

MODELS 5811-0000, -0100 5812-0000, -0200

PARTS AND SERVICE MANUAL



AMERICAN MACHINE & FOUNDRY COMPANY

CONSUMER PRODUCTS SALES DIVISION

PARTS & SERVICE DEPARTMENT

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CHASSIS

TO REPLACE TOP SHROUD

- 1. Remove right and left half end caps from the aluminum trim strip by removing two screws and two lock nuts.
- 2. Remove rubber bumper strip from trim strip around top shroud by prying out with a screw driver.
 - 3. Remove pop rivets by drilling them out.
 - 4. Remove aluminum trim strip.
- 5. Remove bracket holding steering column to the top shroud by removing two screws, two nuts and a holding plate. Remove fasteners from inside storage compartment on top shroud.
- 6. Remove gas cap and support angle which holds the fuel intake to the top shroud. To release the support angle remove one screw and one nut from the top shroud.
- 7. Disconnect wiring loom at connector plug.
- 8. Remove light switch by removing two nuts from the outside of the switch. Then push switch out.
- 9. Remove ignition switch by removing nut on the backside of the switch. Then push switch out.
- 10. Remove wire holding clips from the edge of the access hole on the top shroud.
- II. Remove headlamp assembly from the front of the top shroud by removing two screws. and two nuts.
- 12. Use reverse procedure from that stated above to install new top shroud.
- 13. Use either a pop rivet gun and pop rivets or flat head screws and lock nuts to secure new top shroud. If flat head screws are used, work through the access opening.
- 14. If you have difficulty in replacing rubber bumper strip, use a small amount of trim cement to keep it in place.

TO REPAIR TOP SHROUD

If the top shroud is fractured or punctured, repair with polyester resin and fibre glass cloth. See CHASSIS parts list for paint information.

NOTE: The repair materials are not supplied or kept in stock by the manufacturer. However, they can be purchased locally through auto parts or marine supply companies.

TO REPLACE FUEL TANK

- 1. Remove access cover on top shroud.
- 2. Loosen clamp which holds intake fuel line to the fuel intake plug (See Figure 1). Remove fuel intake plug by unscrewing. The best tool to do this is a pair of long handled adjustable pliers.
- 3. Remove fuel outlet plug (See Figure 1). Use same method to remove as stated above.

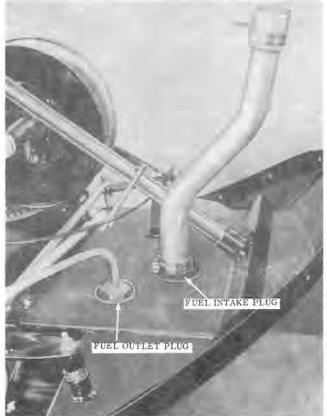


Figure 1

- 4. Loosen bracket located at bottom of chain housing (See Figure 2). Use vice grips to hold bolts while loosening nuts. Remove only one completely. Swing bracket back to free bottom of chain housing.
- 5. Remove "U" bolt completely (See Figure 2) by removing two nuts. Figure 2 shows wrenches on fasteners to be removed.
- 6. Remove brake cable from brake arm by removing the screw (See Figure 3).
- 7. Pry off chain case and driven clutch with two long heavy screw drivers or similar tools.
- Place rear of snowmobile on the kickstand.
- 9. Release track tension by removing both right hand and left hand adjuster plates (See Figure 4). Remove all fasteners holding adjuster plates to the frame.
 - 10. Remove the track tension springs by

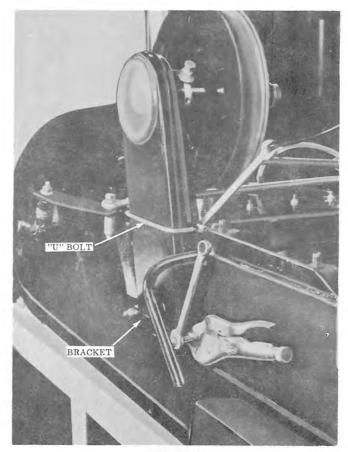


Figure 2

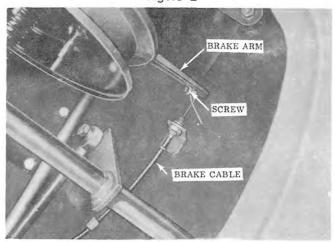


Figure 3

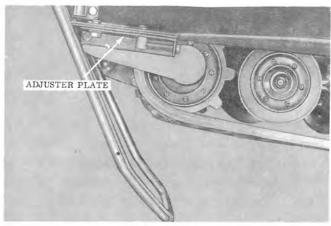


Figure 4

pushing the extended top end toward the center and pulling down. Use same procedure on both sides (See Figure 5). Now the rear supportarms and idler sprockets can be removed.

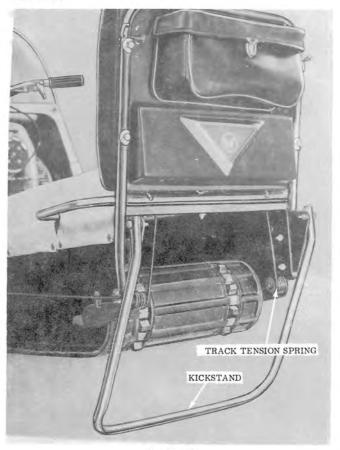


Figure 5

- 11. Tip snowmobile up on its right side.
- 12. Remove the three boggie assemblies by removing a bolt and a washer from each end of the boggie wheel support shaft. Figure 6 shows bolt and washer to be removed.
- 13. Now the only thing holding the track in place is the driving sprockets and drive shaft. To remove:
 - a. With a screw driver carefully pry rubber oil seal from the bearing retainer

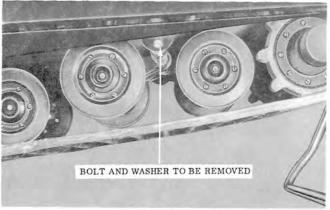


Figure 6

on the drive shaft (See Figure 7) on both right and left hand sides.

b. Figure 8 shows the drive shaft and driving sprockets being removed. Pull shaft towards the side which has the chain housing removed. This will free the drive shaft and sprockets for removal.

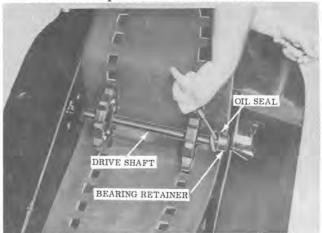


Figure 7



Figure 8

NOTE: When replacing drive sprockets and drive shaft, add one - two ounces of oil to center of shaft. Also check oil level in chain housing after it is reinstalled. The oil level should be approximately $2\frac{1}{2}$ inches deep in the chain housing (approximately 5 ounces). Do not overfill as overfilling can cause leakage at vent hole and possibly get oil on torque converter belt.

- 14. Figure 9 shows screws and nuts to be removed to remove fuel tank retainer plate.
 - 15. Remove retainer plate (See Figure 10).
- 16. Remove bearing retainer which holds the drive shaft by removing four nuts and bolts (See Figure 8). Remove chain case bolt on the opposite side of the Bearing Retainer.
 - 17. Remove fuel tank.
 - 18. Reassemble in opposite order as stated



Figure 9

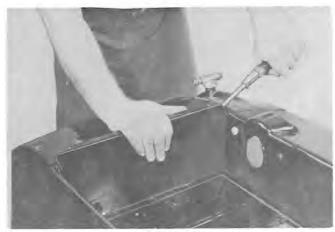


Figure 10

above.

19. During reassembly follow instructions under TRACK TENSION ADJUSTMENT, TRACK ALIGNMENT AND BRAKE ADJUSTMENT.

STEERING

Skis should be properly aligned so they are parallel to each other and parallel with the drive track when the steering handle is in the straight ahead position. Figure II shows skis properly aligned. Measure the distance between the skis at the front and at the rear. The distances should be equal. Figure II shows the front measuring points.

SKI ALIGNMENT

- 1. Center steering handle, check to see that right hand ski is parallel with the drive track.
- 2. If right hand ski is not parallel to drive track adjust drag link. If a large amount of adjustment appears necessary, remove spindle arm retaining bolt with zerk fitting (See Figure 12). Remove the spindle arm from the spindle.
 - 3. Align right hand ski so that it is parallel

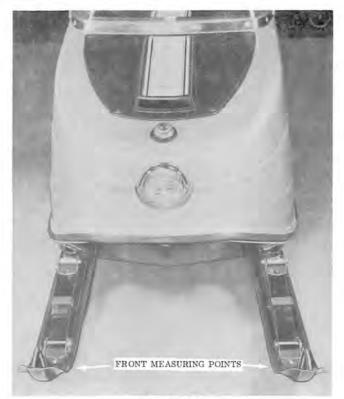


Figure 11

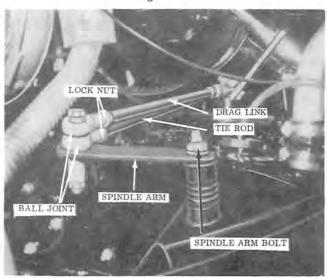


Figure 12

with track and replace spindle arm on the spindle making sure that the splines are aligned and securely tighten retaining bolt.

4. Measure skis front and rear making sure that both skis are in alignment. If the skis are not in alignment with each other, adjust tie rod by loosening the lock nuts and rotating tie rod.

POWER TRAIN

TO REMOVE TORQUE CONVERTER BELT

Remove the belt guard and use a screw driver or similar tool to pry driven sheaves apart as shown in Figure 13. Pull the drive belt down into the driven sheave halves. This will make enough slack in the drive belt to easily pull it up over the driving clutch. Remove other end from driven clutch. Replace in reverse order. After replacing the belt check the belt tension. There should be $10\frac{3}{4}$ inches between the center of the driving clutch and the driven clutch (See Figure 13). If adjustment is necessary, loosen nuts securing engine and slide it backward. The engine can be moved backwards a total of $\frac{3}{8}$ inches.

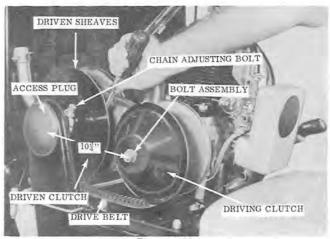


Figure 13

TO REMOVE DRIVING CLUTCH BELL HOUSING

1. Remove the bolt assembly from the outside of the bell clutch housing (See Figure 13).

2. Hold the two halves of the clutch together when removing the bell clutch housing.

IMPORTANT: Remove housing with care to prevent any possible damage to the clutch assembly.

- 3. When replacing bell clutch housing make sure the weights fit into the notches on the outer sheave.
- 4. Lubricate bearing and spring retainer before reassembly.

TO REMOVE CHAIN HOUSING AND DRIVEN CLUTCH

- 1. Remove drive belt as stated above.
- 2. Loosen bracket at bottom of the chain housing (See Figure 14). Use vice grips to holdbolts while loosening nuts. Remove only one completely. Swing bracket back to free bottom of chain housing.
- 3. Remove"U"bolt completely (See Figure 14) by removing two nuts. Figure 14 shows wrenches on fasteners to be loosened and removed.

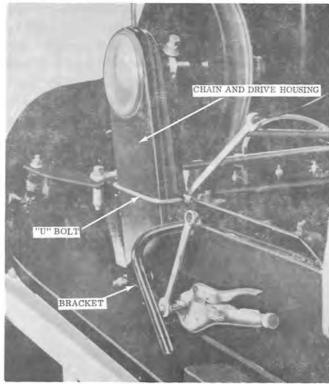


Figure 14

- 4. Remove brake cable from brake arm by removing the screw (See Figure 15).
- 5. Pry off chain and drive housing with two long heavy screw drivers or similar tools.
- 6. If it becomes necessary to remove chain housing from the driven clutch, follow instructions under TO REPLACE DRIVE CHAIN.
- 7. Reassemble in reverse order as stated above.

TO REPLACE DRIVE CHAIN

- 1. Remove chain housing as stated above.
- 2. Remove rubber access plug (See Fig-ure 13).
- 3. Remove cotter pin and nut (See Figure 16).
 - 4. Remove sprockets and chain (See Fig-

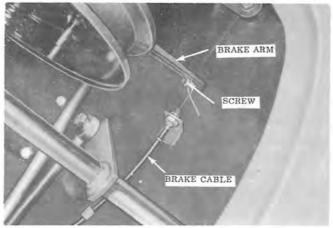


Figure 15

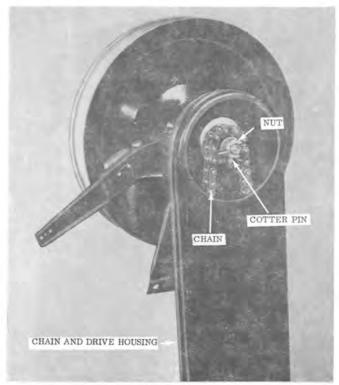


Figure 16

ure 16).

- 5. Remove chain adjusting bolt assembly (See Figure 13) and remove driven clutch. The large sprocket at the bottom of the chain housing will have to be pulled to the top access hole and pried out with a screw driver or similar tool.
- 6. Put in the new chain and replace the large sprocket by driving it in with a fibre hammer as shown in Figure 17.
 - 7. Reassemble in reverse order.
- 8. Check oil level in bottom of chain case when it is reassembled. The oil level should be $2-2\frac{1}{2}$ inches deep in the chain case. Measure with a wire inserted through the top access plug. Also see LUBRICATION instructions.



Figure 17

TRACK GROUP

TO REMOVE DRIVE TRACK

- l. Loosen bracket located at bottom of chain housing (See Figure 18). Use vice grips to hold bolts while loosening nuts. Remove only one completely. Swing bracket back to free bottom of chain housing.
- 2. Remove "U" bolt completely (See Figure 18) by removing two nuts. Figure 18 shows wrenches on fasteners to be loosened and removed.

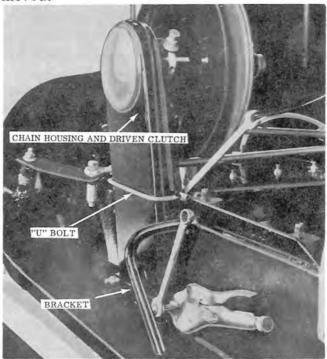


Figure 18

- 3. Remove brake cable from brake arm by removing the screw (See Figure 19).
- 4. Pry off chain and drive housing with two long heavy screw drivers or similar tools.
- Place rear of snowmobile on the kickstand.

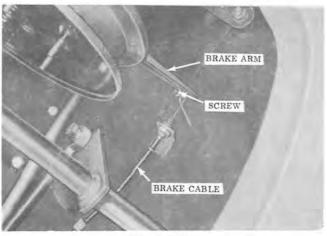


Figure 19

- 6. Release track tension by removing both right hand and left hand adjuster plates (See Figure 20). Remove all fasteners holding adjuster plates to the frame.
- 7. Remove the track tension springs by pushing the extended top end toward center pulling down. Use same procedure on both sides (See Figure 21). Now the rear support arms and idler sprockets can be removed.
 - 8. Lay snowmobile on its right side.
- 9. Remove the three boggie assemblies by removing a bolt and a washer from each end of the boggie wheel support shaft. Figure

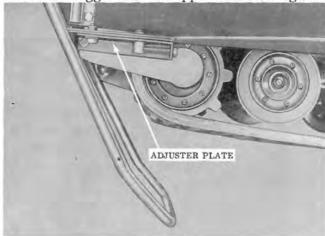


Figure 20



Figure 21

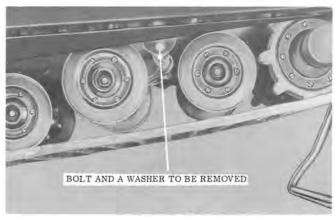


Figure 22

- 22 shows bolt and washer to be removed.
- 10. Now the only thing holding the track in place is the driving sprockets and drive shaft. To remove:
 - a. With a screw driver or similar tool carefully pry out rubber oil seal from the bearing container on the drive shaft (See Figure 23) on both right and left hand sides.

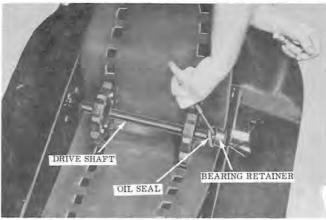


Figure 23

b. Figure 24 shows the drive shaft and sprockets being removed. Pull shaft towards the side which has the chain housing removed. This will free the drive shaft and sprockets.



Figure 24

- II. Insert new track and reassemble in reverse order as stated above. Also, read carefully, and make adjustments that follow.
- 12. When replacing drive sprockets and drive shaft, add one two ounces of oil to shaft. Also check oil level in chain housing after it is reinstalled. The oil level should be from $2 2\frac{1}{2}$ inches deep in the chain housing.

TRACK TENSION ADJUSTMENT

Track tension should be checked periodically as long life and efficiency of the track depends largely on correctness of tension adjustment and alignment. To adjust tension:

- 1. Lift the back of the SKI-DADDLER off the ground with the stand.
- 2. Check track tension by measuring the distance between the bottom of the running board and the bottom edge of the support arm. Measurement should be 3"minimum and $3\frac{1}{2}$ " maximum. Figure 25 shows point of measurement.
- 3. If adjustment is needed, loosen two bolts (No. 1, Figure 25) on each side that secure the adjuster plate (No. 2, Figure 25). Turn adjusting bolt (No. 3, Figure 25) clockwise to tighten and counterclockwise to loosen until proper 3''to $3\frac{1}{2}$ ''measurement is achieved on each side. Adjust both sides equally. Track should have a slack of about 2" to $2\frac{1}{2}$ " in the center.
- 4. Before retightening bolts (No. 1, Figure 25) check the track alignment as outlined below.

TRACK ALIGNMENT

- With the unit still blocked up, run the engine so that the track will turn slowly.
- 2. Stand at the rear of the machine and check to see that the teeth of the rubber

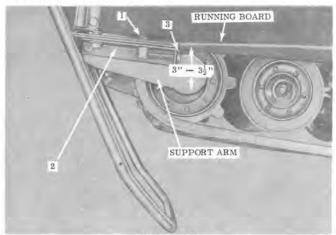


Figure 25

sprocket are centered in the slots in the track and also that the distance between the track and the adjuster plate is the same on each side.

- 3. If the track is not centered tighten the adjusting bolt (No. 3, Figure 25) on the side where the track is closest to the adjuster plate until track is centered.
- 4. When adjustment and alignment of track is completed, retighten the two bolts (No. 1, Figure 25) on each side.

BRAKE ADJUSTMENT

The brake on this unit is applied against the outside of the driven pulley. If it needs adjusting take the following steps:

- 1. Loosen the outer nut (No. 1, Figure 26) on the cable housing a turn.
- 2. Tighten the inner nut (No. 2, Figure 26) tight against the bracket.
- Check to see that brake pad (No. 1 Figure 27) is just free of the pulley with the brake



Figure 26

not applied. If it is too loose tighten further as outlined above.

TO REMOVE BOGGIE WHEELS BOGGIE SPRINGS AND REPLACE BOGGIE WHEEL BEARINGS

 Remove a set of boggie wheels by removing a bolt and a washer from each end of

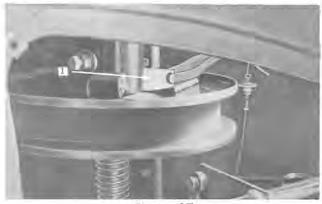


Figure 27

the boggie wheel support shaft. Figure 22 shows one bolt and washer to be removed.

- 2. Pull out the set of boggie wheels.
- 3. To replace or repair any part of a boggie wheel, remove the six screws and nutsholding the boggie wheel halves and the boggie tire together.
- 4. With a steel tube just less than an inch in diameter, carefully hammer out the wheel support from the bearing. Install a new bearing, then strike lightly with a hammer to flare out the end of the wheel support.
 - 5. Reassemble in the opposite order.
- 6. Release the extended ends of the boggie springs by bending the tabs on the boggie support assembly outward.
- 7. Remove the support shaft which holds the boggie wheel support assembly halves together.
- 8. Pull the boggie wheel support halves apart and replace or repair springs.
- 9. Reassemble in the opposite order as stated above.

TO REMOVE IDLER SPROCKETS

- 1. Place the snowmobile on the kickstand.
- 2. Release track tension by removing both right and left hand adjuster plates (See Figure 20). Remove all fasteners holding the adjuster plates to the frame.
- 3. Remove the tension springs by pushing the extended top end toward the center and pulling down (See Figure 21). Now the rear support arms and idler sprockets can be removed.
 - 4. Pull the support arm off the idler shaft.
- 5. Pull off the press on bearing and rubber bearing cover.
- 6. Remove the nine screws and nuts which hold the sprocket plates and the rubber nine tooth sprocket in place.
- 7. Reassemble in opposite order as stated above.

BEARING COVER REPLACEMENT

This rubber cover is important because it holds in the lubrication for the bearing. To replace follow instructions under TO RE-MOVE IDLER SPROCKETS.

TO REMOVE DRIVE SPROCKETS

Follow the instructions under (TO RE-PLACE DRIVE BELT). Then remove drive sprockets the same as outlined under (TO REMOVE IDLER SPROCKETS).

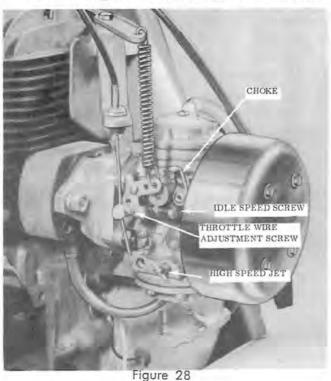
IT IS IMPORTANT NOT TO FORCE ADJUSTMENTS INTO SEATS. The dual carburetors used are Tillotson Model HL-209 and HL-210 carburetors. For best results the engine should be warm when final carburetor adjustments are made. Figure 28 shows the left side of the dual carburetors, and Figure 29 shows the right side.

1. STARTING A COLD ENGINE - Close choke and crank engine. After the engine starts move the choke to the open position. Do not move throttle lever far enough to allow bottom carburetor to be open. The choke is on the top carburetor only, and any opening on the bottom carburetor will cause fuel starvation and hard starting.

2.STARTING A WARM ENGINE It should be started with the choke open as shown in Figure 28.

3. TO ADJUST CARBURETOR - Turn in the high speed jet all the way, (do not force), then open 1½ turns as shown in Figure 28. Turn in the idle mixture screw all the way, (do not force). Open one full turn, as shown in Figure 29. This adjustment controls the mixture at idling speeds. Lean idle mixture will cause poor acceleration. Adjust the idle speed screw shown in Figure 28. Keep idle speed slower than clutch engaging speed (Approximately 1750-2000 RPM).

NOTE: Figure 28 also shows a throttle



NOTE: Figure 31 also shows a throttle wire adjustment collar and screw. Remove carbure-



Figure 29

wire adjustment collar and screw. Remove carburetor air cleaner. Depress the throttle control. If this does not open the throttle plate completely, loosen throttle wire adjustment screw and readjust to open throttle.

CARBURETOR 5812

IT IS IMPORTANT NOT TO FORCE AD-JUSTMENTS INTO SEATS. The single carburetor used is a Tillotson Model HR carburetor. For best results the engine should be warm when final carburetor adjustments are made. Figure 30 shows the left side of the carburetor. and Figure 31 shows the right side.

1. **STARTING A COLD ENGINE** - Close choke and crank engine. After the engine starts move the choke to the open position.

2.STARTING A WARM ENGINE It should be started with the choke open. The choke is shown in Figure 30.

3. TO ADJUST CARBURETOR - Turn in the high speed jet all the way, (do not force), then open l¹/₄ turns as shown in Figure 30 Turn in the idle mixture screw all the way, (do not force). Open I full turn, as shown in Figure 30. This adjustment controls the mixture at idling speeds. A lean idle mixture will cause poor acceleration. Adjust the idle speed screw shown in Figure 31. Keep idle speed slower than clutch engaging speed. (approximately 1750-2000 RPM).

tor air cleaner by pressing in on the bottom of the plug. The inspection plug can easily be pulled out edgewise. Then remove the three screws on the inside of the air cleaner. CAUTION: When replacing screws, use Lock-Tite on them to make sure they stay fastened tight. Depress the throttle control. If this does not open the throttle plate completely, loosen throttle wire adjustment screw and readjust the open throttle.

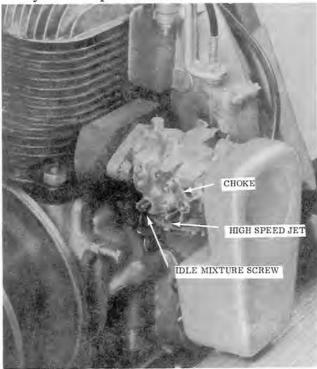


Figure 30

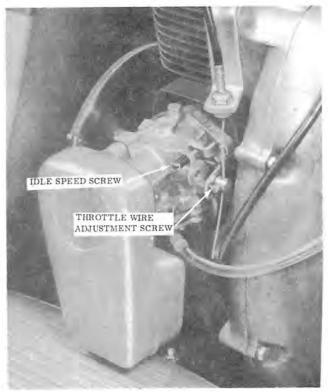
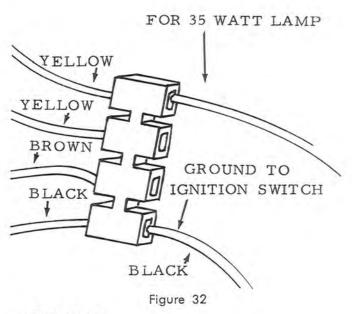


Figure 31

ELECTRICAL INFORMATION

NOTE: Below is a wiring diagram for Model 58120000 and Model 58120000. Other models may be powered by JLO engines with automatic spark advance and 40 watt lighting coils. Engines with 40 watt lighting coil have two yellow wires, a brown wire, and a black wire leading to a junction block (See Figure 32).



HEAD LAMP

To replace head lamp assembly:

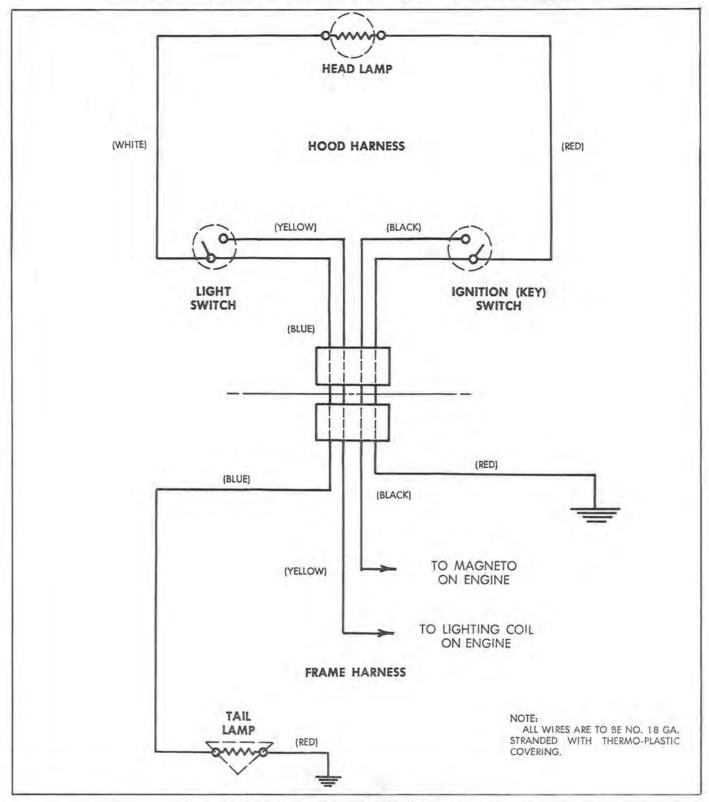
- 1. Remove two screws and nuts which hold the head lamp to the front hood.
- 2. If it is necessary to replace the complete head lamp assembly, remove two screws which connect the wiring to the head lamp.

TAIL LAMP

To replace bulb or any part of the tail lamp assembly, follow these instructions:

- 1. Remove the seat back by removing four seat back bolts and washers.
- 2. Remove three screws that hold the tail lamp cover and lens to the back plate.
- 3. If the whole tail lamp assembly needs replacing, remove two screws that hold the assembly to the seat back.
- 4. Disconnect wiring and replace tail lamp assembly if necessary.
- 5. When reassembling, fasten tail lamp assembly, lens and cover to the seat back plate with three screws and nuts before attaching the seat back plate and seat back to the seat back tube.

REPAIRMANS REFERENCE WIRING DIAGRAM



REPAIRMAN'S REFERENCE WIRING DIAGRAM

The wiring diagram shown here is a technical explanation of the circuitry on this unit. It is intended for use by repairman or owners capable of reading and using wiring diagrams.

The various component parts have been labeled. See your Service Dealer for part numbers, price and ordering information.

Also see your Service Dealer for available Service Manual.

We recommend that unless you are fully qualified to make repairs on the electrical system on this unit, you take it to a competent repairman for such work or adjustments.

LUBRICATION INSTRUCTIONS

PART	LOCATION	TYPE OF LUBRICATION	FREQUENCY
Steering Spindles	Grease zerk on spindles (See Figure 2)	Low Temperature grease	50 hours
Boggie Wheels	Grease zerk in center of Boggie Wheel (See Figure 22)	Low temperature grease	50 hours
Steering	End of handle column	Light engine oil	50 hours
Driving Clutch	Remove "U" bolt for lubrication (See Figure 13)	Light engine oil	Every 25 hours
Driven Clutch	End of pully shaft (See Figure 18)	Light engine oil	25 hours
Chain Housing	With access plug removed (See Figure 16)	Light engine oil	50 hours

FUEL MIXTURE

JLO 252-292 First 25 Ho 20 - 1 After 25 Ho 25 - 1	20 - 1
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FUEL MIXTURE INSTRUCTIONS

The correct oil-gasoline ratio is 24:1 or 1/3 pint oil to a gallon of gasoline. Too much oil will cause carbon deposits. Too little oil will cause insufficient lubrication.

WARNING: Gasoline and oil should be mixed at temperatures above freezing. Below freezing, gas and oil mix with difficulty. Mix with care or damage to engine could result.

Use only a good grade of SAE 30 nondetergent automotive engine or outboard motor oil. Do not use light duty oils for multiviscosity oils.

Use a good grade of regular gasoline. Use fresh gasoline only. Do not use gasoline left over from summer uses.

Mix the gasoline and oil thoroughly in a separate clean container kept for this purpose only. Best way to insure good mix is to add oil to an empty or about half-full container and then fill with gasoline. Mix thoroughly.

Fill gasoline tank on Ski-Daddler from

this separate container of mixed fuel. Use a funnel with a fine screen strainer when filling tank.

OILS AND ADDITIVES

We do not recommend the use of additives for the fuels to be used in the engines of the Ski-Daddler or Snow Clipper. We have received comments from the field that STP and Mercury outboard oils have caused problems.

Some outboard motor oils contain a detergent that works well in an outboard, however, an outboard operates at a much lower temperature because it is water cooled and for this reason we do not recommend outboard oil.

Use an oil for air cooled 2 cycle engines such as Castrol or a good non-detergent #30 or #40 motor oil.

If you experience a problem with moisture in the fuel system a small amount of Dri-Gas or equivalent may be used.

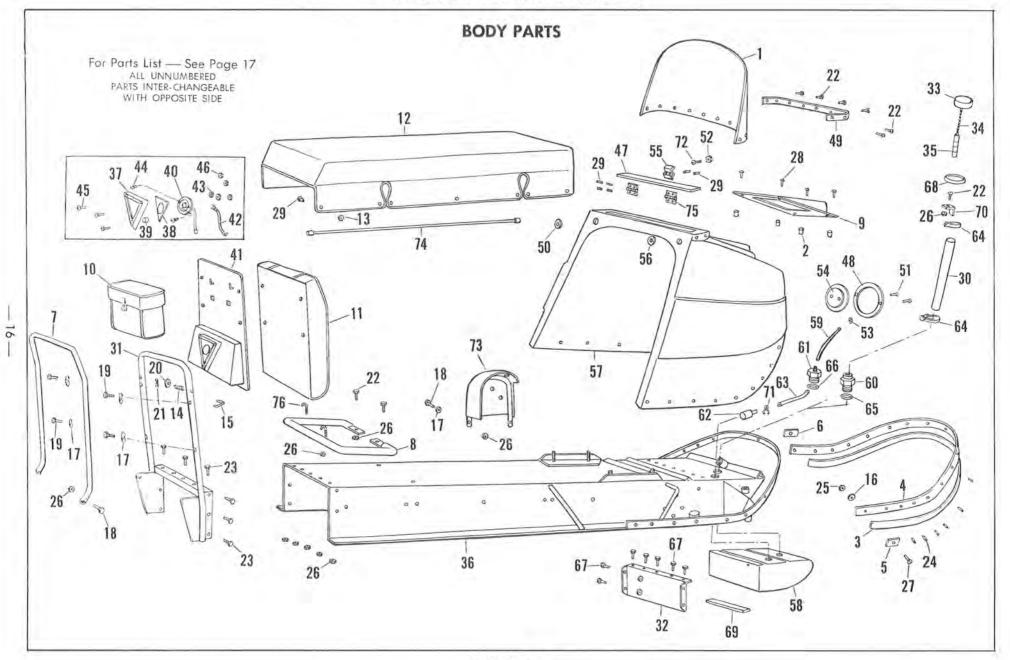


FIGURE 1

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ALWAYS GIVE THE FOLLOWING INFORMATION WHEN ORDERING REPAIR PARTS: 3. QUANTITY DESIRED 2. THE PART NAME 1. THE PART NUMBER 4. THE MODEL NUMBER-58110000, 58110100, 58120000, 58120100 & 58120200 SEND PART ORDERS AS PER THE INSTRUCTIONS ON THE FRONT PAGE Your Unit is Right Hand (R.H.) or Left Hand (L.H.) as you stand behind it. DO NOT USE KEY NUMBERS WHEN ORDERING REPAIR PARTS, ALWAYS USE PART NUMBERS.

BODY PARTS

FIGURE 1 PARTS LIST FOR 58110000, 58110100, 58120000 & 58120200

Key No.	Part No.	Description	Key No.	Part No.	Description
1	30214	Windshield	39	29266	Rubber Spacer
2	30295	Rubber Spacer	40	30363	Tail Lamp
3	30053	Rubber Bumper Strip	41	31150	Seat Back Cover
4	30528	Aluminum Trim Strip	42	30362	Tail Lamp Ground Wire
5	30376	End Cap Trim—R.H.	43	120622	*No. 8-32 Hex Nut
6	30377	End Cap Trim—L.H.	44	132764	*No. 8-32 x 5/8" Rd. Hd. Mach. Sc.
7	30172	Kick Stand Tube	45	134186	*No. 6-32 x 1" Oval Hd. Sc.
8	30173	Hand Rail Tube	46	271482	No. 6-32 Keps Nut
9	30217	Hood Access Lid	47	30527	
10	30221	Tote Pouch	48	30218	Head Lamp Assy.
11	30222	Seat Back	49	30250	
12	30223	Seat	50	16615	Light Switch Decal
1.3	30233	Snap Male Half	51	134244	*No. 8-32 x 1 1/4" Oval Hd. Sc.
14	30245	Spring—Latch Hook	52	996907	*No. 10-32 Keps Nut
15	30246	Latch Hook	53	457514	*No. 8-32 Lock Nut
16	2251	7/32" x 3/4" Washer	54	30283	Sponge Pad
17	8728	Formed Washer	55	30219	Latch
18	121913	* 1/4 "-20 x 1 1/4" Hex Hd. Sc.	56	16616	Key Start Decal
19	121926	*1/4"-20 x 1 1/2" Hex Hd. Sc.	57	30316	Hood
20	9417373	*No. 10 x 1/2" Flat Washer	58	31449	Fuel Tank
21	112726	*No. 10 x ½" Flat Washer *1/16" x ½" Cotter Pin	59	30229	
22	125680	1/4"-20 x 5/8" Truss Hd. Mach. Sc.	60	30263	Gas Tank Inlet Fitting
23	120854	* 1/4"-20 x 5/8" Hex Hd. Sc.	61	30264	Gas Tank Outlet Fitting
24	30275	3/16" x 5/8" Pop Rivet	62	30265	Fuel Filter
25	457509	No. 10-24 Lock Nut	63	30270	
26	9413314	1/4"-20 Lock Nut	64	24180	Hose Clamp
27	120691	No. 10-24 x 1 1/4" Flat Hd. Sc.	65	30278	"O" Ring 1 1/2" O.D.
28	995355	1/4"-20 x 1" Truss Hd. Sc.	66	30279	"O" Ring 1 1/4" O.D.
29	30276	1/8" x .294 Pop Rivet	67	120706	*1/4"-20 x 1/2" Hex Hd. Sc.
30	30267	Fuel Inlet Tube Assy.	68	30810	Hood Grommet
31	30164	Seat Back Tube Assy.	69	24302	Rubber Strip
32	30194	Fuel Tank Retainer Plate Assy.	70	30365	Support Angle
33	30268	Gas Cap	71	30488	Hose Clamp
34	30313	Chain	72	132911	*No. 10-32 x 5/8" Rd. Hd. Sc.
35	30269	Fuel Level Indicator	73	30259	Clutch Guard
36	30235	Main Frame Assy.	74	30364	Lead Wire
37	29080	Tail Lamp Door	75	30272	Hinge
38	29081	Tail Lamp Lens	76	30171	J-Bolt

FIGURE 1 PARTS LIST FOR 58120100

All parts for this model are the same as the list above except the following:

48	31401	Head	Lamp	Assembly
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* Standard Hardware Items May Be Purchased Locally

For Illustration See Page 16 All prices subject to change without notice.

All replacement parts will be supplied in current production colors or in a neutral color.

-SNOWMOBILE TOUCH-UP PAINT-It has been determined that our Parts Department will NOT handle this paint; however, listed below is the color name and code numbers of the matching paint that can be secured locally.

The state of the s	(GM Number)	(Duplicolor Number)
Sable Black	1966-GM93005	DS 100
Artic White	1965-93/93774	DS GM-30
Starlight Silver	1966-181-97210	Silver Mist/DSGM 109

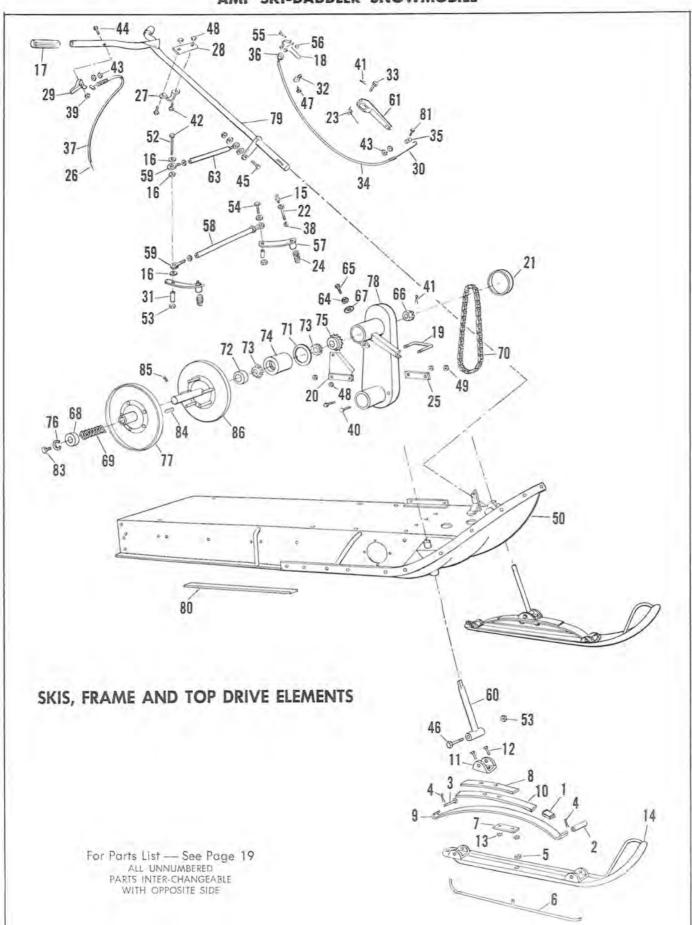


FIGURE 2

SKIS, FRAME AND TOP DRIVE ELEMENTS

FIGURE 2 PARTS LIST FOR ALL MODELS

Key No.	Part No.	Description	Key No.	Part No.	Description
1	30247	Bumper Pad	45	181643	*3/8"-24 x 1 1/2" Hex Hd. Sc.
2	8441	Spring Roller	46	181651	*3/8"-24 x 23/4" Hex Hd. Sc.
3	28762	Spring Pivot Pin	47	999101	*No. 10-32 x 3/8" Self Tap. Sc.
4	137185	1/8" x 1" Cotter Pin	48	9413314	1/4"-20 Lock Nut
		1/ // 20 Control of Nort	49	9415988	5/16"-18 Lock Nut
5	997314	1/4"-20 Centerlock Nut	50	30235	Main Frame ssembly
6	30369	Ski Wear Rod Assy.	51	30820	Driven Clutch Assy. Complete
7	28764	Spring Plate	31	30020	
8	28766	Leaf Spring	-0	101/50	(Not Illust.)
9	28770	Main Leaf Spring	52	181652	3/8"-24 x 3" Hex Hd. Sc.
10	29645	Middle Leaf Spring	53	9415106	3/8"-30 Lock Nut
11	28769	Spring Mounting Bracket	54	181650	3/8"-24 x 21/2" Hex Hd. Sc.
12	120233	*3/8"-16 x 1" Hex Hd. Sc.	55	424339	*No. 10-32 x 1" Rd. Hd. Sc.
13	9416107	3/8"-16 Lock Nut	56	120614	*No. 10-32 Hex Nut
14	30636	Ski and Wear Rod Assembly	57	30060	Spindle Arm
15	706	Grease Fitting	58	29959	Tie Rod
16	21777	Spacer Bushing	59	30081	Rod End Bearing
17	28416	Hand Grip	60	30124	Spindle Tube Assy.
18	28907	Hand Control Assy.	61	30183	Brake Arm & Pad Assy.
19	30068	Chain Housing Rod	63	30196	Drag Link
20	30073	Chain Housing Stiffener	64	120377	*3/8"-16 Hex Nut
21	30077	Oil Seal Chain Housing)	65	122145	*3/8"-16 x 11/4" Hex Hd. Sc:
22	30117	Spindle Balt	66	125250	1/2"-20 Castle Nut
23	30147	Brake Spring	67	996426	7/16" Plain Washer
24	30149	Spring (Spindle)	68	30156	Spring Retainer
25	30200	Chain Housing Strap	69	30979	Spring
26	30202	Throttle Control Cable	70	30159	No. 40 Roller Chain
27	24054	"U" Strap	71	30184	O Ring
28	30211	Column Support Plate (Upper)	72	30236	Oil Seal
29	30211	Thumb Lever (Throttle Control)	73	8290	Roller Bearing
			74	30006	Cam
30	30224	Brake Cable	75		No. 40 Sprocket—9 Tooth
31	30251	Spacer Bushing		30018	3/4" Retaining Ring
32	27128	Cable Clamp	76	2380	
33	30277	Brake Pivot Pin	77	30099	Inner Sheave Plate Assy.
34	30282	Housing (Brake Cable)	78	30174	Chain Housing Assembly
35	2816	Wire Clamp	79	30206	Steering Handle & Col. Assy.
36	29032	Cable Ferrule	80	30228	Foot Pad
37	30284	Cable Housing	81	9414023	No. 10-24 x 1/4" Hex Hd. Sc.
38	120383	Lockwasher	82	30526	Cam & Bearing Assy.
39	457507	No. 10-32 Lock Nut			Consists of 71-72-73-74
40	995354	5/16"-18 x 13/4" Truss Hd. Sc.			(Not Illust.)
41	121224	*3/32" x 1" Cotter Pin	83	120834	*5/16"-18 x 1/2" Hex Hd. Sc.
42	121893	* 1/4"-20 x 7/8" Hex Hd. Sc.	84	30598	Oil Wick 1-9/16"
43	124925	*3/8"-24 Jam Nut	85	30597	Oil Wick 17/32"
44	142443	No. 10-32 x 13/8" Rd. Hd. Sc.	86	30097	Outer Sheave Plate Assy.

^{*} Standard Hardware Items May Be Purchased Locally

For Illustration See Page 18

All prices subject to change without notice.

All replacement parts will be supplied in current production colors or in a neutral color.

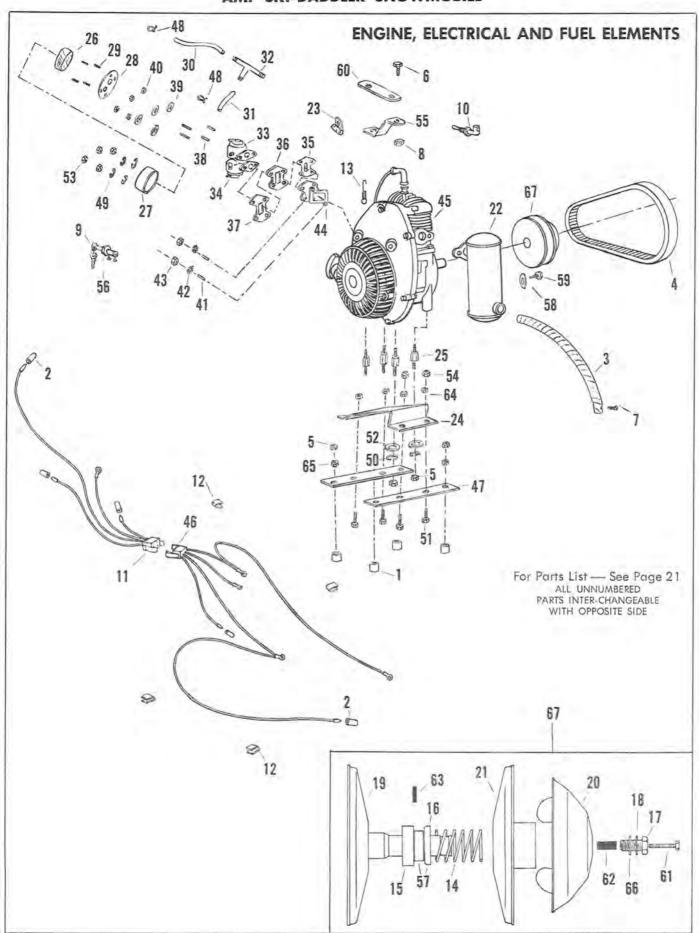


FIGURE 3

ENGINE, ELECTRICAL AND FUEL ELEMENTS

FIGURE 3 PARTS LIST FOR 58110000 & 58110100

Key No.	Part No.	Description	Key No.	Part No.	Description
7	30063	Rubber Engine Mounting Pad	35	30303	Intake Manifold Gasket (Inside)
2	29677	Connector	36	30122	Insulator Block
3	30205	Exhaust Pipe	37	30175	Intake Manifold Gasket (Outside)
4	30226	Variable Speed Belt	38	30304	Stud 1/4"-20 x 11/8"
5	9416107	3/8"-16 Lock Nut	39	29914	Carb. Stud Washer
6	121920	* 1/4"-20 x 13/8" Hex Hd. Sc.	40	120375	* 1/4"-20 Hex Nut
7	999101	*No. 10-32 x 3/8" Self Tap. Sc.	41	30305	Stud
8	9413314	* 1/4"-20 Lock Nut	42	138485	*5/16" Lockwasher
9	28872	Key Switch	43	120376	*5/16"-18 Hex Nut
10	29073	Light Switch	44	30160	Manifold (Dual Carb.)
11	30367	Wiring Harness	45	Engine	See Footnote below
12	30389	Wiring Clip	46	30366	Wiring Harness (Rear)
13	24347	Spring	47	30201	Engine Mounting Strap
14	30055	Spring	48	30489	Hose Clamp (Carb.)
15	30134	Bearing	49	120217	*No. 10 Split Lockwasher
16	30135	Spring Retainer	50	120382	*3/8" Split Lockwasher
17	30596	1/2"-20 x 1" Hex Hd. Sc.	51	180079	*5/16"-18 x 1" Hex Hd. Sc.
18	135629	*1/2" Shakeproof Washer	52	274517	3/8" x 3/4" x 1/16" Washer
19	31137	Inner Sheave Assy.	53	995245	No. 10-32 Hex Nut
20	30141	Bell Assy.	54	9415988	*5/16"-18 Lock Nut
21	30143	Outer Sheave Assy.	55	30294	Throttle Wire Brkt.
22	30388	Muffler	56	138561	3/4" Internal Lockwasher
23	2791	Gas Line Clip	57	30133	Retainer
24	30644	Engine Mount Plate	58	446188	1/4" Flat Washer
25	30170	Stud	59	995360	6 m/m—1.0 x ³ / ₄ " Sc.
26	30176	Air Cleaner Screen	60	30948	Bracket
27	30177	Air Cleaner Cover	61	120706	* 1/4"-20 x 1/2" Hex Hd. Sc.
28	30179	Air Cleaner Mount Plate	62	30594	Oil Wick 1 - 1/16"
29	30181	Air Cleaner Stud	63	30593	Oil Wick 23/32"
30	30307	61/2" Fuel Line	64	124824	5/16"-18 Jam Nut
31	30308	1 1/2" Fuel Line	65	124829	3/8"-16 Jam Nut
32	30309	Fuel Line Tee	66	120396	½" I.D. Washer
33	30108	HL 209 Tillotson Carb.	67	30144	Drive Clutch Assy. (Complete)
34	30109	HL 210 Tillotson Carb.			The state of the s

FIGURE 3 PARTS LIST FOR 58120000, 58120100 & 58120200

All parts for this model are the same as the list above except the following:

27			33 55		Carburetor, Tillotson HR-2A Throttle Wire Bracket
		Number 26, 28, 30, 31, 32, 34, 35,36,	37, 38,	39, 40, 41,	43, 44, & 48 not used

^{*} Standard Hardware Items May Be Purchased Locally

For Illustration See Page 20

All prices subject to change without notice.

All replacement parts will be supplied in current production colors or in a neutral color.

Replacement engines and parts are obtainable from the Engine Manufacturer's authorized Service Stations who are also to be contacted in regards to the Engine Warranty. See your Engine Manual for location of these stations.

FIGURE 4

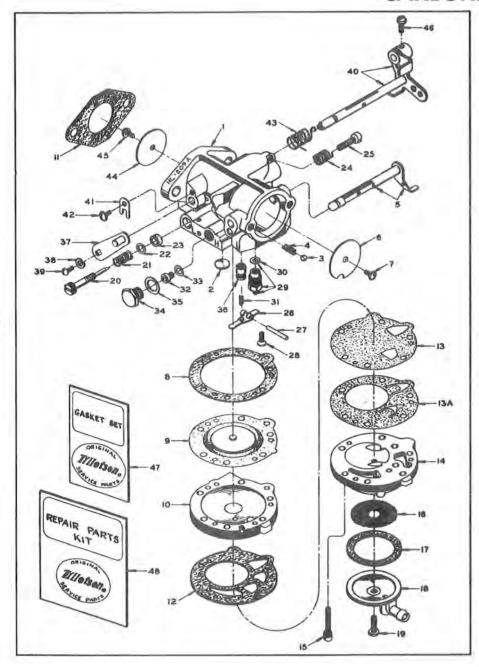
DRIVE BELT AND LOWER DRIVE ELEMENTS

FIGURE 4 PARTS LIST FOR ALL MODELS

Key No.	Part No.	Description	Key No.	Part No.	Description
1	706	Grease Fitting	23	30083	Rear Sprocket Assy. Complete
3 4	2483	Spring Washer			Consists of 24-25-26-27 28
3	29956	Spacer			29-38 (Not Illust.)
4	29975	Adjusting Block	24	29945	Rubber Sprocket—9 Tooth
5	29976	Rear Torsion Spring R.H.	25	30079	Grease Seal
6	29977	Rear Torsion Spring L.H.	26	30080	Ball Bearing
7	30145	Retainer Spring	27	120222	*No. 10-24 x 5/a" Mach. Sc.
8	28776	5/16"-18 x 3" Hex Hd. Sc.	28	997316	No. 10-24 Lock Nut
9	122007	*5/16"-18 x 3/4" Hex Hd. Sc.	29	29955	Sprocket Support Plate Assy.
10	122065	*5/16"-18 x 2" Hex Hd. Sc.	30	30086	Boggie Wheel & Support Assy.
11	138485	*5/16" Lock Washer	31	29943	Boggie Wheel Support Shaft
12	181595	*5/16"-24 x 3/4" Hex Hd. Sc.	32	29944	Boggie Wheel Spring
13	456145	5/16" Washer	33	29942	Boggie Tire
14	30078	Oil Seal	34	29954	
15	9415988	5/16"-18 Lock Nut	35	29953	
16	29980	Belt Adjustment Angle	36	30198	Drive Sprocket Assy. (Complete)
		Assy, R.H.	111	3511(4)	Consists of 7-14-24-26-27-28
17	29981	Belt Adjustment Angle	1114		29-40 (Not Illust.)
		Assy. L.H.	37	120221	No. 10-24 x 1/2" Mach. Sc.
18	29984	Rear Support Arm Assy. R.H.	38	30521	Rear Shaft Assy, w/Plugs
19	29985	Rear Support Arm Assy. L.H.	39	30522	Boggie Supt. Assy. w/Plugs
20	30017	No. 40 Sprocket—26 Tooth	40	30001	Drive Assembly r
21	30227	Traction Belt Assy.	41	126211	5/16"-18 x 5/8" Carriage Bolt
22	30231	Bearing Retainer & Plate Assy.	42	120638	5/16" Split Lockwasher

^{*} Standard Hardware Items May Be Purchased Locally

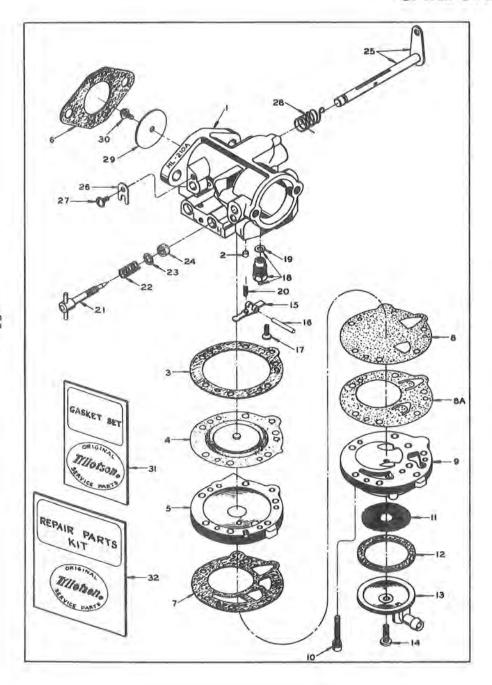
For Illustration See Page 22



Ref. No.	HL-209A Part No.	Part Hame
1	014009	Body (Service)
2	02531	* Body Channel Welch Plug
3	04784	Choke Friction Ball
4	08805	Choke Friction Spring
5	014002	Choke Shaft & Lever
6	013547	Choke Shutter
7	08942	Choke Shutter Screw & Lockwanter
8	012473	Diaphragm Gasket
9	012475	* Diaphragu
10	013549	Diaphragm Cover
11	012354	Flange Gasket
12	012930	Fuel Pump Gasket
13	014230	* Fuel Pump Diaphragm (Pulse)
13A	014229	* Fuel Pump Disphragm (Valve)
14	013335	Fuel Pump Body
15	010098	Fuel Pump Body Screw & Lockwanner
16	010530	* Fuel Strainer Screen
17	010529	Fuel Strainer Cover Gasket
18	010527	Fuel Strainer Cover
19	010571	* Fuel Strainer Cover Ret. Screw
20	011498	* Idle Mixture Screw
21	08793	* Idle Mixture Screw Spring
22	011428	Idle Mixture Screw Washer
23	011401	Idle Mixture Screw Packing
24	05095	* Idle Speed Screw
25	0788	* Idle Speed Screw Spring
26	010513	* Inlet Control Lever
27	013406	* Inlet Control Lever Fulcrum Pin
28	013269	* Inlet Control Lever Pulcrum Pin Ret. Screw
29	013546	* Inlet Needle, Seat & Gasket
30	010165	Inlet Seat Gasket
31	011503	* Inlet Tension Spring
32	013138	* Main Fuel Jet (.036)
33	06076	Main Puel Jet Gasket
34	0675	Main Fuel Jet Flug Screw
35	013094	Main Fuel Jet Plug Screw Gaskat
36	012510	Nozzle Check Valve
37	014007	Throttle Lever Assembly
38	06393	* Throttle Lever Ret. Lockwasher
39	06396	* Throttle Lever Ret. Screw
40	014005	Throttle Shaft & Lever
41	013219	Throttle Shaft Clip
42	010280	Throttle Shaft Clip Ret. Screw
43	013998	* Throttle Shaft Return Spring
44	013534	Throttle Shutter
45	08942	* Throttle Shutter Screw & Lockwasher
46	012305	* Throttle Wire Ret. Screw
47	GS-180	* Gasket & Packing Set
48	BK-690	Repair Parts Kit

(*) Indicates contents of Repair Parts Kit

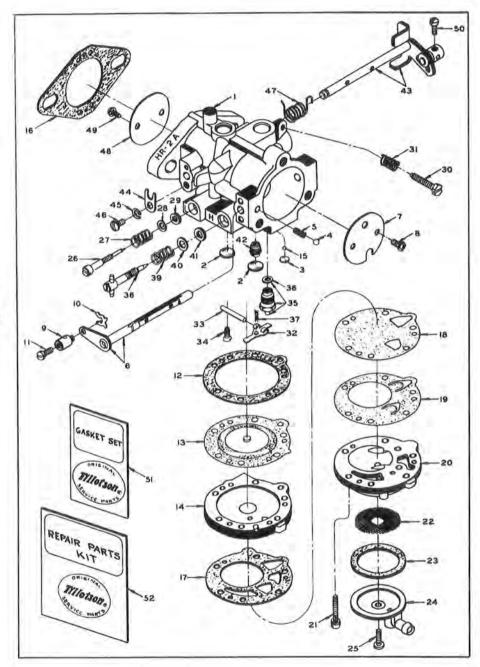
NOTICE: Parts listed on this page available from--Tillotson Mfg. Co.--Parts & Service Division--761-69 Berdan Ave, --Toledo, Ohio-- or through any Authorized Tillotson Service outlet.



Ref. No.	HL-210A Part No.	Part Name	
2	014014	Body (Service)	
2 3	010588	* Body Channel Cup Plug	
3	012473	Diaphragm Gasket	
4 5 6 7	012475	* Diaphragm	
5	013549	Diaphragm Cover	
6	012354	Plange Gasket	
	012930	Fuel Pump Gasket	
8	014230	* Fuel Pump Diaphragm (Fulse)	
BA.	014229	* Fuel Pump Diaphragm (Valve)	
9	013335	Fuel Pump Body	
10	010098	Fuel Pump Body Screw & Lockwanter	
11	010530	* Fuel Strainer Screen	
12	010529	Fuel Strainer Cover Gasket	
13	010527	Fuel Strainer Cover	
14	010571	* Fuel Strainer Cover Ret. Screw	
15	010513	* Inlet Control Lever	
16	013406	* Inlet Control Lever Fulcrum Pin	
17	013269	* Inlet Control Lever Fulcrum Pin Ret. Screw	
18	013546	* Inlet Needle, Seat & Gasket	
19	010165	Inlet Seat Gasket	
20	011503	* Inlet Tension Spring	
21	012225	* High Speed Mixture Screw	
22	08793	* High Speed Mixture Screw Spring	
23	011428	High Speed Mixture Screw Washer	
24	011401	High Speed Mixture Screw Packing	
25	014012	Throttle Shaft & Lever	
26	013219	Throttle Shaft Clip	
27	010280	Throttle Shaft Clip Ret. Screw	
28	013998	* Throttle Shaft Return Spring	
29	014013	Throttle Shutter	
30	08942	* Throttle Shutter Screw & Lockwasher	
31	GS~158	* Gasket & Packing Set	
32	RK-691	Repair Parts Kit	

(*) Indicates contents of Repair Parts Kit

NOTICE: Parts listed on this page available from--Tillotson Mfg. Co. --Parts & Service Division--761-69 Berdan Ave, --Toledo, Ohio-- or through any Authorized Tillotson Service outlet,



No.	Part No. HR-2A	Part Name
1	014385	Body (Service)
2	02531	* Body Channel Welch Plug (2)
3	013737	* Body Channel Welch Plug
4	04784	Choke Friction Ball
5	08805	Choke Friction Spring
6	014359	Choke Shaft & Lever
7	014356	Choke Shutter
8	08942	Choke Shutter Screw & Lockwasher (2)
9	010393	Choke Wire Connection
10	010392	Choke Wire Connection Ret. Clip
11	058	* Choke Wire Ret. Screw
12	012473	Diaphragm Gasket
13	012475	* Diaphragm
14	013228	Diaphragm Cover
15	05322	Economiser Check Ball
16	014319	Flange Gasket
17	012930	Fuel Pump Gasket
18	014230	* Fuel Pump Disphragm (Pulse)
19	014229	* Fuel Pump Diaphragm (Valve)
20	013335	Fuel Pump Body
21	010098	Fuel Pump Body Screw & Lockwasher (6)
22	010530	* Fuel Strainer Screen
23	010529	Fuel Strainer Cover Gasket
24	010527	Fuel Strainer Cover
25	010571	* Fuel Strainer Cover Ret. Screw
26	014321	* Idle Mixture Screw
27	08793	* Idle Mixture Screw Spring
28	011428	Idle Mixture Screw Washer
29	011401	Idle Mixture Screw Packing
30	014326	* Idle Speed Screw
31	0788	* Idle Speed Screw Spring
32	010513	* Inlet Control Lever
33	013406	* Inlet Control Lever Fulcrum Pin
34	013269	* Inlet Control Lever Fulcrum Pin Ret. Screw
35	013546	* Inlet Needle, Seat & Gasket
36	010165	Inlet Seat Gasket
37	013434	* Inlet Tension Spring
38	014323	* High Speed Mixture Screw
39	011103	* High Speed Mixture Screw Spring
40	03114	High Speed Mixture Screw Washer
41	010511	High Speed Mixture Screw Packing
42	014334	* Nozzle Check Valve
43	014361	Throttle Shaft & Lever
44	09678	Throttle Shaft Clip
45	0992	Throttle Shaft Clip Lockwasher
46	01974	Throttle Shaft Clip Ret. Screw
47	014324	* Throttle Shaft Return Spring
48	014320	Throttle Shutter
49	08942	* Throttle Shutter Screw & Lockwasher (2)
50	012305	* Throttle Wire Ret. Screw
51	GS-199	* Gasket & Packing Set
52	RK~756	Repair Parts Kit

(*) Indicates contents of Repair Parts Kit

NOTICE: Parts listed on this page available from--Tillotson Mfg. Co.--Parts & Service Division--761-69 Berdan Ave.--Toledo, Ohio-- or through any Authorized Tillotson Service outlet.