



YOUR LANES | OUR PASSION

PRODUCTS & PARTS

2016-17



Welcome to the FLEX Generation

The modern design of the FLEX makes a bold statement, and the DUO conditioning system under the lid backs it up. DUO Technology gives you the benefit of easily using more than one lane conditioner in your center. By combining the precise accuracy of Sanction Technology™ with dual conditioner cartridges, and still being able to verify how much conditioner will be applied to the lane, DUO Technology gives you versatility, dependability, and accountability.

FLEX gives you features to improve performance, simplify your experience, and allows you to have more control of your lane maintenance program. Want even more? Choose from four colors and add on any of our factory upgrades for a machine perfectly customized to fit your needs.



RED



BLACK



WHITE



BLUE

FLEX	17-5701 (115V/60 Hz)	17-5703 (115V/60 Hz)	17-5705 (115V/60 Hz)	17-5707 (115V/60 Hz)
	17-5751 (230V/50 Hz)	17-5753 (230V/50 Hz)	17-5755 (230V/50 Hz)	17-5757 (230V/50 Hz)
FLEX WALKER	17-5801 (115V/60 Hz)	17-5803 (115V/60 Hz)	17-5805 (115V/60 Hz)	17-5807 (115V/60 Hz)
	17-5851 (230V/50 Hz)	17-5853 (230V/50 Hz)	17-5855 (230V/50 Hz)	17-5857 (230V/50 Hz)

FLEX Machine Weight: 331 lbs. (150.1 kg)

FLEX Walker Machine Weight: 370 lbs. (167.8 kg)

CONDITIONING

- Uses Sanction Technology™ to measure conditioner volume before applying to lane
- Variable Speed Buffer option (see upgrades)
- DUO conditioning system (two pumps and two conditioner cartridges)
- DUO transfer system
- Two pre-filled/refillable conditioner cartridges
- Alternate two conditioners in one pass
- Adjustable microliter streams (per load setting)
- Ability to condition each lane in less than 90 seconds
- Conditioner float switches with low level warning message
- Board-to-board pattern control
- "Oil Only" function
- Touchscreen control of oil pump calibration

CLEANING

- Cleaner Mixing System option (see upgrades)
- Squeegee cartridge for easy replacement of blades
- Sprayless cleaning system
- Ability to monitor and adjust cleaner output
- Cleaner float switches with low level warning message
- Large waste recovery tank (50+ lanes before emptying)
- Duster/cleaning cloth waste roll on top for easy removal
- Patented cushion roller wrap for better cleaning
- Super quiet DC vacuum motor
- "Clean Only" function
- "Dust Only" function
- Touchscreen control of cleaner pump calibration

DRIVE

- Patented six variable drive speeds
- Independent adjustable cleaning speed
- Self-adjusting drive speeds
- LED arrow for better operator positioning
- Dual Drive System

TOUCHSCREEN/PLC

- Full color 5" touchscreen display
- Three programs for both AM and PM
- Stores 30 programs in memory
- Test input/output menu option
- Full detailed error messages with help screens

BATTERIES

- Single lightweight lithium battery
- Three battery options based on number of lanes conditioned per day
- External battery charger

SPECIAL FEATURES

- Pin Deck treatment spray system[†]
- Easy sliding detachable lid assembly
- KOSI™ software kit included (Kegel Online Support Interface)

WALKER ONLY FEATURES

- Zero Turn Radius lane to lane walking function
- Auto-aligning lane whiskers
- Smart processor auto-align memory
- Object detection
- Automatic burn pair



BONUS WARRANTY

Receive an 18 month warranty with an additional 18 months if you agree to only use Kegel lane maintenance products in your lane machine.

UPGRADES

Cleaner Mixing System* • Self-mixing cleaner adjustments
• Precise mixing ratios

Variable Speed Buffer* • Ability to customize four preset buffer speeds
• More control of front to back taper

Batteries • Each machine comes with our K2 Energy® lithium battery
• Upgrade to larger battery based on number of lanes conditioned per day



158-1634**
(40 lanes)



158-1634BU
(62 lanes)



158-1634CU
(90 lanes)

* Factory upgrade (must be installed at time of purchase).

** All FLEX Machines come standard with battery 158-1634.





IKON

High Tech Made Easy

The all new IKON is a battery powered combination lane machine that incorporates Kegel's proven technology with the modern styling of our latest machine, the FLEX.



The IKON uses Sanction Technology for the conditioning system which is reliable, verifiable, and accurate to $\pm 1\%$ with continued precision of $\pm 0.5\%$ after millions of cycles.

For cleaning, the IKON utilizes a sprayless system, which cleans the lane without any overspray into the gutters keeping your customers and pinsetters cleaner.

Kegel's patented conditioning and cleaner systems are the only ones that can be checked and verified before you begin lane maintenance - now that's peace of mind.

FEATURES

- Sanction Technology Conditioning System with forward and reverse capabilities.
- The popular and easy to maintain DUO Transfer System enhances the smoothness of the pattern and allows for easy pattern changes.
- Patented Sprayless Cleaning System - No overspray in the gutters.
- The onboard PLC uses a 3.5 inch color touchscreen which makes it easy to monitor and adjust machine settings.
- The IKON PLC holds 15 patterns of your choice.
- Choose from 3 different size lithium batteries based upon your bowling center's needs or number of lanes ran per day.

TECHNICAL SPECIFICATIONS

- Packaging: One machine per crate
- Part Number:
17-5900 (115V/60 Hz)
17-5950 (230V/50 Hz)
- Weight without the battery: 330 lbs (149.7 Kg)
- Battery Specifications
158-1634 (Red) 25.6 Ah | 24 lbs (10.8 Kg) - Standard
158-1634BU (Orange) 38.4 Ah | 29 lbs (13.1 Kg) - Upgrade
158-1634CU (Yellow) 51.2 Ah | 39 lbs (17.6 Kg) - Upgrade



BONUS WARRANTY

Receive an 18 month warranty with an additional 18 months if you agree to only use Kegel lane maintenance products in your lane machine.



Affordable Quality



The Crossfire is a compact, durable and highly functional lane machine at a very affordable price. This wick combination lane machine allows small centers to experience high quality lane maintenance only Kegel can deliver.

Features:

- Cleans and conditions the lane in about 80 seconds
- On-board keypad for simple machine programming
- 6 High-Flow Wick Pads (upgradeable to 8)
- 12 Lane Conditioner Capacity (upgradeable to 60)
- 32 Lane Cleaner Capacity
- 3 Drive Speeds for enhanced pattern taper
- Compact Design

Machine Weight: 275 lbs. (124.7 kg)

Part Number:

Crossfire - 6 PAD MODEL C

17-5200C (115V/60 Hz) 6 PAD/CAM MACHINE

17-5250C (230V/50 Hz) 6 PAD/CAM MACHINE

Optional Upgrade Kit

Increase to 8 Wick Pads and Conditioner Capacity to 60 lanes

158-8241 - CROSSFIRE UPGRADE KIT - 115V

158-8241E - CROSSFIRE UPGRADE KIT - 230V



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.)

Bracket Kit for FLEX/IKON models

Part Number: 158-8615

LANE MACHINE COMPARISON CHART

	FLEX WALKER	FLEX	IKON
CONDITIONING			
Sanction Technology™ fluid metering conditioning system	✓	✗	✓
Conditions each lane in less than 90 seconds	✓	✗	✓
Conditioner float switches with low level warning message	✓	✗	✓
Left-Right pattern control	✓	✗	✓
"Oil Only" function	✓	✗	✓
Touchscreen control of microliter stream	✓	✗	
Touchscreen control of oil pump calibration	✓	✗	
DUO conditioning system (two pumps and two conditioner cartridges)	✓	✗	
DUO transfer system (roller and single transfer brush)	✓	✗	✓
Two pre-filled/refillable conditioner cartridges	✓	✗	
Ability to alternate two conditioners in one pass	✓	✗	
Board-to-board pattern control	✓	✗	✓
Measure conditioner volume per board stream before applying to lane	✓	✗	✓
Adjustable mic streams (per load setting)	✓	✗	
Different conditioners in each cartridge	✓	✗	
4 Variable Buffer speeds	OPTIONAL	OPTIONAL	
CLEANING			
Sprayless cleaning system	✓	✗	✓
Ability to monitor and adjust cleaner output to the milliliter	✓	✗	✓
Cleaner float switches with low level warning message	✓	✗	✓
Large waste recovery tank (50+ lanes before emptying)	✓	✗	✓
Duster/Cleaning cloth waste roll on top for easy removal	✓	✗	✓
Patented cushion roller wrap for better cleaning	✓	✗	✓
Ultra quiet DC vacuum motor	✓	✗	✓
"Clean Only" function	✓	✗	✓
"Dust Only" function	✓	✗	✓
Adjustable "End Cleaning" and "Return" distance	✓	✗	✓
Multi-adjustment squeegee assembly	✓	✗	✓
Touchscreen control of cleaner volume	✓	✗	✓
Squeegee cartridge for easy replacement of blades	✓	✗	✓
Touchscreen control of cleaner pump calibration	✓	✗	
Cleaner supply tank with large opening for filling	✓	✗	✓
Recovery tank with handles for better transporting/emptying	✓	✗	✓
Self-mixing cleaner system	OPTIONAL	OPTIONAL	
DRIVE			
Patented six variable drive speeds	✓	✗	✓
Independent adjustable cleaning speed	✓	✗	✓
Self-adjusting drive speeds	✓	✗	✓
Zero Turn Radius lane to lane walking function	✓		
Auto-aligning lane whiskers	✓		
Smart processor auto-align memory	✓		
Object detection	✓		
LED arrow for better operator positioning	✓	✗	
KEYPAD/PLC			
Full Color 3.5" touchscreen display			✓
Full Color 5" touchscreen display	✓	✗	
One program for AM and PM			✓
Three programs for AM and PM	✓	✗	
Automatic burn pair	✓	✗	
Stores 15 programs in memory			✓
Stores 30 programs in memory	✓	✗	
Test input/output menu option	✓	✗	✓
Error messages displayed			✓
Full detailed error messages with help screens	✓	✗	
BATTERIES			
Single lightweight lithium battery	✓	✗	✓
External battery charger	✓	✗	✓
3 lithium battery options based on number of lanes conditioned per day	✓	✗	✓
SPECIAL FEATURES			
KOSI™ software kit included (Kegel Online Support Interface)	✓	✗	✓
Pin Deck treatment spray system	✓	✗	

Lane Conditioners



FIRE™

For more hook or slick
lane surfaces

For Sanction Technology™ Lane Machines

- Viscosity: 45.1 cps.
- Surface Tension: 23.6 dyn/cm

Part Number: 156-8135

- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case
5 gallons (19 liters)



Part Number: 156-8135C

- Shipping Weight: 38.5 lbs. (17.4 kg)
- One cartridge: 0.4 gallons (1.5 liters)
- Packaging: 12 cartridges per case
4.75 gallons (18 liters)



ICE™

For more hold area or
high friction lane surfaces

For Sanction Technology™ Lane Machines

- Viscosity: 40.9 cps.
- Surface Tension: 23.2 dyn/cm

Part Number: 156-8130

- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case
5 gallons (19 liters)



Part Number: 156-8130C

- Shipping Weight: 38.5 lbs. (17.4 kg)
- One cartridge: 0.4 gallons (1.5 liters)
- Packaging: 12 cartridges per case
4.75 gallons (18 liters)



Stay Ahead of the Curve

At Kegel we are always looking to extend the boundaries of performance, yet we don't want to overlook our current customers. With that in mind, we have developed Curve, a lane conditioner that advances the capabilities of all our thousands of existing Sanction Technology™ Lane Machine owners worldwide.



CURVE™
LANE CONDITIONER

Curve, Kegel's newest lane conditioner, has been designed to extend our line of performance products and give you more hook when you want it. With Kegel's new custom G3 additive, Curve delivers consistent ball motion frame after frame and has provides more predictable game three ball reaction. It is pinsetter friendly, has low carry-down characteristics, and cleans easily...making it the perfect solution for your bowling center.

For Sanction Technology™ Lane Machines

- Viscosity: 41.0 cps.
- Surface Tension: 22.0 dyn/cm

Part Number: 156-8145

- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case
5 gallons (19 liters)



Part Number: 156-8145C

- Shipping Weight: 38.5 lbs. (17.4 kg)
- One cartridge: 0.4 gallons (1.5 liters)
- Packaging: 12 cartridges per case
4.75 gallons (18 liters)

Lane Conditioners

WICK-PAD CONDITIONER



Physical Properties:

- Viscosity: 24.1 cps.
- Surface Tension: 23.6 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8105

WICK-PAD & SANCTION® CONDITIONERS



Physical Properties:

- Viscosity: 31.2 cps.
- Surface Tension: 23.7 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8095



Physical Properties:

- Viscosity: 31.3 cps.
- Surface Tension: 23.5 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8125

SANCTION® CONDITIONERS



Physical Properties:

- Viscosity: 36.5 cps.
- Surface Tension: 23.1 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8115



Physical Properties:

- Viscosity: 47.3 cps.
- Surface Tension: 22.7 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8025



Physical Properties:

- Viscosity: 50.3 cps.
- Surface Tension: 23.9 dyn/cm.
- Shipping Weight: 40 lbs. (18.1 kg)
- One Container: 1.25 gallon (4.73 liters)
- Packaging: 4 containers per case 5 gallons (19 liters)

Part Number: 156-8075

Conditioner Comparison

SANCTION TECHNOLOGY™								
PROPERTIES	CURVE	FIRE	ICE	NAVIGATE	INFINITY	PRODIGY	DEFENSE-S	OFFENSE HV
VISCOSITY <small>(at 72.5 °F / 22.8 °C)</small>	41	45.1	40.9	31.3	36.5	31.2	47.3	50.3
DURABILITY								
High League Lineage	7	8	10	8	8	6	9	5
High Open Play Lineage	10	10	8	7	6	8	6	8
Reduced Pinsetter Calls	10	9	9	8	7	8	6	8
Easy Cleaning	10	10	10	7	5	7	5	9
Limits Carry Down	10	8	8	8	7	8	7	5
LANE SURFACES								
Pro Lane™	10	10	9	8	5	9	6	5
Anvilane™	8	9	10	7	9	7	7	7
AMF HPL™	9	9	10	7	8	7	8	7
AMF SPL™	8	8	10	8	9	7	7	8
Laneshield®	7	6	8	7	7	7	7	10
Guardian®	8	8	10	7	7	7	8	6
MAD Lanes®	9	9	10	9	9	7	7	7
WOOD FINISHES								
Water Base	8	8	10	5	7	5	9	5
100% Solids	8	8	10	4	7	5	9	7

WICK-PAD TECHNOLOGY			
PROPERTIES	NAVIGATE	PRODIGY	CROSSFIRE
VISCOSITY <small>(at 72.5 °F / 22.8 °C)</small>	31.3	31.2	24.1
WICKING TIME	13 minutes	14 minutes	10 minutes
DURABILITY			
High League Lineage	9	5	7
High Open Play Lineage	8	8	6
Reduced Pinsetter Calls	8	9	6
Easy Cleaning	7	7	8
Limits Carry Down	8	8	9
LANE SURFACES			
Pro Lane™	10	9	8
Anvilane™	8	8	10
AMF HPL™	8	8	8
AMF SPL™	5	6	8
Laneshield®	8	8	10
Guardian®	7	5	7
MAD Lanes®	5	7	9
WOOD FINISHES			
Water Base	4	5	9
100% Solids	4	5	9

Lane Cleaners



Physical Properties:

- Designed for low friction surfaces and stronger backend reaction
- pH: 11.5
- Shipping Weight: 10 lbs. (4.5 kg)
- One Container: 1 Gallon (3.29 liters)
- Packaging: 1 container per case

Part Number: 156-8435



Physical Properties:

- Designed for high friction surfaces
- pH: 12.8
- Shipping Weight: 10 lbs. (4.5 kg)
- One Container: 1 Gallon (3.29 liters)
- Packaging: 1 container per case

Part Number: 156-8425



Physical Properties:

- pH: 7.8
- Appearance: White Tablet with Citrus Scent
- Tablet Weight: 42 g
- Shipping Weight: 12 lbs. (5.4 kg)
- One Bag: 24 tablets
- Packaging: 4 bags per case (96 Tablets)

Part Number: 156-8500B

Note: All Kegel cleaners meet European compliance requirements.



Physical Properties:

- pH: 12.6
- Shipping Weight: 46 lbs. (20.8 kg)
- One Container: 2.5 gallons (9.4 liters)
- Packaging: 2 containers per case

Part Number: 156-8405

Other 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: 16 lbs. (7.2 kg)
- Packaging: 4 rolls per case

Part Number:

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

K2 Kloth (Cardboard Core): 153-0047P

Center Care Products



Spot On™ Pin Deck Spray

Spot On Pin Deck Spray helps you improve pin carry to eliminate off-spot pins and out-of-ranges. Spot On is sold in a spray can to be used in your FLEX* lane machine to apply automatically. Or purchase the new gallon size which can be used manually with your favorite spraying device!

*Designed for use with the 2016 and 2017 FLEX Lane Machines

- One Can: 14 oz. (0.41 liter)
- Packaging: 4 cans per case

Part Number: 156-8310

- One Container: 1 gallon (3.79 liters)
- Packaging: One container per case

Part Number: 156-8311



Balance™ Approach All-In-One

Balance is the all-in-one solution to maximize the performance of your synthetic approaches. With one product you can create an even and uniform surface for optimal slide conditions. Clean and condition your approaches in one simple application. Use with a rotary buffer.

- One Bottle: 16 oz. (0.47 liters)
- Packaging: 4 bottles per case

Part Number: 156-8320



Buffing Pads



Buffing Pad (White)

This 21" buffing pad is made with absorbent synthetic blended yarn. Gently clean away dust from less textured approaches. Machine-washable.

Part Number: 159-4511



Buffing Pad (Green & White)

With green scrubbing stripes on both sides, this 21" buffing pad offers a little something extra. Perfect for more textured approach surfaces, this buffing pad allows you to gently loosen and remove dirt build-up from the pores of your approach. Machine-washable.

Part Number: 159-4510

Microfiber Approach and Utility Mops

Color-coded to separate your approach mops from other mops used in less sensitive areas of your center. These high performance microfiber mops grab dirt and dust for quick and easy cleaning. Approach Mop is ideal for synthetic approaches. Utility Mop is perfect for cleaning in the pit, bowlers area, and elsewhere throughout your center. Machine-washable.



Approach Mop (Green)

- 36" Approach Mop only - 159-4402
- 36" Approach Mop with Handle Assembly - 159-4402C
- 48" Approach Mop only - 159-4403
- 48" Approach Mop with Handle Assembly - 159-4403C



Approach Mop (White)

- 24" Approach Mop only - 159-4420
- 24" Approach Mop with Handle Assembly - 159-4420C
- 36" Approach Mop only - 159-4421
- 36" Approach Mop with Handle Assembly - 159-4421C
- 48" Approach Mop only - 159-4422
- 48" Approach Mop with Handle Assembly - 159-4422C



Utility Mop (Blue)

- 18" Utility Mop only - 159-4410
- 18" Utility Mop with Handle Assembly - 159-4410C
- 24" Utility Mop only - 159-4411
- 24" Utility Mop with Handle Assembly - 159-4411C
- 36" Utility Mop only - 159-4412
- 36" Utility Mop with Handle Assembly - 159-4412C

Industrial Approach Mop



This industrial white approach mop is made of durable non-looped cotton strands that easily lift away dirt and dust. Recommended for wood approaches. Machine-washable.

- 24" Approach Mop only (White) - 159-4430
- 24" Approach Mop with Handle Assembly - 159-4430C
- 36" Approach Mop only (White) - 159-4431
- 36" Approach Mop with Handle Assembly - 159-4431C
- 48" Approach Mop only (White) - 159-4432
- 48" Approach Mop with Handle Assembly - 159-4432C

Gutter Mop



This white gutter mop is made of durable non-looped cotton strands. Recommended for all type gutters. Machine-washable.

- Gutter Mop - 159-4400
- Gutter Mop Frame and Handle only - 159-4400F
- Gutter Mop Complete with Frame and Handle - 159-4400C

Frames and Jaws

- 18" Wire Frame - 159-4450
- 24" Wire Frame - 159-4451
- 36" Wire Frame - 159-4452
- 48" Wire Frame - 159-4453
- Handle Assembly Only - 159-4455



PIN CLEANING MACHINE & CLEANER SOLUTION

Physical Properties:

- Cleans ALL types of bowling pins
- Includes attachment to sand base of pins
- Weight: 37 pounds (16.7 kg)

Part Number:

17-0040 – 115V/60 Hz

17-0040E – 230V/50 Hz



Physical Properties:

- Cleans ALL types of bowling pins
- Not harmful to skin
- For use in ALL pin cleaning machines
- One Container: 1 gallon (3.79 liters)
- Packaging: One container per case
- Concentrated cleaner
- pH: 9.2

Part Number: 156-8800



MOPPING TABLET



Fizzion Mopping Tablets are all-purpose 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
- 45 pre-measured tablets to control cost
- One tablet makes 4 gallons (15.1 liters)

Part Number: 156-8565B

Pro Shop Products



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. (0.236 l) bottle

156-8768C - Case (12 - 8oz. bottles)

156-8762 - 32oz. (0.9 l) bottle

TECHPOWER



24/7 Tech Support

Backed by Kegel's 30-minute guarantee

Tired of being forced into email or having to provide your credit card for tech support? We are too. That's why it's our culture to make sure you'll have a person to talk to when you need it most, 24 hours a day, 7 days a week.

Emergency Lane Maintenance calls will be answered immediately or returned in 30 minutes or less...guaranteed.



myKEGEL

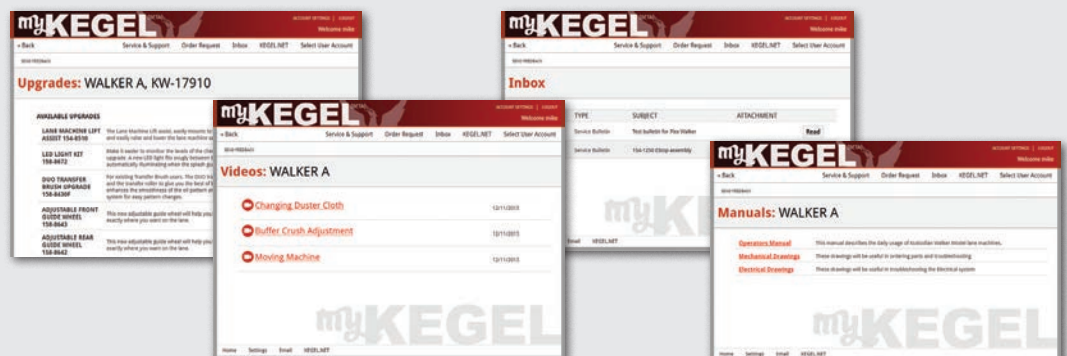


Simplify your maintenance routine with this online lane machine management tool. Receive maintenance reminders, easily access manuals, service bulletins, and help videos, or quickly request parts from your preferred distributor.

myKegel is customized for your Bowling Center and Lane Machine.



my.kegel.net



LEGEND

SUFFIX	MACHINE	SUFFIX	MACHINE
IKN	IKON	KP	KUSTODIAN PLUS
FWYEAR*	FLEX WALKER YEAR	KK	KUSTODIAN
FXYEAR*	FLEX YEAR	EP	ELITE PLUS
FXW	FLEX WALKER	ELT	ELITE
FLX	FLEX	STD	STANDARD
KW	KUSTODIAN WALKER	PXS	PHOENIX S
ION	KUSTODIAN ION	PX	PHOENIX
XF	CROSSFIRE		

* YEAR represents the model year in the serial number.
 Suffix represents all model variations unless model type is specifically indicated (i.e. KP-A).

Cleaning

- Recovery Tank - 164-8017 IKN | FXW | FLX**
- Recovery Tank Filter** (for tank 164-8017)
- 164-8017F - IKN | FXW | FLX (FLX-17733 / FXW-13229 and ABOVE)**
- Recovery Tank Filter** (for tank 164-8017)
- 164-6114 - FXW | FLX (FLX-17732 / FXW-13228 and BELOW)**
- Recovery Tank - 153-8841 - XF | PXS-A,B | PX-A,B**
- Recovery Tank Filter** (for tank 153-8841) - 153-8844 - XF
- 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



Upgraded Cleaner Mixing System

- Complete Cleaner Tank Assembly - 164-8043**
- Complete Water Tank Assembly - 164-8041**
- Cleaner Pump Assembly for Concentrate**
- 164-8027**
- Cleaner Tubing #14 for Super Concentrate**
- 164-8025**

- Cleaner Tubing #16 for Regular Concentrate**
- 164-8026**
- Supply Tank Cap**
- 164-8081**
- Supply Tank Gasket**
- 164-0021**

Cleaning

Complete Cleaner Tank Assembly - 164-8042 - IKN | FXW | FLX
Complete Supply Tank Assembly - 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
Cleaner Supply Tank Float Switch - 154-8693



Cushion Roller With Cloth Cover - 153-8839
Compatible with IKN | FXW | FLX | KW | ION | XF | KP | EP
Same part number will upgrade for these models: KK | ELT | STD
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

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

Replacement Squeegee Blades & Gasket Kit - 164-8038K
IKN | FXW | FLX (also for machines with upgraded Squeegee Cartridge)

Replacement Squeegee Blades - Blue pair - 153-8204E
Replacement Squeegee Blade - Individual - 153-0202E

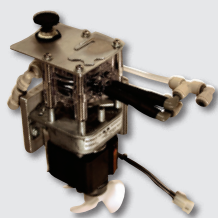


Squeegee Gasket - 164-0003 - IKN | FLX | FLXW



Vacuum Motor - See Motors on pages 28 & 30
Following Items are Not Pictured
Vacuum Housing - 153-0204H
Fan Blade - 153-0204F
Flexible Hose (Sold by the Inch) - 154-0260

Sprayless Cleaner Pumps



Cleaner Pump Drive Motor

154-8874 (115VAC)

154-8875 (230VAC)

158-8404 (24VDC)

Cleaner Pump Assembly - 158-8404D

Norprene® Tubing - 154-0861B

Cleaner Volume Control Valve - 154-1855

Cleaner Tip & Hose Assembly - 154-8852

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)



Cleaner Tip with Check Valve - 164-0012M

Cleaner Tip Check Valve (Pkg of 5)

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



5" Cleaner Tank Filter - 154-0212B

1/2" O-Ring - 154-0287C



Universal In-Line Filter Assembly - 154-8867A

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

Cleaner Funnels

Cleaner Funnel - Long Stem

158-8252

Cleaner Funnel - Short Stem

154-8647

Cleaner Funnel - No Stem

153-0252



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)



Cleaner Pump Repair Kit

Valve/Diaphragm Kit

for Kegel Pump

158-8212K



Spray Pressure Regulator Upgrade

154-8268



Spray Jet Cup Assembly Upgrade

154-8692

Hose and Elbow Kit

With this kit, you will have all of the tubing and fittings to replace the plumbing in the cleaning system of your lane machine.

154-8827 - KK

154-8677 - STD

Cleaning System Tubing

(Sold by the Inch)

1/4" - 153-0208S - for Spray Jet Machines

1/4" - 154-0202C - Clear

Conditioning



FLEX Conditioner Cartridge

(Complete with Valve Assembly) - 164-8015 (Pkg of 2)

FLEX Conditioner Cartridge

(Without Valve Assembly) - 164-8015A

Cartridge Plunger - 164-8015P

Cartridge Cap (with 38mm hole)

164-0004

Viton O-Ring for Cap

164-6079

Viton O-Ring for Plunger (outside)

164-6079

FLEX Conditioner Sub Tanks

164-6015A

164-6015B

FLEX Conditioner Sub Tank Float Switch

154-8693

FLEX Conditioner Sub Tank Filter Assembly

154-0212

Conditioner Transfer System

Single Conditioner Transfer Brush Assembly - 164-0866



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 - 164-8001 - FXW | FLX (2013-2015 FLX-17xxx & FXW-13xxx)

Buffer Brush - 164-8001A - IKN | FW17 | FX17

Transfer Roller - 154-8338 - PX-C

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

Transfer Roller - 158-8204 - XF

Transfer Roller - 164-8008 - IKN | FXW | FLX

Transfer Roller Duo Upgrade - 158-8441

Transfer Roller Belt Duo System - 154-9203 - FXW | FLX



Buffer Belt - 164-9019 - IKN

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

Buffer Belt - 153-9817 - PX-C

Buffer Belt - 158-9201 - XF

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

Buffer Belt Standard - 164-9006 - FXW | FLX

Buffer Belt for Variable Speed Upgrade - 154-9615 - FXW | FLX
(FLX-17733 / FXW-13229 and ABOVE)

Buffer Belt for Variable Speed Upgrade - 164-9006 - FXW | FLX
(FLX-17732 / FXW-13228 and BELOW)

Buffer Belt for Non-Variable Buffer - 164-9016 - FW16,17 | FX16,17

Buffer Belt for Variable Buffer - 164-9017 - FW16,17 | FX16,17



Head Drive Belt - 154-9201

Compatible with ALL applications.

Fluid Metering Components

1. Pulse Suppression Assembly

164-8021 - FXW | FLX

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

154-8816 - IKN | KW | ION | KP | KK

2. Pressure Gauge (60 psi) - 158-1613

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

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

4. Vent Valve

154-8817 - IKN | KW | ION | KP | EP | ELT | STD | PXS-C

164-8007 - FXW | FLX

5. Oil Tank Assembly with Fittings/Float

154-8682 - IKN | 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 - IKN | KW | ION | KP | EP | ELT | PXS-C | PX-C

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

8. Belt for Conditioner Pump Motor

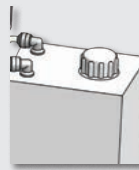
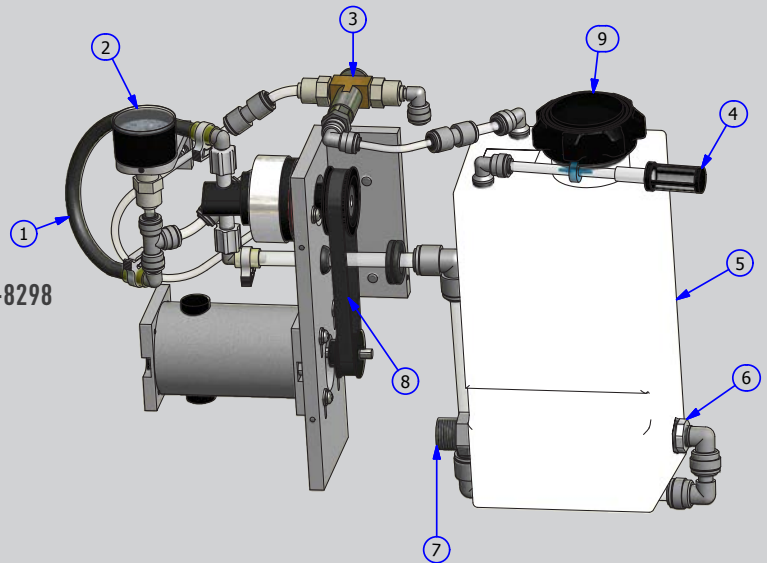
154-9202A (60Hz) 154-9215 (50Hz)

164-9008 - FXW | FLX

9. Oil Tank Cap Assembly

164-8081 - Complete

164-0021 - Gasket only



Oil Tank Cap Assembly

154-0832 - Complete

154-0832C - Cap only

154-0832G - Gasket only

Tubing

Conditioning System Tubing

(Sold by the Inch)

3/16" - 154-0202B

1/4" - 154-0202A

3/8" - 154-0202

Conditioner Head Tip & Hose Holder Assembly (includes tubing)

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

Oil Pencil Tip (Black Molded) - 154-6832

Replacement Felt

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

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 - Painted Sanction Technology™ Machines

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

Felt Kit - 164-8212 - FXW | FLX

Graduated Cylinder (25ml) - 154-0215

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

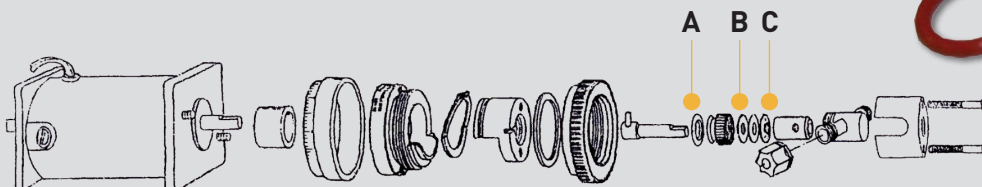
Graduated Cylinder (50ml) - 154-0215A

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

Oil Funnel with 3" Hose - 153-0052A

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

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

Wicks



Glueless Wick Plate Assembly

3.125" - 153-8123

Only Compatible with PX-C

3.125" - 158-8223

Only Compatible with XF



5.125" - 153-8125

Only Compatible with PX-C

5.125" - 158-8225

Only Compatible with XF



7.125" - 153-8127

Only Compatible with PX-C

7.125" - 158-8227

Only Compatible with XF

10.125" - 158-8230

Only Compatible with XF

Not Pictured

45" Wick Material for Glueless Wicks - 153-0005B (5")

Wick Material Stock for Glueless Wicks - 153-0005D

(Custom cut to be purchased by the inch)



Wick Spring (XF Only) - 153-2740

Solenoid Cable Assembly 8.25"

153-8812A (PX-C)

Pattern Smoothing Pads

Pattern Smoothing

Assembly - 154-8617

Velcro for Smoothing Pad

154-8617V (10 per pack)

Smoothing Pad Spring

153-2540A

PLC

PLC Components



CP1H PLC (without Ports)- 158-1610P

CP1L PLC (without Ports) - 164-1230 - XF

Serial Port Converter for CP1 - 158-1610S

Analog Output - 164-1217 - FXW | FLX

Communication Cable - 164-1235 - IKN

Communication Cable - 158-1610D - FXW | FLX

Communication Cable - 158-1610CC - KW C,D | ION C,D

Communication Cable CP1L PLC - 154-8809

CPM2A Keypad Cable - 154-1803

CP1L Keypad Cable - 154-8809

Replacement Battery - 158-1610

PLC Kits

The Omron® CPM2A PLC is no longer available and has been replaced by the Omron® CP1L PLC. A replacement kit has been designed to make the necessary modification in the event a new PLC is needed.

DC Conversion Kit - 158-8454 - KW A,B | ION A,B

AC Conversion Kit* - 158-8254 - KK | KP A,B | XF-C | PX-C

Twido To CP1L Upgrade - 158-8253 - XF A,B

* Additional upgrade kits may be necessary for KK A,B | KP A,B

Contact Kegel for more information.

Touchscreen Components



Touchscreen Display - 158-8671 - KW C,D | ION C,D

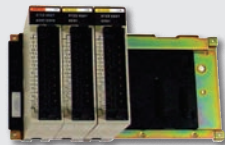
Touchscreen Display - 164-8011 - FXW | FLX

Touchscreen Protector - 158-1612 - FXW | FLX

Touchscreen Mounting Clip - 158-1610TC - FXW | FLX

Touchscreen Display - 164-8803 - IKN

Touchscreen Protector - 164-1234 - IKN



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

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

158-0802 - KW-B

154-0801 - ION | KP | KK

154-0251 - ELT | STD | PXS

158-0204 - XF (Twido®)

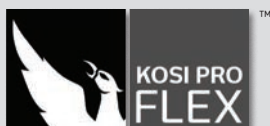
154-0801K - XF (Omron®)

Keypad Mounting Clips

(set of 2)

154-1802C

KOSI Kegel Online Support Interface



KOSI Pro Kit - 154-8781 - IKN | FXW | FLX

USB to Serial Converter

KOSI Cable (32 or 64 bit)

USB Drive with KOSI Pro Software



KOSI PRO Software

KOSI Pro Kit for Kustodian - 154-8771

USB to Serial Converter

KOSI Cable (32 or 64 bit)

KOSI Software CD

KOSI Pro Kit for C200H PLC - 154-8771A

USB to Serial Converter

RS232 Converter Module for KOSI Cable

(for Omron® C200HG & C200HS)

KOSI Cable (32 or 64 bit)

KOSI Software CD

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

KOSI PRO UPGRADE (To 7.x and greater) - 154-8771C

KOSI Communication Kit - 154-8771B

USB to Serial Converter

KOSI Cable (32 or 64 bit)



USB to Serial Converter

157-1057



RS232 Converter Module

for KOSI Cable

(for Omron® C200HG & C200HS) 154-1614



KOSI Cable

(32 or 64 bit) - 154-8724

Batteries & Chargers

Kegel K2 Energy® Lithium Batteries



158-1634 (25.6 Ah)



158-1634B (38.4 Ah)



158-1634C (51.2 Ah)

Batteries				
Machine Type	Lanes Per Charge	KEGEL Charger Being Used	Battery Available	Kit Needed
ION-A,B	Up to 40	ProTech	158-1634	158-8654
	Up to 62	Any	158-1634B	158-8654
KW-A,B	Up to 40	ProTech/ProNautic	158-1634	158-8655
	Up to 62	Any	158-1634B	158-8655
KW ION-C,D	Up to 40	ProTech/ProNautic	158-1634	158-8655
	Up to 62	Any	158-1634B	158-8655
	Up to 90	Any	158-1634C	158-8655
IKN FXW FLX	Up to 40	ProNautic	158-1634	None
	Up to 62	ProNautic	158-1634B	None
	Up to 90	ProNautic	158-1634C	None



ProNautic® Chargers

ProNautic® Chargers		
Machine Type	115V	230V
ION-A,B	158-8476	158-8476E
ION-C,D	164-8471P	164-8471PE
FXW FLX KW	164-8471	164-8471E

*This is a kit that includes the ProNautic® Charger along with the necessary hardware to convert your machine to an external charging unit as the internal unit is no longer available.

DC Voltage Regulator - 158-8417

Smart Charger (IQ-4) - 158-1452 for IOTA® Battery Chargers

LCD Amp Gauge Assembly - 158-8410 KW | ION

Charger DC Cables	Description
158-8474	ProTech DC power cord assembly - 1 FT Internal
158-8475	ProTech DC power cord assembly - 6 FT External
164-8475	ProNautic DC power cord assembly - 6 FT External



Battery Disconnect Housing - Red

158-1407



Battery Disconnect Housing - Blue

158-1408



6 ga. Terminal - 158-1407A

The disconnect housings automatically come with terminals for 10 ga. wire. If your lane machine has 6 ga. wire, order the 6 ga. terminals in addition to the housing.

Electrical Components

Power Cord Components

Description	115V AC	230V AC
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 Button Replacement Assembly - 164-8013 - IKN | FLX

Handle Wire without Connector - 153-8424A

Handle Wire with Kill Plugs - 153-8424C - PXS-A,B | PX-A,B

Handle Wire - 154-8893B - ION | KP

Handle Wire - 154-8624 - ELT | STD | PXS-C

Handle Button Replacement Assembly - 154-8824 - KK

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

Breakers



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

Blade Type Fuses

Fuse 25A - 158-1439 for CVR - KW | ION

Fuse 30A - 164-1214 for CVR on VB Upgrade and

Pro Nautic® Charger - IKN | FXW | FLX

Fuse 40A - 158-1440 for IOTA® Battery Chargers

Maxi-Fuse 40A (for Fuse Link) - 158-1454 - ION

Fuse Link Assembly - 158-8421 - ION

Fuse & Relay Kit



With these kits, you will have all of the small electronic pieces needed to keep you going. These kits contain three of each fuse used in the machine as well as fuse holders, spare relays, buttons and switches.

154-8600F (115V) - STD | PXS-C

154-8600G (230V) - STD | PXS-C

154-8800F (115V) - KK-A,B

154-8800G (230V) - KK-A,B

154-8800J (115V) - KK-C

154-8800K (230V) - KK-C

154-8800R (115V) - KP

154-8800S (230V) - KP

158-8600F - KW-A,B | ION-A,B

158-8600G - KW-C,D | ION-C,D

164-8100F - FXW | FLX

164-8800F - IKN

Fuses

Panel Mount Fuse Holder (115V) - 153-1028

Fuse 0.5A (UL) - 154-1261

Fuse 0.75A (UL) - 154-1262

Fuse 1A (MDL) - 155-1229

Fuse 1.8A (UL) - 154-1265

Fuse 2.25A (UL) - 154-1266

Fuse 3.2A (UL) - 154-1267

Fuse 4A (UL) - 154-1268C

Fuse 7.5A (UL) - 154-1270

Fuse 8A (UL) - 154-1270C

Fuse 10A (UL) - 154-1273

Fuse 20A (UL) **Ceramic** - 154-1274C

Fuse 20A (UL) - 154-1274

Fuse 25A (MDA) **Ceramic** - 164-1222

Panel Mount Fuse Holder (230V) - 153-1028E

Fuse 315mA (IEC - 230V) - 154-1260E

Fuse 500mA (IEC - 230V) - 154-1261E

Fuse 1A (IEC - 230V) - 154-1264E

Fuse 1.6A (IEC - 230V) - 154-1265E

Fuse 4A (IEC - 230V) - 154-1267E

Fuse 6.3A (IEC - 230V) - 154-1269C

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



DPDT 10A
158-1462



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 / FLEX / IKON Models



24VDC DPDT
158-1458



Solid State
158-1460



Super MY4 24V DC
(with Diode)
158-1463



LY3 Relay
(24V DC)
164-1231

Phoenix® Brand Relays



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



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

Automation Direct® Relays



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

Other Electrical Components



Duster Microswitch
(Large) 154-1603
IKN | FXW | FLX | KW | ION
| KP | KK | EP | ELT | PXS-C
| PX-C



Duster Microswitch
(Small) 153-1202
XF | PXS-A,B | PX-A,B



Microswitch with Roller
153-1203
for ALL Machines



Squeegee Microswitch
(Large) 154-1015
KK | ELT | STD | PXS-C |
PX-C



Arc Suppressor
158-1438



Proximity Sensor
154-1220

Proximity Sensor
158-1208 - XF-A



Contactor 24VDC
158-1465 - IKN | FXW | FLX
KW C,D | ION C,D
(Vacuum & Auto Shutdown
Relay)



Red Push Button
(Normally Open)
153-1408



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



E-Stop Assembly for FLEX/IKON - 164-1223
(Includes breaker, black box sold separately)
FLEX E-Stop Breaker - 164-1223B
Prior to serial #FLX-17802 / FXW-13306 use part number 164-1223
(This will replace the discontinued breaker and red triangle shaped
e-stop assembly)



2008 E-Stop (2-Hole Pattern)
154-1250A
Breaker for E-Stop
(2008 and later)
154-1251A

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 wires 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.

Upgrades

DUO™ Transfer System

Transfer Brush System to DUO System

158-8430F

Smoother Pad Transfer System to DUO System

158-8430N - Only painted machines with transfer roller



Complete Squeegee Cartridge Assembly

164-8038

Handle Reinforcement Kit

154-8284 - ION A,B | KP | KK | ELT | EP | STD

Crossfire Upgrades

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

LDS (Center) - 154-8672 - STD

Tach (External) - 154-8290 STD

Head Timing - 154-8673 - STD

Kustodian Upgrades

Head Relay Upgrade Kit

154-8853C - KK-C

Drop Brush Upgrade Kit

154-8853Z - KP

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

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 | 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



Power Button Relocation Kit

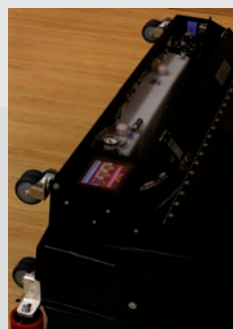
Relocate the power button to the splash guard allowing for easy access to turn the unit on.

158-8673 KW-D | ION-D

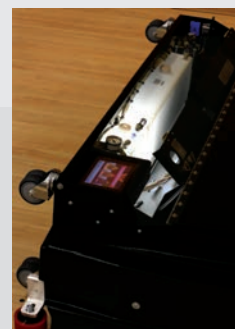
LED Light Upgrade Kit for Supply Tanks

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

158-8672 KW | ION | KP-A,B



BEFORE



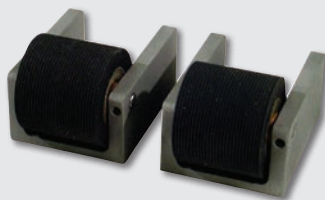
AFTER

Miscellaneous

Non-Adjustable Guide Rollers

Guide Roller - 153-8410
 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



IKN - 164-8800
 FXW | FLX - 164-8030
 KW - 158-8628
 ION - 158-8428
 KP | EP (115V) - 154-8686
 KP | EP (230V) - 154-8687
 KK | ELT | PXS-C | PX-C (115V)
 154-8888
 STD (115V) - 154-8688
 XF (115V) - 164-8030
 XF (230V) - 164-8030

Adjustable Guide Rollers



Complete Front Assembly - 158-8643
 Front Wheel Only - 158-8637
 Complete Rear Assembly - 158-8642
 Rear Wheel Only - 158-8636
 Compression Spring - 153-2978

Whiskers

Whisker Spring - 153-2946 - KW
 Black Vinyl Cap - 153-2941 - KW
 Complete Assembly - 158-8623 - KW
 Whisker Assembly - 164-8660 - FXW

Caster Wheels

Lane to Lane Caster 2"
 153-0812 (Heavy Duty)
 Lane to Lane Caster 3"
 164-0022 - IKN | FLX - 2016 or later

Transport Caster



3" Dual Wheel (Black) - 153-0001BK
 3" Dual Wheel (Gray) - 153-0001
 2" Single Wheel - 153-0002



FLEX Whisker Upgrade
 158-8624 - KW

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



Spring Plunger
 164-2069 - IKN | FW16,17 | FX16,17



Push Latch with Key
 154-0881



Flush Mount Lid Latch
 (With Lock) - 153-2232L



Flange Quarter
 turn Lid Latch
 154-0805



Lid Pin - 164-2002



Rubber Bumper - 154-0006A



Foam (Sold by the Inch) - 153-0036

Motors & Speed Controls

Sanction Technology™

COMPONENTS	IKON	FLX	FXW	KW-C,D ION-C,D	KW-A,B ION-A,B	KK KP	STD SE ELT EP	PXS-C STD AC
Buffer Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8616A	154-8616B	154-8616A
Buffer Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8616E	154-8616E	154-8616E
Buffer Motor (24V DC) - Standard	158-8414	158-8414	158-8414	158-8414	158-8414	N/A	N/A	N/A
Buffer Motor (24V DC) - Variable Speed Upgrade	N/A	164-8014	164-8014	N/A	N/A	N/A	N/A	N/A
Buffer Motor Brushes (24V DC)	158-1406B	158-1406B	158-1406B	158-1406B	158-1406B	N/A	N/A	N/A
Buffer Motor Contactor (115V AC)	N/A	N/A	N/A	N/A	N/A	153-1004A	153-1004A	153-1004A
Buffer Motor Contactor (230V AC)	N/A	N/A	N/A	N/A	N/A	153-1604A	153-1604A	153-1604A
Conditioner Pump Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8604	154-8604	154-8604
Conditioner Pump Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8604E	154-8604E	154-8604E
Conditioner Pump Motor (24V DC)	158-8401A	158-8632	158-8632	158-8632	158-8401A	N/A	N/A	N/A
Conditioner Pump Motor Brushes (24V DC) BISON	N/A	N/A	N/A	N/A	158-1422B	N/A	N/A	N/A
Conditioner Pump Motor Brushes (24V DC) GROSCOPP	158-1422G	N/A	N/A	N/A	158-1422G	N/A	N/A	N/A
Drive Motor (90V DC)	N/A	N/A	N/A	N/A	N/A	154-8865	153-8065 - STD	153-8065 - STD
Drive Motor (90V DC)	N/A	N/A	N/A	N/A	N/A	N/A	154-8365 - ELT EP	154-8365 - PXS-C
Drive Motor (24V DC)	158-8406	N/A	N/A	N/A	158-8406 - ION	N/A	N/A	N/A
Drive Motor (24V DC) Long Shaft	N/A	158-8602	158-8602 ZTR FW16,17	158-8602	158-8602 - KW	N/A	N/A	N/A
Main Drive Motor (24V DC)	N/A	164-8217 FX16,17	164-8217M FW16,17	N/A	N/A	N/A	N/A	N/A
Duster Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	153-8403	153-8403	153-8403
Duster Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	153-8803H	153-8803H	153-8803H
Duster Motor (24V DC)	158-8403	158-8403	158-8403	158-8403	158-8403	N/A	N/A	N/A
Head Drive Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8232	154-8232	154-8232
Head Drive Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8632	154-8632	154-8632
Head Drive Motor (24V DC)	158-8405	164-8032	164-8032	158-8632	158-8405	N/A	N/A	N/A
Head Drive Motor Brushes (24V DC)	158-1404B	N/A	N/A	N/A	158-1404B	N/A	N/A	N/A
Squeegee & Brush Lift Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	153-8207	153-8207	153-8207
Squeegee & Brush Lift Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	153-8807H	153-8807H	153-8807H
Squeegee & Brush Lift Motor (24V DC)	158-8402	158-8402	158-8402	158-8402	158-8402	N/A	N/A	N/A
Transfer Roller Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8206	154-8206*	154-8206
Transfer Roller Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8206A	154-8206A*	154-8206A
Vacuum Motor (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8805	154-8805	154-8805
Vacuum Motor Brushes (115V AC Pair)	N/A	N/A	N/A	N/A	N/A	153-0204B	153-0204B	153-0204B
Vacuum Motor (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8805E	154-8805E	154-8805E
Vacuum Motor Brushes (230V AC Pair)	N/A	N/A	N/A	N/A	N/A	153-0204C	153-0204C	153-0204C
Vacuum Motor (24V DC)	158-8407	158-8407	158-8407	158-8407	158-8407	N/A	N/A	N/A
Vacuum Brushes (24V DC Pair)	158-1421B	158-1421B	158-1421B	158-1421B	158-1421B	N/A	N/A	N/A

* Not used on Kustodian PLUS or Elite PLUS

COMPONENTS	IKON	FLX	FXW	KW-C,D ION-C,D	KW-A,B ION-A,B	KK KP	STD SE ELT EP	PXS-C STD AC
Circuit Board w/Speed Relays (115V AC)	N/A	N/A	N/A	N/A	N/A	154-8810	N/A	154-8312
Circuit Board w/Speed Relays (230V AC)	N/A	N/A	N/A	N/A	N/A	154-8811	N/A	154-8644
Circuit Board w/Speed Relays (24V DC)	N/A	N/A	N/A	N/A	158-8409	N/A	N/A	N/A
Isolator Analog Card 115V AC Drive Assembly	N/A	N/A	N/A	N/A	N/A	N/A	154-8633	N/A
Isolator Analog Card 230V AC Drive Assembly	N/A	N/A	N/A	N/A	N/A	N/A	154-8634	N/A
Isolator Analog Card 115V AC Buffer Assembly	N/A	N/A	N/A	N/A	N/A	N/A	154-8635	N/A
Isolator Analog Card 230V AC Buffer Assembly	N/A	N/A	N/A	N/A	N/A	N/A	154-8636	N/A
Isolator Analog Card Only	N/A	N/A	N/A	N/A	N/A	N/A	154-1413	N/A
Speed Control Assembly (24V DC-Buffer/Drive)	N/A	164-8010	164-8010	N/A	N/A	N/A	N/A	N/A
Speed Control Assembly (24V DC-Drive)	164-8807	N/A	N/A	158-8412	158-8412	N/A	N/A	N/A
Speed Control Assembly (24V DC-Cleaner Pump)	164-8806	158-8415	158-8415	158-8415	158-8415	154-8848 KP	N/A	N/A
Speed Control Assembly (Oil/Cleaner Head)	N/A	158-1605	158-1605	158-1605	N/A	N/A	N/A	N/A
Speed Control Board Only (115V AC)	N/A	N/A	N/A	N/A	N/A	153-1012	153-1012	153-1012
Speed Control Board Only (230V AC)	N/A	N/A	N/A	N/A	N/A	153-1812	153-1812	153-1812
Speed Control Board Only (24V DC)	164-1224	158-1410	158-1410	158-1410	158-1410	N/A	N/A	N/A



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Motors & Speed Controls

Wick-Pad Technology

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

For Dayton® Drive Motor - 153-8065

Rear Seal - 153-1057R

Front Seal (Shaft Side) - 153-1057S

Gasket - 153-1057F

Drive Motor Brushes (90V DC Pair) - 153-1057H

For ALL Baldor® Drive Motors

Rear Seal - 154-1809D

Front Seal (Shaft Side) - 154-1809E

Drive Motor Brushes (24V DC Pair) - 158-1405B

Drive Motor Brushes (90V DC Pair) - 154-1809B

Fittings

Look for our new complete hose and elbow kits on page 17



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
1/4" x 1/4" MPT - 153-0209



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



Union Tee
3/8" Tube - 154-0815



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



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



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



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



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



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



Cleaner Tip with Check Valve
164-0012M



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