



## 2024 600R SnoX Race Prep List

1. Check engine coolant level and routing of overflow hose. \*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. Check steering rack/lower steering post is centered to upper post (adjust steering to drag link if necessary)
7. Adjust handlebar, riser block, throttle asm and brake master cylinder positions
8. Check steering post has free movement thru travel
9. **Check ski alignment (1/4" to 3/8" toe out).** Check tie rod jam nuts for tightness
10. **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.)**
11. 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)
12. **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)
13. **Install bottom middle seat screw** (seat screws/washers in parts bag with sled)
14. Ensure all coolant hose plastic guards are installed/positioned correctly
15. Check brake line routing path
16. **Check and detail all electrical wiring routing/connections. \*Apply a small amount of dielectric grease (NYOGEL 759G) to all electrical connections**
17. Silicone throttle cable tab into throttle lever
18. Silicone fenders to chassis
19. Silicone plenum (air intake under hood) to hood
20. Silicone and/or install closed cell foam to seal headlight to hood
21. Check tightness of the chassis harness ground screw (located on Left Hand IFS shock tower)
22. Radius 90 deg edge on outside of throttle block
23. Move throttle lever pin washers to underside of lever. Verify C-clip is installed securely onto pin
24. Check/Set IFS coil spring preload to 1/2" (with skis off the ground)
25. 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**
26. Check/Set preload of front track coil over spring (1/4") with limiter straps in place
27. Safety wire front track spring clip to shock shaft eyelet to prevent spring clip from moving or coming off



28. Check rear torsion spring preload is set to Medium/Medium
29. Check all Four shocks Compression and Rebound clicker settings (settings are listed in the owner's manual with the sled)
30. Replace stock kill switch with push button kill switch (#4010311)
31. **Red 263 Loctite and torque upper a-arm to spindle lock nut (85ft-lbs)**
32. **Red 263 Loctite and torque rear suspensions FTA to tunnel bolt (60ft-lbs)**
33. **Red 263 Loctite and torque rear suspensions RTA to tunnel bolt (60ft-lbs)**
34. **To remove the upper A-arm's rod end from the Spindle a separator tool is required (#0818052).** Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.
35. Install screen over recoil cover. (See page 4 for more information)
36. Install snow flap straps/plastic center piece that meets ISR rules for competition ([www.isrracing.org](http://www.isrracing.org)). Polaris Tech tip available at Polaris Racing Resources website (<https://snowmobiles.polaris.com/en-us/team-polaris/racer-resources/>)
37. 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 or 72. 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.
38. **Sunoco Surge fuel (105 Octane) should always be used**
39. It is recommended to install bulkhead reinforcement braces from Rox Speed FX. (<https://roxspeedfx.com/>)
40. For data acquisition equipment contact Precision Auto Research at (<http://www.precisionautoresearch.com>). The recommended Data system is the SnoPro "Kompact".
41. 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.
42. 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.
43. The Polaris Race Dept. has IFS shock covers available to protect the IFS shocks from roost (#0818049). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.
44. The Polaris Race Dept. has an upper a-arm mounting brace kit available (#0818050). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.



45. The Polaris Race Dept. has a Rear Torque Arm to Tunnel brace kit available (#0818051). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.

46. 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.

47. The Polaris Race Dept. has service manuals available for the MY24 600R (#9941202). Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.

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



## ***2024 600R Recoil Cover Screen***

The Polaris Race Dept recommends install a recoil cover screen on the 600R to keep debris from entering the flywheel and stator. The screen should be wiped clean daily. **This screen is only available directly from the Polaris Race Dept.** Contact Scott Wilczek at [Scott.Wilczek@polaris.com](mailto:Scott.Wilczek@polaris.com) to order.

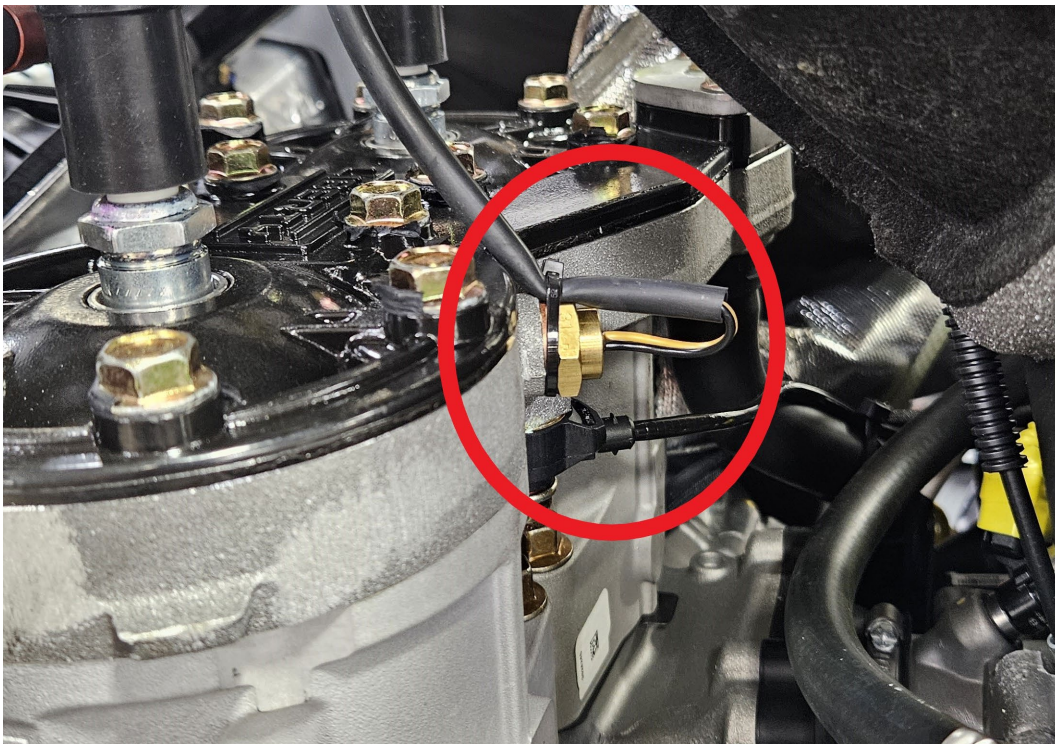
**Part number #0818037 – Recoil Cover Screen**







\*Zip tie the water temp sensor wire to the sensor



<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																



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<b>2024 600R Stock Suspension settings</b>	
Race Track Location:	
Racer of snowmobile:	
<b><u>IFS suspension</u></b>	
Valve Code:	105
Oil Side Spacer:	.300"
Spring Rate:	250lbs
Spring Preload:	.500"
High speed comp:	16
Low speed comp:	12
Rebound:	6
<b><u>FT Suspension</u></b>	
Valve Code:	CO20
Spring Rate:	112lbs
Spring Preload:	.250"
High speed comp:	18
Low speed comp:	18
Rebound:	2
Front arm length:	7.750"
<b><u>RT Suspension</u></b>	
Valve Code:	RO15
Oil Side Spacer:	0
Spring Rate:	Trap 34 at 112 degree
High speed comp:	16
Low speed comp:	12
Rebound:	4
Front Coupling block:	#3
Rear coupling block:	Medium
Lower Torsion Hanger:	"A"
Preload torsion setting:	Med/Med
Comments: All Skid/Tunnel holes in the "A" position	
Ski Toe out: .250" to 375"	
*These are the stock MY24 600R settings	