

2021-2022 Freightliner/Mercedes-Benz Sprinter 2500-4500 2.0L I4 Diesel w/-w/o A/C, w/o Mercedes-Benz N62 or N63 Options

> Requires 6-Groove Pulley For use w/ Vortec 92V Style Alternator 375% Overdrive Ratio w/ 2" Diameter Pulley

Wrenches are available and suggested for removal and retorquing the harmonic balancer bolts. PART# VFL26WR-1 & VFL26WR-2.

These are sold separately.

INSTALLATION NOTES

- 1. The buyer is responsible for providing trained and experienced installation decision making with technical know-how to apply professional judgment that specifically applies to each individual installation.
- 2. Be sure to read and understand all available information including but not limited to instructions, warnings, sale terms, and warranties for the vehicle and all system components prior to attempting installation.
- 3. Disconnect the negative battery cable. Battery is located in the floor behind the driver's seat. Remove the grill and front bumper cover from the vehicle. Remove electric fans to gain access to the charge air cooler bolts. Disconnect the two charge air tubes from the charge air cooler and remove the cowling from the charge air cooler. Remove it from the vehicle.
- 4. Rotate the tensioner to release tension on the belt and remove the belt. A four-millimeter (4mm) pin can be installed in the tensioner arm to hold it open. Remove the OEM belt from the engine (retain as it will be reused).
- 5. If your vehicle is equipped without Mercedes-Benz N62 or N63 style of OEM damper pulley follow instructions 5a (see image(s) below). If your vehicle is equipped with Mercedes-Benz N62 or N63 style of OEM damper pulley follow instructions 5b (see image(s) below):
 - a. Remove the four bolts holding the pulley to the crankshaft (can use VFL26WR-1). Install drive pulley (1) with bolts (3) onto the front of the OEM damper pulley (can use VFL26WR-2). <u>Make certain the</u> <u>alignment bushings in the damper pulley are inserted properly into the front of the crankshaft.</u> Do not use drive pulley adaptor (2). Tighten pulley bolts (3) in the following steps:
 - i. Step 1: 10ft/lbs.
 - ii. Step 2: 35ft/lbs.
 - iii. Step 3: 60ft/lbs.
 - iv. Step 4: 90ft/lbs.
 - b. Remove the four bolts holding the OEM auxiliary accessory component drive pulley and the OEM damper pulley to the crankshaft. Remove the two outside guide pins from the OEM damper pulley (should easily pull out of the OEM damper pulley). Install the add-on drive pulley (1) with the drive pulley adaptor (2) as shown in the parts list onto the front of the OEM damper pulley with bolts (3) (can use VFL26WR-2). Make sure the add-on drive pulley (1) and the drive pulley adaptor (2) are seated properly onto the pilot of the OEM damper pulley. Make certain the alignment bushings in the damper pulley are inserted properly into the front of the crankshaft. Tighten pulley bolts (2) in the following steps:
 - i. Step 1: 10ft/lbs.
 - ii. Step 2: 35ft/lbs.
 - iii. Step 3: 60ft/lbs.
 - iv. Step 4: 90ft/lbs.
- 6. Using the 3/8"-16 tap (13) supplied with the kit, tap the hole out [C] (idler bushing (17) can be used as a guide to help start the tap straight).



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INSTALLATION NOTES (CONTINUED)

- 7. Remove the two lower OEM alternator bolts. Install bracket (4) onto the oil pan with bolts (7) at location [B], bolts (8) with brace (6) at location [A], and the two lower OEM alternator hole location (do not tighten bolts at this time). Install FEAD brace (9) onto the engine with mounting hardware (11-12) at location [C] and bolts (10) to the front of bracket (4). With all the bolts installed, lightly tighten the bolts in this order: First, tighten bolt (11). Then, tighten bolts (10). Finally, tighten bolts (7), bolts (8), and the two lower OEM alternator bolts. Now torque bolts (7, 8, and 11) to 24ft/lbs., and torque bolt (10) to 30ft/lbs.
- 8. Reinstall the OEM belt back to its original routing.
- 9. Install the smooth idler pulley assembly (16-19) onto the front of brace (9) as shown in the illustration. Install tensioner (14) with bolt (15). Install the auxiliary alternator with mounting hardware (20). Install the auxiliary alternator belt (21) as shown in the illustration.
- 10. Reinstall the charge air cooler and cowling with original bolts. Connect the two charge air hoses. Replace the front grill and bumper cover with original hardware. Make certain all sensors and lights are reconnected properly. Reconnect the negative battery cable.

<u>CAUTION:</u> Before starting the engine, check to make certain no wires, hoses, etc. that may have been disturbed during installation do not come in contact with any hot or moving parts. Properly refill any fluids that may have been drained. Check for leaks. Run the engine and check for proper belt tracking and clearance of any hoses, wires, etc. It is the installer's responsibility to correct/adjust any components, if necessary, before the vehicle is put into service.

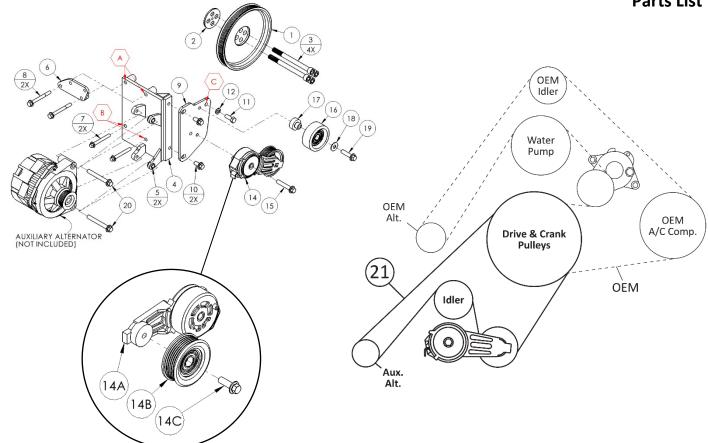
CW Mill Equipment Co., Inc. 14 Commerce Drive Sabetha, KS 66534 Phone: (785) 284-3454 Fax: (785) 284-3601 Email: brackets@cwmill.com Website: www.cwkits.com

VFLMK2692V-6-7.5

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Parts List



PARTS LIST									
Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.		
Add-on Drive Pulley				Tensioner Assembly					
1	VFLPC266-7.5	Add-on Drive Pulley (7.5" Diameter)	1	14	89203-051	Custom Assembled Tensioner	1		
Add-on Drive Pulley Adaptor (Vehicle Application Specific)			14a	89203	Dayco Tensioner Arm	1			
2	VFLPA26	Add-on Drive Pulley Adaptor	1	14b	89051	Dayco 6-Groove Idler Pulley	1		
Add-on Drive Pulley Mounting Hardware				14c	N/A	OEM Dayco 89203 Idler Pulley Bolt	1		
3	1022525	M12-1.5 x 140mm 12.9Gr P/T SHCS	4	15	1018225	M10-1.5 x 55mm 10.9Gr Hex Flg. Bolt	1		
Auxiliary Alternator Mounting Bracket				Smooth Idler Pulley Assembly					
4	VFLMP2692V-6	Auxiliary Alternator Mounting Bracket	1	16	89007	Dayco Smooth Idler Pulley	1		
5	1011888AM	Modeified M14 Slide Bushing (M .500) (Installed)	2	17	VDMB306	Machined Idler Bushing (1-1/4" Diameter)	1		
Auxiliary Alternator Mounting Bracket Support Brace				18	1007644	3/8" USS Flat Washer	1		
6	VFLMB241	Support Brace (Attaches to OEM Alternator)	1	19	1006933	M10-1.5 x 40mm 10.9Gr Hex Flg. Bolt	1		
Auxiliary Alternator Mounting Bracket Mounting Hardware				Auxiliary Alternator Mounting Hardware					
7	1022522	M8-1.25 x 65mm 10.9Gr Hex Flg. Bolt	2	20	1006928	M10-1.5 x 80mm 10.9Gr Hex Flg. Bolt	2		
8	1022529	M8-1.25 x 75mm 10.9Gr Hex Flg. Bolt	2	Belt (Only One Belt is Supplied)					
Auxiliary Alternator FEAD Brace				21	5060548	Dayco 6-Groove 54.8" Belt	1		
9	VFLMB261	Auxiliary Alternator FEAD Brace	1		K060547	Gates 6-Groove 54.7" Belt	1		
Auxiliary Alternator FEAD Brace Mounting Hardware					6PK1395	Bando 6-Groove 1395mm Belt	1		
10	1008390	M10-1.5 x 20mm 10.9Gr Hex Flg. Bolt	2						
11	1005274	3/8"-16 x 1" NC Gr5 Hex Bolt	1						
12	1010315	3/8" MED Lock Washer	1						
13	1011737A	3/8"-16 NC Tap (Not Shown)	1						



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OEM Crank Pulley Applications



Without Mercedes-Benz N62 or N63 OEM Crank Pulley

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OEM Crank Pulley Applications







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Mounting Locations



Mounting Locations [A,B]



Mounting Location [C]

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INSTALLER'S NOTES / DISCLAIMER

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CW Mill Equipment Co., Inc. Mounting Kit and Mounting Kit Component Disclaimer: (1.) Due to the custom nature and variation of all add-on systems of this type, no complete system kits are offered by the manufacturer, and any group of parts marketed as a kit is limited to only the individually defined parts in that specific kit. The system designer's rotating accessory components are not included, offered, or fully known by the manufacturer. In addition to the absence of the rotating accessory system, other potential components such as additional clamps, brackets, wear liners, hardware, or other items that may be required by the system designer must be identified and supplied by the actual system designer. (2.) Due to vehicle manufacturer's assembly tolerances, production changes, and installation variances, it is the buyer's responsibility to ensure adequate clearance for all components including space for and safe location of the fan, radiator, all lines, and wires. Check for possible movement, vibration, friction points, heat exposure and/or shifting of any and all components such as hoses, wires, and all other components including those that may otherwise be considered non-moving and/or unaffected by the installation (3.) The buyer is responsible for the entire installation of a mounting kit as the mounting kit is part of a custom process controlled by the buyer through their whole system design and directed installer as the installer evaluates, locates, routes, aligns, and tightens all components while determining if additional clamps, brackets, wear-liners, or other components may be required, beyond those included in the kit. Any additional items required, beyond those included in the kit, are to be provided at the expense of the buyer. (4.) The buyer is responsible for the development and communication of their whole system installation procedures, safety precautions, application, and use of the engine accessory mounting kit in their system, including efforts to maintain vehicle control and prevent pinch, wear, impact, and/or burn exposure on all hoses, wires, and other parts. (5.) The buyer is responsible for providing trained and experienced installation decision making with technical know-how to apply professional judgment that specifically applies to each individual installation. The buyers chosen installers must be qualified and experienced technicians that are familiar with the vehicle and accessory being mounted as well as the buyer's whole system design and installation procedures associated with the kit. (6.) The buyer is responsible for determining and achieving compliance to all regulatory issues that apply to the use of all products. (7.) The manufacturer reserves the right to make changes and/or improvements to any product at any time with or without notice.