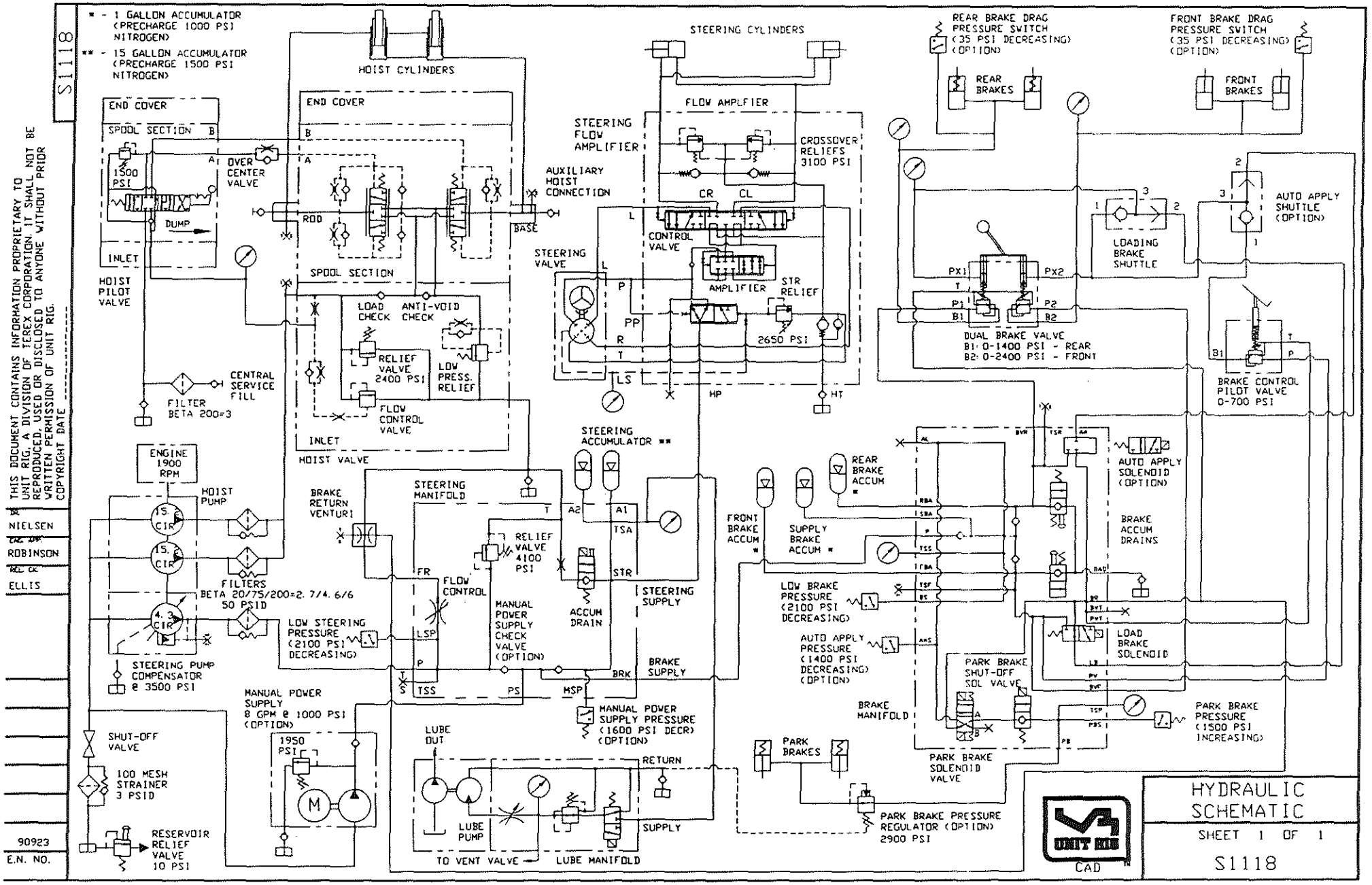
* - 1 GALLON ACCUMULATOR (PRECHARGE 1000 PSI NITROGEN)
** - 15 GALLON ACCUMULATOR (PRECHARGE 1500 PSI NITROGEN)
S1118
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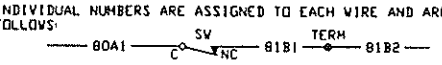
NIELSEN
ROBINSON
ELLIS
90923
E.N. NO.
HOIST CYLINDERS
END COVER
SPOOL SECTION
1500 PSI
DUMP
INLET
HOIST PILOT VALVE
OVER CENTER VALVE
ROD
BASE
SPOOL SECTION
LOAD CHECK
ANTI-VOID CHECK
RELIEF VALVE 2400 PSI
LOW PRESS. RELIEF
FLOW CONTROL VALVE
INLET
HOIST VALVE
CENTRAL SERVICE FILL
FILTER BETA 200=3
AUXILIARY HOIST CONNECTION
STEERING CYLINDERS
FLOW AMPLFIER
STEERING FLOW AMPLIFIER
CROSSOVER RELIEFS 3100 PSI
CR
CL
CONTROL VALVE
AMPLIFIER
STR RELIEF
2650 PSI
STEERING VALVE
L
P
PP
R
T
LS
HP
HT
REAR BRAKE DRAG PRESSURE SWITCH (35 PSI DECREASING) (OPTION)
FRONT BRAKE DRAG PRESSURE SWITCH (35 PSI DECREASING) (OPTION)
REAR BRAKES
FRONT BRAKES
AUTO APPLY SHUTTLE (OPTION)
LOADING BRAKE SHUTTLE
PX1
PX2
P1
P2
B1
B2
DUAL BRAKE VALVE
B1: 0-1400 PSI - REAR
B2: 0-2400 PSI - FRONT
BRAKE CONTROL PILOT VALVE 0-700 PSI
ENGINE 1900 RPM
HOIST PUMP
15 CIR
15 CIR
4.3 CIR
FILTERS BETA 20/75/200=2. 7/4. 6/6 50 PSID
STEERING PUMP COMPENSATOR @ 3500 PSI
BRAKE RETURN VENTURI
STEERING MANIFOLD
RELIEF VALVE 4100 PSI
FLOW CONTROL
MANUAL POWER SUPPLY CHECK VALVE (OPTION)
ACCUM DRAIN
STEERING ACCUMULATOR **
STEERING SUPPLY
BRAKE SUPPLY
LOW STEERING PRESSURE (2100 PSI DECREASING)
MANUAL POWER SUPPLY 8 GPM @ 1000 PSI (OPTION)
1950 PSI
MANUAL POWER SUPPLY PRESSURE (1600 PSI DECR) (OPTION)
LUBE OUT
RETURN
LUBE PUMP
SUPPLY
TO VENT VALVE
LUBE MANIFOLD
SHUT-OFF VALVE
100 MESH STRAINER 3 PSID
RESERVOIR RELIEF VALVE 10 PSI
FRONT BRAKE ACCUM *
SUPPLY BRAKE ACCUM *
REAR BRAKE ACCUM *
LOW BRAKE PRESSURE (2100 PSI DECREASING)
AUTO APPLY PRESSURE (1400 PSI DECREASING) (OPTION)
BRAKE MANIFOLD
PARK BRAKES
PARK BRAKE SHUT-OFF SOL VALVE
PARK BRAKE SOLENOID VALVE
PARK BRAKE PRESSURE REGULATOR (OPTION) 2900 PSI
AUTO APPLY SOLENOID (OPTION)
BRAKE ACCUM DRAINS
LOAD BRAKE SOLENOID
PARK BRAKE PRESSURE (1500 PSI INCREASING)
UNIT RIG
CAD
HYDRAULIC SCHEMATIC
SHEET 1 OF 1
S1118

E.N. NO.	90916	90978						ELLIS	REC'D	GAP	CHK'D	SLF

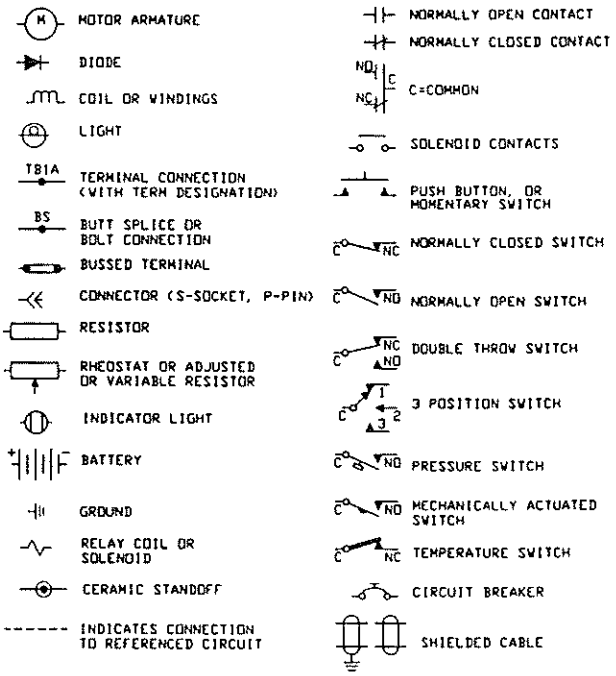
S10324

GENERAL NOTES:

1. THIS SCHEMATIC SHOWS THE CIRCUITRY IN A TRUCK 24 VOLT ELECTRICAL SYSTEM. THE CIRCUIT IS ILLUSTRATED USING SYMBOLS EXPLAINED IN THE FOLLOWING NOTES. THIS DOCUMENT IS FOR TRACING CURRENT FLOW AND TROUBLE SHOOTING.
2. INDIVIDUAL NUMBERS ARE ASSIGNED TO EACH WIRE AND ARE SHOWN AS FOLLOWS:



3. ZONE NUMBERS ARE USED TO LOCATE CIRCUITS AND ARE SHOWN IN THE LEFT HAND MARGIN OF EACH SHEET. THE FIRST ONE OR TWO DIGITS OF THE ZONE NUMBER REFERS TO THE SHEET NUMBER. THE LAST TWO DIGITS ARE THE LINE NUMBERS OF THE CIRCUITS.
EXAMPLE: 321 REFERS TO SHEET 3, LINE 21.
4. A CIRCUIT CONTINUATION IS SHOWN BY A ZONE NUMBER IN A HEXAGON SOME CIRCUITS WILL CONTINUE ON THE POWER AND CONTROL SCHEMATIC AND WILL FOLLOW NOTE #3.
5. CURRENT FLOW ON THIS SCHEMATIC IS FROM LEFT TO RIGHT
6. ALL DEVICES ARE SHOWN IN THEIR NORMAL OR DE-ENERGIZED POSITION
7. A COMMON CHASSIS GROUND SYSTEM IS USED. ALL GROUND WIRES BEGIN WITH 'X' AND ARE CONNECTED TO A SPECIFIC GROUND POINT OR A 'NEAREST' GROUND POINT. 'NEAREST' DEFINES THE CLOSEST MOST DEPENDABLE CHASSIS GROUND POINT TO THE COMPONENT.
8. TERMINAL BOARD AND GROUND POINT LOCATIONS ARE AS FOLLOWS:
   - TB1 THRU TB9 & GND1 THRU GND9 ..... CONTROL BOX
   - TB10 THRU TB19 & GND10 THRU GND19 ..... CAB
   - TB20 THRU TB29 & GND20 THRU GND29 ..... ENGINE
   - TB30 THRU TB39 & GND30 THRU GND39 ..... FRAME
   - TB50 THRU TB59 & GND50 THRU GND59 ..... SUPERSTRUCTURE
   - TB60 THRU TB69 & GND60 THRU GND69 ..... AXLEBOX



ITEM	DESCRIPTION	LOCATION SCHEMATIC	LOCATION TRUCK
11H D	11H DIODE (BETWEEN X15A AND TB11H)	557	CAB
24/12V CONV	24/12V DC CONVERTER	645	CAB
24V ALT	24 VOLT ALTERNATOR	8__	ENGINE
AA1, AA2	AUDIBLE ALARM 1, 2	354	CAB
ABXSVLT SW	AXLE BOX SERVICE LIGHT SWITCH	452	AXLE BOX
AC CMP	AIR CONDITIONER COMPRESSOR	658, 8__	ENGINE
AL PSW	AUTO LUBE PRESSURE SWITCH	630	HYD BOX
AL TMR	AUTO LUBE TIMER	633	CAB
ALSV1 SOL	AUTO LUBE SV1 SOLENOID	628	S/S
ALT SW	AUTO LUBE TEST SWITCH	627	CAB
BF IND	BLOWER FAULT INDICATOR	738	CAB
B1 SW	BATTERY ISOLATION SWITCH	201	FRAME
BU H	BACK UP HOOTER	758	AXLE BOX
CE IND	CHECK ENGINE INDICATOR	357, 9__	CAB
CS	CERAMIC STANDOFF	653	CAB
DBU IND	DUMP BODY UP INDICATOR	726	CAB
DC/AC CONV1	DC/AC CONVERTER 1 (DASH PANEL)	415	CAB
DC/AC CONV2	DC/AC CONVERTER 2 (CENTER CONSOLE)	415	SHIFT TOWER
DOME LT	DOME LIGHT	459	CAB
DOS	DUMP-UP OVERRIDE SWITCH (GE)	729	SHIFT TOWER
DS SW	DATA STORE SWITCH	733	CAB
EBBF SN	ENGINE BLOWBY FLOW SENSOR (GE)	9__	ENGINE
ECL SN	ENGINE COOLANT LEVEL SENSOR	9__	RADIATOR
ECT GA	ENGINE COOLANT TEMPERATURE GAUGE	255, 421, 615, 8__	CAB
ECT SN	ENGINE COOLANT TEMPERATURE SENSOR	615, 8__	ENGINE
ECT SN2	ENGINE COOLANT TEMP. SENSOR (GE)	9__	ENGINE
EDC	ENGINE DIAGNOSTIC CONNECTOR	9__	CAB
EDT SW	ENGINE DIAGNOSTIC TEST SWITCH	9__	CAB
EF IND	ENGINE FAULT INDICATOR	9__	CAB
EK R	ENGINE KILL RELAY	9__	CAB
EK SW	ENGINE KILL SWITCH	747, 9__	HOOD
EO PSW	ENGINE OIL PRESSURE SWITCH (CAB)	618	CAB
EOP GA	ENGINE OIL PRESSURE GAUGE	421	CAB
EOP SN	ENGINE OIL PRESSURE SENSOR (GE)	9__	ENGINE
ES/S SW	ENGINE START/STOP SWITCH	354, 751, 9__	CAB
ESVLT SW	ENGINE SERVICE LIGHT SWITCH	449	HOOD
F GA	FUEL GAUGE	421, 606	CAB
FAN MOT	FAN MOTOR (1, 2)	650, 655	CAB
FAN RES	FAN RESISTOR (1A, 1B, 2A, 2B)	650, 655	CAB
FAN SW	FAN SWITCH	653	CAB
FBK XSW	FOOT BRAKE PROXIMITY SWITCH	504	CAB
FLSH	FLASHER	433	CAB
H	HOOTER	624	S/S
H/TLT SW	HEAD/TAIL LIGHT SWITCH	403	CAB
HBK XSW	HAND BRAKE PROXIMITY SWITCH	508	HYD BOX
HBXSV LT	HYDRAULIC BOX SERVICE LIGHT	456	HYD BOX
HI DP	HIGH SIDE DIODE PANEL	342	CAB
HIB R	HIGH BEAM RELAY	406	FRAME
HIHOT SN	HIGH HYDRAULIC OIL TEMP. SENSOR	543	FRAME
HM	HOURMETER	618	CAB
INDPC	INDICATOR PANEL CONNECTOR	311, 408, 430, 439, 511, 705, 726	CAB
LBK SOL	LOAD BRAKE SOLENOID	525	HYD BOX
LBU LT	LEFT BACK UP LIGHTS	755	AXLE BOX
LESV LT	LEFT ENGINE SERVICE LIGHT	448	HOOD
LFT/C LT	LEFT FRONT TURN/CLEARANCE LIGHT	431	S/S
LO DP	LOW SIDE DIODE PANEL	342	CAB
LOB R	LOW BEAM RELAY	402	FRAME
LOBK PSW	LOW BRAKE PRESSURE SWITCH	539	HYD BOX
LOF SN	LOW FUEL SENSOR	611	FRAME
LOHOL SN	LOW HYDRAULIC OIL LEVEL SENSOR	548	FRAME
LOSTR PSW	LOW STEERING PRESSURE SWITCH	552	FRAME
LRET LT	LEFT RETARD LIGHT	427	AXLE BOX
LRT/C LT	LEFT REAR TURN/CLEARANCE LIGHT	433	DUMP BODY
LT IND	LEFT TURN INDICATOR	430	CAB
LT/S LT	LEFT TURN/STOP LIGHT	435	AXLE BOX
M SW	MASTER SWITCH	226	CAB
MF SW	MULTI-FUNCTION SWITCH	403, 431	CAB
MPS SW	MANUAL POWER SUPPLY SWITCH	534	CAB
MSW R	MASTER SWITCH RELAY	555	CAB
PBK PSW	PARK BRAKE PRESSURE SWITCH	521	HYD BOX
PBKAPP SOL	PARK BRAKE APPLY SOLENOID	519	HYD BOX
PBKREL SOL	PARK BRAKE RELEASE SOLENOID	517	HYD BOX
PBKSO SOL	PARK BRAKE SHUT OFF SOLENOID	515	HYD BOX
PL STRTR	PRELUBE STARTER (CUMMINS)	8__	ENGINE
PL TMR	PRELUBE TIMER (CUMMINS)	9__	FRAME
PLD RH	PANEL LIGHT DIMMER RHEOSTAT	421	CAB
PLEO PSW	PRELUBE ENGINE OIL PRESSURE SWITCH	9__	ENGINE
PLSTRTR R	PRELUBE STARTER RELAY (CUMMINS)	9__	ENGINE
PTT SW	PRESS TO TEST SWITCH	340	CAB
RBU LT	RIGHT BACK UP LIGHTS	757	AXLE BOX
RESV LT	RIGHT ENGINE SERVICE LIGHT	450	HOOD
RFT/C LT	RIGHT FRONT TURN/CLEARANCE LIGHT	440	S/S
RP RH	RETARD PEDAL RHEOSTAT	712	CAB
RRET LT	RIGHT RETARD LIGHT	429	AXLE BOX
RRT/C LT	RIGHT REAR TURN/CLEARANCE LIGHT	442	DUMP BODY
RSC RH	RETARD SPEED CONTROL RHEOSTAT	708	SHIFT TOWER
RT IND	RIGHT TURN INDICATOR	439	CAB
RT/S LT	RIGHT TURN/STOP LIGHT	437	AXLE BOX
S LT	STAIRWAY LIGHT	446	HOOD
SE IND	STOP ENGINE INDICATOR	359, 9__	CAB
SEI R	STOP ENGINE INDICATOR RELAY	9__	CAB
SF IND	SYSTEM FAULT INDICATOR	735	CAB
SLT SW1	STAIRWAY LIGHT SWITCH 1	446	CAB
SLT SW2	STAIRWAY LIGHT SWITCH 2	446	HOOD
SPD M	SPEEDOMETER	421, 720	CAB
SPD R	SPEED (EVENT) RELAY	530	CAB
SR SW	SYSTEM RESET SWITCH	731	CAB
SSW	SELECTOR SWITCH	745	SHIFT TOWER
STRAD SOL	STEERING ACCUMULATOR DRAIN SOLENOID	557	FRAME
STRTR R	STARTER RELAY	9__	ENGINE
STRTR1	STARTER 1 (DDEC)	8__	ENGINE
STRTR2	STARTER 2 (DDEC)	8__	ENGINE
T1	TERMINAL ONE	201, 8__	BATT BOX
TAC M	TACHOMETER	421, 723	CAB
TP RH	THROTTLE PEDAL RHEOSTAT	715	CAB
TX	TERMINAL X	201	BATT BOX
VM	VOLTMETER	421, 601	CAB
WR MOT	WIPER MOTOR	637	CAB
WSHR PMP	WASHER PUMP	641	HYD BOX

MT4400 CAD

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1	NOTES AND REFERENCE DATA
2	24V DISTRIBUTION
3	GROUND DIST., DIODE PANELS
4	LIGHTS
5	HYDRAULICS
6	GAUGES, FAN, WIPER, AUTOLUBE
7	STATEX INTERFACE, SELECTOR SW
8A&9A	DETROIT 16V4000 DDEC IV

SHEETS 2-7 COVER 'STANDARD 24V CIRCUITS'.
SHEETS 8-9 COVER 'ENGINE UNIQUE CIRCUITS'.

ELECTRICAL SCHEMATIC TRUCK 24 VOLT

S10324 SHEET 1 OF 9

S10324

BATTERIES & BATTERY ISOLATION SWITCH

T1
1A1 — A1 BATT + / − — 2A1 — A2 BATT + / − — X30A
1B1 — B1 BATT + / − — 2B1 — B2 BATT + / − — X30B
1C1 — C1 BATT + / − — 2C1 — C2 BATT + / − — X30C
X30A, X30B, X30C → TX → B1 SW (C / NC) → X30E → X30E → GND30

SEE SHEET 8 FOR ENGINE UNIQUE CIRCUITS (8__)

1L1 — 536 — MPS PMP
1B2 — S10492-901 — CB20 (TB2P)

TB30H: 1P1 — CB1A (AUTO RESET) — 1P2
1P2 — 10AA1 — 401 — LOB R
1P2 — 1P3 — 747 — EK SW

1F1

CB1 (AUTO RESET)
1G1 — 10A1 — TB14E
10B1 — 406 — H/TLT SW
10B2 — 404 — H/TLT SW
TB14F
10C1 — 622 — H
10D1 — 429 — FLSH

1G2

CB2
20A1 — TB14A
20E1 — 758 SSV-6C — 20E2 — 525 — LBK SW
20B1 — 459 — DOME LT
20D1 — 449 — ESVLT SW
TB14B
20F1 — TB55G
20F2 — 508 — HBK XSW
20F5 — 456 — HBXSV LT
20F3 — 501 — FBK XSW
20G1 — 447 — SLT SW
20H1 — 509 — HBK R
20A2 — 454 — CBXSV LT

MASTER SWITCH — H SW

1M1 — 645 — 24/12V CONV

1J1

PJ02 — S10639-SHT1 — OPTION: WEIGH SYSTEM DISPLAY

CB9
90A1 — TB15B
90C1 — 452 — ABXSVLT SW
90B1 — 755 — SSV
90D1 — S10492-913 — CONTROL BOX POWER (TB6G)

80A2 — S10492-910 — CONTROL BOX POWER (TB2L)

CB8
80A1 — TB15C
SSV-1C 745 / SSV-3C 751 / SSV-5C 753
80B1 — 80B5 — 729 — OPTION: DDS
80B3 — 702 — RSC SW
TB15D
80C1 — 738 — BF IND
80E1 — 521 — PBK PSW
80F1 — 735 — SF IND
80G1 — 731 — SR SW
80H1 — 530 — SPD R

CB7 — SPARE

CB6 — SPARE

CB5
50A1 — TB15E
628 AL THR
50C1 — 50B1 — 627 — ALT SW
8__ — ENGINE UNIQUE CIRCUITS
50K1 — 531 — SPD R
50K2 — 534 — MPS SW
50D1 — 543 — HIHOT IND
TB15F
50E1, 50E2 — 555 — MSW R, STRAD R
50F1 — 552 — LOSTR PSW
50G1 — 720 — SPD M, TAC M
8__ — ENGINE UNIQUE CIRCUITS

CB4
40A1 — TB15G
40E1 — 750 — ES/SSV D
40B1 — 638 — WR SW
40C1 — 653 — FAN SW
40D1 — 618 — ED PSW

CB3
30A1 — TB14C
601 VM
30B1 — 30C1 — 602 — F GA
30D1 — 609 — LOF SN
TB14D
615 ECT GA
30G1 — 30F1 — 340 — PTT SW
30K1 — 548 — LOHOL IND
30L1 — 539 — LOBKP IND
30E1 — 611 — LOF IND
30J1 — 547 — LOHOL SN
30H1 — 354 — ES/S SW

ALL CB'S = 25A

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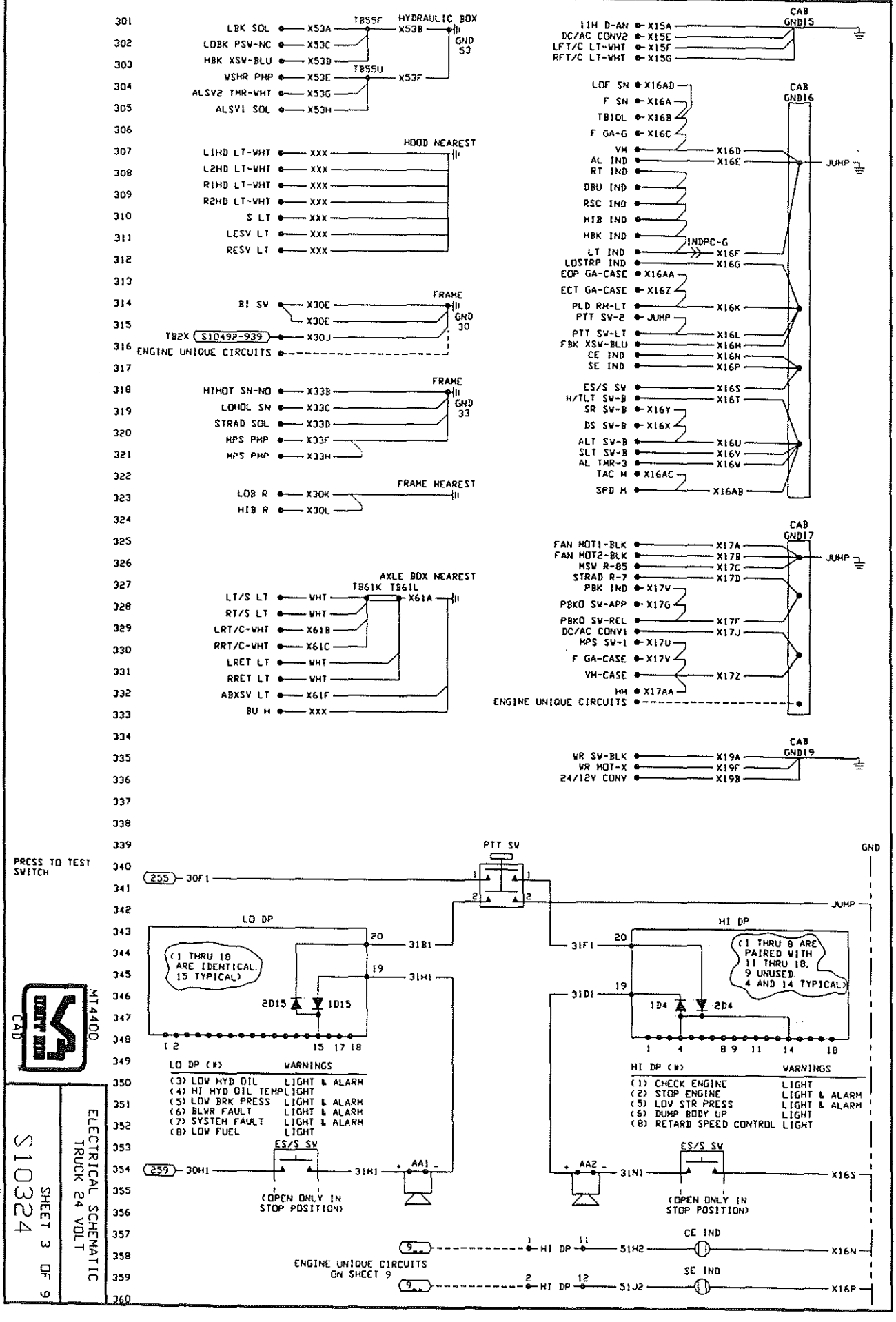

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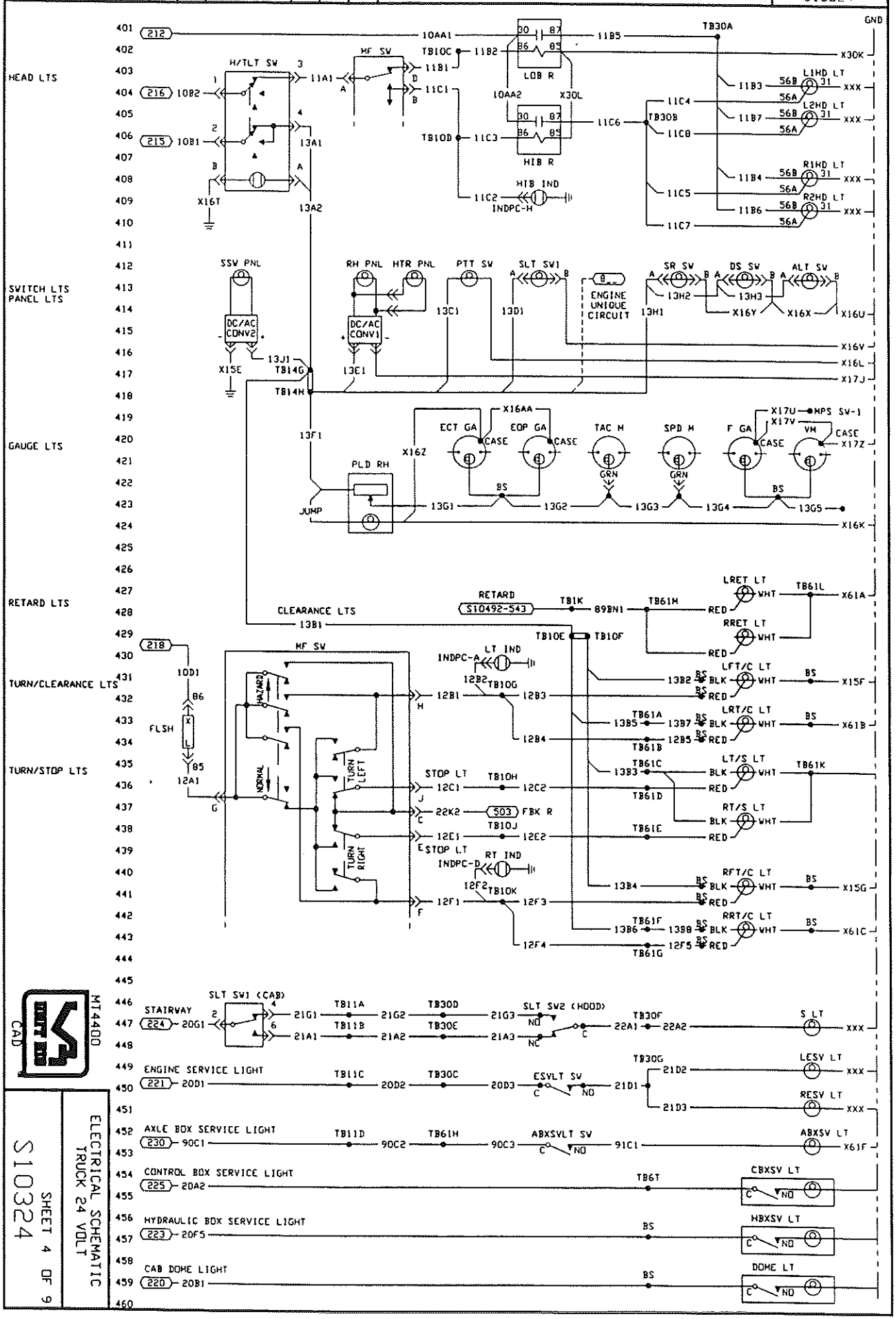
ELECTRICAL SCHEMATIC TRUCK 24 VOLT

S10324 SHEET 3 OF 9

S10324



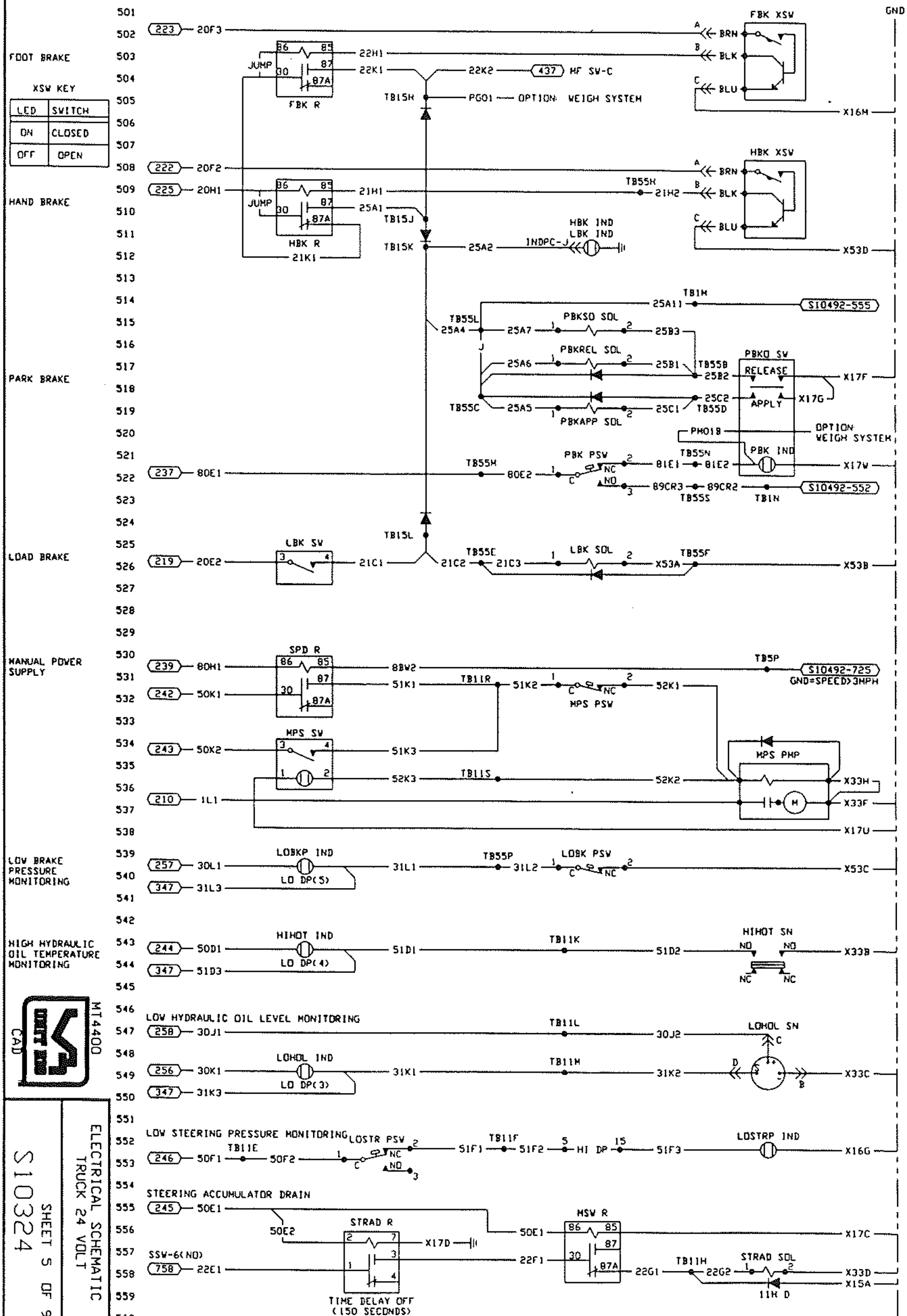
ELECTRICAL SCHEMATIC
TRUCK 24 VOLT

SHEET 4 OF 9

S10324

E.N. NO. 90916 90978 SLF

S10324


FOOT BRAKE
XSW KEY
LED SWITCH
ON CLOSED
OFF OPEN
HAND BRAKE
PARK BRAKE
LOAD BRAKE
MANUAL POWER SUPPLY
LOW BRAKE PRESSURE MONITORING
HIGH HYDRAULIC OIL TEMPERATURE MONITORING
LOW HYDRAULIC OIL LEVEL MONITORING
LOW STEERING PRESSURE MONITORING
STEERING ACCUMULATOR DRAIN
GND
FBK XSW
HBK XSW
FBK R
HBK R
JUMP
HF SV-C
OPTION WEIGH SYSTEM
HBK IND
LBK IND
PBKSO SOL
PBKREL SOL
PBKAPP SOL
PBKO SV
RELEASE
APPLY
PBK PSW
PBK IND
S10492-555
S10492-552
LBK SV
LBK SOL
SPD R
MPS PSW
MPS SW
MPS PMP
S10492-725
GND=SPEED>3MPH
LOBKP IND
LOBK PSW
LO DP(5)
HIHOT IND
HIHOT SN
LO DP(4)
LOHOL SN
LOHOL IND
LO DP(3)
LOSTR PSW
HI DP
LOSTRP IND
STRAD R
MSV R
STRAD SOL
SSW-6(NO)
11H D
TIME DELAY OFF (150 SECONDS)

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ELECTRICAL SCHEMATIC
TRUCK 24 VOLT

SHEET 5 OF 9

S10324

S10324

VOLT METER

FUEL GAUGE

LOW FUEL MONITORING

ENGINE COOLANT TEMPERATURE GAUGE

HOUR METER

HOOTER

AUTOLUBE SYSTEM

WIPERS

SW CONNECTIONS

MT4400 CAD

RETARD SPEED CONTROL

RETARD PEDAL

THROTTLE PEDAL

SPEEDOMETER

TACHOMETER

DUMP BODY UP

SYSTEM RESET SWITCH

DATA STORE SWITCH

SYSTEM FAULT MONITORING

BLOWER FAULT MONITORING

PROPULSION SYSTEM SERIAL CONNECTION

SELECTOR SWITCH

235 80B3 — 2 1 — 89BA2 — TB5F — S10492-531 — GND

347 — 18 — HI DP — 8 — 31A1 — 4 3 JUMP — 2 1 JUMP — 31J1 — RSC IND — INDPC-F

RSC SW

10V IN — S10492-855 — TB5M — 88U3 — TB14J — 88U4 — RSC RH — 3 1 2 — X7AW — TB5J — S10492-535

TB14K — 89BC2 — TB5H — S10492-534

RP RH — 88U5 — A C B — X7AX — TB5E — S10492-528

89BF2 — TB5D — S10492-527

10V OUT — S10492-858 — TB5G — 89BB2 — TP RH — 88U6 — A C B — X7CR — TB5T — S10492-524

8EK2 — TB5V — S10492-522

GROUNDS FOR DIGITAL METER OPTION — X16AB

247 — 50G1 — SPD M — RED — WHT BLK — 2CS07 — 7A4 7B4 — TB1A TB1B — S10492-321 S10492-322

TB1C

50G2 — TAC M — RED — WHT BLK — 2CS08 — X16AC — 7E4 7F4 — TB1G TB1H — S10492-328 S10492-329

TB1J

(24VOLT = UP) — S10492-540 — TB3L — 81V2 — 16 — HI DP — 6 — 81V3 — DBU IND — INDPC-B

234 — 80B5 — DOS — OPTION: DOS — 89AW5

238 — 80G1 — SR SW — 2 4 — 89AW4 — TB5S — S10492-549

80G2 — DS SW — 2 4 — 89BJ2 — TB7E — S10492-517

238 — 80F1 — SF IND — 88B2 — TB6D — S10492-551

347 — 88B3 — LD DP(7)

236 — 80C1 — BF IND — 88D2 — TB5X — S10492-553

347 — 88D3 — LD DP(6)

IN PANEL BELOW DASH — PSSC — 2 3 5 — 3CS20 — RS232 EXTENSION CABLE — RED WHITE BLK — PSSC2 — 2 3 5 — S10492-804 S10492-804 S10492-804

234 — 80B1 — SSW — 1(F) — 89BK2 — TB5K — SSW IN FOR — S10492-537

REV=4, 5, 7
NEU=3, 4, 6
FOR=1, 2, 8

213 — 1P3 — EK SW (LADDER) — C NO — 1R1 — TB30J — 1R3 — TB11G — 1R2

249 — 40E1 — ES/SSW D — ES/S SW — STOP START — SEE ENGINE UNIQUE CIRCUITS

TO RSC SW — 703 — 80B3 — 3(N) — 81B1

5(R) — 89BL2 — TB5L — SSW IN REV — S10492-538

231 — 90B1 — 7(R) — 91B1 — TB11N — 91B2 — TB61J — 91B6 — BS — LBU LT

2(F) — 91B3 — BS — RBU LT

91B4

219 — 20E1 — 6(N) — 22E1 — 557 — STRAD R

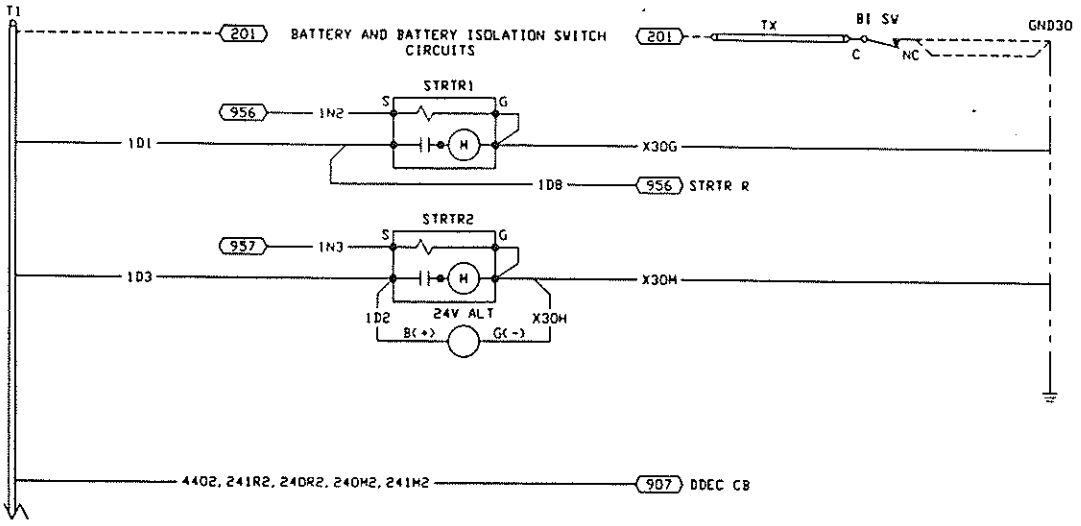
BU H — XXX

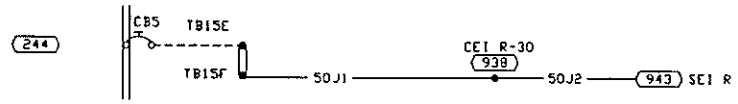
20E2 — 525 — LBK SW

ELECTRICAL SCHEMATIC
TRUCK 24 VOLT

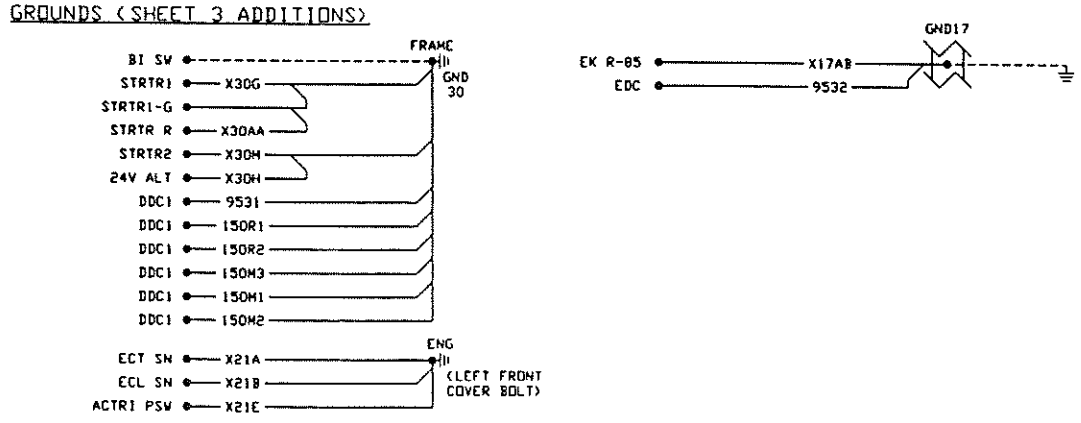
SHEET 7 OF 6
S10324

24V POWER DISTRIBUTION (SHEET 2 ADDITIONS)

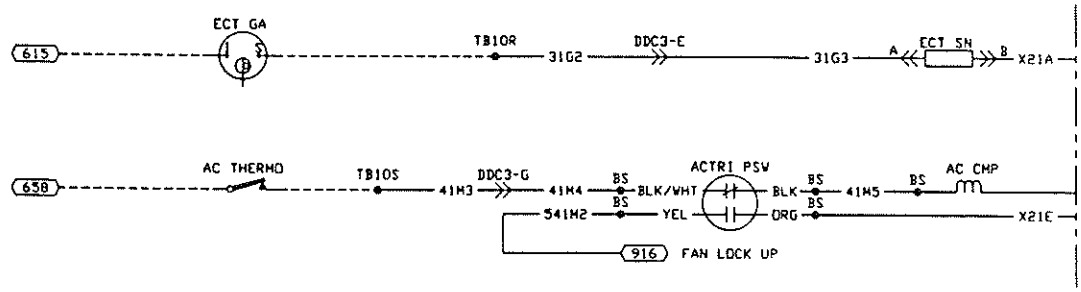




GROUNDS (SHEET 3 ADDITIONS)



GAUGE (SHEET 6 ADDITIONS)



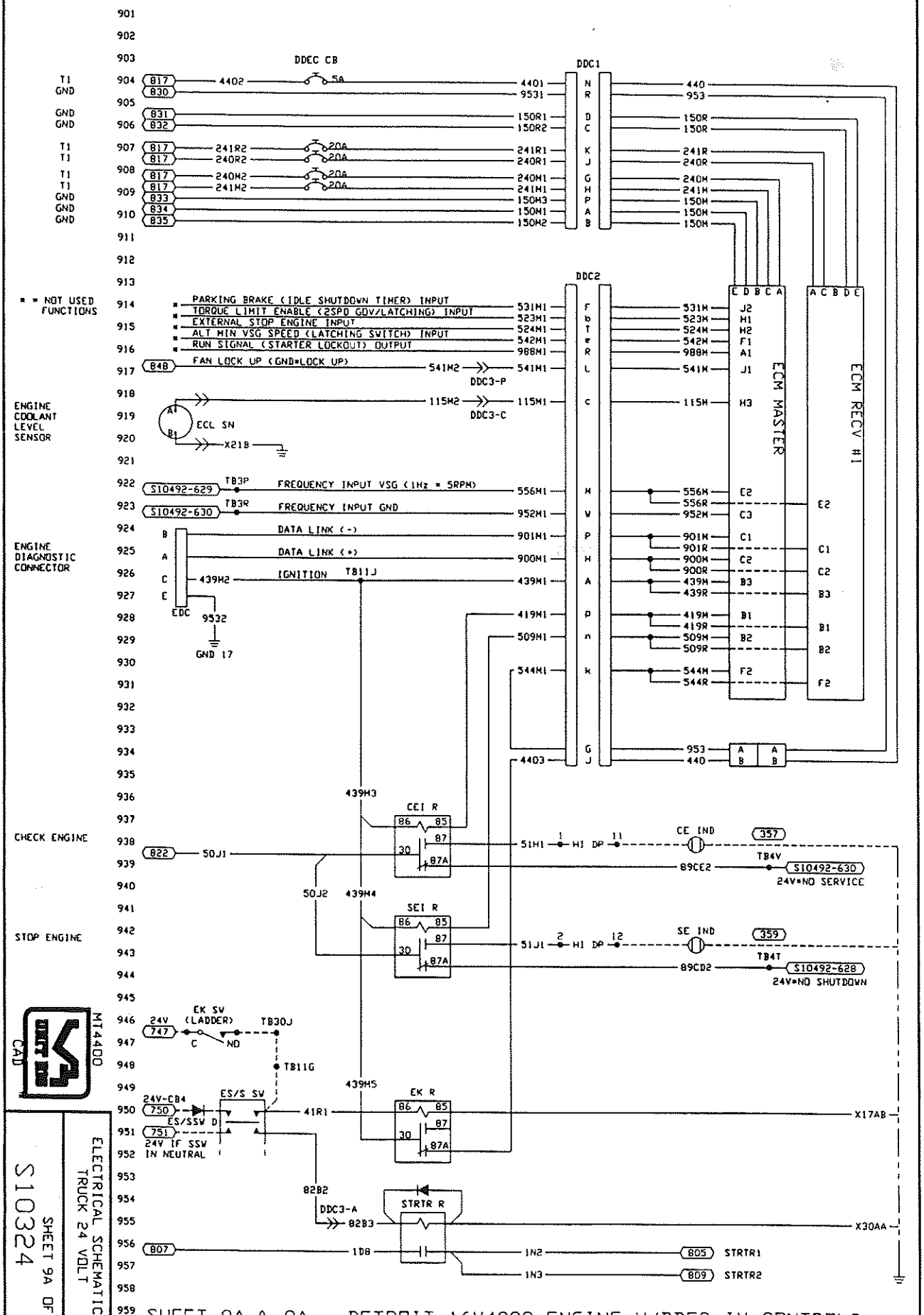
CAD MT4400

ELECTRICAL SCHEMATIC TRUCK 24 VOLT

SHEET 8A OF 9

S10324

SHEET 8A & 9A---DETROIT 16V4000 ENGINE W/DDEC IV CONTROLS



SHEET 8A & 9A---DETROIT 16V4000 ENGINE W/DDEC IV CONTROLS

NOTES:

THIS DRAWING SHOWS 24V WIRING THAT IS UNIQUE TO A SPECIFIC CUSTOMER ORDER. THE CIRCUITS SHOWN BELOW TAKE PRECEDENCE OVER THE STANDARD CIRCUITS SHOWN ON:

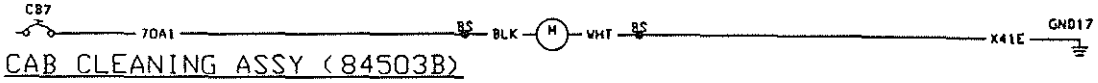
- S10324 ELECTRICAL SCHEMATIC, TRUCK 24V
- S10492 ELECTRICAL SCHEMATIC, POWER/CONTROL

REFER TO S10324 AND S10492 SHEET 1 FOR GENERAL INFORMATION AND NOTES.

SOME FUNCTIONAL INFORMATION HAS BEEN ADDED TO AID TROUBLESHOOTING AS FOLLOWS:

- B+ 24V SUPPLY FROM BATTERY
- B+(MS) 24V SUPPLY FROM BATTERY THAT IS CONTROLLED BY THE MASTER SWITCH.
- (S10324-201) REFERS TO ANOTHER SCHEMATIC (IE S10324) AND LINE NUMBER (IE -201) WHERE THIS OPTION CONNECTS TO THE STANDARD CIRCUITS. THE LINE NUMBERS WERE ACCURATE WHEN THIS SCHEMATIC WAS RELEASED. FUTURE REVISIONS TO S10324 AND S10492 WILL NOT BE REFLECTED ON THIS SCHEMATIC.
- (EXISTING) INDICATES A CONNECTION TO THE STANDARD CIRCUIT SHOWN ON S10324 OR S10492.
- ---------- INDICATES A CONNECTION TO THE STANDARD CIRCUIT SHOWN ON S10324 OR S10492.
- 24V= INDICATES THAT 24V EXISTS WHEN THE CONDITION IS TRUE.
- GND= INDICATES THAT A GROUND EXISTS WHEN THE CONDITION IS TRUE.

(S10324-239)



CAB CLEANING ASSY (84503B)

(S10324-645)
24/12V CONV
12V OUT

RADIO INSTALLATION (76032T)

SEE SCHEMATIC S10639

WEIGH SYSTEM ASSEMBLY (83990X)

MT4400 S/N111-137
BORAX

CAD

ELECTRICAL SCHEMATIC
TRUCK 24 VOLT - OPTIONS

S10324E

SHEET 1 OF 1

E.N. NO.	88470	88883	90394

DR: SLF CK: GAP APP: E.G. ELLIS

NO. S10492

GENERAL NOTES:
THIS SCHEMATIC SHOWS THE CIRCUITRY IN A TRUCKS POWER AND CONTROL SYSTEM (OR PROPULSION SYSTEM). THIS DOCUMENT IS FOR TROUBLESHOOTING POWER AND CONTROL CIRCUITS. SOME CIRCUITS IN CAB ARE ONLY SHOWN FUNCTIONALLY. FOR CAB CIRCUITS (AND CIRCUITS NOT RELATED TO POWER AND CONTROL SYSTEM) USE THE TRUCK ELECTRICAL SCHEMATICS.

THE CIRCUITS ARE ILLUSTRATED USING SYMBOLS EXPLAINED IN THE FOLLOWING NOTES.

1. NUMBERS (IE 80A1 OR 81B1) ARE ASSIGNED TO EACH WIRE AND ARE SHOWN AS FOLLOWS.
   80A1 — SW — 81B1 — TERM — 81B2
2. MAIN POWER CIRCUITS ARE SHOWN BY HEAVY LINES. OPTIONAL CIRCUITS ARE SHOWN BY DASH LINES.
3. ZONE NUMBERS ARE USED TO LOCATE CIRCUITS AND ARE SHOWN IN THE LEFT HAND MARGIN OF EACH SHEET. THE FIRST DIGIT OF THE ZONE NUMBER REFERS TO THE SHEET NUMBER. THE SECOND AND THIRD DIGITS ARE THE LINE NUMBERS OF THE CIRCUITS.
   EXAMPLE: 321 REFERS TO SHEET 3, LINE 21.
4. A CIRCUIT CONTINUATION IS SHOWN BY A ZONE NUMBER IN A HEXAGON.
   5N2 — (333)
5. THE LETTERS SHOWN IN PARENTHESIS AFTER THE SELECTOR SWITCH CALL OUT INDICATE THE POSITION IN WHICH THE CONTACTS ARE CLOSED.
   EXAMPLE: SS3(N) MEANS SWITCH IS CLOSED IN NEUTRAL.
6. ALL DEVICES ARE SHOWN IN THEIR NORMAL OR DE-ENERGIZED POSITION. THE REVERSER IS SHOWN IN THE FORWARD MOVEMENT POSITION.

- MOTOR ARMATURE OR ALT
- COMMUTATING FIELD
- SERIES FIELD
- SHUNT OR SEPERATE FIELD
- TB1A TERMINAL CONNECTION
- BS/BC (WITH TERM DESIGNATION) BUTT SPLICE OR BOLT CONNECTION
- BUSSED TERMINAL
- CN5D CONNECTOR 5 PIN/SOCKET D
- RESISTOR
- ADJUSTED RESISTOR
- RHEOSTAT OR VARIABLE RESISTOR
- THYRITE RESISTOR
- BATTERY
- SHUNT
- ELECTRONIC GROUND
- FRAME GROUND
- RELAY COIL OR SOLENOID OR TEMP SENSOR
- NORMALLY OPEN SWITCH OR RELAY CONTACT
- NORMALLY CLOSED SWITCH OR RELAY CONTACT

- MAIN CONTACTOR
- SOLENOID CONTACTS
- PUSH BUTTON SWITCH
- NORMALLY CLOSED SWITCH
- NORMALLY OPEN SWITCH
- DOUBLE THROW SWITCH
- 3 POSITION TOGGLE SWITCH
- ROTARY SWITCH
- PRESSURE SWITCH
- MECH ACTUATED SWITCH
- TEMPERATURE SWITCH
- CIRCUIT BREAKER
- SUPPRESSION NETWORK
- DIODE
- SILICONE CONTROLLED RECTIFIER DIODE
- ZENER DIODE
- TRANSFORMER
- INDICATOR LIGHT
- LIGHT
- MAGNETIC PICKUP
- METER WITH CIRCUIT SYMBOL INSIDE
- CAPACITOR
- SHIELDED CABLE

EQUIPMENT LIST

ITEM	DESCRIPTION	LOCATION
2DD	2 DIGIT DISPLAY	816-841,9XX
ACF	A.C. FILTER	204
AFSE	ALT FIELD STATIC EXCITER	402-435,9XX
ALT	ALTERNATOR	202,413,432,443
ASYN	ALT SYNCRONIZATION TRANFORMER	429
BATT	BATTERIES A AND B	901
...	BATTERY ISOLATION SWITCH	902
BM1	GRID BLOWER MOTOR 1	226
BM2	GRID BLOWER MOTOR 2	226
BPS	BLOWER PRESSURE SW	556
CB2	CIRCUIT BREAKER 2	9XX
CB20	CIRCUIT BREAKER 20	9XX
CB8	CIRCUIT BREAKER 8	9XX
CB9	CIRCUIT BREAKER 9	9XX
CBSL	CONTROL BOX SERVICE LIGHT	907
CF1	CAPACITOR FILTER (+15VDC)	949
CF2	CAPACITOR FILTER (-15VDC)	954
CPR	CONTROL POWER RELAY	538,9XX
CT	CURRENT TRANSFORMER	433
CTR	CURRENT TRANSFORMER RESISTOR	431
DBU	DUMP BODY UP SWITCH	541,9XX
DDEC	DDEC (WARNING CIRCUITS)	628
DFDP	DIODE FAULT DETECTION PANEL	406,9XX
DOS	DUMPBODY OVERRIDE SWITCH	548
DR LT	DYNAMIC RETARDING LIGHT	543,545
DS SW	DATA STORE SWITCH	518
EFPA	ELECTRONIC FOOT PEDAL ASSY	522
...	ENGINE BLOWBY FLOW SENSOR	642
...	ENGINE COOLANT PRESSURE SENSOR	647
...	ENGINE COOLANT TEMP SENSOR	652
...	ENGINE SERVICE LIGHT	647
	ENGINE SHUTDOWN LIGHT	645
...	FAILED DIODE LIGHT	722
FDT	FAULT DETECTION TRANSFORMER	412
FL275	CARD RACK	3XX,4XX,5XX,6XX,7XX,8XX,9XX
GF	GEN FIELD CONTACTOR	413,505,9XX
GFDR	GEN FIELD DISCHARGE RESISTOR	415
GFIP	GROUND FAULT INPUT PANEL	250,9XX
GFN	GEN FIELD CONTACTOR NETWORK	506,9XX
GFR	GEN FIELD RELAY	402,507,9XX
GFRN	GEN FIELD RELAY NETWORK	507,9XX
...	GROUND FAULT IND LIGHT	718
GRR	GROUND REFERENCE RESISTOR	245,9XX
HB SW	HAND BRAKE SWITCH	554
IA3	ISOLATION AMPLIFIER 3	340,9XX
IA4	ISOLATION AMPLIFIER 4	344,9XX
IA5	ISOLATION AMPLIFIER 5	348,9XX
IA6	ISOLATION AMPLIFIER 6	435,9XX
IA7	ISOLATION AMPLIFIER 7	440,9XX
IA8	ISOLATION AMPLIFIER 8	419,9XX
...	LOW BLOWER PRESS LIGHT(CAB IND)	553
...	MASTER SWITCH	905
M1	MOTOR 1 (LEFT WHEEL)	240
M1 FLD	MOTOR 1 FIELD	457
M1TS	MOTOR 1 TEMPERATURE SENSOR	307
M2	MOTOR 2 (RIGHT WHEEL)	240
M2 FLD	MOTOR 2 FIELD	457
M2TS	MOTOR 2 TEMPERATURE SENSOR	311
MF	MOTOR FIELD CONTACTOR	456,504,9XX
MFDR	MOTOR FIELD DISCHARGE RESISTOR	455
MFN	MOTOR FIELD CONTACTOR NETWORK	505,9XX
MFSE	MOTOR FIELD STATIC EXCITER	439-456,9XX
...	MOTOR OVER TEMPERATURE LIGHT	716
MPU 1	MAGNETIC PICK-UP (WHEEL MOTOR 1)	322
MPU 2	MAGNETIC PICK-UP (WHEEL MOTOR 2)	325
MPU 3	MAGNETIC PICK-UP (ALTERNATOR)	329
MSYN	MOTOR SYNCRONIZATION TRANFORMER	443
...	OIL PRESSURE SENSOR	638
...	OVERSPEED LIGHT	720
P1	PROPULSION POWER CONTACTOR	211,508,9XX
P1N	PROPULSION POWER CONT NETWORK	509,9XX
P2	PROPULSION POWER CONTACTOR	705,9XX
P2N	PROPULSION POWER CONT NETWORK	706,9XX
PBP SW	PARK BRAKE PRESSURE SWITCH	552
PTUA	PTU CONNECTOR A	805
PTUB	PTU CONNECTOR B	810
R1	RESISTOR 1	402
R100B	RESISTORS FOR PTUB	814
R88A	RESISTORS FOR PTUA	805
R90B	RESISTORS FOR PTUB	809
R90A	RESISTORS FOR PTUA	808
RCL	CONTROL LOGIC RESISTOR	855
RECT	RECTIFIER	211
RETARD	RETARDING ELECTRONIC RHEOSTAT	527
REV-F	REVERSER (FORWARD FEED BACK)	502,9XX
REV-R	REVERSER (REVERSE FEED BACK)	503,9XX
REV(F)	REVERSER (FORWARD)	502,9XX
REV(F)N	REVERSER (FORWARD) NETWORK	503
REV(R)	REVERSER (REVERSE)	503,9XX
REV(R)N	REVERSER (REVERSE) NETWORK	504
REVERSER	REVERSER (MAIN CONTACTS)	452
RFR	REVERSER FORWARD RELAY	545
RG1	RET GRID 1	232
RG2	RET GRID 2	232
RLR	RETARD LIGHT RELAY	543,9XX
RP1	RET POWER CONTACTOR 1	235,511,9XX
RP1N	RET POWER CONTACTOR 1 NETWORK	512,9XX
RP2	RET POWER CONTACTOR 2	235,512,9XX
RP2N	RET POWER CONTACTOR 2 NETWORK	513,9XX
RP3	RET POWER CONTACTOR 3	227,513,9XX
RP3N	RET POWER CONTACTOR 3 NETWORK	514,9XX
RP4	RET POWER CONTACTOR 4	226,515,9XX
RP4N	RET POWER CONTACTOR 4 NETWORK	515,9XX
RP5	RET POWER CONTACTOR 5	224,516,9XX
RP5N	RET POWER CONTACTOR 5 NETWORK	517,9XX
RP6	RET POWER CONTACTOR 6	223,707,9XX
RP6N	RET POWER CONTACTOR 6 NETWORK	708,9XX
RP7	RET POWER CONTACTOR 7	222,708,9XX
RP7N	RET POWER CONTACTOR 7 NETWORK	709,9XX
RP8	RET POWER CONTACTOR 8	221,709,9XX
RP8N	RET POWER CONTACTOR 8 NETWORK	710,9XX
RP9	RET POWER CONTACTOR 9	219,711,9XX
RP9N	RET POWER CONTACTOR 9 NETWORK	711,9XX
RSC LT	RETARD SPEED CONTROL LIGHT	530
RSC SW	RETARD SPEED CONTROL SWITCH	530
RSR	RETARD SPEED RHEOSTAT	534
S1	SHUNT 1	240
S2	SHUNT 2	240
S3	SHUNT 3	456
S4	SHUNT 4	412
S6	SHUNT 6	430
S7	SHUNT 7	442
SS	SELECTOR SWITCH	537,538
...	SPEEDOMETER	318
...	SYSTEM FAULT LIGHT (CAB IND)	551
...	SYSTEM RESET SWITCH	550
...	TACHOMETER	331
TAFSE	AFSE TEMPERATURE SENSOR	422
TAMB	AMBIENT TEMPERATURE SENSOR	315
TMFSE	MFSE TEMPERATURE SENSOR	440
VDR3	VOLTAGE DIVIDER RESISTOR 3	414
VMM1	VOLTAGE MEASURING MODULE 1	336,9XX
VMM2	VOLTAGE MEASURING MODULE 2	332,9XX

ABBREVIATIONS FOR ABOVE LIST:

3XX	MULTIPLE LINES OF SHEET 3
4XX	MULTIPLE LINES OF SHEET 4
5XX	MULTIPLE LINES OF SHEET 5
6XX	MULTIPLE LINES OF SHEET 6
7XX	MULTIPLE LINES OF SHEET 7
8XX	MULTIPLE LINES OF SHEET 8
ALT	ALTERNATOR
AUTO	AUTOMATIC
CONT	CONTACTOR
GEN	GENERATOR
IND	INDICATOR
LT	LIGHT
PRESS	PRESSURE
PTU	PORTABLE TEST UNIT
RET	RETARD
SW	SWITCH
TEMP	TEMPERATURE

INDEX

SHEET	CONTENTS
1	NOTES AND REFERENCE DATA
2A	POWER CIRCUIT & GND FAULT (12 GRIDS,3 STEP ERR)
2B	POWER CIRCUIT & GND FAULT (18 GRIDS,3 STEP ERR)
2C	POWER CIRCUIT & GND FAULT (18 GRIDS,7 STEP ERR)
2D	POWER CIRCUIT & GND FAULT (20 GRIDS,7 STEP ERR)
3	FL275 INPUTS
4	AFSE & MFSE
5	FL275 INPUTS & OUTPUTS
6	FL275 INPUTS & OUTPUT ENGINE OPTIONS
7	FL275 INPUTS & OUTPUT OPTIONS
8	FL275 ±15V, 19V, 24V, DISPLAY
9	24V, ±15V AND GND DISTRIBUTION
10	TERMINAL BOARDS

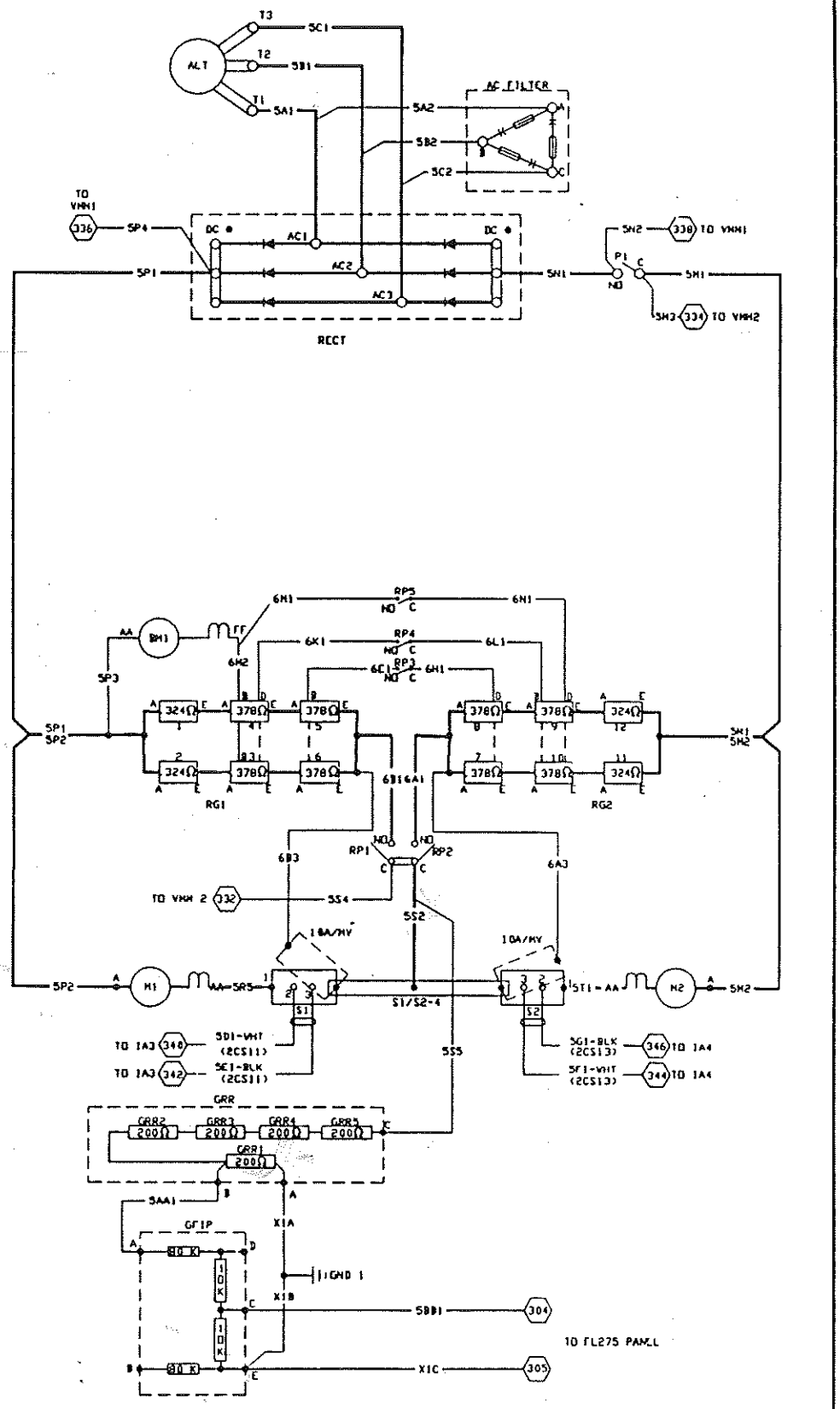
UNIT RIG
CAD

ELECTRICAL SCHEMATIC
POWER / CONTROL

STATEX III FUEL ENHANCED LOAD BOX, ELECTRIC P1 & REV TB CONTROL WIRE INTERFACE 12, 18, OR 20 GRIDS

NUMBER S10492

ECN NO.
88470
88883
90394



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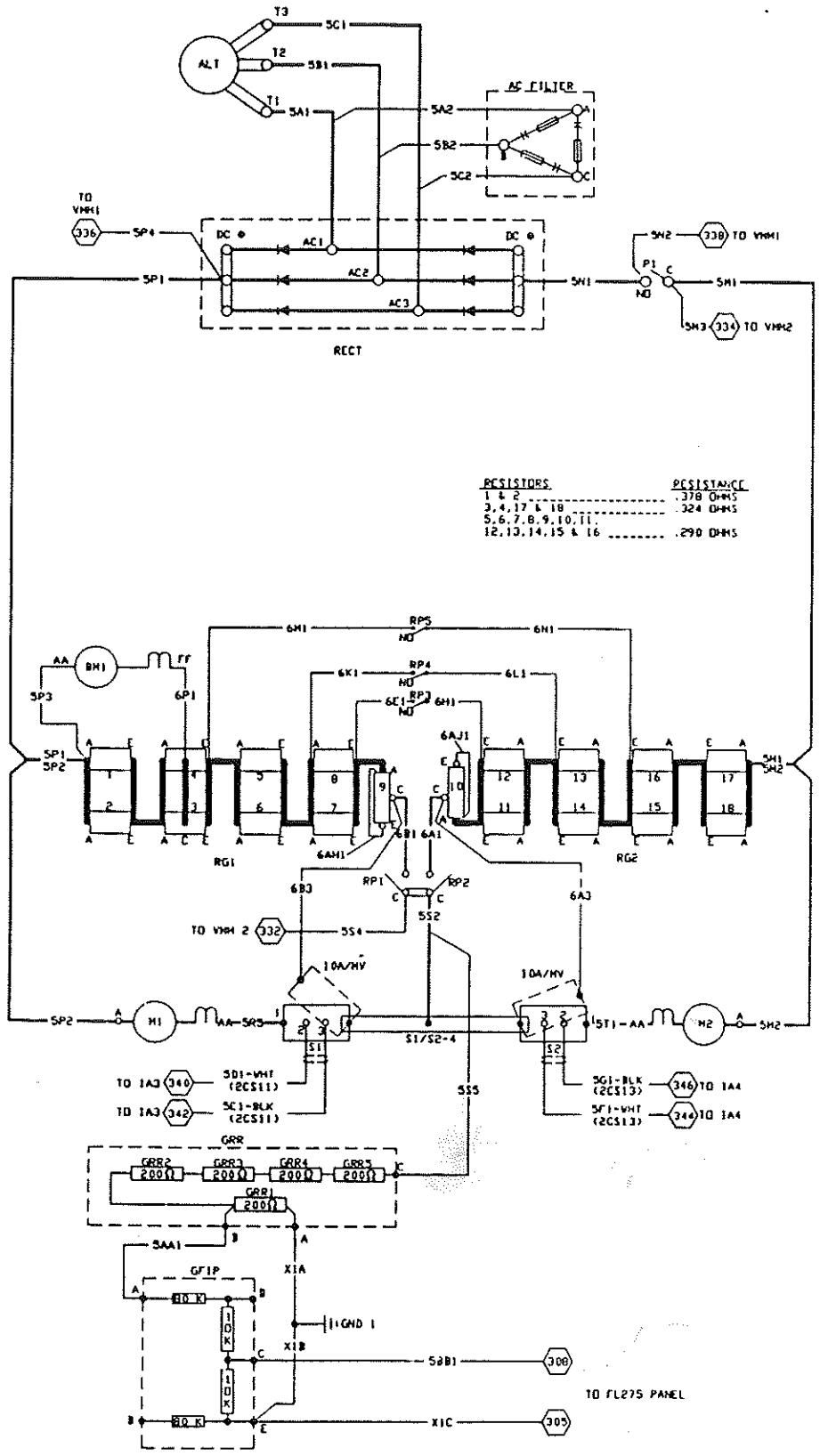


10 GRIDS.3 STEP ERR. & P1 ONLY

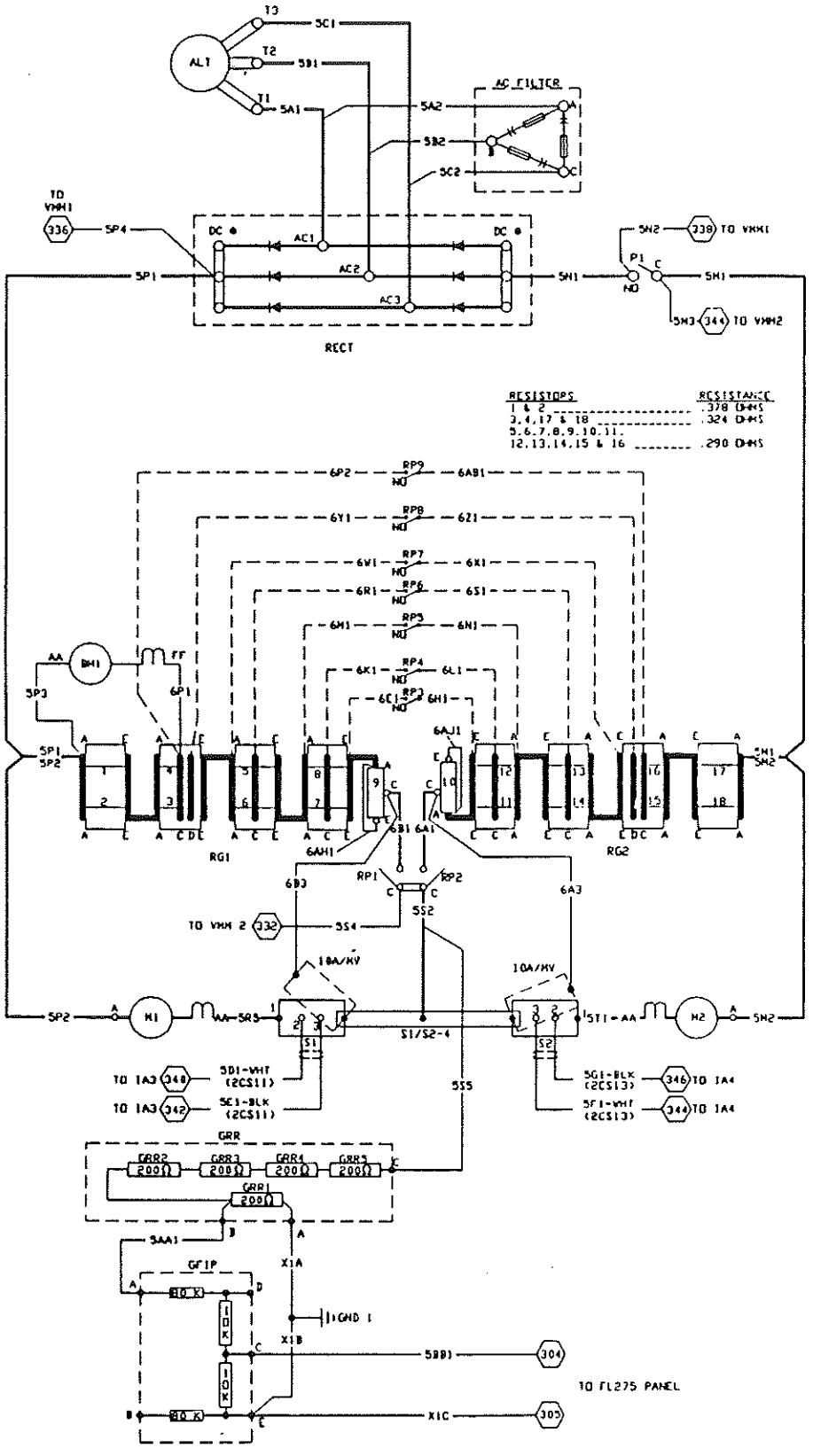
CAD

UNIT RIG

NUMBER	SHEET 28 OF 10	ELECTRICAL SCHEMATIC POWER / CONTROL
S10492		

E.N. NO.
88470
88883
90394

NO. S10492



UNIT RIG CAD

ELECTRICAL SCHEMATIC
POWER / CONTROL

NUMBER S10492

SHEET 2C OF 10

NO. S10492

E.N. NO.
88470
88883
90394

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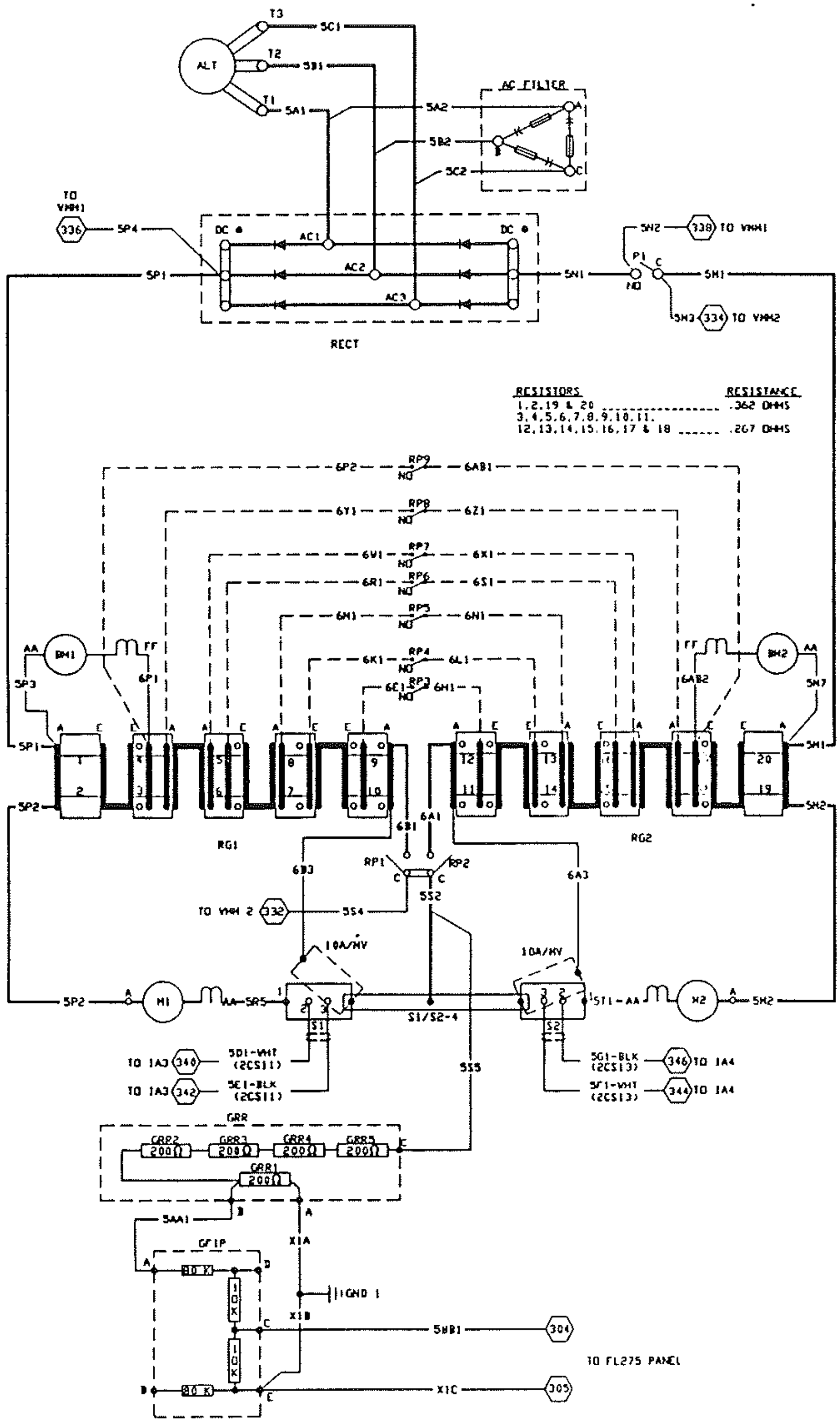


SWING-SHUNT LOAD BOX

20 GRIDS.7 STEP GRR

CAD

ELECTRICAL SCHEMATIC POWER / CONTROL

NUMBER S10492

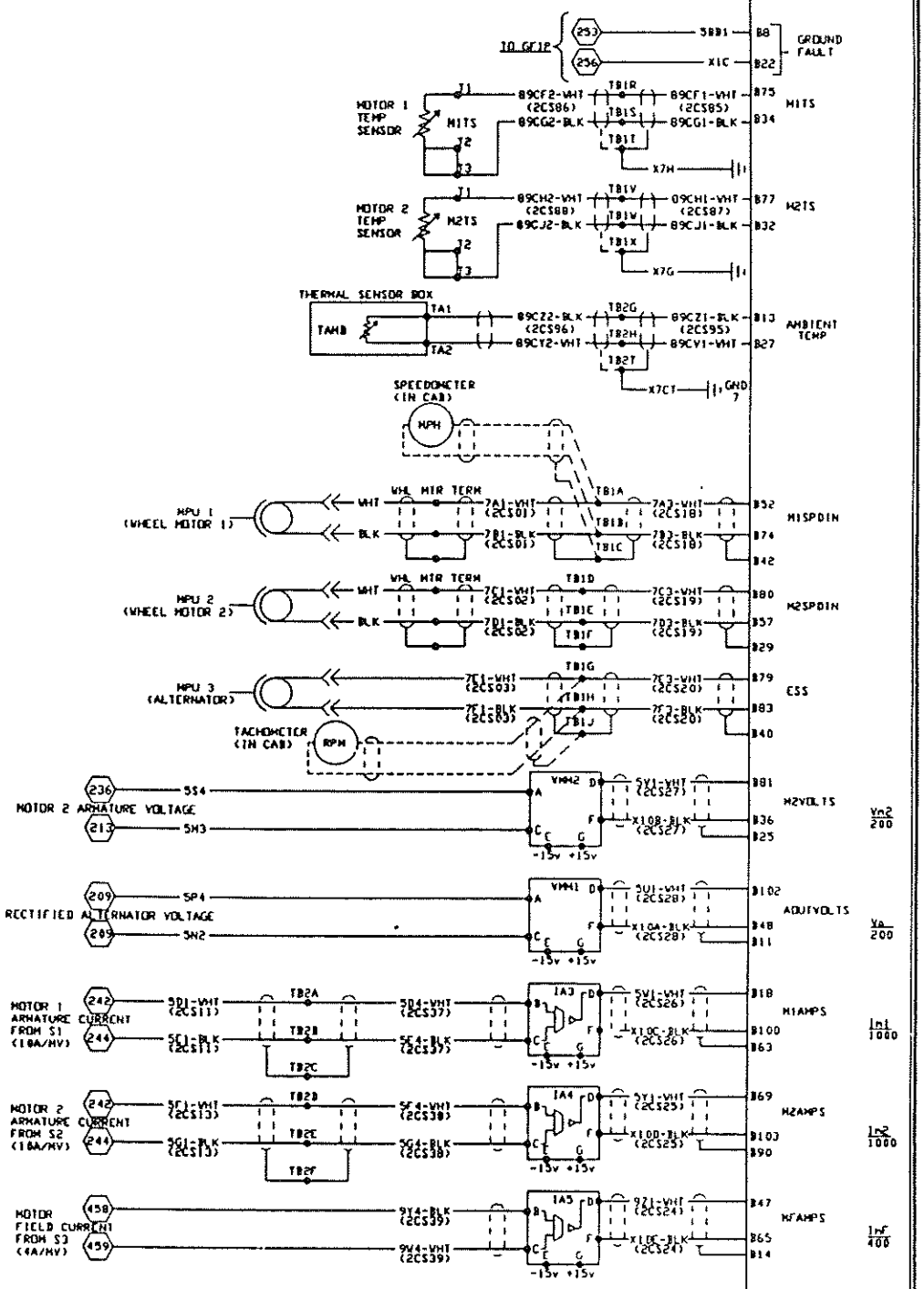
SHEET 2D OF 10

E.N. NO. 88470 88883 90394

NO. S10492

FL275

FL275-INPUTS



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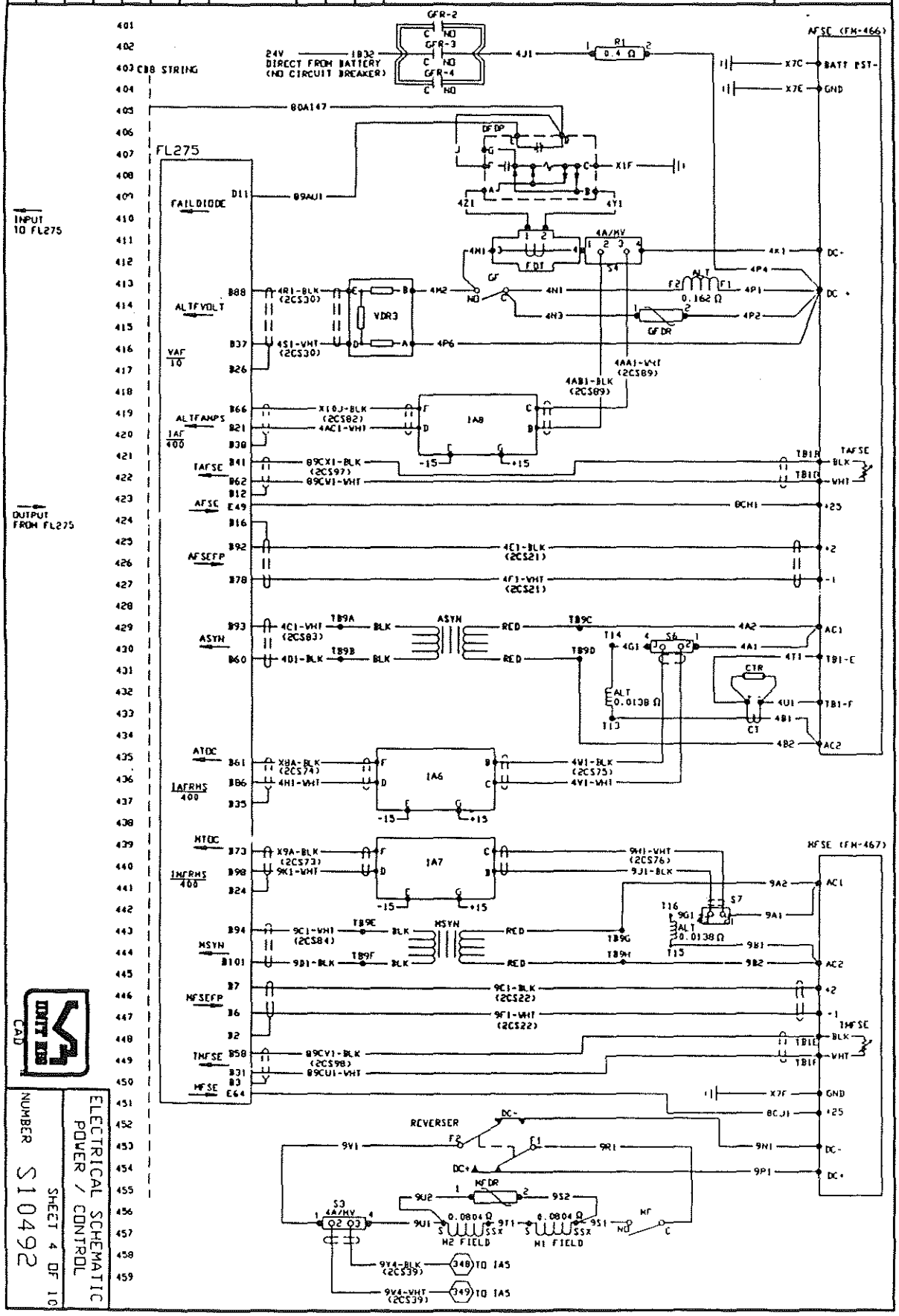
ELECTRICAL SCHEMATIC
POWER / CONTROL

NUMBER S10492

SHEET 3 OF 10

E.N. NO. 88470 88883 90394

NO. S10492



UNIT RIG CAD

ELECTRICAL SCHEMATIC POWER / CONTROL

NUMBER S10492 SHEET 4 OF 10

FL275 INPUT

FL275 OUTPUT

NOTE: CIRCUITS IN CAB AND HYD BOX ARE ONLY REPRESENTATIVE OF CIRCUIT FUNCTION. SEE 24V SCHEMATIC FOR ACTUAL CIRCUIT.

NOTE: TB6S (GND) RESERVED FOR OPTIONAL HOOKUP OF PROXIMITY OR PHOTOCELL SWITCH.

NOTE: DIODE MAY BE OMITTED WHEN OPTIONAL LIGHT IS PROVIDED IN CAB FOR GROUND FAULT OR DIODE FAULT.

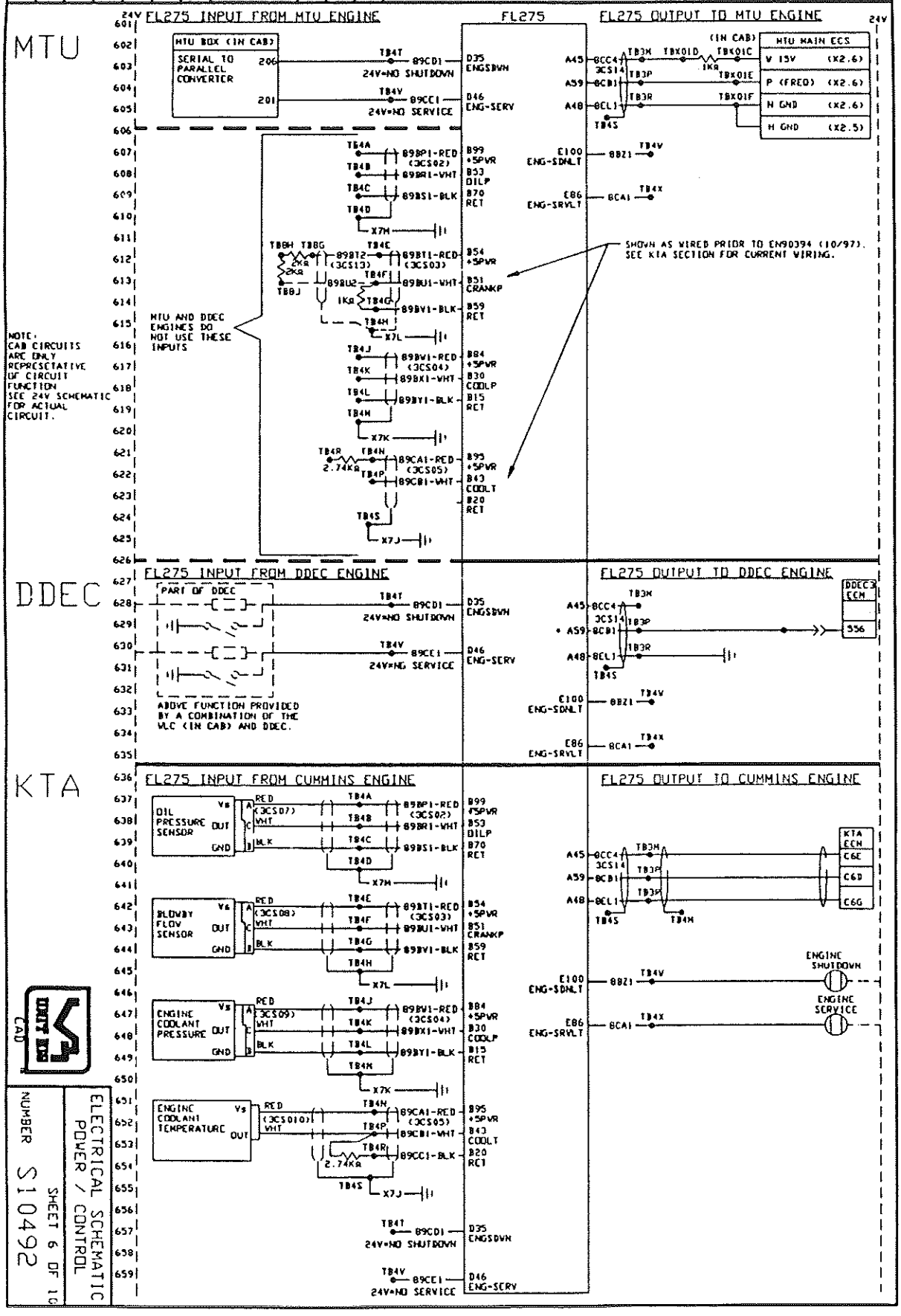
UNIT RIG CAD

ELECTRICAL SCHEMATIC POWER / CONTROL

NUMBER S10492 SHEET 5 OF 10

E.N. NO.	88470	88883	90394								SLF

NO. S10492



OPTIONAL INPUT/OUTPUT OF FL275 ARE SHOWN BELOW. THE INPUT/OUTPUT ARE ALWAYS WIRED FROM FL275 TO TB. IF OPTION IS FULLY WIRED ON TRUCK, IT WILL BE SHOWN ON 24 VOLT SCHEMATIC.

FL275 INPUT

FL275

FL275 OUTPUT

USC WITH RP3,4,&5 FOR 7 STEP ERR (OPTION)

INHIBIT SELECTABLE AS 0V OR 24V

(24V=TRUCK EMPTY)

DEM_SPD_EVENT

TURNED ON=SPEED GREATER THAN SET POINT

DEFAULT USE FUTURE ENHANCEMENT

SIG 2 — DEFAULT USE= TRUCK SPEED 10V = 50 MPH

SIG 3 — DEFAULT USE= MOTOR FIELD PPT 10V = FULL FIRING

SIG 4 — DEFAULT USE= ALTERNATOR FIELD PPT 10V = FULL FIRING

SIG 5 — DEFAULT USE= UNDEFINED

SIG 1 — DEFAULT USE= ENGINE SPEED 10V = 2500 RPM

SIG 7 — DEFAULT USE= GE TESTING

(24V=ACCEL)

(24V=NO RETARD)

(24V=LOW IDLE)

(TURNED ON=LOW IDLE)

(TURNED ON=THROTTLE SHUTOFF)

INPUT AND OUTPUT NOT USED FOR FULL ENHANCED CONFIGURATIONS.

NOTE: CAB CIRCUITS ARE ONLY REPRESENTATIVE OF CIRCUIT FUNCTION. SEE 24V SCHEMATIC FOR ACTUAL CIRCUIT.

CAD

ELECTRICAL SCHEMATIC POWER / CONTROL

NUMBER S10492 SHEET 7 OF 13

E.N. NO.	88470	88883	90394

SLF

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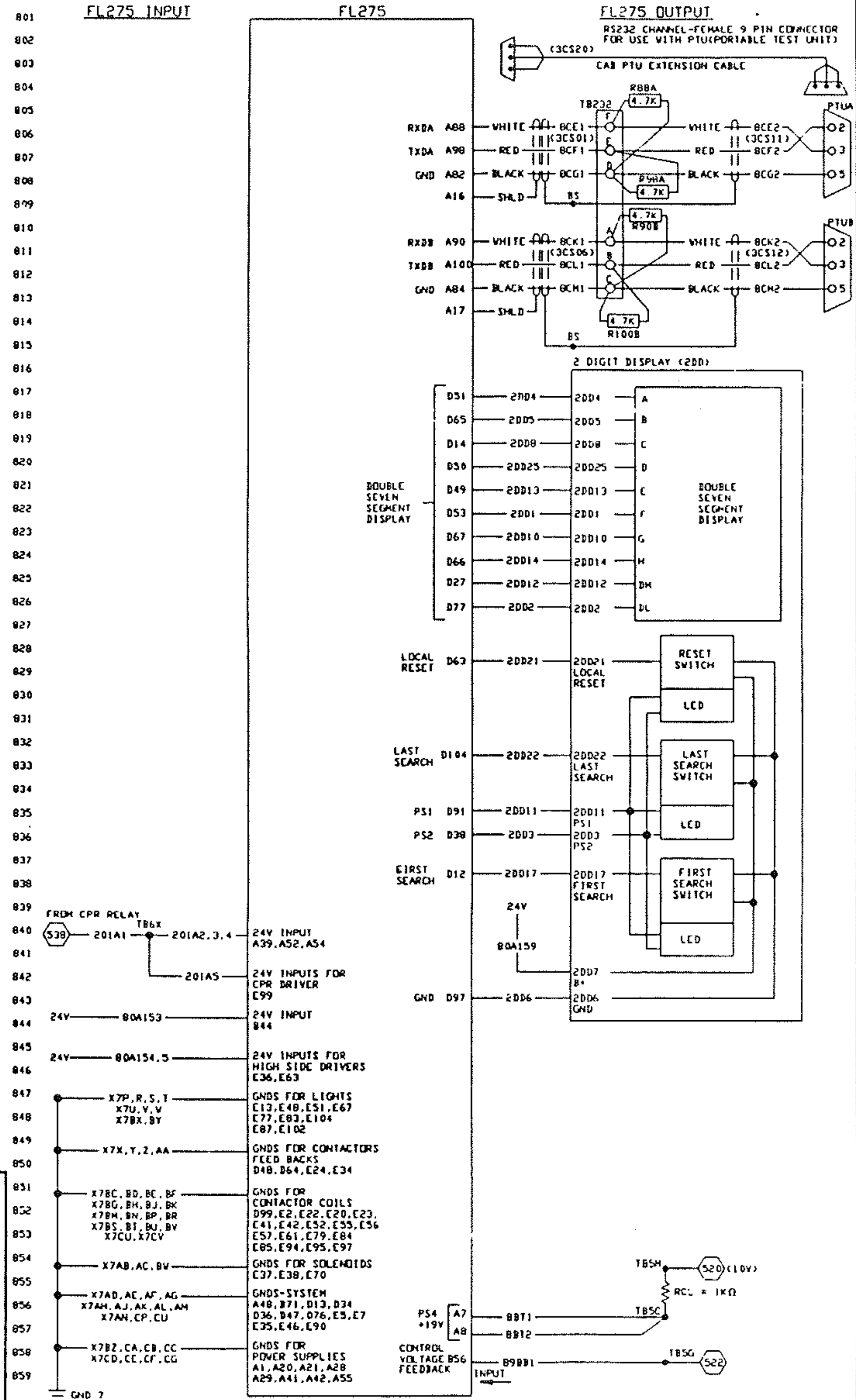

UNIT RIG

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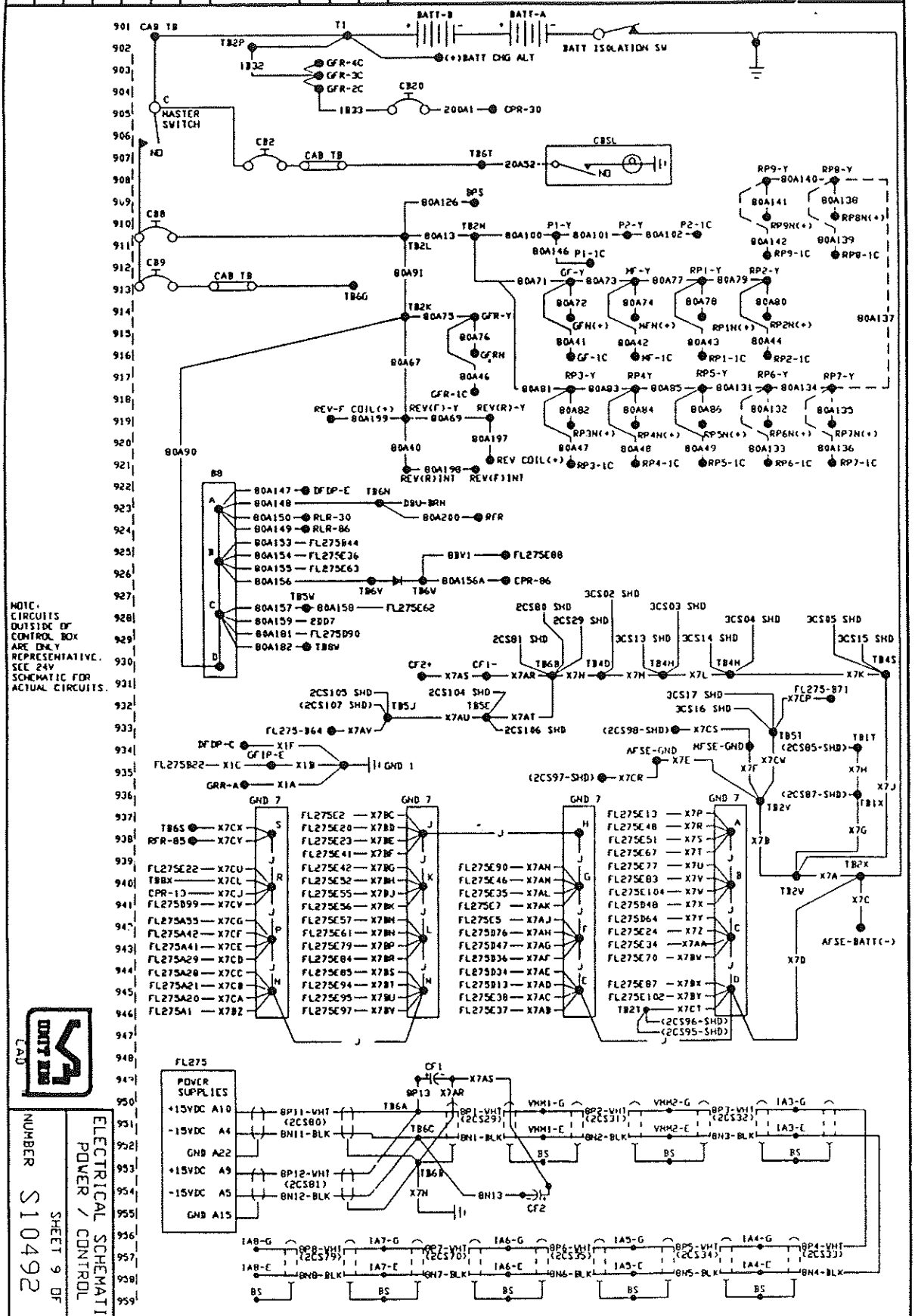
ELECTRICAL SCHEMATIC POWER / CONTROL

NUMBER S10492

SHEET 8 OF 10

E.N. NO. 88470 88883 90394

NO. S10492



NOTE: CIRCUITS OUTSIDE OF CONTROL BOX ARE ONLY REPRESENTATIVE. SEE 24V SCHEMATIC FOR ACTUAL CIRCUITS.

UNIT RIG CAD

ELECTRICAL SCHEMATIC
POWER / CONTROL

NUMBER S10492

SHEET 9 OF 10

E.N. NO.
88470
88883
90394

NO. S10492

NORMALLY USED FOR; ENGINEERING TESTS

NORMALLY USED FOR; TEST POINTS FOR CIRCUITS CONNECTED TO CN4 AND CN5

NORMALLY USED FOR; CONNECTION POINTS FOR OPTIONS

NORMALLY USED FOR; CONNECTIONS POINTS FOR OUTSIDE WIRING THAT DOES NOT ENTER THROUGH A CONNECTOR

TB#	WIRE NUMBER	DESCRIPTION
TB8A	8EA1-VHT	SIG 1
TB8B	8EB1-BLK	SIG 1
TB8C	SHD	SIG 1
TB8D	8EC1-VHT	SIG 7
TB8E	8ED1-BLK	SIG 7
TB8F	SHD	SIG 7
TB8G	----------	-----
TB8H	----------	-----
TB8J	----------	-----
TB8K	----------	-----
TB8L	----------	-----
TB8M	----------	-----
TB8N	----------	-----
TB8P	----------	-----
TB8R	----------	-----
TB8S	----------	-----
TB8T	----------	-----
TB8V	----------	-----
TB8W	80A182	24VC(TEST)
TB8X	X7CL	GNDC(TEST)

SEE LINE 612 FOR CCP 5V WIRING PRE 10/97.

TB6A	8P11-VHT	+15VDC
TB6B	SHD	GND
TB6C	8N11-BLK	-15VDC
TB6D	88B1	SYS FAULT LIGHT
TB6E	81F16	LOW IDLE SOLENOID
TB6F	87B1	THROTTLE CUTOUT SOLENOID
TB6G	90A25	CONTROL BOX OPTIONS
TB6H	8EF1	FUTURE ENHANCEMENT
TB6J	8EG1	FUTURE ENHANCEMENT
TB6K	8EH1	FUTURE ENHANCEMENT
TB6L	8EJ1	FUTURE ENHANCEMENT
TB6M	89CS1	LOVT (24V=EMPTY)
TB6N	80A148,BRN	DBU-24V
TB6P	81V1,VHT	DBU-NC
TB6R	89AV2,BLK	DBU-NO
TB6S	X7CX,BLU	DBU-GND
TB6T	20A52	CTRL BOX SERVICE LIGHT
TB6V	80A156	CPR RAW POWER
TB6W	80A156A	CPR ISOLATED POWER
TB6X	201A1	24V FROM CPR

TB4A	89BP1	OIL PRESS SENSOR
TB4B	89BR1	OIL PRESS SENSOR
TB4C	89BS1	OIL PRESS SENSOR
TB4D	SHD	OIL PRESS SENSOR
TB4E	89BT1	ENGINE BLOWBY FLOW SENSOR
TB4F	89BU1	ENGINE BLOWBY FLOW SENSOR
TB4G	89BV1	ENGINE BLOWBY FLOW SENSOR
TB4H	SHD	ENGINE BLOWBY FLOW SENSOR
TB4J	89BW1	ENGINE COOLANT PRESS
TB4K	89BX1	ENGINE COOLANT PRESS
TB4L	89BY1	ENGINE COOLANT PRESS
TB4M	SHD	ENGINE COOLANT PRESS
TB4N	89CA1	ENGINE COOLANT TEMP
TB4P	89CB1	ENGINE COOLANT TEMP
TB4R	89CC1	ENGINE COOLANT TEMP
TB4S	SHD	ENGINE COOLANT TEMP
TB4T	89CD1	DDEC-ENG SHT DOWN
TB4V	89CE1	DDEC-ENG SERV
TB4W	88Z1	DDEC-ENG SHT DOWN LIGHT
TB4X	8CA1	DDEC-ENG SERV LIGHT

TB2A	5D4-VHT	MOTOR 1 ARMATURE CURRENT
TB2B	5E4-BLK	MOTOR 1 ARMATURE CURRENT
TB2C	SHD	MOTOR 1 ARMATURE CURRENT
TB2D	5F4-VHT	MOTOR 2 ARMATURE CURRENT
TB2E	5G4-BLK	MOTOR 2 ARMATURE CURRENT
TB2F	SHD	MOTOR 2 ARMATURE CURRENT
TB2G	89CZ1-BLK	AMBIENT TEMPERATURE SENSOR
TB2H	89CY1-VHT	AMBIENT TEMPERATURE SENSOR
TB2J	----------	-----
TB2K	80A91	24V SUPPLY
TB2L	80A23	24V SUPPLY
TB2M	80A13	24V SUPPLY
TB2N	----------	-----
TB2P	1B32	24V-NO BREAKER
TB2R	----------	-----
TB2S	2A5	12V-NO BREAKER
TB2T	X	GROUND-BATTERY
TB2V	X	GROUND-BATTERY
TB2W	X	GROUND-BATTERY
TB2X	X	GROUND-BATTERY

TB7A	89CK1	+INHIBIT ALT
TB7B	89CL1	-INHIBIT ALT
TB7C	89CM1	+INHIBIT MOT
TB7D	89CN1	-INHIBIT MOT
TB7E	89BJ1	DATA STORE
TB7F	----------	-----
TB7G	----------	-----
TB7H	----------	-----
TB7J	8CR1-VHT	SIG 2
TB7K	8CS1-BLK	SIG 2
TB7L	SHD	SIG 2
TB7M	8CT1-VHT	SIG 3
TB7N	8CU1-BLK	SIG 3
TB7P	SHD	SIG 3
TB7R	8CV1-VHT	SIG 4
TB7S	8CW1-BLK	SIG 4
TB7T	SHD	SIG 4
TB7V	8CX1-VHT	SIG 5
TB7W	8CY1-BLK	SIG 5
TB7X	SHD	SIG 5

TB5A	89BH1	AS
TB5B	86A1	RS
TB5C	88T3	+19V FOR RETARD
TB5D	89BF1	RETARD LEVEL INPUT
TB5E	X7AY	RETARD LEVEL INPUT
TB5F	89BA1	RETARD SPEED CONTROL
TB5G	89BB1	RETARD SPEED CONTROL
TB5H	89BC1	RETARD SPEED CONTROL
TB5J	X7AV	RETARD SPEED CONTROL
TB5K	89BK1	SS FWD
TB5L	89BL1	SS REV
TB5M	88U3	+10V FOR FUEL ENHANCEMENT
TB5N	81E8	LOW IDLE SV
TB5P	88V1	DEM SPEED EVENT
TB5R	----------	-----
TB5S	89AV3	DUMP BODY UP OVERRIDE SV
TB5T	X7CP	THROTTLE SENSOR GROUND
TB5V	8EK1	THROTTLE SENSOR SIGNAL
TB5W	80A157	CPS FEEDBACK
TB5X	88D1	LOW BLOWER PRESS LIGHT

TB3A	8BU1	P2 COIL
TB3B	89AT1	P2 FEEDBACK
TB3C	8AN1	RP6 COIL
TB3D	89AN1	PP6 FEEDBACK
TB3E	8AP1	RP7 COIL
TB3F	89AP1	RP7 FEEDBACK
TB3G	8AR1	RP8 COIL
TB3H	89AR1	RP8 FEEDBACK
TB3J	8AS1	RP9 COIL
TB3K	89AS1	RP9 FEEDBACK
TB3L	81V1	DUMP BODY UP SV (24V=UP)
TB4N	8CC4	DDEC ENGINE CONTROL
TB3M	89BM1	ACCINH
TB3P	8CB1	FUTURE ENHANCEMENT
TB3R	8EL1	DDEC ENG GND RETURN
TB3S	8CD1	MOTOR OVER TEMP LIGHT
TB3T	88B4	SYS FAULT LT
TB3V	88A3	GROUND FAULT
TB3W	88E1	OVERSPEED LIGHT
TB3X	88Y1	FAILED DIODE

TB1A	7A3-VHT	MOTOR 1 SPEED/SPEEDOMETER
TB1B	7B3-BLK	MOTOR 1 SPEED/SPEEDOMETER
TB1C	SHD	MOTOR 1 SPEED/SPEEDOMETER
TB1D	7C3-VHT	MOTOR 2 SPEED
TB1E	7D3-BLK	MOTOR 2 SPEED
TB1F	SHD	MOTOR 2 SPEED
TB1G	7E3-VHT	ENGINE SPEED/TACHOMETER
TB1H	7F3-BLK	ENGINE SPEED/TACHOMETER
TB1J	SHD	ENGINE SPEED/TACHOMETER
TB1K	89BN1	OUTPUT TO DYNAMIC RETARD LIGHT
TB1L	83B4	BLOWER PRESSURE SV INPUT
TB1M	25A12	HAND BRAKE (SERVBRKSV INPUT)
TB1N	89CR1	PARK BRAKE SV INPUT
TB1P	----------	-----
TB1R	89CF1-VHT	MOTOR 1 TEMP
TB1S	89CG1-BLK	MOTOR 1 TEMP
TB1T	SHD	MOTOR 1 TEMP
TB1V	89CH1-VHT	MOTOR 2 TEMP
TB1W	89CJ1-BLK	MOTOR 2 TEMP
TB1X	SHD	MOTOR 2 TEMP

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ELECTRICAL SCHEMATIC
POWER / CONTROL

NUMBER S10492

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