920i® Programmable HMI Indicator/Controller
Deep Enclosure Installation

PNs 82455, 82456, 82457, 82458, 82459, 82460

This document contains drawings, replacement parts lists, and instructions for installing deep enclosure models of *920i* indicators. See the *920i Installation Manual*, PN 67887, for general installation and configuration and calibration information.

Figure 1 shows the outside dimensions of the deep enclosure.

⚠ **WARNING**	*The 920i has no on/off switch. Before opening the unit, ensure the power cord is disconnected from the power outlet.*
⚠ **CAUTION**	*Use a wrist strap to ground yourself and protect components from electrostatic discharge (ESD) when working inside the indicator enclosure.*

This unit uses double pole/neutral fusing which could create an electric shock hazard. Procedures requiring work inside the indicator must be performed by qualified service personnel only.

The supply cord serves as the power disconnect for the 920i. The power outlet supplying the indicator must be installed near the unit and be easily accessible.
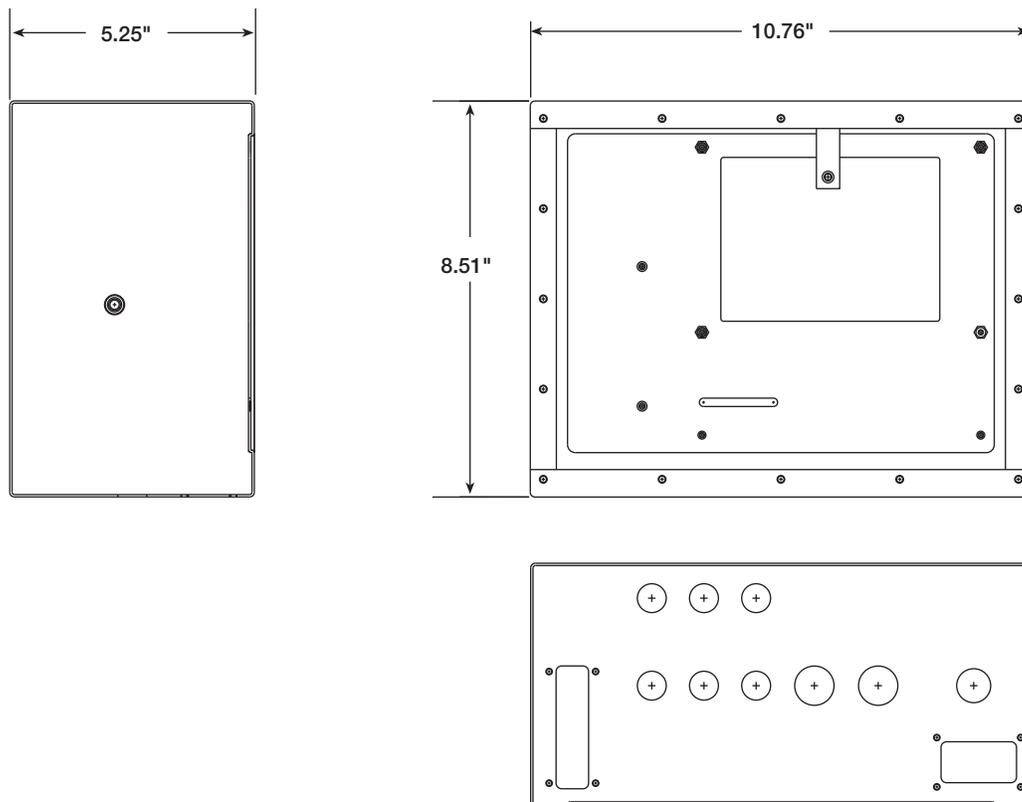

Figure 1. Deep Enclosure Dimensions

Deep enclosure models of the *920i* provide eight cord grips for cabling into the indicator. The parts kit includes cord grip plugs to prevent moisture from entering the enclosure. Install these plugs into all cord grips that will be not be used in your application. Use the cable grounding instructions below for wiring into the indicator.

RICE LAKE
W E I G H I N G   S Y S T E M S

1.1 Cable Grounding

Cables routed through the cord grips should be grounded against the indicator enclosure. Do the following to ground shielded cables:

- Use the lock washers, clamps, and kep nuts provided in the parts kit to install grounding clamps on the enclosure studs adjacent to cord grips. Install grounding clamps only for cord grips that will be used; do not tighten nuts.

- Route cables through cord grips and grounding clamps to determine cable lengths required to reach cable connectors. Mark cables to remove insulation and shield as described below:

   - For cables with foil shielding, strip insulation and foil from the cable half an inch (15 mm) past the grounding clamp (see Figure 2). Fold the foil shield back on the cable where the cable passes through the clamp. Ensure silver (conductive) side of foil is turned outward for contact with the grounding clamp.

   - For cables with braided shielding, strip cable insulation and braided shield from a point just past the grounding clamp. Strip another half inch (15 mm) of insulation *only* to expose the braid where the cable passes through the clamp.
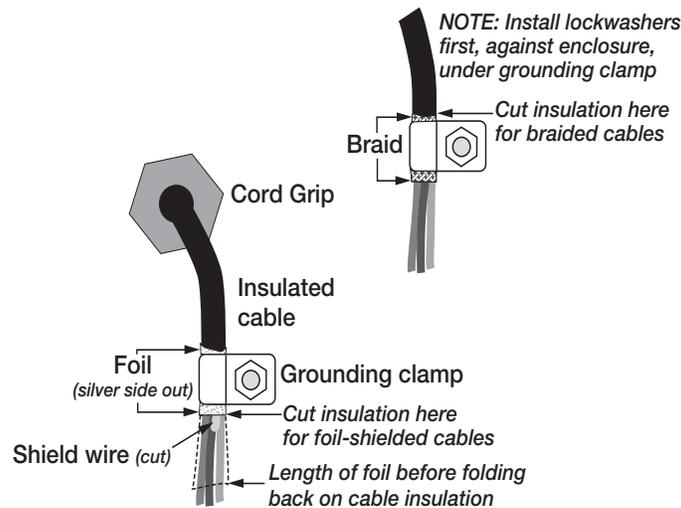

Figure 2. Grounding Clamp Attachment for Foil-Shielded and Braided Cabling

- For load cell cables, cut the shield wire just past the grounding clamp. Shield wire function is provided by contact between the cable shield and the grounding clamp.

- Route stripped cables through cord grips and clamps. Ensure shields contact grounding clamps as shown in Figure 2. Tighten grounding clamp nuts.

- Finish installation using cable ties to secure cables inside of indicator enclosure.

2.2 Power Specifications

Line Voltages   115 or 230 VAC

Frequency   50 or 60 Hz

Maximum Power Consumption, 65W on secondary
   Primary power consumption:100W TRMS
    Constant current: 1.5 A TRMS (115VAC);
                    1.0 A TRMS (230VAC)

Fusing

   115 VAC and 230 VAC North American
      2 x 3.15A TR5 sub-miniature fuses
      Wickmann Time-Lag 19374 Series
      UL Listed, CSA Certified and Approved

   230 VAC European
      2 x 3.15A TR5 sub-miniature fuses
      Wickmann Time-Lag 19372 Series
      UL Recognized, Semko and VDE Approved

See the *920i Installation Manual*, PN 67887, for additional specifications.

RICE LAKE
W E I G H I N G   S Y S T E M S

2.3   Parts Kit Contents

Table 3 lists the parts kit contents for deep enclosure models of the *920i*.

PN	Description
14626	Kep nuts, 8-32NC (4)
14862	Machine screws, 8-32NC x 3/8 (12)
15133	Lock washers, No. 8, Type A (4)
15144	Nylon washers (2)
15631	Cable ties (4–single A/D, 6–dual A/D)
15665	Reducing glands for 1/2 NPT cord grips (2)
15887	6-position screw terminal for load cell connection (1–single A/D, 2–dual A/D)
19538	Cord grip plugs (4–single A/D, 3–dual A/D)
30623	Fillister head screws, 8-32NC x 7/16 (2)
42149	Rubber feet for tilt stand (4)
42350	Capacity label (1–single A/D, 2–dual A/D)
53075	Cable shield ground clamps (4)
68403	Wing knobs for tilt stand (2)
70599	6-position screw terminals for J2 and J10 (2)
71125	3-position screw terminal for J11 (1)
71126	4-position screw terminal for J9 and optional keyboard connection (2)
75062	Sealing washers (14)

Table 3. Parts Kit Contents
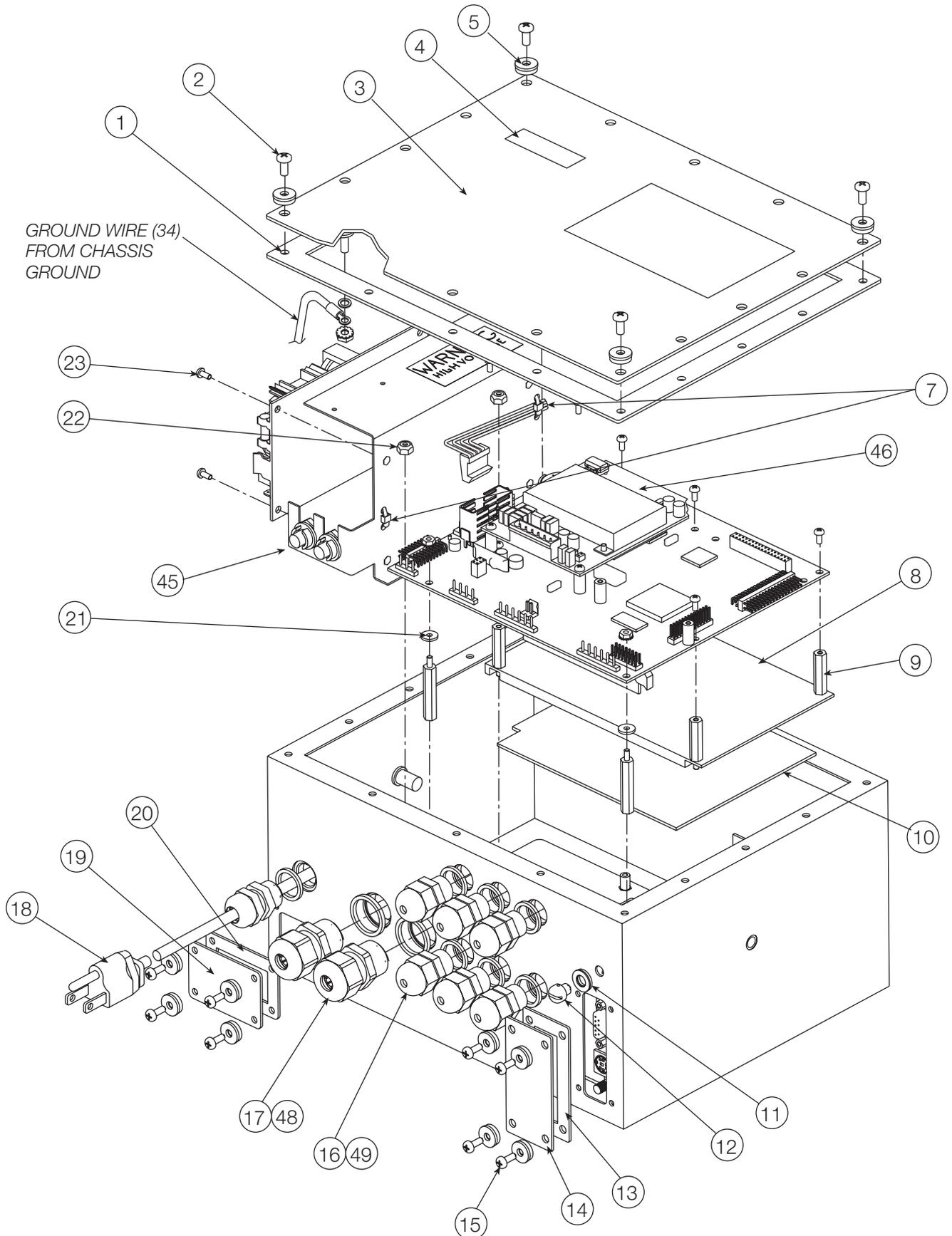
3.1 Replacement Parts and Assembly Drawings

GROUND WIRE (34)
FROM CHASSIS
GROUND

Figure 4. Deep Enclosure Assembly

RICE LAKE
WEIGHING SYSTEMS

Item No.	Part No.	Description (Quantity)	Qty
1	82854	Backplate gasket	1
2	14862	Machine screws, 8-32NC x 3/8 phillips*	4
3	82853	Back panel	1
4	67491	Inspection label	1
5	75062	Sealing washers	12
7	15631	Cable tie, 3-in nylon*	1
8	67614	LCD display	1
9	67886	Standoffs, short	4
10	68598	Protective lens	1
11	44676	Sealing washer for setup switch access screw	1
12	42640	Setup switch access screw, 1/4-28NF x 1/4	1
13	67535	Interface board cover plate gasket	1
14	67530	Interface board connector plate	1
15	14845	Machine screws, 6-32NC x 3/8 phillips	8
16	15626	Cord grips, PG9	6
17	15628	Cord grips, 1/2 NPT	2
18	67795	Power cord assembly, 115 VAC and 230 VAC North American units	1
	69998	Power cord assembly, 230 VAC European units	1
19	68425	Fuse access coverplate	1
20	68621	Fuse access coverplate gasket	1
21	69898	Nylon spacers	2
22	58248	Lock nuts, 6-32NC nylon	2
23	14822	Machine screws, 4-40NC x 1/4	11
45	71462	Fuses F1 & F2 (115 VAC and 230 VAC North American models), 3.15 A Time-Lag TR5	2
	72339	Fuses F1 & F2 (230 VAC European models), 3.15 A Time-Lag TR5	2
46	67610	Single-channel A/D card	1
48	30376	Nylon seal rings for 1/2 NPT cord grips	2
49	30375	Nylon seal rings for PG9 cord grips	6
—	66502	Switch panel membrane	1
—	82855	Tilt stand, deep enclosure	1

* Additional parts included in parts kit.

⚠ **CAUTION** *To protect against the risk of fire, replace fuses only with same type and rating fuse.*
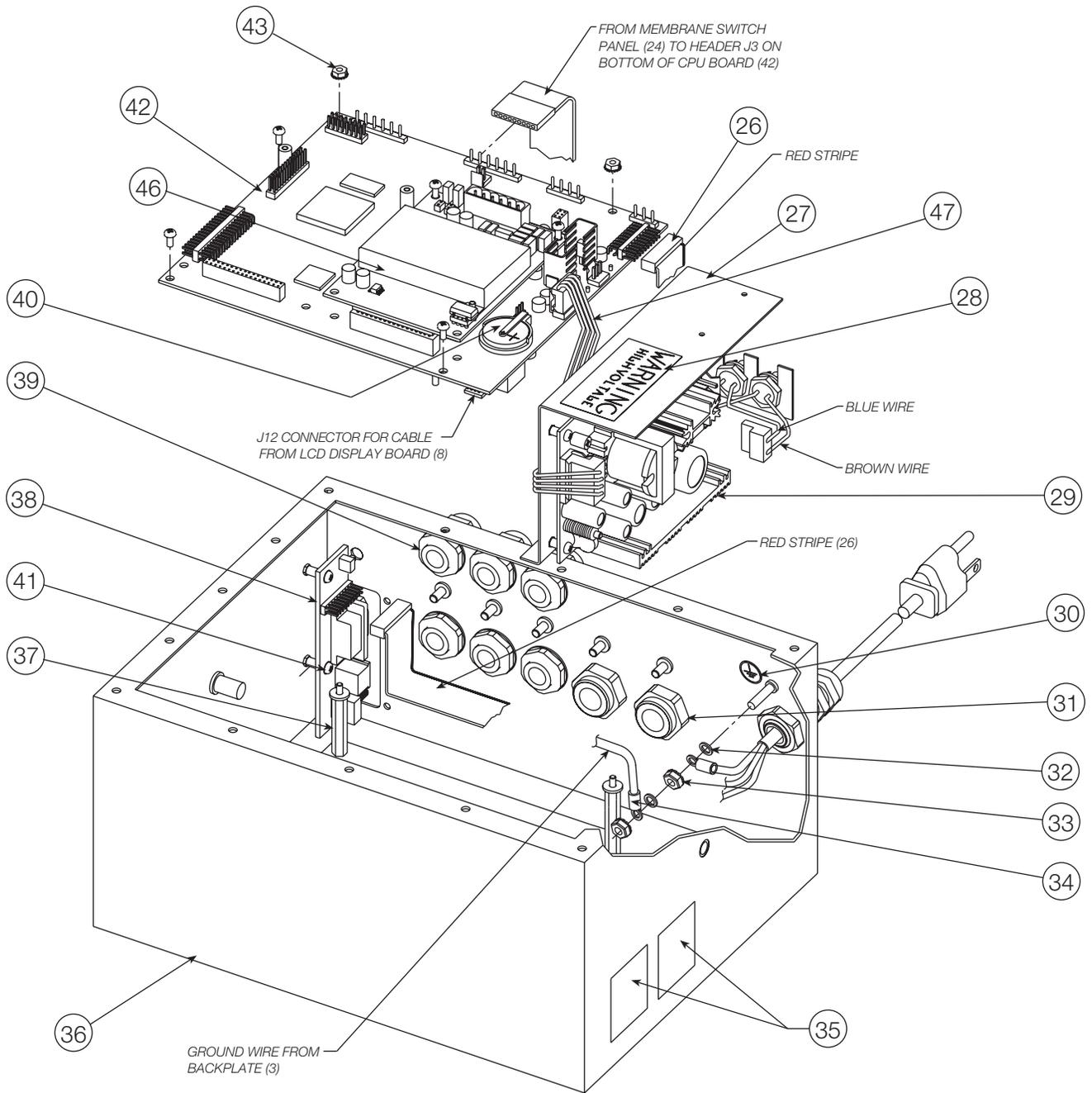
Figure 5. Deep Enclosure, Power Supply and CPU Board

Labels in figure:

43

42

46

40

39

38

41

37

36

FROM MEMBRANE SWITCH PANEL (24) TO HEADER J3 ON BOTTOM OF CPU BOARD (42)

RED STRIPE

26

27

47

28

BLUE WIRE

BROWN WIRE

29

J12 CONNECTOR FOR CABLE FROM LCD DISPLAY BOARD (8)

RED STRIPE (26)

WARNING HIGH VOLTAGE

30

31

32

33

34

35

GROUND WIRE FROM BACKPLATE (3)

RICE LAKE
WEIGHING SYSTEMS

Item No.	Part No.	Description	Qty
26	68662	Ribbon cable to interface board	1
27	82856	Power supply bracket	1
28	16861	High voltage warning label	1
29	71333	Power supply, ±6VDC, 65W	1
30	16892	Ground/Earth label	1
31	15630	Lock nuts for 1/2 NPT cord grips	2
32	15134	Lock washers, No. 8, Type A	3
33	14626	Kep nuts, 8-32NC*	3
34	15601	Ground wire, 6 in w/ No. 8 eye connector	1
35	53308	Model/serial number label	1
36	82852	Enclosure, deep universal	1
37	68661	Standoffs, long	2
38	67869	Interface board	1
39	15627	Lock nuts for PG9 cord grips	6
40	69290	3V Lithium coin battery	1
41	55708	Machine screws, 4-40NC x 3/8 phillips	2
42	117930	CPU board; Board marked as 109549; sold as 117930	1
43	14618	Kep nuts, 4-40NC	2
46	67610	Single-channel A/D card	1
47	71430	Power supply cable assembly, to CPU board	1
* Additional parts included in parts kit.			

RICE LAKE
WEIGHING SYSTEMS

September 3, 2015   PN 83810 Rev A