

GENERAL INFORMATION

1997 Model Identification

	Indy Trail RMK	Indy Classic	Indy Classic Touring	Indy 500
	0970961	0973865	0973365	0972764
Engine Type Engine Model Number	Fan Twin EC50PM05	LC Twin EC50PL17	LC Twin EC50PL19	LC Twin EC50PL17
Displacement (cc)	488	488	488	488
Bore x Stroke (mm)	72x60	72 x 60	72 x 60	72 x 60
Carburetion/Throttle Body	2Mikuni/ACCS VM34SS Slide	2 Mikuni VM38SS Slide	2 Mikuni VM34SS Slide	2 Mikuni VM38SS Slide
Oil Injected	Standard	Standard	Standard	Standard
Ignition	CDI	CDI	CDI	CDI
Alternator Output	12V 200W 2P	12V 200W 2P	12V 200W 2P	12V 200W 2P
Length (in./cm.)	114/289.6	108/121.9	115/292.1	108/274.3
Width (in./cm.)	43.5/110.5	48/121.9	48/121.9	46.5/118.1
Height (in./cm.)	46/116.8	49.5/125.7	51.5/130.8	41/104.14
Ski Center Distance (in./cm.)	38/96.5	42.5/107.9	42.5/107.9	41/104.14
Track Width (in./cm.)	15/38.1	15/38.1	15/38.1	15/38.1
Track Length Overall (in./cm.)	133.5/339.1	121/307.3	133.5/339.1	121/307.3
Fuel Capacity (U.S. gas./Imp. gal./liters)	10.7/8.9/40.5	10.7/8.9/40.5	10.7/8.9/40.5	10.7/8.9/40.5
Recommended Fuel	87 Octane Non-Oxygenated or 89 Octane Oxygenated	87 Octane Non-Oxygenated or 89 Octane Oxygenated	87 Octane Non-Oxygenated or 89 Octane Oxygenated	87 Octane Non-Oxygenated or 89 Octane Oxygenated
Front Suspension	Parallel Link Trailing Arm IFS	IFS	IFS	IFS
Rear Suspension	XTRA 10	XTRA 12	XTRA 12	XTRA 10
Brake Type	Hydraulic Disc	Hydraulic Disc	Hydraulic Disc	Hydraulic Disc
Storage	Rear Seat/Toolbox	Rear of Seat Toolbox	Rear of Seat Toolbox	Rear of Seat Toolbox
Speedometer	Standard	Standard	Standard	Standard
Tachometer	Standard	Standard	Standard	Standard
Electric Fuel Gauge	Option	Standard	Standard	Option
Accessory Lights	Oil/Brake Acc High Beam	Oil/Brake Temp High Beam	Oil/Brake Temp High Beam	Oil/Brake Temp High Beam
Electric Start	Option	Standard	Standard	Option
Handwarmers/Thumbwarmer	Single Heat/Std	Hi-Lo/Std	Hi-Lo/Std	Hi-Lo/Std
Seat	Long/RMK	Long	2 Up/Tour	Short
Storage Rack	Option	Option	Option	Option
Tow Hitch	Option	Option	Option	Option

1997 Models (continued)

Machine Model	Engine Model	Spark Plug		Plug Gap MM/Inches
Indy XLT Touring/ XLT LTD	EC58PL09	BR8ES	RN-3C	0.7/.028
Indy XLT SP / XLT LTD SP	EC58PL12	BR9ES	RN-2C	0.7/.028
Indy 600 XCR/SE	EC59PL01	BR9ES	RN-2C	0.7/.028
Indy RXL	EC65PL05	BR9ES	RN-2C	0.7/.028
Indy Ultra/SP/Touring	EC68PL01	BR9ES	RN-2C	0.7/.028
Indy Ultra SPX/SPX SE	EC68PL03	BR9ES	RN-2C	0.7/.028
Indy 700 XC	SN70LCDCSP-01	BR9ES	RN-2C	0.7/.028
Indy 700 SKS	SN70LCDCSP-01	BR9ES	RN-2C	0.7/.028
Indy 700 RMK	SN70LCDCSP-02	BR9ES	RN-2C	0.7/.028
Indy Storm/SE	EC80PL05	BR9ES	RN-2C	0.7/.028
Indy Storm RMK	EC80PL04	BR9ES	RN-2C	0.7/.028

1998 Models

Machine Model	Engine Model	Spark Plug		Plug Gap MM/Inches
		NGK	Champion	
Lite Models	EC34-2PM02A	BR8ES	RN-3C	0.7/.028
Sport/TranSport/Sport Touring/XCF	EC44-3PM024	BR8ES	RN-3C	0.7/.028
Super Sport	EC50PM061	BR8ES	RN-3C	0.7/.028
Trail/Trail Touring	EC50PM043	BR8ES	RN-3C	0.7/.028
Trail RMK	EC50PM051	BR8ES	RN-3C	0.7/.028
440 XCR	SN44-44LCDCSP-01	BR9ES	RN-2C	0.7/.028
440 LC	EC45PL091	BR8ES	RN-3C	0.7/.028
500 RMK	EC50PL161	BR8ES	RN-3C	0.7/.028
500	EC50PL171	BR8ES	RN-3C	0.7/.028
Classic	EC50PL171	BR8ES	RN-3C	0.7/.028
Classic Touring	EC50PL191	BR8ES	RN-3C	0.7/.028
WideTrak LX	EC50PL201	BR8ES	RN-3C	0.7/.028
XLT SP	EC58PL140	BR8ES	RN-3C	0.7/.028
XLT LTD	EC58PL130	BR8ES	RN-3C	0.7/.028
XLT Touring	EC58PL130	BR8ES	RN-3C	0.7/.028
XLT Classic	EC58PL150	BR8ES	RN-3C	0.7/.028
600 XC	SN60-70LCDCSP-01	BR9ES	RN-2C	0.7/.028
600 XCR	EC59PL020	BR9ES	RN-2C	0.7/.028
600 RMK	SN60-70LCDCSP-02	BR9ES	RN-2C	0.7/.028
Ultra/Touring	EC68PL050	BR9ES	RN-2C	0.7/.028
700 XC	SN70-70LCDCSP-02	BR9ES	RN-2C	0.7/.028
700 XCR	EC68PL060	BR9ES	RN-2C	0.7/.028
700 RMK	SN70-70LCDCSP-01	BR9ES	RN-2C	0.7/.028
Storm	EC80PL052	BR9ES	RN-2C	0.7/.028

Bold indicates production spark plug.

Fuse Link

The fuse link is attached to the ignition switch harness with a tie strap. It can be identified by the light green and brown wires in 2 prong white connectors. The fuse link is the circuit protection device in Type I electrical systems. If a system overload (such as a dead short) occurs, the fuse wire will open the circuit preventing further damage. If this link is open, find and correct the problem and then replace the fuse link. Never attempt to replace the fuse link with a conventional fuse. Use only an OEM fuse link.

Fuse Link PN 3084113

Inspection

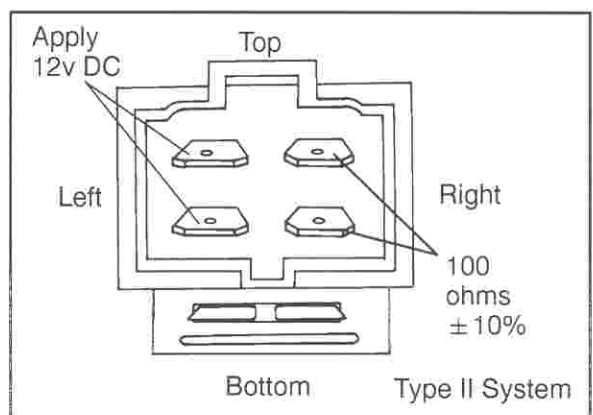
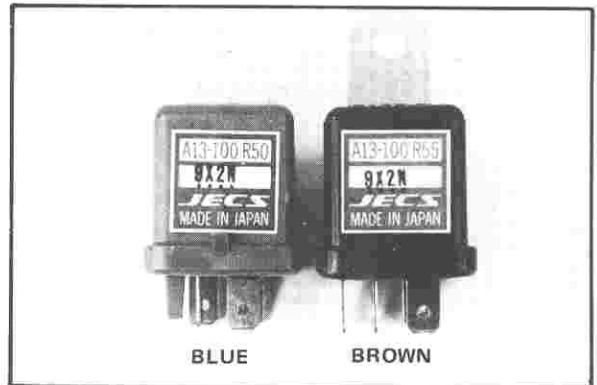
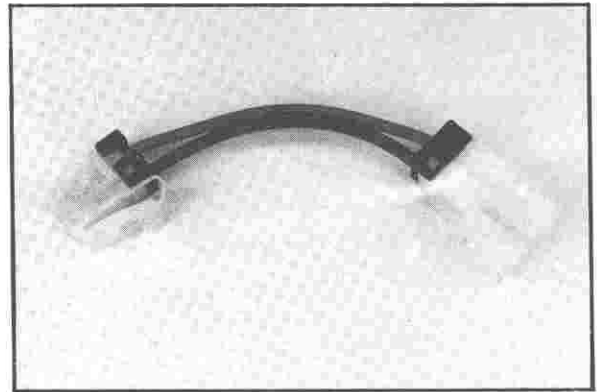
Service of the fuse link is limited to verification of whether or not the wire is continuous. Remove fuse link from machine. Measure resistance on the light green wire and the brown wire. Replace the fuse link if resistance is greater than .5 Ω . Type II systems (500s) use a self-setting circuit breaker, located near the battery.

Relay Coils

The system relay coils for Type I systems are mounted on the front side of the right footrest assembly. The relays for Type II systems are mounted on the ECU. Their function is to control a major current carrying circuit with a smaller, low current carrying control circuit. When the ECU or ignition switch closes the low current coil circuit within the relay, the magnetism in the coil closes the contact points, allowing current to pass through the relay and power up to the ECU, fuel pump, etc. Type I systems incorporate two blue relays (black on Type II systems), one controlling the fuel pump and the other the self shut-off time delay relay. The Type I system also uses a brown relay to control the main power input to the ECU.

Relays can be tested by measuring pull-in coil resistance and volt drop across the main contacts. Coil resistance should be between 65 and 70 ohms measured between the two pins marked "coil" on relay base. When relay is energized, volt drop across relay contacts should be less than .1vDC, measured in parallel with relay. On the bench, the relay can be checked by hooking the marked relay coil terminals to a 12v battery and checking resistance of relay contacts. The resistance must be less than .2 ohms.

Type II style EFI relays are tested by placing 12 volts to contact left side as shown in the diagram at right. Measuring volt drop across contacts .1vDC. Measure resistance of right side contact. This should be 100 ohms $\pm 10\%$.



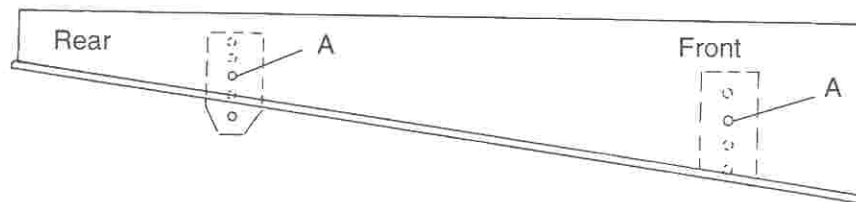
SUSPENSION

1996 Tunnel Mounting Positions

Tunnel Mounting Positions for Deep Snow Operation

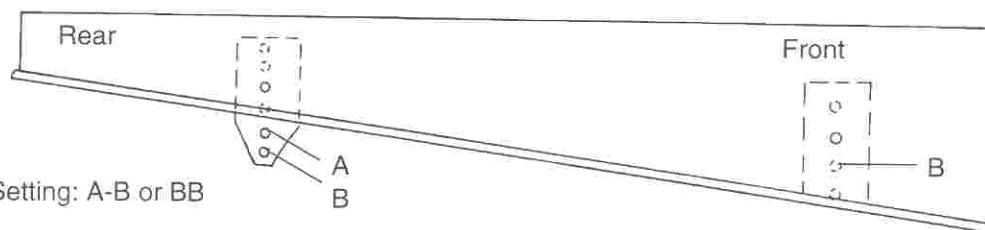
Suspension Mounting Bolt Torque:
7/16" 60 ft.lbs. (8.28 Kg-m)
3/8" 40 ft.lbs. (5.52 Kg-m)

121" Standard Length Tunnel All Models



Factory Setting: A-A
Any Other Combination will Result in Tunnel Damage

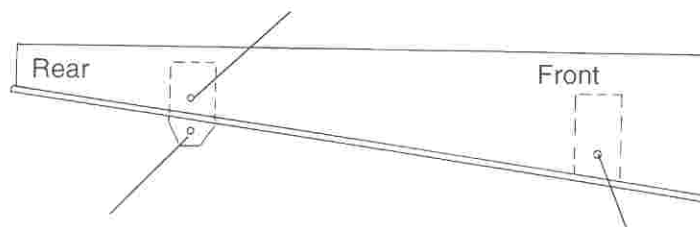
133" SKS Length Tunnel All Models



Factory Setting: A-B or BB

Tunnel Mounting Positions - XTRA 10 133"

133" SKS stock mounting position.
Optional position - lower hole.



133" RMK stock mounting position.
No optional positions for maximum deep
snow performance.

Front torque arm
stock mounting position.
No optional positions.

For improved deep snow performance, tighten the front limiter strap 5/8 - 3/4" (1.59 - 1.91 cm).

NOTE: XTRA 10 121", XTRA 12 121", and XTRA 12 133" have no optional tunnel mounting positions. XTRA 12 front limiter strap may be shortened for more ski pressure and lower track approach angle.

BRAKES/FINAL DRIVE

Reverse Kit Maintenance

8. Wipe off any metal particles from the dipstick. Small amounts of particles will be common.
9. Add lubricant until the level is in the "safe" zone on the dipstick (11 oz.) Do not mix or use other types of lubricant.

Oil Change

1. Change annually, prior to off season storage.

Adjustment

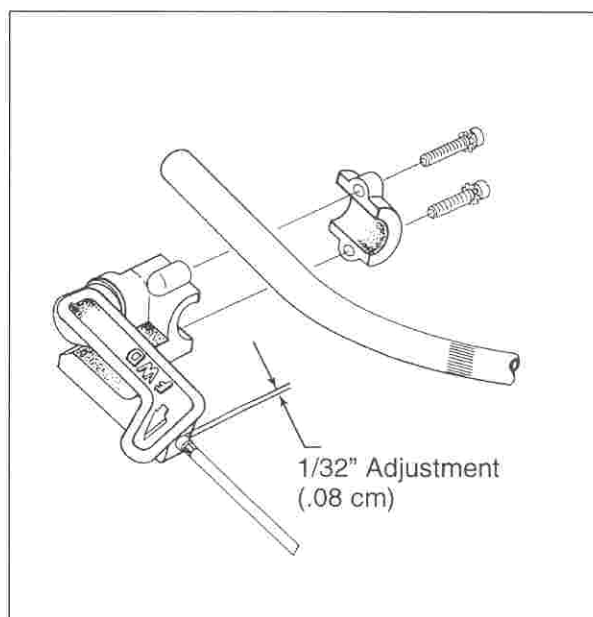
Due to break-in or replacement of components, the reverse shift mechanism may require adjustment. Adjust with the shifter in the forward position.

Standard Indy Style

1. Loosen jam nuts on lower end of cable.
2. Adjust cable until endplay movement of cable housing at the handlebar bracket is $1/32"$ (.08 cm). Do not adjust beyond this point.
3. Tighten jam nuts and re-check adjustment.

Reverse Cable End Play -

$1/32"$ (.08 cm)



Evolved and Aggressive Style

1. Lift shift lever slowly while observing shift arm on transmission.
2. If adjustment is correct, shift will move 1 - 1 1/2" before the shift arm begins to move. If adjustment is required, proceed with step 3.
3. Loosen jam nuts on lower end of cable.
4. Adjust cable end at transmission until the end of the shift lever has 1 - 1 1/2" (2.5 - 3.8 cm) of freeplay before the cable starts to move the shift arm. Do not adjust beyond this point.

Reverse Shift Lever Freeplay -

1 - 1 1/2" (2.5 - 3.8 cm) measured at end of shift lever

