

21C problem resolution for VCR with built in calendar for year range 1991 to 2005

Year	Year Type	Leap Year?	1 January falls on	Equivalent year
1984	8	yes	Sun	
1985	3	no	Tues	
1986	4	no	Wed	
1987	5	no	Thurs	
1988	13	yes	Fri	
1989	1	no	Sun	
1990	2	no	Mon	
1991	3	no	Tues	(A)
1992	11	yes	Wed	(A)
1993	6	no	Fri	(A)
1994	7	no	Sat	(A)
1995	1	no	Sun	(A)
1996	9	yes	Mon	(A)
1997	4	no	Wed	(A)
1998	5	no	Thurs	(A)
1999	6	no	Fri	(A)
2000	14	yes	Sat	(A)
2001	2	no	Mon	(A)
2002	3	no	Tues	(A)
2003	4	no	Wed	(A)
2004	12	yes	Thurs	(A)
2005	7	no	Sat	(A)
2006	1	no	Sun	1995
2007	2	no	Mon	2001
2008	10	yes	Tues	1991/1997
2009	5	no	Thurs	1998
2010	6	no	Fri	1999
2011	7	no	Sat	1994
2012	8	yes	Sun	1995/2001
2013	3	no	Tues	1991
2014	4	no	Wed	1997
2015	5	no	Thurs	1998
2016	13	yes	Fri	1993/1994
2017	1	no	Sun	1995
2018	2	no	Mon	2001
2019	3	no	Tues	1991
2020	11	yes	Wed	1992
2021	6	no	Fri	1993
2022	7	no	Sat	1994
2023	1	no	Sun	1995
2024	9	yes	Mon	1996
2025	4	no	Wed	1997
2026	5	no	Thurs	1998
2027	6	no	Fri	1999
2028	14	yes	Sat	2000
2029	2	no	Mon	2001
2030	3	no	Tues	2002
2031	4	no	Wed	2003
2032	12	yes	Thurs	2004
2033	7	no	Sat	2005
2034	1	no	Sun	
2035	2	no	Mon	
2036	10	yes	Tues	
2037	5	no	Thurs	
2038	6	no	Fri	
2039	7	no	Sat	
2040	8	yes	Sun	
2041	3	no	Tues	
2042	4	no	Wed	
2043	5	no	Thurs	
2044	13	yes	Fri	
2045	1	no	Sun	
2046	2	no	Mon	
2047	3	no	Tues	
2048	11	yes	Wed	
2049	6	no	Fri	
2050	7	no	Sat	
2051	1	no	Sun	
2052	9	yes	Mon	
2053	4	no	Wed	
2054	5	no	Thurs	
2055	6	no	Fri	
2056	14	yes	Sat	
2057	2	no	Mon	
2058	3	no	Tues	
2059	4	no	Wed	
2060	12	yes	Thurs	
2061	7	no	Sat	
2062	1	no	Sun	
2063	2	no	Mon	

Year Type	Leap Year?	Start Day	End Day
1	no	Sun	Sun
2	no	Mon	Mon
3	no	Tues	Tues
4	no	Wed	Wed
5	no	Thurs	Thurs
6	no	Fri	Fri
7	no	Sat	Sat
8	yes	Sun	Mon
9	yes	Mon	Tues
10	yes	Tues	Wed
11	yes	Wed	Thurs
12	yes	Thurs	Fri
13	yes	Fri	Sat
14	yes	Sat	Sun

Explanation

1. The shaded area "A" represents the calendar year range that is programmed into my VCR by the manufacturer (1991 to 2005). The VCR does not support dates beyond 2005. Therefore I have to improvise for dates beyond 2005 to be able to record material automatically.
2. The second shaded area represents the year range (2019 to 2033) that exactly replicates the calendar range programmed into my VCR. So, when 2019 comes around, I reset the calendar date to 1991 and my VCR will continue to represent dates correctly (but for the year of course) until 2033.
3. That just leaves the year range 2006 to 2018 to work out what to do about. However, I note that the calendar for 2006 is the same as that for 1995. So when 1 January 2006 comes round, I must manually reset the date on my VCR to 1 January 2005. Similarly for 2007, I must manually reset the VCR's date to 2001 and so on on a yearly basis until 2018.
4. However, for the years 2008, 2012 and 2016 there is no equivalent calendar in the range 1991 to 2005. What I need to do therefore is select a calendar for the date range 1 January to 28 February in each year that starts on the same day to this year and then select a second calendar for the period 1 March to 31 December that ends with the same day. For example, year 2008 starts on a Tuesday and finishes on a Wednesday (it's a leap year of course). The year 1991 starts on a Tuesday and the year 1997 finishes on a Wednesday. So I use:
 - > for 1 January to 28 February 2008 the calendar for 1991.
 - > for 1 March to 31 December 2008 the calendar for 1997.

For 29 February 2008 I have no available calendar in my VCR. I cannot record material automatically on this date. And similarly for 2012 and 2016.
5. Beyond 2033 I must repeat this entire process!