

RECOMMENDED BELT TENSIONS

Improperly tensioned belts can cause slippage, squealing, heat build-up, and premature failure. Dayco® engineers recommend specific guidelines be followed when tensioning new and/or used drive belts. When installing new drive belts, it is important to tension the belt to its specified tension, then after 3 to 5 minutes of engine “run-in,” retension the belt to compensate for the loss of tension due to the belt “seating” into the pulleys. The guidelines for the new belt installation tension and retension amounts are given below.

NOTE: The chart below shows the recommended installation tension and retension amounts for locked-center drive applications. **For automatic tensioner applications, NO tension recommendations are required, as the tensioner designed for the drive will supply the proper amount of tension.**

Recommended Tensioning Levels for Locked-Center Drive Applications

	Belt Size SAE / Dayco® Series			New Belt Installation Tension Lbs.	Retension Amount (after 3-5 min run-in) Lbs.	Used Belt Tension (measured after belt cools) Lbs.
	IN	METRIC	DAYCO			
V-BELTS	1/4	6A	09	90	70	45
	5/16	8A	11	110	90	50
	3/8	10A	13	140	112	65
	7/16	11A	15	150	120	70
	1/2	13A	17	160	128	75
	11/16	15A	22	175	140	80
	3/4	17A	24	190	152	90
	7/8	20A	28	200	160	90
POLY-V BELTS		3K	3PK	105	90	45
		4K	4PK	140	120	60
		5K	5PK	175	150	75
		6K	6PK	210	180	90
		7K	7PK	245	210	105
		8K	8PK	280	240	120

- The **used belt tension** is the amount of tension that would be maintained under normal drive conditions by the given belt size. If the tension drops below the used belt tension, the belt should be re-tensioned according to the **retension amount**. If the belt is shown to be worn, either caused by excessive slipping or long term operation, it is recommended that the belt be **replaced**.
- It is important that the belt **completely cools prior to measuring and retensioning the belt**.
- If a “run-in” is not feasible, a minimum of 3 belt revolutions is required to “seat” the belt into the pulleys. Once seated, **retension** the belt to the recommended amount.
- For “banded belts”, the recommended tension is found by multiplying the new belt installation tension value provided above of the same belt type, by the number of belts banded together.