

LAMPIRAN-LAMPIRAN



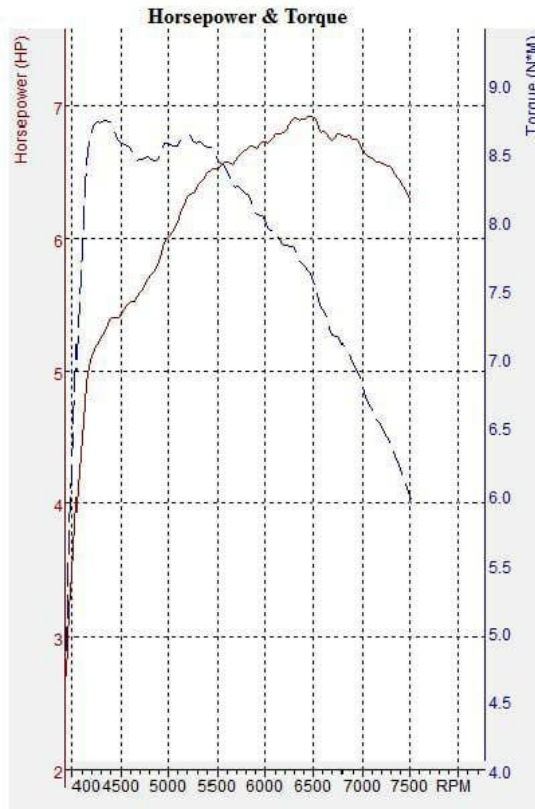
Data Dynotest Torsi Dan Daya 110°, Dengan pengambilan pengulangan data sebanyak 9 kali



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SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

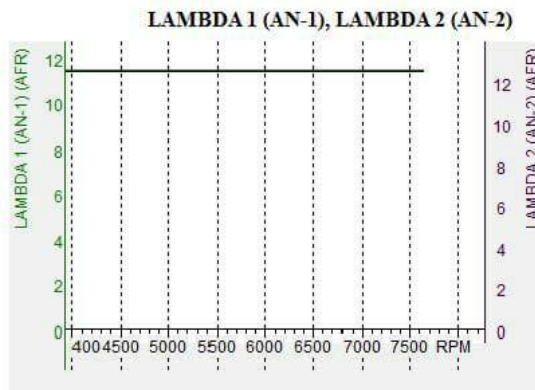
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_128	6.9 / 6440	8.73 / 4322	101.4	25.0	60	1000.0	30/09/2020 14:13:44



DATA FOR TEST: KHARISMA_128

RPM	HP (HP)	TQ (N*M)	Tempol (T C-A) (°C)
4000	3.6	6.40	1000.0
4250	5.2	8.72	1000.0
4322	5.3	8.73	1000.0
4500	5.4	8.57	1000.0
4750	5.7	8.46	1000.0
5000	6.0	8.56	1000.0
5250	6.3	8.59	1000.0
5500	6.5	8.44	1000.0
5750	6.7	8.22	1000.0
6000	6.7	7.98	1000.0
6250	6.9	7.81	1000.0
6440	6.9	7.63	1000.0
6500	6.9	7.56	1000.0
6750	6.8	7.16	1000.0
7000	6.7	6.78	1000.0
7250	6.6	6.42	1000.0
7500	6.3	5.95	1000.0

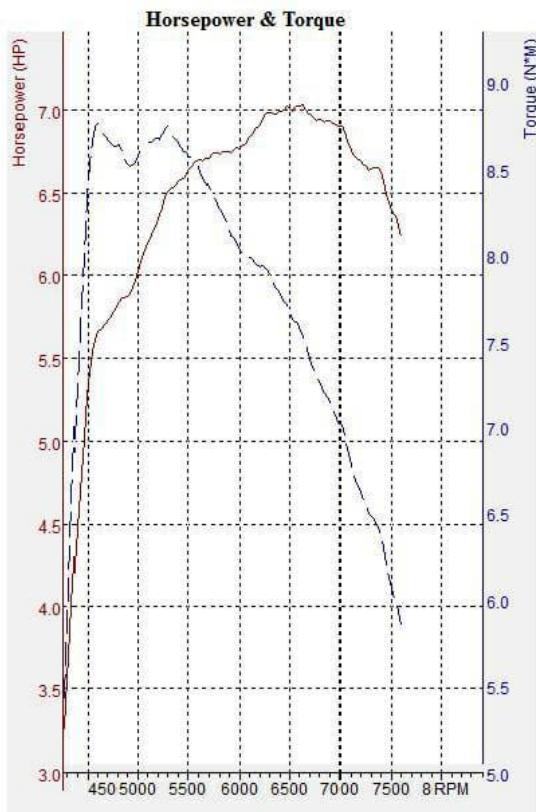
Wheel LOSSES: 6.9 HP 8.7 N*M
 0.0 HP 0.0N*M
TOTAL ENGINE: 6.9HP 8.73N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

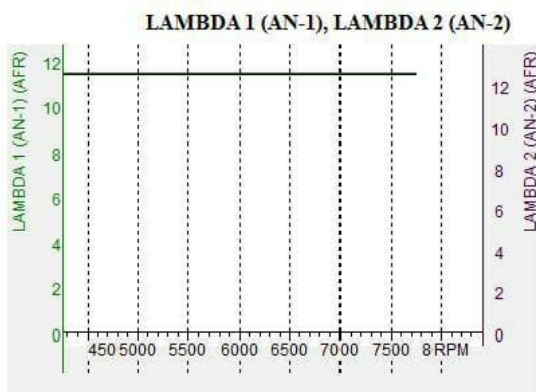
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_127	7.0 / 6630	8.76 / 4395	103.5	25.0	60	1000.0	30/09/2020 14:13:28



DATA FOR TEST: KHARISMA_127

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	5.4	8.44	1000.0
4595	5.7	8.76	1000.0
4750	5.8	8.64	1000.0
5000	6.0	8.57	1000.0
5250	6.4	8.72	1000.0
5500	6.6	8.58	1000.0
5750	6.7	8.34	1000.0
6000	6.8	8.02	1000.0
6250	7.0	7.92	1000.0
6500	7.0	7.67	1000.0
6630	7.0	7.53	1000.0
6750	6.9	7.30	1000.0
7000	6.9	7.01	1000.0
7250	6.7	6.53	1000.0
7500	6.4	6.08	1000.0
7750	6.3	5.87	1000.0

Wheel: 7.0 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0 N*M
 TOTAL ENGINE: 7.0 HP 8.76 N*M

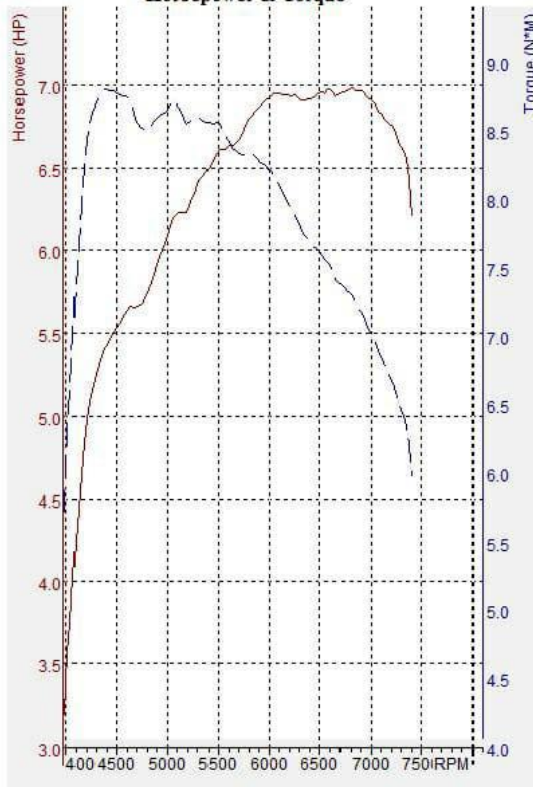




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_126	7.0 / 6805	8.80 / 4354	99.5	25.0	60	1000.0	30/09/2020 14:13:02

Horsepower & Torque

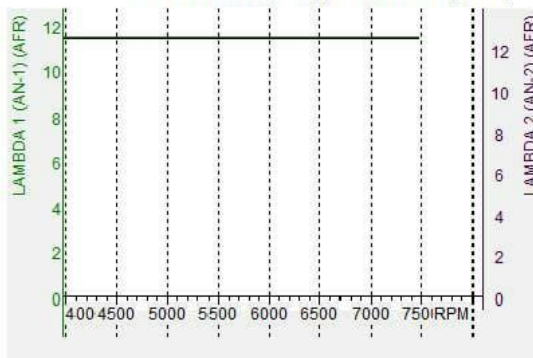


DATA FOR TEST: KHARISMA_126

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	3.5	6.17	1000.0
4250	5.2	8.64	1000.0
4354	5.4	8.80	1000.0
4500	5.6	8.77	1000.0
4750	5.7	8.51	1000.0
5000	6.1	8.65	1000.0
5250	6.3	8.58	1000.0
5500	6.6	8.55	1000.0
5750	6.7	8.32	1000.0
6000	6.9	8.21	1000.0
6250	6.9	7.88	1000.0
6500	7.0	7.61	1000.0
6750	7.0	7.33	1000.0
6805	7.0	7.29	1000.0
7000	6.9	7.02	1000.0
7250	6.7	6.55	1000.0

Wheel: 7.0 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.0HP 8.80N*M

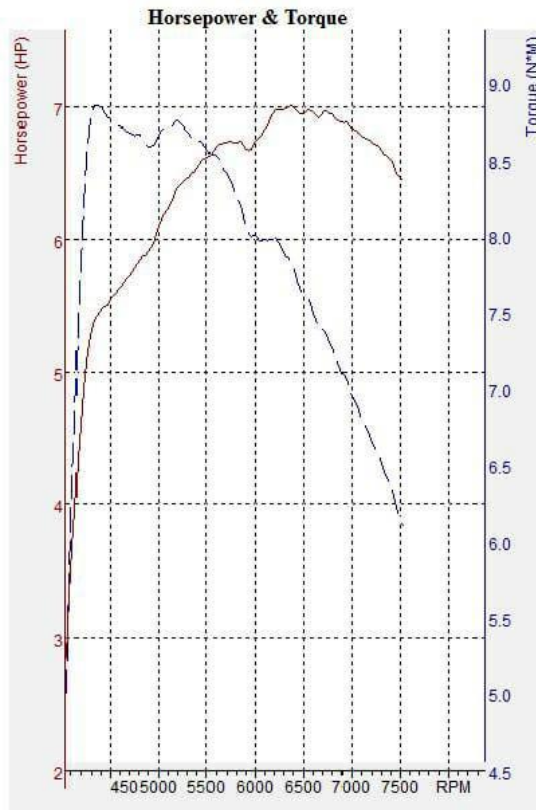
LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)





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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

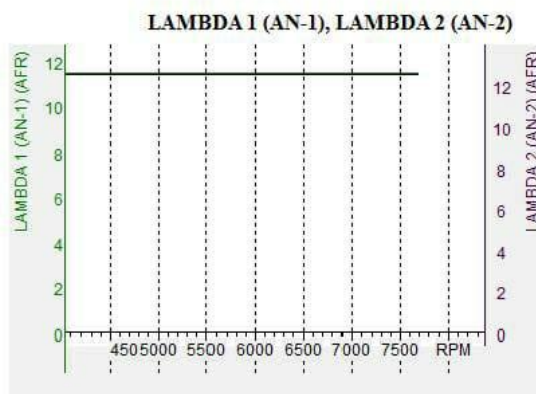
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_125	7.0 / 6336	8.85 / 4310	102.7	25.0	60	1000.0	30/09/2020 14:12:56



DATA FOR TEST: KHARISMA_125

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	5.1	8.50	1000.0
4310	5.4	8.85	1000.0
4500	5.6	8.77	1000.0
4750	5.8	8.66	1000.0
5000	6.1	8.66	1000.0
5250	6.4	8.71	1000.0
5500	6.6	8.56	1000.0
5750	6.7	8.33	1000.0
6000	6.7	8.00	1000.0
6250	7.0	7.94	1000.0
6336	7.0	7.85	1000.0
6500	7.0	7.60	1000.0
6750	7.0	7.34	1000.0
7000	6.8	6.94	1000.0
7250	6.7	6.58	1000.0
7500	6.5	6.12	1000.0

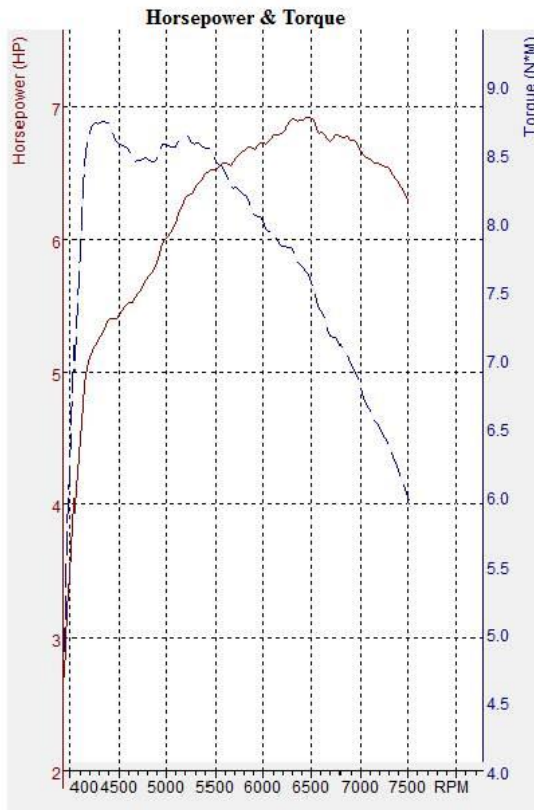
Wheel: 7.0 HP 8.9 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.0HP 8.85N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

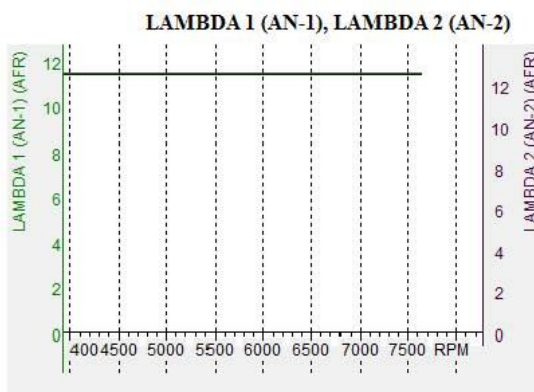
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_132	6.9 / 6440	8.73 / 4322	101.4	25.0	60	1000.0	30/09/2020 14:15:26



DATA FOR TEST: KHARISMA_132

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	3.6	6.40	1000.0
4250	5.2	8.72	1000.0
4322	5.3	8.73	1000.0
4500	5.4	8.57	1000.0
4750	5.7	8.46	1000.0
5000	6.0	8.56	1000.0
5250	6.3	8.59	1000.0
5500	6.5	8.44	1000.0
5750	6.7	8.22	1000.0
6000	6.7	7.98	1000.0
6250	6.9	7.81	1000.0
6440	6.9	7.63	1000.0
6500	6.9	7.56	1000.0
6750	6.8	7.16	1000.0
7000	6.7	6.78	1000.0
7250	6.6	6.42	1000.0
7500	6.3	5.95	1000.0

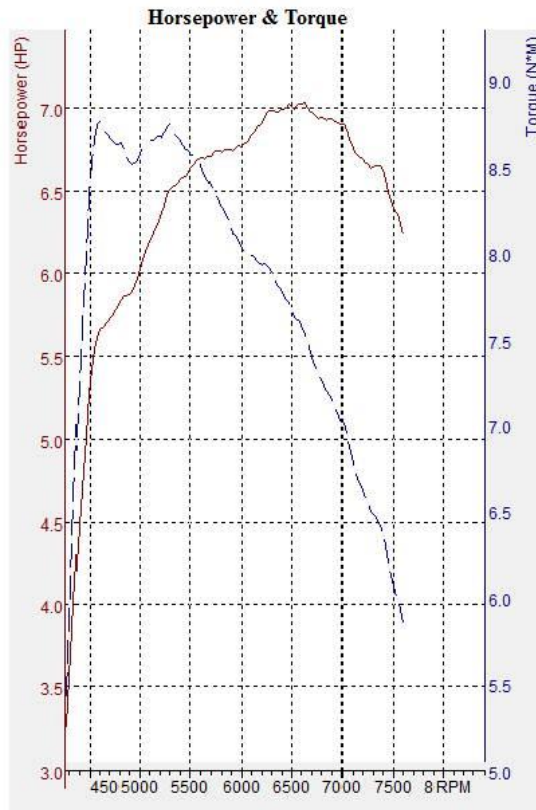
Wheel	6.9 HP	8.7 N*M
LOSSES	0.0 HP	0.0N*M
TOTAL ENGINE:	6.9HP	8.73N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

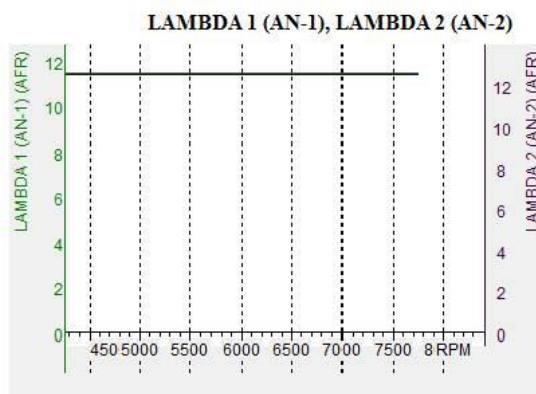
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_133	7.0 / 6630	8.76 / 4395	103.5	25.0	60	1000.0	30/09/2020 14:15:54



DATA FOR TEST: KHARISMA_133

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	5.4	8.44	1000.0
4595	5.7	8.76	1000.0
4750	5.8	8.64	1000.0
5000	6.0	8.57	1000.0
5250	6.4	8.72	1000.0
5500	6.6	8.58	1000.0
5750	6.7	8.34	1000.0
6000	6.8	8.02	1000.0
6250	7.0	7.92	1000.0
6500	7.0	7.67	1000.0
6630	7.0	7.53	1000.0
6750	6.9	7.30	1000.0
7000	6.9	7.01	1000.0
7250	6.7	6.53	1000.0
7500	6.4	6.08	1000.0
7750	6.3	5.87	1000.0

Wheel: 7.0 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.0HP 8.76N*M

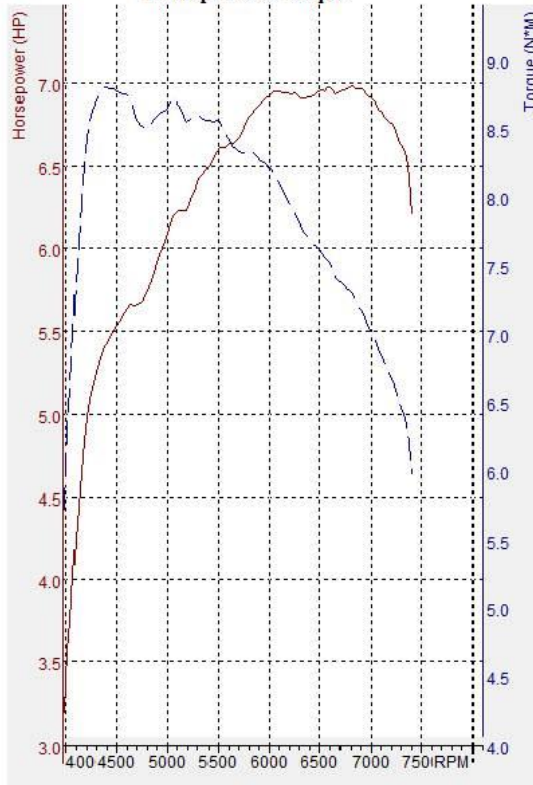




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_134	7.0 / 6805	8.80 / 4354	99.5	25.0	60	1000.0	30/09/2020 14:16:19

Horsepower & Torque

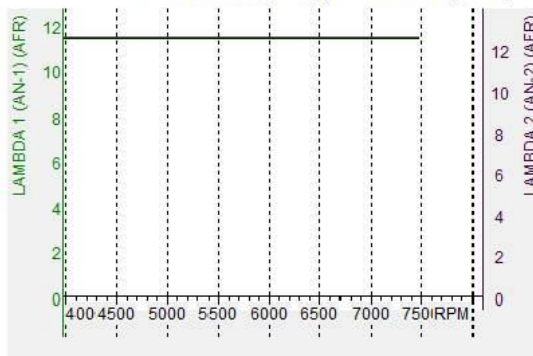


DATA FOR TEST: KHARISMA_134

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	3.5	6.17	1000.0
4250	5.2	8.64	1000.0
4354	5.4	8.80	1000.0
4500	5.6	8.77	1000.0
4750	5.7	8.51	1000.0
5000	6.1	8.65	1000.0
5250	6.3	8.58	1000.0
5500	6.6	8.55	1000.0
5750	6.7	8.32	1000.0
6000	6.9	8.21	1000.0
6250	6.9	7.88	1000.0
6500	7.0	7.61	1000.0
6750	7.0	7.33	1000.0
6805	7.0	7.29	1000.0
7000	6.9	7.02	1000.0
7250	6.7	6.55	1000.0

Wheel: 7.0 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.0HP 8.80N*M

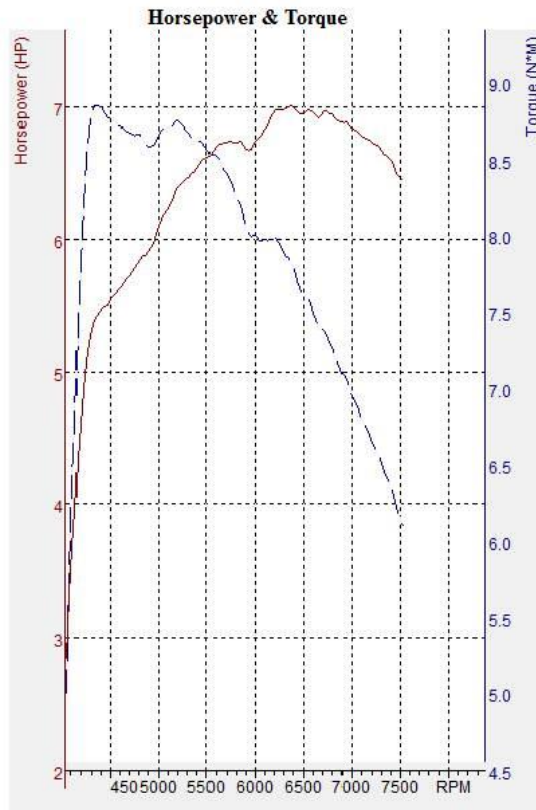
LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)





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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

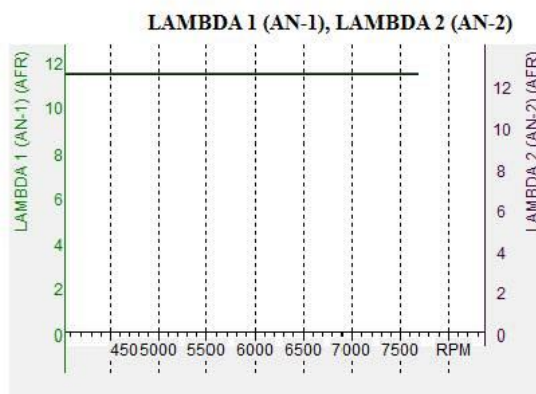
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_135	7.0 / 6336	8.85 / 4310	102.7	25.0	60	1000.0	30/09/2020 14:16:49



DATA FOR TEST: KHARISMA_135

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	5.1	8.50	1000.0
4310	5.4	8.85	1000.0
4500	5.6	8.77	1000.0
4750	5.8	8.66	1000.0
5000	6.1	8.66	1000.0
5250	6.4	8.71	1000.0
5500	6.6	8.56	1000.0
5750	6.7	8.33	1000.0
6000	6.7	8.00	1000.0
6250	7.0	7.94	1000.0
6336	7.0	7.85	1000.0
6500	7.0	7.60	1000.0
6750	7.0	7.34	1000.0
7000	6.8	6.94	1000.0
7250	6.7	6.58	1000.0
7500	6.5	6.12	1000.0

Wheel: 7.0 HP 8.9 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.0HP 8.85N*M

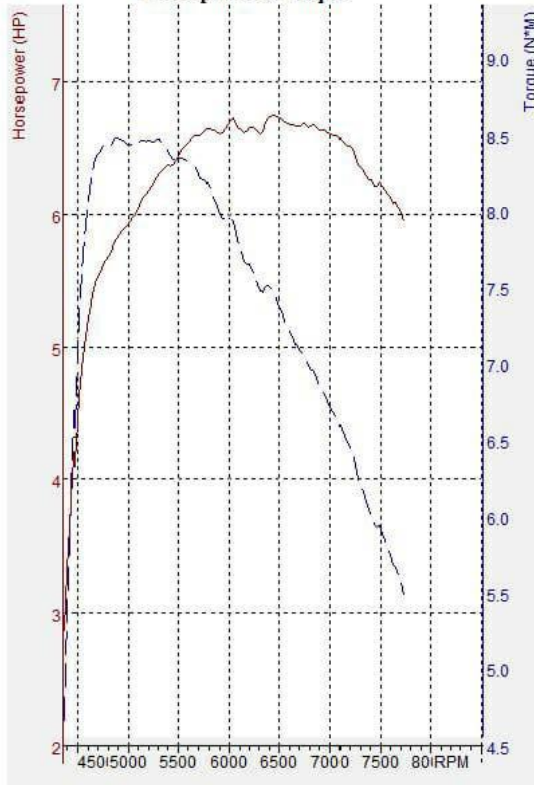




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_130	6.8 / 6433	8.48 / 4854	104.9	25.0	60	1000.0	30/09/2020 14:14:30

Horsepower & Torque

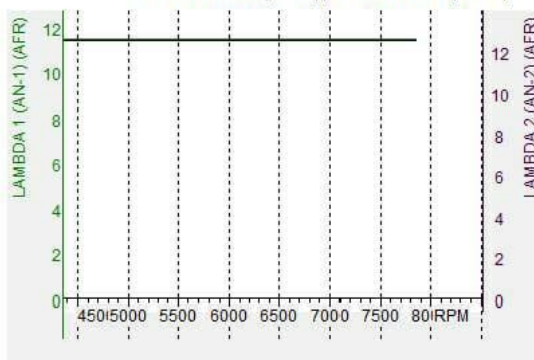


DATA FOR TEST: KHARISMA_130

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	4.5	7.13	1000.0
4750	5.6	8.43	1000.0
4854	5.8	8.48	1000.0
5000	5.9	8.43	1000.0
5250	6.2	8.45	1000.0
5500	6.5	8.35	1000.0
5750	6.6	8.20	1000.0
6000	6.7	7.96	1000.0
6250	6.6	7.55	1000.0
6433	6.8	7.47	1000.0
6500	6.7	7.36	1000.0
6750	6.7	7.05	1000.0
7000	6.6	6.72	1000.0
7250	6.4	6.29	1000.0
7500	6.2	5.91	1000.0
7750	5.9	5.44	1000.0

Wheel: 6.8 HP 8.5 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 6.8HP 8.48N*M

LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)

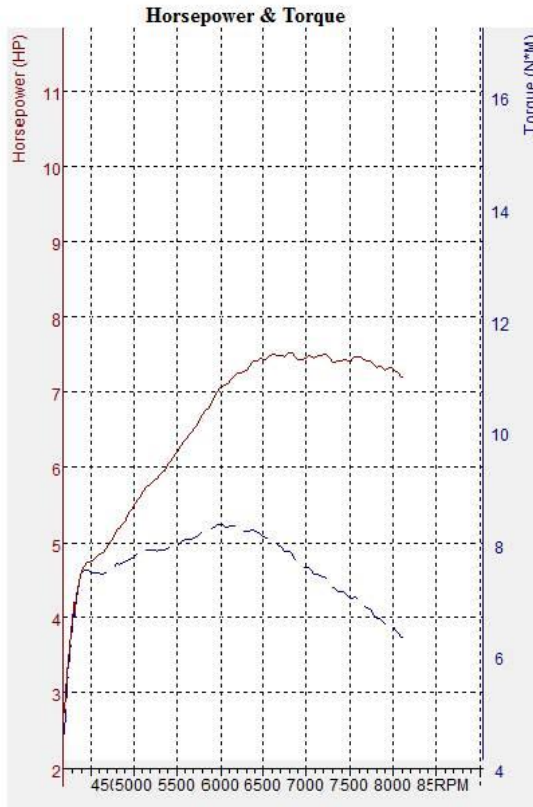


Data Dynotest Torsi Dan Daya 108°, Dengan pengambilan pengulangan data sebanyak 9 kali



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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

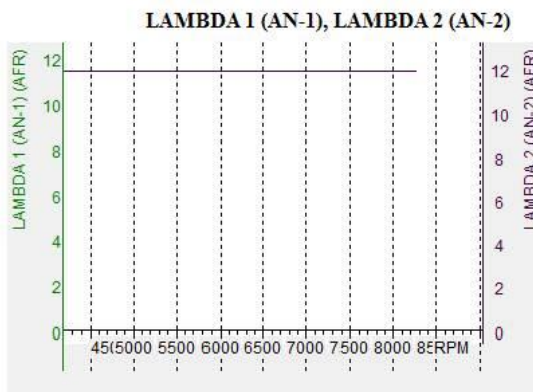
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_139	7.5 / 6803	8.37 / 5982	110.5	25.0	60	1000.0	01/10/2020 21:09:58



DATA FOR TEST: KHARISMA_139

RPM	HP (HP)	TQ (N*M)	Termol (T C-A) (°C)
4250	3.5	5.83	1000.0
4500	4.7	7.49	1000.0
4750	5.1	7.57	1000.0
5000	5.5	7.80	1000.0
5250	5.8	7.90	1000.0
5500	6.2	8.01	1000.0
5750	6.6	8.16	1000.0
5982	7.0	8.37	1000.0
6000	7.1	8.36	1000.0
6250	7.3	8.26	1000.0
6500	7.4	8.13	1000.0
6750	7.5	7.87	1000.0
6803	7.5	7.87	1000.0
7000	7.5	7.59	1000.0
7250	7.5	7.34	1000.0
7500	7.4	7.04	1000.0
7750	7.4	6.78	1000.0
8000	7.3	6.48	1000.0
8250	7.2	6.38	1000.0

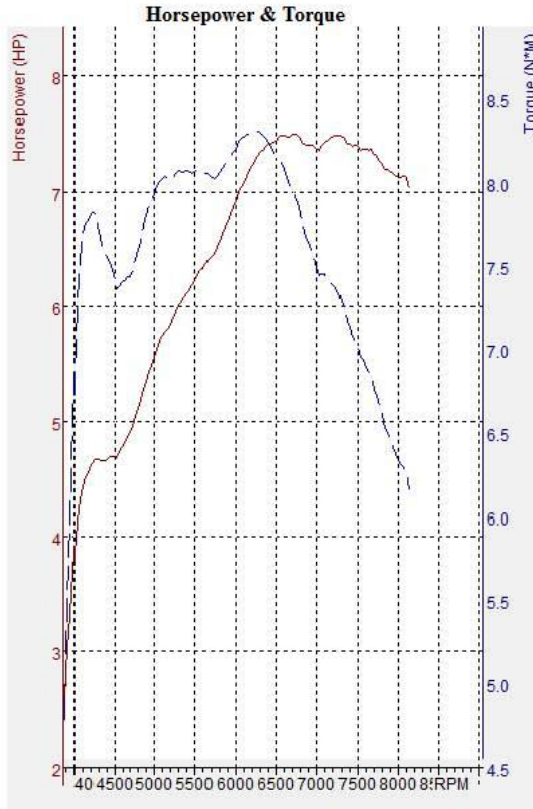
Wheel 7.5 HP 8.4 N*M
 LOSSES 0.0 HP 0.0N*M
TOTAL ENGINE: 7.5HP 8.37N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

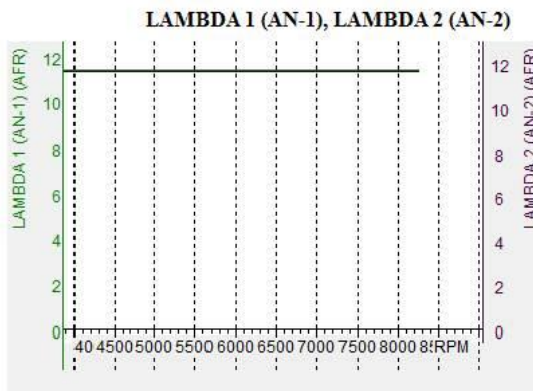
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_147	7.5 / 6703	8.31 / 6223	110.1	25.0	60	1000.0	01/10/2020 2 3:22:56



DATA FOR TEST: KHARISMA_147

RPM	HP (HP)	TQ (N*M)	Tempol (T C-A) (°C)
4000	3.8	6.76	1000.0
4250	4.7	7.81	1000.0
4500	4.7	7.39	1000.0
4750	5.0	7.54	1000.0
5000	5.6	7.95	1000.0
5250	5.9	8.04	1000.0
5500	6.2	8.06	1000.0
5750	6.5	8.04	1000.0
6000	6.9	8.22	1000.0
6223	7.3	8.31	1000.0
6250	7.3	8.30	1000.0
6500	7.5	8.14	1000.0
6703	7.5	7.95	1000.0
6750	7.5	7.88	1000.0
7000	7.4	7.49	1000.0
7250	7.5	7.34	1000.0
7500	7.4	6.99	1000.0
7750	7.3	6.68	1000.0
8000	7.1	6.34	1000.0
8250	7.1	6.29	1000.0

Wheel: 7.5 HP 8.3 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.5HP 8.31N*M

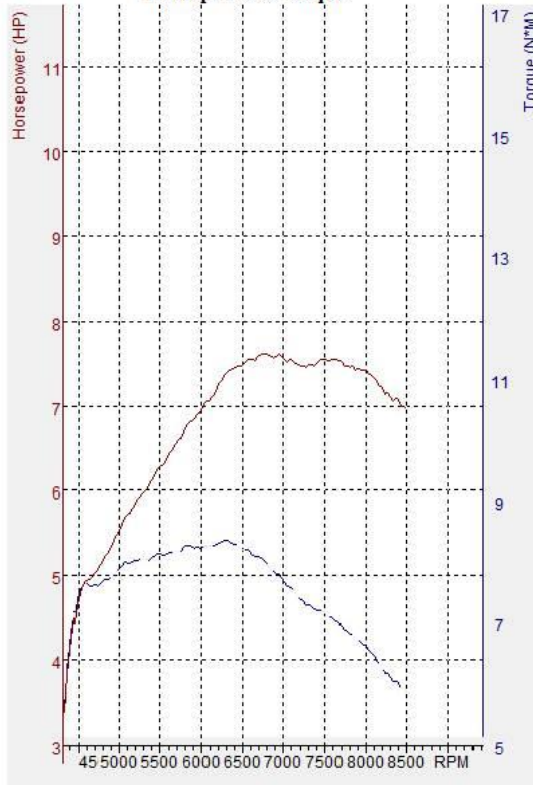




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_140	7.6 / 6754	8.36 / 6289	115.2	25.0	60	1000.0	01/10/2020 21:10:30

Horsepower & Torque

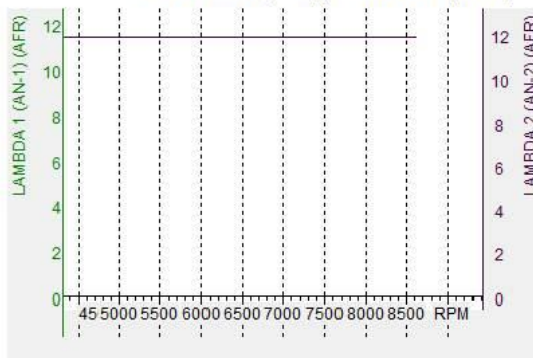


DATA FOR TEST: KHARISMA_140

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	4.8	7.54	1000.0
4750	5.1	7.63	1000.0
5000	5.6	7.90	1000.0
5250	5.9	8.04	1000.0
5500	6.3	8.12	1000.0
5750	6.6	8.19	1000.0
6000	7.0	8.23	1000.0
6250	7.3	8.34	1000.0
6289	7.4	8.36	1000.0
6500	7.5	8.20	1000.0
6750	7.6	8.02	1000.0
6754	7.6	8.02	1000.0
7000	7.5	7.66	1000.0
7250	7.5	7.32	1000.0
7500	7.5	7.16	1000.0
7750	7.5	6.85	1000.0
8000	7.4	6.59	1000.0
8250	7.2	6.17	1000.0
8500	6.9	5.79	1000.0

Wheel: 7.6 HP, 8.4 N*M
 LOSSES: 0.0 HP, 0.0N*M
 TOTAL ENGINE: 7.6HP, 8.36N*M

LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)

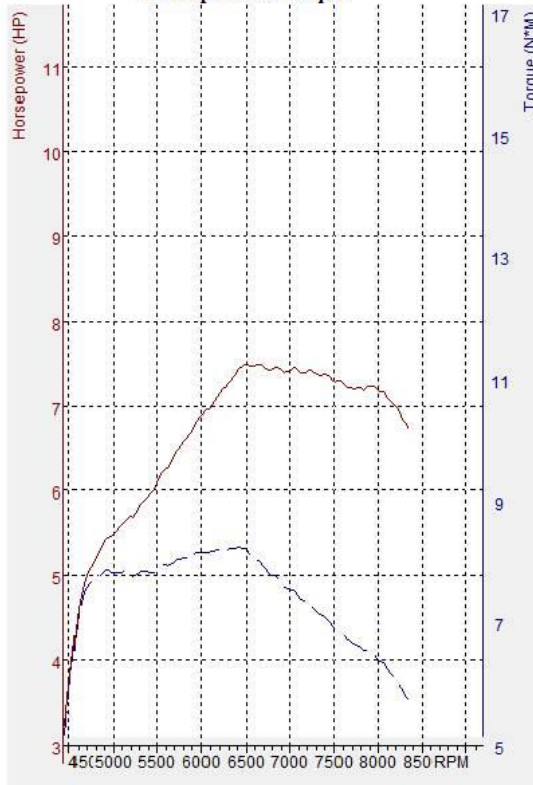




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_138	7.5 / 6500	8.25 / 6403	112.7	25.0	60	1000.0	01/10/2020 21:09:13

Horsepower & Torque

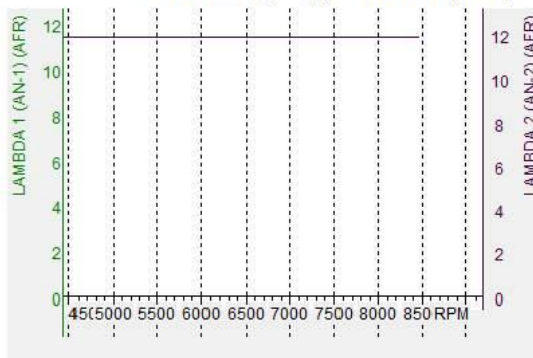


DATA FOR TEST: KHARISMA_138

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	3.8	6.07	1000.0
4750	5.1	7.67	1000.0
5000	5.5	7.81	1000.0
5250	5.8	7.79	1000.0
5500	6.1	7.90	1000.0
5750	6.5	8.04	1000.0
6000	6.9	8.16	1000.0
6250	7.2	8.21	1000.0
6403	7.4	8.25	1000.0
6500	7.5	8.20	1000.0
6500	7.5	8.20	1000.0
6750	7.4	7.83	1000.0
7000	7.4	7.54	1000.0
7250	7.4	7.27	1000.0
7500	7.3	6.90	1000.0
7750	7.2	6.61	1000.0
8000	7.2	6.38	1000.0
8250	6.9	5.92	1000.0

Wheel: 7.5 HP, 8.2 N*M
 LOSSES: 0.0 HP, 0.0N*M
 TOTAL ENGINE: 7.5HP, 8.25N*M

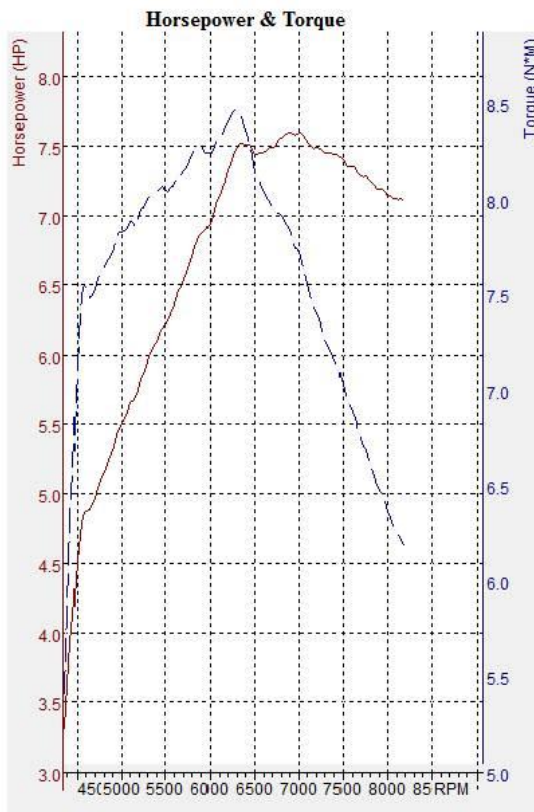
LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

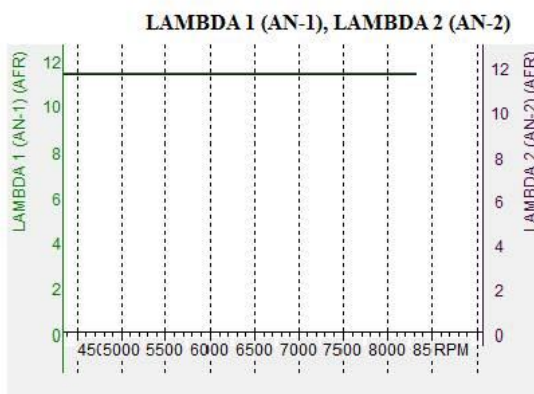
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_148	7.6 / 7000	8.47 / 6262	111.2	25.0	60	1000.0	01/10/2020 23:23:34



DATA FOR TEST: KHARISMA_148

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	4.5	7.17	1000.0
4750	5.1	7.61	1000.0
5000	5.5	7.83	1000.0
5250	5.9	7.96	1000.0
5500	6.2	8.04	1000.0
5750	6.6	8.19	1000.0
6000	7.0	8.25	1000.0
6250	7.4	8.46	1000.0
6262	7.5	8.47	1000.0
6500	7.4	8.15	1000.0
6750	7.5	7.93	1000.0
7000	7.6	7.72	1000.0
7000	7.6	7.72	1000.0
7250	7.5	7.32	1000.0
7500	7.4	7.00	1000.0
7750	7.3	6.68	1000.0
8000	7.1	6.35	1000.0
8250	7.1	6.27	1000.0

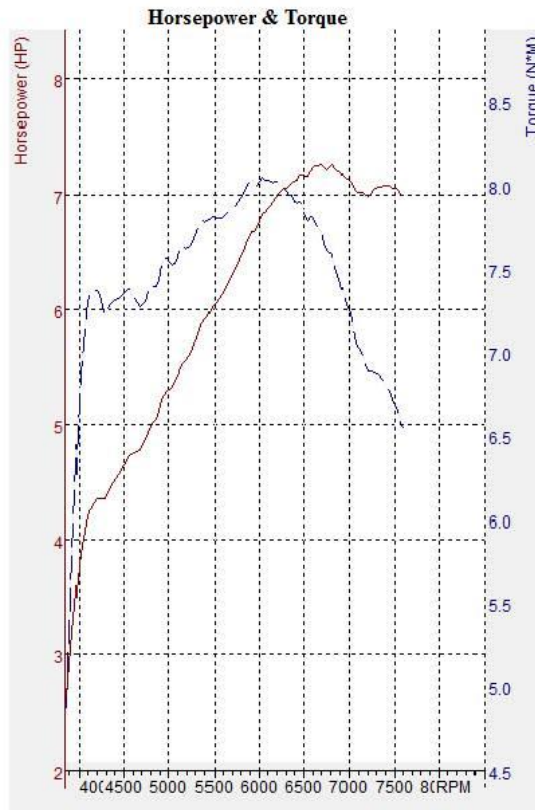
Wheel 7.6 HP 8.5 N*M
 LOSSES 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.6HP 8.47N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

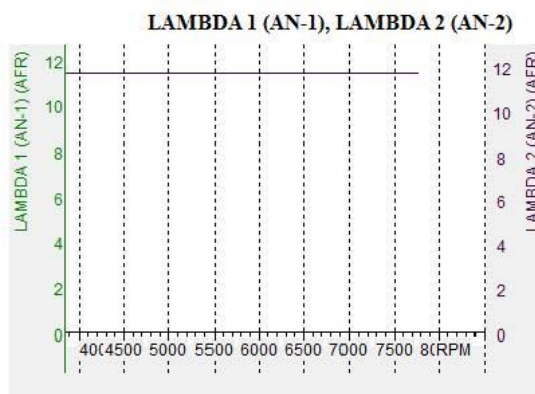
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_142	7.3 / 6814	8.05 / 6028	103.5	25.0	60	1000.0	01/10/2020 23:16:12



DATA FOR TEST: KHARISMA_142

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	3.8	6.77	1000.0
4250	4.3	7.27	1000.0
4500	4.7	7.35	1000.0
4750	4.9	7.34	1000.0
5000	5.3	7.54	1000.0
5250	5.7	7.66	1000.0
5500	6.0	7.81	1000.0
5750	6.4	7.90	1000.0
6000	6.8	8.04	1000.0
6028	6.8	8.05	1000.0
6250	7.0	8.01	1000.0
6500	7.2	7.84	1000.0
6750	7.2	7.60	1000.0
6814	7.3	7.59	1000.0
7000	7.1	7.24	1000.0
7250	7.0	6.89	1000.0
7500	7.1	6.69	1000.0
7750	7.0	6.59	1000.0

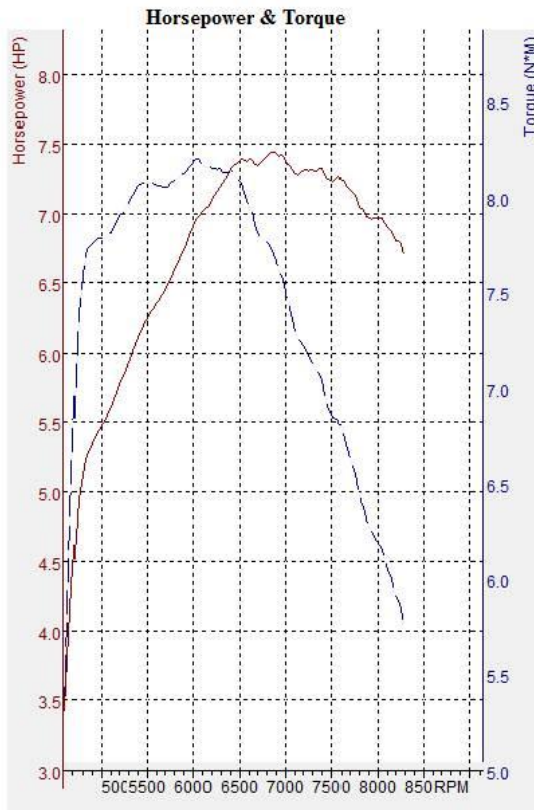
Wheel: 7.3 HP, 8.0 N*M
 LOSSES: 0.0 HP, 0.0N*M
 TOTAL ENGINE: 7.3HP, 8.05N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

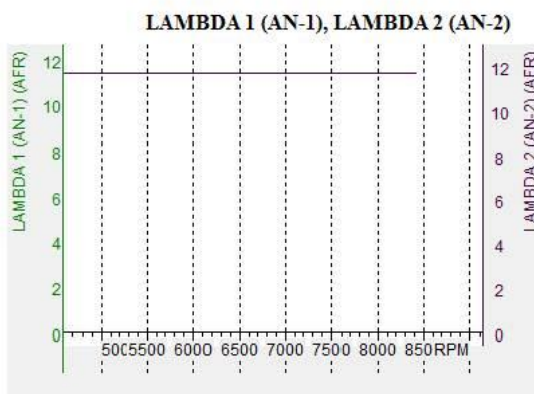
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_143	7.4 / 6825	8.20 / 6040	112.5	25.0	60	1000.0	01/10/2020 23:16:36



DATA FOR TEST: KHARISMA_143

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4750	4.9	7.39	1000.0
5000	5.5	7.78	1000.0
5250	5.9	7.94	1000.0
5500	6.3	8.08	1000.0
5750	6.5	8.07	1000.0
6000	6.9	8.19	1000.0
6040	7.0	8.20	1000.0
6250	7.2	8.15	1000.0
6500	7.4	8.08	1000.0
6750	7.4	7.78	1000.0
6825	7.4	7.73	1000.0
7000	7.4	7.48	1000.0
7250	7.3	7.16	1000.0
7500	7.2	6.86	1000.0
7750	7.1	6.54	1000.0
8000	7.0	6.18	1000.0
8250	6.8	5.83	1000.0

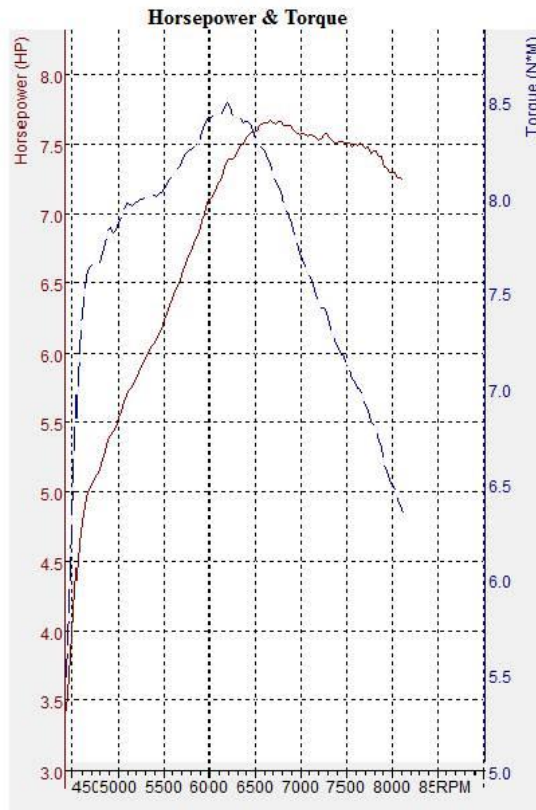
Wheel: 7.4 HP 8.2 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.4HP 8.20N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

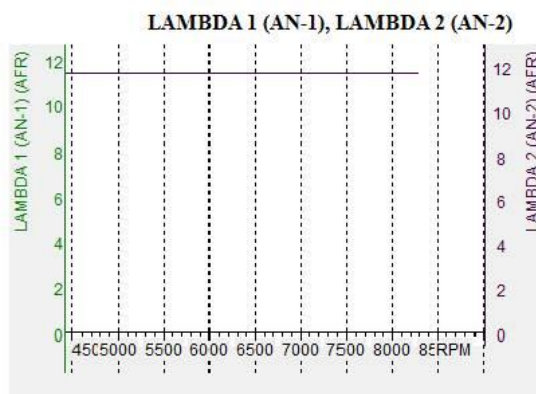
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_145	7.7 / 6642	8.49 / 6185	110.7	25.0	60	1000.0	01/10/2020 23:17:55



DATA FOR TEST: KHARISMA_145

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	4.1	6.45	1000.0
4750	5.1	7.66	1000.0
5000	5.5	7.87	1000.0
5250	5.9	7.99	1000.0
5500	6.2	8.05	1000.0
5750	6.7	8.24	1000.0
6000	7.1	8.41	1000.0
6185	7.4	8.49	1000.0
6250	7.4	8.41	1000.0
6500	7.6	8.30	1000.0
6642	7.7	8.18	1000.0
6750	7.7	8.06	1000.0
7000	7.6	7.69	1000.0
7250	7.6	7.41	1000.0
7500	7.5	7.12	1000.0
7750	7.4	6.82	1000.0
8000	7.3	6.49	1000.0
8250	7.3	6.40	1000.0

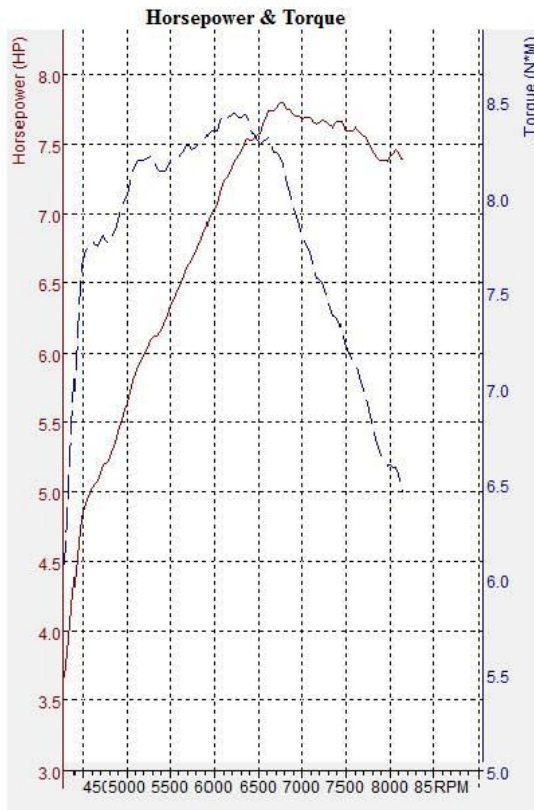
Wheel 7.7 HP 8.5 N*M
 LOSSES 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.7HP 8.49N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

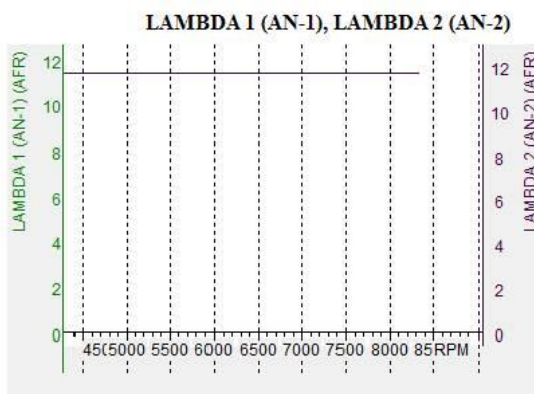
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_146	7.8 / 6774	8.44 / 6194	111.0	25.0	60	1000.0	01/10/2020 23:18:25



DATA FOR TEST: KHARISMA_146

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4500	4.9	7.70	1000.0
4750	5.2	7.78	1000.0
5000	5.6	8.01	1000.0
5250	6.1	8.21	1000.0
5500	6.3	8.19	1000.0
5750	6.7	8.25	1000.0
6000	7.0	8.35	1000.0
6194	7.4	8.44	1000.0
6250	7.4	8.42	1000.0
6500	7.6	8.29	1000.0
6750	7.8	8.19	1000.0
6774	7.8	8.16	1000.0
7000	7.7	7.79	1000.0
7250	7.7	7.51	1000.0
7500	7.6	7.21	1000.0
7750	7.5	6.89	1000.0
8000	7.4	6.59	1000.0
8250	7.5	6.58	1000.0

Wheel 7.8 HP 8.4 N*M
 LOSSES 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.8HP 8.44N*M

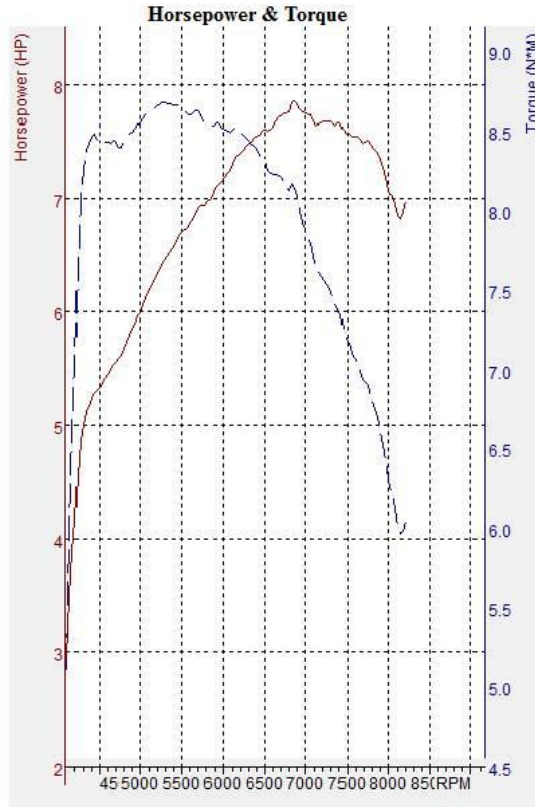


Data Dynotest Torsi Dan Daya 112,5°, Dengan pengambilan pengulangan data sebanyak 9 kali



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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

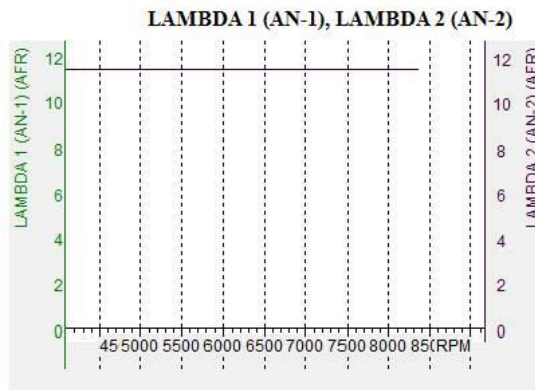
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_153	7.9 / 6840	8.68 / 5290	111.8	25.0	60	1000.0	02/10/2020 14:08:45



DATA FOR TEST: KHARISMA_153

RPM	HP (HP)	TQ (N*M)	Tempol (T C-A) (°C)
4250	4.8	7.95	1000.0
4500	5.3	8.43	1000.0
4750	5.6	8.40	1000.0
5000	6.0	8.57	1000.0
5250	6.4	8.68	1000.0
5290	6.5	8.68	1000.0
5500	6.7	8.66	1000.0
5750	6.9	8.57	1000.0
6000	7.2	8.51	1000.0
6250	7.4	8.46	1000.0
6500	7.6	8.30	1000.0
6750	7.7	8.15	1000.0
6840	7.9	8.16	1000.0
7000	7.7	7.85	1000.0
7250	7.7	7.52	1000.0
7500	7.6	7.17	1000.0
7750	7.5	6.87	1000.0
8000	7.0	6.25	1000.0
8250	6.9	5.98	1000.0

Wheel: 7.9 HP 8.7 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.9HP 8.68N*M

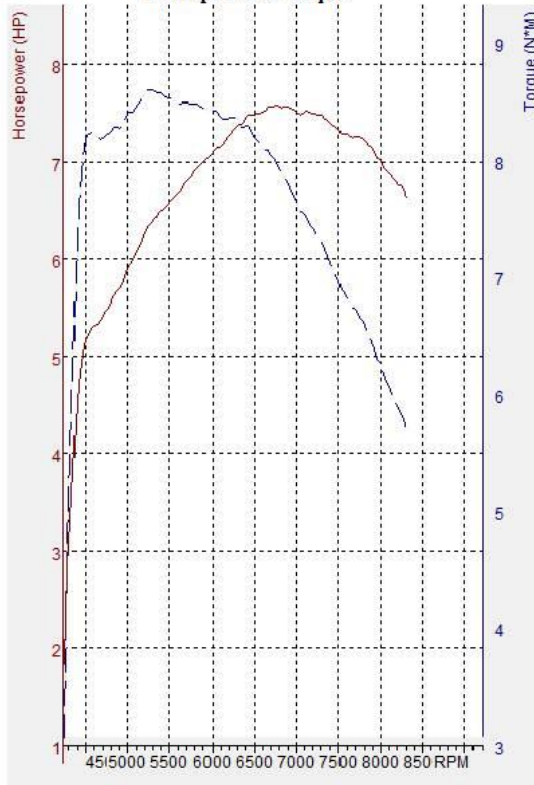




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_151	7.6 / 6674	8.60 / 5246	112.6	25.0	60	1000.0	02/10/2020 14:07:39

Horsepower & Torque

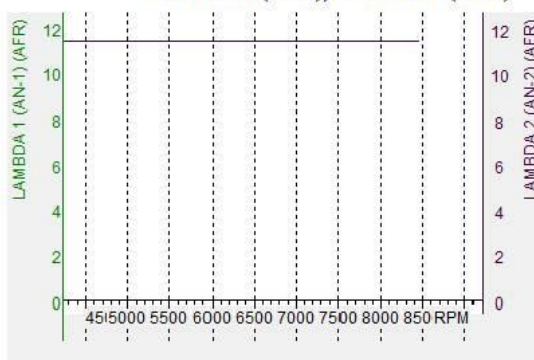


DATA FOR TEST: KHARISMA_151

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	2.0	3.28	1000.0
4500	5.2	8.19	1000.0
4750	5.5	8.22	1000.0
5000	5.9	8.41	1000.0
5250	6.3	8.60	1000.0
5246	6.3	8.60	1000.0
5500	6.6	8.52	1000.0
5750	6.9	8.48	1000.0
6000	7.1	8.42	1000.0
6250	7.4	8.36	1000.0
6500	7.5	8.19	1000.0
6674	7.6	8.06	1000.0
6750	7.6	7.98	1000.0
7000	7.5	7.62	1000.0
7250	7.5	7.34	1000.0
7500	7.3	6.94	1000.0
7750	7.2	6.65	1000.0
8000	7.0	6.23	1000.0
8250	6.7	5.81	1000.0

Wheel	7.6 HP	8.6 N*M
LOSSES	0.0 HP	0.0N*M
TOTAL ENGINE:	7.6HP	8.60N*M

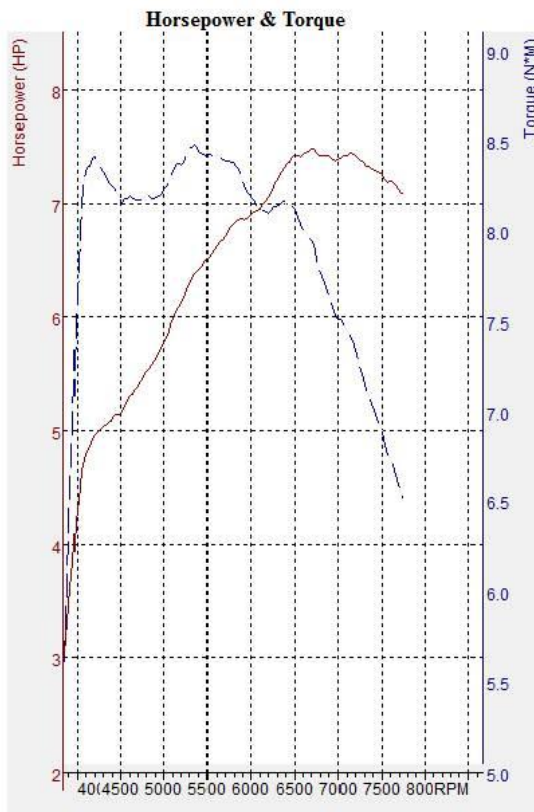
LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

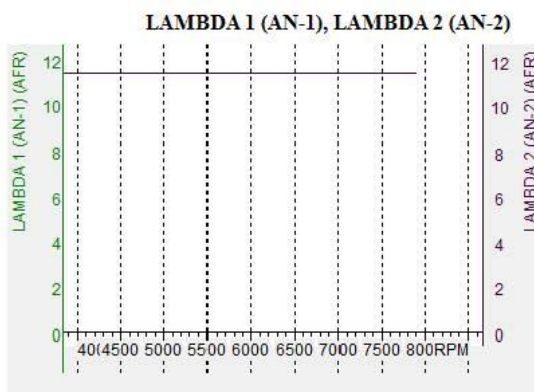
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_150	7.5 / 6694	8.48 / 5330	105.3	25.0	60	1000.0	02/10/2020 14:07:11



DATA FOR TEST: KHARISMA_150

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	4.4	7.79	1000.0
4250	5.0	8.36	1000.0
4500	5.2	8.16	1000.0
4750	5.5	8.18	1000.0
5000	5.8	8.23	1000.0
5250	6.2	8.41	1000.0
5330	6.4	8.48	1000.0
5500	6.5	8.43	1000.0
5750	6.8	8.38	1000.0
6000	6.9	8.18	1000.0
6250	7.2	8.13	1000.0
6500	7.4	8.12	1000.0
6694	7.5	7.94	1000.0
6750	7.5	7.84	1000.0
7000	7.4	7.50	1000.0
7250	7.4	7.23	1000.0
7500	7.3	6.87	1000.0
7750	7.1	6.50	1000.0

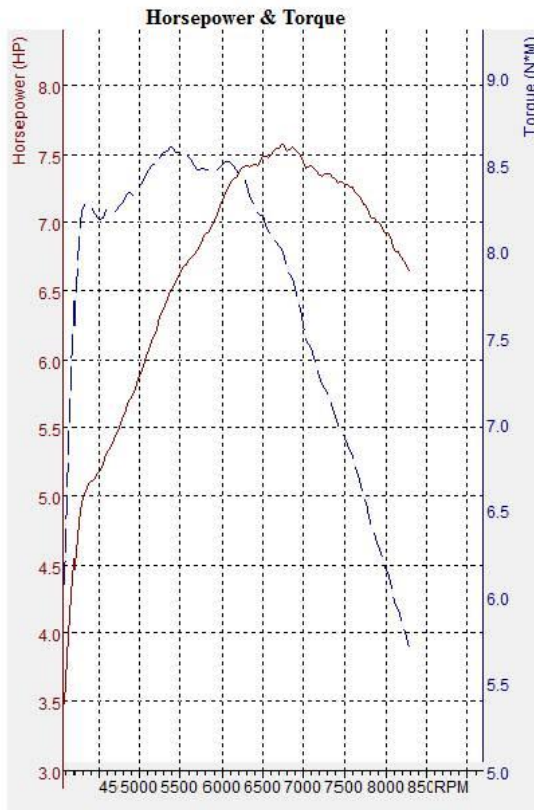
Wheel: 7.5 HP 8.5 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.5HP 8.48N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

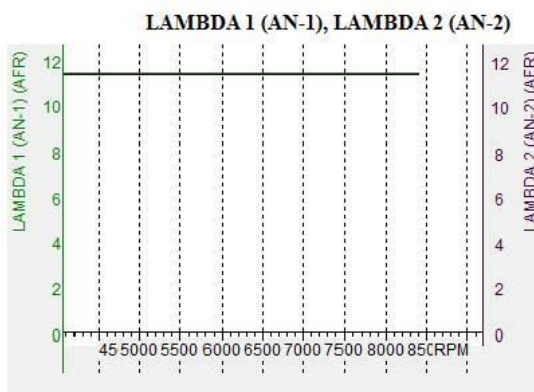
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_155	7.6 / 6732	8.60 / 5361	112.0	25.0	60	1000.0	02/10/2020 14:46:47



DATA FOR TEST: KHARISMA_155

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	4.9	8.13	1000.0
4500	5.2	8.18	1000.0
4750	5.5	8.26	1000.0
5000	5.9	8.38	1000.0
5250	6.3	8.55	1000.0
5361	6.5	8.60	1000.0
5500	6.6	8.57	1000.0
5750	6.9	8.47	1000.0
6000	7.2	8.50	1000.0
6250	7.4	8.43	1000.0
6500	7.5	8.19	1000.0
6750	7.6	7.99	1000.0
6732	7.6	7.99	1000.0
7000	7.4	7.54	1000.0
7250	7.4	7.21	1000.0
7500	7.3	6.91	1000.0
7750	7.1	6.54	1000.0
8000	6.9	6.15	1000.0
8250	6.7	5.75	1000.0

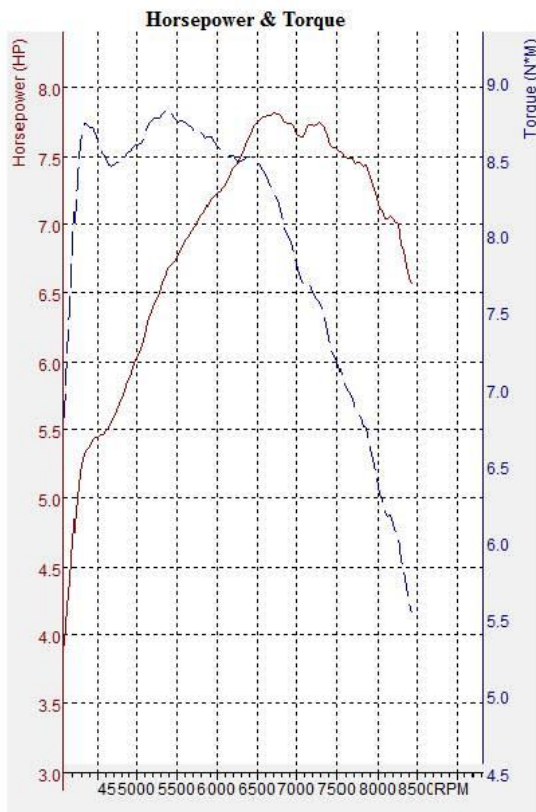
Wheel 7.6 HP 8.6 N*M
 LOSSES 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.6HP 8.60N*M





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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

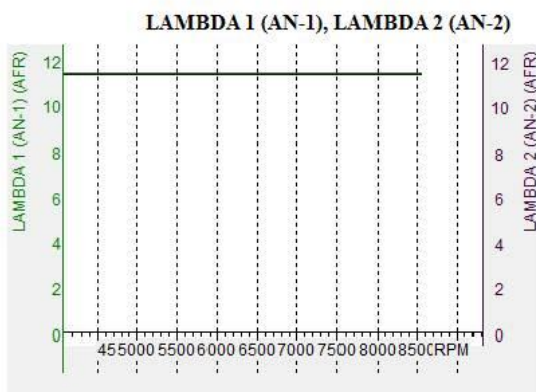
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_157	7.8 / 6675	8.82 / 5389	113.5	25.0	60	1000.0	02/10/2020 14:47:55



DATA FOR TEST: KHARISMA_157

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	5.0	8.43	1000.0
4500	5.5	8.60	1000.0
4750	5.7	8.48	1000.0
5000	6.0	8.60	1000.0
5250	6.5	8.76	1000.0
5389	6.7	8.82	1000.0
5500	6.8	8.74	1000.0
5750	7.0	8.68	1000.0
6000	7.2	8.58	1000.0
6250	7.5	8.48	1000.0
6500	7.8	8.48	1000.0
6675	7.8	8.30	1000.0
6750	7.8	8.22	1000.0
7000	7.7	7.77	1000.0
7250	7.7	7.57	1000.0
7500	7.5	7.15	1000.0
7750	7.5	6.84	1000.0
8000	7.1	6.35	1000.0
8250	7.0	6.04	1000.0
8500	6.8	5.77	1000.0

Wheel: 7.8 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.8HP 8.82N*M

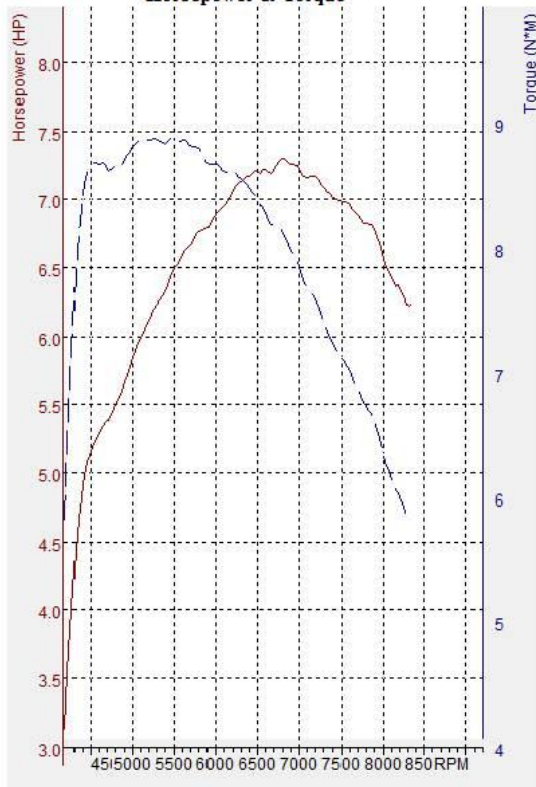




SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_154	7.3 / 6803	8.39 / 5476	112.4	25.0	60	1000.0	02/10/2020 14:46:09

Horsepower & Torque

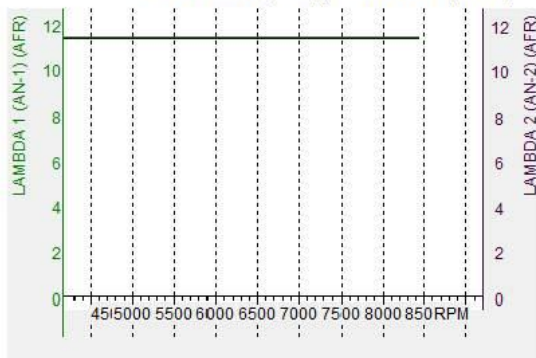


DATA FOR TEST: KHARISMA_154

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	3.9	6.46	1000.0
4500	5.2	8.17	1000.0
4750	5.4	8.14	1000.0
5000	5.9	8.32	1000.0
5250	6.2	8.38	1000.0
5476	7.3	8.39	1000.0
5500	6.5	8.39	1000.0
5750	6.7	8.32	1000.0
6000	6.9	8.17	1000.0
6250	7.1	8.09	1000.0
6500	7.2	7.88	1000.0
6750	7.3	7.66	1000.0
6803	7.3	7.62	1000.0
7000	7.2	7.34	1000.0
7250	7.1	6.97	1000.0
7500	7.0	6.62	1000.0
7750	6.8	6.27	1000.0
8000	6.6	5.83	1000.0
8250	6.3	5.41	1000.0

Wheel: 7.3 HP 8.4 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.3HP 8.39N*M

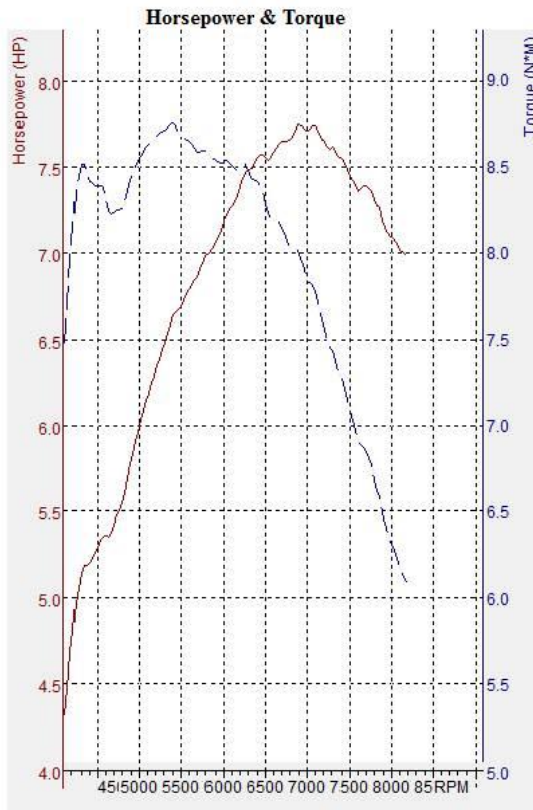
LAMBDA 1 (AN-1), LAMBDA 2 (AN-2)





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

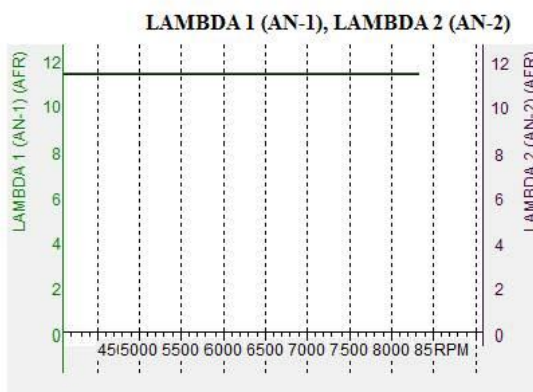
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_156	7.8 / 6896	8.73 / 5386	111.0	25.0	60	1000.0	02/10/2020 14:47:18



DATA FOR TEST: KHARISMA_156

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	5.0	8.38	1000.0
4500	5.3	8.37	1000.0
4750	5.5	8.23	1000.0
5000	6.0	8.53	1000.0
5250	6.4	8.68	1000.0
5386	6.6	8.73	1000.0
5500	6.7	8.65	1000.0
5750	6.9	8.58	1000.0
6000	7.2	8.52	1000.0
6250	7.5	8.50	1000.0
6500	7.6	8.27	1000.0
6750	7.6	8.05	1000.0
6896	7.8	7.99	1000.0
7000	7.7	7.83	1000.0
7250	7.6	7.46	1000.0
7500	7.4	7.06	1000.0
7750	7.4	6.76	1000.0
8000	7.1	6.30	1000.0
8250	7.0	6.21	1000.0

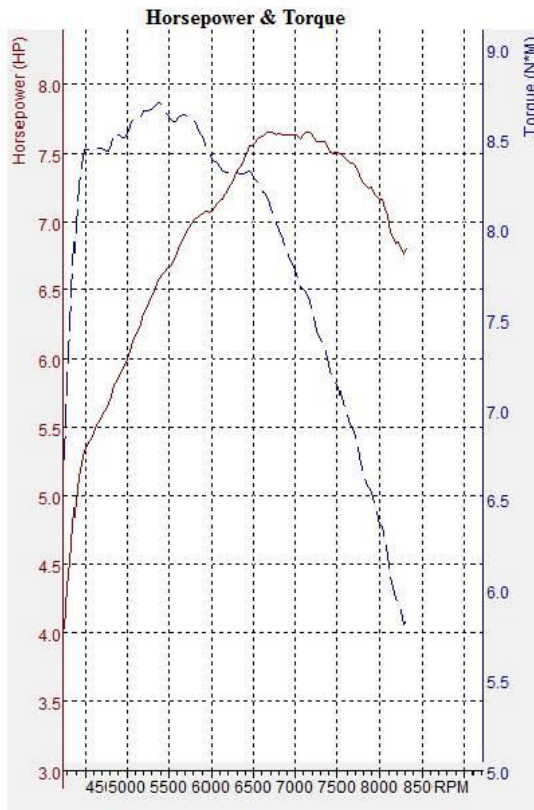
Wheel: 7.8 HP, 8.7 N*M
 LOSSES: 0.0 HP, 0.0N*M
 TOTAL ENGINE: 7.8HP, 8.73N*M





SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

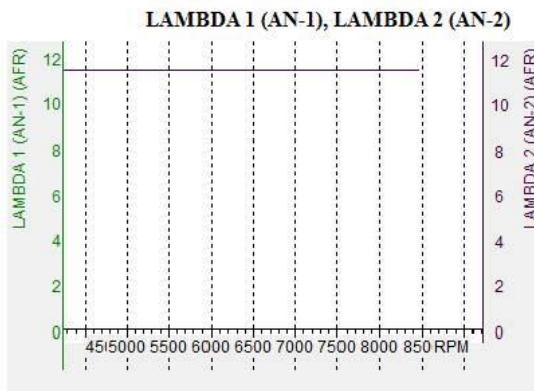
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_152	7.7 / 7115	8.70 / 5391	112.7	25.0	60	1000.0	02/10/2020 14:08:09



DATA FOR TEST: KHARISMA_152

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4250	3.9	6.57	1000.0
4500	5.3	8.45	1000.0
4750	5.6	8.42	1000.0
5000	6.0	8.55	1000.0
5250	6.4	8.65	1000.0
5391	6.6	8.70	1000.0
5500	6.7	8.62	1000.0
5750	7.0	8.61	1000.0
6000	7.1	8.38	1000.0
6250	7.3	8.31	1000.0
6500	7.6	8.29	1000.0
6750	7.6	8.04	1000.0
7000	7.6	7.76	1000.0
7115	7.7	7.64	1000.0
7250	7.6	7.44	1000.0
7500	7.5	7.12	1000.0
7750	7.3	6.72	1000.0
8000	7.2	6.36	1000.0
8250	6.8	5.85	1000.0
8500	6.8	5.81	1000.0

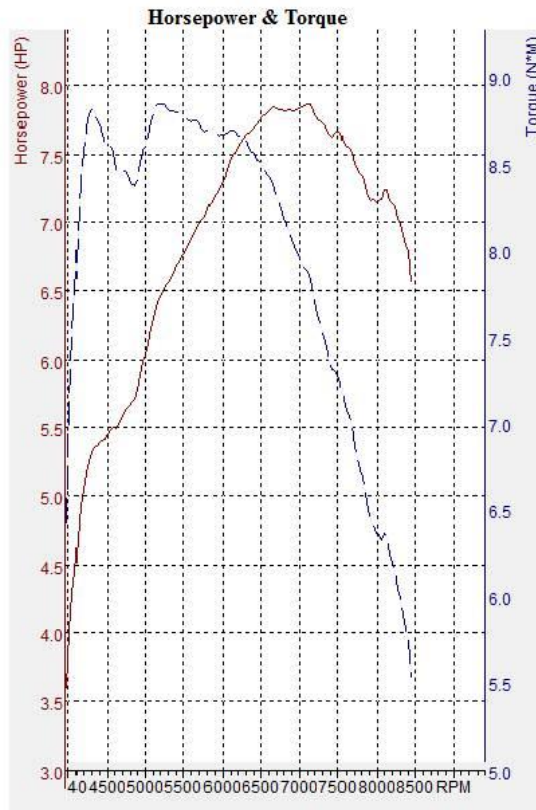
Wheel: 7.7 HP 8.7 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.7HP 8.70N*M





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 SportDyno-Ver date: 28-JUN-2019 (4.0.35.1)
 DYNAMOMETER: SMK PGRI 2 BADUNG
 Correction Factor: EC95 -1
 Power: HP (mechanic)

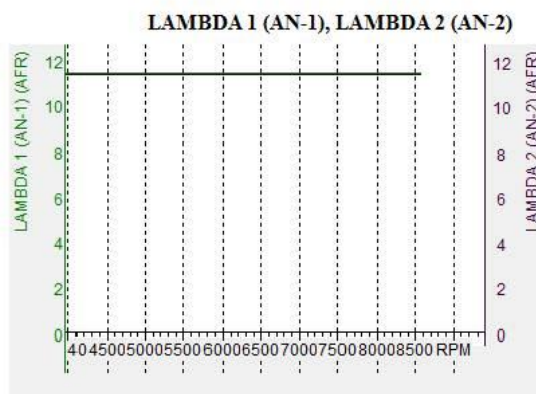
Name	HP/RPM	N*M/RPM	KMH	Temp. (°C)	Humidity (%)	Pressure (mbar)	Date/Time
KHARISMA_158	7.9 / 7102	8.85 / 5210	114.2	25.0	60	1000.0	02/10/2020 14:48:29



DATA FOR TEST: KHARISMA_158

RPM	HP (HP)	TQ (N*M)	Temp (C-A) (°C)
4000	3.9	6.95	1000.0
4250	5.2	8.76	1000.0
4500	5.5	8.60	1000.0
4750	5.6	8.45	1000.0
5000	6.1	8.62	1000.0
5210	6.5	8.85	1000.0
5500	6.5	8.84	1000.0
5750	6.8	8.76	1000.0
6000	7.0	8.69	1000.0
6250	7.3	8.67	1000.0
6500	7.6	8.66	1000.0
6750	7.8	8.50	1000.0
7000	7.8	8.24	1000.0
7102	7.9	7.86	1000.0
7250	7.7	7.59	1000.0
7500	7.7	7.27	1000.0
7750	7.4	6.77	1000.0
8000	7.2	6.36	1000.0
8250	7.0	6.07	1000.0
8500	6.9	5.87	1000.0

Wheel: 7.9 HP 8.8 N*M
 LOSSES: 0.0 HP 0.0N*M
 TOTAL ENGINE: 7.9HP 8.85N*M



Data Konsumsi Bahan Bakar, Dengan pengambilan pengulangan data sebanyak 9 kali

Putaran Mesin (RPM)	Pengulangan Pengujian	Waktu Konsumsi Bahan Bakar (s)		
		LSA 108°	LSA 110°	LSA 112,5°
4500	1	448	433	391
	2	448	432	392
	3	447	433	391
	4	447	431	390
	5	448	430	392
	6	449	432	392
	7	447	431	393
	8	448	434	393
	9	449	434	392
5000	1	437	418	384
	2	438	418	383
	3	437	420	384
	4	438	419	385
	5	439	419	382
	6	437	418	383
	7	437	419	382
	8	438	418	384
	9	438	418	384
5500	1	412	397	369
	2	412	399	368
	3	413	398	367
	4	413	399	367
	5	412	398	367
	6	413	398	368
	7	412	397	366
	8	412	397	366
	9	412	398	367
6000	1	391	386	360
	2	391	385	360
	3	392	386	361
	4	392	385	360
	5	391	386	359
	6	390	386	360
	7	391	386	361
	8	392	384	361

	9	392	384	361
6500	1	387	375	354
	2	388	375	353
	3	387	375	354
	4	386	374	353
	5	387	374	353
	6	387	373	352
	7	387	372	352
	8	388	373	351
	9	388	373	352
7000	1	363	359	320
	2	362	359	320
	3	363	358	319
	4	362	356	318
	5	361	358	318
	6	362	357	317
	7	362	357	318
	8	362	359	319
	9	363	359	319
7500	1	345	331	307
	2	346	332	308
	3	345	331	308
	4	344	332	306
	5	346	331	307
	6	346	330	308
	7	345	332	308
	8	346	333	307
	9	346	333	308





Aan Adji Ahmad Syabani, lahir di Tabanan, 10 Desember 1997. Yang dimana peneliti lahir dari pasangan suami istri, Bapak Jamsidi Rosidi dan Ibu Gusti Ayu Aryati. Peneliti berkebangsaan Indonesia dan beragama Islam. Peneliti tinggal di desa Kuwun Ancak, Kecamatan Marga, Kabupaten Tabanan, Provinsi Bali. Asal asli peneliti dari desa umadiwang, Kecamatan Marga, Kabupaten Tabanan, Provinsi Bali. Dan selama menempuh pendidikan di Universitas Pendidikan Ganesha Peneliti tinggal di Desa Bakti Seraga, Kecamatan Buleleng, Kabupaten Buleleng, Provinsi Bali. Peneliti mengenyam pendidikan Sekolah Dasar di SD Negeri 2 Peken dari tahun 2006-2012, kemudian berlanjut ke jenjang Sekolah Menengah Pertama di Mts Al-Amin Tabanan dari tahun 2012-2014, pada jenjang selanjutnya peneliti melanjutkan pendidikan di SMK 1 Saraswati Tabanan dengan jurusan Teknik Kendaraan Ringan (TKR) tahun 2014-2016, dan saat ini melanjutkan pendidikan di perguruan tinggi negeri di Universitas Pendidikan Ganesha pada tahun 2016 dengan mengambil Program Studi S1 Pendidikan Teknik Mesin, Jurusan Teknologi Industri, Fakultas Teknik dan Kejuruan. Pada semester 9 tahun 2021 penulis telah menyelesaikan Skripsi yang berjudul “Pengaruh Variasi Derajat *Lobe Separation Angle camshaft* Terhadap Torsi, Daya dan Konsumsi Bahan Bakar Motor Bensin 4 Langkah”

