

## BURDEN RESISTOR SELECTION FOR OVERLOAD PROTECTION

(SEE KIT PART NUMBERS IN TABLE 1)

### 200 THRU 300HP

This power unit is supplied with a factory installed overload calibration resistor (2R burden resistor) located on the Potentiometer printed circuit board. (See Figure 1.) Resistor 2R is selected based on small current ranges within a given horsepower rating. Resistor 2R is factory selected for the lowest current range of each horsepower category. Refer to Table 1 for alternate selections for 2R. Select one that most closely matches motor nameplate DC amps. Refer to instruction manual for further explanation of overload protection. The alternate selections for 2R are provided with this instruction sheet. Note for this horsepower range the burden resistor produces 1.0 VDC for rated current. Resistor 1R is omitted from the Potentiometer PCB, 46S02267-0020.

BEND LEADS TO REDUCE  
POSSIBILITY OF APPLYING  
STRAIN TO RESISTOR  
BODY WHEN MOUNTING  
SCREWS ARE TIGHTENED.

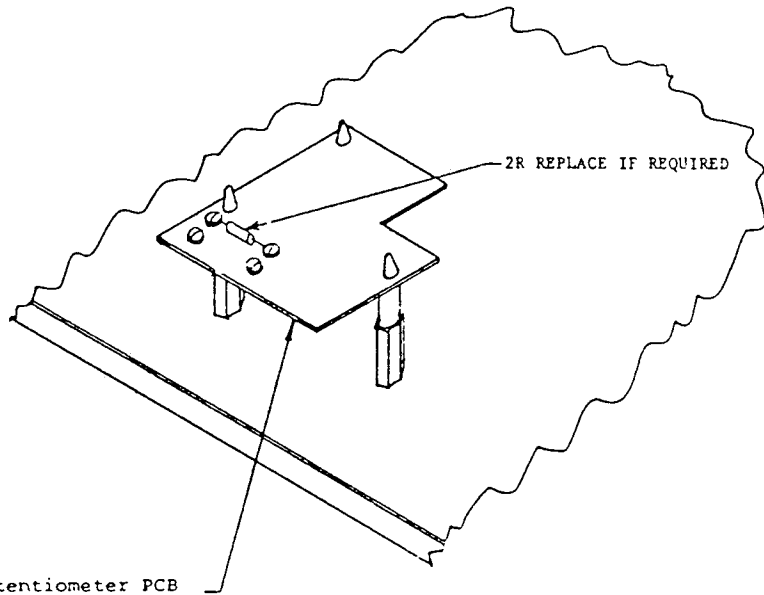
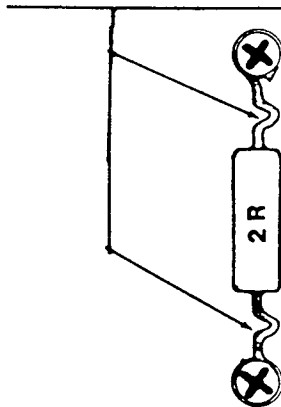


Figure 1.

CHANGE RECORD		4	STD-2954	3-4-88		
1	STD-2033	4/4/84	5	STD-3261		
2	STD-2425	12/18/85				
3	STD-2666	2/9/87				

DWG. NO. 02Y00025-0138  
SHEET 1 OF 4  
EFF. 12/83 (M)

400 THRU 1000 HP

This controller is supplied with a factory installed burden resistor located on 27CONN of the High Horsepower Main Interface PCB. See Figure 2 for location of 27CONN. The burden resistor calibrates the current feedback signal. For this reason, the motor characteristics (full load rated amps, HP, and voltage) must be matched to the proper burden resistor value. Refer to Table 1 for alternate selections of the burden resistor. Each burden resistor kit contains a number of 27CONNs, each of which contains a different valued resistor. Match the resistor marking code on the resistor with that listed in Table 1, and insert into 27CONN. Note for this horsepower range the burden resistor selection is made to achieve 3.3 VDC on the Interface PCB. This value is then reduced to 1.0 VDC on this board and used on 46S2266-0031 Voltage/Speed Main PCB. Resistors 1R, 2R, and 3R are all omitted from the Potentiometer PCB, 46S02267-0040.

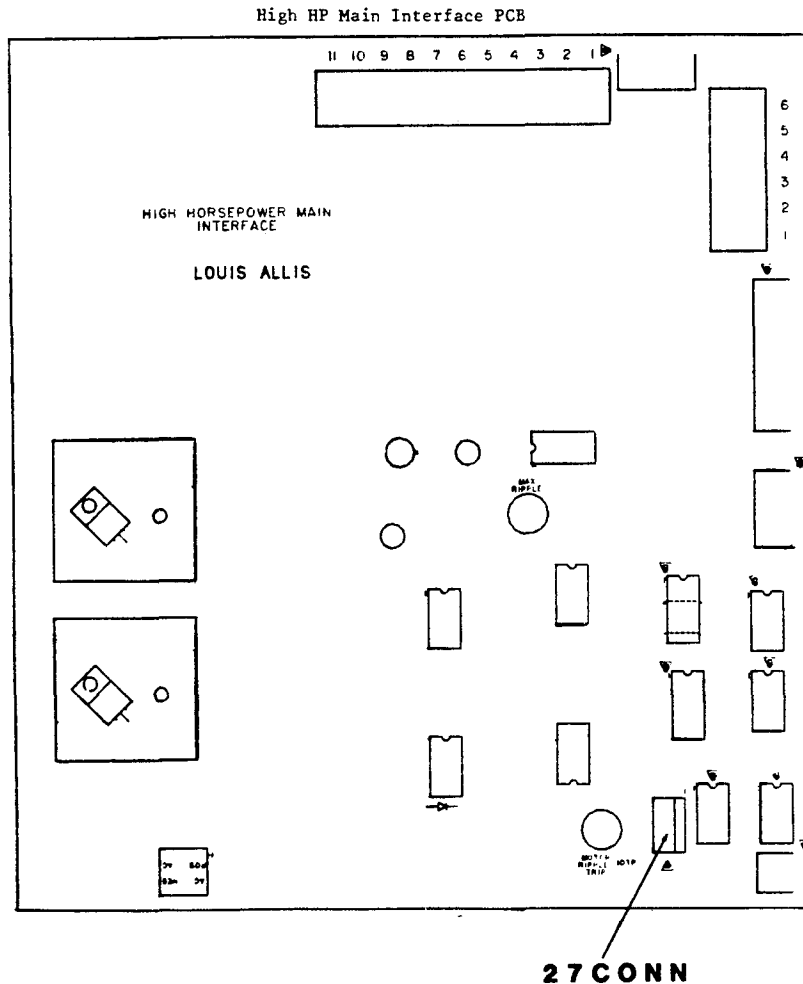


Figure 2.

DWG. NO. 02Y00025-0138  
SHEET 2 OF 4  
EFF. 12/83 (M)

Table 1. Burden Resistor Selection

DRIVE HORSEPOWER	RATED MTR. FULL LOAD AMPERES	BURDEN RESISTOR (2R) KIT PART NO. 46S2299-	KIT RESISTORS OHMS	MAGNETEK D & S PART NO. 05P00225-	RESISTOR MARKING CODE
200	308-315	-0140	274	-0182	2740F
	315-322		221	-0162	2210F
	322-329		178	-0142	1780F
	329-336		150	-0132	1500F
	336-343		127	-2082	1270F
250	390-398	-0150	61.9	-2232	61R9F
	398-412		54.9	-1692	54R9F
300	465-478	-0160	35.7	-1592	35R7F
	478-490		33.2	-0082	33R2F
	490-503		31.6	-1552	31R6F
DRIVE HORSEPOWER	RATED MTR. FULL LOAD AMPERES	BURDEN RESISTOR ASSY. (27CONN) KIT PART NO. 46S2299-	KIT RESISTORS OHMS	MAGNETEK D & S PART NO. 05P00225-	RESISTOR MARKING CODE
400	615-630	-0180	52.3	-2192	52R3F
	630-645		49.9	-1342	49R9F
	645-660		48.7	-1682	48R7F
500	700-710	-0190	45.3	-1662	45R3F
	710-725		44.2	-1352	44R2F
	725-745		43.2	-1652	43R2F
	745-760		42.2	-0942	42R2F
	760-775		41.2	-1642	41R2F
	775-790		40.2	-1632	40R2F
	790-810		39.2	-0572	39R2F
810-830	38.3	-1612	38R3F		
600	830-848	-0200	37.4	-1602	37R4F
	848-867		36.5	-1362	36R5F
	867-887		35.7	-1592	35R7F
	887-907		34.8	-1582	34R8F
	907-928		34.0	-1572	34R0F
	928-950		33.2	-0082	33R2F
	950-972		32.4	-1562	32R4F
972-995	31.6	-1552	31R6F		

DWG. NO. 02Y00025-0138  
 SHEET 3 OF 4  
 EFF. 12/83 (M)

Table 1. Burden Resistor Selection (Continued)

DRIVE HORSEPOWER	RATED MTR. FULL LOAD AMPERES	BURDEN RESISTOR ASSY. (27CONN) KIT PART NO. 46S2299-	KIT RESISTORS OHMS	MAGNETEK D & S PART NO. 05P00225-	RESISTOR MARKING CODE
700	995-1015	-0210	47.5	-0092	47R5F
	1015-1038		46.4	-1672	46R4F
	1038-1062		45.3	-1662	45R3F
	1062-1085		44.2	-1352	44R2F
	1085-1110		43.2	-1652	43R2F
	1110-1134		43.2	-1652	43R2F
	1134-1161		41.2	-1642	41R2F
800	1161-1188	-0220	40.2	-1632	40R2F
	1188-1214		39.2	-1622	39R2F
	1214-1244		38.3	-1612	38R3F
	1244-1272		37.4	-1602	37R4F
	1272-1300		36.5	-1362	36R5F
	1300-1330		35.7	-1592	35R7F
900	1330-1361	-0230	34.8	-1582	34R8F
	1361-1392		34.0	-1572	34R0F
	1392-1424		33.2	-0082	33R2F
	1424-1458		32.4	-1562	32R4F
1000	1458-1492	-0240	31.6	-1552	31R6F
	1492-1527		30.9	-1542	30R9F
	1527-1564		30.1	-1532	30R1F
	1564-1600		29.4	-1522	29R4F

DWG. NO. 02Y00025-0138  
 SHEET 4 OF 4  
 EFF. 12/83 (M)