

**Wayland Motorsports**

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**Wayland  
Motorsports**

**INVOICE**

**BILL TO**  
 Huffaker Motorsports

**SHIP TO**  
 29601 Arnold Dr, Sonoma, CA 95476

**INVOICE** 1062  
**DATE** 04/27/2021  
**DUE DATE** 08/31/2021

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
04/20/2021	Shop Rate	Shop hours 4.20.21 thru 4.27.21 Front suspension disassembly, engine & transmission removal, suspension assessment & removal ~intake runners low torque (likely not re-torqued after heat cycle  leak down test: #1: 15% #2: 8% #3: 4% #4: 4% #5: 4% #6: 4%	10	110.00	1,100.00
04/27/2021	Parts via Distributor	Front suspension: RSR front 19mm raised spindle x2, RSR solid front a-arm bushing set, racing adjustable bump steer kit, steering coupler, 400# springs & tenders, spacers & perches, 964 monoball ass'y, top hats & custom steel water jet cut camber plate to replace damage ~ESTIMATED (now on invoice)	0	5,053.00	0.00
04/27/2021	Parts via Distributor	Rear suspension: RSR coilover setup, re-valved for 500# spring & tenders, spacers & perches ~ESTIMATED (now on invoice)	0	1,460.00	0.00
04/28/2021	Parts via Distributor	Rear: Shock Absorber (Racing 934) Valving 220/180	2	285.00	570.00
04/28/2021	Parts via Distributor	*Front: Strut (Racing "RSR") Valving 220/100, L&R	2	776.50	1,553.00
05/14/2021	Shop Rate	4.28.21 - 5.14.21 engine teardown / verify cam timing @ 5.15mm 1-3, 5.29mm 4-6 (.43mm variance between measurements), cleaning & inspection, Ra test cylinder wall *found 88-90 Ra (CP steel w/ gas nitride rings require 15-30 Ra per call-out), main bearings show wear, crankshaft & rods OK, clean crankcase halves	13	110.00	1,430.00
05/17/2021	Services	*Dyno IROC struts to confirm damage, re-valving replacement shocks, machining of spacers to allow 964/993 mount	1	607.50	607.50
05/17/2021	Parts via Distributor	*Reconfiguration Parts (Front): 964/993 upper mounts, upper spring perches, lower spring seats, springs, tender springs, couplers	1	638.46	638.46

05/17/2021	Parts via Distributor	Reconfiguration Parts (Rear): springs, tender springs, couplers	1	472.04	472.04
05/18/2021	Parts via Distributor	AASCO springs & Ti retainers, amber fiberglass shroud (estimate, will update as parts arrive)	1	2,280.00	2,280.00
05/18/2021	Services	Top end work, spring & valve ~ exhaust porting, cam & rocker touch-up, chamfer combustion chamber if necessary (estimate, prior to inspection by shop)	1	2,000.00	2,000.00
05/18/2021	Shop Rate	Engine Assembly Quoted 5.14.21 ~ESTIMATED	1	7,000.00	7,000.00
05/21/2021	Shop Rate	Vapor blast case, clean & inspect	2	110.00	220.00
06/08/2021	Parts via Distributor	GT3R main bearing set, 930.100.901.04V viton, 930.100.907.04, 911.110.391.40 x6 (gaskets)	1	520.00	520.00
06/08/2021	Parts via Distributor	Mahle PC98-017	1	3,400.00	3,400.00
06/10/2021	Shop Rate	*Plasma torch old camber box plates, measure, adjust & take measurements for new plates ~ found discrepancies between boxes driver's side larger than passenger side ~ found stress fracturing inside of camber box	5	110.00	550.00
06/11/2021	Shop Rate	*Test fit assemblies, checking for correct castor & camber adjustments ~	4	110.00	440.00
06/24/2021	Parts via Distributor	RSR: adjustable bumpsteer kit, steering coupler, rear upper spring hats, rear solid bushing set, front solid bushing set	1	1,425.00	1,425.00
06/24/2021	Shop Rate	*Jun 22-25: continued re-engineering of camber boxes & plates due to accident damage	5	110.00	550.00
06/29/2021	Shop Rate	*Jun 29-Jul 1: Replacement camber plate fitting & welding, completion, re-assemble suspension & deliver car to Huffaker	18.50	110.00	2,035.00
09/08/2021	Shop Rate	9.2, 9.3, 9.7, 9.8 ~ Engine completion, RUSH installation	13.50	0.00	0.00

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PAYMENT

26,791.00

We will keep this invoice open and updated as our expenditures come in. You're welcome to request receipts if needed. I will give my pricing on parts via vendor/distributors.

BALANCE DUE

**\$0.00**

**PAID**

Call/e-mail with any questions.

Thank you!



# ENGINE COMPRESSION & DISPLACEMENT CALCULATOR

	# of Cylinders	Crankcase Half Thickness	Crankshaft Stroke	Cylinder Bore	Rod Length	Barrel Height	Pin to Dome Height	Piston Pin Height COMP. Distance	Shim Thickness	Dome Volume	Cylinder Head Volume (cc)	Measured VOL (dome)	Down-fill Distance	Piston Top Diameter	Top Land Height	
Expressions in mm	6	111.55	70.4	95	127.8	85.37	34	33.75	0.75	47.02	90	47.02				
Expressions in cm			7.04	9.5			3.4	3.375			(Theoretical)		0			
				90.25			0.025									
				bore²			Crown to Dome Height in CM									
Deck Height (in mm)		0.92	(crankcase-half thickness - (stroke/2) + barrel height + shim) - (rod length + piston pin height) /// min. 0.040" / 1.016 mm									1.25 mm engineered deck height				
Dome Volume (in CCs)		47.020	(bore² * down-fill * π/4) + (bore² * (center of pin to top of dome - theoretical compression distance) * π/4) - measured volume													
Swept Volume (in CCs)		499.011	(bore² * stroke * π/4)													
Deck Height Volume (in CCs)		6.521	(bore² * deck height volume * π/4)													
Piston Crevice Volume (in CCs)		0.000	(bore diameter - piston diameter) * bore circumference * top ring land													
Compression Ratio		11.081	(swept volume + deck height volume + cylinder head volume - dome volume ) / (deck height volume + cylinder head volume - dome volume)													
Compression Ratio w/ Crevice		11.081	(swept volume + deck height volume + cylinder head volume - dome volume) / (deck height volume + cylinder head volume + crevice volume - dome volume)													
Displacement (in CCs)		2994.06	(swept volume * # of cylinders)													
π/4 =		0.7854														
mm to cm / by 10																
Head Port Size (I/E)	~															
Cam Grind Profile	DC60															
Cam Timing Spec	5.0															
Measured Valve to Piston Clearance																
Case Stamping	6403324 6/7															