
D.I.D®
POWERED BY TECHNOLOGY
MOTORCYCLE
CHAIN GRIM
2023 CATALOG
MADE IN JAPAN

UNCOMPROMISED QUALITY POWERED BY TECHNOLOGY - SINCE 1933

WORLD'S #1 GENUINE PARTS MANUFACTURER

WORLDWIDE MANUFACTURES

D.I.D is the World's #1 original parts (OE) supplier for Japanese and European motorcycle manufacturers.

HONDA · YAMAHA · SUZUKI · Kawasaki · DUCATI · KTM · TRIUMPH · MV AGUSTA · Beta · HARLEY-DAVIDSON

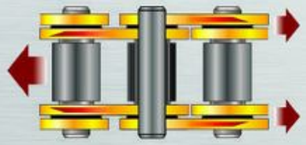
MADE IN JAPAN

DIRECT

Rigidity is D.I.D's original concept born from years of experience in MotoGP development. Rigidity in a chain means resistance to chain deformation and elongation.



LOW RIGIDITY



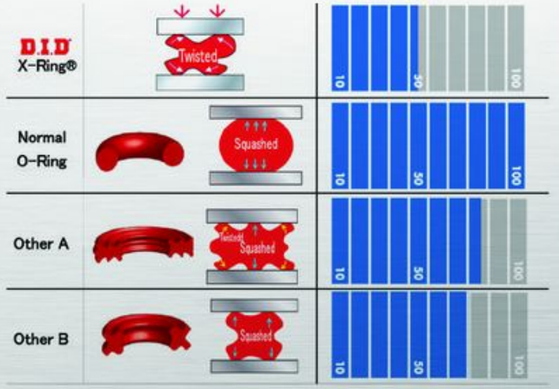
HIGH RIGIDITY

Pin flex robs your bike of its horsepower. The high rigidity of D.I.D pins means a quicker response, resistance from chain elongation, and smoother handling.

D.I.D brand drive chains and aluminum rims are all manufactured in Kaga, Ishikawa prefecture, Japan and supplied through motorcycle dealers worldwide. These top quality products are meticulously made by skilled technicians in order to provide outstanding performance for all riders.

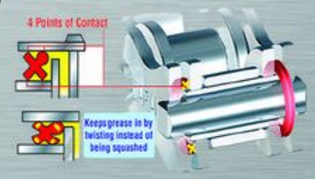
X RING

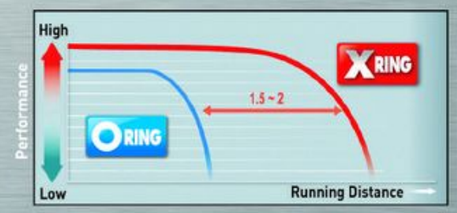
D.I.D's patended X-Ring is superior to other O-Ring designs. The X-Ring construction reduces friction by twisting between the side plate instead of being squashed. The graph below shows friction levels of the X-Ring compared to other seals.



ADVANCED TECHNOLOGY

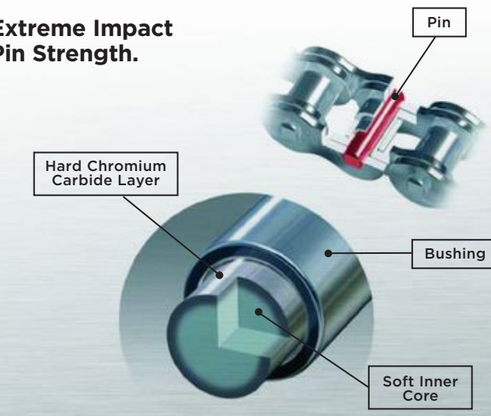
Chain elongation is caused by pin wear. D.I.D's patented X-Ring holds lubrication within the bushing increasing the pin and chain life by 1.5 - 2X.





SDH PIN

Extreme Impact Pin Strength.



SDH pin treatment creates an extremely hard chromium carbide layer on the pin's surface. The inner core remains soft to absorb shock loads.



VR46

D.I.D® × VR|46



VR46 SERIES



AVAILABLE SIZE

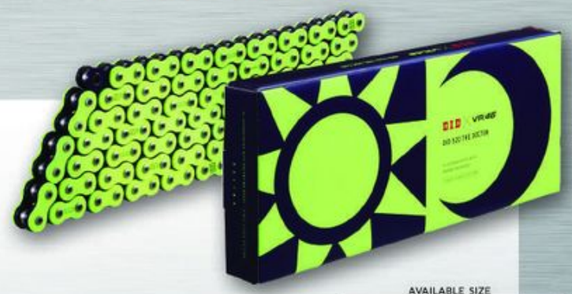
520VR46 - 800cc
525VR46 - 1000cc

DIRECT
X RING
SILVER
SOLID BUSH

VALENTINO ROSSI CHAIN

Official Valentino Rossi collaboration chain with patented X-Ring seals and a Rossi colored master link.

THE DOCTOR



AVAILABLE SIZE

520Doctor - 800cc
520ZVM-X - 1200cc
525ZVM-X2 - 1300cc
530ZVM-X2 - 1400cc

DIRECT
X RING
SOLID BUSH

THE DOCTOR SPECIAL EDITION

THE DOCTOR 800CC

Comes with a 520 sized 120 Link, first class chain, a stainless steel plate with the champion's signature, plastic display with a laser engraved image of Rossi, each with its own serial number. Only 10 available in North America.

9X VALENTINO WORLD CHAMPION ROSSI











OFFICIAL D.I.D - VR46 MERCH

STREET/ADVENTURE



ZVM-X SERIES



AVAILABLE SIZE

520ZVM-X - 1200cc
525ZVM-X2 - 1300cc
530ZVM-X2 - 1400cc

DIRECT
X RING
RACING
SOLID BUSH
GOLD
SILVER
BLACK

SUPERBIKE STRENGTH

D.I.D's ZVM-X Series has greater strength than the VX Series and is designed for heavyweight motorcycles with tremendous torque and horsepower.

LONGEST WEAR LIFE

The twisting action of the X-Ring® increases its sealing performance and its four contact points minimize power loss.

QUICKER RESPONSE

The ZVM-X Series' Direct Energy Transfer, born from our experience in MotoGP, means greater stretch resistance under load.

VO SERIES



BEST ECONOMICAL VALUE

AVAILABLE SIZE

420V - 100cc
520VO - 750cc
525VO - 900cc
530VO - 1000cc
630V - 1200cc

DIRECT
O RING
SOLID BUSH
GOLD

RIDE WITH D.I.D.

Applicable for street and off-road bikes and ATV's up to 1000cc.

UNCOMPROMISED QUALITY

D.I.D's top quality O-Ring chains are quad stake riveted with solid bushings for superior strength and long chain life."

VX SERIES



AVAILABLE SIZE

428VX - 350cc
520VX3 - 800cc
525VX3 - 1000cc
530VX3 - 1100cc

DIRECT
X RING
GOLD
SILVER

WIDE RANGE OF MOTORCYCLES

D.I.D's VX Series includes the 428VX, 520VX3, 525VX3, and 530VX3 chains to for numerous street and off road motorcycles from 350cc to 1100cc.

LONGER CHAIN LIFE

D.I.D's VX Series boasts a much longer chain life than the VO Series due to the patented X-Ring technology. The 520VX3 has a 32% longer chain life than the 520VO and the 525 and 530VX3 has a 41% longer chain life!

SMOOTHER HANDLING

D.I.D's VX Series has increased rigidity in order to reduce flex, so riders can ride smoother with confidence.



SEALED RACING



FOCUSED ON UNCOMPROMISING QUALITY HAS MADE D.I.D THE WORLD'S #1 ORIGINAL PARTS SUPPLIER FOR JAPANESE AND EUROPEAN MOTORCYCLE MANUFACTURERS.

520ERV7



DIRECT
X RING
RACING
SOLID BUSH
GOLD

MOTOGP SPEC

D.I.D's 520ERV7 is the chosen chain of MotoGP, Superbike, and road racing teams alike.

TOP OF THE LINE

Upgraded from the 520ERV3, the 520ERV7 boastsa 3% higher tensile strength, a 13% longer chain life, and less friction due to X-Ring improvements.

ROAD RACING

Flagship model for street bikes and enduro riding.

520ERVT



X RING
RACING
SOLID BUSH
GOLD

ENDURO BOSS

Upgraded from the 520VT2, the 520ERVT is now 2% lighter and has a 15% longer lifespan, all while maintaining the same tensile strength.

ULTIMATE OFF-ROAD X-RING CHAIN

Born from our original motocross chain, the 520ERVT now adds the benefits of an X-Ring. New off-road chain choice for the top AMA teams!



520ATV2



X RING
RACING
SOLID BUSH
GOLD

OPTIMAL ATV CHAIN

Steel alloy construction to minimize heat cracking in cold weather due to severe heating and cooling of the chain during competition.

FASTER & STRONGER

7% lighter, 10% stronger, and 8% longer chain life than the original ATV chain.

NON-SEALED RACING





415ERZ



HIGH RIGIDITY
RACING
SDH PIN
SOLID BUSH
GOLD

ROAD RACING

The 415ERZ chain is a road racing chain specifically for Moto3 Regulations.

SMALL BIKE BIG PERFORMANCE

Our 415ERZ can accomodate matching sized bikes with up to 250cc's of power.

LESS WEIGHT

Perfect size chain for your track bike to help you save on weight.



420NZ3



X RING
RACING
SOLID BUSH
GOLD

MADE FOR FUTURE CHAMPIONS

Made for future champions, the NZ seriesincludes premium chains specifically for mini bike racing.

428NZ



X RING
RACING
SOLID BUSH
GOLD

DESIGNED FOR JR. CHAMPIONS

Our NZ Series is designed for mini champions and vintage bikes alike.

MULTIPLE COLORS

The NZ series chains are available in standard and gold & black (G&B) colors.

MULTI-USE CHAINS

This is a great all-around non-sealed chain.

NON-SEALED RACING



JUSTIN BARCIA

TLD/RED BULL/GASGAS FACTORY RACING
CHOOSES THE 520MX CHAIN AND
DIRTSTAR ST-X RIMS

520ERS3



SOLID BUSH

RACING

GOLD

TRIALS TOP CHOICE

One of the top choices for trials teams such as Repsol Honda, which includes riders Takahisa Fujinami and Toni Bou.

STRONG, YET LIGHT

Using the latest SDH pin technology, the 520ERS3 boasts strength, but is our lightest 520 sized chain making it on-of-a-kind.

UNMATCHED PERFORMANCE

Utilizing a rivet-style (ZJ) master link, this is an excellent choice for smaller street bikes up to 250CC, such as the GSX-250R.

520DZ2



SOLID BUSH

RACING

GOLD

GREAT VALUE HIGH PERFORMANCE

The 520DZ2 is budget-friendly, high-performance racing chain designed specifically with local motocross champions in mind.

LONGER CHAIN LIFE

Designed to meet the demand of even the most grueling MX tracks with SDH technology.

SDH TECHNOLOGY

The use of our patented SDH pin technology results in a longer life of your chain.such as the GSX-250R.

520ERT3



SOLID BUSH

RACING

GOLD

CHAIN OF CHOICE FOR AMA TEAMS

The non-sealed 520ERT3 is our #1 selling motocross chain and is the top choice for 250 class factory race teams.

THE CUTTING EDGE

With a great tensile strength of 8,300 lbs and weighing in at 2.99 lbs/100 links, you can see why this is the no. 1 trusted motocross chain!

520MX



SOLID BUSH

RACING

GOLD

MOTOCROSS MONSTER

The 520MX boasts our highest rated tensile strength among non-sealed chains at 8,930 lbs. Perfect for the beating that chains take during tough, off-road races.

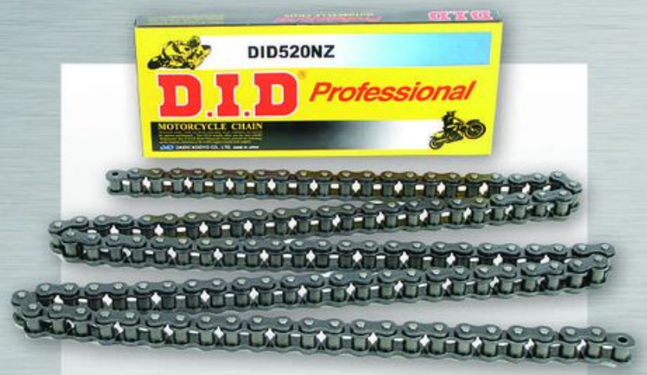
CHAMPIONSHIP QUALITY

With numerous SX, MX, and ATVMX championships under its belt, the 520MX and its incredible strength is the top choice for 450 class factory race teams.

NON-SEALED



NZ SERIES



VINTAGE BIKES

A step up from a standard chain, the NZ Series is great for vintage bikes or smaller bikes with less torque.

SOLID BUSH

AVAILABLE SIZE
420NZ3 - 150cc
428NZ - 100cc
520NZ - 250cc
525NZ - 400cc
530NZ - 750cc

STANDARD SERIES



SIMPLE D.I.D QUALITY

The Standard chain series is simply that; a chain without any technological advancements. A simple chain made with D.I.D precision and quality.

AVAILABLE SIZE
420D - 80cc
428D - 125cc
428HD - 125cc
520 - 250cc
525 - 400cc
530 - 400cc

KART CHAINS

219HTM



REASONABLE ENTRY CHAIN

Great chain for beginners that delivers stable performance at a low cost with a G&B finish.

219HTZ



TOP PERFORMING KART CHAIN

Highly rigid, low friction non-seal chain for racing karts. Available in G&G Finish.

219HV2



HIGH-PERFORMANCE SEAL CHAIN

Newly developed seal ring with special reinforced pins specifically for kart racing. Available in Silver finish

RIMS SECTION

DIRTSTAR®

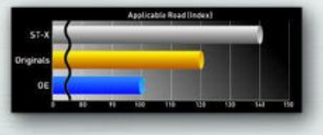


STRONGER THAN OE RIMS

All DirtStar® rims are made from 7-series aluminum alloy, which make them stronger than stock (OE) rims.

EASY TO LACE UP

All DirtStar® rims are designed to be compatible with OE hubs, spokes and nipples.



ORIGINAL SERIES

GREAT VALUE!

20% stronger than OE rims making these a great upgrade



ST-X SERIES

MOTOCROSS MUST-HAVES

40% stronger than OE rims and the go-to choice for AMA race teams.



CHAIN KIT SECTION

Changing/upgrading your bike's drive system just became so easy, eliminating the guess-work in part numbers and fitments. Each kit contains high-quality steel JT Sprockets and a D.I.D chain to directly fit your bike. Changing your chain and sprockets at the same time are recommended to help reduce unnecessary wear.



STREET KIT

ZVM-X SUPER STREET
OR
VX PRO-STREET
X-RING CHAIN
+
JT SPROCKET,
high carbon steel rear and chromemoly steel countershaft sprocket designed to replace your stock OE gearing or one tooth over/under.

DIRECT | X RING | SOLID BUSH | GOLD

OFF-ROAD KIT

520DZ2 MOTOCROSS CHAIN
OR
520VX3® X-RING CHAIN
+
JT SPROCKET,
high carbon steel rear and chromemoly steel counter-shaft sprocket designed to replace your stock OE gearing or one tooth over/under.

Application chart can be found at www.didchain.com/chainkits.



DIRECT | X RING | SOLID BUSH | GOLD

KM500R CHAIN TOOL



To be as tough as our tool, we have now introduced a **NEW metal box** for the KM500R. The D.I.D KM500R tool is a unique 3-in-1 tool with the ability to cut your chain, press-fit connecting link side plates, as well as rivet the pin head.

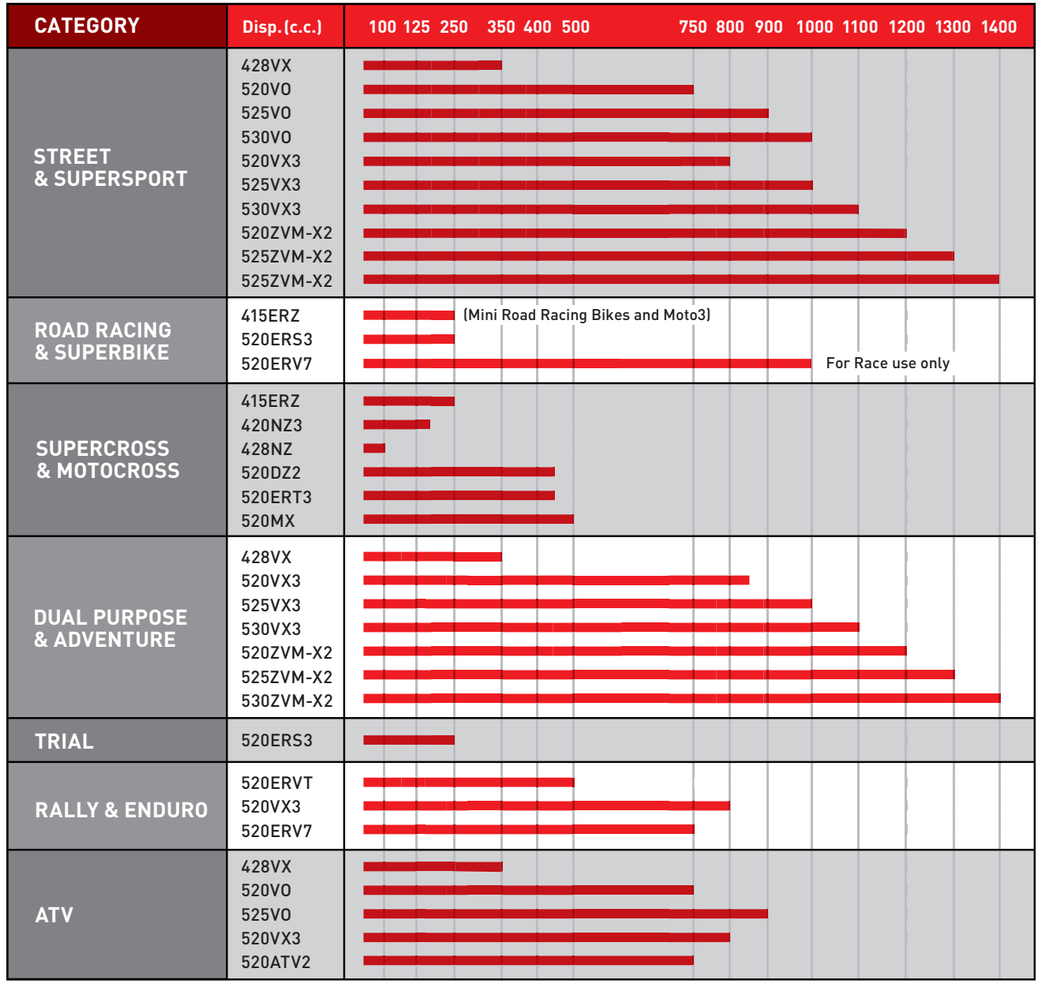
The design of the KM500R tool does not allow over-riveting and should only be used for D.I.D's ZJ rivet style master links, as well as the FJ press-fit clip style master links.

This tool may be used to cut any 520, 525, 530, or 532 sized chains.



CHAIN SPECIFICATIONS CHARTS

CHAIN APPLICATIONS



The above displacement chart is for reference only; displacement limitations may vary from model to model. Displacement guidelines are **NOT** applicable for converted (modified) motorcycles, chain conversions from Original Equipment Manufacturer's specifications, or racing motorcycles. If your stock motorcycle cam with an "endless" chain, a replacement chain must be installed with a river type master link.

Please check the application chart on the D.I.D website. *Master links are NOT interchangeable between old and new chain models.

CHAIN SPECIFICATIONS

Chain	Category	Pin Length (inches)	Pin Dia. (inches)	Plate Thickness IN	Plate Thickness OUT	Weight/ 100L (lbs)	Tensile Strength (lbs)	Seal	Chain Life Index	Master Link ZJ	Master Link FJ	Master Link RJ	Max CC
Exclusive Racing Chains													
415ERZ	Mini MX	0.531	0.156	1.5	1.5	1.45	4,540	N/A	410	Option	NA	Included	250
420NZ3	Mini MX	0.659	0.156	1.8	1.8	1.18	4,930	N/A	410	N/A	Option	Included	150
428NZ	Mini MX	0.744	0.177	2	2	2.2	5,740	N/A	410	Option	Included	N/A	100
520ERS3	Trial	0.659	0.206	1.8	1.8	2.59	5,800	N/A	410	Option	N/A	Included	250
520ERT3	Motocross	0.693	0.21	2	2	2.99	8,300	N/A	410	Option	N/A	Included	450
520MX	Motocross	0.732	0.21	2.2	2.2	3.43	8,930	N/A	410	Option	N/A	Included	500
520DZ2	Motocross	0.695	0.206	2	2	3.08	7,870	N/A	410	Option	N/A	Included	450
520ERVT	Enduro	0.736	0.206	1.8	2	3.22	8,440	X	3,500	Option	Included	N/A	500
520ATV2	ATV	0.738	0.206	2	2	3.42	8,430	X	3,250	Option	Included	N/A	750
520ERV7	Baja / Super Sport	0.752	0.217	2	2	3.41	8,800	X	3,500	Included	N/A	N/A	1,000
Super X-Ring Chains													
520ZVM-X	Street	0.83	0.206	2.2	2.2	3.59	8,745	X	3,500	Included	N/A	N/A	1,200
525ZVM-X2	Street	0.913	0.217	2.4	2.6	4.65	10,408	X	4,000	Included	N/A	N/A	1,300
530ZVM-X2	Street	0.98	0.217	2.4	2.6	4.85	10,408	X	4,000	Included	N/A	N/A	1,400
Pro X-Ring Chains													
428VX	Street / ATV	0.813	0.197	2	2	2.66	7,420	X	2,700	Option	Included	N/A	350
520VX3	Street / ATV	0.736	0.206	2	2	3.35	8,210	X	3,500	Option	Included	N/A	800
525VX3	Street	0.866	0.217	2.2	2.2	4.09	9,980	X	4,000	Included	Option	N/A	1,000
530VX3	Street	0.931	0.217	2.2	2.2	4.29	9,980	X	4,000	Included	N/A	N/A	1,100
Standard O-Ring Chains													
420V	Commuter	0.665	0.156	1.5	1.5	1.6	3,560	O	700	Option	N/A	Included	100
520VO	Street / ATV	0.795	0.2	2	2	3.31	8,000	O	2,350	Option	Included	N/A	750
525VO	Vintage Bikes	0.886	0.205	2.2	2.2	3.88	9,220	O	2,500	Included	Option	N/A	900
530VO	Street / ATV	0.963	0.217	2.2	2.4	4.39	9,220	O	2,500	Included	N/A	N/A	1,000
630V	Street / ATV	0.996	0.235	2.4	2.4	6.52	10,820	O	2,050	(XJ)	Included	N/A	1,200
Super Non-O-Ring Chains													
520NZ	Vintage Bikes	0.722	0.206	2.2	2.2	3.54	8,050	N/A	410	Option	Included	N/A	250
525NZ	Vintage Bikes	0.811	0.206	2.4	2.4	3.99	8,820	N/A	410	Option	Included	N/A	400
530NZ	Vintage Bikes	0.888	0.206	2.4	2.4	4.07	8,600	N/A	410	Option	Included	N/A	750
Standard Non-O-Ring Chains													
420D	Small Bikes	0.581	0.156	1.5	1.5	1.54	3,970	N/A	100	N/A	N/A	Included	80
428D	Small Bikes	0.657	0.177	1.5	1.5	1.84	4,230	N/A	100	N/A	N/A	Included	125
428HD	Small Bikes	0.744	0.177	2	2	2.2	5,250	N/A	100	N/A	N/A	Included	125
520	Small Bikes	0.689	0.2	2	2	3.12	6,700	N/A	100	N/A	N/A	Included	250
525	Small Bikes	0.732	0.2	2	2	3.28	6,930	N/A	100	N/A	N/A	Included	400
530	Small Bikes	0.799	0.2	2	2	3.71	6,930	N/A	100	N/A	N/A	Included	400

RJ — **Safely Clip and Loose-fit Type**
Mainly for non-O-Ring chain for small size motorcycles. You don't need any special tools

FJ — **Safely Clip and Press-fit Type**
For O/X-Ring chain for middle size motorcycles. You need a tool to press -fit outer plate

ZJ — **Rivet and Press-fit Type**
For O/X-Ring chain for large size motorcycles. You need a tool to press -fit outer plate and rivet pins

Riveting FLARE DIMENSIONS

4-Pitch Size	
415ERZ	0.165" to 0.173"
420NZ3	0.174" to 0.187"
420V	0.187" to 0.195"
428NZ	0.187" to 0.195"
428VX	0.205" to 0.217"

520 Size	
520NZ	0.217" to 0.228"
520VO	0.213" to 0.220"
520VX3	0.217" to 0.228"
520ZVM-X	0.217" to 0.228"
520ATV2	0.217" to 0.228"
520DZ2	0.217" to 0.228"
520ERS3	0.217" to 0.228"
520ERT3	0.215" to 0.225"
520ERVT	0.217" to 0.228"
520ERV7	0.217" to 0.228"
520MX	0.217" to 0.228"

525 Size	
525NZ	0.217" to 0.228"
525VO	0.217" to 0.228"
525VX3	0.224" to 0.236"
525ZVM-X2	0.224" to 0.236"

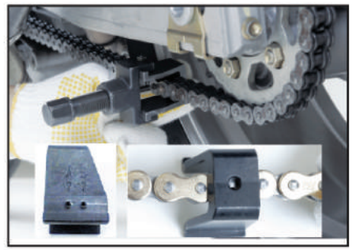
530 Size	
530NZ	0.217" to 0.228"
530VO	0.217" to 0.228"
530ZVM-X2	0.224" to 0.236"

D.I.D CHAIN TOOL INSTRUCTIONS

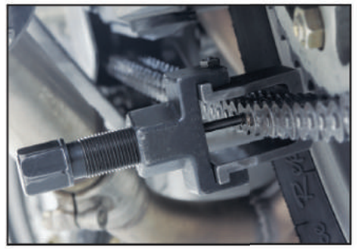
CHAIN CUTTING



1a. Before cutting your chain, loosen it using your motorcycle's rear wheel adjusters. Position your KM500R or KM501E over your chain on the bottom side of your swingarm; cut the pin on the right side of the link you choose first. If your chain has a master link, it is easier to cut the chain at the master link.



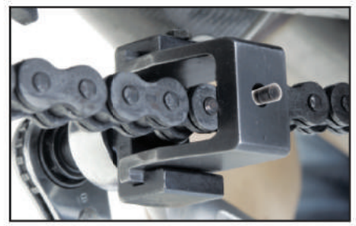
2a. Set the Cutting pin location on your chain tool's U-shaped holder to the point A position.



3a. To align the tool's Cutting pin with the chosen pin head, turn the tool's large bolt head clockwise "by hand" until the Cutting pin comes in contact with the pin head. At this point, make sure that the cutting pin is lined up with the center of the pin you wish to push out.



4a. Use a 27mm closed in wrench to hold firm the body of your chain tool while using a closed end 19mm wrench on the tool's hexagon bolt head to tighten. It will be easier to tighten the bolt if you position your wrenches 30° apart.

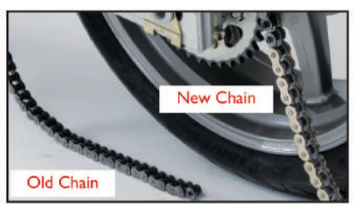


5a. Turn 19mm wrench clockwise on the tool's Hexagon bolt head to push the pin completely out.

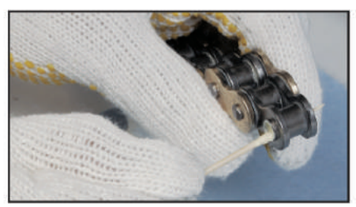


6a. After pushing the pin out, disassemble the chain tool from the chain.

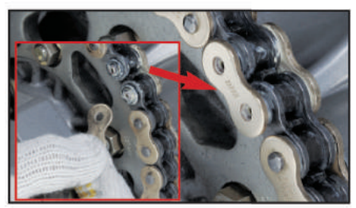
PRESS FITTING CONNECTING LINK SIDE



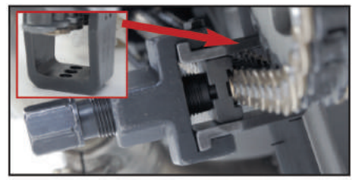
7a. Connect the new chain to the old chain using either a wire or connecting link. Shift transmission into neutral and slowly pull the old chain from under the swingarm toward the rear which then pulls the new chain from the top towards the countershaft sprocket. When new chain goes completely around the front sprocket and out under the swingarm, disconnect the old chain and pull both ends together under the center of the swingarm.



8a. Before installing the connecting link, be sure to put a heavy coat of the supplied grease into the holes of the bushings of the new chains' links, and on the surface of the connecting link's pins. If you are installing an O-Ring or X-Ring® chain, don't forget to put heavily greased ORings or X-Rings on the pins between the sideplates on both sides of the chain.



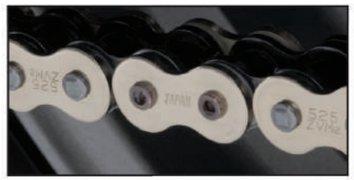
9a. With the inside of the connecting link pushed into place holding the chain together with the pins sticking out the outside of the chain, slide the O-Rings/X-Rings® into place and temporarily press the other side plate on the pins by hand. Set the Cutting pin location on your chain tool's Ushaped holder to the point A position.



10a. Slide the U-shaped portion of the tool overthe inside of the connecting link. Care-fully line up the dimples on the inside of the U-shaped holder with the pin heads of the connecting link. The Cutting pin also needs to be flipped over to where the rivet side is pointed out. Fit the Tool body together and position the Plate holder onto the sideplate that needs to be pressed on. (For FJ clip type links, flip Plate holder over.) Slide the pin's riveting side into the Plate holder and slide the pin side into the inside of the tool.



11a. Hold the hexagon part of the tool body with a 27mm closed end wrench and turn the bolt with a 19mm closed in wrench clockwise until the top of the pins make contact with the groove in the Plate holder.



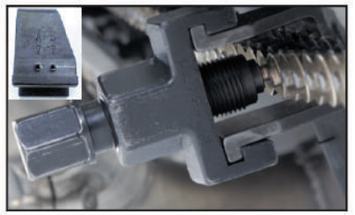
12a. After pressing the sideplate on, disassemble the chain tool and remove it from the chain. The next step is to flare out the pins heads for ZJ (Rivet type) or installing the slide clip for the FJ (Clip type) master link.

RIVETING ZJ CONNECTING LINK PIN



13a. Position the U-shaped holder as seen above.

13b. For clip type (FJ) install the open end of the clip so that it faces in the opposite direction of the chain drive direction.



14a. Set aside the Plate Holder and set the pin on the tool body to the B position to flare out the pin heads.



15a. Hold the hexagon part of the tool body by with a 27mm closed in wrench, and the bolt head with a 19mm closed end wrench; turn clockwise until the flare part of the pin head makes contact with the surface of the side plate.



16a. Example of proper flared pin head. If your pin heads are not flared to this extent, Realign chain tool and flare pin heads until they look like the above photo. If your pin heads have cracks or the connecting link is stiff when flexed, remove connecting link and install a new one.

16a. FLARE DIMENSIONS

5.3 to 5.6mm	520VO
5.5 to 5.8mm	525VO
5.5 to 5.8mm	530VO
5.3 to 5.6mm	428VX
5.5 to 5.8mm	520VX3
5.7 to 6.0mm	525VX3
5.7 to 6.0mm	530VX3
5.5 to 5.8mm	532ZLV
5.5 to 5.8mm	520VR46
5.7 to 6.0mm	525VR46
5.5 to 5.8mm	520ZVM-X
5.7 to 6.0mm	525ZVM-X
5.7 to 6.0mm	530ZVM-X
5.5 to 5.8mm	520ERV7
5.5 to 5.8mm	520ERVT
5.5 to 5.8mm	520ATV2
5.5 to 5.8mm	520MX
5.5 to 5.8mm	520ERT3
5.5 to 5.8mm	520DZ2
5.5 to 5.8mm	520ERS3
4.2 to 4.4mm	415ERZ
4.7 to 4.9mm	428NZ
5.5 to 5.8mm	520NZ
5.5 to 5.8mm	525NZ
5.5 to 5.8mm	530NZ
5.7mm to 6.0mm	*525ZVM-X, 530ZVM-X, 525VX3 & 530VX3

***Note:** Make sure that the Cutting pin has a groove if you are riveting the 525ZVM-X, 530ZVM-X, 525VX3 and 530VX3 chains. These chains can not be riveted by the old Cutting pins.*

KM500R Cutting and Riveting Pin

