

**INSTALLATION  
AND  
OPERATION MANUAL  
FOR**

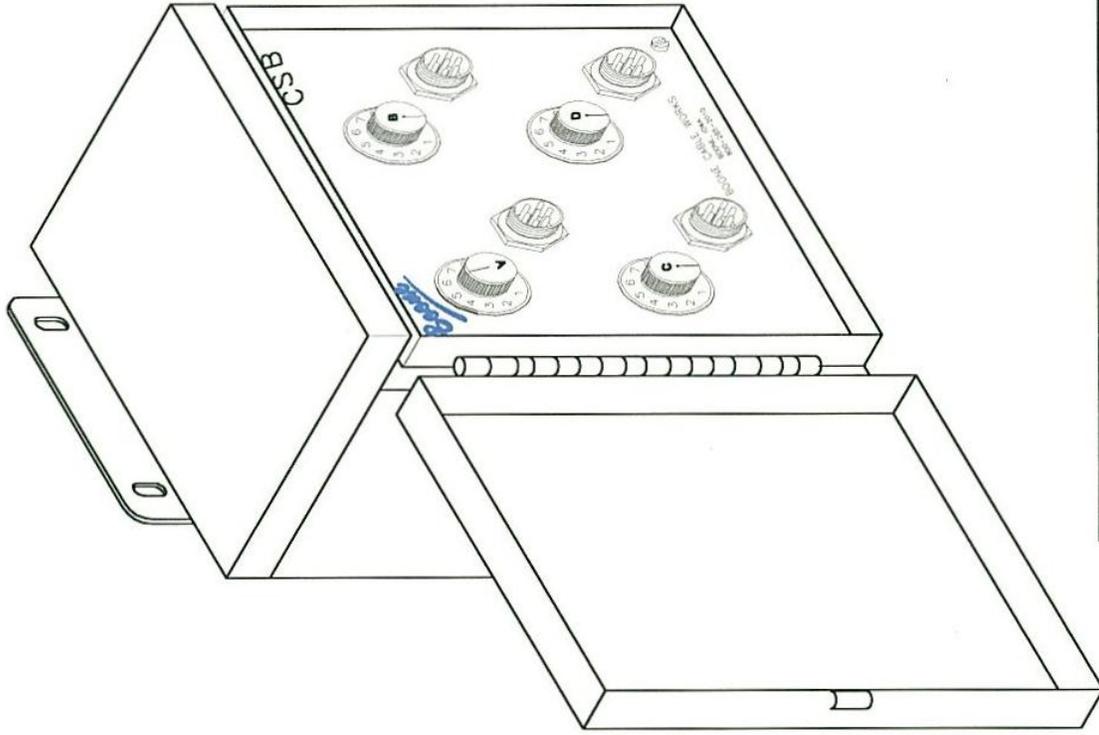
**Boone**

**MODEL CSB  
PORTABLE TYPE  
CABLE SELECTOR BOX**

**SPECIAL NOTE**

**READ THIS ENTIRE BOOKLET  
BEFORE PROCEEDING WITH  
THE INSTALLATION**

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SCALE: NONE	DATE: 11-15-01
DWN BY: RICK H.	REVISION:
JOB NO: -----	DWG: 180049

FOR: CSB-44 Typ.  
Drawing

## **Boone Model CSB Reading Station**

The Boone "Cable Selector Box" (CSB) was designed for locations with portable reading systems, where large numbers of short temperature cables (6 T/C's or less) are used. This makes them ideally suited for flat storage buildings and cottonseed houses. They can be used in new construction with Boone Portable temperature readers or they can be used to replace existing type "T" thermocouple, temperature, reading stations. This is because the CSB reading station is compatible with most existing brands and models of Thermocouple reading instruments, providing they are fitted with a 7-hole plug at the jack handle. This reading box is particularly suited for use with the Boone Model KF200 (Memory Portable Instrument), as it allows for ultra fast downloading of the temperatures into the instrument memory. Reading times are significantly improved with manual type readers such as the KF100 as well.

Each CSB, reading box is set up to read 6 T/C temperature cables 11 at a time, without moving the jack handle to another plug position. They are available in three models that will handle 22, 33 or 44 cables from a single enclosure. Larger systems will require multiple enclosures.

### **Installation Procedure**

Determine a suitable mounting location for your CSB, preferable within easy access of the grouping of cables it will be servicing. If possible, when locating your Reading Station, take into account a location protected from the prevailing winter winds or other inclement conditions.

After the reading station has been mounted, run all of your 6 T/C leads from each cable to the CSB reading station. Be sure to route all leads from the cable to the CSB in such a manner as to keep them free of sharp edges, moving machinery, and out of contact with the gain mass or flowing grain. Do not allow the leads to sag or droop down from the under side of the roof. Use tie bands to secure the leads where necessary. This will ensure that your installation will not suffer from damage, due to broken or torn leads. It is recommended that conduit be used for locations where there is a high degree of likelihood of damage by service person performing routine maintenance, or from the presence of rodents.

Once the leadwires from each cable have been routed and are secured, you are ready to begin wiring the leads into the CSB box. Trim the leads from cable to approximately 2.5 to 3' long inside box. Inside the CSD are 2, 3 or 4-7 level 11 position switches. Each switch has 11-6 T/C pigtailed wires to it that are numbered from 1-11. Each switch also has a corresponding 7, pin plug. The dials for these switches are designated with an A, B, C, or D. The switch designated as "A" is for the first 11 cables of the system. "B" is for cables 12-22 of the system etc. Splice each leadwire in the system to its corresponding switch and pigtail using line-B grease filled splicing crimps as described in diagram (drawing #180203). Also see color code chart, figure 1-1.

## 6 T/C Leadwire Color Code

<u>Color</u>	<u>Thermocouple position</u>
Black-----	#1
Blue-----	#2
Green-----	#3
Red-----	#4
Yellow-----	#5
Clear-----	#6
White-----	Constantan (common)

Figure 1-1

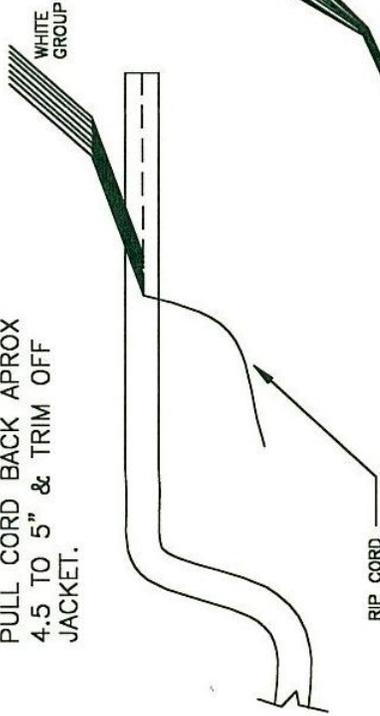
Note: #1 is at the bottom of the cable.

### Operation

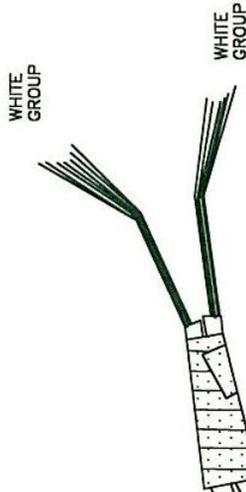
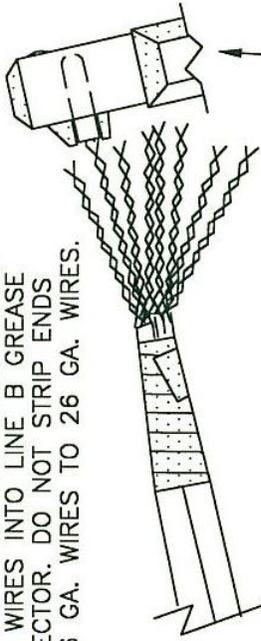
- 1.) To take temperature readings, first insert jack handle into the plug for switch "A".
- 2.) Second place the indicator on knob "A" to position #1.
- 3.) Take all readings for the first cable as normal with your portable reader.
- 4.) Next, move dial "A" to position #2 and read as above.
- 5.) Repeat until all 112 cables of switch "A" are read.
- 6.) Remove jack handle from Plug "A" and insert into Plug "B" and repeat steps above until second set of 11 cables #12-22 have been read.
- 7.) Proceed to Plug "C" & "D" if applicable, until all cables in the system are read.

Note: Be sure to close door on CSB after use to prevent unnecessary7 accumulations of dirt, ice or snow etc.

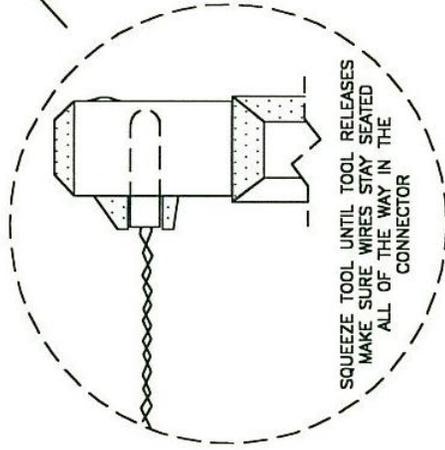
STEP #1 USE A UTILITY KNIFE TO STRIP BACK AND EXPOSE THE RIP CORD. PULL CORD BACK APPROX 4.5 TO 5" & TRIM OFF JACKET.



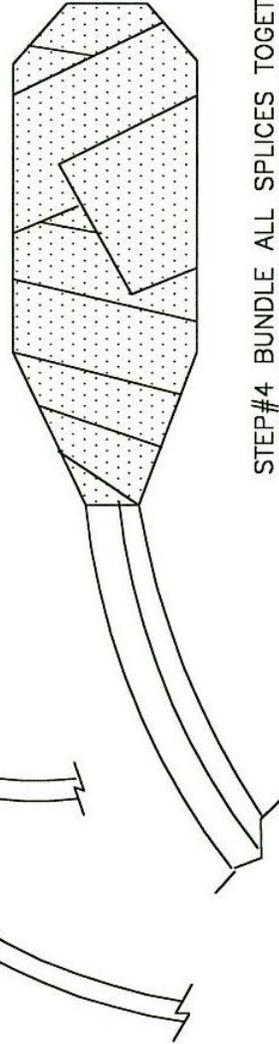
STEP #3 PAIR UP AND TWIST ALL WIRES COLOR TO COLOR. INSERT WIRES INTO LINE B GREASE FILLED WIRE CONNECTOR. DO NOT STRIP ENDS WHEN CRIMPING 26 GA. WIRES TO 26 GA. WIRES.



STEP #2 TAPE LEADWIRES TOGETHER AND TRIM ENDS TO THE SAME LENGTH.(APROX. 4")



NOTE: LINE B GREASE FILLED CRIMPS AND CRIMPING TOOLS CAN BE ACQUIRED FROM BOONE CABLE WORKS AND ELECTRONICS.



STEP#4 BUNDLE ALL SPLICES TOGETHER AND WRAP WITH A GOOD QUALITY ELECTRICAL TAPE.



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SCALE:	NONE	DATE:	8/10/00
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WIRE SPLICING TYPICAL