DASHBOARD - RESULTS

Copyright
DYNATUNE-XL

	ACTUAL	REF	
Aerodynamics			
Fr. Lift Coef.	0,10	0,10	-
Front Suspension Rates (w/o Tires)			
Fr. Wheel Rate	22,0	22,0	N/mm
Bump-Stop Gap @ Wheel	20,0	20,0	mm
Displ. to Final Bump-Stop Rate	35,0	35,0	mm
Bump-Stop Final Rate @ Wheel	75,0	75,0	N/mm
Fr. Rollbar Roll Rate	750,0	750,0	Nm/°
(Total Roll rate	1142,6	1467,6	Nm/°)
Front Tire Data			
Fr. Tire Vertical Stiffness	200,0	200,0	N/mm
Fr. Tire Cornering Stiffness	1050,0	1050,0	N/°
(@ operating point	1087,4	1142,6	N/°)
Front Suspension Geometry			
Fr. Total Static Toe	-0,25	-0,25	°
Fr. Static Camber	-1,00	-1,00	°
Fr. Bump Steer	-3,0	-3,0	°/m
Fr. Roll Center Height	50,0	50,0	mm
Motion Centers			
Fr. Anti-Dive	26,4	26,4	%
Fr. Anti-Lift	7,5	7,5	%
Fr. Inst. Roll Center Height	58,3	36,9	mm

	ACTUAL	REF	
Drag Coef.	0,30	0,30	-
Frontal Area	2,00	2,00	m2
Grip Level			
Tire Friction Coefficient (Mue)	1,00	1,00	-
G-MAX theoretical. (Aero & Frict. Coef.)	0,98	0,98	g
G-Lat MAX (Aero Distribution)	0,98	0,98	g
G-Lat MAX (CoG, Wheel Lift, US/OS)	1,22	1,22	g
Simulation Control			
Speed	120,0	120,0	kph
G-Lat	0,88	0,89	g
G-Long	0,00	-0,30	g
SWA	0,0	0,0	°
Steering System			
Steering Ratio	15,00	15,00	-
Vehicle Data			
Fr. Track Width	1430,0	1430,0	mm
Rr. Track Width	1440,0	1440,0	mm
Wheel Base	2750,0	2750,0	mm
Total Mass	1400,0	1400,0	kg
Overall CoG Height	586,5	585,9	mm
Weight Distribution (% Fr.)	54,7	54,7	%
Total Yaw Inertia	2036,0	2036,0	kgm2
Total Pitch Inertia	1940,2	1940,2	kgm2

	ACTUAL	REF	
Aerodynamics			
Rr. Lift Coef.	0,05	0,05	-
Rear Suspension Rates (w/o Tires)			
Rr. Wheel Rate	20,0	20,0	N/mm
Bump-Stop Gap @ Wheel	40,0	40,0	mm
Displ. to Final Bump-Stop Rate	35,0	35,0	mm
Bump-Stop Final Rate @ Wheel	75,0	75,0	N/mm
Rr. Rollbar Roll Rate	350,0	350,0	Nm/°
(Total Roll Rate	711,9	711,9	Nm/°)
Rear Tire Data			
Rr. Tire Vertical Stiffness	200,0	200,0	N/mm
Rr. Tire Cornering Stiffness	1050,0	1050,0	N/°
(@ operating point	1081,3	931,6	N/°)
Rear Suspension Geometry			
Rr. Total Static Toe	0,25	0,25	°
Rr. Static Camber	-0,50	-0,50	°
Rr. Bump Steer	1,0	1,0	°/m
Rr. Roll Center Height	75,0	75,0	mm
Motion Centers			
Rr. Anti Squat	0,0	0,0	%
Rr. Anti Lift	22,8	22,8	%
Rr. Inst. Roll Center Height	76,6	99,7	mm

	ACTUAL	REF	
Fr. Ride Frequency	1,252	1,627	Hz

	ACTUAL	REF	
Pitch Center rel. to Fr. Axle	-1,10	-1,77	m
Bounce Center rel. to Fr. Axle	-10,16	1,17	m

	ACTUAL	REF	
Rr. Ride Frequency	1,313	1,313	Hz

CALCULATION RESULTS FROM VEHICLE MODEL

Delta Fr. Ride Height (-jounce)	16,8	-0,8	mm
Delta Rr. Ride Height (-jounce)	10,1	29,9	mm
Vehicle Roll Angle	3,6	3,5	°
Lat. Load Transf. Distr. (% Fr.)	59,9	64,0	%
LLT Bias rel. to CoG (+Fwd)	5,2	9,3	%
Vehicle Pitch Angle	0,14	-0,64	mm
Delta H-Point (Pitch & Roll)	39,29	35,98	mm

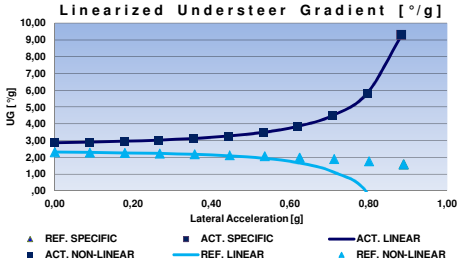
Front Left Corner			
LF Wheel Travel	-50,1	-38,0	mm
LF Toe	0,202	0,210	°
LF Camber	-0,140	-0,416	°
LR Toe	0,202	0,210	°
LR Camber	-0,140	-0,416	°
LR Wheel Travel	-42,0	-53,9	mm
Rear Left Corner			

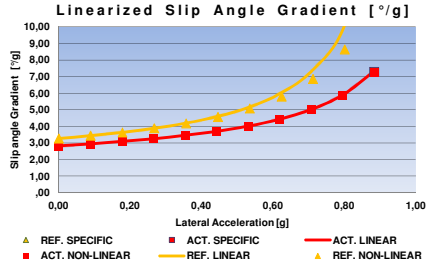
Front Right Corner		Bump-Stop-R	
RF Wheel Travel	17,8	37,0	mm
RF Toe	-1,659	-1,659	°
RF Camber	-0,171	-0,581	°
RR Toe	-1,659	-1,659	°
RR Camber	-0,069	0,449	°
RR Wheel Travel	22,0	-1,9	mm
Rear Right Corner			

UNDERSTEER BUDGET

	ACTUAL	REF	
Characteristic Speed	83,56	92,96	kph
Linear Roll Angle Gradient	4,6	4,6	°/g
Fr. AXLE Cornering Stiffness @ 0 g	75613	77032	N/rad
Rr. AXLE Cornering Stiffness @ 0 g	126124	108947	N/rad
Understeer Gradient @ Wheel @ 0 g	2,87	2,32	°/g
Sideslip Angle Gradient @ 0 g	2,83	3,27	°/g

Understeer Gradient @ g	0,88	9,31	°/g
Sideslip Angle Gradient @ g	0,88	7,28	°/g
Understeer Gradient @ g	0,89	1,59	°/g
Sideslip Angle Gradient @ g	0,89	12,11	°/g



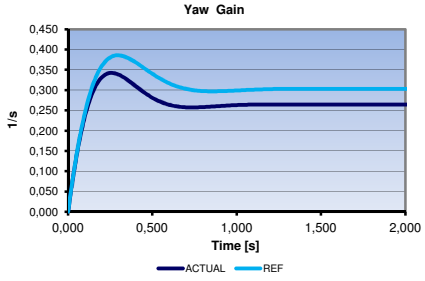


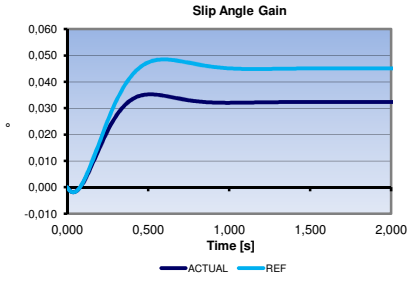
STEP STEER RESPONSE TEST

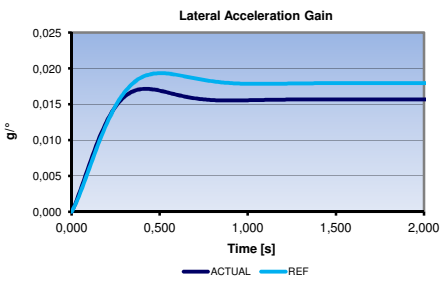
Yaw Gain	ACTUAL	REF	
SWA (0=Generic)	0,0	0,0	°
G-Long	0,0	-0,3	g
Calculated G-Lat @ SWA	0,00	0,00	g
90% Response Time	0,100	0,110	s
Peak Value	0,342	0,386	1/s
Time to Peak Value	0,260	0,300	s
Overshoot @ Peak	1,297	1,273	-

Slip Angle Gain	ACTUAL	REF	
SWA (0=Generic)	0,0	0,0	°
G-Long	0,0	-0,3	g
Calculated G-Lat @ SWA	0,00	0,00	g
90% Response Time	0,320	0,370	s
Peak Value	0,035	0,049	-
Time to Peak Value	0,510	0,600	s
Overshoot @ Peak	1,092	1,075	-

Lateral Acceleration Gain	ACTUAL	REF	
SWA (0=Generic)	0,0	0,0	°
G-Long	0,0	-0,3	g
Calculated G-Lat @ SWA	0,00	0,00	g
90% Response Time	0,230	0,280	s
Peak Value	0,017	0,019	g/°
Time to Peak Value	0,420	0,500	s
Overshoot @ Peak	1,095	1,077	-







FREQUENCY STEER RESPONSE TEST

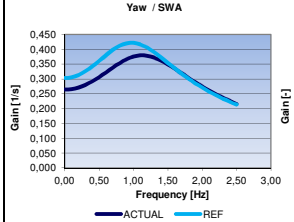
Yaw Gain / SWA	ACTUAL	REF	
SWA (0=Generic)	0,0	0,0	°
G-Long	0,0	-0,3	g
Calculated G-Lat @ SWA	0,00	0,00	g
Peak Frequency	1,150	0,950	Hz
Static Gain @ 0 Hz	0,264	0,303	1/s
Overshoot @ Peak	1,438	1,391	-
Delay Time @ 1 Hz	51,069	72,379	ms

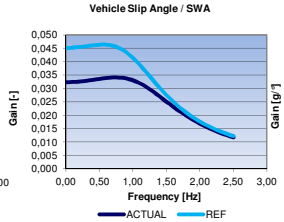
Slip Angle Gain / SWA	ACTUAL	REF	
	0,0	0,0	°
	0,0	-0,3	g
	0,00	0,00	g
	0,750	0,550	Hz
	0,032	0,045	-
	1,055	1,027	-
	226,757	257,490	ms

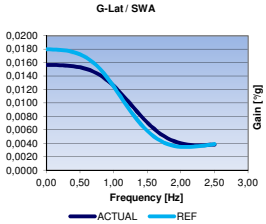
G-Lat Gain / SWA	ACTUAL	REF	
	0,0	0,0	°
	0,0	-0,3	g
	0,00	0,00	g
	0,000	0,000	Hz
	0,016	0,018	g/°
	1,000	1,000	-
	123,914	154,188	ms

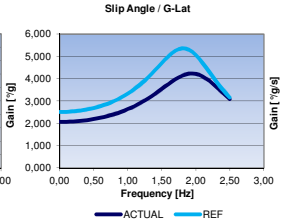
Slip Angle Gain / G-Lat	ACTUAL	REF	
	0,0	0,0	°
	0,0	-0,3	g
	0,00	0,00	g
	1,950	1,800	Hz
	2,065	2,510	°/g
	2,050	2,136	-
	102,843	103,302	ms

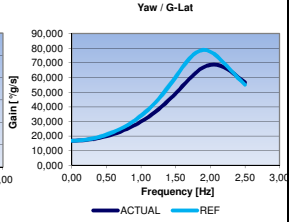
Yaw Gain / G-Lat	ACTUAL	REF	
	0,0	0,0	°
	0,0	-0,3	g
	0,00	0,00	g
	2,050	1,900	Hz
	16,863	16,863	°/s/g
	4,088	4,674	-
	-72,825	-81,809	ms

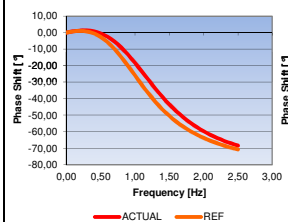


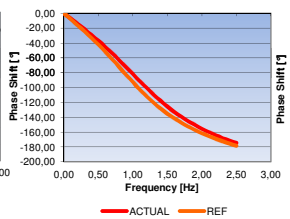


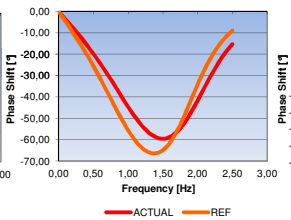


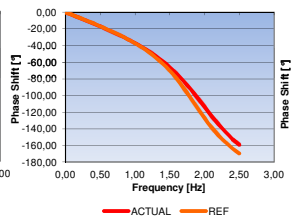


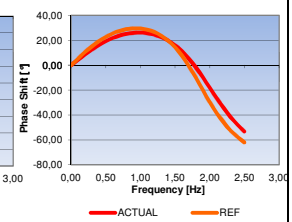












RIDE - TUNING

FRONT SUSPENSION

	ACTUAL	REF	
Fr. Damper to Wheel Motion Ratio	0,61	0,61	-
Fr. Damping Scaling Factor	1,00	1,00	-
Fr. AVERAGE Wheel Rate	22,00	40,21	N/mm
Fr. AVERAGE Ride Rate	19,82	33,48	N/mm
Fr. Body Frequency	1,32	1,78	Hz
Fr. Body Ride Frequency	1,25	1,63	Hz
Fr. Wheelhop Frequency	9,49	9,87	Hz
Fr. Linear Damping @ Wheel	4505,2	4505,2	Ns/m
(Average out of first 3 damper velocity for bump & rebound)			-

G-Load Conditions for all Ride Calculations

	ACTUAL	REF	
G-Lat	0,88	0,89	g
G-Long	0,00	-0,30	g

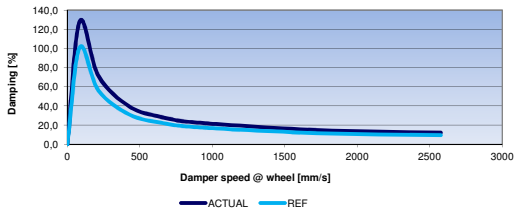
BOUNCE & PITCH CENTER

Pitch Center rel. to Fr. Axle	-1,10	-1,77	m
Bounce Center rel. to Fr. Axle	-10,16	1,17	m
Ratio Rear/Front Ride Frequency	1,049	0,807	-

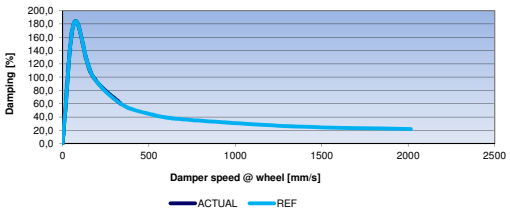
REAR SUSPENSION

	ACTUAL	REF	
Rr. Damper to Wheel Motion Ratio	0,78	0,78	-
Rr. Damping Scaling Factor	1,00	1,00	-
Rr. AVERAGE Wheel Rate	20,00	20,00	N/mm
Rr. AVERAGE Ride Rate	18,18	18,18	N/mm
Rr. Body Frequency	1,38	1,38	Hz
Rr. Body Ride Frequency	1,31	1,31	Hz
Rr. Wheelhop Frequency	10,56	10,56	Hz
Rr. Linear Damping @ Wheel	5338,1	5338,1	Ns/m
(Average out of first 3 damper velocity for bump & rebound)			

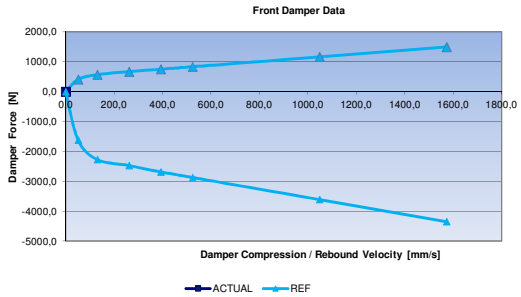
% Average Critical Damping Front Body



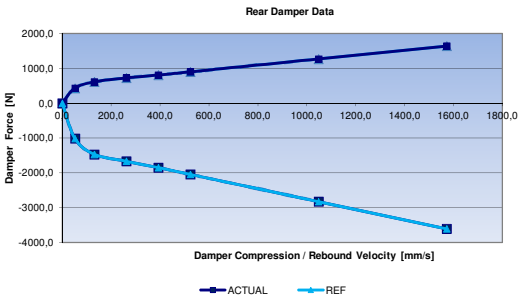
% Average Critical Damping Rear Body



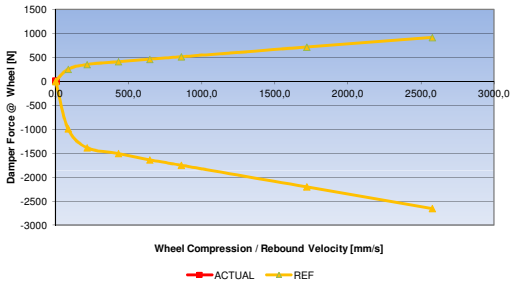
Front Damper Data



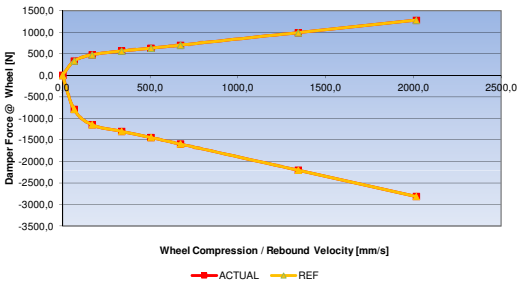
Rear Damper Data



Damping Characteristics at the Front Wheel



Damping Characteristics at the Rear Wheel



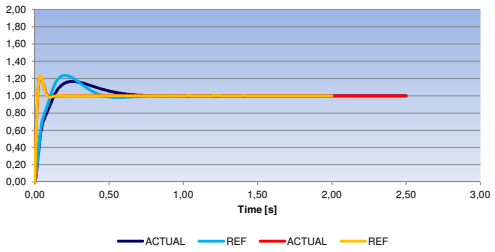
Front Step Input Response

	ACTUAL	REF	
Ride Step Input Response Function Switch	1	1	
Time to 95% dampened oscillation	0,510	0,384	s
Peak Overshoot	1,167	1,237	-
Time to reach Peak Value	0,250	0,200	s

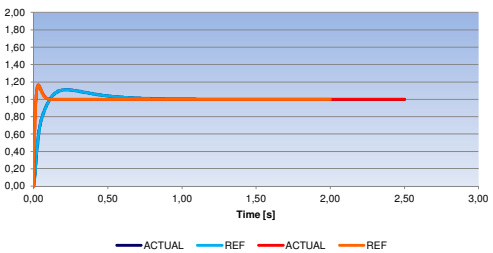
Rear Step Input Response

	ACTUAL	REF	
Ride Step Input Response Function Switch	1	1	
Time to 95% dampened oscillation	0,450	0,448	s
Peak Overshoot	1,111	1,111	-
Time to reach Peak Value	0,220	0,224	s

Front Ride Step Input Response Body & Wheel



Rear Ride Step Input Response Body & Wheel



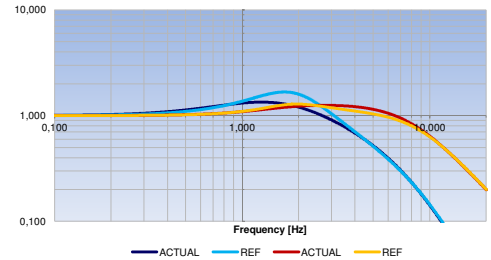
Front Ride Frequency Response Function

	ACTUAL	REF	
Ride Frequency Response Function Switch	1	1	
Front Body Dynamic Overshoot @ Peak Freq.	1,343	1,673	-
Front Wheel Dyn. Load Indicator 0 - 20 Hz	5,808	5,678	-

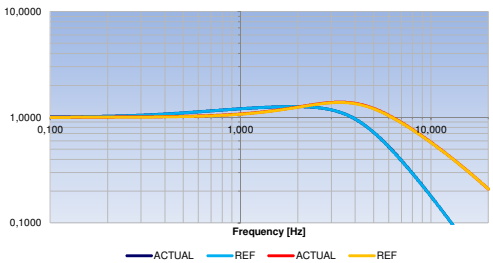
Rear Ride Frequency Response Function

	ACTUAL	REF	
Ride Frequency Response Function Switch	1	1	
Rear Body Dynamic Overshoot @ Peak Freq.	1,260	1,261	-
Rear Wheel Dyn. Load Indicator 0 - 20 Hz	6,598	6,592	-

Front Frequency Response Transfer Function Body & Wheel



Rear Frequency Response Transfer Function Body & Wheel



DO NOT MODIFY COLUMN A - F, ADD OWN DATA AT THE END	ACTUAL	REF	

GO TO MASTER

EXPORT REF. DATA SET TO EXTERNAL

IMPORT EXTERNAL TO REF. DATA SET

Simulation Control Key Input Parameters

LAST DATA SAVE
18/11/2012 19:38
LAST DATA LOAD
17/11/2012 00:53

Speed	120,0	120,0	
G-Lat	0,88	0,89	----- !
G-Long	0,00	-0,30	----- !
SWA	0,0	0,0	

Vehicle Physical Limits

Percentage Front Brake Distribution	70,0%	70,0%	
Percentage Rear Drive Torque Distribution	0,0%	0,0%	
G-MAX theoretical. (Aero & µ)	0,98	0,98	
G-Lat MAX (Aero Balance & Drag)	0,98	0,98	
G-Lat MAX (2 Wheel Lift)	1,22	1,22	
Estimated G-Lat MAX (US/OS)	0,88	0,89	----- !
G-Long MAX (Aero Balance, Drag & µ)	-1,01	-1,01	
G-Long Max Braking (2 Wheel Lift)	-2,15	-2,15	
G-Long Max Accelerating (2 Wheel Lift)	2,53	2,53	
G-Long Max @ Brake Distribution	-0,89	-0,89	
Optimal Brake Distribution for Max. G	76,1%	76,1%	----- !
G-Long MAX @ Traction Configuration	0,40	0,40	
Optimal AWD Configuration for Max. G	66,5%	66,5%	----- !

Vehicle Mass & Inertia Data

CURB Sprung Mass	*1175,0*	*1175,0*	
CURB Sprung Mass X-Coordinate	1250,0	1250,0	
CURB Sprung Mass Y-Coordinate	0,0	0,0	
CURB Sprung Mass Z-Coordinate	625,0	625,0	
CURB Sprung Yaw Inertia	1500,0	1500,0	
CURB Sprung Pitch Inertia	1500,0	1500,0	
Front Unsprung AXLE Mass	125,0	125,0	
Front Wheel Center X-Coordinate	0,0	0,0	
Front Wheel Center Y-Coordinate	715,0	715,0	
Rear Unsprung AXLE Mass	100,0	100,0	
Rear Wheel Center X-Coordinate	2750,0	2750,0	
Rear Wheel Center Y-Coordinate	720,0	720,0	
Driver Mass	0,0	0,0	
Driver H-Point X-Coordinate	1100,0	1100,0	
Driver H-Point Y-Coordinate	400,0	400,0	
Driver H-Point Z-Coordinate	400,0	400,0	
Front Right Passenger Mass	0,0	0,0	
Rear Left Passenger Mass	0,0	0,0	
RL Passenger H-Point X-Coordinate	1800,0	1800,0	
RL Passenger H-Point Y-Coordinate	370,0	370,0	
RL Passenger H-Point Z-Coordinate	400,0	400,0	
Rear Center Passenger Mass	0,0	0,0	
Rear Right Passenger Mass	0,0	0,0	
Mass 3rd Row Left Passenger	0,0	0,0	
3rd Row Left Passenger H-Point X-Coordinate	2750,0	2750,0	
3rd Row Left Passenger H-Point Y-Coordinate	230,0	230,0	
3rd Row Left Passenger H-Point Z-Coordinate	400,0	400,0	
Mass 3rd Row Right Passenger	0,0	0,0	
Mass Pay-Load	0,0	0,0	
Pay-Load X-Coordinate	3000,0	3000,0	
Pay-Load Y-Coordinate	0,0	0,0	
Pay-Load Z-Coordinate	500,0	500,0	
Front Track Width	1430,0	1430,0	
Rear Track Width	1440,0	1440,0	
Wheel Base	2750,0	2750,0	
Total Mass	1400,0	1400,0	
Instantaneous Overall CoG-Height	586,5	585,9	----- !
Instantaneous CoG-Height Sprung Mass	638,8	638,2	----- !
Weight Distribution (% Fr.)	54,7	54,7	
Total Yaw Inertia	2036,0	2036,0	
Total Pitch Inertia	1940,2	1940,2	

Tire Data

Max. Tire Friction Coefficient (µ)	1,00	1,00	
Front Static Loaded Tire Radius	300,0	300,0	
Rear Static Loaded Tire Radius	300,0	300,0	
Instantaneous Front Loaded Tire Radius	300,6	298,7	----- !
Instantaneous Rear Loaded Tire Radius	300,1	302,0	----- !
Front Tire Vertical Stiffness	200,0	200,0	
Rear Tire Vertical Stiffness	200,0	200,0	
Reference Load for Front Tire Data	3500,0	3500,0	
Front Tire Cornering Stiffness @ Reference Load	1050,0	1050,0	
Front Tire Aligning Torque Stiffness @ Reference Load	50,0	50,0	
Front Tire Camber Thrust	25,0	25,0	
Front Tire Cornering Stiffness' Load Dependency	100,0	100,0	
Front Tire Growth of Loaded Radius w/ Speed	0,0	0,0	
Reference Load for Rear Tire Data	3000,0	3000,0	
Rear Tire Cornering Stiffness @ Reference Load	1050,0	1050,0	
Rear Tire Aligning Torque Stiffness @ Reference Load	50,0	50,0	
Rear Tire Camber Thrust	25,0	25,0	
Rear Tire Cornering Stiffness' Load Dependency	100,0	100,0	
Rear Tire Growth of Loaded Radius w/ Speed	0,0	0,0	

Chassis Suspension Data

Steering Ratio	15,0	15,0	
Front Suspension Type	0	0	
Rear Suspension Type	0	0	
Front Suspension Type 1 & 2 Roll Steer	0,000	0,000	
Front Suspension Type 1 & 2 Roll Camber	0,000	0,000	
Rear Suspension Type 1 & 2 Roll Steer	0,000	0,000	
Rear Suspension Type 1 & 2 Roll Camber	0,000	0,000	
Front Suspension Vertical & Roll Coupling Switch	1	1	
Rear Suspension Vertical & Roll Coupling Switch	1	1	
Front Linear Wheel Rate	22,0	22,0	
Front Bump-Stop Gap @ Wheel	20,0	20,0	
Front Displacement to Final Bump-Stop Rate	35,0	35,0	
Front Bump-Stop Final Rate @ Wheel	75,0	75,0	
Front Rollbar Roll Rate	750,0	750,0	
Front Rollbar Wheel Rate	42,0	42,0	
Front Total Roll Rate (Springs & Rollbar)	1142,6	1467,6	----- !
Front Angular Roll Gap to Bump-Stop	2,01	0,97	----- !
Rear Linear Wheel Rate	20,0	20,0	
Rear Bump-Stop Gap @ Wheel	40,0	40,0	
Rear Displacement to Final Bump-Stop Rate	35,0	35,0	
Rear Bump-Stop Final Rate @ Wheel	75,0	75,0	
Rear Rollbar Roll Rate	350,0	350,0	
Rear Rollbar Wheel Rate	19,3	19,3	
Rear Total Roll Rate (Springs & Rollbar)	711,9	711,9	
Rear Angular Roll Gap to Bump-Stop	3,26	4,38	----- !
Front Roll Center @ Reference Ride Height	50,0	50,0	
Front Roll Center Movement vs. Wheel Travel Ratio	1,5	1,5	
Rear Roll Center @ Reference Ride Height	75,0	75,0	
Rear Roll Center Movement vs. Wheel Travel Ratio	1,5	1,5	
Front Instantaneous Front Roll Centre Height	58,3	36,9	----- !
Instantaneous Rear Roll Centre Height	76,6	99,7	----- !
Static Roll Axis Inclination Angle	0,521	0,521	
Instantaneous Roll Axis Inclination Angle (Calculated)	0,381	1,309	----- !
Front Anti-Lift Angle	1,0	1,0	
Front Anti-Dive Angle	5,0	5,0	
Rear Anti-Squat Angle	1,0	1,0	
Rear Anti-Lift Angle	10,0	10,0	
Front Suspension Instant. Side-View Center X Position (Behind Front Axle)	4285,8	4285,8	
Front Suspension Instant. Side-View Center Z Position	374,8	374,8	
Rear Suspension Instant. Side-View Center X Position (Before Rear Axle)	1889,3	1889,3	
Rear Suspension Instant. Side-View Center Z Position	333,0	333,0	
Front Anti-Lift Percentage	7,5	7,5	----- !
Front Anti-Dive Percentage	26,4	26,4	----- !
Rear Anti-Squat Percentage	0,0	0,0	
Rear Anti-Lift Percentage	22,8	22,8	----- !
Front Total Static Toe	-0,25	-0,25	
Front Static Camber	-1,00	-1,00	
Instantaneous Front Total Ride Toe	-0,22	-0,27	----- !
Instantaneous Front Ride Camber	-0,90	-1,16	----- !
Front Bump Steer	-3,0	-3,0	
Front Camber Gain	-20,0	-20,0	
Front Actual Roll Steer	-0,04	-0,04	
Front Actual Roll Camber	-0,25	-0,25	
Front Inclination Angle Gain	0,75	0,75	
Front Lateral Force Toe Compliance	-0,250	-0,250	
Front Lateral Force Camber Compliance	0,200	0,200	
Front Brake Steer	0,010	0,010	
Front Acceleration Steer	0,000	0,000	
Front Aligning Torque Compliance Steer	5,000	5,000	
Rear Total Static Toe	0,25	0,25	
Rear Static Camber	-0,50	-0,50	
Instantaneous Rear Total Ride Toe	0,2	0,3	----- !
Instantaneous Rear Ride Camber	-0,5	-0,2	----- !
Rear Bump Steer	1,0	1,0	
Rear Camber Gain	-20,0	-20,0	
Rear Actual Roll Steer	0,01	0,01	
Rear Actual Roll Camber	-0,25	-0,25	
Rear Inclination Angle Gain	0,75	0,75	
Rear Lateral Force Toe Compliance	0,020	0,020	
Rear Lateral Force Camber Compliance	0,200	0,200	
Rear Brake Steer	0,050	0,050	

Rear Acceleration Steer	-0,010	-0,010	
Rear Aligning Torque Compliance Steer	1,000	1,000	

Spring Tuning Data

Instantaneous Front Left Wheel Rate	22,00	22,00	
Instantaneous Front Right Wheel Rate	22,00	58,43	----- !
Instantaneous Rear Left Wheel Rate	20,00	20,00	
Instantaneous Rear Right Wheel Rate	20,00	20,00	
Instantaneous Front Averaged Wheel Rate	22,00	40,21	----- !
Instantaneous Rear Averaged Wheel Rate	20,00	20,00	
Instantaneous Front Averaged Ride Rate w/Tires	19,82	33,48	----- !
Instantaneous Rear Averaged Ride Rate w/Tires	18,18	18,18	
Front Body Frequency	1,32	1,78	----- !
Front Body Ride Frequency	1,25	1,63	----- !
Front Wheelhop Frequency	9,49	9,87	----- !
Rear Body Frequency	1,38	1,38	
Rear Body Ride Frequency	1,31	1,31	
Rear Wheelhop Frequency	10,56	10,56	
Ratio Rr. To Fr. Ride Frequency	1,049	0,807	----- !
Pitch Frequency (Frequency One)	1,56	1,84	----- !
Bounce Frequency (Frequency Two)	1,27	1,40	----- !
Pitch Center (Motion Center One) relative to CoG	0,14	-0,53	----- !
Bounce Center (Motion Center Two) relative to CoG	-8,91	2,42	----- !
Pitch Center (Motion Center One) relative to Front Axle	-1,10	-1,77	----- !
Bounce Center (Motion Center Two) relative to Front Axle	-10,16	1,17	----- !

Rollbar Tuning Data - Generic & Specific Calculation

Generic Calculation - Front Total Roll Rate (Springs & Rollbar)	1142,6	1142,6	
Generic Calculation - Front Roll Rate due to Springs	392,6	392,6	
Generic Calculation - Front Roll Rate due to Anti-Rollbar	750,0	750,0	
Generic Calculation - % Contribution of Front ARB to Total Front Roll Rate	65,6	65,6	
Generic Calculation - Rear Total Roll Rate (Springs & Rollbar)	711,9	711,9	
Generic Calculation - Rear Roll Rate due to Springs	361,9	361,9	
Generic Calculation - Rear Roll Rate due to Anti-Rollbar	350,0	350,0	
Generic Calculation - % Contribution of Rear ARB to Total Rear Roll Rate	49,2	49,2	
Generic Calculation - Total Roll Rate	1854,5	1854,5	
Generic Calculation - Front Tire Roll Rate	3568,9	3568,9	
Generic Calculation - Front Roll Rate w/Tires	865,5	865,5	
Generic Calculation - Rear Tire Roll Rate	3619,0	3619,0	
Generic Calculation - Rear Roll Rate w/Tires	594,9	594,9	
Generic Calculation - Total Roll Rate w/Tires	1460,4	1460,4	
Generic Calculation - Front Lateral Load Transfer	3310,68	3216,63	----- !
Generic Calculation - Rear Lateral Load Transfer	2215,10	2300,15	----- !
Generic Calculation - Total Lateral Load Transfer	5525,78	5516,78	----- !
Generic Calculation - Linear Body on Chassis Roll Angle	3,49	3,50	----- !
Generic Calculation - Linear Vehicle roll angle (w/ Tires)	4,63	4,64	----- !
Generic Calculation - Linear Lateral Load Transfer Distribution	59,91	58,31	----- !
Generic Calculation - Linear Roll Couple Distribution	61,61	61,61	
Generic Calculation - Lateral Load Transfer Bias	5,21	3,60	----- !
Specific Calculation - Instantaneous Front Total Roll Rate (Springs & Rollbar)	1142,58	1467,61	----- !
Specific Calculation - Instantaneous Front Roll Rate due to Springs	392,58	717,61	----- !
Specific Calculation - Instantaneous Front Roll Rate due to Anti-Rollbar	750,00	750,00	
Specific Calculation - Instantaneous % Contribution of Front ARB to Total Front Roll Rate	65,64	51,10	----- !
Specific Calculation - Instantaneous Rear Total Roll Rate (Springs & Rollbar)	711,90	711,90	
Specific Calculation - Instantaneous Rear Roll Rate due to Springs	361,90	361,90	
Specific Calculation - Instantaneous Rear Roll Rate due to Anti-Rollbar	350,00	350,00	
Specific Calculation - Instantaneous % Contribution of Rear ARB to Total Rear Roll Rate	49,16	49,16	
Specific Calculation - Instantaneous Total Roll Rate	1854,48	2179,51	----- !
Specific Calculation - Instantaneous Front Roll Rate w/Tires	865,50	1039,96	----- !
Specific Calculation - Instantaneous Rear Roll Rate w/Tires	594,88	594,88	
Specific Calculation - Instantaneous Total Roll Rate w/Tires	1460,38	1634,84	----- !
Specific Calculation - Instantaneous Front Lateral Load Transfer	2922,24	3139,16	----- !
Specific Calculation - Instantaneous Front Suspension Load Transfer	2508,93	2694,22	----- !
Specific Calculation - Instantaneous Rear Lateral Load Transfer	1955,20	1763,39	----- !
Specific Calculation - Instantaneous Rear Suspension Load Transfer	1552,34	1404,03	----- !
Specific Calculation - Instantaneous Total Lateral Load Transfer	4877,44	4902,56	----- !
Specific Calculation - Instantaneous Total Suspension Load Transfer	4061,27	4098,25	----- !
Specific Calculation - Instantaneous Front Lateral Load Transfer Distribution	59,91	64,03	----- !
Specific Calculation - Instantaneous Linear Roll Couple Distribution	61,61	67,34	----- !
Specific Calculation - Instantaneous Lateral Load Transfer Bias	5,21	9,32	----- !

Damper Tuning Data

Front Damper to Wheel Motion Ratio	0,61	0,61
Rear Damper to Wheel Motion Ratio	0,78	0,78
Front Damping Scaling Factor	1,0	1,0
Rear Damping Scaling Factor	1,0	1,0
Front Damper Bump Velocity 0	0,0	0,0
Front Damper Bump Velocity 1	52,0	52,0
Front Damper Bump Velocity 2	131,0	131,0
Front Damper Bump Velocity 3	262,0	262,0
Front Damper Bump Velocity 4	393,0	393,0
Front Damper Bump Velocity 5	524,0	524,0
Front Damper Bump Velocity 6	1048,0	1048,0
Front Damper Bump Velocity 7	1572,0	1572,0
Front Damper Bump Force 0	0,0	0,0
Front Damper Bump Force 1	410,0	410,0
Front Damper Bump Force 2	570,0	570,0
Front Damper Bump Force 3	670,0	670,0
Front Damper Bump Force 4	752,5	752,5
Front Damper Bump Force 5	835,0	835,0
Front Damper Bump Force 6	1165,0	1165,0
Front Damper Bump Force 7	1495,0	1495,0
Front Damper Rebound Velocity 0	0,0	0,0
Front Damper Rebound Velocity 1	-52,0	-52,0
Front Damper Rebound Velocity 2	-131,0	-131,0
Front Damper Rebound Velocity 3	-262,0	-262,0
Front Damper Rebound Velocity 4	-393,0	-393,0
Front Damper Rebound Velocity 5	-524,0	-524,0
Front Damper Rebound Velocity 6	-1048,0	-1048,0
Front Damper Rebound Velocity 7	-1572,0	-1572,0
Front Damper Rebound Force 0	0,0	0,0
Front Damper Rebound Force 1	-1617,5	-1617,5
Front Damper Rebound Force 2	-2270,0	-2270,0
Front Damper Rebound Force 3	-2467,5	-2467,5
Front Damper Rebound Force 4	-2682,5	-2682,5
Front Damper Rebound Force 5	-2867,5	-2867,5
Front Damper Rebound Force 6	-3607,0	-3607,0
Front Damper Rebound Force 7	-4347,0	-4347,0
Rear Damper Bump Velocity 0	0,0	0,0
Rear Damper Bump Velocity 1	52,0	52,0
Rear Damper Bump Velocity 2	131,0	131,0
Rear Damper Bump Velocity 3	262,0	262,0
Rear Damper Bump Velocity 4	393,0	393,0
Rear Damper Bump Velocity 5	524,0	524,0
Rear Damper Bump Velocity 6	1048,0	1048,0
Rear Damper Bump Velocity 7	1572,0	1572,0
Rear Damper Bump Force 0	0,0	0,0
Rear Damper Bump Force 1	427,5	427,5
Rear Damper Bump Force 2	612,5	612,5
Rear Damper Bump Force 3	725,0	725,0
Rear Damper Bump Force 4	807,5	807,5
Rear Damper Bump Force 5	900,0	900,0
Rear Damper Bump Force 6	1270,0	1270,0
Rear Damper Bump Force 7	1640,0	1640,0
Rear Damper Rebound Velocity 0	0,0	0,0
Rear Damper Rebound Velocity 1	-52,0	-52,0
Rear Damper Rebound Velocity 2	-131,0	-131,0
Rear Damper Rebound Velocity 3	-262,0	-262,0
Rear Damper Rebound Velocity 4	-393,0	-393,0
Rear Damper Rebound Velocity 5	-524,0	-524,0
Rear Damper Rebound Velocity 6	-1048,0	-1048,0
Rear Damper Rebound Velocity 7	-1572,0	-1572,0
Rear Damper Rebound Force 0	0,0	0,0
Rear Damper Rebound Force 1	-1010,0	-1010,0
Rear Damper Rebound Force 2	-1467,5	-1467,5
Rear Damper Rebound Force 3	-1665,0	-1665,0
Rear Damper Rebound Force 4	-1847,5	-1847,5
Rear Damper Rebound Force 5	-2042,5	-2042,5
Rear Damper Rebound Force 6	-2822,5	-2822,5
Rear Damper Rebound Force 7	-3602,5	-3602,5
Front Damper Bump Velocity @ Wheel 0	0,0	0,0