



## VMK20SD508-6

2023-2024 Mercedes-Benz Sprinter 2500-4500  
2.0L 14 Diesel w/-w/o A/C, w/o Mercedes-Benz N62 or N63 Options

Requires 6 or 8-Groove, 119mm Diameter Clutch  
For use w/ TM13, TM15 or TM16 Ear Mount Compressor  
135% Overdrive Ratio w/ 119mm Diameter Clutch

**A wrench is available and suggested for removal and retorquing of the crank pulley bolts. PART# VM20WR-1.  
This is sold separately.**

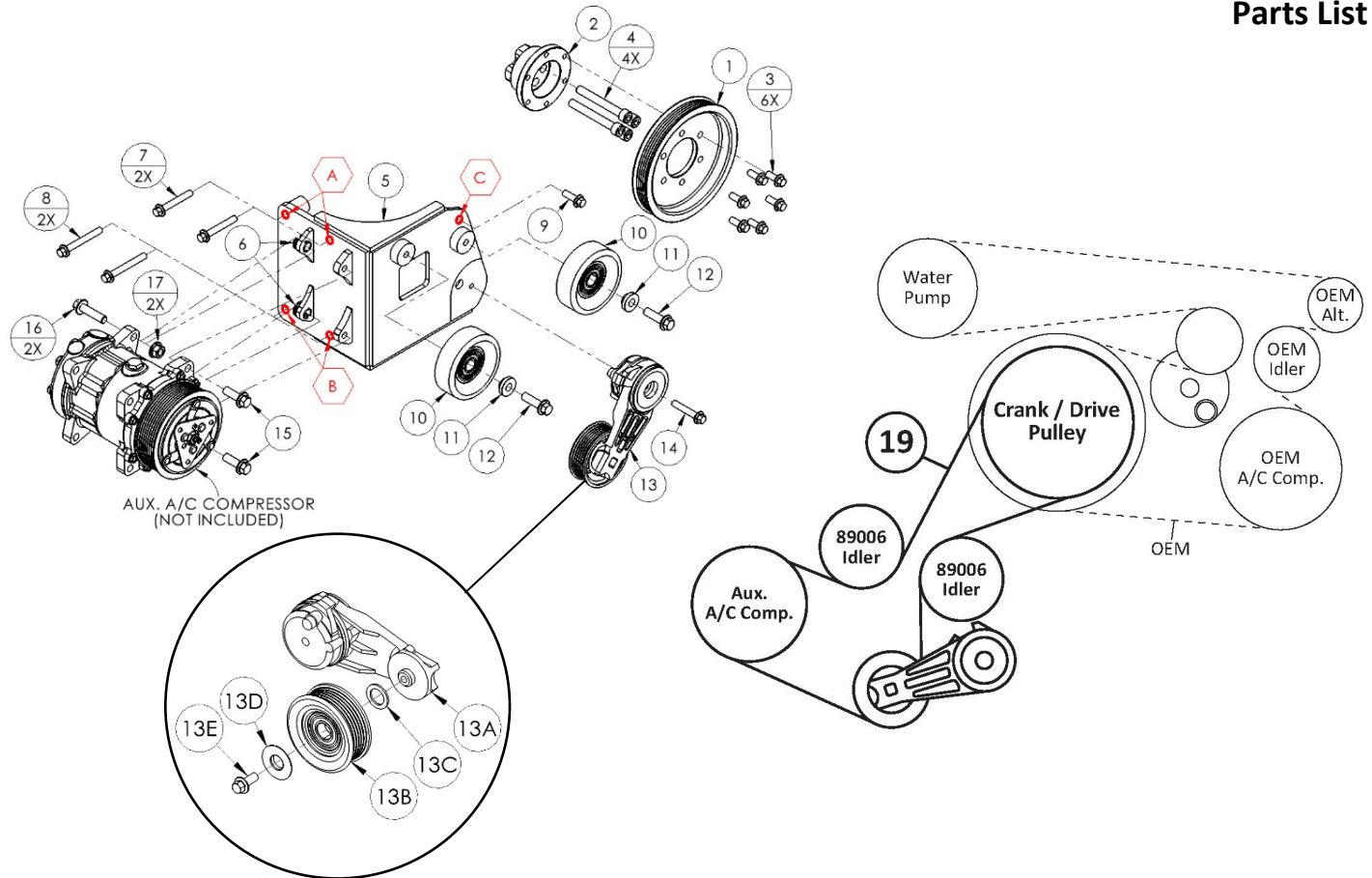
### INSTALLATION NOTES

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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. If necessary, allow the engine to cool down before proceeding. To make the add-on pulley installation easier, it is best to drain the engine coolant and remove the plastic portion of the lower radiator hose that is covering the front of the crank pulley.
4. With the lower radiator hose out of the way, remove the plastic dust cap from the crank pulley. It will not be reused. Use the wrench to hold the engine from turning by placing two of the countersunk bushings over two of the crank pulley bolts. Loosen the exposed bolt. Do not completely remove the loosened bolt from the crank pulley for now. With the bolt loose, move the tool to two other bolts and repeat this until all four bolts are loose. Remove all four bolts at this time. They will not be reused.
5. Attach the other end of the wrench to the add-on drive pulley adaptor (2) using two bolts (3) provided in the kit. Install the add-on drive pulley adaptor (2) with bolts (4). Run all bolts in until snug. Torque bolts in a crossing pattern at the torque specs below:
  - a. Step 1: 30 ft/lbs.
  - b. Step 2: 50 ft/lbs.
  - c. Step 3: 70 ft/lbs.
6. Install the add-on drive pulley (1) to the add-on drive pulley adaptor (2) using bolts (3). Torque to 25 ft/lbs.
7. Install the main bracket (5) onto the engine oil pan with bolts (7) at location [A], bolts (8) at location [B], and bolt (9) at location [C]. Make sure the bracket is touching all location before tightening. Grind off any areas that might be causing the bracket to not mount up properly. Torque bolts to 24 ft/lbs.
8. Install smooth idler pulleys (10) with bolts (12) and alignment bushings (11) onto the main bracket (1).
9. Install the tensioner assembly (13) onto the main bracket (1) with bolt (14).
10. Install the auxiliary A/C compressor onto the main bracket (1) with mounting hardware (15-17).
11. Install the serpentine belt (19) as shown in the diagram. On 8-groove clutches the belt will run in the middle 6-grooves of the clutch.
12. Replace the lower radiator hose, and use spacer (18) at the mounting location of the lower radiator hose to space it forward for clearance to the drive pulley. Replace the engine coolant.

**CAUTION:** 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.

## Parts List



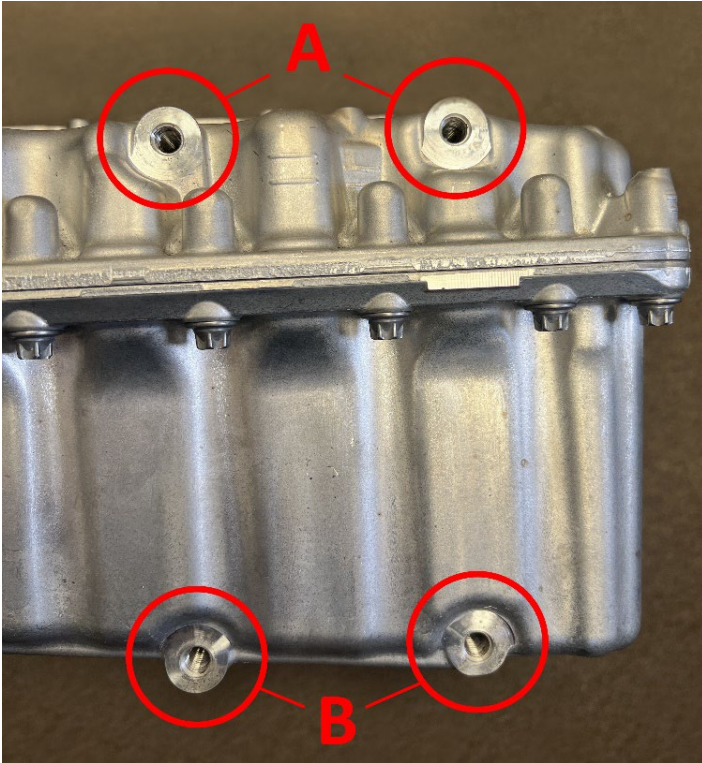
PARTS LIST							
Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
<b>Add-on Drive Pulley</b>				<b>Tensioner Assembly</b>			
1	VMPC206-6.5	Add-on Drive Pulley (6.25" Dia. of Grooves)	1	13	89364-051A	Custom Assembled Tensioner	1
<b>Add-on Drive Pulley Adaptor</b>				13a	89364	Dayco Tensioner Arm	1
2	VMPA20	Add-on Drive Pulley Adaptor	1	13b	89051	Dayco 6-Groove Idler Pulley	1
<b>Add-on Drive Pulley Mounting Hardware</b>				13c	1022570	Custom Spacer	1
3	1013329	M8-1.25 x 20mm 10.9Gr Hex Flg. Bolt	6	13d	N/A	OEM Dayco 89364 Dust Cover	1
<b>Add-on Drive Pulley Adaptor Mounting Hardware</b>				13e	N/A	OEM Dayco 89364 Idler Pulley Bolt	1
4	1022569	M10-1.0 x 80mm 12.9Gr SHCS	4	14	1022567	M8-1.25 x 45mm 10.9Gr Hex Flg. Bolt	1
<b>Auxiliary A/C Compressor Mounting Bracket</b>				<b>Auxiliary A/C Compressor Mounting Hardware</b>			
5	VMP20SD508-6	Auxiliary A/C Compressor Mounting Bracket	1	15	1006927	M10-1.5 x 30mm 10.9Gr Hex Flg. Bolt	2
6	1011888A	M14 Slide Bushing (Installed)	2	16	1006933	M10-1.5 x 40mm 10.9Gr Hex Flg. Bolt	2
<b>Auxiliary A/C Compressor Mounting Bracket Mounting Hardware</b>				17	1018204	M10-1.5 10.9Gr Hex Flg. Nut	2
7	1018237	M8-1.25 x 55mm 10.9Gr Hex Flg. Bolt	2	<b>Lower Radiator Hose Spacer (Not Shown)</b>			
8	1022522	M8-1.25 x 65mm 10.9Gr Hex Flg. Bolt	2	18	SP64-0.1875	3/4" OD x 13/32" ID x 3/16" Length Spacer	1
9	1011887	M8-1.25 x 25mm 10.9Gr Hex Flg. Bolt	1	<b>Belt (Only One Belt is Supplied)</b>			
<b>Smooth Idler Pulley Assembly</b>				19	5060545	Dayco 6-Groove, 54.5" Belt	1
10	89006	Dayco Smooth Idler Pulley	2		K060544	Gates 6-Groove, 54.4" Belt	1
11	FMB480	Machined Idler Alignment Bushing	2		1060545	Goodyear 6-Groove, 54.5" Belt	1
12	1022566	M10-1.5 x 35mm 10.9Gr Hex Flg. Bolt	2		6PK1380	Bando 6-Groove, 1380mm Belt	1

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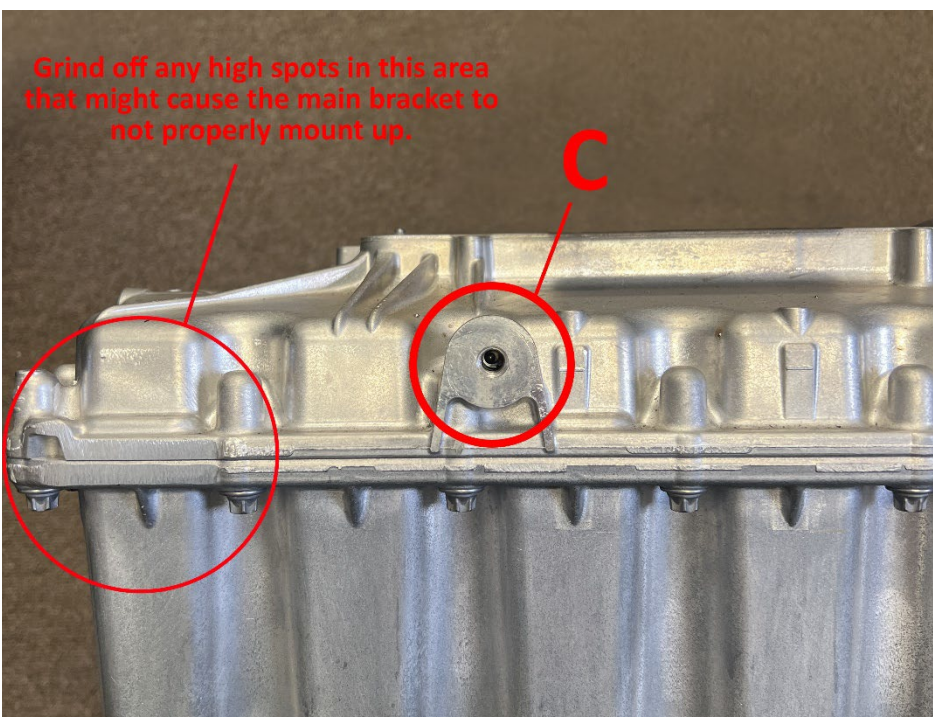
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## Mounting Locations



Mounting Locations, A & B:  
Passenger side of the engine oil pan.



Mounting Location, C:  
Front side of the engine oil pan.



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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.