

S&S® Performance Parts For VICTORY® MOTORCYCLES



S&S® 106" STROKER KIT FOR 2003-'07 VICTORY® FREEDOM® ENGINES

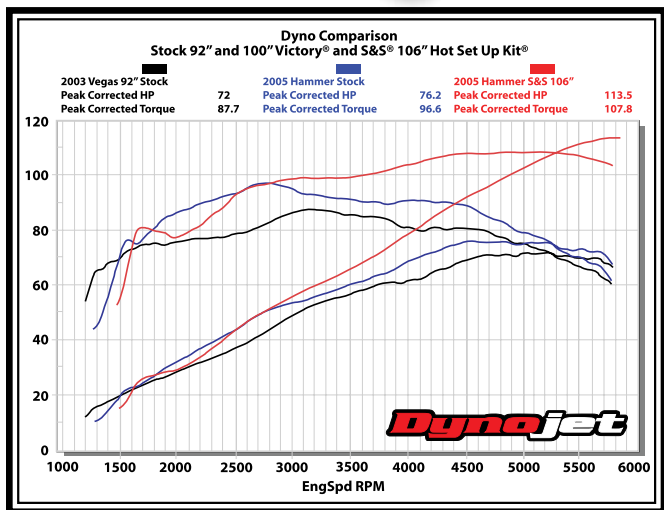
The 106" Stroker kit boosted performance by 37 horsepower over stock! S&S Stroker kit installation is no more difficult than rebuilding a stock engine. All parts are designed to bolt into the stock crankcase with no machining and only minor modifications required. These kits do not include an S&S air cleaner kit because that is the first upgrade most riders do.

FITMENT

- All 2003-'07 Victory models equipped with a Freedom® engine (except Touring Cruiser)

KIT CONTENTS

- S&S stroker crankshaft (108mm/4.252")
- S&S connecting rods
- S&S .495" lift high performance cams
- S&S high lift valve spring kit, complete with top collars and valve keepers
- Authorization code for S&S calibration file for Victory fuel injection system



This dyno chart shows the increase in power and torque that the S&S 106" Stroker Kit delivers over a stock 92" or 100" engine. The 106" test engine was equipped with Victory Stage I mufflers. Dyno results from Dyno Jet® 200 Chassis dynamometer at S&S Cycle's Research and Development facility in Viola, Wisconsin.

106" STROKER KIT WITHOUT AIR CLEANER		
Description	Part No.	MSRP
2003-'05 Vegas®, 2004-'05 Kingpin®, 2005 Eightball™	106-5132	\$1,539.85
2005-'07 Hammer®, 2006-'07 Vegas®, Kingpin®, Eightball™	106-5133	\$1,539.85

NOTE: Installation of the S&S 106" Stroker Kit in a 92" engine requires that a Victory 100" cylinder and piston kit also be installed.



S&S® AIR CLEANER KITS FOR VICTORY® PROVEN PERFORMANCE® THROUGH BETTER BREATHING

One of the most economical and cost effective performance products available for the Victory Freedom® engine is the S&S® high performance air cleaner kit. Used in conjunction with a set of Victory Stage 1 performance mufflers, this kit has consistently shown an increase of up to 20 horsepower from a stock 100" Freedom engine, with no other modifications. S&S air cleaner kits are available for all 2003-up models with Freedom engines except Vision, Crossroads, Cross Country and Touring Cruiser. 50-state kit calibration ensures that the motorcycle complies with emission standards after kit is installed.



S&S air cleaner for 2008-up Freedom engines except Vision, Crossroads, Cross Country or Touring Cruiser models

FITMENT

- Available for 2003-up Freedom® engines
- Not for Vision, Crossroads, Cross Country or Touring Cruiser models
- 50-state version fits 2006-'07

FEATURES AND BENEFITS

- Increased air flow for up to 20 more horsepower with performance exhaust
- Calibration card included in some kits – Allows Victory dealer to load an S&S tune file in stock ECU
- Washable gauze filter element
- Polished billet construction

OPTIONS

- 2003-'07 models
- 2008-up models
- 50-state version legal in California
- Available with calibration card for Victory dealers
- Available without calibration card for installers who are not Victory dealers

KIT CONTENTS

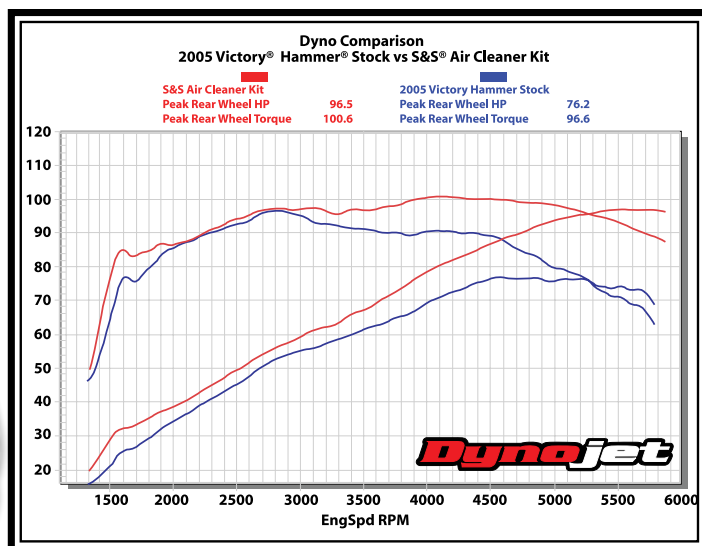
- Polished billet air cleaner housing
- Pleated gauze filter
- All required hardware
- Calibration card included in some kits
- S&S Decal
- Instructions



S&S air cleaner for 2003-'07 models, except Touring Cruiser

PART NUMBERS

S&S® Billet Air Cleaner Kits for Victory® Freedom® Engines		
2003-'07 (includes calibration card).....	41-0021	MSRP \$319.76
2003-'07 (no calibration card).....	106-5130	MSRP \$257.50
2006-'07 California version	106-4735	MSRP \$319.76
2008-up, except Vision, Crossroads, Cross Country model, includes calibration card	106-1319	MSRP \$347.52
2008-up, except Vision, Crossroads, Cross Country model, no calibration card	106-5131	MSRP \$283.25



This dyno chart shows the improvement an S&S high flow air cleaner assembly can make to performance. The test bike was a 2005 Victory® Hammer®. The lower set of curves represent stock configuration, and the upper curves show the gains with the S&S high flow air cleaner and Victory Stage 1 mufflers. Note that the curves are almost identical until about 3000 rpm. At that point the engine needs more air than the stock air cleaner can provide. The S&S air cleaner provides the extra air so the engine can make more power. Dyno results from Dyno Jet® 200 Chassis dynamometer at S&S Cycle's Research and Development facility in Viola, Wisconsin.

SPECIAL NOTES:

It should be noted that the calibration file for this kit was developed for use with the Victory Stage 1 Performance Slip-On mufflers and Victory Stage 1 Exhaust Systems. This tune file can only be accessed by a Victory dealer using the S&S Freedom® Performance Tuner website.

If the installer is not a Victory dealer, we recommend the Dynojet® Power Commander® for EFI tuning.

If a different exhaust is used or other engine modifications are performed, we recommend the Dynojet® Power Commander® for EFI tuning.

S&S® 495 CAMS FOR 2009-UP MODEL VICTORY® FREEDOM® ENGINES

S&S 495 cams and springs for Victory® Freedom® engines have been available for several years now, and have been included in the S&S 106" stroker Hot Set Up Kit® for Victory. They are also recommended for the new 107" and 114" big bore kits shown in this brochure.

A new cam kit is now available for 2009-up model engines that includes cam carriers. The S&S cams are not compatible with the 2009-up cam carriers so in order to install these cams in the new bikes it is necessary to retro-fit the engine with early style carriers. In addition, some extra parts will need to be purchased and used in the installation. See the chart below.

In order to install the S&S 495 cams in any Victory Freedom engine high lift springs need to be installed. The S&S 495 cams and springs are perfect for this application, and are highly recommended.



S&S® 495 CAMS AND VALVE SPRINGS FOR VICTORY® FREEDOM® ENGINES		
Product	Part Number	MSRP
Camshaft Set, 2003-'08 (.495" Lift)	49-0100	\$252.30
Camshaft Set, 2009-up (.495" Lift)	106-2874	\$369.95
Valve Spring Kit (.495" Lift)	49-0115	\$117.21

ADDITIONAL STOCK PARTS NEEDED FOR INSTALLATION IN 2009-UP MODEL ENGINES		
Polaris® Part Number	Description	Quantity
3021189	Rocker Arm Shaft	4
5132593	Stud	12
7547080	Nut	12
7556211	Washer	12

S&S® 495 CAM SPECIFICATIONS FOR .050" VALVE LIFT									
Cam Name	Valve Timing Open/Close		Valve Duration		Valve Lift	Centerline		Lift @ TDC	
	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust
S&S 495	17°/47°	44°/12°	244°	236°	0.495"	105°	106.5°	.115"	.087"



This new S&S® 495 kit for 2009-up Victory® Freedom® engines includes early style cam carriers to retro-fit the engine to be compatible with the S&S cams. High lift valve springs are required.

S&S® 495 valve springs are required for the S&S 495 cams, and work great for other high lift cams with .495" lift or less.

