

## GEAR DRIVE COMMERCIAL MOWERS TECHNICAL MANUAL

## **MODELS**

STG-13KA STG-14KH

**SLM-40 SLM-48** 

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Your mower was built to the highest standards in the industry. However, your mower is only as safe as the operator. Carelessness or error on the part of the operator may result in serious bodily injury. Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of the personel involved in the operation, transport, maintenance, and storage of the equipment. Make sure every operator is properly trained and thoroughly familiar with all of the controls before operating the equipment.

#### SAFETY INSTRUCTIONS

 Know the controls and how to stop quickly. READ THIS TECHNICAL MANUAL and instructions furnished with attachments. A replacement manual is available by sending complete model and serial number to:

> SCAG Power Equipment, Inc. 1000 Metalcraft Drive Mayville, WI 53050

- 2. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- 3. Do not carry passengers. Do not mow when children and others are around.
- 4. Clear the work area of objects (wires, rocks, etc.) that might be picked up and thrown.
- 5. Disengage power to all attachments and shift into neutral before attempting to start the engine.
- 6. Disengage power to attachments, stop the engine and remove key before leaving the operator's position.
- Disengage power to attachments, stop the engine and remove key before making any repairs or adjustments.
- 8. Disengage power to attachments when transporting or not in use.
- Take all possible precautions when leaving the machine unattended, such as disengaging power to attachments, lowering the attachments, setting the parking brake, stopping the engine, and removing the key.
- Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.
- Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control.
   Be especially cautious when changing direction on slopes.
- 12. Stay alert for holes, rocks, and roots in the terrain and other hidden hazards. Keep away from drop-offs.
- 13. Use care when pulling loads or using heavy equipment.
  - a. Use only approved drawbar hitch points.
  - b. Limit loads to those you can safely control.
  - c. Do not turn sharply. Use care when backing.
  - d. Use counterweights or wheel weights when suggested in this technical manual.
- 14. Watch out for traffic when crossing or near roadways.
- 15. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the machine while in operation.

- 16. Handle gasoline with care it is highly flammable.
  - a. Use approved gasoline container.
  - b. Never remove the fuel cap of, or add gasoline to, a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill the tank indoors and always clean up spilled gasoline.
  - c. Open doors if the engine is run in the garage exhaust fumes are dangerous. Do not run the engine indoors.
- 17. Keep the machine and attachments in good operating condition, and keep safety devices and shields in place and in working condition.
- 18. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 19. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- 20. To reduce fire hazard, keep the engine free of grass, leaves or excessive lubricants.
- 21. The machine and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
- 22. Do not change the engine governor settings or overspeed the engine.
- 23. When using the machine with mower, proceed as follows:
  - a. Mow only in daylight or in good artificial light.
  - b. Never make a cutting height adjustment while engine is running if the operator must dismount to do so.
  - c. Shut the engine off and remove key when removing the grass catcher or unclogging chute.
  - d. Check the blade mounting bolts for proper tightness at frequent intervals.
- 24. Under normal usage, the grass catcher bag material is subject to deterioration and wear. Check bag frequently for deterioration and wear and replace worn bags. Check that replacement bags comply with the original manufacturer's recommendations or specifications.
- 25. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after observation of the entire area behind the mower.

## SAFETY INFORMATION CONT'D

- 26. The discharge chute must be installed and in the down position on the side discharge cutting unit except when optional grass catcher is completely installed. If the cutting unit discharge ever plugs, shut engine off and wait for all movement to stop before removing obstruction.
- 27. Performonly those maintenance instructions described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Scag Servicing Dealer. To ensure optimum performace and safety, always purchase genuine SCAG replacement parts and accessories. NEVER USE "WILL FIT" replacement parts and accessories made by another manufacture. Use of unapproved replacement parts may void the warranty.



#### **WARNING**

DO NOT operate on steep slopes. To check a slope, attempt to back up (with cutter deck down). If unit can back up the slope without the wheels slipping, then slope should be managable with careful operating procedures.

## **ASSEMBLY INSTRUCTIONS**

- 1. Remove all crating and packing materials.
- Lay out loose bolts and nuts according to the "Where Used" as listed in the loose parts packing list.
- 3. Set the cutter deck level, about two inches off the floor.
- 4. Remove belt cover. Remove mower engage control rod.
- 5. Move tractor assembly to cutter deck so that mounting brackets clear engine deck.
- Unwind winch lift cable and tilt engine deck to horizontal position. Align the lower set of holes in the mower deck brackets and insert drift pins on each side to temporarily locate holes.

#### **IMPORTANT**

- 7. Use lower set of holes in brackets for mowing two inches and above (for under two inches, use upper set of holes). Insert six (6) 7/16-14 x 1" bolts, flat washers, lock washers and nuts. Tighten all six bolts very securely. Then go back and retorque each one to 60 ft. lbs..
- 8. Raise cutter deck using lift winch and assemble front caster wheels using eight (8) 5/16-18 x 3/4" bolts, lock washers and nuts.

- 9. Install the mower engagement control rod. Secure with hair pin cotter at both ends.
- 10. Route blade drive belt over center spindle pulley. Be sure belt clears the belt guide saddle at center spindle and is positioned between the pulley and its belt guide at the center pulley support bracket.
- Push mower engagement lever forward until it snaps to rest. Adjust belt tension as specified in adjustment sections. Do Not Adjust Too Tight!
- 12. Install grass discharge deflector chute using two (2) 5/16-18 x 1" bolts and elastic stop lock nuts.
- Place seat assembly on the seat support spring using two (2) 3/8-16 x 3/4" bolts and lock washers. Seat can be positioned forward or backward for operator comfort.
- If so equipped, adjust arm rests to horizontal position (if necessary) by turning setscrew in rear of each arm.
- 15. Insert steering handle on shaft and secure with one (1) 5/16-18 x 1-1/2" bolt, two (2) washers and a locknut. Tighten securely.
- 16. Reduce tire pressure to values specified in adjustments section.

NOTE: Tires are over inflated for shipping purposes.



#### WARNING

Severe chemical burns may result from improper handling of battery electrolyte. Contact a physician immediately!



#### WARNING

A battery being charged gives off explosive gases. Sparking can be minimized by connecting the positive cable first, covering the connection with the rubber boot then connecting the negative cable.

- 17. Remove battery and fill each cell with electrolyte (I.265 specific gravity, battery grade) to level indicator. Do Not Fill more than 3/16" above plates. Allow battery to set for 20 minutes. Refill to level. Battery may be placed on charge at 3 amperes for maximum capacity (not usually necessary). Wash off battery (using baking soda) to remove any spilled acid.
- 18. Reinstall battery.
- 19. Check engine crankcase. It was filled at the factory, but may need additional oil for proper level.
- 20. Fill fuel tank.
- 21. Open shut-off under tank.
- 22. After initial run and inspection of cutter belt, replace belt cover.

## **ADJUSTMENTS**

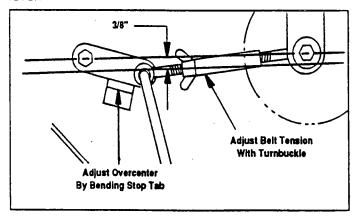
#### **Belt Guides**

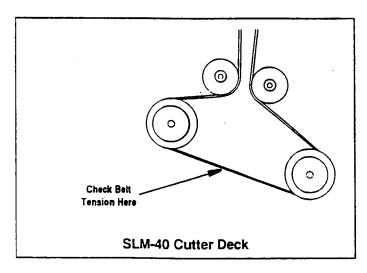
Check that all belts clear their belt guides by about 1/8 to 3/16 inch. Adjust guides if necessary.

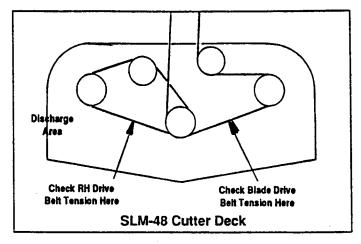
#### **Drive Belts**

#### **Cutter Deck Drive**

Adjust blade drive belt by turning turnbuckle so that about 10 lb. pull sideways deflects belt 1/2 inch. Do Not Overtighten! Only a moderate force should be used on control lever.







#### **Blade Drive**

Adjust cutter deck belt by turning lock nut on "J" pull rod where applicable. About 10 lbs. pull sideways deflects belt 1/2 inch. Test belt at short section between center spindle and left hand spindle (do not test long section at rear of deck).

IMPORTANT: Readjust new belt tensions after 4 hours of operation and again after about 24 hours to take up initial stretch and wear.

#### **Traction Drive**

This belt is spring loaded and does not require a tensioning adjustment.

#### **Tire Pressures**

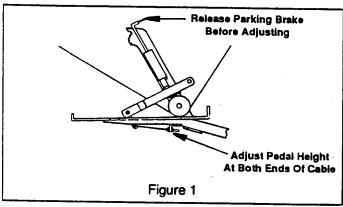
Caster Wheels	25 PSI
Rear Steering Wheel	25 PSI
Drive Wheels	15 PSI

## ADJUSTMENTS CONT'D

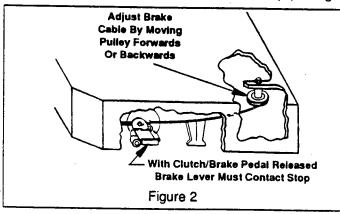
#### Clutch/Brake Control

Three adjustments must be made together and in proper sequence or improper operation and possible damage to the clutch cable, brake cable, pulley, and or brake system may result.

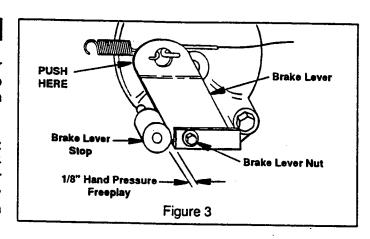
1. With parking brake released adjust foot pedal so that it is 3-1/2"-4" above foot rest (see fig.1). HINT: Use a 2x4 board on edge between pedal and foot rest for approximate positioning. Adjust foot pedal position by adjusting the two cable mounting nuts located on each end of the cable housing.



 Brake must be adjusted in following sequence: With the clutch/brake pedal released (foot pedal in the up position or tension on the transaxle belt) move brake cable pulley (see fig.2) fore or aft in its slot to permit transaxle brake lever to rest against its stop (see fig.3).



3. Then adjust brake lever nut to permit free movement of lever about 1/8 inch from stop by pushing lever with hand pressure. (Pads must not "drag" on brake disc when adjusted.) If brake lever is too tight, shifting may be impossible and brake wear will be excessive.



#### **INITIAL RUN-IN**

Transaxle shifter neutral may require adjustment so that starter engages at neutral stop. Rotate swivel joint if necessary to lengthen or shorten the shift rod.

- Set parking brake before starting engine.
- 2. Please Remember: To start engine, three safety switches must be activated:
  - The shift lever must be in neutral.
  - b. The mower engage lever must be pulled all the way back (and held there).
  - The left foot safety switch pedal must be depressed.
- 3. Run new engine at half speed about 5 minutes before applying any load.
- Adjust fuel-air mixture valves according to specifications in engine manual.
- To release parking brake, depress right hand foot pedal, lift brake lever and rotate 90 degrees and release foot pedal.
- 6. Readjust shift lever for proper neutral, if necessary.

Note: Do not shift on the go, you must declutch.



## **LUBRICATION & MAINTENANCE**

2000		200 Hours (Monthly)	
		PROCEDURE	COMMENTS
		Check engine oil Clean blower screen Clean debris under belt cover Sharpen cutter blades	Do not over fill MORE OFTEN IF NECESSARY
		Grease spindle bearings	+ US Lithium MP White Grease 2125
X		Change engine oil Check battery acid level	See engine mfg. information Distilled water only
X X		Glean air filter Check tire pressure	Adjust as required
********	x	Grease caster wheel bearings	Chassis grease
	X	Grease caster wheel pivots Grease idler pulley pivots	Chassis grease Chassis grease
	X	Remove hubs from axle & grease	. Anti-sieze compound
	188	X Clean and Adjust spark plugs	See engine mfg. information See Adjustments Clutch/Brake step 3
		X Adjust Brake lever freeplay X Grease rider frame pivot	Chassis grease
		X Grease control belicrank	Chassis grease
		X Grease Left axle bearing	Chassis grease
		X Grease steering handle	Chassis grease Chassis grease
		X Grease foot pedal	Chassis grease
		X Grease rear wheel pivot vertical     X Grease rear wheel bearing	+ US Lithium MP White Grease 2125
		X Lubricate idler pulley cam links	LPS type lubricant

- Depending on climate and environment lubrication may be required every 8 to 40 hours. Do not over grease as this may damage seal.
- + Compatible Greases:

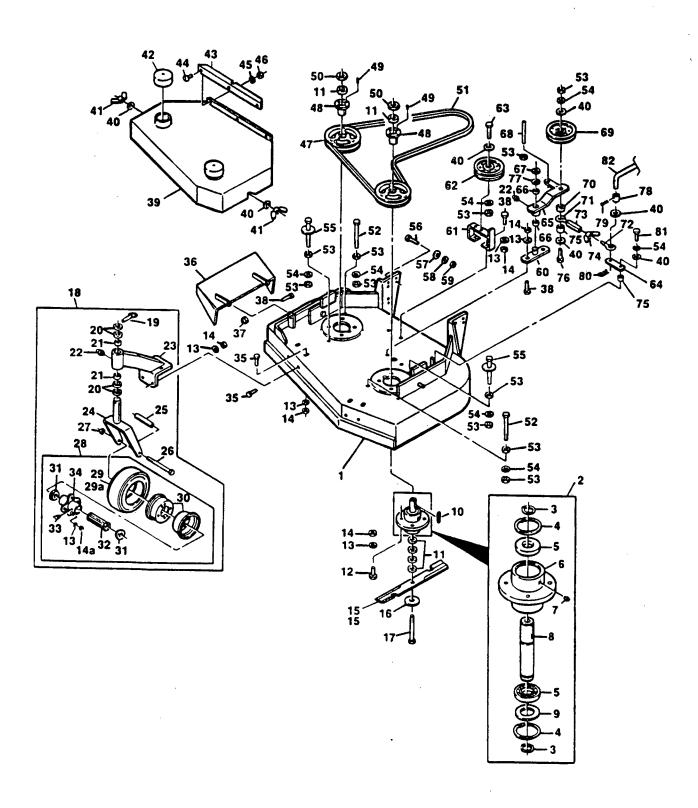
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Lidok EP #2 found at Industrial Shops
Ronex MP found at Exxon Service Stations
Shell Alvania #2 found at Shell Service Stations
Mobilux #2 found at Mobil Service Stations
Super Lube M EP #2 and Super Stay-M #2 found at Conoco Service Stations

Note: Transaxle does not require lubrication, however users have found that a few tablespoons of STP Oil Treatment added to the transaxle extends its life. We suggest this procedure once per season.

## **SLM-40 CUTTER DECK**

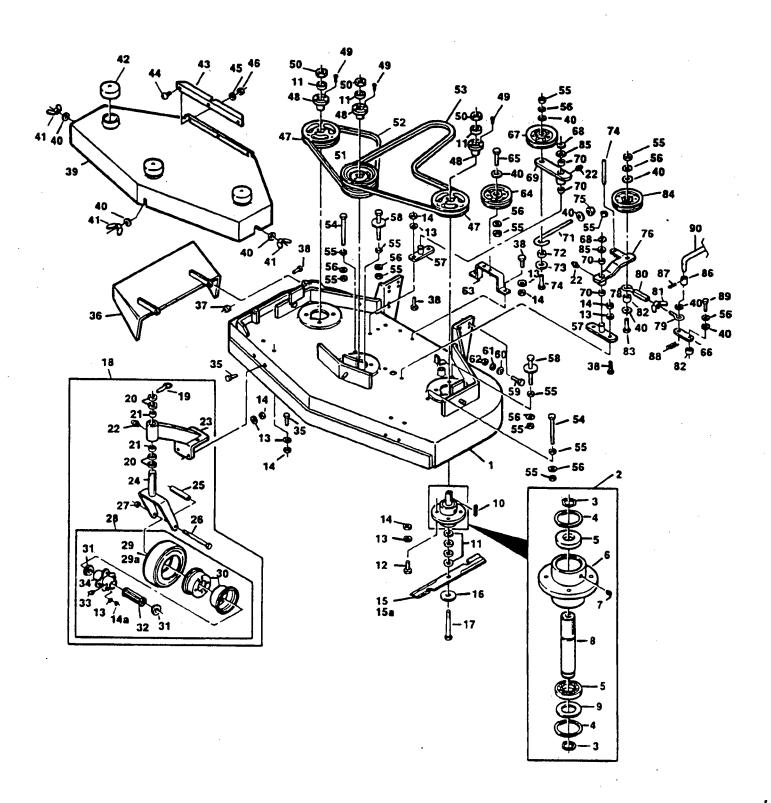


## **SLM-40 CUTTER DECK**

Ref.	Part Number	Description		Part Number	Description
1	46146	Cutter Deck (Includes decals)			
1 2	46020	Cutter Spindle Assembly (Includes 3-9)	41	04022-04	Wing Nut, 3/8-16
3	04050-04	Retaining Ring, 1" Ext-Inverted	42	48098	Spindle Shield
4	04050-07	Retaining Ring, 2-7/16 Int-Basic	43	42184	Belt Cover Skirt
5	48101-02	Bearing, Cutter Spindle	44	•	Sit. Truss Hd. Mch. Screw 1/4-20 x 1/2
6	41001	Spindle Housing	46		Lockwasher, Spring 1/4
7	48114-02	Gresse Fitting, Str. 5/16 Serr.	27	48127	Hex Nut, 1/4-20
8	43001-02	Spindle, Cutter Biade	48	48141	Pulley (Includes 48-49)
9	04041-02	Washer, 1-15/16 x 2-13/32 x 16 ga.	49		Taper Hub
10	04063-08	Key, 1/4 x 1/4 x 2	50		Hex Head Bolt, 1/4-20 x 3/4
11	43038	Spacer, Cutter Blade	51	48086	Hex Nut, 5/8-11
12	•	Hex Head Bolt, 5/16-18 x 1-1/4	52	40000	Belt, Blade Drive
13	• '	Lockwasher, Spring, 5/16	53	•	Hex Head Bolt, 3/8-16 x 5
14	•	Hex Nut, 5/16-18	54	•	Hex Nut, 3/8-16
14A	•	Hex Nut, 5/16-24	55	45098	Lockwasher, Spring, 3/8 Belt Guide
15	48109	Cutter Blade, 20* Std.	56	43030	Hex Head Bolt, 7/16-14 x 1-1/4
16	04040-10	Flat Washer, S/6W	57		
17	04001-41	Hex Head Bott, 5/8-11 x 9-1/2	59		Washer, 15/32 x 59/64 x 16 ga. Loolwasher, Spring, 7/16
18	45079	Cester Assembly (includes 19-28)	59	<b>.</b>	Hax Nut, 7716-14 Elastic Stop
19	04066-01	Quick Pin	50	45037	Haz 140, 1710-14 Emilio Stop
20	43037-01	Spacer, Caster Yoke, 1/2 Long	61	45012	Idler Pulley Support
21	48100-01	Bronze Bearing	62	48068	Pulley, Belt Guide
22	48114-01	Grease Fitting, Str. 1/4-28	63	*******	Hex Head Bolt, 3/8-16 x 1-3/4
23	46082	Support Assembly (Includes 21-22)	64	42057	Cam Link
24	45006	Caster Yoke	65	46145	Idler Arm Assembly (Includes 22 & 66)
25	43022	Sieeve, Caster Wheel Bearing	66	48100-05	Bronze Bearing
26	04001-37	Hex Head Bolt, 1/2/13 x 5/1/2	67	04050-02	Retaining Ring, 3/4 Ext. E
27	•	Hex Locknut, 1/2-13	68	04004-04	Stud
28	48307-01	Wheel Assembly (includes 13-14, 29-34)	69	48269	Idler Pulley, Belt Clutch
29	48307-02	Tire Only, Caster Wheel	70	43063	Spacer, Idler
29A	48006-03	Inner Tube Only, Caster Wheel	71	04070-02	Eyeboit, LH
30	48006-04	Rim Pair, Caster Wheel	72	04070-01	Eyebolt, RH
31	48006-07	Retainer, Bearing, Caster Wheel	73	43025	Turnbuckle
32	48006-06	Roller Bearing, Caster Wheel	74	04022-02	Wing Nut, 5/16-18
33	48114-03	Grease Fitting, 45 1/4-28	75	43042	Sleeve, Cam Clutch
34	48006-05	Hub Assembly w/Bolts, Caster Wheel	76	•	Hex Head Bolt, 3/8-16 x 2-3/4
35	•	Hax Head Bolt, 5/16-18 x 3/4	77	04041-08	Wesher, 49/64 x 1-1/4 x 16 ga.
36	45029	Discharge Chute	78	43043	Sleeve, Clutch Rod
37		Hex Nut, 5/16-18 Electic Stop	79	•	Coner Pin, 3/32 x 1
38	•	Hex Head Bolt, 5/16/18 x 1	80	04062-01	Hair Pin, Large
39	46147	Belt Cover Assembly (Includes decals)	81	•••••••••••••••••••••••••••••••••••••	Hex Head Bolt, 3/8-16 x 1
40	•	Washer, 25/64 x 15/16 x 12 ga.	"		HOX HOME DOIL STOP TO X T

<sup>\*</sup> Common hardware which should be purchased locally. All bolts Grade 5 plated, all other fasteners zinc plate.

## **SLM-48 CUTTER DECK**



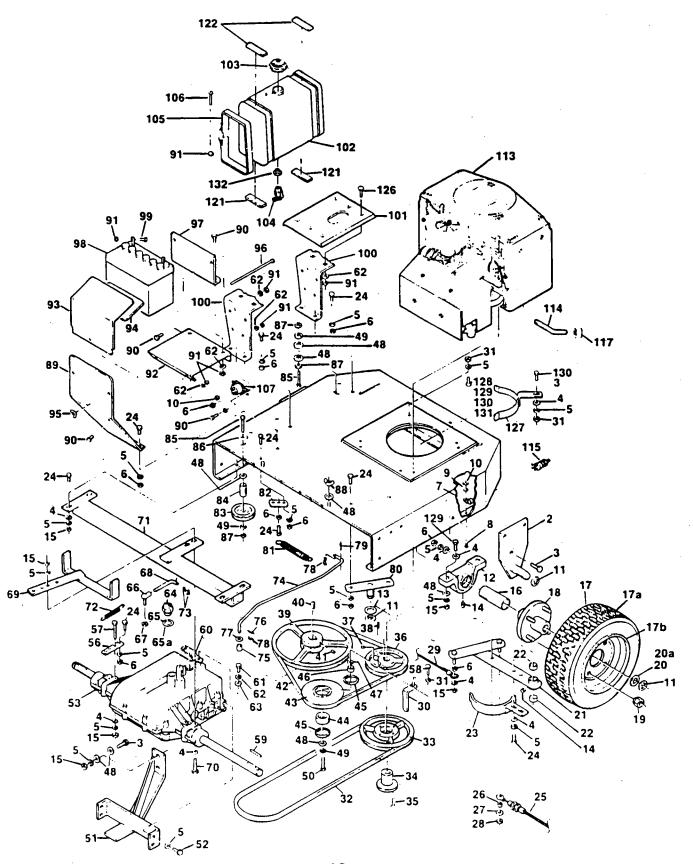


## **SLM-48 CUTTER DECK**

	Part Number	Description	1	Part Number	Description
1	46152	Cutter Deck (Includes decals)	44	•	Sit. Truss Hd.Mach.Screw, 1/4-20 x 1/2
2	46020	Cutter Spindle Assembly (Includes 3-9)	45	•	Lockwasher, Spring 1/4
3	04050-04	Retaining Ring, 1" ExtInverted	46		Hex Nut, 1/4-20
4	04050-07	Retaining Ring, 2-7/16 IntBasic	47	48127	Pulley (Includes 48-49)
5	48101-02	Bearing, Cutter Spindle	48	48141	Taper Hub
6	41001	Spindle Housing	49		Hex Head Bolt, 1/4-20 x 3/4
7	48114-02	Greece Fitting, Str. 5/16 Serr.	50		Hex Nut, 5/8-11
8	43001/02	Spiride, Cutter Blade	51	48129	Pulley, Double (Includes 48-49)
9	04041-02	Washer, 1-15/16 x 2-13/32 x 15 ga.	52	48087	Belt, RH Blade Drive
10	04063-08	Key. 1/4 x 1/4 x 2	53	48088	Belt, Blade Drive
11	43038	Spacer, Cutter Blade	54 55	•	Hex Head Bolt, 3/8-16 x 5
12	_	Hex Head Bolt, 5/16-18 x 1-1/4	55	-	Hex Nut, 3/8-16
13	•	Lockwasher, Spring, 5/16	56	45007	Lockwasher, Spring, 3/8
14	_	Hex Nut, 5/16-18	57	45037	Idler Piviot
14A		Hex Nut, 5/16-24	58 <b>59</b>	45098	Belt Guide
15	48110	Cutter Blads, 16-1/2" Std	59 60		Hex Head Bolt, 7/16-14 x 1-1/4
15A	48184	Cutter Blade, 18-92* High Lift	61		Washer, 15/32 x 59/64 x 18 ga Lockwasher, Spring, 7/16
∞16 	04040-10	Flet Washer, 5/8W	B2		Hex Nut. 7/16-14, Elastic Stop
17	04001-41	Hex Head Boit, 5/8-11 x 9-1/2	63	45012	Idler Pulley Support
- 1 <b>8</b> 19	46079 04066-01	Caster Assembly Complete (Includes 19-28)	64	48068	Pulley, Belt Guide
20	43037-01	Quick Pin Spacer, Caster Yoke, 1/2 Long	65	•	Hex Head. Bolt, 3/8-16 x 1-3/4
21	48100-01	Bronze Bearing	66	42057	Cam Link
22	48114-01	Grease Fitting, Str. 1/4-28	67	48181	Idler Pulley, "V" Groove
23	46082	Support Assembly (Includes 21-22)	68	04050-02	Retaining Ring, 3/4 Ext"E"
24	45006	Caster Yoke	69	46081	Idler Arm Assembly (Includes 22 & 70)
25	43022	Sleeve, Caster Wheel Bearing	70	48100-05	Bronze Bearing
26	04001-37	Hex Head Bolt, 1/2-13 x 5-1/2	71	43028	Rod. idler Pull. J
27	•	Hex Lockmut, 1/2-13	72	43077	Spacer, J Pull Rod
28	48307-01	Wheel Assembly (Includes 13-14, 29-34)	73	04041-12	Washer, 3/8 x 1-1/2 x 16 ga.
29	48307-02	Tire Only, Caster Wheel	74	04004-04	Stud
29A	48006-03	Inner Tube Only, Caster Wheel	75	•	Hex Nut, 3/8-16 Elastic Stop
30	48006-04	Rim Pair, Caster Wheel	76	46145	Idler Arm Assembly (Includes 22 & 70)
31	<b>48006</b> -07	Retainer, Bearing, Caster Wheel	77	43063	Spacer, Idler
32	48006-06	Roller Bearing, Caster Wheel	78	04070-02	Eyebolt, LH
33	48114-03	Grease Fitting, 45 deg, 1/4-28	79	04070-01	Eyebolt, RH
34	48006-05	Hub Assembly W/Bolts, Caster Wheel	80	43025	Turnbucide
35		Hex Head Bolt, 5/16-18 x 3/4	81	04022-02	Wing Nut, 5/16-18
36	45029	Discharge Chute	82	43042	Sleeve, Cam Clutch
37		Hex Nut, 5/16-18 Elastic Stop	83	•	Hex Head Bolt, 3/8-16 x 2-3/4
38	•	Hex Head Bolt, 5/16-18 x 1	84	48269	Idler Pulley, Belt Clutch
39	46149	Belt Cover Assembly (Includes decals)	85	04041-08	Washer, 49/64 x 1-1/4 x 16 ga.
40	•	Washer, 25/64 x 15/16 x 12 ga.	86	43043	Sleeve, Clutch Rod
41	04022-04	Wing Nut, 3/8-16	87	•	Cotter Pin, 3/32 x 1
42	48098	Spindle Shield	88	04062-01	Hair Pin, Large
L	42184	Belt Cover Skirt	89	•	Hex Head Bolt, 3/8-16 x 1

<sup>\*</sup> Common hardware which should be purchased locally. All bolts Grade 5 plated, all other fasteners zinc plate.

## **ENGINE DECK**

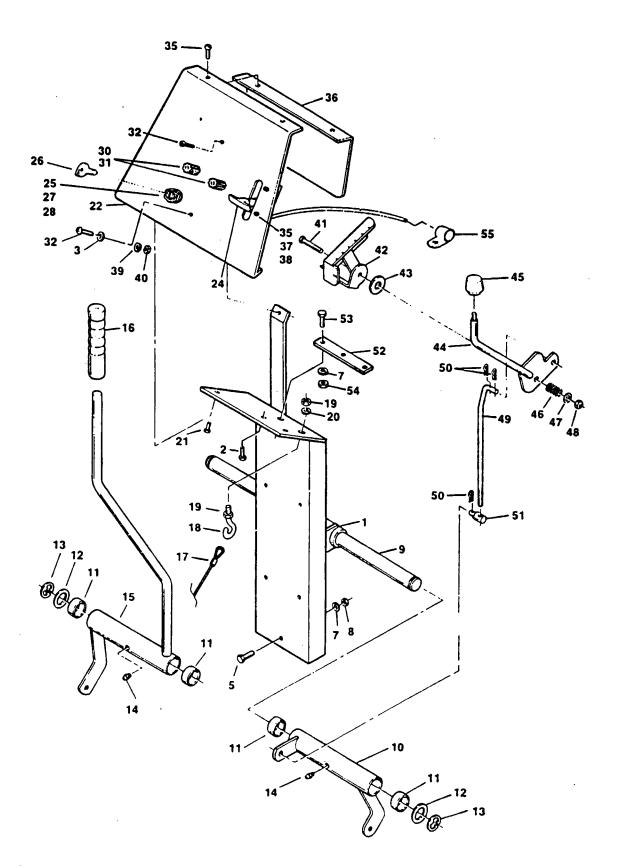




**ENGINE DECK** 

				GINE				ST S
₹ef.	Part		ST		Ref.		D	13KA 14K
lo.	Number	Description	13KA	14KH	No.	Number	Description	13KA 14K
	45177	Engine Dock	×	×	63	04043-01	Washer, 17/64x7/8x1/8 H.T.	x x
	45177 45149	Engine Deck Hitch Bracket	x	x	64	48021	Neutral Safety Switch	x x
	40145	Hex Head Bolt, 5/16-18 x 1	x	x	65	48122-01	Fiber Washer, .010	x x
	•	Washer, 11/32 x 11/16 x 16 ga.	x	x	65A	48122-02	Fiber Washer, .020	x X
	•	Lockwasher, Spring, 5/16	×	x	66	48118	Ball Joint	X
	•	Hex Nut. 5/16-18	X	×	67	04021-06	Hex Lock Nut, 3/8-24	у к
	48030-01	Clamp	¥	×	68	44016	Shift Connector Rod	2 X
	•	Phipe Wahr Hd. Screw #10-32 x 1/2	×	×	69	45119	Bett Guide Hex Head Bolt, 5/16-18 x 3	X X X X X X X X X X X X X X X X X X X
	4	Lockwasher, #10 Ext Tooth	x	X	70 71	45178	Transaxie Support.	
		Hex Nut. #10-32	X X	X X	72	48052	Spring, Brake Return	X X X X X
	04050-02	Retaining Ring, 3/4 Ext. E	X	X X	73	04062-02	Hair Pin, Small	x >
:	48104-02	Bearing, Pillow Block Washer 49/64 x 1 1/4 x 16 ga.	×	×	74	44015	Blade Clutch Rod	x >
) 	04041-08 48114-01	Grease Fitting, Str., 1/4-28	x	x	75	43043	Sleave	x >
, ,	40114-01	Hex Lock Nut, 5/16-18	X	X	76	•	Cotter Pin, 3/32 x 1	<u> </u>
	43107	Spacer - LH Axte	×	×	78	04062-01	Hair Pin, Large	<b>x</b> :
	48374	Drive Wheel Assembly	×	×	79		Catter Pin, 3/32 x 3/4	X :
Α	48004-02	Tire, 16 x 6.50-8 2-Pty	×	× ×	80	45037	Pivot Base	x
В	48004-04	Rim	X.	×	81	48051	Spring, Belt Clutch	X
	48374-05	Hub & Flange (Includes Bolts)	X	X	82	42060 48066	Bracket, Spring Mounting Pulley, Brake Cable	X X
)	48004-06	Wheel Bolt & Washer	X	X	83	48066 43024	Spacer, Pulley	x
)	04042-05	Washer, 1-1/16 x 1-3/4 x 12 ga.	X	X X	85	43024	Hex Head Bolt, 3/8-16 x 3	x
Α	04041-14	Washer, 1-1/16 x 1-3/4 x 18 ga.	X X	×	86	•	Washer, 13/32 x 1-1/2 x 7 ga.	×
l	46144	Idler Arm (Includes 14 & 22) Bronze Bearing	×	x	87	•	Hex Nut, 3/8-16	x
2 3 ,	48100-05 4 <b>501</b> 4	Belt Guide	····x	· · · · · · · · · · · · · · · · · · ·	88	04022-04		×
	43014	Hex Head Bolt, 5/16-18 x 3/4	×	×	89	42187	Battery Mounting Bracket	x
•	48047	Foot Cable Assembly	×	×	90	•	Hex Head Bolt, 1/4-20 x:3/4	X
5	43049	Sleeve, Foot Cable	×	×	91	•	Hex Nut, 1/4-20	×
7	4	Washer, 9/32 x 5/8 x 16 ga.	x	X	92	42188	Battery Shelf	X
8		Hex Lock Nut, 1/4-20	X	X	93	42024	Battery Cover	X
9	48046	Brake Cable	X	X	94	48099	Battery Cover Pad	X
10	45063	Belt Guide	×	x	95	04022-01		X
31	•	Hex Nut, 5/16-18, Elastic Stop	x	X	96	04003-01		X X
32	48086	Belt, Blade Drive SLM40	<b>X</b>	<b>X</b>	97	42055	Battery Clamp Battery	
32	48068	Belt, Blade Drive SLM48		X	98	48015	Hex Head Bolt 1/4-20 x 1/2	x
33	48168	Pulley, Mower Drive (Incl. 34 & 35)	) X X	X X	100		Tank Mtg. Bracket (Vert.)	X
34	48168-03	Taper Hub Hex Head Bolt, 1/4-20 x 1-3/8	×	×	101	Contraction of the Contraction o	Support, Fuel Tank (Hor.)	X
35 36	-4548 1980a.	Pulley	x	·	102	Act 15 (15 (15 (15 (15 (15 (15 (15 (15 (15	Fuel Tank (Incl. 103, 104, & 13	2) ×
30 37	48063	Setscrew, Hex Skt, 5/16-18 x 1-1/		X	103		Fuel Tank Cap	X
38	04063-03	Key, 1/4 x 1/4 x 2-1/2	X	x	104	48308	Fuel Shut-off Valve	X
39	48322	Pulley, Transaxle	x	x	105	5 <b>42369</b>	Fuel Tank Strap	X
40	04063-09		x	x	106	•	Screw, Slotted Rd Hd Mach. 1/4	1-20 x 2 x
41	•	Setscrew, Hex Skt, 5/16-18 x 3/8	x	x	10		Solenoid	apudosabudo paginari 200 5600 560 + 15
42	48085	Belt, Transaxle Drive	X	X	101	A 100 CO. 100		*
43	48065	Pulley, Idler	×	×	10		7900 - 1 <u>1</u> 7. 19. <u>111</u> - A. 1. 2000 <b>00.0000000000000000</b> 000000000000000	×
44	48102	Bearing, Idler Pulley	X	×	11			×
45	04050-06		****** <b>X</b>	×				X X
46	43044	Sleeve, Transmission Idler Bearin		X	200	the state of the s	the state of the s	
47	43039	Spacer, Transmission Idler	X	X	l l		Engine, 13 HP Kawasaki	· <b>x</b>
48	•	Washer, 25/64 x 15/16 x 12 ga.	X	X X			Engine, 14 HP Kohler	
49	-	Lockwasher, Spring, 3/8	X X	X				
50	45440	Hex Head Bolt, 3/8-16 x 1-1/2	×	×			Safety Switch, Blade Clutch	x
51 En	45148	Transaxle Protector  Hex Head Bolt Taptite, 5/16-18 x				· · · · · · · · · · · · · · · · · · ·	Pipe Cap	en grant Marian
52 53	4 74, 4	Transaxie	Ϋ́ ×		**************************************		Pad, Tank Support	<b>X</b>
53 56	48325 42367	Spacer, Transaxie	×	X			Pad, Strap Cushion	×
57	42307	Hex Head Bolt, 5/16-18 x 2-3/4	×	12.50	* lt	The Contract of Miles and	Carriage Head, Bolt 1/4-20 x 5	
58	and the second second	Carriage Head Bolt, 5/16-18 x 3/4	SS 100 1	, y	30 Mar.		Belt Guide	X
59		The second secon	X	Х		28	Hex Head Bolt, Metric 8-1.25	
60		Shift Lever	x	>		29 •	Hex Head Bolt, 5/16-18 x 1-1/	
61			x	>	c   13	32 <b>4830</b> 9	Bushing, Fuel Tank/Valve	x
62		Lockwasher, Spring, 1/4	x	)	(			

## **INSTRUMENT PANEL**

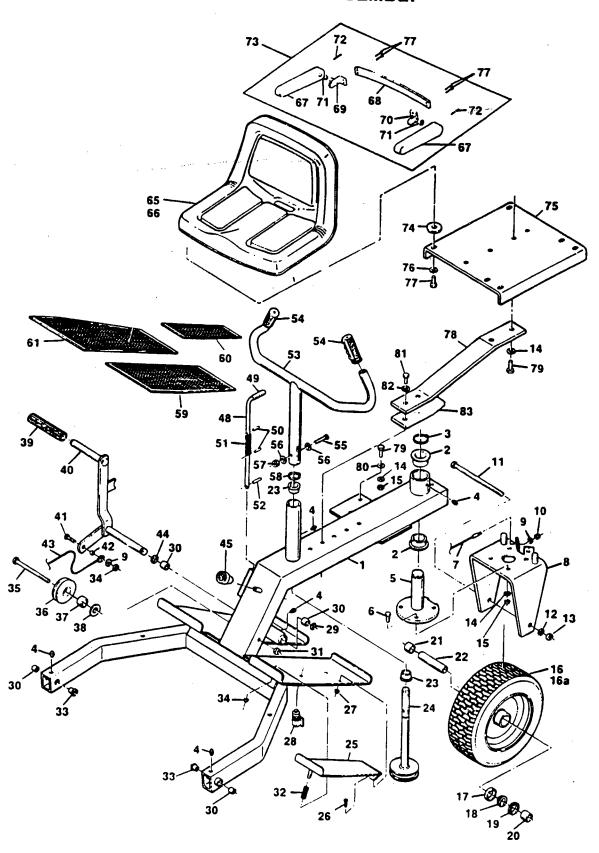


## **INSTRUMENT PANEL**

Ref.	Part		ST	ST
No.		Description	13KA	14KH
1	45025	Console Support	X	X
2	•	Hex Head Bolt, 1/4-20 x 1-1/4	X	X
3	•	Washer, 9/32 x 5/8 x 16 ga.	X	x
4	+	Part Removed from Illustration		<u>.</u>
5	•	Hex Head Bolt, 5/16-18 x 2	X	X
e	•	Part Removad From Hustration	×	*
7.		Lockwasher, 5/16 Spring Hex Lock Nut. 5/16-18	ï	X
8			×.	×
9	43017	Bullcrank Shaft Shafter Assambly (includes 11 & 14)	×	*
10	46142 48100-06	Bronze Bearing	X	X
11 12	04041-08	Washer, 49/64 x 1-1/4 x 16 ga.	x	×
13	04050-02	Retaining Ring, 3/4 Ext. "E"	x	x
14	48114-01	Grease Fitting, 1/4-28 Str.	x	x
15	46143	Mower Engage (includes 11,14,16)	x	x
16	48093	Ging, Mower Lever	×	X
17	48045	Winch Cable Assembly	X	X
18	04070-03		×	T
19	•	Hex Hut, 3/8-15	X	X
20	•	Lockwasher, 3/8 Spring	×	
21	•	Hex Head Bolt, 1/4-20 x 3/4	X	X
22	42190	Instrument Panel	X	x
23	+	Part Removed From Illustration	v	•
24	48246	Throttle Control	X X	X X
25	48017	Starter Switch (Includes 26-28)	Ŷ	â
26	48017-02	Key Ignition	×	X
27	48017-03		×	X
28	48017-04	Her Nut; 5/8-11 Part Removed From Hustration		
29	+ 48024	FUSE Holder	X	х
30	48025-01	Fuse, 20A	X	×
31	40025-01	Truss Head Screw, 1/4-20 x 3/4	x	X
33	+	Part Removed From Illustration		
34	<b>+</b>	Part Removed From Illustration		
35	•	Screw, Phillips Washer Hd, #10-32 x 1/2	<b>x</b>	X X
36	42191	Panel Cover	X	X
37	•	Lockwasher, Ext. Tooth #10	×	X .
38	•	Hex Hut #10-32	×	X
39	•	Lockwasher, 1/4 Spring	×	I
40	•	Hex Nut, 1/4-20	×	X
41	•	Hex Head Bolt, 3/8-16 x 2	X	X
42	45024	Shift Quadrant	X	x
43	04041-10		X	×
44	45023	Shifter Handle	X X	X X
45	48092	Shifter Knob	Ŷ	Ŷ
46	48050	Spring	ì	X
47		Washer, 13/32 x 13/16 x 16/ga.	Ŷ	X
48		Hex Nut; 3/8-16 Elestic Stop	· X	X.
49	Not the Committee of th	Shifter Connector Rod	x	X
50		MARING CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONT	X	X
51	43032	Swivel Joint Winch Cable Attachment	x	×
52	42205	Hex Head Bolt, 5/16-18 x 1	x	x
53	•	Hex Nut, 5/16-18	x	x
54	<b>48030</b> -0		x	x
<b>5</b> 5	48030-0	i Ciamp, Cause		

<sup>\*</sup> Common hardware which should be purchased locally. All bolts Grade 5 plated, all other tasteners zinc plate.

## RIDER FRAME ASSEMBLY



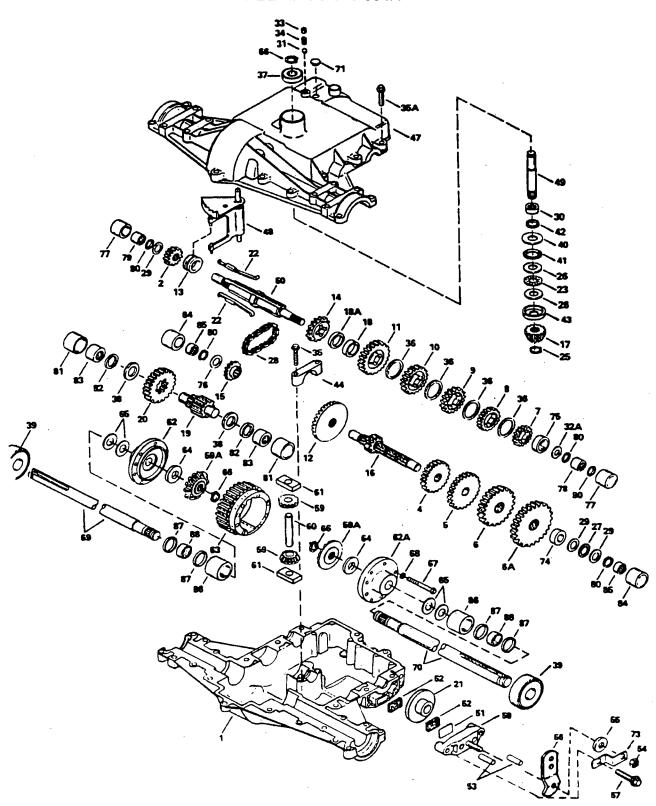
## **RIDER FRAME ASSEMBLY**

2 3 4 5 5 6 7 8 9 10 11 1 12 13 14 15 16 A 17 18 19 20 21 22 23 24 25 26 27	45065 48100-02 04050-02 48114-01 45008 48153 45035 04001-40	Steering Frame Bronze Bearing Retaining Ring, 1-1/8 Ext. Basic Grease Fitting, 1/4-28 Str. Rear Wheel Pivot Hisk Head Bolt, 3/8-16 x 1/3/8 Steering Cabble Rear Wheel Yoke Washer, 9/32 x 5/8 x 16 ga. Hex Lock Nut, 1/4-28 Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16/4-19) Rim Only Bearing Cup Bearing Cone Grease Beal Spacer, Short	X X X X X X X X X X X X X X X X X X X	********	42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	43049 48047 48097 + 45141 48095 48053 46036 48159 04050-03 48369 48370	Sleeve Foot Cable Assembly Washer, 49/64 x 1-1/4 x 16 ga. Bumper Stop Cover Part Removed From Illustration Part Removed From Illustration Parting Brake Lever (Includes 49) Grip Rolling Pin, 5/32 x 3/4 Spring Drive Lock Pin, 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nint, 5/16-18 Retaining Ring, 7/6 Ext: Basic Pad - LH Pad, Safary Pedal	X X X X X X X X X	* * * * * * * * * * * * * * * * * * *
3 4 5 5 6 7 8 9 10 11 11 12 13 14 15 16 16A 17 18 19 20 21 22 22 23 24 25 26 27	04050-02 48114-01 45008 45035 45035 04001-40  48005-01 48005-03 48005-04 48005-05 48005-06	Retaining Ring, 1-1/8 Ext. Basic Grease Fitting, 1/4-28 Str. Rear Wheel Pivot Hitt Heart Bott, 3/5-16 x 1/3/8 Strening Cable Rear Wheel Yoke Washer, 9/32 x 5/6 x 16 ga. Hex Lock Nut. 1/4-28 Hex Head Bott, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut. 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Grease Seal	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	44 45 46 47 48 49 50 51 52 53 54 55 55 56 57 59 59	48097 + 46141 48095 48053 46036 48159 - - - - - - - - - - - - - - - - - - -	Washer, 49/64 x 1-1/4 x 16 ga. Bumper Stop Cover Part Removed From Illustration Part Removed	* * * * * * * * * * * * * * * * * * *	*****
4 5 5 6 7 8 9 10 11 12 13 14 15 16 16 17 18 19 20 21 22 23 24 25 26 27	48114-01 45008 	Grease Fitting, 1/4-28 Str. Rear Wheel Pivot Hex Heart Boit, 3/8-16 x 1-3/8 Streening Cathle Reer Wheel Yoke Washer, 9/32 x 5/8 x 16 ga Hex Lock Nut, 1/4-28 Hex Head Boit, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Grease Seal	X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	45 46 47 48 49 50 51 52 53 54 55 55 56 57 59 59	48053 48053 48053 48053 48053 48159  04050-03 48369	Bumper Stop Cover Part Removed From Illustration Part Removed	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *
5 6 7 8 9 10 11 12 13 14 15 16 16A 17 18 19 20 21 22 22 23 24 25 26 27	45008 48153 45035 5 04001-40 6 6 1 48005-01 48005-04 48005-05 48005-06	Grease Fitting, 1/4-28 Str. Rear Wheel Pivot Hex Heart Boit, 3/8-16 x 1-3/8 Streening Cathle Reer Wheel Yoke Washer, 9/32 x 5/8 x 16 ga Hex Lock Nut, 1/4-28 Hex Head Boit, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Grease Seal	X X X X X X X X X X	X	46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	48053 48053 48053 48053 48053 48159  04050-03 48369	Part Removed From Illustration Part Removed From Illustration Parting Brake Lever (Includes 49) Gep Rolling Pin, 5/32 x 3/4 Spring Drive Lock Pin, 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nint, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	* * * * * * * * * * * * * * * * * * *	******
6 7 8 9 10 11 12 13 14 15 16 16A 17 18 19 20 21 22 22 23 24 25 26 27	48153 45035 04001-40	Rear Wheel Pivot Hitt Heart Bott, 3/8-16 x 1/3/8 Strening Cable Reer Wheel Yoke Washer, 9/32 x 5/8 x 16 ga. Hex Lock Nut. 1/4-28 Hex Head Bott, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut. 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greece Seel	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	47 48 49 50 51 52 53 54 55 56 57 58 59 60	46141 46095 48053 46036 48159  04050-03 48369	Part Removed From Illustration Parting Brake Lever (Includes 49) Grip Rolling Pin; 5/32 x 3/4 Spring Drive Lock Pin; 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nin; 5/16-18 Retaining Ring; 7/8 Ext. Basic Pad - LH	X X X X X X X X X	****
7 8 9 10 11 12 13 14 15 16 16A 17 18 19 20 21 22 23 24 25 26 27	45035 04021-03 04001-40 • • • • • • • • • • • • • • • • • • •	Stearing Cabble Reer Wheel Yoke Washer, 9/32 x 5/8 x 16 ga. Hex Lock hist, 1/4-28 Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16/4-19) Rim Only Bearing Cup Bearing Core Greese Seal	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	48 49 50 51 52 53 54 55 56 57 58 59 60	46141 48095 48053 46036 48159  04050-03 48369	Parking Brake Lever (Includes: 49) Grip Rolling Fin, 5/32 x 3/4 Spring Drive Lock Pin, 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nint, 5/16-18 Retaining Ring: 7/8 Ext. Basic Padi - LH	X X X X X X X X X	*****
8 9 10 11 12 13 14 15 16 16A 17 18 19 20 21 22 23 24 25 26 27	45035 04021-03 04001-40 • • • • • • • • • • • • • • • • • • •	Reer Yineal Yoke Washer, 9/32 x 5/8 x 16 ga; Hex Lock Nut, 1/4-28 Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greese Seal	X X X X X X X X X X	* * * * * * * * * * * * * * * * * * *	49 50 51 52 53 54 55 56 57 58 59 60	48095 48053 46036 48159 54050-03 48369	Grip Rolling Pin; 5/32 x 3/4 Spring Drive Lock Pin; 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nut; 5/16-18 Retaining Ring; 7/8 Ext: Basic Pad - LH	X X X X X X X X X	*****
9 10 11 12 13 14 15 16 16A 17 18 20 21 22 23 24 25 26 27	04021:03 04001-40	Washer, 9/32 x 5/8 x 16 ga. Hex Lock Nut. 1/4-28 Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut. 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greace Seal	x x x x x x x x x	x x x x x x x x x	50 51 52 53 54 55 56 57 58 59 60	48053 46036 48159  04050-03 48369	Rolling Pin; 5/32 x 3/4 Spring Drive Lock Pin; 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nin; 5/16-18 Retaining Ring; 7/8 Ext: Basic Pad - LH	X X X X X X X X	* x x x x x x x x x x x x x x x x x x x
10 11 12 13 14 15 16 16A 17 18 19 20 21 22 23 24 25 26 27	04001-40 48005-01 48005-04 48005-05 48005-06	Hex Lock Nut. 1/4-28 Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut. 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greese Seal	x x x x x x x x	*	51 52 53 54 55 56 57 58 59 60	46036 48159  04050-03 48369	Spring Drive Lock Pin, 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nin, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	X X X X X X	*
11 12 13 14 15 16 16A 17 18 19 20 21 22 23 24 25 26 27	04001-40 48005-01 48005-04 48005-05 48005-06	Hex Head Bolt, 5/8-11 x 9 Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheat Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greace Seal	x x x x x x x	x x x x x x x	52 53 54 55 56 57 58 59 60	46036 48159  04050-03 48369	Drive Lock Pin, 3/16 x 1-1/4 Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nin, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	X X X X X X	x x x x x x
12 13 14 15 16 16A 17 18 20 21 22 23 24 25 26 27	48005-01 48005-03 48005-04 48005-05 48005-06	Lockwasher, Spring, 5/8 Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Cone Greace Seal	x x x x x x	x x x x x x	53 54 55 56 57 58 59 80	48159 04050-03 48369	Steering Handle (Includes 54) Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nut, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	x x x x x	x x x x x x
13 14 15 16 16A 17 18 19 20 21 22 23 24 25 26 27	48005-03 48005-04 48005-05 48005-06	Hex Nut, 5/8-11 Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greace Seel	x x x x x	x x x x x	54 55 56 57 58 59 80	48159 04050-03 48369	Grip Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nut, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	x x x x x	.x x x x
14 15 16 16A 17 18 19 20 21 22 22 23 24 25 26 27	48005-03 48005-04 48005-05 48005-06	Lockwasher, Spring, 3/8 Hex Nut, 3/8-16 Wheat Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Cone Greace Seal	X X X X X	x x x x x	55 56 57 58 59 60	04050-03 48369	Hex Head Bolt, 5/16-18 x 1-1/2 Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nin, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	X X X X	X X X X
15 16 16A 17 18 19 20 21 22 23 24 25 26 27	48005-03 48005-04 48005-05 48005-06	Hex Nut. 3/8-16 Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Greace Seal	X X X X	X X X X	56 57 58 59 60	04050-03 48369	Washer, 11/32 x 11/16 x 16 ga. Hex Lock Nur, 5/16-18 Retaining Ring, 7/8 Ext. Basic Pad - LH	X X X	X X X
16 16A 17 18 19 20 21 22 23 24 25 26 27	48005-03 48005-04 48005-05 48005-06	Wheel Assy (Includes 16A-19) Rim Only Bearing Cup Bearing Core Grease Seel	X X X	X X X	57 58 59 60	04050-03 48369	Hex Lock Nur, 5/16-18 Retaining Ring: 7/8 Ext. Basic Pad - LH	X X X	X X X
16A 17 18 19 20 21 22 23 24 25 26 27	48005-03 48005-04 48005-05 48005-06	Rim Only Bearing Cup Bearing Cone Greace Seal	1 1 1	X X X	58 59 60	04050-03 48369	Retaining Ring, 7/8 Ext. Basic Pad + LH	X X	X X
17 18 19 20 21 22 23 24 25 26 27	48005-04 48005-05 48005-06	Bearing Cup Bearing Cone Greace Beal	X	X X	59 60	48369	PadiktH	×	×
18 19 20 21 22 23 24 25 26 27	48005-05 48005-06	Bearing Cone Greace Seal	×	x	80				***************************************
19 20 21 22 23 24 25 26 27	48005-06	Greece Seel				48370	Pad Safety Pedal		
20 21 22 23 24 25 26 27			<b>X</b>					¥	×
21 22 23 24 25 26 27	#3020L01	Spacer Shart			61	48544	Pad - RH	<b>X</b>	
22 23 24 25 26 27		• •	X	X	62	+	Part Removed From Illustration		
23 24 25 26 27	43020-02	Spacer, Long	X	X	63	+	Part Removed From Illustration		j
24 25 26 27	43021	Rear Wheel Sleeve	x	X	64	+	Part Removed From Illustration		ļ
25 26 27	48100-01	Bronze Bearing	x	X	65 66	48592	Seat Assembly (Includes 66-72,77)	•	x
26 27	45009	Steering Shaft	<b>X</b>	X	57	48592-01 48014-03	Seat Only	<b>X</b>	<b>x</b>
27	45175	Safety Pedal	×	K	68		Arm Rest	×	x
		Flat Head Screw #10-32 x 3/4	×	×	69	48014-07 48014-04	Back Strap	×	×
	40400	Hex Nut. #10-32,Eleatic Stop	×	×	70	48014-04	Mounting Bracket - RH	×	×
	48026 04050-02	Foot Safety Switch	×	×	71		Mounting Bracket - LH	×	x
		Retaining Ring, 3/4 Ext. "E"	X	<b>x</b>	72	48014-06	Wave Washer Set Screw 3/8-16x3/4 Flat Point	*	×
30 31	48100-06	Bronze Bearing	X	X	73	48014-02		X	X
	48049	Hex Nut, 1/2-13, Elastic Stop Spring, Foot Safety Switch	X	X	74	04041-11	Arm Rest Kit (Includes 67-72,78) Washer, 13/32 x 1-1/2 x 7 ga.	X	X
	48100-03	Bronze Bearing	X	x	75	45210	Seat Plate	X	X 1
34	40100-03	Hex Lock Nut, 1/4-20	X	X	76	43210	Lockwasher, 5/16 Spring	X	X
silindacenaceaca	04001-37	Hex Head Bolt, 1/2-13 x 5-1/2	×	X	77	***	Hex Head Bolt, 5/16-18 x 3/4	<b>X</b>	X
	46139	Winch Cable Pulley (Includes 37)	X X	X	78	42026	Seat Suport Spring	X	X
	48100-04	Bronze Bearing			79		Hex Head Bolt, 3/8-16 x 1	X	×
38		Washer, 17/32 x 1-1/16 x 3/32	×	X	80		Washer, 13/32 x 13/16 x 16 ga.	X	×
- A. C.	48096	Sleeve, Foot Pedal	X	×	81		Hex Head Bolt, 7/16-14 x 1-1/2	X	×
	OTHER PRODUCTION	Foot Pedal	× .	<b></b>	82	•	Lockwasher, 7/16 Spring	×	, , , , , , , , , , , , , , , , , , ,
41	45019	LOOK LACO	X X	X X	83	42366	Reinforcement, Seat Spring	X X	X X

<sup>\*</sup> Common hardware purchased locally.All bolts Grade 5 plated, all other fasteners zinc plate.

## TRANSAXLE ASSEMBLY

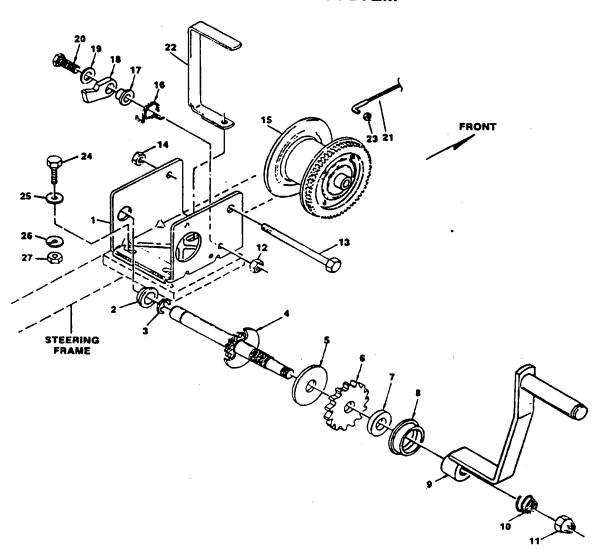
PEERLESS 820-004A



## TRANSAXLE ASSEMBLY

## PEERLESS 820-004A

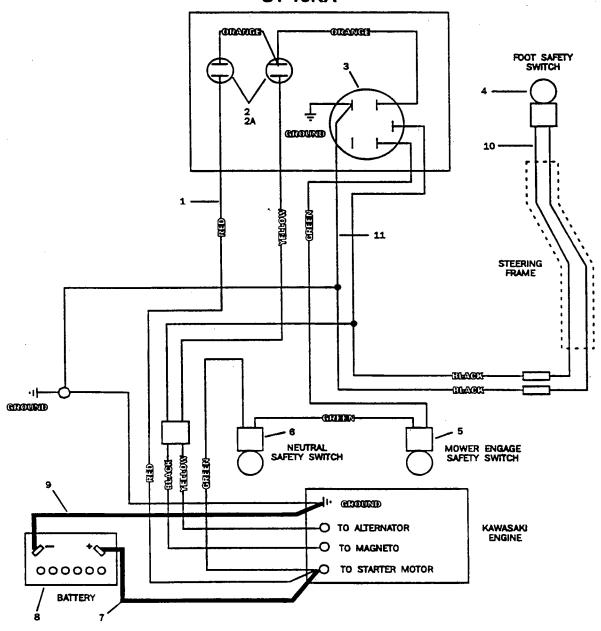
	Part		1	Part Number	Description
No.	Number	Description	NO.	Number	Description
1	770088	Case, Transaxte	48	784342	Rod & Fork Assembly, Shift
2	778253	Gear, Spur (15 Teeth)	49	776274	Shaft, input
3	778199	Gear, Spur (15 Teeth)	50	776277	Shaft Brake
4	778200	Gear, Spur (20 Teeth)	51	790007	Plate, Brake Pad
5	778201	Gear, Spur (25 Teeth)	52	790006	Pad, Brake
6	778202	Gear, Spur (28 Teeth)	53	786026	Pin. Dowel
7	778203	Gear, Spur (22 Teeth)	54	792075	Locknut, 5/16-24
8	778204	Gear, Spur (25 Teeth)	55	792076	Washer, Flat
g	778205	Gear, Spur (30 Teeth)	56	790015	Lever, Brake
10	778206	Gear, Sput (35 Teeth)	57	792073	Screw;Hex Hd:Thrd:Frm,1/4-20x1-1/4
12	778246	Gear, Bevel (33 Teeth)	57A	792085	Screw, Hex Hd. Thrd. Frm. 1/4-20x2-1/4
13	784216	Collar, Shift	58	790025	Holder, Brake Pad
14	786123	Sprocket (18 Teeth)	59	778197	Pinion, Differential Bevel
15	786082	Sprocket (9 Teeth)	59A	778198	Gear, Bevel
16	77 <b>62</b> 76	Shaft, Counter	60	786019	Pin, Drive
17	778245	Bevel Pinion, input	61	778027	Block, Drive
18	786121	Spacer, Neutral	62	774833	Carrier, Differential (Threaded Holes)
18A	786122	Spacer, Neutral	62A	774B34	Carner, Differential
19	776275	Shaft, Output (9 Teeth)	63	778248	Gear, Ring (31 Teath)
20	778247	Gear, Output (35 Teeth)	64	780107	Washer,
21	790043	Disc, Brake	65	780042	Washer, Thrust
22	792123A	Key	66	792018	Ring, Snap
23	780084	Bearing, Thrust	67	792020	Screw, Hex Hd., 1/4-20 x 2-1/4
24	780051	Washer, Thrust	68	792006	Lockwasher, 1/4
25	<b>78804</b> 0	Ring, Retaining	69	774796	Axle (12-1/4" Long)
26	780051	Washer, Thrust	70	774823 792074	Axie (24-1/4" Long) Plug, Hex Hd., 9/16-18
27	780071	Bearing, Thrust	71		Spacer
28	786081	Chain, Roller (No. 41 Chain, 24 Links)	72	786092 786086	Spacer Bracket, Brake Lever
29	780072	Washer, Thrust	73	786071	Spacer
30	780155	Bearing, Needle	75	786071	Spacer
31	792077	Ball, Steel	76	780153	Washer
32	780139	Washer, Thrust	77	786144	Sleeve (Stepped)
33	792078	Screw, Set, 3/8-16 x 3/8	78	780150	Bearing, Needle
34	792079	Spring	78	780150 780152	Bearing, Needle (Capped)
35	792073	Screw, Hex Hd. Thrd. Frm, 1/4-20 x 1-1/4	80	792001	*O* Ring
35A	792129	Screw, Hex Hd. Thrd. Frm, 5/18-18 x 1-1/4	80 81	792001 786142	Sleeve (Stepped)
<b>3</b> 6	780108	Washer, Thrust	82	788071	Ring, Square Cut
37	780119	Bearing, Ball	83	780168	Bearing, Needle (Capped)
38	780128	Washer, Thrust	83 84	786143	Sleeve (Stepped)
39	780050	Bearing, Ball		780151	Bearing, Needle (Capped)
40	780165	Washer, Flat	85 86	786145	Sleeve (Stepped)
41	788077	*O* Ring	87	788070	Ring, Square Cut
42	788042	Seal, Oil	88	780070 780031	Bearing, Needle
43	780166	Washer, Cupped	68	780031 788067	Gear Grease, Bentonite
44	786131	Cap, Bearing		10000/	Con Cross, Deliving
47	772097A	Cover, Transaxle			



## WINCH LIFT SYSTEM

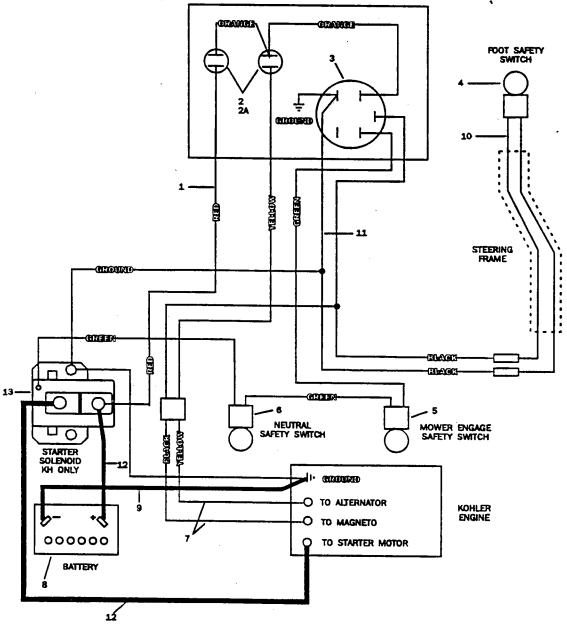
Ref. No.	Part Number	Description		Ref. No.	Part Number	Description
1	48043	Winch Assembly (incl.1-8,10-20)		13	205008	Reel Shaft
2	204009	Shaft Bushing	1	14	205155	Lock Nut. 7/16-14
3	205116	E-Ring	•	15	304227	Winch Real
4	304228	Drive Shaft		16	204363	Ratchet Spring
5	204362	Pressure Plate		17	404166	Ratchet Spacer
6	404164	Ratchet Wheel	. 88000 <b>1</b> 086	18	404409	
7	404163	Pressure Washer		19	205024	Eland-LE
8	204359	Shaft Bushing		20	205167	Ratchet Bolt
9	48044	Winch Handle		21.	48045	Minch Calle Assett
10	204364	Handle Spring		22	42127	Winch Cable Assembly Cable Guide
11	205015	Handle Nut	.272.00990 <b></b>	23	04021-03	
12	205011	Hex Locknut, 3/8-16	ļ	43	04021-03	Hex Lock Nut, 1/4-28

## ELECTRICAL SYSTEM ST-13KA



Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
1	48166	Wiring Harness, Complete	6	48021	Neutral Safety Switch
2	48024	Fuse Holder	7	48029-03	Battery Cable
2A	48025	Fuse	8	48015	Battery
3	48017	Key Switch	9	48029-10	Battery Cable
4	48026	Foot Safety Switch	10	48616	Wire Harness, Foot Safety
5	48019	Mower Engage Salety Switch	11	48638	Harness Adapter, Ground

## **ELECTRICAL SYSTEM** ST-14KH COMMON .



Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
1	48166	Wiring Harness	7	48613	Harness Adapter, KH Only
2	48024	Fuse Holder	8	48015	Battery
2A	48025	Fuse	9	48029-10	Battery Cable
3	48017	Key Switch	10	48616	Wire Harness, Foot Safety
4	48026	Foot Safety Switch	f1	48638	Harness Adapter, Ground
5	48019	Mower Engage Salety Switch	<b>12</b>	48029-03	Battery Cable
6	48021	Neutral Safety Switch	13	48016	Starter Scienoid

#### REPLACEMENT DECALS



48314 Decai - Scag Logo

# DANGER ROTATING BLADES AND BELTS - RESP HANDS, ILET & CLOPPINS CLEAN - RESP HALL DALANDES IN PLACE - BALT OF ELBANG & BREIGHARD SLADE CALITON SECOND SERVICION STADE - CLEAN ANEA OF SELEND SECONDS - USE CALITON SI DIRECTINS DISCUMBES - BLEP STEAMORES CHILDRED IN 19 TIS MINNY - BLED SISTERCTION MANAGES SERVICE CHEMITING - BLED SISTERCTION MANAGES SERVICE CHEMITING

48073
Decal - Danger Rotating Blades

\_\_\_\_



48071. Decal - OPEI Safety



48078 Decal - Mower Engage



48079 Decal - Key Switch

# AVOID INJURY FROM BURNS SHUT OFF ENGINE BEFORE REMOVING FUEL TANK CAP AVOID ENGINE DAMAGE CLOSE FUEL VALVE WHEN

48281 Decal - Gasoline

ENGINE IS NOT AUNNING



SERIOUS BODILY INJURY MAY RESULT FROM FAILURE TO FOLLOW SAFE OPERATING PROCEDURES.

BEFORE LEAVING OPERATOR'S POSITION, YOU MUST

- DISENGAGE CUTTER BLADES
- SHIFT TRANSMISSION TO NEUTRAL
- WAIT FOR ALL MOVEMENT TO STOP

READ OPERATOR'S MANUAL FOR ADDITIONAL SAFETY GUIDES.

48222 Decai - Operator Warning

#### **IMPORTANT**

- ALWAYS TRANSPORT WITH CUTTER DECK DOWN AND LIFT CABLE SLACK
- MOW WITH WINCH CABLE SLACK TWO FULL TURNS
- FOR SMOOTH TURNS
  DEPRESS FOOT CLUTCH
  PEDAL SLIGHTLY

48048 Decal - Transport Down

48

Decal - Mower Deck 40

48318 Decai - Mower Deck 48

#### **CAUTION**

YOU MUST USE CLUTCH WHEN SHIFTING TO AVOID GEAR DAMAGE

48147 Decal - Declutch

# HEAVY DUTY COMMERCIAL

48072 Decai - Heavy Duty Commercial

- 5-
- 4-
- 3-
- 2-
- 1-
- R -

48074 Decal - Shifter Index

CHOKE



fast

slow

48186 Decal - Throttle

PATENT NO. 4.487,006

48182 Decal - Patent

#### 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

This warranty extends to the original retail purchaser only and commences on the date of original retail purchase.

Any part of the Scag commercial mower manufactured by Scag and found, in the reasonable judgment of Scag, to be defective in material or workmanship, will be repaired or replaced by an Authorized Scag Service Dealer without charge for parts and labor.

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 back to the owner after repair or replacement will be paid for by the owner. Scag's responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Scag mower. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an Authorized Scag Service Dealer.

This warranty is limited to one year from the date of original retail purchase for any Scag mower that is used for commercial purposes, or any other income-producing purpose (90 days for rental use).

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 Technical 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 Technical Manual.

The warranty does not cover any mower that has been altered or modified so as to adversely affect the product's operation, performance or durability or that has been altered or modified so as to change the intended use of the product. 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. This warranty does not cover engines, electric starters, and transaxles which are warranted separately by their manufacturer and for a different period of time.

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 back 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.

## PLEASE BE CAREFUL

- 1.Keep all shields in place, especially grass discharge guard.
- 2.Stop machine and remove spark plug wire to adjust or service.
- 3. When mechanism becomes clogged, stop engine before cleaning.
- 4. Keep hands, feet and clothing away from power-driven parts.
- 5.Keep off implement unless seat or platform is provided.
- 6. Keep others off of the tractor (only one person at a time).

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

FAILURE TO FOLLOW CAUTIOUS OPERATING PRACTICES MAY RESULT IN SERIOUS BODILY INJURY. BESIDES, WE WOULD LIKE YOU TO CONTINUE TO ENJOY AND PROFIT BY USING OUR PRODUCTS.

OWNER REFERENCE
TRACTOR MODEL
TRACTOR SERIAL NUMBER
MOWER MODEL
MOWER SERIAL NUMBER