motor (90V DC)	N/A	154-8365 - PXS-C	N/A	N/A	N/A	154-8365 - ELT EP
Drive Motor (24V DC)	N/A	N/A	N/A	158-8406 - ION	N/A	N/A
Drive Motor (24V DC) Long Shaft	N/A	N/A	N/A	158-8602 - KW	158-8602	N/A
Duster Motor (115V AC)	153-8403	153-8403	153-8403	N/A	N/A	153-8403
Duster Motor (230VAC)	153-8803H	153-8803H	153-8803H	N/A	N/A	153-8803H
Duster Motor (24V DC)	N/A	N/A	N/A	158-8403	158-8403	N/A
Head Drive Motor (115V AC)	154-8232	154-8232	154-8232	N/A	N/A	154-8232
Head Drive Motor (230V AC)	154-8232	154-8632	154-8632	N/A	N/A	154-8632
Head Drive Motor (24V DC)	N/A	N/A	N/A	158-8405	158-8632	N/A
Head Drive Motor Brushes (24V DC)	N/A	N/A	N/A	158-1404B	N/A	N/A
Isolator Analog Card 115V AC Drive Assembly	N/A	N/A	N/A	N/A	N/A	154-8633
Isolator Analog Card 230V AC Drive Assembly	N/A	N/A	N/A	N/A	N/A	154-8634
Isolator Analog Card 115V AC Buffer Assembly	N/A	N/A	N/A	N/A	N/A	154-8635
Isolator Analog Card 230V AC Buffer Assembly	N/A	N/A	N/A	N/A	N/A	154-8636
Isolator Analog Card Only	N/A	N/A	N/A	N/A	N/A	154-1413
Speed Control Assembly (24V DC-Drive)	N/A	N/A	N/A	158-8412	158-8412	N/A
Speed Control Assembly (24V DC-Cleaner Pump)	N/A	N/A	154-8848 KP	158-8415	158-8415	N/A
Speed Control Assembly (Oil/Cleaner Head)	N/A	N/A	N/A	N/A	158-1605	N/A
Speed Control Board Only (115V AC)	153-1012	153-1012	153-1012	N/A	N/A	153-1012
Speed Control Board Only (230V AC)	153-1812	153-1812	153-1812	N/A	N/A	153-1812
Speed Control Board Only (24V DC)	N/A	N/A	N/A	158-1410	158-1410	N/A
Squeegee & Brush Lift Motor (115V AC)	153-8207	153-8207	153-8207	N/A	N/A	153-8207
Squeegee & Brush Lift Motor (230V AC)	153-8807H	153-8807H	153-8807H	N/A	N/A	153-8807H
Squeegee & Brush Lift Motor (24V DC)	N/A	N/A	N/A	158-8402	158-8402	N/A
Transfer Roller Motor (115V AC)	154-8206	154-8206	154-8206	N/A	N/A	154-8206*
Transfer Roller Motor (230V AC)	154-8206A	154-8206A	154-8206A	N/A	N/A	154-8206A*
Vacuum Motor (115V AC)	153-8205	154-8805	154-8805	N/A	N/A	154-8805
Vacuum Motor Brushes (115V AC Pair)	153-0204B	153-0204B	153-0204B	N/A	N/A	153-0204B
Vacuum Motor (230V AC)	153-8805	154-8805E	154-8805E	N/A	N/A	154-8805E
Vacuum Motor Brushes (230V AC Pair)	153-0204C	153-0204C	153-0204C	N/A	N/A	153-0204C
Vacuum Motor (24V DC)	N/A	N/A	N/A	158-8407	158-8407	N/A
Vacuum Brushes (24V DC Pair)	N/A	N/A	N/A	158-1421B	158-1421B	N/A

* Not used on Kustodian PLUS or Elite PLUS

COMPONENTS	PX-A,B	PX-C	XF
Blower Motor (115V AC)	153-8801	N/A	N/A
Blower Motor (230V AC)	153-8802	N/A	N/A
Buffer Motor (115V AC)	153-8016A	154-8616A	154-8616A
Buffer Motor (230V AC)	153-8616	154-8616E	154-8616E
Buffer Motor Contactor (115V AC)	153-1004	153-1004A	153-1004A
Buffer Motor Contactor (230V AC)	153-1604	153-1604A	153-1604A
Circuit Board w/Speed Relays (115V AC)	N/A	154-8330	N/A
Circuit Board w/Speed Relays (230V AC)	N/A	154-8331	N/A
Drive Motor (90V DC)	153-8065	154-8865	154-8865
Duster Motor (115V AC)	153-8403	153-8403	153-8403
Duster Motor (230V AC)	153-8803H	153-8803H	153-8803 H
Speed Control Assembly (115V AC 3-Speed)	153-8822	N/A	N/A
Speed Control Assembly (230V AC 3-Speed)	153-8823	N/A	N/A
Speed Control Assembly (115V AC 4 Speed)	153-8842	N/A	N/A
Speed Control Assembly (230V AC 4 Speed)	153-8843	N/A	N/A
Speed Control Assembly (115/230V AC 3-Speed)	N/A	N/A	158-8211
Speed Control Board Only (115V AC)	153-1012	153-1012	158-1212R
Speed Control Board Only (230V AC)	153-1812	153-1812	158-1212R
Squeegee & Brush Lift Motor (115V AC)	153-8207	153-8207	153-8207
Squeegee & Brush Lift Motor (230V AC)	153-8807H	153-8807H	153-8807
Transfer Roller Motor (115V AC)	153-8828	154-8332	153-8828
Transfer Roller Motor (230V AC)	153-8829	154-8332E	153-8829
Vacuum Motor (115V AC)	153-8205	154-8805	158-8208
Vacuum Motor Brushes (115V AC Pair)	153-0204B	153-0204B	153-0204B
Vacuum Motor (230V AC)	153-8805	154-8805E	158-8208E
Vacuum Motor Brushes (230V AC Pair)	153-0204C	153-0204C	153-0204C

For Dayton® Drive Motor - 153-8065

Rear Seal - 153-1057R
Gasket - 153-1057F
Front Seal - 153-1057S
Drive Motor Brushes (90V DC Pair) - 153-1057H

For All Baldor® Drive Motors

Drive End Rear Seal - 154-1809D
Housing End Front Seal - 154-1809E
Drive Motor Brushes (24V DC Pair) - 158-1405B
Drive Motor Brushes (90V DC Pair) - 154-1809B



New Parts Available for the A-2 and GS Machines

Kegel Pinsetter Parts creates the perfect blend of quality and passion. By investing in our facility and manufacturing our parts with state-of-the art materials, KPP brings a new level of quality to pinsetter parts.

Our team of experienced mechanics and machinists not only elevates the durability of parts, but creates new and innovative products to help save time and money. With free technical support, parts you can rely on, and the passion to push towards the better pinsetter solutions, Kegel is changing the world of pinsetter parts.

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2013-14

Tel: +1 863 734 - 0200
Fax: +1 863 734 - 0204
Toll Free: 800 - 280 - 2695

www.kegel.net
1951 Longleaf Boulevard
Lake Wales, FL 33859 USA