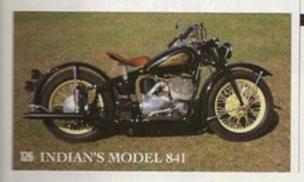


NUTS & BOLTS

- 30 HOW IT WORKS: BRAKE SYSTEMS How they do what they do
- 38 TECHLINE: SHOVELHEAD MODELS Part I: A look at engine sizes, and model and letter designators
- 78 2012 DAYTONA GIVEAWAY BIKE Springers Custom Cycles finishes the mockup
- 88 OIL BUD COOLER

 This one works even when the bike isn't moving!
- 100 HOG HELPLINE: ERROR CODES, OIL PRESSURE & OIL BLOWBY



CLASSIC AMERICAN IRON

126 INDIAN'S MODEL 841 Outfoxing the Desert Fox

HANDBOOK

- 64 CRIVITZ, WISCONSIN, AND THE NICOLET NATIONAL FOREST Where a dollar still goes as far as it used to!
- 68 GOING 200 MPH!

 What goals have you accomplished this year?
- 102 PROTECT YOUR RIGHTS: THE LOWDOWN ON LANE SHARING
- 104 SAFETY ALERT: WATER & SUGAR

SUBSCRIBE TODAY & SAVE!

\$24.95 A Year For 12 Issues (Half Price)

custsvc_ameriron@fulcoinc.com www.AlMag.com

Or Call 877/693-3572



74 BOYESEN POWER X-INTAKE



78 2012 DAYTONA GIVEAWAY BIKE



88 OIL BUD COOLER

2012 DAYTONA GIVEAWAY BIKE

Springers Custom Cycles finishes the mockup



Here's where Scott left off last month. The frame is up on its wheels, and the brakes are on. The powertrain is also installed and fitted. AST MONTH, YOU WATCHED AS SCOTT AT Springers Custom Cycles (SCC) put this year's Official Motorcycle of Daytona Bike Week up on its wheels and dropped in the powertrain. This time around he's going to install all the cool and needed bits that'll make it a real motorcycle. The Official Motorcycle of Daytona Bike Week is the most publicized raffle motorcycle in the world. And since it's a raffle bike, all it takes to own it is 50 bucks and a little luck! With only 4,500 tickets being sold, the odds are definitely in your favor. However, that's only if you buy a ticket! The accompanying sidebar tells you how to get one from the Daytona Beach Community Foundation.

It's time to tell you about the builder of this year's bike, Scott Helper. Scott started his two-wheel wrenching career at age 7 on the same machines I cut my own riding and wrenching teeth on: minibikes! Scott would buy a battered

HOW TO ENTER

SO, HOW DO YOU GET A TICKET to win this year's Springers Custom Cycles bobber? Just mail your name, address, telephone number, the number of tickets you want, and a check for the correct amount (\$50 per ticket) to the Daytona Beach Community Foundation, PO Box 2676, Dept. AIM, Daytona Beach, FL 32115-2676. Or you can fax the foundation at 386/258-5104 with all of the above information plus your Visa, MasterCard, or American Express number, expiration date, and signature. (If you have any questions, you can call the foundation at 386/255-0981.) You can also get more info or enter online at www.OfficialBikeWeek.com.

The drawing will be held at approximately 3 pm on Saturday, March 17, 2012, in Riverfront Park in downtown Daytona Beach (across from Daytona Harley-Davidson). Only 4,500 tickets will be printed, so don't delay. As always, you don't have to be present to win, only your entry does. Good luck!

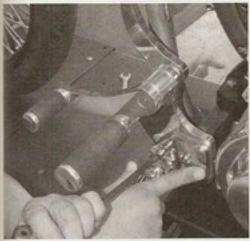




The first parts on this month are a Paughco wraparound oil tank, which is supported by a Biker's Choice oil tank mount.



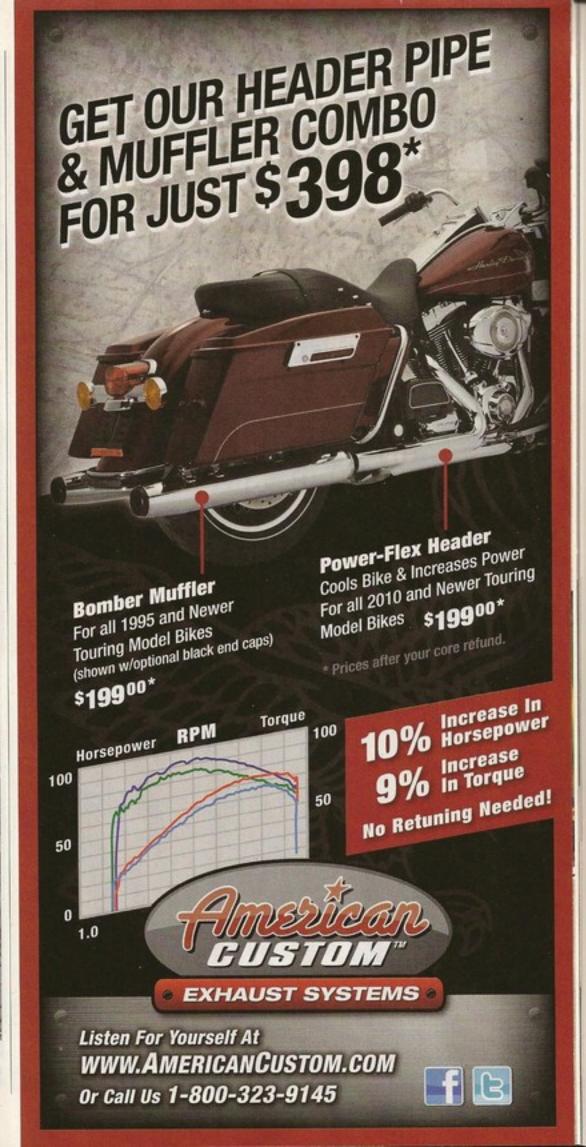
Next on is the right (brake) side, polished Excel foot control with Excel footpeg and Excel brake pedal.

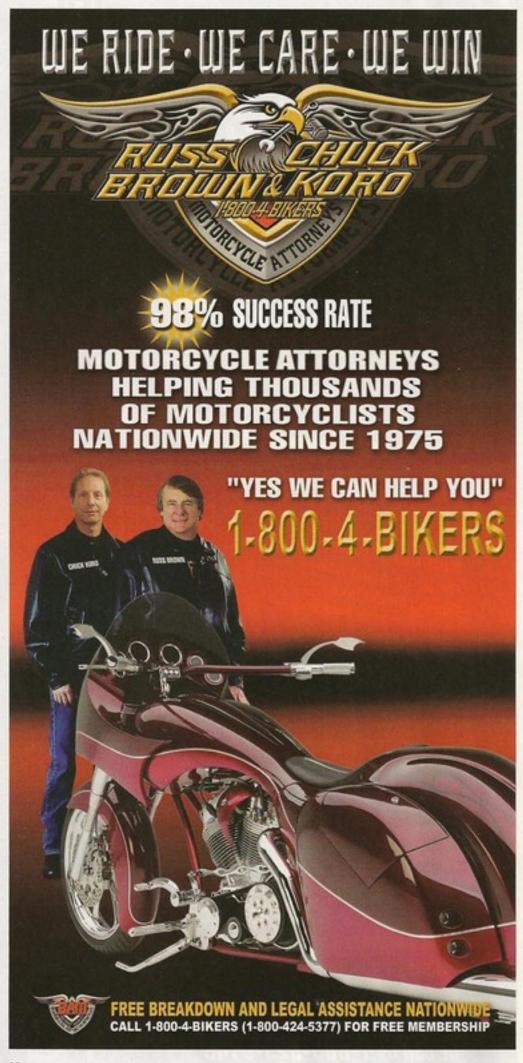


Of course, the left (shifter) side also gets a polished Excel foot control with Excel footpeg and Excel shifter peg.



A Springers Custom Cycles proprietary front fender gets bolted to the Paughco springer front end next to cover the front Ride Wright wheel.



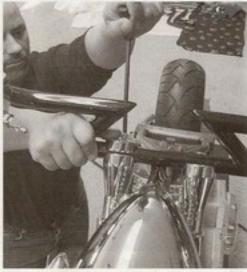




A polished Headwinds headlight, which comes with Headwinds polished turn signals already attached, gets bolted to the Paughco springer using a Headwinds chrome mount. A Headwinds bulb will go in later.



What better risers to top off this great front end than a set of chrome Paughco ones?



Next on is a cool set of Biker's Choice powdercoated gloss black Z-bars!



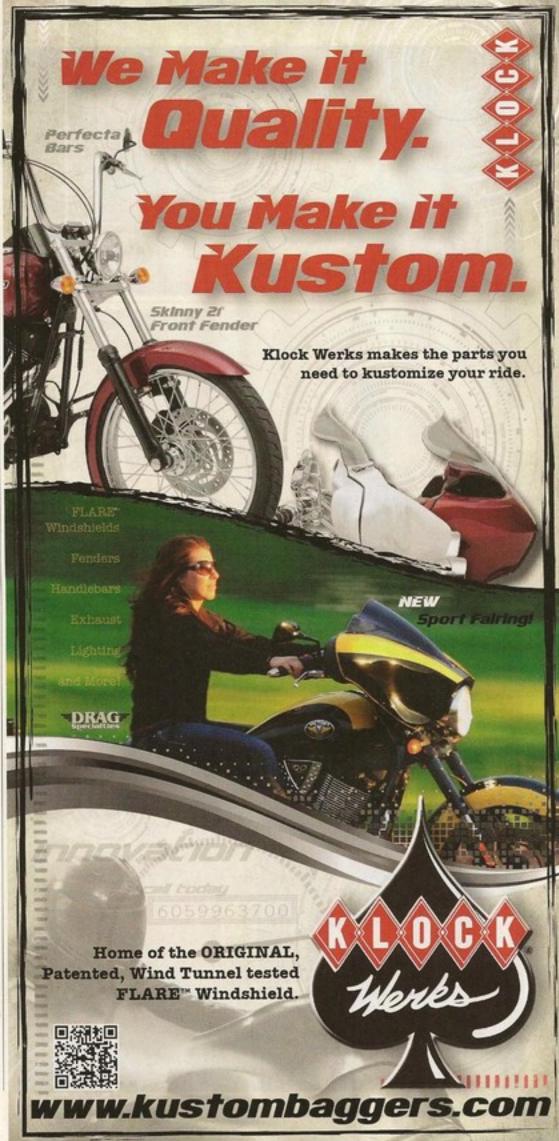
Biker's Choice also supplied the chrome hand controls, which should look great on the gloss black BC Z-bars. The master cylinder and throttle assembly goes on first. By the way, that's a sleek black Excel handgrip.



S&S Cycle sent along one of its dependable as a hammer Super E carbs. But before it gets bolted onto the engine, Scott installs this slick Arlen Ness enrichener knob.

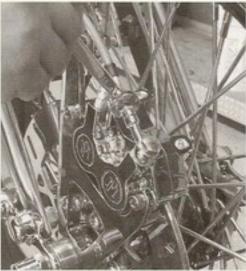


He then bolts the S&S carb to the Crazy Horse intake manifold. You have to use a Crazy Horse manifold since the carb is on the left side of the engine on a V-Plus.

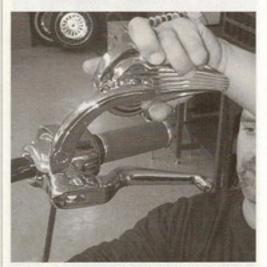








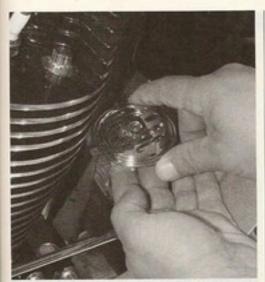
Barnett braided stainless steel brake lines and Goodridge fittings with Biker's Choice banjo bolts are used for both the front and rear brake systems. A Biker's Choice sending unit will keep the police happy.



A chrome Biker's Choice left (clutch) hand control is bolted to the Z-Bars, complete with a black Excel handgrip. Chrome Biker's Choice mirrors add the finishing touch to both sides of the handlebars.



To match the braided stainless steel brake lines, Barnett braided stainless steel throttle cables, and clutch cable are installed next.



To keep things legal, this Biker's Choice horn is installed between the Crazy Horse engine and Rivera Primo six-speed transmission.

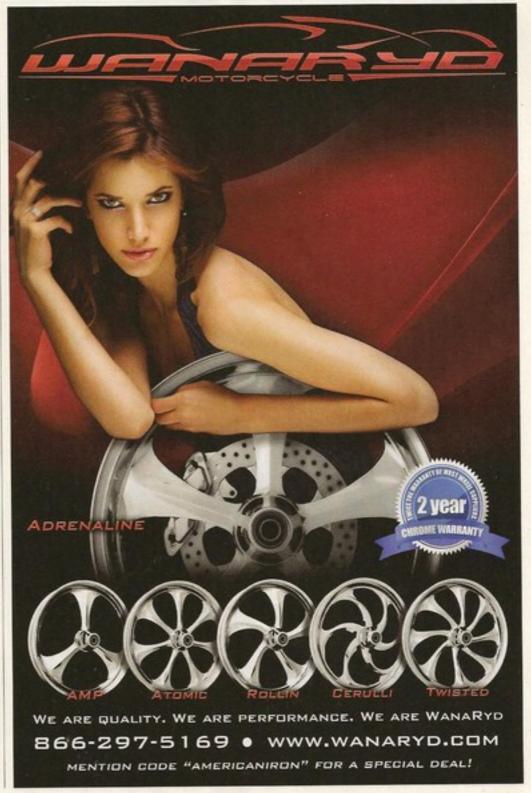


A set of Vance & Hines blacked-out pipes can now go on using V&H brackets and a set of Biker's Choice exhaust flanges. The matching, blacked-out Vance & Hines heat shields will go on at final assembly.



After a stock H-D cup is bolted to the engine, a Dynatek single-fire ignition gets installed into the V-Plus cone.





enabling Genuine Harley Davidson® Electronic

MIDRN LO

Since 2002

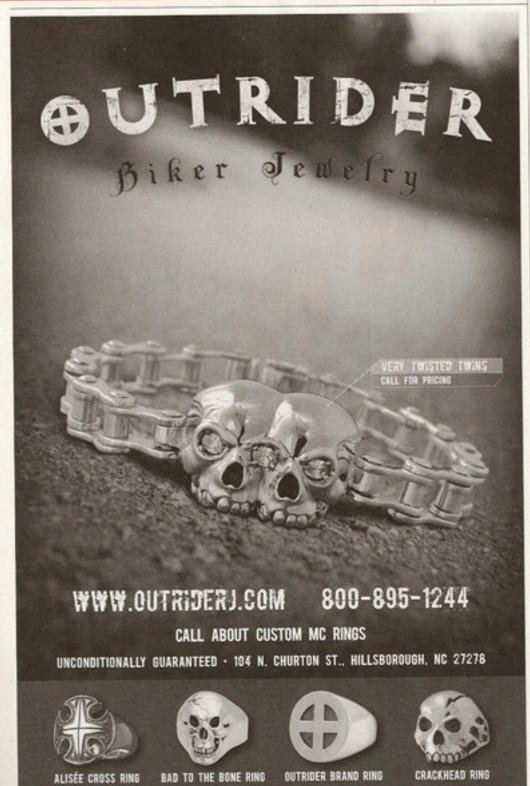
(separate purchase)
set coast resume accelerate
maintain constant speed uphill & downhill

1996- present Softails 1996 - 2001 Road Kings 1998 - 2001 Electra Glides

1996 - present Police & Road Kings No More Throttle Locks! Please!

www.cruisemount.com







A set of Dynetek coils and wires get attached to the right side of the engine using a Biker's Choice coil mount, which is held on with a Springers Custom Cycles handmade mount.



A Springers Custom rear belt guard will protect the H-D rear drive belt.



A proprietary Springers Custom rear fender with built-in struts covers the rear Ride Wright wheel.

SOURCES

ADVANCED CUSTOM DESIGN

39442 North Route 59, Dept. AIM Lake Villa, IL 60046 847/265-9378 www.AlligatorBob.com

ADVANCED SLEEVE/DELKRON

8090 Auburn Rd., Dept. AIM Concord, OH 44077 440/205-1055 www.Delkron-Mfg.com

ARLEN NESS INC.

6050 Dublin Blvd. Dept. AIM Dublin, CA 94568 925/479-6350 www.ArlenNess.com

BARNETT TOOL & ENGINEERING

2238 Palma Dr., Dept. AIM Ventura, CA 93003 805/642-9435 www.BarnettClutches.com

BIKER'S CHOICE

Your local Biker's Choice dealer www.BikersChoice.com

CHOPPER SHOX

Las Vegas, NV 89183 702/683-5143 www.ChopperShox.com

CRAZY HORSE MOTORCYCLES

19403 72nd Ave. South Dept. AIM Kent, WA 98032 253/872-3602 www.CrazyHorseMotorcycles.com

D&W MOTORSPORTS

125 East Philadelphia Ave. Dept. AIM Boyertown, PA 19512 610/473-2001 www.D&WMotorsports.com

DAKOTA DIGITAL

4510 West 61st St. North Dept. AIM Sioux Falls, SD 57107 800/593-4160 www.DakotaDigital.com

DAYTONA BEACH COMMUNITY FOUNDATION

PO Box 2475 Dept. AIM Daytona Beach, FL 32115-2475 386/258-5104, fax www.OfficialBikeWeek.com

DYNATEK

164 South Valencia St. Dept. AIM Glendora, CA 91741 626/963-1669 www.DynaOnline.com

EXCEL COMPONENTS

233 Market St. Dept. AIM Lockport, NY 14094 716/439-0956 www.ExcelComponents.com

GOODRIDGE (USA) INC.

529 Van Ness Ave. Dept. AIM Torrance, CA 90501 310/533-1924 www.Goodridge.net

HARLEY-DAVIDSON MOTOR COMPANY

3700 West Juneau Ave. Dept. AIM Milwaukee, WI 53201 414/343-4056 www.Harley-Davidson.com

HEADWINDS

221 West Maple Ave. Dept. AIM Monrovia, CA 91016 626/359-8044 www.Headwinds.com

LA CHOPPERS

5221 Oceanus Dr. Dept. AIM Huntington Beach, CA 92649 714/274-4065 www.LAChoppers.com

MIDWEST MOTORCYCLE SUPPLY

PO Box 699 Dept. AIM Pevely, MO 63070 636/931-3200 www.Midwest-MC.com

METZELER MOTORCYCLE TYRE, NA

See your local Metzeler dealer www.Metzeler.com

NUB GRAFIX

61 Rider Rd. Dept. AIM Walden, NY 12586 845/778-2191 www.NubGrafix.com

PAUGHCO

PO Box 21390 Dept. AIM Carson City, NV 89721 800/423-2621 www.Paughco.com

PERFORMANCE MACHINE

6892 Marlin Circle, Dept. AIM La Palma, CA 90623 800/479-4037 www.PerformanceMachine.com

PINGEL ENTERPRISES

2072 11th Ave. Dept. *AIM* Adams, WI 53910 608/339-7999 www.PingelOnline.com

PROGRESSIVE SUSPENSION

6911 Marlin Circle, Dept. AIM La Palma, CA 90623 714/523-8700 www.ProgressiveSuspension.com

RIDE WRIGHT WHEELS

3080 East La Jolla St., Dept. AIM Anaheim, CA 92806 714/632-8297 www.RideWrightWheels.com

RIVERA PRIMO INC.

12450 Whittier Blvd. Dept. AIM Whittier, CA 90602 562/907-2600 www.RiveraPrimoInc.com

S&S CYCLE INC.

14025 County Hwy. G, Dept. *AIM* Viola, WI 54664 866/244-2673 www.SSCycle.com

SPRINGERS CUSTOM CYCLES

1432 Route 179, Dept. AIM Lambertville, NJ 08530 908/397-4090 www.SpringersCustomCycles.com

VANCE & HINES

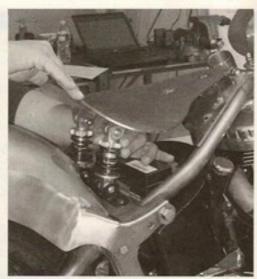
13861 Rosecrans Ave., Dept. AIM Santa Fe Springs, CA 90670 562/921-7461 www.VanceAndHines.com

WIMMER CUSTOM CYCLES

11670 Highway 17 Bypass Dept. AIM Murrells Inlet, SC 29576 866/HOT-CYCLE www.WimmerMachine.com



A Biker's Choice battery, battery strap, and battery cables will supply our bobber with the electrons it needs to run.



A Chopper Shox seat pan and seat shocks builder's kit will see to it that the rider's butt is happy whenever it's in this saddle! This pan will be covered by Alligator Bob at Advanced Custom Design.



After welding a Dakota Digital gauge nacelle to the left side of the frame, Scott pops in a chrome Dakota Digital LED speedo. The gauge will get its signals from a Biker's Choice speedo pickup in the Rivera six-speed transmission.



This dished Paughco gas tank will do a great job of keeping the V-Plus engine's fuel supply safe while looking cool.

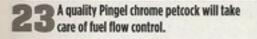


25 Air supply duties will be handled by this chrome Wimmer updraft air cleaner assembly.



A LA Choppers chrome license plate holder and taillight make the tail of our bobber look great!

28 Scott will also thread a Midwest Ultima wiring harness to get all the electrons to their proper locations.





Here's Scott with our finished mockup ready to be disassembled and sent out for paint, polish, and powdercoat.

bike, fix it up, and then flip it for a profit after riding it awhile. As he got older, he made the natural progression to full-size motorbikes, mostly Harley-Davidsons. After a stint as a successful landscaper, Scott decided what he really wanted to do for a living was what he had been doing as a hobby since he was 7, but with a couple of twists. First, Scott wanted to build affordablevet-custom bikes that his customer would have a hand in building. "I love to work with the customers," says Scott, "and get their input regarding things like frame color, engine finish, and wheel style and color, as well as what's chromed and what's painted." The second is that there are no extra charges for upgrades to a Springers bike except for drive line changes. That's because SCC offers what most other companies charge extra for as a stock part. "I also don't believe in the nickel-and-dime approach," says Scott. "For example, whether you want a natural finish engine or a fully polished one, there's no additional charge." That's why the Springers Custom Cycles motto is "We are all different from each other and our bikes should be, too." And to make things even easier for his customers, Scott became a legal manufacturer so SCC customers can fully insure or finance their bikes. That

means when you buy (or win!) a Springers Custom Cycles motorcycle, you get a title, just like you do when you buy a new bike from a Harley-Davidson dealership.

As for the companies Scott uses to do the things he can't, his preferred powdercoater is Dan Woods at D&W Motorsports. When a custom seat is needed for a build, as it is with our Daytona bike, Scott uses Alligator Bob at Advanced Custom Design. When it comes to paintwork, "I only want the very best for my bikes, so I only use Nub Grafix for all my paintwork," says Scott. "I've been working with Nub for years, and I'm always amazed at his work. I only bring him a sample of my frame or wheel color and let him do his thing. He's the artist!"

Before you go to the accompanying photos and captions to see what other companies are involved with this special build, I wanted to thank the companies that have joined in on this project. You'll find them listed on our Sources page. All concerned were easy to work with and got us the right parts the first time. And when you call Excel Components, the company that supplied our forward controls, handgrips, and front and rear passenger pegs, be sure to ask for Cindy! She'll take great care of you. AIM

