# **OPERATION**

AND

# MAINTENANCE MANUAL

WITH

# PARTS LIST -SUPPLEMENT-

**MODEL:** 

**B2-48 Dump Body** 

YEAR:

1977 & UP

MANUAL NO:

M6-001-00

## \*\*IMPORTANT\*\*

READ AND FOLLOW INSTRUCTIONS GIVEN IN SAFETY AND OPERATIONS SECTIONS, AND THOSE SECTIONS RELATED TO YOUR SERVICE AND REPAIR RESPONSIBILITIES.



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# **DUMP BODY SUPPLEMENT**



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#### **OPERATING INSTRUCTIONS**

#### General

This publication is supplemental to the model B2-48 Maintenance, Service, and Parts manual, and covers only the 'dump body' portion of the vehicle.

It is important that the Introduction and Operating Guidelines sections in the B2-48 Maintenance, Service, and Parts manual, are read and understood before operating <u>any</u> control on the vehicle.

#### Controls

The dump body on the vehicle is raised and lowered hydraulically, but is controlled electrically by means of a pair of push button switched located on the left rear panel of the vehicle. Depressing the top push-button starts the 12 volt hydraulic motor, which supplies pressurized fluid to the hydraulic cylinder, and raises the dump body. When the cylinder reaches full travel (dump body fully elevated), a relief valve in the pump unit opens at a factory pre-set pressure of 2,000 psi. Fluid is then returned to the pump tank. At any point prior to the fully elevated position, if the push button is released, the dump body will hold at the position where the switch was released due to a one way check valve, which prevents fluid from returning through the pump to the tank.

To lower the dump body, press the bottom button and the solenoid valve opens allowing fluid to return to the tank at a specified rate. At any point during the lowering of the dump body, if the push button is released, the solenoid valve closes and the dump body will hold its position where the switch was released.



The maximum height of the dump body fully elevated is 9 feet from ground level.

# **ACAUTION**

WHEN THE DUMP BODY IS BEING RAISED OR LOWERED, THE FORWARD/OFF/REVERSE SWITCH SHOULD BE IN THE 'OFF' POSITION AND THE PARKING BRAKE SET. THE OPERATOR ALSO MUST BE SURE THAT THE AREA ABOVE THE DUMP BODY IS CLEAR AND HAS SUFFICIENT ROOM TO RAISE THE BODY.

#### Safety Column

Located to the left of the hydraulic pump/motor unit is the safety column. The purpose of the safety column is to prevent the dump body from being accidentally lowered from the elevated position while the vehicle is being serviced.

To place the safety column in position, raise the dump body so that the column may be placed in position under the upper support seat. Lower the body until the column is secure and supporting the body.

## **ACAUTION**

THE SAFETY COLUMN SHOULD ALWAYS BE USED TO SUPPORT THE DUMP BODY ANYTIME MAINTENANCE OR SERVICE IS BEING PERFORMED IN THE AREA UNDER THE DUMP BODY.

DISCONNECT THE MAIN BATTERY LEADS BEFORE WORKING ON ANY PART OF THE ELECTRICAL SYSTEM.

#### Hydraulic Cylinder Restricted Flow Fitting

The restricted flow fitting is located on the threaded portion of the fitting that is installed to the cylinder. This fitting prevents the dump body from being lowered at too fast a rate. If the hydraulic line to the cylinder should break or rupture, the restricted flow fitting allows the body to lower at a safe rate.

# **ACAUTION**

DO NOT TAMPER WITH OR ALTER THE RESTRICTED FLOW FITTING IN ANY WAY. IF REPLACEMENT IS NECESSARY, USE ONLY TAYLOR-DUNN® PARTS.

#### Manual Override Valve

The manual override valve is located to the left of the hydraulic pump. It allows the manual dumping of hydraulic fluid from the hydraulic cylinder into the pump tank when the dump body is in the raised position, and the solenoid dump valve fails to operate when the down push button is pressed.

# **ACAUTION**

BEFORE OPERATING THE MANUAL OVERRIDE VALVE, BE SURE THE AREA UNDER THE DUMP BODY IS CLEAR.

#### Pressure Relief Valve

The pressure relief valve is factory pre-set to 2,000 psi. It is normally closed and is actuated when the pre-set pressure is exceeded. When this happens, the valve allows fluid to bypass the cylinder and return to the pump tank.

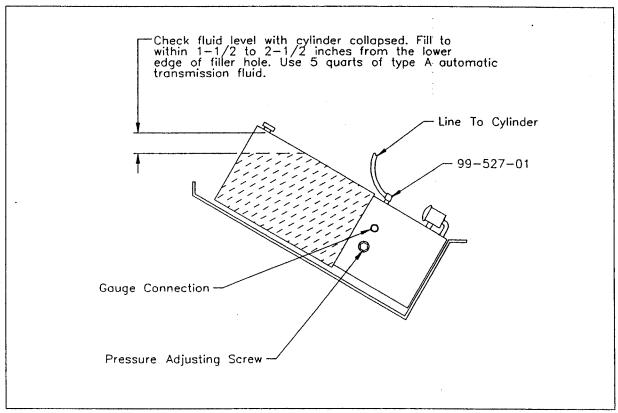


Figure 1

To adjust/set the pressure relief valve (refer to Figure 1):

- 1. Raise dump body and set safety column.
- 2. Relieve pressure in system by depressing 'down' button.
- 3. Remove allen plug and install pressure gauge (0-3000 psi).
- 4. Remove allen plug from adjusting screw hole.
- 5. Raise dump body to fully extended cylinder position and secure with hoist.
- 6. Adjust relief valve through the adjusting screw hole to 2000 psi. Turn adjustor clockwise to increase, and counter-clockwise to decrease pressure.
- 7. Remove gauge and replace allen plugs.

## **ACAUTION**

USE ONLY TYPE 'A' AUTOMATIC TRANSMISSION FLUID. USING ANY OTHER TYPE OF FLUID MAY CAUSE PUMP MOTOR FAILURE.

#### Solenoid Dump Valve

The solenoid dump valve returns fluid from the hydraulic cylinder to the pump tank. The valve is normally closed except when the 'down' push button is pressed. This activates the solenoid valve, which then allows hydraulic fluid to be returned to the pump tank.

#### Lubrication

There are six (6) grease fitting located on the dump body unit. One (1) is located on the front end of the safety column, where it is attached to the vehicle frame. One (1) is located midway on the dump body pivot shaft. Two (2) fittings are located at the top of the hydraulic cylinder, and two (2) at the bottom of the cylinder. Under normal conditions these fittings should be greased every three (3) months. The hydraulic tank fluid level should be checked weekly, and well as all of the hydraulic fittings for leaks.

#### **Dump Body Electrical**

The hydraulic motor operates on 12 volts D.C. from the batteries (refer to Figure 2). All wires and electrical connections should be checked regularly.

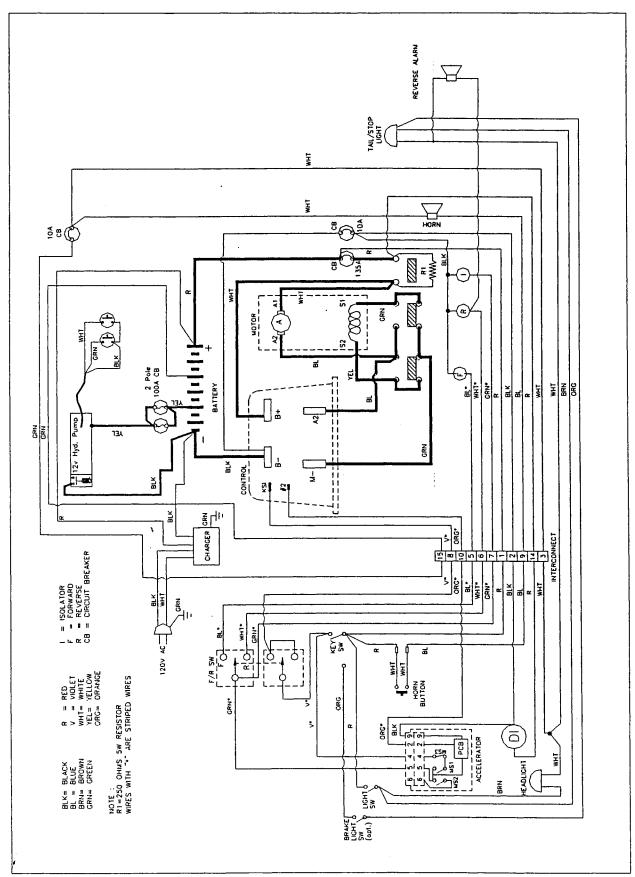


Figure 2 PMC Wiring

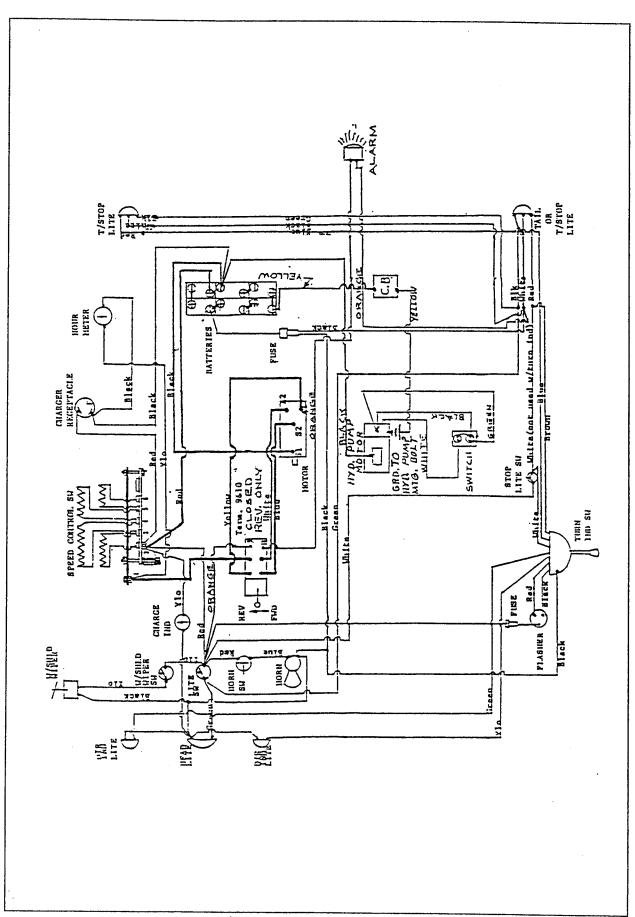


Figure 3 Dump Body Wiring

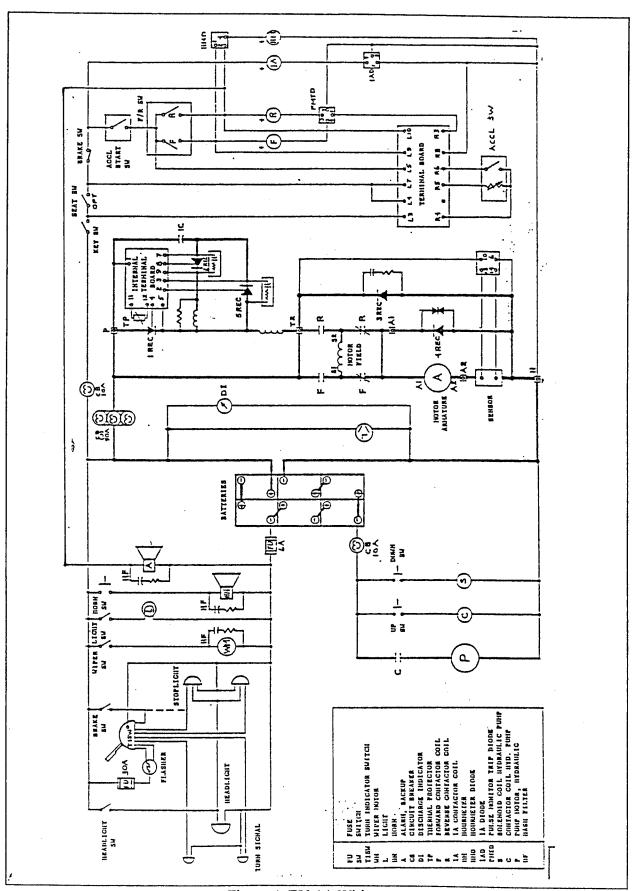


Figure 4 EV-1A Wiring

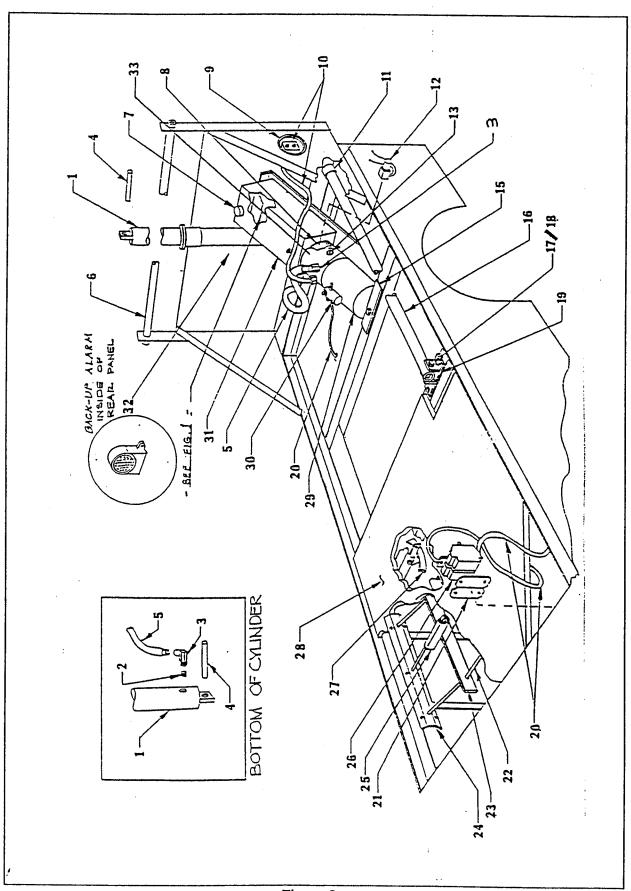


Figure 5

Item No.	Part No.	DUMP BODY (Figure 5)  Description	Ω+··
1	99-524-00	Hydraulic Cylinder, 18" Stroke	Qty 1
$\frac{1}{2}$	99-526-11	Adaptor,3/8 x 3/8 NPTF,w/orifice	<u>1</u>
3	99-527-01	90 Deg Adaptor Union	$\frac{1}{2}$
4	21-018-00	Cylinder Pin	$\frac{2}{1}$
5	99-597-51	Hose Assy, 24", 1/4 Male	1
6	21-019-00	Shaft, Dump Body Pivot	1
7		4	<del></del>
8	41-985-00	Plug, Plastic Vent	1
	80-699-00	O-Ring	1
9	72-022-51 *	Mounting Ring, Rubber	1
10	· · · · · · · · · · · · · · · · · · ·	Push Button Control Station, w/ Cord	1
10a	71-102-15	Button Switch, For Control Station	1
11	98-754-00	Bumper, Rubber, Safety Column	1
12	99-957-53	Solenoid Valve and Block Assy	1
13	99-597-55	Manual Override Valve Assy	1
14			-
15	99-597-50	Mounting Bracket, 12V Pump	1
16	91-285-11	Safety Column	1
17	96-244-00	Bolt, 9/16NC x 3" w/Grease Fitting	1
18	88-169-81	Locknut, 9/16NC	1
19	91-285-10	Anchor, Safety Column	1
20	75-124-00	Wire Harness	1
21	71-610-02	Plate, Circuit Breaker Mounting	1
22	50-240-00	Battery Rod, 1/4NC x 36-3/8", Plated	3
23	77-869-00	Battery Rod Hold Down Bar	2
24	77-980-00	Battery Box, Bolt-In	1
25	50-241-00	Cover Tube, Battery Rod	1
26	79-843-00	Circuit Breaker, 100A/Pole, 2 Pole	2
27	72-400-00	Guard, Wire Harness	1
28	90-442-00	Deckboard	1
29	99-597-56	Motor, 12 Volt	1
30	*	Solenoid Switch	1
31	99-597-00	Pump, Hydraulic, 12 Volt	1
32	73-005-10	Reverse Alarm	1
33	99-597-54	Pump and Base Assy	1
34	99-524-51	Seal Repair Kit	1
35	99-524-52	Packing Gland Nut	1
36	99-524-53	Spreader	1

<sup>\*</sup> Part number not available at this time.





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