

LOOKING FOR A NEW JOB? START HERE PG. 152

DIESEL POWER

THE VOICE OF THE TURBODIESEL ENTHUSIAST

THE PERFECT DIESEL

OFF-ROAD • SLED PULLING
WORK TRUCK • DRAG RACING
DYNO KING • TOWING
FUEL ECONOMY



MARCH 2009 VOLUME 5, NO. 3

INSIDE THE
WORLD'S
QUICKEST
7.3L POWER STROKE

MIDNIGHT
DYNO TEST
IN TEXAS

CONTENTS

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

WWW.DIESELPowerMAG.COM

A SOURCE INTERLINK MEDIA PUBLICATION

MAXIMU



TEXT AND PHOTOS BY JASON SANDS

MAXIMUM POWER

A 1,300HP, STREET-DRIVEN DURAMAX



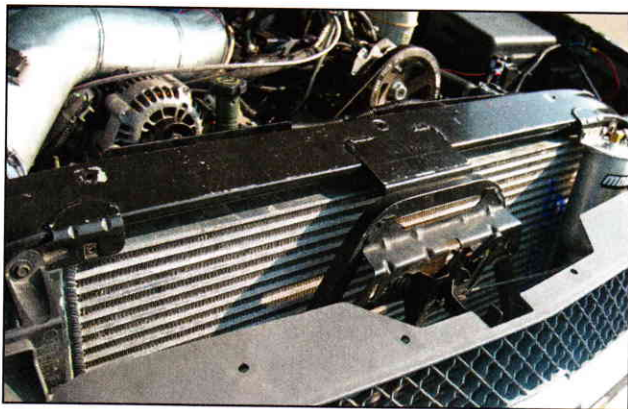
With driver and fuel, Buck Spruill's Silverado tips the scales at a light (for a diesel) 5,850 pounds. To save weight, the front and rear bumpers, as well as the bed, are made of fiberglass.

MAXIMUM POWER

BUCK SPRUILL IS A MAN WHO IS NEVER SATISFIED. THAT MIGHT EXPLAIN why he's taken a regular '03 Chevrolet 2500HD with a 300hp, 6.6L Duramax diesel engine, and transformed it into the 1,300-horsepower monster you see on these pages. The road has been long and hard, and he's broken numerous parts along the way, including 40 (that's four-zero) Allison transmissions!

Before we get too deep into the transmission story, we'd better get you up to speed on the rest of the truck. The engine that produces Allison-melting power is based off an '03 LB7 block that has been fortified with aftermarket rods, 15:1 compression pistons, ported heads, a cam, head studs, and valvespring setup, all from TTS Power Systems. Burkett Racing engines performed all of the machine work and engine assembly, and the heads were fitted with O-rings and LBZ valves.

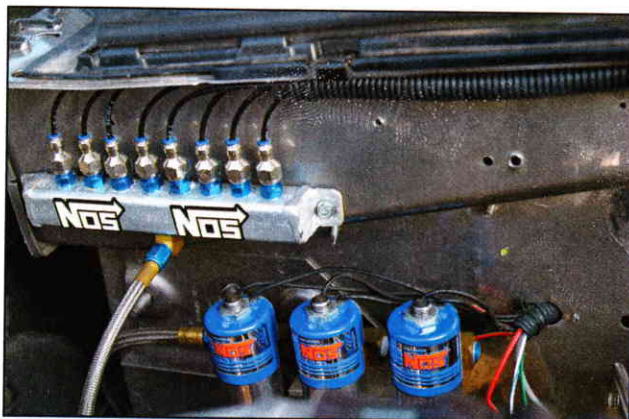
Up top, a Garrett GT4202 turbo provides a whopping 65 psi to the maxed-out engine, while up-pipes from a C4500-series truck, and a



A Spearco intercooler keeps exhaust gas temperatures in check and lowers the intake charge temperature to maximize horsepower.



A huge (74mm) Garrett GT4202 turbo was used to provide an outlandish 65 psi to the fortified Duramax, while a dual fueler kit from ATS using Industrial Injection pumps supplies the fuel.



Buck runs about 400 hp worth of nitrous through this unique fogger system, which uses multiple solenoids along with a distribution block to provide nitrous to eight fogger nozzles located inside the intake.



MAXIMUM POWER

4-inch downpipe provide plenty of exhaust flow in, and out of, the turbocharger. A three-stage NOS Launcher nitrous system was also used, and it has been modified by Buck into a direct-port unit. This way, Buck can inject nitrous into each individual cylinder, controlling EGTs as well as adding an estimated 400 additional horses. Buck also has lots of fuel, thanks to an ATS dual CP3 kit with Industrial Injection CP3 pumps, and Industrial Injection injectors that flow a whopping 100% more

than the stock units. Tuning was handled by TTS Power Systems.

With an estimated 1,300 nitrous-assisted horsepower at 4,000 rpm, the truck has been far from reliable. "We'd take it out in front of the farm on a test run and lean on it a little," Buck recalls. "Half of the time, the truck wouldn't make it back to the house."

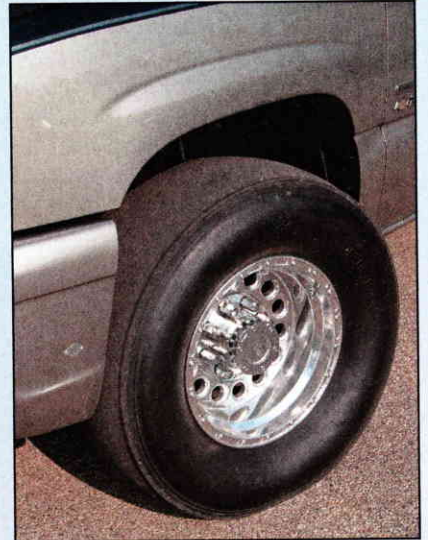
Where normal people would have given up long ago, Buck still wanted his truck to be one of the fastest diesels out there, even if it meant



To lower the truck and aid in tuning, the front suspension was switched to coilover shocks.



The rear has clamped leaf springs, but that's about it. Somehow this all adds up to 60-ft times in the 1.30-second range during Buck's four-wheel-drive launches.



Four 32x12x16 M&H Racemaster nostalgia slicks provide plenty of traction to all four wheels.



Buck has run a 1.31-second 60-foot time on his way to a 6.00-second run (at 115 mph) in the eighth-mile. In the quarter-mile, Buck has run in the mid-9s, at almost 140 mph.

MAXIMUM POWER

switching brand loyalty a little. "I called Ron Wolverton up at Sun Coast Transmissions, and asked him if he was interested in helping me out. He thought about it for a day, then called me and asked when he could have the truck." Three weeks later, it was ready.

When the truck arrived back home to Roper, North Carolina, it had a Sun Coast full metal jacket Dodge 47RE transmission installed where the Allison used to reside. Nicknamed the Duraflite, the transmission was surprisingly easy to adapt to the Chevy. A special engine plate, flexplate, and torque converter were used, but the stock driveshafts and crossmember were retained, making for a pretty simple

swap. With billet input, output, and intermediate shafts, this transmission has proved extremely reliable through a full year of racing.

All of Buck's hard work paid off last year when he made his first few trips down the dragstrip with his new engine and transmission. We're starting to get used to street-legal 11-second trucks, but this thing is in a league of its own. Buck has driven his hot rod Chevy to the track, then flashed down the quarter-mile in 9.70 seconds—and that's lifting at 1,000 feet. Buck's perseverance paid off, and his hard work has made this nitrous-equipped, Dodge-transmissioned, Duramax-powered Chevy one of the quickest 4x4s on the planet. **DP**



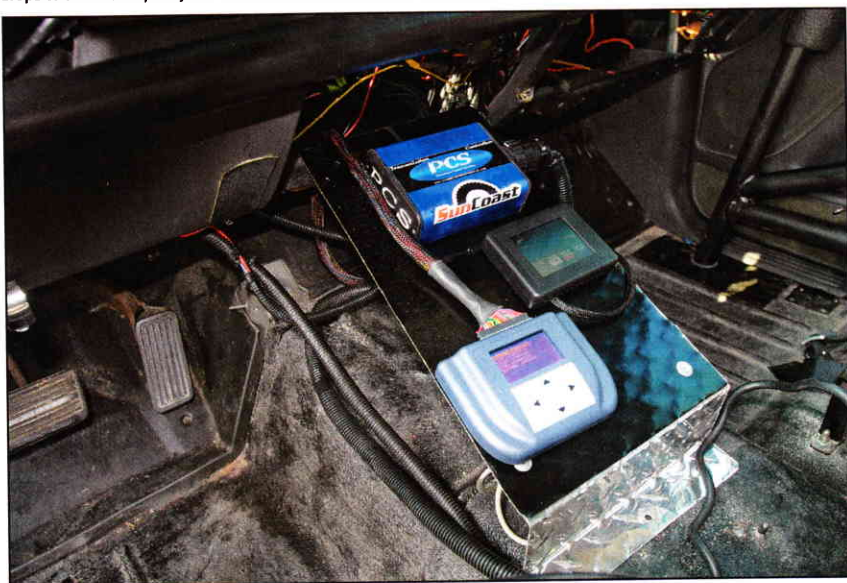
A bottle heater helps keep the truck consistent. Buck keeps the bottle at 1,100 psi and notes that bottle pressure drops to about 900 psi by the end of a run. A full bottle is emptied after only two eighth-mile passes.



To transfer an estimated 1,300 horsepower to the ground, Buck relies on a Dodge 47RE transmission built by Sun Coast. Nicknamed the Duraflite, it has proven to be very reliable.



The interior of the truck is all business. A full rollcage built by DAE Motorsports out of Williamston, North Carolina, protects Buck on his 9-second quarter-mile passes. Racing seats and five-point seatbelts are also important safety features in a truck this quick.



The floor of the interior houses two very important items: a TS Performance data acquisition system, and a programmable transmission control module from Sun Coast. The data acquisition system allows Buck to monitor the truck's real-time performance, then he can adjust transmission shifts as needed in order to keep the Duramax engine in its peak power range.