

SCAG[®]

POWER EQUIPMENT



MODEL SW

FROM SERIAL NUMBER 70000 TO 79999

OPERATOR'S MANUAL



WARNING:

FAILURE TO FOLLOW SAFE OPERATING PRACTICES MAY RESULT IN SERIOUS INJURY.

- * Keep all shields in place, especially the grass discharge chute.
- * Before performing any maintenance or service, stop the machine and remove the spark plug wire and ignition key.
- * If a mechanism becomes clogged, stop the engine before cleaning.
- * Keep hands, feet and clothing away from power-driven parts.
- * Read this manual completely as well as other manuals that came with your mower.

REMEMBER - YOUR MOWER IS ONLY AS SAFE AS THE OPERATOR!

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of the personnel involved in the operation, transport, maintenance, and storage of the equipment.

This manual covers the operating instructions
and illustrated parts list for:

**All SW Machines
with a serial number of xxx70001- xxx79999**

Always use the entire serial number listed on the serial number
tag when referring to this product.

SCAG[®]

POWER EQUIPMENT

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INTRODUCTION

Your mower was built to the highest standards in the industry. However, the prolonged life and maximum efficiency of your mower depends on you following the operating, maintenance and adjustment instructions in this manual.

We encourage you to contact your dealer for repairs. All Scag dealers are informed of the latest methods to service this equipment and provide prompt and efficient service in the field or at their service shop. They carry a full line of Scag service parts.

A replacement Operator's Manual is available from your Scag Servicing Dealer or by contacting Scag Power Equipment, Service Department at P.O. Box 152, Mayville, WI 53050. Please indicate the complete model and serial number of your Scag product.

USE OF OTHER THAN ORIGINAL SCAG REPLACEMENT PARTS WILL VOID THE WARRANTY.

The "Right" and "Left", "Front" and "Rear" of the machine are referenced from the operator's perspective when in the normal operating position and facing the forward travel direction.

GENERAL SAFETY INSTRUCTIONS

READ THIS OPERATOR'S MANUAL and instructions furnished with attachments.

Perform only those maintenance procedures described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Scag Dealer. To ensure optimum performance and safety, always purchase genuine SCAG replacement parts and accessories.

Your safety and the safety of others depends significantly upon your knowledge and understanding of all correct operating practices and procedures of this machine.

SIGNAL WORDS



This symbol means "**Attention! Become Alert! Your Safety is Involved!**" The symbol is used with the following signal words to attract your attention to safety messages found on the decals and throughout this manual. The message that follows the symbol contains important information about safety. To avoid injury and possible death, carefully read the message! Be sure to fully understand the causes of possible injury or death.

Signal Word:

It is a distinctive word on safety decals and throughout this manual that alerts the viewer to the existence and relative degree of the hazard.



The signal word "DANGER" denotes that an extremely hazardous situation exists on or near the machine that could result in high probability of death or irreparable injury if proper precautions are not taken.



The signal word "WARNING" denotes that a hazard exists on or near the machine that can result in injury or death if proper precautions are not taken.



The signal word "CAUTION" is a reminder of safety practices on or near the machine that could result in personal injury if proper precautions are not taken.



BEFORE OPERATING

1. Know the controls and how to stop quickly.
2. Do not allow children to operate the machine. Do not allow adults to operate the machine without proper instruction.
3. Remove all debris or other objects that might be picked up and thrown by the cutter blades. Keep all bystanders away from the mowing area.
4. Keep all shields, safety devices, and decals in place. If a shield, safety device or decal is defective or damaged, repair or replace it before operating. Also, check all nuts, bolts and screws for proper tightness, to assure the machine is in safe operating condition.
5. Do not operate the machine while wearing sandals, tennis shoes, sneakers or shorts. Also, do not wear loose fitting clothing which could get caught in moving parts. Always wear long pants and substantial shoes. Wearing safety glasses and safety shoes is advisable and required by some local ordinances and insurance regulations.
6. Fill the fuel tank with clean, fresh gasoline, with a minimum octane rating of 87. Avoid spilling gasoline. Gasoline is highly flammable, handle it carefully.
 - A. Use an approved gasoline container.
 - B. Do not fill the tank while the engine is hot or running.
 - C. Do not smoke while handling gasoline.
 - D. Fill the fuel tank outdoors and up to approximately 1" (25 mm) below the bottom of the filler neck.
 - E. Wipe up any spilled gasoline.
7. Before attempting to start the engine, shift the transmission into neutral, move the blade engagement switch to the OFF position, and move the neutral latches to neutral.

WHILE OPERATING

1. Start the engine when the neutral latches are in the neutral lock position, the cutter blades are disengaged, and the transmission is in neutral.
2. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.
3. Using the machine demands attention. To prevent loss of control:
 - A. Mow only in daylight or when there is good artificial light.
 - B. Watch for holes or other hidden hazards.
 - C. Do not drive close to a drop-off, ditch, creek bank, or other hazard.
 - D. Reduce speed when making sharp turns and when turning on hillsides.
 - E. Always be sure of your footing. Keep a firm hold on the handles and walk---never run.
 - F. Do not operate where conditions are slippery.
4. The discharge chute must always be installed and in the down position on the side discharge cutter deck except when the Scag optional grass catcher or mulching plate are properly installed. If the discharge area should plug, shut the engine off and wait for all movement to stop before removing the obstruction.
5. Disengage the blades and wait for them to stop before crossing gravel drives, walks or roads.
6. Shut the engine off and wait until the blades come to a complete stop before removing the grass catcher container.
7. Never raise the cutter deck while the blades are rotating.
8. Always park the mower and/or start the engine on a level surface.

9. If the cutting blades should strike a solid object or the equipment should start to vibrate abnormally, stop the engine, disconnect the spark plug wire, and check immediately for the cause. Vibration is generally a warning of trouble. Check the machine for damaged or defective parts. Repair any damage before starting the engine or operating the cutter deck. Be sure the blades are in good condition and the blade bolts are tight.
10. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing directions on slopes.

! WARNING:

DO NOT operate on steep slopes. To check a slope, attempt to back up it (with the cutter deck down). If the machine can back up the slope without the wheels slipping, reduce speed and use extreme caution. ALWAYS FOLLOW OSHA APPROVED OPERATION.

11. Do not touch the engine or muffler while the engine is running or soon after it is stopped. These areas could be hot enough to cause a burn.
12. Before leaving the operator's position or leaving the mower unattended, shift the transmission into neutral, place the neutral latches in the neutral lock position, and move the blade engagement switch to OFF. Shut the engine OFF and remove the key.
13. Do not pass or stand on the grass discharge side of any mower with the engine running. Stop operation when another person approaches.



14. Use only Scag approved riding attachments.

Scag Approved Riding Attachments:

RS-2

RS-ZT

Using unapproved attachments, (especially "stand-up" riding attachments) may be hazardous.

MAINTENANCE AND STORAGE

1. Disconnect the spark plug wire from the spark plug to prevent accidental starting of the engine when servicing, adjusting or storing the machine.
2. If the mower must be tipped to perform maintenance or adjustment, remove the battery, drain the gasoline from the fuel tank and the oil from the crankcase.
3. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.
4. Be sure the machine is in safe operating condition by keeping nuts, bolts, and screws tight. Check the blade mounting bolts and nuts frequently to be sure they are tightened.
5. If the engine must be running to perform a maintenance adjustment, keep hands, feet, clothing and other parts of the body away from the cutter deck blades and other moving parts.
6. Do not overspeed the engine by changing governor settings. To be sure of safety and accuracy, have an authorized dealer check maximum engine speed with a tachometer.
7. The engine must be shut off before checking the oil or adding oil to the crankcase.
8. Allow the engine to cool before storing the mower in any enclosure such as a garage or storage shed. Make sure the fuel tank is empty if the machine is to be stored in excess of 30 days. Do not store the mower near any open flame or where gasoline fumes may be ignited by a spark.

9. Always store gasoline in a safety-approved, red container.
10. Be careful when servicing the battery as it contains acid, which is corrosive and could cause burns to skin and clothing.
11. Batteries release explosive gases when being charged or discharged. Keep batteries away from any source of sparks and/or flame.

INITIAL RUN-IN PROCEDURES (FIRST DAY OF USE OR APPROXIMATELY 10 HOURS)

1. Check the belts for proper tension at 2, 4 and 8 hours. Adjust as needed.
2. Check the steering control rods for neutral adjustment. (See Adjustments, page 6)
3. Check the tires for proper pressure.

Caster Wheels	25 psi.
Drive Wheels	15 psi.
4. Check for loose hardware. Tighten as needed.
5. Check the safety switches for proper adjustment:
 - * The engine will crank, but not start if the machine is not in neutral.
 - * On electric start machines, the engine will not crank if the PTO switch is on.
 - * The engine should crank and start if the machine is in neutral and the PTO engagement switch is OFF.
6. Apply lubricant to all the grease fittings. Lubricant was applied at the factory. This is just a precautionary check to make sure that all the fittings have been lubricated.

MOWER OPERATION

1. Read and understand the safety instructions before attempting to operate this machine.
2. Before starting the engine:
 - * Check the oil level in the engine.
 - * Fill the fuel tank with clean, fresh, lead-free gasoline.
 - * Open the fuel valve on the bottom of the fuel tank.

-NOTE-

Use gasoline with an octane rating no less than 87.

- * The transmission must be in NEUTRAL.
- * The blade clutch switch must be in the OFF position.
- * The operator's presence levers must be released.
- * The neutral latches must be in the neutral lock position.
- * The key switch must be on.

3. Start the engine:

* Choke as required. If the engine is cold, pull the choke knob out. When the engine starts, slowly push the choke in. If the engine stalls, repeat the above operation. When the engine is warm, choking may not be necessary.

4. Engage the cutter blades by lifting and pushing the blade clutch switch into the ON position. Pull the switch to the OFF position to disengage the cutter blades.

-NOTE-

When PTO is engaged or (possibly) disengaged, a squealing sound from the underside of the machine is normal. It is caused by the electric clutch plates meshing as the cutter blades come up to speed. For best equipment life, engage the clutch with the engine at 1/2 throttle, not under full load.

⚠ WARNING:

To avoid serious bodily injury and damage to the transmission, the machine must be at a full stop before shifting between gears or shifting between forward and reverse.

5. Shift the transmission into gear for the desired mowing speed.

-NOTE-

Top speed is suggested only for transport!

6. While squeezing the steering brake levers with both hands, release both neutral latches.
7. When the steering brake levers are released, the machine will travel straight. To make a right turn, squeeze the RH lever. To turn left, squeeze the LH lever.
8. TO STOP, squeeze both levers, lock the neutral latches, and shift the transmission into neutral.

CUTTER DECK BELT ADJUSTMENTS

1. Remove the belt cover.
2. Adjust the cutter deck drive belt using a belt tension gauge. Adjust the belt so that the belt moves 1/2" with 10 pounds of pressure. Adjust the tension by tightening or loosening the J-bolt nut. (See figure 1)

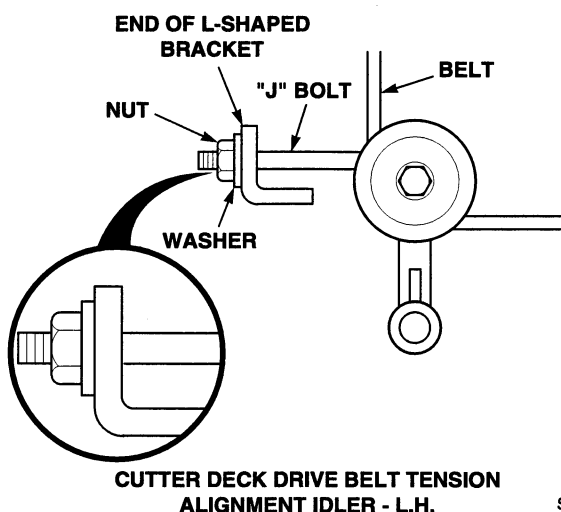


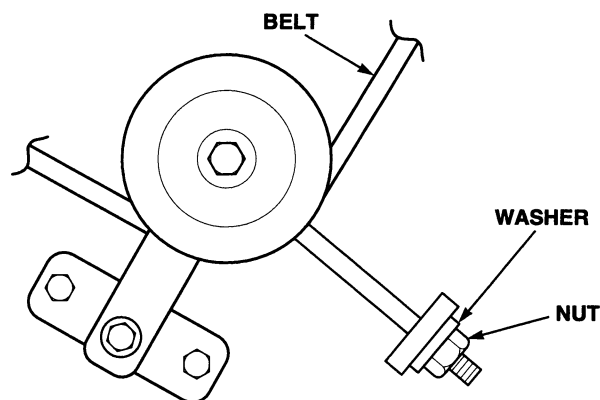
Figure 1

SC400G

-NOTE-

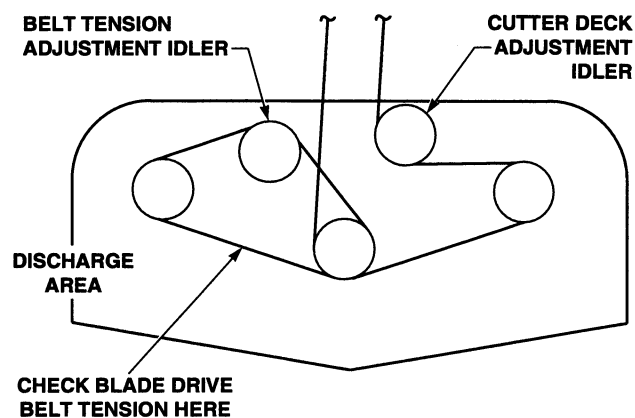
Due to initial belt stretch and to prevent the belt from slipping, check this adjustment after the first 2 hours, 4 hours and 8 hours of operation.

3. Adjust the RH blade drive belt using a belt tension gauge. Adjust the belt so that the belt moves 1/2" with 10 pounds of pressure. Adjust the tension by tightening or loosening the J-bolt nut. (See figure 2 & 3)



SC401G

Figure 2. RH Blade Belt Adjustment



SC402G

Figure 3. Cutter Deck Belts

TRANSMISSION DRIVE BELT

Adjust the transmission drive belt so that there is about a 3/16" deflection with 10 lbs. of pressure. Adjust by loosening idler pulley mounting bolt and sliding the idler left or right to change belt tension.

DRIVE CONTROL ADJUSTMENTS

1. Adjust the steering control rods so that there is approximately $\frac{3}{4}$ " clearance from the bottom of the rod to the bottom of the neutral latch slot when in the drive position. (See figure 4)

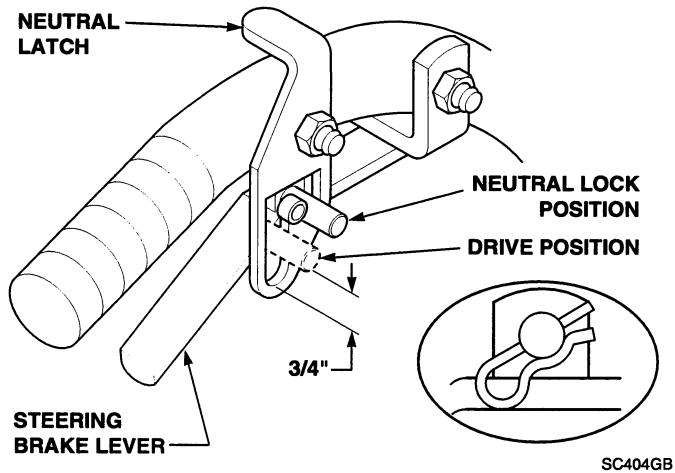


Figure 4. Steering Control Rod Adjustment

2. Adjust the steering brake rods so that the brakes do not apply until the steering levers are pulled tight to the handles. When the steering levers are locked in the neutral position the machine should move freely.

CUTTER DECK ADJUSTMENTS

Due to the many cutting conditions that exist, it is difficult to suggest a cutter deck setting that will work for every lawn. There are two adjustments that can be made on these decks, pitch and height.

PITCH is the angle of the blades (comparing front to rear). A $\frac{1}{4}$ " downward pitch (front of deck down) is recommended for best cutting performance.

HEIGHT is the nominal distance the blade is off of the ground. This measurement is made with the blades pointed side to side and distance is measured between cutting tip and ground. (Also see Blade Height Adjustment, next page)

Changes to the cutting height can be achieved by repositioning the cutter deck. (This adjustment will also effect the pitch of the deck). There are three available positions (see figure 5).

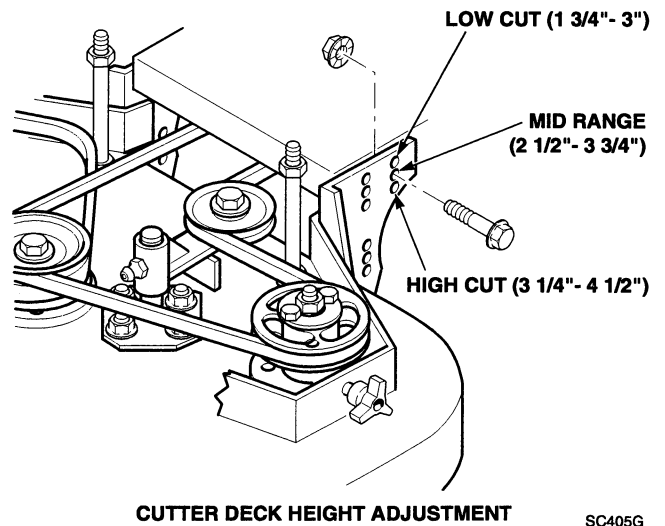


Figure 5. Cutting Height Adjustment

Caster spacers also can be repositioned to change cutting heights and to change the pitch of the deck. (See figure 7)

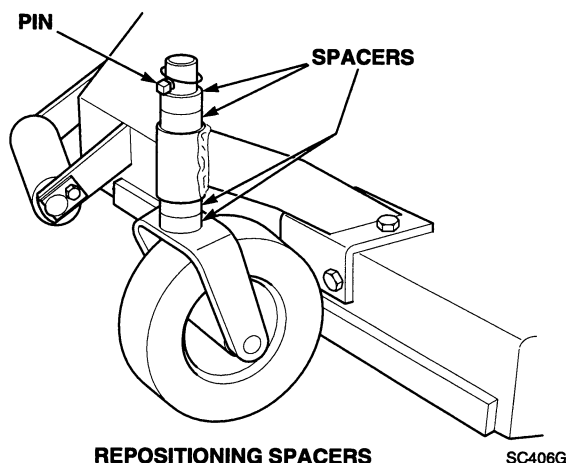


Figure 6. Caster Wheel Spacers

BLADE HEIGHT ADJUSTMENT

Adjusting the blade height can be done by moving any number of the five smaller 1/4" spacers on the blade mounting bolts to the top of the spindle shaft or below the spindle shaft.

-NOTE-

All blades should be positioned equally.

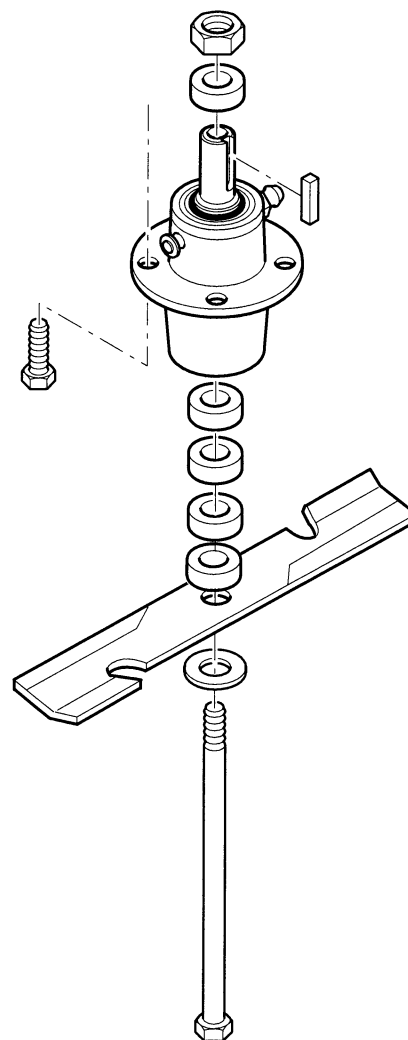
For best cut and discharge, a minimum of three spacers should be installed between the blade and the spindle. (See figure 7).

CUTTER BLADES

Do not sharpen beyond 1/3 of the width of the blade. (See figure 8)

-NOTE-

Dress the blade with a file. Using a wheel grinder may burn the blade. Check the balance of the blade. If blades are out of balance, vibration and premature wear of spindle assembly can occur. See your authorized Scag dealer for blade balancing or special tools if you choose to balance your own blades.



SC407G

Figure 7. Blade Spacers

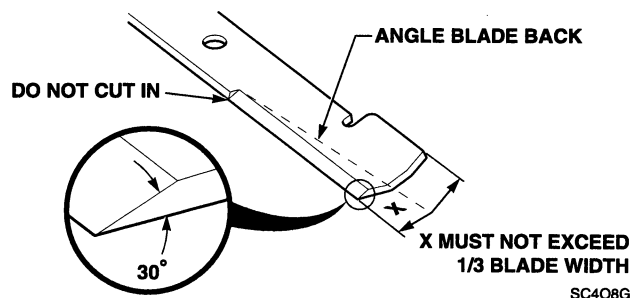


Figure 8. Blade Sharpening

LUBRICATION & MAINTENANCE

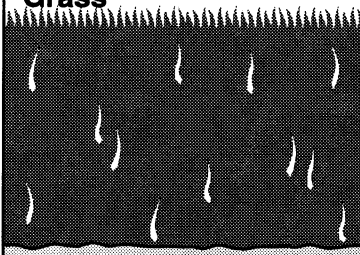
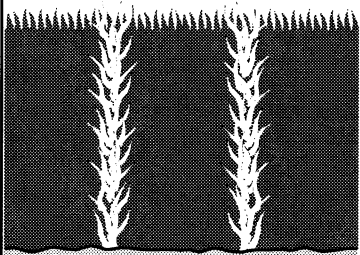
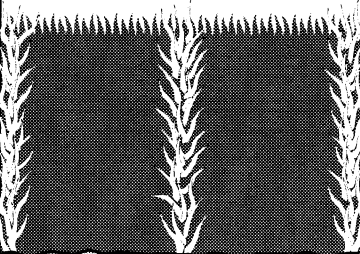
BREAK-IN			
	8 HOURS (DAILY)	+ Grease spindle until grease comes out the relief valve	
	40 HOURS (WEEKLY)	Compatible Greases: Lidok EP #2 (found at industrial shops)	
	100 HOURS (BIWEEKLY)	Ronex MP (Exxon service stations)	
	500 HRS OR ANNUALLY	Shell Alvania (Shell service stations)	
		Mobilux #2 (Mobil service stations)	
		Super Lub M EP #2 (Conoco service stations)	
		PROCEDURE	COMMENTS
X		Check all hardware for proper tightness	
X		Change engine oil and filter at 5 hours	
X		Check engine oil	Do not over fill
X		Remove debris from under belt cover	More often if needed
X		Sharpen cutter blades	More often if needed
X		Grease spindle bearings	+ US Lithium MP White Grease 2125
X		Clean air filter	More often if needed
X		Check belt tension	
X		Check tire pressure	Add or adjust as required
X		Change engine oil	See engine mfg. information
X		Replace air filter	More often if needed
X		Grease caster wheel bearings	Chassis grease
X		Grease caster wheel pivot shafts	Chassis grease
X		Grease idler pulley bracket on cutter deck	Chassis grease
X		Grease drive wheel bearings	Chassis grease
X		Grease transmission couplers	Chassis grease
X		Grease idler bracket LH & RH	Chassis grease
X		Check all hardware for proper tightness	
X		Adjust air gap on electric clutch	Contact your Scag dealer for information about making this adjustment

For your convenience, we are providing a list of common replacement parts for your SCAG product.

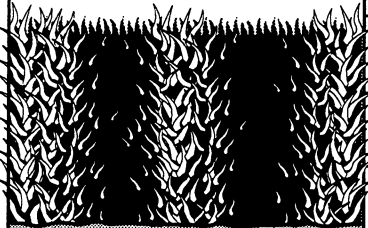
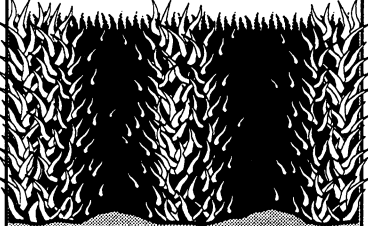
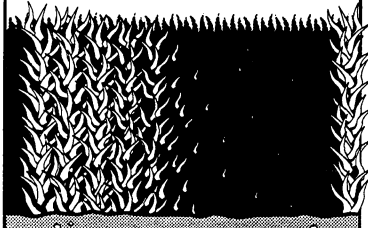
REPLACEMENT PARTS

Part	Description	32	36	48	52	61	72
48110	Cutter Blade 16-1/2"	x		x			
48184	Cutter Blade 16-1/2" High Lift	x		x			
48108	Cutter Blade 18"		x		x		
48185	Cutter Blade 18" High Lift		x		x		
48111	Cutter Blade 21"					x	
48304	Cutter Blade 21" High Lift					x	
48112	Cutter Blade 24"						x
48278	Belt, Blade Drive	x					
48204	Belt, Blade Drive		x				
48087	Belt, RH Blade Drive			x			
48089	Belt, Blade Drive			x			
48285	Belt, RH Blade Drive				x		
48286	Belt, Blade Drive				x		
48265	Belt, RH Blade Drive					x	
48088	Belt, Blade Drive					x	
48295	Belt, RH Blade Drive						x
48296	Belt, Blade Drive						x
48203	Belt, Transmission Drive	x	x	x	x	x	x
48202A	Belt, Wheel Drive	x	x	x	x	x	x
04029-03	Wing Nut, Belt Cover	x	x	x	x	x	x

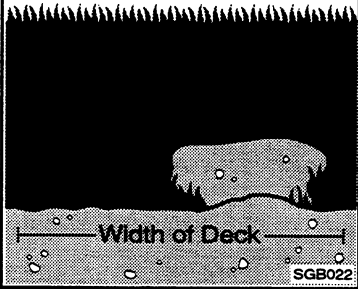
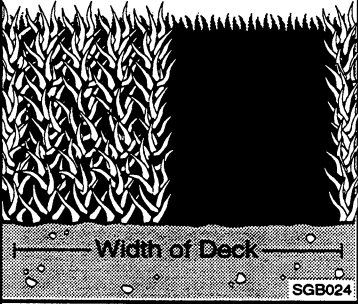
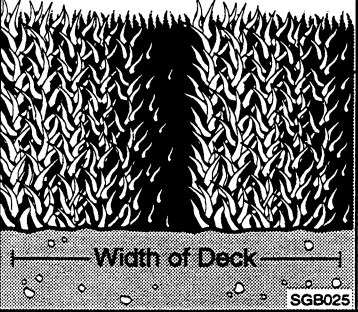
TROUBLESHOOTING CUTTING CONDITIONS

CONDITION	CAUSE	CURE
Stringers - Occasional Blades of Uncut Grass  <small>SGB020</small>	Low engine RPM	Run engine at full 3600 RPM
	Ground speed too fast	Slow speed to adjust for conditions
	Wet grass	Cut grass after it has dried out
	Dull blades, incorrect sharpening	Sharpen blades
	Deck plugged, grass accumulation	Clean underside of deck
	Belts slipping	Adjust belt tensions
Streaking - Strips of Uncut Grass in Cutting Path  <small>SGB018</small>	Dull, worn blades	Sharpen blades
	Incorrect blade sharpening	Sharpen blades
	Low engine RPM	Run engine at full 3600 RPM
	Belt slipping	Adjust belt tension
	Deck plugged, grass accumulation	Clean underside of deck
	Ground speed too fast	Slow speed to adjust for conditions
	Wet grass	Cut grass after it has dried out
	Bent blades	Replace blades
	Not enough overlapping between rows	Increase the overlap of each pass
Streaking - Strips of Uncut Grass Between Cutting Paths  <small>SGB019</small>		

TROUBLESHOOTING

CONDITION	CAUSE	CURE
<p data-bbox="126 380 407 590">Uneven Cut on Flat Ground - Wavy High-Low Appearance, Scalloped Cut, or Rough Contour</p>  <p data-bbox="207 894 375 919">Width of Deck</p> <p data-bbox="402 936 461 953">SGB020</p>	Lift worn off of blade	Replace blade
	Blade upside down	Mount with cutting edge toward ground
	Deck plugged, grass accumulation	Clean underside of deck
	Too much blade angle (deck pitch)	Adjust pitch and level
	Deck mounted improperly	See your authorized SCAG dealer
	Bent spindle area	See your authorized SCAG dealer
<p data-bbox="126 978 448 1150">Uneven Cut on Uneven Ground - Wavy Appearance, High-Low Scalloped Cut, or Rough Contour</p>  <p data-bbox="207 1476 375 1501">Width of Deck</p> <p data-bbox="402 1518 461 1535">SGB021</p>	Uneven ground	May need to reduce ground speed, raise cutting height, and/or change direction of cut
<p data-bbox="126 1560 435 1625">Sloping Ridge Across Width of Cutting Path</p>  <p data-bbox="207 1923 375 1948">Width of Deck</p> <p data-bbox="402 1965 461 1982">SGB023</p>	Tire pressures not equal	Check and adjust tire pressure
	Wheels uneven	Check and adjust tire pressure
	Deck mounted incorrectly	See your authorized SCAG dealer

TROUBLESHOOTING

CONDITION	CAUSE	CURE
<p>Scalping - Blades Hitting Dirt or Cutting Very Close to the Ground</p>  <p>Width of Deck SGB022</p>	Low tire pressures	Check and adjust pressures
	Ground speed too fast	Slow speed to adjust for conditions
	Cutting too low	May need to reduce ground speed, raise cutting height, change direction of cut, and/or change pitch and level
	Rough terrain	May need to reduce ground speed, raise cutting height, and/or change direction of cut
	Ground speed too fast	Slow speed to adjust for conditions
<p>Step Cut Ridge in Center of Cutting Path</p>  <p>Width of Deck SGB024</p>	Blades not mounted evenly	Adjust pitch and level
	Bent blade	Replace blade
	Internal spindle failure	See your authorized SCAG dealer
	Mounting of spindle incorrect	See your authorized SCAG dealer
<p>Slope Cut - Sloping Ridges Across Width of Cutting Path</p>  <p>Width of Deck SGB025</p>	Bent spindle mounting area	See your authorized SCAG dealer
	Internal spindle failure	See your authorized SCAG dealer
	Bent deck housing	See your authorized SCAG dealer

TECHNICAL SPECIFICATIONS

MODELS

SW32-13KA, SW36-13KA, SW36-13KH, SW48-14KA, SW48-14KH,
SW48-14KAE, SW48-16BV, SW-14KA, SW-16BV, SW-18BV,
SW-18CVE

ENGINE

General Type: Heavy duty industrial/commercial
Brand / Model: Kawasaki FB460V & FC420V: Kohler CV12.5, CV14T & CVE18:
Briggs & Stratton 303776 & 350776 Vanguard V-Twin OHV.
Horsepower: Kawasaki FB460V=13 HP, FC420V=14 HP: Kohler CV12.5=12.5HP,
CV14T=14 HP, CVE 18=18 HP: B&S 303776=16 HP, 350776=18 HP
Type: Kaw. 13 HP & 14 HP: Kohler 12.5 HP & 14 HP = 4 cycle gas, single
cylinder, vertical shaft engine. Kohler 18 HP, B&S 16 HP & 18 HP = 4
cycle gas, twin cylinder, vertical shaft engine.
Displacement: Kaw. 13 HP=460cc, 14 HP=423cc: Kohler 13 HP=398cc,
14 HP=398cc: B&S 16 HP=480cc, 18 HP=570cc
Cylinders: Single cast-iron sleeves & 2 cast-iron sleeves
Governor: Mechanical type governor with variable speed control. Settings:
Kawasaki 13 HP= 3350 rpm (+/- 75 rpm), 14 HP=3600 rpm (+/-
75rpm): idle set at 1200 rpm (+/- 75 rpm) / Kohler 12.5 HP, 14 HP &
18 HP=3600 rpm (+/- 75 rpm), idle set at 1200 rpm (+/- 75 rpm)
B&S 16 HP & 18 HP- Mechanical Type Governor.
Air Cleaner: Large capacity dual element with cyclonic-type air filter.
Exhaust: Single & dual exhaust canister muffler.
Starter/Electrical: Electronic ignition with recoil starter. 18CVE-12 volt battery with
alternator, solid state ignition with key start.
Fuel Pump Group: Varied - See manufacturer's specification.
Oil Pump Group: Varied - See manufacturer's specification.
Valve Group: Varied - See manufacturer's specification.

ENGINE DECK

Thickness: 7 gauge steel.
Fuel Tank: 5 gallon (19.0 liters) seamless polyethylene.
Drive Wheels/Tires: 13.0 x 6.50-6 two-ply pneumatic tubeless.
Handle Bars: 1-1/4" diameter.

DRIVE SYSTEM

Type: Belt drive with twin power belts for increased friction to pulley surface.
Transmissions: Peerless 5-speed transmission, Model #700-026.
Steering/Travel Control: Clutch/brake fingertip steering, key lock switch. (EZ Grip
design allows minimum hand force to operate controls.)
Brakes: 6" drum, band brake, one on each wheel.
Parking Brakes: 6" drum, band brake, one on each wheel.
Axles: 1"
Wire Harness: 14 gauge wire.
Safety Group: Hand actuated operator presence system with blade / clutch and
transmission interlock to engine kill.
Forward Speed Range: 2.0 to 6.0 mph
Reverse Speed Range: 2.0 mph

TECHNICAL SPECIFICATIONS (CON'T)

CUTTER DECK

Type:	Out-front design with anti-scalp rollers.
Construction:	SWM32-48: 7-gauge steel with 7-gauge (3/16") steel skirt SWM52, 61, 72: 10-gauge steel with 7-gauge (3/16") steel skirt
True Cutting Width:	SWM32=32.0" (81.3cm), SWM36=36.0" (90.2cm), SWM48=48.0" (122.0cm), SWM52=52.0" (132.0cm), SWM61=61.0" (155.0cm), SWM72=71.5" (181.6cm)
Blade Engagement:	Electric blade engagement clutch with control panel switch
Cutting Height Adjustment:	Manual adjustment 1-3/4" to 4-1/2" in 1/4" increments.
Cutter Blades:	.204" thick, milled edge, 5150 alloy steel SWM32 = Two (2) 16.5" blades, SWM36 = Two (2) 18" blades, SWM48 = Three (3) 16.5" blades, SWM52 = Three (3) 18" blades SWM61 = Three (3) 21" blades, SWM72 = Three (3) 24 1/2" blades.
Discharge Opening:	SWM32, 36, 52 Extra wide 11.5", SWM48 Extra wide 13.5", SWM61, 72 Extra wide 13.75" discharge opening with hinged chute.
Caster Wheels:	9.4 x 3.5 smooth-tread flotation, inner tubes, split rims, roller bearings, with quick pin removal.
Spindles:	Cast housing, taper roller bearing, low maintenance with top access grease fitting and grease overflow relief poppet.
Spindle Pulleys:	Cast-iron with easily removed taper hubs
Cutter Deck Belts:	B-section with Kevlar cord

ADDITIONAL SPECIFICATIONS

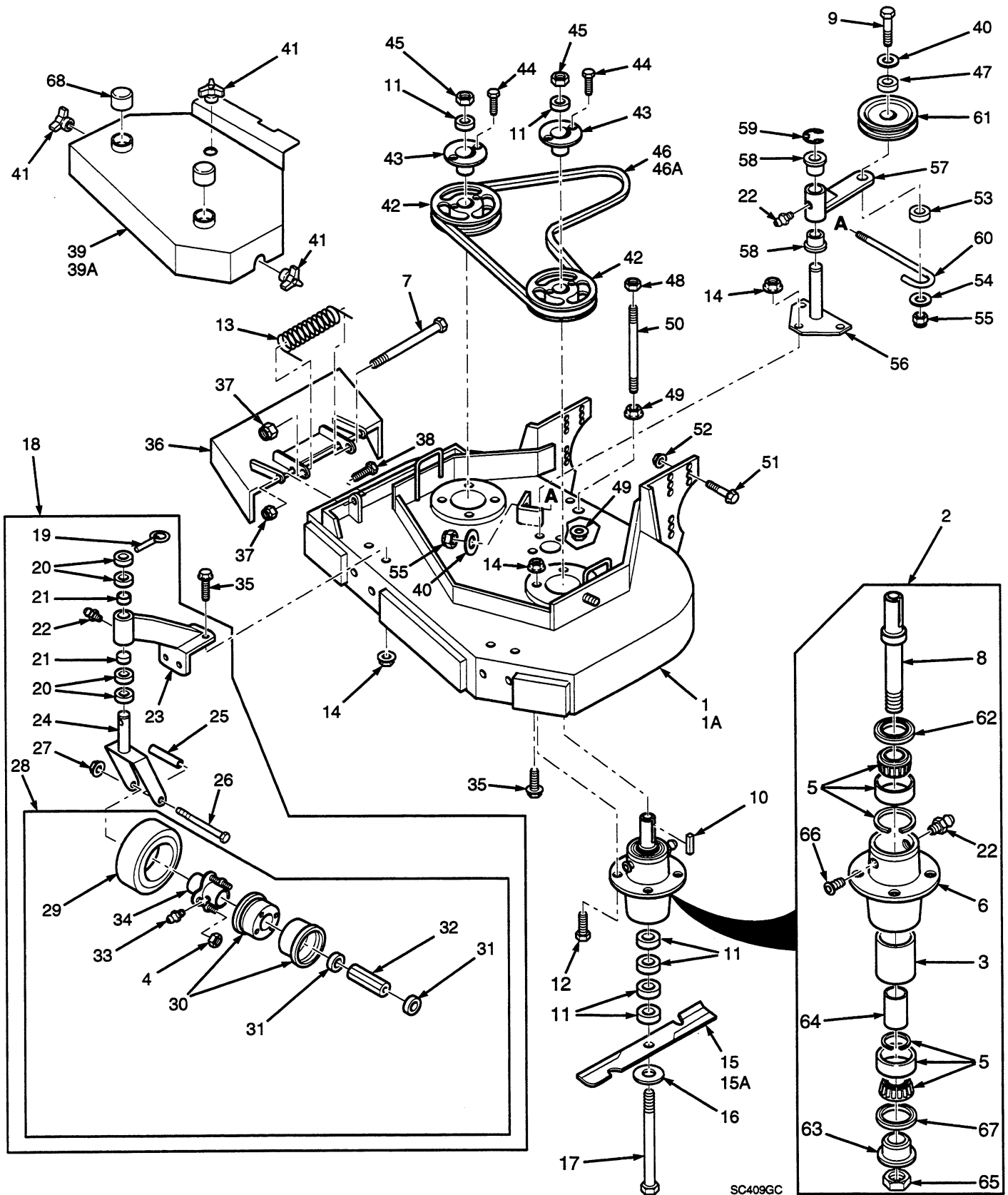
OPTIONAL ITEMS/ATTACHMENTS

Fabric Grass Catcher:	GC-F4 Grass Catcher with 4 cubic ft. capacity
Metal Grass Catcher:	GC-4D Grass Catcher with 4 cubic ft. capacity and rope pull dump or pick-up and dump.
Sulky:	RS-2 Two-Wheel Sulky with padded seat. RS-ZT Two-Wheel Zero Turn Sulky with padded seat.
Mulching Plate:	Steel plate fits over discharge opening. No blade change or removal required. Installs and removes in the field.

APPROXIMATE DIMENSIONS

	SWM32	SWM36	SWM48	SWM52	SWM61	SWM72
Length:	70.0"	72.0"	76.0"	76.0"	77.0"	78.0"
Length with grass catcher:	70.0"	72.0"	76.0"	76.0"	77.0"	78.0"
Tracking Width:	32.0"	37.0"	37.0"	37.0"	42.0"	42.0"
Width:	43.0"	48.0"	60.0"	60.0"	70.0"	81.0"
Width (with discharge chute up):	33.0"	38.0"	50.0"	53.0"	63.0"	74.0"
Width with grass catcher:	51.0"	56.0"	68.0"	71.0"	80.0"	91.0"
Height:	40.5"	40.5"	40.5"	40.5"	40.5"	40.5"
Height with grass catcher:	40.5"	40.5"	40.5"	40.5"	40.5"	40.5"
Weight:	440 lbs.	465 lbs.	515 lbs.	525 lbs.	555 lbs.	610 lbs.
Weight with GC-F4 grass catcher:	480 lbs.	505 lbs.	555 lbs.	565 lbs.	595 lbs.	650 lbs.
Weight with GC-4D grass catcher:	490 lbs.	515 lbs.	565 lbs.	575 lbs.	605 lbs.	660 lbs.

32" & 36" CUTTER DECKS

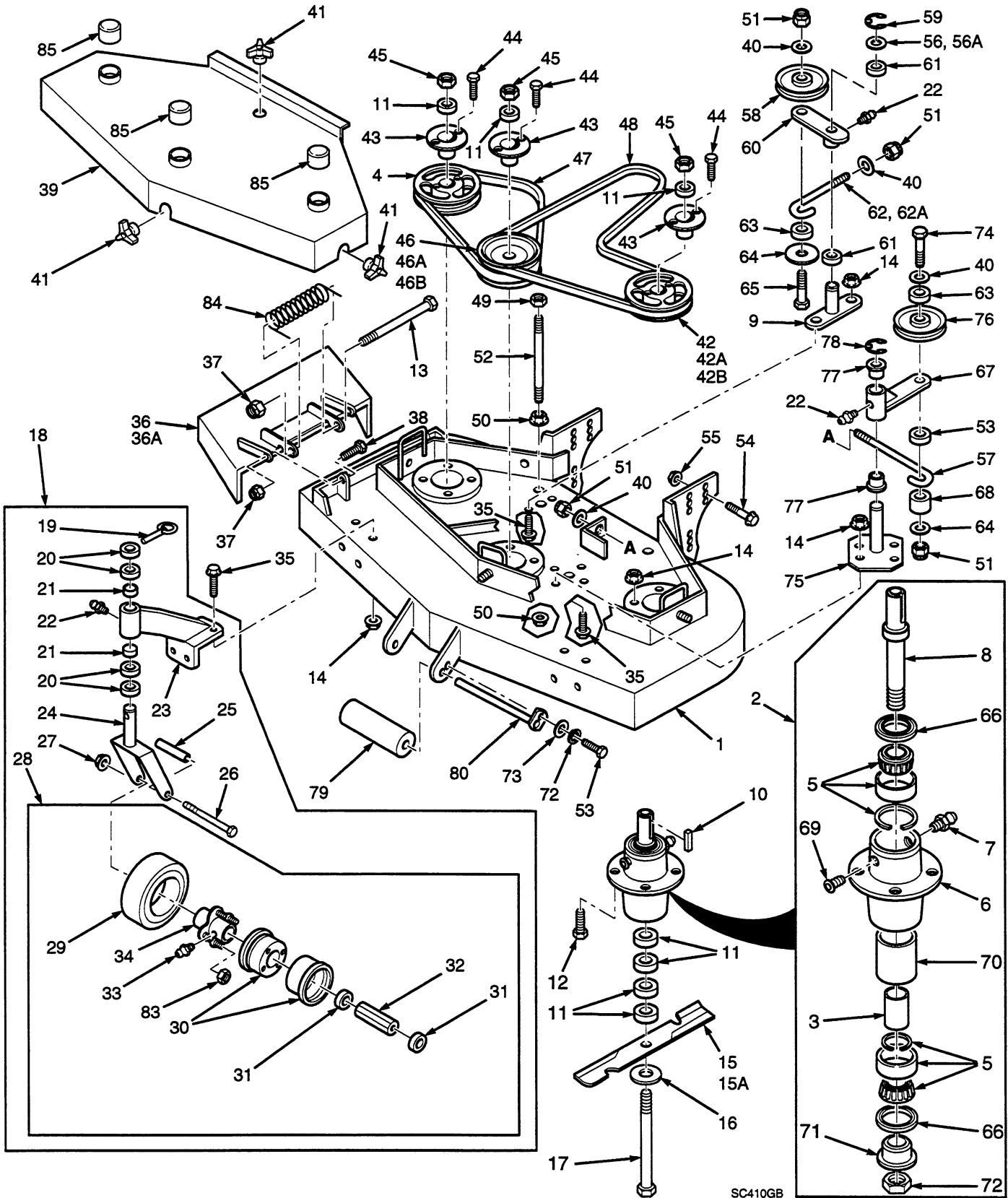


32" & 36" CUTTER DECKS

Ref. Part No. Number	Description	32	36	Ref. Part No. Number	Description	32	36
1	46849	Cutter Deck (Includes Decals)	x	42	48924	Pulley	x x
1A	46850	Cutter Deck (Includes Decals)	x	43	48926	Tapered Hub	x x
2	46631	Cutter Spindle Assy.	x	44	04001-01	Hex Hd. Bolt, 1/4-20 x 3/4"	x x
3	43312	Spacer, Outside	x	45	04020-09	Hex Nut, 5/8-11	x x
4	48307-08	Tapered Nut, 5/16-24	x	46	48278	Belt, Blade Drive	x
5	481022	Tapered Bearing (Two)	x	46A	48204	Belt, Blade Drive	x
6	43294	Spindle Housing	x	47	43077	Spacer	x x
7	04001-108	Bolt, 5/16-18 x 4-1/4" Hex Head	x	48	04021-05	Hex Nut, 3/8-16 Center Locknut	x x
8	43298	Spindle Shaft	x	49	04019-04	Nut, 3/8-16 Serrated Flange	x x
9	04001-77	Bolt, 3/8-16 x 3-1/2" Hex Head	x	50	04004-02	Support, Belt Cover	x x
10	04063-08	Key, 1/4 x 1/4 x 2"	x	51	04017-42	Cpscrw, 7/16-14 x 1" Ser.Fig. HH	x x
11	43278	Spacer, Cutter Blade - Small	x	52	04019-05	Nut, 7/16-14 Serrated Flange	x x
12	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x	53	43277	Spacer, J-Hook	x x
13	481050	Spring, Chutte Return	x	54	04041-12	Washer, 3/8 x 1-1/2 x 16 GA	x x
14	04019-03	Nut 5/16-18 Serrated Flange	x	55	04021-09	Elastic Stop Nut, 3/8-16	x x
15	48110	Cutter Blade 16-1/2"	x	56	45423	Idler Pivot	x x
15	48108	Cutter Blade, 18"	x	57	46748	Idler Arm Assy. (Inc. 22 & 58)	x x
15A	48184	Cutter Blade 16-1/2 Hi Lift	x	58	48100-02	Bronze Bearing	x x
15A	48185	Cutter Blade, 18 Hi Lift	x	59	04050-05	Retaining Ring, 1-1/8" Ext. "E"	x x
16	04040-10	Flatwasher, 5/8 W	x	60	44078	J-Hook	x x
17	04001-41	Hex Hd. Bolt, 5/8-11 x 9-1/2"	x	61	48269	Idler Pulley, Belt Clutch	x x
18	46079	Caster Assembly (Inc.19-28)	x	62	481024	Seal, Cutter Spindle	x x
19	04066-01	Quick Pin	x	63	43297	Spindle Bushing	x x
20	43037-01	Spacer, Caster Yoke, 1/2" long	x	64	43296	Spacer, Inside	x x
21	48100-01	Bronze Bearing	x	65	481035	Nut,	x x
22	48114-04	Grease Fitting	x	66	48677	Relief Fitting, Cutter Spindle	x x
23	46082	Support Assembly (Inc. 21-23)	x	67	481025	Seal, Cutter Spindle	x x
24	45006	Caster Yoke	x	68	48098	Spindle Shield	x x
25	43022	Sleeve, Caster Wheel Bearing	x				
26	04001-37	Hex Hd. Bolt, 1/2-13 x 5-1/2"	x				
27	04021-07	Elastic Stop Nut, 1/2-13	x				
28	48307	Wheel Assy. (Inc.4, 29-34)	x				
29	48307-02	Tire only, Caster Wheel	x				
NS	48006-03	Inner Tube only	x				
30	48307-04	Rim Pair, Caster Wheel	x				
31	48006-07	Retainer, Bearing, Caster Wheel	x				
32	48006-06	Roller Bearing, Caster Wheel	x				
33	48114-03	Grease Fitting, 45 degree 1/4-28	x				
34	48006-05	Hub Assembly	x				
35	04017-16	Cpscrw, 5/16-18 x 3/4" Ser.Fig. HH	x				
36	46725	Discharge Chute	x				
37	04021-10	Hex Nut, 5/16-18 Elastic Stop	x				
38	04001-09	Hex Hd Bolt, 5/16-18 x 1"	x				
39	46853	Belt Cover Assy (Includes Decal)	x				
39A	46797	Belt Cover Assy (Includes Decal)	x				
40	04041-07	Flat Washer, 3/8" Special	x				
41	04029-03	Wing Nut, 3/8-16	x				

* Common hardware which should be purchased locally. All bolts are Grade 5 plated, all other fasteners zinc plated.

48", 52", 61", & 72" CUTTER DECKS

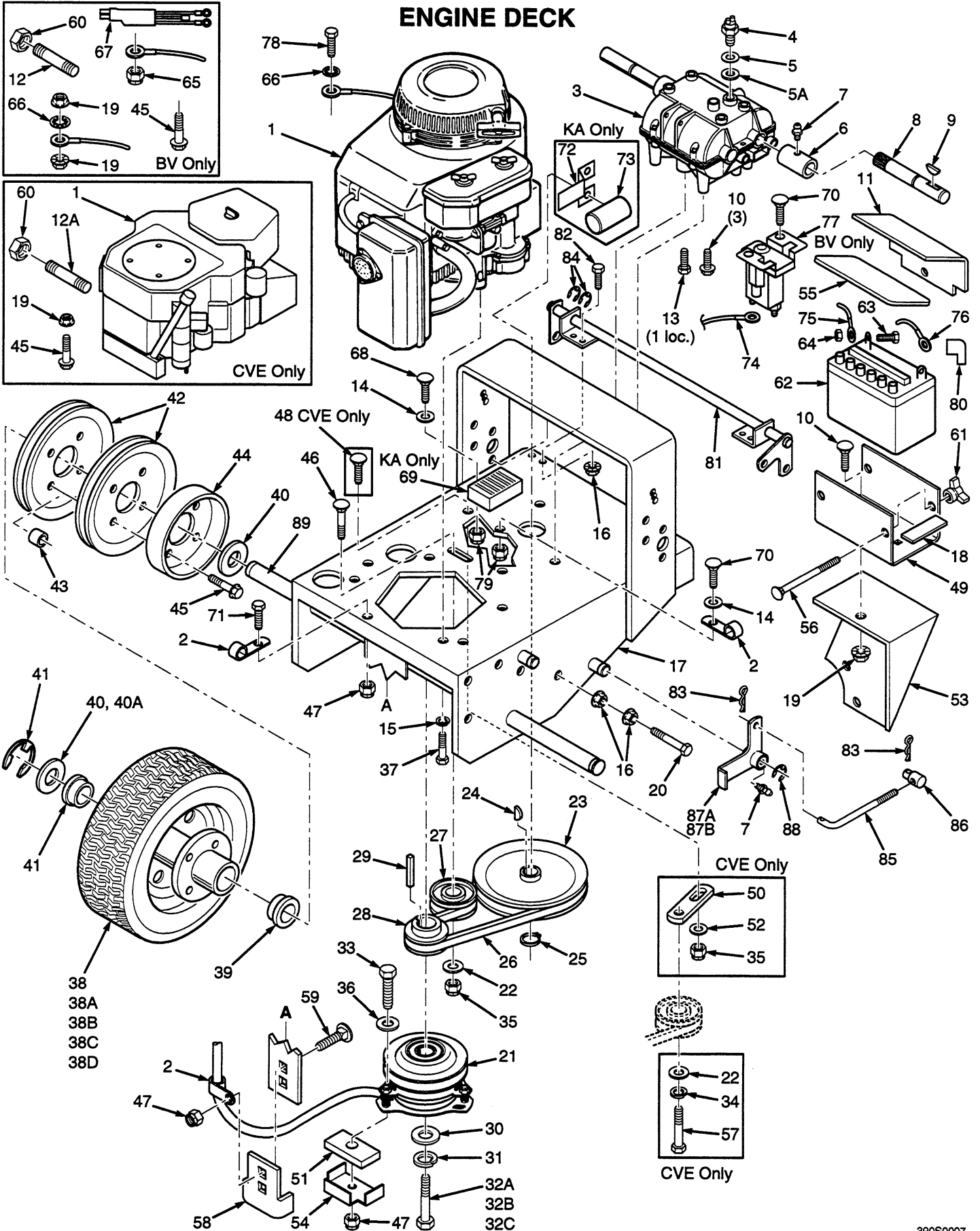


SC410GB

48, 52, 61, & 72" CUTTER DECKS

Ref. Part No. No.	Description	48	52	61	72	Ref. Part No. No.	Description	48	52	61	72	
1	46851	Cutter Deck (Includes decals)	x			45	04020-09	Nut, 5/8-11 Hex	x	x	x	x
1	46751	Cutter Deck (Includes decals)		x		46	48923	Pulley, Double	x	x		
1	46752	Cutter Deck (Includes decals)			x	46A	48940	Pulley, Double			x	
1	46608	Cutter Deck (Includes decals)				46B	48966	Pulley, Double				x
2	46631	Spindle Assembly	x	x	x	47	48087	Belt, RH Blade Drive	x			
3	43312	Spacer, Inside	x	x	x	47	48285	Belt, RH Blade Drive		x		
4	48924	Pulley	x	x	x	47	48265	Belt, RH Blade Drive			x	
5	481022	Tapered Bearing (Two)	x	x	x	47	48295	Belt, RH Blade Drive				x
6	43294	Spindle Housing	x	x	x	48	48089	Belt, Blade Drive	x			
7	48114-04	Grease Fitting Str. 5/16	x	x	x	48	48286	Belt, Blade Drive		x		
8	43298	Spindle Shaft, Tapered Brng	x	x	x	48	48088	Belt, Blade Drive			x	
9	45037	Idler Pivot	x	x	x	48	48296	Belt, Blade Drive				x
10	04063-08	Key, 1/4 x 1/4 x 2"	x	x	x	49	04021-05	Nut, 3/8-16, Nut Centerlock	x	x	x	x
11	43278	Spacer, Cutter Blade - Small	x	x	x	50	04019-04	Nut, 3/8-16, Serrated Flange	x	x	x	x
12	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x	x	x	51	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x	x
13	04001-108	Bolt, 5/16-18 x 4-1/4" Hex Head	x	x	x	52	04004-02	Support, Belt Cover	x	x	x	x
14	04019-03	Serrated Flange Nut, 5/16-18	x	x	x	53	04001-08	Bolt, 5/16-18 x 1/2" Hex Head	x	x	x	x
15	48110	Cutter Blade 16-1/2"	x			54	04017-42	Cpscrg, 7/16-14 x 1" Ser Fling H Hd	x	x	x	x
15	48108	Cutter Blade 18"		x		55	04019-05	Nut, 7/16-14 Serrated Flange	x	x	x	x
15	48111	Cutter Blade 21"			x	56	04041-08	Flat Washer 3/4" Special	x	x	x	x
15	48112	Cutter Blade 24"				56A	04041-08S	Flat Washer 3/4" Special	x	x	x	x
15A	48184	Cutter Blade 16-1/2 Hi Lift	x			57	44078	J-Hook	x	x	x	x
15A	48185	Cutter Blade 18 Hi Lift		x		58	48181	Idler Pulley, "V" Groove	x	x	x	x
15A	48304	Cutter Blade 21 Hi Lift			x	59	04050-02	Retaining Ring, 3/4" Ext."E"	x	x	x	x
16	04040-10	Flatwasher, 5/8" (.688 x 1.75 x .134)	x	x	x	60	46081	Idler Arm Assy. (Incl. 22 & 61)	x	x	x	x
17	04001-41	Hex Head Bolt, 5/8-11 x 9-1/2"	x	x	x	61	48100-05	Bronze Bearing	x	x	x	x
18	46079	Caster Assembly, (incl. 19-28)	x	x	x	62	43028	J-Rod, Idler Pulley	x	x	x	
19	04066-01	Quick Pin	x	x	x	62A	44078	J-Rod, Idler Pulley				x
20	43037-01	Spacer, Caster Yoke, 1/2" thick	x	x	x	63	43077	Spacer, J-Rod	x	x	x	x
21	48100-01	Bronze Bearing	x	x	x	64	04041-12	Washer, 3/8 x 1-1/2 x 16 ga.	x	x	x	x
22	04030-03	Lock Wshr, 5/16" (.317 x .586 x .078)	x	x	x	65	04001-46	Bolt, 3/8-16 x 2-1/4" Hex Head	x	x	x	x
23	46082	Support Assembly, (incl. 21-23)	x	x	x	66	481024	Seal, Cutter Spindle	x	x	x	x
24	45006	Caster Yoke	x	x	x	67	46748	Idler Arm Assy (Includes 22&77)	x	x	x	x
25	43022	Sleeve, Caster Wheel Bearing	x	x	x	68	43277	Spacer, J-Rod	x	x	x	x
26	04001-37	Hex Hd Bolt, 1/2-13 x 5-1/2"	x	x	x	69	48677	Relief Fitting, Cutter Spindle	x	x	x	x
27	04021-07	Elastic Stop Nut, 1/2-13	x	x	x	70	43312	Spacer, Outside, Cutter Spindle	x	x	x	x
28	48307	Wheel Assy. (incl. 29-34,81)	x	x	x	71	43297	Spindle Bushing	x	x	x	x
29	48307-02	Tire only, Caster Wheel	x	x	x	72	481035	Nut, Cutter Spindle	x	x	x	x
NS	48006-03	Inner Tube only, Caster Wheel	x	x	x	73	04040-15	Flat Wash., 5/16" (.375 x .875 x .083)	x	x	x	
30	48307-04	Rim Pair, Caster Wheel	x	x	x	74	04001-77	Bolt, 3/8-16 x 3-1/2" Hex Head	x	x	x	x
31	48006-07	Bearing Retainer, Caster Wheel	x	x	x	75	45329	Idler Pivot	x	x	x	x
32	48006-06	Roller Bearing, Caster Wheel	x	x	x	76	48269	Idler Pulley, Belt Clutch	x	x	x	x
33	48114-03	Grease Fitting 45 deg., 1/4-28	x	x	x	77	48100-02	Bronze Bearing	x	x	x	x
34	48006-05	Hub Assembly, (incl. bolts)	x	x	x	78	04050-05	Retaining Ring	x	x	x	x
35	04017-16	Capscrew, 5/16-18 x 3/4"	x	x	x	79	48038	Guide Roller	x	x	x	x
36	46726	Discharge Chute			x	80	45046	Roller Shaft	x	x	x	x
36A	46725	Discharge Chute	x	x		81	481025	Seal, Cutter Spindle	x	x	x	x
37	04021-04	Nut, 5/16-18 Elastic Elastic Stop	x	x	x	82	43277	Spacer, J-Hook	x	x	x	x
38	04001-09	Bolt, 5/16-18 x 1" Hex Head	x	x	x	83	48307-08	Nut, 3/8-24 Tapered	x	x	x	x
39	46798	Belt Cover (Includes decals)	x			84	481050	Spring, Chute Return	x	x	x	x
39	46804	Belt Cover (Includes decals)		x		85	48098	Spindle Shield	x	x	x	x
39	46805	Belt Cover (Includes decals)			x							
39	46848	Belt Cover (Includes decals)										
40	04041-07	Flat Washer, 3/8" Special	x	x	x							
41	04029-03	Wing Nut, 3/8-16	x	x	x							
42	48924	Pulley	x	x								
42A	48753	Pulley			x							
42B	48967	Pulley										
43	48926	Tapered Hub	x	x	x							
44	04001-01	Bolt, 1/4-20 x 3/4" Hex Head	x	x	x							

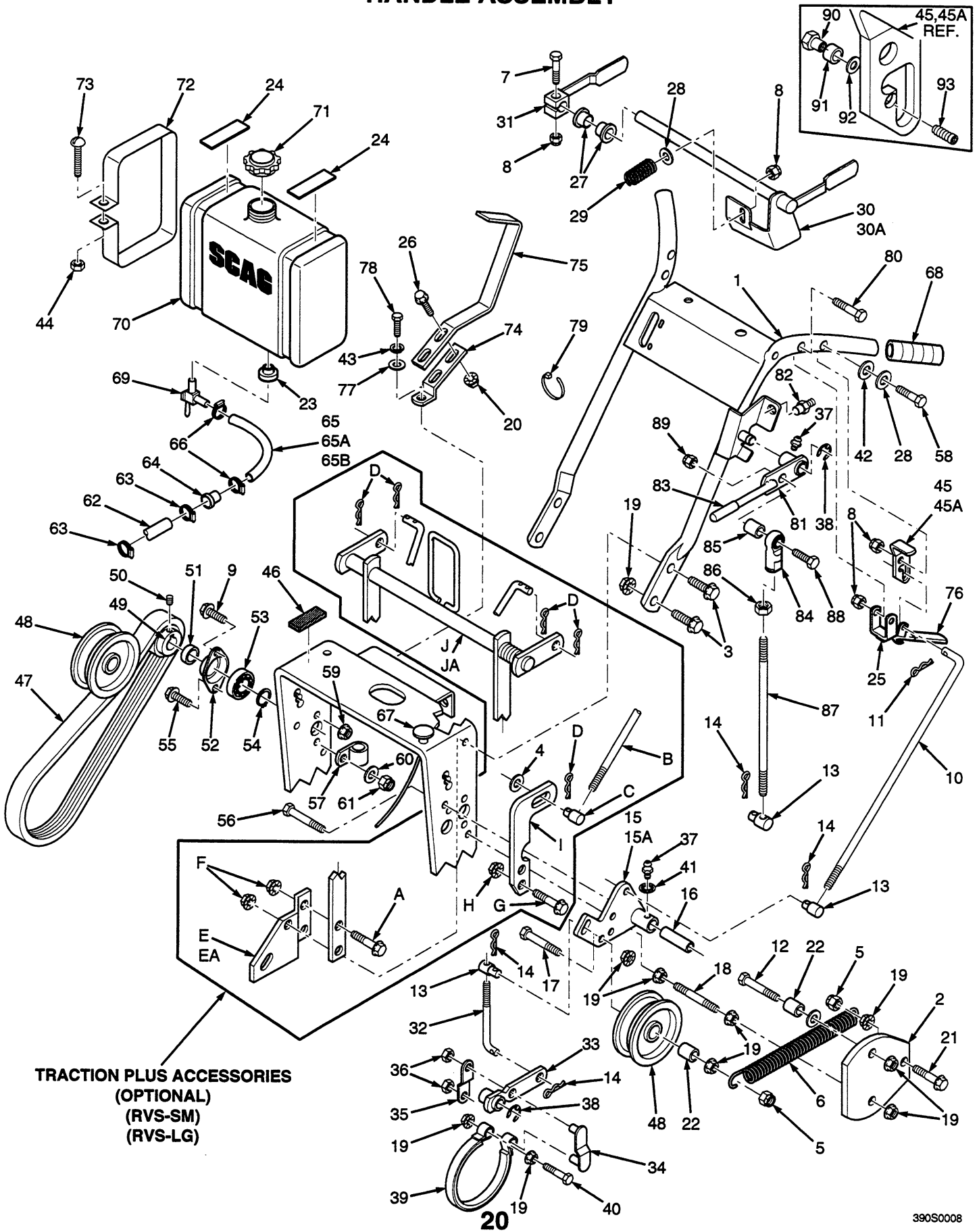
ENGINE DECK



ENGINE DECK

Ref. Part No.	Part No.	Description	13KH13KA 16BV				Ref. Part No.	Part No.	Description	13KH13KA 16BV			
			14KH14KA	18BV	18KH	14KAE				14KH14KA	18BV	18BV	18BV
1A	48843	Engine, 12.5HP Kohler (PS-1256)	x				38B	48193-03	Rim & Bearing Assembly (incl. 39) (fits SW36,48,52,61 & 72)	x	x	x	x
1A	48844	Engine, 14HP Kohler (CV 12.5T PS-1413)	x				38C	48253-02	Tire, 13 x 5.00-6 2-ply (SW32 only)		x		
1B	48841	Engine 12.5HP Kawasaki (FB460-ES05)		x			38D	48253-03	Rim Assembly (incl. 39) (SW32 only)		x		
1B	48842	Engine, 14HP Kawasaki (FC420V)		x			39	48193-02	Wheel Brg. NWC (OD 1.984-1.980)	x	x	x	x
1B	481052	Engine, 14HP Kawasaki Elec. Start		x			40	04042-05	Washer, 1-1/16 x 1-3/4 x 12 ga	x	x	x	x
1C	481065	Engine, 16HP Briggs Vanguard (303772 0345 02)			x		40A	04041-14	Washer, 1-1/16 x 1-1/2 x 18 ga	x	x	x	x
1C	48766	Engine, 16HP BVE			x		41	04050-08	Retaining Ring, 1" Ext. - "E"	x	x	x	x
1C	481066	Engine, 18HP Briggs Vanguard			x		42	48200	Pulley, Wheel Drive	x	x	x	x
1D	48969	Engine, 18HP Kohler (Electric Start V-Twin)				x	43	43088	Spacer, Wheel Pulley	x	x	x	x
2	48030-09	Cable Clamp	x	x	x	x	44	48209	Brake Drum	x	x	x	x
3	48331	Transmission, 5-speed (Peerless 700-026)	x	x	x	x	45	04017-19	Bolt, 5/16-18 x 1-1/2" Serrated Flange			x	x
4	48231	Neutral Safety Switch	x	x	x	x	46	04003-03	Bolt, 3/8-16 x 2" Carriage	x	x	x	x
5	48122-01	Fibre Washer, thin	x	x	x	x	47	04021-10	Nut, 5/16-18 Elastic Stop	x	x	x	x
5A	48122-02	Fibre Washer, thick	x	x	x	x	48	04003-11	Bolt, 3/8-16 x 1-1/4" Carriage				x
6	48851	Coupler, Jackshaft	x	x	x	x	49	421703	Battery Box		x	x	x
7	48114-05	Grease Fitting, straight 1/4-28	x	x	x	x	50	42330	Bracket, Idler Pulley				x
8	48225	Jackshaft (fits SW32,36 & 48)	x	x			51	48814	Rubber Pad, Clutch Stop	x	x	x	x
8A	48242	Jackshaft (fits SW52,61 & 72)			x	x	52	04041-11	Washer, 13/32 x 1-1/2 x 7 ga				x
9	04063-09	Key, Hi-Pro #9	x	x	x	x	53	45685	Battery Support Weldment		x	x	x
10	04003-12	Bolt, 5/16-18 X 3/4" Carriage	x	x	x	x	54	421564	Backing Plate	x	x	x	x
11	421408	Battery Cover			x		55	48099	Battery Cover Pad				x
12	48402-03	Oil Drain Extension 5-1/4"			x		56	04003-01	Bolt, 1/4-20 x 6" carriage				x
12A	48402-04	Oil Drain Extension 4-3/4"			x		57	04001-21	Bolt, 3/8-16 x 1-3/4" Hex Head				x
13	04001-08	Bolt, 5/16-18 X 3/4" Hex Head	x	x	x	x	58	421370	Anti Rotation Bracket	x	x	x	x
14	04040-14	Flat Washer 1/4" (.312 X .75 X .065)	x	x	x	x	59	04003-04	Bolt, 5/16-18 x 1" Carriage	x	x	x	x
15	04030-03	Lock Wshr. 5/16"	x	x	x	x	60	48257	Pipe Cap				x
16	04019-04	Nut, 3/8-16 Serrated Flange	x	x	x	x	61	04029-01	Wing Nut, 1/4-20		x	x	x
17	46943	Engine Deck (fits SW32)					62	48015	Battery		x	x	x
17A	46944	Engine Deck (fits SW36 & 48)					63	04001-44	Bolt, 1/4-20 x 1/2" Hex Head		x	x	x
17B	46945	Engine Deck (fits SW52,61 & 72)					64	04020-02	Nut, 1/4-20		x	x	x
18	48661	Rubber Pad				x	65	04021-08	Nut, 1/4-20 Elastic Stop	x	x	x	x
19	04019-03	Nut, 5/16-18 Serrated Flange		x	x	x	66	04031-09	Lock Washer Internal Tooth	x	x	x	x
20	04001-51	Bolt, 3/8-16 x 3-3/4" Hex Head	x	x	x	x	67	481077	Wire Harness Adapter, Man. Start				x
21	48786	Electric Clutch	x	x	x	x	67	481054	Wire Harness Adapter, Elec. Start				x
22	04041-07	Washer, 3/8" (.391 x .938 x .105)	x	x	x	x	68	04001-59	Bolt, 1/4-20 x 1-1/4"	x	x		
23	48197	Pulley, Transmission Input	x	x	x	x	69	21066-2071	Rectifier (order from Kawasaki)		x		
24	04063-07	Key, Woodruff #9	x	x	x	x	70	04003-02	Bolt, 1/4-20 x 3/4" Carriage	x	x	x	x
25	04050-09	Retaining Ring, 5/8" Ext, Basic	x	x	x	x	71	04001-09	Bolt, 5/16-18 x 1" Hex Head	x	x	x	x
26	48203	Belt, Transmission Drive	x	x	x	x	72	421390	Bracket, Capacitor		x		
27	481048	Idler Pulley, Transmission	x	x	x	x	73	21013-2064	Condenser (order from Kawasaki)		x		
28	48945	Pulley, Traction Drive	x	x	x	x	74	48029-06	Battery Cable, 18" Red				x
29	04063-19	Key, 1/4 x 1/4 x 3/4"	x	x	x	x	75	48029-11	Battery Cable, 27" Black		x		
30	04041-18	Flat Washer, 7/16" Special	x	x	x	x	75	48029-15	Battery Cable, 36" Black				x
31	04030-05	Lock Washer, 7/16"	x	x	x	x	75	48029-14	Battery Cable, 31" Black				x
32A	04001-101	Bolt, 7/16-20 x 2-1/2" Hex Head			x		76	48029-02	Battery Cable, 31.5" Red		x	x	x
32B	04001-102	Bolt, 7/16-20 x 1-3/4" Hex Head				x	77	48016	Starter Solenoid				x
32C	04002-08	Cpsrw, M10-1.5 x 60 Metric Hex Hd	x	x			78	04002-07	Bolt, M8-1.25 x 1.0	x			
33	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x	x	x	x	79	04021-08	Nut, 1/4-20 Elastic Stop	x	x	x	x
34	04030-04	Lockwasher, Spring 3/8"				x	80	48126	Rubber Boot		x	x	x
35	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x	x	81	45854	Brake Shaft Weldment (Large Frame)		x	x	x
36	04040-15	Flat Washer, 5/16"	x	x	x	x	81	45842	Brake Shaft Weldment (Small Frame)	x	x	x	x
37	04018-01	Bolt, M8-1.25 x M25 Metric Hex Hd	x	x			82	04001-19	Bolt, 3/8-16 x 1" Hex Head	x	x	x	x
38	48192	Wheel Assembly (incl. 38A-38B) (fits SW36,48,52,61,72)	x	x	x	x	83	04062-01	Hair Pin Cotter (.094 x 1.62)	x	x	x	x
38	48253	Wheel Assembly (incl. 38C-38D) (SW32)	x	x			84	04050-02	Retaining Ring .75 Ext. "E"	x	x	x	x
38A	48192-02	Tire, 13 x 6.50-6, 2-ply (fits SW36,48,52,61 & 72)	x	x	x	x	85	44005	Brake Rod	x	x	x	x
							86	43032	Swivel Joint	x	x	x	x
							87A	45844	Brake Actuator Lever LH	x	x	x	x
							87B	45845	Brake Actuator Lever RH	x	x	x	x
							88	04050-01	Retaining Ring .625 Ext. "E"	x	x	x	x
							89A	43100	Wheel Axle (SW 52,61,72)		x	x	x
							89B	43085	Wheel Axle (SW36,48)	x	x	x	
							89C	43104	Wheel Axle (SW 32)		x		

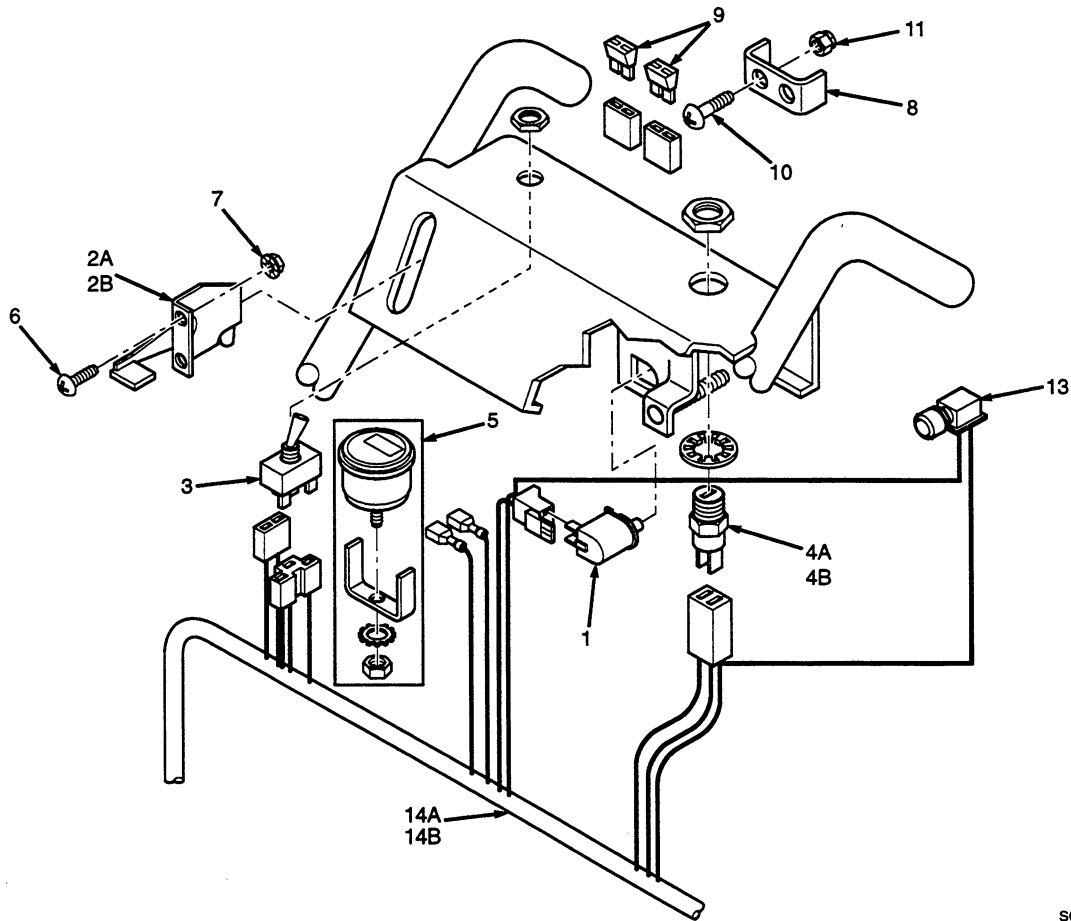
HANDLE ASSEMBLY



HANDLE ASSEMBLY

Ref. Part No.	Part No.	Description	13KH13KA 16BV			Ref. Part No.	Part No.	Description	13KH13KA 16BV			
			14KH14KA	18BV	18BVE				14KH14KA	18BV	18BVE	
			14KAE						14KAE			
1	46936	Handle Assembly (Fits SW 36,48)	x	x		54	04050-09	Retaining Ring, 5/8 Ext. Basic	x	x	x	x
1	46937	Handle Assembly (Fits SW52,61,72)	x	x	x	55	04017-06	Capscrew, 1/4-20 x 1" Ser. Flange	x	x	x	x
2	421360	Belt Guard	x	x	x	56	04003-01	Bolt, 1/4-20 x 6" Carriage				x
3	04017-27	Capscrew, 3/8-16 x 1" Ser. Flange	x	x	x	57	48030-09	Clamp	x	x	x	x
4	04001-17	Washer, 3/8" (.391 x .938 x .105)	x	x	x	58	04001-17	Bolt, 5/16-18 x 2" Hex Head	x	x	x	x
5	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x	59	04019-02	Nut, 1/4-20 Serrated Flange	x	x	x	x
6	48755	Spring, Idler	x	x	x	60	04040-15	Flatwasher, 5/16 (.375 x .875 x .083)	x	x	x	x
7	04001-10	Bolt, 5/16-18 x 1-1/4" Hex Head	x	x	x	61	04021-02	Nut, 1/4-20 Elastic Stop	x	x	x	x
8	04021-10	Nut, 5/16-18 Elastic Stop	x	x	x	62	48179	Fuel Hose (Kawasaki Only)				
9	04017-05	Capscrew, 1/4-20 x 3/4" Hex Head	x	x	x	63	48059-02	Fuel Hose Clamp (Kaw. Only)	x			
10	44004	Control Rod, Steering	x	x	x	64	48057-02	Fuel Filter (Kawasaki Only)		x		
11	04062-02	Hair Pin, Small	x	x	x	65	48058	Fuel Hose, 1/4"ID, 10" (Kohler Only)	x			
12	04001-23	Bolt, 3/8-16 x 4-1/2" Hex Head	x	x	x	65A	48058	Fuel Hose, 1/4"ID, 20" (KAW & Brigs)		x	x	
13	43032	Swivel Joint	x	x	x	65B	48058	Fuel Hose, 1/4"ID, 23" (Kohler 18CVE)				x
14	04062-01	Hair Pin, Large .094 Diameter	x	x	x	66	48059-01	Clamp, Fuel Hose	x	x	x	x
15	45847	Idler Bracket, RH	x	x	x	67	481072	Choke Control			x	
15A	45846	Idler Bracket, LH	x	x	x	67	48780	Choke Control				x
16	43092	Idler Sleeve	x	x	x	68	48159	Grip, Handle	x	x	x	x
17	04001-62	Bolt, 3/8-16 x 3/4" Hex Head	x	x	x	69	48308	Valve, Fuel Shut Off	x	x	x	x
18	04004-17	Support Belt Guard	x	x	x	70	46174	Fuel Tank Assy. (Incl. Bush. & Valve)	x	x	x	x
19	04019-04	Nut, 5/16-18 Serrated Flange	x	x	x	71	48311	Fuel Tank Cap	x	x	x	x
20	04019-03	Nut, 5/16-18 Serrated Flange	x	x	x	72	421239	Strap, Fuel Tank	x	x	x	x
21	04017-28	Cpscrew, 3/16-18 x 1-1/4" Ser. Flng.	x	x	x	73	04010-10	Screw, 1/4-20 x 2" Round Hd Slotted	x	x	x	x
22	43286	Spacer	x	x	x	74	42388	Shift Lever	x	x	x	x
23	48309	Bushing	x	x	x	75	421241	Shift Lever Extension	x	x	x	x
24	48292	Rubber Pads, (Upper)	x	x	x	76	48144	Grip, Steering Lever	x	x	x	x
25	46089	Steering Lever	x	x	x	77	04043-01	Washer, 1/4 (.265 x .875 x .125)	x	x	x	x
26	04017-17	Capscrew, 5/16-18 x 1" Ser. Flng.	x	x	x	78	04001-55	Bolt, 1/4-28 x 3/4" Hex Head Grd 8	x	x	x	x
27	48312	Bushing	x	x	x	79	48028-05	Cable Tie	x	x	x	x
28	04040-15	Washer, 5/16 (.375 x .875 x .083)	x	x	x	80	04001-53	Bolt, 5/16-18 x 2-1/2"	x	x	x	x
29	48951	Spring, Operator Presence	x	x	x	81	46954	Brake Lever with Grip	x	x	x	x
30	45573	Operator Presence Lever, LH (Small Frame)	x	x		82	481476	Switch	x	x	x	x
30A	45571	Operator Presence Lever, LH (Large Frame)	x	x	x	83	48342	Grip, Brake	x	x	x	x
31	45572	Operator Presence Lever, RH	x	x	x	84	48464	Ball Joint	x	x	x	x
32	44005	Brake Rod	x	x	x	85	43212	Spacer	x	x	x	x
33	45092	Brake Lever	x	x	x	86	04020-14	Nut, 3/8-24	x	x	x	x
34	45093	Brake Link	x	x	x	87	44125	Rod, Brake Lever	x	x	x	x
35	42254	Brake Link Plate	x	x	x	88	04001-21	Bolt, 3/8-16 x 1-3/4"	x	x	x	x
36	04024-01	Nut, 3/8 Push-on	x	x	x	89	04021-09	Nut, 3/8-16 Elastic Stop	x	x	x	x
37	48114-05	Grease Fitting, Straight 1/4-28	x	x	x	90	481411	Bushing, Bearing Retainer	x	x	x	x
38	04050-01	Retaining Ring, 5/8 Ext. "E"	x	x	x	91	481420	Bearing	x	x	x	x
39	48210	Brake Band	x	x	x	92	04041-23	Washer, #8-.170 x .375 x .032	x	x	x	x
40	04001-45	Bolt, 3/8-16 x 2" Hex Head	x	x	x	93	04015-13	Socket Head Capscrew #8-32 x 1/2"	x	x	x	x
41	04031-08	1/4" Internal Tooth Lockwasher	x	x	x	Traction Plus Accessories (Optional), RVS-SM & RVS-LG						
42	04032-01	Curved Spring Washer	x	x	x	A	04017-27	Capscrew, 3/8-16 x 1" Ser. Flng	x	x	x	x
43	04030-02	Lockwasher, 1/4 Spring	x	x	x	B	44098	Rod, Traction Control	x	x	x	x
44	04020-02	Nut, 1/4-20 Hex	x	x	x	C	43023	Swivel Joint	x	x	x	x
45	46942	Neutral Latch, RH	x	x	x	D	04062-01	Hair Pin, Large .094 Dia.	x	x	x	x
45A	46941	Neutral Latch, LH	x	x	x	E	421372	Mounting Brkt. LH Traction Cont.	x	x	x	x
46	48205	Rubber Pad (Lower)	x	x	x	EA	421373	Mounting Brkt. RH Traction Cont.	x	x	x	x
47	48202A	Belt, Wheel Drive	x	x	x	F	04019-04	Nut, 3/8-16 Serrated Flange	x	x	x	x
48	48198	Idler Pulley, Wheel Drive	x	x	x	G	04017-16	Capscrew, 5/16-18 x 3/4" Ser. Flng.	x	x	x	x
49	48199	Pulley, Jackshaft (Inc. 50)	x	x	x	H	04019-03	Nut, 5/16-18 Serrated Flange	x	x	x	x
50	04012-04	Setscrew, Hex Socket Knurl Cup Pt. 5/16-18 (nylock)	x	x	x	I	421428	Traction Lever, LH	x	x	x	x
51	43098	Spacer, Jackshaft Pulley	x	x	x	IA	421429	Traction Lever, RH	x	x	x	x
52	48223	Flange, Jackshaft Bearing	x	x	x	J	45554	Traction Lever Widmnt. (Small Fm.)	x	x		
53	48224	Bearing, Jackshaft	x	x	x	JA	45555	Traction Lever Widmnt. (Large Fm.)	x	x	x	x

INSTRUMENT PANEL

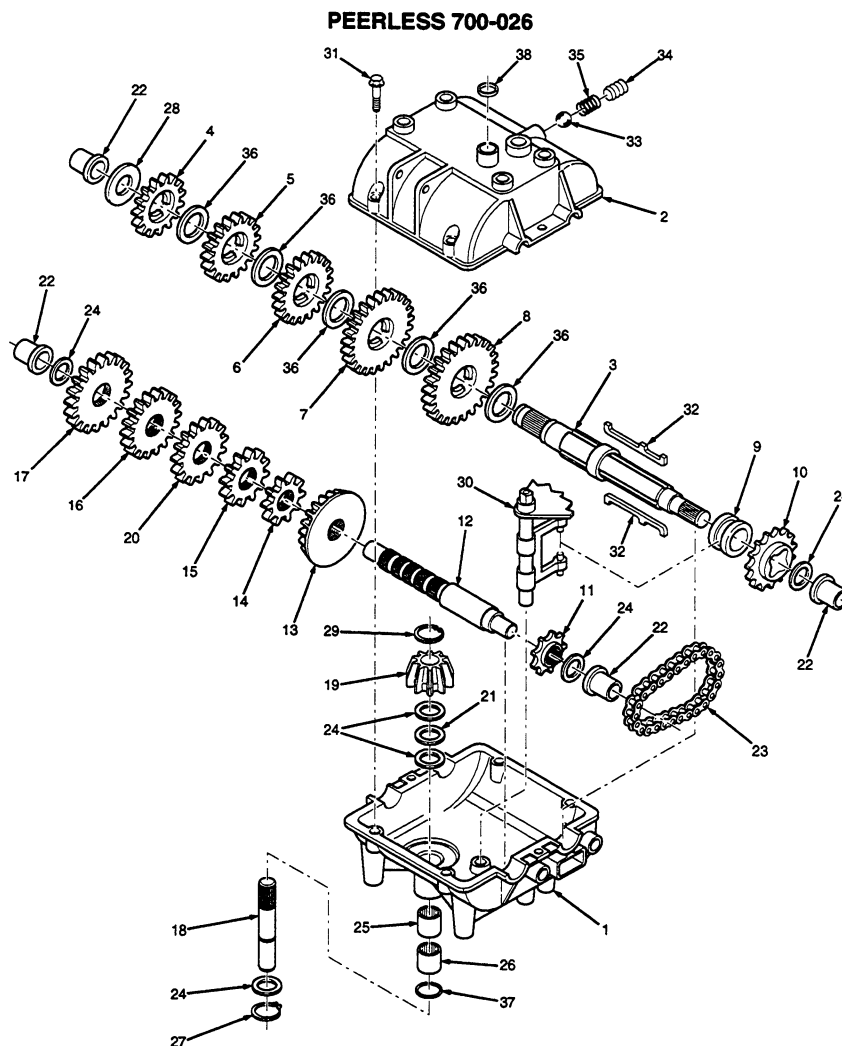


SC413GB

REF. PART NO.	NO.	DESCRIPTION	13KH	13KA	16BV	14KH	14KA	18BV	18CVE
1	48717	Switch, Neutral Interlock	X	X	X	X			
2A	481071	Throttle Control	X	X					
2B	48946	Throttle Control			X			X	
3	48787	Engagement Switch, Electric Clutch (Includes hardware)	X	X	X	X			
4A	48609	Key Switch (Includes hardware)	X	X	X				
4B	48798	Key Switch (Includes hardware)							X
5	48023	Hour Meter (dealer installed)	X	X	X	X			X
6	*	Screw, #10-32 x .50 Phillips Washer Head	X	X	X	X			X
7	04019-01	Nut, #10-32 Serrated Flange Hex Head	X	X	X	X			X
8	42413	Bracket, Fuse Holder			X	X		X	
9	48298	Blade Fuse, 20A			X	X		X	
10	*	Screw, #10-32 x 1-1/2"			X	X		X	
11	04021-01	Nut, #10-32 Elastic Stop			X	X		X	
12	48951	Spring, Operator Presence	X	X	X	X		X	
13	481476	Switch, Brake	X	X	X	X		X	
14A	481407	Handle Wire Harness, Electric Start				X			X
14B	481406	Handle Wire Harness, Manual Start	X	X	X				
NS	48030-09	Clamp, Wire Harness	X	X	X	X		X	

* Common hardware which should be purchased locally. All bolts grade 5 plated, all other fasteners zinc plated.

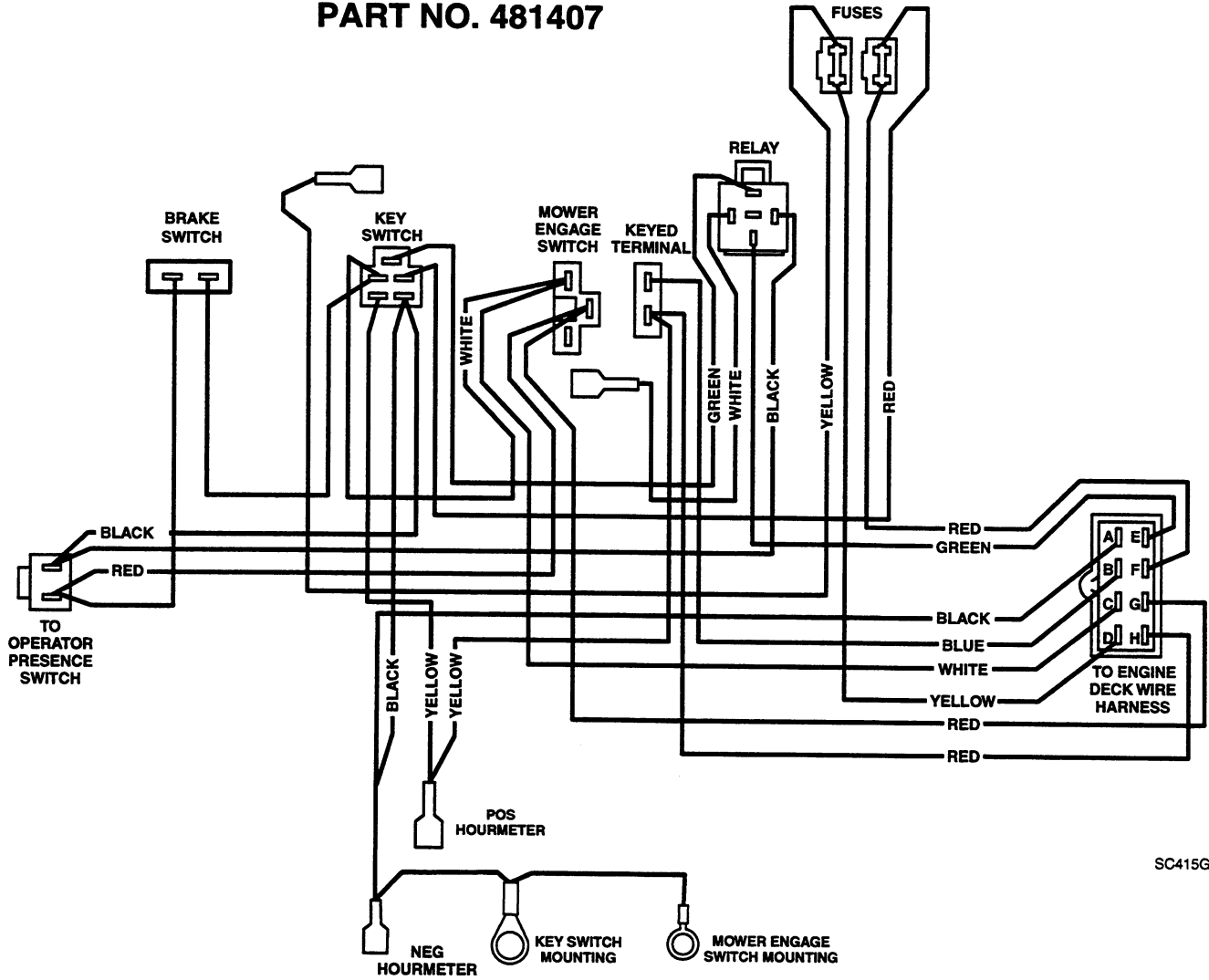
PEERLESS 700-026



SC414G

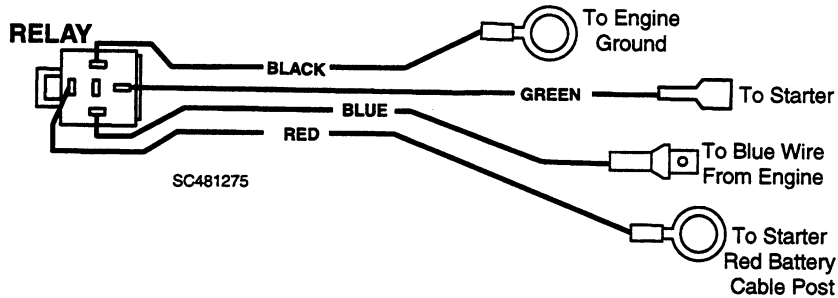
REF. PART NO. NO.	DESCRIPTION	REF. PART NO. NO.	DESCRIPTION
1 770061	Case, Transmisson	22 780105A	Bushing, Flanged
2 772083	Cover, Transmission	23 786081	Chain, Roller (No.41 chain,24 links)
3 776217	Shaft, Output & Brake	24 780072	Washer, Thrust
4 778123A	Gear, Spur (25 teeth)	25 780086	Bearing, Needle
5 778124A	Gear, Spur (30 teeth)	26 780142	Bearing, Needle
6 778239	Gear, Spur (32 teeth)	27 792035	Ring, Retaining
7 778125	Gear, Spur (35 teeth)	28 780139	Washer, Thrust
8 778146A	Gear, Spur (37 teeth)	29 788040	Ring, Retaining
9 784266	Collar, Shift	30 784267	Rod & Fork Assy., Shift
10 786083	Sprocket (18 teeth)	31 792073	Screw, Flanged Hex Hd Thread, 1/4-20 x 1-1/4"
11 786082	Sprocket (9 teeth)	32 792089A	Key
12 776134	Shaft, Counter	33 792077	Ball, Steel, 5/16"
13 778154	Gear, Bevel (42 teeth)	34 792078	Screw, Set 3/8-16 x 3/8"
14 778145	Gear, Spur (12 teeth)	35 792079	Spring
15 778151	Gear, Spur (15 teeth)	36 780108	Washer, Thrust
16 778126A	Gear, Spur (20 teeth)	37 792001	"O" Ring
17 778127A	Gear, Spur (25 teeth)	38 788069	Seal, Square cut
18 776135	Shaft, Input		
19 779176	Bevel Pinion, Input		
20 778240	Gear, Spur (18 teeth)		
21 780071	Bearing, Thrust		

HANDLE WIRE HARNESS - ELECTRIC START PART NO. 481407



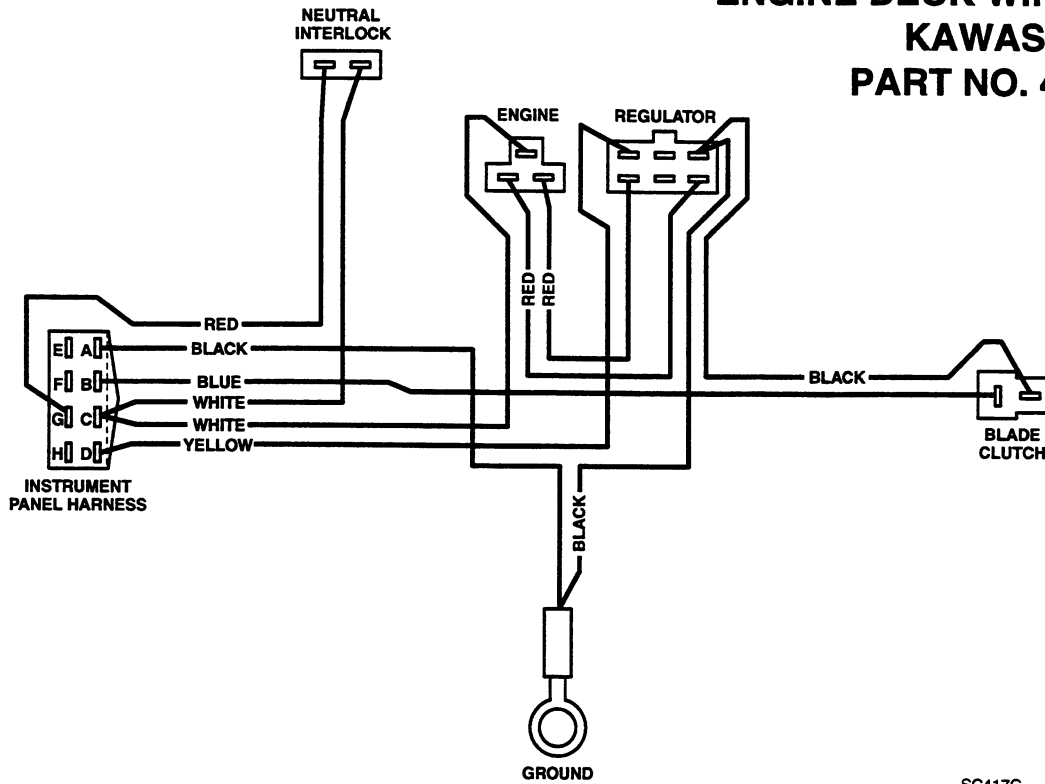
SC415G

WIRE HARNESS WITH RELAY PART NO. 481275



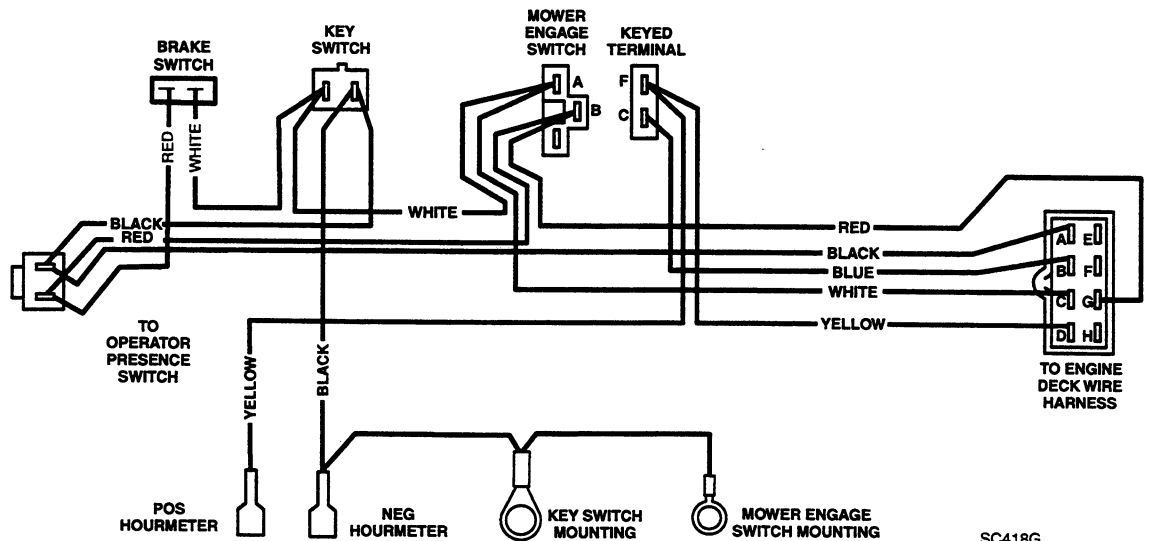
SC481275

ENGINE DECK WIRE HARNESS - KAWASAKI PART NO. 481074

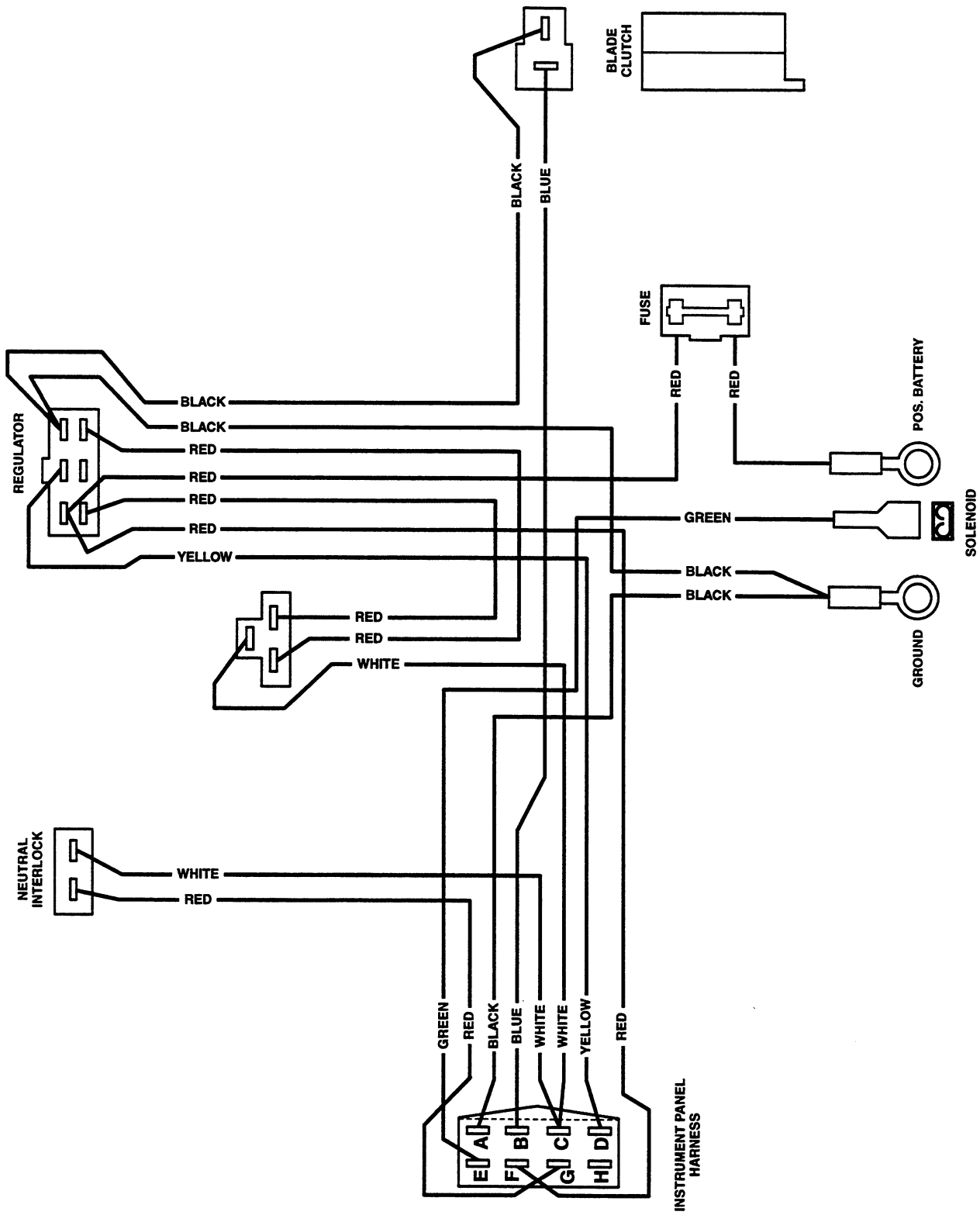


SC417G

HANDLE WIRE HARNESS - MANUAL START PART NO. 481406

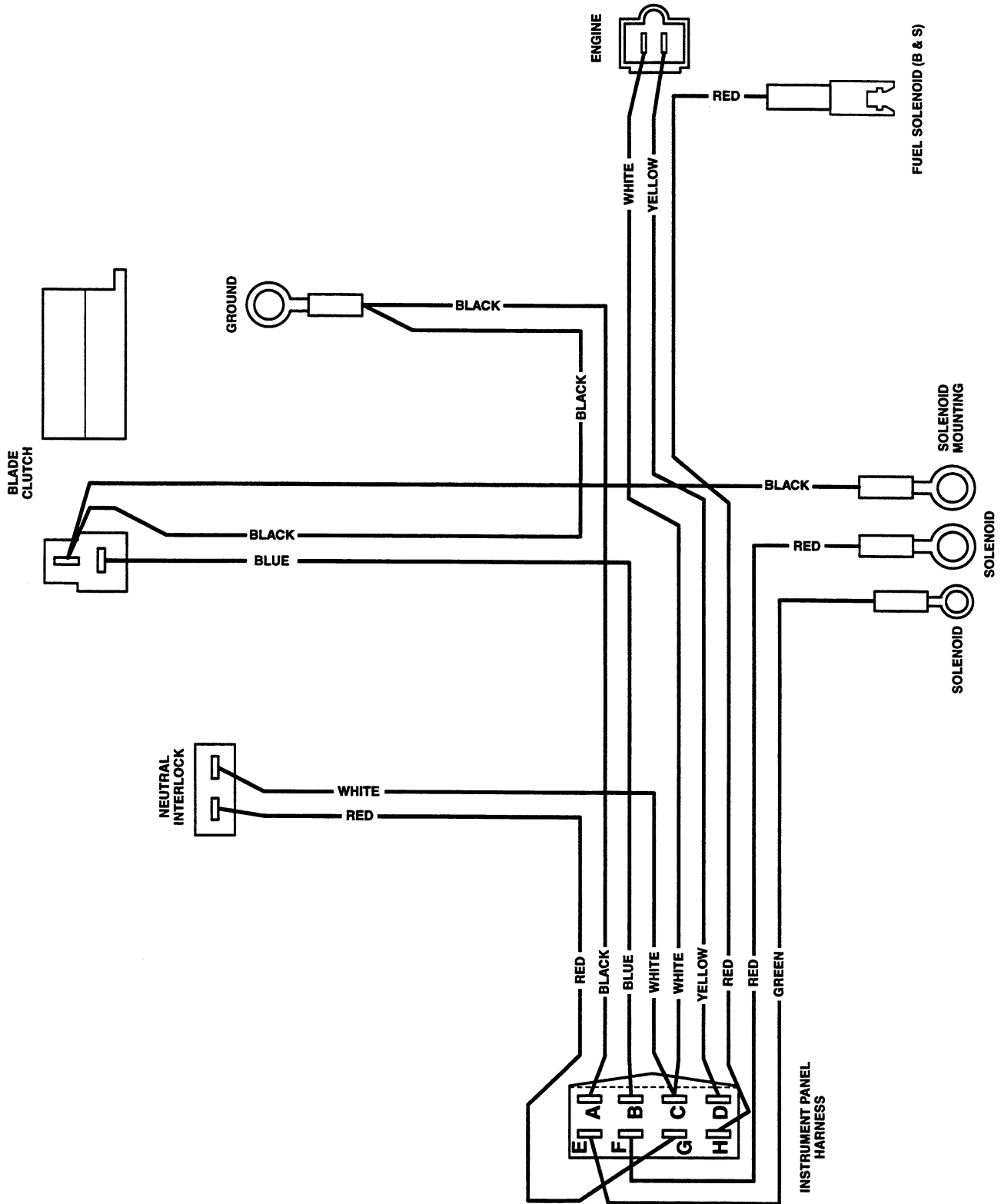


SC418G



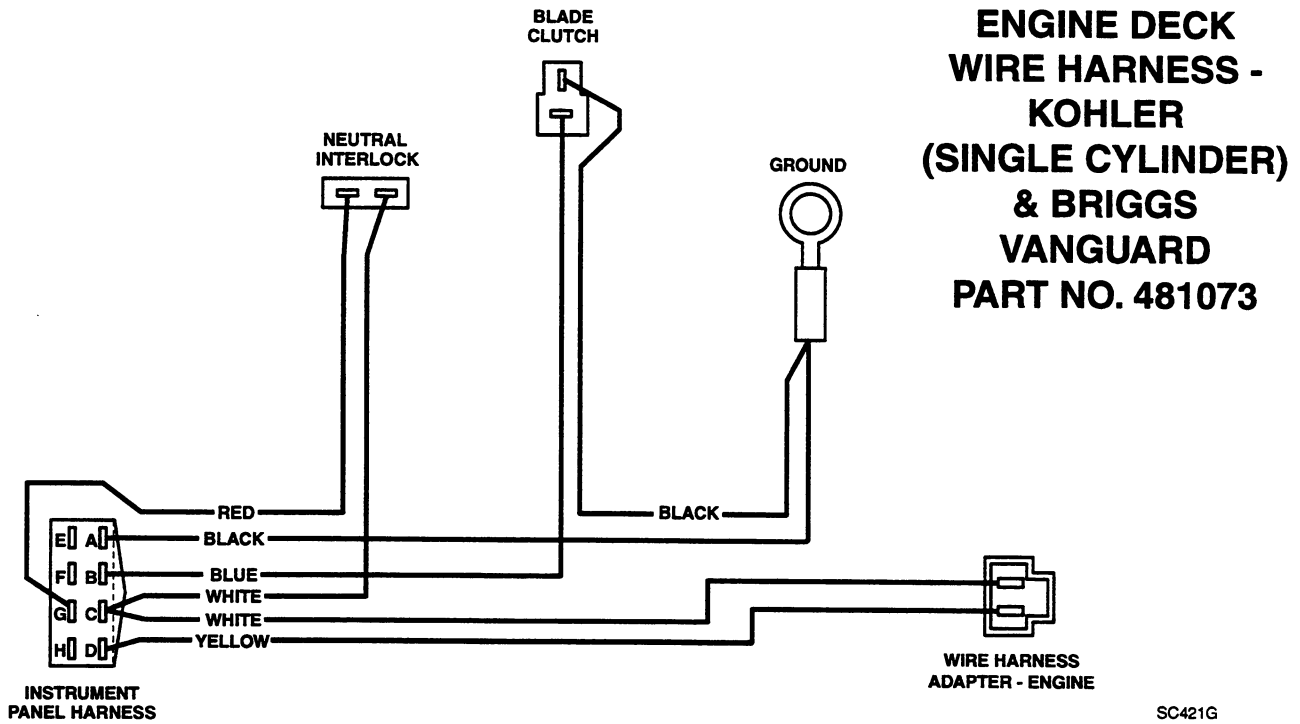
ENGINE DECK WIRE HARNESS - SW48-14KAE
PART NO. 481051

SC419G

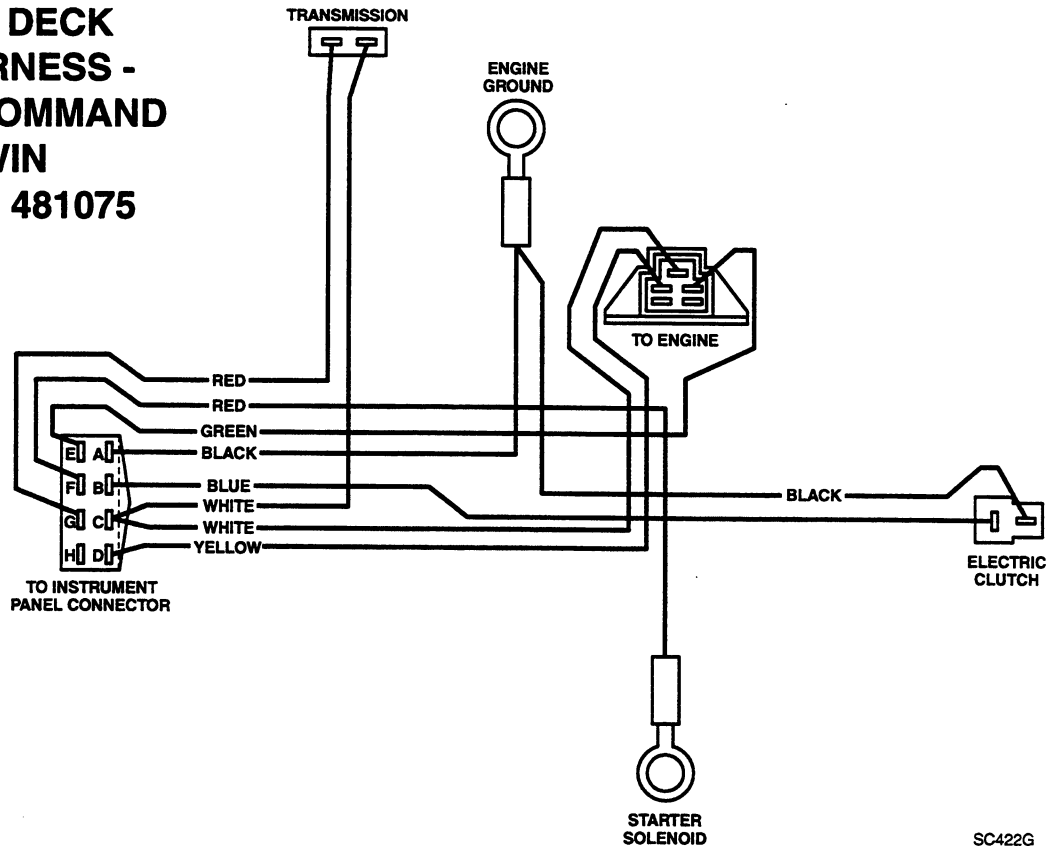


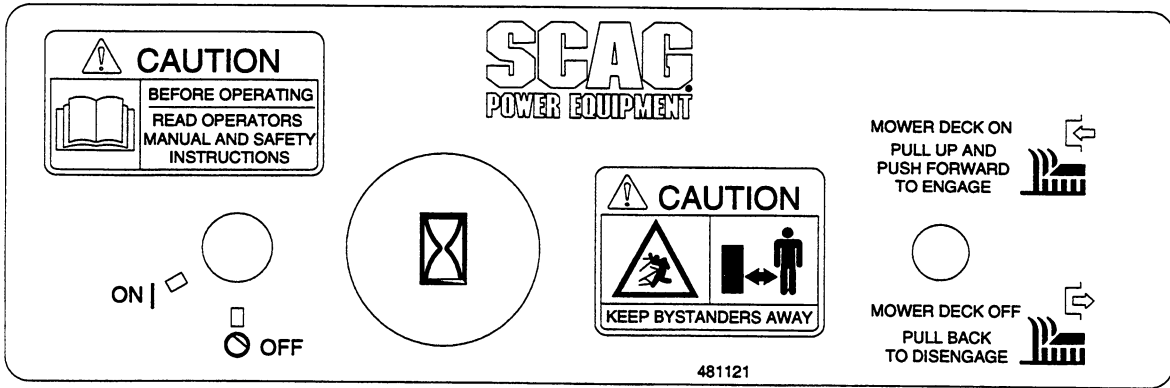
**ENGINE DECK WIRE HARNESS - 16HP-BV ELECTRIC START
PART NO. 481014**

SC420G

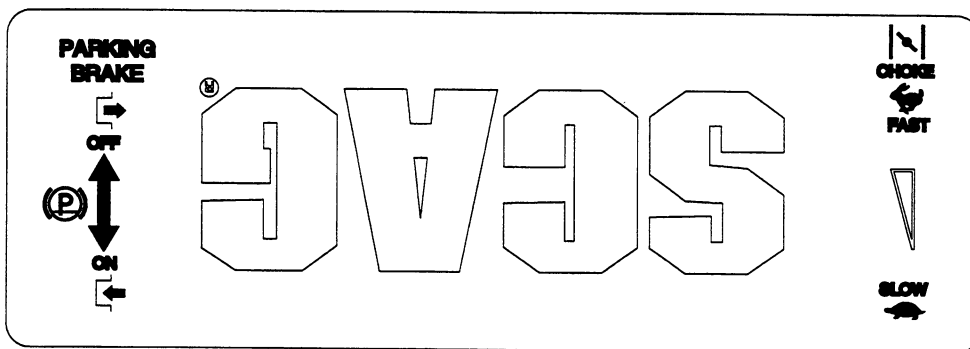


ENGINE DECK WIRE HARNESS - KOHLER COMMAND V-TWIN PART NO. 481075

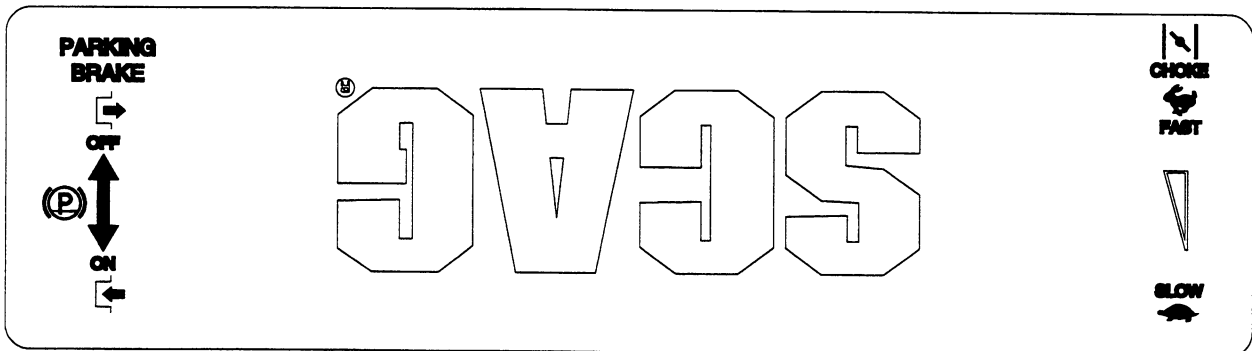




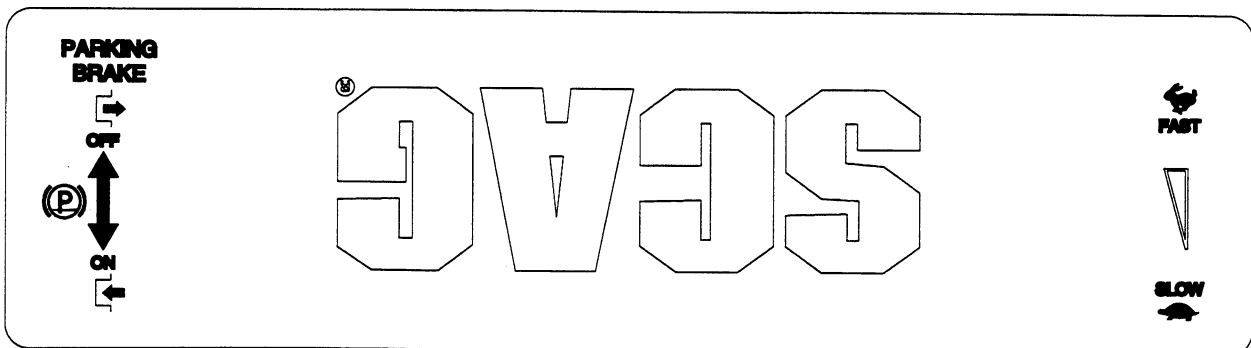
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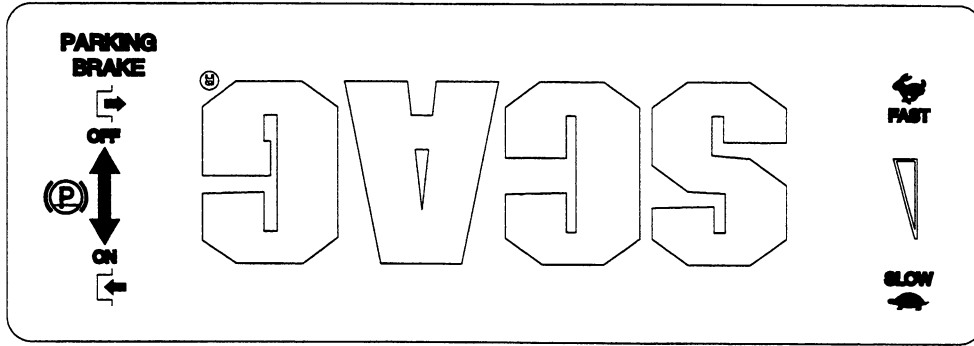
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481415



481423



481438



48071



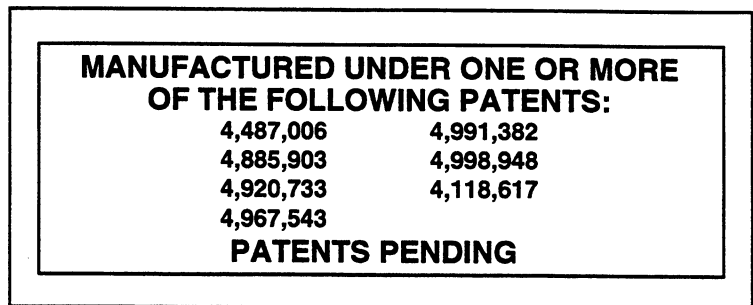
48404



481039



48072



48656

 **WARNING**

ROTATING BLADES AND BELTS

- KEEP HANDS, FEET & CLOTHING CLEAR
- KEEP ALL GUARDS IN PLACE
- SHUT OFF ENGINE & DISENGAGE BLADE CLUTCH BEFORE SERVICING
- CLEAR AREA OF DEBRIS BEFORE MOWING
- USE CAUTION IN DIRECTING DISCHARGE
- KEEP BYSTANDERS, CHILDREN & PETS AWAY
- READ INSTRUCTION MANUAL BEFORE OPERATING

DO NOT OPERATE WITHOUT DISCHARGE CHUTE, MULCHING KIT, OR ENTIRE GRASS CATCHER INSTALLED

481040

481040

48

- 32" - 48315
- 36" - 48316
- 48" - 48318
- 52" - 48319
- 61" - 48320
- 72" - 48327

 **WARNING**

FALLING HAZARD
USE ONLY SCAG APPROVED
RIDING ATTACHMENTS
SEE OPERATOR'S MANUAL

481109

481109

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48332



WARNING:

If incorrectly used, this machine can cause severe injury. Those who use and maintain the machine should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to set up, operate, adjust or service the machine.

LIMITED WARRANTY-COMMERCIAL EQUIPMENT

Any part of the Scag commercial mower manufactured by Scag Power Equipment and found, in the reasonable judgment of Scag, to be defective in materials or workmanship, will be repaired or replaced by an Authorized Scag Service Dealer without charge for parts and labor. This warranty is limited to the original purchaser and is not transferable. Proof of purchase will be required by the dealer to substantiate any warranty claims. All warranty work must be performed by an Authorized Scag Service Dealer.

This warranty is limited to the following specified periods from the date of the original retail purchase for defects in materials or workmanship:

- * Wear items including drive belts, blades, hoses and tires are warranted for 90 days.
- * Batteries are covered for 90 days.
- * Frame, deck, and structural components including oil reservoir, fittings, and oil cooler are warranted for 1 year.
- * Engines and electric starters are covered by the manufacturer's warranty period.
- * Drive system components are warranted for 1 year by the component manufacturer, in conjunction with Scag Power Equipment. (Excluding fittings, hoses, cooling system, oil reservoir, drive belts).
- * Electric clutch components are warranted for 1 year.

Any Scag product used for rental purposes is covered by a 90 day warranty.

The Scag mower, including any defective part must be returned to an Authorized Scag Service Dealer within the warranty period. The expense of delivering the mower to the dealer for warranty work and the expense of returning it to the owner after repair will be paid for by the owner. Scag's responsibility is limited to making the required repairs and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Scag mower.

This warranty does not cover any mower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Operator's Manual. The warranty does not apply to any damage to the mower that is the result of improper maintenance, or to any mower or parts that have not been assembled or installed as specified in the Operator's Manual and Assembly Manual. The warranty does not cover any mower that has been altered or modified, changing performance or durability. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the reasonable judgment of Scag, are either incompatible with the Scag mower or adversely affect its operation, performance or durability.

Scag Power Equipment reserves the right to change or improve the design of any mower without assuming any obligation to modify any mower previously manufactured.

All other implied warranties are limited in duration to the one (1) year warranty period or ninety (90) days for mowers used for rental purpose. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the appropriate one year or ninety day warranty period. Scag's obligation under this warranty is strictly and exclusively limited to the repair or replacement of defective parts and Scag does not assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Scag assumes no responsibility for incidental, consequential or other damages including, but not limited to, expense for gasoline, expense of delivering the mower to an Authorized Scag Service Dealer and expense of returning it to the owner, mechanic's travel time, telephone or telegram charges, rental of a like product during the time warranty repairs are being performed, travel, loss or damage to personal property, loss of revenue, loss of use of the mower, loss of time or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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