Starting Line Products, Inc.

015-098005

"Setting the World's Performance Standards"

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# SLP Single Pipe with Lightweight Silencer
## for 2023-24 G5 Ski Doo MXZ/Renegade 850
## Part #09-8005

JB 03/27/23 JM

**Parts List:**

1 - Single Pipe (Part #090-8071)
1 - SLP Lightweight Silencer (Part #090-343)
1 - 25' Roll Reflective Heat Tape (Part #092-0532)
1 - Instruction (Part #015-098005)
2 - Zip Ties (Part #999-5431)
3 - 3/16" Rivets (Part #999-0054)
3 - Rivet Washers (Part #090-44)
1 - Anti-Seize (Part #090-0146)
1 - Oval SLP Sticker (Part #60-60)
1 - Outlet Plate (Part #091-6058)
1 - Y-pipe (Part #090-8672)
1 - 9" Heat Sleeve (Part #09-41)

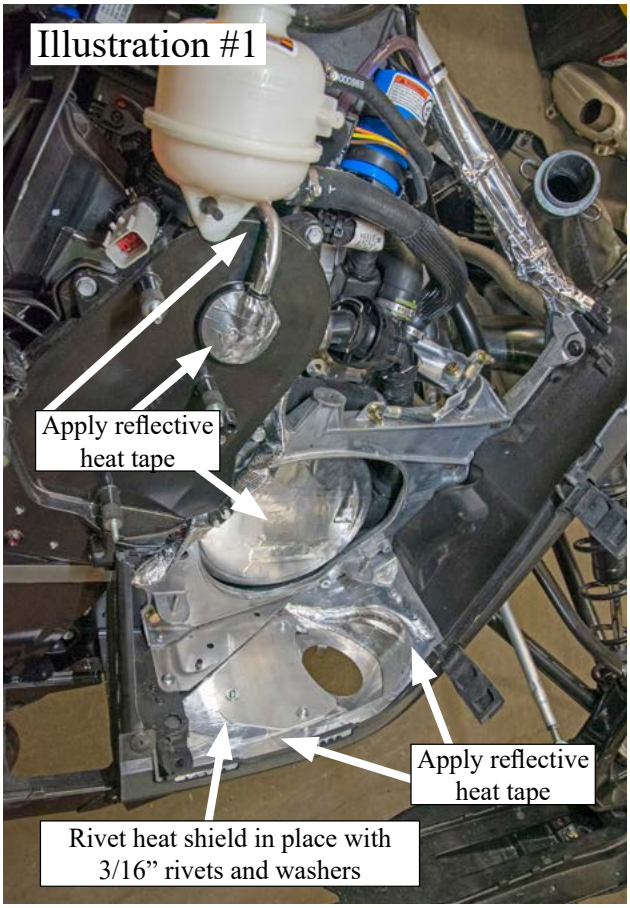
**Step 1:** Remove the right hand side panel and left hand side oil access cover. Remove the 4 hood to chassis fastening screws using a T-25 torx socket and ratchet and remove hood (retain all hardware).

**Step 2:** Carefully remove the silencer heat mats (retain heat mats). **NOTE:** The front of the lower mat is held in place on a plastic stud located on the shock tower.

**Step 3:** Disconnect silencer EGT probe from the wiring harness connection.

**Step 4:** Using 17mm wrench remove the EGT probe from the stock pipe.

**Step 5:** Remove Pipe, Y-Pipe and OEM Silencer (retain all hardware).
**NOTE:** Removal of the y-pipe is done easiest by using a short 2" 6mm ball end Allen wrench (SLP Part #20-241) with a swivel and long extension.




**Step 6:** Using a 17mm wrench, remove the EGT probe from the stock silencer.

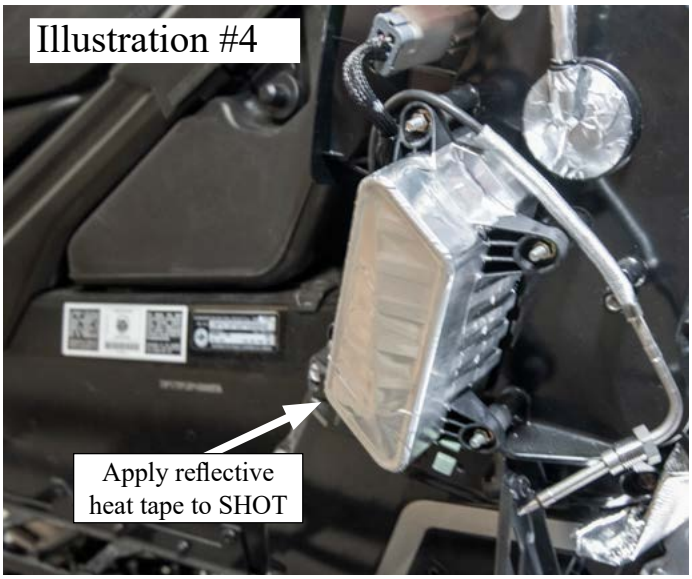
**Step 7:** Cover the belly pan area in front of and to the side of the outlet with reflective heat tape. (see Illustration #1).

**Step 8:** Roll the sled onto its left side. Using a 3/16" drill bit, remove the 3 stock rivets holding the inner outlet plate. Install outer outlet plate from the bottom of sled into the outlet hole with the alignment tangs down. This is done easiest with the outlet plate perpendicular to the hole. Insert it into the outlet hole one notched side at a time (the front of the outlet plate will be on the inside of the belly pan) (see Illustration #2). Then rotate it so the plate is flat against the bottom of the belly pan and the front of the outlet plate matches the inside of the bellypan shape and the 3 rivet holes are aligned (see Illustration #3). **Do not** rivet into place at this time. **NOTE:** The tangs that protrude down from the outlet plate will position and center the silencer outlet in the outlet hole once the silencer is installed.


**Step 9:** Install the stock inner outlet plate on the inside of the belly pan. Using the 3/16" rivets and rivet washers (provided), fasten the outlet plates by riveting from the bottom of the belly pan, through the outer outlet plate, belly pan and the inner outlet plate using the rivet washers on top of the inner outlet plate (see Illustration #1).


**Step 10:** Apply heat tape to the front and side of the SHOT in the area closest to the silencer as well as the recoil housing, chaincase fill cap and vent tube (see Illustrations #1 and #4).

**Step 11:** Disconnect speedometer wire plug. **NOTE:** To remove lower speedometer wire connector from the chaincase clip, lift out on the top tab of the clip and slide connector up.




**Step 12:** Cut the supplied insulated heat sleeve in half. Slide one half of the insulated heat sleeve up the speedometer wires and one half down the speedometer wires. Reconnect plug and straighten the insulated sleeve so that it covers the speedometer wires completely (see illustration #5). Use zip ties or the stock chaincase clip to tie wires to the chaincase.

**Step 13:** Heat tape upper frame support. This support has overflow and vent lines running down it (see Illustration #6). Rotate lines to the lower side of the frame support before applying heat tape.

**Step 14:** On the front lower sides of the belly pan, remove the stock foam. Apply heat tape the whole inside of the belly pan as shown in illustration #7 and 8.

**Step 15:** Heat tape the underside of the hood making sure to apply heat tape to the inboard side of the hood clips (see illustration #9 and 10)

**Step 16:** Remove stock rubber dampers from stock silencer and reinstall onto SLP Silencer. The upper damper needs the metal stem installed into it.

**Step 17:** Install SLP Silencer into the sled using the stock 6mm bolt with spring in the upper mount and torque to 7 Nm (62 in-lbs). Install stock springs from the pipe to the silencer. Install the EGT probe into the silencer using anti-seize on silencer bung and the probe threads and torque to 45 Nm (33ft-lbs).

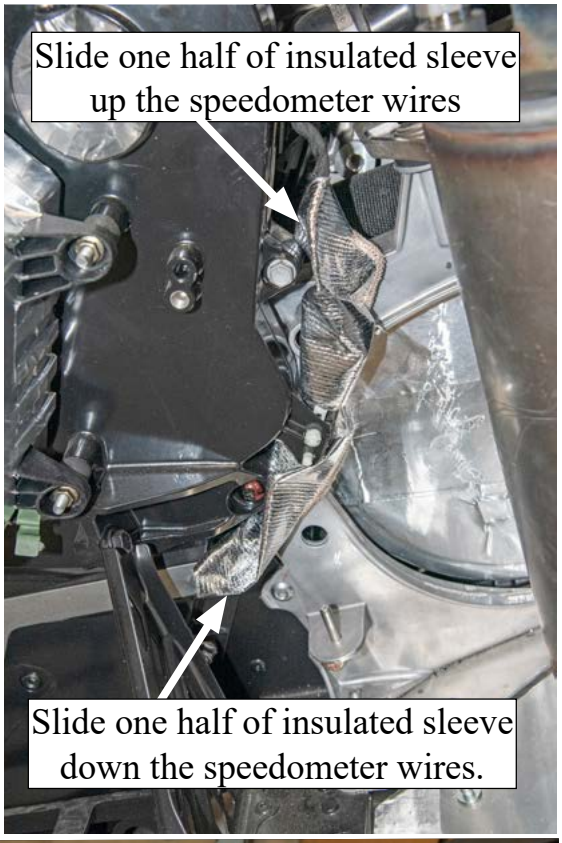
**Step 18:** Remove the silencer probe connector from the chaincase. Cut the rear locating tab off of the white connector clip (see Illustration #11). Reinstall the probe connector into the chaincase in the stock position. The removal of the tab will allow the connector to rotate for routing purposes. Route silencer EGT probe wire along top edge of chaincase. The wire will go inside SHOT start wire loop and inboard of the chaincase breather (see Illustration #12). Connect the probe wire connector.

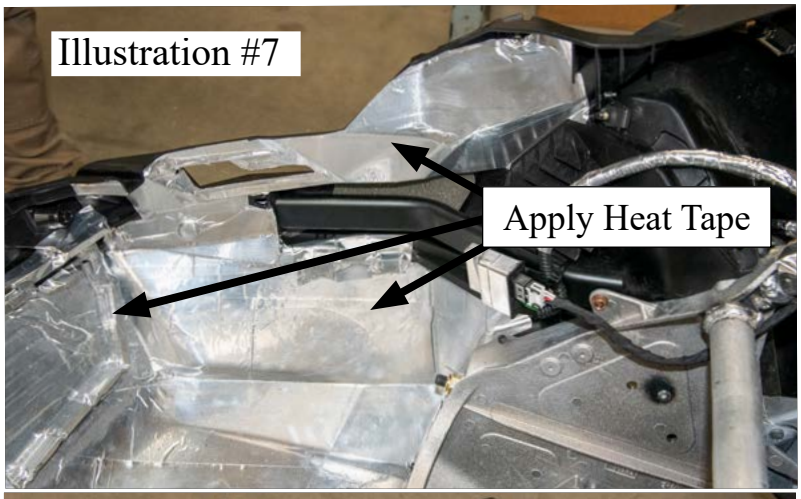
**Step 19:** Using a short 2" 6mm ball end allen wrench (SLP Part #20-241) with a swivel and long extension, install the SLP Y-Pipe.

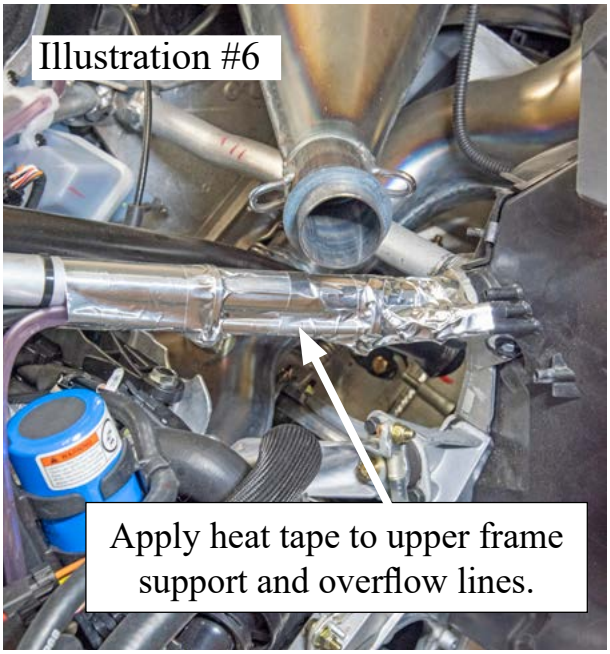
**Step 20:** Remove rubber bumper from the stock pipe support and install it into the pipe support bracket on the SLP Pipe. Then install SLP Pipe and spring into place using the stock springs.

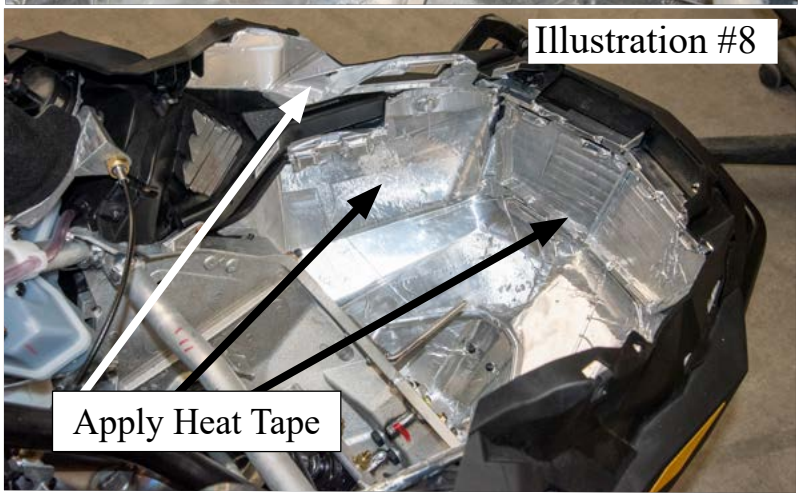
**Step 21:** Re-install silencer heat mats, hood and side panel.
**NOTE: You must re-install silencer heat mats, failure to do so may result in heat damage to the side panel.**

Illustration #5



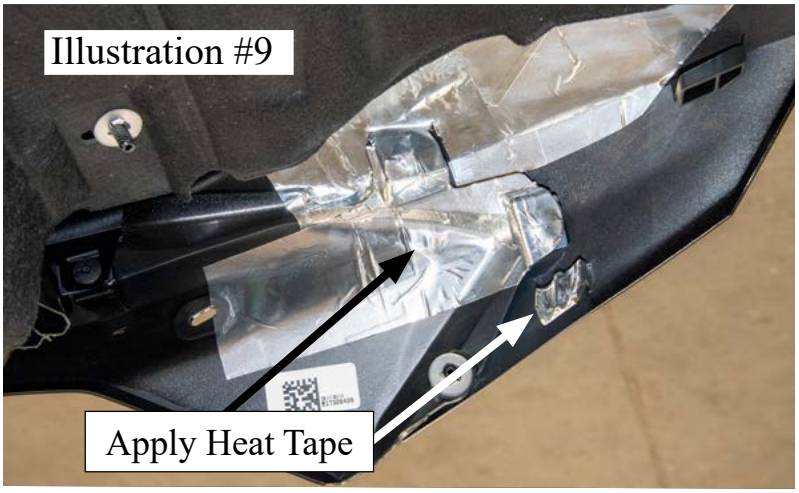



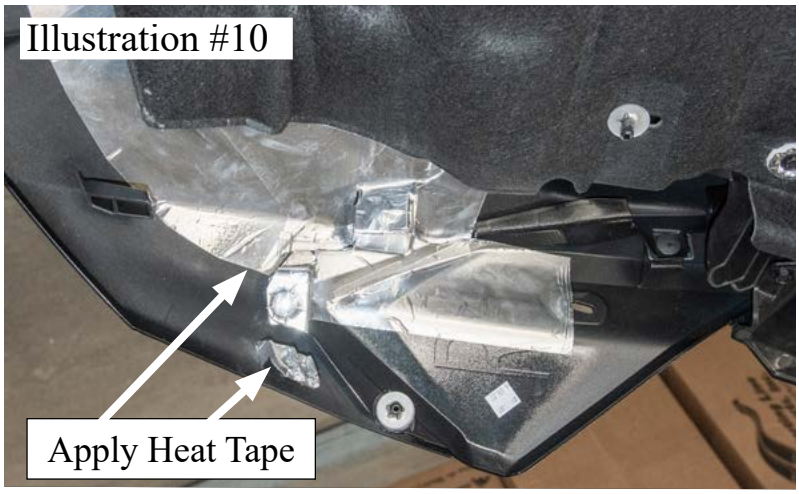



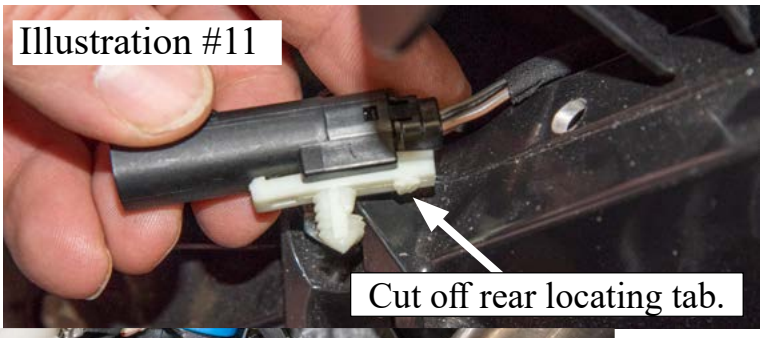



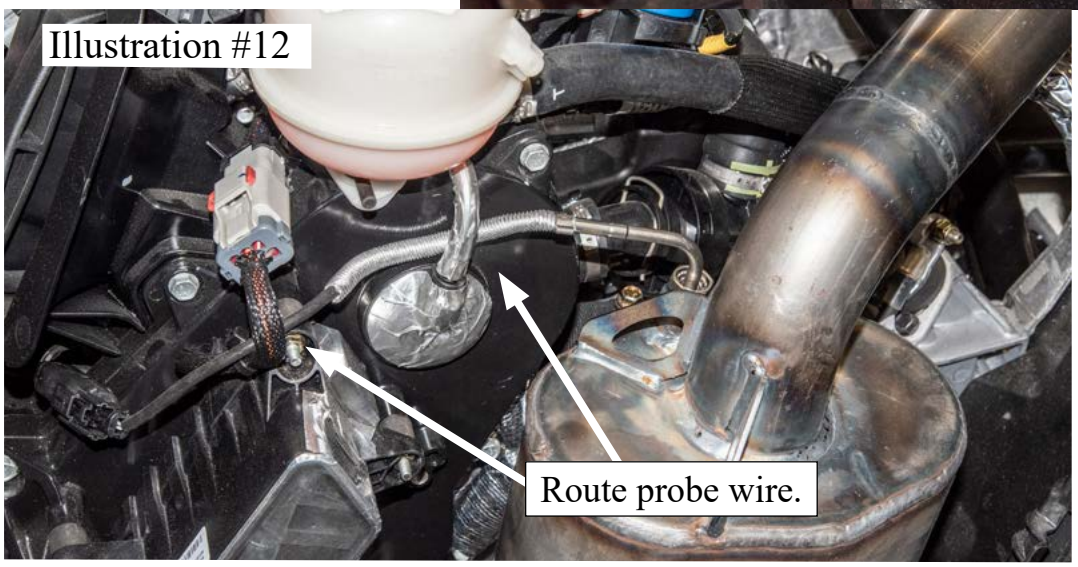
**If the sled is held wide open or ridden hard, especially in deep snow for an extended period of time. Make sure to brush snow off of the vents when you stop to allow hot air to escape. In extreme conditions it is a good idea to stop and open the side panels to let heat out periodically. SLP will not warranty heat damaged components.**

**Fuel Recommendation:** 91 octane. This is the stock octane recommendation. Using lower octane fuel will result in detonation, which the ECU automatically detects and is programmed to protect the engine which causes higher exhaust temperatures. Low octane fuel also results in lower performance.

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# Clutching for 2023-24 Ski-Doo 850 G4 E-TEC MXZ

| Altitude (feet) | Stock Drive Clutch | | Stock Driven Clutch | |
|---|---|---|---|---|
| | Weight / Pivot Bolt | Drive Spring | Helix | Driven Spring |
| 0-3000' (0-900m) | Magnum Force (#40-161)<br>4 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | 50/40<br>(#52-50/40) | Black Ski-Doo<br>157/303<br>#417127039 |

**Running RPM 7800-8000**

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

# Clutching for 2023-24 Ski-Doo 850 G4 E-TEC Renegade

| Altitude (feet) | Stock Drive Clutch | | Stock Driven Clutch | |
|---|---|---|---|---|
| | Weight / Pivot Bolt | Drive Spring | Helix | Driven Spring |
| 0-3000' (0-900m) | Magnum Force (#40-161)<br>2 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | Stock | Black Ski-Doo<br>157/303<br>#417127039 |
| 3-6000' (900-1525m) | Magnum Force (#40-155)<br>5 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | Stock | Blue Ski Doo<br>157/221<br>#417127118 |
| 6-8000' (1525-2743m) | Magnum Force (#40-155)<br>4 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | Stock | Blue Ski Doo<br>157/221<br>#417127118 |
| 8-10,000' (2743-3048m) | Magnum Force (#40-155)<br>3 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | Stock | Blue Ski Doo<br>157/221<br>#417127118 |
| 10,000'-12,000' (3048-3658m) | Magnum Force (#40-155)<br>2 Set Screws<br>1 Lock Set | Yellow/Purple/Blue<br>165/350<br>(#40-233) | Stock | Blue Ski Doo<br>157/221<br>#417127118 |

**Running RPM 7800-8000**

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

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JB 02/14/23 JM

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.

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## 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.**