



BOOSTBYSMITH'S NOS HARNESS FOR ECU FLASHING

****WARNING****: You must have your ECU re-flashed and setup for NOS control **BEFORE** install this nitrous harness. Failure to do so will damage your engine, as well as nitrous solenoid.

Flapper Valve Solenoid Connection:

Remove drivers seat and lift tank. Locate the flapper valve solenoid located along the left side frame rail (2 pin black connector with orange and brown wires). Disconnect the solenoid and connect the plug and play 2 pin connector. Once connected you no longer have control of the flapper valve located in the bottom of the stock airbox (which the small box mod eliminates anyway). Warning, until you change the settings, in stock form this output is triggered from 600-2200 RPM.

Toggle Switch:

The toggle switch is long enough to reach to your left side inner panels, mount wherever is convenient. Drill a 1/4" through hole for the toggle to slide up through. DO NOT OVERTIGHTEN THE NUT. The toggle switch will pull itself apart if you over-torque the retaining nut.

Relay:

The relay is setup to rest between your battery and the ECU, you may need to gently lift up on the ECU's harness to get it to fit in there snugly.

Battery Connections:

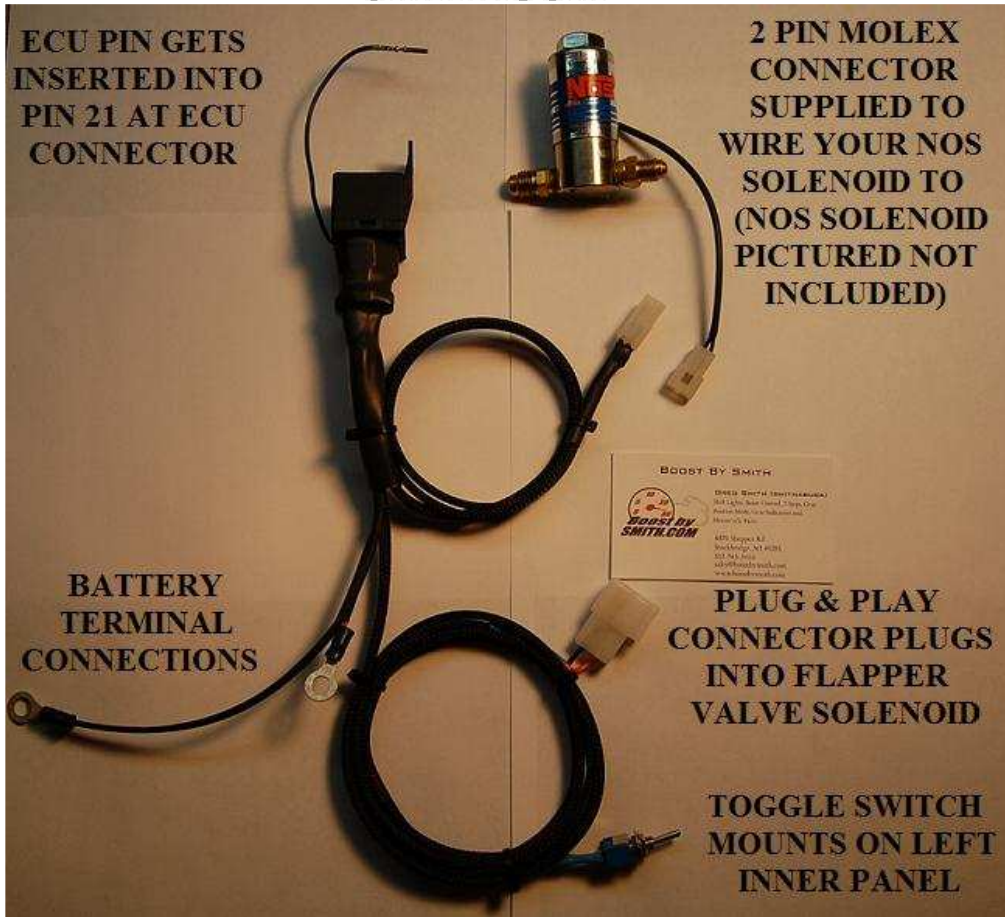
Connect the red wire with 1/4" eyelet to the positive terminal of the battery. Connect the black wire with 1/4" eyelet to the negative terminal of the battery. Be sure to tighten the bolts back nice and snug. A loose ground connection at your battery will cause all sorts of interesting issues.

ECU Connection:

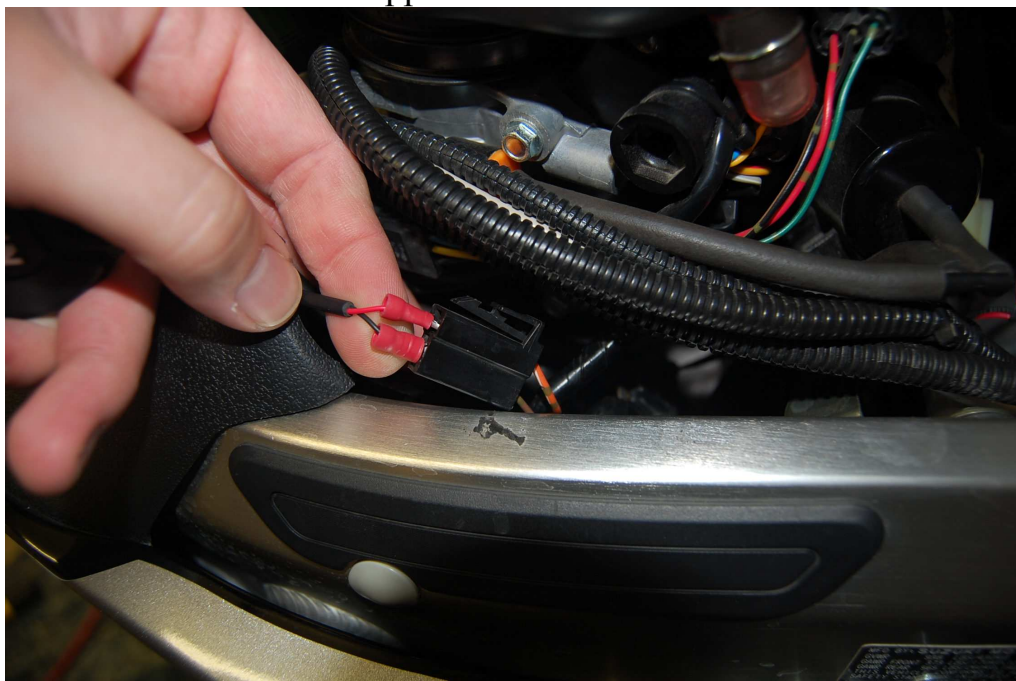
Remove the black wire with tan tracer (pin 21 on the 34 pin connector) and insert the wire with ECU pin from my harness in it's place. Simply tape off or place shrink tube over the black wire with tan tracer to keep the pin from grounding on anything else metal.

NOS Solenoid Connection:

Solder and or crimp on the 2 small molex pins and insert into the 2 pin white molex housing onto your nos solenoid. This will allow you to easily plug in and remove your NOS solenoid from the bike. To trigger anything other than a solenoid, please see last page of directions.



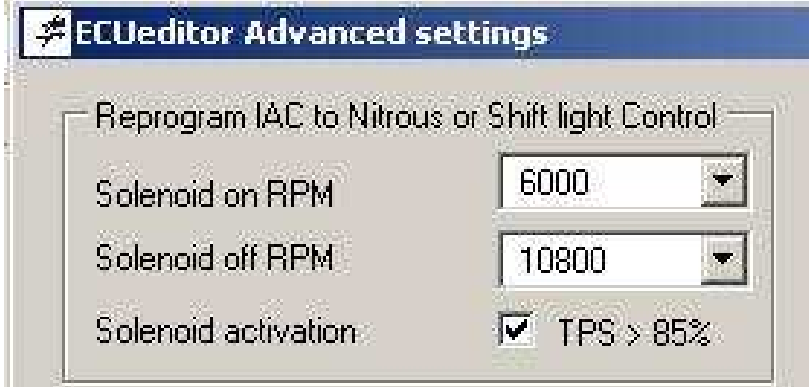
Flapper Valve Location





Setup in ECU Editor:

In the advanced settings tab in the upper left hand corner you can program the window and wide open throttle switch like in the picture below.



When mapping for nitrous, you use the MS FUELMAP, and MS IGNITION MAP. Refer to my 4 tutorial videos for further info...

	0	0.8	1.2	1.9	2.5	3.1	3.7	4.4	U	7	8	9	11	16	21	25	30	40	50	60	70	90	100
800	42	43	55	74	84	97	94	97	100	114	117	123	123	125	129	133	134	137	137	138	142	144	144
1000	42	43	55	74	84	97	94	97	106	111	117	123	123	125	129	133	134	137	137	138	142	144	144
1200	38	37	52	70	78	82	88	88	97	101	108	114	119	127	127	127	123	122	123	124	128	129	133
1400	37	35	47	68	71	78	79	83	89	94	102	105	110	122	126	126	126	128	128	127	127	127	127
1600	37	35	45	57	65	72	75	78	84	90	94	99	105	122	125	127	127	127	127	127	127	129	129
1800	38	33	40	53	62	60	74	77	83	88	93	98	104	121	129	131	132	132	132	134	134	137	144
2000	32	32	37	46	58	67	73	76	83	87	92	97	103	121	130	136	138	138	139	139	139	140	152
2200	30	30	37	43	55	63	69	71	79	83	88	92	98	111	121	128	131	132	132	133	134	138	144
2400	29	29	38	41	52	59	64	68	74	79	83	87	90	103	112	122	126	127	128	128	130	132	141
2600	29	29	33	38	40	54	60	64	70	74	80	84	88	99	110	120	125	129	130	130	133	138	143
2800	29	29	30	36	47	50	57	62	68	72	78	83	88	98	109	118	125	131	131	133	138	140	145
3000	28	28	28	34	43	48	55	60	67	72	78	83	87	102	115	123	132	139	139	140	144	148	151
3200	28	28	28	32	39	46	54	58	67	73	77	82	88	106	120	128	138	146	146	147	150	155	158
3400	29	29	28	30	37	43	52	57	66	72	77	83	88	105	120	130	141	150	153	154	157	162	169
3600	28	28	28	29	35	42	49	55	65	73	78	83	89	104	116	130	143	158	158	168	162	168	177
3800	28	28	28	29	34	42	49	54	65	74	79	84	88	102	116	128	141	156	160	161	165	167	180
4000	28	28	28	29	34	42	49	53	67	76	81	84	88	101	114	126	138	155	164	162	166	167	182
4200	28	28	28	29	33	41	48	52	66	76	81	85	89	100	112	123	134	155	164	164	166	167	181
4400	28	28	28	29	31	38	48	53	68	76	81	85	88	99	110	120	130	154	168	167	166	169	180
4600	28	28	28	28	30	37	45	51	62	71	77	81	85	95	105	114	127	150	164	168	170	173	182
4800	26	26	26	26	29	34	43	47	57	66	73	76	80	90	101	109	121	146	162	160	172	177	187
5000	26	26	26	29	30	32	39	44	53	62	68	72	75	85	96	104	115	140	159	168	171	175	184
5200	26	26	26	29	29	30	35	40	51	60	65	70	73	81	91	101	111	137	158	168	169	172	180
5400	26	26	26	29	29	29	33	38	47	56	62	68	71	80	90	101	111	137	158	169	173	175	183
5600	26	26	26	28	28	27	31	36	44	52	59	65	68	79	89	99	113	138	161	175	183	187	193
5800	26	26	26	26	26	29	30	33	42	51	58	64	76	86	97	113	137	160	176	183	187	192	
6000	25	25	25	25	25	29	30	33	40	46	54	62	74	84	95	112	135	158	177	185	191	195	
7200	24	24	24	24	24	28	29	30	36	42	52	61	72	82	94	109	133	157	178	190	195	200	
7600	24	24	24	24	24	25	28	28	30	34	41	49	59	69	81	93	105	130	156	178	192	200	204
8000	22	22	22	22	22	25	28	28	29	33	40	48	57	68	80	92	105	129	154	176	190	200	204
8400	21	21	21	22	22	25	28	28	29	33	40	48	56	68	80	89	102	126	153	173	188	198	202
8800	21	21	21	22	22	25	28	28	29	32	38	45	54	68	77	85	101	124	150	172	188	200	205
9200	18	18	18	21	22	25	28	28	29	32	37	45	53	66	76	84	98	121	148	168	185	198	204
9600	18	18	18	20	22	25	28	28	28	30	36	44	53	65	74	82	95	118	144	165	182	195	204
10000	18	18	18	20	22	25	28	28	28	30	36	42	52	65	73	81	94	112	138	160	175	190	194
10400	17	17	17	20	22	25	28	28	29	34	41	52	65	73	80	93	109	134	156	174	185	189	
10800	17	17	17	20	22	25	28	28	28	33	40	49	62	72	78	89	106	133	153	170	181	184	
11200	17	17	17	20	22	25	28	28	28	32	38	46	58	68	77	86	104	129	148	164	176	177	
11600	17	17	17	20	22	25	28	28	28	30	37	44	56	66	74	84	101	124	141	157	168	170	
12000	17	17	17	20	22	25	28	28	28	30	36	42	54	64	72	82	97	118	133	150	161	164	
12400	17	17	17	20	22	25	28	28	28	30	36	42	54	64	72	82	97	118	133	150	161	164	
12800	17	17	17	20	22	25	28	28	28	30	36	42	54	64	72	82	97	118	133	150	161	164	

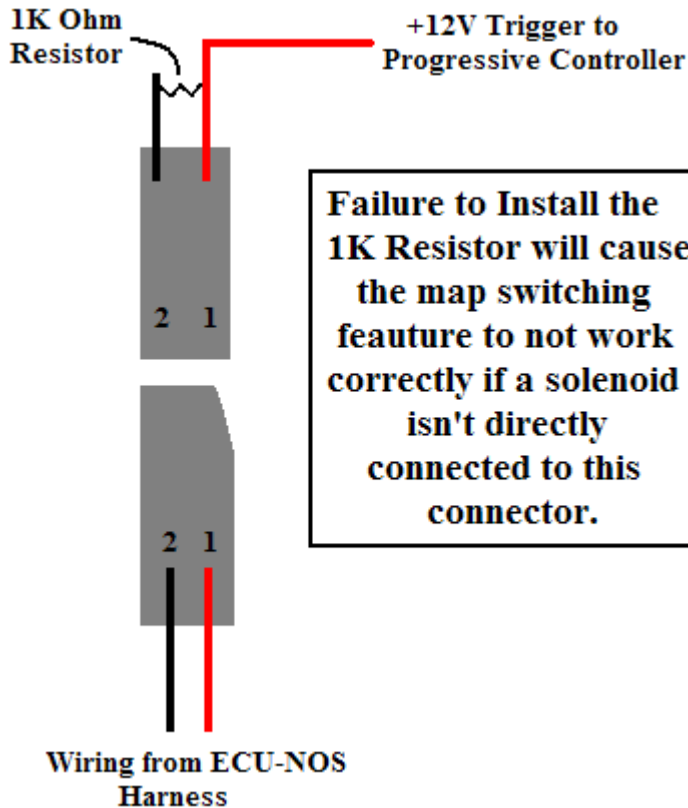
****In order to make a dry run to see that fueling and ignition is different in your secondary map, you must leave the solenoid connected to the harness and just turn the*



bottle off. If the solenoid isn't connected, the circuit won't work correctly. If you need to run the bike without a solenoid connected, I would remove the wire from the relay to pin 21, and replace the stock wire.

Triggering a Progressive Controller:

Triggering a progressive controller is no problem when using this harness, but you will need to install a resistor at the white molex connector to replace the resistance that the NOS solenoid would typically provide. Purchase a $\frac{1}{4}$ or $\frac{1}{2}$ W 1.0K Ohm resistor from Radio Shack. The red wire at the molex connector switches to +12 Volts when the NOS criteria are met. The ground is a direct connection to the battery ground. Using the provided connector, pins, and schematic below will ensure a proper activation / map switching setup for a progressive controller.



Contact Information:

Greg Smith

www.boostbysmith.com

greg@boostbysmith.com

(517)743-3666 (only available in the evenings after work, 6PM EST I am home)