



*"Setting the World's
Performance Standards!"*

**Starting Line
Products, Inc.**

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

SLP PART #09-865

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.

After completely following the setup instructions if you are experiencing difficulty SLP technical assistance is available online at the SLP website:

www.startinglineproducts.com

or by phone at 208-524-3397



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SLP Single Pipe Kit (SLP Stage 2) for 2013 Ski-Doo 800 E-TEC Summit XP & 2013-17 XM and 2013-16 XS/Renegade Models

P.N. 09-865

Effective Date:11-27-17

Kit Contents:

- | | | |
|---|--------------------------------|----------------------------|
| 2 - Large Head Rivet (#090-42) | 1 - Rivet Washer (#090-44) | 1 - Pipe (#090-8861) |
| 1 - Silencer Outlet Seal (#090-2912) | 1 - Y-pipe (#090-8814) | 1 - Silencer (#09-317) |
| 1 - 30" reflective heat tape (#090-31) | 4 - Med Springs (#090-47) | 3 - Spring Tabs (#090-697) |
| 2 - Modified, 8mm Allen Bolts (#999-0153) | 2 - Exhaust Gaskets (#090-868) | |
| 1 - Temperature Probe Plug(#09-15) | | |

Read instructions carefully and completely before attempting installation.

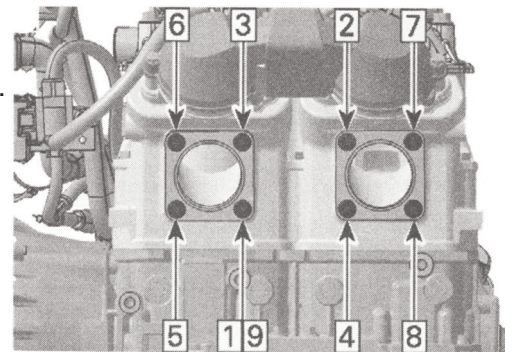
1. Remove stock muffler and exhaust pipe.
2. Heat each manifold (Y-pipe) screw for 30 seconds before loosening to prevent screw breakage.

Hint: For easier removal and installation of Y-pipe use a 6mm x 5" long 3/8" drive ball end allen SLP #20-221 with a swivel and a long extension.

3. Remove manifold. (Retain OEM springs, grafoil seals, and Y-pipe bolts for reinstallation.)

NOTE: Chase the threads with an 8mm x 1.25 tap to clean out all the Loctite.

4. Install SLP Y-pipe using supplied (2) SLP bolts on the **bottom inside** holes and OEM bolts on the other holes. Use supplied Y-pipe to cylinder gaskets. (Notched portion is for the bottom inside bolts). See torque sequence illustration.



5. From the inside of the left side footwell measure forward 2 1/2" and 1/2" in from the aluminum outlet plate. Drill a 3/16" hole and rivet into place with the provided spring tab with it facing forward (see illustration 1).

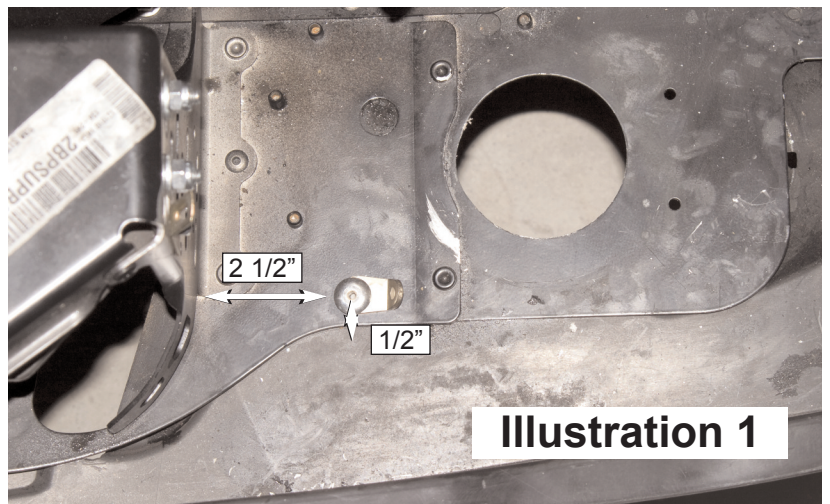


Illustration 1

6. Remove bolt on the front of chaincase. (second up from the bottom.) Install the supplied spring tab pointing up using the stock bolt (see illustration #2).

7. Place supplied orange silencer outlet seal on exhaust outlet. Install SLP lightweight silencer into stock outlet hole and spring into place using OEM springs.

8. Remove foam from the left front corner of the nose cone and cover with supplied reflective heat tape (see illustration #3).

Note XM Models Only: Install supplied spring tab (with it pointing up) on front side of the bulk-head next to stock spring tab using the existing hole on the PTO side (see illustration #4).

9. Install SLP pipe using the OEM grafoil seals between the pipe and y-pipe and the pipe and silencer. Spring into place using OEM springs on the headpipe and stinger. Using the 4 medium springs provided double spring the head pipe (see illustration #5)

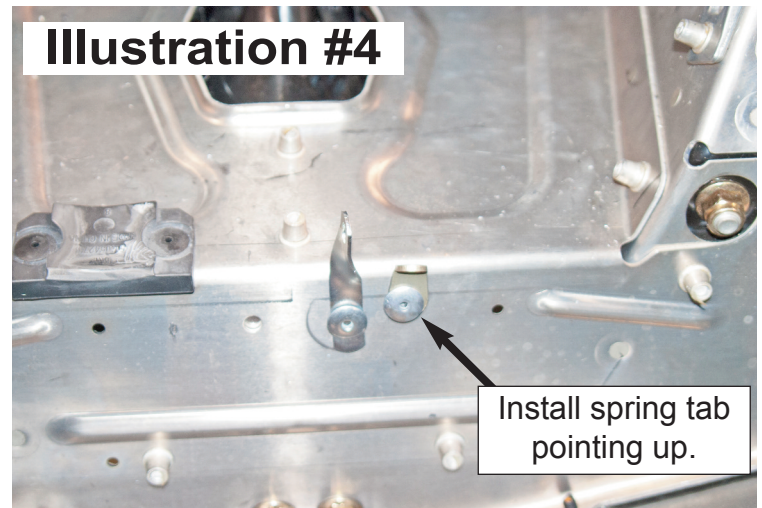
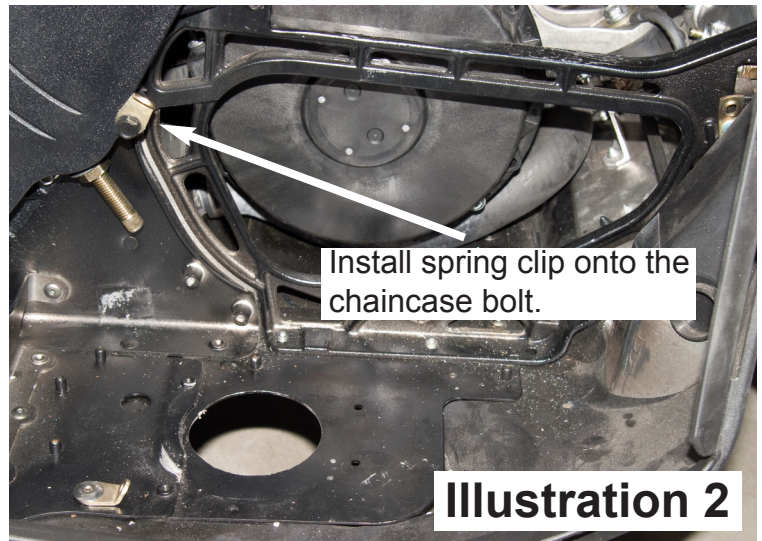
NOTE: XS Models Only install the pipe temperature plug (090-15 supplied) into the pipe.

10. Reinstall EGT probes into pipe (**Note XM/XP Models Only**) and silencer torque to 33 ft/lbs (45 Nm),

NOTE: It is recommended to fill y-pipe to pipe springs with Ultra Black Silicone (SLP Part #090-24).

Note: Do not remove the banding placed on the midsection of the pipe. It has been placed there to reduce noise emissions, improve performance and reliability. Check the tightness of the clamp every 100 miles for the first 300 miles and periodically thereafter.

Hot Air Elimination Kits XP Part # 32-555 and 32-556, XM Part #32-614 and 32-615 are also recommended.





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 inspected 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 gauge. 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 REQUIREMENT: 91 octane minimum

If running for more than a mile at wide open throttle SLP recommends the use of Lucas Racing Formula Octane Boost.

SLP Single Pipe (SLP Stage 2) Clutching for 2013-16 Ski-Doo 800 E-TEC MXZ/Renegade XS

IMPORTANT: The following clutching information has been thoroughly tested and is highly recommended for proper performance and reliability. Ramp profile, roller pin weight, drive spring and helix must be changed according to the chart if applicable for your elevation. Running any combination other than recommended may cause poor, inconsistent performance.

Altitude	Drive Clutch				Stock Driven Clutch			TEAM Tied Clutch	
	Ramp Profile	Clicker Setting (Stock Clutch)	Roller Pin Weight	Spring	Helix	Spring	Clicker Setting (Stock Clutch)	Helix	Spring
0-3000' (0-900m)	413 Part # 417222508	#2	Adj. Weight Pins #40-121 (13.8g empty, 1.5" long) 2ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 19g	Yellow/ Almond SLP #40-302	44/42 (Stock)	Stock	#3	TEAM Ind. 64-60F #50-224	TEAM Ind. Red/Blue #50-4
3-6000' (900-1525m)	415 SLP #40-201	#2	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 2ea. 2.2g set screw (0.5" long) Total Weight: 14.9g	Yellow/ Almond SLP #40-302	44/42 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55
6-8000' (1525-2743m)	415 SLP #40-201	#2	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 13.5g	Yellow/ Almond SLP #40-302	44/42 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55
8000' & Above (Above 2743m)	415 SLP #40-201	#3	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 2ea. 0.8g set screw (0.25" long) Total Weight: 12.1g	Yellow/ Almond SLP #40-302	44/42 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55

NOTE: Test sled was a 2012 Ski-Doo 800 E-TEC Renegade with stock gearing.

Running RPM 7900-8000

SLP Single Pipe (SLP Stage 2) Clutching for 2013 Ski-Doo 800 XP E-TEC Summit

IMPORTANT: The following clutching information has been thoroughly tested and is highly recommended for proper performance and reliability. Ramp profile, roller pin weight, drive spring and helix must be changed according to the chart if applicable for your elevation. Running any combination other than recommended may cause poor, inconsistent performance.

Altitude	Drive Clutch			Stock Driven Clutch		TEAM Tied Clutch			
	Ramp Profile	Clicker Setting (Stock Clutch)	Roller Pin Weight	Spring	Helix	Spring	Clicker Setting (Stock Clutch)	Helix	Spring
0-3000' (0-900m)	413 Part # 417222508 (Stock)	#2	Adj. Weight Pins #40-121 (13.8g empty, 1.5" long) 2ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 19g	Yellow/ Almond SLP #40-302	Stock	Stock	#3	TEAM Ind. 64-60F #50-224	TEAM Ind. Red/Blue #50-4
3-6000' (900-1525m)	415 SLP #40-201	#1	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 2ea. 2.2g set screw (0.5" long) Total Weight: 14.9g	Yellow/ Almond SLP #40-302	43/47 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55
6-8000' (1525-2743m)	415 SLP #40-201	#2	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 13.5g	Yellow/ Almond SLP #40-302	43/47 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55
8000' & Above (Above 2743m)	415 SLP #40-201	#3	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) Total Weight: 12.7g	Yellow/ Almond SLP #40-302	43/47 (Stock)	Stock	#5	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Blk/Purple #50-55

NOTE: Test sled was a Ski-Doo 800 E-TEC Summit 154" with 19/45 gearing.

Running RPM 7900-8000

SLP Single Pipe (SLP Stage 2) Clutching for 2013-16 Ski-Doo 800 XM E-TEC Summit

IMPORTANT: The following clutching information has been thoroughly tested and is highly recommended for proper performance and reliability. Ramp profile, roller pin weight, drive spring and helix must be changed according to the chart if applicable for your elevation. Running any combination other than recommended may cause poor, inconsistent performance.

Altitude	Drive Clutch			Stock Driven Clutch		TEAM Tied Clutch			
	Ramp Profile	Clicker Setting (Stock Clutch)	Roller Pin Weight	Spring	Helix	Spring	Clicker Setting (Stock Clutch)	Helix	
0-3000' (0-900m)	415 SLP #40-201	#1	Adj. Weight Pins #40-121 (13.8g empty, 1.5" long) 1ea. 2.2g set screw (0.5" long) Total Weight: 16g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Red/Blue #50-4
3-6000' (900-1525m)	415 SLP #40-201	#2	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 2ea. 2.2g set screw (0.5" long) Total Weight: 14.9g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#2	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Black/Purple #50-55
6-8000' (1525-2743m)	415 SLP #40-201	#3	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 13.5g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#2	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Black/Purple #50-55
8000' & 10,000 (2743-3048m)	415 SLP #40-201	#4	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) Total Weight: 12.7g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#3	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Black/Purple #50-55
10,000-12,000 (Above 3048m)	415 SLP #40-201	#4	Adj. Weight Pins #40-120 (10.5g empty, 1.25" long) No set screws Total Weight: 10.5g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#4	TEAM Ind. 66-60.36 #50-212	TEAM Ind. Black/Purple #50-55

NOTE: Test sled was a 2013 Ski-Doo 800 E-TEC Summit 154" with 19/49 gearing.

Running RPM 7900-8000

SLP Single Pipe (SLP Stage 2) Clutching for 2015-17 Ski-Doo 800 XM E-TEC Summit T3 174"

IMPORTANT: The following clutching information has been thoroughly tested and is highly recommended for proper performance and reliability. Ramp profile, roller pin weight, drive spring and helix must be changed according to the chart if applicable for your elevation. Running any combination other than recommended may cause poor, inconsistent performance.

Altitude	Drive Clutch				Stock Driven Clutch			TEAM Tied Clutch		
	Ramp Profile	Clicker Setting (Stock Clutch)	Roller Pin Weight	Spring	Helix	Spring	Clicker Setting (Stock Clutch)	Helix	Spring	
0-3000' (0-900m)	415 SLP #40-201	#1	Adj. Weight Pins SLP #40-121 (13.8g empty, 1.5" long) 1ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 16.8g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#3	TEAM Ind. 66-60.36 SLP #50-212	TEAM Ind. Red/Blue SLP #50-4	
3-6000' (900-1525m)	415 SLP #40-201	#1	Adj. Weight Pins SLP #40-120 (10.5g empty, 1.25" long) 2ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 15.7g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#2	TEAM Ind. 66-60.36 SLP #50-212	TEAM Ind. Blk/Purple SLP #50-55	
6-8000' (1525-2743m)	415 SLP #40-201	#1	Adj. Weight Pins SLP #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) 1ea. 0.8g set screw (0.25" long) Total Weight: 13.5g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#2	TEAM Ind. 66-60.36 SLP #50-212	TEAM Ind. Blk/Purple SLP #50-55	
8-10,000' (2743-3048m)	415 SLP #40-201	#2	Adj. Weight Pins SLP #40-120 (10.5g empty, 1.25" long) 1ea. 2.2g set screw (0.5" long) Total Weight: 12.7g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#3	TEAM Ind. 66-60.36 SLP #50-212	TEAM Ind. Blk/Purple SLP #50-55	
10-12,000' (above 3048m)	415 SLP #40-201	#2	Adj. Weight Pins SLP #40-120 (10.5g empty, 1.25" long) No set screws Total Weight: 10.5g	Yellow/ Almond SLP #40-302	40 (Stock)	Stock	#4	TEAM Ind. 66-60.36 SLP #50-212	TEAM Ind. Blk/Purple SLP #50-55	

NOTE: Test sled was a 2015 Ski-Doo 800 E-TEC Summit T3 173" with stock gearing.
Running RPM 7900-8000

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.