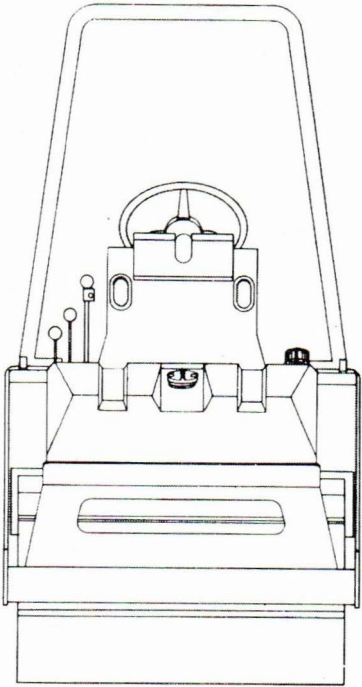
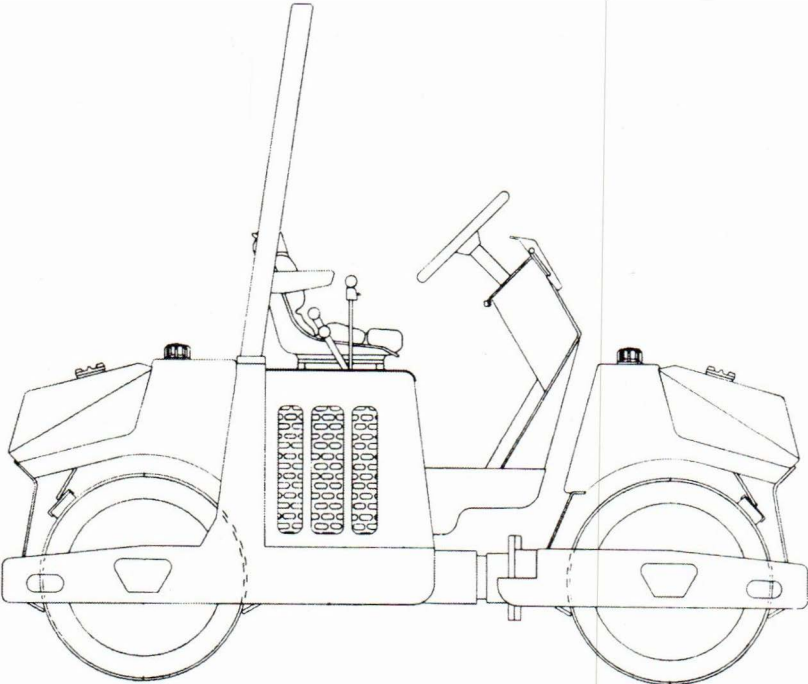


NEW
BEUTHLING

OWNER'S MANUAL

B350
VIBRATORY

RIDE-ON VIBRATORY COMPACTOR ARTICULATED
SERIAL NUMBER 350-126 & UP



WARNING! READ THIS MANUAL AND  CIMA ROLLER COMPACTOR SAFETY MANUAL BEFORE OPERATING OR SERVICING YOUR MODEL B350.

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NOTE:

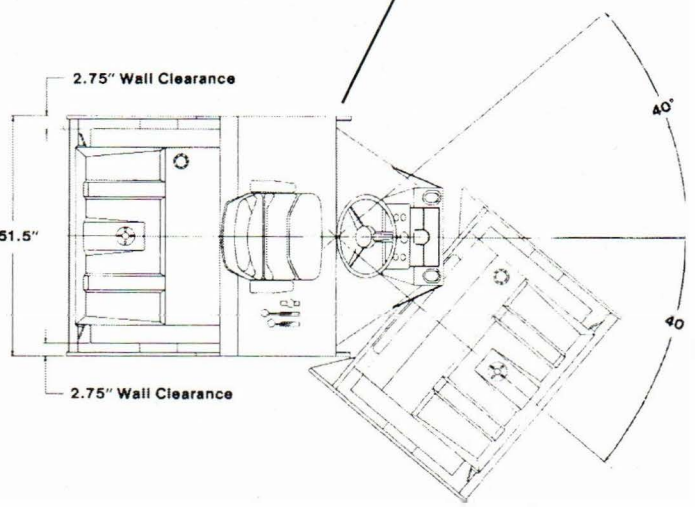
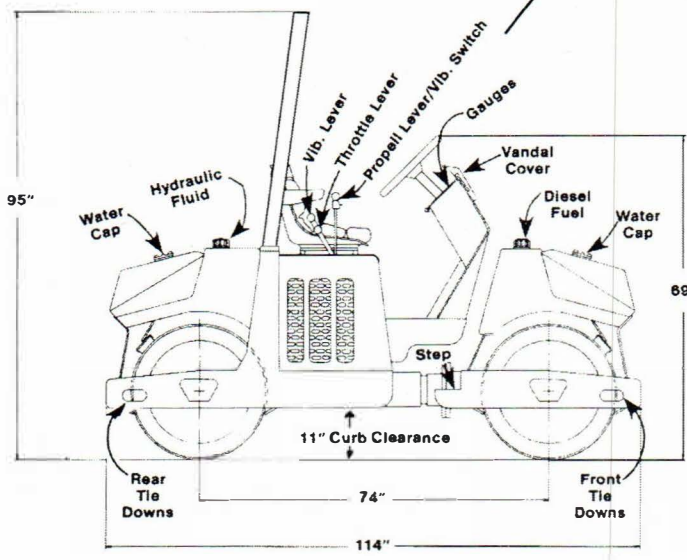
FOR ALL INQUIRES PLEASE INDICATE:

MACHINE MODEL

SERIAL NUMBER

ENGINE TYPE

(MODEL & SERIAL NUMBER PLATE IS LOCATED IN ENGINE COMPARTMENT, LH FRAME)



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

OPERATION



WARNING:

Read this manual and the CIMA "Roller - Compactor Safety Manual", supplied with the machine, BEFORE starting, operating, or servicing the machine. Be sure to check the engine before starting it (for details see owners manual).

Before starting engine make certain control lever is in "NEUTRAL" (center) position. 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 toggle switch is located on the console dash panel and is "ON" (or brake applied) when toggle switch is in UP position and "OFF" when toggle switch is in DOWN position.

When brake toggle switch is "ON", red indicator light is LIT and ALARM buzzer is SOUNDING.



WARNING:

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

DO NOT operate the machine, if the machine will MOVE when the secondary/parking brake toggle switch is "ON".

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

When starting, if so equipped, and not previously done, unlock the locks securing the floor and dash covers and steering lock bar. Move the covers and lock bar to the stowed position.

Continued next page

CAUTION:

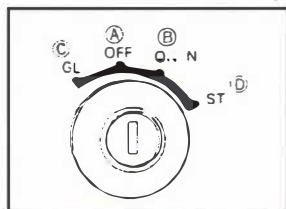
Never start the engine with the "amber" vibration system "on" indicator lighted. Damage to the vibrator system and/or engine can occur.

Before starting engine, 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. Propel lever is in the neutral position, vibrator control lever, and vibrator switch on the propel lever are in the off position. Set throttle lever to the ¼ position, and parking brake switch in the ON position. Propel lever and vibrator control lever have neutral start switches, and engine will not start unless these levers are in neutral and off positions.

STARTING THE ENGINE

- (1) Check that the engine stop lever is in the original position.
- (2) Place the speed control lever at more than half of "OPERATION".
- (3) Insert the key into the starter switch, and turn it to "ON".
- (4) Check to see that the green run and charge lamp is on.
- (5) Setting the starter switch to "ST" (starting) rotates the starter and starts the engine.

As soon as the engine starts, release the starter switch.



- A. "Switched Off"
- B. "Operation"
- C. "Preheating"
- D. "Starting"

- (6) When the ambient temperature is below 50°F (10°C), preheating is needed. The preheating time depends on ambient temperatures. See the chart below. Keep the starter switch at "GL" (preheating) for several seconds, and set it to "ST" (starting). There is no need to preheat the engine when it is already warm.

Ambient Temperature	Preheating Time	
	Ordinary Heat Type	With glow lamp timer
Above 50°F (10°C)	NO NEED	Automatic preheating is made for about 6 seconds when starter switch key is turn to preheating position.
50°F (10°C) to 23°F (-5°C)	Approx. 5 Seconds	
Below 23°F (-5°C)	Approx. 10 Seconds	
Limit of continuous use	20 Seconds	

Check the oil pressure guage for proper oil pressure. If oil pressure guage does not have proper pressure immediately stop the engine and check.

Maintain low R.P.M. for approximately 5 minutes to allow hydraulic system to warm up, move parking brake toggle switch to the off position before moving unit. Travel speed and direction of travel are controlled by the propel lever, next to seat.

Check gauges, instruments and warning lights frequently to assure that they are functioning and their readings are within the operating range.

CAUTION:

To Avoid Personal Injury:

Do NOT allow children to approach the machine while the engine is running.

Important:

- Never turn the starter switch while the engine is running.
- If the engine does not catch 10 seconds after the starter switch is set at "START", wait for another 30 seconds and then start the engine starting sequence over again. Do not allow the cell monitor to run continuously for more than 20 seconds.
- Be sure to warm up the engine not only in winter but also in other warmer seasons. An insufficiently warmed-up engine can shorten its service life.
- When there is fear of temperatures dropping below 5°F (-15°C) detach the battery from the machine, and keep it indoors to be reinstalled just before the next operation.

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 rotating beacon and work 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 hydraulic 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.

STOPPING ENGINE:

- (1) Return the speed control lever, and run the engine under idling conditions.
- (2) Move vibrator control lever to off position.
- (3) Set parking brake switch to on position (red light and buzzer on).
- (4) Set the engine stop lever to "STOP", or on key stop system engine with electric valve, the starter switch placed at "OFF", and the engine will stop.
- (5) With the starter switch place at "OFF", remove the key. (Be sure to return the stop lever as it was after stopping the engine, and get ready for the next starting.)

EMERGENCY SHUTDOWN PROCEDURE:

- (1) Move Speed and Direction Lever to neutral position.
- (2) Turn ignition key counter clockwise to Off Position and remove from switch. Emergency Brakes are spring actuated when engine is stopped and Ignition Switch is turned off.

See Kubota Engine Owners Manual for additional details on engine operation.

DYNAMIC BRAKING

Hydrostatic drive motors on both drums provide hydraulic dynamic braking when the speed and direction propel control lever is moved to neutral.

SECONDARY / PARKING BRAKES:

Failsafe, mechanical disc brakes in the hydrostatic drive motors are spring actuated when engine is stopped. They are hydraulically released when engine is started. Manual parking brake switch on console controls solenoid hydraulic valve which actuates, and releases parking/emergency brake when engine is running. Manual switch in "OFF" position releases brakes, and in "ON" position actuates brakes. (Red light & Buzzer "ON")

 **WARNING:**

Do Not try to move machine with secondary parking brakes engaged. Backup pressure of hydraulic system with low engine RPM's may have adverse affects on engine and hydraulic system if this happens.

This unit is equipped with a towing by-pass valve and manual brake release tools to allow the unit to be moved up to 100 feet without the engine running. This feature **is not** designed for long distance or high speed highway towing.

When towing this compactor a short distance without the engine running, the following procedure must be carefully followed:

- (1) Connect towing vehicle to compactor, make sure towing vehicle is headed uphill if compactor is located on an inclined surface, and parking brakes are set. One roller on compactor should be blocked on both sides to prevent any movement of compactor when crawling under machine to open towing by-pass valve.
- (2) Open Towing by-pass valve as follows:
The Towing by-pass valve is located on the bottom of the propel pump, page 7. This valve is opened for

Towing by turning the Hex Head Plug counter clockwise (CCW)(MAXIMUM 2 TURNS). To (close) by-pass valve for normal operation turn shaft clockwise (CW), Torquing 7 to 10 ft. lbs. maximum.

- (3) Release brakes manually on both hydraulic drive motors as follows:

Use two Brake Tools, part No. 000-5116, shown on pages 7 & 8 as item (28). Tool mounted on item (2) when not being used.

- a. Move the hexagon nut as close to bolt head as possible.
- b. Hold washer against nut and insert bolts thru slot in left hand side of frames on drive motors side.
- c. Thread bolt into tapped hole in each drive motor end plate by hand until it bottoms.
- d. Hold bolts in place and turn nut clockwise against washer until motor end plate is pulled toward frame enough to disengage brakes. About ½ turn after bolt starts to pull motor end plate.
(DO NOT EXCEED 34.6 FT. LBS.)
- e. Remove tools to return brakes to operating position before moving compactor by its engine.

**WARNING:**

DO NOT OPERATE UNIT WITH HYDRAULIC MOTOR BRAKES MANUALLY RELEASED.

**CAUTION:**

To prevent the compactor from moving accidentally, **DO NOT** release the hydraulic motor brakes manually until:

- (1) Compactor is connected to towing vehicle.
- (2) Compactor drum is blocked.
- (3) Towing by-pass valve must be opened before releasing the hydraulic motors brakes manually. Opening the Towing by-pass valve will remove hydraulic fluid braking force. This will permit the compactor to move when the hydraulic motor brakes are manually released.
- (4) Tow compactor at speeds under 2 miles per hour, short distance only.
- (5) After compactor has been towed, remove brake tools from hydraulic motors to activate brakes on motors.
- (6) Block both sides of one compactor drum to prevent any movement of compactor when crawling under machine to close the Towing by-pass valve.
- (7) Disconnect from towing vehicle.

**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 TOWING (OPEN) position.

WATER SPRAY SYSTEM

This unit is equipped with a pressurized water spray system having a switch located on the control panel which activates water pump for front and rear spray bars.

VIBRATION SYSTEM

The B350 features Dual Drum Drive and Dual Drum Vibration. The vibratory system has a single level for frequency settings from 0 to 3000 vpm's. One selector switch allows (3) compaction modes: vibration on rear drum only (REAR), vibration on both drums (DUAL) and static on both drums (OFF).

MACHINE TRANSPORT

Be sure steering locking bar, Item (20) (page 10), is installed between lower front & rear frames (RH side) when the machine is being moved by truck or trailer. Use SOLID wood blocks in lower front, and at the rear, on EACH side of EACH drum. Four (4) 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. EXCESSIVE tie down tension on outer frames can cause damage to drum rubber mounts. Secure all fill caps and covers before transporting.



CAUTION:

Disconnect steering locking bar before attempting to move or steer this machine. Be extremely careful when pinning locking bar into position.

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" Kubota V1505, published by Kubota Engines, for approved, correct engine component inspection and maintenance periods and/or procedures.

HYDRAULIC SYSTEM



CAUTION:

After a new unit has run for five (5) hours, the hydraulic filters for the propulsion and vibratory systems should be changed. This is to rid the systems of any trapped contaminations from factory assembly. The filters should be changed every 200 hours thereafter.



CAUTION:

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 can result.

Check hydraulic fluid daily, change fluid every 200 hours or sooner if conditions warrant, i.e. extreme dust or condensation. This unit is equipped with a 17 gallon oil reservoir - when changing or adding fluid, use H.D. 32 HYD. To prevent any foreign matter from entering the tank, extreme care should always be used when removing filler cap. Fluid is at the proper level when seen at the bottom of the screen in the fill neck - never fill reservoir to overflowing.

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.

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.

See Kubota engine manual. Starting the engine is done with a spring loaded key switch located on the right hand side of the steering column. A green charge indicator is located at the top right hand side of the dash panel. This light will be on when engine is running and charging system is working properly. A red light is located directly below on the dash panel. This light is on when the electrical parking brake is on. The brake is controlled by a switch located directly below the red light. An alarm located on the panel below the dash will also sound when parking brake is engaged. A pulsating alarm located on the left hand rear engine cover will sound when the unit is in reverse. Two neutral start switches are located below the control panel weldment. They are wired in series to assure the unit is in neutral and vibs are off before the unit will start.

A 30 AMP circuit breaker has been placed in the circuit for safety. The circuit breaker will reset automatically every 10 seconds or until problem has been located and resolved. The circuit breaker is located on the inside of the upper right hand gusset of the steering column.

Six functions are monitored by gauges on the dash panel. These functions are; ENGINE OIL PRESSURE, ENGINE WATER TEMPERATURE, HYDRAULIC FLUID TEMPERATURE, VOLTMETER, TACHOMETER, and HOURMETER.

Do not run engine with 12V battery disconnected to prevent electrical damage from the alternator.

Do not weld on unit unless battery is disconnected. Always remove cable from negative (-) side of battery for electrical safety.

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 (See Chart Page 6)

L.H. and R.H. vibrator shaft bearings should be greased every 100 hours with EP-2 chassis lubricant. A/R.

Oscillating tube should be greased every 100 hours with EP-2 chassis lubricant. A/R.

Pivot Pin should be greased every 100 hours with EP-2 chassis lubricant. A/R.

Drum Bearings should be greased every 100 hours with EP-2 chassis lubricant. A/R.

Check engine oil daily. Change engine oil and filter after the first 35 hours and every 100 hours thereafter. See Kubota engine manual.

Engine Air cleaner should be checked daily. Dust cap should be removed and cleaned once a week, sooner if conditions warrant. If red signal on the dust indicator attached to the air cleaner is visible, the air cleaner has reached the service level. Clean element immediately, and reset the signal with the "RESET" button. See Kubota engine manual.

Fuel filter should be replaced every 100 hours to assure clean fuel and to prolong injector systems life. After changing filter, bleeding of the system is required. See Kubota engine manual.

Radiator coolant should be checked daily and replenished with a 50/50 mixture when low. See engine manual

Hydraulic Oil Reservoir should be checked daily. Fluid is at proper level when seen at the bottom of the screen in the fill neck. RECOMMENDED HYDRAULIC FLUID H.D. 32 HYD. OR EQUIVALENT.

Hydraulic Oil Filters should be changed after first five (5) hours and every 200 hours thereafter.

Battery should be checked every 100 hours and cells filled with distilled water if low.

WATER SPRAY SYSTEM

The water system should be drained when freezing temperatures are expected as follows: Remove strainer body Item 9 to drain Pump and Filter. Open petcocks on front and rear spray bars. Remove Outlet Hoses Items (1) and (6) at Tank Connections. See Water Spray System Diagram page 18.

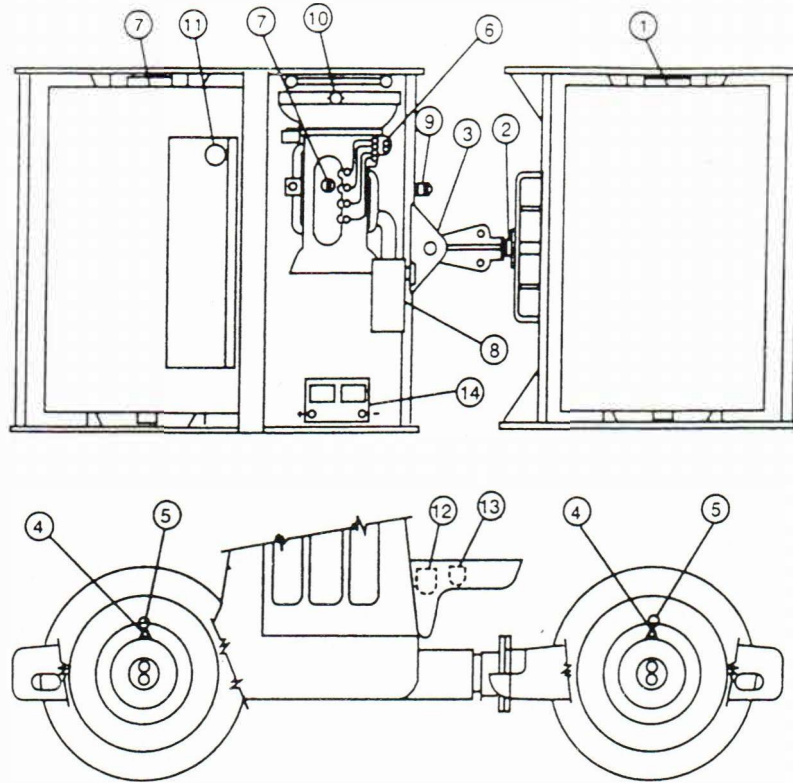
DRUM SCRAPERS / COCOA MATS

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.

Important:

Rubber scrapers adjusted too tight may cause a drum braking effect, especially when rubbers are NEW or DRY. When this occurs the operator may notice the engine "lugging down" or a "lack of power". NEVER force rubber scrapers against the drums.

Check and replace both cocoa mats when worn or damaged. Never allow steel cocoa mat pans to come in contact with drum. Front and rear cocoa mat pans are designed to pivot away from drum when not in use.



MODEL B350 & B400 LUBRICATION CHART

Ref.	Lubrication Point					Type of Lubricant	Lub. Fitting
		Daily	First	100 Hrs.	200 Hrs.		
1	Vib. Shaft L.H. Side				●		Yes
2	Oscillating Tube				●		Yes
3	Pivot Pin				●	EP-2 Chassis Lube	Yes (2)
4	Drum Bearing				●		Yes
5	Vib. Shaft R.H. Side				●		Yes
6	Engine Oil Filter		▲		●		No
7	Engine Crankcase	✓	▲		●		No
8	Engine Air Cleaner	✓				See Engine Manual	No
9	Fuel Filter				●		No
10	Radiator	✓					No
11	Hydraulic Oil Reservoir	✓			●	Sunco TH Fluid or Equivalent	No
12	Propel Filter		★		●	Change Filter Element	No
13	Vib. Filter		★		●		No
14	Battery			✓		Water, distilled	No

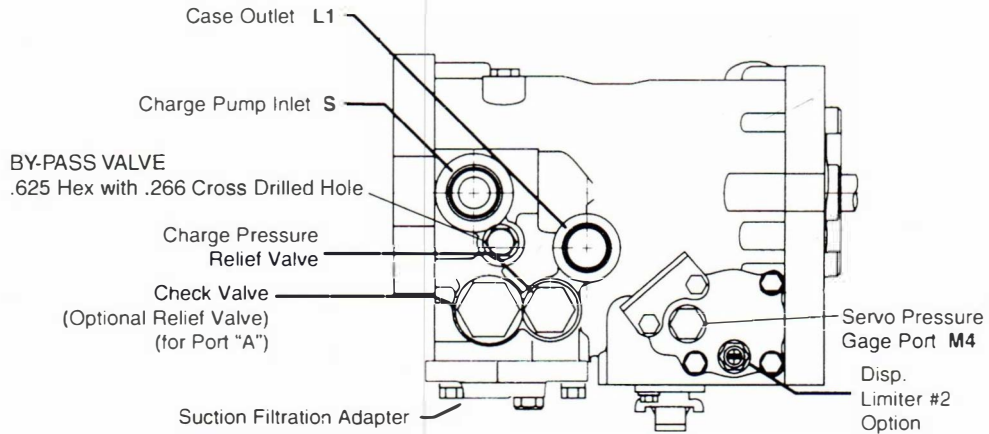
★ 1st Element Change 5 Hrs. ▲ 1st Crankcase Change 35 Hrs. ● Lub. Or Change ✓ Check
 HYDRAULIC SYSTEM ENGINE

See Owner's Manual For Further Details

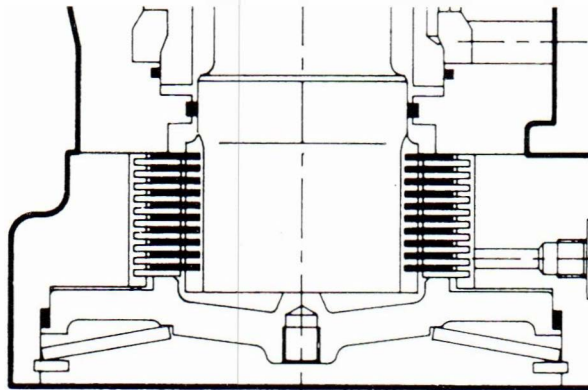


465 GRIFFIN BLVD • AMERY, WI 54001

PROPEL PUMP (P/N 100-0023)



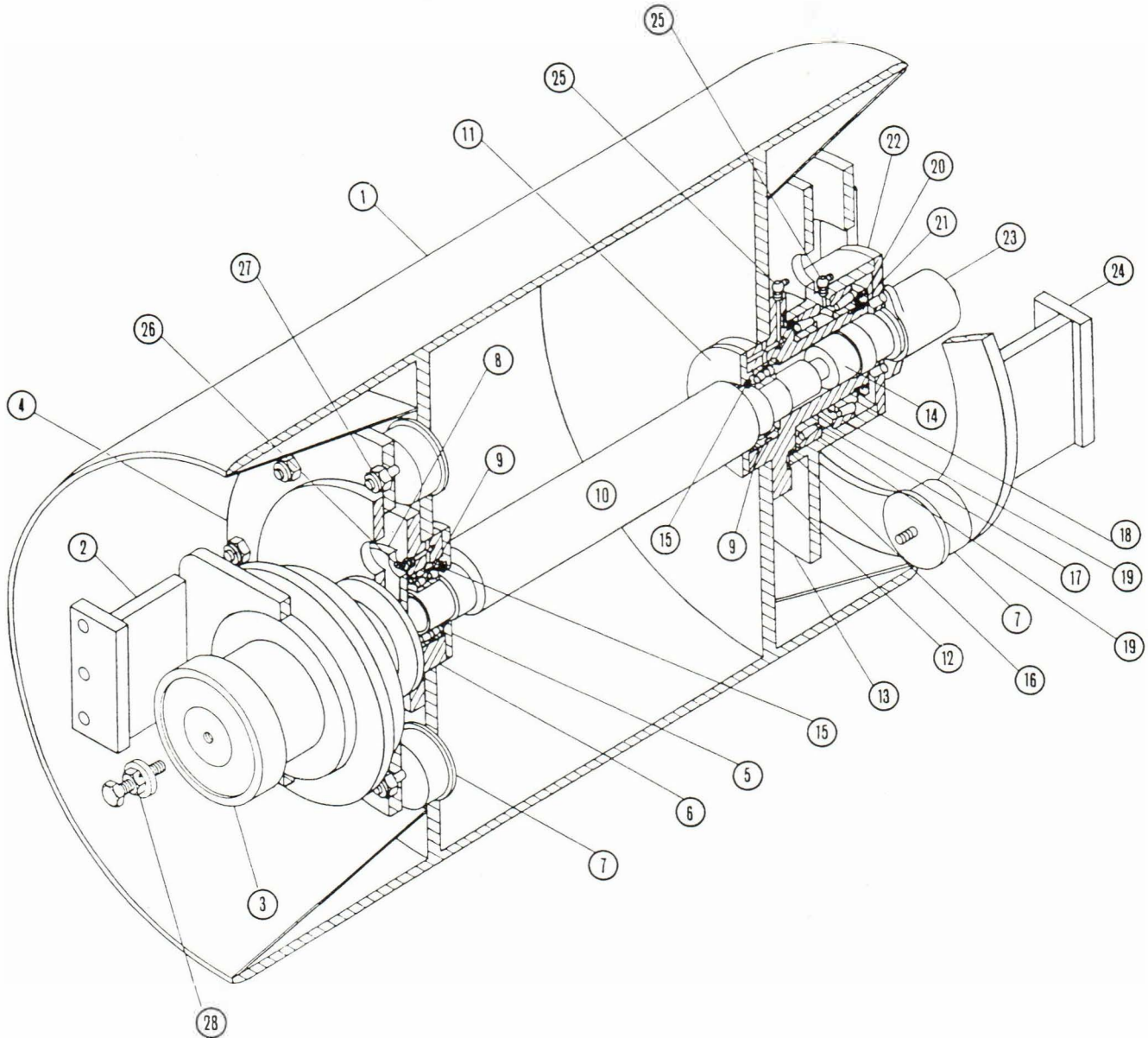
DRIVE MOTOR W/BRAKE (P/N 105-0027) & (105-0028)



DRIVE MOTOR BRAKE RELEASE TOOL (P/N 000-5116)



MANUAL BRAKE RELEASE
SEE OWNERS MANUAL FOR
PROPER TOWING PROCEDURE
BEUTHLING MFG CO.



MANUAL BRAKE RELEASE
SEE OWNERS MANUAL FOR
PROPER TOWING PROCEDURE
BEUTHLING MFG. CO.

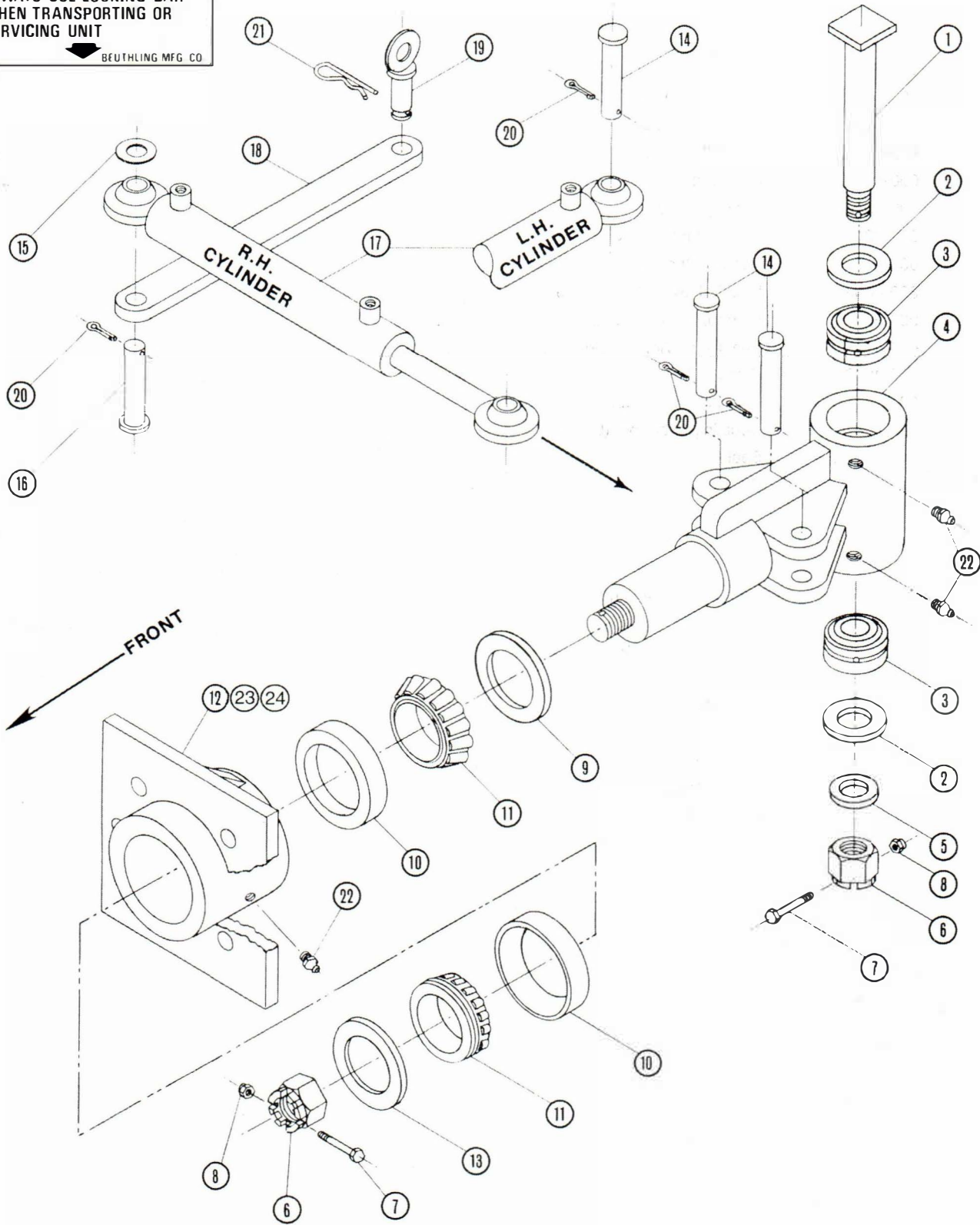
DRUM ASSEMBLY

Item No.	Part No.	Description	Qty.
1	000-5006	Drum	1
2	000-5018	Drive Motor Bracket	1
3	105-0027	Drive Motor w/Brake (Front Drum).....	1
3	105-0028	Drive Motor w/Brake (Rear Drum)	1
4	000-5015	Drive Plate	1
5	000-4024	Seal Cap - Drive Side	1
6	000-4030	Bearing Housing - Drive Side.....	1
7	325-0011	Rubber Mount (Qty. 8 Drive Side) (Qty. 4 Vib. Motor Side).....	8
8	000-4025	Bearing Cap	1
9	300-0009	Double Row Spherical Bearing	2
10	000-5019	Vibrator Shaft.....	1
11	000-4023	Seal Cap - Vibrator Side	1
12	000-4029	Spindle Casting	1
13	000-5012	Hub	1
14	230-0003	Coupling, Vibratory (Between Vib. Shaft and Vib. Motor)	1
15	365-0002	Seal	2
16	365-0003	O-Ring	1
17	300-0011	Bearing Cone	1
18	300-0010	Bearing Cone	1
19	300-0012	Bearing Cup.....	2
20	300-0016	Lockwasher, Ring (Mounts on item 21)	1
21	300-0015	Lock Nut (For Bearing Cone).....	1
22	000-4022	Mounting Plate - Vib. Motor	1
23	105-0029	Motor, Vibratory	1
24	000-5010	Ring - Rubber Mount	1
25	370-0004	Grease Fitting 90° x 1/8 NPT	2
26	370-0007	Grease Fitting 45° x 1/8 NPT	1
27	607-0019	Flexloc Nut FH x 1/2-20 NF	8
28	000-5116	Drive Motor Brake Release Tool (Found mounted on Item #2).....	2

**ARTICULATED STEERING
LOCKING BAR**

ALWAYS USE LOCKING BAR
WHEN TRANSPORTING OR
SERVICING UNIT

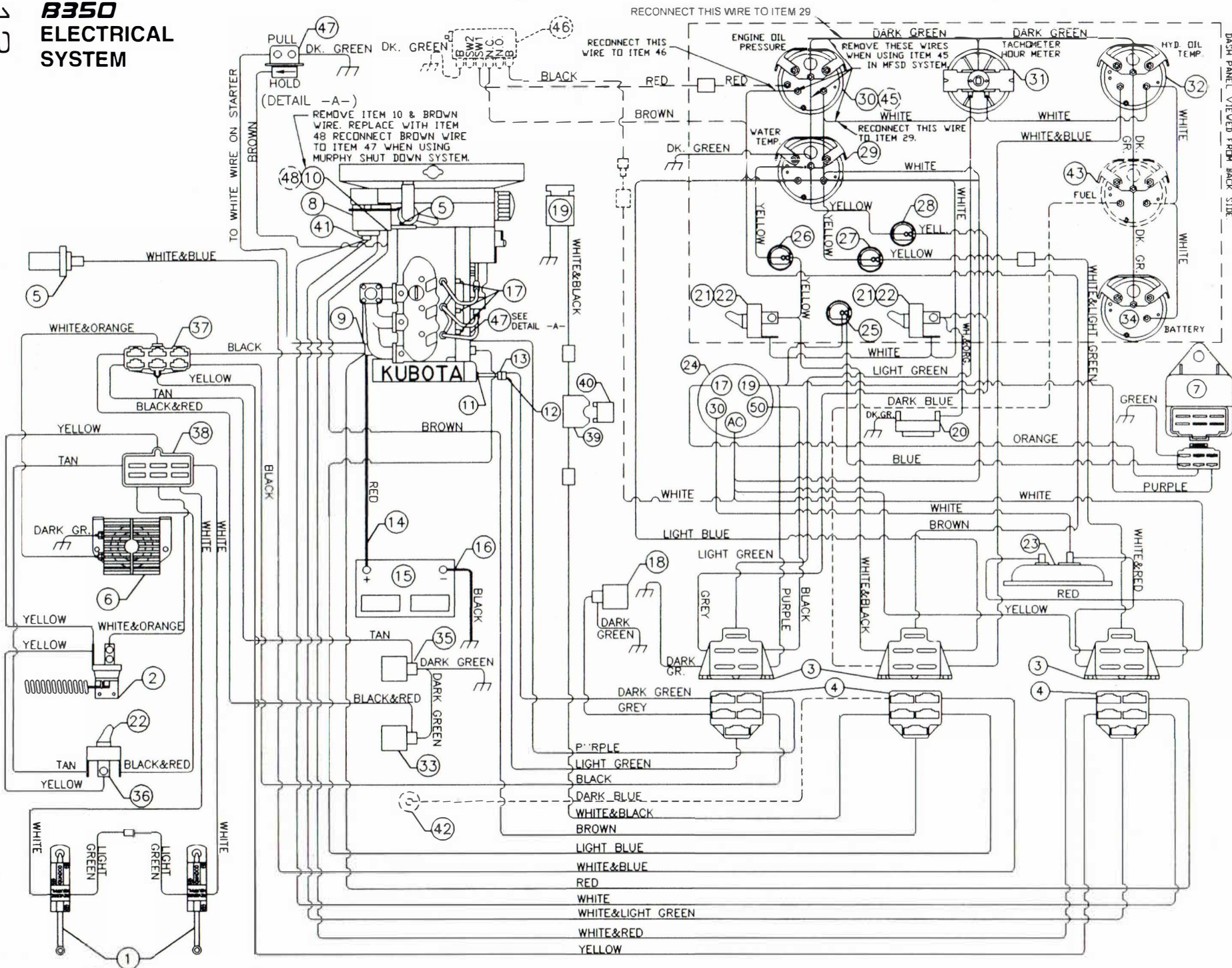
BEUTHLING MFG. CO



FRAME CONNECTOR ASSEMBLY

Item No.	Part No.	Description	Qty.
1	000-4078	Pivot Pin.....	1
2	000-4067	Pivot Tube Grease Seal Washer.....	2
3	300-0017	Torrington Bearing.....	2
4	000-5075	Frame Connector.....	1
5	000-4079	Pivot Pin Nut Washer.....	1
6	609-0027	Nut, Castle 1 1/2 - 12 NF.....	2
7	600-2011	Bolt, 5/16 x 2 1/2 NC.....	2
8	607-0002	Nut, Flexlock 5/16 NC.....	2
9	000-4068	Oscillating Tube Inner Grease Washer.....	1
10	300-0014	Bearing Cup.....	2
11	300-0013	Bearing Cone.....	2
12	000-4059	Oscillating Tube.....	1
13	000-4069	Oscillating Tube Outer Grease Washer.....	1
14	000-5107	Pin, Steering Cylinder - Short.....	3
15	000-1292	Cotter Pin Washer.....	1
16	000-5106	Pin, Steering Cylinder - Long.....	1
17	115-0003	Steering Cylinder.....	2
18	000-5096	Locking Bar - Articulated Steering.....	1
19	000-4179	Locking Bar Clevis Pin.....	1
20	630-0016	Cotter Pin.....	4
21	630-0007	Hairpin Clip.....	1
22	370-0006	Grease Fitting, 1/8 NPT.....	3
23	600-9003	7/8 x 3" Bolt - NOT SHOWN.....	6
24	607-0009	Nut, Flexlock 7/8 - NOT SHOWN.....	6

B350 ELECTRICAL SYSTEM



DASH PANEL VIEWED FROM BACK SIDE



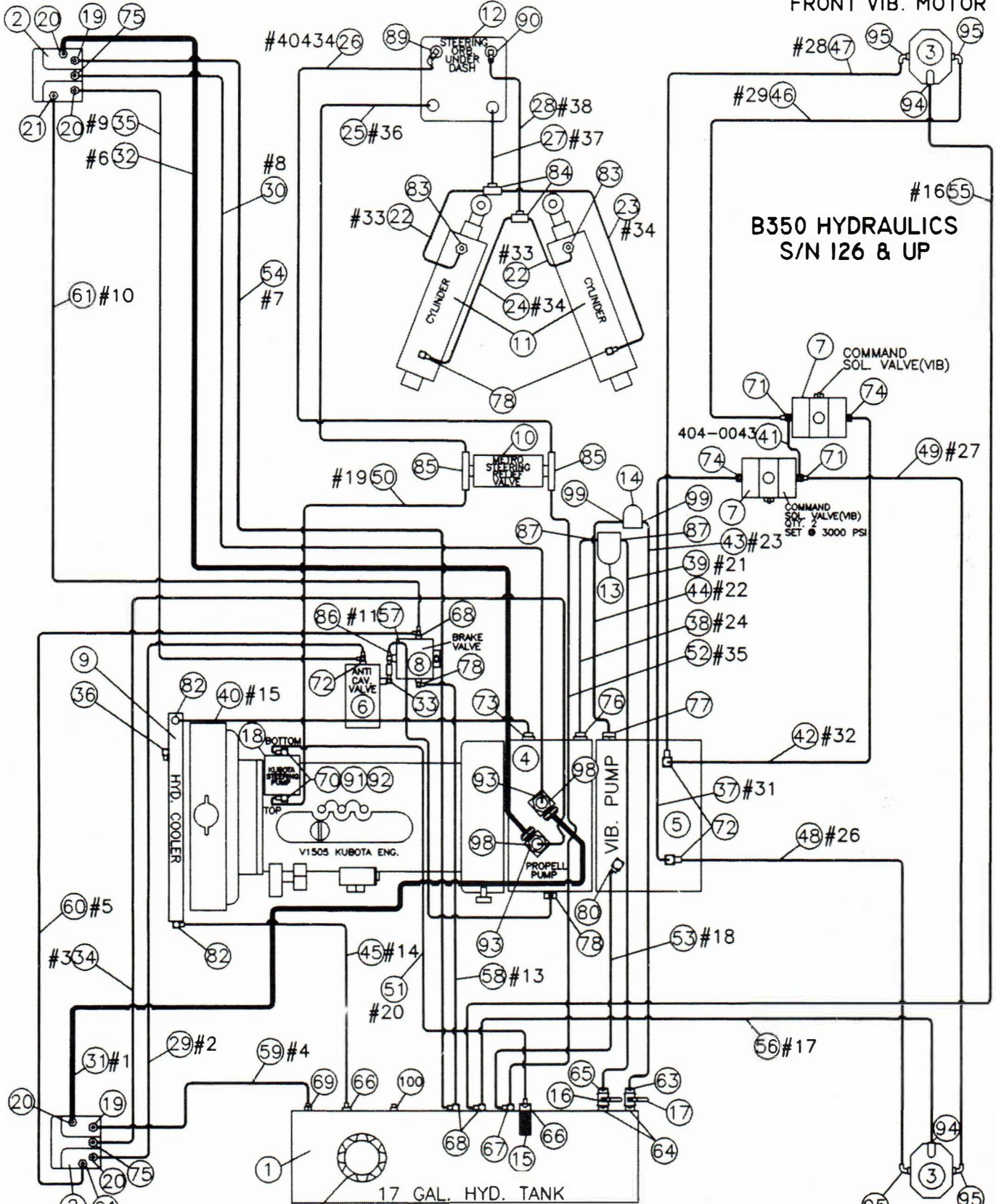
B350

ELECTRICAL SYSTEM

Item No.	Part No.	Description	Qty.
1	335-0090	Switch, Neutral Start	2
2	335-0094	Switch, Back Up Alarm	1
3	335-0075	Connector, Female Line - 5 Way	3
4	335-0074	Connector, Male Line - 5 Way	3
5	375-0010	Sender, Temperature	2
6	335-0084	Back Up Alarm	1
7	207-0028	Lamp Timer	1
8	207-0004	Alternator 40 AMP, Kubota	1
9	207-0005	Solenoid	1
10	375-0006	Sender, Oil Pressure	1
11	375-0012	Magnetic Pulse Source	1
12	335-0068	Connector, Female	1
13	335-0045	Connector, Male.....	1
14	335-0002	Cable, Positive Battery (Red).....	1
15	335-0076	Battery, 12 Volt	1
16	335-0020	Cable, Negative Battery (Black).....	1
17	207-0015	Glow Plug.....	4
18	110-0012	Brake Valve	1
19	338-0014	Water Pump.....	1
20	335-0121	Brake Alarm	1
21	335-0071	Toggle Switch (ON-OFF)	2
22	335-0067	Rubber Boot.....	3
23	335-0063	Circuit Breaker	1
24	207-0008	Key Switch	1
25	207-0030	Timer Indicator Lamp.....	1
26	335-0007	Indicator Light, Amber	1
27	335-0019	Indicator Light, Green	1
28	335-0105	Indicator Light, Red	1
29	375-0003	Gauge, Water Temperature.....	1
30	375-0005	Gauge, Oil Pressure	1
31	375-0011	Tachometer/Hourmeter	1
32	375-0008	Gauge, Oil Temperature	1
33	110-0023	Vibrator Valve	1
34	375-0013	Voltmeter	1
35	110-0020	Vibrator Valve	1
36	335-0184	Toggle Switch (ON-OFF-ON).....	1
37	335-0189	Connector, Male Line - 6 Way	1
38	335-0190	Connector, Female Line - 6 Way	1
39	335-0177	Fuse Holder	1
40	335-0178	Fuse, 10 Amp, Spade Type	1
41	205-0007	Plugs, Alternator & Regulator	1
42	375-0022	Sending Unit, Fuel	1
43	375-0009	Gage, Fuel Level	1
44	335-0100	Murphy Fuel Shut Down System, Consisting of Items 45, 46, 48 (OPTIONAL)	1
45	375-0015	Gage, Oil Pressure - Replaces Item 30 (OPTIONAL)	1
46	375-0016	Switch, Magnetic (OPTIONAL)	1
47	375-0017	Shut Down Solenoid Valve	1
48	375-0018	Oil Line Kit Replaces Item 10 (OPTIONAL).....	1

FRONT DRIVE MOTOR

FRONT VIB. MOTOR



WARNING

HYDRAULIC SYSTEM

DO NOT START engine with valves closed. Serious DAMAGE to hydraulic system will occur.

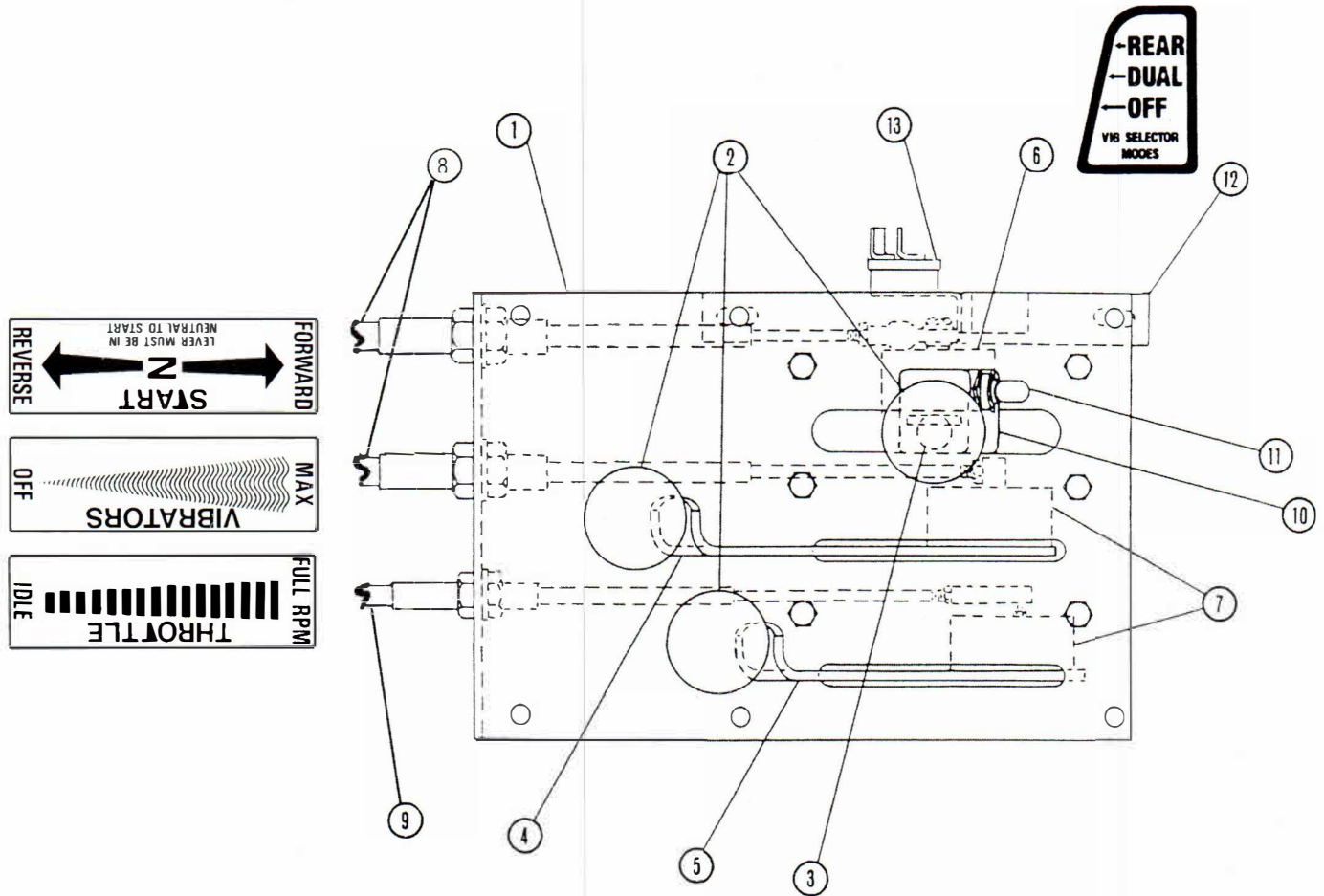
BEUTHLING

HYDRAULICS

Item No.	Part No.	Description	Qty.
1	000-5054	Reservoir, Hydraulic Oil (Integral w/Rear outer Support Frame)	1
2 a.	105-0027	Drive Motor w/Brake (Front Drum)	1
2 b.	105-0028	Drive Motor w/Brake (Rear Drum)	1
3	105-0029	Motor, Vibratory (1) Front Drum (1) Rear Drum	2
4	100-0023	Pump, Propel	1
5	100-0025	Pump, Vibratory	1
6	110-0038	Valve, Anti Cav.	1
7	110-0039	Control Valve Package, Vibratory	1
8	110-0012	Valve, Brake	1
9	125-0002	Heat Exchanger	1
10	110-0011	Relief Valve, Steering	1
11	115-0003	Cylinder, Steering	2
12	105-0008	Motor, Steering Orbital	1
12	330-0014	Steering Column	1
13	130-0010	Filter Head, Propel (Large)	1
14	130-0003	Filter Head, Vibratory (Small)	1
15	130-0006	Strainer, Suction (in Hydraulic Reservoir)	1
16	110-0015	Ball Valve, 1" (on Hydraulic Reservoir)	1
17	110-0014	Ball Valve, 3/4" (on Hydraulic Reservoir)	1
18	100-0018	Pump, Power Steering (on Engine)	1
18	000-4124	Power Steering Pump Flange	1
19	500-0078	Adapter, Straight	4
20	500-0029	Adapter, Straight	2
21	500-0079	Adapter, Straight	2
22	403-0054	Hose Assembly, 3/8 I.D. x 17" Lg.	2
23	403-0055	Hose Assembly, 3/8 I.D. x 22 3/4" Lg.	1
24	403-0034	Hose Assembly, 3/8 I.D. x 28 1/2" Lg.	1
25	404-0076	Hose Assembly, 1/2 I.D. x 35 1/2" Lg.	1
26	404-0034	Hose Assembly, 1/2 I.D. x 36" Lg.	1
27	403-0056	Hose Assembly, 3/8 I.D. x 35 1/2" Lg.	1
28	403-0057	Hose Assembly, 3/8 I.D. x 35 5/8" Lg.	1
29	404-0060	Hose Assembly, 1/2 I.D. x 62 3/4" Lg.	1
30	404-0062	Hose Assembly, 1/2 I.D. x 81" Lg.	1
31	406-0035	Hose Assembly, 3/4 I.D. x 59 1/2" Lg.	1
32	406-0036	Hose Assembly, 3/4 I.D. x 81 1/2" Lg.	1
33	502-0049	Adapter, 90 Degree	1
34	404-0061	Hose Assembly, 1/2 I.D. x 70" Lg.	1
35	404-0063	Hose Assembly, 1/2 I.D. x 75 3/4" Lg.	1
36	502-0037	Adapter, 90 Degree	1
37	404-0073	Hose Assembly, 1/2 I.D. x 17 1/2" Lg.	1
38	408-0021	Hose Assembly, 1 I.D. x 21 1/2" Lg.	1
39	406-0039	Hose Assembly, 3/4 I.D. x 25 5/8" Lg.	1
40	406-0038	Hose Assembly, 3/4 I.D. x 38 1/4" Lg.	1
41	404-0043	Hose Assembly, 1/2 I.D. x 19 3/4" Lg.	1
42	404-0074	Hose Assembly, 1/2 I.D. x 14" Lg.	1
43	408-0020	Hose Assembly, 1 I.D. x 24 1/2" Lg.	1
44	406-0040	Hose Assembly, 3/4 I.D. x 24" Lg.	1
45	406-0037	Hose Assembly, 3/4 I.D. x 50 3/4" Lg.	1
46	404-0071	Hose Assembly, 1/2 I.D. x 80 1/2" Lg.	1
47	404-0070	Hose Assembly, 1/2 I.D. x 90 1/2" Lg.	1
48	404-0068	Hose Assembly, 1/2 I.D. x 39 3/4" Lg.	1
49	404-0069	Hose Assembly, 1/2 I.D. x 36" Lg.	1
50	404-0065	Hose Assembly, 1/2 I.D. x 29 1/2" Lg.	1
51	404-0066	Hose Assembly, 1/2 I.D. x 27 1/2" Lg.	1
52	404-0075	Hose Assembly, 1/2 I.D. x 38 1/4" Lg.	1
53	404-0064	Hose Assembly, 1/2 I.D. x 20 1/2" Lg.	1

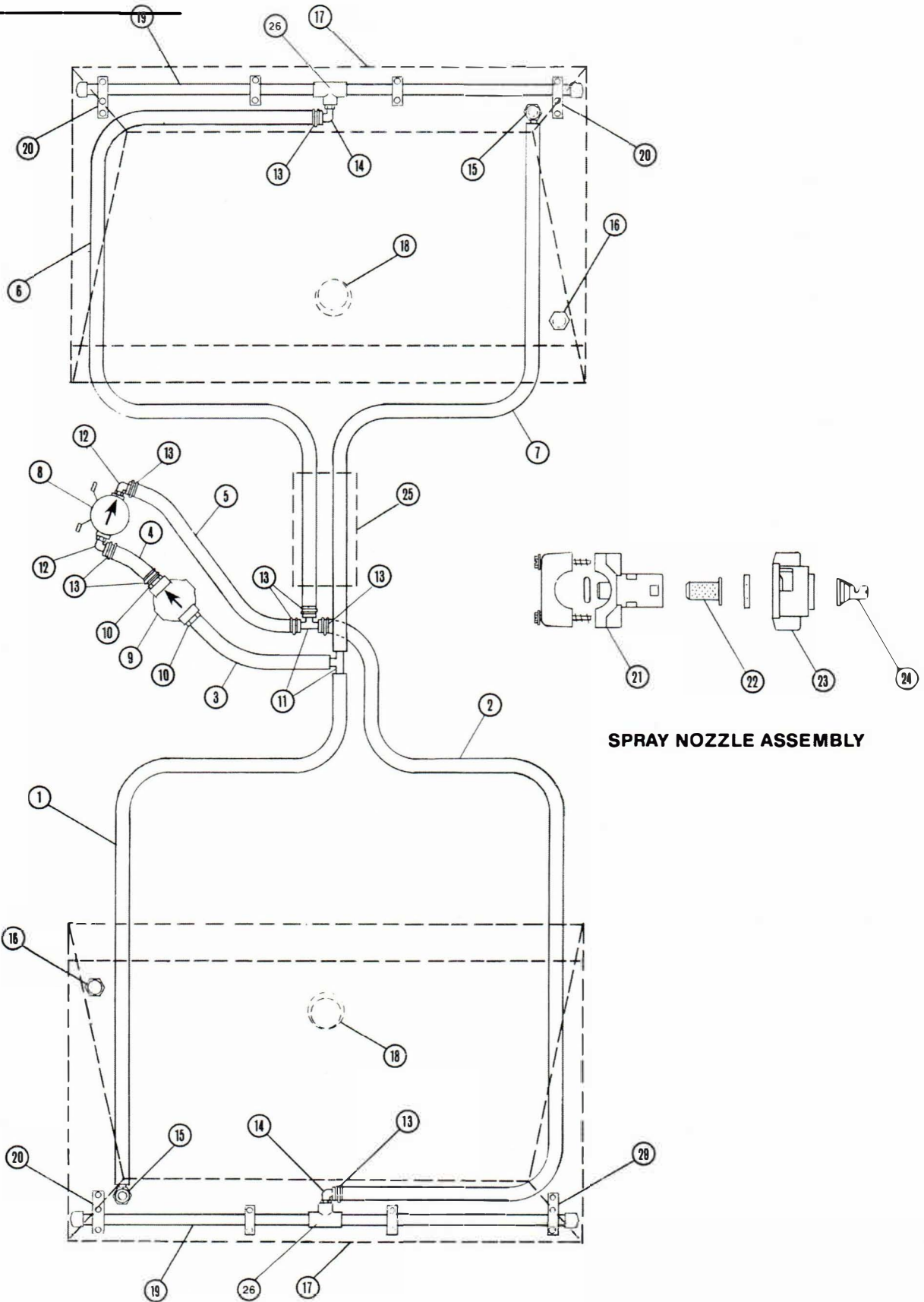
HYDRAULICS (Continued)

Item No.	Part No.	Description	Qty.
54	403-0047	Hose Assembly, 3/8 I.D. x 94 1/4" Lg.	1
55	403-0052	Hose Assembly, 3/8 I.D. x 91 3/4" Lg.	1
56	403-0053	Hose Assembly, 3/8 I.D. x 54 1/4" Lg.	1
57	403-0049	Hose Assembly, 3/8 I.D. x 27 3/4" Lg.	1
58	403-0051	Hose Assembly, 3/8 I.D. x 24 1/4" Lg.	1
59	403-0045	Hose Assembly, 3/8 I.D. x 43 3/4" Lg.	1
60	403-0046	Hose Assembly, 3/8 I.D. x 67 3/4" Lg.	1
61	403-0048	Hose Assembly, 3/8 I.D. x 64" Lg.	1
63	500-0037	Adapter, Straight 3	3
64	500-0077	Adapter, Straight 1	1
65	502-0022	Adapter, 90 Degree 1	1
66	501-0017	Adapter, 90 Degree 2	2
67	503-0008	Adapter, Tee 1	1
68	503-0009	Adapter, Tee 2	2
69	500-0003	Adapter, Straight 1	1
70	502-0024	Adapter, Straight 2	2
71	503-0021	Adapter, Tee 4	4
72	503-0008	Adapter, Tee 3	3
73	502-0025	Adapter, 90 Degree..... 2	2
74	502-0031	Adapter, 90 Degree 1	1
75	500-0031	Adapter, Straight..... 4	4
76	502-0026	Adapter, 90 Degree 1	1
77	500-0004	Adapter, 90 Degree 1	1
78	502-0027	Adapter, 90 Degree 3	3
80	502-0029	Adapter, 90 Degree 1	1
82	502-0030	Adapter, 90 Degree 1	1
83	500-0003	Adapter, Straight 3	3
84	503-0012	Adapter, Tee 2	2
85	503-0015	Adapter, Tee 2	2
86	500-0046	Adapter, Straight 1	1
87	500-0076	Adapter, 90 Degree..... 1	1
89	502-0029	Adapter, 90 Degree 1	1
90	502-0034	Adapter, 90 Degree..... 1	1
91	000-4124	Flange, Power Steering Pump..... 1	1
92	365-0014	O-Ring 1	1
93	503-0022	Adapter, Tee 2	2
94	502-0012	Adapter, 90 Degree. 2	2
95	502-0031	Adapter, 90 Degree 2	2
98	500-0080	Adapter, Straight 1	1
99	502-0025	Adapter, 90 Degree 1	1
100	375-0010	Sender, Oil Temperature 1	1
101	350-0028	Fill Cap with Screen..... 1	1



CONTROL LEVERS & CABLES

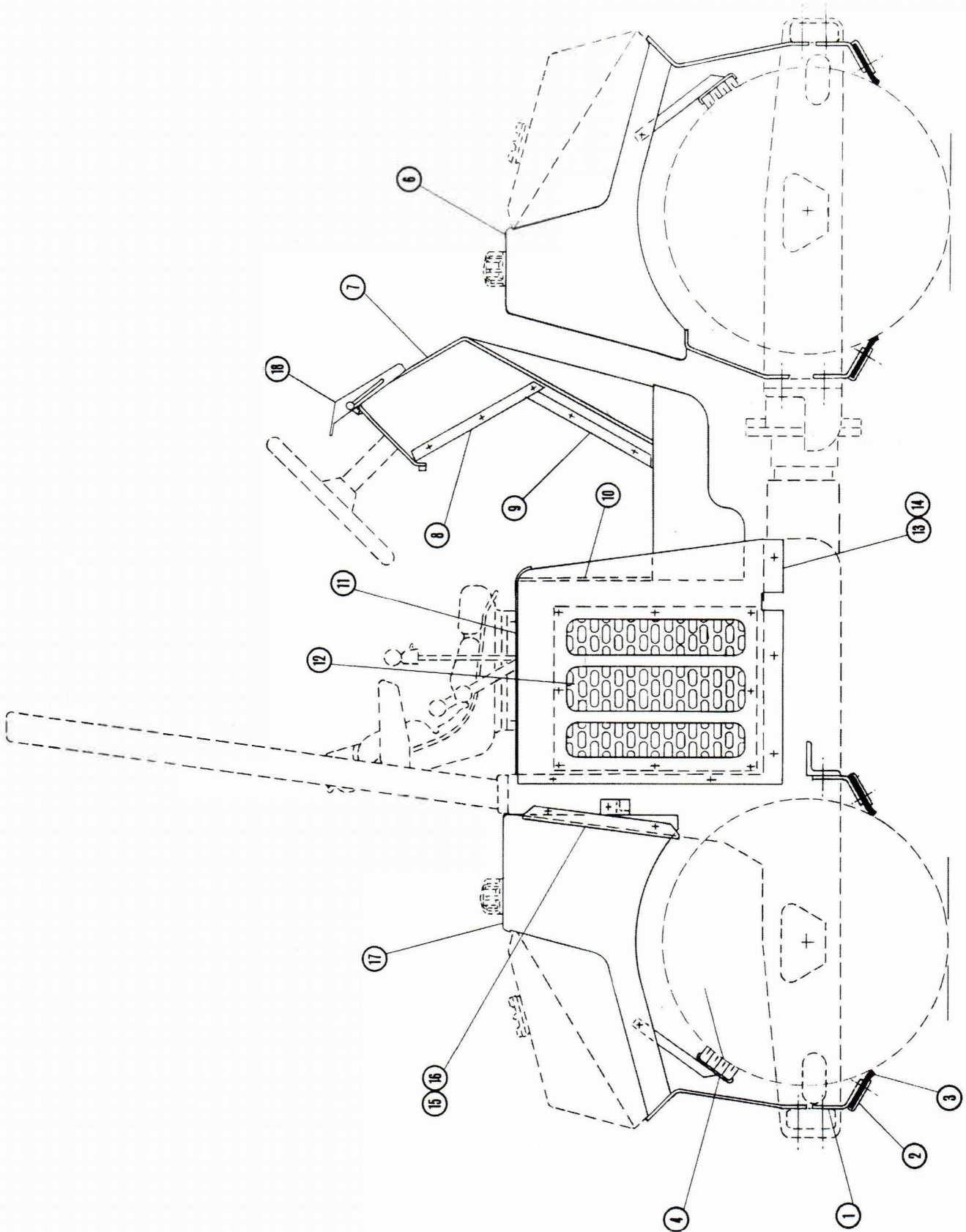
Item No.	Part No.	Description	Qty.
1	000-4142	Control Panel	1
2	350-0009	Black Plastic Knob	3
3	000-5105	Control Lever, Propel (Forward & Reverse).....	1
4	000-4146	Control Lever, Vibratory (VPM's)	1
5	000-4147	Control Lever, Throttle (Engine RPM)	1
6	310-0006	Control Forward & Reverse	1
7	310-0007	Control, Vibrator & Throttle	2
8	315-0011	Cable, Pump Control (1) Propel (1) Vibrator	2
9	315-0015	Cable, Throttle	1
10	000-3013	Housing, Vibrator Switch	1
11	335-0184	Switch, Vibrator Control	1
12	000-4171	Bracket, Back Up Alarm Switch	1
13	335-0094	Switch, Back Up Alarm	1



SPRAY NOZZLE ASSEMBLY

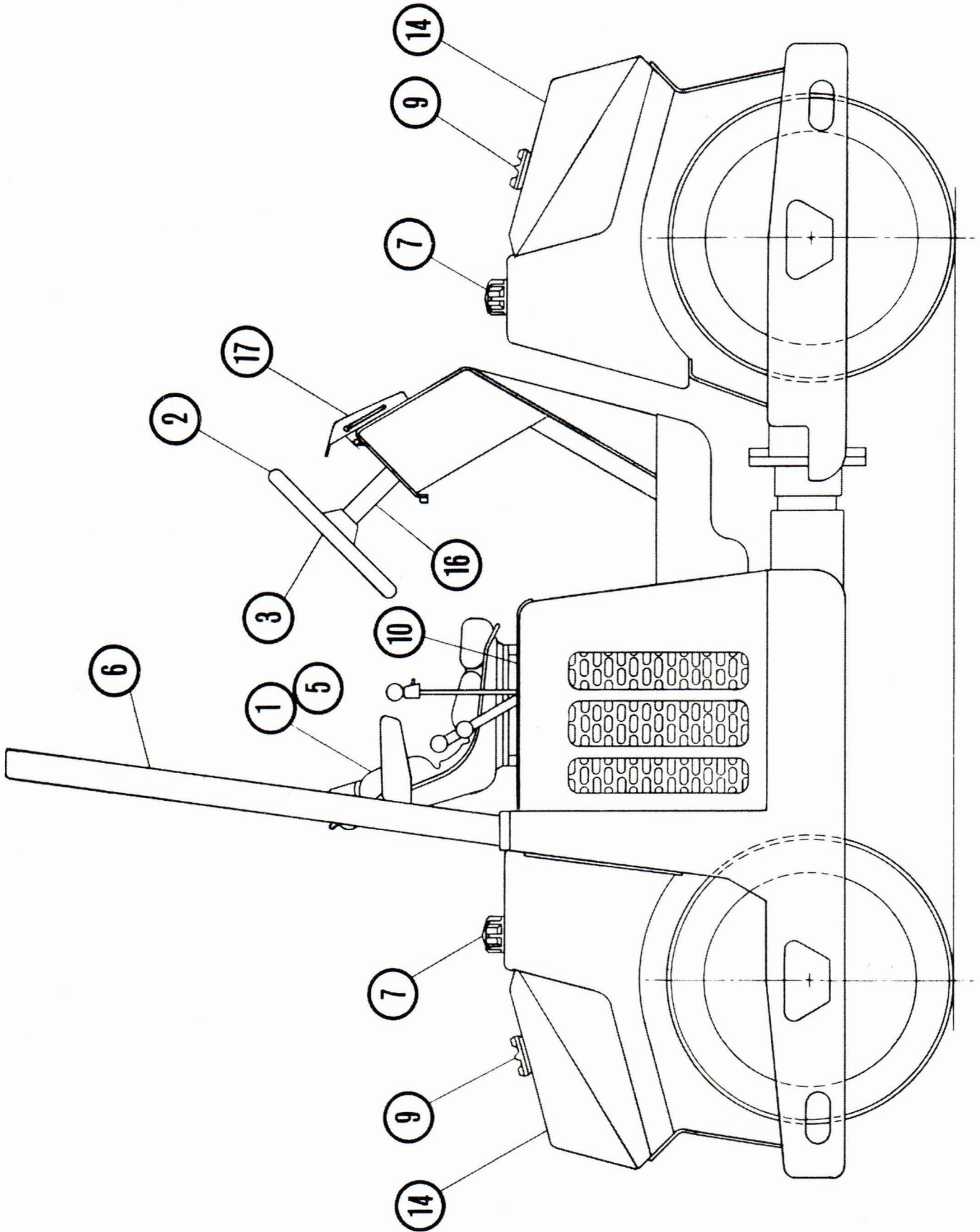
WATER SPRAY SYSTEM

Item No.	Part No.	Description	Qty.
1	424-0001-74	Water Hose 1/2" I.D. x 74" Lg. (Blue)	1
2	424-0001-74	Water Hose 1/2" I.D. x 74" Lg. (Blue)	1
3	424-0001-14	Water Hose 1/2" I.D. x 14" Lg. (Blue)	1
4	424-0001-2	Water Hose 1/2" I.D. x 2" Lg. (Blue)	1
5	424-0001-22	Water Hose 1/2" I.D. x 22" Lg. (Blue)	1
6	424-0001-82	Water Hose 1/2" I.D. x 82" Lg. (Blue)	1
7	424-0001-77	Water Hose 1/2" I.D. x 77" Lg. (Blue)	1
8	338-0014	Water Pump	1
9	338-0020	Strainer, System	1
10	540-0008	Adapter, Straight Barb	2
11	543-0003	Adapter, Barb Tee, Poly	2
12	542-0004	Adapter, 90° Poly	2
13	645-0040	Uni-Clamp	6
14	542-0002	Adapter, 90° Poly	2
15	542-0003	Adapter, 90° Poly	3
16	546-0002	Plug, 3/4" Poly	2
17	000-1715	Water Tank, U.S. Gal. (each) (1) Front (1) Rear	2
18	350-0020	Water Cap w/Chain	2
19	000-5112	Spray Bar, PVC	2
20	000-5111	Bracket, Spray Bar	4
21	338-0011	Base, Spray Nozzle	8
22	338-0013	Strainer, Spray Nozzle	8
23	338-0012	Cap and Gasket, Spray Nozzle	8
24	338-0010	Spray Tip (Brass)	8
25	385-0042	Protective Sleeve - Same as Item 11, Page 15	1
26	338-0016	Petcock, Drain - Spray Bar	2



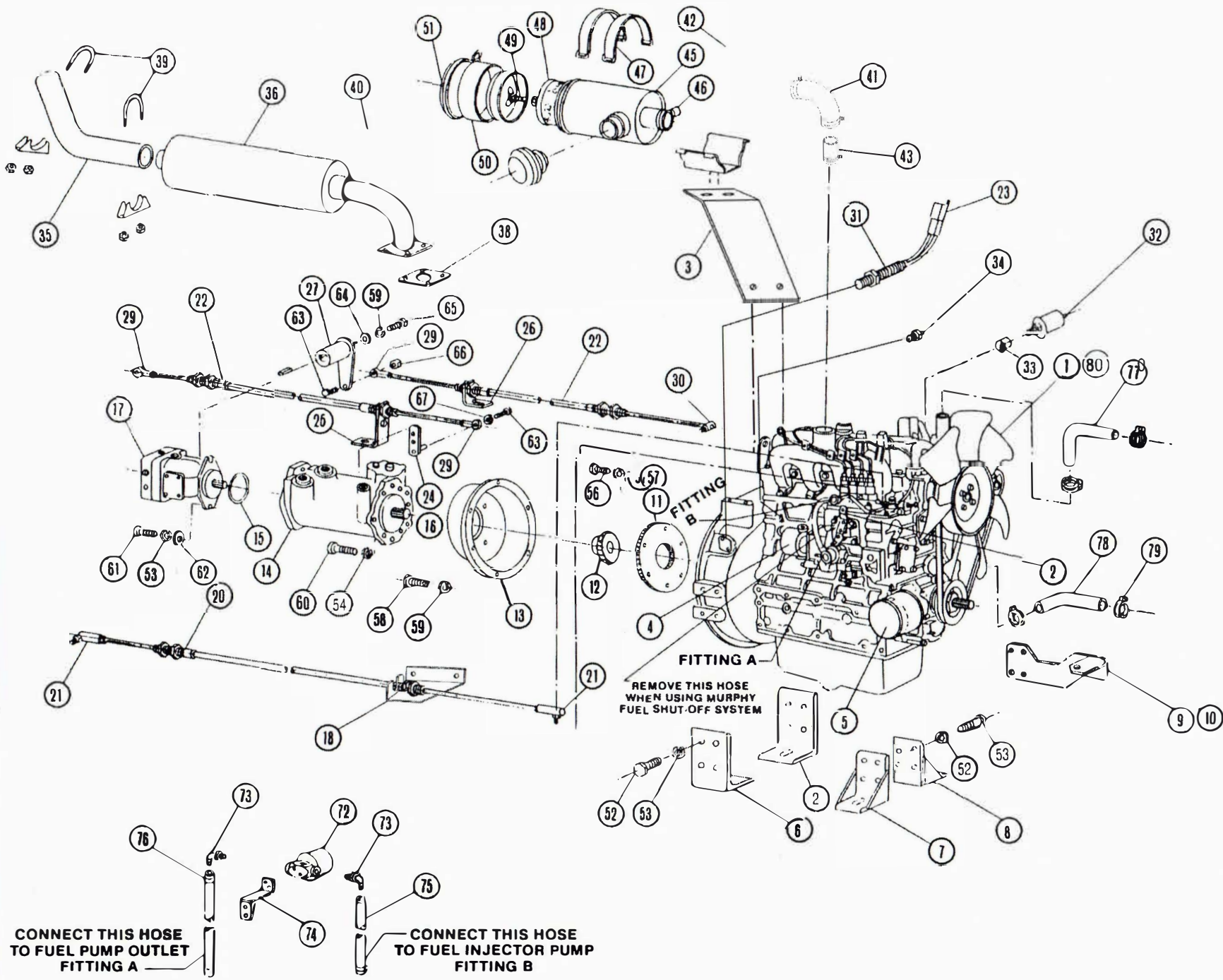
COVERS, SCRAPERS AND COCOA MATS

Item No.	Part No.	Description	Qty.
1	000-5085	Bracket, Scraper Bar	4
2	000-5086	Bar, Scraper Follower	4
3	000-5084	Rubber Scraper	4
4	000-5110	Pan, Cocoa Mat	2
5	355-0011	Cocoa Mat	2
6	000-5083	Front Tank & Support.....	1
7	000-5043	Console, Steering	1
8	000-4086	Upper Cover - Console	1
9	000-5101	Lower Cover - Console	1
10	000-5090	Cover, Front Engine.....	1
11	000-5061	Cover, Top Engine	1
12	000-5089	Grill Plate	1
13	000-5033	Side Plate, L.H.	1
14	000-5034	Side Plate, R.H.	1
15	000-5099	Cover, R.H. Rear Engine	1
16	000-5098	Cover, L.H. Rear Engine	1
17	000-5054	Reservoir, Hydraulic Oil (Integral w/Rear Outer Support Frame)	1
18	000-4207	Cover, Vandal	1



MISCELLANEOUS

Item No.	Part No.	Description	Qty.
1	395-0003	Seat, w/Arm Rests	1
2	330-0011	Steering Wheel	1
3	330-0005	Cap, Steering Wheel	1
4	380-0048	Complete Decal Set	1
5	395-0007	Seat Belt - (Optional) used with R.O.P.S. only	1
6	390-0003	R.O.P.S. (Optional)	1
7	350-0011	Fill Cap, w/Screen	2
8	335-0133	Spare Keys	1
9	350-0020	Water Cap, w/Chain	2
10	645-0057	Lockable Hood Latch	1
11	335-0076	Battery - NOT SHOWN	1
12	000-1175	Battery Hold Down Bar- NOT SHOWN	1
13	385-0008	Battery Hold Down Bolts - OBSOLETE	1
14	000-1715	Water Tank	2
15	000-5116	Drive Motor Brake Release Tool - NOT SHOWN (See Drum Assembly Page 6)	2
16	330-0014	Steering Column	1
17	000-4207	Cover, Vandal	1



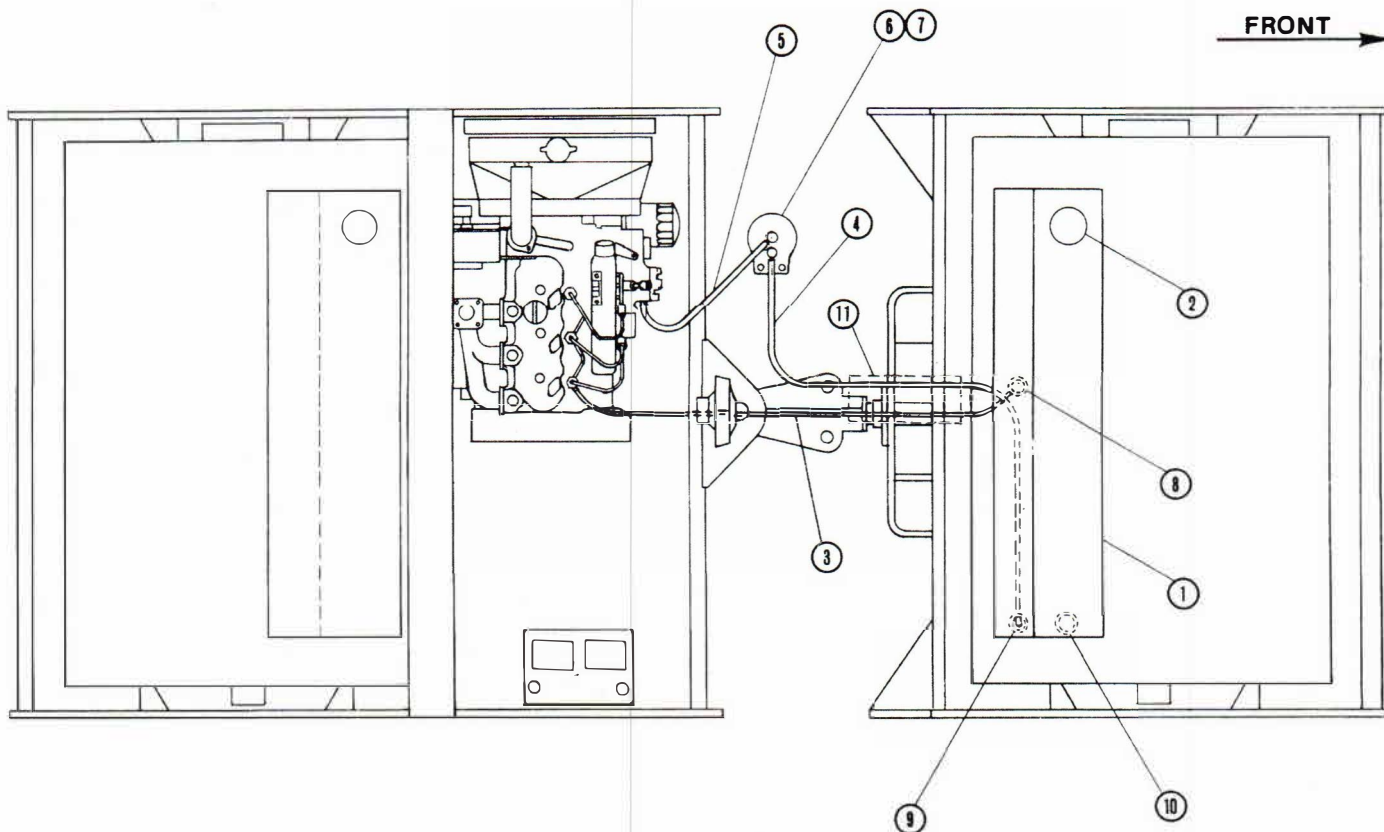
KUBOTA V1505 DIESEL ENGINE & RELATED COMPONENTS

Item No.	Part No.	Description	Qty.
1	205-0169	Fan Blade.....	1
2	000-5057	Rear R.H. Engine Mount	1
3	000-5129	Bracket, Air Cleaner.....	1
4	100-0018	Pump, Power Steering.....	1
5	205-0156	Filter, Engine Oil	1
6	000-5058	Front R.H. Engine Mount	1
7	000-5055	Front L.H. Engine Mount	1
8	000-5056	Rear L.H. Engine Mount	1
9	205-0234	Front Radiator Support	1
10	205-0235	Rear Radiator Support.....	1
11	230-0051	Nylon Flange, on Engine Flywheel	1
12	230-0045	Hub, on Propel Pump	1
13	230-0052	Housing, Pump Drive.....	1
14	100-0023	Pump, Propel.....	1
15	000-4248	Adapter Plate (Between Pumps)	1
16	101-0023	Control Lever Handle - Pump to Bracket (Not Shown)	1
17	100-0025	Pump, Vibratory.....	1
18	000-5130	Bracket, Throttle.....	1
20	315-0015	Cable, Throttle	1
21	645-0026	Ball Joint	2
22	315-0011	Cable, Pump Control (1) Propel (1) Vibrator	2
23	335-0068	Connector, Male.....	1
24	000-5126	M46 Pump Control Bracket	1
26	000-4134	Bracket, Control Cable	2
27	000-4254	Lever, Vibratory Pump Speed Control.....	1
29	645-0022	Ball Joint	3
30	645-0026	Ball Joint	1
31	375-0019	Magnetic Pulse Source for Tac	1
32	375-0024	Sender, Oil Pressure	1
33	501-0012	Adapter, 45 Degree	1
34	375-0010	Sender, Temperature.....	1
35	000-5122	Tail Pipe, Exhaust	1
36	205-0120	Muffler	1
38	205-0229	Gasket, Exhaust Flange	1
39	397-0010	Exhaust Clamp.....	2
41	205-0058	Hose, Air Cleaner.....	1

Continued Next Page

KUBOTA V1505 DIESEL ENGINE & RELATED COMPONENTS (Continued)

Item No.	Part No.	Description	Qty.
43	205-0228	Hose, Air Cleaner.....	1
44	205-0060	Pipe Clamp	2
45	205-0050	Air Cleaner Body	1
46	205-0051	Dust Indicator, Air Cleaner.....	1
47	205-0052	Band - Air Cleaner	2
48	205-0155	Air Filter	1
49	205-0053	Wing Bolt	1
50	205-0054	Cover, Air Cleaner	1
51	205-0055	Band Assembly	1
52	610-1001	Bolt, Metric	16
53	625-0006	Lock Washer	16
54	625-0007	Lock Washer, 1/2.....	8
56		Bolt - Kubota	8
57		Lock Washer - Kubota	8
58		Bolt - Kubota	6
59		Lock Washer - Kubota	6
60	600-5014	Bolt, 1/2 NC x 1 1/2 Lg.	2
61	600-5013	Bolt, 1/2 NF x 1 3/4 Lg.	2
62	620-0007	Flat Washer, 1/2.....	2
63	600-1002	Bolt, 1/4 NC x 1 Lg.	2
64	620-0005	Flat Washer, 3/8.....	1
65	600-3013	Bolt, 3/8 NF x 2 1/4 Lg. HHCS	1
66	607-0001	Flexloc Nut, 1/4	1
67	625-0003	Lock Washer, 1/4.....	1
72	375-0017	Solenoid, Shut Down - OPTIONAL	1
73	502-0021	Adapter, 90 Degree	2
74	000-A004	Bracket.....	1
75	432-0001	Fuel Line, 5/16 x 12" Lg. (SAE Approved)	2
76	645-0031	Clamp.....	4
77	205-0232	Hose, Upper	1
78	205-0231	Hose, Lower	1
79	205-0233	Clamp.....	4
80	205-0230	Radiator, Kubota (Not Shown)	1



FUEL SYSTEM

Item No.	Part No.	Description	Qty.
1	000S5083	Diesel Fuel Tank	1
2	350-0011	Filler Cap w/screen	1
3	420-0001	Fuel Line 3/16 x 49" Lg. (SAE Approved)	1
4	432-0001	Fuel Line 5/16 x 57" Lg. (SAE Approved)	1
5	432-0001	Fuel Line 5/16 x 16" Lg. (SAE Approved)	1
6	205-0036	Mounting Plate, Fuel Filter	1
7	205-0014	Fuel Filter	1
8	500-0015	Adapter, Straight	1
9	502-0021	Adapter 90°	1
10	526-0004	Plug, 1/2" NPT	1
11	385-0042	4" Protective Sleeve 18" Lg.	1

SPECIFICATIONS

WEIGHTS

Shipping Weight 6,400 lbs.
Operating Weight (Full Ballast + Operator) 7,100 lbs.

DIMENSIONS

Overall Length 114 in.
Height without ROPS 69 in.
Height with ROPS 95 in.
Width 51.5 in.
Wheelbase 74 in.
Curb Clearance (each side)..... 11 in.
Wall Clearance (each side) 2.75 in.

CAPACITIES

Fuel..... 17 gal.
Hydraulic Fluid 17 gal.
Engine Oil 5 qts.
Water Tank 52 gal.

FRONT AND REAR DRUMS

Width 46 in.
Diameter 29 in.
Shell Thickness50 in.

STEERING

Type Hydraulic Center-Pivot Articulated
Turning Radius (outside) 12 ft.
Turning Radius (inside) 8 ft.
Oscillation +15°

DRIVE

Drive System Dual Drum Hydrostatic
Controls..... Single Lever, Infinitely Variable
Travel Speed 0-6 MPH
Engine Kubota Diesel, water cooled, 4 cylinder
Model V1505B, 38 HP @ 3000 RPM

BRAKES

ServiceHydrostatic drive provides
dynamic braking
Parking/EmergencyFailsafe, Spring applied,
hydraulically released, manual
switch on console

VIBRATION SYSTEM - Dual Drum

TypeHydraulic Drive Direct
ControlSingle lever for variable VPM setting,
3 position switch, (1) Dual Drum
Vib "on", (2) Single Drum Vib "on",
(3) All Modes Vib "off"
Frequency 0 - 3000 VPM (each drum)
Centrifugal Force ..7080 Lbs. @ 3000 VPM (each drum)
Dynamic Force Per Linear Inch
Front - 228 PLI • Rear - 232 PLI
Static Force Per Linear Inch
Front - 67 PLI • Rear - 70 PLI
Total Applied Force per Drum
Front - 10,480 lbs • Rear - 10,680 lbs.
Total Applied Force of Complete Unit 21,160 Lbs.

WATER SPRAY SYSTEM

Type..... Pressurized w/control switch,
spray bar with quick disconnect brass spray
nozzles & strainers. Also, Spin ON System Strainer
TankBeuthling polyethylene, front &
rear, 52 Gal. total
Drum Scrapers.....Four adjustable, neoprene rubber
Drum Cocoa Mats One each drum, pivoting

STANDARD EQUIPMENT

- Dual Drum Drive
- Dual Drum Vibration
- GaugesFuel, Oil Pressure, Water Temp.,
Hydraulic Fluid Temp., Voltmeter,
Tachometer, Hourmeter
- Seat.....Bucket type w/Arm Rests,
Adjustable Front to Back,
- Safety Devices Neutral Start Switches,
Propel & vib., Back-up Alarm, Parking
Brake w/switch on console, Articulated Steering Lock
- Vandal Protection Instrument Vandal Cover,
Locking Fuel & Hydraulic Fluid
Caps, Lockable Engine Cover
- ROPS/FOPS Rollover Protection
Structure and Seat Belt,
(Meets SAE Requirements J1040C)

OPTIONAL EQUIPMENT

- Special Paint
- Work Lights, Rotating Beacon



8300·8200



ONE YEAR LIMITED WARRANTY

We warrant to the original consumer that each new unit sold by us will be free from manufacturing defects in materials or workmanship in normal service for a period of one year from date of shipment, provided the unit is operated and maintained in accordance with NEW BEUTHLING'S instruction and manuals.

Defective parts are to be returned to the factory, freight prepaid, and will be replaced or repaired whichever NEW BEUTHLING elects. Some components, i.e., engine, hydraulic pumps and motors etc. are subject to manufacturer's warranty. Most of these warranties meet or exceed the NEW BEUTHLING WARRANTY.

For the first 12 months, NEW BEUTHLING will cover all parts and labor. After the first six months, rental units and the following specific components are not covered under the NEW BEUTHLING WARRANTY: batteries, electrical components, throttle, choke, & control cables.

This warranty is not applicable to normal maintenance service (such as engine tune-ups) or normal replacement of service or wear items, such as filters, lubricating oil, grease and rubber scrapers.

Allowance for repairs or alterations will not be allowed unless they are authorized in writing by NEW BEUTHLING.

Liability for damages or delay caused by defective parts will not be assumed by NEW BEUTHLING.

Credit will not be allowed if in the opinion of NEW BEUTHLING a part failed through neglect of maintenance, misuse or as the result of an accident. The machine may not be altered or modified in any manner which affects the mechanical operation of the machine as designed by the manufacturer.

NEW BEUTHLING makes every effort to continually improve its products, and it does so without incurring any obligation to make such changes on units previously shipped. NEW BEUTHLING also reserves the right to discontinue the production of any product at any time.

To obtain warranty service, purchaser must bring the unit to an authorized NEW BEUTHLING dealer.

**New Beuthling
465 Griffin Blvd.
Amery, Wisconsin 54001
715-263-2300**

MACHINE IDENTIFICATION INFORMATION

MACHINE SERIAL NUMBER: _____

ENGINE MAKE, MODEL & SERIAL NUMBER: _____

PURCHASE DATE: _____

DEALER: _____

MACHINE SERVICE INFORMATION