



**RAMROD**



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**550/750  
"A" SERIES  
MINI SKID**

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**Owner's  
Manual**

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# INTRODUCTION

## TO OUR CUSTOMER:

**RAMROD EQUIPMENT CORPORATION** are pleased that you have chosen a **RAMROD MINI SKID**. This loader is a simple, compact power source designed and manufactured to give you years of dependable service.

Read this Manual carefully before operating the loader. It contains the necessary information for safe and proper operating, routine servicing and preventive maintenance.

We also recommend that you carefully read the Engine Manufacturer's Manual before operating the loader. Do not neglect the maintenance that is recommended.

The reference to right-hand and left-hand used throughout this Manual refers to the position when operating the machine, facing forward.

For any additional information required, please refer to your **RAMROD** Dealer.

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December 1997  
Printed in Canada



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# I. SAFETY

## OPERATE LOADER SAFELY

IMPROPER OPERATION OF THIS LOADER MAY RESULT IN SERIOUS INJURY. BEFORE OPERATING THIS LOADER, OPERATORS MUST HAVE PROPER INSTRUCTIONS, BE FAMILIAR WITH THE SAFETY PRECAUTIONS, AND HAVE READ THIS AND THE ENGINE MANUFACTURER'S MANUAL THOROUGHLY.

THIS SAFETY ALERT SYMBOL POINTS OUR IMPORTANT SAFETY PRECAUTIONS.



OPERATORS MUST UNDERSTAND CAPABILITIES AND LIMITATIONS OF THE EQUIPMENT, WITH RESPECT TO SPEED, BRAKING, STEERING, STABILITY AND LOAD CHARACTERISTICS BEFORE STARTING TO OPERATE.

NEW OPERATORS MUST CHECK ALL CONTROLS IN A SAFE, OPEN AREA BEFORE STARTING WORK.









### WARNING

*This Decal Advises Of Actions Or Danger Which Can Cause Personal Injury.*

### IMPORTANT

*This Decal Identifies Procedures Which Must Be Followed To Prevent Damage To The Loader.*

























## SAFETY PRECAUTIONS

-  READ YOUR OWNER'S MANUAL AND ALL SUPPLEMENTS BEFORE OPERATING YOUR MINI LOADER.
-  WHEN LEARNING TO OPERATE, PROCEED SLOWLY AND CAREFULLY.
-  WEAR CLOSE FITTING PROTECTIVE CLOTHING AND SHOES.
-  DO NOT PLACE FEET UNDER THE PLATFORM.
-  DO NOT OPERATE ANY OF THE CONTROL LEVERS INCLUDING AUXILIARY POWER TAKE-OFF UNLESS YOU ARE STANDING WITH BOTH FEET ON THE PLATFORM AND FIRMLY HOLDING THE GRIP HANDLES.
-  DO NOT JERK THE CONTROL LEVERS, USE A STEADY EVEN MOTION.

# SAFETY

---

## SAFETY PRECAUTIONS - CONTINUED

-  KEEP HANDS, FEET AND CLOTHING AWAY FROM ALL MOVING PARTS AND CYLINDERS.
-  DO NOT RIDE IN BUCKET.
-  DO NOT ALLOW MORE THAN ONE PERSON ON THE LOADER AT ANY TIME.
-  DO NOT ALLOW ANY OTHER PERSON OR ANIMAL CLOSE THE MINI LOADER WHILE IN OPERATION.
-  WATCH FOR OTHER PEOPLE AND EQUIPMENT.
-  KEEP THE BUCKET LOW WHEN TRAVELLING, TURNING OR CHANGING SPEED.
-  TRAVEL SLOWLY OVER ROUGH TERRAIN.
-  BEWARE OF TRENCHES, HOLES, AND SIDE SLOPES.
-  DO NOT DRIVE THE MINI LOADER ACROSS STEEP SLOPES.
-  LOAD, UNLOAD AND TURN AROUND ON FLAT, LEVEL GROUND ONLY.
-  ENSURE ADEQUATE VENTILATION WHEN USING THE MACHINE IN CONFINED SPACES.
-  DO NOT CARRY LOAD WITH ARMS IN A RAISED POSITION. ALWAYS CARRY LOADS CLOSE TO THE GROUND. DO NOT STEP OFF PLATFORM WITH THE LOAD RAISED.
-  TO AVOID FREE-FALL OF LOAD WHEN LOWERING LIFT ARMS, DO NOT PUSH LIFT ARM LEVER FULLY FORWARD.
-  DO NOT EXCEED RATED LOAD CAPACITY.
-  ALWAYS LOWER THE BUCKET AND SHUT OFF THE ENGINE BEFORE LEAVING THE MACHINE.
-  AVOID PARKING ON A SLOPE. IF IT IS NECESSARY, PARK ACROSS THE GRADE, GROUND THE BUCKET AND BLOCK THE WHEELS.
-  WHEN HOOKING UP ATTACHMENTS TO THE MACHINE, CHECK TO BE SURE LOCK PINS ARE FULLY ENGAGED.
-  DO NOT PLACE ANY PART OF THE OPERATOR'S BODY OR ALLOW ANYONE UNDER LOADER ARMS OR ATTACHMENTS.
-  DO NOT REMOVE PROTECTIVE GUARDS ON MACHINE EXCEPT IN THE CASE OF MAINTENANCE.
-  DO NOT LUBRICATE, ADJUST OR REPAIR THE MACHINE WITH THE ENGINE RUNNING.
-  NEVER FUEL A HOT MACHINE.
-  DO NOT SMOKE WHEN FUELING OR OPERATING THE MACHINE.
-  ALWAYS READ THE OWNER'S MANUAL FOR PROCEDURES FOR SERVICING AND MAINTENANCE OF THE MINI LOADER.
-  REMEMBER, **SAFETY FIRST.**

## II. CONTROLS

It is necessary to become familiar with the location and purpose of each control before operating the loader.

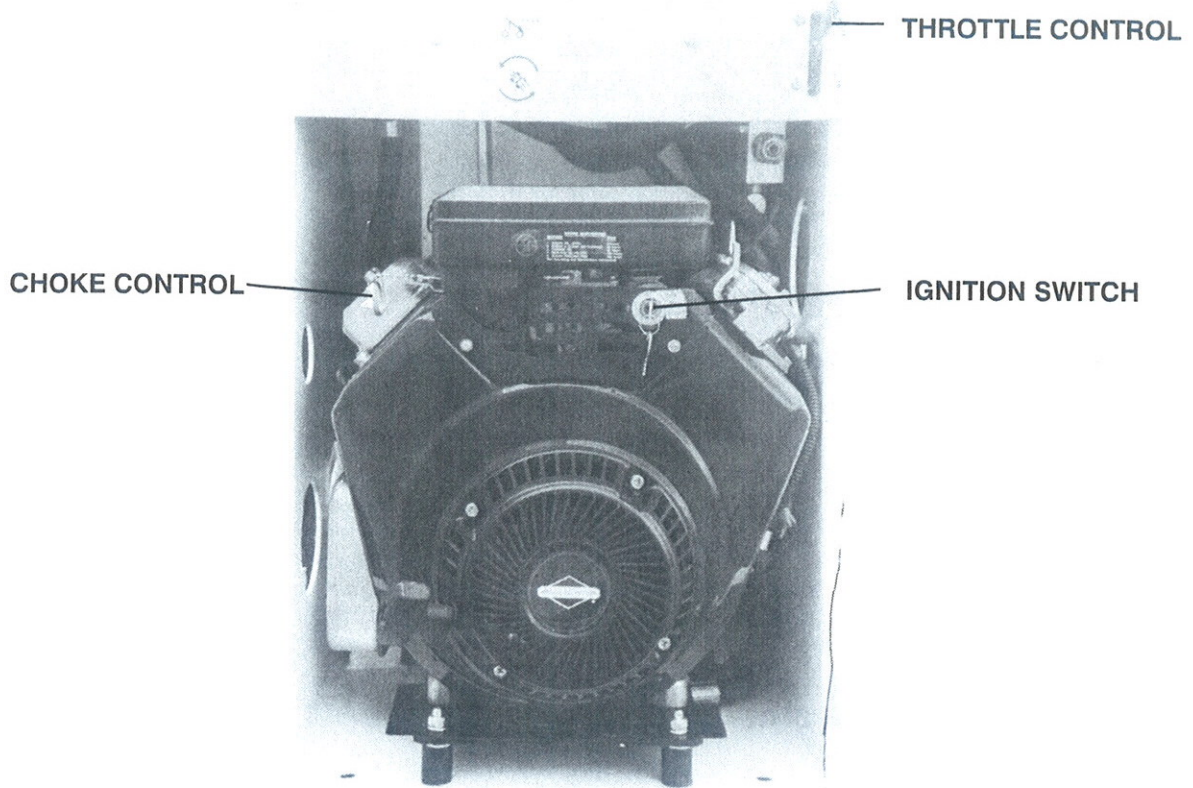


FIGURE 1 - GAS ENGINE CONTROLS

### ENGINE CONTROLS - GASOLINE

#### IGNITION SWITCH - FIGURE 1

The ignition switch is a three position switch. Clockwise from the OFF position are the ON and START position.

#### THROTTLE CONTROL - FIGURE 1

When the throttle control is set fully up the engine is at idle speed. Pushing the control downward increases the engine speed.

#### CHOKE CONTROL - FIGURE 1

Pull choke control out to start a cold engine. As the engine warms up push choke control in gradually.

### IMPORTANT

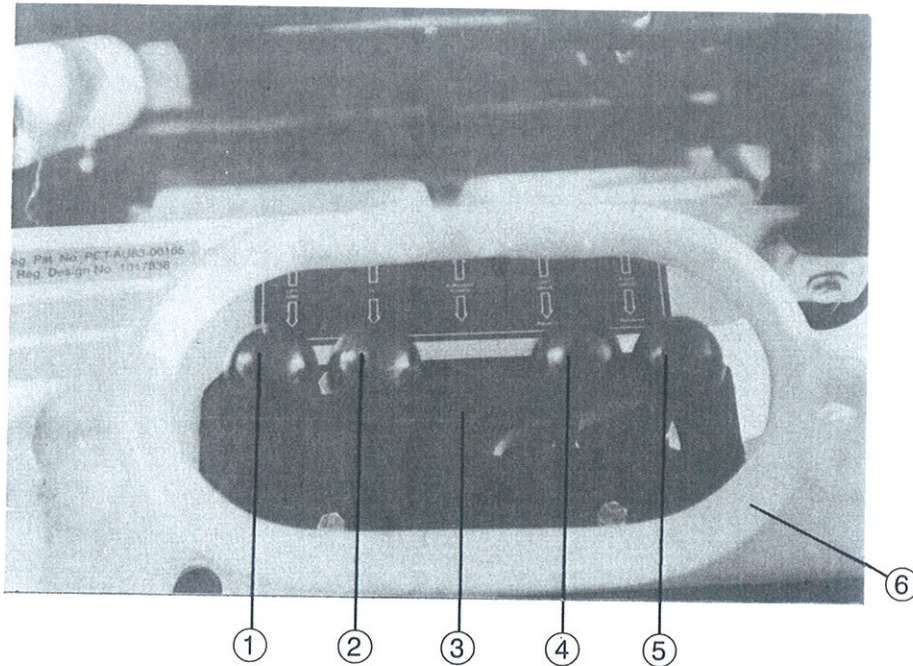
*Be Sure Ignition Key Is In Off Position,  
Or Even Removed, When The Engine  
Is Not Running.*

### IMPORTANT

*For Maximum Power While Working  
The Engine Should Be Running At Full  
Throttle.*

# CONTROLS

On the top face of the mini loader are four spring centered levers which control the basic mini loader functions. The auxiliary power level (in the center) is for use with powered accessories.



1. Lift Arm Lever
2. Tilt Lever
3. Auxiliary Lever
4. Left Hand Drive Lever
5. Right Hand Drive Lever
6. Grip Handle

FIGURE 2 - CONTROL PANEL

The left hand drive lever controls the wheels on the left hand side and the right hand drive lever controls the wheels on the right hand side.

Engage the drive levers slowly because even a small movement of the levers will cause motion. All lever movements should be smooth and gradual. To drive the loader straight forward, move both control levers forward the same amount. To drive the loader straight

backward, move control levers back the same amount. The loader is steered by moving one lever further forward than the other. To turn left, move the right lever further ahead than the left lever; to turn right, move the left lever further ahead than the right lever. For the loader to for into a spin-turn, or "Skid Steer", move one lever forward and the other backward the same amount.



## WARNING

*Do Not Move Any Of The Control Levers Unless Standing With Both Feet On The Platform And Holding The Grip Handles.*



## WARNING

*Use Extreme Caution When Stopping. If The Bucket Or Attachments Is Raised, The Machine Can Tip. Keep All Movements Smooth. All New Operators Must Work The Machine In A Safe Open Area To Become Familiar With Its Operating Characteristics.*

# CONTROLS

## LIFT CONTROL LEVER - FIGURE 2

The outside control lever located on the left hand side controls the lift. Pushing the lever forward lowers the lift arm and pulling the lever back raised the lift arm. In these two positions, the lever is spring centered to neutral upon release of the lever.

## AUXILIARY CONTROL LEVER - FIGURE 2

The auxiliary control lever is located on the top and between the main levers and can be used to control accessory attachments such as; post hole augers, trenchers, rock hammers, etc. Accessory hydraulic hoses are connected to the quick couplers at the front of the machine. Pushing the auxiliary lever ahead puts the attachment in forward motion and pulling it back reverses the motion. The lever is not spring centered and must be returned to neutral manually.

## TILT CONTROL LEVER - FIGURE 2

The inside control lever located on the left hand side controls the tilting action of attachments such as buckets, forks, etc. Pulling the lever back tilts the attachment back. The lever is spring centered to neutral upon release.

## IMPORTANT

*Ensure That The Auxiliary Lever Is Kept In Neutral When Not Being Used To Avoid Wasting Power. Engine Is Difficult To Start If Lever Is Engaged. Hydraulic Oil May Also Overheat.*

## ATTACHMENT LOCK PINS

### ATTACHMENT LOCK PINS

The tool bar design allows changing from one attachment to another quickly without having to remove bolts.

The two pins are located on the inner side and along the top of the attachment frame. To unlock attachments, pull up the pin handle and slide towards the centre, as shown in **Figure 3**.

To lock attachments, first check that the lock pins align with, and enter freely into the attachments holes; then slide the pins into the attachment mounting bars and lock the pin handle in a downward position, as shown in **Figure 4**.

LOCK PINS DISENGAGED

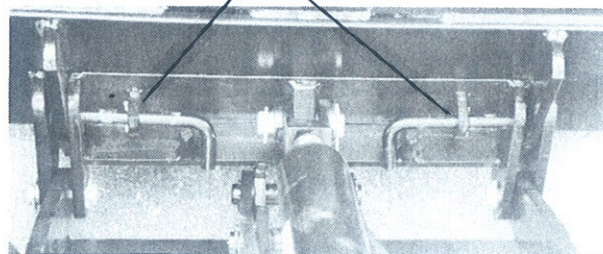


FIGURE 3

LOCK PINS ENGAGED

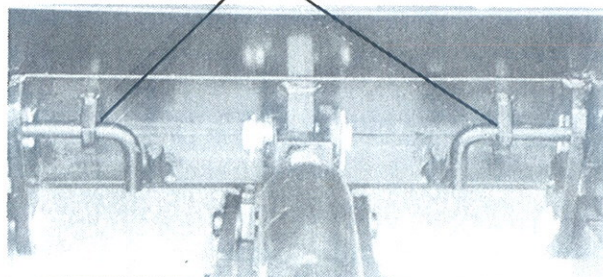


FIGURE 4



## WARNING

*After Hook-Up To Attachment, Check To Be Sure Lock Pins Are Fully Engaged, And Locked Into Position.*



## III. OPERATION

You can take full advantage of all the features of your **RAMROD Mini Loader** by following the operating information presented here. The loader has been designed to do a lot of work with a minimum of operating fatigue.

### PRE-STARTING INSPECTION AND PREPARATION

Before you start the loader for the first time each day, perform the following checks and service:

1. Check engine crankcase oil level.
2. Check engine fuel and open fuel shut-off valve if closed.
3. Check hydraulic fluid level in tank.
4. Check for fuel, engine oil or hydraulic leaks.  
-WARNING- Never check for hydraulic leaks with your bare hand. High pressure fluid could penetrate your skin and cause injury.
5. Visually inspect all hoses, lines, fittings, tires, pivot points, mounting pins, nuts and bolts, safety shields and decals for possible failure or looseness.
6. Check that all controls are in the neutral position.



#### WARNING

*Do Not Move Any Of The Control Levers Unless Standing With Both Feet On The Platform And Holding The Grip Handles.*

### STARTING PROCEDURE

1. Push the throttle lever down slightly.
2. Pull choke control completely out.
3. Turn the ignition switch to "ON" and then through to the "START" position. (If the engine fails to start by cranking for 10 seconds, wait 5 seconds before trying again).
4. As the engine warms up, push back the choke control gradually.
5. Set the throttle lever for idling speed. Avoid excessive engine speed during warmup.
6. To restart a warm engine - move throttle control slightly and turn ignition key to "START".

#### IMPORTANT

*Do Not Crank Engine With Starter For More Than 10 Seconds At A Time, As This Will Overheat The Starter.*

#### IMPORTANT

*Ensure That The Auxiliary Lever Is Kept Neutral When Not Being Used To Avoid Wasting Power. Engine Is Difficult To Start If Lever Is Engaged. Hydraulic Oil May Also Overheat.*

#### IMPORTANT

*Do Not Put Loader Under Full Load Condition Until It Has Had An Adequate Warm-Up Period.*

**NOTE:** For more information regarding engine starting and operation, refer to your Briggs and Stratton "Owner's Manual".

# OPERATION

## SHUT-OFF PROCEDURE

1. Park the loader on level ground. If it is necessary to park on a slope, park across the grade and block the wheels.
2. Lower the lift arms and ground the bucket.
3. Return throttle control to "idle" position, and allow engine to idle for a short while.
4. Turn ignition key off.
5. Place control levers in neutral position, and remove the key.

### IMPORTANT

*Be Sure Ignition Key Is In OFF Position, Or Even Removed, When The Engine Is Not Running.*

## MOUNTING ATTACHMENTS

### INSTALLATION OF ATTACHMENT

1. Pull up pin handles and slide the pins toward the center of the attachment mount frame.
2. Tilt the attachment frame forward as shown in **Figure 5**, and line up the mount bars on the attachment with the slots on the attachment frame.
3. Drive up the attachment and tilt back the attachment frame until the attachment is lifted off the ground and rests against the attachment frame, as shown in **Figure 6**.
4. Be sure that the mount bars on the attachment are fitted properly into the slots on the attachment frame.
5. Slide pins into the attachment mounting bars and lock the pin handle in a downward position.
6. Connect accessory hydraulic hoses to the quick couplers if so required. See **Figure 7**. Restart the engine.

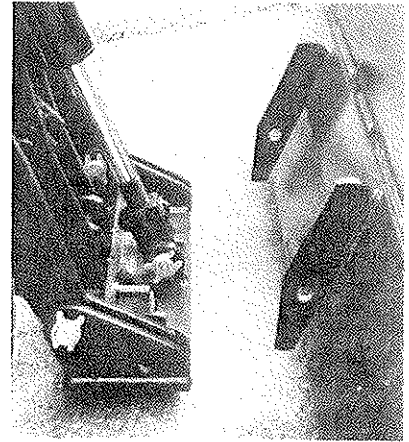


FIGURE 5



FIGURE 6

### ⚠ WARNING ⚠

*After Hook-Up To Attachment, Check To Be Sure Lock Pins Are Fully Engaged, And Locked Into Position.*

### REMOVAL OF ATTACHMENT

1. Lower lift arms fully and tilt attachment frame back. Stop the engine.
2. If attachment is hydraulically equipped, relieve pressure in the lines, and disconnect the hydraulic hoses.
3. Pull the locking pin handles up and slide the pins toward the center of the attachment frame.
4. Start engine, tilt the attachment frame forward and back the loader away from the attachment.

**NOTE:** You may have to rest the attachment on a higher point (i.e. pallet, etc.) before removing it. The remaining procedures are the same.

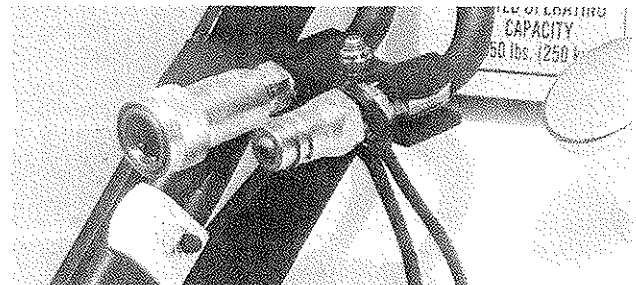


FIGURE 7

# OPERATION

## OPERATIONAL PROCEDURE

Loader operational procedure and suggestions in this manual are based on the use of a bucket. Operating procedure and suggestions for such other attachments as dozer blade, post hole auger, trencher, rock hammer, etc., are included in the respective attachment bundle.



FIGURE 8 - EMPTY BUCKET

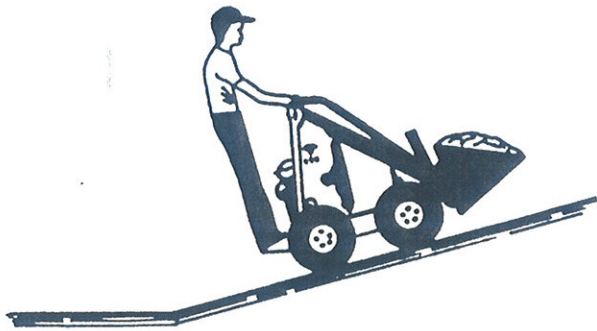


FIGURE 9 - FULL BUCKET



FIGURE 10

### OPERATING SUGGESTIONS

1. Install an attachment (bucket). Drive carefully to a clean and level area and practice operating the loader at a slow rate until familiar with the operation of all controls.
2. Hydraulic power transmission is instantaneous. When using the drive levers, sudden movement will result in acceleration to full speed and a very jerky ride. Use smooth and gradual movements when using the drive levers.
3. For efficient operation of the loader, keep the work area small, and as level as possible.
4. Decrease cycle time by "SKID" turning rather than backing up, using a slow turn, then going forward.
5. When driving on slopes keep the heaviest end of the loader upward. When driving on a slope with an empty bucket, back up the slope in reverse, and drive down a slope forward as in **Figure 8**. When driving on a slope with a load, drive up the slope forward and back down the slope in reverse as in **Figure 9**.
6. Fill the bucket to rated capacity. Turning is easier with a full load than with a partial load.
7. To increase machine life, let the engine warm completely before starting operations each day. Avoid "over-loading" or "lugging" the loader.

### ⚠ WARNING ⚠

*Always Carry The Bucket Low While Moving. Drive Directly Up And Down Instead Of Across A Slope.*

### ⚠ WARNING ⚠

*If Operating Loader Indoors, Make Sure Building Is Well Ventilated.*

### FILLING AND DUMPING A BUCKET

1. Approach the pile with the lift arms fully down and bucket cutting edge just skimming the top of the ground as in **Figure 10**.

## OPERATION

2. As soon as the bucket is full, tilt bucket back and back away from the pile, as shown in **Figure 11 and 12**.
3. When dumping, raise bucket high enough to clear stock pile or sides of container being loaded.
4. Drive slowly forward until bucket is over dumping area and tilt bucket forward until it completely empties.
5. Tilt bucket, back up if necessary to clear container side and back away.



FIGURE 11

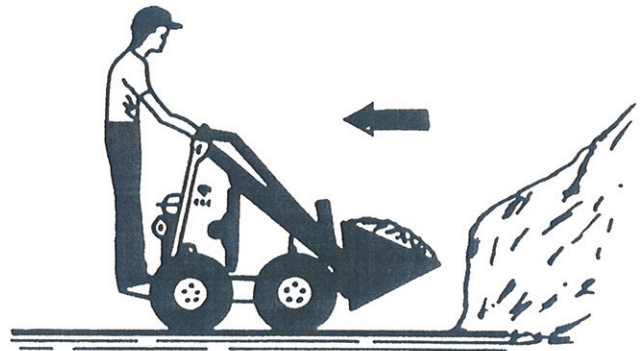


FIGURE 12

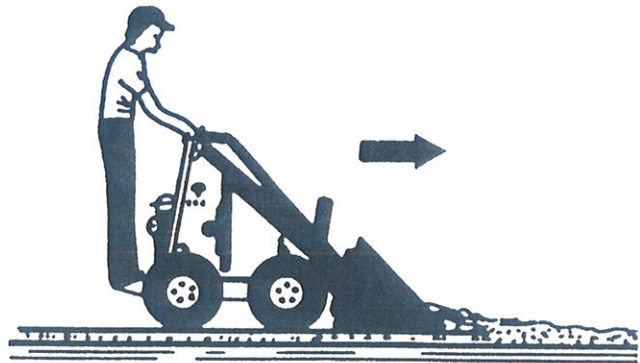


FIGURE 13

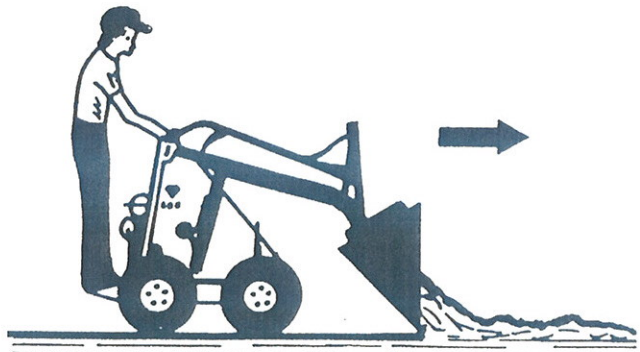


FIGURE 14

### ⚠ WARNING ⚠

*Use Extreme Caution When Stopping. If The Bucket Or Attachment Is Raised, The Machine Can Tip. Keep All Movements Smooth And Gradual When Manoeuvring With Lift Arms Raised. All New Operators Must Work The Machine In A Safe Open Area To Become Familiar With Its Operating Characteristics.*

### ⚠ WARNING ⚠

*Never Step Off The Operator Platform With The Load Raised.*

#### DIGGING WITH A BUCKET

1. Lower lift arms fully and tilt bucket forward until cutting edge is on the ground.
2. Drive machine forward slowly and continue to tilt bucket forward until it enters the ground to desired depth and then tilt it back a small amount to keep an even depth, as shown in **Figure 13**.
3. Continue driving forward until bucket is full and then tilt bucket fully back while driving slowly forward or stopping the machine.

#### LEVELLING

1. To spread material on uneven ground, raise lift arms and tilt bucket forward while driving slowly forward, as in **Figure 14**.

## OPERATION

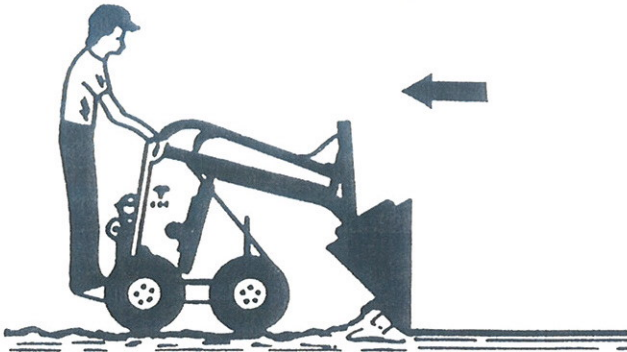


FIGURE 15

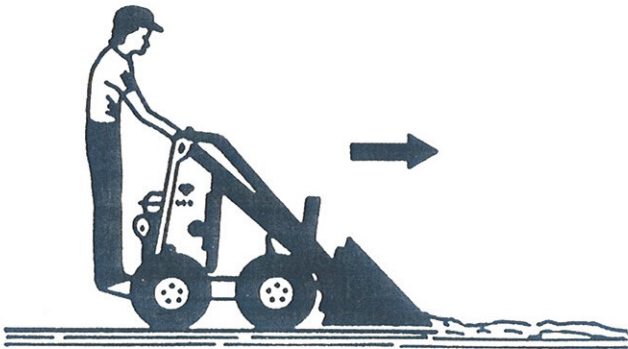


FIGURE 16

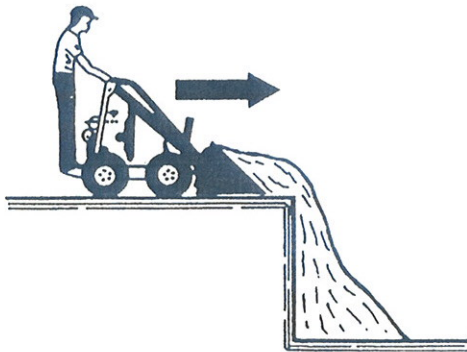


FIGURE 17

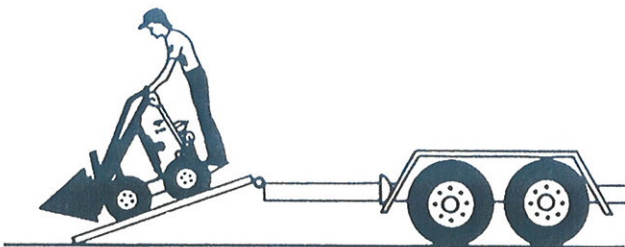


FIGURE 18

2. To level a filled area, tilt bucket forward and drive machine backwards to drag bucket and spread material, as in **Figure 15**.
3. Another method of levelling is to travel forward with bucket down and level, full of material and pushing excess into low areas. Depth is controlled by tilting the bucket slightly up or down, as in **Figure 16**.

### BACKFILLING

1. When filling a trench or a hole, drive up the hole with bucket low or push material up to edge, as in **Figure 17**.
2. Tilt bucket forward as soon as it reaches the edge of the hole and when necessary raise the arms to empty the bucket.

### TRANSPORTING THE LOADER

## IMPORTANT

*Never Tow The Loader.  
Damage May Result.*

When the machine is transported on a truck or trailer, proper ramps must be used for loading.

A loader with an empty bucket, or no attachment should be driven backwards up a ramp onto the trailer or forward down a ramp, as shown in **Figure 18**.

After the loader is driven onto the transporting vehicle, lower any attachments, and install chains to hold loader from moving during sudden stops or when travelling up and down grades.

Close the fuel valve when the mini loader is to be transported. Vibration during transport could cause the carburetor to flood.

## ⚠ WARNING ⚠

*When Transporting On A Road Or Highway During The Day Or At Night, Be Sure That The Trailer Is Equipped With Lights And Signs As Required By Law.*

## IV. MAINTENANCE

Maintenance and service of the mini loader is made simple by the use of hydraulics for power transmission and the accessibility to the components.

Maintenance and service intervals recommended in this manual are based on operation under average conditions. When operating the loader in severe conditions of heat, cold, dust, high humidity or other extremes, service the loader at more frequent intervals.

Failure to perform regular maintenance will result in damage to the loader. Periodic maintenance and service is the key to trouble free operation.

When replacement parts are needed for mini loader components, **Figure 19** on Page 12 shows a complete breakdown of the loader. Page 13 & 14 shows the corresponding parts list containing item number, part number, description and quantity.

### USING THE PARTS LIST

#### ITEM:

- The item number is the identifying number from the illustration.

#### PART NUMBER:

- The part numbers that appear in the part number column, are 7 digit numbers by which the components may be identified and ordered from us.

#### DESCRIPTION:

- This column contains the name and description of the part.

#### QUANTITY:

- This column shows the quantity of each part used on that loader component.

### ORDERING PARTS

When ordering parts from us, be sure to state:

- 1) Part Number
- 2) Full Description
- 3) Quantity Required

- 4) Loader Model and Serial Number

**NOTE:** The reference to right and left used throughout this manual, refers to the position when operating the machine, facing forward.

### APPLIED WARRANTIES

Below are listed the warranties for the major components of the mini loader as set by their respective manufacturers at the publication date of this manual. For the complete **RAMROD** warranty, refer to Page 31 of this manual.

For information on the engine warranty, refer to the Briggs and Stratton or Duetz Rugggerini booklet.

#### HYDRAULIC PUMP

- 6 months from the time of 1st delivery to purchaser.

#### OVER CENTRE VALVE-FLUID CONTROL

- 6 months from the time of 1st delivery to purchaser.

#### WHEEL MOTOR

- 18 months from date shipped and/or 12 months from date installed.

#### BATTERY

- 9 months from time installed.

#### TIRES

- 12 months or 25% No Charge replacement on Factory defects. 4 year weather check.

#### CYLINDERS - RAM INDUSTRIES

- 6 months from date installed.

ASSEMBLY  
DIAGRAM

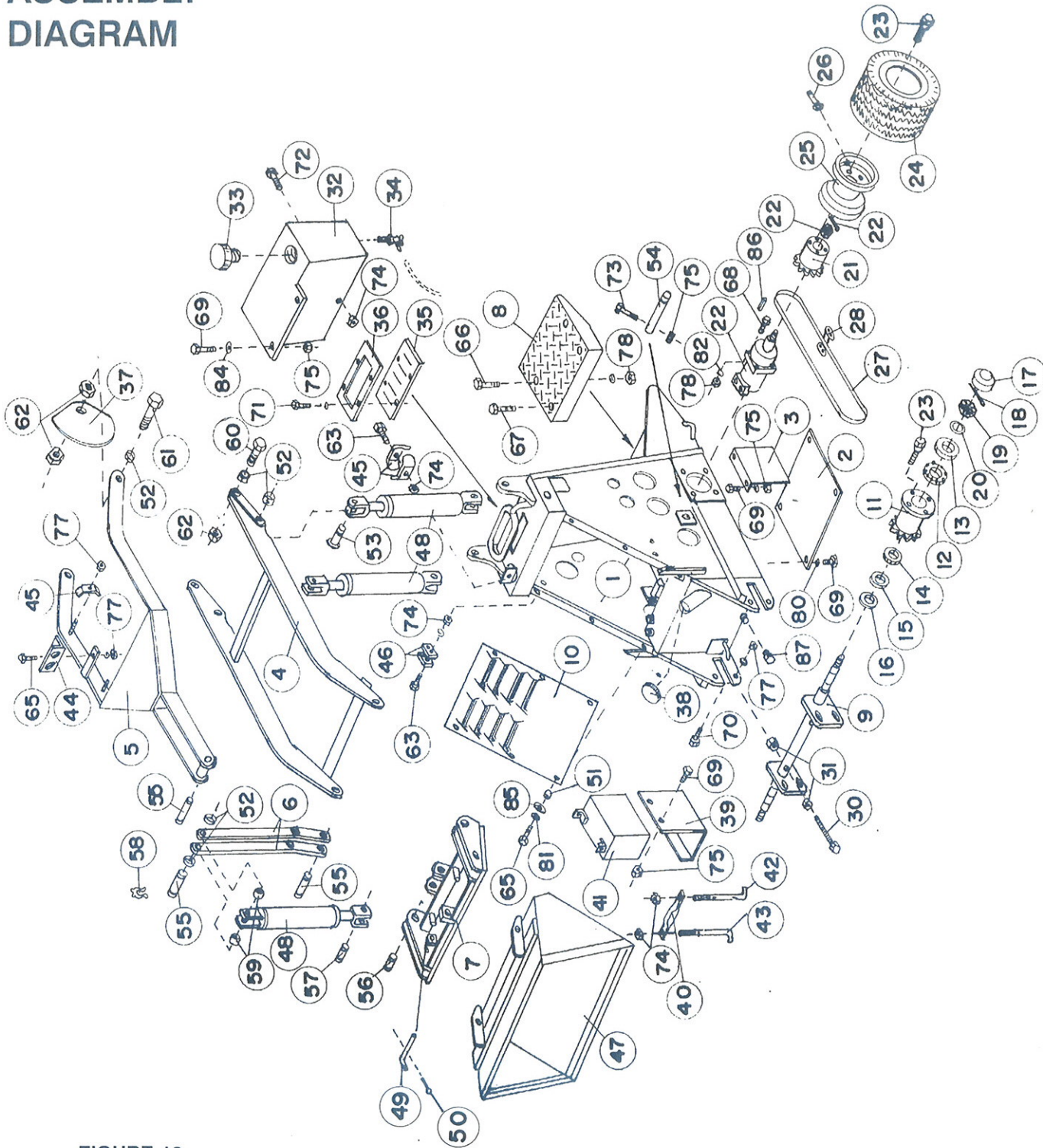


FIGURE 19

# MAINTENANCE

## RAMROD 550 - 750 PARTS LIST ("A" SERIES)

Item	Part No.	Description	No. Used
1	1230001	Body Weldment .....	1
2	1230055	Belly Pan .....	1
3	1230057	Chain Side Guard .....	2
4	1230010	Lift Arms .....	1
5	1230014	Self Levelling Frame .....	1
6	1230013	Cylinder Link .....	2
7	1230020	Front Mount Frame .....	1
8	1144241	Counterweight .....	1
9	1230354	Front Axle .....	2
10	1117146	Front Cover (Plastic) .....	1
11	1230624	Front Hub/Sprocket Weldment (4" & 6" Tires) .....	2
11	1230619	Front Hub/Sprocket Weldment (8" Tires) .....	2
12	1135343	Cup, Bearing Race, Outer .....	2
13	1135344	Bearing, Roller Cone, Outer .....	2
14	113251	Cup, Bearing Race, Inner .....	2
15	1135250	Bearing, Roller Cone, Inner .....	2
16	1135252	Seal, Inner .....	2
17	1135345	Dust Cap .....	2
18	1102768	Cotter Pin .....	2
19	1105400	Slotted Nut .....	2
20	1102637	Machine Bushing .....	2
21	1230110	Rear Hub (4" & 6" Tires) .....	2
21	1230626	Rear Hub (8" Tires) .....	2
22	1127099	Hydraulic Motor c/v Nut & Cotter Pin .....	2
23	1135341	Wheel Bolt .....	20
24	1135070	Tire, 4.00 x 8 - 4 Ply .....	4
24	1135071	Tire, 16 x 6.5 - 8, 4 Ply .....	4
24	1135072	Tire, 18 x 8.5-8, 4 Ply .....	4
25	1135034	Rim, 8 x 4, 5 Bolt .....	4
25	1135035	Rim, 8 x 5.25, 5 Bolt .....	4
25	1135036	Rim, 8 x 7, 5 Bolt .....	4
26	1135154	Valve Stem .....	4
27	1230115	Drive Chain .....	2
29	1113349	Connector Link .....	2
30	1230361	Chain Tensioner Bolt .....	2
31	1102540	Hex Nut, 5/8" UNC .....	4
32	1117147	Fuel Tank .....	1
33	1179230	Fuel Filler Cap .....	1
34	1123206	Fuel Shut-Off Valve .....	1
35	1230499	Valve Grommet .....	1
36	1230498	Valve Cover Plate .....	1
37	1230685	Handguard .....	2
38	1179194	Oil Filler Spout Cap .....	1
39	1230542	Battery Mount Bracket .....	1
40	1230534	Battery Cross Bar .....	1
41	1179130	Battery, 12 Volt .....	1
42	1230532	Long Battery Tie Bolt .....	1
43	1230533	Short Battery Tie Bolt .....	1
44	1230618	Bracket, Aux. Hose Support .....	1
45	1707130	Line Climap, 2 Pipe .....	6
46	1230531	Shut Off Valve Spacer .....	2
47	1230031	Bucket, 31" Wide .....	1
47	1230068	Bucket, 36" Wide .....	1
47	1230069	Bucket, 42" Wide .....	1
48	1126288	Hydraulic Cylinder .....	3
49	1225644	Quick Attach Pin .....	2
50	1102764	Cotter Pin .....	2
51	1230684	Front Cover Spacer .....	6
52	1115510	"Connex" Spring Bushing (All Pivot Points) .....	25
53	1230284	Top Lift Cylinder Pin .....	2
54	1230360	Bottom Cylinder Pin .....	2
55	1225644	Pin, 1" x 5.25" U.L. ....	3
56	1225620	Pin, 1" x 2.12" U.L. ....	2
57	1225654	Pin, 1" x 2.88 U.L. ....	1
58	1500115	Pin Retainer .....	16



# MAINTENANCE

## RAMROD 550 - 750 PARTS LIST ("A" SERIES) continued

Item	Part No.	Description	No. Used
59	1230076	Spacer, Tilt Cylinder.....	2
60	1102255	Hex Bolt, 1" UNC x 4".....	2
61	1102253	Hex Bolt, 1" UNC x 3".....	2
62	1102567	Jam Nut, 1" UNC.....	6
63	1101929	Hex Bolt, 1/4" x 2 1/2".....	3
64	1102004	Hex Bolt, 3/8" x 2 1/2".....	4
65	1102001	Hex Bolt, 3/8" x 1".....	11
66	1102057	Hex Bolt, 1/2" x 3 1/2".....	2-550
			4-750
67	1102055	Hex Bolt, 1/2" x 2 1/2".....	2-550
68	1102052	Hex Bolt, 1/2" x 1 3/4".....	8
69	1101950	Hex Bolt, 5/16" x 1".....	10
70	1102002	Hex Bolt, 3/8" x 1 1/2".....	5
71	1101923	Hex Bolt, 1/4" x 3/4".....	4
72	1101926	Hex Bolt, 1/4" x 1 1/2".....	1
73	1101954	Hex Bolt, 5/16" x 2".....	6
74	1102515	Hex Nut, - 1/4".....	6
75	1102520	Hex Nut, 5/16".....	12
76	1102525	Hex Nut, 3/8".....	6
77	1102526	Hex Locknut, 3/8".....	8
78	1102535	Hex Nut, 1/2".....	18
79	1102588	Lockwasher, 1/4".....	3
80	1102589	Lockwasher, 5/16".....	20
81	1102590	Lockwasher, 3/8".....	8
82	1102595	Lockwasher, 1/2".....	14
83	1102607	Flatwasher, 1/4".....	9
84	1102607	Flatwasher, 5/16".....	6
85	1102641	Flatwasher, 3/8".....	14
86	1127208	Key, Wheel Motor.....	2
87	1122919	Drain Plug.....	1
88	1101975	Hex Bolt, 5/16" x 1" U.N.F.....	4
89	1101926	Hex Bolt, 1/4" x 1 1/2".....	2

# MAINTENANCE

## GASOLINE/DIESEL ENGINE LAYOUT

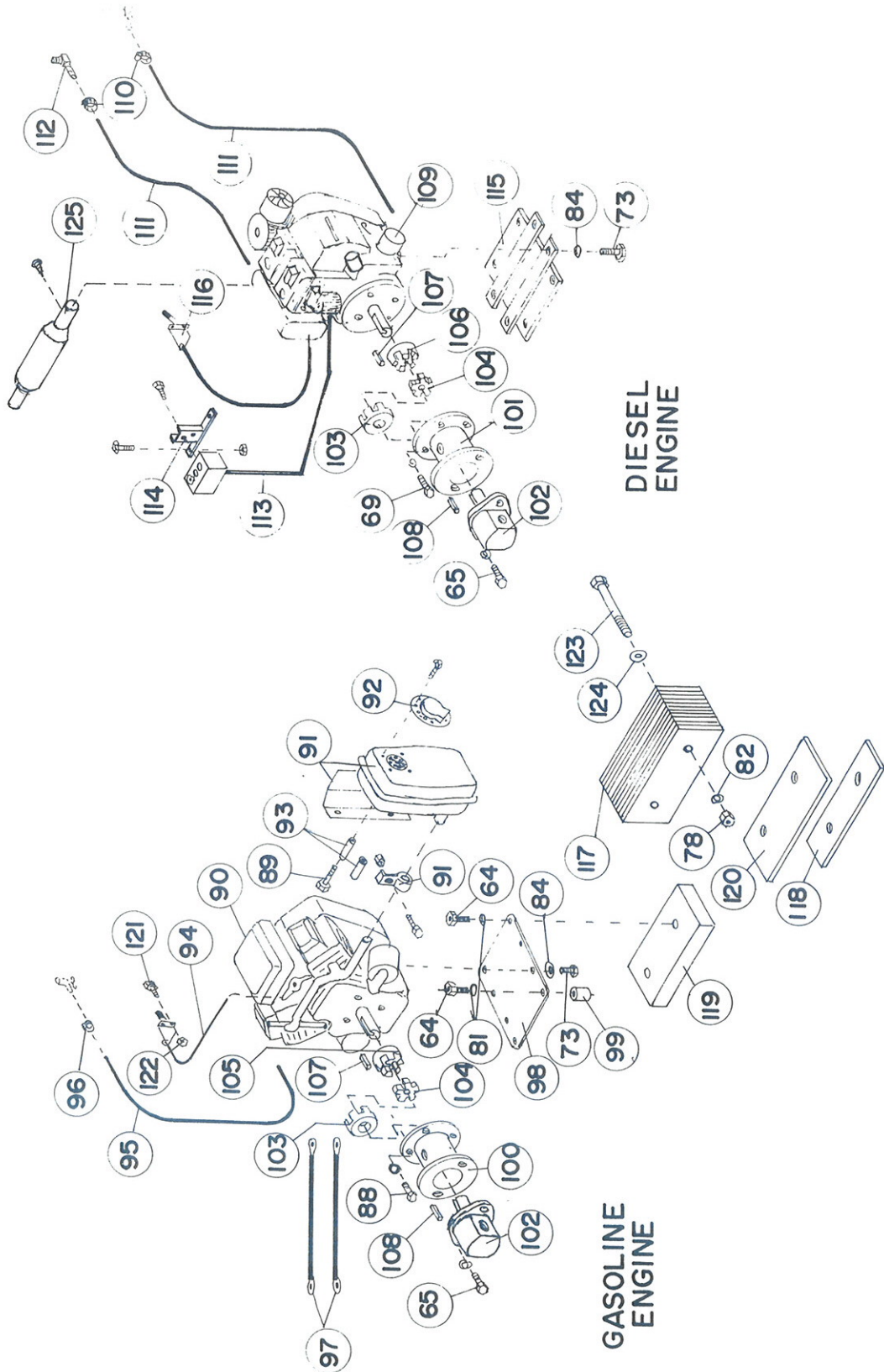
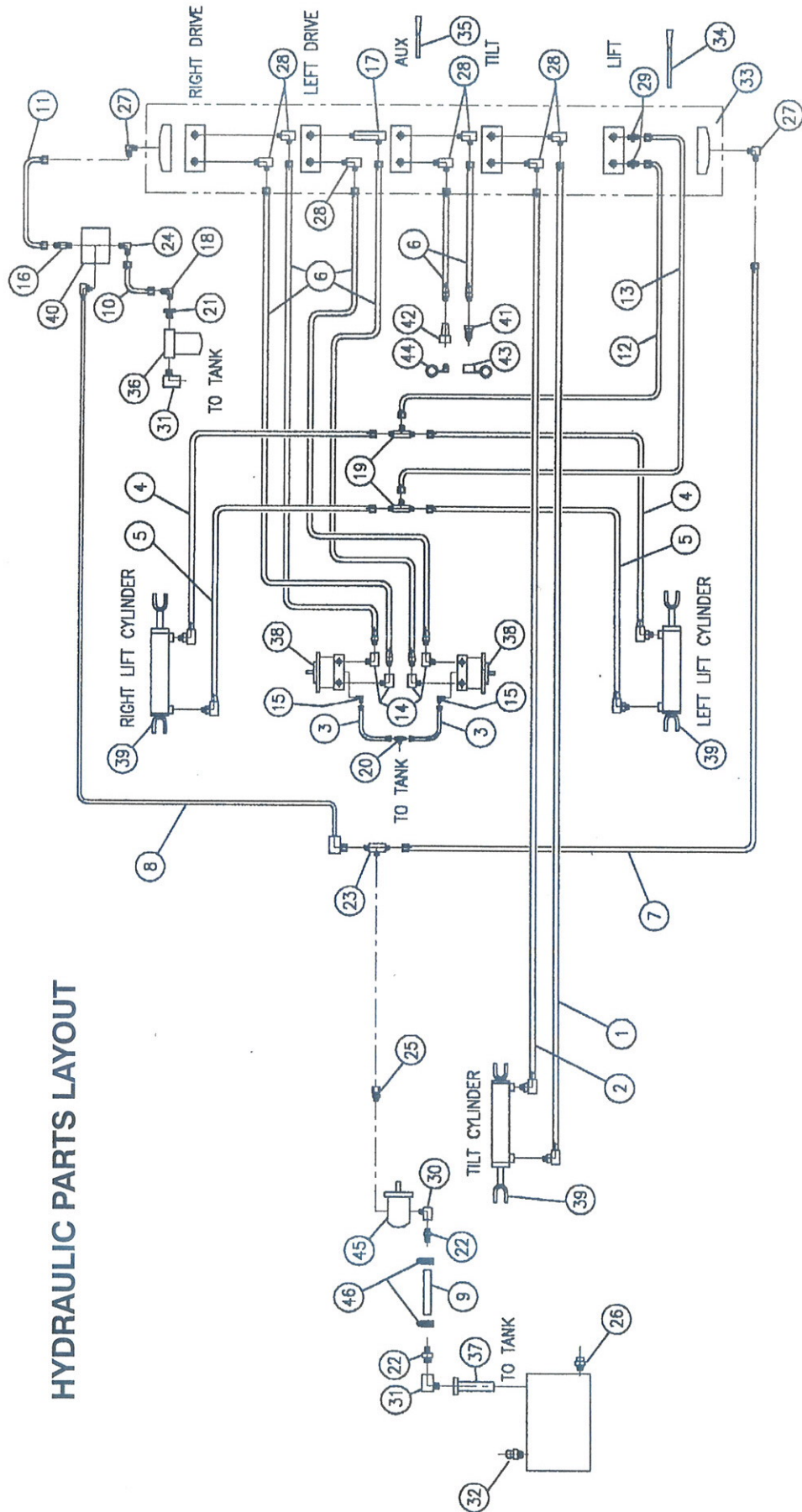


FIGURE 20

# MAINTENANCE

## ENGINE OPTIONS (Note - Parts Not Shown Twice Are Common To Both Gas And Diesel Models)

Item	Part No.	Description	No. Used
90	1117120	Gas Engine - Briggs & Stratton 16 hp .....	1
91	1123204	Muffler c/w Heat Shield and Clamp .....	1
92	1123205	Muffler Deflector .....	1
93	1230683	Muffler Spacer .....	2
94	1117125	Throttle Assembly .....	1
95	1123188	Gas Line .....	1
96	1123184	1/4" Gas Line Hose Clamps .....	2
97	1230541	Battery Cable .....	2
98	1230528	Motor Base Plate - Gas Engine .....	1
99	1230528	Motor Base Plate Spacer .....	2
100	1230351	Pump Mount Bracket - Gas Engine .....	1
101	1230365	Pump Mount Bracket - Diesel Engine .....	1
102	1179208	Hydraulic Pump, B & P .....	1
103	1117074	Half Coupling .....	1
104	1117076	Spider .....	1
105	1117083	Half Coupling - Gas Engine .....	1
106	1117075	Half Coupling - Diesel Engine .....	1
107	1105190	Key - Engine .....	1
108	1127207	Key - Pump .....	1
109	1117148	Diesel Engine - Duetz - Ruggerini 15.2 hp .....	1
110	1123184	1/4" Gas Line Hose Clamps .....	4
111	1123188	Fuel / Return Line .....	2
112	1123180	Barbed Connector - Return Line .....	1
113	1117150	Diesel Keyswitch Box .....	1
114	1117151	Box Mount Bracket .....	1
115	1230368	Motor Base Plate - Diesel Engine .....	1
116	1117149	Throttle Assembly - Diesel Engine .....	1
117	1230308	Stacking Counterweight - 750 Only .....	12
118	1230328	Bottom Counterweight - 750 Only .....	1
119	1230329	Motor Mont Counterweight - 750 Only .....	1
120	1230327	Top Counterweight - 750 Only .....	1
121	1101942	#10 Hex Head Screw .....	2
122	1102578	# Hex Nut .....	2
123	1102064	Hex Bolt, 1/2" x 7" (750 Only) .....	2
124	1102611	1/2" Flatwasher .....	2
125	1230375	Exhaust Purifier (Optional For Diesel) .....	1



HYDRAULIC PARTS LAYOUT

# MAINTENANCE

## HYDRAULIC PARTS

Item	Part No.	Description	No. Used
1	1123196	3/8" NPTM x 3/4" ORB x 69" 100R2 Hose .....	1
2	1123195	3/8" NPTM x 3/4" ORB x 81" 100R2 Hose .....	1
3	1123270	1/4" 100R1 Hose x 13" Long .....	2
4	1123197	3/8" 100R2 Hose x 22" Long .....	2
5	1123198	3/8" 100R2 Hose x 12" Long .....	2
6	1124199	3/8" 100R2 Hose x 39" Long .....	6
7	1123200	1/2" 100R2 Hose x 30" Long .....	1
8	1123108	3/8" 100R1 Hose x 22" Long .....	1
9	1123219	3/4" Suction Hose .....	1
10	1128072	Hyd. Oil Line, Ocv To Filter .....	1
11	1128074	Hyd. Oil Line, Valve To Ocv. ....	1
12	1128075	Hyd. Oil Line, Aux. B To Lift .....	1
13	1128076	Hyd. Oil Line, Aux A To Lift .....	1
14	1124735	7/8" ORBM x 1/2" Elbow .....	4
15	1124467	1/4" ORBM x 1/4" JICM Elbow .....	2
16	1122970	3/8" NPTM x 1/2" JICM Adapter .....	1
17	1123201	Elbow, 9/16" ORBM x 3/8" JICM (Long) .....	1
18	1124405	1/2" NPTM x 1/2" JICM Elbow .....	3
19	1124400	1/2" JICM Tee .....	2
20	1124466	1/4" JICM (2) x 1/4" NPTM Tee .....	1
21	1122898	3/4" NPTM x 1/2" NPTF Reducer Bushing .....	1
22	1124589	3/4" NPTM x 3/4" Barbed Union .....	2
23	1124739	3/4" ORBM x 1/2" JIC (2) Tee .....	1
24	1124403	3/8" NPTM x 1/2" JICM Elbow .....	1
25	1124738	Reducer, 7/8" ORBM x 3/4" ORBF .....	1
26	1122920	3/8" NPT Plug .....	1
27	1123210	3/4" ORBM x 1/2" JICM Elbow .....	2
28	1122804	9/16" ORBM x 3/8" JICM Elbow .....	7
29	1123212	9/16" ORBM x 1/2" JICM Adapter .....	2
30	1122941	1 1/16" ORBM x 3/4" NPTF Elbow .....	1
31	1124468	3/4" NPT Street Elbow .....	2
32	1124461	Breather Plug .....	1
33	1128335	Valve Assembly - Walvoil .....	1
34	1128335	Long Valve Handle .....	4
35	1128320	Short Valve Handle .....	2
36	1127100	Filter Assembly .....	1
37	1127202	Strainer Assembly .....	1
38	1127099	Hydraulic Motor .....	2
39	1126288	Hydraulic Cylinder .....	3
40	1127204	Overcentre Valve .....	1
41	1127184	Nipple .....	1
42	1127183	Coupler .....	1
43	1127185	Dust Cap .....	1
44	1127186	Dust Plug .....	1
45	1179208	Gear Pump, B & P .....	1
46	1123290	Hose Clamps .....	2
-	1107358	Bolt, 8mm x 1.25 x 2.5cm (valve mount) .....	4

# MAINTENANCE

## FUELS, LUBRICANTS AND CAPACITIES

The service obtained from your loader is greatly affected by the quality of the petroleum products used in it. It requires only common products which are commercially available through the outlets of major refineries. The following chart shows which lubricant to use in the various components of the loader.

COMPONENT	TEMPERATURES	TYPE OF LUBRICANT/FLUID	CAPACITY Litre (Imp. Gal.)
Engine Oil - must see Briggs & Stratton Motor specifications	Above 25°C (77°F) 0° to 25°C (32° - 77°F) -15°C to 0°C (5° - 32°F) Below -15°C (5°F)	SAE 30 SAE 10W SAE 10W SAE 5W30	1.6 Litres (1.4 Imp. Gal.)
Fuel Tank	All Temperatures	91 Octave, Regular	8.5 L. (1.8 Imp. Gal.)
Hydraulic Oil Reservoir		<b>ISO-46 HYD OIL</b>	44 Litres (39 Quarts)



### WARNING

*Never Add Fuel To A Loader When  
The Engine Is Running Or Is Hot.*



### WARNING

*Do Not Service Loader While Engine  
Is Running*

FUEL FILLER SPOUT

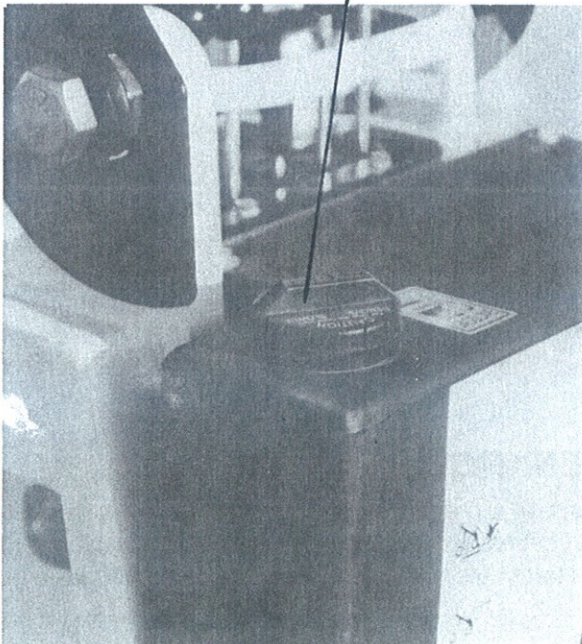
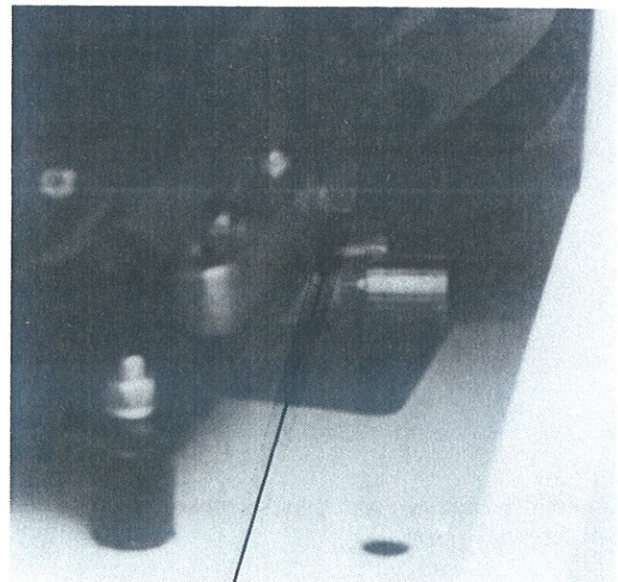


FIGURE 21

FIGURE 22



ENGINE OIL DRAIN LOCATION

# MAINTENANCE

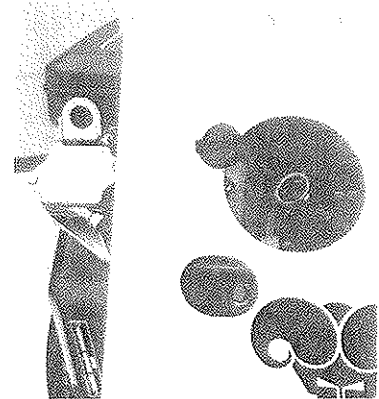
## ENGINE MAINTENANCE

### OIL LEVEL CHECK

1. Ensure that the loader is standing level.
2. Remove dipstick on the right hand side of the engine, **Figure 23**, visibly check the level. Top up with recommended oil; see the chart on Page 19 if required.

For proper engine maintenance, refer to your Briggs and Stratton Owner's Manual. This pertains to all applicable maintenance on your Briggs and Stratton engine. Maintenance with respect to fluids and lubricants are included in the "Periodic Maintenance and Service Schedule"; on Page 22.

FIGURE 23



### NOTE: Spark Plug Removal

The spark plug is removed by removing spark plug wire and inserting a 5/8" socket wrench through the access holes on either side of Mini Loader.

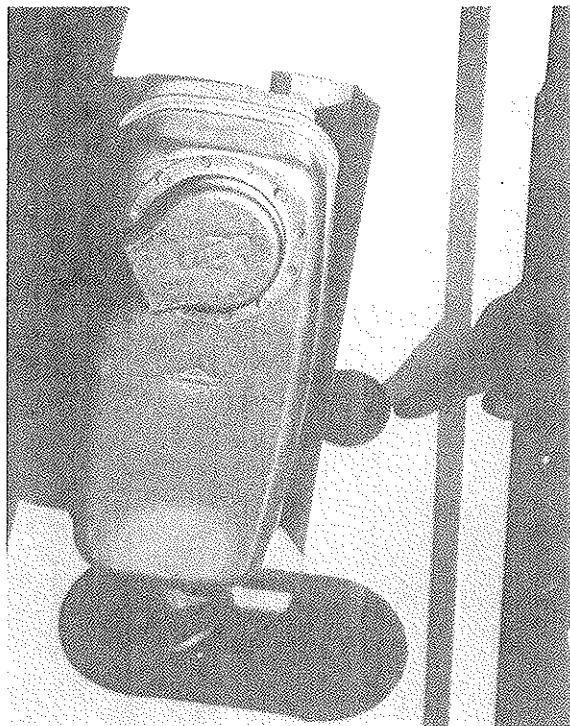


FIGURE 24

## BATTERY MAINTENANCE

Check the battery hold down bracket for tightness. Do not overtighten.

Remove any acid corrosion from the battery terminals and cables with baking soda and water solution. Coat the terminals with a high temperature grease.

# MAINTENANCE

## HYDRAULIC/HYDROSTATIC SYSTEM MAINTENANCE

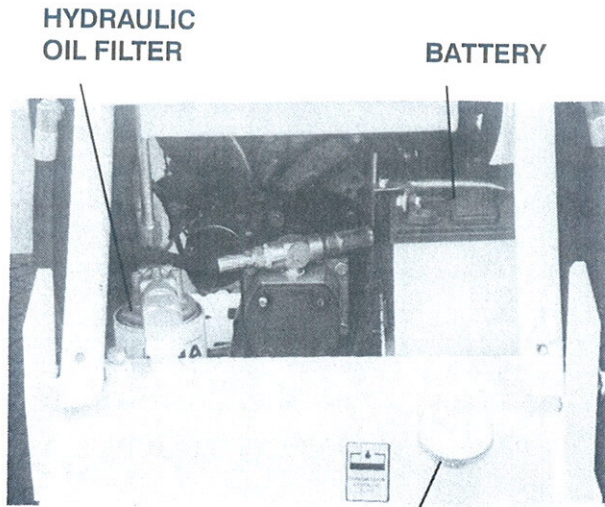


FIGURE 25

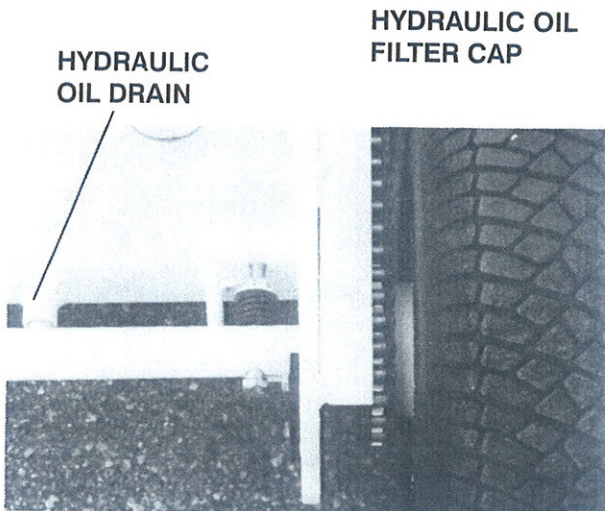


FIGURE 26

### HYDRAULIC OIL LEVEL CHECK

1. Ensure that the loader is standing level, the lift arms are down and the tilt cylinder is closed.
2. Remove the oil cap, see **Figure 25**, and check the level. If oil is apparent, the level is satisfactory.
3. If necessary, add the proper type and grade of oil, until it appears at the check point.

### CHANGING HYDRAULIC OIL

The hydraulic oil normally needs to be changed after 1,000 operating hours or annually. However, if the oil becomes contaminated, or a major repair has been done to the hydrostatic transmission, it should be changed at once.

1. Remove the oil drain plug. See **Figure 26**, and drain the oil. Remove the oil cap to ensure a better flow.
2. Replace the oil drain plug, and refill reservoir with clean oil of proper grade and type.
3. Start engine, and check for leaks. Stop engine and re-check the oil level.

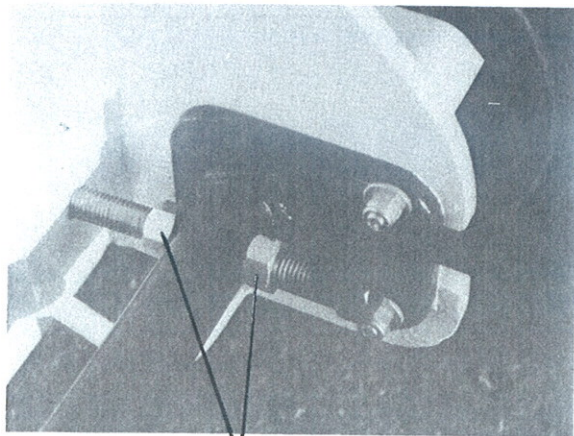
### CHANGING HYDRAULIC OIL FILTER

1. With the engine stopped, unscrew and remove the old oil filter, see **Figure 25**.
2. Clean the oil filter mounting flange.
3. Apply a thin film of oil to the sealing ring and screw the new filter into place. Hand-tighten the filter.
4. Start the engine and check for leaks. Stop the engine, and check the hydraulic oil level.

## IMPORTANT

*Do Not Allow Dirt To Enter Into  
The Hydraulic/Hydrostatic System*

## FINAL DRIVE MAINTENANCE



ADJUSTING NUTS

### DRIVE CHAIN

To obtain proper chain tension, adjust the 4 tensioning nuts, (2 each side) to move the front axle forward or backwards. See **Figure 26**.



# MAINTENANCE

## PERIODIC MAINTENANCE AND SERVICE SCHEDULE

ITEM	MANUAL	SERVICE REQUIRED	HOURS OF OPERATION				
			8 OR DAILY	25 OR WEEKLY	50 OR BI-WEEKLY	100 OR MONTHLY	1000 OR ANNUALLY
Engine Oil	Ramrod Manual	Check level of engine oil and top up if necessary.	X				
Engine Fuel	Ramrod Manual	Check level, and if necessary, top up.	X				
Hydraulic Oil	Ramrod Manual	Check level, and if necessary, top up.	X				
Tires and Wheel Nuts	Ramrod Manual	Check tire pressure and wheel nuts.	X				
Decals	Ramrod Manual	Check if damaged safety or instruction decals Replace if necessary.	X				
Engine Oil	Engine Manual	Change oil after first 20 hours of operation.			X		
Wheel Drive Chain	Ramrod Manual	Check and adjust tension if necessary.		X			
Air Cleaner	Engine Manual	Clean element and re-oil.		X			
Battery	Ramrod & Engine Manuals	Clean and protect battery terminals.			X		
Engine Oil	Engine Manual	Replace engine oil.				X	
Fuel Filter	Engine Manual	Clean and dry thoroughly.				X	
Spark Plug	Engine Manual	Clean and check gap.				X	
Hydraulic System	Ramrod Manual	Check all hoses, tires, fittings, etc. thoroughly. Replace if needed.				X	
Hydraulic Oil Filter	Ramrod Manual	Replace oil filter.				X	
Hydraulic Oil	Ramrod Manual	Change hydraulic oil.					X
Engine Oil Filter	Engine Manual					X	

# OPERATION

## TROUBLE SHOOTING

The following chart is intended to help isolate troubles and possible remedies.

SYMPTOM	POSSIBLE CAUSES	POSSIBLE REMEDIES
Starter does not crank engine	Fuse protecting ignition system burned Low battery output Loose or disconnected battery cable	Replace with 1.5A fuse  Recharge or replace battery Check and tighten all connections
Engine turns over but does not start	No fuel in tank.  Fuel shut-off valve closed Improper starting procedure Auxiliary control lever engaged Spark plug fouled	Fill tank with clean fuel  Open fuel shut-off valve Refer to starting procedure Set auxiliary lever to neutral Check spark plug gap and clean or replace spark plug
Noisy hydrostatic system	Air in system  Loose suction line and/or fittings Clogged oil filter Hydraulic oil too heavy Internal pump or motor damage	Check oil level, add if necessary Bleed system Tighten all fittings and connections Replace oil filter Warm up hydraulic oil when too cold See your RAMROD Dealer
Erratic or no output on transmission	Hydraulic oil too heavy  Hydraulic oil level too low Drive coupling between engine and pump broken	Use proper viscosity oil. Refer to Page 19. Check oil level. Add if necessary Check couplings, replace if necessary
Loss of hydraulic oil flow from gear pump	Reservoir low on oil  Drive couplings between engine and pump broken Hydraulic gear pump not functioning	Check oil level. Add if necessary  Check couplings, replace if necessary  Inspect and repair if necessary
Hydraulic cylinders do not function properly	Loss hydraulic flow from gear pump  Air in system	See above  Bleed system
Oil overheating	Reservoir low on oil Auxiliary control lever engaged Setting of relief valve too high or too low	Check oil level. Add if necessary Return auxiliary level to neutral Set to correct pressure
No drive of either wheel on one side	Key sheared on motor shaft	Inspect shaft and hub for damage or wear. Replace key and tighten on slotted nut.
No drive of front wheel on one side	Chain failure	Inspect and replace
Noisy operation	Chains too loose Chains dry	Tighten chain Lubricate chain

# LOADER SPECIFICATIONS

## 550 MINI LOADER

Rated Operating Capacity ..... 550 lbs (250 Kg)

Shipping Weight: (Crated)  
 with 4" wheels less bucket ..... 1170 lbs (532 Kg)  
 with 6" wheels less bucket ..... 1180 lbs (536 Kg)  
 with 8" wheels less bucket ..... 1190 lbs (541 Kg)

Travel Speed ..... 3.5 mph (5.6 kph)

### DIMENSIONS: (4" (10.2 cm) Wide x 8" (20 cm) Rim)

- A. Overall Operating Height ..... 90.00" (2299 mm)
- B. Height to Hinge Pin ..... 65.00" (1164 mm)
- C. Overall Height of Loader ..... 47.00" (1194 mm)
- D. Overall Length with 31" Bucket ..... 78.00" (1981 mm)
- E. Dump Angle ..... 90 deg
- F. Dump Height @ 45 deg Dump Angle ..... 48.00" (1219 mm)
- G. Reach, Fully Raised @ 45 deg Dump Angle ..... 22.13" (562 mm)
- H. Height to Bottom of 31" Bucket ..... 62.25" (1581 mm)
- I. Maximum Roll Back at Ground ..... 30 deg
- J. Maximum Roll Back Fully Raised ..... 35 deg
- K. Wheel Base ..... 25.25" (641 mm)
- L. Overall Length Less Bucket ..... 58.75" (1492 mm)
- M. Ground Clearance ..... 5.00" (127 mm)
- N. Angle of Departure ..... 26 deg
- O. Clearance Circle Without Bucket ..... 28.00" (712 mm)
- P. Clearance Circle With 31" Bucket ..... 47.50" (1207 mm)
- Q. Clearance Circle Rear ..... 34.50" (876 mm)
- R. Overall Width Without Bucket ..... 31.00" (787 mm)
- S. Tread Width ..... 27.00" (686 mm)

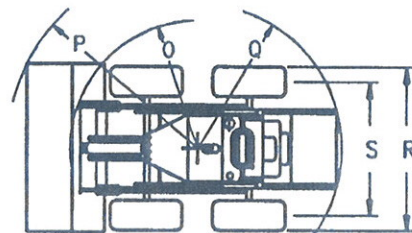
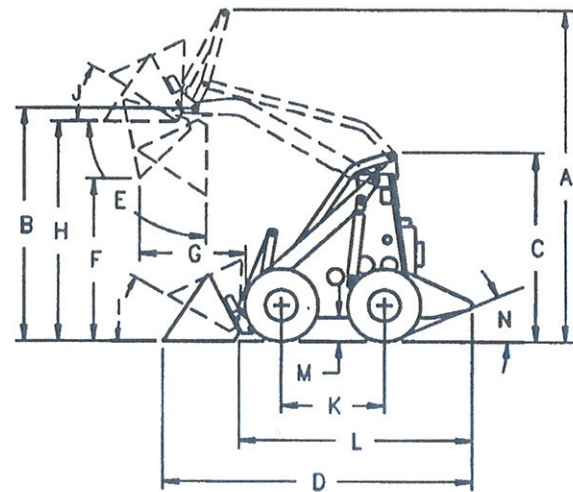


FIGURE 28

**NOTE:** 6" (15.2 cm) Wide x 8" (20 cm) Rim will increase machine dimensions as follows: All vertical dimensions will decrease by 0.50" (13 mm).

- G. Reach, Fully Raised @ 45 deg Dump Angle ..... 22.63" (575 mm)
- R. Overall Width Without Bucket ..... 35.00" (889 mm)
- S. Tread Width ..... 29.00" (737 mm)

**NOTE:** 8" (20 cm) Wide x 8" (20 cm) Rim will increase machine dimensions as follows: All vertical dimensions will decrease by 0.50" (13 mm).

- G. Reach, Fully Raised @ 45 deg Dump Angle ..... 21.75" (552 mm)
- R. Overall Width Without Bucket ..... 39.00" (991 mm)
- S. Tread Width ..... 31.00" (787 mm)

# LOADER SPECIFICATIONS

## 550 MINI LOADER

### ENGINE - GASOLINE

Make and Model ..... Briggs & Stratton 16 hp Vanguard  
Cycle, Valve Arrangement ..... 4 cycle, Overhead Valve  
Displacement ..... 40.00 cu in (656 cc)  
Maximum Output (Horsepower) ..... 16 hp (12 KW) @ 3600 RPM  
Dry Weight (Mass) ..... 82 lbs (35 Kg)

### ENGINE - DIESEL

Make and Model ..... Duetz-Ruggerini MD151  
Cylinders ..... 2 cycle, Air Cooled Direct Injection  
Displacement ..... 40.00 cu in (654 cc)  
Maximum Out put (hp) ..... 16.3 @ 3600 RPM  
Dry Weight (Mass) ..... 110 lbs (50 Kg)

### HYDROSTATIC/HYDRAULIC SYSTEM & FINAL DRIVE

Pump ..... Gear Type, Fixed Displacement, 0.48 cu in/rev (7.75 cc/rev)  
Pump Capacity ..... 6.1 USGPM (13 l/min) @ 3600 RPM  
Motor ..... Fixed Displacement, 18.7 cu in/rev (305 cc/rev)  
Control Valve ..... 5 Spool, Series Parallel, Spring Return and Detent on Auxiliary  
System Relief Pressure ..... 3000.PSI (200 Bar)  
Filtration ..... Return Line: 10 Micron  
Cylinders (3) ..... Double Acting 2.50 Bore, 8.00 Stroke, 1.25 Rod  
Final Drive ..... Primary Chain Number ASA 60

### ELECTRICAL

Battery ..... 12 Volt, Negative Ground, 220 Amp

### FLUID CAPACITIES

Fuel Tank ..... 2.2 US gal (8.3 litres)  
Engine Oil with Filter change ..... 3.5 US pints (1.6 litres)  
Engine Oil ..... 3.0 US pints (1.4 litres)  
Hydraulic Oil Reservoir ..... 11.6 US gal (44 litres)

### TIRES AND BUCKETS

#### TIRE

4" (10.2 cm) Wide x 8: (20 cm) Rim ..... 50 psi (345 KPa)  
6" (15.2 cm) Wide x 8" (20 cm) Rim ..... 30 psi (207 KPa)  
8" (20 cm) Wide x 8" (20 cm) Rim ..... 20 psi (138 KPa)

#### PRESSURE

#### BUCKET

31" (787 mm) ..... 2.84 cu ft (0.08 cu M)  
36" (914 mm) ..... 3.30 cu ft (0.09 cu M)  
42" (1067 mm) ..... 3.85 cu ft (0.11 cu M)

#### CAPACITY

# LOADER SPECIFICATIONS

## 750 MINI LOADER

Rated Operating Capacity ..... 750 lbs. (340 Kg)

Shipping Weight: (Crated)

with 6" wheels less bucket ..... 1380 lbs (627 Kg)

with 8" wheels less bucket ..... 1390 lbs (632 Kg)

Travel Speed ..... 3.3 mph (5.3 kph)

### DIMENSIONS: (6" (10.2 cm) Wide x 8" (20 cm) Rim)

- A. Overall Operating Height ..... 89.00" (2273 mm)
- B. Height to Hinge Pin ..... 65.00" (1651 mm)
- C. Overall Height of Loader ..... 46.50" (1181 mm)
- D. Overall Length with 36" Bucket ..... 78.00" (1981 mm)
- E. Dump Angle ..... 90 deg
- F. Dump Height @ 45 deg Dump Angle ..... 47.50" (1207 mm)
- G. Reach, Fully Raised @ 45 deg Dump Angle ..... 22.63" (575 mm)
- H. Height to Bottom of 36" Bucket ..... 61.75" (1568 mm)
- I. Maximum Roll Back at Ground ..... 30 deg
- J. Maximum Roll Back Fully Raised ..... 35 deg
- K. Wheel Base ..... 25.25" (641 mm)
- L. Overall Length Less Bucket ..... 58.75" (1492 mm)
- M. Ground Clearance ..... 4.50" (114 mm)
- N. Angle of Departure ..... 26 deg
- O. Clearance Circle Without Bucket ..... 28.00" (712 mm)
- P. Clearance Circle With 36" Bucket ..... 48.50" (1232 mm)
- Q. Clearance Circle Rear ..... 34.50" (876 mm)
- R. Overall Width Without Bucket ..... 35.00" (889 mm)
- S. Tread Width ..... 29.00" (737 mm)

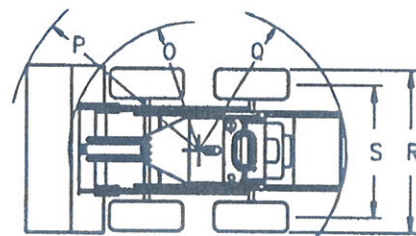
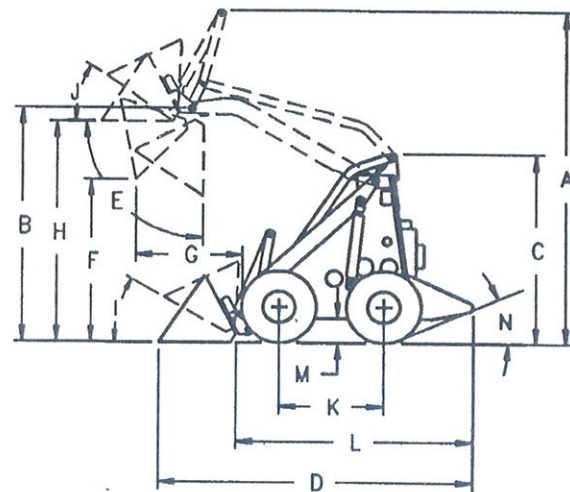


FIGURE 29

**NOTE:** 8" (20 cm) Wide x 8" (20 cm) Rim will increase machine dimensions as follows: All vertical dimensions will decrease by 1.00" (25 mm).

- G. Reach, Fully Raised @ 45 deg Dump Angle ..... 21.75" (552 mm)
- R. Overall Width Without Bucket ..... 39.00" (991 mm)
- S. Tread Width ..... 31.00" (787 mm)

# LOADER SPECIFICATIONS

## 750 MINI LOADER

### ENGINE - GASOLINE

Make and Model ..... Briggs & Stratton 16 hp Vanguard  
Cycle, Valve Arrangement ..... 4 cycle, Overhead Valve  
Displacement ..... 40.00 cu in (656 cc)  
Maximum Output (Horsepower) ..... 16 hp (12 KW) @ 3600 RPM  
Dry Weight (Mass) ..... 82 lbs (35 Kg)

### ENGINE - DIESEL

Make and Model ..... Duetz-Ruggerini MD151  
Cylinders ..... 2 cycle, Air Cooled Direct Injection  
Displacement ..... 40.00 cu in (654 cc)  
Maximum Out put (hp) ..... 16.3 @ 3600 RPM  
Dry Weight (Mass) ..... 110 lbs (50 Kg)

### HYDROSTATIC/HYDRAULIC SYSTEM & FINAL DRIVE

Pump ..... Gear Type, Fixed Displacement, 0.55 cu in/rev (9.0 cc/rev)  
Pump Capacity ..... 7.2 USGPM (13 l/min) @ 3600 RPM  
Motor ..... Fixed Displacement, 18.7 cu in/rev (305 cc/rev)  
Control Valve ..... 5 Spool, Series Parallel, Spring Return and Detent on Auxiliary  
System Relief Pressure (Max) ..... 3000 PSI (200 Bar)  
Filtration ..... Return Line: 10 Micron  
Cylinders (3) ..... Double Acting 2.50 Bore, 8.00 Stroke, 1.25 Rod  
Final Drive ..... Primary Chain Number ASA 60

### ELECTRICAL

Battery ..... 12 Volt, Negative Ground, 220 Amp

### FLUID CAPACITIES

Fuel Tank ..... 2.2 US gal (8.3 litres)  
Engine Oil with Filter change ..... 3.5 US pints (1.6 litres)  
Engine Oil ..... 3.0 US pints (1.4 litres)  
Hydraulic Oil Reservoir ..... 11.6 US gal (44 litres)

### TIRES AND BUCKETS

TIRE	PRESSURE
6" (15.2 cm) Wide x 8" (20 cm) Rim	30 psi (207 KPa)
8" (20 cm) Wide x 8" (20 cm) Rim	20 psi (138 KPa)

BUCKET	CAPACITY
36" (914 mm)	3.30 cu ft (0.09 cu M)
42" (1067 mm)	3.85 cu ft (0.11 cu M)

# LOADER SPECIFICATIONS

## DECALS

### Operating Instructions

Part No. 179150

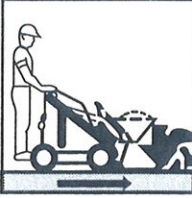


Location: Far L/H side on rear face

**OPERATING INSTRUCTIONS**

Hydraulic power transmission is instantaneous. When using the drive levers, sudden movement will result in acceleration to full speed and very jerky ride. Ease the levers either forward or reverse.

If the bucket is pivoted down while the arms are down, the front of the mini loader will lift off the ground. This is a standard operation when scraping and leveling. The standing platform will prevent the mini loader from overturning backwards.

**HINTS FOR USE**

- When attacking the heap or pile, always have the bucket level. To achieve this, lower the loader arm and activate bucket tilt cylinder to bring the bucket level with the ground.
- Towards the end of the run when the bucket is nearly full, gently roll the bucket backwards. This decreases the lifting resistance when the arms are raised and promotes an efficient tear out.
- When transporting material in the bucket on hill-sides or rough ground, keep the bucket close to ground level. This lowers the centre of gravity of the loader and maximizes stability.
- When scraping, leveling and surface stripping, lower the bucket to ground level, tilt it down and so raise the front wheels slightly off the ground. Drive forward using the back wheels, the bucket will bite into the soil as you move forward.
- The material may then be dumped into a trailer or utility truck for removal or repositioning on the site. Do not step off the operator platform with the load raised.

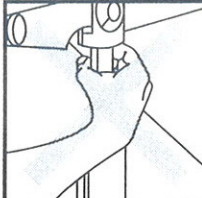
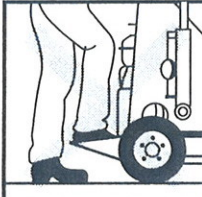


Manoeuvring is made possible by individual controls for the hydraulic motor on each side of the mini loader. A turn may be achieved by varying the amount and/or direction of power supplied to each side of the machine. The machine is capable of turning in its own length by applying equal forward and reverse power to opposite sides of the machine.

### Operating Instructions

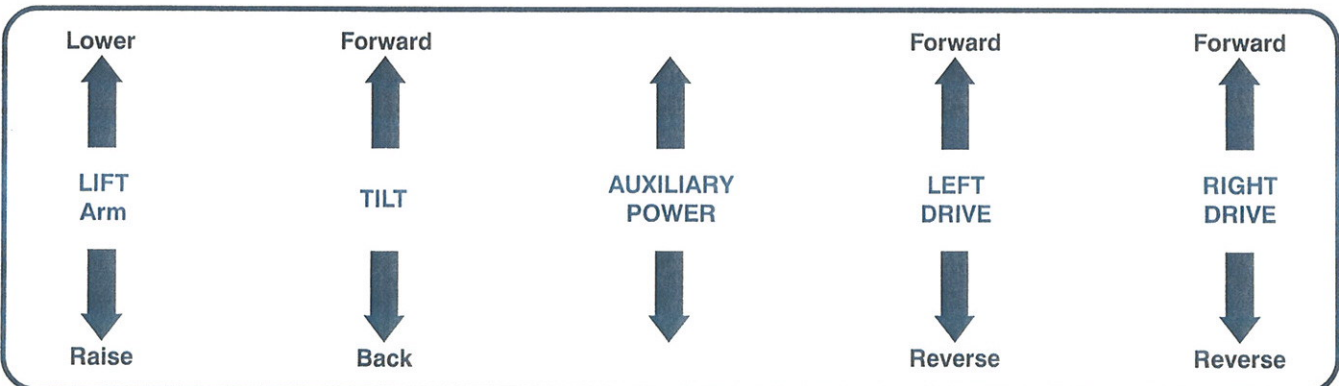
Part No. 179150

Location: Far L/H side on rear face

**1 Safety First**

- Wear close fitting protective clothing and shoes.
- Keep hands, feet and clothing away from all moving parts and rams.
- Do not allow more than one person on the loader at any time.
- Do not smoke while fuelling or operating the mini loader.
- Do not operate any of the control levers including auxiliary power take-off unless you are standing with both feet on the platform and firmly holding the grip handles.
- Do not place feet under the platform.
- Do not ride in the bucket.
- Do not allow any other person or animal close to the mini loader while in operation.
- Ensure adequate ventilation when using the machine in confined spaces.
- Do not drive the mini loader across steep slopes.
- Always place bucket on ground when parking or leaving the loader unattended.
- Do not carry load with the arms in a raised position. Always carry loads close to the ground. Do not step off platform with load raised.
- Caution - Never jerk the control levers, use a steady even motion.



Operating Levers Decal  
Part No. 1179159

# LOADER SPECIFICATIONS

Operating Instructions  
Part No. 179150  
Location: Far L/H side on rear face

## SHUTDOWN AND CAUTION PARKING

When parking the mini loader always the bucket to the ground. Do not park on steep slopes. To turn off the engine, reduce the engine speed at the throttle and turn the start key to the "Off" position. If the mini loader is to be transported close the fuel valve. Vibration during transport could cause the carburetor to flood.

**RATED OPERATING CAPACITY**  
550 lbs. ( 250 kg )

Decal: 550 Rated Oper. Cap.  
Black on Yellow Back  
Part No. 1179161

**RATED OPERATING CAPACITY**  
750 lbs. ( 340 kg )

Decal: 750 Rated Oper. Cap.  
Black on Yellow Back  
Part No. 1179165

Ignition Switch Decal  
Part No: 1179157



Patent  
Part No: 179152  
Location: Top centre of rear face

**INT. REG. PAT. No. PCT-AU83-00165**  
**INT. REG. DESIGN No. 1017838**

Decal: Flow Cotrol "OFF"  
Black on White Back  
Part No: 1179160



Ramrod 2" High  
Part No: 179140

# RAMROD

Mini Loader 1" High  
Part No: 179141

# Mini Loader

Black Ram Head - Small  
Part No: 179142



550 - 1 1/2" High  
Part No. 1179158

# 550

750 - 1 1/2" High  
Part No. 1179164

# 750

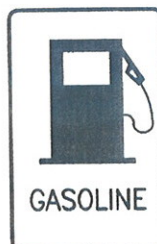
White Ram Head - Small  
Part No: 179144



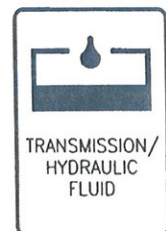
Throttle Control Decal  
part No: 1179156



Decal: Gasoline  
Black on Yellow Back  
Part No: 1179162



Decal: Hydraulic Fluid  
Black on Yellow Back  
Part No: 1179163

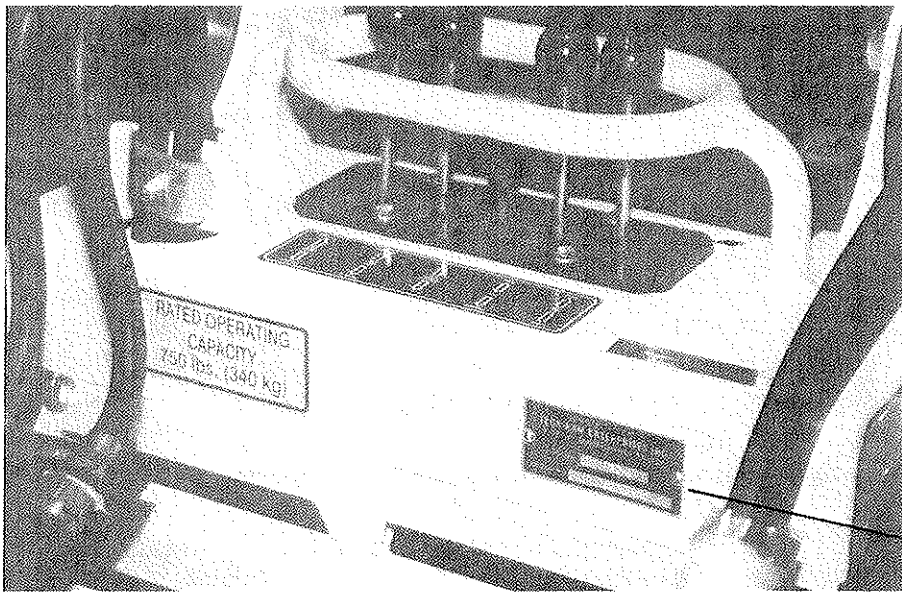




## LOADER IDENTIFICATION

The loader serial number plate is located on the front face of the control under the lift arm. The Briggs and Stratton engine serial number is located on the right side of the engine fan shroud. In order to qualify for warranty, the "New Loader Warranty Registration

Form" must be completed and one copy mailed to **RAMROD EQUIPMENT CORPORATION**. One copy should be retained by the Selling Dealer, and one by the Owner. For engine warranty, refer to the Briggs and Stratton Owners Manual.



SERIAL NUMBER  
PLATE

FIGURE 30

## **RAMROD WARRANTY**

The **RAMROD EQUIPMENT CORPORATION** warrants each new **RAMROD** Skid Steer Loader to be free from proven defects in material and workmanship under normal use and maintenance for a period of six (6) months, commencing with delivery to the original buyer. Under conditions of this warranty, the Skid Steer Loader must be operated according to manufacturer's instructions and by a competent and careful operator.

This warranty shall not apply to the Loader on any part thereof which has been subject to misuse, negligence, alteration, accident, or used in any way which, in the manufacturer's option, adversely affects its performance.

It is the responsibility of the Buyer, at his expense, to transport the Loader or any part thereof in fulfilling this warranty to a designated service shop.

In no event shall the Buyer be entitled to recover for incidental or consequential damages such as, but not limited to, rental of replacement equipment, loss of profits, and loss of Loader fluids and lubricants.

This warranty does not extend to Loader components such as, but not limited to, engine, tires, batteries, hydraulic/hydrostatic components which are manufactured by others, and which carry separate warranties of their respective manufacturer's

This warranty is in lieu of all other warranty expressed or implied, and there are no warranties of merchantability or fitness for a particular purpose.

No representative of the manufacturer, nor the selling dealer has authority to change this warranty in any manner whatsoever.

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