2027 INDY Matryx Cross Country Factory 600 Terrain Racing settings

All part numbers listed are Polaris part numbers unless otherwise noted.

Fuel: Use **non-ethanol** 91 octane premium pump gas with Polaris Anti-Static fuel treatment, select 91-NON-fuel curve on vehicles digital dash display

Oil Injection: Use Polaris VES-Extreme synthetic 2-cycle oil (#2883733 -quart) or (#2883732 -gallon)

Clutching Spec: 10-64 weights (stock), 150/290 primary spring (stock), 160/240 secondary spring (stock), 58/44/.36 helix (stock) and #3212369 belt (stock). Target RPM is 8300 to 8400

Optional Clutching parts: 165/310 primary spring (#7041988). ***For long distance racing/Iron Dog race, use a Non-Reverse Helix for durability**

Gearing: 22 tooth top gear (Stock), 41 tooth bottom gear (Stock)

Controls: Order the #RR-001-SGL Race Rubber from www.race-rubber.com and install over the kill switch knob

Tracks: Camso 136" Cobra (#5413655*Stock) or Camso 136" Ripsaw2 (#2839216)

Traction Products: Contact Stud Boy Traction products at www.studboytraction.com .

Sway Bar: stock sway bar (.438") or no sway bar depending on course conditions

Brakes: Custom heated angled brake lever for stealth 88 master cylinder (#0818067 *Order from Race Dept)

Suspension spring preloads:
IFS springs: .500" preload on stock 150lb IFS spring
*Optional softer IFS Springs are available: #7045096-458 – 125lb
FT spring: .125" preload on stock race dual rate 135/185lb front track spring
RT springs: Medium/Medium on stock 18lb@95 degree torsion spring preload blocks
*Optional rear torsion springs are available:
#7046419-329 – LH 20lb@95 degree and #7046420-329 – RH 20lb@95 degree
#7046150-329 – LH 16lb@87 degree and #7046151-329 – RH 16lb@87 degree

WER Shocks: The Walker Evans Racing shocks are calibrated for Terrain Racing. Below are the stock shock settings.
IFS shocks: Gas Pressure: 150-PSI, High Speed Comp: 6, Low Speed Comp: 11, Rebound: 6
FT shock: Gas Pressure: 200-PSI, High Speed Comp: 5, Low Speed Comp: 8, Rebound: 4
RT shock: Gas Pressure: 200-PSI, High Speed Comp: 5, Low Speed Comp: 5, Rebound: 5

Venting: Permitted Cross Country Factory 600 Venting: Additional venting is allowed on the 2027 Indy Cross Country sled. You must follow the Polaris Racing templates/directions exactly! No deviations will be allowed. To download the venting templates and directions visit the Polaris Snowmobile Racing website at https://snowmobiles.polaris.com/en-us/team-polaris/racer-resources/. Go to the ***Cross-Country*** section.

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.

The Polaris Race Dept. has service manuals available for the MY27 Cross Country sled (#9942459). Contact Scott Wilczek at Scott.Wilczek@polaris.com to order.

Data Acquisition: Order SnoPro Kompact from Precision Auto Research **(www.precisionautoresearch.com)**

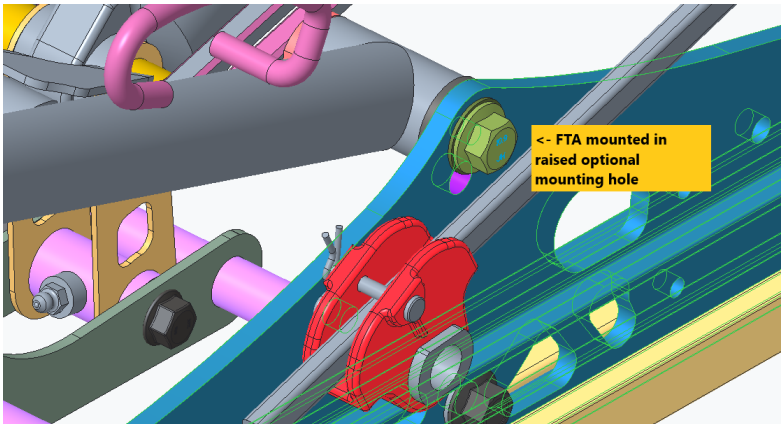
Rules: for the rules pertaining to this class go to the International Snowmobile Racing website, www.isrracing.org

The suspension settings listed here are the starting point. Adjust suspension calibrations to course/snow conditions to maximize the vehicles handling.

To order any of the Polaris Parts listed on this sheet contact Scott Wilczek at the Polaris Race Dept. 715-355-3008 or Scott.Wilczek@polaris.com

For any race setup questions contact Ben Hayes at the Polaris Race Dept. 715-355-5157 or Ben.hayes@polaris.com

*The MY27 CC sled has a raised optional Front Torque Arm mounting hole in the rail. As seen in the below picture with the FTA installed in the raised optional mounting hole. This raised position will change how the vehicle reacts to throttle input. The vehicle will not lift the skis as much/transfer back in this setting. This raised optional position may require you to adjust the limiter strap to a longer setting to find the desired amount of ski pressure and vehicle balance.



Details	Date				
	Location				
	Driver				
	Sled				
	Class				
		Practice	**Heat 1**	**Heat 2**	**Final**
	Ambient temp F°				
	Density Alt				
	Track condition				
Engine	ECU Curve				
	Gauge setting	PREM REG	PREM REG	PREM REG	PREM REG
	Fuel Blend				
	Speed MPH				
	Spark plugs & Gap				
	EGT temp F°				
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	/ "	/ "	/ "	/ "
	Carbides				
	SwayBar				
	IFS shock valve #				
	Clicker settings	**H- L- R -**	**H- L- R -**	**H- L- R -**	**H- L- R -**
	Spring rate				
	Preload				
	Oil side spacers				
	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	/	/	/	/
	Oil side spacers				
	Coupling blocks				
	Stud style				
	Stud count				
	Stud pattern				

Comments

Practice Comments:

Heat 1 Comments:

Heat 2 Comments:

Final Comments:

2027 600CC Stock Suspension settings	
Race Track Location:	
Racer of snowmobile:	
IFS suspension	
Valve Code:	XFB17
Oil Side Spacer:	.200"
Spring Rate:	150lbs
Spring Preload:	.500"
High speed comp:	6
Low speed comp:	11
Rebound:	6
FT Suspension	
Valve Code:	XCG1
Spring Rate:	135/185lbs
Spring Preload:	.125"
High speed comp:	5
Low speed comp:	8
Rebound:	4
Front arm length:	7.065" to 7.125"
RT Suspension	
Valve Code:	XRB16
Oil Side Spacer:	.100"
Spring Rate:	18lbs at 95 degree
High speed comp:	5
Low speed comp:	5
Rebound:	5
Front Coupling block:	radius of bar to arm
Rear coupling block:	High
Lower Torsion Hanger:	STK hole
Preload torsion setting:	Med/Med
Comments:	
*These are the stock MY27 600-CC settings	

2027 Indy Matryx Cross Country 600

Relocate the chain case vent hose

The Polaris Race Dept recommends relocating the chain case vent hose as shown in the below picture. Ensure the hose is secured with two zip ties and the end of the hose is behind the lower rear section on the engine.

