UNITED TECHNOLOGIES CARRIER	Commercial Division Carrier Corporation	BULLETIN: CA-SB-19-E-70-52 DATE: 9/4/70 PAGE: 1 OF: 3
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SUBJECT: **19EA ISOLATION VALVE**		

PURPOSE

To advise of changes in the construction of the 19EA isolation valve, and to describe its operation.

MACHINES AFFECTED

19EAs.

INFORMATION

A Carrier designed and manufactured valve is used on 19EA machines to isolate the large lines between the unishell and utility vessel. Refrigerant flow is blocked by two valve plates (containing O-rings) being forced against the valve body.

Construction Changes

Beginning with Machine Serial No. 15001:

DU Washers

Two DU antifriction washers were added to reduce friction.

Safety Head (Relief Device)

The original safety head has been replaced by Part No. EB51LR810, available from Service Parts.

When a valve body is filled completely with cold refrigerant which is then heated, resultant high pressures can rupture the valve body. The replacement safety head is set high enough at 810 psi to prevent nuisance bursting and still protect the valve body.

Operation

Reference Fig. 1 to locate valve parts.

1. Closing Valve

   Before closing the valve, the stem must be at the full counter-clockwise position. Slide the stem into the valve until it bottoms.

   When the valve stem is turned clockwise, the nut (6) moves toward the wedge block (9) which, in turn, forces the valve plates (7) against the valve body.

2. Opening Valve

When the valve stem is turned counterclockwise, the nut moves away from the wedge block, permitting the springs (8) to pull the valve plates away from the valve body.

If there is a pressure differential holding either plate against the valve body, turning the stem further permits it to bottom on the valve body. The nut will then rise against the levers (5) to force the plates away from the valve body.

NOTE: If a safety head should leak while the valve is in its open (stem out) position, it is possible for the refrigerant pressure to hold the valve plate against the safety head opening with a force of approximately 1700 lb. If such a leak in the safety head is suspected, carefully remove the safety head, install a hand valve, and pressurize to machine pressure to free the valve plate from the valve body.

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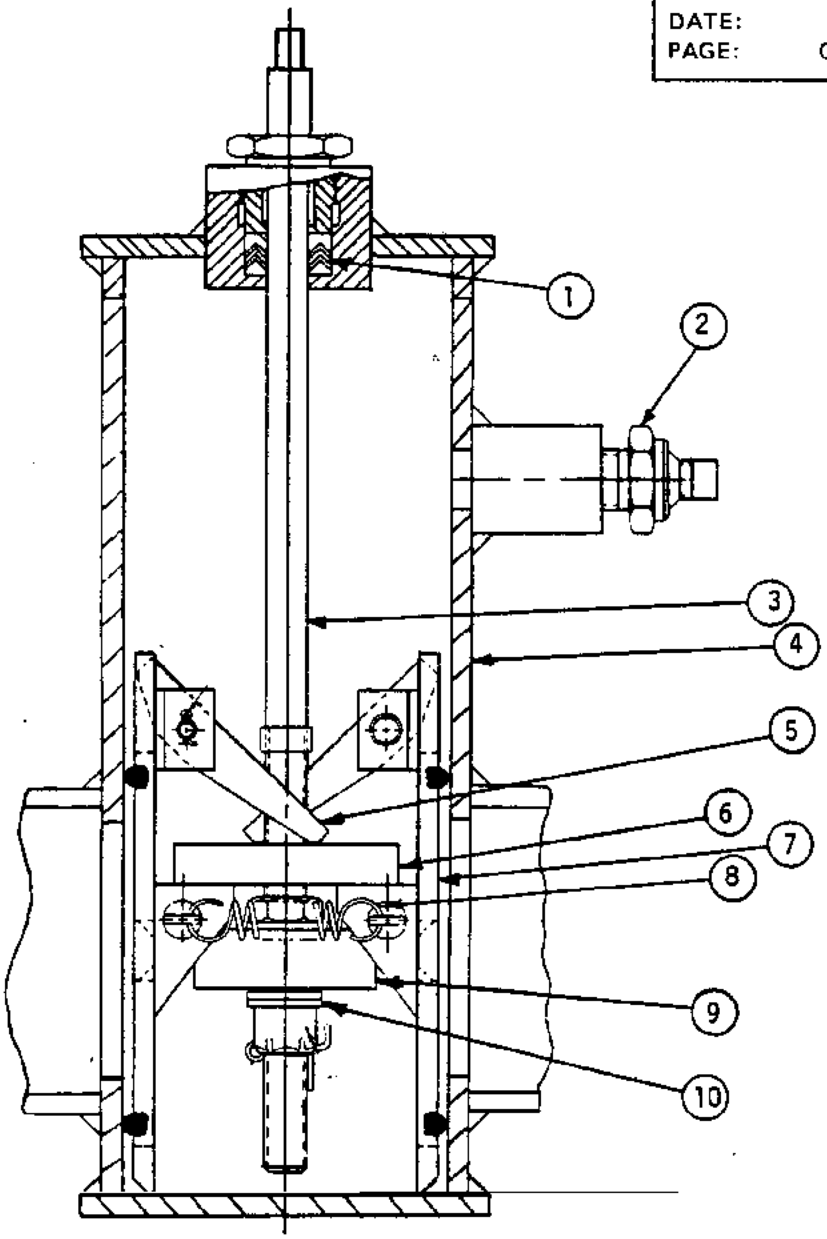

1 Teflon Packing
2 Safety Head
3 Stem (Left Hand Threads)
4 Valve Body
5 Lever Assembly
6 Nut
7 Valve Plate with O-ring vulcanized into its circular groove.
8 Spring
9 Wedge Block (Not threaded; moves up and down with stem.)
10 DU Washers

Fig. 1