Ingersoll rand Type 30, 20 & 25 HP, Compressor

Industrial Machinery Manuals is Proud to Offer 1 Digitally Enhanced Quality Bound Copy Of A: Ingersoll Rand Type 30, 20 & 25 Horsepower, Compressor, Instructions & Maintenance Manual Year (1973) This Manual Covers Models: T3025LTM, T3025HTM, T3025LBP, T3025HBP, 20T, 20S, 20S2, 20S3, 20S4, 25T, This Manual Includes: Form 1084-F, Superseding 1084-E, General Description, Accessories & Piping Arrangement, Installation, Regulation, Operation, Trouble Chart, Maintenance, This Manual Has 35 Printed Pages. Year August 1973

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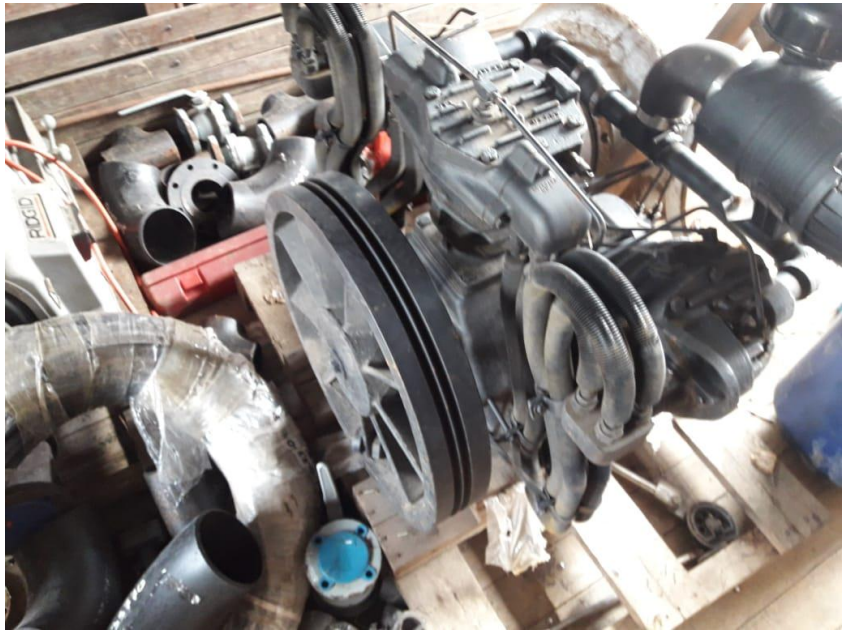

SECTION 1

GENERAL DESCRIPTION

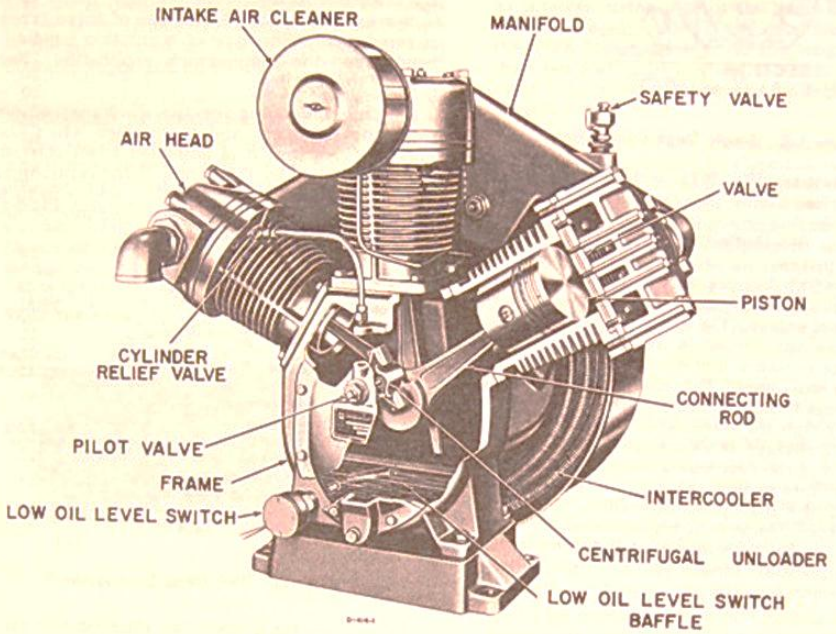

Figure 1-1. Internal Construction of Typical 20 and 25 H. P. Compressor.

This booklet covers both single and two-stage compressors. Since single and two-stage machines operate somewhat differently, the basic principle of operation of each is treated separately in the following paragraphs.

The single-stage 20S, 20S2, 20S3 and 20S4 compressors are built for low-pressure air applications and the basic principle of operation is as follows: on the suction stroke of the individual pistons, air at atmospheric pressure enters the cylinders through the individual air cleaners and the inlet section of the channel valves in each air head. On the compression stroke of each piston, the air is forced out through the discharge section of the channel valves and passes into a common discharge manifold which is piped to the air receiver or system.

For maintaining the air receiver, or system, air pressure within predetermined limits, the compressor is equipped with one of three types of regulation. The type of regulation used depends upon the compressor's application. See page 14 for details.

Starting unloading, or the discharge of air from the cylinders when the unit stops so that it is unloaded when started, is accomplished by the action of the centrifugal unloader operating a pilot valve, which in turn activates the air head unloaders, thus relieving pressure.