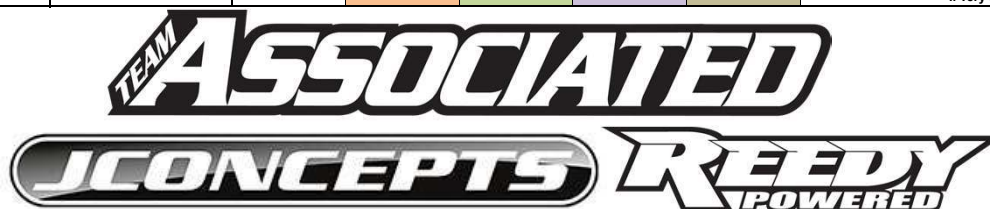


TEAM ASSOCIATED B5M SETUP GUIDE - Ray Munday



		Standard Australia Setup	Low Grip (Change from standard AU setup)	High Grip (Change from standard AU setup)	Very Bumpy (Change from standard AU setup)	Carpet* (Change from standard AU setup)	This setup guide has been created to give a starting point for typical track conditions experienced in Australia (dry, dusty, bumpy). Use the 'Standard Australia Setup' as a starting point, then make adjustments to suit your track condition. For more setups, see www.rc10.com and www.keilorr.org.au/setups.htm
FRONT SUSPENSION	Shock Mount Top / Bottom	Middle / Outer					Usually leave in this position.
	Camber Link Tower / Hub	Inner / Inner					Very rarely change. Lengthening gives less initial response, more mid/exit steering.
	Washers Inner	2mm	1.5mm				Less washers (higher roll centre) gives more aggressive initial turn-in but less mid corner. Good for slippery tracks.
	Camber	-1 deg	-0.5deg	-1.5deg	-1.5deg		Less camber = more grip but less forgiving in bumps. Very sensitive adjustment for bumpy tracks.
	Kickup / Castor	25deg / 30deg					Usually leave in this position.
	Washers Rack / Outer	1mm / 0mm		2mm / 0mm			Sensitive adjustment. Less washers on rack gives more initial steering at low speed. Good for hairpins
	Axle Height	Medium (Kit)					Not tested
	Trail / Hub Spacing f/r	4mm / 2mm Rr	3mm / 1mm f/r				Less trail gives more reactive steering on entry.
	Toe In / Out	1 deg Out	1.5deg Out				More toe out gives more steering on low speed turn in.
	Arms	Flat (Hard if hot weather)	Gull (Kit) Plastic	Hard arms, hubs, front brace		All hard parts	Flat arms = smoother steering. Gull arms (kit) give more low speed steering feel.
	Ride Height	24mm	25mm		24mm	18mm	Hard front arms make steering much more precise and smooth in high grip / high temp. 24mm used most of the time. Higher ride height = more traction on slippery surface, but more chance of traction roll on grippy surface.
	Spring	AE White	AE Green	AE Grey	AE Green	AE Red	AE White most of the time. Use Grey to smooth out steering in very high grip. Green for more steering and smoother in bumps.
REAR SUSPENSION	Oil / Piston	AE 40wt / 1.7mm (32.5 / 1.6 if smooth)	AE 37.5wt / 1.7mm	AE 35wt / 1.6	AE 37.5wt / 1.7mm	AE 37.5wt / 1.6mm	1.7mm pistons ride bumps better and give more traction feel than 1.6mm pistons. If temps are cool, drop 2.5wt. Use 1.6mm pistons if track is very smooth and becomes 'aggressive' traction.
	Limiters / Length / Rebound	2 Limiters / 20mm rod / 3mm rebound			1 limiter (20.7mm rod)		More limiters gives flatter / more precise steering, but can limit grip in low traction. Usually use 2 limiters.
	Shock Mount Top / Bottom	Inner / Inner		Middle / Inner		Middle / Inner	Always use inner hole on arm. On tower, inner hole gives more rear grip in sweepers and bumps.
	Camber Link Inner / Hub	Inner / Middle (Rr inner with alloy hub)					Very rarely change. Longer link smooths out traction on high grip tracks, but not necessary on this car.
	Washers Inner / Height Outer	1mm / Up (3mm outer with alloy hub)		2mm @ Inner			Less inner washers (higher rear roll centre) gives more steering at mid / exit. More washers (lower rear roll centre) gives smoother rear grip.
	Camber	-1deg	-0.5deg	-1.5deg	-2deg	-2deg	Less camber = more grip but less forgiving in bumps. Very sensitive adjustment for bumpy tracks. Use more camber for high grip to reduce traction roll.
	Anti-Squat	2 deg		1 deg		1 deg	Usually use 2deg for Australian tracks. 1deg gives smoother side bite and better braking, but less forward traction.
	Toe In (Inner / Outer)	3deg / 0	3.5deg				Usually use 3deg. 3.5deg if need more stability on corner exit on very slippery tracks.
	Wheelbase	Short (BSR Rear arms)		Medium (B5M rear arms)		Long (B5M rear arms)	Sensitive adjustment. Use B5R rear arm (gives ~2mm shorter wheelbase) in most conditions. Shorter wheelbase = more forward traction (better for most dirt tracks)
	Anti-Roll Bar	No		Green (If track has many sweeping corners)		Green	Rear anti-roll bar keeps car flatter through corner. Makes car feel more 'locked in' through sweepers but at tight corners has less turn in / more exit oversteer. Only use for very high grip / flowing turns.
	Ride Height	23mm	24mm		24mm	18mm	23mm used most of the time. Higher ride height = more traction on slippery surface, but more chance of traction roll on grippy surface.
	Spring	AE White	AE Green	AE White	AE Green	AE White	AE White most of the time. Use Green if track is very slippery or bumpy. Typically use same spring colour front and rear unless steering becomes aggressive on high grip.
TYRES	Oil / Piston	AE 35wt / 1.7mm (27.5 / 1.6 if smooth)	AE 32.5wt / 1.7mm	AE 30wt / 1.6mm	AE 32.5wt / 1.7mm	AE 32.5wt / 1.6mm	1.7mm pistons ride bumps better and give more traction feel than 1.6mm pistons. If temps are cool, drop 2.5wt. Use 1.6mm pistons if track is very smooth and becomes 'aggressive' traction.
	Limiters / Length / Rebound	1 Limiter / 27mm rod / 3mm rebound			0 limiters (27.7mm rod)		Sensitive adjustment. Use longer rear shock (0 limiter or wind out shock 2 turns) if track is very bumpy.
TYRES	Front	See JC Tyre Chart (Usually Rip or Bar Code)	See JC Tyre Chart (Usually Rips)	See JC Tyre Chart (usually Dirt Web)	See JC Tyre Chart	Carpet tyre (cut ribs)	Front: Typically JConcepts Rips if the track is damp, Bar Codes if dusty, and Dirt Webs if grooved.
	Rear	See JC Tyre Chart (Usually 3D or Bar Code)	See JC Tyre Chart (Usually 3D or Flip Outs)	See JC Tyre Chart (usually Bar Code)	See JC Tyre Chart	Carpet tyre (pins)	Rear: JConcepts 3Ds if hard packed but dusty / loose on top, Bar Codes if grooved, Flip Outs if wet. Blue compound most of the time, with orange if it is very hot and green if damp. See http://www.rctech.net/forum/10587840-post2.html for more detail.
DRIVETRAIN	Motor	Reedy Sonic 8.5T		Sonic 7.5T		6.5T	8.5T for most tracks.
	Timing / Rotor	30deg	20deg	30deg	10deg	20deg	Increase timing for more power feel and higher top speed. Reduce timing for better controllability at low speed on slippery / bumpy tracks.
	Pinion / Spur	23/75 (24/75 if large track)					
	Slipper	V2 Vented	VTS	V2 Vented	VTS	V2 (Set to stop wheelstand)	V2 slipper is less weight and more responsive. VTS (kit) slipper is smoother on low traction / bumpy tracks. For 17.5T, use slipper eliminator.
	Ratio	8.48 / 8.125					
	Diff	Ball, Medium Tight		(Gear diff 3K oil if very grippy)		Gear, 3K to 5K	Use tighter setting than for rear motor to avoid diffing out on corner exit.
ELECTRONICS	Gearbox	4 gear		3 gear if very grippy		3 gear	4 gear transmission gives more forward traction and more pitch control in the air. 3 gear more on power steering and better braking.
	Radio	KO KIV EX-1					
	EPA Brake	80 (Just stop lockup in straight line)	Adjust to suit	Adjust to suit	Adjust to suit	Adjust to suit	Tune brake EPA to just stop wheel lockup on straight from high speed. May change from race to race - check on warm up lap.
	EXPO Steer / Throttle / Brake	0 / -15% / 0					
	Servo	Low Profile		Full size (add 10-20g on top of low profile)			Low profile servo is good for most Australian tracks (less weight on front) but requires some servo case modification to fit B5M servo mounts.
	ESC / Fan	Reedy Blackbox 410R	Mount ESC further back if need extra forward traction				Mount ESC behind servo. If track is ultra low grip, can move ESC back and use shorty at rear for more rearwards weight bias.
	Drag Brake	13%					Increase for slippery track.
	Brake Strength	83%					
	DeadBand %	3%					
	Drive / Brake Frequency (kHz)	16K / 1.6K					Higher drive frequency smooths out power.
	Advance / RPM / Max RPM	OFF					
	XTRA Timing	OFF	OFF	10deg if very long straight	OFF		Use boost timing on long straight with good traction. If track is bumpy or slippery, I prefer no boost.
AERO / CHASSIS	Battery Placement	RR	RR	Front	Rr	Front	Makes a big difference to weight balance. Battery rear = more forward traction, less on power steering. Battery front = more on power steering, smoother cornering and jumping, but less forward traction.
	Battery	Reedy 5700 Saddle or Reedy 4100 Shorty	Use shorty at rear with ESC back if need extra forward traction	Shorty if smooth	Saddle	Shorty	Saddle packs make the car easier to drive in most conditions, but are less responsive for tighter tracks. For 17.5T, use shorty to reduce weight.
	Body	JConcepts Silencer JConcepts Finisher	JConcepts Silencer	JConcepts Finisher			Body can make a big difference. JConcepts Silencer - smoother steering, easier to drive. JConcepts Finisher - more aggressive steering on corner exit.
	Wing	JConcepts 6.5" Hi-Clearance					I use this wing all the time.
	Wing Lip / Angle	Line #0 / Minimum angle					Sensitive adjustment: B5M wing sits a long way back and has strong leverage on car. If wing is too big, will jump nose high. Minimum lip and minimum angle most conditions.
	Chassis / Fr & Rr Arms	All plastic (hard front arms if >30C)	All plastic. Loosen screws from transmission brace if need extra rear grip.	Hard arms, hubs, front brace. Hard rear arms if very grippy.	All plastic. Loosen screws from transmission brace if need extra rear grip.	All hard parts.	If temperature is low, use plastic parts. If temperature is high and grip comes up, use hard parts (starting from the front of the car).
AERO / CHASSIS	Ballast	Brass C block	Brass D block 10g on rear tower if very slippery	Alloy or plastic C and D block.	Brass C block.	Brass front bulkhead. Alloy C and D blocks.	Very sensitive adjustment (key to making mid-motor work on all tracks): Use Brass C most of the time (adds forward traction and rotation). Use Brass D if need extra forward traction (but will lose on power steering) If very low traction, add 10-20g behind tower.



B5M Setups

Ray Munday

Driver:

Date:

Track:

Meeting:

Track:

	Run:						
	Vehicle Run:						
	Time:						
	Weather:						
FRONT SUSPENSION	Shock Mount Top / Bottom						
	Camber Link Tower / Hub						
	Washers Inner						
	Camber / Kickup / Castor						
	Washers Rack / Outer						
	Axle Height						
	Trail / Hub Spacing f/r						
	Toe In / Out						
	Arms						
	Ride Height						
	Spring						
	Oil / Piston						
	Limiters / Length / Rebound						
	Shock Mount Top / Bottom						
REAR SUSPENSION	Camber Link Inner / Hub						
	Washers Inner / Height Outer						
	Camber						
	Anti-Squat						
	Toe In (Inner / Outer)						
	WheelBase						
	Anti-Roll Bar						
	Ride Height						
	Spring						
	Oil / Piston						
	Limiters / Length / Rebound						
	Tyres						
	Inserts						
	Wheels						
FRONT TYRES	Set						
	Run No						
	Traction Compound						
	Tyres						
REAR TYRES	Inserts						
	Wheels						
	Set						
	Run No						
DRIVETRAIN	Traction Compound						
	Motor						
	Run No						
	Timing / Rotor						
	Rotor Run No						
	Pinion / Spur						
	Ratio						
	Diff						
ELECTRONICS	Driveshafts						
	Radio						
	EPA Steer / Brake						
	EXPO Steer / Throttle / Brake						
	Receiver						
	Servo						
	ESC / Fan						
	Profile / Wire Gauge						
	Drag Brake Y/N, Initial %						
	DeadBand % / Min Drive%						
	Drive / Brake Frequency (kHz)						
	Advance / RPM / Max RPM						
	XTRA Timing						
	Battery Placement						
AERO / CHASSIS	Battery						
	Charge						
	Body						
	Vent ESC						
	Wing						
	Wing Lip / Angle						
	Chassis / Fr & Rr Arms						
	Ballast						
NOTES	Weight / Dist%						
	Conditions						
	Comments						
	Handling Comments						
LAP TIMES	Race Comments						
	Race Time						
	Fastest Lap Time						
	Average Lap Time						
	Consistency						