



**4-STROKE THAT TURNS HEADS** - With a new graphics package, billet wheels, skis, shocks, seat wrap, polished tunnel and a lot more, our 2010 project sled was a **looker AND a runner**. This one has trail manners **AND** a lot of off-trail 4-stroke attitude.



## AMSNOW PROJECT SLED: TRANSFORMING A RENEGADE 1200 4-TEC!

BY MARK BONCHER

**SKI-DOO ANSWERED** the prayers of 4-stroke lovers with the extended track 1200 4-TEC Renegade in 2010. BUT, there are always those who are not totally happy. We heard many hard-core Doo-heads asking for more power, more snazz, more storage and a better off-trail 4-stroke. So we decided to make one!

### Function First

AmSnow teamed up with Straightline Performance for this project and with access to everything in its Forest Lake, Minn., shop, it was the perfect place to assemble this masterpiece. Because we wanted our more muscle-bound sled to be practical and functional we started with some pieces any stock 1200 Renegade owner should buy to get the most from this sled.

A slightly taller and adjustable 4 to 5.5-inch Rox riser was added so that we could have an easier time standing up for off-trail excursions. These risers allow you to clamp to a stock 7/8-inch diameter bar or remove the reducers and clamp to a 1½-inch bar. We also got a wind-shield pack and a rear tunnel bag from Skinz Protective gear

because storage was basically nil on the stock sled. Skinz also provided us with a "grip-per" seat wrap that was perfect as it wasn't so sticky that you couldn't move around on it, but wasn't so slippery that you felt like you were going to fly off the back when you grabbed a handful of throttle.

For wide-open off-trail and deep powder use, a Frogskinz 4-piece XR nose vent kit was installed for increased airflow to cool the engine. USI also stepped up and sent us a pair of its X2 Triple Threat stage one skis as well. These have a removable/adjustable tail fin system in them for use in changing conditions, or if you just want more or less ski-bite on the trail, or more turning ability off-trail.

Also, if you are doing any amount of icy trail or lake riding, traction products are a good idea. We didn't get too crazy with the number of Woody's Grand Master studs that we installed, just the minimum 96 count. We figured 96 was plenty for a sled that we would mostly be using off-trail. We also added Woody's 6-inch Trailblazer carbide runners to the USI skis.

Arvin Meritor, or Ryde FX

chipped in with a set of its famous Air 2.0 front shocks. These shocks are known for a plush feel with good anti-bot-toming characteristics.

### Mod Time

It wouldn't be a project sled if we didn't add some mods under the hood! This year we added a Straightline Performance ceramic coated header and lightweight muffler. SPI says the header gains 10-11 hp at 8,300-8,500 rpm and the muffler sheds 16 lbs. and adds 1-2 hp. To most efficiently harness the extra ponies we were putting out, a TEAM hollow jackshaft and TEAM-tied secondary clutch kit were added. This kit from SPI comes with a helix, a drive and a driven spring, 2 TRA ramps and an adjustable pin kit. SPI also tuned the clutching and added an Ultimax XS Carlisle belt.

We also wanted our project sled to turn some heads, or more accurately, snap the necks of all those snowmobile gawkers at the local watering hole. So, we had Blown Concepts of Plymouth, Minn., put together a killer graphics package.

We also gave Wahl Brothers

a call and they sent us some blingtastic billet rear wheels and 4 billet idler wheels. Carbon Sled Parts also got in on the action and we installed some of the firm's lightweight handguards and a carbon fiber windshield. Finally, the boys at SPI put in some extra hours and polished the entire tunnel.

Total build time for the sled was about 16 hours and when we put it on the dyno we saw 152 horses. That's an increase of approximately 20 hp over stock. We also put this sled on the scale after all the work had been done and all the additions put on and found it weighed just more than 600 lbs. totally full of fluids. That's not too bad for an extended track 4-stroke.

Not surprisingly, in our Real World acceleration tests this sled completed the ¼-mile the quickest of any of our stock sleds. It also beat the modified Cat 1000 we had on hand, running the ¼-mile in an impressive elapsed time of just 12.61 seconds.

Fast and good looking, a hot combo!

### PROJECT SLED SPECS

**Horsepower** - 152 hp

**Wet Weight** - 607 lbs.

## PROJECT SLED TEST

### TIMED SPEED RESULTS

#### 2010 Ski-Doo Renegade 1200 4-TEC

Top speed (mph)	94.13
¼-mile (sec.)	12.61
¼-mile (mph)	94.13
1000 ft. (sec.)	11.31
1000 ft. (mph)	93.44
660 ft. (sec.)	8.73
660 ft. (mph)	85.63
0-30 mph (sec.)	2.34
0-60 mph (sec.)	4.53
30-50 mph (sec.)	1.38

**Note:** This sled featured about \$4,800 in modifications and used a mild, or trail-friendly Woodys Traction package.

## PARTS LIST AND PRICING:

**Blown Concepts** graphic kit (custom kits about \$300) [www.blownconcepts.com](http://www.blownconcepts.com)

**Rox** 4-5.5-inch Elite adjustable riser (\$149.95) [www.roxspeedfx.com](http://www.roxspeedfx.com)

**Skinz Protective Gear** Ski-Doo Grip Top seat wrap (\$224.95), Windshield Pak bag and rear Tunnel Pak (\$29.95, \$79.95) [www.skinzprotectivegear.com](http://www.skinzprotectivegear.com)

**Wahl Bros.** spoked aluminum rear (stock height) and 4 billet idler wheels (\$89.95, \$38) [www.wahl-racing.com](http://www.wahl-racing.com)

**USI** X2 Triple Threat skis (\$209.25 a pair) [www.usi-skis.com](http://www.usi-skis.com)

**Ryde FX** Air 2.0 front, standard center and rear HPG Ryde FX shock (\$691.95, \$258.95, \$258.95) [www.rydefxair2.com](http://www.rydefxair2.com)

**Woodys** Grand Master 96 count, 1.325-inch studs with round aluminum single backers and big support nuts (Ski-Doo pre-marked track holes). 6-inch Trailblazer 4 single carbide runners (\$306.95, \$67.95 a pair) [www.wiem.com](http://www.wiem.com)

**Carbon Sled Parts** carbon fiber windshield and handguards (XR standard black (\$120, \$150 for mount and guards) [www.carbonsledparts.com](http://www.carbonsledparts.com)

**Frogskinz** XR nose vent kit (\$53.51) [www.straightlineperformance.com](http://www.straightlineperformance.com)

**Straightline Performance** complete header and lightweight muffler, (\$700, \$300) [www.straightlineperformance.com](http://www.straightlineperformance.com)

**TEAM** hollow jackshaft and TEAM tied secondary clutch kit (Tuning and cost through SPI is \$749) [www.straightlineperformance.com](http://www.straightlineperformance.com)

**Ultimax XS Carlisle** belt, [www.carlisesnowbelts.com](http://www.carlisesnowbelts.com)



## WANT TO SPLIT A FEW MORE HAIRS?

The Vector covered 1,000 feet in 11.47 seconds, just 0.01 faster than the GSX, yet the GSX was at 88.27 mph, while the Vector was at 86.79. We're talking eyelashes in all the other comparative numbers too, the biggest difference being between 30 and 50 mph where the Yamaha was 0.13 seconds quicker.

From the data, you could argue it's too close to call. So you may have to look elsewhere for differentiators, say weight and mileage. But again, each scores points.

In our wet weight check the Ski-Doo wins out, tipping the scales at 618 lbs., while the Vector LTX weighed 676 lbs. Both were full of all fluids, just like you'd ride them on the trail, and neither was stud-ded. Yet in our mileage check during our week of trail rides, the Yamaha was the winner at 15.7 mpg to the GSX's 13.4. In the Ski-Doo's defense, it was not quite as well broken in as the Yamaha, and we suspect its numbers will improve. Last year our MXZ X 1200 managed 14.28 in Real World testing.

## SLEDS OF INTEREST!

*AmSnow* had two other extremely popular sleds in its fleet this winter, the dramatic and radical Polaris 600 Rush with its Pro Ride rear suspension and Arctic Cat's Sno Pro 500 riding in Cat's lightweight cross-country and snocross racing chassis.

Both ran well, with the Rush posting a solid top speed of 84.49 mph and a ¼-mile time of 14.57 sec-

## RUSH, PLUSH, AND

**MORE** - The Polaris Rush in its production form (top) was received much more pleasurably from our test riders than when we rode it in pre-production form. It's a crowd favorite! The Ski-Doo GSX SE was the most plush sled in our fleet and wasn't a slouch in the acceleration tests either!