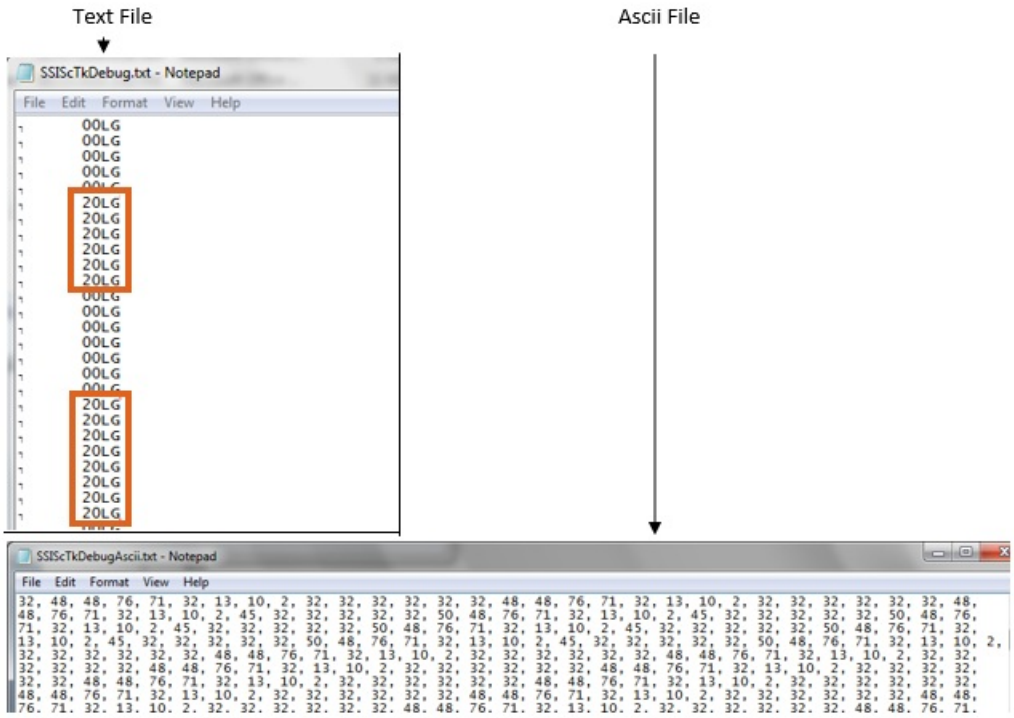
Reading a Scale Interface Debug Report

Last Modified on 11/16/2026 3:59 pm CST

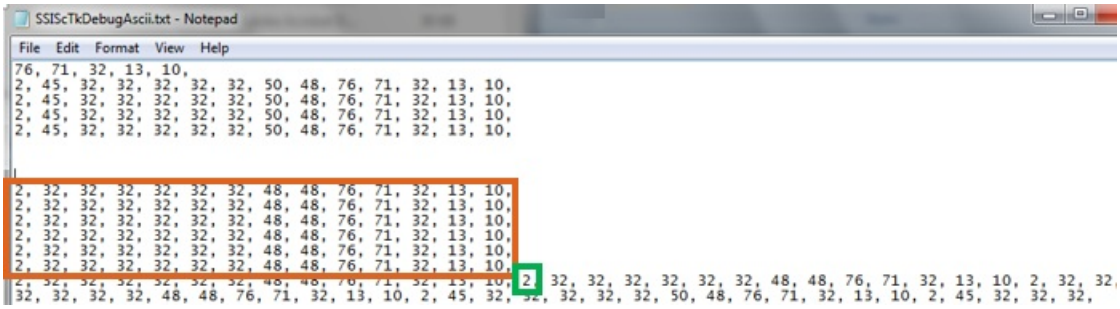
Reading a debug file for scale interface is not as complicated as it looks. Once the debug has run, it will create two files in the selected directory called *SSIScTkDebug.txt* and *SSIScTkDebugAscii.txt*. The first file will list all of the weights showing on the indicator. The second is the Ascii format of the weights being sent to Agvance.



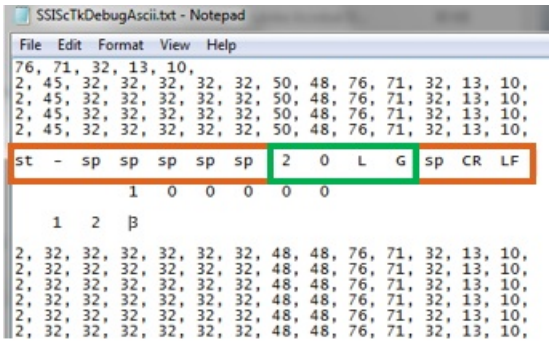
Setup

The first step to reading the debug file is finding the beginning of the text in the Ascii file. Many systems send the number 2 to indicate start of text. If a 2 is not in the string, another character will have to be found that is unique in the string. The string may be between 10 and 15 characters long. The sample file here uses a *2* to indicate start of text. If a *2* is not used, the number *71* is a viable alternative. It is best to avoid using 13 or 10 as the beginning number. This number will become the *Scale Char* on the scale setup screen.

The next step in reading the debug file is to break the Ascii file into individual strings, each beginning with the*Scale Char* (in this example number *2*) to signify the beginning of a new line of text. To do this, place the cursor before the next *2* in the string, and press **Enter**. Each number *2* starts another string of text. The block of numbers inside the orange box represents character strings already separated. The next *2* that should be broken out is highlighted in green.



Now use an Ascii table (available online, see last image below) to decipher what each number stands for (e.g. 32 is a space, 50 is 2, 48 is 0, 76 is L, 71 is G, etc.). Write or type these below the string for reference like in the following image. In this case, there is a reference to 20 LG in green.



After looking at the SSIScTkDebug.txt file sent during debug, *20 LG* was part of the string captured in the text file. Most scales will read up to 100,000 lbs. In this case, enter the number *100000* below the actual string as it would be expected to see that weight shown in a debug file. To get the *Start Char*, count how many places to the right of the *Scale Char* are needed to pick up the first number of the weight 100000. In the case above, move three spaces to the right to get to the *1* in 100000. The *Num Char* is the number of characters needed for the scale to read from the *Start Char*. Since 100,000 has six digits, use *6*. If the scale maximum weight was 90,000, the *Num Char* would be *5* and the *Start Char* would be *4*.

The only thing left to review is the length of the string. In this case, it is 14 characters from the *2* to *10* (each character is represented by two digits in the file). The *Min Buffer* defaults in Agvance to *15*. This is the number of characters the buffer will hold while trying to find a weight. In most cases, *15* is fine. However, a few scale systems exist that send nearly double the number of characters in a string. The *Min Buffer* needs to be set to a number at least as long as the string and up to twice the length (usually around 25).

Ascii Table

Dec	Hx	Oct	Char	Dec	Hx	Oct	Html	Chr	Dec	Hx	Oct	Html	Chr	Dec	Hx	Oct	Html	Chr
0	0	000	NUL (null)	32	20	040		Space	64	40	100	@	@	96	60	140	`	`
1	1	001	SOH (start of heading)	33	21	041	!	!	65	41	101	A	A	97	61	141	a	a
2	2	002	STX (start of text)	34	22	042	"	"	66	42	102	B	B	98	62	142	b	b
3	3	003	ETX (end of text)	35	23	043	#	#	67	43	103	C	C	99	63	143	c	c
4	4	004	EOT (end of transmission)	36	24	044	$	$	68	44	104	D	D	100	64	144	d	d
5	5	005	ENQ (enquiry)	37	25	045	%	%	69	45	105	E	E	101	65	145	e	e
6	6	006	ACK (acknowledge)	38	26	046	&	&	70	46	106	F	F	102	66	146	f	f
7	7	007	BEL (bell)	39	27	047	'	'	71	47	107	G	G	103	67	147	g	g
8	8	010	BS (backspace)	40	28	050	(	(	72	48	110	H	H	104	68	150	h	h
9	9	011	TAB (horizontal tab)	41	29	051	)	)	73	49	111	I	I	105	69	151	i	i
10	A	012	LF (NL line feed, new line)	42	2A	052	*	*	74	4A	112	J	J	106	6A	152	j	j
11	B	013	VT (vertical tab)	43	2B	053	+	+	75	4B	113	K	K	107	6B	153	k	k
12	C	014	FF (NP form feed, new page)	44	2C	054	,	,	76	4C	114	L	L	108	6C	154	l	l
13	D	015	CR (carriage return)	45	2D	055	-	-	77	4D	115	M	M	109	6D	155	m	m
14	E	016	SO (shift out)	46	2E	056	.	.	78	4E	116	N	N	110	6E	156	n	n
15	F	017	SI (shift in)	47	2F	057	/	/	79	4F	117	O	O	111	6F	157	o	o
16	10	020	DLE (data link escape)	48	30	060	0	0	80	50	120	P	P	112	70	160	p	p
17	11	021	DC1 (device control 1)	49	31	061	1	1	81	51	121	Q	Q	113	71	161	q	q
18	12	022	DC2 (device control 2)	50	32	062	2	2	82	52	122	R	R	114	72	162	r	r
19	13	023	DC3 (device control 3)	51	33	063	3	3	83	53	123	S	S	115	73	163	s	s
20	14	024	DC4 (device control 4)	52	34	064	4	4	84	54	124	T	T	116	74	164	t	t
21	15	025	NAK (negative acknowledge)	53	35	065	5	5	85	55	125	U	U	117	75	165	u	u
22	16	026	SYN (synchronous idle)	54	36	066	6	6	86	56	126	V	V	118	76	166	v	v
23	17	027	ETB (end of trans. block)	55	37	067	7	7	87	57	127	W	W	119	77	167	w	w
24	18	030	CAN (cancel)	56	38	070	8	8	88	58	130	X	X	120	78	170	x	x
25	19	031	EM (end of medium)	57	39	071	9	9	89	59	131	Y	Y	121	79	171	y	y
26	1A	032	SUB (substitute)	58	3A	072	:	:	90	5A	132	Z	Z	122	7A	172	z	z
27	1B	033	ESC (escape)	59	3B	073	;	;	91	5B	133	[	[	123	7B	173	{	{
28	1C	034	FS (file separator)	60	3C	074	<	<	92	5C	134	\	\	124	7C	174			|
29	1D	035	GS (group separator)	61	3D	075	=	=	93	5D	135	]	]	125	7D	175	}	}
30	1E	036	RS (record separator)	62	3E	076	>	>	94	5E	136	^	^	126	7E	176	~	~
31	1F	037	US (unit separator)	63	3F	077	?	?	95	5F	137	_	_	127	7F	177	&#127;	DEL

Source: www.LookupTables.com