

## II

*(Acts whose publication is not obligatory)*

## COMMISSION

## COMMISSION DIRECTIVE

of 30 June 1988

**adapting to technical progress Council Directive 78/764/EEC on the laws of the Member States relating to the driver's seat on wheeled agricultural or forestry tractors**

(88/465/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

at the removal of technical barriers to trade in the agricultural or forestry tractor sector,

Having regard to the Treaty establishing the European Economic Community,

HAS ADOPTED THIS DIRECTIVE:

Having regard to Council Directive 74/150/EEC of 4 March 1974 on the approximation of the laws of the Member States relating to the type approval of wheeled agricultural or forestry tractors<sup>(1)</sup>, as last amended by Directive 88/297/EEC<sup>(2)</sup>, and in particular Article 11 thereof,

*Article 1*

Annexes I and II to Directive 78/764/EEC are hereby amended in accordance with the Annex to this Directive.

Whereas, in view of the experience acquired and taking account of the current state of the art, it is now possible to amend the classification of the standard tractors provided for in Council Directive 78/764/EEC<sup>(3)</sup>, as last amended by Directive 87/354/EEC<sup>(4)</sup>, and to make certain provisions of that Directive more precise and complete;

*Article 2*

1. From 1 October 1988, no Member State may:
  - (a) — refuse, in respect of a type of tractor, to grant EEC type approval, to issue the document referred to in Article 10 (1), final indent, of Directive 74/150/EEC, or to grant national type approval, or — prohibit the entry into service of tractors,
 

if the driver's seat on this type of tractor or tractors complies with the provisions of this Directive;
  - (b) — refuse, in respect of a type of driver's seat, to grant EEC component type approval or national type-approval if seats of that type comply with the provisions of this Directive, or
 

— prohibit the placing on the market of driver's seats which bear the EEC component type approval mark issued in accordance with the provisions of this Directive.

Whereas this new classification has also been accepted by the ISO on the basis of the results of research carried out in Europe and the United States of America;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee on the Adaptation to Technical Progress of the Directives aimed

<sup>(1)</sup> OJ No L 84, 28. 3. 1974, p. 10.

<sup>(2)</sup> OJ No L 126, 20. 5. 1988, p. 52.

<sup>(3)</sup> OJ No L 255, 18. 9. 1978, p. 1.

<sup>(4)</sup> OJ No L 192, 11. 7. 1987, p. 43.

2. From 1 October 1989, Member States :

- (a) — shall no longer issue the document referred to in Article 10 (1), final indent, of Directive 74/150/EEC in respect of a type of tractor the driver's seat of which does not comply with the provisions of this Directive,
- may refuse to grant national type approval in respect of a type of tractor the driver's seat of which does not comply with the provisions of this Directive ;
- (b) — shall not grant EEC component type approval in respect of a type of driver's seat if it does not comply with the provisions of this Directive,
- may refuse to grant national component type approval in respect of a type of driver's seat if it does not comply with the provisions of this Directive.

*Article 3*

Member States shall bring into force the provisions necessary in order to comply with this Directive not later than 30 September 1988. They shall forthwith inform the Commission thereof.

*Article 4*

This Directive is addressed to the Member States.

Done at Brussels, 30 June 1988.

*For the Commission*

COCKFIELD

*Vice-President*

## ANNEX

Annex I to Directive 78/764/EEC shall be amended as follows :

— The wording of point 16.1 shall be replaced by the following :

'16.1. the characteristics of these tractors are as follows :

number of axles : two

Suspension : unsuspended rear axle.'

— The wording of point 16.2 shall be replaced by the following :

'16.2. category A tractors shall be divided up into three classes :

Class I : tractors having an unladen mass of up to 3 600 ;

Class II : tractors having an unladen mass of 3 600 — 6 500 kg ;

Class III : tractors having an unladen mass of more than 6 500 kg.'

Annex II to Directive 78/764/EEC shall be amended as follows :

— The following wording shall be added to that of point 1.12 :

'... and seats tested for class III tractors are suitable for class II and III tractors.'

— The two references to Appendices 4 and 5 in point 2.5.3.1.1 must be replaced by a reference to Appendices 4, 5a and 5b of this Annex.

— The values  $a_{wb}^*$  in point 2.5.5.1. shall be amended as follows :

$a_{wb}^*$  = 2,05 m/s<sup>2</sup> for class I, category A tractors.

$a_{wb}^*$  = 1,5 m/s<sup>2</sup> for class II, category A tractors.

$a_{wb}^*$  = 1,3 m/s<sup>2</sup> for class III, category A tractors.'

— The wording of point 2.5.5.2 shall be replaced by the following :

'2.5.5.2. For each of the two drivers provided for in point 2.5.3.3.1, the weighted acceleration of the vibratory movement shall be measured at the seat for 28 seconds in the case of classes I and III, and for 31 seconds in the case of class II. The measurement must begin at the set value signal corresponding to  $t = 0$  seconds and end at the set value signal corresponding to  $t = 28$  or 31 seconds (see table in Appendices 4, 5a and 5b of this Annex). At least two test runs must be carried out. The measured values must not deviate from the arithmetical mean by more than  $\pm 5\%$ . Each complete set point sequence must be reproduced in  $28$  or  $31 \pm 0,5$  s.'

— the reference to Appendices 4 and 5 in point 2.5.7.2 shall be replaced by a reference to Appendices 4, 5a and 5b of this Annex.

— The following indication shall be added to the two indications set out in 3.5.2.3 :

'II and III : for class II and III, category A tractors.'

Appendix 5 becomes Appendix 5a with the following amendments :

— The last value '28,0' in the last column is replaced by '31,0'

— The intermediary values '0' and '31,0' in the last column are deleted.

— Add the following new Appendix 5b after Appendix 5a :

*Appendix 5b*

Set-value signals for the test-stand testing of drivers' seats for category A tractors in class III (point 2.5.3.1.1)

PS = set point

a = amplitude of the set value signal in mm

t = measurement time in seconds

If the signal sequence is repeated for 701 points in the table, point 700 and 0 merge in time, with amplitude  $a = 0$ .

PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s
1	0	0,000	69	5	1,861	137	-20	3,722	205	-12	5,584
2	-3	0,027	70	-1	1,869	138	-23	3,750	206	-14	5,611
3	-0	0,055	71	-8	1,916	139	-22	3,777	207	-14	5,638
4	2	0,082	72	-14	1,943	140	-18	3,804	208	-12	5,666
5	4	0,109	73	-18	1,971	141	-11	3,832	209	-9	5,693
6	6	0,137	74	-19	1,998	142	-3	3,859	210	-4	5,720
7	6	0,164	75	-17	2,025	143	5	3,887	211	0	5,748
8	5	0,192	76	-13	2,053	144	13	3,914	212	5	5,775
9	3	0,219	77	-6	2,080	145	19	3,941	213	9	5,803
10	1	0,246	78	0	2,108	146	23	3,969	214	13	5,830
11	-0	0,274	79	8	2,135	147	23	3,996	215	15	5,857
12	-2	0,301	80	15	2,162	148	20	4,023	216	15	5,885
13	-4	0,328	81	19	2,190	149	14	4,051	217	13	5,912
14	-4	0,356	82	21	2,217	150	6	4,078	218	9	5,939
15	-4	0,383	83	19	2,244	151	-2	4,106	219	4	5,967
16	-2	0,411	84	15	2,272	152	-11	4,133	220	-1	5,994
17	-1	0,439	85	8	2,299	153	-17	4,160	221	-7	6,022
18	0	0,465	86	0	2,326	154	-21	4,188	222	-11	6,049
19	2	0,493	87	-7	2,354	155	-22	4,215	223	-15	6,076
20	3	0,520	88	-15	2,361	156	-20	4,242	224	-16	6,104
21	-4	0,547	89	-19	2,409	157	-14	4,270	225	-16	6,131
22	3	0,575	90	-21	2,436	158	-7	4,297	226	-12	6,158
23	1	0,602	91	-20	2,463	159	0	4,325	227	-7	6,186
24	0	0,630	92	-15	2,491	160	8	4,352	228	-1	6,213
25	-1	0,657	93	-8	2,518	161	14	4,379	229	4	6,240
26	-3	0,684	94	-0	2,545	162	18	4,407	230	10	6,268
27	-4	0,712	95	7	2,573	163	19	4,434	231	16	6,295
28	-4	0,739	96	14	2,600	164	17	4,461	232	17	6,323
29	-4	0,766	97	19	2,628	165	13	4,489	233	17	6,350
30	-2	0,794	98	21	2,655	166	7	4,516	234	14	6,377
31	-0	0,821	99	19	2,662	167	0	4,543	235	9	6,405
32	2	0,848	100	14	2,710	168	-6	4,571	236	3	6,432
33	4	0,876	101	7	2,737	169	-11	4,598	237	-3	6,459
34	6	0,903	102	-0	2,764	170	-14	4,626	238	-10	6,487
35	6	0,931	103	-8	2,792	171	-16	4,653	239	-15	6,514
36	6	0,958	104	-15	2,819	172	-14	4,680	240	-19	6,542
37	4	0,985	105	-19	2,847	173	-11	4,708	241	-19	6,569
38	1	1,013	106	-20	2,874	174	-6	4,735	242	-17	6,596
39	-1	1,040	107	-18	2,901	175	-1	4,762	243	-12	6,624
40	-4	1,067	108	-13	2,929	176	4	4,790	244	-6	6,651
41	-6	1,093	109	-5	2,956	177	8	4,817	245	1	6,678
42	-8	1,122	110	2	2,983	178	12	4,845	246	9	6,706
43	-8	1,150	111	10	3,011	179	13	4,872	247	16	6,733
44	-7	1,177	112	16	3,038	180	13	4,899	248	21	6,761
45	-4	1,204	113	20	3,055	181	11	4,927	249	22	6,783
46	-1	1,232	114	20	3,093	182	7	4,954	250	21	6,815
47	2	1,259	115	17	3,120	183	3	4,981	251	16	6,843
48	6	1,286	116	12	3,148	184	-1	5,009	252	9	6,870
49	8	1,314	117	5	3,175	185	-5	5,036	253	0	6,897
50	10	1,341	118	-3	3,202	186	-9	5,064	254	-8	6,925
51	10	1,369	119	-10	3,230	187	-11	5,091	255	-16	6,952
52	8	1,396	120	-17	3,257	188	-12	5,118	256	-22	6,979
53	4	1,423	121	-20	3,284	189	-12	5,146	257	-25	7,007
54	0	1,451	122	-21	3,312	190	-10	5,173	258	-24	7,034
55	-4	1,478	123	-18	3,339	191	-6	5,200	259	-20	7,062
56	-8	1,505	124	-13	3,367	192	-2	5,228	260	-13	7,089
57	-11	1,533	125	-6	3,396	193	1	5,255	261	-4	7,116
58	-13	1,560	126	2	3,421	194	5	5,283	262	5	7,144
59	-12	1,587	127	10	3,449	195	9	5,310	263	14	7,171
60	-9	1,613	128	16	3,476	196	11	5,337	264	24	7,198
61	-4	1,642	129	21	3,503	197	13	5,365	265	25	7,226
62	6	1,670	130	22	3,531	198	12	5,392	266	26	7,253
63	6	1,697	131	20	3,558	199	11	5,419	267	23	7,281
64	11	1,724	132	15	3,586	200	7	5,447	268	17	7,308
65	15	1,752	133	8	3,613	201	3	5,474	269	8	7,335
66	16	1,779	134	0	3,640	202	-0	5,501	270	-1	7,363
67	14	1,806	135	-8	3,668	203	-5	5,529	271	-11	7,390
68	11	1,834	136	-15	3,695	204	-9	5,556	272	-20	7,417

PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s
273	-26	7,445	341	-11	9,306	409	6	11,167	477	3	13,028
274	-27	7,472	342	-3	9,333	410	7	11,195	478	6	13,056
275	-25	7,500	343	4	9,361	411	7	11,222	479	6	13,083
276	-19	7,527	344	11	9,388	412	6	11,249	480	5	13,110
277	-11	7,554	345	16	9,415	413	4	11,277	481	4	13,138
278	-1	7,582	346	19	9,443	414	1	11,304	482	2	13,165
279	9	7,609	347	19	9,470	415	-1	11,331	483	0	13,193
280	18	7,636	348	16	9,498	416	-4	11,359	484	-0	13,220
281	24	7,664	349	11	9,525	417	-7	11,386	485	-1	13,247
282	27	7,691	350	4	9,552	418	-8	11,413	486	-2	13,275
283	26	7,718	351	-2	9,580	419	-8	11,441	487	-2	13,302
284	21	7,746	352	-9	9,607	420	-6	11,468	488	-1	13,329
285	13	7,773	353	-14	9,634	421	-4	11,496	489	-1	13,357
286	4	7,801	354	-17	9,662	422	-1	11,523	490	-0	13,384
287	-5	7,828	355	-18	9,689	423	1	11,550	491	0	13,412
288	-13	7,855	356	-16	9,717	424	4	11,578	492	1	13,439
289	-20	7,883	357	-12	9,744	425	7	11,605	493	1	13,466
290	-24	7,910	358	-7	9,771	426	8	11,632	494	1	13,494
291	-25	7,937	359	-1	9,799	427	8	11,660	495	0	13,521
292	-22	7,965	360	4	9,826	428	7	11,687	496	0	13,548
293	-17	7,992	361	9	9,853	429	5	11,715	497	-0	13,576
294	-9	8,020	362	13	9,881	430	2	11,742	498	-1	13,603
295	-1	8,047	363	16	9,908	431	-0	11,769	499	-1	13,630
296	7	8,074	364	15	9,935	432	-2	11,797	500	-1	13,659
297	14	8,102	365	14	9,963	433	-4	11,824	501	-1	13,685
298	20	8,129	366	10	9,990	434	-6	11,851	502	-1	13,713
299	22	8,156	367	5	10,018	435	-7	11,879	503	-1	13,740
300	22	8,184	368	-0	10,045	436	-6	11,906	504	-0	13,767
301	19	8,211	369	-5	10,072	437	-6	11,934	505	-0	13,795
302	13	8,239	370	-10	10,100	438	-4	11,961	506	0	13,822
303	6	8,266	371	-13	10,127	439	-3	11,988	507	1	13,849
304	-1	8,293	372	-15	10,154	440	-1	12,016	508	1	13,877
305	-9	8,321	372	-14	10,182	441	0	12,043	509	2	13,904
306	-15	8,348	374	-12	10,209	442	2	12,070	510	2	13,932
307	-19	8,375	375	-7	10,237	443	4	12,098	511	2	13,959
308	-20	8,403	376	-2	10,264	444	6	12,125	512	2	13,986
309	-19	8,430	377	2	10,291	445	7	12,152	513	1	14,014
310	-14	8,457	378	8	10,319	446	7	12,180	514	1	14,041
311	-8	8,485	379	11	10,346	447	7	12,207	515	0	14,068
312	-0	8,512	380	13	10,373	448	6	12,235	516	-0	14,096
313	6	8,540	381	13	10,401	449	4	12,262	517	-1	14,123
314	12	8,567	382	11	10,428	450	1	12,289	518	-1	14,151
315	16	8,594	383	7	10,456	451	-1	12,317	519	-2	14,178
316	18	8,622	384	2	10,483	452	-5	12,344	520	-2	14,205
317	16	8,649	385	-2	10,510	453	-8	12,371	521	-2	14,233
318	12	8,676	386	-7	10,538	454	-10	12,399	522	-2	14,260
319	6	8,704	387	-10	10,565	455	-11	12,426	523	-1	14,287
320	0	8,731	388	-11	10,592	456	-11	12,454	524	-1	14,316
321	-7	8,759	389	-11	10,620	457	-9	12,481	525	-1	14,342
322	-12	8,786	390	-8	10,647	458	-5	12,509	526	-0	14,370
323	-15	8,813	391	-5	10,674	459	-1	12,536	527	-0	14,397
324	-16	8,841	392	-0	10,702	460	3	12,563	528	0	14,424
325	-13	8,868	393	3	10,729	461	8	12,590	529	0	14,452
326	-8	8,895	394	7	10,757	462	11	12,618	530	1	14,479
327	-1	8,923	395	9	10,784	463	13	12,645	531	2	14,506
328	5	8,950	396	9	10,811	464	12	12,673	532	2	14,534
329	11	8,978	397	8	10,839	465	10	12,700	533	3	14,561
330	15	9,005	398	5	10,866	466	7	12,727	534	4	14,598
331	17	9,032	399	1	10,893	467	2	12,755	535	4	14,616
332	15	9,060	400	-2	10,921	468	-2	12,782	536	3	14,643
333	11	9,087	401	-6	10,949	469	-6	12,809	537	2	14,671
334	5	9,114	402	-7	10,975	470	-9	12,837	538	1	14,698
335	-2	9,142	403	-8	11,003	471	-10	12,864	539	-0	14,725
336	-9	9,169	404	-7	11,030	472	-10	12,891	540	-2	14,753
337	-15	9,196	405	-5	11,058	473	-8	12,915	541	-5	14,780
338	-18	9,224	406	-2	11,085	474	-5	12,946	542	-7	14,807
339	-19	9,261	407	0	11,112	475	-2	12,974	543	-8	14,835
340	-16	9,279	408	4	11,140	476	1	13,001	544	-8	14,862

PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s
545	- 7	14,890	613	- 3	16,741	681	14	18,612	749	- 9	20,473
546	- 5	14,917	614	2	16,776	682	13	18,639	750	-10	20,500
547	- 1	14,944	615	8	16,803	683	10	18,667	751	- 9	20,526
548	1	14,972	616	12	16,833	684	6	18,694	752	- 7	20,556
549	6	14,999	617	15	16,860	685	1	18,721	753	- 4	20,583
550	9	15,026	618	16	16,888	686	- 3	18,749	754	- 1	20,610
551	12	15,054	619	15	16,915	687	- 6	18,776	755	2	20,637
552	13	15,081	620	12	16,942	688	-11	18,804	756	5	20,665
553	11	15,109	621	8	16,970	689	-13	18,831	757	7	20,692
554	9	15,136	622	2	16,997	690	-13	18,858	758	8	20,719
555	4	15,163	623	- 2	17,024	691	-10	18,886	759	7	20,747
556	- 0	15,191	624	- 8	17,052	692	- 7	18,913	760	5	20,774
557	- 6	15,218	625	-12	17,079	693	- 3	18,940	761	2	20,802
558	-11	15,245	626	-14	17,107	694	1	18,968	762	- 1	20,829
559	-15	15,273	627	-15	17,134	695	4	18,996	763	- 4	20,856
560	-16	15,300	628	-14	17,161	696	7	19,022	764	- 7	20,884
561	-15	15,327	629	-11	17,189	697	8	19,050	765	- 9	20,911
562	-12	15,356	630	- 7	17,216	698	8	19,077	766	- 9	20,938
563	- 6	15,382	631	- 2	17,243	699	6	19,105	767	- 7	20,966
564	- 0	15,410	632	1	17,271	700	4	19,132	768	- 5	20,993
565	6	15,437	633	6	17,298	701	1	19,159	769	- 1	21,021
566	12	15,464	634	9	17,326	702	- 0	19,187	770	2	21,048
567	17	15,492	635	11	17,353	703	- 2	19,214	771	5	21,075
568	19	15,519	636	12	17,380	704	- 2	19,241	772	8	21,103
569	18	15,546	637	11	17,408	705	- 2	19,269	773	10	21,130
570	14	15,574	638	9	17,435	706	- 1	19,296	774	10	21,157
571	8	15,601	639	6	17,462	707	0	19,324	775	8	21,185
572	1	15,629	640	2	17,490	708	1	19,351	776	6	21,212
573	- 6	15,656	641	- 0	17,517	709	2	19,378	777	2	21,239
574	-12	15,683	642	- 3	17,544	710	2	19,406	778	- 1	21,267
575	-17	15,711	643	- 5	17,572	711	1	19,433	779	- 4	21,294
576	-19	15,738	644	- 6	17,599	712	- 0	19,460	780	- 7	21,322
577	-19	15,766	645	- 6	17,627	713	- 2	19,488	781	- 9	21,349
578	-15	15,793	646	- 6	17,654	714	- 5	19,515	782	- 9	21,376
579	-10	15,820	647	- 4	17,681	715	- 6	19,543	783	- 8	21,404
580	- 8	15,848	648	- 3	17,709	716	- 7	19,570	784	- 7	21,431
581	4	15,875	649	- 1	17,736	717	- 7	19,597	785	- 4	21,458
582	11	15,902	650	- 0	17,763	718	- 5	19,625	786	- 1	21,486
583	16	15,930	651	0	17,791	719	- 3	19,652	787	1	21,513
584	18	15,957	652	1	17,818	720	0	19,679	788	4	21,541
585	18	15,984	653	0	17,845	721	3	19,707	789	6	21,568
586	15	16,012	654	0	17,873	722	7	19,734	790	7	21,595
587	10	16,039	655	0	17,900	723	9	19,761	791	7	21,623
588	3	16,066	656	- 0	17,928	724	11	19,789	792	7	21,650
589	- 3	16,094	657	- 0	17,955	725	11	19,816	793	5	21,677
590	-10	16,121	658	- 0	17,982	726	10	19,844	794	3	21,705
591	-15	16,149	659	0	18,010	727	7	19,871	795	0	21,732
592	-17	16,176	660	1	18,037	728	3	19,898	796	- 1	21,760
593	-17	16,203	661	3	18,065	729	- 0	19,926	797	- 4	21,787
594	-15	16,231	662	4	18,092	730	- 4	19,953	798	- 5	21,814
595	-10	16,258	663	5	18,119	731	- 8	19,980	799	- 6	21,842
596	- 3	16,285	664	5	18,147	732	-11	20,008	800	- 5	21,869
597	2	16,313	665	5	18,174	733	-12	20,035	801	- 4	21,896
598	9	16,340	666	4	18,201	734	-12	20,063	802	- 2	21,924
599	14	16,368	667	2	18,229	735	-10	20,090	803	- 0	21,951
600	16	16,395	668	- 0	18,256	736	- 7	20,117	804	2	21,978
601	17	16,422	669	- 3	18,283	737	- 3	20,145	805	4	22,006
602	14	16,450	670	- 6	18,311	738	0	20,172	806	5	22,033
603	10	16,477	671	- 9	18,339	739	5	20,199	807	5	22,061
604	5	16,504	672	-10	18,366	740	8	20,227	808	4	22,088
605	- 1	16,532	673	-10	18,393	741	11	20,254	809	3	22,115
606	- 7	16,559	674	- 9	18,420	742	12	20,282	810	0	22,143
607	-12	16,587	675	- 6	18,448	743	11	20,309	811	- 1	22,170
608	-15	16,614	676	- 3	18,475	744	9	20,336	812	- 3	22,197
609	-16	16,641	677	1	18,502	745	6	20,364	813	- 5	22,225
610	-16	16,669	678	6	18,530	746	1	20,391	814	- 6	22,252
611	-13	16,696	679	10	18,557	747	- 2	20,418			
612	- 8	16,728	680	12	18,585	748	- 6	20,446			

PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s	PS No	a mm	t s
815	- 5	22,280	867	-16	23,703	919	4	25,126	972	- 2	26,577
816	- 4	22,307	868	-12	23,730	920	8	25,153	973	0	26,604
817	- 3	22,334	869	- 7	23,758	921	11	25,181	974	3	26,631
818	- 0	22,362	870	- 1	23,785	922	12	25,208	975	6	26,659
819	1	22,389	871	4	23,812	923	11	25,236	976	9	26,686
820	4	22,416	872	9	23,840	924	9	25,263	977	10	26,714
821	5	22,444	873	12	23,867	925	4	25,290	978	11	26,741
822	6	22,471	874	14	23,894	926	- 0	25,318	979	10	26,768
			875	13	23,922	927	- 5	25,345	980	8	26,796
824	6	22,526	876	11	23,949	928	- 9	25,372	981	5	26,823
825	5	22,553	877	7	23,977	929	-12	25,400	982	1	26,850
826	3	22,581	878	2	24,004	930	-13	25,427	983	- 3	26,878
827	0	22,608	879	- 1	24,031	931	-12	25,455	984	- 7	26,905
828	- 2	22,635	880	- 6	24,059	932	- 9	25,482	985	-10	26,933
829	- 4	22,663	881	- 9	24,086	933	- 5	25,509	986	-12	26,960
830	- 7	22,690	882	-11	24,113	934	- 0	25,537	987	-13	26,987
831	- 8	22,717	883	-11	24,141	935	4	25,564	988	-12	27,015
832	- 9	22,745	884	- 9	24,168	936	8	25,591	989	-10	27,042
833	- 8	22,772	885	- 6	24,196	937	11	25,619	990	- 6	27,069
834	- 7	22,800	886	- 3	24,223	938	13	25,645	991	- 2	27,097
835	- 4	22,827	887	0	24,250	939	13	25,674	992	2	27,124
836	- 1	22,854	888	4	24,278	940	11	25,701	993	6	27,152
837	2	22,882	889	7	24,305	941	7	25,728	994	10	27,179
838	6	22,909	890	9	24,332	942	3	25,756	995	12	27,206
839	9	22,936	891	9	24,360	943	- 1	25,783	996	14	27,234
840	11	22,964	892	8	24,387	944	- 5	25,810	997	13	27,261
841	12	22,991	893	6	24,414	945	- 8	25,839	998	11	27,288
842	11	23,019	894	3	24,442	946	-10	25,855	999	8	27,316
843	9	23,046	895	- 0	24,469	947	-11	25,892	1 000	3	27,343
844	5	23,073	896	- 3	24,497	948	-10	25,920	1 001	- 0	27,370
845	0	23,101	897	- 6	24,524	949	- 8	25,947	1 002	- 5	27,399
846	- 5	23,128	898	- 8	24,551	950	- 6	25,975	1 003	- 9	27,426
847	- 9	23,155	899	- 9	24,579	951	- 2	26,002	1 004	-12	27,453
848	-13	23,183	900	- 8	24,606	952	0	26,029	1 005	-13	27,480
849	-15	23,210	901	- 6	24,633	953	3	26,057	1 006	-13	27,507
850	-15	23,238	902	- 2	24,661	954	5	26,084	1 007	-11	27,535
851	-13	23,265	903	0	24,688	955	7	26,111	1 008	- 7	27,562
852	- 9	23,292	904	4	24,716	956	8	26,139	1 009	- 2	27,589
853	- 3	23,320	905	7	24,743	957	8	26,166	1 010	1	27,617
854	3	23,347	906	8	24,770	958	7	26,194	1 011	6	27,644
855	9	23,374	907	9	24,798	959	6	26,221	1 012	9	27,672
856	14	23,402	908	7	24,825	960	4	26,248	1 013	11	27,699
857	18	23,429	909	5	24,852	961	2	26,276	1 014	12	27,726
858	18	23,457	910	1	24,880	962	0	26,303	1 015	10	27,754
859	16	23,484	911	- 2	24,907	963	- 2	26,330	1 016	8	27,781
860	12	23,511	912	- 6	24,935	964	- 4	26,358	1 017	4	27,808
861	5	23,539	913	- 8	24,962	965	- 5	26,385	1 018	0	27,836
862	- 1	23,566	914	-10	24,989	966	- 6	26,413	1 019	- 3	27,863
863	- 7	23,593	915	- 9	25,017	967	- 7	26,440	1 020	- 6	27,891
864	-13	23,621	916	- 7	25,044	968	- 7	26,467	1 021	- 8	27,918
865	-16	23,648	917	- 3	25,071	969	- 7	26,495	1 022	- 9	27,945
866	-17	23,675	918	0	25,099	970	- 6	26,522	1 023	- 8	27,973
						971	- 4	26,549	1 024	0	28,000