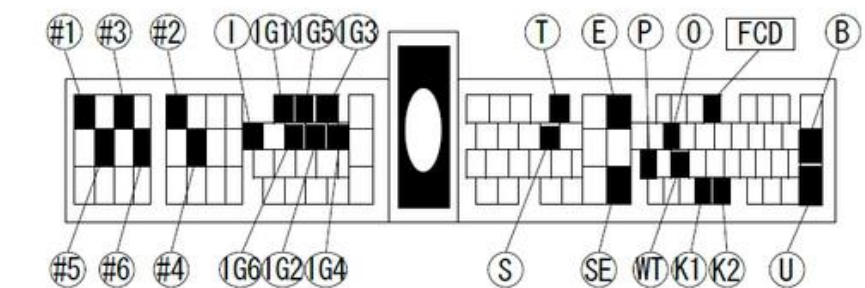
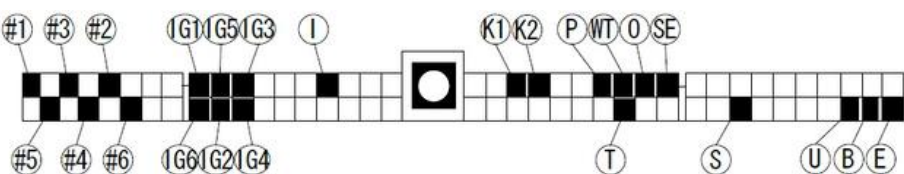


NISSAN SKYLINE (ECR33/ER34) STARTDATA MANUAL = NP5-8/NP5-2 Harness

NISSAN SKYLINE (ER34) ECU Side Terminal
[NP5-8 Base]
NISSAN ECU Side Terminal[NP5-4 Base]
Refer the following for special setting when modifying the wiring, etc.



NISSAN SKYLINE (ECR33) ECU Side Terminal
[NP5-2 Base]
Refer the following for special setting when modifying the wiring, etc.



- Explanatory Notes**
- ⓑ: Power Supply (12V)
 - Ⓤ: Backup Power Supply (12V)
 - ⓔ: Ground
 - Ⓢⓑ: Center Ground
 - Ⓟ: Pressure Sensor, Airflow Signal, etc.
 - ⓕⓐⓈ: Press Sensor Signal for HKS FCD
 - ⓐⓇⓕ: Airflow Signal for HKS AFR
 - Ⓢ: Speed Signal
 - ⓈⓁⓓ: Speed Signal for HKS SLD
 - Ⓡ: RPM Signal
 - ⓈⓇⓐ: RPM Signal Level Converter Required.
 - Ⓢ: Injector Signal
 - ⓈⓅ: Primary Injector Signal
 - ⓈⓈ: Secondary Injector Signal
 - Ⓣ: Throttle Angle Signal
 - Ⓡⓖ: Ignition Signal
 - ⓇⓖⓁ: Leading Ignition Signal
 - ⓇⓖⓉ: Trailing Ignition Signal
 - ⓇⓖⓈⓁ: Rotor Detect Signal(Leading Side)
 - ⓇⓖⓈⓉ: Rotor Detect Signal(Trading Side)
 - ⓌⓉ: Water Temp Signal
 - ⓇⓉ: Intake Air Temp Signal
 - Ⓚ: Knocking Signal
 - ⓐ: O2 Sensor Signal
 - S/C·T/C: Supercharger·Turbocharger
 - A/T: Automatic Transmission
 - M/T: Manual Transmission
- ※ When there is more than one signal, a number comes after the mark.
The number comes with the injector and ignition signals mean a number of cylinder.

To prepare the vehicle data, write ER34/ECR33 STARTDATA on HKS website to F-CONVPRO. Setting by using an actual vehicle according to each vehicle characteristics is required.
* ER34/ECR33 STARTDATA is data only to start the engine.

Suppose the vehicle is a boost-up specs using a factory injector.
The max boost is set to ≒1.0K considering the performance of the factory injector and fuel pump. Excessive boost-up may lead to the engine damage.

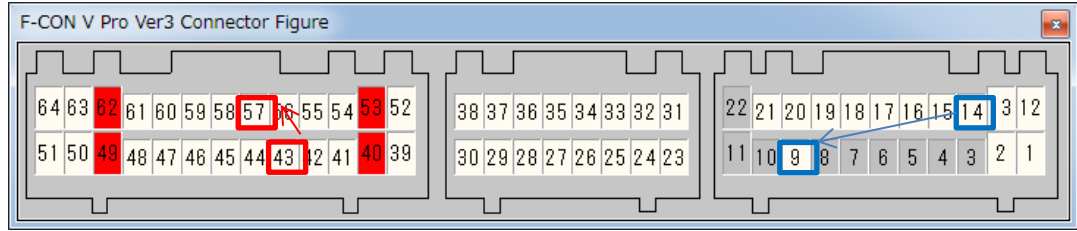
This explains the main points to prepare STARTDATA using the modified harness NP5-8, NP5-2 for Nissan Skyline(ER34/ECR33). For mapping, parameter settings, and data logging, refer to the operation manual of F-CON V Pro Ver.3.4.

- EVC6IR2,4
- Super Power Flow KIT
- Metal Catalyzer
- HI-POWER409 Muffler

■ SKYLINE ER34 (NP5-8 ONLY) Harness modification and software setup
* ECR33 (NP5-2 Harness) Does not Require these modifcaitons.

■ Stock Pressure Sensor

The stock vehicle has a pressure sensor as well as air flow meters. "Start Data" is setup to utilize the stock pressure sensor. When connecting HKS3 Pressure sensor, please follow the notes below:



- Move FCON terminal 14->9
- Move FCON terminal 43->57

Parameter Setting

Basic

Crankshaft/Camshaft

Input Setting

Voltage

Option Voltage Input [Type1]

#1 PIN 14 Intake Air Pressure

#2 PIN 21 AirFlow_1

#3 PIN 9 AirFlow_2

Option Voltage Input [Type2]

#9 PIN 52 Pull-Up Water Temp.

#10 PIN 39 Pull-Up Intake Air Temp.

#11 PIN 23 Pull-Up OFF

Parameter Setting

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Voltage

Voltage Output

	X Axis	Y Axis	Output Maximum Value
#1 PIN 56	Input_Value(AirFlow1)	Input_Value(AirFlow1)	4000 [mV]
#2 PIN 57	Input_Value(AirFlow2)	Input_Value(AirFlow2)	3800 [mV]

Go to Input Setting under Parameter Setting, and select Voltage. Set PIN 9 to "AirFlow_2". Also, go to Output Setting, and select "Input_Value(Airflow2) for PIN57. Set the output maximum value to approximately 3800MV Connect the now unconnected terminal 14 to HKS Pressure sensor signal (Blue) terminal.

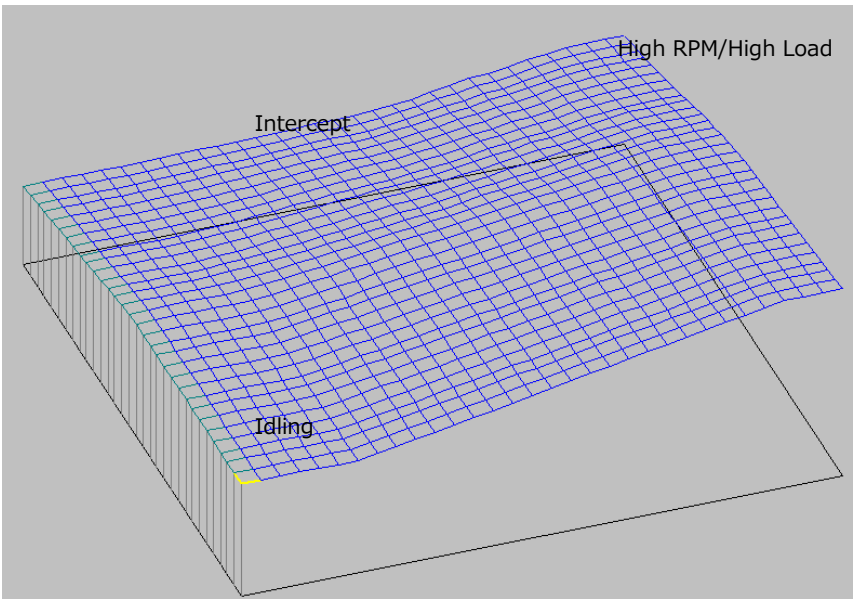
Vehicle Setup Points (Setup on Chassis Dynamo Meter)

■ Standard Ignition Time Main Map Based on information from F-CONIS「C_TX」[C_RX], the ignition time map tracing the factory ECU ignition time was prepared to maintain the vehicle condition. (At intercept≠BTDC15, and under high speed & high load area ≠BTDC21)

To prepare STARTDATA, the knocking signal from the factory knocking sensor was confirmed using Oscilloscope, and the vehicle conditions were checked from its output waveform.

This map's values may vary depending on the vehicle's individual difference. Attention must be paid to the vehicle' knocking during setting up the vehicle.

Use the acceleration trim ignition time map and other items that may effect on the engine response as default data. The setup must be performed in accordance with each vehicle characteristics.



	2661	2903	3145	3387	3629	3871	4113	4355	4597	4839	5081	5323	5565	5806	6048	6290	6532	6774	7016	7258	7500
-0.80	21.9	22.5	23.0	23.6	24.2	24.8	25.4	26.0	26.5	27.1	27.7	28.3	28.9	29.4	30.0	30.6	31.2	31.8	31.8	31.8	31.8
-0.74	21.8	22.4	22.9	23.5	24.1	24.7	25.3	25.8	26.3	26.9	27.5	28.1	28.7	29.2	29.8	30.4	31.0	31.5	31.5	31.5	31.5
-0.68	21.8	22.3	22.8	23.4	24.0	24.5	25.1	25.7	26.2	26.8	27.3	27.9	28.4	28.9	29.5	30.1	30.7	31.2	31.2	31.2	31.2
-0.63	21.7	22.3	22.8	23.3	23.9	24.4	25.0	25.5	26.0	26.6	27.2	27.7	28.2	28.7	29.3	29.9	30.5	31.0	31.0	31.0	31.0
-0.57	21.6	22.2	22.7	23.2	23.8	24.3	24.9	25.4	25.9	26.5	27.1	27.5	28.1	28.6	29.1	29.7	30.3	30.8	30.8	30.8	30.8
-0.51	21.6	22.1	22.6	23.1	23.7	24.2	24.8	25.3	25.8	26.4	26.9	27.3	27.9	28.4	28.9	29.5	30.0	30.5	30.5	30.5	30.5
-0.45	21.5	22.0	22.5	23.0	23.6	24.0	24.6	25.1	25.6	26.2	26.7	27.1	27.7	28.2	28.7	29.3	29.8	30.2	30.2	30.2	30.2
-0.39	21.5	22.0	22.5	23.0	23.5	23.9	24.5	25.0	25.5	26.1	26.6	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.0	30.0	30.0
-0.34	21.5	22.0	22.5	23.0	23.5	23.9	24.4	24.9	25.4	25.9	26.4	26.8	27.3	27.8	28.3	28.8	29.3	29.8	29.8	29.8	29.8
-0.28	21.4	21.9	22.4	22.8	23.3	23.7	24.2	24.7	25.2	25.7	26.2	26.6	27.1	27.6	28.0	28.5	29.0	29.4	29.4	29.4	29.4
-0.22	21.3	21.8	22.3	22.7	23.2	23.6	24.1	24.6	25.1	25.5	26.0	26.4	26.9	27.4	27.8	28.3	28.8	29.2	29.2	29.2	29.2
-0.16	21.3	21.8	22.3	22.7	23.2	23.6	24.0	24.5	24.9	25.4	25.8	26.2	26.7	27.1	27.6	28.0	28.5	28.9	28.9	28.9	28.9
-0.10	21.3	21.7	22.2	22.6	23.0	23.4	23.9	24.3	24.7	25.2	25.6	26.0	26.5	26.9	27.4	27.8	28.3	28.7	28.7	28.7	28.7
-0.05	21.2	21.6	22.1	22.5	22.9	23.3	23.8	24.2	24.6	25.1	25.5	25.9	26.3	26.8	27.2	27.6	28.0	28.5	28.5	28.5	28.5
0.01	21.1	21.6	22.0	22.4	22.8	23.2	23.6	24.1	24.5	24.9	25.3	25.7	26.1	26.6	27.0	27.4	27.8	28.3	28.3	28.3	28.3
0.07	21.1	21.5	21.9	22.3	22.7	23.1	23.5	23.9	24.4	24.7	25.1	25.5	25.9	26.3	26.7	27.1	27.5	27.9	27.9	27.9	27.9
0.13	20.8	21.2	21.6	22.0	22.3	22.7	23.1	23.5	24.0	24.3	24.7	25.1	25.5	25.9	26.3	26.7	27.1	27.5	27.5	27.5	27.5
0.19	20.3	20.7	21.1	21.5	21.8	22.2	22.5	22.9	23.4	23.7	24.1	24.5	25.0	25.4	25.8	26.2	26.6	27.0	27.0	27.0	27.0
0.25	19.8	20.1	20.5	20.8	21.2	21.5	21.8	22.2	22.7	23.0	23.4	23.8	24.3	24.7	25.1	25.5	25.9	26.3	26.3	26.3	26.3
0.30	19.5	19.8	20.2	20.5	20.8	21.1	21.4	21.8	22.3	22.6	23.0	23.4	23.8	24.3	24.7	25.1	25.5	25.9	25.9	25.9	25.9
0.36	18.9	19.2	19.6	19.9	20.2	20.4	20.7	21.1	21.5	21.8	22.3	22.7	23.1	23.5	24.0	24.4	24.8	25.2	25.2	25.2	25.2
0.42	18.6	18.8	19.1	19.4	19.7	19.9	20.2	20.5	20.9	21.2	21.7	22.1	22.6	22.7	23.1	23.6	24.0	24.5	24.5	24.5	24.5
0.48	18.0	18.2	18.5	18.7	19.0	19.2	19.5	19.8	20.2	20.5	21.0	21.4	21.9	22.0	22.4	22.9	23.3	23.8	23.8	23.8	23.8
0.53	17.6	17.8	18.1	18.3	18.5	18.7	19.0	19.3	19.6	20.0	20.5	20.9	21.3	21.5	21.9	22.4	22.8	23.1	23.1	23.1	23.1
0.59	17.1	17.3	17.5	17.7	17.9	18.1	18.3	18.7	19.0	19.4	19.9	20.3	20.7	20.9	21.3	21.8	22.0	22.5	22.5	22.5	22.5
0.65	16.6	16.8	17.0	17.2	17.4	17.6	17.7	18.0	18.3	18.7	19.2	19.6	20.1	20.2	20.7	21.2	21.5	21.9	21.9	21.9	21.9
0.71	16.1	16.3	16.5	16.6	16.8	16.9	17.1	17.4	17.7	18.1	18.6	19.0	19.5	19.6	20.1	20.6	20.9	21.3	21.3	21.3	21.3
0.77	15.6	15.8	16.0	16.1	16.3	16.3	16.5	16.8	17.1	17.4	18.0	18.4	18.8	19.0	19.5	20.0	20.3	20.7	20.7	20.7	20.7
0.83	15.1	15.3	15.5	15.6	15.7	15.7	15.8	16.1	16.4	16.8	17.3	17.7	18.2	18.4	18.9	19.4	19.7	20.1	20.1	20.1	20.1
0.88	14.7	14.8	15.0	15.1	15.2	15.2	15.3	15.6	15.9	16.3	16.8	17.2	17.7	17.9	18.4	18.9	19.2	19.6	19.6	19.6	19.6
0.94	14.2	14.3	14.4	14.5	14.6	14.6	14.7	15.0	15.3	15.6	16.2	16.6	17.1	17.3	17.7	18.3	18.6	19.1	19.1	19.1	19.1
1.00	13.7	13.7	13.8	13.9	14.0	14.0	14.1	14.3	14.6	14.9	15.5	16.0	16.5	16.6	17.1	17.7	18.0	18.5	18.5	18.5	18.5

Vehicle Setup Points (Setup on Chassis Dynamo Meter)

■ Standard Ignition Time Main Map

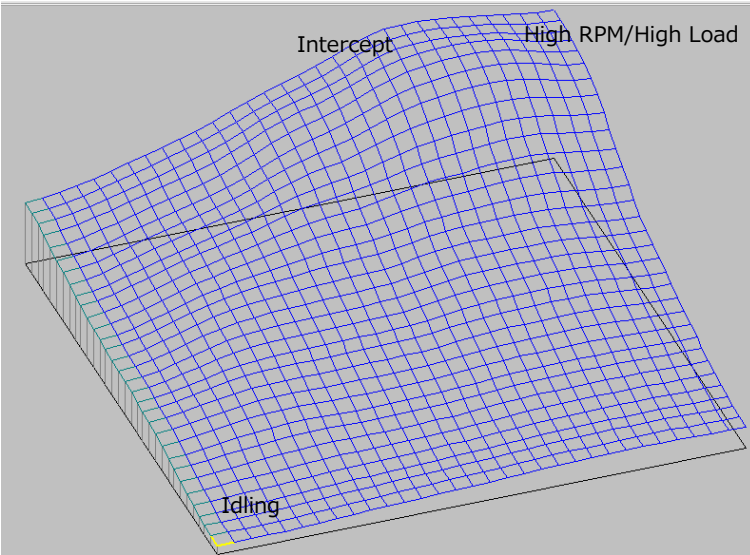
Based on information from F-CONIS “F Main Input・Output”, the ignition timing map tracing the factory ECU ignition time was prepared to maintain the vehicle condition.
(At intercept≒18000μSEC, and under high area (nearly the rev limit) ≒16000μSEC afterward.)

Under the high RPM area, the boost pressure slightly dropped, but the injector opening rate became nearly equal to 95% or higher; therefore, the limit of the factory boost pressure increase should be about 1.0K. Also, it was confirmed that the value of the AF was about 11.0 under the high RPM and high load area.

UnitData DATA Inform...	Voltsec	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0
[F3]Fuel Control	Time	5000	4000	3000	2000	1625	1250	1100	950	825	700	650	600	550	500	450	400

Considering the injector dead time of the factory injectors, the injector dead time of the injector dead time map was set to be longer, and the total injection time was adjusted in the standard injection time main map.

Use the non-phase injection time map, acceleration trim map (fuel correction), and other items that may effect on the engine response as default data. The setup must be performed in accordance with each vehicle characteristics.



Refer to the manual of F-CON V Pro Ver.3.4 for use of the fuel mapping, etc.

UnitData DATA Inform...		2661	2903	3145	3387	3629	3871	4113	4355	4597	4839	5081	5323	5565	5806	6048	6290	6532	6774	7016	7258	7500
[F1]Axis Setting	-0.80	1524	1594	1660	1729	1802	1879	1959	2038	2111	2178	2238	2284	2320	2345	2359	2360	2350	2330	2308	2290	2281
[F2]Conversion Table	-0.74	1580	1626	1691	1758	1831	1909	1990	2071	2147	2216	2276	2324	2361	2386	2399	2400	2390	2371	2348	2330	2321
[F3]Fuel Control	-0.68	1651	1710	1769	1833	1904	1984	2069	2155	2238	2312	2375	2425	2463	2487	2499	2499	2488	2468	2446	2427	2419
[F3]Fuel Map 1	-0.63	1805	1853	1903	1960	2029	2110	2200	2293	2383	2464	2532	2584	2622	2645	2654	2652	2640	2620	2598	2579	2571
[F3]Fuel Map 2	-0.57	2024	2059	2097	2147	2212	2293	2388	2488	2586	2674	2746	2799	2834	2854	2860	2858	2842	2821	2798	2780	2771
[F3]Fuel Map 3	-0.51	2301	2321	2350	2392	2453	2535	2633	2740	2845	2938	3012	3064	3096	3111	3112	3103	3087	3065	3041	3022	3013
[F3]Fuel Cut	-0.45	2621	2629	2650	2688	2747	2828	2930	3043	3152	3248	3322	3371	3398	3408	3404	3391	3371	3345	3319	3298	3288
[F4]A/F	-0.39	2971	2970	2987	3022	3078	3160	3265	3381	3494	3592	3685	3712	3735	3741	3733	3715	3689	3657	3626	3600	3589
[F5]Ignition Control	-0.34	3350	3343	3355	3385	3439	3520	3626	3745	3861	3961	4036	4083	4106	4110	4077	4042	3999	3955	3922	3907	
[F5]Ignition Map 1	-0.28	3750	3742	3748	3772	3821	3901	4008	4130	4251	4358	4439	4491	4517	4524	4513	4483	4435	4373	4311	4263	4242
[F5]Ignition Map 2	-0.22	4158	4154	4156	4175	4221	4302	4413	4544	4678	4795	4887	4947	4982	4994	4985	4947	4879	4790	4700	4632	4602
[F6]ISC	-0.16	4568	4568	4570	4586	4632	4718	4842	4991	5144	5279	5385	5455	5497	5516	5508	5460	5370	5249	5128	5033	4992
[F7]Boost	-0.10	4969	4979	4985	5001	5051	5148	5293	5469	5648	5802	5917	5991	6037	6058	6050	5992	5881	5730	5577	5458	5407
[F8]Valve Timing	-0.05	5372	5390	5400	5420	5478	5587	5755	5960	6166	6336	6453	6521	6561	6578	6566	6500	6374	6201	6026	5889	5830
[F9]Option Output	0.01	5773	5802	5821	5847	5909	6033	6222	6452	6677	6854	6966	7024	7052	7060	7039	6963	6828	6646	6461	6316	6252
	0.07	6174	6221	6254	6289	6356	6487	6691	6938	7173	7352	7456	7505	7524	7523	7492	7406	7264	7079	6892	6746	6680
	0.13	6582	6657	6712	6760	6830	6965	7175	7432	7673	7850	7950	7998	8018	8016	7977	7882	7733	7546	7357	7211	7145
	0.19	7004	7118	7203	7268	7343	7478	7692	7956	8202	8381	8481	8536	8569	8578	8543	8445	8290	8094	7898	7745	7676
	0.25	7439	7605	7731	7819	7903	8040	8258	8532	8788	8973	9080	9147	9201	9235	9217	9127	8968	8763	8552	8386	8310
	0.30	7877	8106	8283	8404	8502	8647	8877	9170	9445	9644	9761	9844	9923	9991	10008	9935	9781	9565	9335	9151	9066
	0.36	8298	8603	8846	9011	9133	9295	9546	9868	10174	10403	10542	10647	10756	10861	10912	10867	10722	10501	10253	10047	9950
	0.42	8683	9072	9393	9618	9777	9968	10252	10617	10961	11234	11409	11537	11678	11818	11887	11866	11730	11490	11222	10994	10873
	0.48	9018	9495	9905	10203	10416	10652	10984	11394	11809	12133	12351	12538	12700	12852	12946	12919	12766	12525	12218	11953	11831
	0.53	9302	9865	10366	10748	11030	11324	11715	12190	12664	13061	13346	13578	13765	13924	13994	13974	13794	13530	13191	12898	12749
	0.59	9549	10192	10793	11253	11612	11972	12423	12861	13394	13972	14334	14627	14821	14973	15019	14949	14762	14458	14069	13745	13579
	0.65	9775	10486	11157	11709	12143	12569	13078	13661	14270	14808	15242	15574	15785	15931	15940	15860	15653	15308	14875	14507	14299
	0.71	9979	10740	11471	12089	12592	13081	13644	14270	14901	15478	15933	16298	16525	16661	16668	16575	16325	15868	15482	15084	14856
	0.77	10320	11099	11914	12584	13135	13596	14157	14779	15454	16043	16507	16837	17044	17128	17093	16980	16704	16309	15813	15410	15160
	0.83	10609	11377	12201	12885	13448	13898	14449	15086	15778	16381	16828	17114	17250	17276	17195	17023	16728	16320	15872	15508	15291
	0.88	10873	11609	12404	13070	13622	14070	14620	15269	15980	16601	17038	17241	17308	17258	17104	16918	16614	16245	15872	15582	15393
	0.94	10930	11636	12350	12987	13528	14049	14640	15308	16047	16656	17069	17266	17280	17166	16991	16766	16485	16175	15874	15652	15520
	1.00	10965	11656	12341	12964	13506	14058	14678	15352	16074	16681	17093	17255	17251	17118	16917	16689	16404	16133	15871	15684	15552

Vehicle Setup Points (Setting Items, etc.)

OTHER

Fuel control during engine starting has been modified in Parameter•Fuel 1. Whilst there are difference between each vehicle, if the engine is starting to an acceptable level, please retain the default data and continue setup.

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Fuel

Fuel 1

Fuel Control Type

Fuel Group Distribution

Injector Coefficient

Injector Volume

First Injection Time

Port 1	Main x1	Port 1	Group1
Port 2	Main x1	Port 2	Group1
Port 3	Main x1	Port 3	Group1
Port 4	Main x1	Port 4	Group1
Port 5	Main x1	Port 5	Group1
Port 6	Main x1	Port 6	Group1
Port 7	OFF	Port 7	Group1
Port 8	OFF	Port 8	Group1

Injector Coefficient

12800000

Fuel Coefficient

1.00

Injector Volume

Main

370 [mL/min]

Sub

First Injection Time

7000 [usec]

Airflow Meter Parameter

“Start Data” is designed to work with stock airflow meters and not setup to be used airflow-less. Airflow meter signals are not clipped with maximum value set at 5000MV

		-20	-10	0	10	20	30	40	50	60	70	80	90	100	110	120	130
1	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
2	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
3	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
4	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
5	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
6	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
7	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410
8	88980	54850	25040	16990	12150	10710	9280	7850	6410	6410	6410	6410	6410	6410	6410	6410	6410

[F7]Boost

[F8]Valve Timing

[F9]Option Output

Voltage Output 1

Voltage Output 2

Voltage Output 3

Voltage Output 4

Voltage Output 1 Option Trim

Voltage Output 2 Option Trim

Frequency Output 1

Frequency Output 2

Duty Pulse Output 1

Duty Pulse Output 2

	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500
-0.30	500	991	1111	1256	1370	1466	1545	1622	1688	1750	1807	1860	1909	1956	2000
-0.68	500	1164	1435	1622	1768	1892	1998	2095	2181	2260	2333	2401	2465	2525	2582
-0.55	500	1394	1644	1858	2027	2169	2291	2400	2499	2590	2674	2752	2825	2894	2959
-0.42	500	1485	1806	2041	2226	2381	2516	2636	2745	2844	2936	3022	3102	3178	3250
-0.30	500	1573	1939	2192	2391	2557	2702	2831	2947	3054	3153	3245	3331	3413	3490
-0.17	500	1666	2064	2322	2533	2709	2863	2999	3122	3236	3340	3438	3529	3616	3697
-0.05	500	1749	2158	2427	2650	2844	3005	3148	3277	3396	3506	3608	3704	3795	3881
0.08	500	1823	2248	2541	2772	2965	3133	3282	3417	3541	3655	3762	3862	3957	4046
0.20	500	1891	2331	2635	2874	3074	3248	3403	3543	3671	3790	3901	4005	4103	4195
0.32	500	1954	2408	2722	2969	3176	3356	3516	3651	3779	3895	4009	4118	4223	4319
0.45	500	2012	2481	2804	3059	3272	3457	3622	3757	3887	4003	4115	4222	4326	4425
0.57	500	2067	2549	2880	3142	3361	3551	3720	3873	4014	4143	4264	4379	4485	4586
0.70	500	2119	2612	2952	3220	3445	3640	3813	3970	4114	4247	4371	4487	4597	4701
0.82	500	2168	2672	3020	3295	3524	3724	3901	4062	4209	4345	4472	4591	4703	4810
0.95	500	2214	2730	3085	3365	3600	3804	3985	4149	4299	4439	4568	4689	4804	4913
1.07	500	2258	2784	3147	3433	3672	3880	4065	4232	4385	4527	4659	4780	4890	5000

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Fuel

Voltage

STARTDATA

Voltage Output

X Axis

Y Axis

Output Maximum Value

#1 PIN 56	Input_Value(AirFlow1)	Input_Value(AirFlow1)	4000 [mV]
#2 PIN 57	Input_Value(AirFlow2)	Input_Value(AirFlow2)	3800 [mV]

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Fuel

Voltage

w/out Airflow Meter

Voltage Output

X Axis

Y Axis

Output Maximum Value

#1 PIN 56	RPM	Intake_Air_Pressure	5000 [mV]
#2 PIN 57	Input_Value(AirFlow2)	Input_Value(AirFlow2)	3800 [mV]

Unit Data DATA Inform...

[F3]Fuel Cut

[F4]

Deceleration Fuel Cut

RPM Fuel Cut

Port	1	2	3	4	5	6	7	8
Cut	7500	7450	7500	7450	7500	7450	20000	20000
Return	7400	7400	7400	7400	7400	7400	20000	20000

RPM Fuel Cut Map

For those vehicles equipped with the factory CAT or Metal Catalyzer, the rev limiter is controlled by fuel cut. For STARTDATA, the impact from the fuel cut is reduced by the setting shown above.

For those vehicles without CATs, the rev limiter can be controlled by editing Ignition Cut RPM of Parameter Setting as shown in the diagram on the right. Make sure not to perform this setting for the vehicle equipped with a CAT. If neglected, it may cause damage to a CAT by unburnt gas which results in damage to an engine.

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Fuel

Ignition

Ignition 1

Ignition 2

Ignition Cut RPM

Normal

7500 [rpm]

Start

20000 [rpm]

Ignition Cut (Start) Setting

■ Speed Limiter Cancel Function

The speed signal setting is done in #1 PIN 45 of Frequency Output Setting under Parameter Setting.

#For ER34/ECR33STARTDATA, the following setting was done to cancel the speed limiter.

The speed limiter cancel function is set to activate at 170.1[km/h] by input 170.1 to the output maximum value.

#For ER34/ECR33STARTDATA, the output maximum value is set to the value shown above, and the ECU's speed recognition is clipped approximately at 170km.

Option Frequency Input's Frequency 1 PIN 58, and "2" was input for Number of JIS Car Speed Signal Pulse.

Parameter Setting

Basic

Crankshaft/Camshaft

Input Setting

Output Setting

Voltage

Frequency

Switch (LSL1)

Switch (LSL2)

Switch (LSH1)

Frequency

Frequency			
Frequency Output			
	X Axis	Y Axis	Output Maximum Value
#1 PIN 45	Input_Value	Input_Value	170.1 [km/h]
#2 PIN 46	OFF	OFF	2000.0 [Hz]

Parameter Setting

Basic

Crankshaft/Camshaft

Input Setting

Voltage

Throttle/Accel

Pressure

Others

Switch

Frequency

A/F - Knock

Output Setting

Voltage

Frequency

Switch (LSL1)

Switch (LSL2)

Switch (LSH1)

Switch (LSH2)

Switch (HS)

Fuel

Fuel 1

Fuel 2

Twin Injector

Frequency

Option Frequency Input

Frequency 1 PIN 58 JIS_Speed

Frequency 2 PIN 59 OFF

Car Speed Control Data JIS_Speed

Wheel Speed 1 Tire Circumference 0 [mm]

Wheel Speed 1 Number of Pulse 0

Wheel Speed 1 Trim Coefficient 0.0 [%]

Wheel Speed 2 Tire Circumference 0 [mm]

Wheel Speed 2 Number of Pulse 0

Wheel Speed 2 Trim Coefficient 0.0 [%]

Number of JIS Car Speed Signal Pulse 2