



## 2021 600R SnoX Race Prep List

1. Check engine coolant level and routing of overflow hose. **Most of the 600R sleds shipped without engine coolant!** Lift front of vehicle when bleeding coolant system.
2. Check chain case oil level
3. Check chain case chain tension (hand tight, then 1/2" turn loose)
4. Check drive belt deflection
5. Check for full open of throttle body assembly (Visually check throttle body butterflies are 90 degrees to bore)
6. **Remove and discard small "C-clip" from throttle body sync pin (Reference page 3).**
7. Check steering rack/lower steering post is centered to upper post (adjust steering to drag link if necessary)
8. Adjust handlebar, riser block, throttle asm and brake master cylinder positions
9. Check steering post has free movement thru travel
10. Check ski alignment (1/4" to 1/2" toe out)
11. Check Alignment of primary and secondary clutch's (Alignment tool "Axys Race" (#AXYS19AL) is required, contact [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) at the Polaris Race Dept.)
12. **Install the 2 middle seat base bolts (They are in the sleds parts bag)**
13. Install the "Optional" resonator to over structure mounting bolt and steel (Gold color) bushing. Before installing clean up internal threads with M8x1.0 tap (Bolt & Bushing are in the sleds parts bag)
14. **Align track and adjust tension** (raise rear of sled and measure tension where there is the most drop in the track, adjust until top of track drive cog is flush with bottom of hyfax)
15. Check brake line routing path
16. **Check all electrical wiring. Zip tie and reroute as necessary. Make sure the TPS wire has adequate free play. The TPS Sensor is not serviceable!**
17. Verify tether connection to chassis connection is plugged all the way in. Verify tether system functions
18. Silicone throttle cable tab into throttle lever
19. Silicone belly pan to chassis, plenum (air intake under hood) to hood
20. Silicone and/or install closed cell foam to seal headlight to hood
21. Radius 90 deg edge on outside of throttle block
22. Move throttle lever pin washers to underside of lever. Verify C-clip is installed securely onto pin
23. Check/Set IFS coil spring preload to 1/2" (with ski's off the ground). **It is highly recommended for all racers from Amateur level up to replace the stock 190lb IFS coil springs with 250lb coil springs.** The 250lb coil springs (#H-250-10.00-2.25) can be purchased from calling RE Suspension <https://www.resuspension.com/>. When installing 250lb IFS coil springs set preload to 1/2" and set IFS shocks Rebound adjuster to 6 clicks out (from all the way closed).
24. Grease inside of lower limiter straps to allow smooth pivoting action of limiter strap on lower cross shaft. **Use an O-ring safe grease on this area only**

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25. Check/Set preload of front track coil over spring (3/8") with limiter straps in place
26. Safety wire front track spring clip to shock shaft eyelet to prevent spring clip from moving or coming off
27. Set rear torsion spring preload to High/Medium (doesn't make a difference which side is on High)
28. Replace stock kill switch with push button kill switch (#4010311)
29. Red Loctite and torque upper a-arm to spindle bolt/nut
30. Red Loctite and torque rear suspensions FTA to tunnel bolt/nut
31. Red Loctite and torque rear suspensions RTA to tunnel bolt/nut
32. For MY21 600R there are now 2 (#5813934) exhaust valve gaskets on each exhaust valve to cylinder
33. Install snow flap straps/plastic center piece that meets **\*NEW\*** ISR rules for competition ([www.isrracing.org](http://www.isrracing.org)). Polaris Tech tip coming soon for this also
34. When studding the track, the maximum number of studs allowed is 108. The recommend starting point for stud quantity for ISOC Nationals via standard double Super light backers or standard Pro Series backers (**Not \*Plus series**) is 54. For CSRA, ECS and Reginal tracks where there is more ice the suggested stud quantity is 108 studs via double standard Super light backers or standard Pro Series backers (**Not \*Plus series**). Contact Stud Boy (<https://studboytraction.com/>) for optional stud patterns.
35. **Sunoco Surge fuel (105 Octane) should always be used**
36. It is recommended to install bulkhead reinforcement braces from Rox Speed FX. (<https://roxspeedfx.com/>)
37. For data acquisition equipment contact Precision Auto Research at ([http://www.precisionautoresearch.com/ECU\\_DATA/SnoPro/PAR31.htm](http://www.precisionautoresearch.com/ECU_DATA/SnoPro/PAR31.htm)). The recommended Data system is the "Kompact".  
The Polaris Race Dept. has a mounting plate for installing the Kompact onto the 600R sled (#0818028). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.
38. The Polaris Race Dept. has a side panel strap kit available for tool free side panel removal (#0818004). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.
39. Extra venting is allowed in all stock SnoX classes. Visit the "Racer Resources" website <https://snowmobiles.polaris.com/en-us/team-polaris/racer-resources/> and go under "SnoCross" to download the ISR approved document for permitted venting.

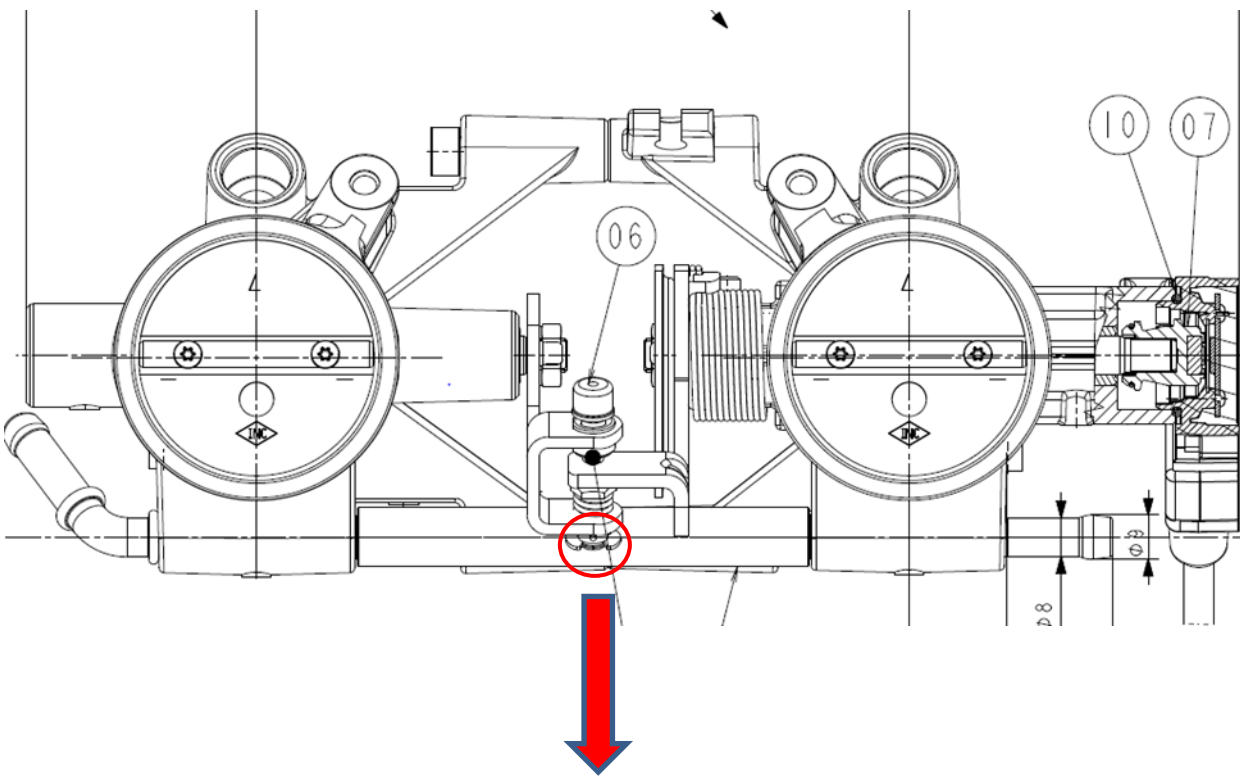
For updates throughout the race season visit the Polaris Racing "Racer Resources" page at <https://snowmobiles.polaris.com/en-us/team-polaris/racer-resources/>

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### *MY21 600R Throttle body sync pin clip removal*

Remove and discard the small C clip from the sync pin that is pointed out in the below picture



**Remove and discard C clip**



<b>Details</b>	Date												
	Location												
	Driver												
	Sled												
	Class												
		<b>Practice</b>			<b>Round 1</b>			<b>Round 2</b>			<b>Final</b>		
	Ambient temp F°												
	Density Alt/ Baro	/			/			/			/		
	Data Acquisition #												
<b>Engine</b>	ECU Map												
	Hotstart Temp												
	Coolant Temp												
	Fuel Spec												
	Oil-oil ratio												
	Spark plugs												
	Spark plug Gap												
	Holeshot EGT												
	Race Track EGT												
<b>Clutching</b>	Drive Belt												
	Belt length/Width	/			/			/			/		
	Flyweight style												
	Total flyweight												
	Added weight												
	Spider shims												
	Engage/Peak RPM	/			/			/			/		
	Primary spring												
	Secondary spring												
	Helix												
	Top/Bottom gear	/			/			/			/		
<b>Suspension</b>	Skis												
	Toe out												
	IFS shock valve #												
	Clicker settings	H-	L-	R-	H-	L-	R-	H-	L-	R-	H-	L-	R-
	Spring rate												
	Preload												
	FT shock valve #												
	Clicker settings	H-	L-	R-	H-	L-	R-	H-	L-	R-	H-	L-	R-
	Spring rate												
	Preload												
	FT arm height												
	RT shock valve #												
	Clicker settings	H-	L-	R-	H-	L-	R-	H-	L-	R-	H-	L-	R-
	Spring rate												
	Preload	/			/			/			/		
	FT coupling blocks												
	RT coupling blocks												

**Comments**

Practice Comments:

Round 1 Comments:

Round 2 Comments:

Final Comments:

