



UNDERHOOD® 40 – Bid Specifications

These specifications are for bid purposes only and are provided by VMAC.

All specifications are subject to change without notice.

Compressor Air End:

The air compressor must be installed on the vehicle engine and must have 100% duty cycle. Compressor must provide up to 40 CFM and 150 PSI. A high temperature cut off switch must be integrated on the compressor. The compressor air end dimensions are to be no larger than 6.3" W x 4.2" H x 7.3" L in size. A multi-groove drive clutch will be used with a poly-v FEAD belt. The air compressor will weigh no more than 15 lb including the air inlet valve.

Air Oil Separator Tank/Cooler:

The air oil separator tank/cooler must act as an oil/air separator and air/oil cooler. Material must be of high-grade aluminum and contain an integrated coalescing oil separator element. It must have a lubricant sight glass no smaller than 1 1/2" in diameter. It must have a replaceable spin on 25-micron oil filter with safety bypass feature. It must contain an integral pneumatically piloted blow down valve. The tank dimension must be no larger than 8" W x 17.5" H x 19.75" L and the weight must be no greater than 35 lb.

Digital Throttle Control:

The Digital Throttle Control must have two-speed operation and automatically modulate engine RPM depending on air usage.

Display Box:

OLED Display Box* must display real-time system information, service notifications and informative diagnostics messages.

Control Module:

The Control Module* (controller) must continually monitor sensor health and safety interlocks. The controller must provide real-time diagnostics, system use, hours, service intervals, remote start/stop, and error codes with optional reporting through telematics and industry standard interface.

Safety Features:

Safety features* must include automatic system checks prior to engaging the compressor, compressor temperature, pressure and blowdown sensors, a compressor thermal protection circuit, an open/short circuit real-time diagnostics on sensors, automatic rapid blow-down valve on the tank, a 200 PSI pressure relief valve, and an automatic air-to-liquid cooler fan.

Note:

System must include compressor mounting bracket, accessory brackets, air receiver tank, all applicable belts, fasteners, compressor oil, hoses, installation manual and owner's manual.

*Available for most popular 2023+ model year commercial work trucks and vans; see application list for details.