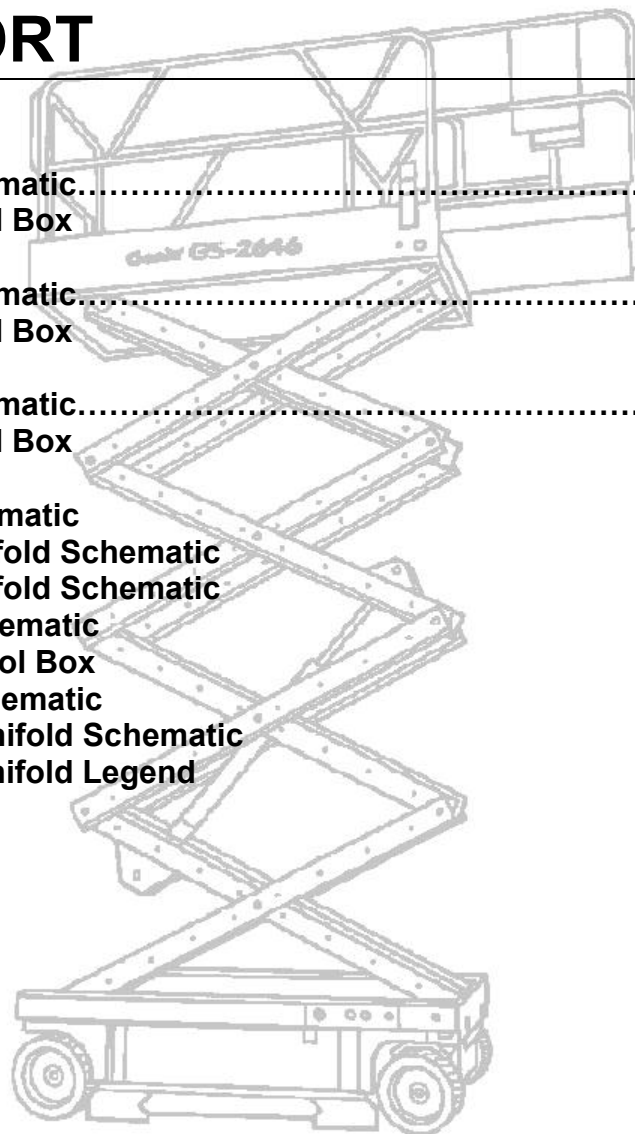
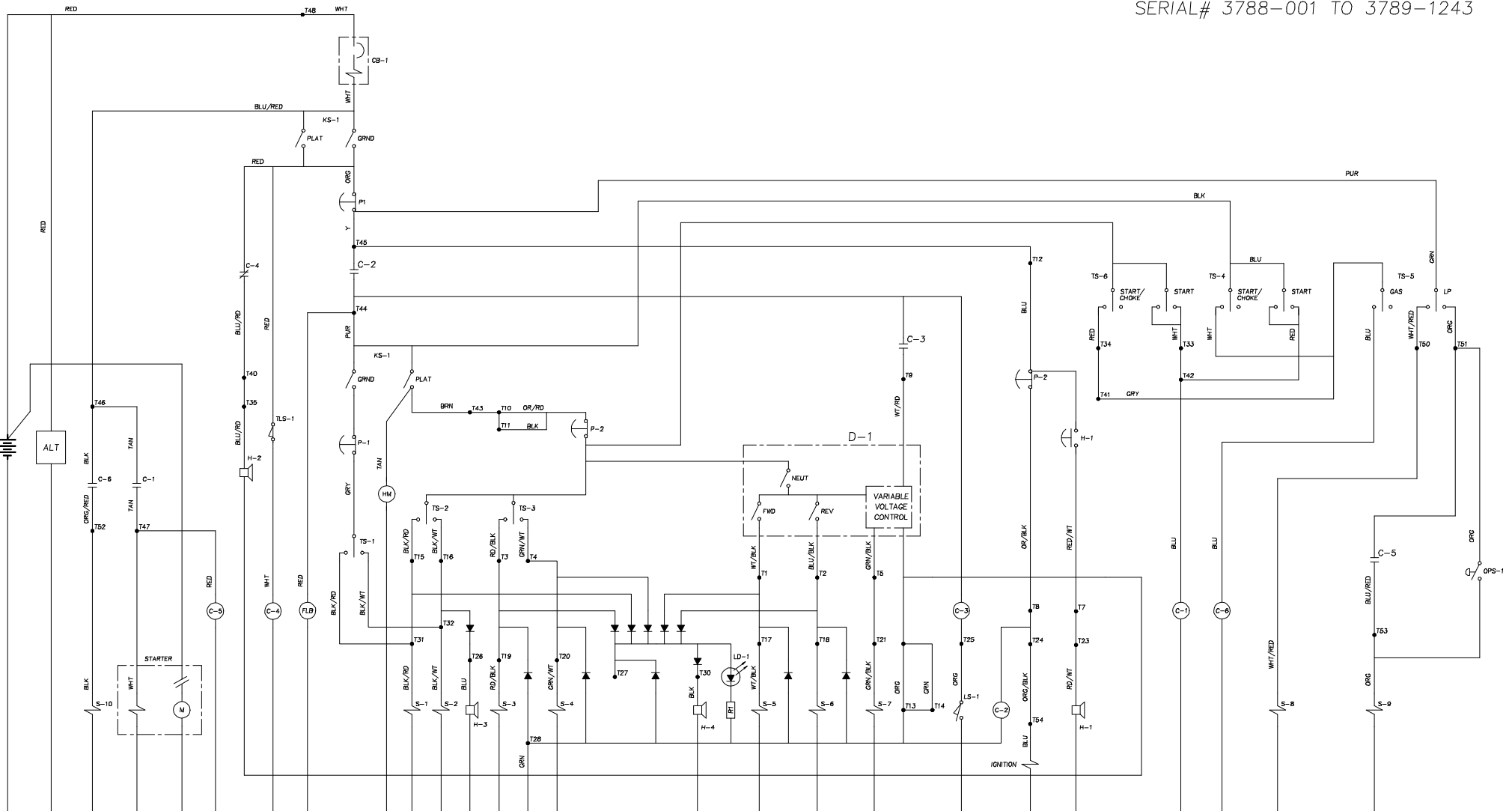


V3 V2470 RT & DRT

Page:	Model:	Serial Number:
V3-01	V2470 RT - Electrical Schematic.....	3788-001 to 3789-1243
V3-02	V2470 RT - Ground Control Box	" " " "
V3-03	V2470 RT - Wiring Diagram	" " " "
V3-04	V2470 RT - Electrical Schematic.....	3789-1244 to 3790-1900
V3-05	V2470 RT - Ground Control Box	" " " "
V3-06	V2470 RT - Wiring Diagram	" " " "
V3-07	V2470 RT - Electrical Schematic.....	3790-1901 & higher
V3-08	V2470 RT - Ground Control Box	" " " "
V3-09	V2470 RT - Wiring Diagram	" " " "
V3-10	V2470 RT - Hydraulic Schematic	" " " "
V3-11	V2470 RT - Hydraulic Manifold Schematic	" " " "
V3-12	V2470 RT - Hydraulic Manifold Schematic	" " " "
V3-13	V2470 DRT - Electrical Schematic	
V3-14	V2470 DRT - Ground Control Box	
V3-15	V2470 DRT - Hydraulic Schematic	
V3-16	V2470 DRT - Hydraulic Manifold Schematic	
V3-17	V2470 DRT - Hydraulic Manifold Legend	

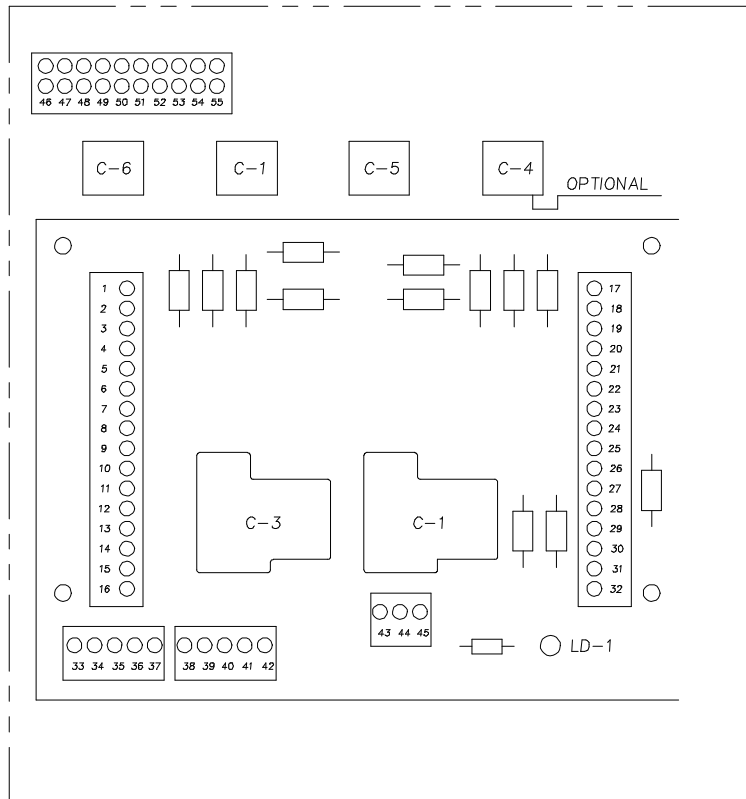


V2470 RT
ELECTRICAL SCHEMATIC
SERIAL# 3788-001 TO 3789-1243



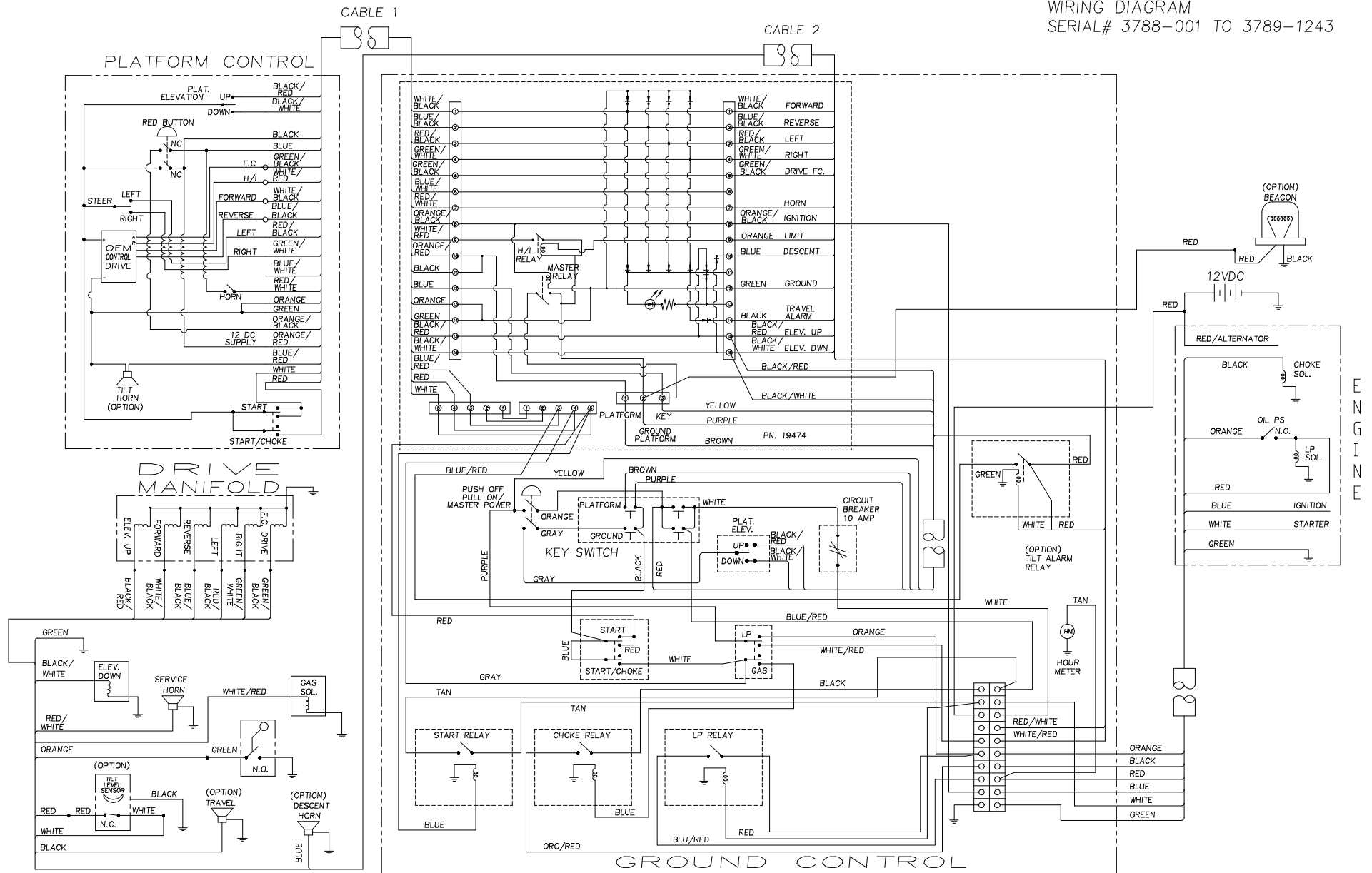
V2470 RT
GROUND CONTROL BOX
SERIAL# 3788-001 TO 3789-1243

GROUND CONTROL BOX

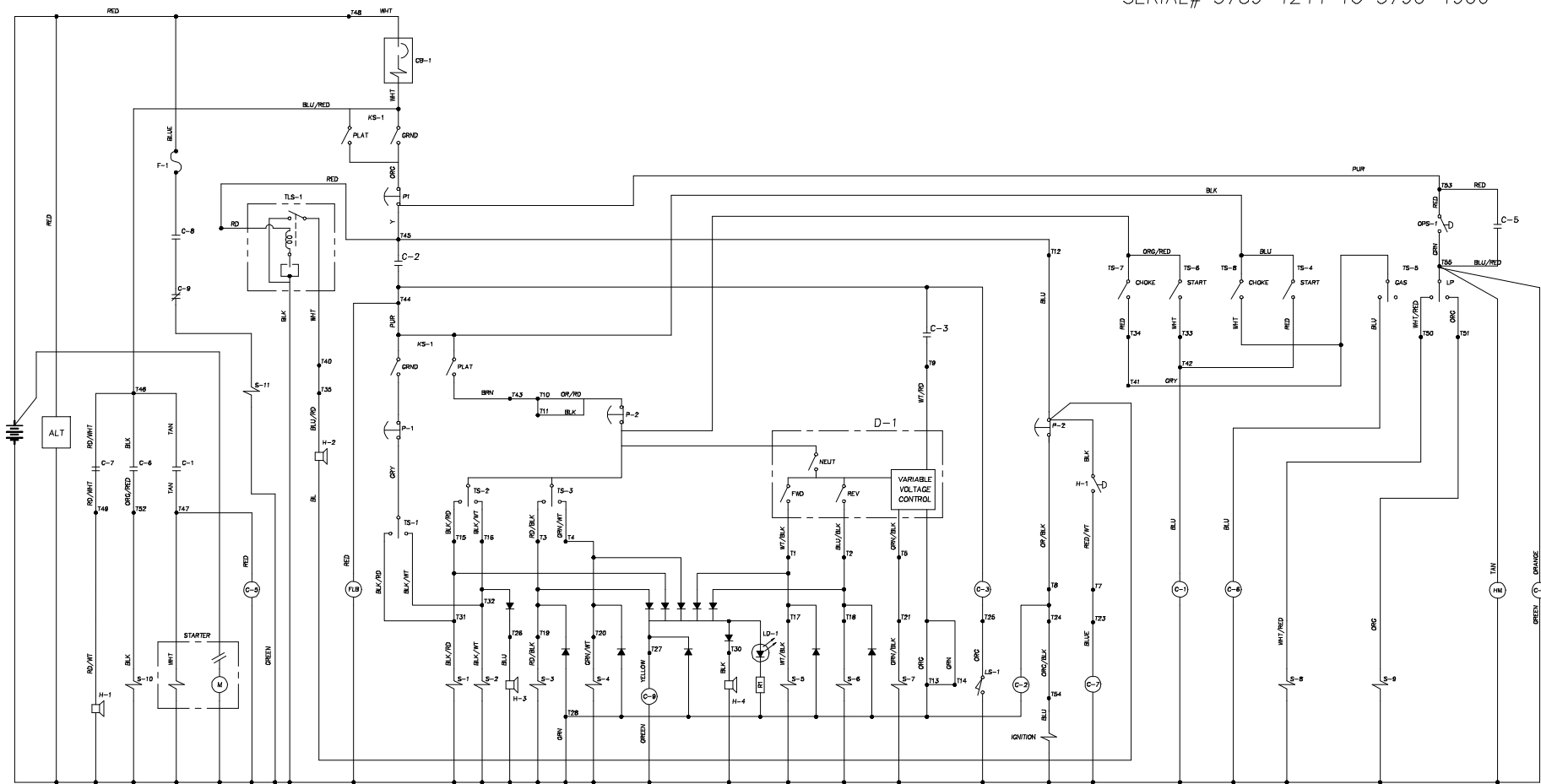


- | | | |
|--------|---|----------------------------------|
| CB-1 | CONTROL CIRCUIT 10 AMP CIRCUIT BREAKER | GROUND CONTROL STATION |
| C-1 | 12 VOLT ENGINE START RELAY | GROUND CONTROL STATION |
| C-2 | 12 VOLT CONTROL CIRCUIT MASTER RELAY | GROUND CONTROL STATION |
| C-3 | 12 VOLT HIGH/LOW SPEED RELAY | GROUND CONTROL STATION |
| C-4 | 12 VOLT TILT LEVEL ALARM RELAY (NC) | GROUND CONTROL STATION |
| C-5 | 12 VOLT LIQUID PROPANE (LP) RELAY | GROUND CONTROL STATION |
| C-6 | 12 VOLT CHOKE RELAY | GROUND CONTROL STATION |
| D-1 | DRIVE FORWARD/REVERSE PROPORTIONAL CONTROL JOYSTICK | PLATFORM CONTROL STATION |
| FLB | OPERATING MACHINE FLASHING BEACON | CHASSIS |
| H-1 | SERVICE HORN BUTTON AND INDICATOR | PLATFORM CONTROL STATION/CHASSIS |
| H-2 | TILT LEVEL INDICATOR | PLATFORM CONTROL STATION |
| H-3 | ELEVATE SYSTEM DESCENT INDICATOR | CHASSIS |
| H-4 | DRIVE SYSTEM TRAVEL INDICATOR | CHASSIS |
| HM | HOURLY METER | GROUND CONTROL STATION |
| KS-1 | KEY SWITCH-SELECT GROUND OR PLATFORM CONTROLS | GROUND CONTROL STATION |
| LD-1 | CONTROL CIRCUIT LIGHT EMITTING DIODE | GROUND CONTROL STATION |
| LS-1 | DRIVE SPEED LIMIT SWITCH (SHOWN WITH PLATFORM UP) | CHASSIS |
| LV1 | LOW VOLTAGE INTERRUPT SYSTEM | PLATFORM CONTROL STATION |
| OPS-1 | OIL PRESSURE SENSOR SWITCH | INTERNAL COMBUSTION ENGINE |
| P-1 | POWER ON/OFF BUTTON | GROUND CONTROL STATION |
| P-2 | POWER ON/OFF BUTTON | PLATFORM CONTROL STATION |
| S-1 | ELEVATE UP DIRECTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-2 | ELEVATE DOWN DIRECTIONAL CONTROL SOLENOID | ELEVATE CYLINDER |
| S-3 | STEER LEFT DIRECTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-4 | STEER RIGHT DIRECTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-5 | DRIVE FORWARD DIRECTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-6 | DRIVE REVERSE DIRECTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-7 | DRIVE PROPORTIONAL CONTROL SOLENOID | HYDRAULIC CONTROL MANIFOLD |
| S-8 | GASOLINE (GAS) SOLENOID | GASOLINE TANK |
| S-9 | LIQUID PROPANE (LP) SOLENOID | INTERNAL COMBUSTION ENGINE |
| S-10 | CHOKE SOLENOID | INTERNAL COMBUSTION ENGINE |
| T1-T55 | WIRING CONNECTION TERMINALS | GROUND CONTROL STATION |
| TLS-1 | TILT LEVEL SENSOR | CHASSIS |
| TS-1 | PLATFORM UP/DOWN TOGGLE SWITCH | GROUND CONTROL STATION |
| TS-2 | ELEVATE UP/DOWN TOGGLE SWITCH | PLATFORM CONTROL STATION |
| TS-3 | STEER LEFT/RIGHT TOGGLE SWITCH | PLATFORM CONTROL STATION |
| TS-4 | ENGINE START/START CHOKE TOGGLE SWITCH | GROUND CONTROL STATION |
| TS-5 | FUEL SELECT GAS/LP TOGGLE SWITCH | GROUND CONTROL STATION |
| TS-6 | ENGINE START/START CHOKE TOGGLE SWITCH | PLATFORM CONTROL STATION |

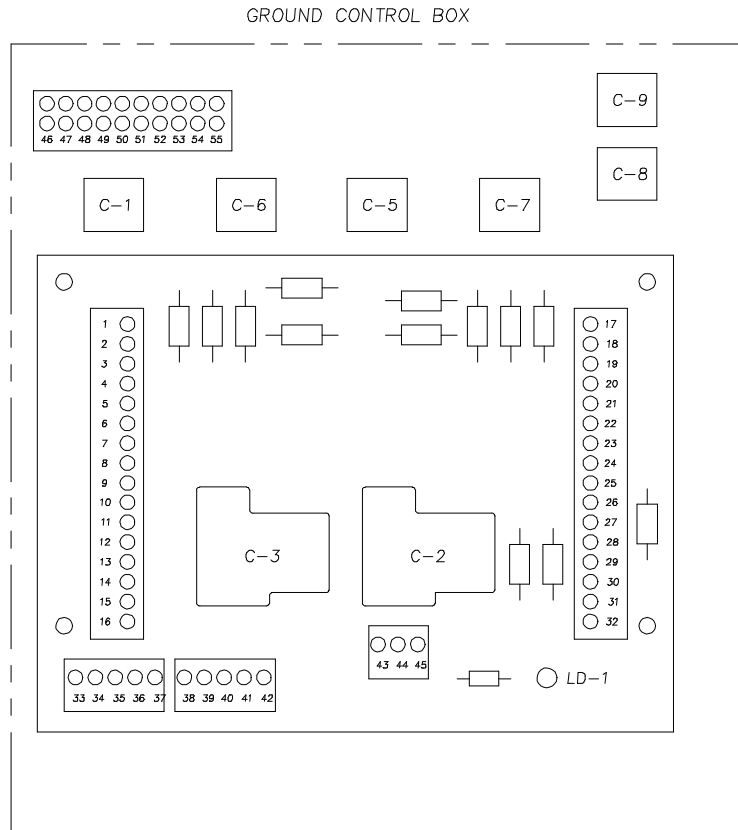
V2470 RT
WIRING DIAGRAM
SERIAL# 3788-001 TO 3789-1243



V2470 RT
ELECTRICAL SCHEMATIC
SERIAL# 3789-1244 TO 3790-1900

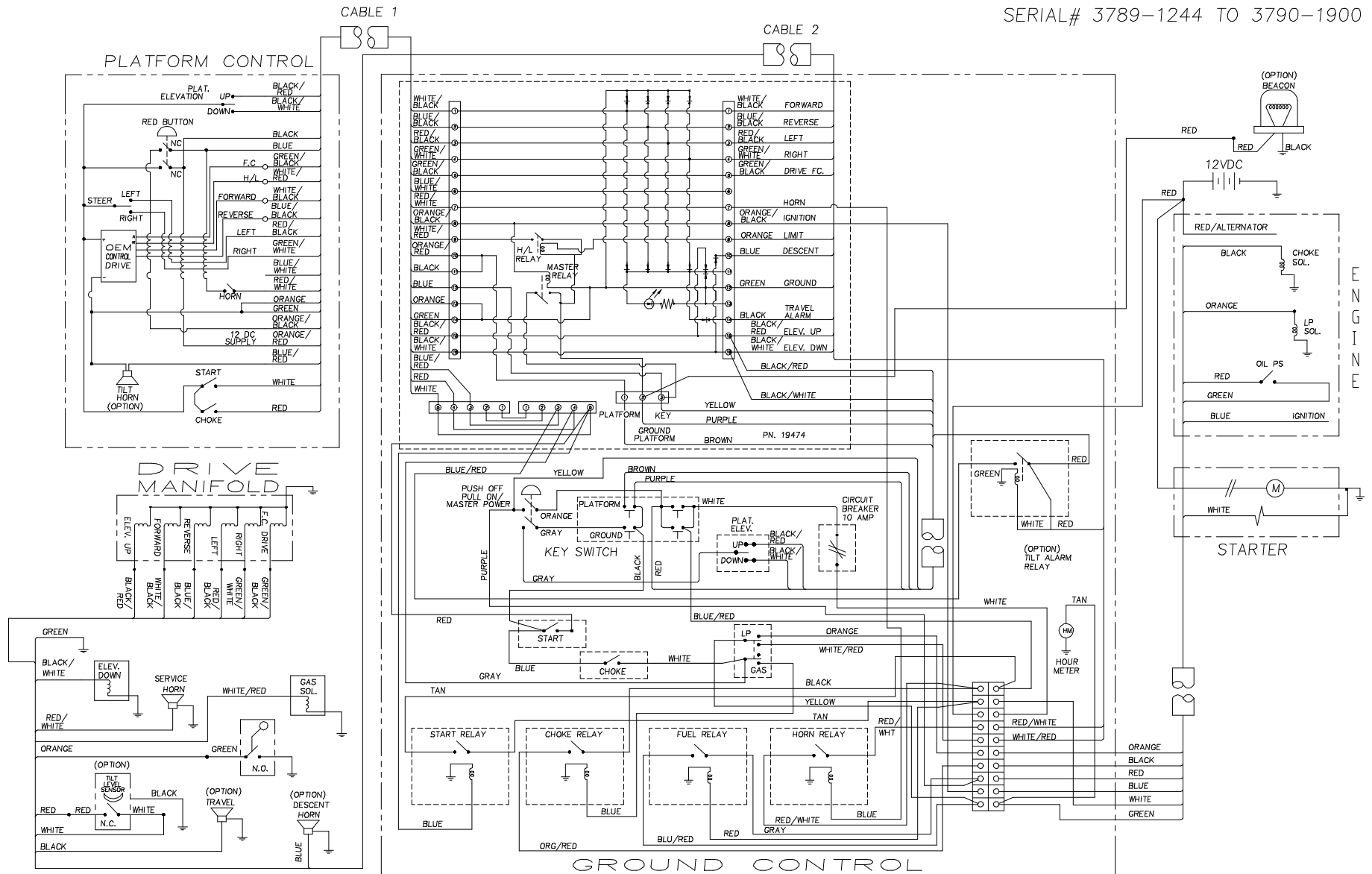


V2470 RT
GROUND CONTROL BOX
SERIAL# 3789-1244 TO 3790-1900

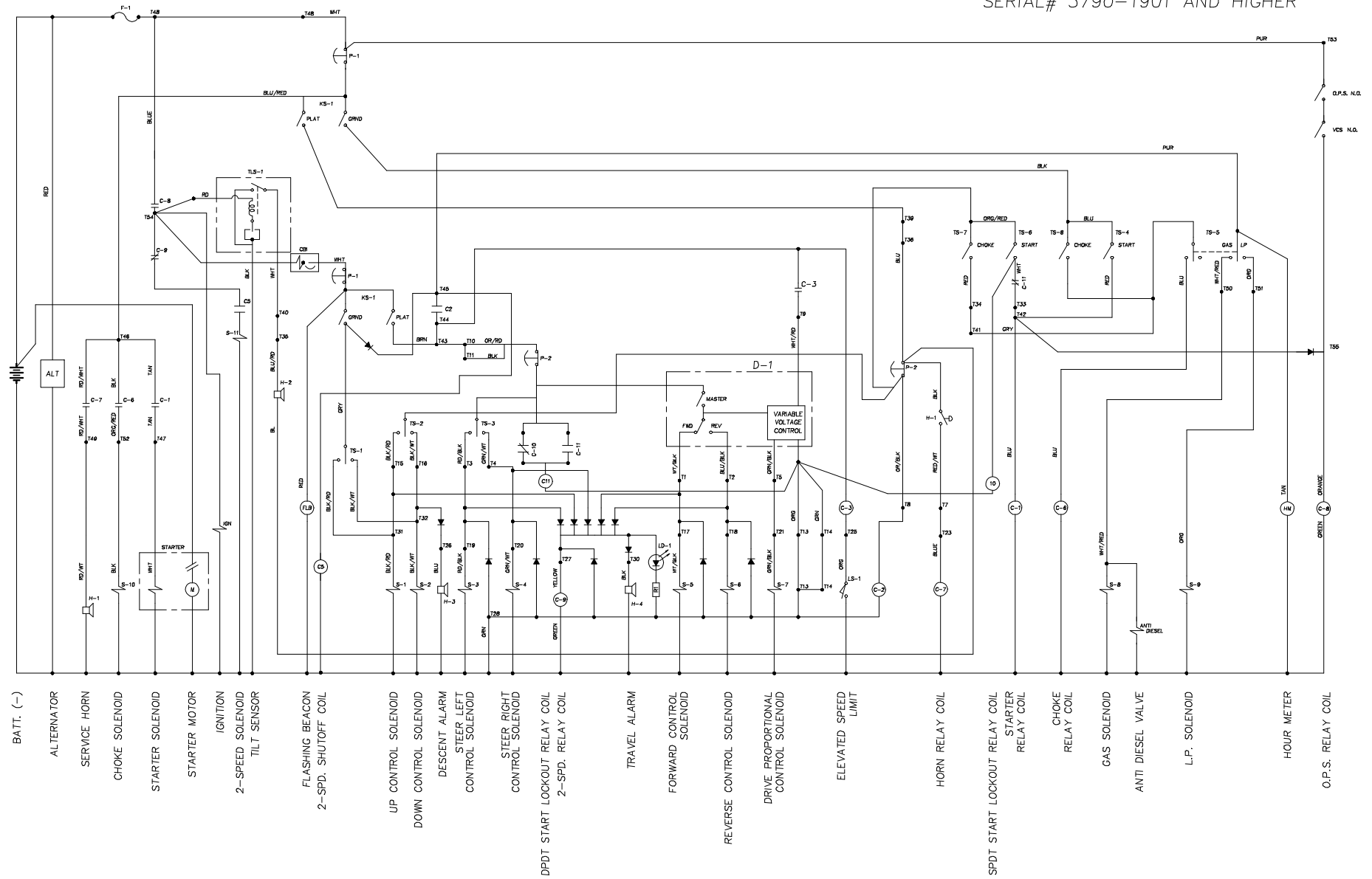


CB-1	CONTROL CIRCUIT 10 AMP CIRCUIT BREAKER	GROUND CONTROL STATION
C-1	12 VOLT ENGINE START RELAY	GROUND CONTROL STATION
C-2	12 VOLT CONTROL CIRCUIT MASTER RELAY	GROUND CONTROL STATION
C-3	12 VOLT HIGH/LOW SPEED RELAY	GROUND CONTROL STATION
C-5	12 VOLT FUEL RELAY	GROUND CONTROL STATION
C-6	12 VOLT CHOKE RELAY	GROUND CONTROL STATION
C-7	HORN RELAY	GROUND CONTROL STATION
C-8	2 SPEED THROTTLE RELAY (NO)	GROUND CONTROL STATION
C-9	2 SPEED THROTTLE RELAY (NC)	GROUND CONTROL STATION
D-1	DRIVE FORWARD/REVERSE PROPORTIONAL CONTROL JOYSTICK	PLATFORM CONTROL STATION
F-1	15 AMP FUSE	GROUND CONTROL STATION
FLB	OPERATING MACHINE FLASHING BEACON	CHASSIS
H-1	SERVICE HORN BUTTON AND INDICATOR	PLATFORM CONTROL STATION/CHASSIS
H-2	TILT LEVEL INDICATOR	PLATFORM CONTROL STATION
H-3	ELEVATE SYSTEM DESCENT INDICATOR	CHASSIS
H-4	DRIVE SYSTEM TRAVEL INDICATOR	CHASSIS
HM	HOUR METER	GROUND CONTROL STATION
KS-1	KEY SWITCH-SELECT GROUND OR PLATFORM CONTROLS	GROUND CONTROL STATION
LD-1	CONTROL CIRCUIT LIGHT EMITTING DIODE	GROUND CONTROL STATION
LS-1	DRIVE SPEED LIMIT SWITCH (SHOWN WITH PLATFORM UP)	CHASSIS
LV1	LOW VOLTAGE INTERRUPT SYSTEM	PLATFORM CONTROL STATION
OPS-1	OIL PRESSURE SENSOR SWITCH	INTERNAL COMBUSTION ENGINE
P-1	POWER ON/OFF BUTTON	GROUND CONTROL STATION
P-2	POWER ON/OFF BUTTON	PLATFORM CONTROL STATION
S-1	ELEVATE UP DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-2	ELEVATE DOWN DIRECTIONAL CONTROL SOLENOID	ELEVATE CYLINDER
S-3	STEER LEFT DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-4	STEER RIGHT DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-5	DRIVE FORWARD DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-6	DRIVE REVERSE DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-7	DRIVE PROPORTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-8	GASOLINE (GAS) SOLENOID	GASOLINE TANK
S-9	LIQUID PROPANE (LP) SOLENOID	INTERNAL COMBUSTION ENGINE
S-10	CHOKE SOLENOID	INTERNAL COMBUSTION ENGINE
S-11	2 SPEED THROTTLE SOLENOID	INTERNAL COMBUSTION ENGINE
T1-T55	WIRING CONNECTION TERMINALS	GROUND CONTROL STATION
TLS-1	TILT LEVEL SENSOR	CHASSIS
TS-1	PLATFORM UP/DOWN TOGGLE SWITCH	GROUND CONTROL STATION
TS-2	ELEVATE UP/DOWN TOGGLE SWITCH	PLATFORM CONTROL STATION
TS-3	STEER LEFT/RIGHT TOGGLE SWITCH	PLATFORM CONTROL STATION
TS-4	ENGINE START/START CHOKE TOGGLE SWITCH	GROUND CONTROL STATION
TS-5	FUEL SELECT GAS/LP TOGGLE SWITCH	GROUND CONTROL STATION
TS-6	ENGINE START/START CHOKE TOGGLE SWITCH	PLATFORM CONTROL STATION

V2470 RT
WIRING DIAGRAM
SERIAL# 3789-1244 TO 3790-1900

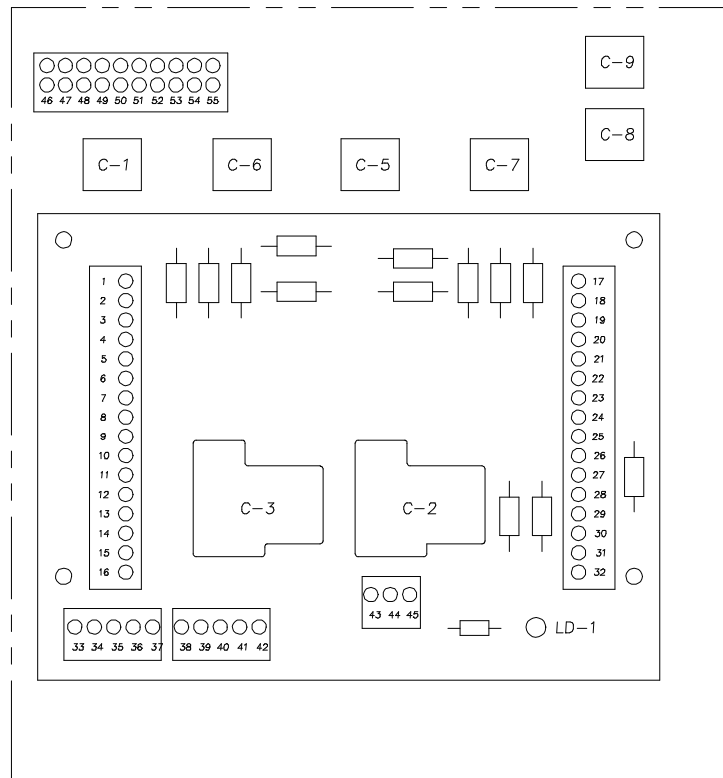


V2470 RT
ELECTRICAL SCHEMATIC
SERIAL# 3790-1901 AND HIGHER



V2470 RT
ELECTRICAL SCHEMATIC LEGEND
GROUND CONTROL BOX
SERIAL# 3790-1901 AND HIGHER

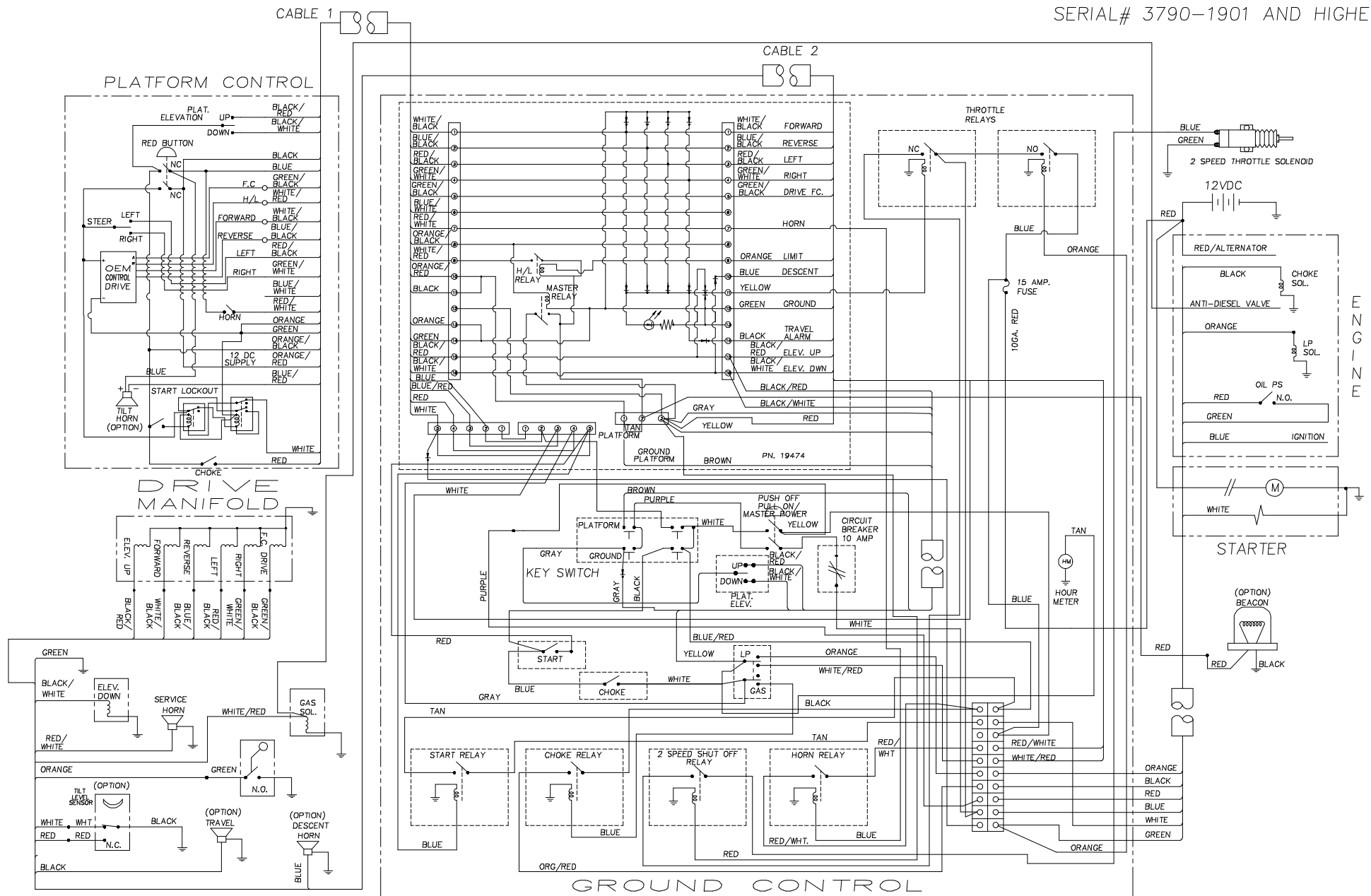
GROUND CONTROL BOX



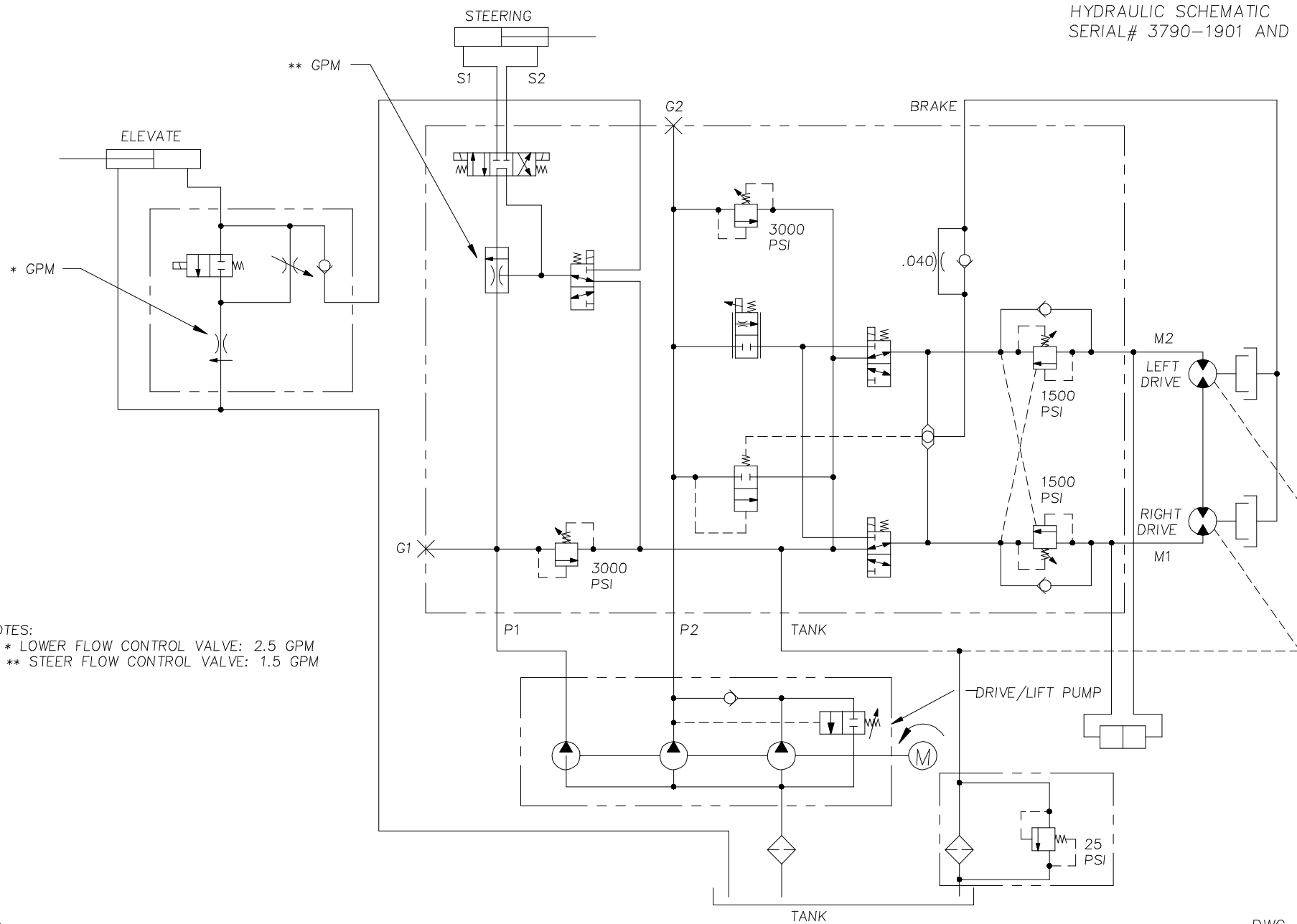
CB-1	CONTROL CIRCUIT 10 AMP CIRCUIT BREAKER	GROUND CONTROL STATION
C-1	12 VOLT ENGINE START RELAY	GROUND CONTROL STATION
C-2	12 VOLT CONTROL CIRCUIT MASTER RELAY	GROUND CONTROL STATION
C-3	12 VOLT HIGH/LOW SPEED RELAY	GROUND CONTROL STATION
C-5	12 VOLT 2 SPEED SHUT OFF RELAY	GROUND CONTROL STATION
C-6	12 VOLT CHOKE RELAY	GROUND CONTROL STATION
C-7	HORN RELAY	GROUND CONTROL STATION
C-8	2 SPEED THROTTLE RELAY (NO)	GROUND CONTROL STATION
C-9	2 SPEED THROTTLE RELAY (NC)	GROUND CONTROL STATION
D-1	DRIVE FORWARD/REVERSE PROPORTIONAL CONTROL JOYSTICK	PLATFORM CONTROL STATION
F-1	15 AMP FUSE	GROUND CONTROL STATION
FLB	OPERATING MACHINE FLASHING BEACON	CHASSIS
H-1	SERVICE HORN BUTTON AND INDICATOR	PLATFORM CONTROL STATION/CHASSIS
H-2	TILT LEVEL INDICATOR	PLATFORM CONTROL STATION
H-3	ELEVATE SYSTEM DESCENT INDICATOR	CHASSIS
H-4	DRIVE SYSTEM TRAVEL INDICATOR	CHASSIS
HM	HOUR METER	GROUND CONTROL STATION
KS-1	KEY SWITCH-SELECT GROUND OR PLATFORM CONTROLS	GROUND CONTROL STATION
LD-1	CONTROL CIRCUIT LIGHT EMITTING DIODE	GROUND CONTROL STATION
LS-1	DRIVE SPEED LIMIT SWITCH (SHOWN WITH PLATFORM UP)	CHASSIS
LV1	LOW VOLTAGE INTERRUPT SYSTEM	PLATFORM CONTROL STATION
OPS-1	OIL PRESSURE SENSOR SWITCH	INTERNAL COMBUSTION ENGINE
P-1	POWER ON/OFF BUTTON	GROUND CONTROL STATION
P-2	POWER ON/OFF BUTTON	PLATFORM CONTROL STATION
S-1	ELEVATE UP DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-2	ELEVATE DOWN DIRECTIONAL CONTROL SOLENOID	ELEVATE CYLINDER
S-3	STEER LEFT DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-4	STEER RIGHT DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-5	DRIVE FORWARD DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-6	DRIVE REVERSE DIRECTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-7	DRIVE PROPORTIONAL CONTROL SOLENOID	HYDRAULIC CONTROL MANIFOLD
S-8	GASOLINE (GAS) SOLENOID	GASOLINE TANK
S-9	LIQUID PROPANE (LP) SOLENOID	INTERNAL COMBUSTION ENGINE
S-10	CHOKE SOLENOID	INTERNAL COMBUSTION ENGINE
S-11	2 SPEED THROTTLE SOLENOID	INTERNAL COMBUSTION ENGINE
T1-T55	WIRING CONNECTION TERMINALS	GROUND CONTROL STATION
TLS-1	TILT LEVEL SENSOR	CHASSIS
TS-1	PLATFORM UP/DOWN TOGGLE SWITCH	GROUND CONTROL STATION
TS-2	ELEVATE UP/DOWN TOGGLE SWITCH	PLATFORM CONTROL STATION
TS-3	STEER LEFT/RIGHT TOGGLE SWITCH	PLATFORM CONTROL STATION
TS-4	ENGINE START/START CHOKE TOGGLE SWITCH	GROUND CONTROL STATION
TS-5	FUEL SELECT GAS/LP TOGGLE SWITCH	GROUND CONTROL STATION
TS-6	ENGINE START/START CHOKE TOGGLE SWITCH	PLATFORM CONTROL STATION

V2470 RT WIRING DIAGRAM

SERIAL# 3790-1901 AND HIGHER

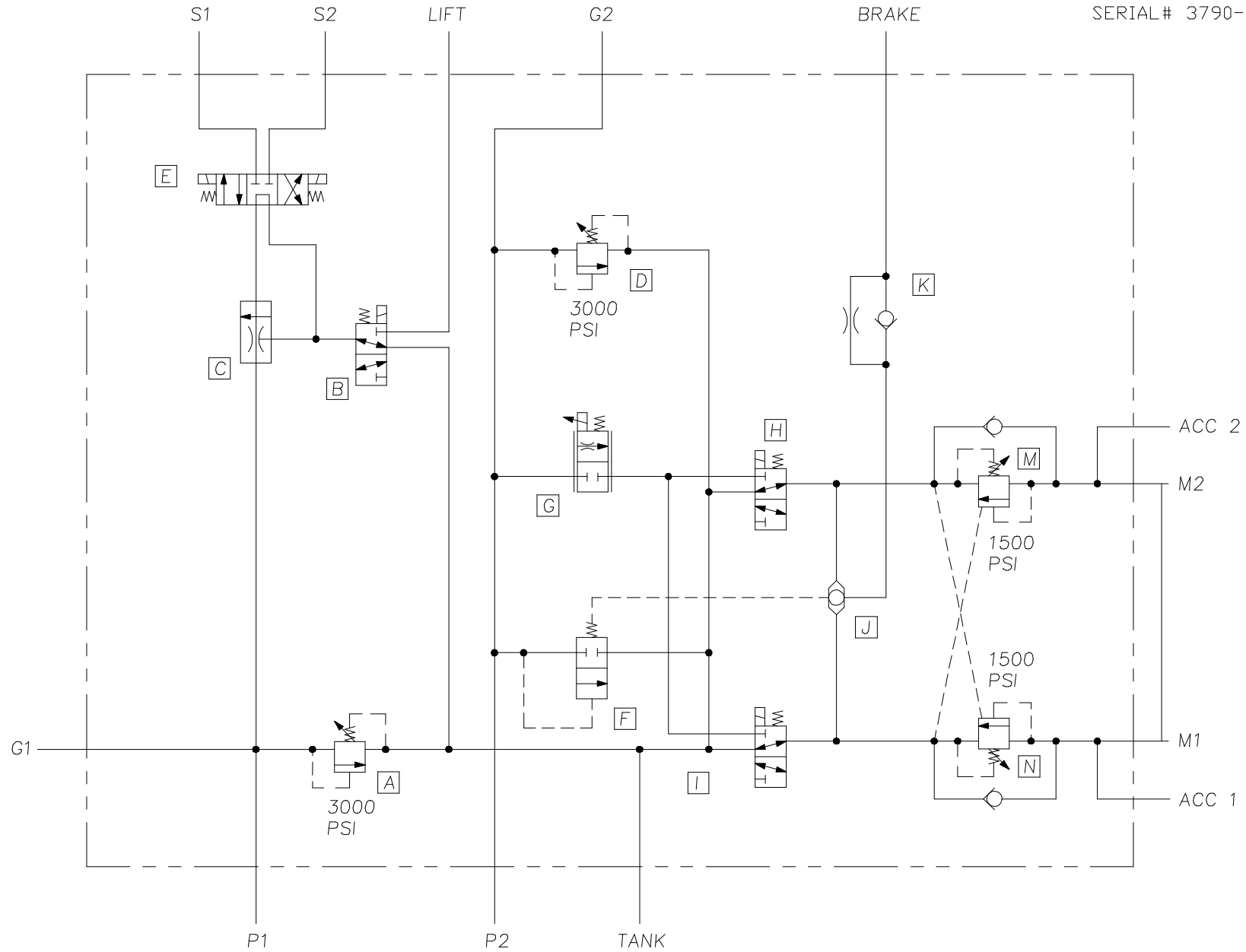


V2470 RT
HYDRAULIC SCHEMATIC
SERIAL# 3790-1901 AND HIGHER



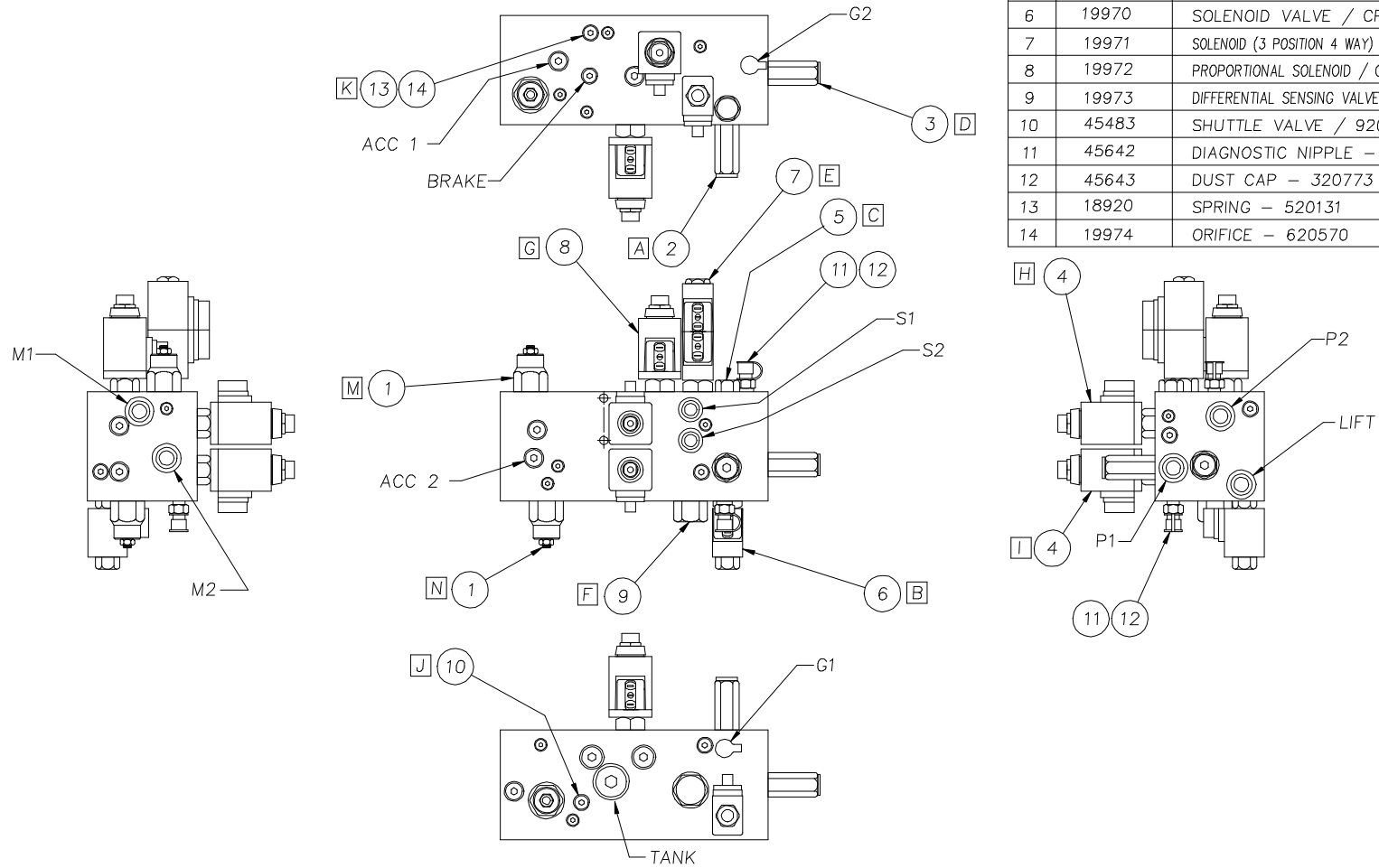
NOTES:
1. * LOWER FLOW CONTROL VALVE: 2.5 GPM
2. ** STEER FLOW CONTROL VALVE: 1.5 GPM

V2470 RT
HYDRAULIC MANIFOLD SCHEMATIC
SERIAL# 3790-1901 AND HIGHER

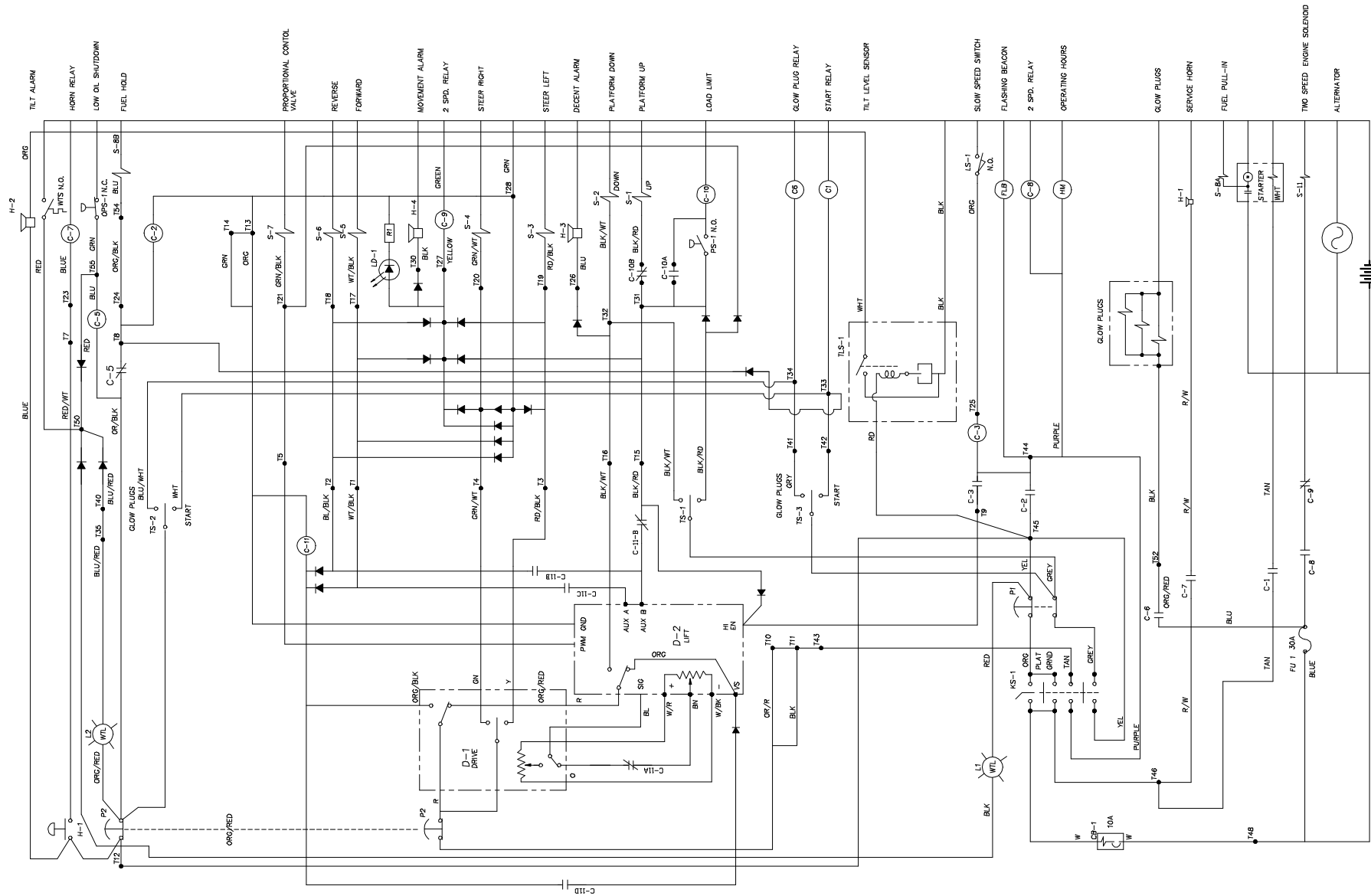


V2470 RT
HYDRAULIC MANIFOLD SCHEMATIC
SERIAL# 3790-1901 AND HIGHER

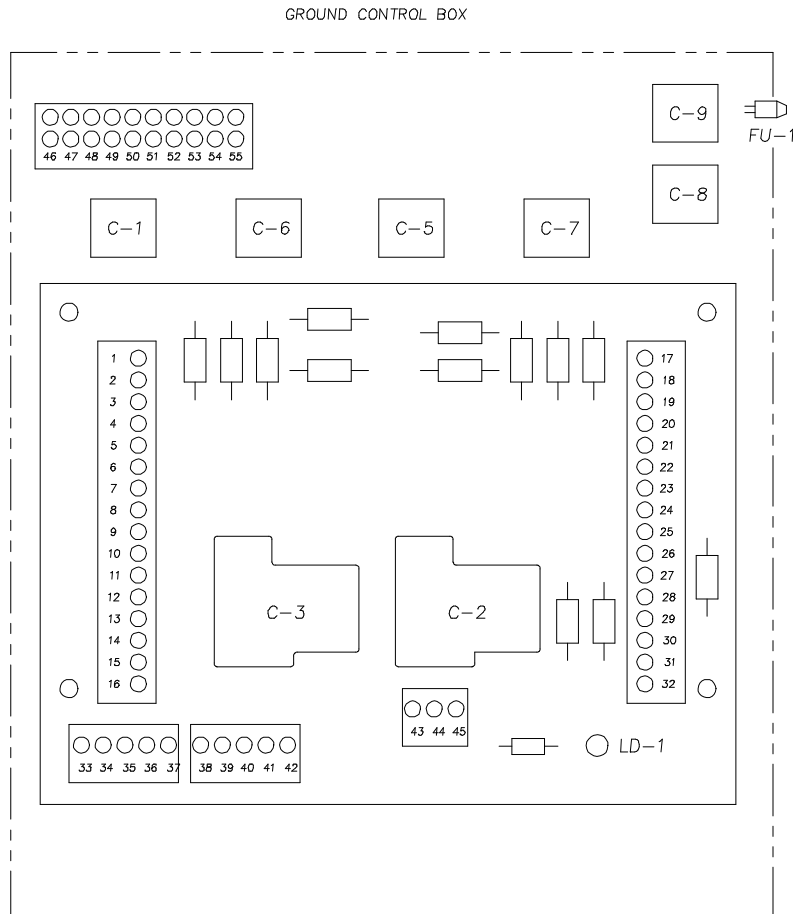
1	19967	COUNTER BALANCE VALVE / C441-1-B-0-E-B-150-10.0-15	2
2	19968	RELIEF VALVE / CP200-1-B-O-A-B-250	1
3	18911	RELIEF VALVE / CP200-1-B-O-A-C-300	1
4	19969	SOLENOID VALVE / CP521-1-B-O-12D-S	2
5	19206	FLOW REGULATOR / CP310-1L-B-O-1.5	1
6	19970	SOLENOID VALVE / CP520-1-B-O-12D-S	1
7	19971	SOLENOID (3 POSITION 4 WAY) / CP530-3P-B-O-1-12D-S	1
8	19972	PROPORTIONAL SOLENOID / CP551-30-B-O-20H-12D-S	1
9	19973	DIFFERENTIAL SENSING VALVE / CP701-1-B-O-150	1
10	45483	SHUTTLE VALVE / 920067	1
11	45642	DIAGNOSTIC NIPPLE - 320772	2
12	45643	DUST CAP - 320773	2
13	18920	SPRING - 520131	1
14	19974	ORIFICE - 620570	1



V2470 DRT ELECTRICAL SCHEMATIC



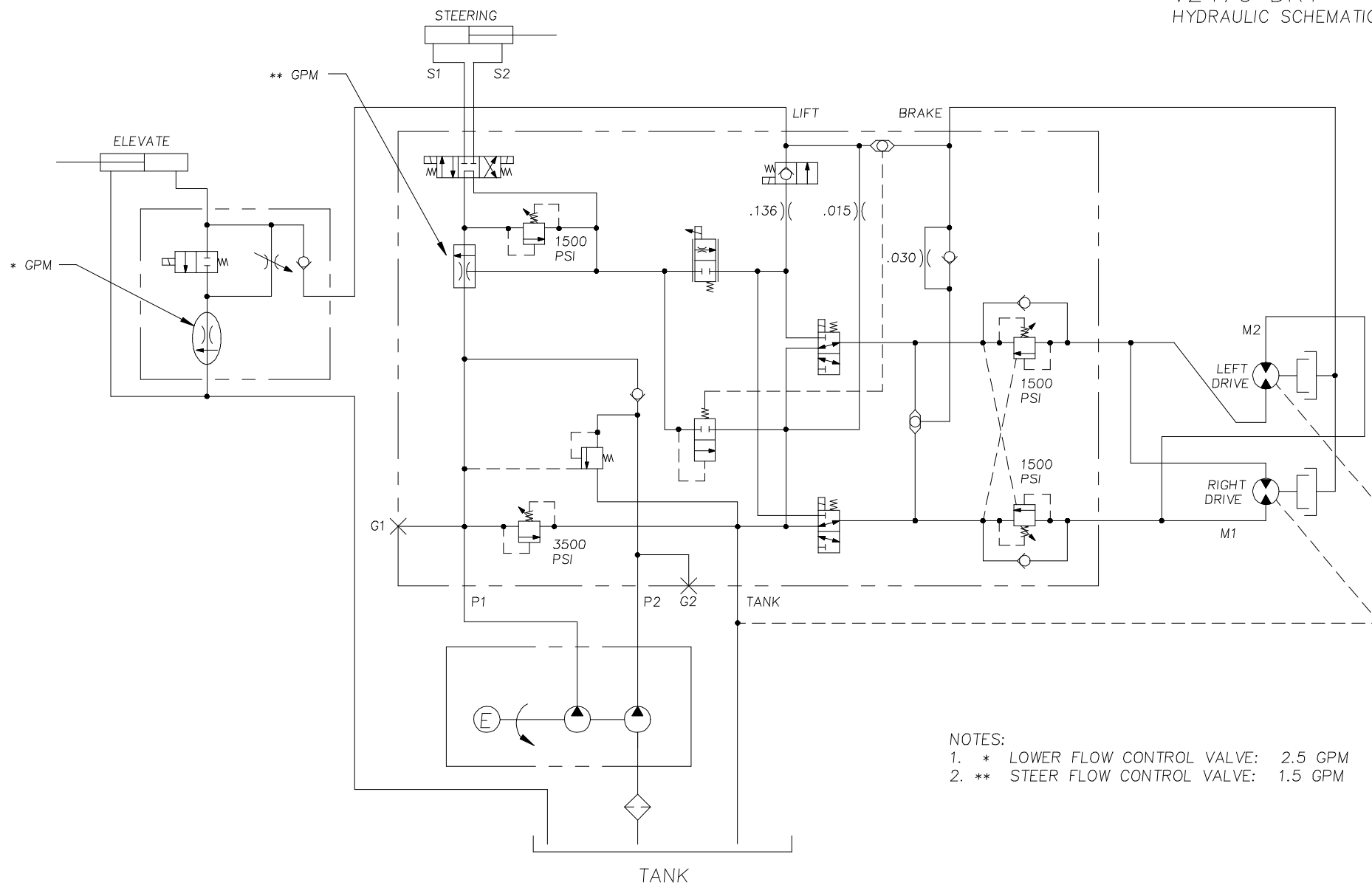
V2470 DRT
GROUND CONTROL BOX



- CB-1 CONTROL CIRCUIT 10 AMP CIRCUIT BREAKER
C-1 12 VOLT ENGINE START RELAY
C-2 12 VOLT CONTROL CIRCUIT MASTER RELAY
C-3 12 VOLT HIGH/LOW SPEED RELAY
C-5 12 VOLT LOW OIL SHUT DOWN
C-6 12 VOLT GLOW PLUG RELAY
C-7 HORN RELAY
C-8 2 SPEED THROTTLE RELAY (NO)
C-9 2 SPEED THROTTLE RELAY (NC)
C-10 LOAD LIMIT RELAY
C-11 DRIVE OVERRIDE RELAY
D-1 DRIVE FORWARD/REVERSE PROPORTIONAL CONTROL JOYSTICK
D-2 LIFT UP/DOWN PROPORTIONAL CONTROL JOYSTICK
FU-1 30 AMP FUSE
FLB OPERATING MACHINE FLASHING BEACON
H-1 SERVICE HORN BUTTON AND INDICATOR
H-2 TILT LEVEL INDICATOR
H-3 ELEVATE SYSTEM DESCENT INDICATOR
H-4 DRIVE SYSTEM TRAVEL INDICATOR
HM HOUR METER
KS-1 KEY SWITCH-SELECT GROUND OR PLATFORM CONTROLS
LD-1 CONTROL CIRCUIT LIGHT EMITTING DIODE
LS-1 DRIVE SPEED LIMIT SWITCH (SHOWN WITH PLATFORM UP)
OPS-1 OIL PRESSURE SENSOR SWITCH
P-1 POWER ON/OFF BUTTON
P-2 POWER ON/OFF BUTTON
S-1 ELEVATE UP DIRECTIONAL CONTROL SOLENOID
S-2 ELEVATE DOWN DIRECTIONAL CONTROL SOLENOID
S-3 STEER LEFT DIRECTIONAL CONTROL SOLENOID
S-4 STEER RIGHT DIRECTIONAL CONTROL SOLENOID
S-5 DRIVE FORWARD DIRECTIONAL CONTROL SOLENOID
S-6 DRIVE REVERSE DIRECTIONAL CONTROL SOLENOID
S-7 DRIVE PROPORTIONAL CONTROL SOLENOID
S-8 S-8A+B FUEL PULL AND HOLD
S-11 2 SPEED THROTTLE SOLENOID
T1-T55 WIRING CONNECTION TERMINALS
TLS-1 TILT LEVEL SENSOR
TS-1 PLATFORM UP/DOWN TOGGLE SWITCH
TS-4 ENGINE START GLOW PLUG TOGGLE SWITCH
TS-6 ENGINE START GLOW PLUG TOGGLE SWITCH

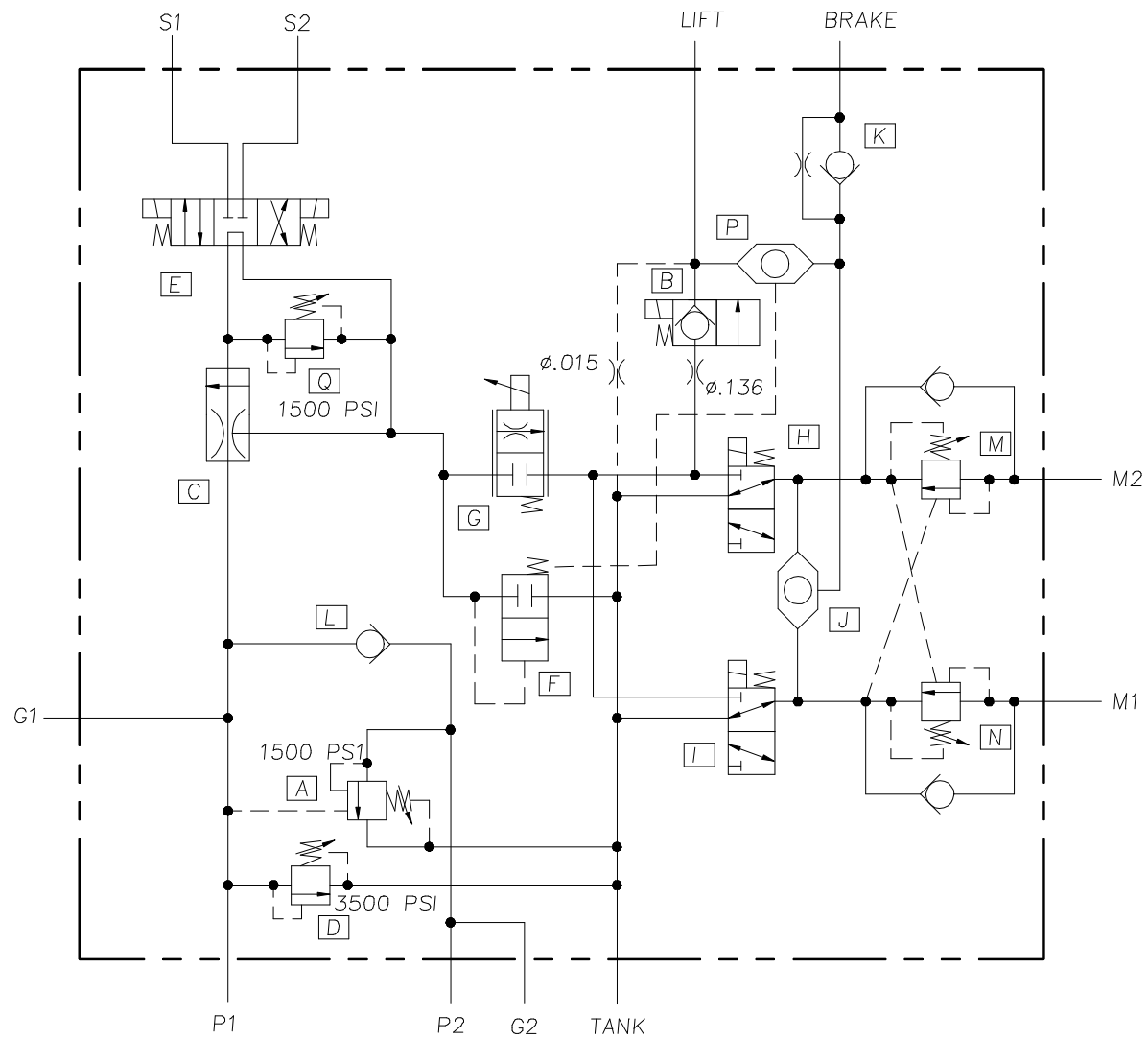
- GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
PLATFORM CONTROL STATION
PLATFORM CONTROL STATION
PLATFORM CONTROL STATION
GROUND CONTROL STATION
CHASSIS
PLATFORM CONTROL STATION/CHASSIS
PLATFORM CONTROL STATION
CHASSIS
CHASSIS
GROUND CONTROL STATION
GROUND CONTROL STATION
GROUND CONTROL STATION
CHASSIS
INTERNAL COMBUSTION ENGINE
GROUND CONTROL STATION
PLATFORM CONTROL STATION
HYDRAULIC CONTROL MANIFOLD
ELEVATE CYLINDER
HYDRAULIC CONTROL MANIFOLD
HYDRAULIC CONTROL MANIFOLD
HYDRAULIC CONTROL MANIFOLD
HYDRAULIC CONTROL MANIFOLD
HYDRAULIC CONTROL MANIFOLD
DIESEL ENGINE
DIESEL ENGINE
GROUND CONTROL STATION
CHASSIS
GROUND CONTROL STATION
GROUND CONTROL STATION
PLATFORM CONTROL STATION

V2470 DRT HYDRAULIC SCHEMATIC



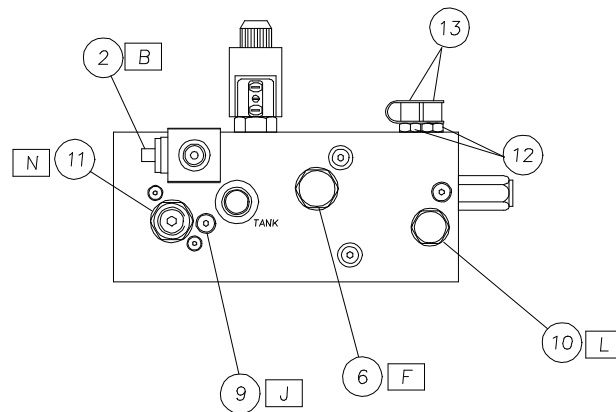
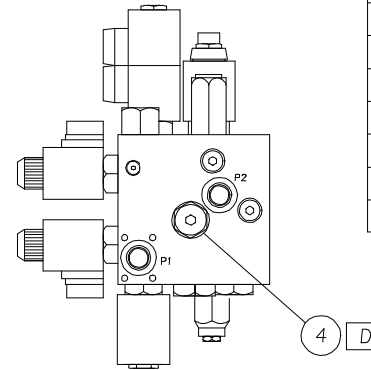
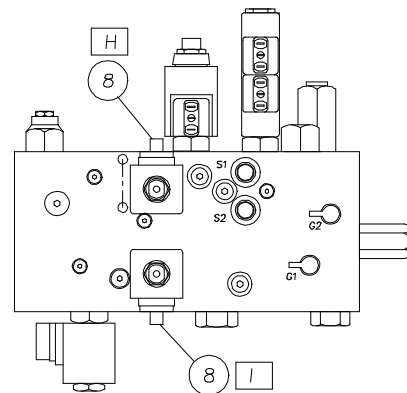
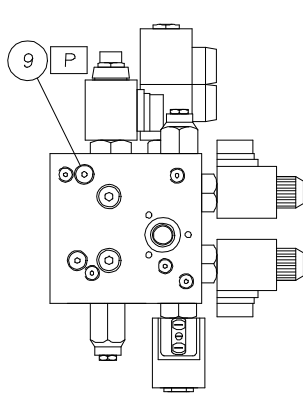
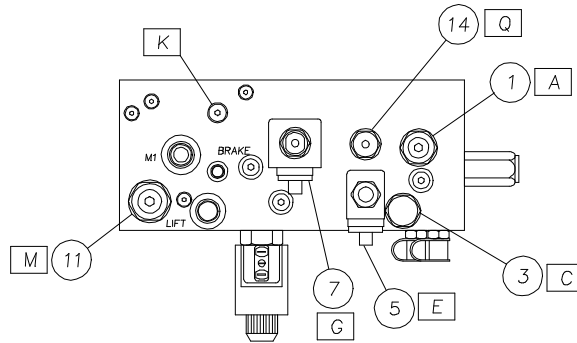
- NOTES:
1. * LOWER FLOW CONTROL VALVE: 2.5 GPM
 2. ** STEER FLOW CONTROL VALVE: 1.5 GPM

V2470 DRT
HYDRAULIC MANIFOLD SCHEMATIC



V2470 DRT

HYDRAULIC MANIFOLD LEGEND



1	.	SEQUENCE VALVE - CP241-30-B-0-A-B-150	1
2	27832	SOLENOID VALVE - CP500-1-B-0-12D-S	1
3	.	FLOW REGULATOR - CP311-1-B-0-1.5	1
4	27834	RELIEF VALVE - CP200-1-B-0-A-C-350	1
5	19971	3 POS. 4 WAY - CP530-3P-B-0-1-12D-S	1
6	19973	DIFF SENSING VALVE - CP701-1-B-0-150	1
7	.	PROPORTIONAL VALVE - CP551-30-B-0-G1-12D-S	1
8	.	SOLENOID VALVE - CP521-1-B-0-12D-S	2
9	45483	SHUTTLE VALVE - 920067	2
10	.	CHECK VALVE - CP100-3-B-0-005	1
11	19967	C.BAL. VALVE - CP441-1-B-0-E-B-150-10.0-15	2
12	45642	NIPPLE - 320772	2
13	45643	DUST CAP - 320773	2
14	27837	RELIEF VALVE - CP200-1-B-0-A-B-100	1

1. PORT SIZES:
 G1, G2, & BRAKE - #4 SAE
 S1 & S2 - #6 SAE
 LIFT - #8 SAE
 M1, M2, P1 & P2 - #10 SAE
 TANK - #12 SAE