

MERCUISER PRODUCT ELECTRICAL SYSTEM SCHEMATIC REFERENCE

REVISIONS			1
REV	DESCRIPTION	DRAWN	CHECKER
02	050700-085 REVISED	JLR	JRR

ON ENGINE WIRING HARNESS, FOR DETAILED SCHEMATIC SEE THE INFORMATION CONTAINED IN TABLE #3 SHOWN ON THIS SHEET

21 PIN ENGINE INTERFACE CONNECTOR. (SEE PINOUT DETAIL SHEET 9, DETAIL D) FOR -21PN & -21SN PIN LOCATIONS (SEE SHEET 14, DETAIL G)

CONNECTION PATH FOR ALL ENGINES NOT USING VDO GAUGE PANELS. (SINGLE AND DUAL STATION APPLICATIONS)

SINGLE STATION (SEE NOTE 3)

INSTRUMENT HARNESS (SEE NOTE 7, DETAIL A)

ENGINE	PART #
1.7M, 2.8E, 4.2M, 4.2E	84-860618

INSTRUMENT HARNESS (SEE NOTE 7, DETAIL A)

ENGINE	PART #
1.7M, 2.8E, 4.2M, 4.2E	84-860618

INSTRUMENT HARNESS (SEE NOTE 7, DETAIL A)

ENGINE	PART #
1.7M, 2.8E, 4.2M, 4.2E	84-860618

INSTRUMENT EXTENSION HARNESS (SEE NOTE 2, DETAIL A)

ENGINE	PART #	LENGTH
1.7M, 2.8E, 4.2M, 4.2E	84-860615	4 METERS
1.7M, 2.8E, 4.2M, 4.2E	84-860616	7 METERS

DUAL STATION (SEE NOTE 4)

SECOND STATION "Y" HARNESS (SEE NOTE 8, DETAIL C)

ENGINE	PART #
1.7M, 2.8E, 4.2M, 4.2E	84-860617

INSTRUMENT EXTENSION HARNESS (SEE NOTE 2, DETAIL A)

ENGINE	PART #	LENGTH
1.7M, 2.8E, 4.2M, 4.2E	84-860615	4 METERS
1.7M, 2.8E, 4.2M, 4.2E	84-860616	7 METERS

SEE SECOND STATION INSTRUMENTATION REFERENCE TABLE #2 (THIS SHEET)

TABLE #1: PRIMARY STATION INSTRUMENTATION

ENGINES	PART #	PANEL DETAILS
1.7M, 2.8E, 4.2M, 4.2E	806029	BLANK PANEL WITH FIVE (5) GAUGE LOCATIONS
1.7M	859701A2	BLACK FACE WITH BLACK BEZEL FLAGSHIP INSTRUMENTS. INCLUDES TACHOMETER, OIL PRESSURE, COOLANT TEMP., BATTERY METER AND HOURMETER. ALARM PANEL INCLUDED WITH KEYSWITCH, STOP AND TEST SWITCHES.
2.8E, 4.2E	859702A1	
4.2M	859701A1	
1.7M	859701A12	WHITE FACE WITH WHITE BEZEL FLAGSHIP PLUS INSTRUMENTS. INCLUDES TACHOMETER, OIL PRESSURE, COOLANT TEMP., BATTERY METER AND HOURMETER. ALARM PANEL INCLUDED WITH KEYSWITCH, STOP AND TEST SWITCHES.
2.8E, 4.2E	859702A11	
4.2M	859701A11	

TABLE #2: SECOND STATION INSTRUMENTATION

ENGINES	PART #	PANEL DETAILS
1.7M, 2.8E, 4.2M, 4.2E	859707A1	FLAGSHIP 2ND STATION GAUGE KIT W/SENDERS
	859707A11	FLAGSHIP PLUS 2ND STATION GAUGE KIT W/SENDERS
1.7M	859704A2	BLACK FACE WITH BLACK BEZEL FLAGSHIP TACHOMETER AND ALARM PANEL. INCLUDES START AND STOP TOGGLE SWITCHES.
2.8E, 4.2E	859705A1	
4.2M	859704A1	
1.7M	859704A12	WHITE FACE WITH WHITE BEZEL FLAGSHIP PLUS TACHOMETER AND ALARM PANEL. INCLUDES START AND STOP TOGGLE SWITCHES.
2.8E, 4.2E	859705A11	
4.2M	859704A11	

INSTRUMENT EXTENSION HARNESS (SEE NOTE 2, DETAIL A)

ENGINE	PART #	LENGTH
1.7M, 2.8E, 4.2M, 4.2E	84-860615	4 METERS
1.7M, 2.8E, 4.2M, 4.2E	84-860616	7 METERS

INSTRUMENT PANEL ASSEMBLIES (SEE SCHEMATICS PAGES 5, 6, 7, 8)

ENGINE	PART #	COMMENTS	REF. NOTE
1.7MS & MI	881800A1	BASIC PANEL	5
1.7MS	881801A1	OPTIONAL PANEL	6
1.7MI	881801A2	OPTIONAL PANEL	6
4.2 & 2.8 ES/EI	881800A3	BASIC PANEL	14
4.2 & 2.8 ES	881801A5	OPTIONAL PANEL	15
4.2 & 2.8 EI	881801A6	OPTIONAL PANEL	15
4.2MS/MI	881800A2	BASIC PANEL	14
4.2MS	881801A3	OPTIONAL PANEL	15
4.2MI	881801A4	OPTIONAL PANEL	15

TABLE #3

SHEET	DESCRIPTION
1	1.7M, 2.8E, 4.2E SYSTEM INTERCONNECTS
2	1.7M STERNDRIVE ENGINE HARNESS
3	1.7M INBOARD ENGINE HARNESS
4	4.2M ENGINE WIRING HARNESS
5	1.7M/4.2M BASIC INSTRUMENT PANEL
6	1.7M/4.2M OPTIONAL INSTRUMENT PANEL ASSEMBLY
7	2.8E/4.2E BASIC INSTRUMENT PANEL ASSEMBLY
8	2.8E/4.2E OPTIONAL INSTRUMENT PANEL ASSEMBLY
9	2.8E/4.2E ENGINE CONTROL MODULE INTERCONNECT HARNESS
10	2.8E 200 ENGINE CONTROL MODULE INTERCONNECT HARNESS
11	2.8E/4.2E ENGINE WIRING HARNESS
12	2.8E 200 ENGINE WIRING HARNESS
13	NON VDO INSTRUMENT INTERCONNECT HARNESS
14	NOTES AND DETAILS

NOTE: THIS DRAWING SHOULD BE USED FOR REFERENCE INFORMATION ONLY. FOR DETAILED INFORMATION ON SPECIFIC ENGINE ELECTRICAL SYSTEMS, REFERENCE THE INDIVIDUAL MERCUISER SERVICE MANUALS. THESE MANUALS CAN BE OBTAINED BY ORDERING VIA MERCNET.

Cummins Inc.

ITEM NAME: DIAGRAM, WIRING INSTALLATION

IDENTIFIER: DIAGRAM DRAWING

ITEM NUMBER: 3970674

SCALE: NONE

SHEET 1 OF 14

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994

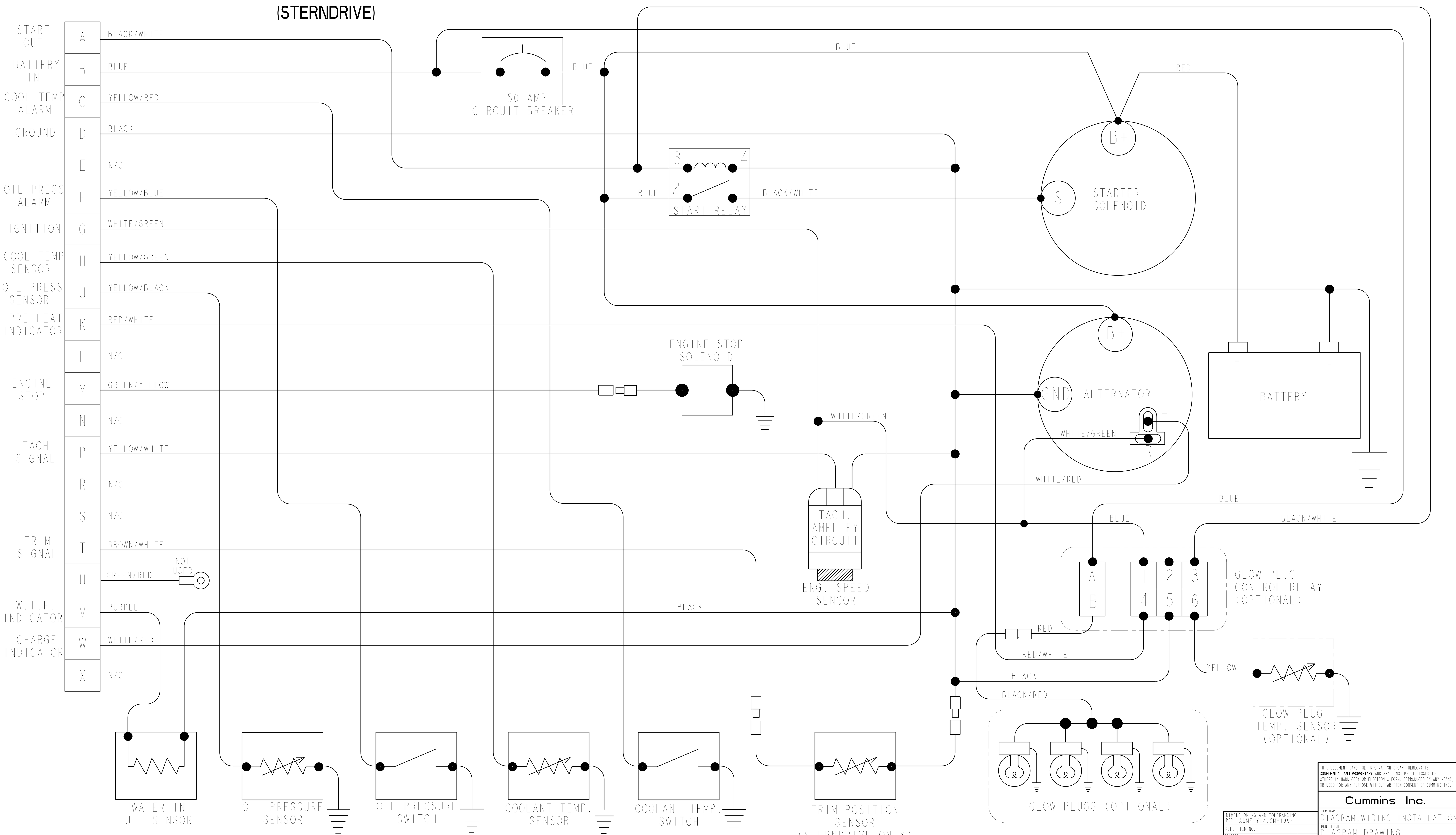
DATE: 01 JUL 93

CHECKER: J R RATTIGAN

APPROVAL:

MERCURISER 1.7 LITRE ENGINE WIRING HARNESS (STERNDRIVE)

REV		DESCRIPTION	REVISIONS		
02	050700-085	REVISED	DRAFTER	CHECKER	APPROVAL
			J.L.R.	J.R.R.	



*NOTE: ALL SENSORS, EXCEPT WIF, ARE CASE GROUNDED SINGLE TERMINAL TYPE.

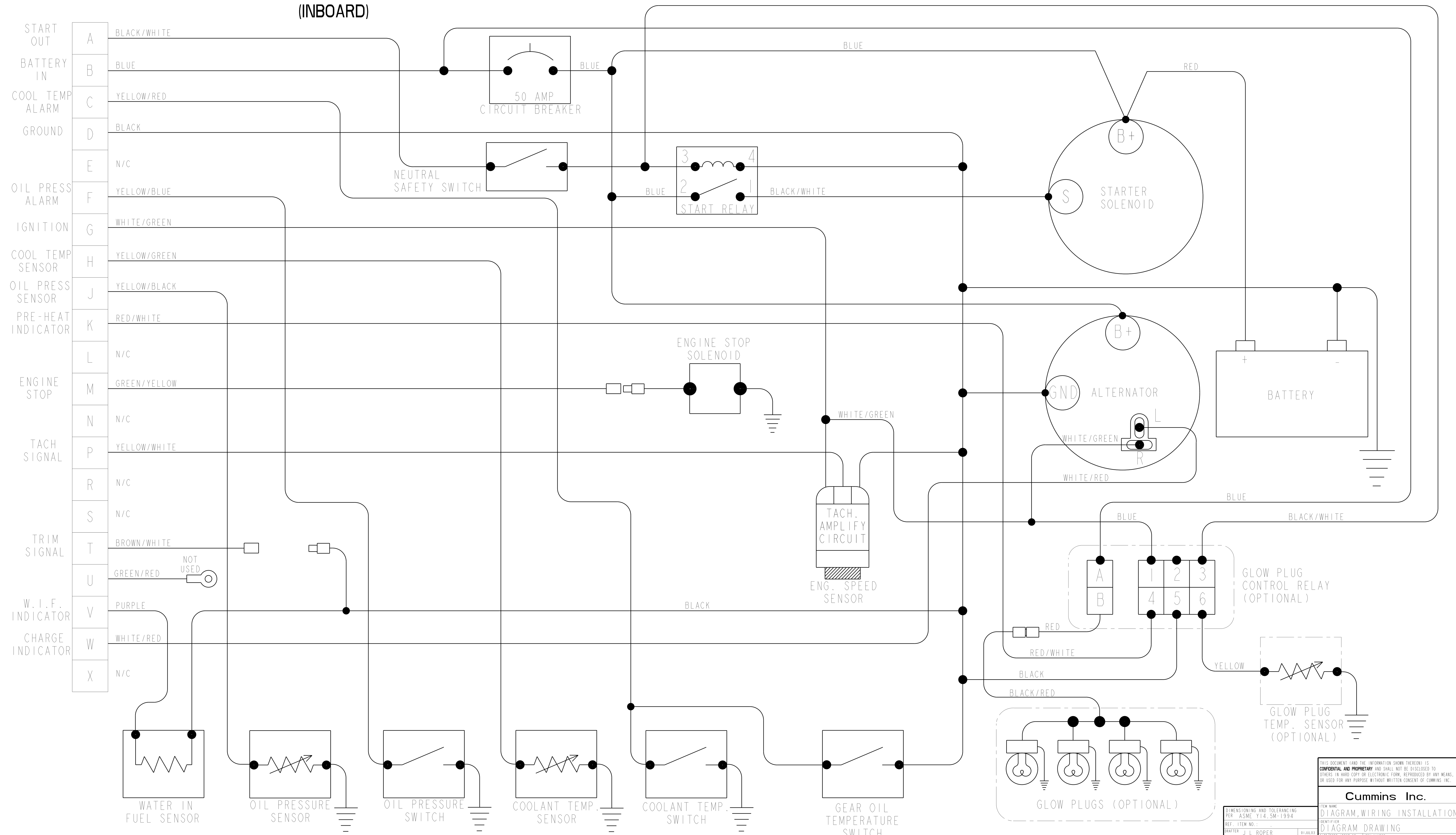
DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		ITEM NAME	
DRAFTER: J. L. ROPER		DIAGRAM, WIRING INSTALLATION	
CHECKER: J. R. RATTIGAN		IDENTIFIER	
DESIGN APPROVAL:		DIAGRAM DRAWING	
DATE: 01 JUL 93		ITEM NUMBER	
SIZE CODE: 220C103		3970674	
SCALE: NONE		ITEM CONTROL: CMU	
		SHEET 2 OF 14	

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MERCURISER 1.7 LITRE ENGINE WIRING HARNESS (INBOARD)

REVISIONS		
REV	DESCRIPTION	DATE
02	050700-085 REVISED	



*NOTE: ALL SENSORS, EXCEPT WIF, ARE CASE GROUND SINGLE TERMINAL TYPE.

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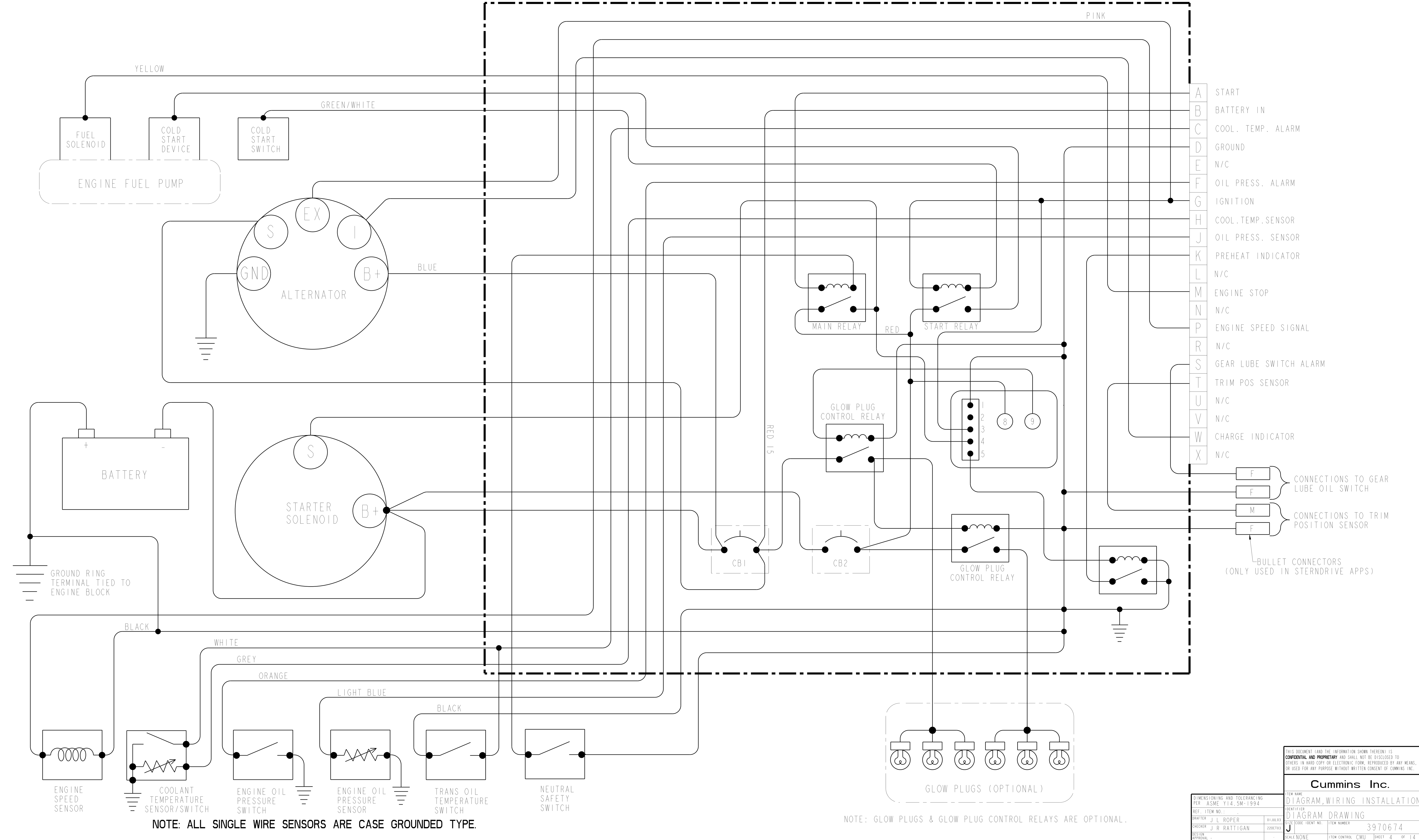
ITEM NAME: DIAGRAM, WIRING INSTALLATION
IDENTIFIER: DIAGRAM DRAWING
ITEM NUMBER: 3970674

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
REF. ITEM NO.:
DRAFTER: J. L. ROPER
CHECKER: J. R. RATTIGAN
DATE: 01 JUL 93
SIZE: 220C103
SCALE: NONE
SHEET: 3 OF 14

ENGINE WIRING HARNESS MERCURISER 4.2 MECHANICAL

ELECTRICAL INTERFACE ENCLOSURE

REVISONS				
REV	DESCRIPTION	DRAWN	CHECKED	APPROVAL
02	050700-085 REVISED	JLR	JRR	



- A START
 - B BATTERY IN
 - C COOL. TEMP. ALARM
 - D GROUND
 - E N/C
 - F OIL PRESS. ALARM
 - G IGNITION
 - H COOL. TEMP. SENSOR
 - J OIL PRESS. SENSOR
 - K PREHEAT INDICATOR
 - L N/C
 - M ENGINE STOP
 - N N/C
 - P ENGINE SPEED SIGNAL
 - R N/C
 - S GEAR LUBE SWITCH ALARM
 - T TRIM POS SENSOR
 - U N/C
 - V N/C
 - W CHARGE INDICATOR
 - X N/C
- F } CONNECTIONS TO GEAR LUBE OIL SWITCH
 F }
 M } CONNECTIONS TO TRIM POSITION SENSOR
 F }
 BULLET CONNECTORS (ONLY USED IN STERNDRIVE APPS)

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ITEM NAME: DIAGRAM, WIRING INSTALLATION
 IDENTIFIER: DIAGRAM DRAWING
 ITEM NUMBER: 3970674

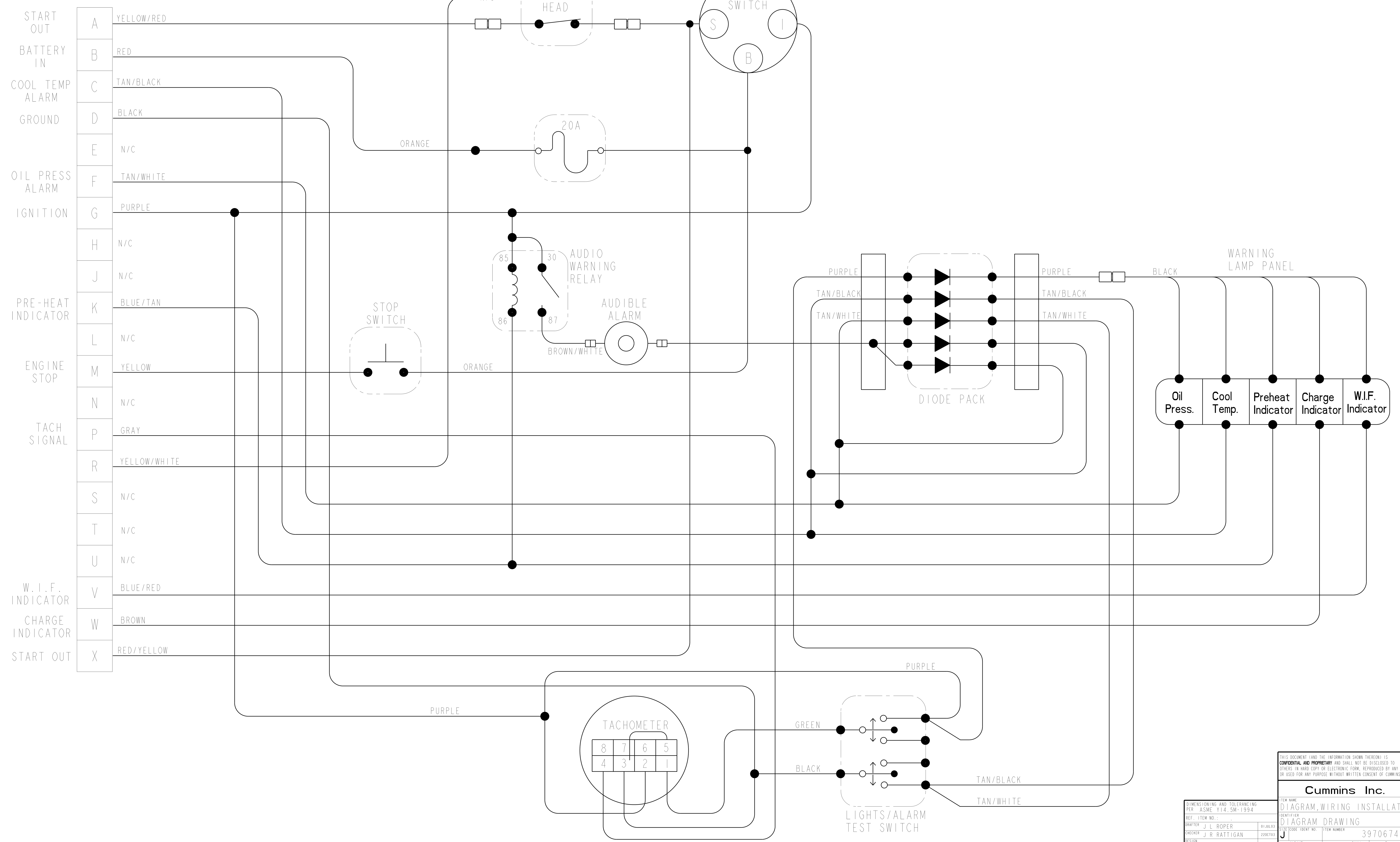
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994		DATE: 01JUL93	
DRAWN: J. L. ROPER	CHECKED: J. R. RATTIGAN	SCALE: NONE	SHEET: 4 OF 14

NOTE: ALL SINGLE WIRE SENSORS ARE CASE GROUND TYPE.

NOTE: GLOW PLUGS & GLOW PLUG CONTROL RELAYS ARE OPTIONAL.

MERCURISER 1.7M/4.2M BASIC INSTRUMENT PANEL

REVISIONS			DRAFTER		CHECKER		APPROVAL	
REV	DESCRIPTION	DATE	JLR	JRR				
02	050700-085 REVISED							



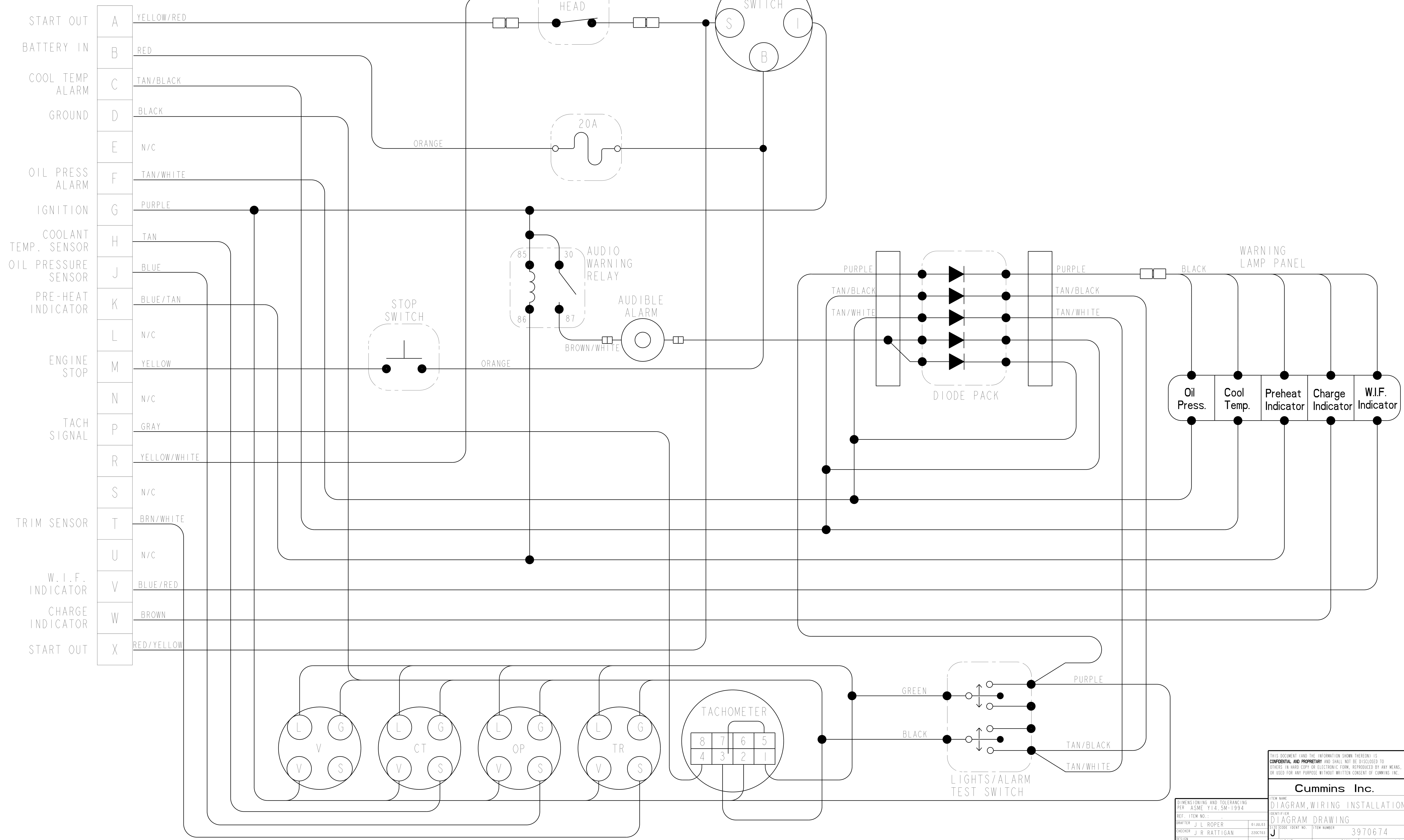
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DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		ITEM NAME	
REF. ITEM NO.:		DIAGRAM, WIRING INSTALLATION	
DRAFTER: J L ROPER		IDENTIFIER	
CHECKER: J R RATTIGAN		DIAGRAM DRAWING	
DATE: 01JUL93	SIZE CODE: 220C103	ITEM NUMBER	3970674
SCALE: NONE		ITEM CONTROL	CMU
		SHEET	5 OF 14

MERCUISER 1.7M/4.2M OPTIONAL INSTRUMENT PANEL

REVISIONS			1
REV	DESCRIPTION	DRAFTER	CHECKER
02	050700-085 REVISED	JLR	JRR



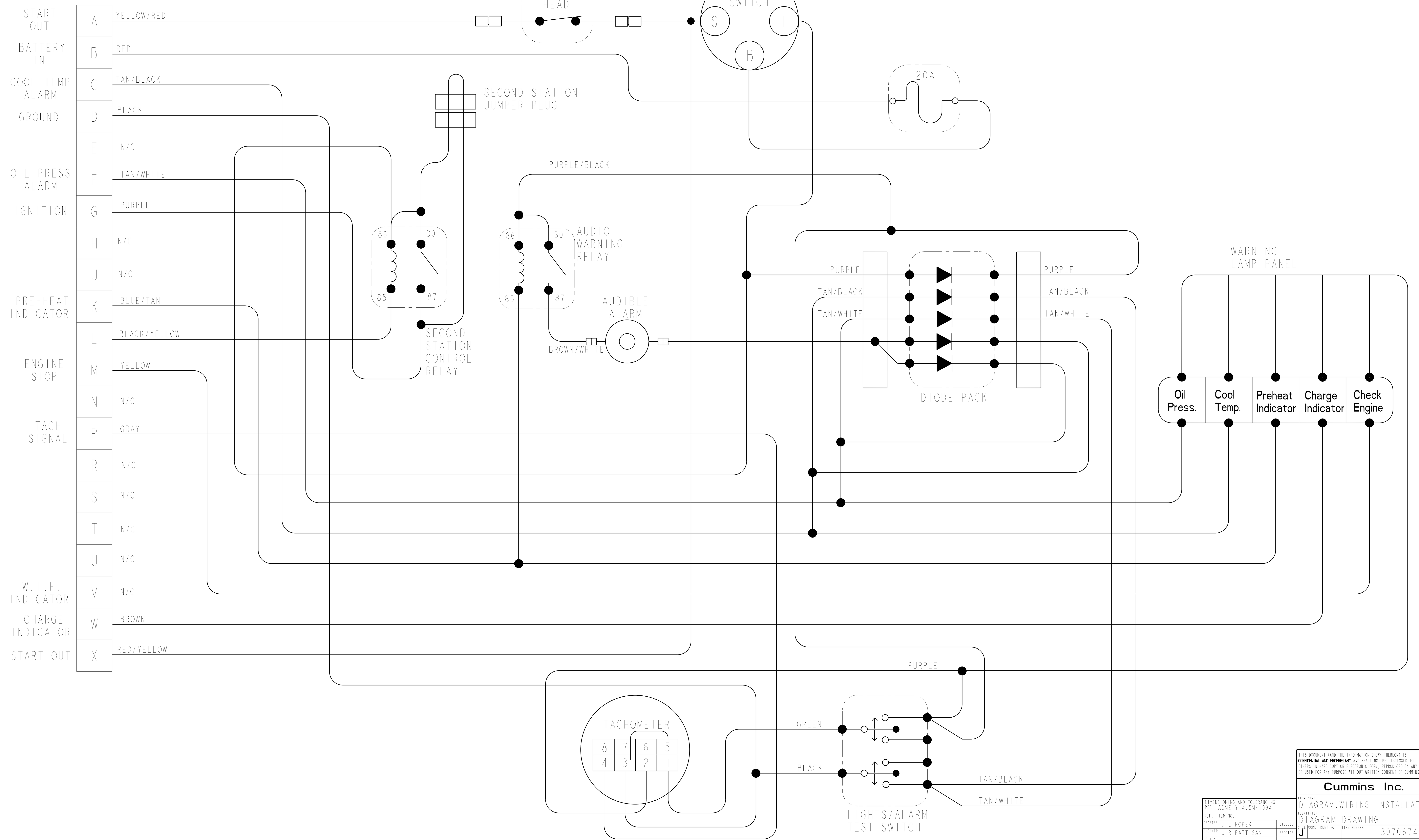
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REF. ITEM NO.:		IDENTIFIER: DIAGRAM DRAWING	
DRAFTER: J L ROPER	DATE: 01JUL93	ITEM NO.:	3970674
CHECKER: J R RATTIGAN	DATE: 22OC193	SCALE: NONE	SHEET: 6 OF 14

MERCURISER 2.8E/4.2E BASIC INSTRUMENT PANEL

REV		DESCRIPTION	REVISIONS		DRAFTER	CHECKER	APPROVAL
02	050700-085	REVISED			JLR	ZSWATTS	



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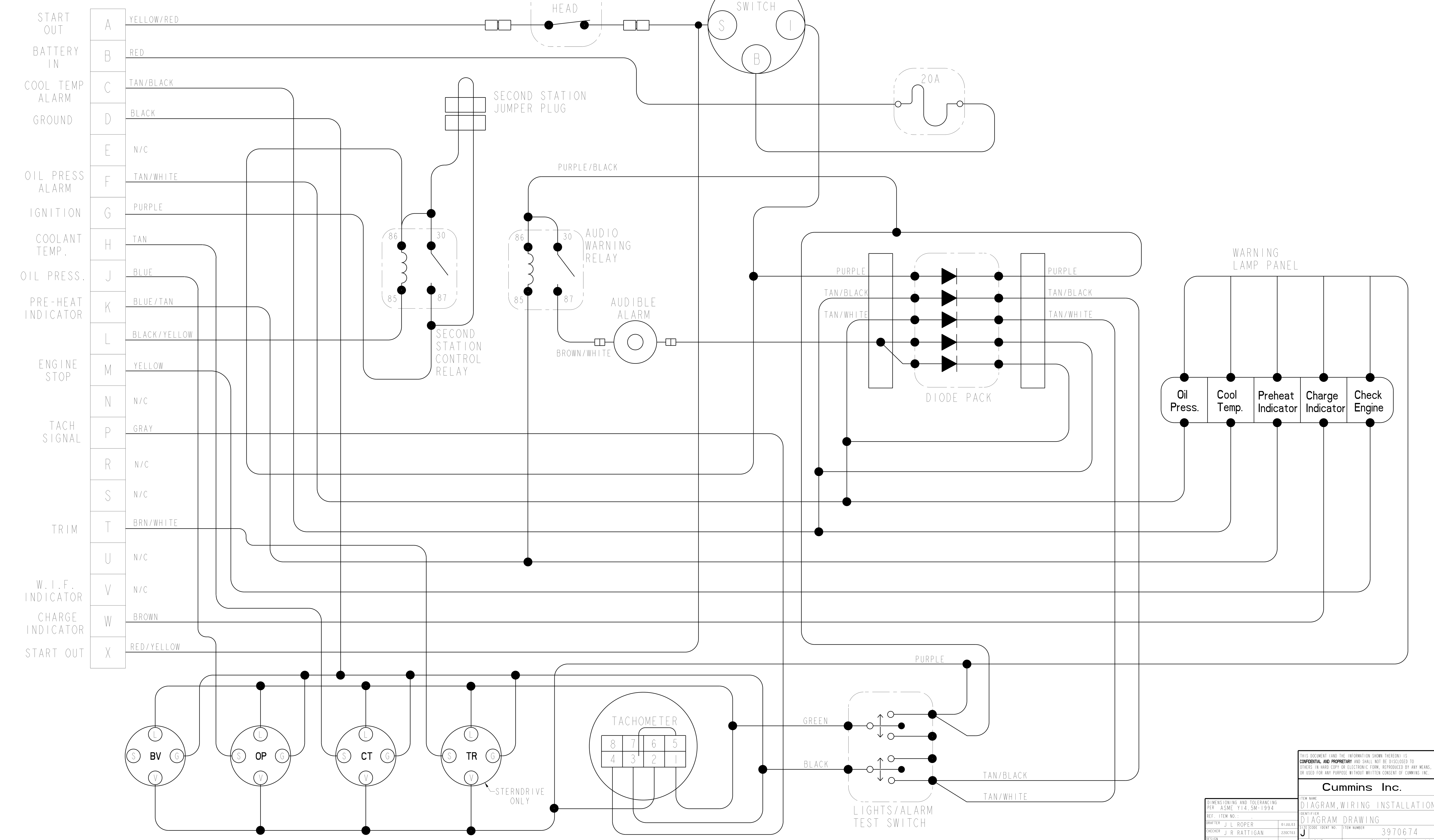
Cummins Inc.

ITEM NAME: DIAGRAM, WIRING INSTALLATION
IDENTIFIER: DIAGRAM DRAWING
ITEM NUMBER: 3970674

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994	
REF. ITEM NO.:	01JUL93
DRAFTER: J L ROPER	220C103
CHECKER: J R RATTIGAN	
DESIGN APPROVAL:	

MERCURISER 2.8E/4.2E FULL INSTRUMENT PANEL

REV		DESCRIPTION	DRAFTER	CHECKER	APPROVAL
02	050700-085	REVISED	JLR	JRR	



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ITEM NAME: DIAGRAM, WIRING INSTALLATION
 IDENTIFIER: DIAGRAM DRAWING
 ITEM NUMBER: 3970674

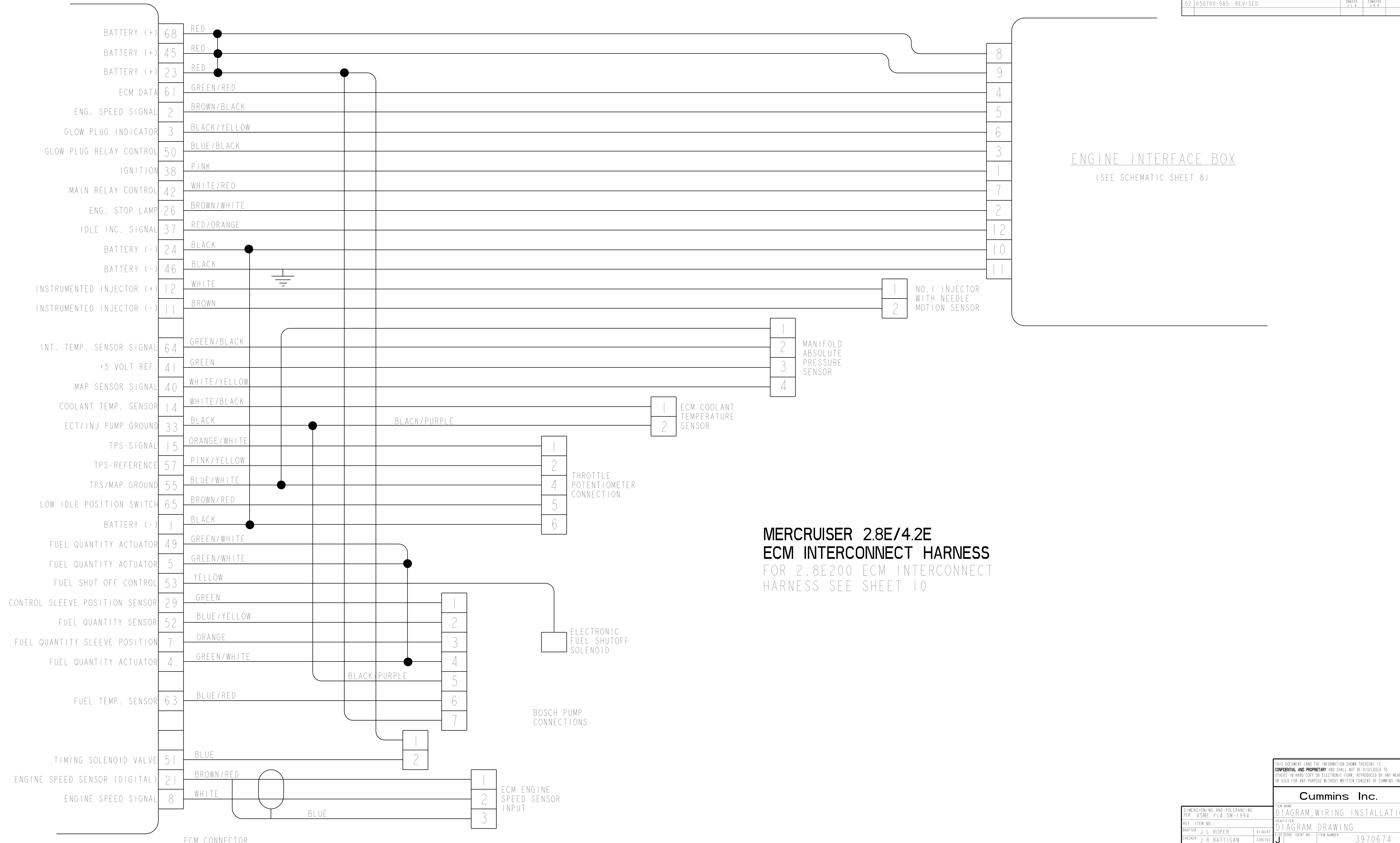
DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994	
DRAFTER: J. L. ROPER	DATE: 01 JUL 93
CHECKER: J. R. RATTIGAN	SIZE CODE: IDENT NO. 220C103
DESIGN APPROVAL:	SCALE: NONE

SHEET 8 OF 14

REVISIONS			
REV	DESCRIPTION	DRAFTER	CHECKER
02	050700-085 REVISED	JLR	JRR

ENGINE INTERFACE BOX
(SEE SCHEMATIC SHEET 8)

**MERCUISER 2.8E/4.2E
ECM INTERCONNECT HARNESS**
FOR 2.8E200 ECM INTERCONNECT
HARNESS SEE SHEET 10



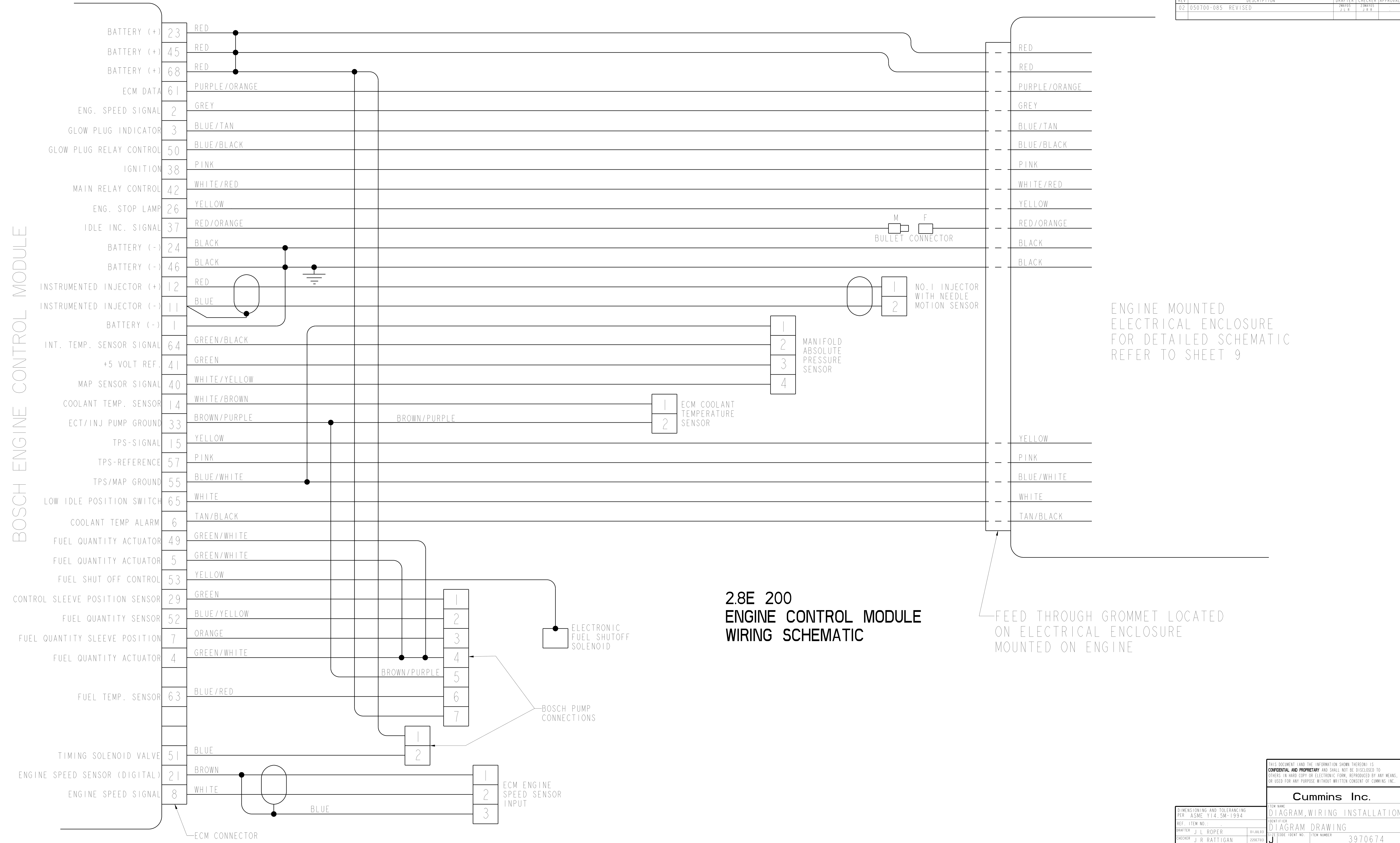
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DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		ITEM NAME DIAGRAM, WIRING INSTALLATION	
REF. ITEM NO.:		IDENTIFIER DIAGRAM DRAWING	
DRAFTER J L ROPER	01JUL93	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3970674
CHECKER J R RATTIGAN	220C103	SCALE NONE	ITEM CONTROL CMU
DESIGN APPROVAL			SHEET 9 OF 14

REVISIONS			1
REV	DESCRIPTION	DRAFTER	CHECKER
02	050700-085 REVISED	JLR	JRR

BOSCH ENGINE CONTROL MODULE



**2.8E 200
ENGINE CONTROL MODULE
WIRING SCHEMATIC**

ENGINE MOUNTED
ELECTRICAL ENCLOSURE
FOR DETAILED SCHEMATIC
REFER TO SHEET 9

FEED THROUGH GROMMET LOCATED
ON ELECTRICAL ENCLOSURE
MOUNTED ON ENGINE

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IDENTIFIER DIAGRAM DRAWING		ITEM NUMBER 3970674	
DRAFTER J L ROPER	DATE 01JUL93	SIZE CODE (IDENT NO.) J	ITEM NUMBER 3970674
CHECKER J R RATTIGAN	DATE 22OCT93	SCALE NONE	ITEM CONTROL CMU
DESIGN APPROVAL			SHEET 1 OF 14

REVISONS		
REV	DESCRIPTION	APPROVAL
02	050700-085 REVISED	DRAFTER: JLR CHECKER: JRR APPROVAL:

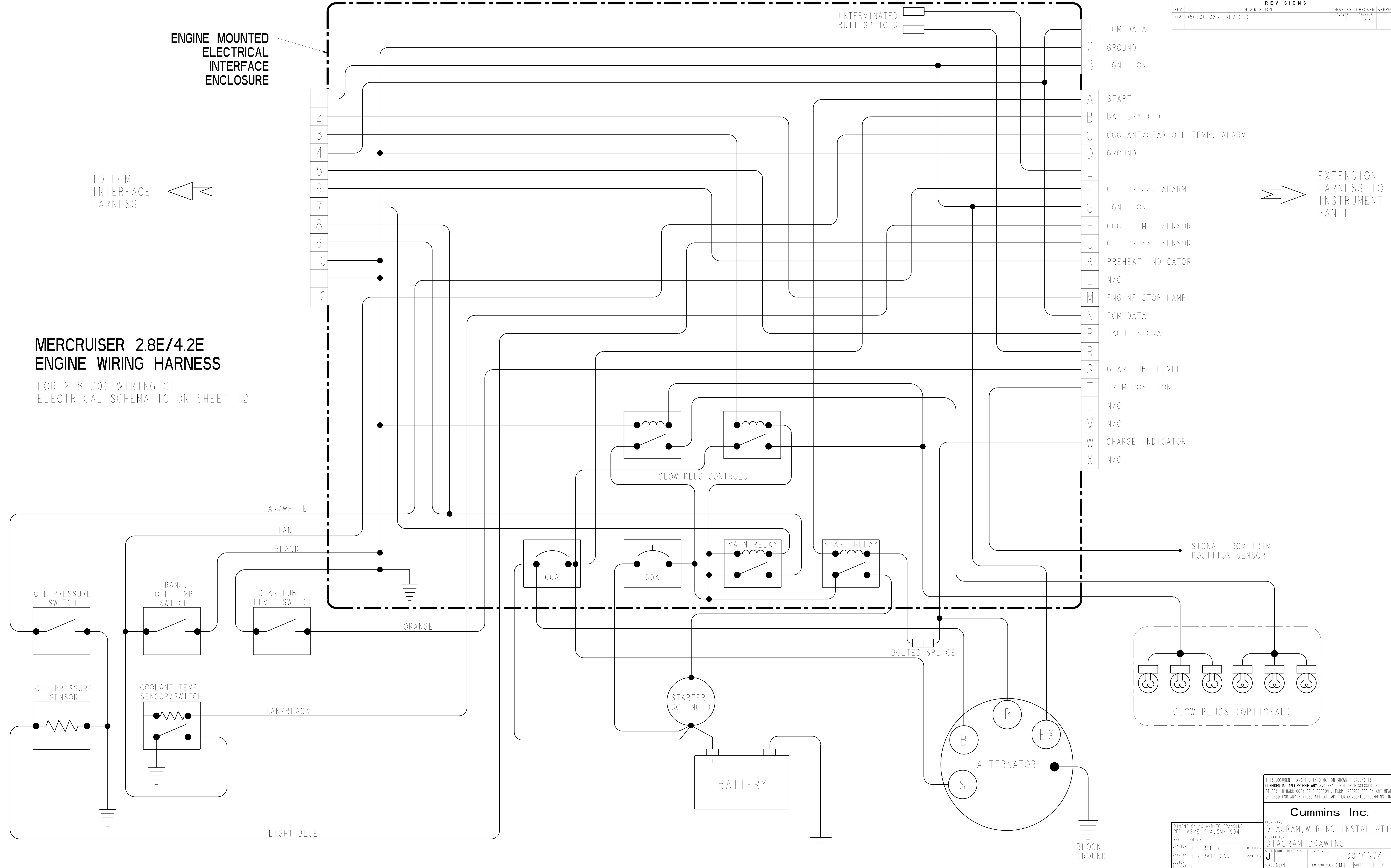
MERCUISER 2.8E/4.2E ENGINE WIRING HARNESS

FOR 2.8 200 WIRING SEE
ELECTRICAL SCHEMATIC ON SHEET 12

ENGINE MOUNTED
ELECTRICAL
INTERFACE
ENCLOSURE

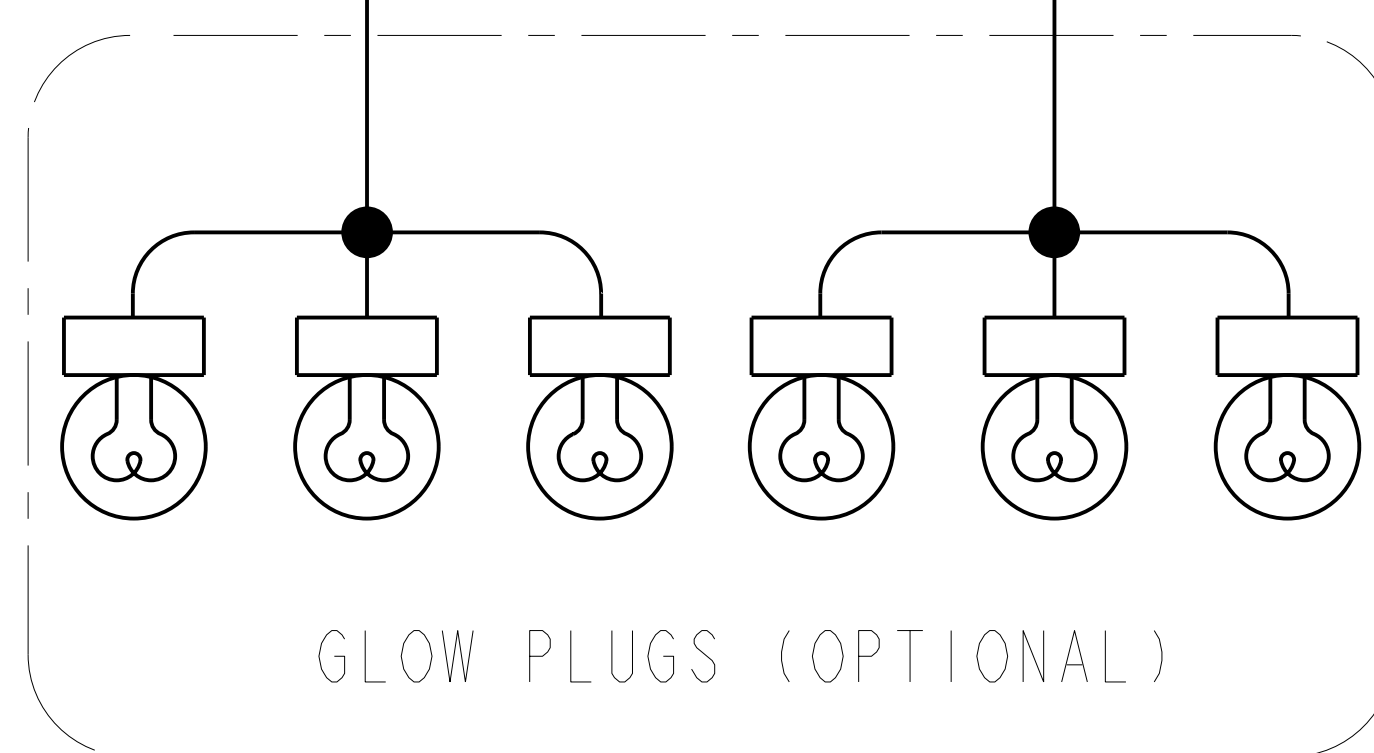
TO ECM
INTERFACE
HARNESS

EXTENSION
HARNESS TO
INSTRUMENT
PANEL



- 1 ECM DATA
- 2 GROUND
- 3 IGNITION
- A START
- B BATTERY (+)
- C COOLANT/GEAR OIL TEMP. ALARM
- D GROUND
- E
- F OIL PRESS. ALARM
- G IGNITION
- H COOL. TEMP. SENSOR
- J OIL PRESS. SENSOR
- K PREHEAT INDICATOR
- L N/C
- M ENGINE STOP LAMP
- N ECM DATA
- P TACH. SIGNAL
- R
- S GEAR LUBE LEVEL
- T TRIM POSITION
- U N/C
- V N/C
- W CHARGE INDICATOR
- X N/C

SIGNAL FROM TRIM
POSITION SENSOR



DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994		ITEM NAME DIAGRAM, WIRING INSTALLATION	
IDENTIFIER DIAGRAM DRAWING		ITEM NUMBER 3970674	
DRAFTER: J L ROPER	01JUL93	SCALE: NONE	
CHECKER: J R RATTIGAN	220C103	ITEM CONTROL: CMU	
DESIGN APPROVAL:		SHEET 11 OF 14	

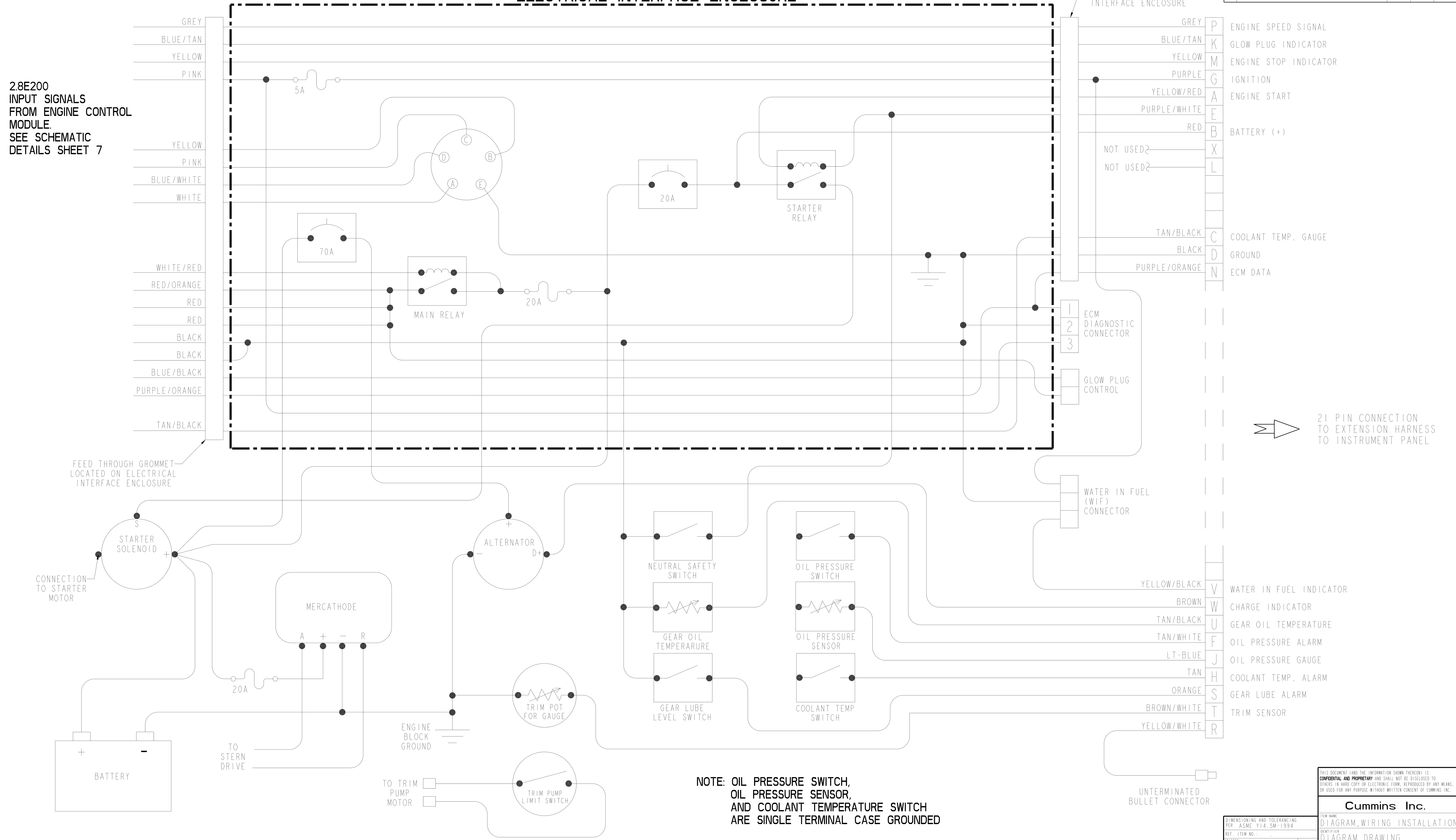
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ELECTRICAL INTERFACE ENCLOSURE

REVISIONS		
REV	DESCRIPTION	DATE
02	050700-085 REVISED	20021013

2.8E200
INPUT SIGNALS
FROM ENGINE CONTROL
MODULE.
SEE SCHEMATIC
DETAILS SHEET 7



TERMINAL	COLOR	DESCRIPTION
P	GREY	ENGINE SPEED SIGNAL
K	BLUE/TAN	GLOW PLUG INDICATOR
M	YELLOW	ENGINE STOP INDICATOR
G	PURPLE	IGNITION
A	YELLOW/RED	ENGINE START
E	PURPLE/WHITE	
B	RED	BATTERY (+)
X		NOT USED
L		NOT USED
C	TAN/BLACK	COOLANT TEMP. GAUGE
D	BLACK	GROUND
N	PURPLE/ORANGE	ECM DATA
1		ECM DIAGNOSTIC CONNECTOR
2		
3		
		GLOW PLUG CONTROL
		WATER IN FUEL (WIF) CONNECTOR
V	YELLOW/BLACK	WATER IN FUEL INDICATOR
W	BROWN	CHARGE INDICATOR
U	TAN/BLACK	GEAR OIL TEMPERATURE
F	TAN/WHITE	OIL PRESSURE ALARM
J	LT-BLUE	OIL PRESSURE GAUGE
H	TAN	COOLANT TEMP. ALARM
S	ORANGE	GEAR LUBE ALARM
T	BROWN/WHITE	TRIM SENSOR
R	YELLOW/WHITE	

21 PIN CONNECTION TO EXTENSION HARNESS TO INSTRUMENT PANEL

NOTE: OIL PRESSURE SWITCH, OIL PRESSURE SENSOR, AND COOLANT TEMPERATURE SWITCH ARE SINGLE TERMINAL CASE GROUND

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		ITEM NAME	
REF. ITEM NO.:	01JUL93	DIAGRAM, WIRING INSTALLATION	
DRAWER:	J L ROPER	IDENTIFIER	
CHECKER:	J R RATTIGAN	DIAGRAM DRAWING	
DESIGN APPROVAL:	220C103	SIZE CODE / IDENT NO.:	ITEM NUMBER
		J	3970674
		SCALE: NONE	ITEM CONTROL: CMU
			SHEET 12 OF 14

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REVISIONS		
REV	DESCRIPTION	DATE
02	050700-085 REVISED	JLR

DETAIL A
INSTRUMENTATION HARNESS
(SEE NOTE 10)

- START A YEL/RED
- BATTERY(+) B RED
- COOLANT TEMP ALARM C TAN/BLACK
- GROUND D BLACK
- E N/C
- OIL PRESSURE ALARM F TAN/WHITE
- IGNITION G PURPLE
- COOLANT TEMP SENSOR H TAN
- OIL PRESSURE SENSOR J LIGHT BLUE
- PRE HEAT INDICATOR K BLUE/TAN
- L BLACK/YELLOW
- ENGINE STOP M YELLOW
- N PURPLE/ORANGE
- TACH SIGNAL P GRAY
- FUEL LEVEL R YELLOW/WHITE
- GEAR LUBE ALARM S ORANGE
- TRIM POSITION T BROWN/WHITE
- U N/C
- V N/C
- W BROWN
- CHARGE INDICATOR W BROWN
- X RED/YELLOW

- GRAY TACHOMETER CONNECTIONS
- PURPLE TACHOMETER CONNECTIONS
- BLACK TACHOMETER CONNECTIONS
- GREEN TACHOMETER CONNECTIONS
- TAN WATER TEMPERATURE CONNECTIONS
- PURPLE WATER TEMPERATURE CONNECTIONS
- BLACK WATER TEMPERATURE CONNECTIONS
- GREEN WATER TEMPERATURE CONNECTIONS
- BLUE OIL PRESSURE CONNECTIONS
- PURPLE OIL PRESSURE CONNECTIONS
- BLACK OIL PRESSURE CONNECTIONS
- GREEN OIL PRESSURE CONNECTIONS
- PURPLE VOLTMETER CONNECTIONS
- BLACK VOLTMETER CONNECTIONS
- GREEN VOLTMETER CONNECTIONS
- BRN/WHT TRIM GAUGE CONNECTIONS (STERNDRIVE)
- BLACK TRIM GAUGE CONNECTIONS (STERNDRIVE)
- GREEN TRIM GAUGE CONNECTIONS (STERNDRIVE)
- PURPLE TRIM GAUGE CONNECTIONS (STERNDRIVE)
- YEL/WHT FUEL GAUGE CONNECTIONS
- BLACK FUEL GAUGE CONNECTIONS
- GREEN FUEL GAUGE CONNECTIONS
- PURPLE FUEL GAUGE CONNECTIONS
- PURPLE HOUR METER CONNECTIONS
- BLACK HOUR METER CONNECTIONS

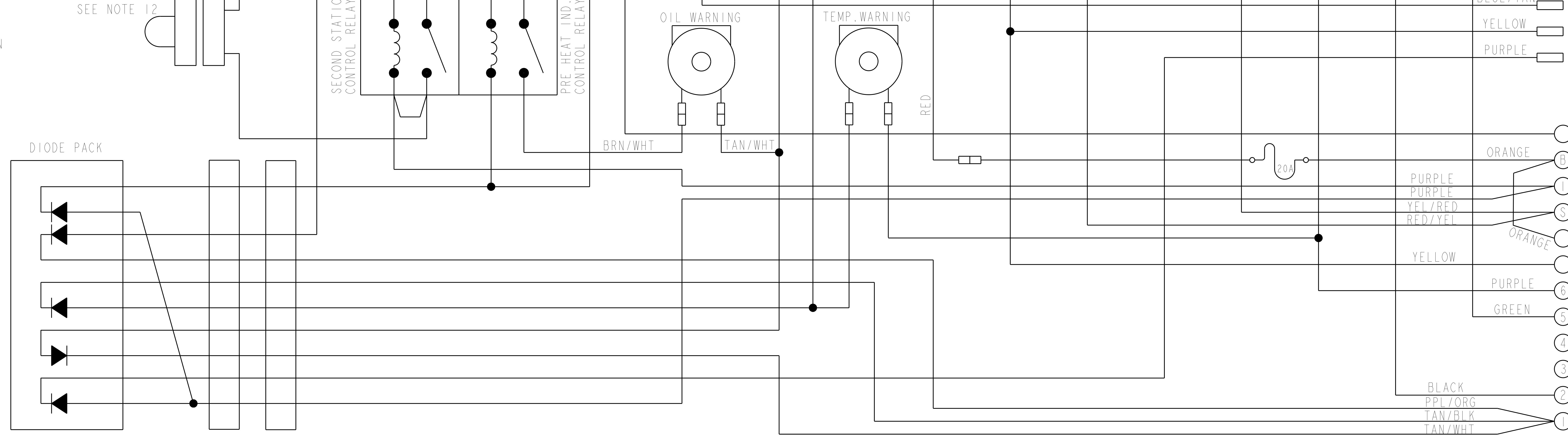
- TAN/BLK HIGH COOLANT TEMPERATURE
- TAN/WHT LOW OIL PRESSURE/LOW GEAR LUBE
- BROWN CHARGE INDICATOR
- BLUE/TAN PRE HEAT INDICATOR
- YELLOW CHECK ENGINE INDICATOR
- PURPLE POWER

WARNING LAMP CONNECTIONS (SEE NOTE 9)

GAUGE CONNECTION COLOR CODE
PPL - IGNITION
BLK - GROUND
GRN - LAMP
OTHER - SENSOR IN

CONNECTION LEGEND
RING TERMINAL
BUTT SPLICE
FEMALE SPADE TERMINAL

JUMPER PLUG (SINGLE STATION APPLICATIONS) SEE NOTE 12



- ORANGE STOP (SEE NOTE 12)
- BATTERY BATTERY
- IGNITION IGNITION
- START START
- STOP SWITCH CONNECTIONS (SEE NOTE 12)
- ALARM TEST/LAMP SWITCH CONNECTIONS (SEE DETAIL E)
- 6
- 5
- 4
- 3
- 2
- 1

DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994		ITEM NAME	
DRAFTER J L ROPER		DIAGRAM, WIRING INSTALLATION	
CHECKER J R RATTIGAN		IDENTIFIER	
DATE 01 JUL 93		DIAGRAM DRAWING	
SIZE CODE 220C103		ITEM NUMBER	
REGION		3970674	
APPROVAL		SCALE NONE	
		ITEM CONTROL CMU SHEET 13 OF 14	

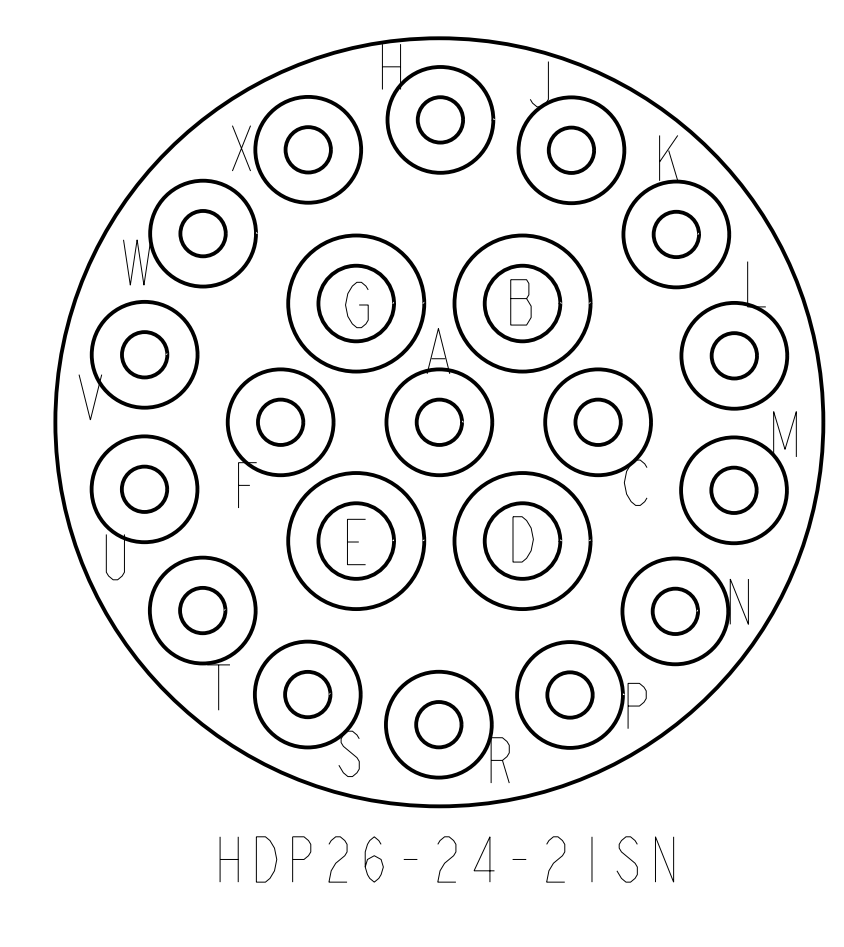
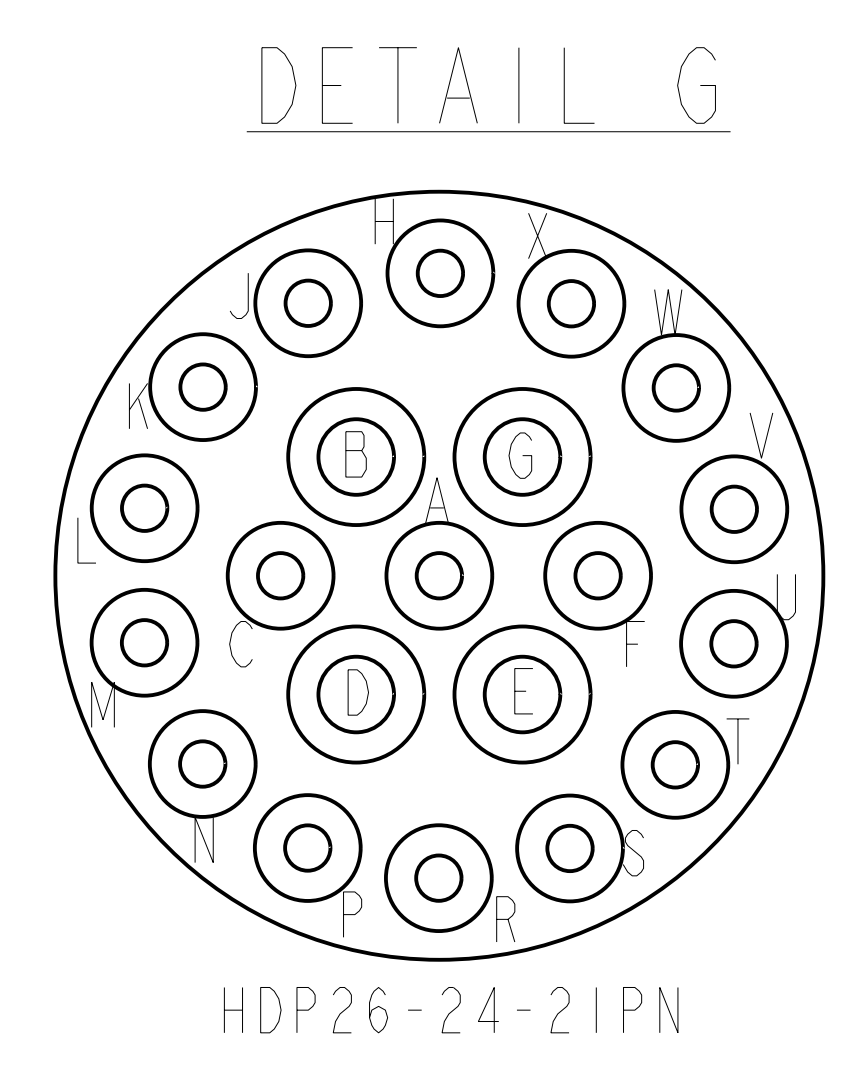
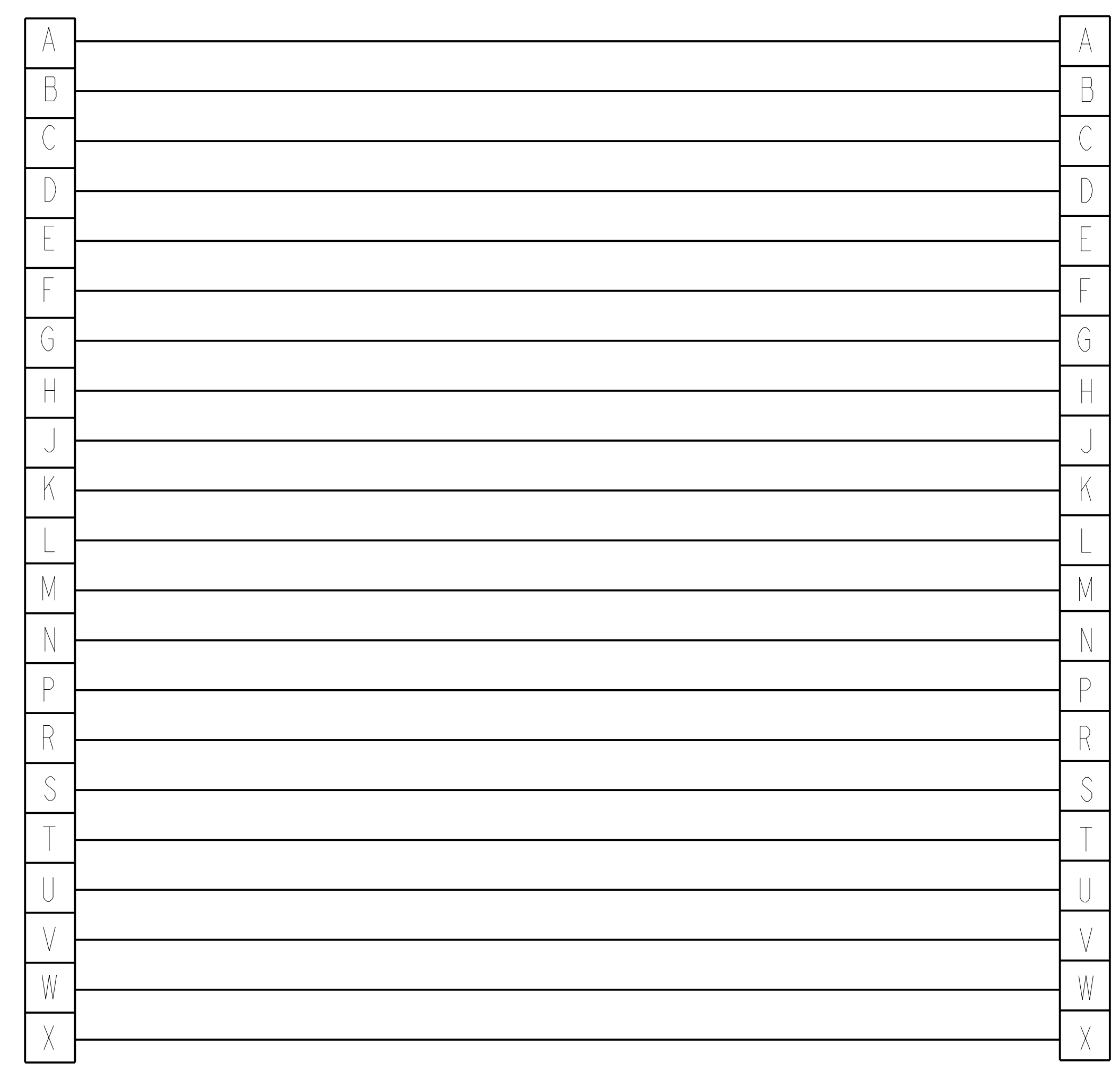
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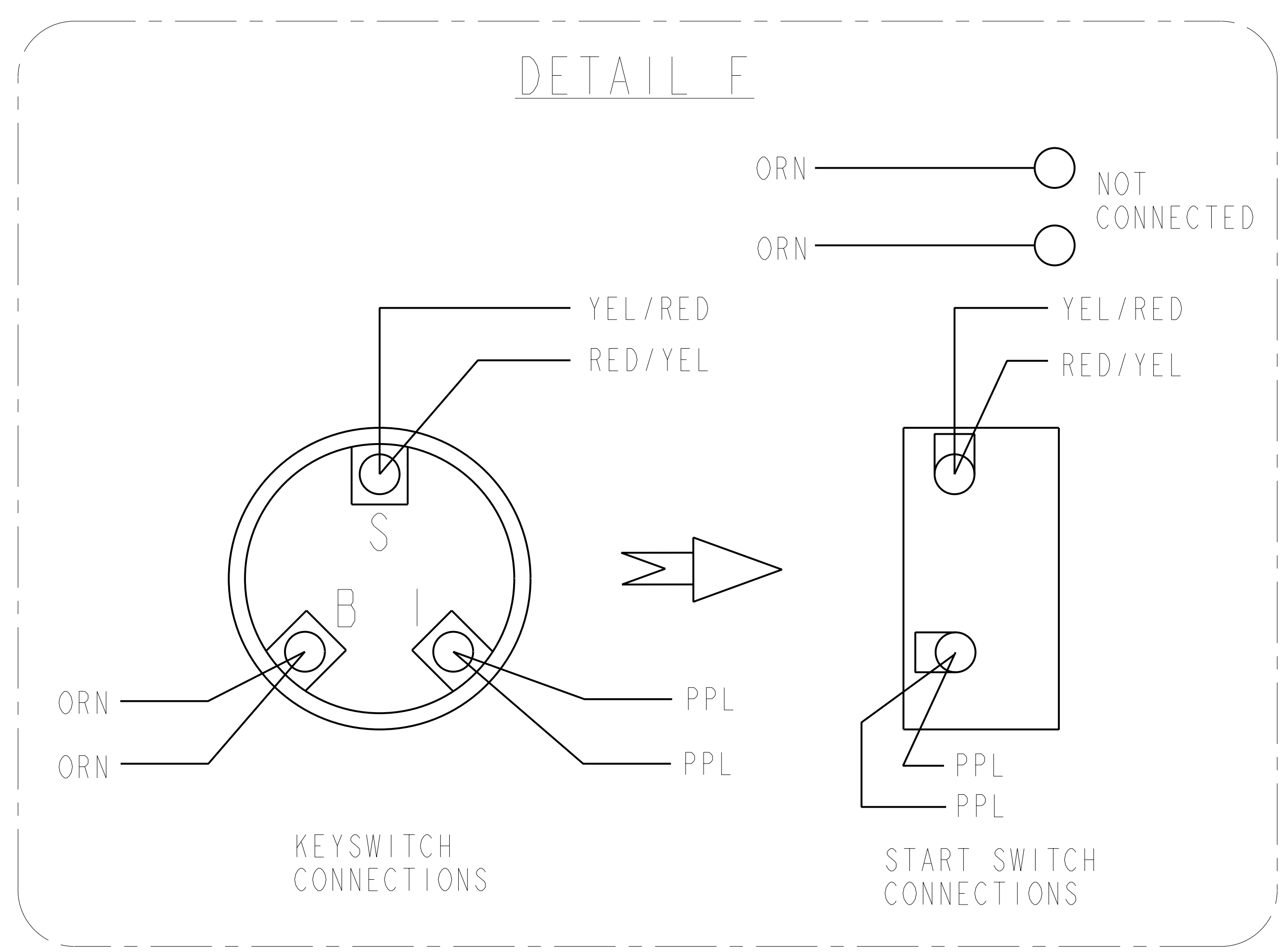
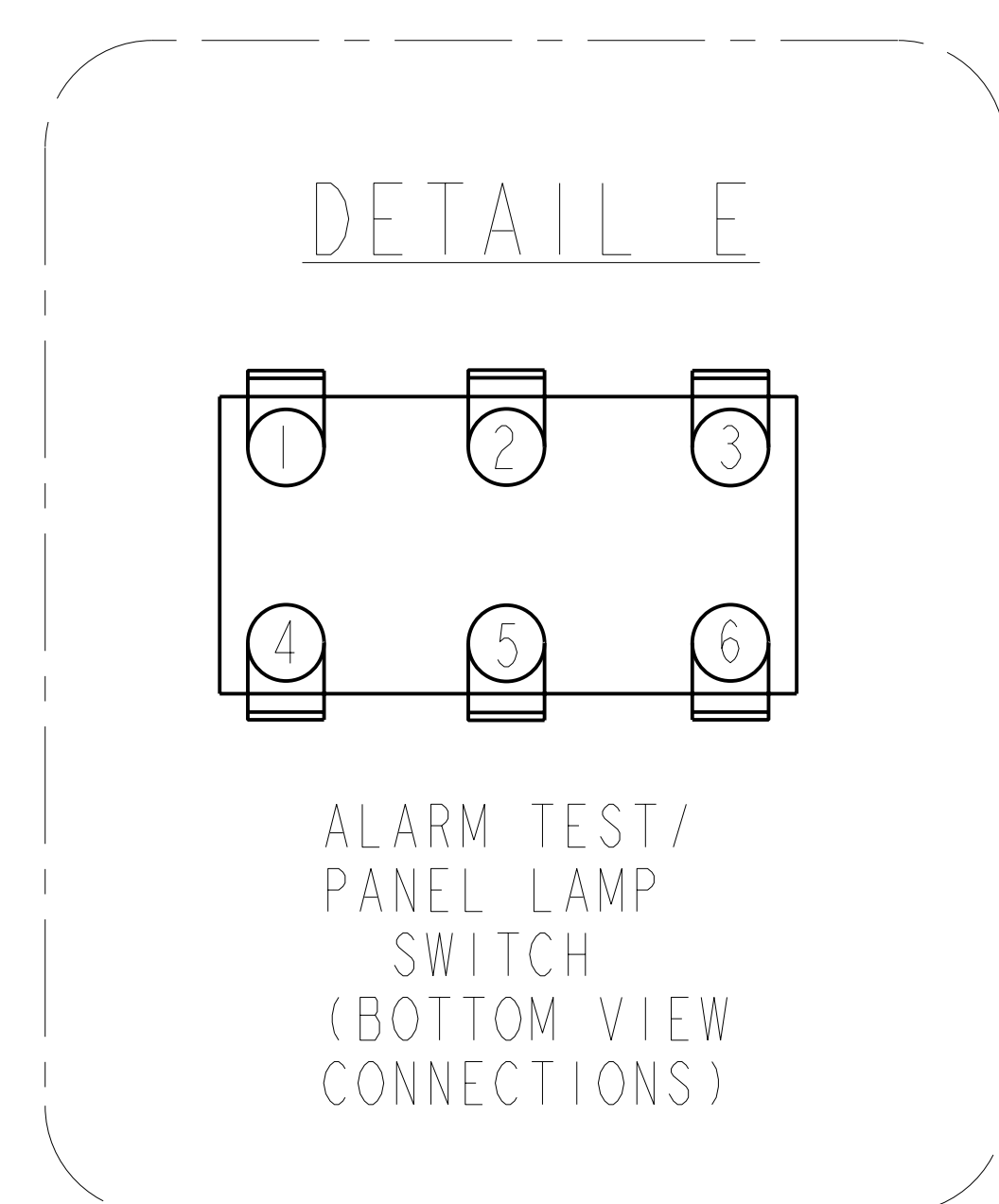
REVISIONS			
REV	DESCRIPTION	DRAFTER	CHECKER / APPROVAL
02	050700-085 REVISED	JLR	JRR

- INDIVIDUAL ENGINE WIRING HARNESS CONNECTIONS SHOWN ON SEPARATE SHEETS OF THIS DRAWING. NOTES DESCRIBING CONNECTIONS DIFFERENCES DUE TO INBOARD AND STERNDRIVE INSTALLATIONS MAY BE SHOWN ON INDIVIDUAL SHEETS.
- INSTRUMENT EXTENSION HARNESS COMMON BETWEEN ALL ENGINES. CONNECTION POINT FROM ENGINE WIRING HARNESS TO INSTRUMENT HARNESS OR SECOND STATION "Y" HARNESS.
- THIS CONNECTION PATH ONLY WHEN APPLICATION IS SINGLE STATION CONFIGURATION.
- THIS CONNECTION PATH ONLY WHEN APPLICATION IS DUAL STATION CONFIGURATION.
- BASIC INSTRUMENT PANEL INCLUDES TACHOMETER, WARNING TEST SWITCH, STOP PUSHBUTTON, KEYSWITCH, AND WARNING INDICATOR LAMPS.
- OPTIONAL INSTRUMENT PANEL INCLUDES ALL OF NOTE 5 WITH THE ADDITION OF AN OIL PRESSURE GAUGE, COOLANT TEMPERATURE GAUGE, VOLTMETER, AND TRIM GAUGE. TRIM GAUGE NOT APPLICABLE ON INBOARD APPLICATIONS.
- INSTRUMENT HARNESS USED TO CONNECT 21 PIN HELM TERMINATION CONNECTOR TO ALL GAUGES, SWITCHES, AND ALARMS AT THE HELM LOCATION. ALL WIRES ARE LABELED AND COLOR CODED DETAILING FUNCTIONALITY AND CONNECTION POINTS. ALL CONNECTIONS ARE SHOWN IN DETAILED SCHEMATIC ON SHEET 11, HOWEVER SOME TERMINATIONS ARE NOT MADE DEPENDING ON ELECTRONIC / MECHANICAL ENGINES AND INBOARD / STERNDRIVE APPLICATIONS.
- SECOND STATION "Y" HARNESS ONLY USED IN TWO STATION APPLICATIONS. "Y" HARNESS TO BE LOCATED AT MAIN STATION AT TERMINATION OF INSTRUMENT EXTENSION HARNESS.
- MECHANICAL ENGINES ONLY USE 4 LAMPS (CHECK ENGINE NOT USED) WHILE THE ELECTRONIC ENGINES IMPLEMENT ALL 5 LAMPS. IF APPLIED ON MECHANICAL ENGINES LEAVE THE YELLOW WIRE UNTERMINATED.
- INSTRUMENTATION HARNESS IS COMMON ON ALL MERCURUISER PRODUCT CONFIGURATIONS REFERENCE DETAIL F FOR CONNECTIONS TO THE KEYSWITCH, START AND STOP BUTTONS DEPENDING ON ENGINE TYPE AND STATION CONFIGURATION.
- KEYSWITCH CONNECTIONS TO BE MADE AS SHOWN PER SCHEMATIC ON SHEET 11. FOR SINGLE STATION & PRIMARY STATIONS IN DUAL STATION APPLICATIONS. FOR CONNECTION TO THE START SWITCH ON THE SECONDARY STATION OF DUAL STATION APPLICATIONS REFER TO SHEET 9, DETAIL F.
- JUMPER PLUG USED IN SINGLE STATION APPLICATIONS ONLY WHEN DUAL STATION CONFIGURATION IS REQUIRED, THE SECOND STATION CONTROL RELAY IS REQUIRED.
- SECOND STATION RELAY ONLY REQUIRED IN INSTALLATIONS WHERE SECOND STATION INSTRUMENT PANEL IS REQUIRED.

- BASIC INSTRUMENT PANEL INCLUDES: TACHOMETER, WARNING TEST SWITCH KEYSWITCH, AND WARNING INDICATOR LAMPS.
- OPTIONAL INSTRUMENT PANEL INCLUDES: ALL CONTAINED IN NOTE 14 WITH ADDITION OF OIL PRESSURE GAUGE, COOLANT TEMPERATURE GAUGE, VOLTMETER, AND TRIM GAUGE. TRIM GAUGE NOT APPLICABLE ON INBOARD APPLICATIONS.



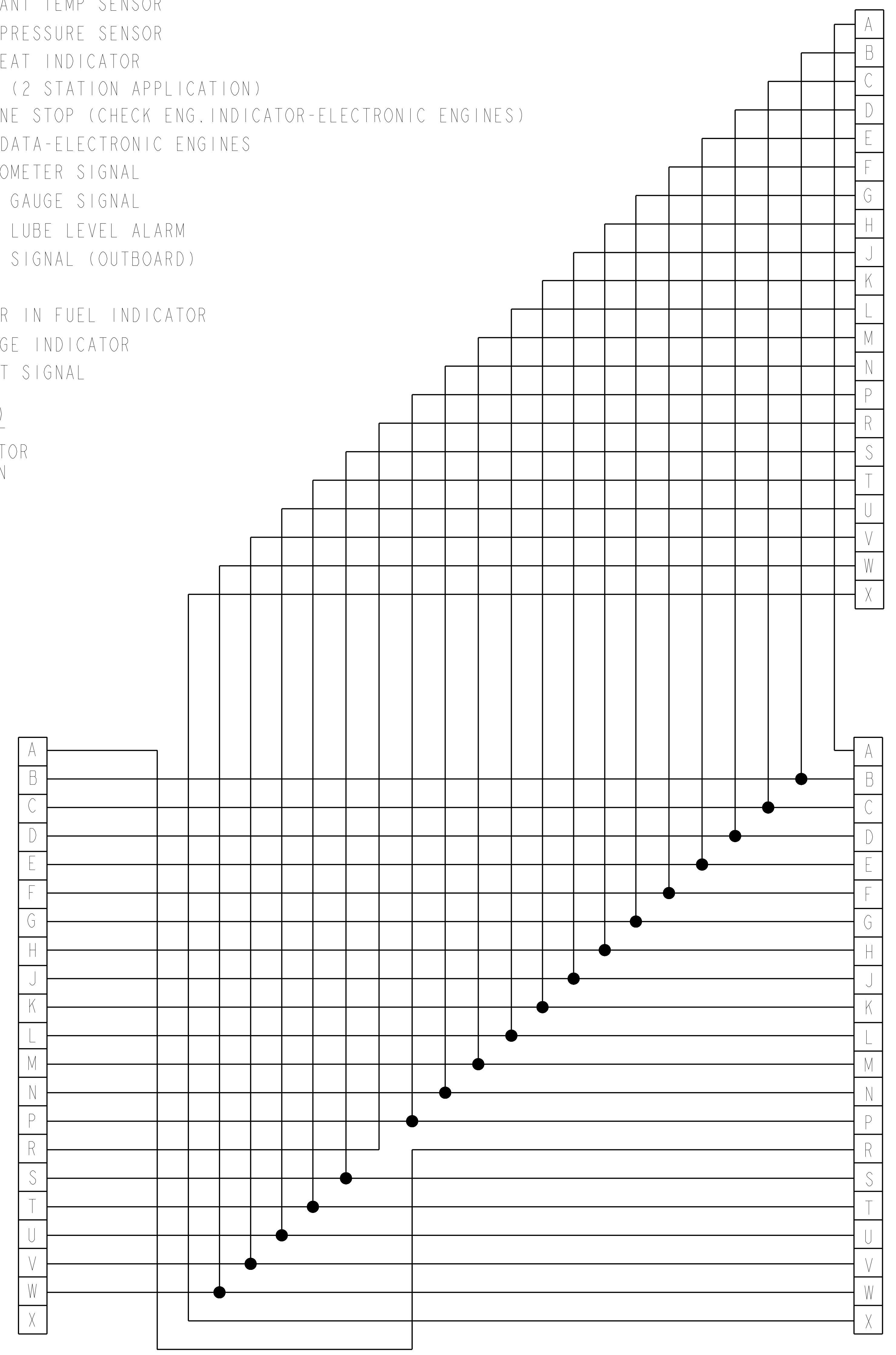
DETAIL B
INSTRUMENT
EXTENSION
HARNESS



- A START SIGNAL
- B BATTERY
- C COOLANT TEMP. ALARM
- D GROUND
- E N/C
- F OIL PRESSURE ALARM
- G IGNITION
- H COOLANT TEMP SENSOR
- J OIL PRESSURE SENSOR
- K PREHEAT INDICATOR
- L STOP (2 STATION APPLICATION)
- M ENGINE STOP (CHECK ENG. INDICATOR-ELECTRONIC ENGINES)
- N ECM DATA-ELECTRONIC ENGINES
- P TACHOMETER SIGNAL
- R FUEL GAUGE SIGNAL
- S GEAR LUBE LEVEL ALARM
- T TRIM SIGNAL (OUTBOARD)
- U N/C
- V WATER IN FUEL INDICATOR
- W CHARGE INDICATOR
- X START SIGNAL

DETAIL D
21 PIN CONNECTOR
I/O DEFINITION

FROM
INSTRUMENT
EXTENSION
HARNESS



DETAIL C
SECOND STATION
"Y" HARNESS

MAIN
STATION
INSTRUMENT
PANEL
CONNECTIONS

SECOND
STATION
INSTRUMENT
PANEL
CONNECTIONS

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ITEM NAME: DIAGRAM, WIRING INSTALLATION
IDENTIFIER: DIAGRAM DRAWING
ITEM NUMBER: 3970674

DIMENSIONING AND TOLERANCING PER: ASME Y14.5M-1994
DRAFTER: J L ROPER
CHECKER: J R RATTIGAN
DATE: 01JUL93
SCALE: NONE

SHEET 14 OF 14