THOMPSON VACUUM-PRESSURE UNITS -

THOMPSON MODEL "VC" VACUUM-PRESSURE PUMP



GENERAL DESCRIPTION

The Thompson Model VC-454-RM4-HS and VC-565-M4R-HS pump are air cooled. positive displacement, reciprocating vacuum-pressure pumps designed to operate at continuous high vacuum and pressure without overheating.

The Thompson Model "VC" Vacuum-Pressure Pump incorporates a Chevrolet engine short block, converted to accept our specially engineered head, valves and accessories. The efficient lubrication system, standard with the engine block, gives excellent protection against corrosion and overheating. This also provides a lower end considerably more durable than other piston-type V.P pumps.

The pumps' size and shape is such that it will readily mount on the side of a truck chassis or on a platform in front of or underneath a semi-trailer.

- Over 60 years of leadership in the vacuum-pressure pump field.
- Engineered for durability.
- Rebuilding by any mechanic.
- High Speed Valves
- 4 Ring Pistons

- Built-in reliability.
- Multiple methods of mounting.
- More efficient with less H.P.
- Continuous duty.
- Custom Rings Oil wiping

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Disassembly of Thompson VC Pump Head

- 1. Remove 4-VC Head Bolts and Head Assembly Front Block
- 2. Loosen 5-VC Valve Cover Plate evenly and carefully, One Half to One Revolution at a time, due to the high tension of the 14-C-CSD hold down springs.
- 3. Remove the 14-C-CSD hold down springs, the 5-C-HSS suction and 6-C-HSD Discharge Valves and the 15-C-CSD Copper Valve Seat Gaskets.
 - NOTE: The position or placement of the Suction and Discharge Valves for reassembly
- 4. Inspect interior of pump for foreign material and damage such as scored cylinder walls.
- 5. Inspect each valve for foreign material and damage. Check condition of Valve Springs and 7-C-MHT Valve Disc.
- 6. Warning: Do not clamp 10-C-HSS Suction Valve cap or 12-C-HSD Discharge Valve Body in a vise. Make a temporary Jig for disassembly and assembly by placing two 1/4 bolts in a vise, threads up with 3/8" exposed on 1 3/8" centers.

Assembly of Thompson VC Pump Head

- 7. Assemble 5-C-HSS Suction Valves Place four (4) 8-C-8HT Suction Valve Springs on a 10-C-HSS Suction Valve Cap on top of each other with the Spring Guides alternately inserted into the recessed slots. Place the 7-C-MHT disc over the8-C-8HT Suction Valve Springs, holding the assembly in place, insert into 9-C-HSS Suction Valve Body, insert the 11-C-GRB Bolt through the 11-CA Star Lock Washer and 11-C-CSD Spacer and tighten to 45 Ft. Lbs. or torque
- 8. Assemble 6-C-HSD Discharge Valves place four (4) 8-C-9HT Discharge Valve Springs on a 13-C-HSD Discharge Valve Cap on top of each other and follow the same procedure specified above, using the 12-C-HSD Discharge Valve Body.
 - NOTE: The 8-C-8HT Suction Valve Springs and the 8-C-9HT Discharge Valve Springs are not identical and must be used only on the valve it was designed for. Do not interchange, performance will be severely effected.
 - Place the 14-C-CSD hold down springs over the Valve Assembly. NOTE: The 14-C-CSD hold down springs is not sold as part of the Valve Assemblies
 - Replace 5-C-HSS Suction and 6-C-HSD Discharge Valves back into their respective parts.
- 9. Assembly VC Head Assembly Place 20-VC Head Cover Plate with 21-VC Gasket onto 14-C-CSD hold down springs.
 - A. Prior to assembly use a good quality anti-seize on Bolt Threads and Sealer on Gaskets.
 - B. Insert 5-VC Cover Plate Bolts and tighten evenly one half to one revolution at a time. Tighten to 55 Ft. Lbs. torque
 - C. Insert 4-VC-Head Bolts and tighten evenly to 55 Ft. Lbs. Torque

Replacement Parts

1. Lower end - Chevrolet Cylinder or Short Block and most of the components are obtainable at vour local dealer.

Custom components manufactured by Thompson Tank Inc. are:

- A. Custom Four (4) Ring Pistons B. Custom Piston Rings - Oil Wiping
- D. Custom 7 Ot. Oil Pan E. Custom Oil Pick Up Screen F. Custom Dip Stick Assembly
- C. 60 VC Oil Pump Drive

and the Thompson VC Vacuum Pressure Pump Head assemblies.

