

Triton® White Paper

Procedure to Align Pump & Motor on Triton Vacuum Units in the Field

Scope: This procedure is intended to show the steps needed to align the pump and the motive source (diesel engine or electric motor) if a field alignment is needed.



Procedure:

1. Triton installs one of the components (either the pump or the motor) on a fixed base, and the other on a slide base. On our electric units, the pump is fixed and the motor is adjusted. On our diesel units, the engine is fixed and the pump is adjusted. The following instructions apply to the adjustable component.
2. Remove the belt guard.
3. Square the motor or pump on the base by loosening the 2 adjustment rods on the side of the slide base and 4 bolts on slide base, taking measurements from a fixed point such as edge of slide base.
4. Use the straightedge to check the alignment between the pump pulley and the motor pulley.
5. If alignment is required: There are 6 bolt holes on the motor pulley - 3 threaded, and 3 unthreaded. The unthreaded holes are used to move the pulley in, and the threaded holes to move the pulley out (off the hub). Remove the pulley.
6. Adjust motor or pump hub in or out by tapping with a hammer, until alignment is achieved (hold the pulley on by hand to check with the straightedge, and remember there will be a couple of millimeters give when the pulley is reinstalled).
7. Reinstall pulley bolts, and recheck alignment. Adjust hub again if necessary.
8. Install belt. May need to loosen adjustment rods further to allow motor or pump to move forward.
9. Tighten adjustment rods to move motor or pump back about a half-turn at a time, until belt is tight. This is approximately when twisting the belt halfway between the pump and motor yields ~45 degrees off axis, or if available, use a belt tension gauge.
10. Confirm alignment with straightedge, to ensure no toe-in or out of the motor relative to the pump. Adjust rods to correct if necessary.
11. Tighten 4 slide base bolts
12. Reinstall belt guard.

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