1994-97 XCR 600/1993-97 XLT TRIPLE PIPE SET P.N. 09-5970 Installation Instructions

Revised 8/20/02

Read instructions carefully before installation

1-Remove stock exhaust, Y-pipe, and rear muffler support.

2-Install three exhaust flanges, marked "C" for center, "P"for PTO and "M" for mag (right).

3-Install three strips of heat insulating tape (4 1/2"x 1 1/2") over right side shock tower (see illustration 1). Install two strips of heat insulating tape to left side shock tower (see illustration 1).

NOTE: For best tape adhesion, make sure belly pan is clean and oil-free.

4-Install mag (right) side suspension tower heat shield (small formed steel plate). Position this plate on forward edge of suspension tower 2 1/2" inward from outer forward edge of suspension tower (see illustration 1). Mark and drill 3/16" holes, rivet in place.

5-Wire loom and speedo cable relocation: Remove plastic tie securing wire loom and speedo cable to left hood hinge. Relocate loom and speedo cable 1 1/2" left of hinge. Drill 3/16" hole in edge of hood and secure loom and cable with provided tie (see illustration 2). Remove OEM aluminum loom/cable support located at base of windshield, replace OEM loom/cable support with plastic tie provided. Secure loom/cable with plastic tie to rubber O-ring securing windshield. Place OEM loom/cable support removed from hood below clutch guard hinge, drill 3/16" hole in belly pan and rivet in place (see illustration 1).

NOTE: To prevent heat damage, cover wire loom and speedo cable with reflective heat tape provided in areas closest to pipe.

6-IMPORTANT NOTE: The bolt connecting steering drag link to bell crank must be installed with bolt head up to allow clearance between center pipe and bolt.

7-Exhaust outlet plate installation: Drill out rivets and remove OEM belly pan outlet plate. Install belly pan plate included in kit (spring hooks forward). Rivet in place using four large head rivets provided.

8-Pipe installation: Head pipe is marked to identify location. Install mag (right) pipe first (marked "M"), center pipe second (marked "C"), PTO left pipe third (marked "P").

NOTE: Make sure cylinder flange rings do not bind when installing pipes. Place ring end gaps 180 degrees from each other. For best seal, apply silicone sealer (Permatex #27B or equivalent) to all joints.

9-Install silencer (see illustration 3). Install all springs (see step#10). With pipe set and silencer installed, install rubber anti-vibration mount and "L" shaped silencer support (included in parts kit) to rear of silencer with 1/4" nylock nuts provided (see illustration 4) do not tighten nuts. Ensure silencer is positioned for best clearance between chain case and hood; position silencer support against foot rest and mark foot rest for 1/4" hole (to be drilled). Remove silencer, drill 1/4" hole in foot rest, reinstall silencer. Connect silencer support to vibro-insulator with nylock nut, bolt support to foot rest with 1/4" bolt and nut provided. Tighten all nuts and bolts. Install all springs.

10-Spring Installation: Eight shorter and two longer springs are supplied with kit. Six shorter springs connect cylinder flanges to pipes, one longer spring connects from front of center pipe to oval hole in the aluminum nose plate. One longer spring connects the center head pipe to PTO pipe mid section. Use OEM springs for silencer-to-pipe connection. Two short springs connect from silencer outlet to belly pan plate.

TUNING INSTRUCTIONS

LUBRICATION

Oil Injection Adjustment. Injection arm adjustment at full throttle position. Alignment mark should be advanced by 1-2 mm. This will allow slightly more oil delivery.

Type of Oil. For high-performance trail application, SLP recom-mends SLP brand XPT oil. For full mod applications, use SLP SP oil.

CARBURETOR TUNING

For XLT Stock Engine with 09-5970 Pipe Set, 34mm Carbs

Note: For stock air box: Air inlet must be slightly altered. The air intake plate is located by the gauges on the top of the hood. Remove the plate and remove the foam. Re-install plate.

Altitude	-20 & Below	-20 to +10	+10 to +40	+40 & Above
0-3000'	250	240	230	220
3-6000'	230	220	210	200
6-9000'	210	200	190	180
9-12000'	190	180	170	160

TEMPERATURE

Main Jet Note: Mag cylinder on some sleds (most common on 1993 models) require <u>one size</u> larger main jet than the above chart. Plug color will be even on each cylinder when correct.

Boxed zone altitude should drop jet needle one position (raise E clip).

Altitude	0-5000'	5000' & Above
Pilot jet	35	30
Needle jet	166 Q-2	166 Q-0
Needle	All elevation:	s: 6DP17-3 (stock), 95 XLT 600: 6DH17-3 (stock)
Slide	2.0	2.0

XLT 580 with SLP Trail Porting, stock 34mm carbs and SLP Pipes:

Use the above tuning chart and increase main jet size by one, and richen needle clip position by one

TUNING INSTRUCTIONS

For XLT 580/600, stock engine, 38mm round slide carbs and SLP pipes (airbox in place and unaltered with foam removed from the air inlet plate located by the gauges).

TEMPERATURE

Altitude	-20 & Below	-20 to +10	+10 to +40	+40 & Above
0-3000'	290	280	270	260
3-6000'	270	260	250	240
6-9000'	240	230	220	210
9-12000'	220	210	200	190
Altitude	0-5	000' 5000' & /	Above	
Pilot jet Needle jet Needle Slide Air Screw	6DI 2.5	45 Q-0 247 P- P10-3 6DP10 2.5 turn 1.5 tur	-3	

Bored 38mm Round Slide Carbs to 39.2mm: Increase main jet by one size over the above chart.

For 1996 XLT RMK with ACCS.

TEMPERATURE

	-20 & Below 220	-20 to +10 210	+10 to +40 190	+40 & Above 180	
Pilot jet Needle jet Needle	35 (stock) 480 Q-0 6DP17-3 (stock)				
For 1997 X	LT RMK with ACCS.				

TEMPERATURE

	-20 & Below 280	-20 to +10 260	+10 to +40 240	+40 & Above 230
Pilot jet Needle jet Needle Air Screw	50 (stock) 480 P-2 (stock) 6EJ3-2 (stock) 3/4 turn (stock)			

TUNING INSTRUCTIONS

For XCR 600, stock engine, 38mm carbs and SLP pipes (airbox in place and unaltered with foam removed from the air inlet plate located by the gauges).

Note: For 1997 XC 600, increase main jet size one larger than chart.

TEMPERATURE

Altitude	-20 & Below	-20 to +10	+10 to +40	+40 & Above
0-3000'	290	280	270	260
3-6000'	270	260	250	240
6-9000'	240	230	220	210
9-12000'	220	210	200	190

Note: For oxygenated fuels, increase main jet size by one.

Altitude	0-5000'	5000' & Above
Pilot jet Needle jet	35 Q-2	35 P-8
Needle	6DH7	6DH7
Slide	2.5	2.5
Air Screw	1/2 turn	1/2 turn

CLUTCH TUNING

XLT 580/600 with SLP Pipe Set #09-5970 Peak Running RPM: **8900-9100**

ELEVATION	0-3000'	3-6000'	6000' and Higher
Primary Spring	Blue #7041080	Blue #7041080	Blue #7041080
Primary Weight	10M White #1321527	10M Red #1321530	P1 #5630089 w/ Max Clip #40-4
Secondary Spring	Black 40-3 #3 hole	Black 40-3 #3 hole	Black 40-3 #3 hole
Helix	40-40/36	40-38/34	40-38/34

XCR 600 with SLP Pipe Set #09-5970 Peak Running RPM: **8900-9100**

ELEVATION	0-3000'	3-6000'	6000' and Higher
Primary Spring	Blue #7041080	Blue #7041080	Godl #7041148
Primary Weight	10M White #1321527	10M Red #1321530	P1 #5630089 w/ Max Clip #40-4
Secondary Spring	Black 40-3 #3 hole	Black 40-3 #3 hole	Black 40-3 #3 hole
Helix	40-42/34	40-42/34	40-42/34

(High-Altitude Deep Snow Riding: 38/34 Helix Prefered)

8/21/02

TUNING INSTRUCTIONS

IMPORTANT NOTES: Failure to perform the following adjustments could cause loss of performance and "boggy" low end power.

1. **Belt side clearance**. Be sure the belt side clearance is not excessive. Recommended .010" to .030" between belt and clutch face. Re-shim spider if needed. Excessive clearance may cause a low end bog.

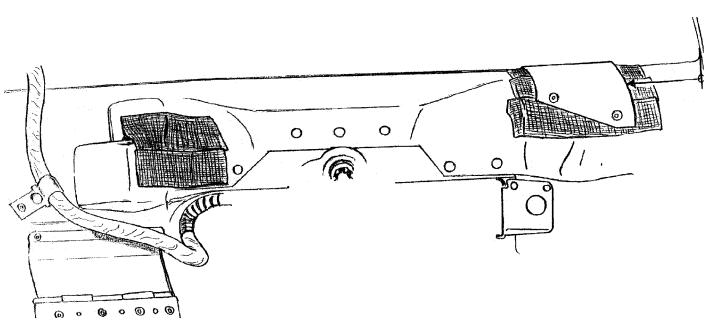
2. Type of belt. Use only SLP-approved performance belts or stock Polaris brand belts.

3. **Tuning variable**. Due to rider's weight and conditions sled is used in, heavier or lighter clutch weights and/or springs may have to be used to achieve proper running RPM.

4. **Belt free-play**. Proper belt free-play is very important. To achieve best performance, driven shims can be added or subtracted (or cam adjustment on later models) to adjust belt as tight as possible without creeping at an idle.

IGNITION TIMING

For best performance, ignition timing should be checked. Timing should be 20 degrees at 7500 RPM, 28 degrees at 3000 RPM + 1 degree. High RPM timing is most important. Refer to Polaris service information for proper timing procedure.



ILLUSTRATIONS



III. 2



III. 3



III. 4