



**VFK241J180-I6**  
2021-2023 Ford E-350-E-450 Cutaway Van  
7.3L V8 Gas w/ A/C, w/o OEM Dual Alternators

Requires 6-groove Pulley  
For use w/ J180-Style Alternator

## 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, sales terms, and warranties for the vehicle and all system components prior to attempting installation.
3. Disconnect negative battery cable. For easy access, drain radiator low enough for removal of upper radiator hose (does not have to be done for installation).
4. Remove air cleaner box assembly. Cut box as shown. Remove fan clutch wire and bracket from engine. Remove belt. Disconnect alternator wires and remove alternator. Remove OEM alternator bracket and bolts (discard).
5. Install new bracket (1) with mounting hardware (3-4).  
**NOTE:** Install bolt into bracket hole closest to water pump before installing bracket.
6. Install wire extension (16) and heat shrink (17) to alternator wire with hardware (18-19). Install alternator with mounting hardware (8-9). Wires will go behind the bracket.
7. Remove tube off of air duct and engine. Cut plastic hose off and install rubber hose (21) with clamps (22) as shown. Install back onto the engine.
8. Install smooth idler pulley assemblies (5-7) onto main bracket (1). Install auxiliary alternator onto main bracket (1) with mounting hardware (10-15) Install belt (23).
9. Reinstall fan wire and bracket. If removed, reinstall upper radiator hose and fill coolant.
10. Install air cleaner bracket (2) then the air cleaner box as shown. Add hardware (20).

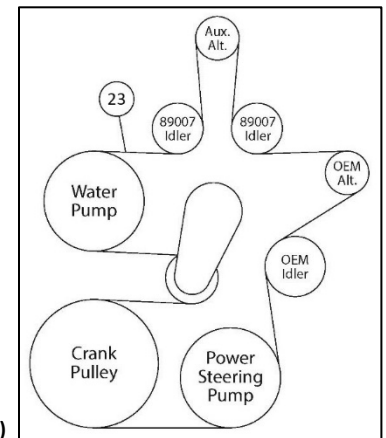
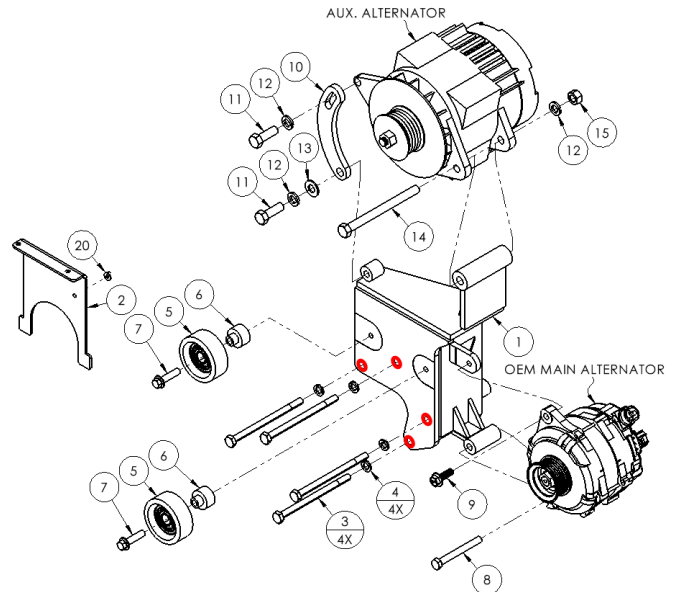
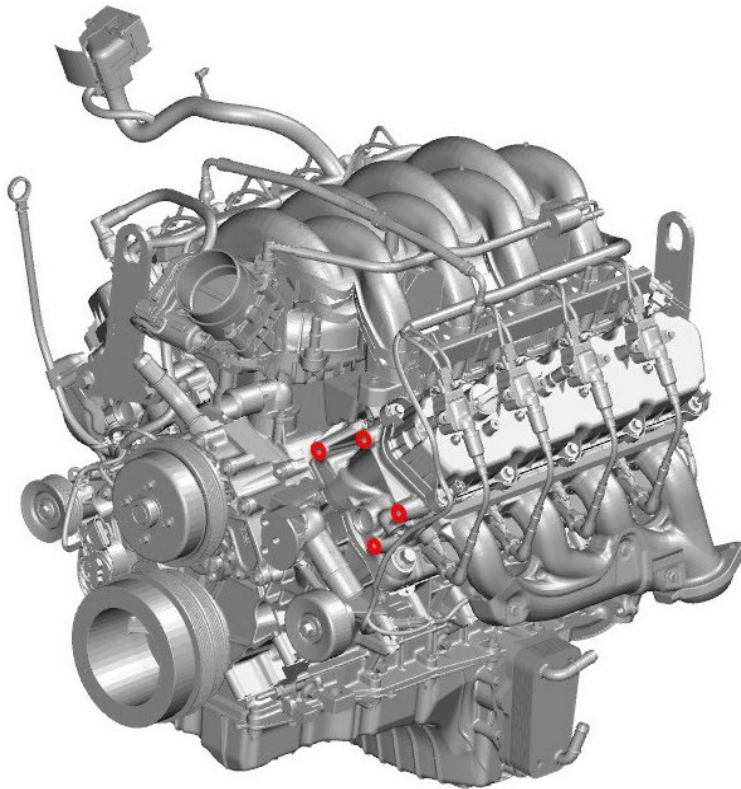
**NOTE:** Check for any water leaks and any hoses or wires that were disturbed during installation do not come in contact with any hot or moving parts. Run engine and check for proper belt tracking.

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.

# VFK241J180-I6

2021-2023 Ford E-350-E-450 Cutaway Van  
 7.3L V8 Gas w/ A/C, w/o OEM Dual Alternators

Requires 6-groove Pulley  
 For use w/ J180-Style Alternator



Belt Routing (23)

PARTS LIST							
Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
<b>Main Bracket</b>				12	1010318	1/2" Lock Washer	3
1	VFMB241J180-I6	Main Bracket	1	13	1006931	1/2" Flat Washer	1
<b>Air Cleaner Bracket</b>				14	1006120	1/2"-13 x 6" NC Gr5 Hex Bolt	1
2	VFMB241-2	Air Cleaner Bracket	1	15	1018231	1/2"-13 NC Gr5 Hex Nut	1
<b>Main Bracket Mounting Hardware</b>				<b>Wire Extension (Not Shown)</b>			
3	1005275	M10-1.5 x 150mm 10.9Gr Hex Bolt	4	16	FMB241WE	Wire Extension	1
4	1003822	M10 Lock Washer	4	17	1005393	Heat Shrink	3"
<b>Smooth Idler Pulley Assembly (2x)</b>				18	1011623	M8-1.25 x 12mm 10.9Gr Hex Flg. Bolt	1
5	89007	Dayco Smooth Idler Pulley	2	19	1013333	M8-1.25 10.9Gr Hex Flg. Nut	1
6	FMB241-1	Machined Idler Pulley Bushing	2	<b>Emissions Hose Hardware</b>			
7	1006933	M10-1.5 x 40mm 10.9Gr Hex Flg. Bolt	2	20	1016331	M6-1.0 10.9Gr Hex Flg. Nut	1
<b>OEM Alternator Mounting Hardware</b>				21	1010299	5/8" Rubber Hose	22"
8	N/A	OEM M10-1.5 x 90mm Hex Bolt	1	22	1018276	#8 Hose Clamp	2
9	1006927	M10-1.5 x 30mm 10.9Gr Hex Flg. Bolt	1	<b>Belt (Only One Belt is Supplied)</b>			
<b>Auxiliary Alternator Mounting Hardware</b>				23	5060990	Dayco 6-Groove 99.0" Belt	1
10	VFMB241J180-1	J180 Alternator Slide	1		K060990	Gates 6-Groove 99.0" Belt	1
11	1013337	1/2"-13 x 1-1/2" NC Gr5 Hex Bolt	2				

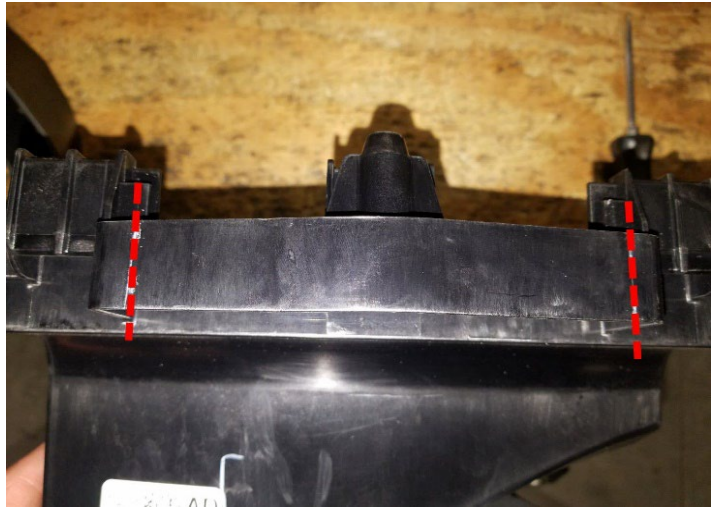
**CW** **CW Mill Equipment Co., Inc.**  
14 Commerce Drive Sabetha, KS 66534  
Phone: (785) 284-3454  
Fax: (785) 284-3601  
Email: brackets@cwmill.com  
**MOUNTING KITS** Website: [www.cwkits.com](http://www.cwkits.com)

# VFK241J180-I6

2021-2023 Ford E-350-E-450 Cutaway Van  
7.3L V8 Gas w/ A/C, w/o OEM Dual Alternators

Requires 6-groove Pulley  
For use w/ J180-Style Alternator

Air Cleaner Box Assembly (Cut at Red Lines)



Air Cleaner Box Assembly (Cut at Red Lines)



Air Cleaner Box Assembly



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

# VFK241J180-I6

2021-2023 Ford E-350-E-450 Cutaway Van  
7.3L V8 Gas w/ A/C, w/o OEM Dual Alternators

Requires 6-groove Pulley  
For use w/ J180-Style Alternator



Emissions Hose Assembly