



015-09827

“Setting the World’s  
Performance Standards”

743 East Iona Road, Idaho Falls, ID 83401, (208) 529-0244 Fax (208) 529-9000

## SLP Single Pipe Set with *PicNic'R* Silencer for 2017-20 G4 Ski Doo 850 Part # 09-827

### Parts List:

- |  |   |
|--|---|
| 1 - Single Pipe (Part #090-8671)         | 1 - Probe Retention Washer (Part #090-8673)     |
| 1 - Lightweight Silencer (Part #090-331) | 1 - Inner Aluminum Heat Shield (Part #091-6057) |
| 1 - Y-pipe (Part #090-8672)              | 7 - 7" Insulated Heat Tape (Part #090-29)       |
| 1 - Outlet Plate (Part #091-6056)        | 1 - 240" Reflective Heat Tape (Part #090-240)   |
| 2 - Cooker Mount Spring (Part #090-49)   |   |
| 1 - Anti-Seize (Part #090-0146)          |   |
| 1 - Heat Sleeve (Part #09-38)            |   |
| 2 - Zip Ties (Part #999-5431)            |   |
| 3 - 3/16" Rivets (Part #999-0054)        |   |
| 1 - 91 Octane Sticker (Part #60-38)      |   |
| 1 - Oval SLP Sticker (Part #60-60)       |   |
| 1 - Instruction (Part #015-09867)        |   |

**Step 1:** Remove Hood, Side Panels, Pipe, Y-Pipe and OEM Silencer (retain all hardware).

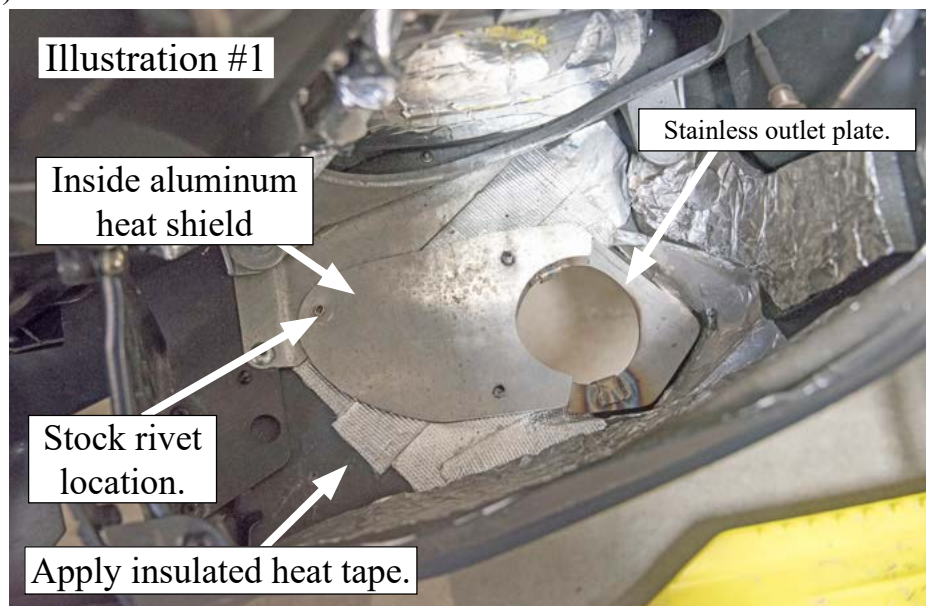
**Step 2:** Apply insulated heat tape onto inside of belly pan at rear of outlet hole (see Illustration #1).

**Step 3:** Using a 3/16" drill bit remove stock rivet behind the outlet (see Illustration #1). Install outlet plate from the bottom of sled into the outlet hole. Notched corners align with the flat of the belly pan and rear hole aligns with the hole from the removed rivet.

**Step 4:** Using the outlet plate as a guide, holding the plate tight against the belly pan. Drill outer 2 holes using a 3/16" drill bit.

**Step 5:** Install inner aluminum heat shield inside of belly pan aligning with the 3 holes and rivet into place.

**Step 6:** Apply heat tape to inside of belly pan along the side where the side panel connects and along the side panel where it connects to the belly pan (see Illustration #2 and #2a)



**Step 7:** The probe connector will need to be removed from the inside of the front bumper and relocated to the side of the belly pan. Run the wires under chassis cross braces. Measure from the bolt connecting the right side fender to the nose cone, 1" forward and 1/2" down. Drill a 3/16" hole and use the provided zip tie to install the probe connector to the belly pan (see Illustration #3). Cover silencer probe wire with heat tape.

**Note:** For 2019 model sleds you will need to remove the clip on the chaicase holding the probe wires. Then zip tie them to the coolant line in front of the chain case in order for the probe to reach the probe boss in the SLP silencer. (see Illustration #4)

**Step 8:** Disconnect speedo wire plug. Slide insulated heat sleeve onto speedo wires. Reconnect plug and straighten the insulated sleeve so that it covers the speedo wires completely in the exposed areas from the bottom side of the chaincase to the top front of the chaincase. Use zip ties to tie wires to the chaincase. Apply heat tape to the recoil housing, chaincase fill cap and tube (see Illustration #5).

**Note:** SHOT equipped sleds need to have the box removed from the chaincase. The front and the side of the box needs to be covered in insulated heat tape. Then cover the insulated heat tape with reflective heat tape. (See Illustration #6).

**Step 9:** Heat tape upper frame support. This support has coolant/chaincase overflow lines running down it (see Illustration #3)

**Step 10:** Remove stock rubber dampers from stock silencer and reinstall onto SLP Silencer. The upper damper needs the metal stem installed onto it.

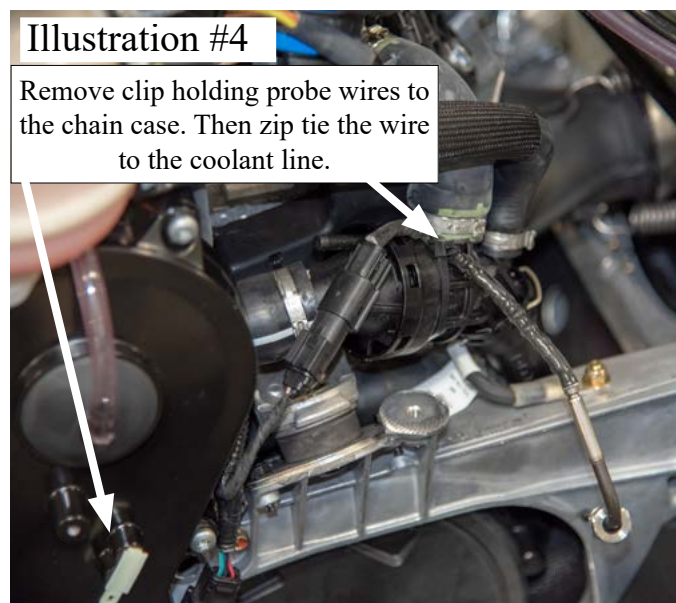
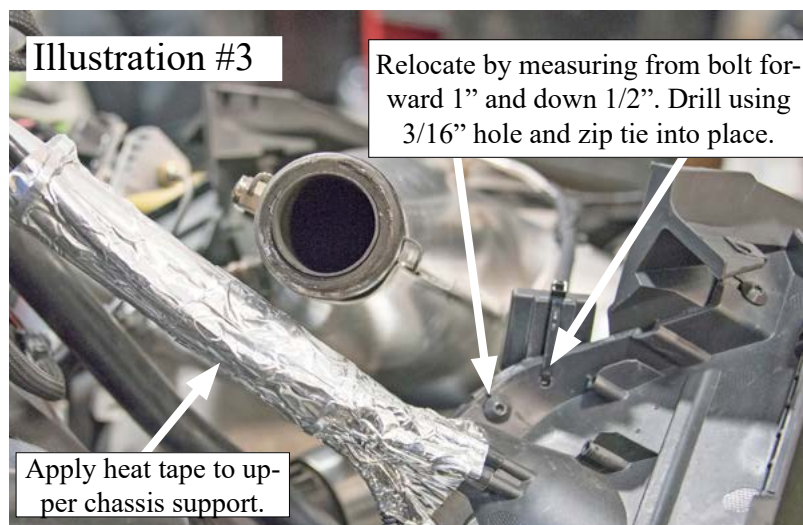
**Step 11:** Install SLP Silencer into the sled using the stock 6mm bolt, torque to 7 Nm (62 in-lbs), with spring in the upper mount and stock springs from the pipe to the silencer. Install the EGT probe into the silencer.

**NOTE:** Use anti-seize on silencer bung and the probe threads and torque to 45 Nm (33ft-lbs).

**Step 12:** On the front lower sides of the belly pan, remove the stock foam. Install reflective heat tape in its place (see Illustration #6) and then install heat tape onto the upper portion of the left side of the belly pan (see Illustration #8).

**Step 13:** On the front left underside of the hood install reflective heat tape(see Illustration #9).

**Step 14:** Using a short 2" 6mm ball end allen wrench with a swivel and long extension, install the SLP Y-Pipe.





**Step 15:** Remove rubber bumper from the stock pipe support and install it into the pipe support bracket on the SLP Pipe. Then install SLP Pipe and spring into place using the stock springs.

**Step 16:** Install the supplied SLP Retention Washer onto the pipe probe. Then install the probe into the pipe aligning the large bent tab on the retention washer with the flat spot on the side of the probe boss (see Illustration #10). After probe is torqued bend the small tabs up flush against the probe nut.

**NOTE:** Use anti-seize on pipe and silencer probe and torque to 45 Nm (33ft-lbs).

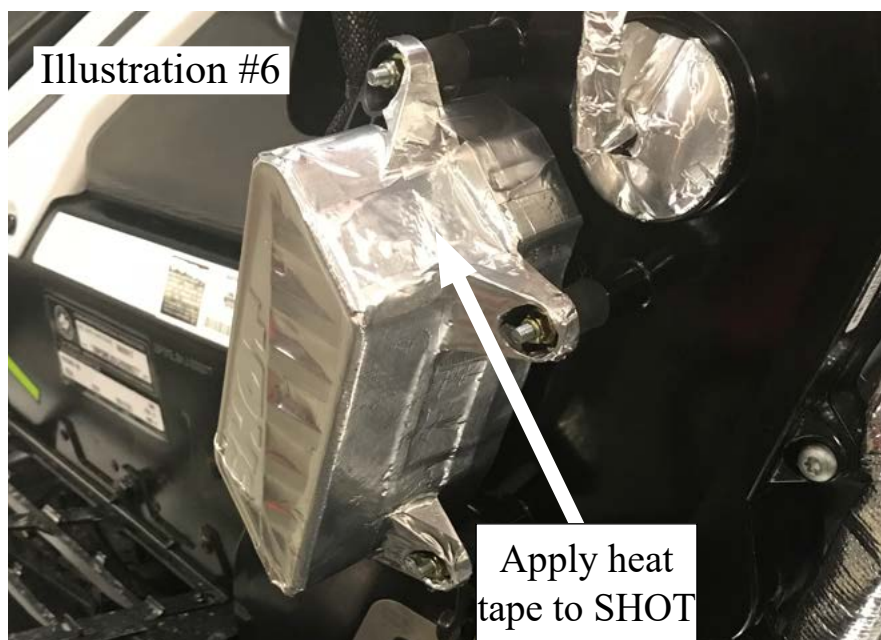
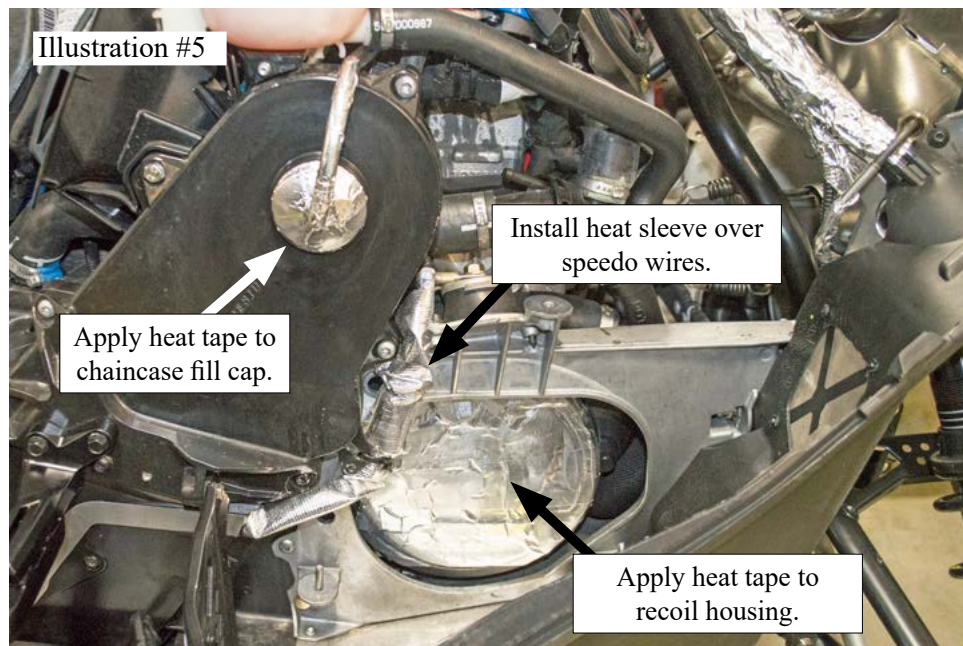
**Step 17:** Place the cooker on top of the mount. Make sure the latch is facing outward so the cooker is easily accessible. Then using the two provided springs, you will see 4 small spring alignment tabs, spring together holding the base of the preferred cooker. (see illustrations 11 & 12)

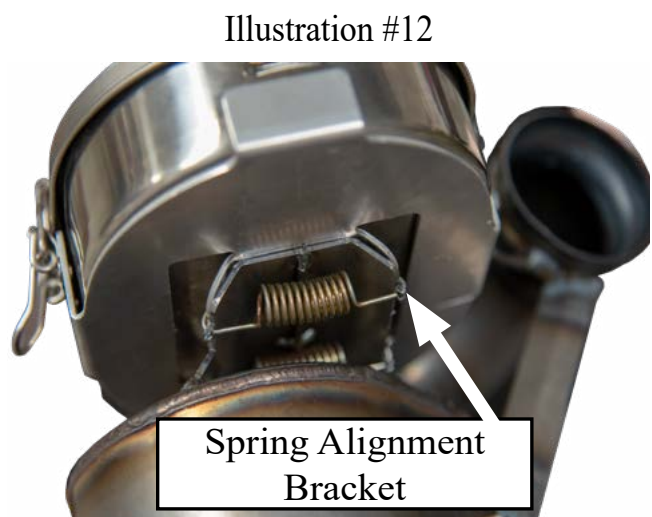
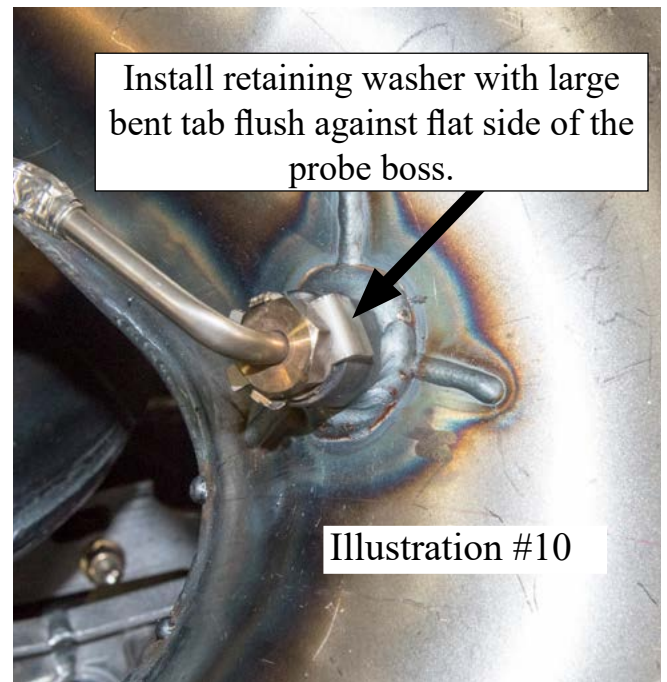
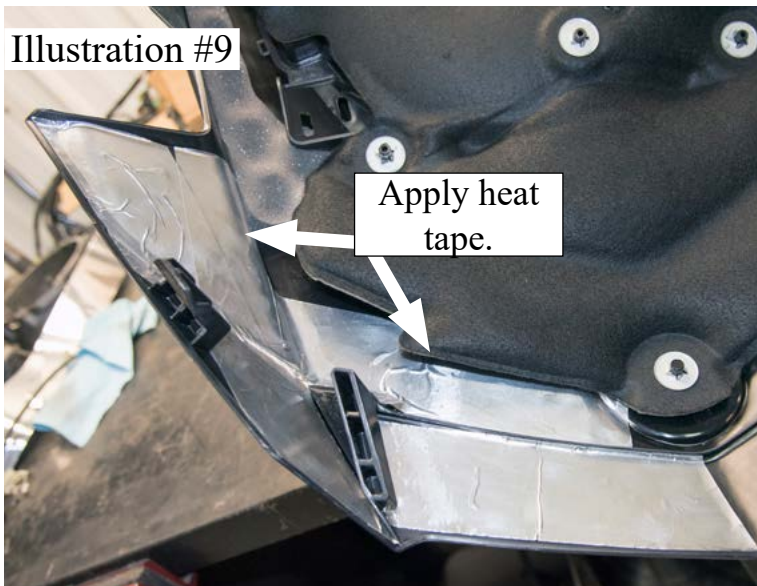
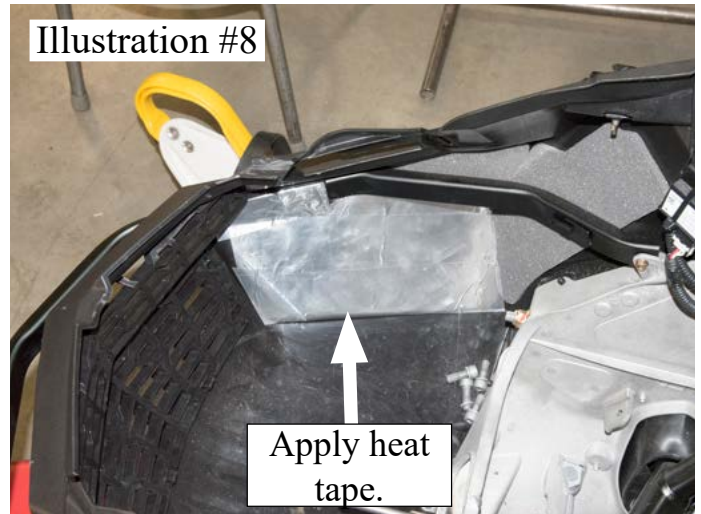
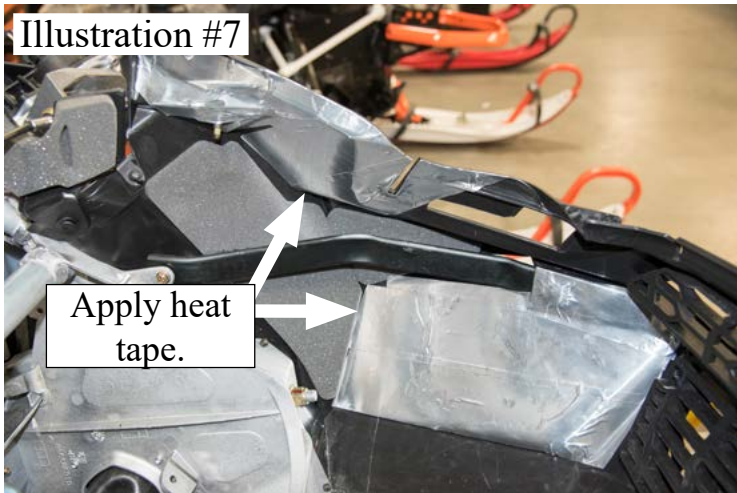
**Step 18:** Re-install hood and side panels.

**Step 19:** Install "Minimum 91 Octane Recommended" sticker on or near gas cap.

**SLP Exhaust Side Hot Air Elimination Kit (Part #32-644) HIGHLY RECOMMENDED.**

**If the sled is held wide open or ridden hard, especially in deep snow for an extended period of time. Make sure to stop and open the side panel to let heat out periodically. SLP will not warranty heat damaged components.**







# Clutching for 2017-20 Ski-Doo 850 G4 E-TEC Summit

Altitude (feet)	Drive Clutch		Stock Driven Clutch	
	Weight	Drive Spring	Helix	Driven Spring
0-3000' (0-900m)	Magnum Force (#40-161) 3 Set Screws 1 Lock Set	Yellow/Purple/Blue 165/350 (#40-233)	Stock	Stock
3-6000' (900-1525m)	Magnum Force (#40-155) 5 Set Screws 1 Lock Set	Yellow/Purple/Blue 165/350 (#40-233)	Stock	Stock
6-8000' (1525-2743m)	Magnum Force (#40-155) 4 Set Screws 1 Lock Set	Yellow/Purple/Blue 165/350 (#40-233)	Stock	Stock
8-10,000' (2743-3048m)	Magnum Force (#40-155) 3 Set Screws 1 Lock Set	Yellow/Purple/Blue 165/350 (#40-233)	Stock	Stock
10,000'-12,000' (3048-3658m)	Magnum Force (#40-155) 2 Set Screws 1 Lock Set	Yellow/Purple/Blue 165/350 (#40-233)	Stock	Stock

**Note:** Test sled was a 2017 Ski-Doo 850 E-TEC Summit 154”

## Running RPM 7800-8000

**Note:** Weight Axle Removal Kit is required to remove the ramps. (#20-232).

### 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 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.

---

### 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 water and a mild detergent. 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.

### **IMPORTANT:**

**When transporting snowmobile in an open environment (ie. open trailer or on a sled deck) SLP highly recommends covering the snowmobile. This will help keep road salt and other ice removing chemicals off of the pipe as it can attack and eat away at the coating.**