SelectGloss™ 21P





OPERATOR MANUAL AND PARTS LISTKent MODEL 56010814



RECORD THIS IMPORTANT INFORMATION

DATE OF PURCHASE	
PURCHASED FROM	
ADDRESS	
CITY	STATE ZIP
PHONE	CONTACT
MACHINE SERIAL NUMBER	
ENGINE	
ENGINE SERIAL NUMBER	
IMPORTANT PHON	IE NUMBERS
Medical Emergency	
Police	
Fire Department	

Safe Operating Practices

for Kent by Nilfisk-Advance Propane Powered **Burnishers**

VARNING

Give serious consideration to items marked by this symbol, failure to do so may cause injury to yourself or others and/or cause damage to the machine.

- Only allow qualified and trained personnel to operate equipment.
- Closely follow maintenance and operating instructions.
- Keep accurate records of maintenance and service in provided log book.
- Remember, routine maintenance NOW will prevent a breakdown LATER.
- Always check oil level before starting.
- Keep nuts and bolts tightened and hose connections snug.
- Refer to engine manufacturer's service manual or contact Nilfisk-Advance for engine repairs or adjustments not listed in this manual.
- Never alter or reconstruct the fuel system. To do so may be dangerous and will void the factory warranty.
- Always use U.L., C.T.C./D.O.T. listed cylinders supplied by Nilfisk-Advance.
- Be careful not to cross thread the Rego gas line coupling at the fuel cylinder.
- Always store cylinder outside away from heat and direct sunlight.
- Never leave the machine running unattended.
- Always operate in a well ventilated area. Failure to do so may cause nausea or carbon monoxide poisoning.)
- Warning: Keep hands and feet clear of rotating pad! Inspect pad holders regularly. (A fractured pad holder may result in pad fragments causing injury.)



Have the machine serviced by a certified technician, including an emission check WARNING every three (3) months.



Failure to follow the instructions and warnings appearing in this operating manual or on machine labels may result in serious injury to the person using the machine and possibly to other persons and property.

NOTE: This machine is manufactured for commercial use only.

SAFE OPERATING PRACTICES (Continued)

Propane Powered Floor Burnishers are designed and manufactured for high speed commercial floor buffing only. These machines are designed to buff most modern types of floors including composition tile, stone, marble, terrazzo, and resilient floor covering using floor coatings designed for high speed buffing.

Even though NFPA 58 8-4.5 says... " these machines shall be permitted to be used in buildings frequented by the public, including the times when such buildings are occupied by the public." Nilfisk-Advance suggests use when occupancy of a given work area is at a minimum.

These machines should not:

- Be used in nursing homes, hospitals, day care centers etc.
- · Be used by unqualified or untrained personnel.
- · Be used unless properly maintained and adjusted.
- · Be left running unattended.
- Be used on areas with obstructions such as thresholds, floor outlet boxes, etc.
- · Be used in rooms without proper ventilation.

These Propane Powered Burnishers are designed with the burnishing head offset to the right side to make it easier to burnish the floor close to the edge. It is recommended to start burnishing on the right side of the aisle, turn and come back down the isle in the opposite direction overlapping the previous path slightly. Continue this pattern until the floor area to be burnished has been covered with the last pass being on the right side of the machine. The forward speed is generally at a normal walking speed.

Caution: Do not allow the burnisher to operate without moving. It may burn the floor and could cause damage to the floor covering.

SPECIFICATIONS

SELECTGLOSS™ 21P

Pad Size	21" (53.3cm)
Pad Speed	
Width	22.75" (57.8 cm)
Length	51.5" (130.8 cm)
Engine	
Starting	110 Volt
Weight	201 lbs. (91.2 kg.)
Deck	Cast Alum. Alloy
Vibration	Less than 2.5m/s ²
Sound Level	88 db

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I. Propane Machine Safety

A. Purpose

The accepted demand for and use of propane powered burnishers underscores the need for responsible manufacturers and users to stress the importance of safety. This manual is designed to provide the information you need to ensure proper and safe use of propane powered burnishers.



In addition, we recommend operators of propane powered burnishers to complete a program of training and certification on the safe operation of this equipment.

B. Refueling and Storage of Fuel Cylinders

Propane cylinders should only be filled by an authorized propane dealer. When not in use, they should always be stored outside in an upright position in a secure, tamper-proof, steel mesh storage cabinet. This cabinet may be located next to the building but with at least five feet of space between the cabinet and the nearest building opening (door or window).

The National Fire Protection Association (NFPA) Standard for Storage and Handling of LP Gas is the appropriate U.S.A. authority on safe propane use. A copy of this publication is available through the National Fire Protection Association in Quincy, Massachusetts (1-800-334-3555).

C. Safety in Engineering

Nilfisk-Advance engineers and manufactures machines utilizing U.L. (Underwriters Laboratories) approved components where possible. The U.L. logo will be affixed to a particular component. This means the component is listed. Component recognition for the following parts is important: fuel cylinders, couplings, regulators, and fuel lines. We strongly recommend that you use only machines meeting the above minimum requirements. Even though the Kent propane powered burnishers meet the O.S.H.A. Time Weighted Average (TWA) standard for noise, we still recommend hearing protection be worn by the operator.

D. Use and Care



Enclosed with your propane burnisher is a detailed Operator's Manual. Safety dictates that before using any new equipment, read and understand the Operators Manual. We strongly recommend this practice.

II. Machine Preparation

A. Adding Oil

The Burnisher is shipped by overland freight with the correct amount of oil in the engine. Air freight shipments require the machine to be shipped without oil.

When Filling a "Dry" Burnisher or Changing The Oil:

Honda Engine: Add no more than 1 quart, then check the dipstick in the fill cap. Add oil if necessary but **DO NOT OVERFILL!** Always check oil before using the machine.

NOTE: Honda engines use premium quality SAE 30, single viscosity motor oil.

IMPORTANT: When checking oil, be sure that the machine is level. Fill cap should be fully screwed out and free. Do not check oil by screwing cap in and then out again. This will give a false reading.

II. Machine Preparation (continued)

B. Filling the Propane Fuel Cylinder

Nilfisk-Advance uses the 20 lb. capacity aluminum fuel cylinder which meets the D.O.T. 4E240 standards. These cylinders are also listed by U.L.. Filling should ONLY be done by a qualified propane dealer. A properly filled cylinder should not exceed 80% of the rated capacity.



DO NOT attempt cylinder repair. Return the cylinder to your propane dealer if repair is necessary. Please note that D.O.T. regulations prohibit shipping of cylinders after the cylinder has been filled with propane.

C. Installing the Fuel Cylinder

Strap the cylinder in place by clamping the toggle assembly to the cylinder band. Adjust the toggle assembly by screwing in or out in order to keep the tank firmly secured. Connect the fuel hose coupling to the service valve by turning right (clockwise). **HAND TIGHTEN ONLY.** Make sure coupling is not cross threaded and check for leakage by noting any odors of propane immediately after cylinder is connected. (It is sometimes easier to install if the connection to the service valve is made before strapping the cylinder in place.

To remove cylinder, reverse above procedure. Always connect or change cylinders in a well ventilated area.

III. Operating Instruction

A. Starting Instructions



- 1. Check oil and fuel levels.
- 2. Check and clean engine air filter.

NEVER RUN CONTINUOUSLY FOR MORE THAN 1 HOUR WITHOUT CLEANING OR CHANGING ENGINE DUST FILTER. (See Scheduled Maintenance)

- 3. Check carburetor air filter. Change if necessary. (See Scheduled Maintenance).
- 4. Turn propane service valve on the fuel cylinder counter-clockwise to open.
- 5. Allow machine to tilt backward (pad off floor) and move the throttle to the **SLOW** position.
- 6. Plug electric cord into 110 volt wall receptacle and onto starter switch.
- 7. Engage starter by pushing the button on starter switch.

Note: Do not engage starter for more than 10 seconds. Allow a 60 second cool down period for each 10 second start-up cycle. If the starter overheats an internal overload switch will prevent it from operating until cooled. Wait 15 or 20 minutes before trying again.

8. After engine starts, adjust the throttle to the proper speed.

B. Operation

- 1. After engine has started, allow approximately 30 seconds for the engine to "warm up" then advance the throttle to operating speed.
- Lower the burnishing head to the floor while moving the machine forward.
 CAUTION!! Do not run the machine without moving. If allowed to run in one spot damage to the floor may occur.
- 3. To stop burnishing, push down on handle raising the burnishing head off the floor.

III. Operating Instructions (continued)

C. Idling and Stopping the Machine

If for any reason the machine needs to idle for short periods of time, simply raise the burnishing head and move the throttle to the SLOW position.

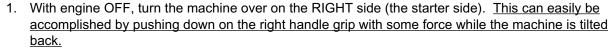


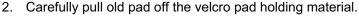
Allowing the engine to idle excessively will increase the concentration of carbon monoxide!

To stop the engine, close the service valve on the fuel cylinder by turning it clockwise. (The engine will stop when the fuel in the lines has been depleted).

NOTE: FOR EMERGENCY STOP: Pull throttle lever all the way back, this will activate the "KILL" switch.

D. Installing/Changing Burnishing Pad





- Carefully inspect the padholder for cracks or damage. Replace if necessary.
 NOTE: A damaged padholder rotating at high speeds may be an extreme hazard if it should come apart.
- 4. Pull center from new pad, center pad on padholder and tuck the center under the plastic center ring.
- 5. Press pad onto velcro.
- 6. Return machine to upright position.

E. Storage



WARNING

Only authorized, trained personnel should have access to propane cylinders and machines.

- Remove propane fuel cylinder when not in use and store it outside in a storage cage in accordance with NFPA Chapter 5-4.2.1. Do not release or bleed propane inside of building.
 Please consult your local Fire Marshall to insure that you are in compliance with local fire codes.
- 2. Store machine away from objects that may fall and damage it.
- 3. Never store machine or fuel cylinders near an open flame or heat producing devices.
- 4. Make sure machine is cleaned properly before storing.
- 5. Never store machines with cylinders installed, or spare cylinders, in an enclosed van or trailer.

F. Transportation

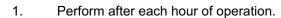
When transporting a propane powered burnisher with the fuel cylinder installed, the cylinder should be securely fastened with the service valve closed and the machine should be secured in the vehicle. Any propane fuel cylinders not installed on a machine should be securely fastened to avoid movement and damage. The service valves should be closed. Never store machines with cylinders installed, or spare cylinders, in an enclosed van or trailer.

It is good practice to check propane cylinders for overfilling before transporting them. If overfilled, correct before loading them in the vehicle by venting the excess propane outside in a safe area using the fixed liquid level gauge.

IV. SCHEDULED MAINTENANCE

Following proper scheduled maintenance procedures will provide years of uninterrupted service.

		REGULAR SERVICE PERIOD				
			(Pe	erformed At Ind	dicated Hour Inte	ervals)
ITEM or TYPE of SERVIO	CE					
		Each				
		Use	20 hrs.	50 hrs.	100 hrs.	300 hrs
Engine Oil	Check Level	2				
	Change		2,4,5	2,4,5		
Engine Dust Filter	Inspect	1			2,4,5	
	Clean/Change	1,2				
Carburetor Air Cleaner	Inspect	2				
	Clean/Change			2,4,5		
Belt	Inspect	2				
	Adjust/Replace		As Required (5 below)			
Fuel Hose & Connections	Inspect	2				
	Replace		I f Sigr	Signs of Wear are Present (3,5)		
Cooling Fins	Clean			2		
Burnishing Head Assembly	Inspect			6		
Padholder	Inspect		6 When Changing Pads			
	Replace		If Cracks Appear (7)			
Bolts & Connections	Inspect			6		
	Tighten			6		
Spark Plug	Clean/Replace			5,6	4,5	
Valve Clearance	Check					3,4,5
Exhaust Emissions	Check					3,5





- 2. Refer to Section V "General Maintenance Procedures".
- 3. These items should be serviced by an authorized Kent Service Center.
- 4. Refer to Engine Manufacturer's "Owners Manual" for recommended replacement.
- 5. Always enter maintenance performed in "Service Log Book"
- 6. Routine maintenance.

V. General Maintenance Procedures

A. Fuel System

The fuel system works from vacuum created by the engine running. Turning the safety fill cylinder valve on pressurizes the system for flow to the carburetor once the engine starts to crank.

1. Adjusting the Regulator:

Note: The regulator and carburetor, on this machine has been factory pre-set. Only Kent authorized personnel trained and certified in propane fuel systems, should modify or adjust the system or its settings.

N.F.P.A. 58 8-1.4 states, "In the interest of safety, each person engaged in installing, repairing, filling, or otherwise servicing an LP-Gas engine fuel system shall be properly trained in the necessary procedures."

2. Engine Dust Filter

The engine dust filter should be cleaned each hour and after each use by rinsing with mild detergent.

Squeeze out excess water (do not wring). Allow the filter to air dry.

Failure to maintain a clean engine air filter will cause the engine to overheat. Also, it may cause the exhaust emissions to elevate to harmful levels!

3. Carburetor Air Filter

- a. Loosen wing nut on top of air cleaner cover.
- b. Remove foam pre-cleaner and paper filter element.
- c. Clean foam pre-cleaner using the same procedure as "2" above.
- d. Clean filter seal, making sure no dust is allowed in carburetor inlet.
- e. Inspect paper element. Replace the paper element if dirty, bent or damaged.
- Install the clean paper element, pre-cleaner, air cleaner cover and wing nut.

Note: Failure to maintain a clean air filter may produce excessive carbon monoxide emissions. Inspect it before each operation!

4. Fuel Hose and Connections

- a. Inspection
 - Inspect hose for abrasions and other signs of wear; replace all worn or damaged hoses.
 - (2) Check for gas leaks by spreading a soapy water solution around all connections with the service valve OPEN and the fuel system pressurized.

b. Fixing Leaking Joints

- (1) Uncouple bad joint, clean joint then apply pipe sealing compound (Loc-Tite Pipe Sealant with Teflon or equivalent) to clean joint.
- (2) Recouple joint finger tight plus 1/2 turn.
- (3) Recheck for leaks using soap and water solution and watching for bubbles at the joint with fuel cylinder service valve turned OPEN and the fuel system pressurized.

B. Engine Maintenance

1. Cooling Fin Maintenance

- a. Remove the blower housing and other cooling shrouds.
- b. Clean the cooling fins as necessary.
- c. Reinstall the blower housing and other cooling shrouds.

2. Head Bolt Maintenance

Refer to Engine Manufacturer's Service Manual.



WARNING



B. Engine Maintenance (continued)

3. Changing the Oil

- Run engine for 5 minutes to warm oil.
- b. Locate oil drain plug and place a receptacle where the oil will drain into the receptacle.
- c. Open the oil drain plug.
- d. Allow oil to drain completely into receptacle.
- e. Close the oil drain plug and set the machine upright.
- f. Tighten the drain plug and wipe any remaining oil from the engine and deck.
- g. Remove the oil fill cap/dipstick. For Honda engines slowly add 1quart of 10W-40 SE or SF oil.
- h. Check oil level with dipstick. Add additional oil if necessary.

DO NOT OVERFILL AND NEVER RUN ENGINE LOW ON OIL!

Important: Honda Engines: When checking oil, be sure that the machine is level. Fill cap should be fully screwed out and free. Do not check oil by screwing cap in and then out again. This will give a false reading.

i. Replace filler cap/dipstick and hand tighten.



Note: Care should be taken when changing the oil. Used motor oil should be treated as a hazardous material.

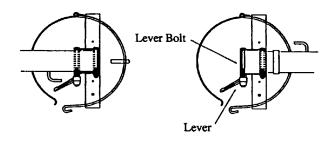
C. Belt Maintenance

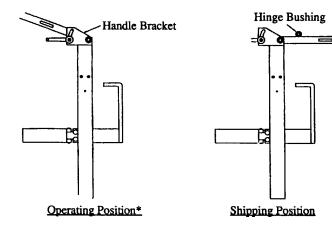
To inspect the belt it is necessary to turn the machine over on the right side (Starter side) for Honda models. This can be easily accomplished by pushing down on the right handle handle grip with some force while the machine is tilted back. If the belt is badly cracked or worn it should be replaced.

To check for the proper tightness squeeze the belt together. The belt should depress between 1/4" and 1/2". To Change belt:

- 1. Turn the machine over on the right side.
- 2. Remove the padholder by holding the end of the shaft on the top of the machine with a 3/4" wrench and turn the padholder counter-clockwise.
- 3. Using the 3/4" wrench to turn the end of the spindle shaft on top of the machine while removing the old belt from the spindle pulley.
- 4. Finish removing the belt from the engine pulley, if necessary.
- 5. Check engine pulley for correct alignment with the spindle pulley. Check hardware attaching pulleys for correct tightness.
- 6. Install the new belt onto the engine pulley.
- 7. Reinstall the new belt onto the spindle pulley using the 3/4" wrench to turn the spindle clockwise. Make sure the belt is correctly placed on the idler pulley.
- 8. Reinstall the padholder onto the spindle shaft.
- 9. Turn the machine upright in the burnishing position.
- 10. Check belt for correct operation. Check all hardware for correct tightness.

D. Adjusting the Handle

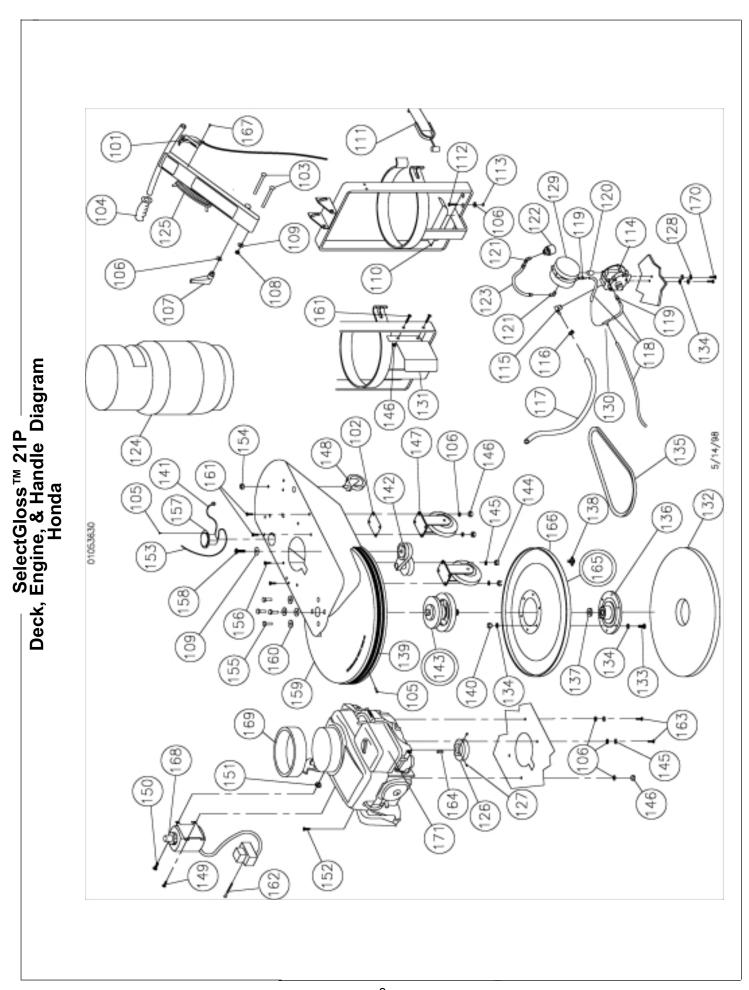




^{*} Insert lever bolt through handle bracket and hinge bushing to locate handle in operating position.

VI. TROUBLESHOOTING

<u>SYMPTOM</u>	POSSIBLE CAUSES
1. Hard to Start	Spark plug or head bolts loose. Blown head gasket. Insufficient vacuum. Coil, air gap needs adjusting. Low oil.
2. Will Not Start	No fuel, Blown head gasket, Insufficient vacuum Defective Spark Plug, Defective coil, Dirty air filter, Low oil.
3. Engine lacks power	Leaking head gasket. Insufficient vacuum. Governor needs adjusting. No compression - worn rings. Check air filters.
4. Smell of burned rubber	Belt out of adjustment or not aligned properly.
5. Machine vibrates	Loose bolts. Pad not centered.
6. Machine "Bogs Down" When in Use	Operator is bearing down too hard. Dirty air filters.
7. Machine Pulls To One Side	Check for bent wheel bracket.
8. Engine stops running	Dirty air filter, High exhaust emissions, Out of fuel, Low oil.



SelectGloss™ 21P Handle, Deck & Engine Parts List

ITEM	REF. NO.	DESCRIPTION	QTY	ITEM	REF. NO.	DESCRIPTION	QTY
101	56630108	Cable, Throttle, Control, 32"	1	137	56630141	Washer, .755 x 1.005 x .060, SS	1
102	56630102	Block, Wheel, 14GA	1	138	56630119	Velcro, Studs	50
103	56630148	Bolt, Carriage, 3/8 - 16 x 4, Zinc	2	139	56630130	Moulding, 1 1/8, Black, Bumper	5 ft.
104	56630105	Grip, Handle	2	140	56630137	Nut, Lock, 1/4	10
105	56630133	Rivet, Pop, 1/8 x 1/4	7	141	56622110	Wire, Ground, Hour Meter Assembly	1
106	56630145	Washer, Flat, 5/16	8	142	56630098	Tensioner, Belt, w/4" Pulley	1
107	56630104	Handle, Adjustable Lever	1	143	56630110	Spindle, w/5.54" Pulley, Asm	1
108	56630149	Nut, Acorn, 3/8 - 16 UNC	1	144	56622119	Nut, 5/16 - 18 NC	1
109	56630139	Washer, Flat, 3/8	2	145	56622132	Washer, Lock, 5/16	5
110	56622099	Velcro, Felt, Black, 1 Yd	2	146	56630136	Nut, Lock, 5/16 - 18 NC	5
111	56630107	Toggle, Tank Strap	1	147	56630122	Wheel, w/Bracket 5"	2
112	56622129	Bolt, Carriage 3/8 - 16 x 1 1/4	5	148	56630080	Caster, 2 1/2", Rear, 3/4" Stem	1
113	56622120	Nut, Lock, 3/8 NC	5	149	56630142	Screw, 6mm x 20mm	2
114	56630087	Regulator, Dry Gas	1	150	56622118	Bolt, Flange, M8 x 1.25 x 30	2
115	56622094	Elbow, Brass, Large, Reg to Fuel	1	151	56630135	Nut, Flange, M8 - 1.25	2
116	56630144	Hose, Clamp, No. 38	2	152	56630134	Screw, BH, 5/16 - 18 x 1 3/4	1
117	56630132	Fuel, Line, 3/8", 1 Ft	2	153	56622109	Wire, Lead, Hour Time Indicator	1
118	56630131	Hose, Vacuum, 5/32, 1 Ft	2	154	56648249	Nut, Hex, 1/2 - 13, Jam	1
119	56630083	Ballcheck, 1/8 NPT	2	155	56622135	Bolt, Hex, 1/2 x 1, NC	4
120	56630089	Fitting, 3325 x 4, Reg to Fuelock	1	156	56622122	Bolt, Carriage, 5/16 x 1	1
121	56630090	Fitting, 49 x 6, Reg to Fuelock	2	157	56630126	Meter, Hour, Round	1
122	56630093	Coupler, Quick Rego, Female	1	158	56630143	Screw, Cap, 3/8 x 1 1/4	1
123	56630092	Hose, 12", Regulator	1	159	56630078	Deck, 21P Painted Complete	1
124	56630082	Cylinder, Safety Fill, Unpainted, w/Dec	1	160	56622136	Washer, Flat, 7/16	5
125	56630084	Cord, Starter, Electric	1	161	56622125	Screw BH, 5/16 - 18 x 1	9
126	56630114	Pulley, 3.5", Motor Drive	1	162	56630140	Screw, Sheet Metal, 8 x 2 1/2	2
127	56622116	Screw, Set, Hex Socket, 5/16 - 18 x 3/8	2	163	56630150	Screw, Cap, 5/16 - 24 x 1 1/4	2
128	56622131	Washer, Lock, 1/4	2	164	56622105	Key, 1/4 x 1 1/2"	1
129	56648248	Fuelock, w/Primer	1	165	56648240	Padholder, 21", Complete Asm	1
130	56622115	Tee, 3/16 x 3/16 x 3/16,Nylon	1	166	56630170	Padholder, 21", w/Studs Only	1
131	56630095	Guard, Reg./Fuelock, Kent	1	167	56622121	Screw, Drill Kwik, 8 x 3/4	2
132	56630163	Pad, 21", Blue (pkg of 5)	1	168	56630085	Starter, 110V, Electric	1
133	56630146	Screw, BH, 1/4 - 20 x 1	6	169	56630123	Filter, Recoil, Dust, Honda	1
134	56630138	Washer, Flat, 1/4	14	170	56622134	Screw, Cap, HH, 1/4 - 20 x 1	2
135	56630116	Belt, BX-36	1	171	56630067	Element, Air Cleaner	1
136	56630176	Flexi Disc	1				



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