

"In the end, a bike has to be a solid ride."

— HIRO ISHIHARA

SATSUMA CYCLE WORKS: THE TOOLS OF THE TRADE

SPEED IS ESSENTIAL

There's an old adage "Use the right tools for the right job." That can mean tooling up your own tools. Such is the case for bike builder and tool maker Hiromichi "Hiro" Ishihara, who, at the age of 18, began developing his design and fabrication skills including a stint in

aluminum welding at one of Yamaha's factories. His travels would eventually take him to Nova Scotia, Canada, where he gained more experience at a custom bike shop before returning to Osaka, Japan, where he opened the doors of his Satsuma Cycle Works in 2005.

The original shop consisted of a 30-year-old lathe, a set of drill presses and a TIG welder. He then picked up an older model, well-used CNC machine and taught himself CAD. He also made himself an English wheel and a planishing hammer for fabrication. While his

focus is on his own full custom bike projects, he also makes such tools for other custom shops.

Having put those tools to good use, Hiro's custom bike skills were quickly recognized by his clients, his peers in the industry and bike mags both in Japan and later on an international scale. For Sturgis 2007, Hiro was contacted by Chica Custom Cycles of California to enter the One World Chopper Show organized by Michael Lichter. Hiro brought the "SCWFF" bike seen here to the event, and the very positive reception it received helped put Hiro and Satsuma Cycle Works on the world bike-building map. Hiro's bike-building philosophy is definitely old-school with a penchant for knuckleheads infused with his special blend of modern performance. As he says, "In the end, a bike has to be a solid ride. Speed is essential."

The SCWFF custom features one of Hiro's signature frames—the hidden-shock rigid offering a compact platform upon which to build. That thinking also drove the engine choice, which started with a complete re-build and polish of 1992 Evo. Inside, roller rockers, valve-springs, pistons and cam were all chosen for their performance attributes. To keep the sleek look, Hiro shaved off the bottom five heat fins and then followed up with polishing. The rocker covers were taken from a Sportster, both frame downtubes shaved to allow the rocker covers adequate space. The frame modifications were made to hug the engine, resulting in the impression of an oversized engine stuffed into a reduced space. To further streamline the look, all wiring runs hidden through the frame while the throttle cable was plumbed through the custom-made handlebars.

Tolerance of fit and assembly was another focal point. Because Hiro CNC-fabbed all the one-off parts from aluminum, the challenge was to maintain strength and durability as they were fitted as tightly as possible to the frame, again to keep the bike as compact as possible. All bolts outside the engine and transmission were also machined with the CNC. That was also true for the brackets, the oil tank fins, the carb cover, the pushrod covers, the side-stand, the headlight, the front brake

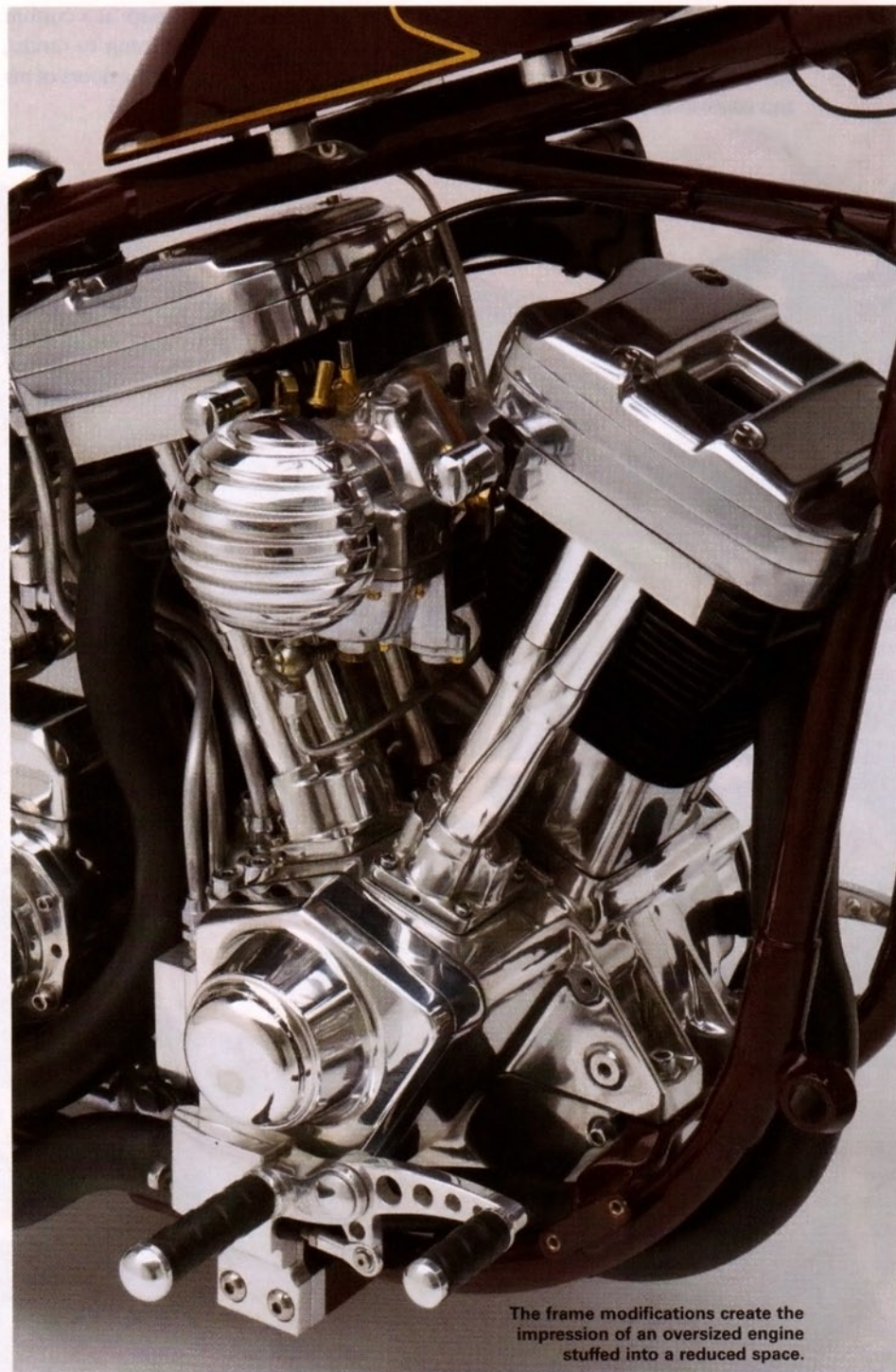
caliper, the point cover, the primary cover, jockey shift, and all clips. The seat, tank, rear fender, and primary cover were all hand pounded and formed with the English wheel out of aluminum. Later, a 5-speed hydraulic kickstart was customized and fitted with a CNC-fabbed kickarm and pedal.

Much of the Satsuma Cycle Works current parts catalog stems directly from the SCWFF project including the

weld-on, pop-up gas cap, the side stand, the handmade springer front end and dozens of more components available to the public.

Says Hiro of the SCWFF bike, which is his personal ride, "In the end, this is a bike for riding, plain and simple. It is quick off the line and nimble on the clogged streets of Osaka and Kobe." Or anywhere else for that matter.

—Paul Garson



The frame modifications create the impression of an oversized engine stuffed into a reduced space.



Owner: Hiro Ishihara/
Satsuma Cycle Works
City: Osaka, Japan
Designer: Hiro
Fabrication: Satsuma Cycle Works
Year/make: 2006 Satsuma
Model: SCWFF
Assembly: Satsuma Cycle Works
Time: 3 months
Chroming: Satsuma Cycle Works
ENGINE
Year and make: 1992 H-D
Type: Evo
Displacement: 88 cubic inches
Cam: EV27
Ignition: Crane
Pistons: H-D
Heads: factory
Lifters: stock
Carb(s): S&S E
Pipes: Satsuma Cycle Works
TRANSMISSION
Year and make: 2006 H-D
Modifications: Satsuma Cycle Works
Shifting: 5-speed jockey
PAINTING
Painter: Fraks
Color: red/brown
FRAME
Year: 2006
Builder: Satsuma Cycle Works
Type: hidden-shock
Rake: 30 degrees
Stretch: none
Shocks: Works Performance
ACCESSORIES
Bars: Satsuma Cycle Works
Handlebar controls: Satsuma Cycle Works
Fenders: Satsuma Cycle Works
Headlight: Satsuma Cycle Works
Taillight: Satsuma Cycle Works
Pegs: Satsuma Cycle Works
Electrics: Satsuma Cycle Works
Gas tank: Satsuma Cycle Works
Oil tank: Satsuma Cycle Works
Oil system: JIMS
Seat: Satsuma Cycle Works
Grips: Satsuma Cycle Works
FORKS
Type: H-D 74/Satsuma Cycle Works
Extension: stock
WHEELS
Size: 23-inch front, 18-inch rear
Wheels: 120-spoke
Tires: Avon
Brakes: H-D front, K-Tech single-sided rear
Photos: Michael Lichter
Contact: Satsuma Cycle Works
www.satsumacycle.com