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Performance Standards!"*

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743 E. Iona Rd. Idaho Falls, ID 83401, (208)529-0244 Fax (208)529-9000

**SLP PART #09-890**

**ATTENTION DEALER**

**PLEASE PROVIDE YOUR CUSTOMER WITH THE  
INSTALLATION AND INSTRUCTION DATA THAT IS  
SUPPLIED IN THIS PACKET FOR THIS PRODUCT.**

**Before you begin, please read the following:**

**The information contained in the instruction sheet supplied with this products is intended to provide complete setup and tuning specifications needed to have successful installation. It also acts as a reference guide for future tuning for altitude and temperature differentials. Varying from these standards can reduce performance and/or dependability.**

**Please read the following instructions for best results.**

**If you are experiencing difficulty after completely following the setup instructions, SLP technical assistance is available online at the SLP website:**

**[www.startinglineproducts.com](http://www.startinglineproducts.com)**

**or by phone at 208-524-3397**



**Starting Line  
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## **SLP Single Pipe for 2011-12 Polaris 800 Rush/Switchback Part # 09-890**

Effective Date:1/24/2011

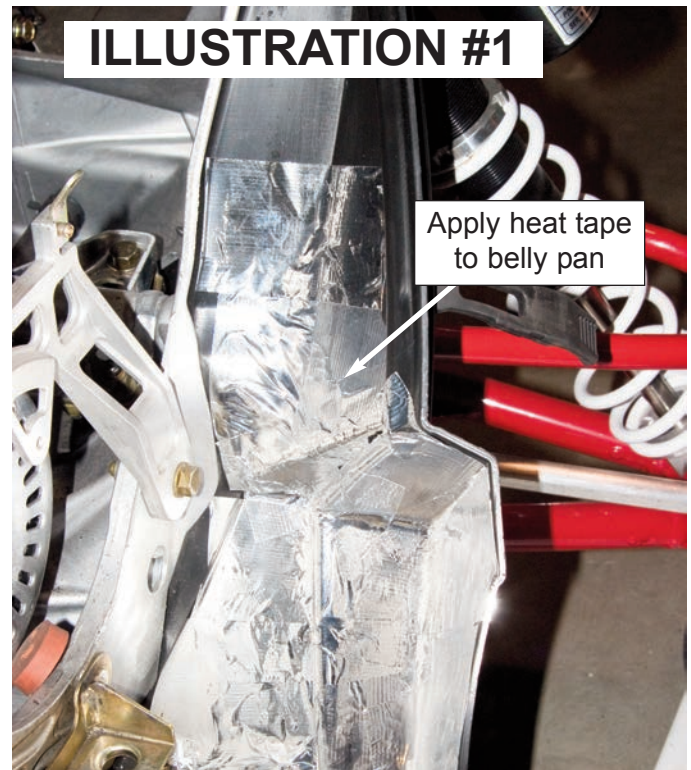
### **Kit Contents:**

- |   |  |                           |
|---|--|---------------------------|
| 1 - Lightweight Silencer (#090-8911)              | 1 - Single Pipe (#090-8910)            | 1 - Hitch Pin (#999-9120) |
| 1 - Pack Anti-Seize (#090-0146)                   | 2 - Pipe Adjustment Washers (#090-104) |                           |
| 1 - Silicone Outlet Seal (#091-4095)              | 2 - 30" Reflective Heat Tape (#090-31) |                           |
| 1 - Silencer Shim (#090-106) for 2012 models only |  |                           |
| 1 - 91 Octane Sticker (#60-38)                    |  |                           |

**Important:** Read instructions carefully before installation.

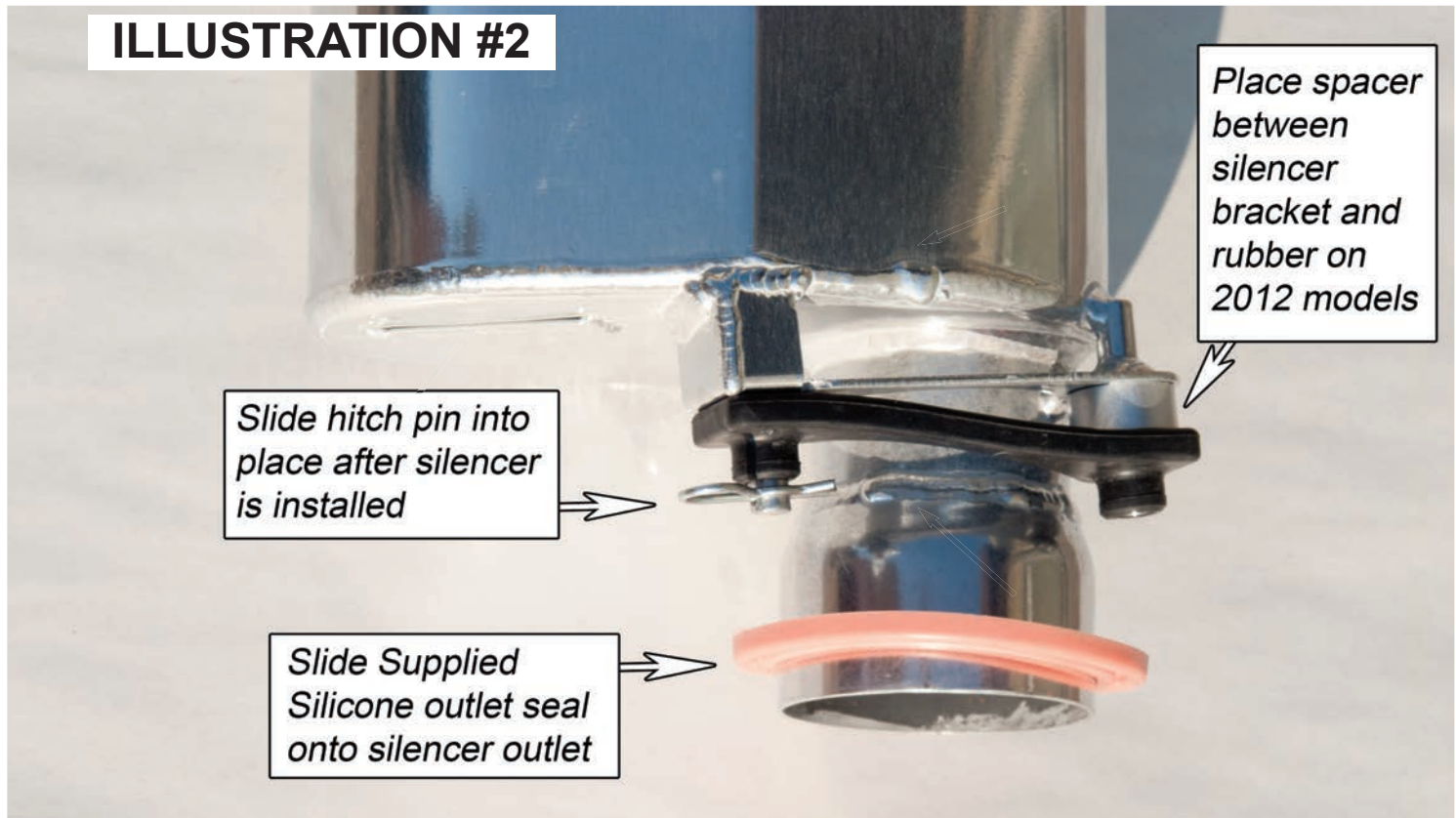
**Note:** Do not remove the pipe heat shield. It has been placed there to improve performance, running consistency, reliability, and reduce noise emissions. Check tightness of the clamps every 100 miles for the first 300 miles and periodically thereafter.

1. Remove hood and side panels.
2. Carefully remove EGT probe from pipe. Remove stock exhaust pipe and silencer (retain OEM springs, rubber dampener from the bottom of silencer and the one on the bottom of the pipe, grafoil seals and gaskets for pipe installation or replace if needed).
3. Install heat tape on the right front of the belly pan from the side panel strap to the outlet (see illustration #1).
4. Install stock rubber silencer support onto the bottom of the silencer and the supplied silicone outlet seal to the outlet of the silencer. **NOTE: Narrow side of the outlet seal needs to be towards the outside of the sled. Once installed in the sled with silicone seal inset into the stock outlet apply a high temp silicone sealer such as Permatex® Ultra Black® (PX#82180) or Loctite® RTV Silicone 598™ to glue silicone seal to silencer and stock outlet.**
5. Install OEM rubber silencer support onto bottom of SLP silencer.



**For 2012 Models:** Install aluminum silencer spacer between silencer bracket and OEM rubber damper on rear leg. (see illustration #2).

## ILLUSTRATION #2



Install silencer into the stock silencer bracket. Once the silencer is installed, the supplied hitch pin clip needs to be installed through the hole in the front leg of the silencer support bracket (see illustration #2).

6. Install stock rubber vibro support onto SLP Pipe. Install SLP Single Pipe using stock grafoil gaskets and springs. Apply anti-seize (provided) to the threads of the exhaust temperature probe and install into the pipe, torque to 12-15 ft/lbs.

7. Reinstall hood and check for pipe clearance to the hood and bulkhead. Pipe adjustment washers have been provided to shim the pipe up (if needed) to center the pipe between bulkhead and upper chassis cross tube.

8. Reinstall side panels.

### **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.



# Fuel Requirements

**Oil Recommendation:** For best performance and dependability on the 800 be sure to run very high quality oil like Red Line full synthetic Racing oil which is the first choice. The second choice would be the new Polaris "VES Gold Plus" oil that we understand is good. No other oils are recommended.

**Octane:** Minimum 91 octane pump fuel.

**Premium/Ethanol Resistor:** Make sure that the 240Ω resistor is installed if using ethanol fuel (up to 10% ethanol) or the 160Ω resistor if using non-ethanol fuel.

**NOTE:** Within the parts kit of this pipe set you will find a "Minimum 91 Octane Recommended" sticker. We recommend placing this sticker on or around the fuel cap as a friendly reminder.

**General Fuel Note:** Due to inconsistencies in quality of fuel available today the following are tips to prevent issues that may arise due to fuel.

- Make sure that the premium/ethanol resistor is set proper for the fuel being used.
- If you are unsure of your fuel quality, add a **1 oz of Lucas Octane Booster** to every gallon of fuel. This can be found at most automotive stores.

## Fuel Control Box Recommendation:

We recommend using the Power Commander 5 (PCV) SLP Part #70-138 or #70-168 PCFC fuel control box be used with the SLP Single Pipe, SLP High-Flow™ Intake Kit (P.N. 14-307) and SLP Powder Valves (P.N.14-136) combination.

### 2011 Models

- #70-224 fuel map for elevations 0-3000'
- #70-227 fuel map for elevations 3000' and above

### 2012 Models

- #70-233 fuel map for elevations 0-3000'
- #70-234 fuel map for elevations 3000' and above

If V-Force 3 Reeds are added to the above combination;

### 2011 Models

- #70-226 fuel map for elevations 0-3000'
- #70-227 fuel map for elevations 3000' and above

### 2012 Models

- #70-235 fuel map for elevations 0-3000'
- #70-234 fuel map for elevations 3000' and above

Other modifications including but not limited to: head modifications, increased timing, cylinder porting or intake modifications other than specified in the above combinations may require a different fuel map.

# Clutching for 2011-12 Polaris 800 Rush

Altitude (feet)	Drive Clutch		Stock TEAM TSS-04 Driven Clutch		TEAM Tied Clutch	
	Clutch Spring	Shift Weight	Clutch Spring	Driven Helix	Clutch Spring	Driven Helix
0-3000 ft	SLP Blue / Red #40-71	SLP MTX 71g #40-84 1g rivet outer hole 1g inner hole	TEAM Ind. Blue / Black (Stock Rush)	TEAM Ind. 64/42.36 (Stock Rush)	TEAM Ind. Black / Red #50-42	TEAM Ind. 64/60F #50-224
3000-6000 ft	SLP Blue / Red #40-71	SLP MTX 68g #40-83 3g rivet outer hole	TEAM Ind. Blue / Black (Stock Rush)	TEAM Ind. 64/42.36 (Stock Rush)	TEAM Ind. Black / Red #50-42	TEAM Ind. 64/60F #50-224
6000-8000 ft	SLP Blue / Red #40-71	SLP MTX 68g #40-83 1g rivet outer hole	TEAM Ind. Black / Purple (#50-55)	TEAM Ind. 64/42.36 (Stock Rush)	TEAM Ind. Black / Red #50-42	TEAM Ind. 64/60F #50-224
8000-10000 ft	TBA	TBA	TBA	TBA	TBA	TBA

## Running RPM 8150-8300

Specifications tested with Rush 121" x 1 1/4" studded track (96 studs), longer tracks, more aggressive studding patterns and harder pulling snow may require slight modifications to this recommended clutching.

**Important Note:** This SLP Single Pipe Kit needs to be loaded heavily on initial shift force. If you choose not to run our recommended clutching, you may experience a hesitation if you are too light on your initial shift force.

## **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 pipe temperatures exceed 1300 degrees F, it is normal for the coating to turn dull gray. These areas should also be washed and polished periodically.