

# **Installation Manual A700161 VR70 Seal Retainer Assembly Replacement Instructions**

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Installation Manual A700161. VR70 Seal Retainer Assembly  
Replacement Instructions.

Changes and Revisions

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## Important Information

The information in this manual is intended for certified VMAC installers who have been trained in installation procedures and for people with mechanical trade certification who have the tools and equipment to properly and safely perform the installation. Do not attempt this installation if you do not have the appropriate mechanical training, knowledge and experience.

Follow all safety precautions and standard shop practices for mechanical work.

These instructions are a general guide for installing this product on standard production trucks and do not contain information for installation on non-standard trucks. If you have difficulty with the installation, contact VMAC.

To order parts, contact your VMAC dealer. Your dealer will ask for the VMAC serial number, part number, description and quantity. To locate your nearest dealer, call 1-888-241-2289.

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# 1 Removal of the Compressor From the Vehicle

- Ensure that the engine is switched off and all components are cool enough to work on.
- Remove the belt from the compressor clutch, take note of the belt routing for re-assembly. Turn the clutch slightly to ensure that the compressor is drained of all oil
- Remove the oil return connection on the side of the compressor. Cover the orifice on the compressor and hose to ensure there is no residual oil spill.
- Remove the discharge connection from the rear of the compressor. Cover the orifice on the compressor and hose to ensure there is no residual oil spill.
- If required, remove the inlet control valve from the top of the compressor; If this is required ensure the intake of the compressor is covered to prevent any ingress of foreign material. If inlet valve removal is not required then the pressure control, scavenge line and pressure transducer electrical connections must be disconnected.
- Carefully remove the compressor from the vehicle and place it on a suitable working surface.
  - P120002 (3 mounting point compressor)
    - Remove the M8 nuts from the underside of the compressor mounting bracket.
  - P120004 (4 mounting point compressor)
    - Remove the 4 M8 Socket head cap screw bolts from the topside of the compressor. This may involve removal of the inlet valve to access one or more of the bolts. If this is the case ensure no debris enters the intake port of the compressor or the outlet of the inlet valve.



***Identify length of socket head cap screws retaining the inlet valve during removal (if necessary) and reinstall in same configuration. (Longer bolts are located closer to the air intake). Failure to do this could result in serious damage to the air end.***

- Carefully remove the compressor from the vehicle and place it on a suitable working surface.

## **2 Removal of the Seal Assembly From the Compressor**

- Remove the clutch assembly from the compressor; this involves the removal of four bolts from the gear case cover and the centre mount bolt of the clutch assembly. The clutch is mounted on a tapered shaft with woodruff key and will require removal by use of a 5/8-11 bolt in the front of the clutch to pry the clutch off of the shaft.
- When removed clean seal area free of all debris to ensure none enters the bearing when open.
- Remove the seal assembly using a suitable pinwrench. To loosen it, turn the seal assembly counter clockwise when facing the front of the compressor. Check compressor drive shaft for excessive play, if excessive play is noticed, the gear cover may need replacement. Check for pitting where seal rests.
- Clean the threaded area inside of the gear cover, ensure no debris enters the bearing.
- Apply Loctite blue, 242 to the threads on the new seal retainer assembly. Place the o-ring in the groove of the assembly and retain in position using a suitable grease.
- Carefully thread the assembly into the gear cover, be careful not to gall the threads. Apply approximately 30 ft-lbs of torque to the pinwrench to ensure an adequate seal.
- Reinstall the clutch.
- Reinstall the compressor onto the vehicle.

- Reinstall the belt onto the compressor system.
- Test system to ensure no seal leakage occurs.