



"Setting the World's
Performance Standards"

0/ ,16,/ 2

2003-04 POLARIS 700/800 PRO X SINGLE PIPE

P.N. 09-839

Important: Read instructions carefully before installation.

Note: Do not remove banding placed on the mid section of the pipe. It has been placed there to reduce noise emissions, improve performance and reliability.

1-Remove stock exhaust, Y-Pipe, and silencer (Retain OEM springs and exhaust gaskets for pipe installation).

2-Install the SLP Y-Pipe using OEM gaskets and grafoil seal.

3-Apply reflective heat tape between hood vents on the right side of the hood (see illustration #1). Apply reflective heat tape between the center hood vents. Cover the speedo cable from the hood hinge to the top of the hood foam. Remove the hood foam on the right hand side of the hood and cover with reflective heat tape. Trim the hood tab that sticks from the plenum directly above the brake assembly to 1/16" and cover with reflective heat tape (see illustration #1) also cover the right hand side of the shock tower. Warning: Failure to position heat tape properly may result in belly pan damage. Belly pan damage due to improper installation of heat barrier tape will not be covered by Starting Line Products.

4-Zip tie the coolant bottle to the fuel pump (see illustration #2) for pipe clearance also zip tie the oil injection cable to the coolant hose for pipe clearance (see illustration # 2).

5-Bolt the SLP spring clip to the upper rear chain case cover bolt. Position spring clip in the 2 o'clock position and tighten. Use a silicone sealer such as Loctite 598 Ultra Black to seal silencer to the belly pan outlet hole. Install silencer and spring into place using OEM short and long springs.

6-Install SLP single pipe and spring into place using OEM short springs to connect the pipe to the Y-pipe and pipe to silencer. Use two SLP long springs to connect the pipe to the stock pipe support bracket. Note: Use a silicone sealer such as Loctite 598 Ultra Black on all exhaust joints.

PIPE FIT NOTE: Check shock tower and hood clearance. The pipe can be adjusted up or down by adding or removing the washers under the OEM rubber insulator. If pipe is contacting the shock tower cross brace and pipe support bracket is roughly 1/2" away from the OEM rubber insulator, then the silencer is not properly seated in the stock silencer support cradle. It is most likely that the silencer is riding on top of the two silencer side locator tabs. Simply pull the silencer away from the chain case so that the silencer can drop into place. The bottom of the silencer must be fully contacting the top of the silencer support cradle.

WARNING: Closing the plastic hood vents is not recommended and may result in heat damage. SLP recommends the plastic hood vent screens be replaced with a metal mesh vent screening Polaris P.N. 5243463-067 for optimum air flow.

NOTE: Check tightness of band clamp around pipe every 100 miles for the first 300 miles and periodically thereafter.

Spring Tension Adjustment:

Spring loop adjustment is suggested for proper spring tension to prevent leakage and wear (low tension), allow adequate flex (proper tension) and prevent spring breakage (excessive tension).

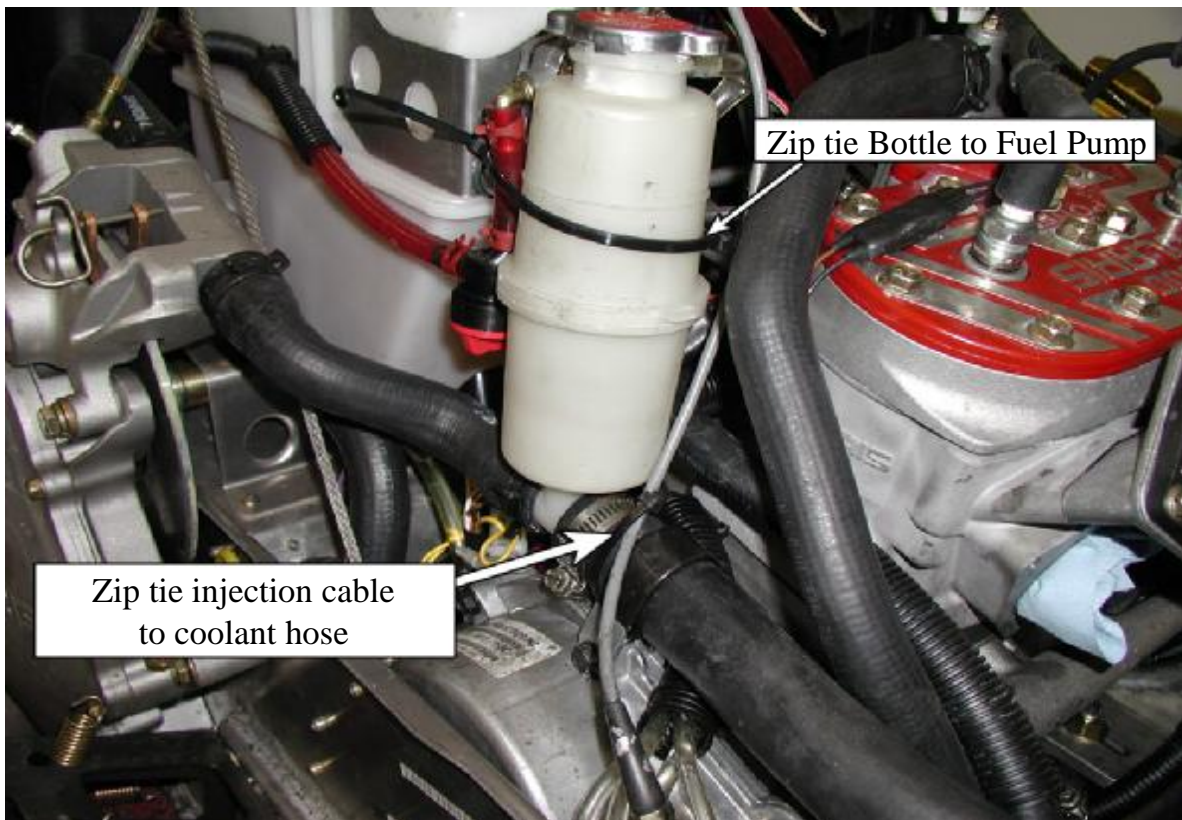
When system is installed the spring can be judged for proper tension. The winding spacing at the center of the spring will indicate tension. When proper the two center windings will have .040" to .050" clearance between them. This is easily tested with a feeler gage.

If tension is incorrect, the loop on the pipe or silencer can be bent in the direction needed to increase or decrease tension. Attach a vise grip firmly to the loop and bend.

ILLUSTRATION #1



ILLUSTRATION #2



2003 POLARIS 700 Pro X SINGLE PIPE JETTING CHART (High Flow)

Altitude		Ambient Temperature			
		Below -20° F Below -29° C	-20 to +10° F -29 to -12° C	+10 to +40° F -12 to +5° C	Above 40° F Above 5° C
Feet (Meters)	0-3000 (0-900)	MAG 520N PTO 520N #4	MAG 510N PTO 510N #4	MAG 500 PTO 500 #3	MAG 490 PTO 490 #3
	3000-6000 (900-1800)	MAG 490 PTO 480 #4	MAG 470 PTO 460 #4	MAG 450 PTO 440 #3	MAG 430 PTO 420 #2
	6000-9000 (1800-2700)	MAG 430 PTO 420 #3	MAG 400 PTO 390 #3	MAG 370 PTO 360 #2	MAG 350 PTO 340 #2
	9000-12000 (2700-3700)	MAG 380 PTO 370 #3	MAG 370 PTO 360 #2	MAG 340 PTO 330 #2	MAG 330 PTO 320 #2

Pilot Needle 45 (stock)
Needle Jet 9DGN05-57 (stock)
Needle Jet Cutaway Stock
Fuel Screw 1.5 (stock)
Air Screw Adjust as needed for best throttle response.

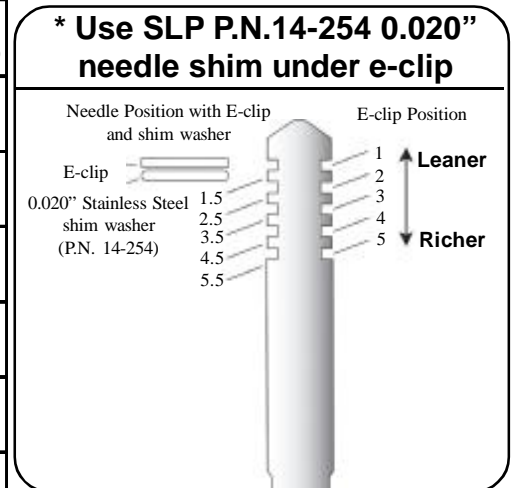
2- Flow-Rites (P.N. 14-194)
 Installed in the hood shelf and air horns removed from air box

2003-04 POLARIS 800 Pro X SINGLE PIPE JETTING CHART (High Flow)

Pilot Needle 45 (stock)	Cutaway 2.0 (stock)
Needle Jet 9DGN5-57 (stock)	Fuel Screw Adjust as needed for best idle and throttle response
Needle Jet P-8 (stock)	Air Screw Adjust as needed for best idle and throttle response

2- Flow-Rites (P.N. 14-194) installed in the hood shelf and SLP Air Horn Kit installed in the airbox.

Altitude		Ambient Temperature					
		Below -30°F Below -34°C	-30 to -10°F (-34 to -23°C)	-10 to 10°F (-23 to -12°C)	10 to 30°F (-12 to -1°C)	30 to 50°F (-1 to 10°C)	Above 50°F (Above 10°C)
Meters (Feet)	0-600 (0-2000)	520N #5	510N #5	500 #3.5*	490 #3.5*	470 #3	450 #3
	600-1200 (2000-4000)	510N #4	490 #4	470 #3.5*	450 #3.5*	430 #3	410 #3
	1200-1800 (4000-6000)	460 #4	440 #4	420 #3	400 #3	380 #2	360 #2
	1800-2400 (6000-8000)	420 #4	400 #3	380 #3	360 #2	340 #1	320 #1
	2400-3000 (8000-10,000)	400 #3	380 #3	360 #2	340 #1	320 #1	300 #1
	3000-3700 (10,000-12,000)	370 #3	350 #2	330 #2	310 #1	290 #1	270 #1



***Needle E-Clip set in #3 with .020" needle shim under E-Clip.**

FUEL REQUIREMENT: Minimum 91 Octane fuel

Important! Fuels containing ethanol or alcohol based fuel compounds will require larger main jets, usually 2 sizes larger than the SLP jetting chart. Jet Needle must be raised one "E" clip position.

Carburetor Tuning Note: Carb tuning specifications included in this section are a base line and should be adjusted as needed for your atmosphere. Use exhaust gas temperature guages and/or monitor piston wash as a tuning guide.

2003 POLARIS 700 Pro X SINGLE PIPE CLUTCHING CHART

ALTITUDE		DRIVE			DRIVEN	
		Clutch Spring	Shift Weight Polaris (Good)	Shift Weight SLP MTX (Best)	Clutch Spring	Driven Helix
FEET (METERS)	0-3000 (0-900)	Polaris Black/Green (stock)	10-64	SLP MTX 68 g P.N. 40-83 3 g rivet in outer hole 2 g rivet in inner hole	Black/Red (Stock)	62/42.46 (Stock)
	3000-6000 (900-1800)	SLP Blue/Silver 40-69	10-62	SLP MTX 68 g P.N. 40-83 3 g rivet in outer hole	Black/Red (Stock)	62/42.46 (Stock)
	6000-9000 (1800-2700)	Polaris Black/Green (stock)	10-62	SLP MTX 68 g P.N. 40-83 1 g rivet in outer hole	Black/Red (Stock)	62/42.46 (Stock)
	9000-12000 (2700-3700)	Polaris Black/Green (stock)	10-60	SLP MTX 65 g P.N. 40-82 1 g rivet in outer hole	Black/Red (Stock)	62/42.46 (Stock)

Running RPM 7900-8100

2003-04 POLARIS 800 Pro X SINGLE PIPE CLUTCHING CHART

ALTITUDE		DRIVE			DRIVEN	
		Clutch Spring	Polaris Shift Weight	SLP MTX Shift Weight	Clutch Spring	Driven Helix
FEET (METERS)	0-3000 (0-900)	SLP Blue/Yellow P.N. 40-70	10-66	71g P.N. 40-84 No rivets	Team Ind. Red/Blue P.N. 50-4	Team Ind. P.N. 50-48 Set at 70/46
	3000-6000 (900-1800)	SLP Blue/Silver P.N. 40-69	10-64	68g P.N. 40-83 3g rivet outer hole	Team Ind. Red/Black P.N. 50-6	Team Ind. P.N. 50-30 Set at 58/40
	6000-9000 (1800-2700)	Polaris Black/Green (stock)	10-64	68g P.N. 40-83 3g rivet outer hole	Team Ind. Red/Black P.N. 50-6	Team Ind. P.N. 50-30 Set at 50/40
	9000-12000 (2700-3700)	Polaris Black/Green (stock)	10-62	68g P.N. 40-83 No rivet	Team Ind. Red/Black P.N. 50-6	Team Ind. P.N. 50-30 Set at 50/38

Running RPM 7800-8000

Caring for your ceramic coated pipes and/or silencer:

Ceramic Coating is an aluminum matrix applied to your exhaust system to provide a thermal barrier for more consistent performance. It is a coating which requires little maintenance to keep your pipes and/or silencer looking like new.

Upon completion of new installation, wipe the ceramic coated parts of the exhaust system down with brake cleaner. This will prevent oils and grease (usually in the form of fingerprints) from burning on and staining the exhaust during first initial startup.

To maintain your ceramic coated system, wash it with soap and water periodically (especially necessary after trailering it to and from your riding area on roads that have been treated with salt and other ice removing chemicals). Salt and other ice removing chemicals will attack and eat away at the ceramic coating. This will result in rust coming through the coating. Typically you will notice this rusting after your snowmobile has set for a period of time without the exhaust system being brought up to running temperature.

Periodically polish your ceramic coated pipes and/or silencer after each washing with an aluminum polish such as Mothers, Maas or Blue Magic aluminum polish that can be found at any automotive parts store. Do not use any acidic cleaners! For stubborn stains use fine 000 steel wool, then use a soft cloth with polish. Failure to maintain your ceramic coated pipes or silencer can result in damage to the ceramic coating for which there is no warranty coverage. A little care will insure that your pipes and/or silencer will continue looking like new for many years.

Note: In areas of the ceramic coated system where skin temperatures exceed 1300 degrees F, it is normal for the coating to turn dull gray. These areas should also be washed and polished periodically.