

1976

***Liquid Cooled
Kit Manual***

Polaris®

INTRODUCTION

The following pages of this manual outline the procedure for installation and modification of the 1976 Polaris Liquid Cooled Modification Kit.

All information and specifications are printed to the best of our knowledge at this time. "Changes and adjustments usually are required after meeting our competition and to suit various track conditions" so there can and will be some changes to this manual. To enable us to send this new information to you it is essential that the registration form accompanying this manual be filled out in full and mailed to Polaris.

Good luck and successful racing to all of you.

Competitive Snowmobile Eng. Dept.

POLARIS
A Division of Textron
Roseau, Minnesota 56751

250 LIQUID COOLED KIT COMPONENTS

2	3082302	Gasket (cylinder)
2	3082494	Guide stud (cylinder to crankcase) 10 mm
6	3082495	Stud (cylinder to crankcase) 10 mm
2	3082531	Piston complete
2	3082532	Piston ring
1	3082533	Cylinder complete
1	3082534	Cylinder head
1	3082535	Gasket (head)
1	3082501	Cover (cylinder head water jacket)
1	3082502	Gasket (cylinder head water jacket cover)
4	3080667	Bolt (head water jacket cover) 6 mm x 25 mm
8	3082505	Thick flat washer (head water jacket cover) 8 mm
4	3080078	Flat washer (head water jacket cover) 6 mm
8	3080530	Lock washer (head water jacket cover) 8 mm
4	3080077	Lock washer (head water jacket cover) 6 mm
8	3082506	Nut (head water jacket cover) 8 mm
8	3082507	Thick flat washer (head cover, head & cylinder) 10 mm
8	3080050	Lock washer (head cover, head & cylinder) 10 mm
8	3080047	Nut (head cover, head & cylinder) 10 mm
1	3082508	Thermostat cover
1	3082509	Gasket (thermostat cover)
3	3080109	Bolt (thermostat cover) 6 mm x 40 mm
3	3080078	Flat washer (thermostat cover) 6 mm
3	3080077	Lock washer (thermostat cover) 6 mm
2	3082068	Gasket (exhaust)
1	3082511	Drain plug with 'O' ring
1	3082512	'O' ring (drain plug)
1	3082513	Bypass hose
2	3082514	Bypass hose clamp
2	3082515	Bypass hose fitting with 'O' ring
2	3082512	'O' ring (bypass hose fitting) NOTE: Same as drain plug
1	3082516	Water pump, including pulley
1	3082517	Water pump belt
1	3082518	Gasket (water pump)
5	3082519	Nut (water pump) 6 mm
5	3082520	Thick flat washer (water pump) 6 mm
5	3080077	Lock washer (water pump) 6 mm
1	3082521	Water pump drive pulley (crankshaft)
1	3082522	Belt guide (outer)
1	3082523	Spacer (drive pulley belt guide)
1	3082524	Recoil spacer/water pump cover
1	3082525	Starting pulley
2	3082526	Guide bolt (drive pulley, starting pulley, pulley guide) 8 mm

2	3082527	Bolt (starting pulley, drive pulley, pulley guide) 6 mm
2	3080142	Flat washer (starting pulley, drive pulley, pulley guide) 8 mm
2	3080078	Flat washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3080530	Lock washer (drive pulley, starting pulley, pulley guide) 8 mm
2	3080077	Lock washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3082536	VM34SC Carburetor
2	3082439	VM34SC Carburetor adapter
2	3082011	VM34SC Carburetor band assy.
2	3082573	Main jet No. 200
2	3081771	Main jet No. 400
2	3070152	Spark plug (N57G)
1	4110042	Thermostat
1	2870340	Gauge - temperature
1	2511116	Cap - pressure
1	2511115	Weldment - surge tank
1	5410259	Hose - pump inlet - 30"
1	5410260	Hose - engine outlet - 5"
1	5410261	Hose - tank outlet - 28"
1	5410262	Hose - crossover - 52"
6	7080183	Clamp - hose (band type)
40	7621425	3/16" pop rivet
1	2511119	Extrusion - weld. r.h.
1	2511118	Extrusion - weld. l.h.
1	1321291	Drive clutch assy.
2	1260389	Weldment - exhaust flange
1	1260395	Pipe - exhaust - PTO
1	1260396	Pipe - exhaust - MAG
2	3081078	Spring - exhaust
3	7080184	Clamp - worm gear hose
5	3082554	Stud (water pump)

340 LIQUID COOLED KIT COMPONENTS

2	3082302	Gasket (cylinder)
2	3082494	Guide stud (cylinder to crankcase) 10 mm
6	3082495	Stud (cylinder to crankcase) 10 mm
2	3082496	Piston complete
2	3082497	Piston ring
1	3082498	Cylinder complete
1	3082499	Cylinder head
1	3082500	Gasket (head)
1	3082501	Cover (cylinder head water jacket)
1	3082502	Gasket (cylinder head water jacket cover)
4	3080667	Bolt (head water jacket cover) 6 mm x 25 mm
8	3082505	Flat washer (head water jacket cover) 8 mm
4	3080078	Flat washer (head water jacket cover) 6 mm
8	3080530	Lock washer (head water jacket cover) 8 mm
4	3080077	Lock washer (head water jacket cover) 6 mm
8	3082506	Nut (head water jacket cover) 8 mm
8	3082507	Thick flat washer (head cover, head & cylinder) 10 mm
8	3080050	Lock washer (head cover, head & cylinder) 10 mm
8	3080047	Nut (head cover, head & cylinder) 10 mm
1	3082508	Thermostat cover
1	3082509	Gasket (thermostat cover)
3	3080109	Bolt (thermostat cover) 6 mm x 40 mm
3	3080078	Flat washer (thermostat cover) 6 mm
3	3080077	Lock washer (thermostat cover) 6 mm
2	3082068	Gasket (exhaust)
1	3082511	Drain plug with 'O' ring
1	3082512	'O' ring (drain plug)
1	3082513	Bypass hose
2	3082514	Bypass hose clamp
2	3082515	Bypass hose fitting with 'O' ring
2	3082512	'O' ring (bypass hose fitting)
		NOTE: Same as drain plug
1	3082516	Water pump, including pulley
1	3082517	Water pump belt
1	3082518	Gasket (water pump)
5	3082519	Nut (water pump) 6 mm
5	3082520	Thick flat washer (water pump) 6 mm
5	3080077	Lock washer (water pump) 6 mm
1	3082521	Water pump drive pulley (crankshaft)
1	3082522	Belt guide - outer
1	3082523	Spacer (drive pulley belt guide)
1	3082524	Recoil spacer/water pump cover
1	3082525	Starting pulley
2	3082526	Guide bolt (drive pulley, starting pulley, pulley guide) 8 mm

2	3082527	Bolt (drive pulley, starting pulley, pulley guide) 8 mm
2	3080142	Flat washer (drive pulley, starting pulley, pulley guide) 8 mm
2	3080078	Flat washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3080530	Lock washer (drive pulley, starting pulley, pulley guide) 8 mm
2	3080077	Lock washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3082528	VM38SC Carburetor
2	3082439	VM38SC Carburetor adapter
2	3082011	VM38SC Carburetor band assy.
2	3080171	Main jet No. 220
2	3081772	Main jet No. 420
2	3070152	Spark plug (N57G)
1	4110042	Thermostat
1	2870340	Gauge - temperature
1	2511116	Cap - pressure
1	2511115	Weldment - surge tank
1	5410259	Hose - pump inlet - 30"
1	5410260	Hose - engine outlet - 5"
1	5410261	Hose - tank outlet - 28"
1	5410262	Hose - crossover - 52"
6	7080183	Clamp - hose (band type)
40	7621425	3/16" pop rivet
1	2511119	Extrusion - weld. r.h.
1	2511118	Extrusion - weld. l.h.
1	1321292	Drive clutch assy.
2	1260389	Weldment - exhaust flange
1	1260393	Pipe - exhaust - PTO
1	1260394	Pipe - exhaust - MAG
2	3081078	Spring - exhaust
3	7080184	Clamp - worm gear hose
5	3082554	Stud (water pump)
4	3082062	Bolt (rubber mount)

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440 LIQUID COOLED KIT COMPONENTS

2	3082296	Gasket (cylinder)
2	3082539	Guide stud (cylinder to crankcase) 10 mm
6	3082540	Stud (cylinder to crankcase) 10 mm
2	3082541	Piston complete
2	3082542	Piston ring
1	3082543	Cylinder complete
1	3082544	Cylinder head
1	3082545	Gasket (head)
1	3082546	Cover (cylinder head water jacket)
1	3082547	Gasket (cylinder head water jacket cover)
4	3080667	Bolt (head water jacket cover) 6 mm x 25 mm
8	3082505	Thick flat washer (head water jacket cover) 8 mm
4	3080078	Flat washer (head water jacket cover) 6 mm
8	3080530	Lock washer (head water jacket cover) 8 mm
4	3080077	Lock washer (head water jacket cover) 6 mm
8	3082506	Nut (head water jacket cover) 8 mm
8	3082507	Thick flat washer (head cover, head & cylinder) 10 mm
8	3080050	Lock washer (head cover, head & cylinder) 10 mm
8	3080047	Nut (head cover, head & cylinder) 10 mm
1	3082508	Thermostat cover
1	3082509	Gasket (thermostat cover)
3	3080109	Bolt (thermostat cover) 6 mm x 40 mm
3	3080078	Flat washer (thermostat cover) 6 mm
3	3080077	Lock washer (thermostat cover) 6 mm
2	3082297	Gasket (exhaust)
1	3082511	Drain plug with 'O' ring
1	3082512	'O' ring (drain plug)
1	3082550	Bypass hose
2	3082514	Bypass hose clamp
2	3082515	Bypass hose fitting with 'O' ring
2	3082512	'O' ring (bypass hose fitting)
		NOTE: Same as drain plug
1	3082516	Water pump, including pulley
1	3082517	Water pump belt
1	3082518	Gasket (water pump)
5	3082519	Nut (water pump) 6 mm
5	3082520	Thick flat washer (water pump) 6 mm
5	3080077	Lock washer (water pump) 6 mm
1	3082521	Water pump drive pulley (crankshaft)
1	3082522	Belt guide (outer)
1	3082523	Spacer (drive pulley belt guide)
1	3082551	Recoil spacer/water pump cover
1	3082525	Starting pulley
2	3082526	Guide bolt (starting pulley, drive pulley, pulley guide) 8 mm

2	3082527	Bolt (drive pulley, starting pulley, pulley guide) 6 mm
2	3080142	Flat washer (drive pulley, starting pulley, pulley guide) 8 mm
2	3080078	Flat washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3080530	Lock washer (drive pulley, starting pulley, pulley guide) 8 mm
2	3080077	Lock washer (drive pulley, starting pulley, pulley guide) 6 mm
2	3082552	VM44SC Carburetor
2	3082340	VM44SC Carburetor adapter
2	3082341	VM44SC Carburetor band assy.
2	3080415	Main jet No. 300
2	3082401	Main jet No. 500
2	3070152	Spark plug (N57G)
1	4110042	Thermostat
1	2870340	Gauge - temperature
1	2511116	Cap - pressure
1	2511115	Weldment - surge tank
1	5410259	Hose - pump inlet
1	5410260	Hose - engine outlet
1	5410261	Hose - tank outlet
1	5410262	Hose - crossover
6	7080183	Clamp - hose (band type)
40	7621425	3/16" pop rivet
1	2511119	Extrusion - weld. r.h.
1	2511118	Extrusion - weld. l.h.
1	1321293	Drive clutch assy.
1	1260391	Pipe - exhaust - PTO
1	1260392	Pipe - exhaust - MAG
2	1260390	Weldment - exhaust flange
2	3081078	Spring - exhaust
3	7080184	Clamp - worm gear hose
1	2010013	Throttle flipper
1	7080185	Throttle cable
1	5430001	Bar grip
4	3082062	Bolt (rubber mount)
5	3082554	Stud (water pump)

LIQUID COOLED MODIFICATION KIT INSTALLATION INSTRUCTIONS

NOTE: Before attempting installation of kit, read instructions thoroughly, making note of special tools necessary to accomplish installation. Have available the 1976 Polaris shop manual and TX Starfire Owners Technical Manual.

Plan on at least one full day and possible more for complete installation time.

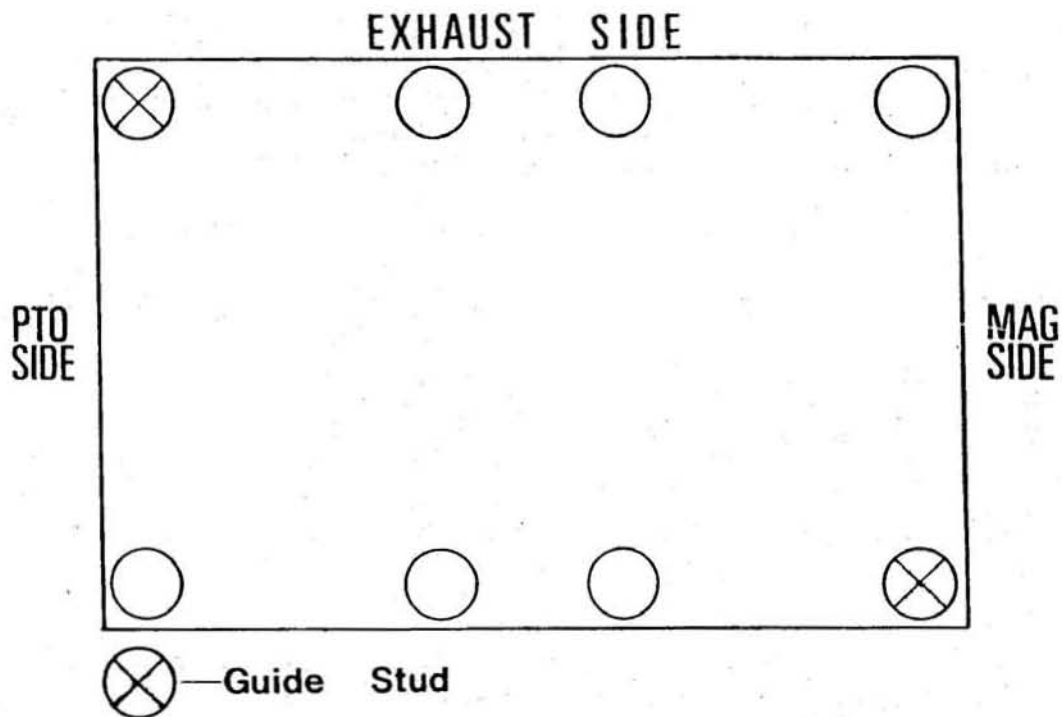
1. Carry out all chassis preparation items outlined in TX Starfire Owners Technical Manual.
2. Remove engine, exhaust system and clutches and set aside.
3. Remove fuel tank from machine.
4. Remove slide rail.
5. Cut hose opening hole in left hand foot brace and deburr. Use template 'A'. A sabre saw and router will be needed.
6. Turn unit upside down (with track up).
7. Mark center points of heat exchanger inlet and outlet. Use templates 'B' right and 'B' left. Cut 1 1/4" holes with hole saw or sabre saw.
8. Remove the three (3) rivets holding the front suspension mounting pads to the running board. With rivets removed, cut suspension mounting pad off with hack-saw just above bend line radius or approximately 3/8" down from bottom of lower suspension mounting hole.
9. With holes drilled for head exchanger, place heat exchanger on unit by visual location. Mark or scribe a line around exchanger. Remove exchanger and cut away nose pan and remove all obstruction so that exchanger can lay flat on under side of running board.
10. Place exchanger on unit and clamp in place. Drill rivet holes (3/16" drill) using holes in exchanger as a guide.
11. Rivet exchanger in place with the 3/16" pop rivets supplied in kit. (Rivet from top of running board down, and from outside of tunnel in.)
12. Turn sled upright.
13. Using template 'C' cut oblong hole in left side of console for water lines with sabre saw.
14. Using 2 1/8" hole saw and template 'D' cut hole in center of console for temperature gauge and install gauge.
15. Install slide rail and fuel tank.

With your engine now out of the chassis, completely disassemble and clean and dry all parts thoroughly. In a dry, safe place store your cylinder heads, head gasket, cylinders, pistons, piston rings, carburetors, muffler and clutch. The parts can be used at a later date if you should want to change the engine back to the original.

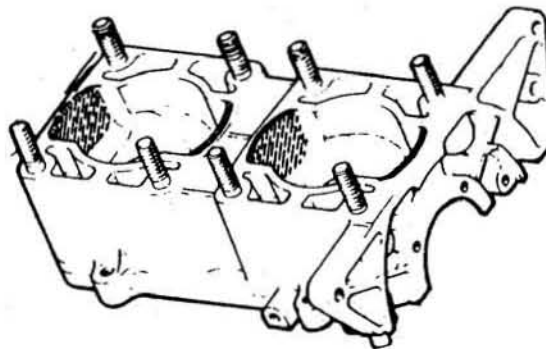
Installation Procedure:

16. Remove cylinder base studs and install the new ones supplied in the kit.

NOTE: You will notice that you have six (6) studs of one type and two (2) of another type. The two of the different type are guide studs and must be installed as per diagram no. 1 on next page.



17. Using the top half of the crankcase, the transfer port inlets will have to be mated to the cylinder:
 - A. Set top half of crankcase on the cylinder.
 - B. Use a scribe and mark the crankcase using the cylinders as a guide.
 - C. Grind the crankcase to match your scribe line and polish.

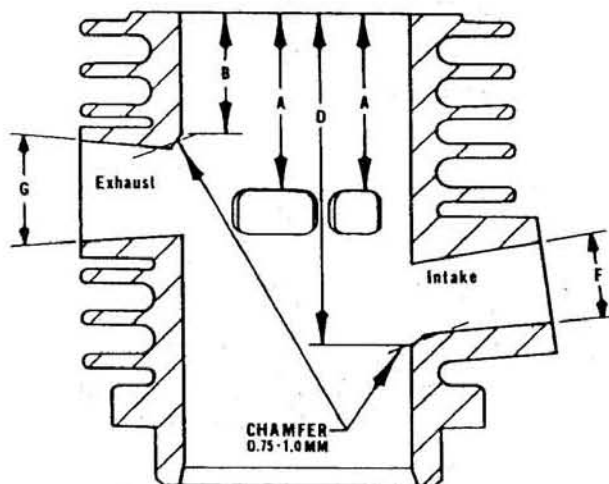
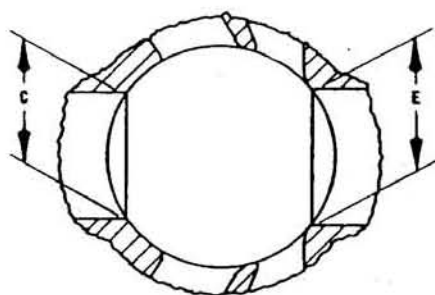


18. At this point the cylinders must be modified. If you are not equipped to do this or do not have the experience in this area, find someone who does.

KIT SPECIFICATIONS

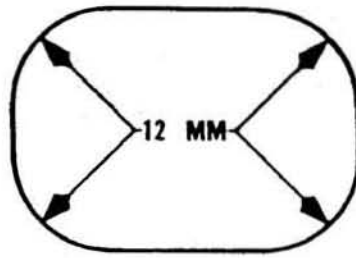
	STOCK			MAXIMUM RECOMMENDED ALTERATION		
	250	340	440	250	340	440
A. Transfer height (to top) [MM]	43.0	43.0	47.0	43.0	43.0	47.0
B. Exhaust port height (to top) [MM]	30.0	30.0	32.0	27.0	27.0	28.5
C. Exhaust port width (bowstring) [MM]	33.0	39.0	43.0	37.0	43.0	50.0
D. Intake port height (to bottom) [MM]	89.7	89.8	98.0	92.0	93.0	102.5
E. Intake port width (bowstring) [MM]	39.0	45.0	48.0	39.0	45.0	48.0
F. Intake ID at flange	39	39	41	39	42	46
				to match carb adapter		
G. Exhaust ID at flange	37	41	41	42	42	45
				to match exhaust manifold		
Cylinder head volume [CC]	11.9	18.0	19.6	11.0	18.0	19.5
Ignition timing [B.T.D.C.]	20°	20°	20°	18°	18°	18°
Maximum H.P. RPM				10,000-10,000-9500	10,250	10,250
Recommended spark plug				N57G	N57G	N57G

Refer to diagram no. 2



NOTE: The above port dimensions include the chamfer which should be .75 – 1.0 mm.

Refer to the TX Starfire Owners Technical Manual for assistance in laying out ports. When laying out and grinding the exhaust ports try to maintain the same port shape and radius as diagram no. 3. Intake ports should be layed out and ground to maintain the same port shape and radius as supplied.



When measuring the transfer ports you may notice a variation of height of approximately 0.5 MM from the specification. It is not mandatory that these ports be the same, however a performance increase can be obtained if these port heights are ground to the same dimensions.

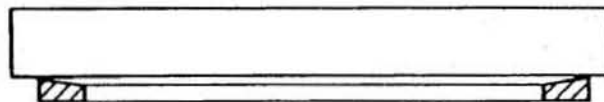
Do not exceed the recommended specification.

Be certain to grind and polish all chamfers to a fine finish.

Install new exhaust flanges, gaskets and carburetor rubber mounts. Match to cylinder by grinding and polish exhaust port.

19. Wash in cleaning solvent the crankcase, new cylinder, cylinder heads, pistons, piston rings, and piston pin and blow dry. Wash the above mentioned pieces again in hot soapy water, rinse and blow dry.
 20. Check the crankshaft run-out. Refer to TX Starfire Owners Technical Manual page 39.
 21. Assemble crankshaft in crankcase and install new seals at both ends if worn or damaged.
- NOTE: Do not install ignition unit at this time.
22. Match new cylinder base gasket to crankcase and install.
 23. Install pin bearings and spacers on connecting rod and oil.
 24. Install new piston on the rod (stamped 'F' on piston toward flywheel).
 25. Install new rings on piston.

NOTE: Rings are the 'keystone' type and are beveled to the inside.
This bevel must be to the top of the piston. Refer to diagram below:

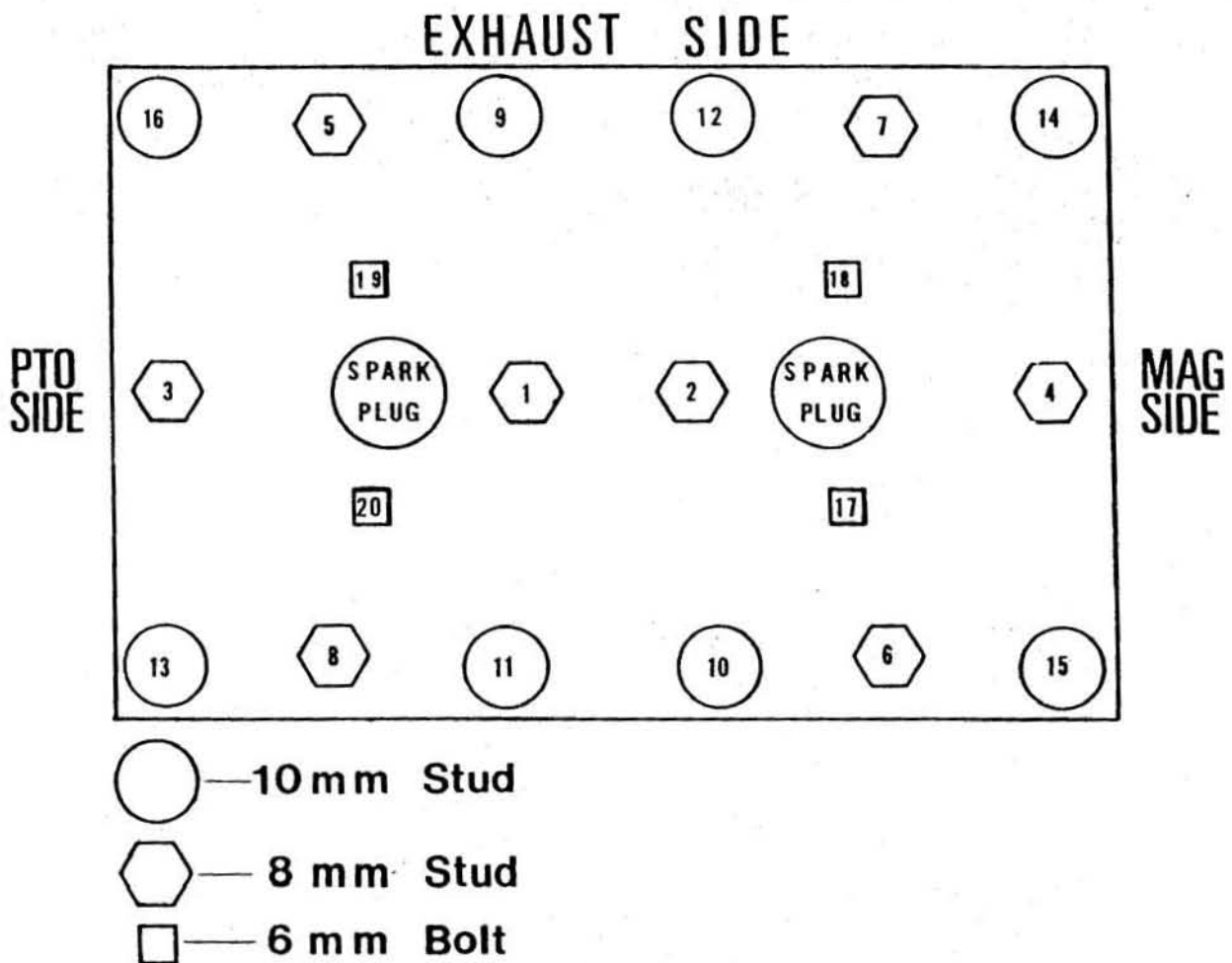


Oversized pistons and rings are available if you should need them. (See data below.) The 0.25 and 0.50 MM oversized pistons will not make the engine over-bored or illegal.

	Polaris No.	Piston Marking	Bore Size in Inches
250 standard piston	3082531	STD L	2.0827 – 2.0839
0.25 mm oversized	3082555	25 L	2.0925 – 2.0937
0.50 mm oversized	3082561	50 L	2.1024 – 2.1035
340 standard piston	3082496	STD L	2.4322 – 2.4335
0.25 mm oversized	3082556	25 L	2.4421 – 2.4433
0.50 mm oversized	3082562	50 L	2.4520 – 2.4531
440 standard piston	3082541	STD L	2.6661 – 2.6673
0.25 mm oversized	3082557	25 L	2.6760 – 2.6772
0.50 mm oversized	3082563	50 L	2.6858 – 2.6870
250 standard ring	3082532	STD	
0.25 mm oversized	3082558	25	
0.50 mm oversized	3082564	50	
340 standard ring	3082497	STD	
0.25 mm oversized	3082559	25	
0.50 mm oversized	3082565	50	
440 standard ring	3082542	STD	
0.25 mm oversized	3082560	25	
0.50 mm oversized	3082566	50	

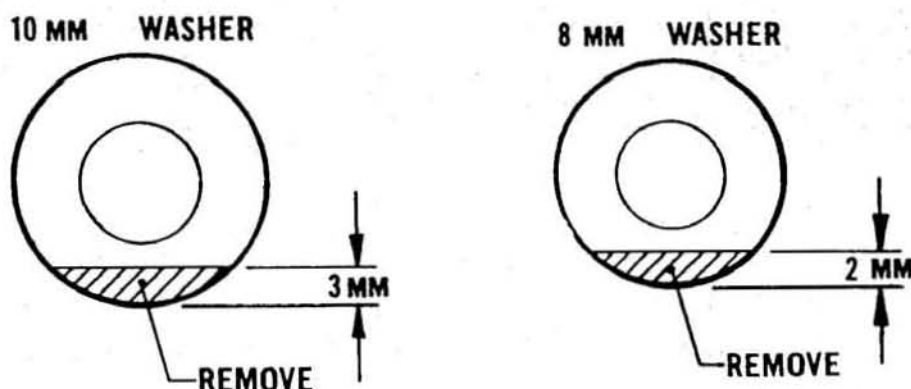
26. Apply a thin coat of oil to piston, ring and cylinder bores and slip cylinder over pistons, using your fingers to fit the ring.
27. Install new head gasket with large diameter of metal on the gasket towards the cylinder, then install cylinder head, cylinder head cover gasket and cylinder head cover.
28. Install the four (4) 6 mm x 25 mm bolts, flat washers and lock washers. Refer to diagram no. 5. Do Not Tighten.

CYLINDER HEAD BOLT & TORQUE PATTERN



29. Install the eight (8) thick flat washers (8 mm), eight (8) lock washers (8 mm) and 8 mm nuts on the 8 mm studs. Refer to diagram no. 5. Do Not Tighten.

Note: The 8 mm flat washer for torque location No. 8 must be modified as the diagram shown (Diagram No. 6). Locate flat washer so not to interfere with thermostat housing.



30. Install the eight (8) thick 10 mm flat washers, 10 mm lock washers and 10 mm nuts on the 10 mm studs. Refer to diagram no. 2. Do Not Tighten.

Note: The 10 mm flat washer for torque location No. 13 must be modified as the diagram shown (Diagram No. 6). Locate flat washer so not to interfere with thermostat housing.

31. Torque all head and cylinder mounting studs and bolts as per diagram.

Torque Specifications:

6 mm:	4 - 6 ft. lbs. or 49 - 78 in. lbs.
8 mm:	15 - 18 ft. lbs.
10 mm:	16 - 29 ft. lbs.

WARNING: After two hours of running on engine, cylinder heads must be retorqued with engine COLD.

32. Install thermostat cover gasket, thermostat and cover. Use the three (3) 6 mm x 40 mm bolts, 6 mm flat washers and 6 mm lock washers.
33. Install stator plate and flywheel, tighten and torque.
34. With flywheel in place, install your dust cover and new spacer (inner belt guide), water pump drive pulley and outer belt guide.
35. Install the new starter pulley.
36. Install the two (2) guide bolts 8 mm, 8 mm flat washers and 8 mm lock washers through drive assembly and starter pulley where holes are drilled out to 8 mm and secure to flywheel.
37. Install the two (2) 6 mm bolts, 6 mm flat washers and 6 mm lock washers.
38. Place water pump gasket and water pump over mounting studs.
39. Place the five (5) thick 6 mm flat washers, 6 mm lock washers and 6 mm nuts on water pump mounting stud. Do Not Tighten.

40. Place the water pump drive belt on pulleys and adjust.

Belt deflection at midspan: 8 – 10 mm (.3 – .4")

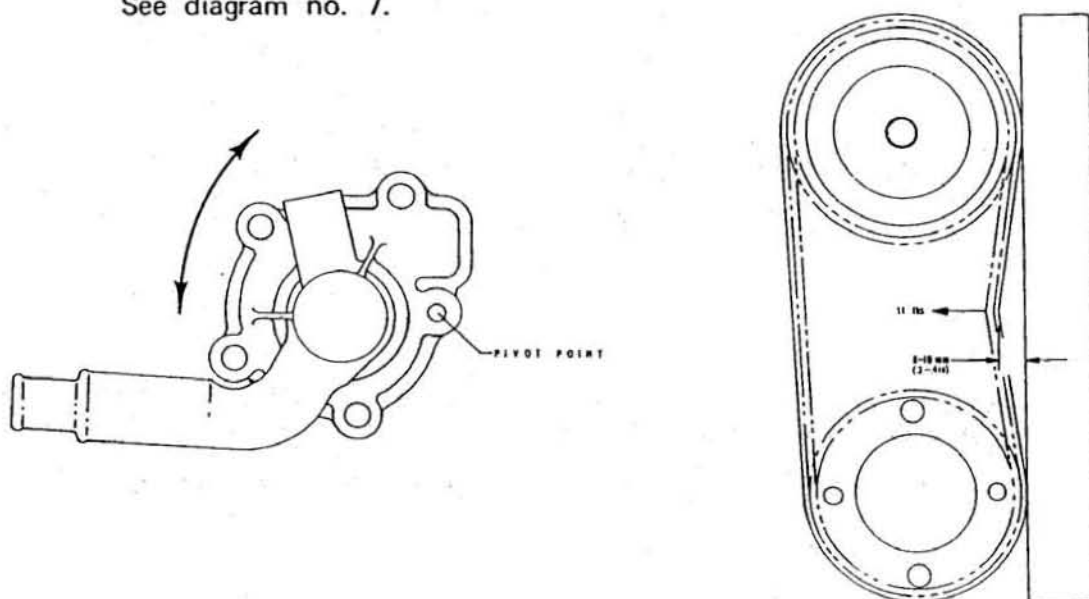
Applied load at midspan: 5 kg. (11 lb.) Refer to diagram.

Belt deflection must not exceed the above specified limits during 360 degree rotation of crankshaft or premature belt failure will occur.

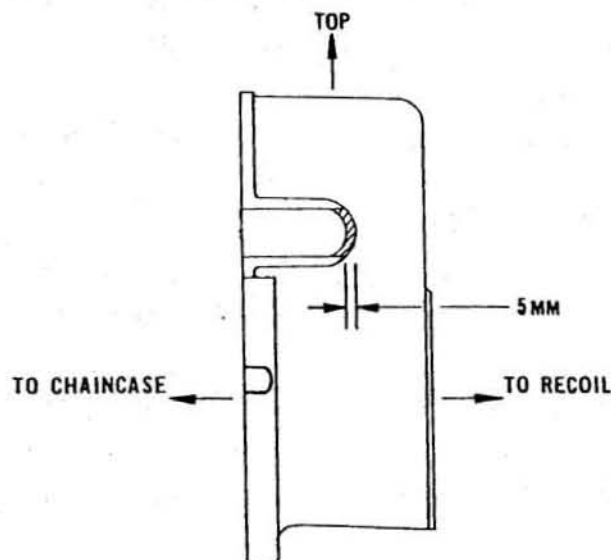
If the belt deflection exceeds the specified limitations, remove the four nuts retaining the drive sprocket and adjust until it is concentric with the crankshaft. It may be necessary to enlarge the two small holes in the drive sprocket (i.e. for guide bolts) to reduce eccentricity.

If a dial indicator is available, check eccentricity of drive sprocket before installing drive belt. The maximum permissible eccentricity is .011 inches. Once obtained, install belt as indicated above.

Note: Belt can be adjusted by moving water pump either forward or back. See diagram no. 7.



41. Install o-rings and bypass hose fittings in water pump and cylinder head.
42. Install bypass hose and use clamps supplied.
43. Modify the flywheel and water pump cover (recoil housing) as the diagram (Diagram No. 8) and install to engine. This modification is necessary for proper clearance between cover and water pump inlet.



44. Install new carburetor rubber mounts, clamps, and carburetors to cylinder.
45. Install new clutch.
46. Mount engine in chassis.
47. Route the cross-over hose (52") through console and behind chain case and attach to the exchanger fittings closest to the tunnel, using the band type clamps.
48. Route the inlet hose (30") behind the chain case and attach to the right hand exchanger fitting, using a band type clamp, and to the water pump inlet, using a worm gear type clamp.
49. Attach the outlet hose (5") to the thermostat housing, using a worm gear type clamp, and to the upper fitting on the surge tank, using a band type clamp.
50. Route the surge tank outlet hose (28") through the console, attach to the surge tank lower fitting and to the left hand exchanger fitting with band type clamps.
- * On 440 models only —new throttle cable, throttle lever and handle bar grip as supplied must be installed. The stock cable and lever on the 250 and 340 are adequate for kit use.
51. Using template 'E' on the upper left hand bulkhead brace, drill and slot a 3/16" x 3/4" hole.
52. Using a worm gear clamp, thread it through the slot and attach the surge tank outlet hose to the clamp and brace. Tighten. This will keep the surge tank from excessive movement.
53. Connect thermostat sender to engine.
54. Purchase a good quality "permanent type" anti-freeze and mix at a 50:50 ratio with water.
55. Fill engine and cooling system and install radiator cap.
NOTE: Special care must be taken in filling the system. "Air locks" can occur. Entire cooling system capacity is approximately one gallon. Check after running for a short period.
56. Install new N57G spark plugs.
57. Cut holes in nose pan for pipes to go through using a router.
58. Fill fuel tank with premium gas and oil at a mixture of 16:1.
59. Set ignition timing:

250	=	18° BTDC
340	=	18° BTDC
440	=	20° BTDC
60. Break in engine as outlined in TX Starfire Owners Technical Manual.

CLUTCH SPECIFICATIONS

	<u>250</u>	<u>340</u>	<u>440</u>
Clutch Model	1321291	1321292	1321293
Springs:			
Part No.	7041036	7041036	7041036
I. D. Color	Dayglow pink	Dayglow pink	Dayglow pink
Wire dia.	.171"	.171"	.171"
Weights:			
Part No.	5630151	5630145	5630146
I. D. Letter	Z1	L1	Q1
Weight in grams	29.5	34.5	38.0

Optional springs and weights are outlined in the TX Starfire Owners Technical Manual along with tuning procedures.

Clutches must be adjusted for maximum RPM —

250	—	10,000 — 10,250
340	—	10,000 — 10,250
440	—	9500

CARBURETOR SPECIFICATIONS

	<u>250</u>	<u>340</u>	<u>440</u>
Carb model (Mikuni)	VM34SC	VM38SC	VM44SC
Main jet in carb	No. 250	No. 320	No. 620
Turns open	1/2	1/2 —	1/2
Optional main jets supplied	No. 200, 300	No. 220, 420	No. 500
Pilot jet	40	60	35
Jet needle	6DH4-3	6DH4-3	7DH2-3
Cutaway	2.0	1.5	1.5
Air screw (turns open)	1/2	1	1 1/2

Your Mikuni carburetors are equipped with a adjustable high speed main jet. This adjustment will change approximately 100 main jet sized in its one (1) turn.

Example: The 340 carburetor (38 MM) has installed a No. 320 main jet. With the adjustment completely closed you will have the equivalent of a No. 270 main jet. If opened 1/2 turn you will have the equivalent of a No. 320 main jet. If opened one (1) turn you will have the equivalent of a No. 370 main jet.

As these adjustments are very important for maximum engine power your know-how will be the key for race wins.

DISCLAIMER OF WARRANTY

In accepting delivery of this modification kit, the buyer acknowledges that he has, before entering into an agreement to purchase, examined the contents and components as fully as he desires and further understands:

- 1) The modification kit and its individual components are being sold on an "as is" and "with all faults" basis.
- 2) The entire risk as to the quality and performance of the components or the machine on which they are installed is with the buyer.
- 3) These components were manufactured for racing and should they prove defective following the purchase, the buyer assumes the entire cost of all necessary servicing or repair.

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