



# M 8000 SNO PRO

Early Release

# New for 2018

All-new 8000 Series C-TEC2 794cc engine with Dual-Stage Injection (DSI) delivers increased performance and rideability in the 160-hp class. It provides crisp throttle response, outstanding mid-range and class-leading performance in addition to improved fuel mileage and reduced oil consumption.

New Ascender platform with new Next-Gen Mountain bodywork offers 10 percent narrower profile for improved sidehill performance; improved fit and finish; easy on/off body panels and distinctive Arctic Cat styling. In addition, the Ascender platform features improvements that originally debuted on the 2017 Mountain Cat:

- 1) A driveshaft that has been positioned 1" lower and  $\frac{3}{4}$ " rearward for increased clearance of the 3-in. lug track while enabling the use of 8-tooth drive sprockets (vs. 7-tooth) compared to the previous design and results in a flatter track-to-snow approach angle for improved floatability, quicker climbing on top of the snow while accelerating as well as improved overall handling.
- 2) Revised running boards are 1.0 in. narrower than previous designs for improved side-hill performance and ease of laying the sled over in deep snow.
- 3) Revised bellypan shape allows the rider's feet to move 2 in. further forward for even greater ergonomic options for riding.
- 4) Thinner gauge aluminum on the rear tunnel section, plus strategic cut-outs on the front tunnel section, reduces weight by more than 2 lbs.



M 8000 SNO PRO (153/162)  
[NEW MODEL FOR 2018]  
[EARLY RELEASE MODEL]

New TEAM Rapid Response II drive clutch features an auto-adjusting belt tension design and a 12.5 percent lower effective starting ratio (while maintaining the top ratio) for smoother engagement and reduced belt wear at drive-away speed.

FOX FLOAT 3 rear track shock has been lengthened one inch, allowing increased air volume that translates into a suppler ride quality in its initial compression. (Sno Pro)

FOX FLOAT 3 ski shocks are improved with a new end cap and shorter negative spring, resulting in increased air volume that translates into suppler ride quality in its initial compression. (Sno Pro)

M 8000 Sno Pro Early Release models are equipped with a 153-in. or 162-in. PowerClaw track with 3.0-in. lugs.

## New Model for 2018

# All-New 800 Platform Available Now

M 8000 SNO PRO (153/162)  
[EARLY RELEASE MODEL]

Arctic Cat rides into 2018 early, and with a pair of new M 8000 Sno Pro machines powered by the all-new, all-powerful Arctic Cat 8000-Series 794cc C-TEC2 engine with Dual-Stage Injection. They feature all-new, narrow profile Next-Gen Mountain bodywork which is part of the new Ascender platform. Each gets the Arctic Mountain Drive System, narrowed running boards and increased forward foot placement for maximum backcountry performance. And they're available in limited quantities at Arctic Cat dealerships after Feb. 1, 2017.

Mountain riders will rejoice when they feel the crisp, clean power of the new 8000-series Arctic Cat C-TEC2 engine. More powerful than its predecessor and with a stronger low- and mid-range hit thanks to its new APV exhaust valve featuring 3-stage control of all exhaust ports, the new engine sets a new standard in 160-hp class performance. That performance stays consistent with the quick acceleration and auto-adjusting design of the TEAM Rapid Response II drive clutch, Rapid Reaction driven clutch and the entire

### Arctic Drive System.

Last year the Mountain Drive System and mountain chassis modifications debuted on the Mountain Cat package, offering improved deep snow carving, acceleration and rider ergonomics via narrower running boards, forward foot position and the lowered driveshaft. That system is now on all 2018 M 8000 models and, as part of the Ascender platform, it's complemented by new mountain bodywork that's 3 in. (10%) narrower than the previous design, offering even better side hilling manners.

The improved handling of the M Series is aided by the lightweight Arctic Mountain Suspension (AMS), which features mountain-specific spindles, geometry and 34.5-38.5-in. stance to enable better side-hilling, reduced drag in the snow and improved handling. Last year the FLOAT-ACTION rear suspension was improved with a new front arm and rail geometry for increased travel, improved ride quality and consistent track tension. In 2018 this suspension has been improved even more with the Fox FLOAT 3 rear track shock being lengthened to provide even better ride control in the



snow and on rough routes that get riders to their favorite play areas. The tapered ProClimb-7 skis keep the tips up when moving through deep snow, further aiding control in the backcountry.

They come with a fixed (non-telescoping) and vertical steering post, 11.7-gallon fuel tank, front-mounted heat exchanger and ice scratchers. They climb on and through the deepest snow thanks the category-leading PowerClaw track, available in either 153- or 162-in. length with aggressive 3.0-in. lugs.

The early-release 2018 M 8000 Sno Pro comes in Dynamic Gray and is available in limited quantities.

# M 8000 SNO PRO (153/162)



## FEATURES

12V OUTLET	Standard
ELECTRIC START	Accessory
FRONT BUMPER	Sport
GOGGLE HOLDER	Accessory
HAND & THUMB WARMERS	Standard
HANDGUARDS	Accessory
HCR-TYPE HEAT EXCHANGER	Standard
HEADLIGHTS	Dual halogen 2-bulb
ICE SCRATCHERS	Standard
LIGHTWEIGHT BRAKE DISC	Standard
MIRRORS	Accessory
MOUNTAIN STRAP	Standard
REAR RACK	Accessory
REAR STORAGE	Mountain Storage Bag
SEAT	Lightweight Mountain
SIDE PANEL WIND DEFLECTORS	Accessory
SNO PRO BRAKE LEVER	Accessory
STEERING	Vertical steering post, 4.5" riser with adjustable mountain handlebar
TETHER SWITCH	Accessory
TOW HITCH	Accessory
TUNNEL FLARE	Accessory
VISOR PLUG-INS	Accessory
WINDSHIELD	3" Mountain-height

## ENGINE

TYPE	2-stroke
DISPLACEMENT (CC)	794cc
COOLING	Liquid
CYLINDERS	2
BORE X STROKE (MM)	85 x 70 mm
LUBRICATION	Electronic injection
IGNITION	Digitally Controlled CDI
STATOR OUTPUT	325 Watts
FUEL DELIVERY	Dual stage injection
EXHAUST	APV with tuned pipe, pipe sensor and stainless steel muffler
FUEL CAPACITY (GAL.)	11.7
OIL CAPACITY (QT)	3.6
COOLANT CAP. (QT)	5
MINIMUM OCTANE	91

## POWERTRAIN

DRIVE CLUTCH	TEAM Rapid Response II
DRIVEN CLUTCH	TEAM Rapid Reaction BOSS
DRIVE SYSTEM	Arctic Mountain Drive System
BRAKES	Race Radial Master Cylinder Hydraulic Brake-Lightweight
CLUTCH CALIBR. (FT.)	6,000-8,000
GEARING	19/50
CHAIN PITCH	96
REVERSE	Push-button Engine

## SUSPENSION

FRONT SUSPENSION	Arctic Mountain Suspension (AMS)
SKI SHOCKS	FOX FLOAT 3
FRONT TRAVEL (IN.)	7
REAR SUSPENSION	FLOAT-ACTION Rear Suspension
FRONT TRACK SHOCK	Arctic Cat IFP 1.5
REAR TRACK SHOCK	FOX FLOAT 3
REAR TRAVEL (IN.)	15.5 (153) / 16.5 (162)

## DIMENSIONS

OVERALL LENGTH (IN.)	132.3 (153) / 137.3 (162)
OVERALL WIDTH (IN.)	41.5-45.5
OVERALL HEIGHT (IN.)	50
TRACK TYPE	PowerClaw
TRACK WIDTH (IN.)	15
TRACK LENGTH (IN.)	153 / 162
LUG (IN.)	3.00
PITCH (IN.)	3.00
SKI STANCE (IN.)	34.5-38.5 Adjustable
SKI TYPE / WIDTH (IN)	ProClimb - 7
RUNNER TYPE	Single runner w/carbide

## INSTRUMENTATION

TYPE OF GAUGE	Deluxe Digital
SPEEDOMETER	Digital
TACHOMETER	Digital
ODOMETER	Digital
FUEL	Digital
OIL	Indicator Light
COOLANT	Digital/Indicator Light
CLOCK	Digital
BATTERY VOLTAGE	Digital
ALTIMETER	Digital
HOURS	Digital

## COLORS

AVAILABLE COLORS	Dynamic Gray
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# 2018 ARCTIC CAT M SERIES TECHNOLOGY



## M Series Weight Reduction

2018 marks the third consecutive year of significant weight reduction on most M Series machines, with 13 lbs. shaved off the 6000 and 8000 series models via several key areas:

- A new molded fuel tank is 5 lbs. lighter than the previous injection-molded tank, plus adds increased storage area. (Non-electric start models)
- A new aluminum drive shaft is 3 lbs. lighter than the previous steel shaft.
- A new hollow jackshaft is 2.25 lbs. lighter than the previous solid shaft.
- A new lightweight brake assembly featuring new caliper, disc and pads is 1.3 lbs. lighter than the previous brake assembly.
- All-new narrow profile Gen II Mountain body plastic is 1 lb. lighter than previous bodywork.
- Revised composite steering support is 0.5 lbs. lighter than the aluminum support.

## Next-Gen Mountain Bodywork

New for 2018 on all M 6000 and M 8000 models, the low-profile Next-Gen Mountain bodywork is 3 inches narrower than the original ProClimb bodywork, to provide easier side-hilling and carving in deep snow conditions. It's also 1-lb. lighter than the original ProClimb bodywork and provides easier access to under hood service components.

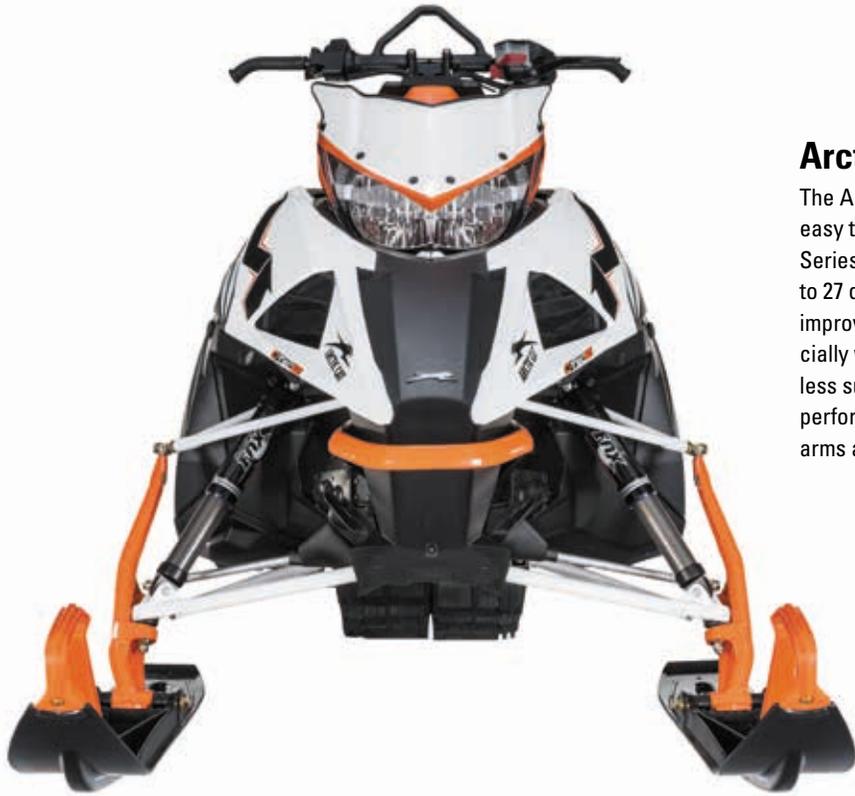
## Ascender Platform

All 2018 M Series models deliver a higher level of backcountry performance and handling via the Ascender Platform – the key engineering improvements that debuted on the 2017 Mountain Cat package:

- The driveshaft has been positioned 1" lower and  $\frac{3}{4}$ " back for increased clearance of the 3-in. lug track, while also enabling the use of 8-tooth drive sprockets (vs. 7-tooth) compared to the previous design. This results in a flatter track-to-snow approach angle for improved floatability, quicker climbing on top of the snow while accelerating as well as improved overall handling.
- Running boards are 1.0 in. narrower than previous designs for improved side-hill performance.
- Revised shaping of the footrest, tunnel support and bellypan allows the rider's feet to move 2 in. further forward on the tunnel edge roll for even greater ergonomic options for sidehilling.
- Revised tunnel that reduces total weight by more than 2 lbs.



# 2018 ARCTIC CAT M SERIES TECHNOLOGY

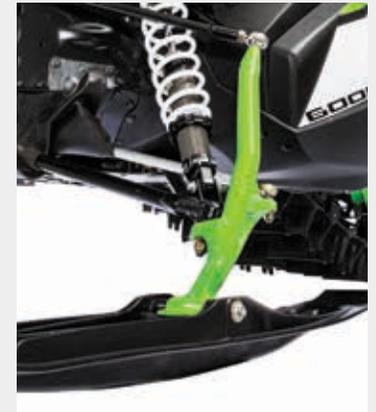


## Arctic Mountain Suspension (AMS)

The AMS features mountain-specific geometry, spindles and A-arms for easy to maneuver handling in deep snow. Compared to 2015 and older M Series, the spindle geometry includes an increased spindle caster angle to 27 degrees (vs. 17 degrees), which results in increased ski camber for improved off-trail cornering and more predictable counter-steering, especially when side-hilling. The lightweight, forged-aluminum spindles have less surface area than the previous design, reducing drag and improving performance in deep snow. Also dual-phase high strength alloy-steel A-arms are lighter than previous designs.

## FLOAT-ACTION Rear Suspension

Arctic Cat redesigned the rear suspension in 2017, which combined with new revised rails last season that shed 1.5 – 2.0 lbs., give the M Series snowmobiles optimal suspension travel and a better ride quality in all conditions. Compared to models from 2015 and older, the FLOAT-ACTION suspension incorporates revised mountain-specific geometry, with a longer rear-arm pull-rod and revised rail profile that deliver consistent track tension during the full range of travel. A longer front arm shock works with the new pull-rod for increased front arm travel, which improves the ride performance in all conditions, especially in big bumps. The FLOAT-ACTION suspension is built in three lengths to accommodate 141-, 153- and 162-in. track lengths.



## Lightweight Ski Spindles

One-piece forged ski spindles feature a stout, low-profile design that cuts through deep snow with minimal plowing/ drag. Their tall design and optimized distance between the A-arms reduces forces/ loads into the chassis for increased strength.

## LED Headlight

A new LED headlight on select 2018 Spring-order M 8000 models and all M 9000 models delivers enhanced lighting performance. When the high beam is activated, the low beam also stays on to deliver a light pattern with great range and width. Special LED accent lighting comes on when the key is turned on.

# 2018 ARCTIC CAT M SERIES TECHNOLOGY

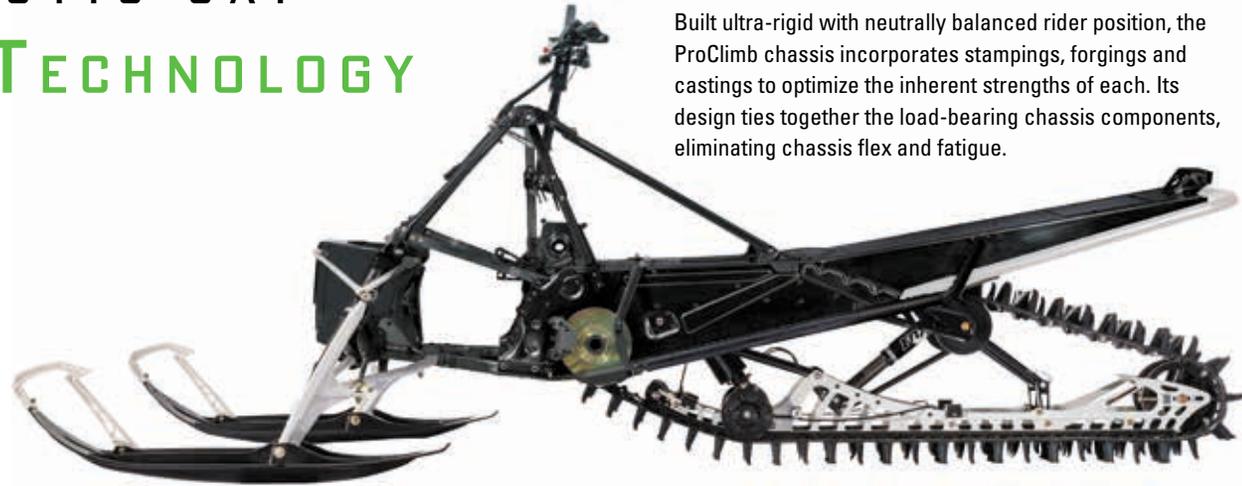


## Vertical Steering Post

All M sleds except the 9000's feature a vertical steering post, which delivers a more natural handlebar turning arc for a standing rider who wants to counter-steer on steep sidehills compared with the traditional "laydown" post.

## Electric Start

The convenience of electric start or the weight savings on non-electric is an option on 2018 M Series models. Non-electric start models feature a lighter weight seat that also offers rear storage space.



## ProClimb Chassis

Built ultra-rigid with neutrally balanced rider position, the ProClimb chassis incorporates stampings, forgings and castings to optimize the inherent strengths of each. Its design ties together the load-bearing chassis components, eliminating chassis flex and fatigue.

## 34.5-38.5-in. Ski Stance

To enhance side hilling performance and to ease laying, carving and counter-steering in deep snow, all Arctic Cat M models feature a narrow 34.5-38.5-in. adjustable ski stance. This is a wider range of adjustability than previous models, as well as providing the option for a narrower stance.



## Power Claw Track

This lightweight, single-ply track with a 3.0-in. pitch sets the standard for deep snow performance, with stagger-set, curved-forward paddle towers that won't fold over or take a set, and matched with Attack 20 paddles for superior deep snow floatation. For 2018, M models feature the industry leading the Power Claw track in either 2.6- or 3.0-in. lug heights in 141- and 153-inch lengths, and in 3.0-in. lug heights for all 162-in. tracks. The Power Claw design is the industry-leader in deep snow traction and performance.

# 2018 ARCTIC CAT M SERIES TECHNOLOGY



## ProClimb-7 Skis

The ProClimb-7 skis work in concert with the AMS spindles to deliver a new level of deep snow performance and adjustability. The skis incorporate a tapered width, from 7 in. at the tip to 6.5 in. in the middle, which works with a revised rubber dampener to keep the ski tips up and floating on top of the snow while preventing diving or knifing into the snow. A wider ski saddle accommodates a full 4 in. of lateral ski stance adjustability. A deeper keel design provides improved cornering in off-trail conditions.



## Deluxe Digital Gauge

The Deluxe Digital gauge features two operator-configurable displays, with information available for: speed; rpm; maximum rpm; clock; altimeter; odometer; hours; Trip 1; Trip 2; coolant temperature; exhaust temperature; intake air temperature; voltage; and fuel level.

## Push-Button Reverse

Arctic Cat snowmobiles are equipped with electronic push-button reverse systems for quick, easy activation. The 8000- and 6000-Series engines utilize engine-reverse technology, also activated by a push-button.



## Improved Handlebar & Grips

The low-profile grip design is 3.7mm smaller diameter for improved comfort and ergonomics. The material is now made primarily of rubber instead of plastic, resulting in a softer grip with enhanced tactile feel, and is enhanced by a new grip pattern.



## Single Front Heat Exchanger

All M Series models incorporate the lightweight, single, front-mounted heat exchanger. The system is nearly 4 lbs. lighter than a full-length heat exchanger and results in the least amount of snow and slush retention during riding, helping the M Series maintain their real-world weight savings advantage. All M Series snowmobiles also come standard with ice-scratchers.



## Improved High-Power Halogen Headlight

New last year, improved halogen headlight reflector optics extend the high beam pattern downward by 5 degrees compared to previous years, improving light pattern aim and coverage.

# 2018 ARCTIC CAT M SERIES TECHNOLOGY



## Radial Master Cylinder (RMC)

Braking System Borrowing technology from Superbike motorcycles, the RMC brake system features a radial master cylinder and a longer lever for greater braking force. The dual-piston caliper is mounted on the rear portion of the rotor, so that any chassis flex won't knock back the pistons. Reduced knock-back allows smaller caliper pistons and a shortened lever "throw" before the pads contact the rotor, which in turn allows more powerful braking pressure. The system incorporates the race version 9/16-in. master cylinder for enhanced braking power. All 6000 and 8000 M series models get the new lightweight disc/caliper/pad brake assembly, as well as the drilled race version brake disc.

## TEAM Drive and Driven Clutches

Introduced in 2016, the Arctic Drive System features TEAM Rapid Response drive and Rapid Reaction BOSS driven clutch combination for smooth shifting, optimal performance, maximum durability; great serviceability; and reduced weight.

The new Rapid Response II drive clutch features a roller bearing on the shaft that enables an auto-adjusting belt tension design and delivers consistent performance without manual adjustments. It also features a 12.5 percent lower effective starting ratio (while maintaining the top ratio) for smoother engagement and reduced belt wear at drive-away speed, with more evenly distributed force for lower belt pressure. It's a design that's unique to Arctic Cat.

The Rapid Reaction BOSS driven clutch features the Built On Shaft Secondary design, in which the clutch is designed with machined sheaves that mount directly to the machined-matched driven shaft. Unique to Arctic Cat, BOSS eliminates the need for the steel clutch post in traditional designs, saving weight, reducing rotating mass, improving clutch balance and achieving tighter clutch/ shaft mounting tolerance.

In addition to the benefits of BOSS, the Rapid Reaction driven clutch features optimized cooling fin geometry that results in low clutch and belt temperatures for improved belt life and performance. The Rapid Reaction BOSS is also 0.25 lbs. lighter than previous designs, resulting in quicker acceleration.





### FOX FLOAT QSL Rear Track Shock

For 2018 Arctic Cat and FOX build upon the pioneering QS3 shock technology with the all-new FLOAT QSL rear track shock for improved deep-snow performance on mountain sleds. The QSL features 1-2-L compression settings that correspond to light, medium and “locked” calibration. In deep snow conditions, the L-position prevents too much rear-arm squat and exaggerated ski lift, for greater control and performance. The L-position is not fully locked: there’s a blow-off point in the valve to prevent damage to the shock during severe compression. A dial mounted on the remote reservoir can easily and quickly be turned to customize the compression calibration for riding conditions and intensity. It utilizes a remote reservoir for fade-free performance. It comes in a 1.5-in. diameter body. It’s exclusive to Arctic Cat and comes on select M Series machines for 2018.



### FOX FLOAT QS3 Shocks

For 2018 the pioneering FOX QS3 shocks are now available on some models in the air-sprung FLOAT package, and feature three compression settings that correspond to light, medium and firm shock calibration. A dial mounted on the remote reservoir can easily and quickly be turned to customize the compression calibration for riding conditions and intensity. They utilize a remote reservoir for fade-free performance, they come in a 1.5-in. diameter body. For 2018 the QS3 shocks have revised end caps that make it easier to access the QS switch.

## 2018 ARCTIC CAT M SERIES TECHNOLOGY



### FOX FLOAT 3 Shocks

FOX FLOAT 3 air shocks are improved for 2018 with improved ride and handling – with more supple compression in the initial stroke travel – thanks to increased shock length (from 16-in. to 17-in. in 2018) on the rear arm shock and increased volume on the ski shocks (via a new body cap and shorter negative spring). The use “negative” spring technology on all shocks delivers a plush ride during initial travel and faster, stiffer cornering while maintaining big-hit control. Easy air valve access simplifies air pressure adjustment for customizing ride control. They are calibrated for comfort and control in deep snow, through bumps and on the trail.



### Arctic Cat IFP Gas Shocks

Select 2018 Arctic Cat snowmobiles utilize one or more of the new Arctic Cat IFP gas shocks. Engineered with much of the same technology utilized on previous shock packages, Arctic Cat IFP coil-over shocks feature a hard-anodized aluminum body; 0.5- in. shaft; aluminum internal floating piston; and the same high-quality seals and ice scrapers. A forged eyelet on the shaft-end is utilized instead of a welded eyelet.

# 2018 ARCTIC CAT M SERIES TECHNOLOGY



## 6000-Series C-TEC2 600 Engine with Dual-Stage Injection

The first clean technology Arctic Cat 2-stroke engine, the 6000-Series 599cc C-TEC2 with Dual-Stage Injection (DSI) leads the 125-hp class in performance. It features batteryless EFI; electric oil pump; APV electronic exhaust valves; Exhaust Pipe Temperature Sensor (EPTS); knock sensor; and engine reverse technology. It's exceedingly robust and lightweight. It's built at the Arctic Cat Engine Facility in St. Cloud, Minn.



## 8000-Series C-TEC2 800 Engine with Dual-Stage Injection

The next generation of clean Arctic Cat 2-stroke engine technology, the all-new 8000-Series 794cc C-TEC2 with Dual-Stage Injection (DSI) delivers increased performance and ride ability in the 160-hp class of engines. It features an all-new Arctic Power Valve system with 3-stage control of the auxiliary exhaust ports via side valves, along with 3-stage control of primary exhaust port. Its ECM-controlled electronic oil pump provides precision oil injection that's more efficient than previous designs. In addition, it features batteryless EFI; Exhaust Pipe Temperature Sensor (EPTS); knock sensor; and engine reverse technology. It's exceedingly robust and lightweight. It's built in the USA at the Arctic Cat Engine Facility in St. Cloud, Minn.



## 9000-Series Engine

The 9000-Series C-TEC4 Turbocharged three-cylinder engine produces 200-hp class performance at 8750 RPM. A joint project between Arctic Cat and Yamaha, this new 998cc 4-stroke engine features an intercooled turbo for maximum horsepower in all conditions. To achieve maximum performance and durability in the lightest configuration, the DOHC design is matched with new 4-hole fuel injectors; engine braking control via an idle speed circuit and engine mapping; lightweight aluminum cylinders; and a press forged crankshaft. It offers ultra-quick throttle and turbo response, and is 10 lbs. lighter than the 1100 Turbo Suzuki twin that powered previous 9000-Series Arctic Cat snowmobiles. The new 998 Turbo engine is designed and built by Yamaha.