

**NEW**

**BEUTHLING**

**B150**

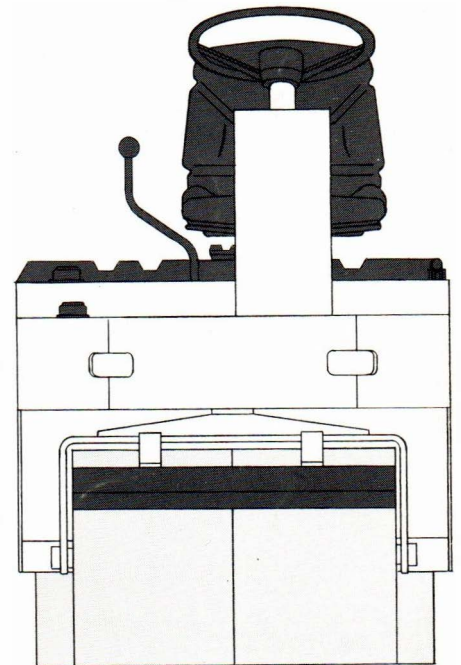
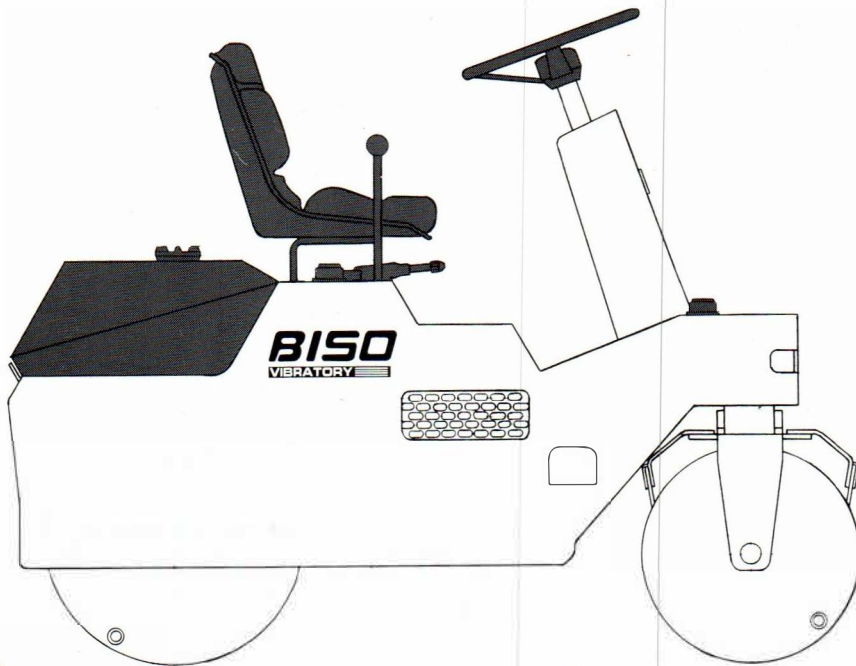
**VIBRATORY** 

STEEL WHEEL VIBRATORY COMPACTOR

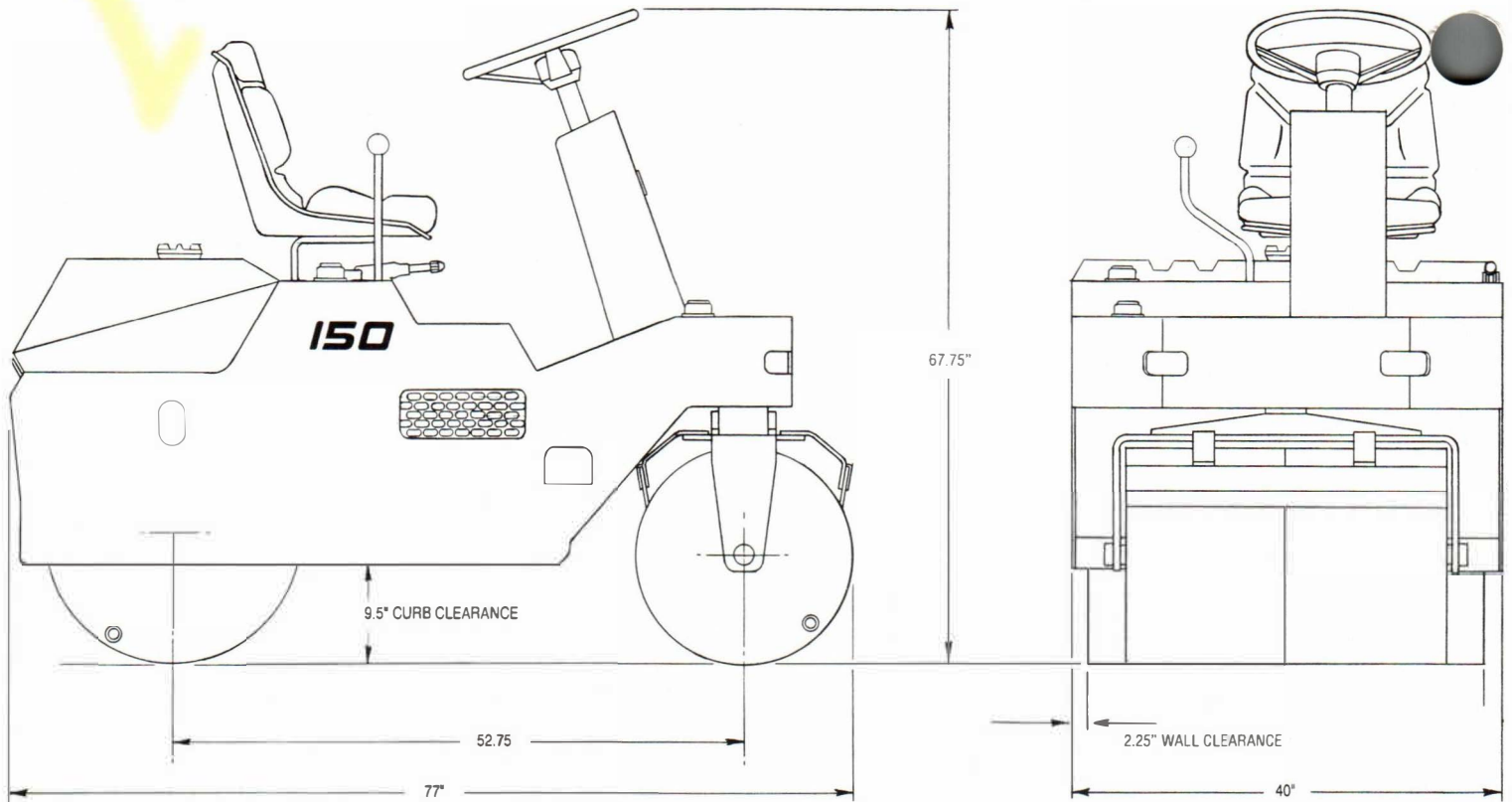
OWNER'S MANUAL  
PARTS MANUAL

S/N 1001 & UP

**NOTE:** When ordering parts be sure to indicate MODEL and SERIAL NUMBER of unit. Model and Serial number plate is located in engine compartment on frame right hand side plate.



WARNING! READ THIS MANUAL AND  CIMA ROLLER COMPACTOR SAFETY MANUAL BEFORE OPERATING OR SERVICING YOUR MODEL B150.



## OPERATION

### SAFETY WARNING

- BEFORE OPERATING UNIT, READ AND UNDERSTAND "OWNER'S MANUAL."
- IT IS THE CUSTOMER'S RESPONSIBILITY TO SUPERVISE, TRAIN AND EDUCATE THEIR EMPLOYEES OR ANY OTHER USER OF THIS EQUIPMENT FOR PROPER OPERATION, MAINTENANCE AND SAFETY.
- KEEP HANDS AND FEET CLEAR WHEN UNIT IS RUNNING OR MOVING.



OPERATING OR PARKING THIS UNIT ON INCLINES, HILLS, RAMPS OR NEAR THE EDGE OF A WORK SURFACE MAY BE DANGEROUS AND CAUSE THIS UNIT TO BECOME UNSTABLE OR ROLLOVER.



ALWAYS BE IN CONTROL OF YOUR UNIT

**FAILURE TO OBEY SAFETY WARNINGS MAY RESULT IN SERIOUS INJURY TO OPERATOR OR OTHERS.**

380-0027 REV



### WARNING:

Read this manual and the CIMA "Roller - Compactor Safety Manual", supplied with the machine, BEFORE starting, operating, or servicing the machine.

Before starting engine make certain control lever is in "NEUTRAL" (center) position and the secondary/parking brake is engaged. The transmission MUST be in the "NEUTRAL" position for the engine to be started. A neutral start switch has been included within the electrical system. The brake handle is located at the operator's right and is "ON" (or brake applied) when handle is in the up position and "OFF" when handle is in the down position.



### WARNING:

The machine MUST NOT move, at ANY time, when the secondary/parking brake lever is in the "ON" (up) position.

Do NOT operate the machine, if the machine will MOVE when the secondary/parking brake lever is "ON".

NEVER drive the machine with the secondary/parking brake lever "ON".

When starting, keep the secondary /parking brake in the "UP" (brake applied) position. If so equipped, and not previously done, unlock the locks securing the optional floor and dash covers. Move the covers to the stowed position. On gasoline engine powered machines, put the fuel shut off valve, if so equipped, in the "RUN" position is not previously done.

*Continued next page*



### **CAUTION:**

Never start the engine with the “amber” vibration system “on” indicator lighted. Damage to the vibrator clutch and/or engine can occur.

If the engine does NOT start within ten (10) seconds of continuous cranking, turn the ignition key switch to the “OFF” position and wait at least thirty (30) seconds. This will allow the starter motor time to cool. Try starting the engine again. Do NOT increase the speed of the engine ABOVE the LCYV rpm for a period of one (1) minute, to allow the hydraulic oil to reach operating temperature.

If so equipped with ROPS, IMMEDIATELY, after being seated, place the seat belt across the lap and SECURELY insert the metal end into the belt buckle. TIGHTEN the belt, AGAINST the body, by pulling on the loose end of the belt.

Move the engine speed throttle control to the LOW (down) engine idle speed position. Pull the engine choke knob to the “choke” (up) position, if the engine is cold.

Turn the ignition switch key to the START position. Crank and start the engine. The “green” (on) indicator light, located near the switch, will be lighted. If used, push the choke knob “in” as the engine warms. Put the engine throttle speed (RPM) control in the desired engine speed position and turn the throttle control handle clockwise to “lock” in position.



### **WARNING:**

Do NOT put the engine throttle speed (RPM) control in the “FULL” engine speed position when the machine is being run in a confined area, or is near ANY object.

Check operation of ALL gauges and instruments. Check the operation of ALL other optional equipment, such as the pressurized water sprinkler system and working lights, if so equipped. The machine is put into motion by moving the control lever in the direction of the travel desired. PUSHING the lever in the FORWARD direction will select a FORWARD direction of machine travel. PULLING the lever in the BACKWARD direction will select the REVERSE direction of the machine travel. If so equipped, note that the back up alarm system sounded when the control lever moved within the REVERSE position. The machine travel speed is proportional to the amount of the control lever movement, UNTIL full lever travel has been reached, in EITHER direction. The control lever should be moved slowly from one direction through neutral to the opposite direction. The procedure utilizes the hydraulic system’s DYNAMIC BRAKING capability to bring the machine’s weight to a complete stop, at neutral, before going in the opposite direction. This procedure allows the transmission system and engine to slow the machine to a stop.

If it is noticed that the engine power decreases when the control lever is fully advanced during a heavy pull, move the control lever back to increase power and decrease “engine lugging”.



### **WARNING:**

Slowing or stopping of machine during LEVEL surface operation is done by moving the directional/speed control lever TOWARD, and then TO the NEUTRAL position. Slow, or stop, the machine on a SLOPE, by moving the directional/speed control lever to the direction OPPOSITE the direction of machine travel.

If the machine speed can NOT be controlled through the use of dynamic braking, use dynamic braking AND the secondary/parking brake system to slow, and then stop the machine.

The secondary/parking brake system MUST be used to hold the machine in a “stopped” condition at ALL times. The transmission system will NOT hold the machine in a “stopped” condition.

### **VIBRATION SYSTEM**

To start and stop the vibration system an “on/off” switch is found on the directional/speed control lever. Push the switch to “ON” to start the vibration system. The “amber” (on) indicator light, located on the dash, will be lighted. Move the switch back to “OFF” to stop the vibration system.

### **WATER SPRINKLER SYSTEM**

The standard gravity, or optional pressurized water sprinkler system will help keep both drums clean when compacting asphalt. Fill the water tank with clean water. Located by the seat are dual water valves. Open these valves, by moving the valve handles, until the desired flow rate is obtained at each drum. If the machine is equipped with the optional pressurized sprinkler system, also, put the water sprinkler system control switch in the “ON” position (located on dash). NEVER run the system dry.

A full width cocoa mat is located on each drum and is used in combination with the water sprinkler system to help keep the drum surface clean.

### **DRUM SCRAPERS**

Both the front and rear drums are equipped with full width, adjustable rubber scrapers which are mounted ahead of, and behind each drum. These scrapers are designed to help keep large pieces of material from clinging to the drums when traveling in either direction. The scrapers must remain adjusted against the surface of the drums at all times.

### **DRUM BALLAST**

This machine is designed for use with or without liquid ballast in the front and rear drums.

Greater compaction will be achieved WITHOUT liquid ballast, when vibration is used. If water ballast is used in temperatures below freezing, use 30% alcohol in water. If fuel oil is used, allow 10% for expansion. A pipe plug is located in each roller for filling and draining purposes, be sure to fill both front drums. Access to plug in rear roller is through a large clearance hole in right side plate. Rotate rear roller to remove plug.

Before stopping the engine make sure the vibration switch is “OFF”. Place the directional/speed control lever in NEUTRAL. Put the secondary/parking brake lever in the “UP” position to apply brake. Put the engine throttle control in the LOW engine idle speed (RPM) position. Run the engine for a period of at LEAST one (1) minute, at the LOW idle speed, BEFORE the engine is stopped.

### **TOWING BY-PASS VALVE**

The towing by-pass valve is located on the top of the hydraulic transmission in the engine compartment. Normal operation-close valve CW (clockwise), to freewheel-open valve 180 degrees CCW (counterclockwise). See by-pass valve decal next to valve for operating instructions.

*Continued next page*

Do NOT tow the machine unless it is TOTALLY disabled and MUST be moved from the job site for repair. If the machine must be removed from the work surface, tow it at a SLOW SPEED and on a LEVEL surface ONLY. Tow it only for a distance less than 100 feet, without the engine "running".

If the machine must be towed a longer distance than above, also disconnect the rear drum drive chain and remove it from the machine. NEVER tow this machine on a road or highway.

 **CAUTION:**

**BEFORE and AFTER towing APPLY the secondary/parking brake. Return the towing by-pass valve to the "normal operation" (closed) position. Always block drums when machine is stationary with a by-pass valve in FREEWHEEL (OPEN) position.**

### MACHINE TRANSPORT

When the machine is being moved by truck or trailer, use SOLID wood blocking. Use SOLID wood blocks in front, and at the rear, on EACH side of EACH drum. Six (6) tie-down areas are provided and are to be used, with the blocking, to secure the machine to the truck or trailer bed when transporting the machine. Secure all fill caps and covers before transporting.

## MAINTENANCE

 **WARNING:**

**DO NOT operate machine if any part is not in proper operating condition or is missing. Always remove key from switch when performing maintenance (engine off), leaving equipment unattended or when equipment is not in use.**

### ENGINE

Daily check the engine lubrication oil level in the crankcase. The engine lubrication oil MUST be kept at a level ABOVE the "ADD" mark but NOT ABOVE the "FULL" mark on the engine lubrication oil dipstick. Check the engine inlet air cleaner condition and remove and replace as needed.

 **CAUTION:**

**See the "Engine Operation and Maintenance Instruction Manual", published by the Kohler Engine, for approved, correct engine component inspection and maintenance periods and/or procedures.**

### HYDRAULIC SYSTEM

After a new machine has run FIVE (5) hours, the oil filter should be changed. This is to rid the system of any trapped contamination from factory assembly. ANYTIME the filter has been changed, IDLE engine for three (3) minutes with control lever in neutral. At the end of this running period SLOWLY engage forward to reverse. This allows fluid to replace the air in the pump area introduced into the system with the filter change. IF THIS PROCEDURE IS NOT FOLLOWED partial or complete failure of the pump will result.

Check hydraulic fluid daily, change fluid and filter every 250 hours or yearly, sooner if conditions warrant, i.e., extreme dust or condensation. The B100 is equipped with a 3 gallon oil reservoir - when changing or adding fluid, use Sunco TH Fluid or Equivalent. To prevent any foreign matter from entering the

tank, extreme care should always be used when removing fill cap. Fluid is at proper level when seen at the "middle" of the screen in the fill neck.

### DIRECTIONAL CONTROL LEVER

Lubricate the directional control lever and cable assembly exposed, and pivoting part areas, with EP-2 chassis grease. NO zerk fitting is found on the directional control lever and/or cable assembly. Inspect the mechanical condition of the control lever and cable assembly. It must NOT be loose, damaged, or bind within the lever, or cable. Repair, or replace, the direction control lever and/or cable assembly if any damage is noted.

### SECONDARY/PARKING BRAKE

Daily inspect and adjust (if necessary) brake lever next to operator. Further adjustment can be made at the brake band clevis (2) and brake cable threaded mount. Check and inspect brake cable. Lubricate the secondary/parking brake arm assembly, found on the right side of the machine. Access to the one (1) zerk fitting is from the under side of the arm assembly.

### FRONT DRUMS

Several times per year, lift the front drums and check for any side movement (end play) of the drums, through the tapered roller bearings. If needed, adjust the movement by loosening the two (2) set screws found on each end of the front axle and tightening the cap screws (having grease zerks) to obtain correct end play. Retighten the set screws.

### DRIVE CHAIN/REAR DRUM

Weekly check the main drive chain for link wear, or damage. Repair, or replace, the drive chain if any wear, or damage is noted. Check the slack adjustment of the drive chain. The chain should have 1/2 inch slack. The slack is measured by laying the straight edge on top of the chain, between the sprockets. The chain "sag", measured at the center of the chain, between the sprockets should be 1/2 inch. To tighten the main drive chain, adjust chain tensioner inward. Removal of a chain link will compensate for any excess stretch which may develop in the chain. Check for proper sprocket alignment, if necessary hydraulic motor mount may be adjusted left to right by loosening the four (4) motor mount bolts, retighten securely. Use a brush, or a oil can, to lubricate the main drive chain with "light" oil.

### DRUM SCRAPERS/COCOA MATS

Check the condition and adjustment of all four (4) rubber scrapers, if worn beyond adjustment replace with new. NOTE: Rubber scrapers can be removed and flipped to opposite side to extend life. Check and replace both cocoa mats when worn or damaged. Never allow steel cocoa mat to come in contact with drum.

### BEARINGS

Lubricate each of the four (4) front axle bearings through the one (1) zerk fitting found at the left, and the right end of the front axle shaft with EP-2 chassis grease. Use enough grease through zerk fitting to purge old grease on inner bearings.

All bolts, drive coupling set screws and collar set screws of bearings, should be checked during each periodical maintenance check and lubrication activity.

See lubrication chart in this manual and under center floor cover for complete bearing lubrication.

*Continued next page*

## VIBRATORY SYSTEM

Check condition of vibration system drive belt. Replace the belt with new, if found to be cut, torn or other damage. To adjust drive belt, loosen tensioner bolt on the outer left hand main frame side plate. Swing tensioner arm downward to achieve proper belt tension, and retighten tensioner mounting bolt. Always make sure there is tension against the tensioner arm and pulley. NEVER attempt to adjust belt tensioner with engine on.

Inspect the condition of the four (4) rubber drum mounts. Immediately replace any mount, with new if found to be torn, cracked or otherwise damaged.

## VIBRATOR SHAFTS TIMING

Two eccentric shafts create the vibration in the rear drum. If either of these shafts are removed, they must be properly timed when replaced. Timing is achieved through proper meshing of the steel and fiber gears located at the end of the vibrator shafts. Proper timing procedure is to mesh the gears together so that the dot indentation of each gear is lined up with the other. When properly timed, four cycles take place with each revolution of both shafts as follows: The out of balance weight of each shaft first point down together, second point the opposite direction of each other, third point up together and fourth point toward each other. This type of vibrating

action produces only a straight up and down motion to the rear drum, never a forward or backward motion.

## ELECTRICAL SYSTEM

This system is 12-volt, during engine and other system maintenance inspections, check the electrical wiring for correct routing and support. Inspect the wires for loose terminal connections, cracks or wear in the wiring insulation and for corrosion.



### WARNING:

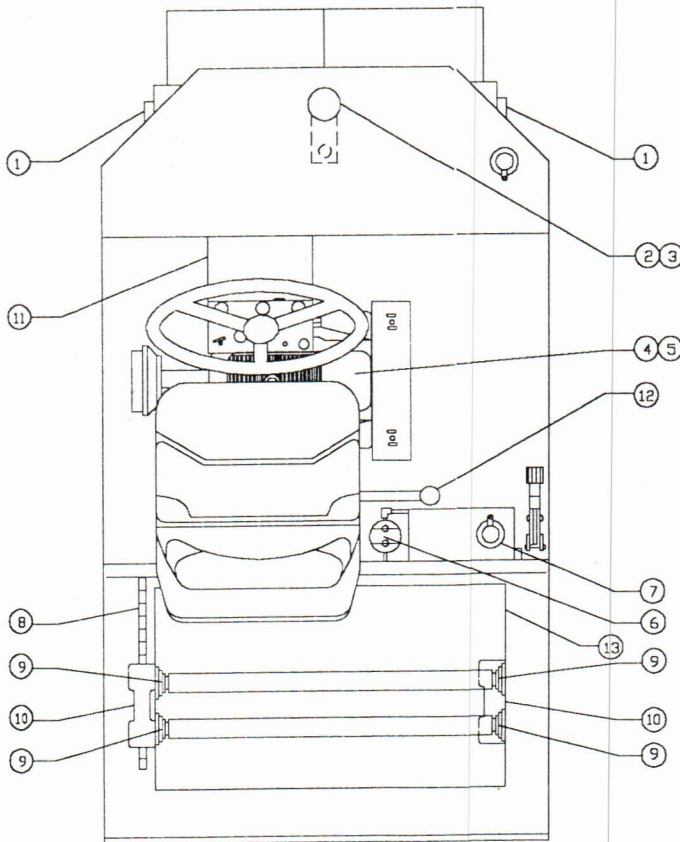
**BATTERY EXPLOSION CAN OCCUR IF A BATTERY IS SHORTED. ALWAYS disconnect BOTH the positive (+) AND the negative (-) battery cables from a battery, BEFORE ANY repair procedures are done to the electrical wiring or components. DO NOT weld on machine unless battery is disconnected.**

A thirty (30) amp circuit breaker has been installed in the electrical circuit. It is located on the lower steering column, in the engine compartment. If a circuit overload occurs, the circuit breaker will reset automatically every ten (10) seconds, or until the cause of the overload has been located and corrected.

The machine is equipped with an hourmeter. NEVER attempt to disconnect the hourmeter. Engine and machine operating hours are essential for proper machine maintenance.

## LUBRICATION CHART

### MODEL 150

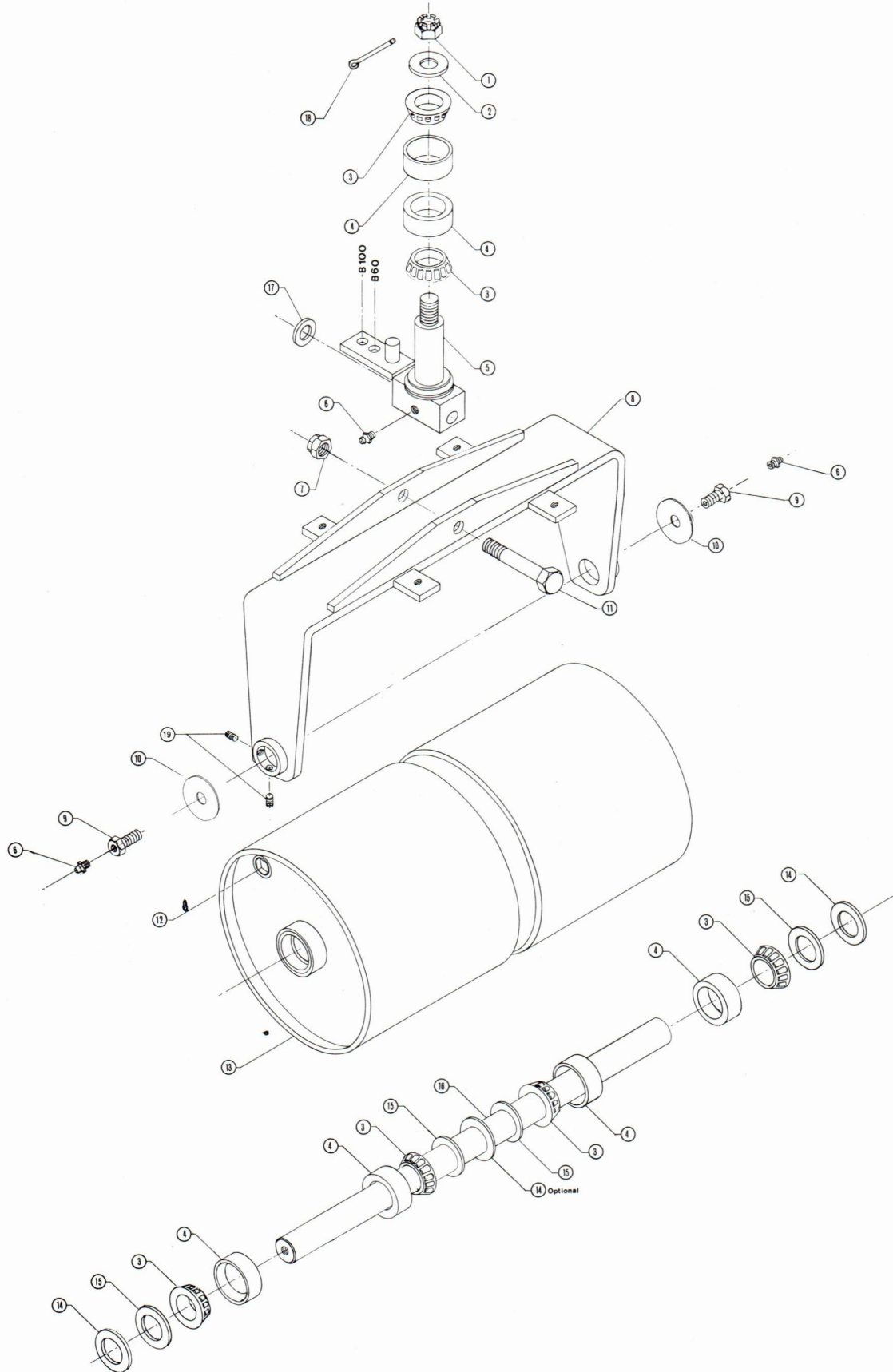


Ref. No.	Lubrication Point					Types of Lubricant	Lub. Fitting
		DAILY	WEEKLY	MONTHLY	250 HOURS		
1	Front Axle Bearings	•				EP-2 Chassis Lub.	Yes
2	Front Pivot Tube	•				EP-2 Chassis Lub.	Yes
3	Oscillating King Pin	•				EP-2 Chassis Lub.	Yes
4	Engine Crankcase/Filter	✓				See Engine Manual	No
5	Engine Air Cleaner	✓				See Engine Manual	No
6	Hydraulic Oil Filter				•	Replace	No
7	Hydraulic Oil Reservoir	✓				• Sunco TH Fluid or Equivalent	No
8	Main Drive Chain		✓	•		Light Grade Oil	No
9	Vibrator Shaft Flange Bearings (4)					Sealed Bearing	No
10	Rear Pillow Block Drum Bearings (2)		✓	•		EP-2 Chassis Lub.	Yes
11	Steering Gear Box				✓	EP-2 Chassis Lub.	No
12	Control Lever	✓	•			EP-2 Chassis Lub.	No
13	Parking Brake Arm Assembly	✓	•			EP-2 Chassis Lub.	Yes

✓ Check

• Lub. or Change

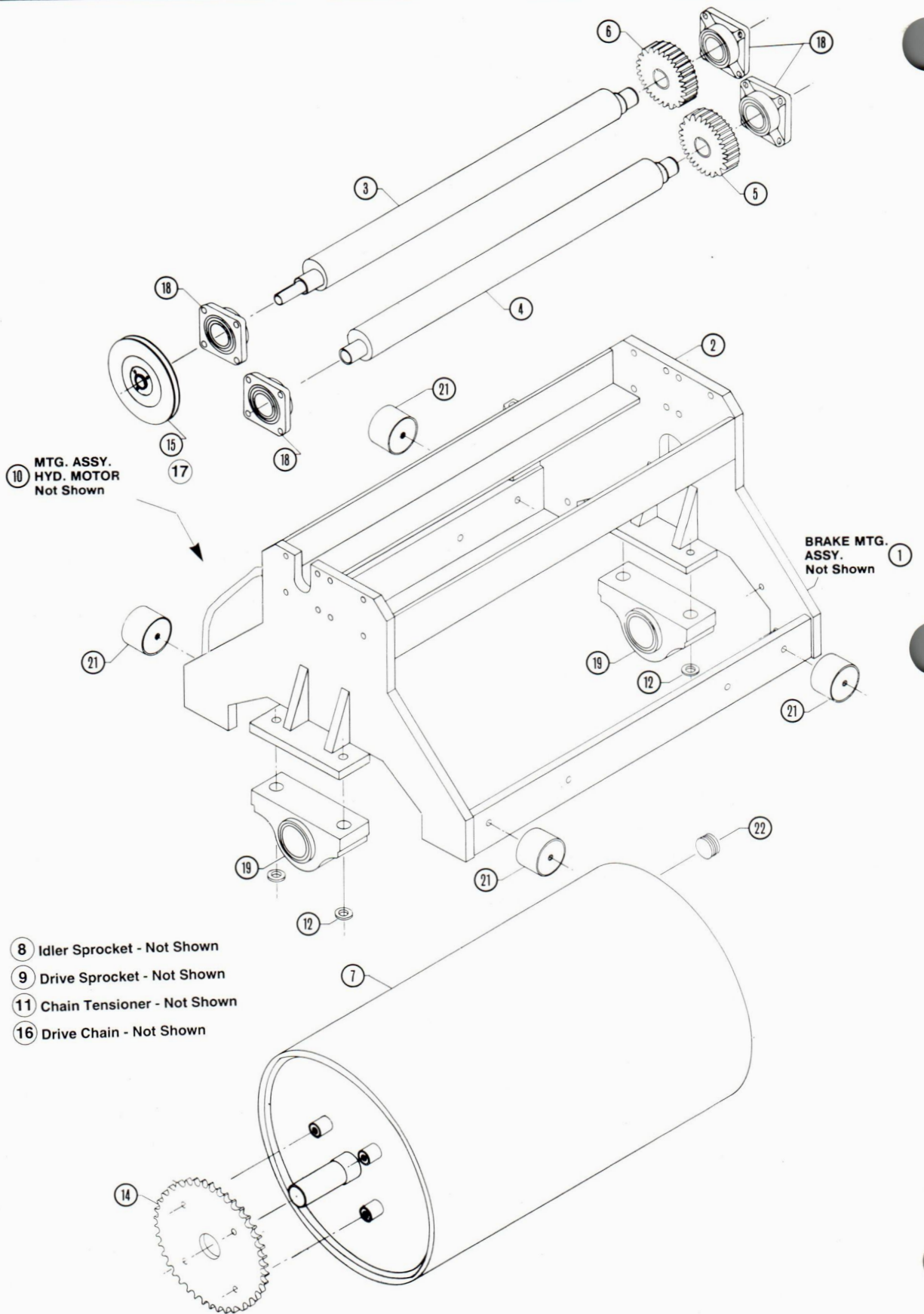
See Owner's Manual For Further Details



## FRONT END ASSEMBLY

150

Item No.	Part No.	Description	Qty.
1	609-0076	1 1/4" - 12 NF Thd. Hex Slotted Nut .....	1
2	000-1043	Washer - King Pin .....	1
3	300-0001	Bearing Cone .....	6
4	300-0002	Bearing Cup .....	6
5	000S1380	King Pin Assembly .....	1
6	370-0001	1/4 - 28 NF Grease Fitting .....	3
7	607-0010	1" - 8 NC Thd. Flexloc Nut .....	1
8	000S1325	Yoke Assembly .....	1
9	000-1106	Rework - Cap screw w/ lock washer .....	2
10	000S1109	Washer.....	2
10	000-1107	Washer - Front Axle.....	2
11	600-9000	King Pin Bolt .....	1
12	526-0001	1 1/4" Countersunk Ballast Fill Plug.....	2
13	000S1323	Front Drum Assembly .....	2
14	000-1059-1-2-3	Front Axle Bearing Spacer .....	Vari.
15	000-1058	Front Axle Grease Seal Inner & Outer.....	4
16	000-1057	Front Axle.....	1
17	000-1292	King Pin Bolt Spacer.....	Vari.
18	630-0009	Cotter Pin .....	1
19	615-5001	3/8" - 16 NC x 1/2" Soc. Head Set Screw .....	4

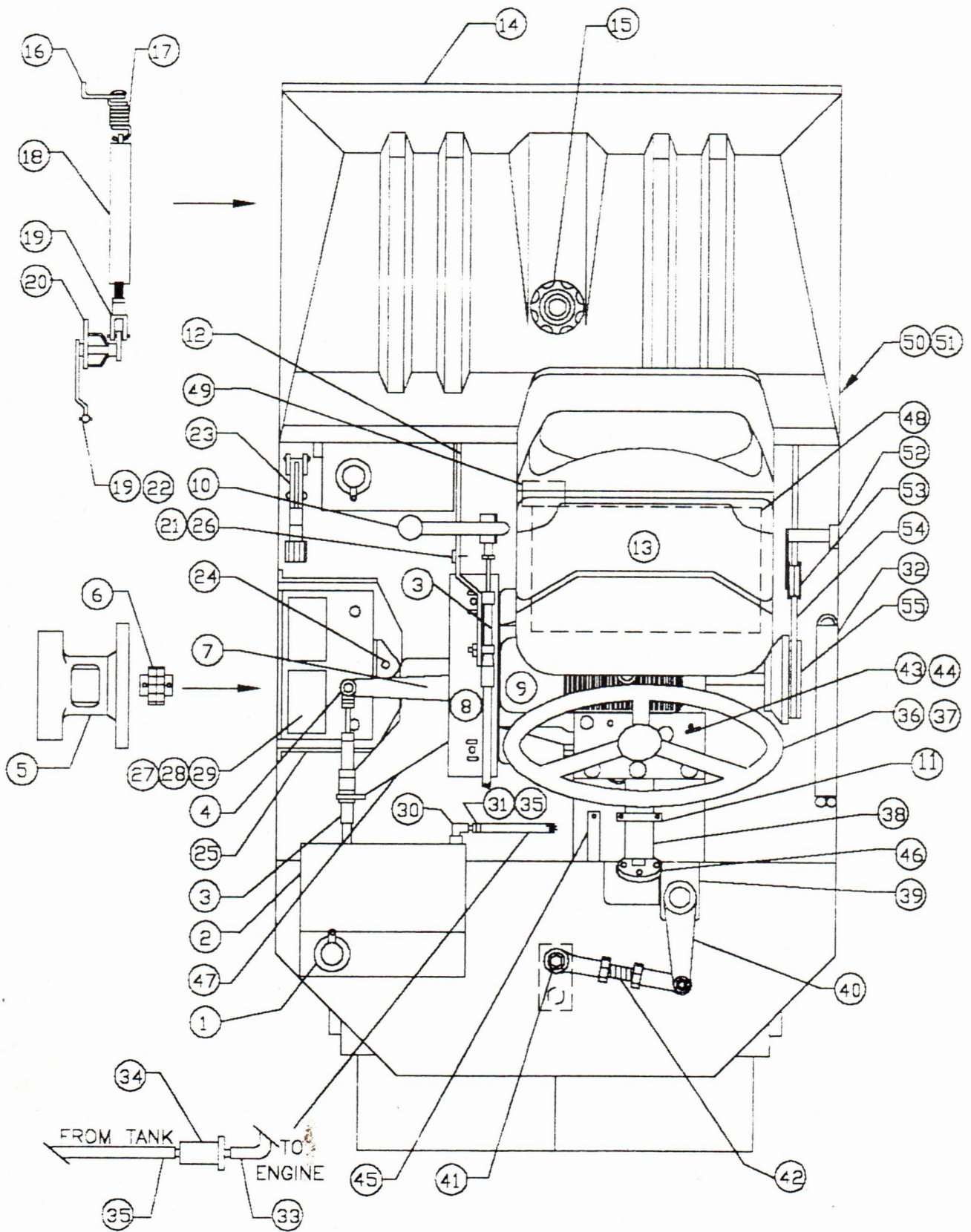




**REAR END ASSEMBLY**

**150**

Item No.	Part No.	Description	Qty.
1	000S6040	Brake Mounting Assembly - NOT SHOWN.....	1
2	000S6052	Vibrator Frame.....	1
3	000-6015	Vibrator Driving Shaft.....	1
4	000-6016	Vibrator Driven Shaft.....	1
5	000-1094	Fiber Spur Gear.....	1
6	000-1095	Steel Spur Gear.....	1
7	000S6014	Rear Drum Assembly.....	1
8	220-0009	Idler Sprocket - NOT SHOWN.....	1
9	000-1347	Drive Sprocket - NOT SHOWN.....	1
10	000S1118	Foot Mount Assembly - NOT SHOWN.....	1
11	220-0003	Chain Tensioner - NOT SHOWN.....	1
12	000-1221	Spacer - Rear Drum Bearing.....	4
14	000-6001	Sprocket - Rear Drum.....	1
15	220-0005	Vibrator Shaft Pulley.....	1
16	225-0017	Drive Chain - NOT SHOWN - No. 60-86.....	1
17	220-0006	Taperlock Bushing.....	1
18	300-0003	Vibrator Shaft Bearing.....	4
19	300-0026	Rear Drum Bearing.....	2
21	325-0001	Rubber Mounts.....	4
22	526-0001	1 1/4" Countersunk Ballast Fill Plug.....	1



## MISCELLANEOUS COMPONENTS

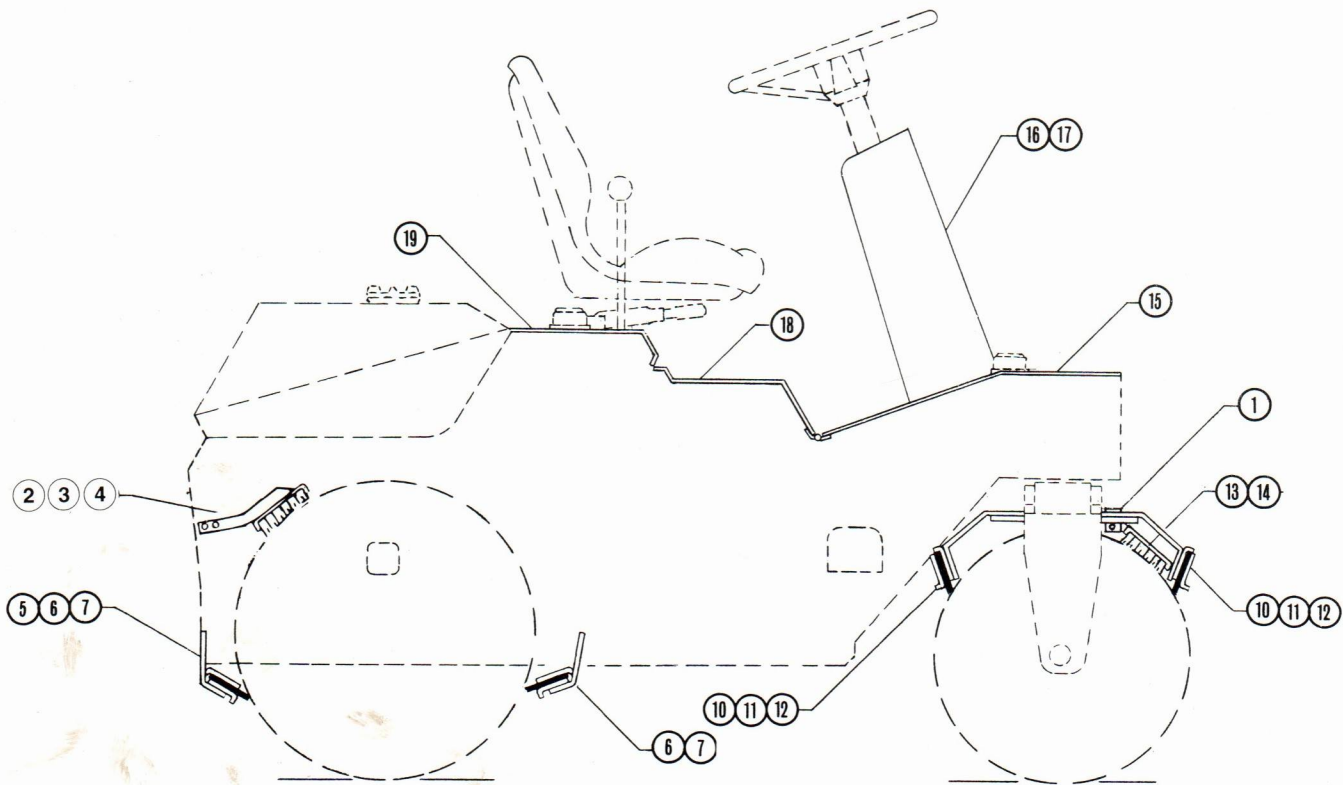
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Item No.	Part No.	Description	Qty.
1	350-0002	Filler Cap Assembly w/Screen .....	1
2	00S1358	Fuel Tank Assembly .....	1
3	315-0010	Pump Control Cable.....	1
4	645-0022	Ball Joint .....	2
5	345-0001	Pump Mount (000-1295) .....	1
6	230-0006	Chain Coupling .....	1
7	00S3020	Pump Control Lever.....	1
8	200-0269	Muffler - Kohler TH16 .....	1
9	200-0268	Kohler Engine - 16 HP Twin Model TH16 .....	1
10	000-3036	Forward & Reverse Control Lever Assembly.....	1
11	000-1182	Mounting Bar - Steering Column .....	1
12	000-1409	Upper Control Cable Bracket.....	1
13	395-0001	Seat .....	1
14	000-1402	Polyethylene Water Tank.....	1
15	350-0020	Water Cap w/Chain .....	1
16	000-1219	Spring Anchor .....	1
17	360-0001	Tension Spring.....	1
18	00S1121	Brake Band Assembly .....	1
19	635-0002	Clevis with Pin & Cotter .....	3
20	00S6040	Brake Arm Assembly .....	1
21	000-1479	Back Up Alarm Switch Bracket .....	1
22	315-0012	Brake Cable .....	1
23	310-0001	Brake Lever .....	1
24	385-0074	Battery Hold Down Clamp .....	1
25	000-1405	Battery Tray .....	1
26	335-0094	Back Up Alarm Switch .....	1
27	335-0001	Battery 12 Volt .....	1
28	335-0250	Battery Cable - Negative - NOT SHOWN .....	1
29	335-0251	Battery Cable - Positive - NOT SHOWN .....	1
30	502-0047	90° Adapter 1/4 - 1/4 NPT x 1/4 Barb .....	1
31	645-0031	1/4" Fuel Hose Clamp .....	4
32	125-0001	Heat Exchanger .....	1
33	420-0001-3	1/4" Fuel Line x 3" Lg. (Filter to Engine) .....	1
34	200-0027	Fuel Filter .....	1
35	420-0001-39	1/4" Fuel Line x 39" Lg. - (Filter to Tank) .....	1
36	330-0004	Steering Wheel .....	1
37	330-0005	Steering Wheel Cap.....	1
38	00S3054	Steering Column Assembly .....	1
39	330-0021	Steering Gear Assembly .....	1
40	330-0022	Pitman Arm .....	1
41	645-0025	Ball Joint - B000S1464 Assembly .....	2
42	000-1036	Steering Tie Rod - B000S1464 Assembly .....	1
43	315-0019	Throttle Cable .....	1
44	315-0001	Choke Cable .....	1
45	000-1389	Brace - Steering Column .....	1
46	330-0007	Steering Coupling .....	1
47	000-1475	Pump Control Base Plate.....	1
48	00S1240	Seat Base Assembly .....	1
49	335-0084	Back Up Alarm .....	1
50	220-0003	Tensioner - Chain - NOT SHOWN.....	1
51	220-0009	Idler Sprocket - Chain - NOT SHOWN .....	1
52	220-0003	Tensioner - Vib. Belt .....	1
53	220-0002	Tensioner Pulley .....	1
54	235-0008	BX63 Vibrator Belt .....	1
55	210-0002	Electric Clutch.....	1

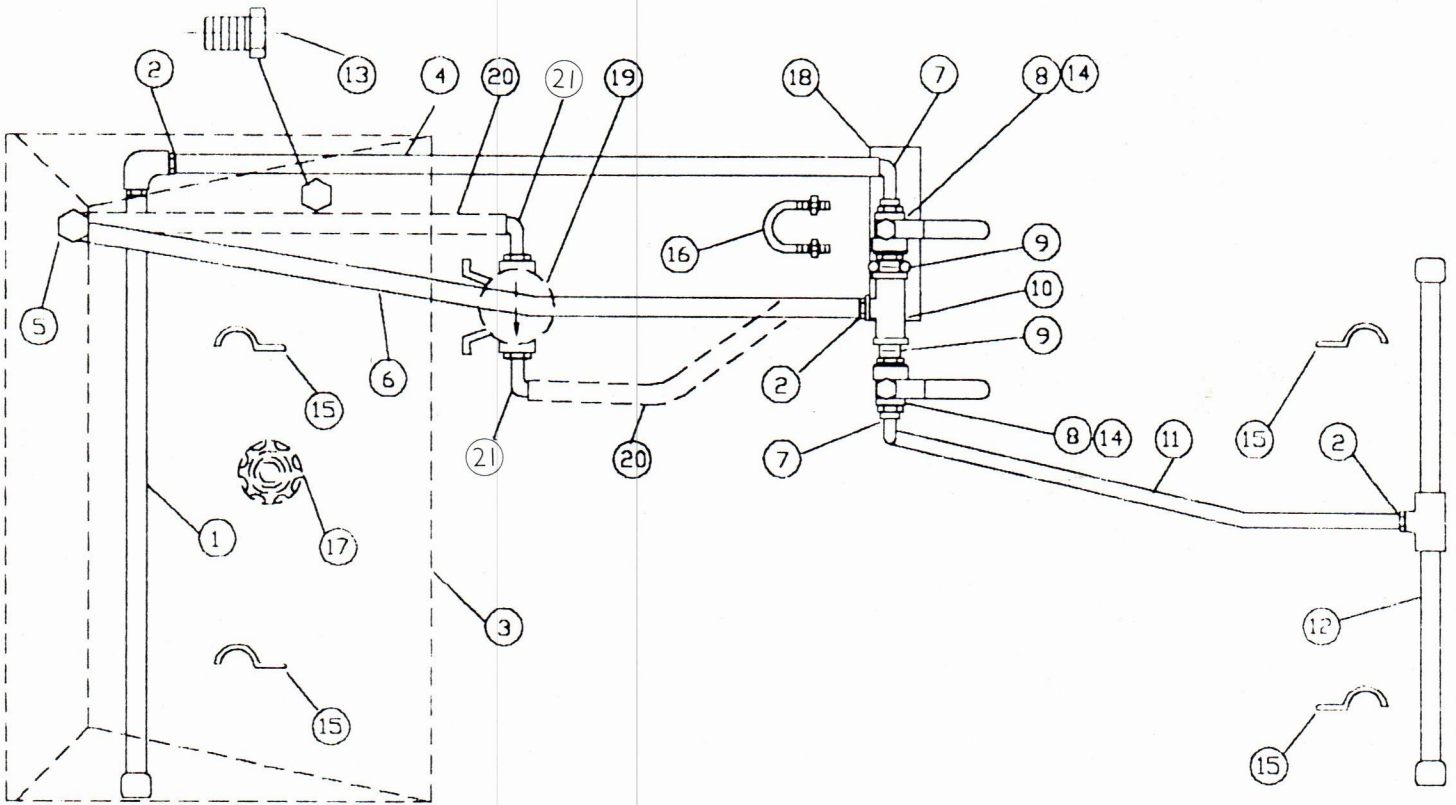
## COVERS, RUBBER SCRAPERS AND COCOA MATS

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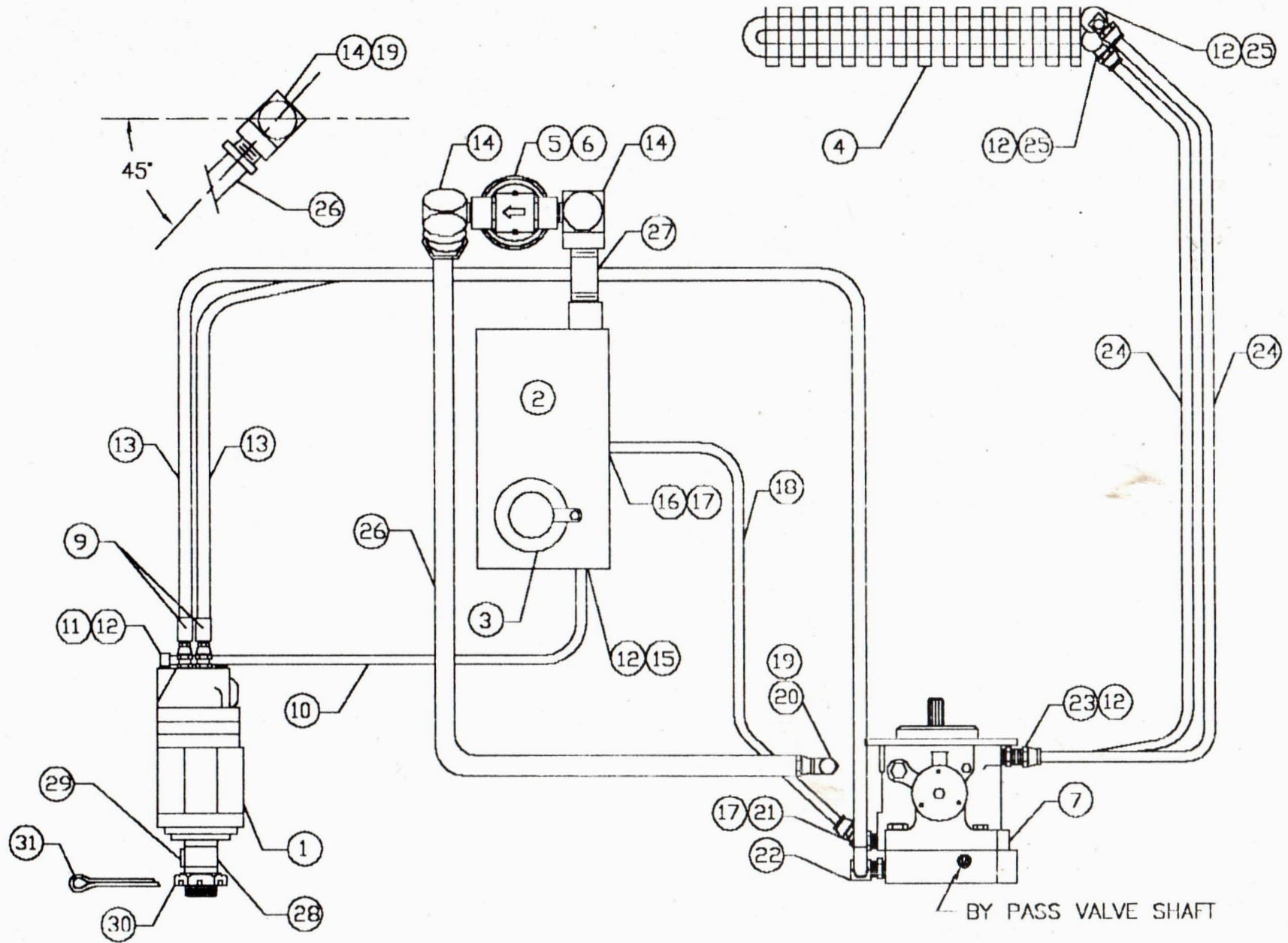
Item No.	Part No.	Description	Qty.
1	000-1416	Front Cocoa Mat Pivot Bracket.....	2
2	000-1271	Rear Cocoa Mat Pivot - Bracket .....	2
3	000-6053	Cocoa Mat Pan - Rear .....	1
4	355-0018	Cocoa Mat Rear .....	1
5	000-1296	Bracket - Rear Drum Scraper .....	4
6	000-6004	Back Up Bar - Rear Rubber Scraper .....	4
7	000-6003	Rear Rubber Scraper.....	2
10	000-1268	Back Up Bar - Front Rubber Scraper.....	4
11	000-1269	Front Rubber Scraper .....	2
12	000-1407	Front Scraper Arm .....	4
13	000S1419	Front Cocoa Mat Pan.....	1
14	355-0001	Cocoa Mat Front .....	1
15	000-1363	Front Floor Cover.....	1
16	000S1401	Back Up Plate Assembly - Steering Column - NOT SHOWN .....	1
17	000-1370	Steering Column Cover .....	1
18	000S1367	Center Floor Cover Assembly .....	1
19	000-6005	Rear Floor Cover .....	1
*	380-0079	Complete Set of Decals .....	1



# SPRINKLER SYSTEM 150



Item No.	Part No.	Description	Qty.
1	000S6002	Rear Sprinkler Bar Assembly (PVC Sch 40) .....	1
2	540-0002	Straight Adapter 1/2 NPT x 1/2 Barb .....	2
3	000-1402	Water Tank .....	1
4	424-0001-26	1/2" I.D. Low Pressure Hose x 26" Lg.....	1
5	542-0003	90° Poly Adapter 3/4 NPT x 1/2 Barb (3 Required with Water Pump) .....	1
6	424-0001-34	1/2" I.D. Low Pressure Hose x 34" Lg.....	1
7	542-0002	90° Poly Adapter 1/2 NPT x 1/2 Barb .....	2
8	530-0001	1/2" Bronze Ball Valve .....	2
9	520-0010	1/2" NPT Nipple Galvanized Pipe .....	2
10	523-0001	1/2" NPT Tee Galvanized Pipe .....	1
11	424-0001-52	1/2" I.D. Low Pressure Hose x 52" Lg.....	1
12	000S1123	Front Sprinkler Bar Assembly (PVC Sch 40) .....	1
13	546-0002	3/4" NPT Plug (PVC Sch 40) .....	1
14	000-6056	Handle Extension - Water Valve .....	2
15	645-0008	1/2" Pipe Clamp .....	4
16	645-0019	U-Bolt for Ball Valve.....	1
17	350-0004	Vented Cap - Water Tank .....	1
18	000-1733	Water Valve Bracket .....	1
19	338-0014	2100 - 579 Water Pump - OPTIONAL .....	1
20	424-0001-28	1/2" I.D. Low Pressure Hose x 28" Lg. - OPTIONAL .....	2
21	542-0004	90° Poly Adapter 3/8 NPT x 1/2 Barb .....	2



**▲ OPERATION WARNING ▲**  
 EQUIPPED WITH TRANSMISSION BY-PASS VALVE  
 NORMAL OPERATION - CLOSE VALVE CW (CLOCKWISE)  
 FREEWHEEL - OPEN VALVE 180° CCW (COUNTER CLOCKWISE)

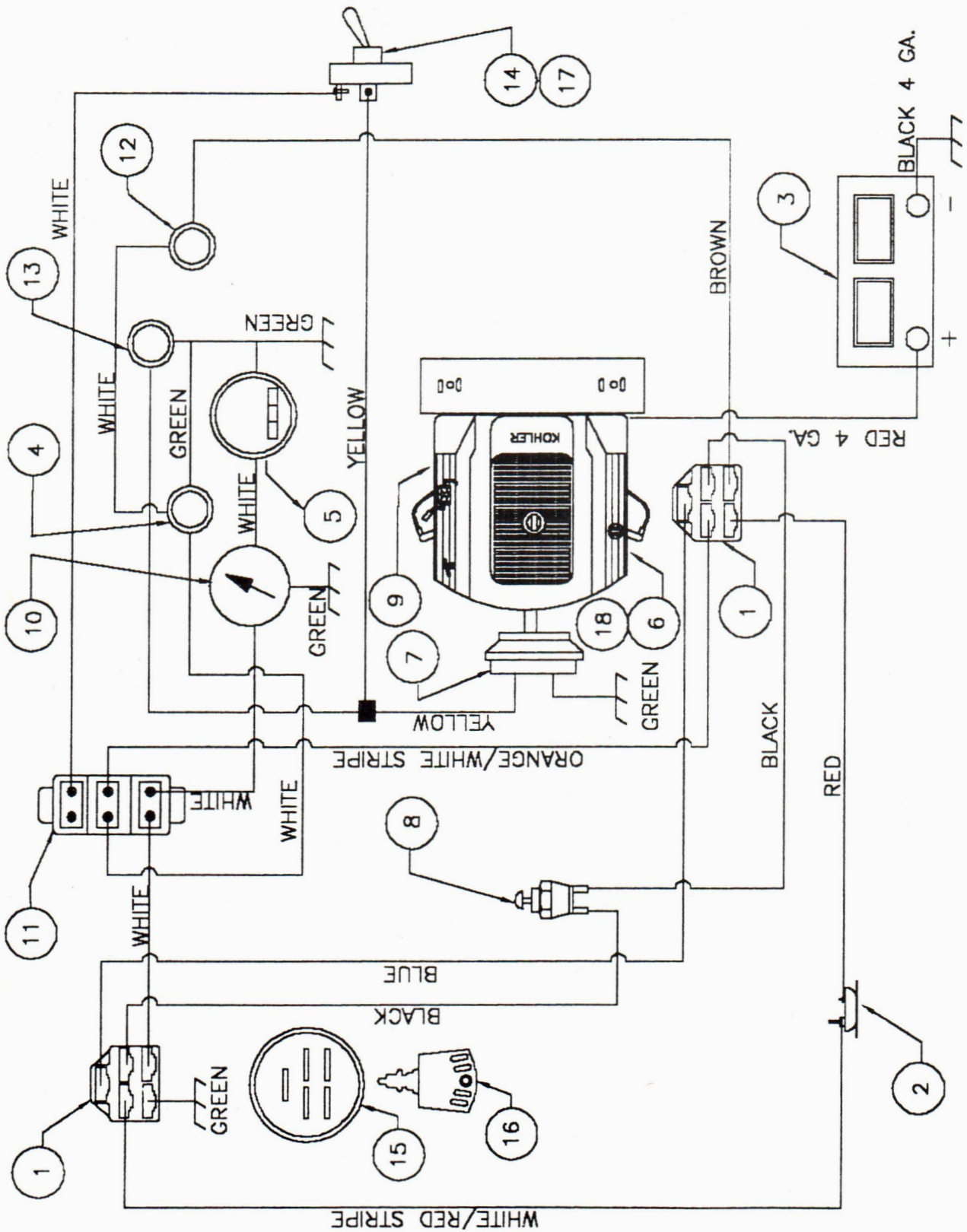
NORMAL OPERATION (CLOSED)  
 FREEWHEEL (OPEN)

8

**HYDRAULIC SYSTEM w/TH16 KOHLER  
150**

*possibly should be  
sup-0029*

Item No.	Part No.	Description	Qty.
1	105-0010	Hydraulic Drive Motor .....	1
2	C000S1362	Oil Reservoir Assembly - 3 U.S. Gallons .....	1
3	350-0002	Filler Cap Assembly w/Screen .....	1
4	125-0001	Heat Exchanger .....	1
5	130-0001	10 Micron Filter Complete .....	1
6	130-0002	10 Micron Filter Element Only .....	1
7	100-0008	Hydraulic Pump with Internal Transmission By-Pass .....	1
8	380-0021	Transmission By-Pass Valve Decal .....	1
9	500-0016	Straight Adapter 7/8 - 14 Male Straight Thread "O" Ring x 7/8 - 14 Male 37 Deg. IC .....	2
10	423-0001-20	3/8" I.D. Low Pressure Hose x 20" Lg. ....	1
11	500-0068	Straight Adapter 7/16 - 20 Male Straight Thread "O" Ring x 9/16 - 18 Male 37 Deg. JIC .....	1
12	500-0007	Barbed Insert 9/16 - 18 Female Swivel 37 Deg. JIC x 3/8 Barb .....	6
13	<del>404-0026</del>	1/2" I.D. High Pressure Hose 3500 PSI - 7/8 - 14 Female Swivel 37 Deg. JIC B.E. x 26" Lg. ....	2
14	502-0007	90 Deg. Adapter 3/4 - 14 Male NPT x 3/4 - 14 Female NPT .....	1
15	500-0070	Straight. Adapter 3/8 - 18 NPT Male x 9/16 - 18 Male 37 Deg. JIC .....	1
16	500-0071	Straight Adapter 1/2 - 14 NPT Male x 3/4 - 16 Male 37 Deg. JIC .....	1
17	500-0005	Barbed Insert 3/4 - 16 Female Swivel 37 Deg. JIC x 1/2 Barb .....	2
18	424-0001-18½	1/2" Low Pressure Hose x 18½" Lg. TH16 .....	1
19	500-0006	Barbed Insert 3/4 - 14 NPT Male x 3/4 Barb .....	2
20	502-0004	90 Deg. Adapter 3/4 - 14 NPT Female Swivel x 3/4 - 16 Male Straight "O" Ring .....	1
21	500-0001	Straight Adapter 3/4 - 16 Male Straight Thread "O" Ring x 3/4 - 16 Male 37 Deg. JIC .....	3
22	500-0004	Straight Adapter 9/16 - 18 Male Straight Thread "O" Ring x 9/16 - 18 Male 37 Deg. JIC .....	2
23	502-0013	90 Deg. Adapter 9/16 - 18 Male Straight Thread "O" Ring x 9/16 - 18 Male 37 Deg. JIC .....	2
24	423-0001-33	3/8" I.D. Low Pressure Hose x 33" Lg. ....	2
25	500-0072	Straight Adapter 1/4 - 18 NPT Male x 9/16 - 18 Male 37 Deg. JIC .....	1
26	426-0001-22	3/4" I.D. Low Pressure Hose x 22" Lg. TH16 .....	1
27	520-0022	3/4" NPT Pipe Nipple Close. ....	1
28	000-1347	Drive Sprocket - NOT SHOWN .....	1
29	105-0020	Special Drive Motor Key .....	1
30	609-0077	Hexagon Thin Slotted Nut .....	1
31	630-0010	1/8" x 1 3/4" Cotter Pin .....	1





**ELECTRICAL SYSTEM w/TH16 KOHLER ENGINE**  
**150**

Item No.	Part No.	Description	Qty.
1	335-0074	5-Way Connector (1) at Keyswitch (1) at Engine.....	2
2	335-0063	30 Amp. Circuit Breaker - Under Dash .....	1
3	335-0001	Battery 12-Volt .....	1
4	335-0019	Green Running Light .....	1
5	375-0001	Hour Meter .....	1
6	335-0008	Solenoid - On Engine.....	1
7	210-0002	Electric Clutch .....	1
8	335-0013	Neutral Start Switch - at Control Lever .....	1
9	200-0268	Engine - Kohler 16 HP Twin Model TH16 (gas).....	1
10	335-0072	Volt Meter.....	1
11	335-0021	Terminal Block - Under Dash.....	1
12	335-0105	Red Light - Low Oil Indicator .....	1
13	335-0007	Amber Light - Vib. Indicator .....	1
14	335-0071	Vibrator On/Off Toggle Switch - at Control Lever Knob.....	1
15	335-0047	Keyswitch - 5-pole 12-volt w/Keys .....	1
16	335-0064	Spare Keys .....	2
17	335-0067	Rubber Boot for Toggle Switch.....	1
18	200-0274	Starter - Kohler TH16 .....	1
*	000-6000	Beuthling Wiring Harness - NOT SHOWN.....	1

SPECIFICATIONS

**WEIGHTS**

Shipping Weight..... 2400 lbs.  
Operating Weight (Full Ballast + Operator) ..... 3300 lbs.

**DIMENSIONS**

Overall Length ..... 77 In.  
Overall Height..... 67.75 in.  
Overall Width ..... 40 in.  
Wheelbase ..... 50.75 in.  
Curb Clearance ..... 9.50 in.  
Wall Clearance ..... 2.25 in.  
Turning Radius Inside ..... 60 in.

**CAPACITIES**

Fuel ..... 3 gal.  
Hydraulic Fluid ..... 3 gal.  
Engine Oil (w/filter) ..... 1.5 qts.  
Water Tank..... 34 gal.

**DRUMS**

**FRONT:**

Type.....Steel, machined surface w/ballast fill plug  
Overall Width ..... 30 in.  
Diameter ..... 20 in.  
Shell Thickness ..... .375 in.  
Oscillation ..... 24 Total  
Steering Front Drum.....Automotive Type, Mechanical

**REAR:**

Type.....Steel, machined surface w/ballast fill plug  
Overall Width ..... 34 in.  
Diameter ..... 24 in.  
Shell Thickness ..... .500 in.

**DRIVE**

Drive System ..... Hydrostatic  
Travel Speed ..... 0-5 MPH  
Engine ..... Kohler 16 HP OHC V-Twin (gasoline),  
..... Electric Start, 12 Volt Battery

**VIBRATION SYSTEM - REAR DRUM**

Type .... Electric Clutch, On-Off Switch on Control Lever  
Frequency.....2600 VPM  
Centrifugal Force .....4400 lbs.  
Total Applied Force.....6450 lbs.

**WATER SPRAY SYSTEM**

Type .....Gravity w/dual brass ball valves  
Tank..... 34 gal. capacity, polyethylene, rear, 3" fill neck,  
.....cap w/safety chain  
Drum Scrapers ..... Four adjustable, neoprene rubber  
Drum Cocoa Mats ..... One each drum, pivoting

**STANDARD EQUIPMENT**

- Brakes .....Dynamic w/mechanical band type parking brake on rear drum, adjustable brake lever
- Transmission By-Pass .....Control within pump to "freewheel unit"
- Gauges .....Hourmeter, Voltmeter & Low Oil Indicator Light
- Vandal Protection ..... Locking fill caps for fuel and hydraulic fluid
- Safety Devices..... Neutral Start Switch
- Tie Downs ..... (6) for Transporting

**OPTIONAL EQUIPMENT**

- *Special Paint*
- *Arm Rests*
- *Back-up Alarm*
- *Vandal Protection Package (Locking floor & dash cover)*
- *Kubota Diesel Engine, 14 HP, water cooled, 2 cylinder*
- *Sight Gauge, Hydraulic Reservoir*
- *Pressurized Sprinkler System*
- *Working Lights*
- *ROPS (Rollover Protection Structure) w/seat belt*

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## MACHINE IDENTIFICATION INFORMATION

MACHINE SERIAL NUMBER: \_\_\_\_\_

ENGINE MAKE, MODEL & SERIAL NUMBER: \_\_\_\_\_

PURCHASE DATE: \_\_\_\_\_

DISTRIBUTOR: \_\_\_\_\_

## MACHINE SERVICE INFORMATION

**NEW**  
**BEUTHLING**

**B150**

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