



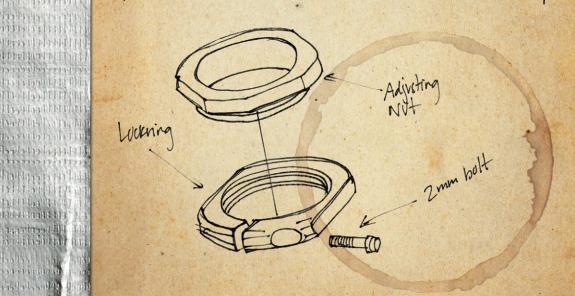
napolita ar ma man

THE LEVEL TO THE PARTY OF THE P

Bulling all many me

(Samuel Market

BICYCLE PARTS CATALOG & BATHROOM READER



WELCOME!

Thanks for your interest!

If you've made it this far, we've piqued your interest enough to convince you to open our bathroom reader to page 1. We're flattered. Thank you. If you haven't tossed it into the wastepaper bin by now, please, allow me to convince you to read further.

At Problem Solvers, we're devoted to making complex, crazy, creative and custom bike projects possible. Our parts and accessories give you options—compatibility across diverse industry "standards", replacement hardware, add-ons and attachments—to make your bike just the way you like. To put it simply: we help you transform your bike for purposes never conceived by the manufacturer...much to the chagrin of manufacturers.

This is our first print catalog. We've organized it roughly according to what area of the bike the part is used for, but our hope is that you page through it all to see the vast array of our arsenal.

Enjoy.

TABLE OF CONTENTS

| Accessory Mounts 4-7 | Hardware27 |
|------------------------------------|------------------------------|
| Handlebar | Chainring Bolts & Nuts |
| Lights | Axle Nuts & Crank Bolts |
| Bottom Bracket Stuff 8–9 | Headset Stuff28-30 |
| PressFit 30 BBs | Headtube Adapters |
| Conversion Kits | Spacers |
| Brake Stuff10–15 | Top Caps & Compression Plugs |
| Doublers & Levers | Pumps & Inflation31 |
| Plugs & Adapters | Pedals32 |
| Hangers & Carriers | Seatpost Enhancements33–34 |
| Hardware | Bolts |
| Cable & Housing16–17 | Clamps |
| Stops & Guides | Shims |
| Cassette Stuff18 | More Shims & Spacers35 |
| Spacers & Cogs | SpaceOuts SpaceOuts |
| Derailleur & Shifting Things 19–26 | Steerer Tube |
| Shifter Mount | Handlebar |
| Front Derailleur Adapters | Wheel Tools36-37 |
| Chain Tensioners | Shop Rags 38 |
| Derailleur Hanger | 5110p 113g5 |

REV.

A-00

DESCRIPTION

GRAPHIC PLACEMENT

ZONE

TEAM PROBLEM SOLVERS

CHRIS DUERKOP General Manager

My belly can attest: I like messing about with bikes and parts and their configuration more than I actually ride 'em. I'm widely regarded (by my mom and dad) as an expert basement bike mechanic. I watch far too many home improvement shows, I drink too much beer of poor quality, I don't wear workshop-appropriate footwear and I sometimes use 25.4mm stem clamps with 26.0mm handlebars like it's no big deal.





BEN OLIVER Sales & Customer Service

People call me BenO. I've worked in the cycling industry my entire adult life as a mechanic, both in shops and for different road cycling teams. I'm also one of those A-holes who thinks the bicycle really is a solution to many of the world's ills, if we could just get more people riding them. That's what's so great about working for Problem Solvers—we help people to get on their bikes by making wacky stuff that makes other things work even when they're not supposed to.... in a way it's like we're crusaders for world peace.

ANDERS BROSTE Lead (and only) Engineer

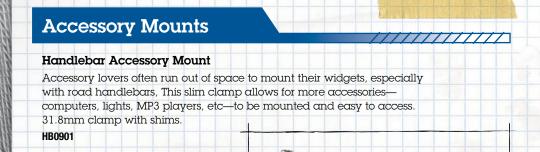
To me a bicycle is freedom to go, freedom to think, and freedom to achieve. I ride because I love it and for no other reason. I've always loved fixing bikes, and now I design bikes and bike parts, which is a dream come true. I love Problem Solvers because necessity is the mother of invention: creativity at its finest. And we've always been about re-purposing and reusing our bike stuff, which was "green" before "green" was cool. Oh, and I don't like the idea of electronic shifting...





DATE

ISSUED BY





THE WRONG TOOL FOR THE JOB

SPOKE AS AN AWL

Bend a 1.8mm spoke into a comfy handle and sharpen the other end for a handy awl to clear out housing ends after cutting, pick glass out of tires or as toothpick and/or splinter pick (sterilize with the blowtorch). The spoke head is also very effective at puling hair clogs out of drains.

HB0901

| ı | ZONL | KLV. | |
|---|------|------|------------------|
| | | A-00 | GRAPHIC PLACEMEN |



Brake Stud Light Mounts

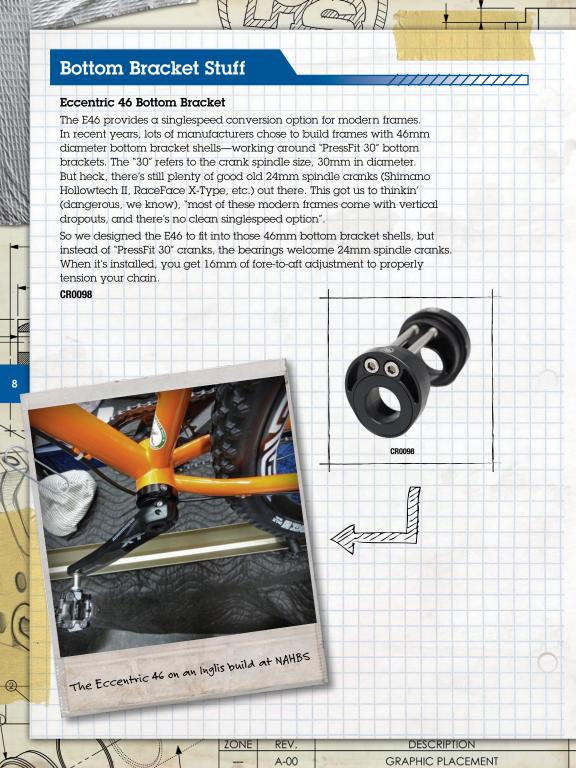
During a brief visit to Calhoun Cycle in Minneapolis, Greg (sales guy and idea man) asked, "Hey, why don't you guys do a light mount for V-brake studs?" To which I quickly responded, "I don't know." Well Greg, ask and ye shall receive. This pair of mounts attaches to your brake studs to provide a medium-height light position. It'll work with or without the brakes installed. 22mm diameter, black, pair.

LT0901









Bottom Bracket Stuff

Abnormal 46 Bottom Bracket

The A46 combines normally incompatible cranks and frames, accepting 24mm cranks and fitting inside 46mm diameter BB shells (frames designed around PressFit 30 BBs). The good news (for you) is that your old cranks

aren't obsolete! The bad news (for crank manufacturers) is that your old cranks aren't obsolete!

| CR0094 | A46 | PF30 to Hollowtech II, MegaExo, X-Type |
|--------|-----|---|
| CR0095 | A46 | PF30 to GXP |

BB30/PressFit 30 Adapter Kit

Machined from high-density Dupont Delrin plastic, these adapters allow for the use of external bottom bracket crankarms (24mm spindles) with newer BB30 and PressFit 30 bottom bracket bearings.

CR0096

GXP Spindle Adapter Kit

Our GXP Adapter Kit is made specifically to adapt our BB30/PressFit 30 Adapter Kit and/or our Eccentric 46 Bottom Bracket for use with SRAM/Truvativ GXP cranks.

CR0097

American to English Bottom Bracket Adapter

Having a hard time finding a decent replacement BB for your Schwinn Varsity? This simple converter allows you to use your English-threaded bottom bracket in older American-style bottom bracket shells.

CR9900

Up-Cup #54

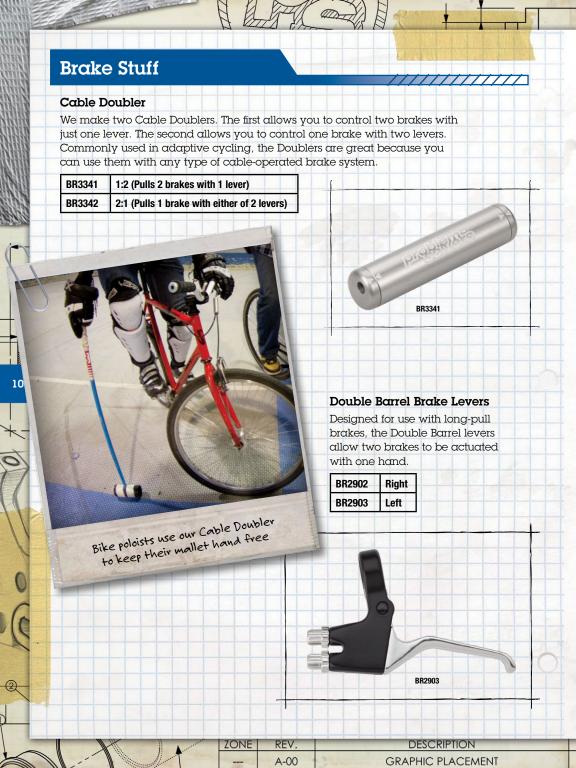
Our alloy Up-Cup #54 replaces the plastic non-drive side bottom bracket cups for Shimano UN54 square-taper bottom brackets. Use the Up-Cup to replace broken cups or upgrade from the original.

| CR5468 | 68mm |
|--------|------|
| CR5473 | 73mm |



CR0095





Brake Boss Plugs

Brake Boss Plugs replace removable brake studs—preventing grit, grime and rust from gettin' all up in there. Remember a few years ago when all them mountain frames came with both disc tabs AND removable brake studs? That's why we wanted these. 8 or 10mm diameter. Alloy or plastic. Pairs.

| FK9940 | Plastic | M8 x 1.25mm |
|--------|---------|--------------|
| FK9942 | Plastic | M10 x 1.25mm |
| FK9941 | Alloy | M8 x 1.25mm |
| FK9943 | Alloy | M10 x 1.25mm |





Center-Lock Adapters

ISSUED BY

These adapters allow the use of 6-bolt rotors on Shimano's Center-Lock hubs. We've got two versions: one with a standard Center-Lock lockring, and the other with a pinch-bolt for hubs that have buggered threads.

| BR0381 | Center-Lock Adapter w/lockring |
|--------|----------------------------------|
| BR0380 | Center-Lock Adapter w/pinch bolt |



PS

| DA | TE | |
|----|----|--|
| | | |

Cable Hangers

12

For stoppin' the housin' and hangin' the cables...you know? One interesting note: if you've got a Cane Creek headset, we've got two hangers that are Interlok™ compatible on the bottom.

| Part # | Description | Steerer | Color |
|--------|-----------------------------------|---------|--------|
| BR3362 | Cross Hanger w/adjuster | 1-1/8" | Silver |
| BR3363 | Cross Hanger w/adjuster | 1-1/8" | Black |
| BR3364 | Cross Hanger w/adjuster, Interlok | 1-1/8" | Silver |
| BR3367 | Cross Hanger w/adjuster, Interlok | 1-1/8" | Black |
| BR3358 | Clamp-on Hanger w/noodle | 1" | Silver |
| BR3359 | Clamp-on Hanger w/noodle | 1" | Black |
| BR3360 | Clamp-on Hanger w/noodle | 1-1/8" | Silver |
| BR3361 | Clamp-on Hanger w/noodle | 1-1/8" | Black |





co h b se th

Wide Cable Carrier

Spanning 50mm, the Wide Cable Carriers can be mounted lower than conventional hangers, allowing for greater leverage and braking power, especially handy for 'cross setups. The extra clearance also makes them perfect for use with fenders.

| BR0350 | Silver |
|--------|--------|
| BR0351 | Black |



| Ready for | Prime Time |
|-----------|--|
| | No. of Contract of |

ZC

| NE | REV. | DESCRIPTION |
|----|------|-------------|
| | | |

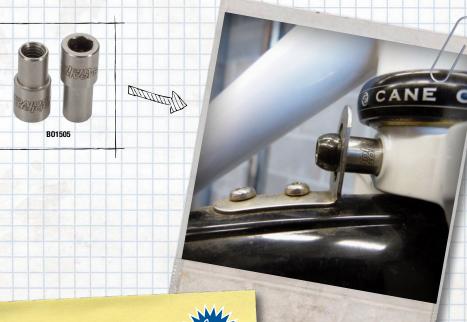
A-00

GRAPHIC PLACEMENT

Sheldon Fender Nuts

Mounting fenders to bikes with road calipers is a real pain in the arse. Fickle creatures, the calipers become difficult to adjust once the fenders' tab is stuck on the backside. Enter the late Sheldon Brown. One of our true heroes, Sheldon gave us the idea for the Sheldon Fender Nut. Basically, the Sheldon nut replaces your caliper's brake nut, but also contains threads for standard M6 bolts. This allows you to install and remove the fenders without messing with your brakes.

| B01505 | 13mm front, 10mm rear |
|--------|-----------------------|
| B01506 | 32mm front, 10mm rear |



THE WRONG TOOL FOR THE JOB

ISSUED BY

BABY POWDER FOR SEATING TIRES

Drop the powder on the portion of the tire that's stickin. When you pump it back up, you should be golden. Gold Bond would probably work too.



DATE 21-Feb-2012

FENDER MOUNTING

The nature of the beast is this: fender mounting is an inherently imprecise science. Your frame manufacturer develops the rear triangle with a certain tire size and clearance in mind. The fender maker designs their products around a certain range of frame sizes. As soon as you want to swap out tires or reuse your older fenders, you'll be stuck with some ill-fitting polycarbonate. A couple PS fanboys sent us these DIY fender hacks for better-fitting mudguards.

Vintage Spacers

14

Mark couldn't get the radius he wanted when his fender was mounted to the chainstay bridge, so he chopped of a bit of wine cork to serve as a spacer. This gave him consistent coverage and a bit of classic flair.

Presta Valve Fender Mount

A friend of ours couldn't get enough fender clearance on his hardtail 29'er (the frame was designed to be able to run fatty tires very close to the seat tube). He realized that he just needed the fender mount to be positioned a bit higher, and told us how he did it:

- Grab a scrap tube and cut out a section that includes the Presta valve (about 2" on each side in this case)
- 2. Thread on the Presta valve nut all the way and cut the valve off (leaving about 10mm)
- 3. Back off the nut to re-thread the valve stem
- Use a pair of zip ties to attach the tube piece/ valve to the seat tube so the valve portion points to the rear
- 5. Mount the fender to the valve stem and secure with the valve nut

It ain't pretty. But if you're picky about your fender security and placement, this is a handy trick to have in your arsenal.



Travel Agent

This fancy doo-dad increases the cable pull of short-pull road levers so they'll work with long-pull brakes (like V-brakes or mechanical disc brakes). What? Road and mountain together? It's a perfect example of what we hope to accomplish with this little brand: making two opposing, incompatible forces work together in harmony. Maybe we should've called it the Diplomat...

| BR0300 | Silver |
|--------|----------------------------|
| BR0311 | Black |
| BR0400 | Silver w/adjustment barrel |
| BR0411 | Black w/adjustment barrel |





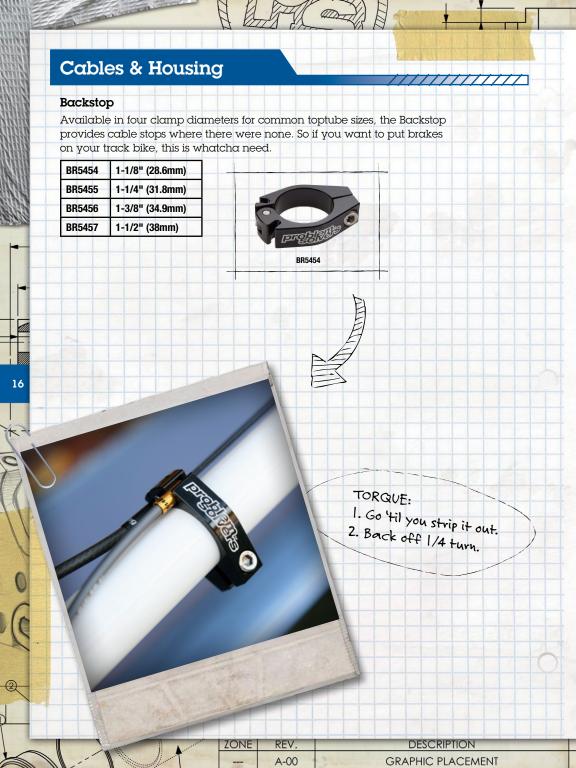
Other Brake Hardware

ISSUED BY

| BR7922 | Brake Lever Adjustment Barrel, 10mm |
|--------|-------------------------------------|
| B01500 | Brake Nut (for road calipers), 22mm |
| B01502 | Brake Nut (for road calipers), 30mm |
| FS1180 | Cantilever Stud, M10 x 1.25mm |
| FS1169 | Cantilever Stud, M10 x 1mm |
| FS1067 | Cantilever Stud Repair Kit |



DATE 21-Feb-2012

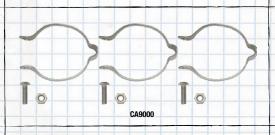


Cables & Housing

Clamp-On Cable Guides

Our Clamp-on Cable Guides secure full housing on frames that don't have cable stops or housing guides brazed on. Stainless. Three clamp diameters, sold in sets of three.

| CA0900 | 25.4mm |
|--------|--------|
| CA0901 | 28.6mm |
| CA0902 | 31.8mm |



17

Housing Guides

Put your hydraulic hose or cable housing where you want it.

| BR4114 Hydraulic Brake Guides | | Mount to existing housing stops | Silver | Pair |
|-------------------------------|---------------------------------|---------------------------------|--------|-------|
| BR4115 | Hydraulic Brake Guides | Mount to existing housing stops | Black | Pair |
| BR4120 | Stick-On Hydraulic Brake Guides | Zip ties included | Black | Bag/5 |

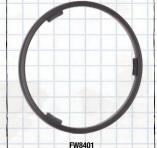


DATE 21-Feb-2012

Cassette Stuff

Spacers

| FW8294 | 3.0mm, 8-speed spacer | Silver |
|--------|--|--------|
| FW1323 | 3.5mm, 5/6-speed spacer | Black |
| FW8400 | 4.5mm, fits 7-speed cassette to 8/9/10-speed freehub | Black |
| FW8401 | Fits 10-speed cassette to 11-speed freehub | Black |



Cogs

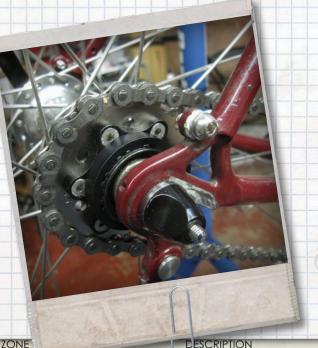
18

Stamped singlespeed cogs are inexpensive, but tend to wear a groove into your freehub body's spline. Cogs with thicker profiles tend to be pretty expensive, so when they wear out you're stuck buying a new one.

Wouldn't it be great if you could have a little of both?

Our cogs have no splines, but they easily mount to our splined Cassette Cog Carrier (CCC). That way, you get the broad contact patch of the CCC along with inexpensive cog replacements. Here's the kicker: the hole-pattern for the cogs fits on to 6-bolt disc rotor mounts. So if you've always wanted flip-flop fixed/free hub for off-roadin', you've got it.

| FW9907 | CCC w/17t 6-bolt cog |
|--------|----------------------|
| FW9908 | CCC w/19t 6-bolt cog |
| FW9900 | 16t 6-bolt Cog |
| FW9901 | 17t 6-bolt Cog |
| FW9902 | 18t 6-bolt Cog |
| FW9903 | 19t 6-bolt Cog |
| FW9904 | 20t 6-bolt Cog |
| FW9905 | 21t 6-bolt Cog |
| FW9906 | 22t 6-bolt Cog |
| | |



ZONE

A-00

GRAPHIC PLACEMENT

Derailleur & Shifting Things

Direct Mount Adapter

We initially developed this adapter for standard mountain bike frames with 68/73mm-wide bottom bracket shells, but quickly realized the need was much greater for the fat bike market, where the 100mm wide bottom brackets make front derailleur applications a little difficult. So we did both: our Direct Mount Adapters clamp around the seat tube to allow for the use of Shimano high direct-mount front derailleurs on frames with either 68/73 or 100mm wide bottom brackets.

| Part # | BB Shell | Seat Tube Clamp Size | | |
|--------|------------|-----------------------------------|--|--|
| FS1322 | 100mm | 34.9mm Clamp w/31.8, 28.6mm shims | | |
| FS1325 | Moonlander | 34.9mm Clamp w/31.8, 28.6mm shims | | |
| FS1323 | 68/73mm | 34.9mm Clamp w/31.8mm shims | | |
| FS1326 | 68/73mm | 28.6mm | | |



DATE 21-Feb-2012



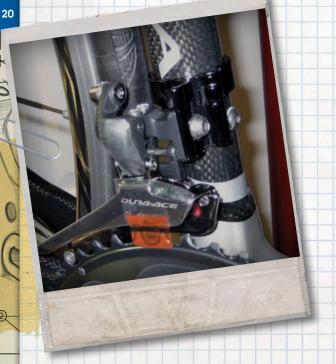
Braze-on Adapters

For mounting braze-on front derailleurs on bikes without the braze-on mount. Because these are slotted, they come in especially handy on smaller frames where water bottle cage bolts interfere with proper derailleur mounting.

| DP0910 | 28.6mm | Silver |
|--------|--------|--------|
| DP0911 | 28.6mm | Black |
| DP0920 | 31.8mm | Silver |
| DP0921 | 31.8mm | Black |
| DP0930 | 34.9mm | Silver |
| DP0931 | 34.9mm | Black |



DP0911



WHO'S YOUR MECHANIC?

ZONE REV. DESCRIPTION
--- A-00 GRAPHIC PLACEMENT



MisMatch Adapter

We love that mountain component manufacturers are making shift and brake levers that can be connected to each other to save handlebar space. But what if you want to mix 'n' match? We've developed our MisMatch Adapter to mate MatchMakerTM compatible SRAM shifters with I-SpecTM compatible brake levers from Shimano.

BR0385



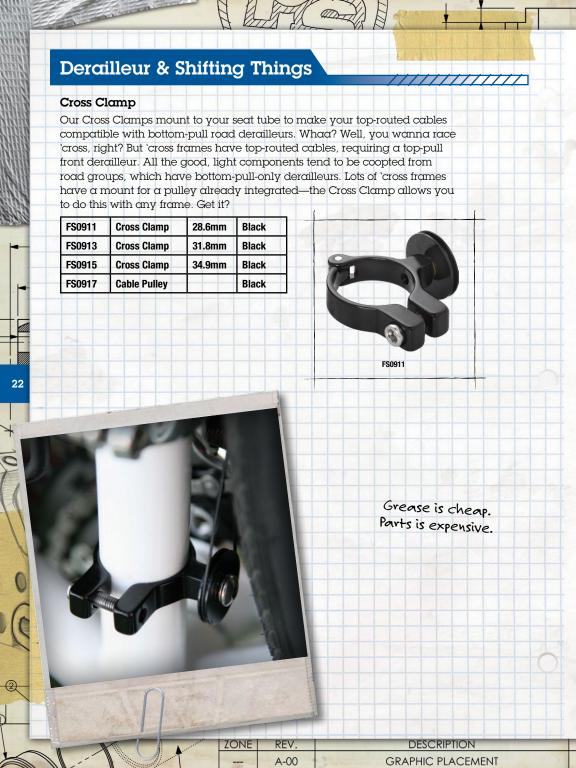


Ps

DATE

21-Feb-2012

ISSUED BY



Derailleur & Shifting Things

Two-Pulley Tensioner

On frames with vertical dropouts, use our TPT to take up chain slack on singlespeeds or internally geared hubs on bikes with vertical dropouts. For bonus points, you can use it to create 2 x 1 or 3 x 1 drivetrains. On-the-go chainline adjustments make this a favorite among the Solvers staff. Max cog size: 18-tooth. Chain wrap: 20-teeth. For 3/32" chains.

CH0900





Chain Tensioner w/Derailleur Hanger

Cures singlespeed frame-buyer's remorse. This handy tensioner secures your axle in place and features a derailleur hanger so you can convert back to geared living.

CH0901



21-Feb-2012

DATE ISSUED BY



Shifter Mounts

We love us some downtube shifters. In fact, we love 'em so much we'd like to put 'em on bikes that don't have downtube shifter mounts. Use this clamp to mount 9/10-speed shifters to 28.6/31.8mm downtubes.

| LD0900 | Downtube Shifter Mount |
|--------|----------------------------|
| LD0901 | Steerer Tube Shifter Mount |

THE WRONG TOOL FOR THE JOB

SPANNER WRENCH AS BAR TAPE HOLDER

I loathe wrapping drop bars. You've got to be meticulous, consistent. But then you get halfway through and get a call (from nature, duty or your mom). You've got one hand on the wrap, but if you leave you lose your progress.

Before starting to wrap, grab a spanner wrench. When you've got to take a break in the middle of the job, just pinch the tape to the bar with the spanner. It acts as a clothespin, gently holding the wrap in place. Now you can jump-rope, go to the fridge, or page through the latest Family Handyman magazine and get back to your bar wrapping at your leisure.

ZONE REV. DESCRIPTION GRAPHIC PLACEMENT

A-00

Derailleur & Shifting Things

Universal Derailleur Hanger

The Universal Hanger should be in everyone's saddlebags. If your existing derailleur hanger busts, strips or is totally wonky, the Universal Hanger replaces the drive-side nut on your quick-release skewer so you can get the majority of your gear range back. This little guy is absolutely essential for touring or epic mountain biking.

FS0920





FS0921

Derailleur Hanger Plug

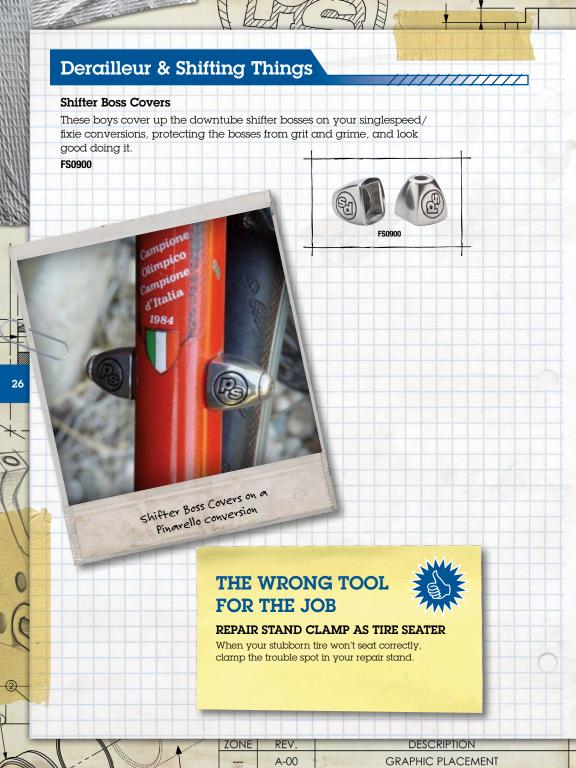
We've seen all those fixed-gear conversions in the wild with the derailleur hanger just sitting there lookin' ugly. Enter the Derailleur Hanger Plug. It's stainless (which is nice). The cool part: the 4mm hex broach is on the inside of the derailleur hanger, so you get a smooth, finished look instead of an empty hole. Better yet, it'll keep grit and grime from mucking up the threads.

FS0921



21-Feb-2012

DATE ISSUED BY

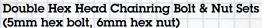


Hardware

Chainring Bolt & Nut Sets

Because those chainrings won't attach themselves.

| Part # | Usage | Material | Color | Qty | |
|--------|--------|-----------|--------|-------|--|
| CR1470 | Single | CroMoly | Silver | Set/5 | |
| CR1471 | Double | CroMoly | Silver | Set/5 | |
| CR0010 | Single | Alloy | Silver | Set/5 | |
| CR0011 | Single | Alloy | Black | Set/5 | |
| CR1401 | Double | Alloy | Silver | Set/5 | |
| CR1400 | Double | Alloy | Black | Set/5 | |
| CR1472 | Single | Stainless | Silver | Set/5 | |
| CR1473 | Double | Stainless | Silver | Set/5 | |



| CR1475 | Double | Alloy | Silver | Set/5 | |
|--------|----------------|-------|--------|-------|--|
| CR1476 | Double | Alloy | Black | Set/5 | |
| CR1477 | Double w/Guard | Alloy | Silver | Set/5 | |
| CR1478 | Double w/Guard | Alloy | Black | Set/5 | |

Inner Chainring Bolts (no nuts)

| CR1647 | Inner (12.5mm) | CroMoly | Silver | Set/5, bolts only |
|--------|----------------|-----------|--------|-------------------|
| CR1405 | Inner (8mm) | Alloy | Black | Set/5, bolts only |
| CR1406 | Inner (8mm) | Alloy | Silver | Set/5, bolts only |
| CR1650 | Inner (16mm) | Stainless | Silver | Set/5, bolts only |

More Hardware

| HU7100 | Axle Nuts, 10 x 1mm |
|--------|---------------------------|
| HU7101 | Axle Nuts, 9.5mm x 26 tpi |
| HU7102 | Axle Nuts, 9 x 1mm |
| CR1408 | Crank Bolts, M15 |
| CR1238 | Crank Bolts, M8 |









27

DATE

ISSUED BY





Headtube Adapters

28

Adapt your headtube to accommodate different fork sizes, or to add a "regular" fork to your "weird" frame. These reducers are designed for traditional, external cup headsets.

| Part # | Fork | Headtube | Stack Height |
|--------|--------|---------------------------|--------------|
| HD9900 | 1-1/8" | EC37 (1-1/4" traditional) | Adds 2mm |
| HD9901 | 1" | EC34 (1-1/8" traditional) | +2mm |
| HD9902 | 1-1/8" | Headshok (2") | +12.7mm |
| HD9903 | 1-1/8" | Klein (2") | +12.5mm |
| HD9904 | 1-1/8" | EC49 (1-1/2" traditional) | +9mm |



Headset Stuff

Locking Headset Spacers

Locking spacers keep the fork in place when the top cap and stem are removed. This is useful for a multitude of reasons: maintaining headset adjustment when switching stems, displaying frame/fork combinations, shipping bikes, or traveling with a bike. 8mm tall. For 1-1/8" steerer tubes only.

| HD9974 | Black |
|--------|--------|
| HD9975 | Silver |



Top Caps & Compression Plugs

Things could get very unpleasant, very fast if you don't have one of these installed.

| Part # | Model | Color | Steerer Size |
|--------|---------------------|--------|--------------|
| HD0900 | Ultra Light Top Cap | Silver | 1-1/8" |
| HD0901 | Ultra Light Top Cap | Black | 1-1/8" |
| HD0111 | Standard Top Cap | Black | 1" |
| HD0131 | Standard Top Cap | Black | 1-1/8" |
| HD0931 | Top Cap w/star nut | Black | 1-1/8" |
| HD9911 | Compression Plug | Black | 22-26mm ID |





ISSUED BY





DATE



Pumps & Inflation

Air Bob

The Air Bob is a universal tire inflator that attaches to air compressors (via standard 1/4" NTP quick couplers) and sports an integrated pressure gauge. Fits Presta & Shraeder valves. Quickly inflate your tubes and leave the floor pump alone.

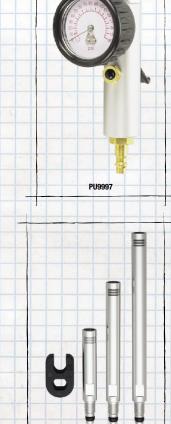
PU9997

Presta Valve Extenders

Available for both standard valves and those with removable cores, our Presta Valve Extenders add 30–70mm to your existing valve length for the deep section rims.

| Part # | Туре | Length | Color |
|---------|----------------|--------|--------|
| PU4513 | Removable Core | 30mm | Silver |
| PU4516 | Removable Core | 30mm | Black |
| PU4514 | Removable Core | 50mm | Silver |
| PU4517 | Removable Core | 50mm | Black |
| PU4515 | Removable Core | 70mm | Silver |
| PU4518 | Removable Core | 70mm | Black |
| PU4500 | Standard | 34mm | Black |
| PU4501 | Standard | 34mm | Silver |
| PU4511 | Standard | 52mm | Black |
| PI14512 | Standard | 52mm | Silver |

PU4500

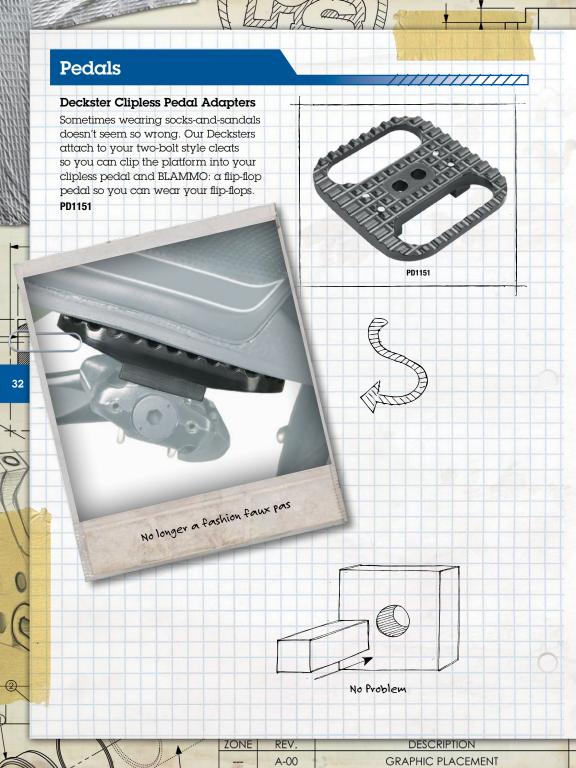


PU4513

31

DATE

ISSUED BY



Seatpost Enhancements

Seat Binder Bolts

CroMoly. Slotted. Shiny.

| ST0934 | 16mm |
|--------|------|
| ST0935 | 19mm |
| ST0936 | 21mm |



Seatpost Clamps

Our Seatpost Clamps with rack mounts provide a stable spot to mount your rear rack stays on bikes without seatstay braze-ons. Very handy.

| ļ | ST0686 | 31.8mm | Black |
|---|--------|--------|-------|
| | ST0687 | 34.9mm | Black |



THE WRONG TOOL FOR THE JOB



SPOKE AS CHAIN HOLDER

Got this one from Brett Fleming over at Efficient Velo Tools. Use your needlenose to bend a spoke around in a full loop, put an angle on the end. This will keep your chain in place while you mess around with your chain tool and connector links.



33

DATE

ISSUED BY



Seatpost

Seatpost Shims

34

| Part # | Seatpost Size | Seat Tube Size | Thickness |
|--------|------------------|-------------------|-----------|
| ST0250 | 30.9mm | 31.6mm | 0.7mm |
| ST0214 | 27.2mm | 28.6mm | 1.4mm |
| ST0220 | 27.2mm | 29.2mm | 2.0mm |
| ST0222 | 27.2mm | 29.4mm | 2.2mm |
| ST0224 | 27.2mm | 29.6mm | 2.4mm |
| ST0226 | 27.2mm | 29.8mm | 2.6mm |
| ST0228 | 27.2mm | 30.0mm | 2.8mm |
| ST0230 | 27.2mm | 30.2mm | 3.0mm |
| ST0232 | 27.2mm | 30.4mm | 3.2mm |
| ST0236 | 27.2mm | 30.8mm | 3.6mm |
| ST0237 | 27.2mm | 30.9mm | 3.7mm |
| ST0242 | 27.2mm | 31.4mm | 4.2mm |
| ST0244 | 27.2mm | 31.6mm | 4.4mm |
| ST0246 | 27.2mm | 31.8mm | 4.6mm |

| Part # | Seatpost Size | Seat Tube Size | Thickness |
|--------|------------------|-------------------|-----------|
| ST0506 | 27.2mm | 26.0mm | 0.6mm |
| ST0508 | 25.4mm | 26.2mm | 0.8mm |
| ST0510 | 25.4mm | 26.4mm | 1.0mm |
| ST0512 | 25.4mm | 26.6mm | 1.2mm |
| ST0514 | 25.4mm | 26.8mm | 1.4mm |
| ST0516 | 25.4mm | 27.0mm | 1.6mm |
| ST0518 | 25.4mm | 27.2mm | 1.8mm |
| ST0532 | 25.4mm | 28.6mm | 3.2mm |
| ST0538 | 25.4mm | 29.2mm | 3.8mm |
| ST0550 | 25.4mm | 30.4mm | 5.0mm |
| ST0552 | 25.4mm | 30.6mm | 5.2mm |
| ST0554 | 25.4mm | 30.8mm | 5.4mm |
| ST0555 | 25.4mm | 30.9mm | 5.5mm |
| ST0562 | 25.4mm | 31.6mm | 6.2mm |





ZONE REV. A-00

DESCRIPTION
GRAPHIC PLACEMENT

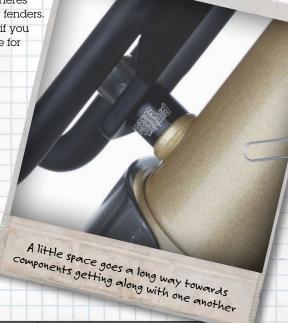


SpaceOuts

6mm spacers for use with M5 bolts.

These little guys are especially helpful when the front derailleur clamp interferes with water bottle cage mounting. Or fenders. Or any time your bolt is too long. Or if you want to make a really ugly necklace for a special someone.

| (| 3 |
|-----|-----|
| 970 | 198 |
| | |



Steerer Tube Shims

| Part # | OD | ID | Length/Height | |
|--------|--------|--------|---------------|--|
| SM0260 | 25.4mm | 22.2mm | 10mm | Fits 1-1/8" cable hangers on quill stems |
| SM5320 | 28.6mm | 25.4mm | 38mm | Fits 1-1/8" stems on 1" threadless steerer |
| SM5318 | 28.6mm | 25.4mm | 49mm | Fits 1-1/8" stems on 1" threadless steerer |

Handlebar Shims

| Part # | OD | ID | Length |
|--------|--------|--------|--------|
| SM5317 | 31.8mm | 26mm | 48mm |
| SM5316 | 31.8mm | 25.4mm | 44mm |
| SM1071 | 26mm | 25.4mm | 45mm |
| SM1070 | 26mm | 25.4mm | 35mm |
| SM3002 | 22.2mm | 25.4mm | 38mm |

SM5317



35

ISSUED BY

WHEEL TOOLS

Wheel Tools

We offer a weirdly small selection of wheel tools. As we don't do any other tools, they seem out of place. Well, long story short, our small staff is part of a much larger whole, Quality Bicycle Products, who's wheel-building department has a long-running history of problem solving...

Hjerpe's Nipple Driver

Dan Hjerpe works in QBP's facilities department. We don't really know what he does, other than

he materializes whenever something goes wrong. Dan's responsible for many one-of-a-kind tools that the wheelbuilders use on a daily basis: a stand for filling hubs, a custom track system for wheels that come out of the lacing machine, wood table inserts that stabilize hubs and rims for hand-lacing...the department was truly built from the ground up. As things grew, they needed a faster way to lace wheels than the hand-cranked nipple driver that was available. Many iterations of what later became the Holy Driver were hand-made by Dan before we brought it to market.

Williams' Adapters

36

In training for wheelbuilding, I paged through Gerd Schraner's *The Art of Wheelbuilding*, read up on sheldonbrown.com and looked at all manner of diagrams, and read up on "leading" and "trailing" spokes. I didn't get it. One day, Joel Williams came over to the bench where

I was lacing, impatient. "Here. See the logo [on the hub]? Count four, grab this one and start here [by the valve hole]. Then it's just over, over, under." In those few seconds I learned how to lace a three-cross wheel. Joel's mastered the art of making life easier. Joel thought that the thru-axle truing stand adapters we made were okay, but not great; they always slipped out of the hub when he put 'em in the squisher or checked the dish. He and Dan collaborated to cut a groove into the alloy and install an o-ring so they didn't fall out. He brought the idea to us and our new Thru Axle Truing Stand Adapters are the result.





Holy Driver

For quicker wheel building, use the Holy Driver to set your nipples to consistent depths. CroMoly with a black oxidized finish.

TL1302



Thru-Axle Adapters for Truing Stands

Two adapters: one front and one rear for current thru-axle hubs.

Grooves and O-rings help keep the adapters in place while you check dish or stress-relieve the spokes.

| TL1303 | Front | 9/15/20mm | Pair |
|--------|-------|-----------|------|
| TL1304 | Rear | 10/12mm | Pair |



ISSUED BY



PS

37

DATE

Shop Rags

How often is it that you remember to wear your apron? If you're like us, you forget a lot. So we wear our Problem Solvers t-shirts, 'cause when they get a big nasty chainring stain on 'em or we spill a super-dark stout down the front, we can just rip 'em up and they make the best damn shop rags around.

| Square | Peg | | |
|--------|--------|---------|--|
| Size | Men's | Women's | |
| SM | CL5900 | CL5905 | |
| MD | CL5901 | CL5906 | |
| LG | CL5902 | CL5907 | |
| XL | CL5903 | CL5908 | |
| XXL | CL5904 | | |

38

| What's ' | Your Problem | ? | |
|----------|--------------|---------|--|
| Size | Men's | Women's | |
| SM | CL5909 | CL5914 | |
| MD | CL5910 | CL5915 | |
| LG | CL5911 | CL5916 | |
| XL | CL5912 | CL5917 | |
| XXL | CL5913 | | |



A-00

GRAPHIC PLACEMENT



Sometimes it's hard to know what to do next when you reach an impasse on a project. Sometimes it's hard to find the right tool. The next time you're uncertain, use this handy die to help guide your decision.



PROBLEM SOLVERS

SMASHER

MELTER







BRAIN JUICE

MINI CROWBAR







STICKY STRAP

HANDCUFFS

DONATION BIN

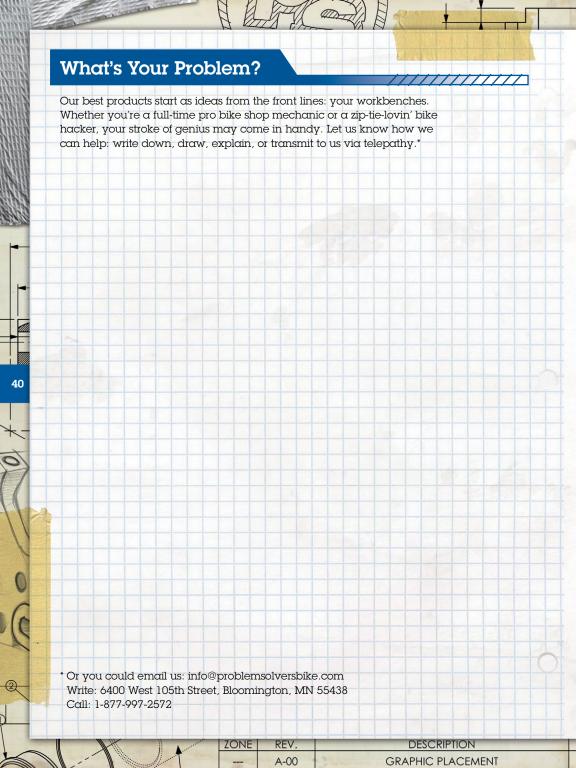
Cut along the dotted line and fold along the solid lines. Glue the tabs. Roll.



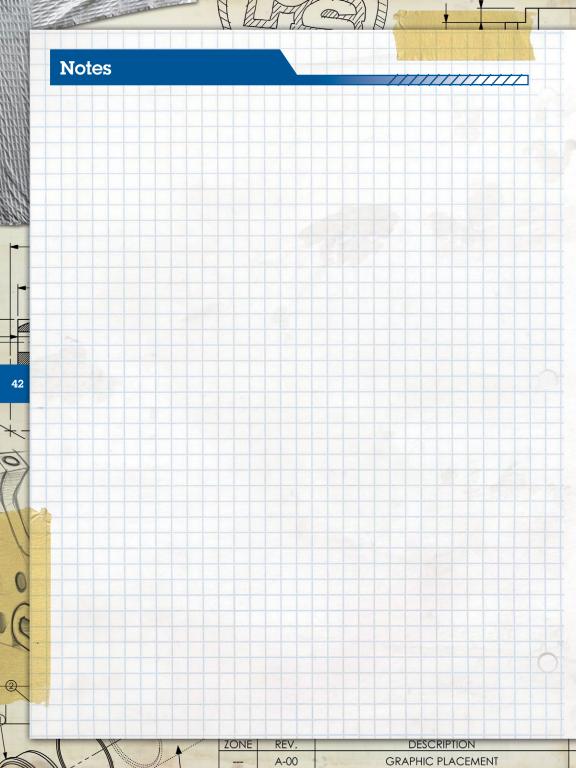
PS

DATE

ISSUED BY







Buy Problem Solvers Locally!

You'll notice that there aren't any prices in this here "catalog." That's 'cause we don't sell our stuff directly to just anybody. We're sold exclusively through bicycle retailers. Why? At one point or another, everyone on the Problem Solvers team has worked in a bike shop. And we understand that the bike shop knows best. Our motivations and product ideas come from the workbench, and we want knowledgeable, technically savvy folks installing our products. We're sold through 5,000 different bike shops in the US of A—there's probably one in your town.

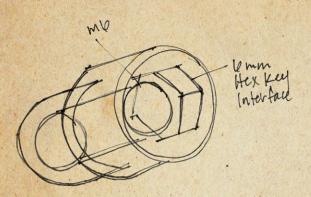
We recently said "engage" for a "Buy Local Now" button to be displayed next to our products on ProblemSolversBike.com. In this way, any visitor to the website can find the product they want from a bike shop in their hometown or, if one's not available, an online retailer. We think that's pretty cool.



Danke Schöen! Team Problem Solvers



DATE 21-Feb-2012 ISSUED BY

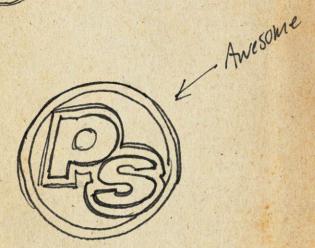




เลเลือกัดตัวเลเละ โทย โท โทยพอเมลา

D. Haballall dosable

loolidaa looliaa haad oo aasaa tagu o daada loolidaa loollasaa oo loogaana oo dasaala



| Maria | itinal | Conversions |
|-------|--------|--------------|
| MUVV | uvine | MACADA SIGN. |

| inches |
|--------|
| 7/8" |
| T |
| 11/8 |
| 11/4 |
| 13/8 |
| 11/2 |
| |

28.6 clamp Backstop

