



Diamond Tools and Equipment

You're hard working, tough driving - you have true grit, you are full of moxie, fortitude and tenacity. The growl of a saw gets your blood pumping and heart racing. Your go-to phrase is "Try Me". Nothing, and I mean *nothing* gives you more pleasure than being underestimated.

At ICS, we know you don't have the time for tools that are just "good enough". Your tools had better not just show up, but measure up. Like you, we believe there are no substitutes for hard work and absolutely no shortcuts to getting the job done right. All our products are designed, engineered and manufactured for you to outwork your competition, outlast the toughest jobs, and out perform any challenge.

We have been the leader in chain based concrete and pipe cutting solutions for over 30 years. Our concrete cutting diamond chains are designed and manufactured in Portland, Oregon, using the best in global materials. Our patented SealPro® 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 significantly lower risk than conventional cutoff saws.

ICS chain, coupled with our best-in-class guidebars and powerheads gives you a cutting system that can plunge cut up to 63 cm deep. Our system also allows you to cut precise openings and clean, square corners with no overcuts. All our powerheads are designed for wet cutting and have integrated water delivery systems that reduce airborne particles during the cut.

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icsdiamondtools.com

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SealPRO® Technology

here are many jobs that only an ICS power cutter can do. And for those jobs, only ICS includes patented SealPRO 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. Our diamond segments are laser-welded to a steel chassis so that you can cut through concrete, stone and masonry with precision and speed.

We know the challenges you face and understand the importance of investing in the right tools.





695XL - PETROL POWER

4.8 kW horsepower 94 cc displacement 1.4 bar water supply 8 lpm water flow 50:1 (2%) fuel mix



695XL - GC

Operates FORCE3 diamond chains:

Standard - fast cutting, economical Abrasive - excels in abrasive materials Premium - for heavy aggregate & rebar 35 cm & 40 cm lengths available

695XL - F4

Operates FORCE4 diamond chains:

Standard - general purpose
Premium L - delivers longer life
Premium S - speed
Abrasive - excels in abrasive materials
Texas Chain - optimized for hard materials
CrossLINK - faster cuts, smoother handling
Sandwich - improved cut straightness

30 cm, 40 cm & 50 cm lengths available

	695XL - GC PETROL POWER
P/N	Description
581192	ICS 695XL GC Powerhead
584296	ICS 695XL-14 GC Petrol Power Cutter Pkg, with 35 cm Guidebar & FORCE3 Chain
584300	ICS 695XL-16 GC Petrol Power Cutter Pkg, with 40 cm Guidebar & FORCE3 Chain
584292	ICS FORCE3 chain 35 cm
584294	ICS FORCE3 chain 40 cm
584302	ICS FORCE3 Premium chain 35 cm
584303	ICS FORCE3 Premium chain 40 cm
584299	ICS FORCE3 Brick chain 35 cm
584301	ICS FORCE3 Brick chain 40 cm
73600	ICS 695GC Guidebar 35 cm
71600	ICS 695GC Guidebar 40 cm
70949	ICS Drive Sprocket for 695XL-GC Series

	695XL-F4 PETROL POWER
575826	ICS 695XL F4 Powerhead
576151	ICS 695XL-12 F4 Petrol Power Cutter Pkg, with 30 cm FORCE4 Guidebar & FORCE4 Chain
575872	ICS 695XL-16 F4 Petrol Power Cutter Pkg with 40 cm FORCE4 Guidebar & FORCE4 Chain
531743	ICS FORCE4-25 chain 30 cm
525342	ICS FORCE4-29 chain 40 cm
5317 <mark>4</mark> 9	ICS FORCE4-34 chain 50 cm
5317 <mark>4</mark> 5	ICS FORCE4-25 Premium L chain 30 cm
525343	ICS FORCE4-29 Premium L chain 40 cm
525351	ICS FORCE4-34 Premium L chain 50 cm
531739	ICS FORCE4-25 Premium S chain 30 cm
531735	ICS FORCE4-29 Premium S chain 40 cm
531741	ICS FORCE4-34 Premium S chain 50 cm
531747	ICS FORCE4-25 Abrasive chain 30 cm
525344	ICS FORCE4-29 Abrasive chain 40 cm
531753	ICS FORCE4-34 Abrasive chain 50 cm
599881	ICS FORCE4-50 Cross-LINK chain 30 cm
599882	ICS FORCE4-58 Cross-LINK chain 40 cm
599883	ICS FORCE4-68 Cross-LINK chain 50 cm
605443	ICS FORCE4-25 Sandwich Segment chain 30 cm
605414	ICS FORCE4-29 Sandwich Segment chain 40 cm
605400	ICS FORCE4-34 Sandwich Segment chain 50 cm
598280	ICS FORCE4-25 Texas Edition chain 30 cm
598281	ICS FORCE4-29 Texas Edition chain 40 cm
598282	ICS FORCE4-34 Texas Edition chain 50 cm
553208	ICS 695F4 Guidebar 30 cm
524490	ICS 695F4 Guidebar 40 cm
626485	ICS 695F4 Guidebar 50 cm
525496	ICS Drive Sprocket for 695XL-F4 Series



680ES - PETROL POWER

3.7 kW horsepower 76.5 cc displacement 1.4 bar water supply 8 lpm water flow 50:1 (2%) fuel mix

680ES-GC

Operates FORCE3 diamond chains:

Standard - fast cutting, economical Abrasive - excels in abrasive materials Premium - for heavy aggregate & rebar

30 cm & 35 cm lengths available

Concrete Cutting Chains, Guidebars & Drive Sprockets pages 8-10

Pipe Cutting Chains, Guidebars & Drive Sprockets page14

	680ES-GC PETROL POWER
576155	ICS 680ES Powerhead
576154	ICS 680ES-12 GC Petrol Power Cutter Pkg, with 12 in/30 cm Guidebar & FORCE3 Chain
576153	ICS 680ES-14 GC Petrol Power Cutter Pkg, with 14 in/35 cm Guidebar & FORCE3 Chain
584290	ICS FORCE3 chain 30 cm
584292	ICS FORCE3 chain 35 cm
584297	ICS FORCE3 Brick chain 30 cm
584299	ICS FORCE3 Brick chain 35 cm
584298	ICS FORCE3 Premium chain 30 cm
584302	ICS FORCE3 Premium chain 35 cm
71395	ICS 680GC Guidebar 30 cm
513122	ICS 680GC Guidebar35 cm
70949	ICS Drive Sprocket for 680ES-GC Series













890F4

Operates FORCE4 diamond chains:

Standard - general purpose
Premium L - delivers longer life
Premium S - speed & efficiency
Abrasive - exels in abrasive materials
Texas Chain - optimized for hard materials
CrossLINK - faster cuts, smoother handling
Sandwich - improved cut straightness

25 cm, 38 cm, 50 cm, 63 cm lengths available

890F4 FLUSH

Operates FORCE4 diamond chains:

Standard - general purpose
Premium L - delivers longer life
Premium S - speed & efficiency
Abrasive - excels in abrasive materials
Texas Chain - optimized for hard materials
CrossLINK - faster cuts, smoother handling
Sandwich - improved cut straightness

25 cm, 38 cm, 50 cm & 63 cm lengths available

	890F4 HYDRAULIC POWER
P/N	Description
566110	ICS 890F4 Hydraulic Powerhead 30 lpm, 30 cm hose whips
566355	ICS 890F4 Hydraulic Powerhead 30 lpm, 2.5m hose whips
566112	ICS 890F4 Hydraulic Powerhead 45 Ipm, 30 cm hose whips
566116	ICS 890F4 Hydraulic Powerhead 45 lpm, 2.5m hose whips

	890F4 FLUSH HYDRAULIC POWER
P/N	Description
566113	ICS 890F4 Hydraulic Flush Cut Powerhead 30 lpm, 30 cm hose whips
566351	ICS 890F4 Hydraulic Flush Cut Powerhead 30 lpm, 2.5m hose whips
566114	ICS 890F4 Hydraulic Flush Cut Powerhead 45 lpm, 30 cm hose whips
566117	ICS 890F4 Hydraulic Flush Cut Powerhead 45 lpm, 2.5m hose whips

890F4 - HYDRAULIC POWER 30lpm

4.6 kW horsepower

9.6 Nm torque

172.5 bar hydraulic supply

1.4 bar water supply

8 lpm water flow

890F4 - HYDRAULIC POWER 45lpm

6.0 kW horsepower 13.5 Nm torque

172.5 bar hydraulic supply

1.4 bar water supply

8 lpm water flow

Concrete Cutting Chains, Guidebars & Drive Sprockets pages 8-10

Pipe Cutting Chains, Guidebars & Drive Sprockets page 14



701-A

P/N

573511

Operates FORCE4 diamond chains:

Standard - general purpose
Premium L - delivers longer life
Premium S - speed & efficiency
Abrasive - excels in abrasive materials
Texas Chain - optimized for hard materials
CrossLINK - faster cuts, smoother handling
Sandwich - improved cut straightness

25 cm, 38 cm, 50 cm, 63 cm lengths available

701-A	PNEUMATI	C POWER	

701-A PNEUMATIC POWER

ICS 701-A Powerhead, pneumatic

5 kW horsepower 6 bar 3.5m³/min air supply requirements 1.4 bar water supply

8 lpm water flow

Description

701-/	A & 890F4 DIAMOND CHAIN, BARS, SPROCKETS
P/N	Description
531743	ICS FORCE4-25 chain 25 cm
525342	ICS FORCE4-29 chain 38 cm
531749	ICS FORCE4-34 chain 50 cm
525345	ICS FORCE4-40 chain 63 cm
531745	ICS FORCE4-25 Premium L chain 25 cm
525343	ICS FORCE4-29 Premium L chain 38 cm
531751	ICS FORCE4-34 Premium L chain 50 cm
525346	ICS FORCE4-40 Premium L chain 63 cm
531739	ICS FORCE4-25 Premium S chain 25 cm
531735	ICS FORCE4-29 Premium S chain 38 cm
531741	ICS FORCE4-34 Premium S chain 50 cm
531737	ICS FORCE4-40 Premium S chain 63 cm
531747	ICS FORCE4-25 Abrasive chain 25 cm
525344	ICS FORCE4-29 Abrasive chain 38 cm
531753	ICS FORCE4-34 Abrasive chain 50 cm
525347	ICS FORCE4-40 Abrasive chain 63 cm
599881	ICS FORCE4-50 Cross-LINK chain 25 cm
599882	ICS FORCE4-58 Cross-LINK chain 38 cm
599883	ICS FORCE4-68 Cross-LINK chain 50 cm
599884	ICS FORCE4-80 Cross-LINK chain 63 cm
605443	ICS FORCE4-25 Sandwich Segment chain 25 cm
605414	ICS FORCE4-29 Sandwich Segment chain 38 cm
605400	ICS FORCE4-34 Sandwich Segment chain 50 cm
605399	ICS FORCE4-40 Sandwich Segment chain 63 cm
598280	ICS FORCE4-25 Texas Edition chain 25 cm
598281	ICS FORCE4-29 Texas Edition chain 38 cm
598282	ICS FORCE4-34 Texas Edition chain 50 cm
598283	ICS FORCE4-40 Texas Edition chain 63 cm
529829	ICS Force4 Guidebar 25 cm
523080	ICS Force4 Guidebar 38 cm
529767	ICS Force4 Guidebar 50 cm
525320	ICS Force4 Guidebar 63 cm
565065	ICS Drive Sprocket - fits 890F4 & 701-A saws
565066	ICS Drive Sprocket - fits all 890F4-FL saws



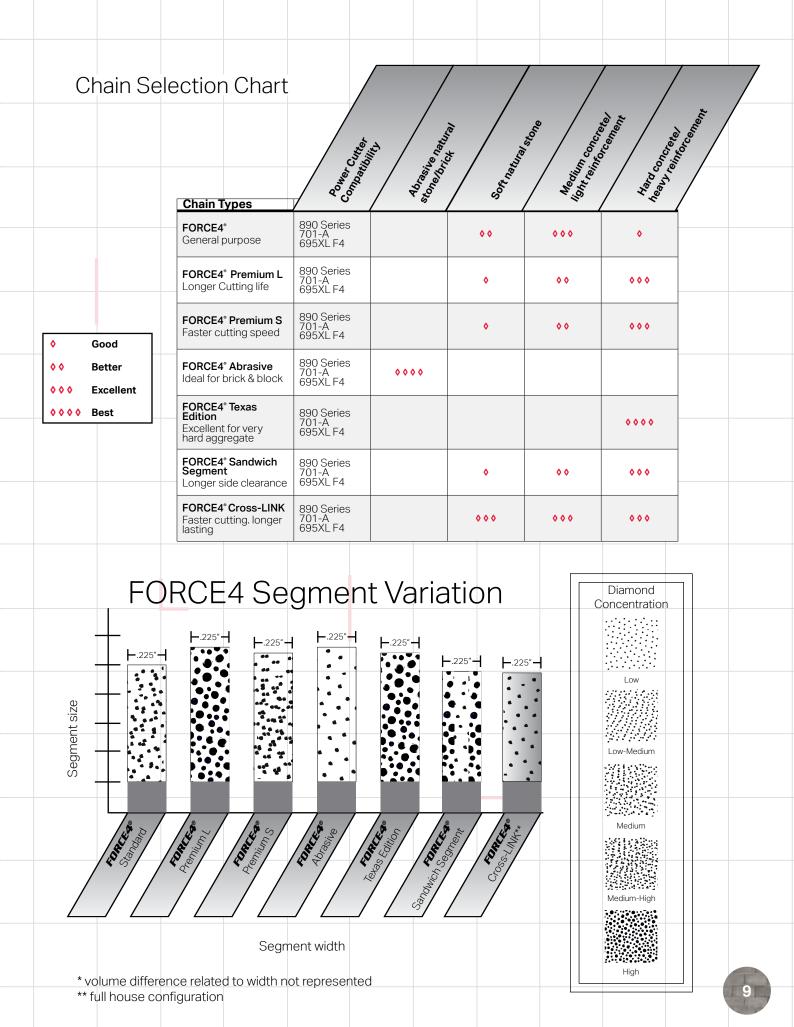
Designed to be the strongest, longest-lasting diamond chains ever made, the FORCE4 series delivers unrivaled performance in professional cutting applications. With eight different configurations, there is a FORCE4 chain to meet any cutting challenge.

Cross-LINK	Faster cuts, smoother handling, longer life
FORCE4 Standard	Tough, general purpose diamond chain
FORCE4 Premium L	Delivers longer life in hard aggregate
FORCE4 Premium S	Speed & efficiency in one diamond chain
FORCE4 Abrasive	Excels in the abrasive cutting environments
FORCE4 Sandwich	Improved cut straightness and longer side clearance
FORCE4 Texas Edition	Optimized for very hard materials



		695XL FORCE4 GUIDEBARS	
	553208	ICS 695F4 Guidebar 30 cm	
	524490	ICS 695F4 Guidebar 40 cm	
	626485	ICS 695F4 Guidebar 50 cm	
	695XL FORCE4 DRIVE SPROCKET		
[525496	ICS 695XL FORCE4 Drive Sprocket	

890 & 701-A FORCE4 GUIDEBARS		
529829	ICS Force4 Guidebar 25 cm	
523080	ICS Force4 Guidebar 38 cm	
529767	ICS Force4 Guidebar 50 cm	
525320	ICS Force4 Guidebar 63 cm	
890 & 701-A FORCE4 DRIVE SPROCKETS		
565065	ICS 890 & 701-A FORCE4 Drive Sprocket	
565066	ICS 890 FLUSH FORCE4 Drive Sprocket	





Designed to be used with the full line of ICS petrol power cutters, these chains offer the ultimate combination of versatility and affordability. Available in three configurations to match your specific application and cutting challenges.

FORCE3
Standard
<u>. </u>

Fast cutting, economical chain for everyday use

FORCE3
Premium



Best chain to cut harder aggregates and heavy rebar

FORCE3
Brick



Larger segments for longer life.

Best for cutting brick,

block and more

680ES FORCE3 GUIDEBARS					
71395		ICS 680GC Guidebar 30 cm			
513122		ICS 680GC Guidebar 35 cm			
	695XL FORCE3 GUIDEBARS				
73600		ICS 695GC Guidebar 35 cm			
71600		ICS 695GC Guidebar 40 cm			
680ES/695XL FORCE3 DRIVE SPROCKET					
70949		Fits 680, and 695 Petrol Saws	_		









Chain Selection Chart

I	◊	Good
ı	◊ ◊	Better
	◊◊◊	Excellent
ı	◊◊◊◊	Best
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Mediun concrete

Hard Concreted

Gerierai purpose
FORCE3® Premium For harder materials

FORCE3®



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FORCE3® Brick Ideal for brick & block 680ES GC 695XL GC

680ES GC 695XL GC

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APPLICATIONS

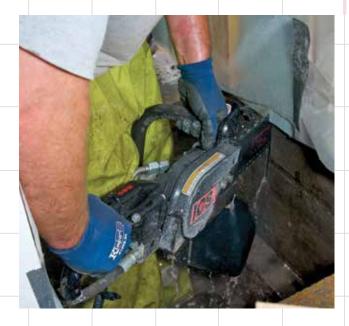






CONCRETE CUTTING

Cut through foundations and create egress windows from one side with no overcuts. Plunge straight into thick walled concrete, and create small openings with no overcuts. The depth-of-cut possible with a concrete power cutter makes curb cuts possible without damaging surrounding materials. From precision vent or window installations to controlled demolition, our ICS power cutter is one of the most versatile tools on the job site.









695XL-F4

Operates PowerGrit & PowerGrit XL chains 30 cm, 40 cm & 50 cm lengths available

680ES-PG

Operates PowerGrit & PowerGrit XL chains 25 cm length available

	695XL-F4 PETROL POWER
P/N	Description
575826	ICS 695XL F4 Powerhead
575827	ICS 695XL-16 PG Petrol Power Cutter Pkg with 40 cm FORCE4 Guidebar & PowerGrit Chain
547641	ICS PowerGrit Chain 30 cm
537764	ICS PowerGrit Chain 40 cm
537765	ICS PowerGrit Chain 50 cm
608233	ICS PowerGrit XL Chain 30 cm
607664	ICS PowerGrit XL Chain 40 cm
608216	ICS PowerGrit XL Chain 50 cm
553208	ICS 695F4 Guidebar 30 cm
524490	ICS 695F4 Guidebar 40 cm
626485	ICS 695F4 Guidebar 50 cm
525496	ICS Drive Sprocket for 695XL-F4 Series
524490 626485	ICS 695F4 Guidebar 40 cm ICS 695F4 Guidebar 50 cm

	680ES-GC PETROL POWER
580423	ICS 680ES-10 PG Petrol Power Cutter Pkg, with 25 cm Guidebar & PowerGrit Chain
580424	ICS 680 PowerGrit Chain 25 cm (48 drive links)
608234	ICS 680 PowerGrit XL chain 25cm (48 drive links)
579158	ICS 680 PowerGrit Guidebar 25 cm
525496	ICS Drive Sprocket for 680ES-PG Series

680ES - PETROL POWER

3.7 kW horsepower 76.5 cc displacement 1.4 bar water supply 8 lpm water flow 50:1 (2%) fuel mix

695XL - PETROL POWER

4.8 kW horsepower 94 cc displacement 1.4 bar water supply 8 lpm water flow 50:1 (2%) fuel mix



890F4 & 890F4 FLUSH

Operates PowerGrit & PowerGrit XL chains 25 cm, 38 cm, 50 cm & 63 cm lengths available

900E4 HV	DRAULIC POWER CUTTERS AND CONSUMABLES			
890 F4 HYDRAULIC POWER COTTERS AND CONSUMABLES				
P/N	Description			
P/N				
566110	ICS 890F4 Hydraulic Powerhead 30 lpm, 30 cm hose whips			
566355	ICS 890F4 Hydraulic Powerhead 30 lpm, 2.5m hose whips			
566112	ICS 890F4 Hydraulic Powerhead 45 lpm, 30 cm hose whips			
566116	ICS 890F4 Hydraulic Powerhead 45 lpm, 2.5m hose whips			
566113	ICS 890F4 Hydraulic Flush Cut Powerhead 30 lpm, 30 cm hose whips			
566351	ICS 890F4 Hydraulic Flush Cut Powerhead 30 lpm, 2.5m hose whips			
566114	ICS 890F4 Hydraulic Flush Cut Powerhead 45 lpm, 30 cm hose whips			
566117	ICS 890F4 Hydraulic Flush Cut Powerhead 45 lpm, 2.5m hose whips			
89	0 F4 POWERGRIT PIPE CUTTING CONSUMABLES			
547641	ICS PowerGrit Chain 25 cm			
537764	ICS PowerGrit Chain 38 cm			
537765	ICS PowerGrit Chain 50 cm			
545017	ICS PowerGrit Chain 63 cm			
608233	ICS PowerGrit XL Chain 25 cm			
607664	ICS PowerGrit XL Chain 38 cm			
608216	ICS PowerGrit XLChain 50 cm			
608215	ICS PowerGrit XL Chain 63 cm			
529829	ICS Force4 Guidebar 25 cm			
523080	ICS Force4 Guidebar 38 cm			
529767	ICS Force4 Guidebar 50 cm			
525320	ICS Force4 Guidebar 63 cm			
565065	ICS 890 FORCE4 Drive Sprocket			
565066	ICS 890 FLUSH FORCE4 Drive Sprocket			

890F4 - HYDRAULIC POWER 30 lpm/45 lpm

4,6 kW horsepower/6 kW horsepower
9.6 Nm torque/13.5 Nm torque
172.5 bar hydraulic supply
1.4 bar water supply
8 lpm water flow



701-A

Operates PowerGrit & PowerGrit XL chains 25 cm, 38 cm, 50 cm & 63 cm lengths available

	701-A PNEUMATIC POWER CUTTERS
P/N	Description
573511	ICS 701-A Powerhead, pneumatic
70	1-A POWERGRIT PIPE CUTTING CONSUMABLES
547641	ICS PowerGrit Chain 25 cm
537764	ICS PowerGrit Chain 38 cm
537765	ICS PowerGrit Chain 50 cm
545017	ICS PowerGrit Chain 63 cm
608233	ICS PowerGrit XL Chain 25 cm
607664	ICS PowerGrit XL Chain 38 cm
608216	ICS PowerGrit XLChain 50 cm
608215	ICS PowerGrit XL Chain 63 cm
529829	ICS Force4 Guidebar 25 cm
523080	ICS Force4 Guidebar 38 cm
529767	ICS Force4 Guidebar 50 cm
525320	ICS Force4 Guidebar 63 cm
565065	ICS 890 FORCE4 Drive Sprocket

701-A PNEUMATIC POWER

5 kW horsepower

6 bar 3.5m³/min air supply requirements

1.4 bar water supply

8 lpm water flow





Utilized by public and private water and wastewater departments worldwide, this patented technology 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



Designed to cut ductile iron, cast iron and more

PowerGrit XL



Specifically designed to cut high-density polyethylene (HDPE)

Good

Better

Excellent

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	680ES FORCE4 GUIDEBARS	
579158	ICS 680 PowerGrit Guidebar 25 cm	
(680ES FORCE4 DRIVE SPROCKET	
525496	ICS Drive Sprocket for 680ES-PG Series	
	695XL FORCE4 GUIDEBARS	
553208	ICS 695F4 Guidebar 30 cm	
524490	ICS 695F4 Guidebar 40 cm	
626485	ICS 695F4 Guidebar 50 cm	
6	695XL FORCE4 DRIVE SPROCKET	
525496	ICS 695XL FORCE4 Drive Sprocket	

	8	890 & 701	I-A FORCE4	GUIDEBARS	
52982	9	ICS Ford	e4 Guidebar	25 cm	
52308	0	ICS Ford	e4 Guidebar	38 cm	
52976	7	ICS Ford	e4 Guidebar	50 cm	
52532	0	ICS Ford	e4 Guidebar	63 cm	
890 & 701-A FORCE4 DRIVE SPROCKETS					
56506	5	ICS 890	& 701-A FOR	CE4 Drive Sp	orocket
56506	6	ICS 890	FLUSH FOR	CE4 Drive Sp	ocket





Chain Selection Chart

i	on C	Chart			Comos Curies	Ductile rom Case	2014 300H	
	PowerGrit* 890 Series 701-A 695XL PG 680ES PG		⋄⋄⋄					
	PowerG Improve in utility	rit° XL d performano pipe	е	890 Serie 701-A 695XL PC 680ES PC	3	***	**	

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.



APPLICATIONS







PIPE CUTTING

Our pipe cutting power cutter addresses operator safety with revolutionary grinding technology, virtually eliminating rotational kickback and improving operator positioning. Utilized by public water, private water and wastewater departments worldwide. The patented technology, 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 63 cm pipe completely from one side radically reduces the difficulty of the job. Complete your next job safer, faster and easier.





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 40 - 80 linear feet (12 - 24m) in 15 cm concrete. On ICS hydraulic power cutter, this range is most often doubled.



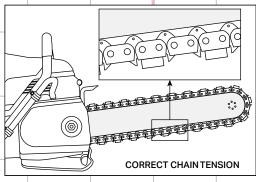


Worn FORCE4 chain

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 hose 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 1.4 bar going through the power

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.

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.

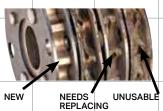
WHAT IF IT IS FREEZING OR BELOW FREEZING AND I CANNOT GET WATER TO MY POWER CUTTER BECAUSE THE HOSE OR POWER CUTTER IS FROZEN AND PLUGGED UP...CAN I MAKE MY CUT?

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 the ICS gas power cutters, is every 2-4 chains and for the ICS hydraulic power cutters, is every 7-9 chains (depending on chain chassis).

HYDRAULIC





CAN A DIAMOND CHAIN CUT REBAR?

Yes, 12 or 16 mm bar is not a problem. Anything over 25 mm 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 pipe cutting chain is designed to cut ductile iron pipe, cast iron pipe, HDPE and PVC.

WHAT IS THE MIXTURE RATIO OF FUEL TO OIL?

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

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.

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.

For more information and to view instructional videos, please visit: ICSDIAMONDTOOLS.COM.

ICS ACCESSORIES

Hydraulic Powerpack

A self-contained source of hyrdraulic power that is easily transported to any job site.



PART NUMBER	DESCRIPTION			
599653	P95 POWERPACK			

An oil formula that is cleaner burning, and provides better thermal protection.

ICS 2-Stroke Oil

50:1 (2%) Mix



PART NUMBER	DESCRIPTION				
571229	OIL - 6-PACK 100 ml				

Hydraulic Hoses

Quick disconnect, 7.5m long (25 ft), 3000psi.



PART NUMBER	DESCRIPTION				
70466	HYDRAULIC HOSES				

Pipe Clamp

The pipe clamp accessory developed for pipe application brings a new level of safety, accuracy and ease of use to the job.

Works with: 890F4 Series 701-A Series



PART NUMBER	DESCRIPTION			
537640	PIPE CLAMP			
537634	PIPE CLAMP AXLE			

Flow Adapter Valve

Power your ICS hydraulic power cutter from skid steers, backhoes, and other common construction equipment.



PART NUMBER	DESCRIPTION				
70350	FLOW ADAPTOR 30 lpm (8gpm)				
71287	FLOW ADAPTOR 45 lpm (12gpm)				

ICS Gearbags

Available in 2 sizes.

Small size fits an assembled 695XL with up to a 35cm guidebar



PART NUMBER	DESCRIPTION			
582025	SMALL GEARBAG			
582026	LARGE GEARBAG			

GLOBAL ICS FIT-UP CHART

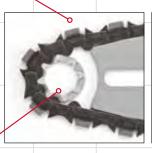


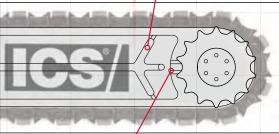
CHAIN LIFE

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

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.





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.

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.

				ICS 680ES	ICS 695XL	ICS 890F4/FL	ICS 701-A	Pentruder CWF630 HF	ICS 814PRO	Husqvarna® K 970 Chain	Husqvarna® K 6500/7000 Chain (Prime)	Stihl® GS 461 Rock Boss®	Cardi CD35	Dr. Bender Espada 400	CS Unitec	Weka TK40	Stanley® DS06	AGP CS11
	ch)	621540	GUIDEBAR (25SEG/50DL/25CM)	Χ									Χ					
	3-Pit	71395	GUIDEBAR (80CC/29SEG/58DL/30CM)	Х									Χ					
	3/8	513122	GUIDEBAR (80CC/32SEG/64DL/35CM)	Х									Χ					
-	FORCE3® Guidebars (3/8-Pitch)	553207	GUIDEBAR (90CC/29SEG/58DL/30CM)		Х					Х	Χ					Χ		
		73600	GUIDEBAR (90CC/32SEG/64DL/35CM)		Х					Х	Χ					Χ		
		71600	GUIDEBAR (90CC/35SEG/70DL/40CM)		Х					Х	Χ					Χ		
		560807	GUIDEBAR (32SEG/64DL/35CM) GS 461									Χ						
		74042	GUIDEBAR (25SEG/50DL/33CM)						Χ								Χ	Χ
		579158	GUIDEBAR, 680PG (80CC/48DL/25CM)	Х														
	itch)	553208	GUIDEBAR F4 (90CC/25SEG/50DL/30CM)		Х					Х	Х					Χ		
	s (.444-Pitch)	524490	GUIDEBAR F4 (90CC/29SEG/54DL/40CM)		Х					Х	Χ					Χ		
Jars (.4	bars (.₄	626485	GUIDEBAR F4 (90CC/34SEG/68DL/50CM)		Х					Х	Х					X		
	uide	529829	GUIDEBAR F4 (25SEG/50DL/25CM)			Х	Х	Х						Х	X			
	FORCE4® Guidebar	523080	GUIDEBAR F4 (29SEG/58DL/38CM)			Х	Х	Χ						X	X			
	FOR	529767	GUIDEBAR F4 (34SEG/68DL/50CM)			Х	Х	Χ						X	X			
		525320	GUIDEBAR F4 (40SEG/80DL/63CM)			Х	Х	Х						Χ	X			
		525320	GUIDEBAR F4 (40SEG/80DL/63CM)			Х	X	Χ						Χ	X			

TECHNICAL SPECIFICATIONS

695XL TECHNICAL SPECIFICATIONS

Bar Cutting Depth	PowerGrit/PowerGrit XL 30cm, 40cm FORCE3 30cm, 35cm, 40cm FORCE4 30cm, 40cm					
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/s² (K=0.2 m/s²) Front Handle 3.1 m/s² (K=0.2 m/s²) Rear Handle					
Vibration, a hv, eq Pipe Cutting (2)	5.62 m/s² (K=0.2 m/s²) Front Handle 5.28 m/s² (K=0.2 m/s²) 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 ISO19432:201

680ES TECHNICAL SPECIFICATIONS

Bar Cutting Depth	FORCE3 30cm, 35cm PowerGrit/PowerGrit XL 25cm
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/s² (K=1.0 m/s²) Front Handle 8.5 m/s² (K=1.0 m/s²) 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

TECHNICAL SPECIFICATIONS

890F4 TECHNICAL SPECIFICATIONS

	30 lpm	45 lpm					
Bar Cutting Depth	FORCE4 & PowerGrit/PowerGrit XL 25 cm, 38 cm, 50 cm, 63 cm						
Powerhead Weight (1'hose whips)	10.6 kg						
Length	58.5	5 cm					
Height	26.5	5 cm					
Width	24	cm					
Hydraulic Supply	30 lpm @ 172.5 bar	45 lpm @ 172.5 bar					
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)*	4.5 kW	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)		n/s²) Front Handle n/s²) Rear Handle					
Vibration a _{hv, eq} PowerGrit Cutting (3)	4.6 m/s² (K=0.1 m/s²) Front Hand 4.8 m/s² (K=0.3 m/s²) Rear Hand						

(1)Measured using 18HP hydraulic power pack 30 lpm and 23HP hydraulic power pack 45 lpm at 138 bar. (2) Measured in accordance with ISO3744:2010 (3) Measured in accordance with ISO5349-1:2001

701-A TECHNICAL SPECIFICATIONS

Bar Cutting Depth	FORCE4 & PowerGrit/PowerGrit XL 25 cm, 38 cm, 50 cm, 63 cm					
Powerhead Weight	13 kg					
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 m³/min)					
Motor lubrication	Resin and acid-free SAE 5 W to SAE 10 W oil					
Water Supply Requirements	Minimum: 1.4 bar					
Water Flow	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/s² (K=0.2 m/s²) Rear handle: 5.07 m/s² (K=0.2 m/s²)					
Vibration ahv, eq PowerGrit Cutting (2)	Front handle: 4.58 m/s² (K=0.2 m/s²) Rear handle: 4.43 m/s² (K=0.2 m/s²)					
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

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

CHOOSE ICS DIAMOND CHAIN

FORCE4®

From the company that revolutionized concrete power cutters comes a revolution in diamond chains: FORCE4*.

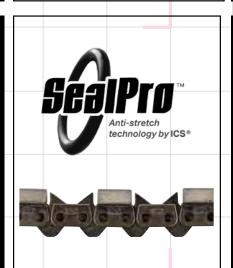
Designed to be the strongest, longest lasting diamond chains ever made, the FORCE4 series delivers unrivaled performance in professional cutting applications.



FORCE4° Standard
FORCE4° Premium L
FORCE4° Premium S
FORCE4° Abrasive
FORCE4° Cross-LINK
FORCE4° Sandwich
FORCE4° Texas Edition

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 eliminating rotational kickback and improving operator positioning when cutting. Featuring a brazed layer diamond coating on our FORCE4 platform, this chain makes your job safer, faster and easier.



PowerGrit®

Designed to cut ductile iron, cast iron and more

PowerGrit XL®

Specifically designed to cut high-density polyethylene (HDPE)

IDENTIFY ICS DIAMOND CHAIN

FORCE3® Series	ld N°	Application	Category
FORCE3® Standard chain & best choice for standard equipment	17	Masonry / General Construction Concrete with rebar up to 12mm Granite with high concentration of quartz	Standard
FORCE3® BRICK Abrasive chain for longer use	18	Lime sandstone / Sandstone Light Concrete	Longer Life
FORCE3® PREMIUM Plus chain for better cutting speed	19	Hard Materials Heavily reinforced concrete Hard Natural Stone	Universal
FORCE4 [®] Series	Id N°	Application	Category
FORCE4® Standard chain & best choice for standard equipment	06	Masonry / General Construction Concrete with rebar up to 12mm Granite with high concentration of quartz	Standard
FORCE4® PREMIUM L Long Life	07	Hard Materials Heavily reinforced/hard concrete Natural Stone	Universal
FORCE4® PREMIUM S Best Cutting Speed	09	Heavily reinforced/hard concrete Medium concrete/light reinforcement	Universal & Speed
FORCE4® ABRASIVE Perfect for Abrasive Materials	08	Masonry / Lime sandstone Sandstone / Light Concrete	Longer Life
FORCE4® TEXAS Excellent for very hard aggregate	20	Hard concrete / Heavily reinforced Soft segment for very hard materials	
FORCE4® SANDWICH Longer side clearance	16	Hard concrete / Heavily reinforced	
FORCE4® CROSS-LINK Faster cutting, longer lasting	X1	Medium concrete/light reinforcemen Soft Natural Stone Hard concrete / Heavily reinforced	Speed & Longer Life
POWERGRIT [®]	ld N°	Application	Category
PowerGrit® Standard chain & best choice for standard equipment	*	Ductile Iron / Cast Iron PVC HDPE	Standard
PowerGrit XL® Improved performance in utility pipe		Specifically designed to cut high-density polyethylene (HDPE)	

*Brazed Diamond Layer

