



## 2022 Indy Cross Country USSA Factory 600 ICE Racing settings

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

**Fuel:** Use non-ethanol 91 octane premium pump gas, 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 (#7041645), 160/240 secondary spring (stock), 66/44-.46-degree helix and #3211208 belt. Target RPM is 8400 to 8500

**Optional Clutching parts:** 175/240 secondary spring

\*Order the below clutch spring and Helix from Venom Products, [www.venomproducts.com](http://www.venomproducts.com)  
1-955557 – secondary spring 175/240

**The Secondary clutch requires “Big Roller” Helix’s.**

1-BR-113 -- BR66/44-.46 Helix

**Gearing:** 21 tooth top gear (#3221097), 42 tooth bottom gear (#3222192), 70 pitch chain (33221115)

**Controls:** replace the stock kill switch with the push button below  
1-4010311 – push button kill switch

**Tracks:** Camso 136” Cobra (#5413655\*Stock) or Camso 136 Ripsaw1 (#2839969)

**Track clips:** standard and tall track clips can be ordered from Wahl Brothers Racing,

[www.wahlracing.com](http://www.wahlracing.com)

Tall clip – (#02-653)                      standard clip – (#02-651)

**Traction Products:** Contact Stud Boy Traction products at [www.studboytraction.com](http://www.studboytraction.com) . (176 stud’s minimum are recommended for ice racing)

**Tunnel enclosure:** Contact Wahl Brothers Racing , [www.wahlracing.com](http://www.wahlracing.com)

**Front torque arm:** Drill a new hole in the limiter straps to shorten the front arm travel length. Measuring from the top of the bump stop on the rail to the bottom of the torque arm the distance should be 1.625”

# POLARIS RACING

## **Suspension Springs:**

*IFS:* 130lbs/in coil over spring 9" x 2.25" I.D. (#189A0130 – order from <https://www.resuspension.com/>)

*Front track:* 80lb/in coil over spring 6" x 2.25" I.D. (#0617003 \*order from Race Dept.)

*Rear track:* 13lbs/degree torsion springs at 80-degree preload. (These are the stock torsion springs)

## **Suspension spring preloads:**

*IFS Springs:* .500" preload on IFS springs

*FT Spring:* .250" preload on front track spring

*RT Springs:* Medium/Medium on torsion spring preload blocks

**Sway Bar:** .562" sway bar (#0617006 \*order from Race Dept.)

**Skis:** Order skis from USI at [www.usi-skis.com](http://www.usi-skis.com)

USI X2 triple threat stage 1 ski (#X2)

USI 301 high performance mount shoe (#po1-hpb)

or

Order skis from C&A Pro at [www.caproiskis.net](http://www.caproiskis.net)

XPT ski (#0420)

Mounting kit (#76000224)

**Tail light:** a current OEM production stock qualified snowmobile tail light is required. Light must remain illuminated at all times sled is in the field of competition, whether the engine is running or not.

**Venting:** Permitted Cross Country Factory 600 Venting: Additional venting is allowed on the 2022 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.

**Rules:** for the rules pertaining to this class go to the International Snowmobile Racing website, [www.isrracing.org](http://www.isrracing.org)

The suspension settings listed above are the starting point. Adjust suspension calibrations to course/ice 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](mailto: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](mailto:Ben.hayes@polaris.com)

# POLARIS

## RACING

Indy Cross Country 600 **ICE IFS** shock settings

Shock part number: 7045851

Oil side spacer: .300"

Piston: Grey 6 port, .052" bleed hole (drill out stock piston bleed to .052")

IFP height: 2.0"

Nitrogen PSI: **200**

Jounce bumper: None, \*Remove jounce

\*Replace stock shaft with (#1800774) short shock shaft

Compression clickers: Low speed: 6 clicks out from stiff, High speed: 5 clicks out from stiff

### Compression

1.550 x 8  
1.550 x 8  
.900 x 12  
1.450 x 8  
1.300 x 8  
1.200 x 10  
1.100 x 10  
.900 x 8  
.800 x 8  
.700 x 15  
1.500 x .120 plate

### Rebound

1.300 x 10  
.800 x 8  
1.000 x 10  
.700 x 8  
.600 x 15  
.750 x .060 (x3)washer

torque shim stack nut to 15ft/lbs.

# POLARIS

## RACING

Indy Cross Country 600 **ICE Front Track** shock settings

Shock part number: 7045849

Oil side spacer: 2.0"

Piston: Grey 6 port, .073" bleed hole

IFP height: 1.750"

Nitrogen PSI: **150**

Jounce bumper: None, \*Remove jounce and plastic scraper

Compression clickers: Low speed: 8 clicks out from stiff, High speed: 7 clicks out from stiff

### Compression

1.550 x 8  
1.000 x 8  
1.550 x 8  
1.200 x 8  
1.450 x 8  
1.200 x 8  
1.000 x 8  
.900 x 8  
.800 x 8  
.600 x 15  
1.000 x 15  
1.500 x .125 plate

### Rebound

1.300 x 8  
.700 x 8  
1.100 x 12  
.900 x 10  
.700 x 8  
.600 x 15  
.750 x .060 (x3)washer  
torque shim stack nut to 15ft/lbs.

# POLARIS RACING

Indy Cross Country 600 **ICE Rear Track** shock settings

Shock part number: 7045850

Oil side spacer: .200"

Piston: Grey 6 port, .042" bleed hole (Drill out stock piston bleed to .042")

IFP height: 2.0"

Nitrogen PSI: **200**

\*Replace stock shaft with (#0818021) custom short shaft (\*must order from Polaris Race Dept.)

Compression clickers: Low speed: 6 clicks out from stiff, High speed: 5 clicks out from stiff

## Compression

1.550 x 10(x6)

1.500 x 8

1.300 x 8

1.200 x 6

.900 x 6

.700 x 8

.600 x 15

.600 x 15

1.500 x .120 plate

## Rebound

1.300 x 10

.900 x 6

1.100 x 8

.900 x 10

.700 x 10

.600 x 15

.750 x .060 (x2)washer

torque shim stack nut to 15ft/lbs.

<b>Details</b>	Date												
	Location												
	Driver												
	Sled												
	Class												
		<b>Practice</b>			<b>Heat 1</b>			<b>Heat 2</b>			<b>Final</b>		
	Ambient temp F°												
Density Alt													
Track condition													
<b>Engine</b>	ECU Curve												
	Gauge setting	PREM	REG	PREM	REG	PREM	REG	PREM	REG				
	Fuel Blend												
	Speed MPH												
	Spark plugs & Gap												
	EGT temp F°												
<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	/ "			/ "			/ "			/ "		
	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													



