KITTY CAT OPERATOR'S MANUAL 1972



ARCTIC CAT SNOWMOBILES

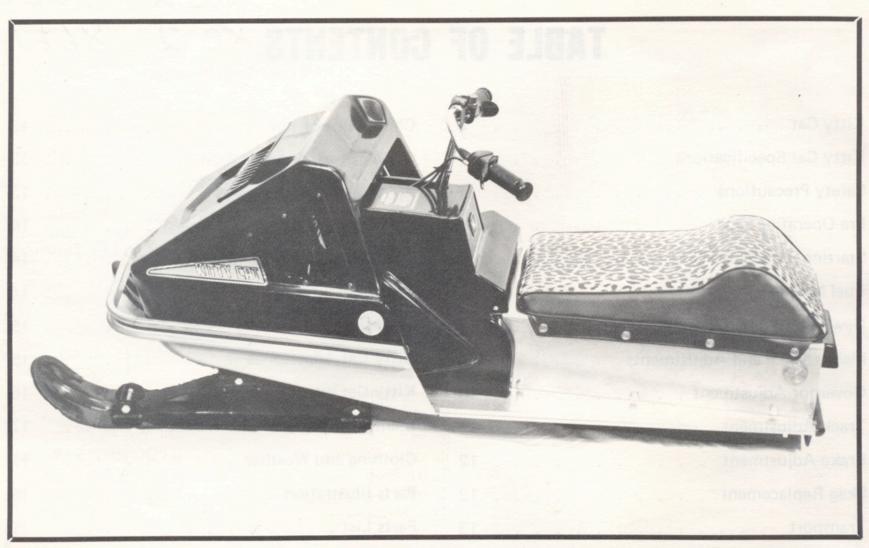
INTRODUCTION

The Arctic Cat "Kitty Cat" is a child's snowmobile produced for use by responsible children in the 5 to 10-year-old age group under adult supervision. Every effort has been made to insure the child's safety; however, the Kitty Cat is still a motorized vehicle and must be treated with due respect.

This manual is provided to aid you and your child in the safe and trouble-free operation of your new Kitty Cat. Before allowing any children to operate the Kitty Cat, first familiarize yourself with the controls and the safety precautions as explained in this manual. Then instruct each "operator" of the same. Be especially sure that they know how to stop the engine in case of an emergency.

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KITTY CAT Specifications

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Engine Specifications

Make		. Arct	ic Ca	t (k	(aw	asaki)
Model Number .				T5/	406	0S1A
Displacement						
Bore			42 m	m	(1.6)	5 In.)
Stroke			44 m	m	(1.7)	3 In.)
Ignition Timing .		25°	BTD	C ((0.01	5 In.)
Spark Plug				N	GK	B-6H
Spark Plug Gap .					.02	20 In.
Fuel Mixture Ratio						25:1

SAFETY PRECAUTIONS

Whenever possible, moving parts are completely enclosed; however, DO NOT dress your child in clothing with any strings attached, loose-fitting scarves or long stocking caps which may become entangled in the track or other moving parts.

Keep all protective covers and shields securely fastened in place. The Kitty Cat is designed to carry one rider (driver only) with a maximum weight of 100 pounds.

Never allow children to operate the Kitty Cat on any streets or alleys; nor should it be operated after dark.

Never allow children to operate the Kitty Cat in a reckless or irresponsible manner.

Instruct all "operators" to keep their feet on the running boards at all times.

DO NOT allow sleds or any other object to be towed by the Kitty Cat. The handle on the rear of the machine is for lifting only. While the Kitty Cat incorporates many of the design features of the larger Arctic Cats which make them exceptionally stable, it still can be upset on a steep side slope. Such operation should be avoided.

As produced, the Kitty Cat has a top speed of about 10 miles per hour. Until the "operator" becomes familiar with the machine, and at all times for younger children, it is suggested that the maximum speed be reduced. (See Governor Adjustment, page 10.)

To prevent injury in case of an emergency situation, the Kitty Cat is provided with a handlebarmounted safety switch. Instruct each operator on its proper use.

Also provided is a key switch mounted on the engine shroud. The key can be removed to prevent unauthorized operation of the Kitty Cat.

To provide protection against head injuries, all Kitty Cat operators should wear an SAE-approved helmet. (See Accessories, page 15.)

PRE-OPERATING TIPS

To prevent trouble and gain more enjoyment from your Kitty Cat snowmobile, the following steps must be checked every time you start your machine. Taking the few minutes necessary to insure that you and your machine are prepared may prevent a breakdown while snowmobiling. Practice these steps until they become a habit.

- Check the operation of the throttle control.
 The control lever should depress without excessive effort and return freely when released.
- Check the operation of the brake control.
 The brake should engage upon depressing the control lever approximately 3/4 inch and disengage freely and completely when released. (See page 12 for brake adjustment.)
- Check the steering to make sure that the skis turn freely. Remove any ice or snow buildup around the steering mechanism.

- Check the fuel supply. Always fill the fuel tank before starting. NEVER fill fuel tank while the engine is hot.
- Check all points for loose bolts or fasteners which may be loosened by vibration in normal use.
- Check the weather and wind chill index. Snowmobiling is fun, but don't forget the importance of dressing properly to stay warm. When moving at snowmobile speeds the wind chill factor may be right to cause frostbite to exposed face or hands. Wear Arctic Cat clothing, designed to protect you against the cold.
- After the engine has been started, check to make sure that the handle-bar mounted safety switch is working properly.

STARTING PROCEDURE

- Fill the fuel tank with premixed 25 to 1 fuel. (See page 7 for mixing instructions.)
- Open the fuel shut-off valve located under the fuel tank.

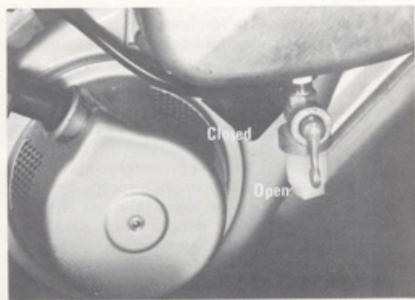


Illustration 2

Insert key in the engine-mounted switch and turn to ON position.

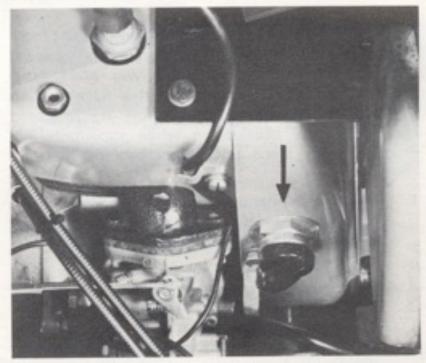


Illustration 3

WARNING

Never attempt to fill the fuel tank while the engine is running or is still hot.

 Make sure that the handlebar-mounted safety switch is in the ON position.



Illustration 4

 Move the choke lever to the ON position (down). The carburetor contains a primer button for cold weather starts. Depress primer button for about 15 seconds.



Illustration 5

Grasp the recoil handle and pull with a short brisk motion.

CAUTION: DO NOT pull recoil rope to its limit nor allow the rope to snap back. Such use may damage the recoil spring or rope.

- After the engine starts, use the choke as necessary to keep the engine running during warm-up.
- After the engine is thoroughly warm, adjust the idle speed, if necessary.

FUEL MIXING

The engine that powers your new Kitty Cat snowmobile is of the two-stroke principle, which requires the lubrication oil to be mixed with gasoline. As this gas-oil mixture is carried through the crankcase, it lubricates the engine's internal moving parts.

WARNING

When mixing fuel or filling your machine fuel tank, do so outdoors or in a well-ventilated building to eliminate the danger of fire or inhaling fumes. Also, keep all lit cigarettes and camp fires at a safe distance.

Mix 25 parts of regular gasoline with 1 part of a high-quality snowmobile oil such as Arctic's Purple Powerlube. This is equal to one quart oil in six gallons gasoline or one pint oil in three gallons gasoline. Always premix the gasoline and oil before filling your machine fuel tank. Using a clean container, fill to about one half full with gasoline, then add the recommended amount of oil and shake well. Then finish filling the container with gasoline and shake again.

CAUTION: A mixture containing too much oil will cause excessive carbon formation, smoking, plug fouling and loss of power. A mixture containing too little oil will cause overheating of the engine with resulting piston seizure or bearing failure.

Do not use outboard motor oil unless specifically formulated for both water-cooled and air-cooled two-cycle engines. Automotive engine oils are also not recommended as lubrication requirements of two-cycle engines differ from four-cycle engines.

Oil and gasoline will not mix well in extreme cold temperatures. Therefore, it is recommended that the gasoline and oil be at room temperature when mixing.

NEW ENGINE BREAK-IN

Avoid full throttle or constant speed operation during the first 2-1/2 gallons or approximately 5 tanks of fuel. Varying the engine speed helps promote proper wearing in of new parts. It is not necessary to use any special fuel mixture ratio other than the recommended ratio (25 to 1) for the break-in period.

WARNING

Engine must be OFF when performing any of the following operations.

MAINTENANCE AND ADJUSTMENTS

The engine on your Kitty Cat snowmobile is equipped with a float-type carburetor. The idle speed and idle mixture screws have been preset at the factory and should not need adjustment. However, if the machine creeps forward when idling, or will not stay running after warm-up, the following adjustment procedure should be used:

If the engine idles too fast, first check to see if the throttle arm (A) rests on the idle speed screw (B). If it does, simply turn idle speed screw (B) counterclockwise until proper idle speed is obtained. If the throttle arm (A) does not rest on the idle speed screw (B), loosen the set screw (C) that secures the throttle cable on the governor linkage. (See illustration 7 on page 10.) Then determine if the throttle returns to idle position. When retightening set screw, make sure that there is a small amount of tension in the control cable in the idle position and that the control operates freely.

If the engine idles too slow and stalls, turn the idle speed screw (B) clockwise until proper engine speed is obtained. Then adjust the idle mixture screw until engine runs at maximum idle speed. If the speed has changed appreciably, it may be necessary to reset the idle speed screw.

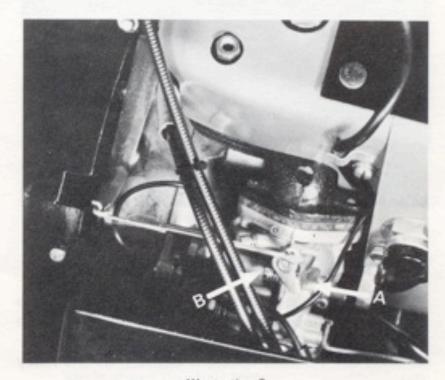


Illustration 6

WARNING

Do not adjust the carburetor or governor while engine is running to avoid unexpected clutch engagement or getting entangled in a moving part.

Frequently observe condition of throttle cable and housing. Replace any cable that is kinked, stretched, frayed or does not operate smoothly.

performance; therefore, changing any part of the governor assembly will not produce better performance but definitely could cause engine damage. If the governor linkage assembly is tampered with or the lead seal is broken, the warranty will be voided.

TRACK ADJUSTMENT

Proper adjustment of the track will avoid "ratcheting" of the drive sprockets and undue wear on both the track and sprockets.

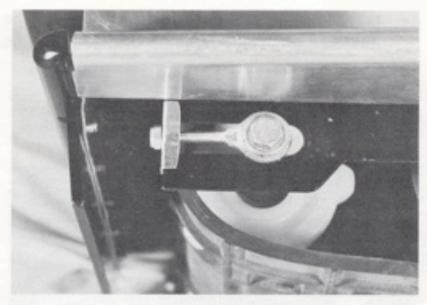


Illustration 9

- Switch off engine. Disconnect spark plug lead wire.
- Prop rear of machine up so that the track is off the ground.
- Loosen bolts on each end of rear axle.
- Adjust tension adjustment screws until track sag is about one-half inch.

- Make sure that both tension screws are adjusted an equal amount.
- Tighten bolts on the rear axle.
- Connect spark plug lead wire.

CAUTION: The tension adjustment screws are only intended to carry the tension of the track while adjusting. When adjusting track tension, the bolts on the ends of the rear axle must be loosened before tightening the tension screws and must be re-tightened after adjustment.

BRAKE ADJUSTMENT

Remove the chain guard.

The brake can be adjusted by repositioning the jam nuts on the lower end of the brake cable housing. Further adjustment can be obtained by repositioning the retaining pin on the end of the brake cable. Adjust the brake so that it locks tightly, but also releases completely.

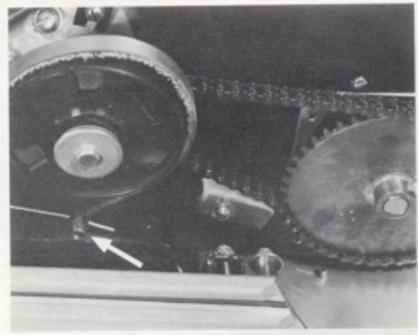


Illustration 10

SKAG REPLACEMENT

The skag is a replaceable wear bar attached to the underside of the skis to aid in turning on hard packed snow and to prevent wear of skis when crossing roads or bare terrain. The condition of the skags should be inspected regularly and they must be replaced when excessively worn. To replace the skag:

- 1. Pry push-nut off rear of worn skag.
- 2. Put new skag in place.
- Drive new push-nut on rear of skag.

TRANSPORT

To avoid fuel spillage, close the fuel shut-off valve when transporting the Kitty Cat. If the machine needs to be tipped, place it on its right side. If tipped on the left side, the fuel pressure will override the float valve and badly flood the engine. In this condition the engine is very difficult to start, requiring 30 to 50 pulls on the recoil rope.

CHAIN LUBRICATION

The chain should be lubricated after every 10 hours of operation (or more often, if operated in dusty conditions). The recommended lubricant is a dry, graphite-base chain lubricant which can be

obtained in spray cans. Use of this material will avoid dirt buildup on the chain.

If a dry lubricant is not available, lubricate the chain with 2 or 3 drops of engine oil.

At each lubrication, inspect the chain for dirt buildup. If dirt is present, remove the chain, clean in a solvent, replace and lubricate.

CLUTCH BEARING LUBRICATION

When the chain is inspected and lubed (10 hour intervals), place a drop of engine oil on the bronze clutch bearing.

AIR CLEANER AND AIR FILTER

The carburetor air cleaner should be removed and cleaned after every 10 hours of operation. To gain access to the air cleaner, remove the chain guard and the console (see photo). Then remove the snap ring in the air cleaner housing. Take out the two metal screens and the foam screen. Wash in clean solvent and replace. Replace the snap ring, console and chain guard.

FUEL SEDIMENT BOWL AND SCREEN

Remove and clean after every 30 hours of operation.

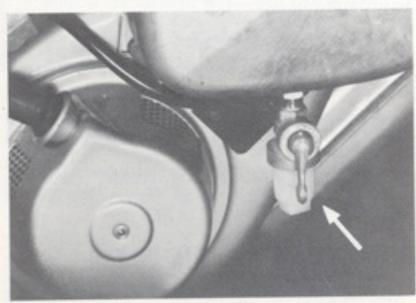


Illustration 11

SPINDLE LUBRICATION

After every 30 hours of operation, remove the ski spindles and lubricate with low-temperature grease. The spindle can be removed by taking out the 5/16 in. bolt on top of the crank and pulling the

entire ski assembly out from the bottom. After lubrication, replace the spindle by sliding back up into the spindle bearing, replacing crank and securing with the 5/16 plain washer, lock washer and bolt.

BLOWER AIR VENTS

It is imperative that the screens on the blower air intake vents on the recoil be kept clean. The results of allowing these vents to become clogged will be serious overheating and probable damage to the engine.



Illustration 12

SUMMER RUNNING

Units operated in dusty conditions should be cleaned frequently and thoroughly. Light lubrication should be applied to all pivot or bearing surfaces to protect and prolong the life of these surfaces.

STORAGE

- Drain fuel from tank.
- Start engine. Run at idle speed until all fuel in float chamber is used up.
- Loosen track.
- Remove the spark plug and squirt a small amount of Arctic Cat engine preservative into the cylinder and crank engine over several times with recoil starter. Replace spark plug.

KITTY CAT ACCESSORIES

Wheel Kit — Part No. 0134-707 Now your Kitty Cat can be a year-round runner! The kit includes a set of wheels to be mounted on the skis and a summer air filter.

Machine Cover — Part No. 0134-708

An attractive, high-quality cover which will protect your machine during transport or storage.

High Altitude Parts

To compensate for engine power loss at higher altitudes, a No. 68 main carburetor jet (part no. 3000-361) and a 48-tooth chain drive sprocket (part no. 51-048-0041) should be installed. These items are necessary for satisfactory performance at altitudes of 5000 feet and above.

Helmet - Part No. 0164-831

This fully-insulated, SAE-approved helmet is sized especially for children, but provides all the protection and styling of the adult helmets.

KITTY CAT WARRANTY POLICY

Arctic Enterprises, Inc. warrants each new Arctic Kitty Cat to be free from defects in factory materials or workmanship for a period of ninety (90) days from date of sale to the original retail purchaser.

Our obligation under this warranty is expressly limited to the repair or replacement of the part or parts that we determine to be defective. We shall not be responsible for consequential labor costs (unless specified otherwise in writing by Arctic Enterprises, Inc.).

This warranty does not apply to:

- Units that have been modified in any way, including adjustment or tampering with the engine governor.
- Units that have been damaged because of accident, negligence or unauthorized repair.

- Units sold by anyone other than an authorized Arctic dealer.
- Normal wear of "wear parts" such as: skags, brake linings, drive chain, spark plug, track sprockets, fuel and air filters, etc. (Note: Use on other than snow will cause faster wear and require more frequent maintenance.)
- Units which have been operated in dusty conditions without having the optional air filter, part no. 3000-711, installed on the carburetor. This condition applies whether or not wheels have been put on the skis.
- Rental units are warranted to be free of defects in material and workmanship for a period of thirty (30) days.

Warranty repair and warranty claim application must be accomplished by an authorized Arctic dealer.

IDENTIFICATION

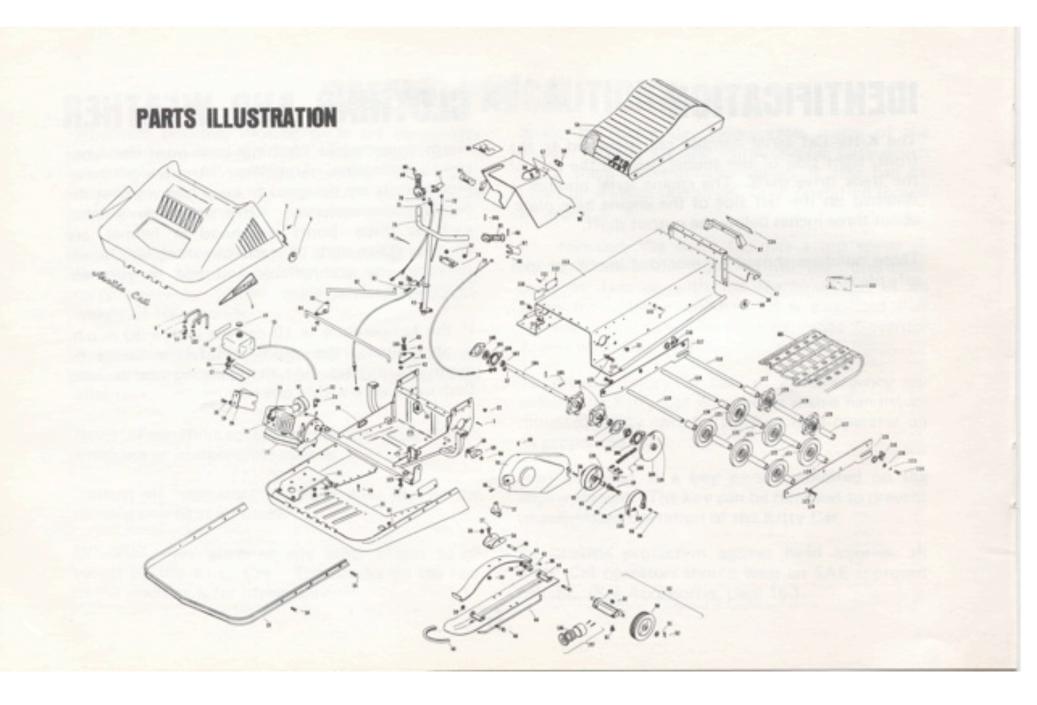
The Kitty Cat serial number tag is riveted to the front, right side of the tunnel, just to the rear of the track drive shaft. The engine serial number is stamped on the left side of the engine base plate, about three inches below the output shaft.

These numbers should be recorded and kept in a safe place.

CLOTHING AND WEATHER

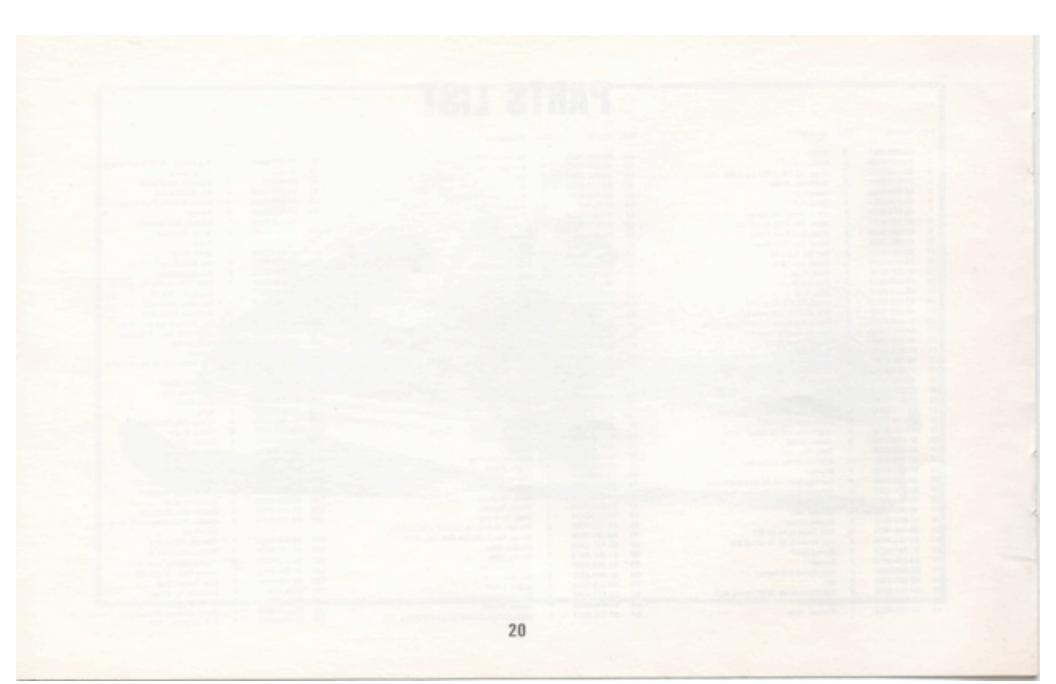
Warm snowmobile clothing is a must for your child's protection. ArcticWear "Arcticrider" snowmobile suits are designed to keep him warm at the coldest temperatures. Other clothing articles, such as mitts, boots and hood or helmet, are an important part of each snowmobiler's needs to keep you comfortable and add to your enjoyment of winter.

If the temperature is 10 degrees with a 30 m.p.h. wind blowing, the wind chill factor would be minus 33 degrees. At that temperature exposed flesh can freeze within one minute.



PARTS LIST

Fiet	Part No.	Oty	Description	Ref.	Part No.	Gry	Owseription	Re	. Part No.		
1	53-045-0221	1	Hood					700	. Part No.	Oty.	Description
2	51-047-0076	- 2	Spring Latch	48	53-088-0001	2	Moulding, Ski Tip	96	81-111-0021		Cap Screw-1/4-28 N/Fx1/2 H.H.
3	89-133-0001	45	River 1/8 Dia.x.481 Lq. Steel	49	42-056-0050	- 2	Brecket, Axle	94	51-059-0010	1	Band, Brake
4	51 473 0001	2	Reflector, Amber	50	50-052-0012	4	Mheel	92		1	Element, Air Cleaner
- 6	56-914-0882	-	Dwost-L.H.	51	64-152-0001	4	Washer, Plain-17/32 1 Dx1 OD	96			Pin, Brake Band
	56-014-0881	- 1	Decal-R.H.	52	86-336-0001	4	Pin, Cotter-1/8x1	99			
7	56-014-0883			53	0134-707	2	Wheel Kit	100		- 1	Screw, Set 1/4-20x1/4 Socket Ho
	81-205-0011	-	Decal-Arene Cat Script	54	53-061-0011	1	Cover, Seat	101		2	Florige
- 1	51-066-0026	-	Serew No. 8-32 NCx1" Lg.	. 55	53-063-0005	- 1	Pad, Foam	100			Bearing, Self Aligning
10	51-066-0025	2	Strep, Gas Yank Long	56	53-014-0001	1	Logo, Arctic Plate	193	21222200	5	Coller, Locking
11			Strep, Gas Tank Short	57	56-014-0875	1	Dwcaf, Dash	104			Track
12	83-101-0003	- 2	Not No. 8-32 NC	58	53-045-0220	1	Console		The second second	1	Sheft, Drive
13	56-014-0879	1	Decal, Gas Tank	59	83-000-0006	3	Nvt, Speed 5/32	106	The same and the	4	Pin, Roll-3/16x1-1/2 Lg.
	51-021-0005	- 1	Tank, Fuel	60	56-014-0678	1	Denal, Console	106		2	Sprocket Drive
14	51-029-0008	1	Cap. Geo Plain	6.1	56-014-0076	1	Decal, Throttle	107		1	Link, Connecting No. 35 H.D.
15	55-064-0012	. 1	Line, Fuel	62	56-014-0877	1	Decal, Choke	108		- 1	Chain, No. 35x70
16	57-082-0001	,	Fifter, Fuel & Shut Off	63	81-121-0017	2	Cop Screw 5/16-24 NFx3/4 H.H.	109		- 1	Sprocket, Drive 42T
17	53-063-0008	2	Pad, Rubber Adhesive Back	64	51-073-0002	2	Reflector, Red		51-048-0041	1	Sprocket, Drive 48T
18	81-205-0012	3	Soree No. 6 mm-1x10 mm Hex. Hd.	65	53-026-0015	1	Mand Grip L.H.	110			Pin, Roll 5/4 Dis. vt. 5/4 La.
19	84-033-0002	4	Washer, Spring Lock-1/6	66	86-053-0001	2	Pin 1/4x15/8	111		4	Rivet 3/32 Dia x 212 Steel
20	42 056 0051	1	Mount, Fuel Tank	67	53-031-0001	3	Lever, Control	112	53-014-0004	1	Plate, Sorial
21	57-018-0152	- 1	Engine (Kaw) 60 or	68	88-300-0012	2		113	51-044-0019	1	Tunnel
22	83-000-0008	7	Not Lock Snap-In	60	53-026-0016	-	Retaining Ring, 1/4 Crescent	114	81-131-0016	12	Cop Screw-3/8-16 NC+3/6 H.H.
23	51-056-0287	1	Bracket	20	53-008-0002		Hand Grip R.H.	115	52-040-0001		Snep
24	42-056-0049	1	Mount, Plate Engine	71	81-205-0009	- 1	Insert, Thromie	116	51-031-0084	2	Adjuster, Chain
26	42-056-0052	1	Plata, Motor	72	57 076 0015	*	Screw, No. 4-40 Rd. Hd. Self-Tap.	117	42 056 0053	- 1	Plate, Side R.H.
26	84-223-0001	4	5/16 Split Lock Washer	73		1	Cable, Throttle	110	51-058-0018	. 1	Axie, Hear
27	81-121-0010		Cap Screw 5/16-18 NC+3/4 H.H.	74	57-072-0017	1	Switch, Push-Stop	119	51-058-0019	2	Aute
28	89-209-0001	18	Rivet-3/16 Dia.s.527		0217-010	1	Spork Plug	120	51-046-0095	4	Spacer-63x.75+1.656
29	81-131-0008	4	Cap Screw-3/8-16 NCx1" H.H.	75	42-027-0002		Hundle, Steering	121	50-052-0003	6	Wheel, Bogie
30	51-080-0028	2	Quide, Hood	76	80-000-0003	2	Cable Tie, Black	122	51-046-0093	4	Specer -62x 75x3.562
31	53 086 0008		Belly Pan	77	3000-517	1	Muffler	123	84-233-0001	16	Wester, Spring Lock-3/9
32	83-115-0001	18	Non-1/4-20 NC Estoc Hex	78	51-056-0273	1	Bracket, Steering	124	51-073-0003	1	Reflector, Red
33	51-025-0020	1	Bumper	79	57-076-0014	1	Coble, Brake	125	42 056 0054	-	Plate, Side L.M.
34	62-413-0001		Carriage Bult-1/4-20 NCx3/4 Plated	80	51-010-0020	1	Clamp, Steering	126	84-137-0002	2	Wesher, Plain-13/32 I.D.
35	82-413-0002	2	Carriage Boit-1/4-20 NCx1-3/4 Plated	81	B1-111-0001		Cap Screw 1/4-20x3/4 H.H.	127	51-046-0094	2	Spacer-63x 75x2 625
26	51-056-0271	1	Plate, Rear	62	51-042-0117	- 1	Red, Tie Short	128	53-048-0001	2	Sprocket, Idler
37	42-058-0028	2	Spindly, Ski	63	51-004-0011	2	Crank, Spingle	129	51-046-0092		
38	51-056-0278		Sintellin, Upper		51-042-0118	1	Red, Tie Long	130	84 122-0001		Spacer-62x 75x5.562
	83-125-0001	-	Not, Esloc-5/16-18 NC	85	84 123 0002	2	Wesher, Plain 5/16 I.D.x1" O.D.x14 Ga.	-	00 112 0001		Wester, Plain-5/16 I DX 11/16
_	81-121-0009			- 84	83-101-0005	7	Screw, No. 8:32x3/4 Self-Tag. H.M.	131	56-032-0245		00×1/16
	51-047-0074		Cep Screw 5/16-18 NCx2-3/4	87	53-027-0003	1	Handle, Rear	132	84-101-0007		Manual, Operator's
-	53-025-0012		Spring, Leaf		51-047-0073	1	Spring, Idler			2	Washer, Plain No. B
	83 000 0007		Bumper		53-063-0007	.1	Tightner, Chain	133	84-223-0001		Washer, Spring Lock 5/16
			Nut, Speed-3/8 Palnut	90	83-000-0009		Nut. Post-1/4"	134	81-201-0002		Serew, Hex-1/8-32×3/8
	42 000-0001		Ski	91	53-025-0014		Guard, Chain	136	83-105-0001		Not, Edge-1/8-32
_	81-121-0016		Cop Screw 5/16 18 NCx3-1/2 H.H.	92	50-011-000E		Clutch, Centrifugal	136	3000-712	1	Element, Air Filter
	53-042-0114		Skag, Rod	93	51-046-0099		Spacer, Clutch	137	3000-711	1	Air Fifter Assembly
4.7	53-005-0013	1	Bumper, Rear	94	84-125-0001		Basher, Plain-21/64 I.D.x1-1/2 O.D.x.134	130	53-014-0005	1	Dreat, Canadian Compliance
							4.00 COM 1.D.X1-112 O.D.X.134	139	87-254-0002	1	Key, 3/16 Sq. x 1/2



Your new Kitty Cat was manufactured by the makers of the famous Arctic Cat snowmobile to provide a safe learning vehicle as well as enjoyable recreation for your youngsters. Arctic engineers have designed this vehicle with safety and reliability uppermost in their minds. Training in the proper operation of the Kitty Cat as well as constant supervision is recommended to provide a safe learning experience for your children.