



Diamond Tools and Equipment
for Construction and Infrastructure

Product Catalog

icsdiamondtools.com



Diamond Tools and Equipment

Our commitment is to help professionals get their job done right. We have been the leader in chain based concrete and pipe cutting solutions for over 25 years. Our concrete cutting diamond chains are designed and manufactured in Portland, Oregon using the best in global materials. Our patented SealPro® and SealPro Advanced™ anti stretch technology significantly reduces chain stretch so your chain lasts longer and you spend less time tensioning. Our patented PowerGrit® pipe cutting chain allows you to cut ductile iron, HDPE and PVC pipe in a confined space with no fear of rotational kickback.

Our chain, combined with our best-in-class bars and power heads give you a cutting system that can plunge cut up to 63 cm deep, cut tight radiuses and clean square corners with no overcutting. All our power heads are designed for wet cutting and have integrated water delivery systems that reduce airborne particles during the cut. Your job demands power and precision. ICS provides cutting systems that allow you to get your job done quickly and safely compared to other cutting methods.

Headquartered in Portland, Oregon, ICS also has a sales and distribution office in Belgium and a worldwide sales and service network covering more than 70 countries. ICS concrete power cutters, diamond chains, and related products are sold and supported by a network of ICS Authorized Dealers and backed by a comprehensive network of factory-trained personnel and service centers.

SealPRO® Technology

There are many jobs that only an ICS power cutter can do. And for those jobs, only ICS includes patented SealPRO and SealPRO Advanced anti-stretch technology, which locks out the abrasive slurry created when cutting concrete, stone, or masonry, reducing chain stretch and increasing the useful life of the chain.

Concrete cutting pros like you depend on your tools. All day, every day. Under the toughest conditions. The precision and versatility you've come to expect from ICS in addition to the perfect blend of power and efficiency. Diamond segments laser-welded to a steel chassis grind through concrete, stone and masonry, eliminating kickback and the damage that percussive methods can cause. This remarkable property allows ICS power cutters to plunge cut up to 63cm into the hardest concrete or make perfectly square corners with no overcuts. We know the challenges you face and understand the importance of investing in the right tools.

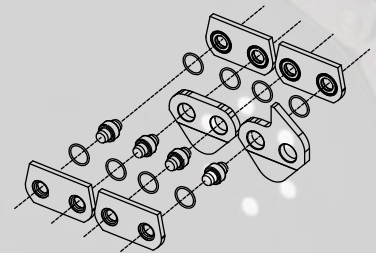
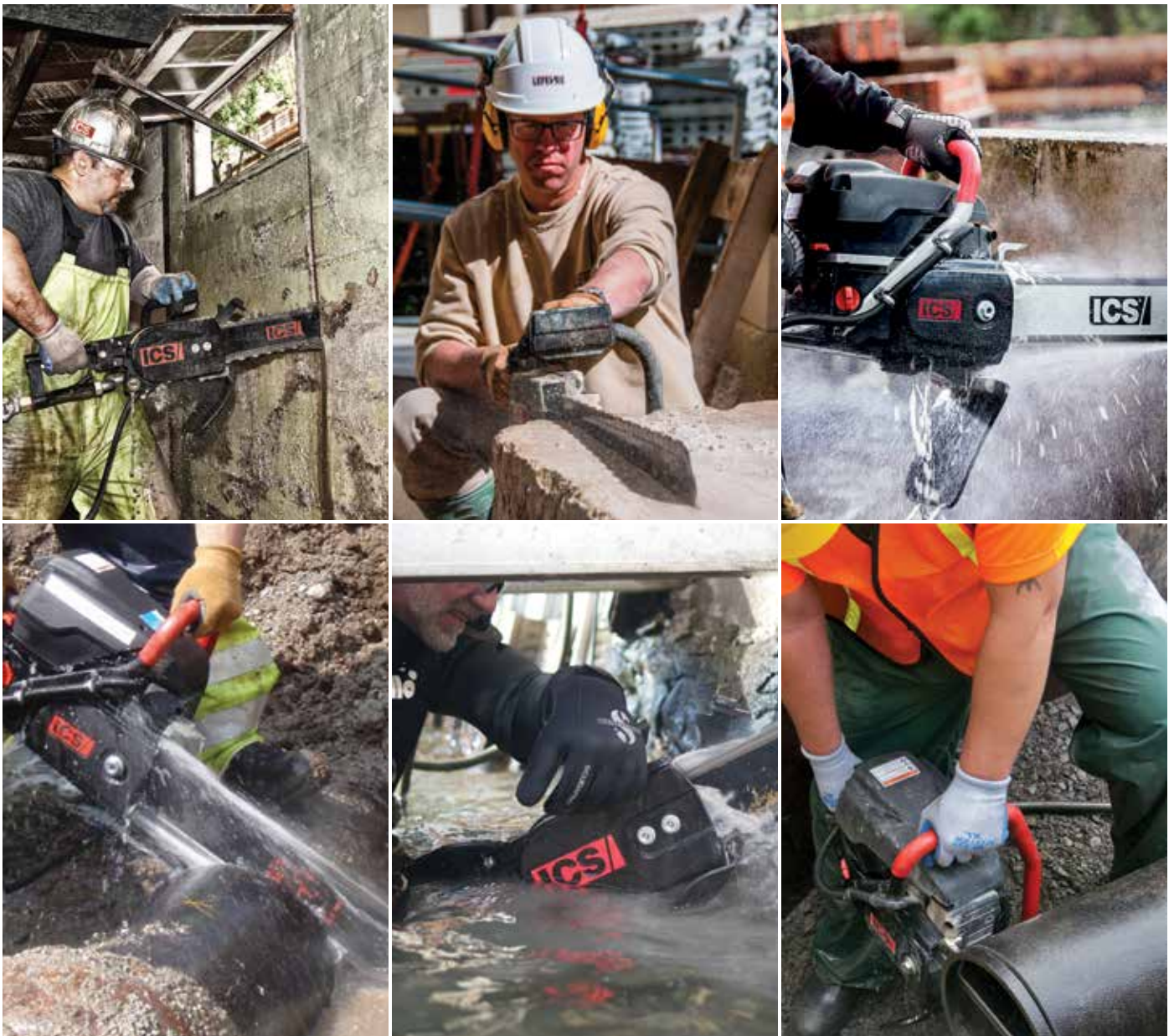


Table of Contents

ICS Power Cutters

ICS Petrol Power Cutters	4-7
ICS Hydraulic Power Cutters	8-11
ICS Pneumatic Power Cutters	12-13
ICS PowerGrit Technology	14-15
ICS Diamond Chains	16-19
Accessories	20-21
FAQ's	22-23
Global Bar Fit-up Chart	24-25
Part Numbers	26-27

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Petrol Power



695XL - F4 - Petrol
Cutting an egress window
Portland, OR - 2015

For Cutting Concrete & Pipe

695XL

Equipped with integrated water delivery system that continuously feeds water to the blade, the 695XL features also include: an easy-to-start engine with higher energy ignition system and durable, long-lasting components including a new muffler, carburetor and piston & cylinder. Available with 30 cm - 40cm guidebars and the entire line of FORCE3™, FORCE4® and PowerGrit® series diamond chains. Based on the best-selling 695 power cutter platform, the 695XL is the highest horsepower ICS petrol power cutter for frequent-use by general construction, utility contractors and concrete professionals.



695XL-GC

Compatible with FORCE3™ chains.
Ideal for general construction.



695XL-F4

Operates the strongest ICS chains - FORCE4®.
Ideal for professional intensive use.



695XL-PG

Compatible with revolutionary PowerGrit® chains.
Created for pipe cutting.

695XL TECHNICAL SPECIFICATIONS

Bar Cutting Depth	38 cm PowerGrit 35 cm, 40 cm FORCE3 30 cm, 40 cm FORCE4
Powerhead Weight	9.6 kg
Engine Speed	9300 +/- 150 rpm (max)
Idling Speed	2700 +/- 100 rpm
Horsepower	4.8 kW@ 9000 rpm
Engine Type	2-stroke, single cylinder, air cooled
Displacement	94 cc
Powerhead Dimensions	46 cm x 36 cm x 30 cm
Guaranteed Sound Power Level, Lwa (1)	115 dB(A); (Kwa = 1.0 dB(A))
Sound Pressure Level, at Operator's Ear Lwa (1)	104.6 dB(A); (K = 1.0 dB(A))
Vibration, a _{hv, eq} Concrete Cutting (2)	3.6 m/s ² (K=0.2 m/s ²) Front Handle 3.1 m/s ² (K=0.2 m/s ²) Rear Handle
Vibration, a _{hv, eq} Pipe Cutting (2)	5.62 m/s ² (K=0.2 m/s ²) Front Handle 5.28 m/s ² (K=0.2 m/s ²) Rear Handle
Water Supply Requirement	Minimum of 1.4 bar
Water Flow Requirement	Minimum: 8 lpm
Fuel Mix Ratio	2% (50:1) fuel-to-oil
Fuel Capacity	1.0 liter

(1) Measured in accordance with ANSI S12.51-2012/ISO3741:2010

(2) Measured in accordance with ISO5349-1:2001, ISO22867:2011 and ISO19432:2012

Did you know...

All chains have a tendency to stretch when used. Diamond chains stretch more than wood cutting chains because of the abrasive materials they cut. If the chain is too tight, a lot of the power cutter's power goes into turning the chain rather than the cut. In extreme over-tightened cases, the power cutter may not be able to turn the chain at all. In addition, damage can occur to the bar nose and premature stretch may occur.

See the entire list of our guidebar and chain compatibility on page 23-24

Petrol Power



680ES - Petrol
Cutting an egress window
Seattle, WA, 2015

For Cutting Concrete & Pipe

680ES

Equipped with integrated water delivery system that continuously feeds water to the blade and built to meet the operation and flexibility demands of the general construction user, the 680ES stands alone in terms of reliability and value. Built to meet the operation and flexibility demands of the general construction user, the 680ES stands alone in terms of reliability and value. Easy to start with a new multifunction lever to control choke, run, and stop functions. The distinctive black powerhead houses specially designed carburetion and ignition systems that work together to ensure easy starting, cooler operation and dependable performance at just about any elevation. Available with 30 cm and 35 cm guidebars and the entire line of FORCE3™ series diamond chain. With a quick switch of the guidebar, chain and drive sprocket, the new 680ES can operate PowerGrit Pipe cutting chain 25 cm cutting depth, designed to cut ductile iron pipe.



Compatible with FORCE3™ chains.
Ideal for general construction.



Compatible with revolutionary PowerGrit® chains.
Created for pipe cutting.

680ES TECHNICAL SPECIFICATIONS

Bar Cutting Depth	25cm PowerGrit only 30cm, 35cm FORCE3
Powerhead Weight	9.6 kg
Engine Speed	11500 +/- 500 rpm (max)
Idling Speed	2800-3200 rpm
Horsepower	3.7 kW
Engine Type	2-stroke, single cylinder, air cooled
Displacement	76.5 cc
Powerhead Dimensions	46 cm x 29 cm x 25 cm
Guaranteed Sound Power Level, Lwa ⁽¹⁾	117 dB(A); (Kwa = 3.0 dB(A))
Sound Pressure Level, at Operator's Ear Lwa ⁽¹⁾	101.0 dB(A); (K = 2.0 dB(A))
Vibration, a _{hv} , eq Concrete Cutting ⁽²⁾	7.2 m/s ² (K=1.0 m/s ²) Front Handle 8.5 m/s ² (K=1.0 m/s ²) Rear Handle
Water Supply Requirement	Minimum of 1.4 bar
Water Flow	Minimum: 8 lpm
Fuel Mix Ratio	2% (50:1) fuel-to-oil
Fuel Capacity	0.88 liter

(1) Measured in accordance with ANSI S12.51-2012/ISO3741:2010

(2) Measured in accordance with ISO5349-1:2001 and ISO22867:2011

Did you know...

Your 680ES can be converted to cut ductile iron, cast iron, PVC and more? Just replace the guidebar, chain and drive sprocket and you are all ready to go!

See the entire list of our guidebar and chain compatibility on page 23-24.

Hydraulic Power



890 F4 - Hydraulic
Creating an opening for an egress window
Seattle, WA - 2014

For Cutting Concrete & Pipe

890 Series

The ICS 890 Series hydraulic cutting system offers the superior strength of FORCE4® technology and is equipped with integrated water delivery system that continuously feeds water to the blade. From the redesigned, more durable rear handle, to the easy to replace drive sprocket, this hydraulic power cutter is engineered to stand up to your toughest jobs. In a package that exceeds industry standards, this sleek powerhouse is packed with features designed to make it work as hard as you do.

890PG



890F4



890F4-FL

Cut to within 4.8 mm of floor or wall



890F4/PG TECHNICAL SPECIFICATIONS

	30 lpm	45 lpm
Powerhead Weight (30 cm hose whips)	10.6 kg	
Bar Cutting Depth	25 cm, 38 cm, 50 cm, 63 cm FORCE4 & PowerGrit	
Length	58.5 cm	
Height	26.5 cm	
Width	24 cm	
Hydraulic Supply	30 lpm @ 172.5 bar (2,500 psi)	45 lpm @ 172.5 bar (2,500 psi)
Hydraulic Fluid Requirements (Type)	PC HYDREX MV32 or equivalent	
Water Supply Requirements	Minimum: 1.4 bar	
Water Flow	8 lpm minimum	
Operating Speed	6,100 rpm (avg. free running) 5,500 sfm (avg. free running chain)	6,500 rpm (avg. free running) 5,800 sfm (avg. free running chain)
Torque*	9.6 Nm	13.5 Nm
Horsepower ^{(1)*}	6 hp (4.5 kW)	8 hp (6.0 kW)
Guaranteed Sound Power Level L_{wa} ⁽²⁾	107 dB(A) (K=0.2 dB(A))	
Equivalent Sound Pressure at the Operator's Ear L_{pA} ⁽²⁾	98 dB(A) (K=0.7 dB(A))	
Vibration $a_{hv,eq}$ Concrete Cutting ⁽³⁾	2.0 m/s ² (K=0.1 m/s ²) Front Handle 6.0 m/s ² (K=1.4 m/s ²) Rear Handle	
Vibration $a_{hv,eq}$ PowerGrit Cutting ⁽³⁾	4.6 m/s ² (K=0.1 m/s ²) Front Handle 4.8 m/s ² (K=0.3 m/s ²) Rear Handle	

(1) Measured using 18HP hydraulic power pack (8 gpm/30 lpm and 23HP hydraulic power pack (12 gpm/45 lpm) at 2000psi/138 bar.

(2) Measured in accordance with ISO3744:2010

(3) Measured in accordance with ISO5349-1:2001

* Output ratings based on maximum input conditions and efficiency assumptions and may vary depending on power supply.

Did you know...

Our diamond chain can cut through up to 22mm rebar? Large amounts and larger sized rebar will reduce chain life. Caution: rebar must be surrounded by concrete or aggregate material.

See the entire list of our guidebar and chain compatibility on page 23-24.

Hydraulic Power



814PRO - Hydraulic
Creating a 9cm x 9cm opening for an electrical box
Las Vegas, NV - 2008

For Cutting Concrete

814PRO

It may be small but with as much power as the 890 series, the 814PRO is ready for the big jobs. Lighter than other hydraulic power cutters with the ability to cut perfectly square openings as small as 9 cm. The 814PRO is equipped with integrated water delivery system that continuously feeds water to the blade, and is a natural for tothing out brick and tuck pointing along with other applications where a mix of portability and power are required.



814PRO TECHNICAL SPECIFICATIONS

Powerhead weight	6.8 kg
Bar Cutting Depth	33 cm
Motor Speed	8800 rpm
Powerhead Dimensions	36.3 cm Length 28.7 cm Height 23.4 cm Width
Torque	9.6 Nm
Horsepower ⁽¹⁾	4.5 kW (6 hp)
Hydraulic Supply	30 lpm, 172.5 bar
Noise Level	88 dB @ 1 m
Vibration Level	3.5 m/s ² (front handle)
Water Supply Requirement	8 lpm minimum
Water Flow	Minimum 1.4 bar

(1) Measured using 18HP hydraulic power pack (8 gpm/30 lpm and 23HP hydraulic power pack (12 gpm/45 lpm) at 2000psi/138 bar.

Did you know...

Drive sprockets need to be replaced when the groove has worn 50% of the way through the top of the sprocket tooth. A rule of thumb for the ICS petrol power cutters is every 2-4 chains and for ICS hydraulic power cutter, every 7-9 chains (depending on chain chassis).

**For information on
power cutter maintenance:**

[ICSDIAMONDTOOLS.COM/PRO-CORNER](https://www.icsdiamondtools.com/pro-corner)

ICS Customer Service

Trust the experience and product knowledge of the ICS Customer Service team to help you make the most of your investment in ICS products. Proud of their quick response time, our helpful representatives are available by phone or email to answer questions about maintenance and repair, to place orders for products and parts, direct you to a local dealer and make sure you are delighted with your ICS experience.

See the entire list of our guidebar and chain compatibility on page 23-24.

Pneumatic Power



701A - Pneumatic
Egress window opening
Portland, OR - 2015

For Cutting Concrete & Pipe

701-A

Built tough to stand up to everyday use in the harsh environment of concrete cutting. Cut with ease, speed and portability through Reinforced Concrete, Brick, Block, Concrete Pipe, Ductile Iron, Cast Iron, PVC and Natural Stone. The ICS powerful pneumatic power cutter is designed to cut through walls, floors and columns in a single pass.

701-A



701-A PG



701-A TECHNICAL SPECIFICATIONS

Weight (without bar and chain)	13 kg
Bar Cutting Depth	Up to 63 cm
Powerhead Dimensions	58.5 cm x 26.5 cm x 30.5 cm
Air Motor Power	5 kW
Air Supply Requirements (maximum)	6 bar - 3.5 m ³ /min
Motor lubrication	Resin and acid-free SAE 5 W to SAE 10 W oil
Water Pressure Requirements	Minimum: 1.4 bar
Water Flow Requirements	Minimum: 8 lpm
Operating Speed	5,700 rpm (average free running) 4,900 sfm (average free running chain)
Vibration ahv, eq Concrete Cutting ⁽²⁾	Front handle: 5.09 m/s ² (K=0.2 m/s ²) Rear handle: 5.07 m/s ² (K=0.2 m/s ²)
Vibration ahv, eq PowerGrit Cutting ⁽²⁾	Front handle: 4.58 m/s ² (K=0.2 m/s ²) Rear handle: 4.43 m/s ² (K=0.2 m/s ²)
Guaranteed Sound Power Level Lwa ⁽¹⁾	113 dB(A); (Kwa=0.5 dB(A))

1) Measured in accordance with ANSI S12.51-2012/ISO3741:2010

2) Measured in accordance with ISO5349-1:2001 and ISO22867:2011

Did you know...

It's time to replace your chain when the diamond segment has worn down to the welded pad on the chain chassis. Typically a chain will cut 12 – 24 linear meters in 15cm concrete. On ICS hydraulic power cutter, this range is most often doubled.

See the entire list of our guidebar and chain compatibility on page 23-24.

The ICS PowerGRIT® Advantage

PowerGRIT® – Safer. Faster. Easier.

ICS® Utility saws have addressed operator safety with a revolutionary grinding technology which eliminates rotational kickback and offers improved operator positioning when cutting pipe. Utilized by water and wastewater departments worldwide, this patented platform, exclusively from ICS, is designed to cut a variety of materials from ductile iron to plastic pipe with far less excavation. The ability to cut up to 63cm pipe completely from one side radically reduces the difficulty of the job. Complete your next job safer, faster and easier with ICS Utility chain saws.

Features & Benefits

- No rotational kickback
- Single-point access
- Operator control
- Safer operation
- No flying debris or dust

Cutting Applications

- Ductile Iron Pipe
- Cast Iron Pipe
- PVC Pipe
- HDPE Pipe
- Insituform Pipe Lining
- Asbestos* Cement Pipe

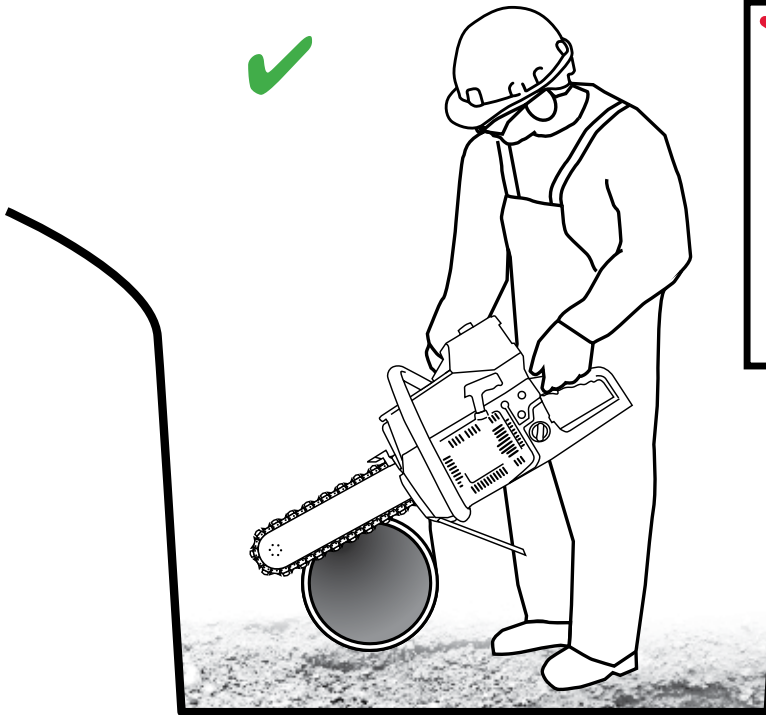


Brazed Diamond Layer

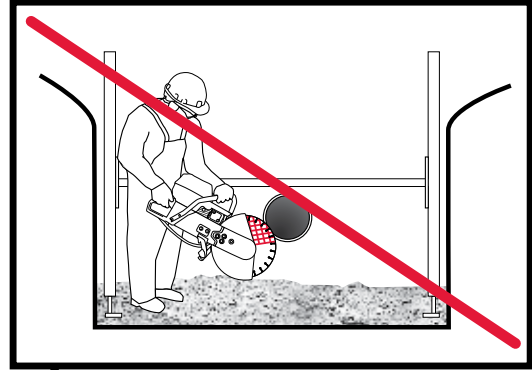


* Asbestos is a hazardous material, known to cause serious respiratory diseases. Cutting into asbestos can release asbestos fibers into the air. Always research and follow the correct safety procedures, including applicable national and state or provisional occupational health and safety regulations, and protect yourself and those around you from asbestos-related disease. Always arrange for the material to be removed safely by a qualified person. ICS is not responsible for exposure to asbestos caused by use of this product.

ICS PowerGRIT® Method Versus Conventional Method



ICS PowerGRIT® Method



Conventional Method

ICS PowerGRIT® Method

- Cutting depth from 38 up to 63 cm
- No rotational kickback
- Gyroscopic motion eliminated
- Chain stops quickly after throttle is released
- Direct drive sprocket eliminates slippage
- Cutting depth allows for single side access
- Reduced excavation below the pipe, may eliminate the need for shoring

Conventional Method

- Cutting depth of only 10 - 12 cm
- Operator exposed to potential rotational kickback
- Gyroscopic motion reduces saw control
- Blade continues turning after throttle is released
- Excess excavation needed to cut below the pipe
- Access to both sides of pipe is required
- Guard positioning compromises operator safety

Not all cities, municipalities, townships, and governments follow the same laws. Be sure to adhere to local guidelines and regulations when operating our products.

Diamond Chains



Diamond Chain Technology

Diamond chains are not all created equal, so insist on Diamond Chains from ICS[®], the people who invented the technology. As the inventors of Diamond Chain Technology[™], ICS is committed to continually improving the quality and versatility as well as the perfect blend of power, precision and efficiency: chains specifically designed for different power cutter types as well as the many different materials you encounter on the job. Choosing the right chain for your needs is essential to getting the best value for your purchase.

Chain Selection Chart

Chain Applications	Power Cutter	Soft Stone/ Abrasive/ Brick	Natural Stone	Medium Con- crete/ Light Reinforcement	Hard Con- crete/ Heavy Reinforcement	Ductile Iron/ Cast Iron/PVC/ HDPE
FORCE3 [™] General Purpose	680ES GC 695XL GC		♦	♦		
FORCE3 [™] Premium For harder materials	680ES GC 695XL GC		♦	♦	♦	
FORCE3 [™] Brick Ideal for brick & block	680ES GC 695XL GC	♦				
TwinPro [™] General Purpose	814PRO		♦	♦	♦	
FORCE4 [®] General Purpose	890 Series 701-A 695XL F4		♦	♦	♦	
FORCE4 [®] L Longer Cutting life	890 Series 701-A 695XL F4		♦	♦	♦	
FORCE4 [®] S Faster cutting speed	890 Series 701-A 695XL F4			♦	♦	
FORCE4 [®] Abrasive Ideal for brick & block	890 Series 701-A 695XL F4	♦				
PowerGrit [®] For Utility Pipe	890 Series 701-A 695XL PG 680ES PG					♦

Did you know...

It's time to replace your chain when the diamond segment has worn down to the welded pad on the chain chassis.

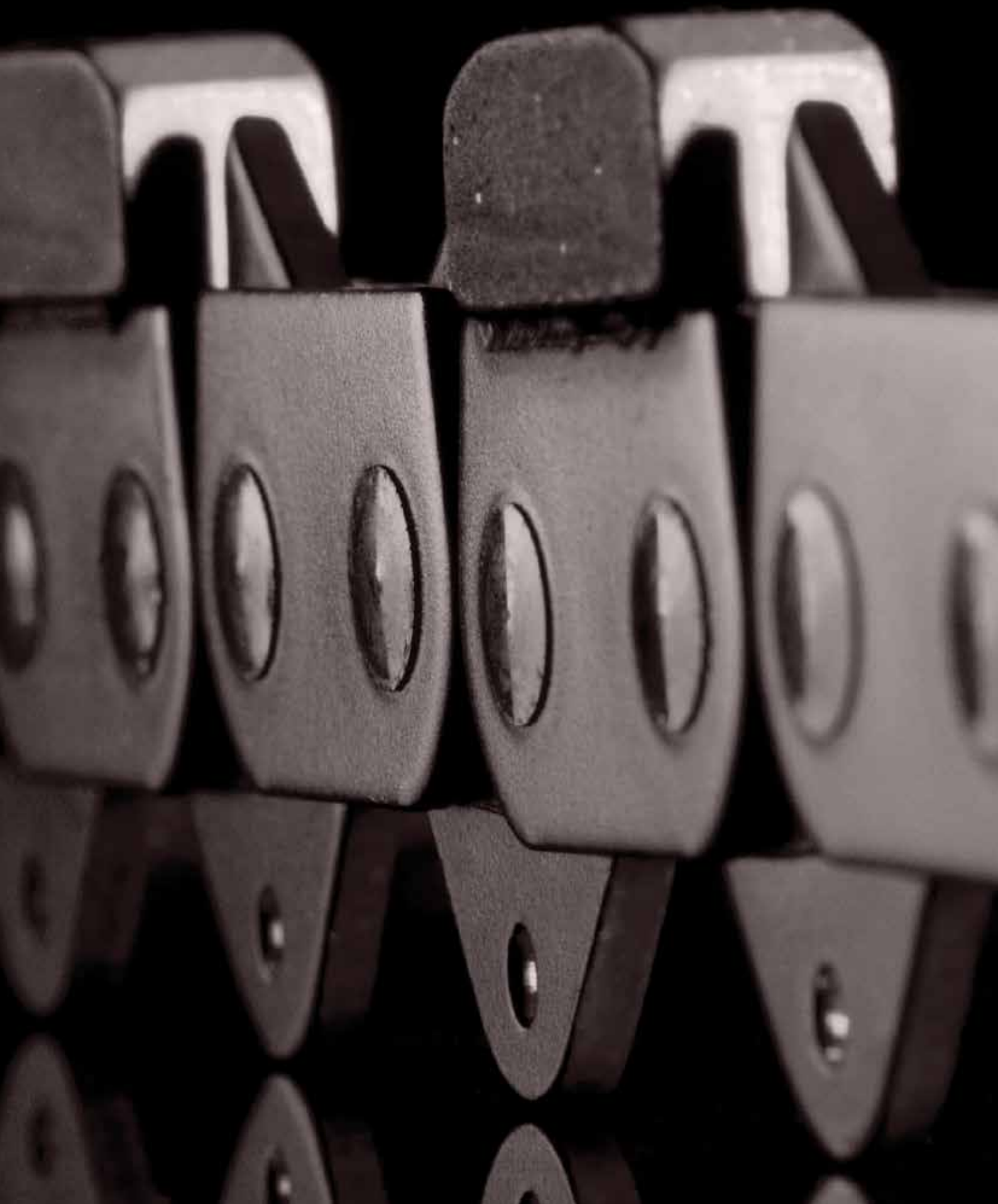


Worn FORCE4 chain



Worn PowerGRIT chain

Diamond Chains



FORCE4®

From the company that revolutionized concrete power cutters comes a revolution in diamond chains: FORCE4®. Designed to be the strongest, longest lasting diamond chains ever made, the FORCE4 series delivers unrivaled performance in professional cutting applications.



FORCE4®

Tough general purpose diamond chains that excel in common cutting jobs.

FORCE4® Premium L

Delivering longer life in hard aggregate, this is the best choice when faced with the more demanding jobs.

FORCE4® Premium S

Speed and strength in one chain. Built to cut fast in medium to hard concrete.

FORCE4™ Abrasive

A heavy duty diamond chain that excels in the harshest, most abrasive cutting environments.

FORCE3™

Diamond chain with SealPRO technology - our patented design inserts micro o-rings around every rivet on every link, to seal out the abrasive materials that cause chain stretch. Giving you up to 50% more chain life than concrete cutting chains without SealPRO technology.



FORCE3™

Optimized for general-purpose cutting materials and common jobs.

FORCE3™ Premium

Built to tackle harder materials and heavier rebar. FORCE3™ Premium is a long-lasting general purpose diamond chain.

FORCE3™ Brick

A special diamond concentration and harder bond make this diamond chain perfect for cutting through highly abrasive aggregate like brick and sandstone.

PowerGrit®

Utilized by public and private water and wastewater departments worldwide, this patented platform exclusively from ICS is designed to cut a variety of materials from ductile iron to plastic pipe. Featuring a brazed layer diamond coating on our FORCE4 platform, this chain makes your job safer, faster and easier.



PowerGrit® Pipe Cutting Chain

The ICS Pipe cutting chain addresses operator safety with its revolutionary grinding technology which eliminates rotational kickback and improves operator positioning when cutting pipe. This patented platform, exclusively from ICS, is designed to cut a variety of materials from ductile iron to plastic pipe with far less excavation.

Hydraulic Hoses

Quick disconnect, 7,5m long, 20,6 bar.



PART NUMBER	DESCRIPTION
70466	7,5 m hoses

ICS® 2-Stroke Oil

Intensive laboratory and field testing have resulted in an oil formula that is cleaner burning, provides better thermal protection and an improved film barrier reducing piston ring wear. Protect your investment with work-proven ICS® 2-stroke Engine Oil.

50:1 Mix



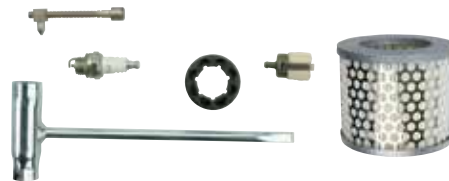
PART NUMBER	DESCRIPTION
571229	ICS 2 -Stroke Oil, 2%, 100 ml, 6-pack
571230	ICS 2 -Stroke Oil, 2%, 100 ml, 24-pack

Accessories

Whether it's making cuts straighter or job sites cleaner, there's an ICS® accessory that gets the job done. More than 25 years of experience a whole lot of ingenuity have gone into making these work-proven products indispensable complements to your ICS concrete or utility chain power cutter.

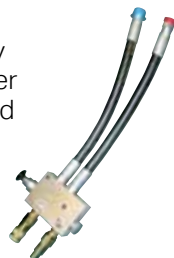
Replacement Parts

Visit your local dealer or see our website icsdiamondtools.com/customer-service-support/ for a complete listing of available parts.



Flow Adapter Valve

Enjoy the convenience and efficiency of powering your ICS® hydraulic power cutter from skid steers, backhoes, and other common construction equipment. Available for both 30 lpm and 45 lpm power cutters.



PART NUMBER	DESCRIPTION
70350	30 lpm Flow adapter valve
71287	45 lpm Flow adapter valve

Portable Water Supply

When water isn't readily available, this corrosion resistant water supply system, with tank provides the solution. This system offers the pressure and flow that ICS power cutters require. The High-Flo pump provides 1.8 gpm at 60 psi and comes with alligator clips for 12v battery hookup. Comes with a whip fitted with a standard hose end, ready for any regular hose.



PART NUMBER	DESCRIPTION
551529EU	Portable Water Supply

Portable Hydraulic Powerpack

ICS® petrol powered powerpacks are a dependable, self-contained source of hydraulic power that offer superior cooling capacity. The functional, ergonomic design makes them easily transportable to any job site.

P95 13.5 kW Powerpack

Adjustable for 20 lpm or 30 lpm operation.



PART NUMBER	DESCRIPTION
599653	P95 13.5 kW Powerpack

Looking for helpful tips and tricks?

Visit us on the web:

icsdiamondtools.com/pro-support

SpeedHook System

PART NUMBER	DESCRIPTION
528551	SpeedHook System includes 1 m rail & mounting bracket

Works with:
890F4 Series
701-A Series
880F4 Series
853PRO Series



ICS® Large Carry Case

Fits 890, 880 and 853PRO series.

PART NUMBER 71772



ICS® Transport Bag

Fits 680ES & 695XL

PART NUMBER 582025 & 582026



Looking for downloadable versions of our literature?

Visit us on the web:

icsdiamondtools.com

and click on the "support" tab

890F4/701-A Pipe Clamp

In addition to the time saving value of PowerGrit® technology, the pipe clamp accessory developed for the underground pipe application brings a whole new level of safety, accuracy and ease of use to the job. With a simple adaptor, you can mount to this clamp and dramatically reduce the effort of handling the power cutter, while providing a solid, stable cutting platform that also improves operator safety and the precision of the cut. Fits pipes up to 30 cm (outside diameter).

PART NUMBER	DESCRIPTION
537640	Pipe Clamp
537634	Axle replacement



FOR 890F4/701-A ONLY

Frequently Asked Questions



890 F4
Cutting stones to exact size during restoration of the Panthéon
Paris, France - 2015

WHEN DO I NEED TO REPLACE A CHAIN?

When the diamond segment has worn down to the welded pad on the chain chassis. Typically a chain will cut 12 - 24 linear meters in 15 cm concrete. On ICS hydraulic power cutter, this range is most often doubled.



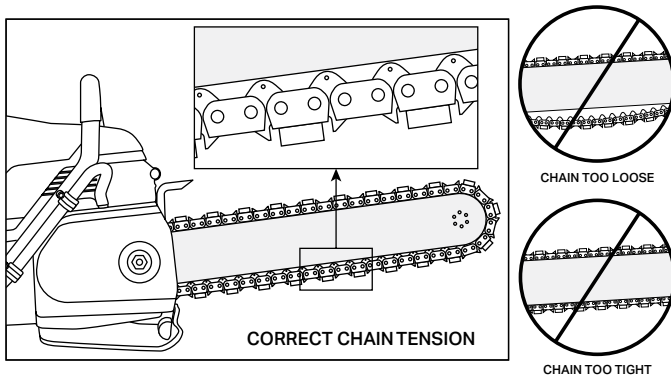
Worn FORCE4 chain



Worn PowerGRIT chain

WHAT IS THE PROPER CHAIN TENSION?

All chains have a tendency to stretch when used. Diamond chains stretch more than wood cutting chains because of the abrasive materials they cut. If the chain is too tight, a lot of the power cutter's power goes into turning the chain rather than the cut. In extreme over-tightened cases, the power cutter may not be able to turn the chain at all. In addition, damage can occur to the bar nose and premature stretch may occur.



If the chain is too loose, it could come off the bar, or it will allow the drive sprocket to spin without turning the chain, which can chew up drive links. When a chain stretches to a point where the drive links are hanging approximately 12 mm to 18 mm below the bar, it is time to tension the chain.

See ICS training videos for power cutter setup

REGARDING CUTTING PIPES THAT ARE FULL OF WATER...CAN I CUT INTO THE PIPE AND RELY ON THE WATER INSIDE TO COOL THE CHAINS (DIAMOND AND POWERGRIT)?

The cooling and lubrication for the chains needs to be delivered thru the power cutter/guidebar and therefore you must have a minimum of 1.5 gpm going through the power cutter.

CAN I POUR WATER ON THE CHAIN IF I DO NOT HAVE A WATER SOURCE DELIVERABLE THROUGH A HOSE?

The guidebar is designed with water channels that distribute water to the chain to lubricate and cool and also flush the chain of debris. Pouring water on the chain is not only dangerous, it will drastically increase chain stretch and reduce chain and bar life.

WHAT IS THE MIXTURE RATIO OF FUEL TO OIL

Consult your operator manual for the proper fuel to oil mix recommendation.

TO CUT CONCRETE, BRICK, BLOCK OR EVEN DUCTILE IRON PIPE. IS THE WATER REQUIREMENT DIFFERENT FOR THESE?

The water requirement for using the ICS Diamond Chain or the ICS Powergrit Chain to cut any of the above is the same however if you can use more water, especially when cutting abrasive things like brick and block, more water helps to add to longer chain and guidebar life because it is flushing the abrasive materials away.

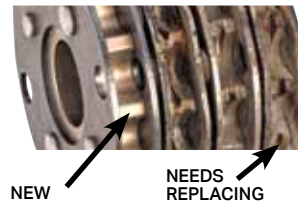
WHAT IF IT IS FREEZING OR BELOW FREEZING AND I CANNOT GET WATER TO MY POWER CUTTER BECAUSE THE HOSE OR POWER CUTTER IS FROZEN AND PLUGGED UP...CAN I MAKE MY CUT?

Water as previously stated is crucial to the performance of these chains. There are several different anti-freeze products you can use in this situation. Contact your regulatory agency for specific details.

WHEN DO I NEED TO REPLACE MY DRIVE SPROCKET?

Drive sprockets need to be replaced when the groove has worn 50% of the way through the top of the sprocket tooth. A rule of thumb for ICS petrol power cutters is every 2-4 chains and for ICS hydraulic power cutters, every 7-9 chains (depending on chain chassis).

HYDRAULIC



PETROL



CAN A DIAMOND CHAIN CUT REBAR?

Yes, number (12 or 16 mm) bar is not a problem. Anything over 25mm is difficult. Large amounts of rebar will reduce chain life. Caution: rebar must be surrounded by concrete or aggregate material.

WILL POWERGRIT CUT STEEL?

PowerGrit utility chain is designed to cut ductile iron pipe, cast iron pipe, HDPE and PVC.

WHAT IS THE BEST WAY TO BREAK IN A NEW CHAIN?

Opening up the diamonds will increase the cutting speed. To do this, make a few cuts into an abrasive material like cinder block.

WHAT STEPS SHOULD I TAKE DAILY TO MAINTAIN MY POWER CUTTER?

After each use, rinse the power cutter, bar and chain with water. Inspect all fasteners, sprocket, starter rope and air filter for wear. Oil the guidebar, diamond chain and bar nose sprocket and grease the chain tensioner.

For more information and to view instructional videos, please visit: icsdiamondtools.com.

Global ICS Bar Fit-Up Chart



CHAIN LIFE

SealPro® Patented O-Ring technology protects the rivet joints from abrasive slurry. This reduces water requirements and significantly increases chain chassis life.

1

SPECIAL ALLOY STEEL

ICS bars are made out of a special alloy steel to hold up to the harsh environment of concrete cutting. These are not wood cutting guidebars.

4



2

DRIVE SPROCKET LIFE

Positive contact between the chain drive links and the drive sprocket and nose sprocket reduces wear on chain components and drive sprocket teeth.

3

GUIDEBAR AND NOSE SPROCKET LIFE

Bypass channel milled into outer laminate provides water injection to the bearings inside the outer race. This provides lubrication, cooling and cleaning to prevent slurry and friction from damaging the bearings, resulting in longer life of the guidebar and nose sprocket.

PROTECTED BY:



Use the chart below to determine what ICS guidebar is compatible with your tool.

			680 Series	695 Series	890 Hydraulic	701-A Pneumatic	Pentrunder HF Power Cutter	814 Hydraulic	K950-K970	HCP Prime HF Chainsaw	Stihl® RockBoss®	Cardi	Cedima®	Dr. Bender	Demco	CS Unitec	Weka	Stanley	
3/8 pitch bars	71395	GUIDEBAR (80CC/29SEG/58DL/30CM)	X																
	513122	GUIDEBAR (80CC/32SEG/64DL/35CM)	X									X	X						
	553207	GUIDEBAR (90CC/29SEG/58DL/30CM)		X					X	X									
	73600	GUIDEBAR (90CC/32SEG/64DL/35CM)		X					X	X									
	71600	GUIDEBAR (90CC/35SEG/70DL/40CM)		X					X	X								X	
	560807	GUIDEBAR (32SEG/64DL/35CM) GS461										X							
	74042	GUIDEBAR (25SEG/50DL/33CM)						X											X
Petrol FORCE4 bars	579158	GUIDEBAR, 680PG	X																
	524490	GUIDEBAR F4(90CC/29SEG/54DL/40CM)		X						X					X				
	553208	GUIDEBAR F4(90CC/25SEG/50DL/30CM)		X						X									
FORCE4 Hydraulic and Air bars	529829	GUIDEBAR F4 (25SEG/50DL/25CM)			X	X	X						X	X		X			
	523080	GUIDEBAR F4 (29SEG/50DL/38CM)			X	X	X						X	X		X			
	529767	GUIDEBAR F4 (34SEG/50CM)			X	X	X						X	X		X			
	525320	GUIDEBAR F4 (40SEG/80DL/63CM)			X	X	X						X	X		X			

Part Numbers

680ES-GC PETROL POWER CUTTERS AND CONSUMABLES

PART NUMBER	DESCRIPTION
576155	ICS 680ES Powerhead
584291	ICS 680ES GC-12 Petrol Saw Package, with 30 cm Guidebar & FORCE3 Chain
584293	ICS 680ES GC-14 Petrol Saw Package, with 35 cm Guidebar & FORCE3 Chain
584290	ICS FORCE3-29, 30 cm chain
584297	ICS FORCE-29 Brick 30 cm chain
584298	ICS FORCE3-29 Premium 30 cm chain
71395	ICS 680GC Guidebar 30 cm/29 segments
584292	ICS FORCE3-32, 35 cm chain
584299	ICS FORCE3-32 Brick 35 cm chain
584302	ICS FORCE3-32 Premium 35 cm chain
513122	ICS 680GC Guidebar 35cm/32 segments
70949	ICS 680GC Drive Sprocket
73935	ICS 680ES Premium Tensioner Kit

Guidebars, chains and drive sprockets fit 613GC

680ES-PG PETROL POWER CUTTER AND CONSUMABLES

PART NUMBER	DESCRIPTION
580423	ICS 680ES PG-10 Petrol Saw Package with 25 cm FORCE4 guidebar, PowerGrit-25 chain
580424	ICS PowerGrit-25, 25 cm Chain
579158	ICS 680PG Guidebar 25 cm/25 segments
525496	ICS 680ES PowerGrit Drive Sprocket
73935	ICS 680ES Premium Tensioner Kit

Guidebars, chains and drive sprockets fit 613GC

814PRO HYDRAULIC POWER CUTTER AND CONSUMABLES

PART NUMBER	DESCRIPTION
75256	ICS 814PRO Powerhead 30 l/m
71675	ICS 814PRO Saw Package with 33 cm Guidebar & TwinPRO-25 Diamond Chain
74719	ICS TwinPRO-25, 33 cm chain
74042	ICS 814PRO Guidebar 33 cm/25 segments
71385	ICS 814PRO Drive Sprocket
74061	Tensioning Assembly

695XL-GC PETROL POWER CUTTERS AND CONSUMABLES

PART NUMBER	DESCRIPTION
575862	ICS 695XL GC Powerhead
584296	ICS 695XL GC-14 Petrol Saw Package, with 35 cm Guidebar & FORCE3-32 Chain
584300	ICS 695XL GC-16 Petrol Saw Package, with 40 cm Guidebar & FORCE3-35 Chain
584292	ICS FORCE3-32, 35 cm chain
584299	ICS FORCE3-32 Brick, 35 cm chain
584302	ICS FORCE3-32 Premium, 35 cm chain
73600	ICS 695GC Guidebar 35 cm/32 segments
584294	ICS FORCE3-35, 40 cm chain
584301	ICS FORCE3-35 Brick, 40 cm chain
584303	ICS FORCE3-35 Premium, 40 cm chain
71600	ICS 695GC Guidebar 40 cm/35 segments
70949	ICS 695GC Drive Sprocket
543904	ICS 695XL-GC Premium Tensioner Kit

Guidebars, chains and drive sprockets fit 633F4

695XL-F4/695XL-PG PETROL POWER CUTTERS AND CONSUMABLES

PART NUMBER	DESCRIPTION
575826	ICS 695XL F4 Powerhead
576151	ICS 695XL F4-12 Petrol Saw Package, with 30 cm FORCE4 Guidebar & ProFORCE-25 Chain
575872	ICS 695XL F4-16 Petrol Saw Package, with 40 cm FORCE4 Guidebar & ProFORCE-29 Chain
575827	ICS 695XL PG-16 Petrol Saw Package with 40 cm guidebar, PowerGrit-29 chain
531743	ICS ProFORCE-25, 30 cm chain
531745	ICS ProFORCE-25 Premium L 30 cm chain
531739	ICS ProFORCE-25 Premium S 30 cm chain
531747	ICS ProFORCE-25 Abrasive 30 cm chain
553208	ICS 695F4 Guidebar 30 cm/25 segments
525342	ICS ProFORCE-29, 40 cm chain
525343	ICS ProFORCE-29 Premium L 40 cm chain
531735	ICS ProFORCE-29 Premium S 40 cm chain
525344	ICS ProFORCE-29 Abrasive 40 cm chain
524490	ICS 695F4 Guidebar 40 cm/29 segments
537764	ICS PowerGrit-29, 40 cm Chain
524490	ICS 695F4 Guidebar 40 cm
525496	ICS 695F4 Drive Sprocket
543904	ICS 695XL - F4/PG Premium Tensioner Kit

Guidebars, chains and drive sprockets fit 633GC

Part Numbers

890F4 HYDRAULIC POWER CUTTERS AND CONSUMABLES

PART NUMBER	DESCRIPTION
566357	ICS 890F4 Powerhead 30 l/m, 30 cm hose whips
566356	ICS 890F4 Powerhead 30 l/m, 2.5 m hose whips
566353	ICS 890F4 Powerhead 45 l/m, 30 cm hose whips
566354	ICS 890F4 Powerhead 45 l/m, 2.5 m hose whips
566352	ICS 890F4-FL Powerhead 30 l/m, 30 cm hose whips
566350	ICS 890F4-FL Powerhead 30 l/m, 2.5 m hose whips
566127	ICS 890F4-15 Saw Package 30 l/m with 38 cm Guidebar, ProFORCE-29 chain, 30 cm hose whips, case
566123	ICS 890PG-15 Saw Package with 38 cm Guidebar, PowerGrit-29 chain
531743	ICS FORCE4-25 chain 25 cm
531745	ICS FORCE4-25 Premium L chain 25 cm
531739	ICS FORCE4-25 Premium S chain 25 cm
531747	ICS FORCE4-25 Abrasive chain 25 cm
529829	ICS 890F4 Guidebar 25 cm
525342	ICS FORCE4-29 chain 38 cm
525343	ICS FORCE4-29 Premium L chain 38 cm
531735	ICS FORCE4-29 Premium S chain 38 cm
525344	ICS FORCE4-29 Abrasive chain 38 cm
537764	ICS PowerGrit Chain 38 cm
523080	ICS 890F4 Guidebar 38 cm
531749	ICS FORCE4-34 chain 50 cm
531751	ICS FORCE4-34 Premium L chain 50 cm
531741	ICS FORCE4-34 Premium S chain 50 cm
531753	ICS FORCE4-34 Abrasive chain 50 cm
537765	ICS PowerGrit Chain 50 cm
529767	ICS 890F4 Guidebar 50 cm
525345	ICS FORCE4-40 chain 63 cm
525346	ICS FORCE4-40 Premium L chain 63 cm
531737	ICS FORCE4-40 Premium S chain 63 cm
525347	ICS FORCE4-40 Abrasive chain 63 cm
545017	ICS PowerGrit Chain 63 cm
525320	ICS 890F4 Guidebar 63 cm
565065	ICS 890F4 Drive Sprocket
565066	ICS 890F4-FLUSH Drive Sprocket
70636	890F4 Tensioner Kit
523946	890F4-FL Tensioner Kit

701-A PNEUMATIC POWER CUTTER AND CONSUMABLES

PART NUMBER	DESCRIPTION
573511	ICS 701-A Powerhead
574173	ICS 701-A F4-15 Pneumatic Saw Package with 38cm guidebar, ProFORCE-29 chain
531743	ICS FORCE4-25 chain 25 cm
531745	ICS FORCE4-25 Premium L chain 25 cm
531739	ICS FORCE4-25 Premium S chain 25 cm
531747	ICS FORCE4-25 Abrasive chain 25 cm
529829	ICS 701-A Guidebar 25 cm
525342	ICS FORCE4-29 chain 38 cm
525343	ICS FORCE4-29 Premium L chain 38 cm
531735	ICS FORCE4-29 Premium S chain 38 cm
525344	ICS FORCE4-29 Abrasive chain 38 cm
537764	ICS PowerGrit Chain 38 cm
523080	ICS 701-A Guidebar 38 cm
531749	ICS FORCE4-34 chain 50 cm
531751	ICS FORCE4-34 Premium L chain 50 cm
531741	ICS FORCE4-34 Premium S chain 50 cm
531753	ICS FORCE4-34 Abrasive chain 50 cm
537765	ICS PowerGrit Chain 50 cm
529767	ICS 701-A Guidebar 50 cm
525345	ICS FORCE4-40 chain 63 cm
525346	ICS FORCE4-40 Premium L chain 63 cm
531737	ICS FORCE4-40 Premium S chain 63 cm
525347	ICS FORCE4-40 Abrasive chain 63 cm
545017	ICS PowerGrit Chain 63 cm
525320	ICS 701-A Guidebar 63 cm
565065	ICS 701-A Drive Sprocket
575013	Airpac, pneumatic saw oiler
575130	Oiler, with hose whip 3/4 x 6ft.
70636	Tensioner Kit

Guidebars, chains and drive sprockets fit 880F4



Diamond Tools and Equipment

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