SUPER CLAW MODEL D
QUICK REFERENCE CHART

THIS CHART IS TO BE USED WITH LOGIC BOX 31443500
**DEMOGRAPHICS**

**PRODUCT:**

**ALL DIMENSIONS IN INCHES**

**MACHINE FINISH UNLESS OTHERWISE STATED**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**THIRD ANGLE PROJECTION**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

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**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

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**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

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**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

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**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

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**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**

**IMPLIED TOLERANCES**

**FRACTION   1/8**

**.X   .06**

**.XX  .03**

**.XXX .010**

**VARIETY**

**NONC**

**VOLUMETRIC**

**ASSEMBLY:**
NOTE: CLAW CYLINDER RETRACT ONLY WHILE BUTTON IS PUSHED. NO INWARD FORCE DURING PULL STROKE.
JOHN DEERE TIER 3 ENGINE
WITH HOUSTON STREET ENGINE CONTROLLER
ALL INFORMATION CONTAINED ON THIS DRAWING IS CONSIDERED TO BE BOTH
CONFIDENTIAL AND PROPRIETARY BY NORDCO INC. NO USE OR REPRODUCTION
THEREOF MAY BE MADE WITHOUT THE EXPRESS WRITTEN CONSENT OF NORDCO INC.

SHEET NO. D

PLANE ANGLES +/- 1

SIZE SCALE REV. DRAWING CODE NUMBER

DESCRIPTION:
PRODUCT:

ALL DIMENSIONS
IN INCHES

MACHINE FINISH
UNLESS OTHERWISE
STATED

CUSTOMARY:

IMPLIED TOLERANCES
FRACTION   1/8  .06
            .XX    .03
            .XXX   .010

THIRD ANGLE

PROJECTION

250
Nordco

JOHN DEERE TIER 3 ENGINE
WITH MURPHY POWERVIEW DISPLAY
CUMMINS TIER 4 FINAL ENGINE
WITH MURPHY POWERVIEW DISPLAY
NO GOLD CONTACTS

S/N350648 TO 350669
CUMMINS TIER 4 FINAL ENGINE WITH MURPHY POWERVIEW DISPLAY AND GOLD CONTACTS

S/N350670 & UP
### SUPERCLAW MODEL D

**LOGIC BOX CONFIGURATION**

<table>
<thead>
<tr>
<th>REVISION</th>
<th>CUSTOMER</th>
<th>P/N</th>
<th>REV</th>
<th>F</th>
<th>F.O</th>
<th>J</th>
<th>J</th>
<th>J</th>
<th>J</th>
<th>K</th>
<th>K</th>
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<tr>
<td>NORDCO</td>
<td>UPRR</td>
<td>31443505</td>
<td>X</td>
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<td>KCS</td>
<td>31443515</td>
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<td></td>
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<td>X</td>
<td>X</td>
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<tr>
<td>F.O, Q, U</td>
<td>UPRR</td>
<td>31443516</td>
<td>X</td>
<td>-</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
<td>AMECO</td>
<td>31443517</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

### HISTORY NOTES:
1. LOGIC BOX 31443516 FOR S/N350637 TO S/N350647.
2. S/N350622 TO 350636, UPRR LOGIC BOX WAS 31443515.
3. S/N350600 & UP, ALL COMPONENT IDENTIFICATIONS SHOWN BOXED ARE TO BE LISTED.
4. MOD M09 STANDARD ON ALL LOGIC BOXES STARTING S/N350648.
5. MOD M10 ADDED FOR UPRR STARTING 2017.
7. MOD M06 ADDED TO 31443516 AT S/N350659.
8. MOD M11 ADDED FOR CUMMINS T4F, S/N350670 & UP.
9. MOD M03, SPEEDO, REMOVED FOR UPRR, S/N350667 & UP.

**NOTES:**
1. REFERENCE SCHEMATIC 975100A.
2. USE CABLE TIES ITEM 50 AS REQUIRED.
3. ALL WIRES TO BE IDENTIFIED WITH WIRE MARKERS AT BOTH ENDS. MARKERS ARE TO BE APPLIED ON WIRE, NOT ON TERMINALS.
4. APPLY HEAT SHRINK MATERIAL OVER ALL RESISTORS, DIODES AND CAPACITORS (INDIVIDUAL).
5. ALL WIRE SIZES AND CONNECTORS TO BE PER WIRE CONNECTION LIST.
6. ALL COMPONENT IDENTIFICATIONS SHOWN BOXED ARE TO BE LABELED WITH TEXT SHOWN.
7. WIRES TO BE STRANDED COPPER OF THE INDICATED GAUGE, SXL TYPE OR APPROVED EQUIVALENT.

**S/N 350600 & UP**

**CUSTOMARY**

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1443516</td>
<td>7085918</td>
<td>20 AWG BLACK</td>
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<tr>
<td>1443516</td>
<td>7085919</td>
<td>20 AWG GREEN</td>
</tr>
<tr>
<td>1443516</td>
<td>7085920</td>
<td>20 AWG GOLD</td>
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</tbody>
</table>

**DIAGNOSTIC VOLTAGE CONVERTER**

- Indicating options previously installed, non-current.

- Indicates options previously installed, non-current.

**ADD/REMOVE:**

- INDICATES OPTIONS PREVIOUSLY INSTALLED, NON-CURRENT.

### LEGEND

- "A:" CURRENT CONFIGURATION
- "B:" SEE NOTES FOR OPTION HISTORY
- "C:" INDICATES OPTIONS PREVIOUSLY INSTALLED, NON-CURRENT

**DRAWING LOGIC BOX 24V**

- INDICATES OPTIONS PREVIOUSLY INSTALLED, NON-CURRENT

**REVISION HISTORY LOCATED ON LAST SHEET**

- INDICATES OPTIONS PREVIOUSLY INSTALLED, NON-CURRENT

**DIAGNOSTIC VOLTAGE CONVERTER**

- INDICATES OPTIONS PREVIOUSLY INSTALLED, NON-CURRENT

### HISTORY NOTES:
1. MOD M11 ADDED FOR CUMMINS T4F, S/N350670 & UP.
2. MOD M03, SPEEDO, REMOVED FOR UPRR, S/N350667 & UP.
REP: BASE-LID

NOTE: SHOWN ON SHEET 15A ONLY.

WARNING
INTERLOCK/WARMUP

COVER AND LockOUT

OFF POSITION, CLOSE

PUMP OFF WHEN IDLING

BEFORE WELDING

ENGINE FOR MORE

THAN 30 MINUTES

RETURN HYDRAULIC

FILTER

CLEAN

CLEANCLEAN

24 VOLT DC

CYLINDER

OFF

OFF

ON

PUSH TO SHUTDOWN

EMERGENCY

STOP

STOP

CLAW OPENING

FRAME PIN

CLAW

PIN

PB3

N.C.

PB1

U

U

TGS10

198

TGS9

1

TGS7

2

TGS5 TGS4

5

2

72

853

852

63

5

2

248

30

40

8

244

23

23

2

8

22

27

22

28

22

23

10

10

20

29

30

24

27

22

28

22

92

91

92

91

802

82

TGS2

8

76

86

65

85

27

22

28

22

23

10

10

20

29

31

6

N

RED RED

RED

GREEN

LT-2

LT-6

LT-7

LT-8

LT-10

LT-5

BA

BUZZER

CUSTOMER SPECIFIED SPEEDOMETER CANNOT BE IMPLEMENTED WITH M11

CUSTOMER SPECIFIED NON-STANDARD GAGE

CUSTOMARY FRACTION

ALL DIMENSIONS

S/N 350600 & UP

S/N 350600 & UP

LOCATED ON LAST SHEET

NOTE: SHOWN ON SHEET 15A ONLY.
M01
HOUSTON STREET CONTROLLER

BILL OF MATERIALS

<table>
<thead>
<tr>
<th>NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>ROLE</th>
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<tbody>
<tr>
<td>1</td>
<td>HOUSTON STREET CONTROLLER</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PART NUMBER</td>
<td>1</td>
<td>SUBTRACT</td>
</tr>
<tr>
<td>3</td>
<td>PART NUMBER</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>4</td>
<td>PART NUMBER</td>
<td>1</td>
<td>WIRE</td>
</tr>
<tr>
<td>5</td>
<td>PART NUMBER</td>
<td>1</td>
<td>WIRE</td>
</tr>
</tbody>
</table>

INSIDE VIEW

OUTSIDE VIEW

S/N 350600 & UP

HOUSTON STREET TECHNOLOGIES
PRE-SHUT DOWN WARNING SENTINEL AUDIBLE ALARMS

COMPONENT ADD
COMPONENT SUBTRACT
BOX MOD
WIRE SUBTRACT
WIRE ADD

MOD. NEEDS

COMPONENT
ADD
SUBTRACT
BOX
MOD
WIRE
SUBTRACT
ADD

REVISION HISTORY
LOCATED ON LAST SHEET
M02

MURPHY POWERVIEW DISPLAY

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>REV</th>
<th>PART NUMBER</th>
<th>PART NAME</th>
<th>QTY.</th>
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<tbody>
<tr>
<td>D</td>
<td>7079011</td>
<td>GAUGE, DIGITAL MURPHY POWERVIEW</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>D</td>
<td>5166816</td>
<td>PLUG, 6-SOCKET</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>D</td>
<td>5112936</td>
<td>LOCKING WEDGE, FOR 6-SOCKET PLUG</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>D</td>
<td>5166796</td>
<td>AR SOCKET, 14 - 16 GA</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>D</td>
<td>5125579</td>
<td>SWITCH, TOGGLE ON-ON DPST</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>D</td>
<td>7072117</td>
<td>GAUGE, FUEL CHROME, 240-33 OHM RANGE</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>I</td>
<td>53110039</td>
<td>PANEL, MURPHY MOUNT <em>SEE NOTE</em></td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>61000048</td>
<td>RESISTOR, 390 OHM, 1/2 WATT R10</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>61200044</td>
<td>RESISTOR, 1.3k OHM, 1/2 WATT R11</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>5120746</td>
<td>CONNECTOR, ENGINE</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>7050060</td>
<td>GAUGE, HYD OIL TEMP, 12V</td>
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<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>61200106</td>
<td>RESISTOR 12V GAGE ADAPTOR</td>
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<td>ADD</td>
</tr>
<tr>
<td>J</td>
<td>5150175</td>
<td>LAMP, BULB 24V BAYONET</td>
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<td>ADD</td>
</tr>
<tr>
<td>J,U</td>
<td>5164408</td>
<td>TERMINAL RING, 14-16 GA #10 STUD P17</td>
<td>2</td>
<td>ADD</td>
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<tr>
<td>J,U</td>
<td>5270228</td>
<td>13 FT CORD, #16-2 SOOW P17</td>
<td>1</td>
<td>ADD</td>
</tr>
<tr>
<td>U</td>
<td>520340</td>
<td>A/R CABLE, 18/2 J1939 SHIELDED</td>
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<td>ADD</td>
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ADD/REMOVE

<table>
<thead>
<tr>
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<th>END 1 LOCATION</th>
<th>END 2 LOCATION</th>
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<tbody>
<tr>
<td>1</td>
<td>TB1-2 P110@B</td>
<td>14 AWG GREEN</td>
</tr>
<tr>
<td>2</td>
<td>PB4@2 PB12@2</td>
<td>14 AWG BLACK</td>
</tr>
<tr>
<td>3</td>
<td>PB12@2 PB13@2</td>
<td>14 AWG BLACK</td>
</tr>
<tr>
<td>305</td>
<td>PB4@1 PB12@1</td>
<td>14 AWG BLACK</td>
</tr>
<tr>
<td>305</td>
<td>PB12@1 PB13@1</td>
<td>14 AWG BLACK</td>
</tr>
<tr>
<td>305</td>
<td>PB13@1 P110@A</td>
<td>14 AWG BLACK</td>
</tr>
</tbody>
</table>

MURPHY DISPLAY PAIRED WITH JOHN DEERE TIER 3 ENGINE USED ON S/N350622 & ABOVE.

HYDRAULIC OIL TEMPERATURE GAUGE - GA7 ADDED STANDARD.

S/N 350600 & UP

CUSTOMARY

DRAWING LOGIC BOX 24V

SHEET 7/13

MACHINE FINISH UNLESS OTHERWISE STATED

IMPLIED TOLERANCES

SIZE SCALE DRAWING CODE NUMBER REV.XXX

0.06

0.03

0.010

IMPLIED TOLERANCES

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02.1

02.6

02.10

02.16

02.5

02.3

02.4

02.11

02.7

02.8

02.2

02.15

02.18

88
M03
SPEEDOMETER
FOR MACHINES WITH GLOBAL MOTORS

M04
CYCLE COUNTERS

ADD/REMOVE
ITEM # PART NUMBER OR MATERIAL QTY. REQ. PART NAME DESIGNATION

04.1 74243530 1 SPEEDOMETER PROGRAMMED SUPER CLAW

04.2 5120815 RECEPTACLE, MICROFAST 4-PIN FEM. FRONT MOUNT 1/4-18 NPT P4

04.3 3048028 2 NUT, HEX #6-32

04.4 3064452 2 WASHER, LOCK #6

REVISION HISTORY
LOCATED ON LAST SHEET
THIRD ANGLE PROJECTION
CUSTOMARY ALL DIMENSIONS IN INCHES
PRODUCT: SUPER CLAW MODEL D
W31443500NTSD
DRAWING, LOGIC BOX 24V ASSEMBLY
PLANE ANGLES +/- 1
SHEET: 8 / 13

MACHINE FINISH UNLESS OTHERWISE STATED
SIZE SCALE DRAWING CODE NUMBER REV.XXX
.FXX .XX .X .03 .06 .010
IMPLIED TOLERANCES

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MOD. NEEDS
COMPONENT
ADD
COMPONENT
SUBTRACT
BOX
MOD
WIRE
ADD
WIRE
SUBTRACT

P4 (03.2)
03.1
03.2
03.3

COMPONENT
MOD. NEEDS
ADD
SUBTRACT

04.1
04.2
04.3
04.4

04.1
03.3
03.1
04.1

03.1

04.1

04.1

03.1
03.3
04.1

S/N 350600 & UP

31443500

Nordco
TM
NO.
250
03.3 53110051 1 PANEL, MURPHY & SPEEDO S/N 350600 & UP
**DESCRIPTION:**

Nordco TM NO. 250

**ADD 06.2 690163 1 DECAL, WORK HOURS**

**BILL OF MATERIAL**

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<tr>
<th>ITEM</th>
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<th>REQ. PART NAME MFG NUMBER DEVICE</th>
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<td>31403510</td>
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<td>05.2</td>
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<td>05.3</td>
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<td>5190950</td>
<td>1 LAMPHOLDER</td>
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<td>05.4</td>
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<td>1 DIODE D22</td>
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<td>05.5</td>
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<td>TERMINAL, FEMALE 16-14 SWG P25</td>
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<td>05.7</td>
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<td>SEAL, CABLE 16-14 GA GRAY P25</td>
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<td>05.8</td>
<td>13</td>
<td>5270228</td>
<td>13FT CORD, #1616-2 P25</td>
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</table>

**ADD 08.1 56406652 1 PLAQUE, LOGIC BOX SP2R**

**ADD 07.1 56406272 1 PLAQUE, LOGIC BOX SP2R**

**ADD 06.1 520094 1 HOUR METER, 10 000 HOURS**

**MOD. NEEDS**

**TO WARN OPERATOR OF HIGH TEMPERATURE OR LOW OIL CONDITION IN HYDRAULIC OIL TANK.**

**NOTE:** PARTS & WIRES IN COMMON WITH TURNTABLE WARNING

**COMPONENT**

**ADD**

**SUBTRACT**

**BOX**

**WIRED**

**ADD**
**Bill of Material**

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>PART NUMBER</th>
<th>PART NAME</th>
<th>QTY.</th>
<th>REQ.</th>
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<tbody>
<tr>
<td>02.8</td>
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<td>RECEPTACLE, SQ. FLANGE 9 PIN P81</td>
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<td>WASHER, LOCK #8</td>
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<td>10.4</td>
<td>3064455</td>
<td>WASHER, LOCK #8</td>
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<tr>
<td>10.5</td>
<td>3048034</td>
<td>NUT, MACHINE SCREW #8/32</td>
<td>4</td>
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</tr>
</tbody>
</table>

**Notes:**

1. 12.0 LONG LEADS.
2. INSULATE ENDS AND COIL IN BOX.
3. POWER SUPPLY WIRE FOR CUSTOMER SUPPLIED RADIO
DESCRIPTION:

CUMMINS GOLD CONTACTS
S/N350670 & ABOVE

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>PART NAME</th>
<th>MFG. PART NUMBER</th>
<th>DEVICE CODE</th>
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<tr>
<td>11.1 5166896</td>
<td>6 PIN CONTACT 16-20 AWG GOLD</td>
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<td>11.2 5166849</td>
<td>13 SOCKET CONTACT 16-20 AWG GOLD</td>
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<td>11.3 5166946</td>
<td>1 SPLITTER 6-WAY J1939 J1939</td>
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<td>11.4 5166805</td>
<td>4 CONNECTOR PLUG 3-PIN J1939-X</td>
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<td>11.5 61200162</td>
<td>1 TERMINATING RESISTOR 120 OHM J1939-5</td>
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NOTE:

GOLD-PLATED TERMINALS ITEMS 11.1 AND 11.2 ARE TO BE USED AT ALL J1939 CONNECTIONS.
TWISTED PAIR SHIELDED WIRE ITEM 147 TO BE USED FOR ALL CONNECTIONS.
PORT 4 CAN USE REGULAR 16 AWG WIRE TO GROUND TERMINAL BLOCK WIRE 2 X 162-2.
**NORDCO Engineering Note:**
- 97335035dwg must be revised when this Switch Box is revised.

**ADDED WIRE COLORS & ENGINEERING NOTE**
- 97335035dwg must be revised when this Switch Box is revised.
**REMOTE E-STOP WIRING**

**VERSION 1**

N.O. Contacts

1. E-Stop wiring VERSION 1 uses the N.O. contacts on switch.
   E-Stop wiring VERSION 2 uses the N.C. contacts on switch.

2. Remote E-Stop button in VERSION 1 is wired in PARALLEL to existing Logic Box E-Stop button.
   Remote E-Stop button in VERSION 2 is wired in SERIES to existing Logic Box E-Stop button per above diagrams.

**NOTES:**

**REMOTE E-STOP WIRING**

**VERSION 2**

N.C. Contacts

1. E-Stop wiring VERSION 1 uses the N.O. contacts on switch.
   E-Stop wiring VERSION 2 uses the N.C. contacts on switch.

2. Remote E-Stop button in VERSION 1 is wired in PARALLEL to existing Logic Box E-Stop button.
   Remote E-Stop button in VERSION 2 is wired in SERIES to existing Logic Box E-Stop button per above diagrams.
NOTE:
Remote HORN button is wired in PARALLEL to existing Logic Box horn button as shown in diagram above.

REMOTE HORN WIRING

LOGIC BOX
HORN

Step 4
ADD THIS WIRE

BLK  - 212-N

RED 10-N

NEW REMOTE HORN SWITCH

Step 5
ADD THIS WIRE

SEE NEXT SHEET FOR SWITCH/WIRING LAYOUT.
S/N350600 TO S/N350621
HOUSTON STREET ENGINE CONTROLLER
SEE SHEET 2 FOR NEWER MACHINES
S/N350622 & ABOVE
MURPHY ENGINE DIAGNOSTIC
SEE SHEET 1 FOR EARLIER MACHINES
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**SHEET 4 OF 6**

**PRODUCT:** BATTERY CABLE LAYOUT

**DESCRIPTION:**

- **LOGIC BOX**
- **ENGINE STUDS**
- **FRACTION**

**IMPLIED TOLERANCES**

<table>
<thead>
<tr>
<th>FRACTION</th>
<th>TOLERANCE</th>
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<tbody>
<tr>
<td>1/8</td>
<td>.06</td>
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<td>.03</td>
<td>.03</td>
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<td>.010</td>
<td>.010</td>
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**CUSTOMARY**

- **FRAME GROUND**
- **ENGINE BLOCK GROUND STUD**
- **STARTER**

**DRAWING REFERENCES:**

- 97491043DWG = SPECIFICATION BATTERY CABLE ASSY
- BC BATTERY CABLE CODE

**REVISION HISTORY**

LOCATED ON LAST SHEET

**S/N350667 AND ABOVE**