



Advanced Powertrain Research Facility



Downloadable Dynamometer Database (D^3) - Test Summary Sheet

2013 Dodge Ram 1500 HFE

Vehicle architecture	Conventional
Document date	5/13/2015
Revision Number	1
Notes:	

Vehicle Setup Information

Test cell location	ANL APRF Bdg 371
Vehicle dynamometer Input	
Test weight [lb]	4950
Target A [lb]	37.3256
Target B [lb/mph]	1.11147
Target C [lb/mph ²]	0.018876
Test Fuel Information	
Fuel type	EPA Tier II EEE HFO437
Fuel density [g/ml]	0.741
Fuel Net HV [BTU/lbm]	18330

Test ID [#]	Cycle	Date	Cold start (CS) / Hot start [HS]	Test Cell Temp [C]	Test Cell RH [%]	Test Cell Baro [in/Hg]	Vehicle cooling fan speed: Speed Match [SM] or constant speed [CS]	Solar Lamps [W/m ²]	Vehicle Climate Control settings	Hood Position [Up] or [Closed]	Window Position [Closed] or [Down]	Cycle Distance [mi]	Cycle Fuel Economy [mpg] (Emiss Bag)	Cycle Fuel Consumed [gal] (Emiss Bag)
	Test information		Test cell information		Test cell setup		Vehicle setup							
61407041	UDDS CS	07/10/14	-6	7.1	29.5	SM	0	Cold FTP	Closed	Closed	7.45	17.0	0.437	
61407042	UDDS HS #1	07/10/14	-6	7.3	29.5	SM	0	Cold FTP	Closed	Closed	7.45	20.0	0.373	
61407043	UDDS HS #2	07/10/14	-6	6.8	29.5	SM	0	Cold FTP	Closed	Closed	7.48	20.3	0.368	
61407045	HWY	07/10/14	-5	8.8	29.5	SM	0	Cold FTP	Closed	Closed	10.25	29.4	0.349	
61407046	US06	07/10/14	-7			SM	0	Cold FTP	Closed	Closed	8.00	19.5	0.410	
61407003	UDDS CS	07/03/14	22	45.1	29.4	SM	0	Off	Closed	Down	7.45	19.7	0.379	
61407004	UDDS HS #1	07/03/14	23	44.0	29.4	SM	0	Off	Closed	Down	7.46	21.5	0.347	
61407005	UDDS HS #2	07/03/14	23	45.2	29.4	SM	0	Off	Closed	Down	7.45	22.1	0.337	
61407006	UDDS HS - Start Stop Disabled	07/03/14	22	47.8	29.4	SM	0	Off	Closed	Down	7.45	20.8	0.359	
61407007	HWY	07/03/14	25	40.0	29.4	SM	0	Off	Closed	Down	10.25	32.6	0.315	
61407008	US06	07/03/14	22			SM	0	Off	Closed	Down	8.00	21.0	0.381	
61407009	US06 - Start Stop Disabled	07/03/14	24			SM	0	Off	Closed	Down	8.00	20.8	0.385	
61407014	WLTP	07/07/14	24	51.8	29.1	SM	0	Off	Closed	Down	14.43	23.7	0.609	
61407015	NEDC	07/07/14	22	60.1	29.1	SM	0	Off	Closed	Down	6.84	24.4	0.281	
61407016	NEDC- Start Stop Disabled	07/07/14	22	59.4	29.1	SM	0	Off	Closed	Down	6.89	22.9	0.301	
61407017	NYCC, Ph 1- Start Stop Enabled	07/07/14	20	65.0	29.0	SM	0	Off	Closed	Down	1.19	12.2	0.097	
61407017	NYCC, Ph 2- Start Stop Disabled	07/07/14	20	65.8	29.0	SM	0	Off	Closed	Down	1.19	10.7	0.112	
61407020	Steady State Stairs- 0% grade	07/07/14	25	47.3	29.0	SM	0	Off	Closed	Down	6.21			
61407025	Passing maneuver 0%,3%, 6% grade	07/07/14	26	45.5	29.0	SM	0	Off	Closed	Down	9.10			
61407011	LA92	07/03/14	23	42.3	29.4	SM	0	Off	Closed	Down	9.81	20.6	0.476	
61407012	LA92- Start Stop Disabled	07/03/14	23	43.3	29.4	SM	0	Off	Closed	Down	9.81	20.1	0.488	
61407033	UDDS CS	07/09/14	35	40.5	29.2	SM	850	HVAC Max	Closed	Closed	7.49	16.9	0.444	
61407034	UDDS HS #1	07/09/14	36	38.0	29.2	SM	850	HVAC Max	Closed	Closed	7.49	18.2	0.412	
61407035	UDDS HS #2	07/09/14	36	39.2	29.2	SM	850	HVAC Max	Closed	Closed	7.48	18.4	0.407	
61407038	HWY	07/09/14	38	32.0	29.2	SM	850	HVAC Max	Closed	Closed	10.27	30.4	0.338	
61407039	US06	07/09/14	36			SM	850	HVAC Max	Closed	Closed	8.03	19.5	0.412	
61407051	SC03	07/11/14	36	40.4	29.5	SM	850	HVAC Max	Closed	Closed	3.59	18.0	0.199	

Summary notes

For the highway and US06, SC03, cycles only the second (hot) test results are presented in this summary.

Electric energy consumption:

HV battery Integrated net current --> Integrated current as reported by power analyzer

HV battery Average Zero crossing Voltage --> Calculated Average Zero crossing Voltage over the phase or cycle

HV Net Energy --> Integrated power as reported by power analyzer

Note that HV Net Energy is not equal to the product of HV battery Integrated net current times Average Zero crossing Voltage.

* Fuel Consumption & Economy results listed for test number 61407039 and 61407041 were captured from Fuel Scale

* Target Coefficients developed during AVTE coast down testing

Advanced Powertrain Research Facility Data referencing:

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