

# SLEEVES

## PWC



Model	Years	LA Sleeve Part No.	Advanced Sleeve Part No.
<b>Kawasaki</b>			
<b>1100cc</b> All models	2001-04		3036FA \$129.95
<b>Polaris</b>			
<b>785cc SLX Pro</b>	1998-98	FL5342SL \$119.95	
<b>Yamaha</b>			
<b>701cc</b> Blaster Runner	1994-04		3054FA \$129.95
<b>701cc</b> Raider SuperJet	1995-08		3215FA \$149.95 NA after stock
<b>760cc</b> All models	1996-00	YA5304SL \$99.95	
<b>784cc</b> All 800's XL XLT GP	1998-04	YA5356SL \$109.95	3291FA \$129.95
<b>1200cc</b> GP1200 XL1200	1999-00		3286FA \$129.95

### \*CYLINDER TYPE CODE DESCRIPTIONS

- AC:** Original cylinder bore is alloy-chrome plated, nikasil, electrofused or boron composite. Cylinder must be bored to accept new sleeve.
- CS:** Original cylinder has cast-in liner in cylinder. Cylinder must be bored out to accept new sleeve. Cast-in liner will be bored completely out of cylinder. Do not try to push out the cast-in liner, cylinder damage may result.
- CI:** Original cylinder has cast-iron liner. Cylinder must be bored to accept new sleeve. Cast-in liner will not be completely removed. Sleeve is designed to insert into the iron lined cylinder.
- RS:** Original cylinder has a replacement sleeve. Heat cylinder to remove sleeve. Re-heat cylinder to install new cylinder sleeve.

## Street Bikes



Model	Years	Sleeve Part #	Price
<b>Honda</b>			
<b>CB750</b> 2-Valve, Stock <b>CB750F</b> <b>CB750K</b>	1973-77 1969-78 1969-78	H15SL	\$119.95
<b>CB750</b> 4-Valve Overbore to 985cc	1979-82	H113SL	\$89.95
<b>CB900F</b> Overbore to 1063cc	1979-82	H113SL	\$89.95
<b>CBR900</b> 72-74mm Bore	1992-99	3005FA	\$99.95
<b>CB1100</b> Stock Block	1982-84	H118SL	\$99.95
<b>Kawasaki</b>			
<b>GPZ750</b> Ninja 750R <b>ZN750</b> Ltd. <b>KZ750</b>	1980-85 1984-85 1980-85 1980-85	KA686SL	\$129.95
<b>GPZ1100</b> <b>GPZX1100</b> <b>KZ900</b> <b>KZ1000</b> <b>KZ1000ST</b> <b>KZ1100</b> <b>Z1R/Z2R</b> Overbore to 1200cc	1981-84 1983-84 1973-77 1976-80 1976-80 1983-84 1983-84	KA629SL	\$69.95
<b>KZ900</b> 66mm Std. <b>KZ1000ST</b> 70mm Std. <b>Z1R/Z2R</b> 70-73mm bore	1973-77 1976-80 1977-80	KA627SL	\$89.95
<b>GPZ1100</b> <b>KZ1000</b> <b>KZ900</b> <b>KZ1000ST</b> <b>KZ1100</b> <b>Z1R/Z2R</b> Overbore 1200-1260cc	1983-84 1976-80 1973-77 1976-80 1983-84 1977-80	3010FA or KA750SL	\$99.95 \$69.95
<b>GPZ1100</b> <b>KZ1000</b> <b>KZ900</b> <b>KZ1000ST</b> <b>KZ1100</b> <b>Z1R/Z2R</b> Overbore 1425cc Big Block only	1983-84 1976-80 1973-77 1976-80 1983-84 1977-80	KA773SL	\$69.95
<b>Suzuki</b>			
<b>GS1000</b> <b>GS1150</b> <b>GPZX1100</b> <b>GSX1100E</b> Overbore 1175-1260cc	1980-83 1984-86 1983-84 1980-83	3010FA	\$99.95
<b>GSXR1100</b> <b>GSXR1100F</b> Katana	1986-92 1988-92	3188FA	\$109.95
<b>GS1100</b> Overbore 1463-1568cc	1980-83	3028FA	\$109.95
<b>GSXR1100</b> Overbore 1192-1198cc	1993-98	3016FA	\$109.95
<b>Triumph</b>			
<b>Bonneville T100</b>	2001-03	W6194	\$169.95
<b>Yamaha</b>			
<b>FJ1100</b> <b>FJ1100</b> <b>FJ1200</b> <b>XJR1200</b> Overbore 1188cc	1986-93 1995-98 1986-93 1995-98	3015FA	\$99.95
<b>FJ1100</b> <b>FJ1100</b> <b>FJ1200</b> <b>XJR1200</b> Overbore 1250-1314cc	1986-93 1995-98 1986-93 1995-98	3032FA	\$99.95

- Swag
- Electronics
- Fuel Management
- Crankshafts
- Valves Train
- Clutch
- Top End:**
- Aprilia
- Arctic Cat
- BMW
- Cagiva
- Can-Am
- Ducati
- Gas Gas
- GM Speedway
- Honda
- Husaberg
- Husqvarna
- Jawa
- Indian
- Kawasaki
- KTM
- Polini
- Polaris
- Rotax, ATK
- Suzuki
- Triumph
- VOR
- Yamaha
- PWC**
- Sleeves
- Rings
- Accessories

# SLEEVES

## Off-Road Cycle & ATV



Model	Years	Sleeve Part #	Price	Cyl. Type
<b>Honda • Motorcycle • 2-Stroke</b>				
CR80R	1988-02	3101FA	\$119.95	AC
CR125R	1996-99	3259FA	\$129.95	AC
CR125R	2001	3377FA	\$129.95	AC
CR125R	2002	3418FA	\$129.95	AC
CR125R	2003	3433FA	\$129.95	AC
CR250R	1989	3132FA	\$129.95	AC
CR250R	1990-91	3133FA	\$129.95	AC
CR250R	1995-96	3103FA	\$129.95	AC
CR250R	1997-98	3220FA	\$129.95	AC
CR250R	1999-00	3280FA	\$129.95	AC
CR250	2002-04	3361FA	\$129.95	AC
<b>Honda • Motorcycle • 4-Stroke</b>				
XR100	1992-06	3078FA	\$99.95	CI
XR400	1996-04	3236FA	\$109.95	RS
XR400 Big Bore	1996-04	3052FA	\$109.95	AC
<b>Honda • ATV • 4-Stroke</b>				
TRX300 2-Valve	1988-00	H5062SL	\$89.95	RS
TRX300 4-Valve	1993-03			
TRX400 EX	1999-08	3052FA	\$109.95	RS
TRX400EX Sportax	1999-08	3236FA	\$109.95	RS
TRX450 Foreman ES	1998-01	3409FA	\$119.95	RS
Foreman S	1998-01			
Foreman FE ES	2004-05			
FM Foreman S	2002-04			
<b>Kawasaki • Motorcycle • 2-Stroke</b>				
KX65	2000-10	3402FA	\$119.95	AC
KX80	1991-94	3049FA	\$129.95	AC
KX80	1998-00	3267FA	\$119.95	AC
KX85	2001-09	3296FA	\$119.95	AC
KX100	1995-97	3171FA	\$129.95	AC
KX100	1998-09	3248FA	\$129.95	AC
KX125	1990-91	3048FA	\$129.95	AC
KX125	1996-97	3331FA	\$129.95	AC
KX125	1998-99	3337FA	\$129.95	AC
KX125	2001	3356FA	\$129.95	AC
KX250	1998-99	3289FA	\$129.95	AC
KX250	2000-01	3407FA	\$129.95	AC
KX500	1989-04	3161FA	\$149.95	AC
<b>Kawasaki • Motorcycle • 4-Stroke</b>				
KLX400	2003-04	3287FA	\$119.95	AC
KLX400 440 Big Bore	2000-04	3481FA	\$119.95	CI
<b>Kawasaki • ATV • 4-Stroke</b>				
KXF400	2003	3287FA	\$119.95	AC
KXF400 440 Big Bore	2000-04	3481FA	\$119.95	CI
<b>Polaris • ATV • 4-Stroke</b>				
Predator 104.75-107.5mm	2003-06	3458FA	\$119.95	AC

Model	Years	Sleeve Part #	Price	Cyl. Type
<b>Suzuki • Motorcycle • 2-Stroke</b>				
RM65 44.5mm-46.5mm	2003-06	3402FA	\$119.95	AC
RM100	2003-05	3171FA	\$129.95	AC
RM125	1981	FL722SL	\$119.95	CI
RM125	1994-96	3156FA	\$129.95	AC
RM125	1998-99	3299FA	\$129.95	AC
RM125	2000-03	3425FA	\$129.95	AC
RM250	2000-02	3306FA	\$129.95	AC
<b>Suzuki • Motorcycle • 4-Stroke</b>				
DRZ400	2000-08	3287FA	\$119.95	AC
DRZ400 440 Big Bore	2000-07	3481FA	\$119.95	AC
<b>Suzuki • ATV • 4-Stroke</b>				
LT250R	1987	3148FA	\$129.95	CS
LT-Z 400	2003-08	3287FA	\$119.95	AC
LT-Z 400 Big Bore	2003-08	3481FA	\$119.95	AC
<b>Yamaha • Motorcycle • 2-Stroke</b>				
YZ80	1993-01	3177FA	\$119.95	CI
YZ125	1996-98	3183FA	\$129.95	AC
YZ125	1999-01	3217FA	\$129.95	AC
YZ125	2002	3422FA	\$129.95	AC
YZ250	1999-07	3332FA	\$129.95	AC
<b>Yamaha • Motorcycle • 4-Stroke</b>				
YZ250F	2000-02	YA5424SL	\$89.95	AC
YZ250F	2001-05	3305FA	\$99.95	AC
SRX600	1983-96	3191FA	\$119.95	RS
TT600				
XT600				
Tenere 600 95-98mm	1983-96	3192FA	\$119.95	RS
SRX600				
TT600				
XT1600	1983-96	3192FA	\$119.95	RS
Tenere 600 101mm				
<b>Yamaha • ATV • 2-Stroke</b>				
YFS200 Blaster	1988-06	3100FA	\$129.95	CS
YFZ350 Banshee	1987-04	3061FA	\$129.95	CI
<b>Yamaha • ATV • 4-Stroke</b>				
YFM250 Raptor	2008-11	4425FB	\$159.95	AC
YFM250 SE Raptor				
YFM250 SE Custom Raptor				
YFM350X Warrior	1987-08	3107FA	\$99.95	RS
YFM350 Raptor	2004-08	3428FA	\$119.95	AC
YFZ450	1998-02	3191FA	\$119.95	AC
YFM660F Grizzly	1998-01	3192FA	\$119.95	AC
YFM660F Grizzly	2001-05	3347FA	\$119.95	RS
YFM660R Raptor	2002-08			
YFM660F Grizzly				



Swag
Electronics
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Crankshafts
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<b>Top End:</b>
Aprilia
Arctic Cat
BMW
Cagiva
Can-Am
Ducati
Gas Gas
GM Speedway
Honda
Husaberg
Husqvarna
Jawa
Indian
Kawasaki
KTM
Polini
Polaris
Rotax, ATK
Suzuki
Triumph
VOR
Yamaha
PWC
<b>Sleeves</b>
Rings
Accessories

## Cylinder Honing Procedure

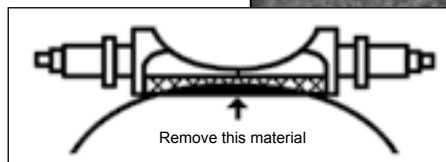
**Cast Iron Sleeved Cylinders:** To ensure proper ring seal, it is necessary to hone the cylinder with a rigid or brush hone. DO NOT install a new piston without honing the cylinder to break the glaze. Finish hone with a 280 grit. Cross hatch is necessary to ensure proper ring seal and adequate lubrication. If the cylinder is in good condition, simply honing the cylinder may be enough to restore the bore to an acceptable condition. However in some cases, boring may be necessary to insure the cylinder bore is within the tolerances outlined in the service manual.

**Plated Cylinders:** (Includes nickel ceramic coatings (Nikasil), chrome, Electrofusion, and boron composite.) If the plated cylinder is in good condition, honing may not be necessary. If deglazing is necessary, DO NOT use a ball hone. Use a rigid or brush type diamond hone. Plated cylinders cannot be bored oversize without replating or resleeving.

**Any time a cylinder is bored or honed:** All ports must be chamfered. The top of the cylinder should be deburred, and the bottom should be generously chamfered for ease of piston and ring installation. When boring a cylinder with an exhaust bridge, the face of the bridge must be relieved .002"-.004" to allow for bridge expansion. Without proper bridge clearance, engine damage could occur.

**IMPORTANT:** After honing, the cylinder must be washed with warm soapy water to remove all honing grit. Be sure to wash away any grit that may have traveled into the transfer and exhaust ports during honing. The cylinder is NOT clean until you can wipe the cylinder wall with a clean, oil dampened cloth and it does not pick up any honing grit. Lightly oil the cylinder bore to prevent oxidation and assist with piston installation.

**Exhaust Power Valves (2-Stroke engines):** When boring cylinders with exhaust power valves the exhaust power valve must be inspected to ensure it does not extend into the cylinder. The exhaust power valve must have approximately .015" clearance from the cylinder bore. Without proper clearance, the exhaust power valve could contact the piston and engine damage could occur. If machining the exhaust power valve is necessary, remove metal only in the area that extends into the cylinder bore. (See illustration)



## Honing Brushes

Nylon Soft Hone Brushes					
Bore Range mm	Bore Range Inches	Part No.	Brush O.D.	Overall Length	Price
45-57mm	1.77"-2.24"	W6075	2"	10"	\$49.40
57-70mm	2.24"-2.76"	W6076	3"	10"	\$49.40
63-76mm	2.48"-2.99"	W6077	4"	14"	\$64.73
76-89mm	2.99"-3.50"	W6078	4"	14"	\$64.73
89-102mm	3.50"-4.02"	W6079	4"	14"	\$72.83

