2027 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 “600R Race” (#0818014) is required, contact 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. Check rear torsion spring preload is set to Medium/Medium

28. Check all Four shocks Compression and Rebound clicker settings (settings are listed in the owner's manual with the sled)
29. Replace stock kill switch with push button kill switch (#4010311)
30. Red 263 Loctite and torque upper a-arm to spindle lock nut *(85ft-lbs)*
31. Red 263 Loctite and torque rear suspensions FTA to tunnel bolt *(60ft-lbs)*
32. Red 263 Loctite and torque rear suspensions FTA to rail 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 to order.
35. Torque upper and lower A-arm to bulkhead bolts to 50ft-lbs

36. Install snow flap straps/plastic center piece that meets ISR rules for competition (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 72 or 108. 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. ***New design for the MY25 thru MY27 600R**. (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 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 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 to order.

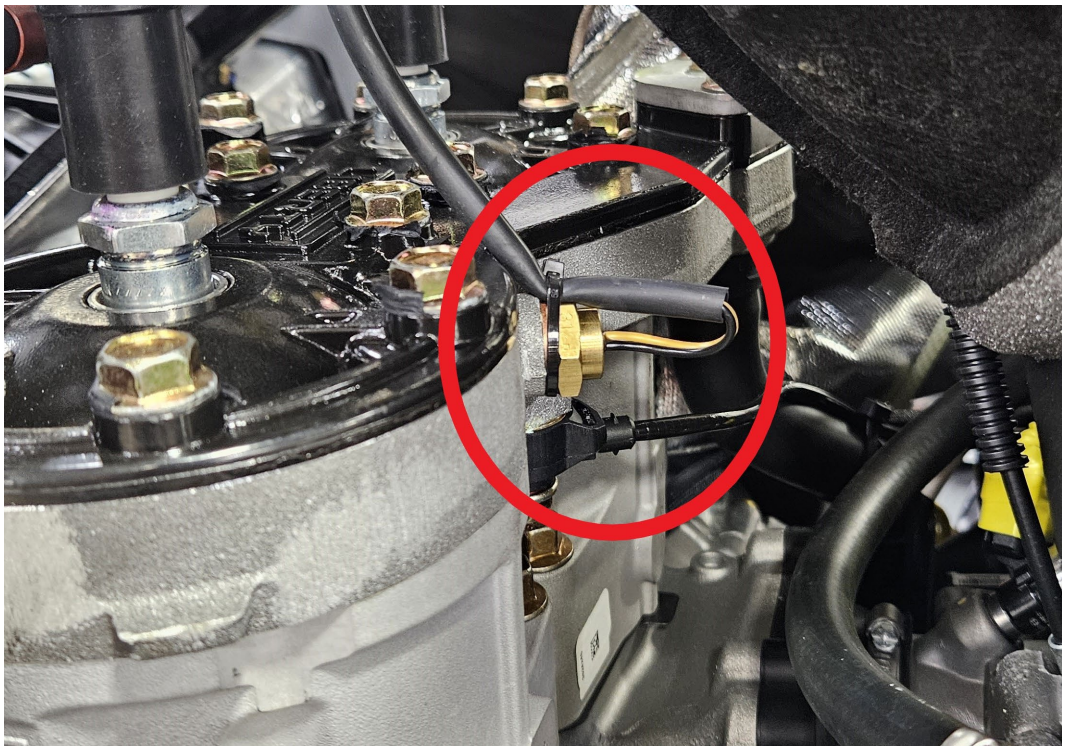
44. The Polaris Race Dept. has a Rear Torque Arm to Tunnel brace kit available (#0818051). Contact Scott Wilczek at Scott.Wilczek@polaris.com to order.

45. 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.

46. The Polaris Race Dept. has service manuals available for the MY27 600R (#9942463). Contact Scott Wilczek at 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/

*Zip tie the water temp sensor wire to the sensor



Details	Date				
	Location				
	Driver				
	Sled				
	Class				
		Practice	**Round 1**	**Round 2**	**Final**
	Ambient temp F°				
	Density Alt/ Baro	/	/	/	/
	Data Acquistion #				
Engine	ECU Map				
	Hotstart Temp				
	Coolant Temp				
	Fuel Spec				
	Oil-oil ratio				
	Spark plugs				
	Spark plug Gap				
	Holeshot EGT				
	Race Track EGT				
Clutching	Drive Belt				
	Belt length/Width	/	/	/	/
	Flyweight style				
	Total flyweight				
	Added weight				
	Spider shims				
	Engage/Peak RPM	/	/	/	/
	Primary spring				
	Secondary spring				
	Helix				
	Top/Bottom gear	/	/	/	/
Suspension	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:



2027 600R Stock Suspension settings	
Race Track Location:	
Racer of snowmobile:	

IFS suspension

Valve Code:	IO5
Oil Side Spacer:	.300"
Spring Rate:	250lbs
Spring Preload:	.500"
High speed comp:	16
Low speed comp:	12
Rebound:	6

FT Suspension

Valve Code:	CO20**B**
Spring Rate:	112lbs
Spring Preload:	.250"
High speed comp:	18
Low speed comp:	18
Rebound:	2
Front arm length:	7.750"

RT Suspension

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 MY27 600R settings