

2021 FREERIDE™

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// WHAT'S NEW

- Rotax® 850 E-TEC® Turbo engine available on select models
- One-piece lightweight hood on all configurations
- Short tunnel with lightweight snowflap
- Lightweight front and rear shock springs
- 4.5-in. digital display
- Smaller diameter handlebar ends and handgrips
- Low handlebar strap
- Compact and lightweight deep snow seat

// PACKAGE HIGHLIGHTS

- REV® Gen4 platform with narrow-design bodywork
- Rotax® 850 E-TEC® engine available
- E-TEC® SHOT™ starter available
- RAS™ 3 front suspension with lightweight ski spindle and revised ski stopper to reduce ski drag and improve predictability in technical sidehills
- tMotion™ rear suspension with reinforced rails and ice scratchers
- KYB® Pro 36 R front shocks with lightweight springs, KYB® Pro 40 (rear) and KYB® Pro 40 with lightweight spring (center) shocks aluminum piggyback with Easy-Adjust compression adjuster (22 clicks)
- Sway bar quick-disconnect
- Full-length extruded profile running boards with large openings
- Sea-level calibration available on select configurations



FREERIDE™ 165 850 E-TEC® TURBO SHOWN



FREERIDE™ 154 850 E-TEC® TURBO SHOWN

ROTAX® ENGINE	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Engine details	Liquid-cooled, two-stroke, turbocharged, eRAVE™	Liquid-cooled, two-stroke, eRAVE™
Cylinders	2	2
Displacement	849 cc / 51.9 in. ³	849 cc / 51.9 in. ³
Bore	82 mm / 3.2 in.	82 mm / 3.2 in.
Stroke	80.4 mm / 3.2 in.	80.4 mm / 3.2 in.
Maximum engine speed	7,900 RPM	7,900 RPM
Carburation	E-TEC® direct injection with additional booster injectors	E-TEC direct injection with additional booster injectors
Recommended fuel type	Premium unleaded	Premium unleaded
Minimum octane	91	91
Fuel tank	36 L / 9.5 US gal	36 L / 9.5 US gal
Oil tank capacity	3.4 L / 3.6 qt	3.4 L / 3.6 qt

DRY WEIGHT	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
	212 kg / 468 lb [154 in.] 215 kg / 475 lb [165 in.]	204 kg / 450 lb [146 in.] 203 kg / 447 lb [154 in.] 206 kg / 453 lb [165 in.]

POWERTRAIN	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Drive clutch type	pDrive™ with clickers	pDrive™ with clickers
Driven clutch type	QRS	QRS
Engagement	3,800 RPM	Sea-Level: 3,300 RPM High Altitude: 3,600 RPM
Small sprocket number of teeth	21	21
Large sprocket number of teeth	51 [154 in.] 53 [165 in.]	49 [146 in.] 51 [154 in.] 53 [165 in.]
Drive sprocket number of teeth	6	8 [146 in.] 6 [154 - 165 in.]
Drive sprocket diameter	164 mm / 6.5 in.	164 mm / 6.5 in.
Drive sprocket pitch	89 mm / 3.5 in.	73 mm / 2.86 in. [146 in.] 89 mm / 3.5 in. [154 - 165 in.]
Brake system	Brembo racing brake with stainless-steel braided brake line	Brembo racing brake with stainless-steel braided brake line

SUSPENSION	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Front suspension	RAS™ 3	RAS™ 3
Front shock	KYB® Pro 36 R Easy-Adjust	KYB® Pro 36 R Easy-Adjust
Front suspension travel	215 mm / 8.5 in.	215 mm / 8.5 in.
Rear suspension	tMotion™	tMotion™
Center shock	KYB® Pro 40 Easy-Adjust	KYB® Pro 40 Easy-Adjust
Rear Shock	KYB® Pro 40 Easy-Adjust	KYB® Pro 40 Easy-Adjust
Rear suspension travel	239 mm / 9.4 in.	239 mm / 9.4 in.

COLOR	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Catalyst Grey		

DIMENSIONS	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Vehicle overall length	3,058 mm / 120.4 in. [146 in.] 3,188 mm / 125.5 in. [154 in.] 3,299 mm / 129.9 in. [165 in.]	3,058 mm / 120.4 in. [146 in.] 3,188 mm / 125.5 in. [154 in.] 3,299 mm / 129.9 in. [165 in.]
Vehicle overall width	1,080 to 1,110 mm / 42.5 to 43.7 in.	1,080 to 1,110 mm / 42.5 to 43.7 in.
Vehicle overall height	1,395 mm / 54.9 in.	1,395 mm / 54.9 in.
Ski stance	910 or 950 mm / 35.8 or 37.4 in.	910 or 950 mm / 35.8 or 37.4 in.
Track (Length x Width x Profile)	PowderMax® II with FlexEdge™: 146 x 16 x 2.5 in. [3,705 x 406 x 64 mm] PowderMax® Light with FlexEdge™: 154 x 16 x 2.5 in. [3,912 x 406 x 64 mm] 154 x 16 x 3.0 in. [3,912 x 406 x 76 mm] opt. 165 x 16 x 2.5 in. [4,178 x 406 x 64 mm] sea-level opt. only 165 x 16 x 3.0 in. [4,178 x 406 x 76 mm]	PowderMax® II with FlexEdge™: 146 x 16 x 2.5 in. [3,705 x 406 x 64 mm] PowderMax® Light with FlexEdge™: 154 x 16 x 2.5 in. [3,912 x 406 x 64 mm] 154 x 16 x 3.0 in. [3,912 x 406 x 76 mm] opt. 165 x 16 x 2.5 in. [4,178 x 406 x 64 mm] sea-level opt. only 165 x 16 x 3.0 in. [4,178 x 406 x 76 mm]

FEATURES	850 E-TEC® Turbo (154 and 165 in. only)	850 E-TEC®
Frame	REV® Gen4	REV® Gen4
Bodywork	Narrow design	Narrow design
Skis	Pilot™ DS 3	Pilot™ DS 3
Seating	Deep snow compact and lightweight	Deep snow compact and lightweight
Handlebar	Tapered U-shaped aluminum with J-hooks / Low grab handle	Tapered U-shaped aluminum with J-hooks / Low grab handle
Riser block height	165 mm / 6.5 in.	165 mm / 6.5 in.
Starter	850 E-TEC: Electric, SHOT (opt.) 850 E-TEC Turbo: SHOT	850 E-TEC: Electric, SHOT (opt.) 850 E-TEC Turbo: SHOT
Reverse	RER™	RER™
Heated throttle lever / grips	Standard	Standard
Gauge type	4.5 in. digital display	4.5 in. digital display
Windshield	Optional	Optional
Runner	Square 3/8	Square 3/8
Carbide configuration	102 mm / 4 in. at 90°	102 mm / 4 in. at 90°
Bumpers (Front/Rear)	Std / Std	Std / Std

// FEATURE HIGHLIGHTS



Rotax 850 E-TEC® Turbo engine

The first-ever factory-built 2-stroke turbocharged engine in any industry. It boasts instant response and a full 165 HP up to 8,000 feet of elevation. Sophisticated design integrates flawlessly with the REV Gen4 platform for maximum agility. Factory install ensures peace of mind.



E-TEC® SHOT™ starter

Push-button starting with almost no added weight. Uses energy stored in the lightweight ultracapacitor to turn the magneto and with E-TEC® technology, starts the engine.



KYB® Pro 36 R Easy-Adjust front shocks

Extreme capability, extreme durability shocks with compression and rebound calibration ranges for optimized control in the toughest conditions. Easy Adjust knobs for compression and rebound adjustments.



Short tunnel

Shorter tunnel length without snowflap for greater deep snow capabilities with more clearance and lighter overall weight. Standard rear fender with LinQ-ready attachment points.



tMotion™ rear suspension

A swiveling rear arm and split front arm allow the skid to flex laterally for more predictable carving. More rising-rate motion ratio adds capacity and comfort.



4.5-in. digital display

All-digital LCD gauge cluster with flatter viewing angle for an easy-to-read info center whether standing or sitting.

ski-doo

