

AIR BRAKES

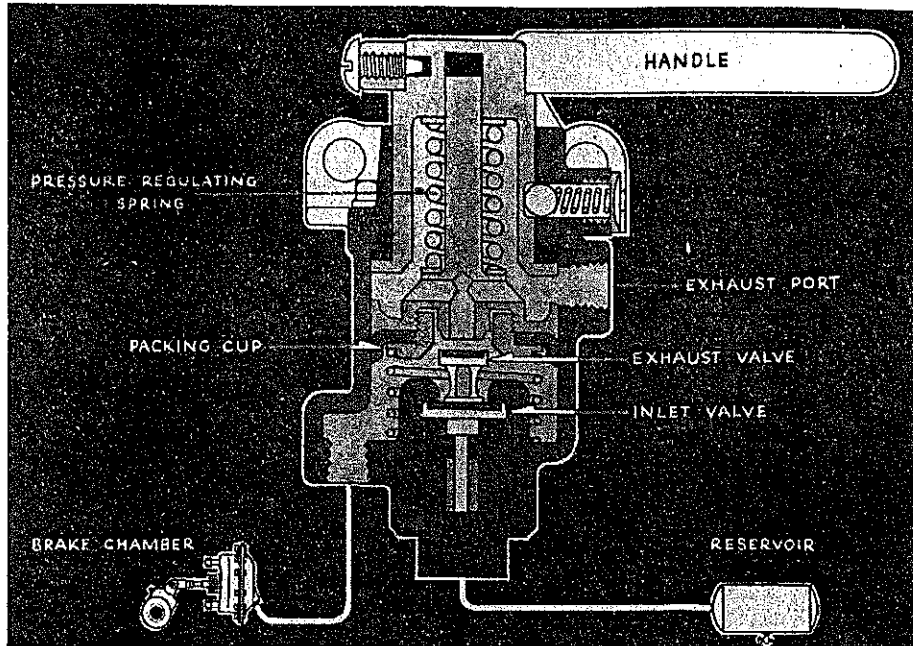


Fig. 19 Releasing position of HP Brake Valve

Fig. 20 Sectional view of Quick Release Valve

tions such as blocking the wheels must be taken as there is the possibility the air pressure in the system may be depleted due to leakage and the brakes release after a reasonable lapse of time.

OPERATING TESTS—Check the delivery pressure of the brake valve, using an accurate air pressure test gauge. The test gauge may be conveniently connected to the service line outlet at the rear of the vehicle. With the brake valve handle moved to its fully applied position, the brake valve must deliver at least 60 pounds pressure.

Move the brake valve handle to several different positions between fully applied and fully released positions and observe that the air pressure registered by the test gauge varies in accordance with the position to which the handle is moved.

LEAKAGE TESTS—

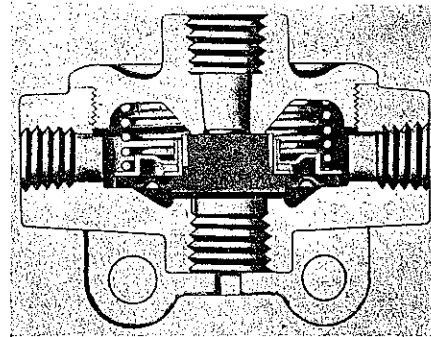
1. With brake valve handle in released position, coat the exhaust port with soapsuds to check for leakage.
2. With brake valve handle in fully applied position, coat the exhaust port with soapsuds to check for leakage.
3. Leakage in excess of a one-inch soap bubble in one second is not permissible in either of these tests. If excessive leakage is found, it will usually be caused by dirty or worn valves or valve seats and the inlet and exhaust valve assembly or the complete brake valve must be repaired or replaced. Leakage due to dirty valves and valve seats may be corrected by removing the inlet and

exhaust valve assembly and cleaning the valves and valve seats. Leakage due to worn valves may be corrected by installing a new inlet and exhaust valve assembly. If the valve seats are pitted or worn excessively, or if the installation of a new inlet and exhaust valve assembly does not correct the leakage, the brake valve must be repaired or replaced.

QUICK RELEASE VALVE

The purpose of the quick release valve is to reduce the time required to release the brakes by hastening the exhaust of air pressure from the brake chambers. It is most commonly used with front wheel brake chambers.

The valve consists of a body, Fig. 20, containing a spring loaded diaphragm so arranged as to permit air pressure to flow through the valve in one direction but when the supply pressure is reduced, the air which has passed through the valve is permitted to escape through the exhaust port.



OPERATION—The quick release valve assumes three positions during normal operation. These three positions are (1) the applying position, when air pressure is passing through the valve into the brake chambers; (2) the holding position, when pressure is being held in the brake chambers; (3) the releasing position, when the brake chamber pressure is being exhausted, Fig. 21.

When air pressure from the brake valve enters the top connection of the quick release valve, the diaphragm moves down and closes the exhaust port. Air pressure then deflects the outer edges of the diaphragm downward and flows out the side

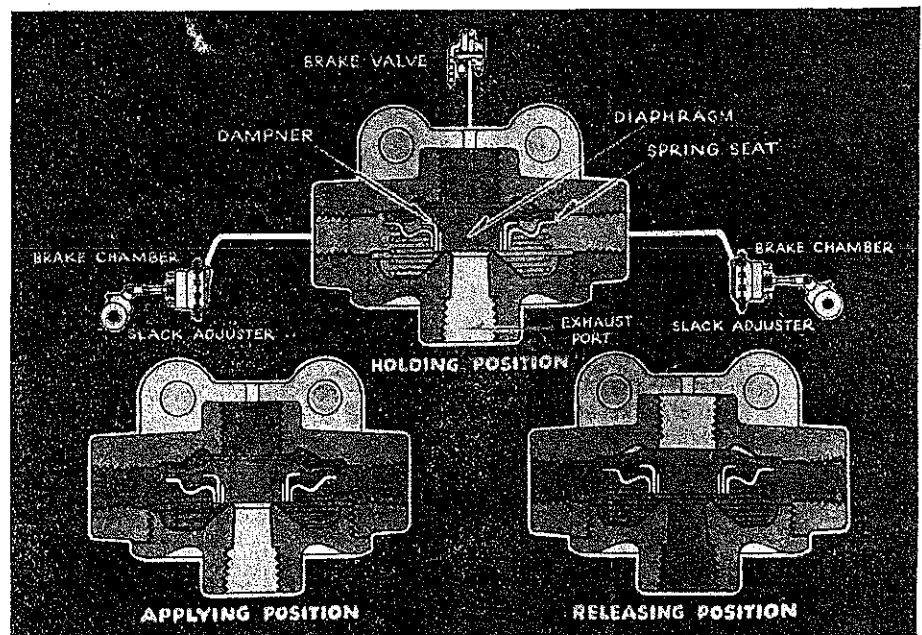
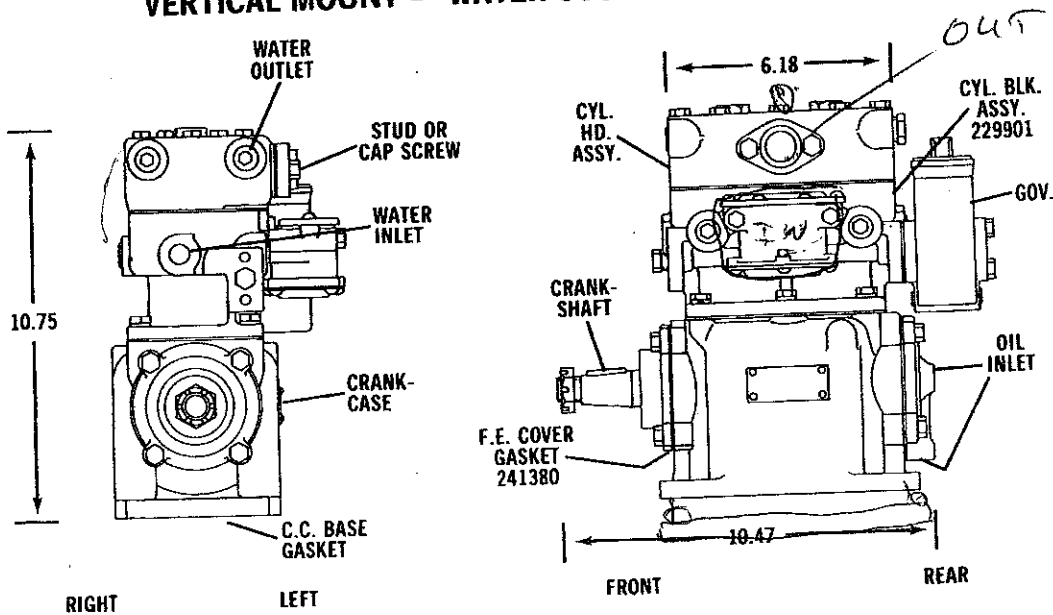


Fig. 21 Applying, holding and releasing positions of Quick Release Valve

VERTICAL MOUNT — WATER COOLED — 4 HOLE BASE



REMFR. EXCH. AND CHANGEVER SELECTIONS

TF-400 COMPR. PC. NO.	STD. REMFR. EXCH.	OPTIONS	CHANGEVER TO/FROM		
			TF-500 EQUIV.	TF-501 EQUIV.	TF-600 EQUIV.
101142*	101142	289158	—	—	—
101242*	101242	281286, 282783, 283502, 283504	—	—	—
226085	227400	226433, 226688, 226718, 227055	227320	286526	280602
226335	227403	226557, 226558, 226706, 279310	227322	286527	280604
226365	227401	226434, 226463, 226518, 226519	227322	286527	280604
226433	227400	226688, 226716, 227055, 279349	227320	286526	280602
226434	227401	226463, 226518, 226519, 226520	227322	286527	280604
226463	227401	226518, 226519, 226520, 275781	227322	286527	280604
226518	227401	226519, 226520, 226659, 275781	227322	286527	280604
226519	227401	226520, 226659, 277056, 277342	227322	286527	280604
226520	227401	226659, 277056, 277342, 275781	—	—	—
226557	227403	SUPERSEDED BY 226558	227322	286527	280604
226558	227403	226706, 279310, 279313, 283600	227322	286527	280604
226562	227402	226705, 287132, 279512, 281592	227320	286526	280602
226659	227401	277056, 281094, 277342, 275781	227322	286527	280604
226688	227400	226716, 227055, 279349, 281786	227320	286526	280602
226689	227404	276791, 277636	227323	286526	280605
226705	227402	287132, 279512, 281592, 281715	227320	286526	280602
226706	227403	279310, 279313, 283600, 284014	227322	286527	280604
226716	227400	277055, 279349, 281786, 282462	227320	286526	280602
226727	227402	226755, 226893, 226948, 227739	227320	286526	280602
226755	227402	226893, 226948, 227739, 228137	227320	286526	280602
226760	227400	226984, 227220, 227227, 227405	227320	286526	280602
226849	226849	275833	—	—	—
226893	227402	226948, 227739, 228137, 227047	227320	286526	280602
226948	227402	227739, 228137, 227047, 228991	227320	286526	280602
226981	226981	—	—	—	—
226982	226981	—	—	—	—
226984	227400	227220, 227227, 227405, 228503	227320	286526	280602
227047	227402	SUPERSEDED BY 229092	227320	286526	280602
227110	227403	227171, 227284, 227563, 227872	227322	286527	280604
227155	227401	227206, 227279, 227970, 275781	227322	286527	280604
227171	227403	227284, 227563, 227872, 228670	227322	286527	280604
227220	227400	227227, 227405, 228503, 228827	227320	286526	280602
227227	227400	227405, 228503, 228827, 228596	227320	286526	280602
227279	227401	227970, 228103, 275350, 275781	227322	286527	280604
227284*	227403	227563, 227872, 228670, 228902	—	—	—
227400*	227400	278555, 227405, 281879, 226760	227320	286526	280602
227401*	227401	278469, 281787, 282126, 275781	227322	286527	280604
227402*	227402	278556, 279319, 279863, 281156	227320	286526	280602
227403*	227403	278503, 278554, 282968, 285593	227322	286527	280604
227404*	227404	226689, 276791, 277636	227323	286526	280605
227405*	227400	228503, 228827, 228596, 276360	227320	286526	280602
227410*	227401	227206, 228103, 275350, 275781	227332	—	280611
227548	227402	SUPERSEDED BY 229093	227320	286526	280602
227551	227402	SUPERSEDED BY 229094	227320	286526	280602
227563	227403	227872, 228670, 228902, 229096	227322	286527	280604
227739	227402	SUPERSEDED BY 229056	227320	286526	280602
227864	227864	—	—	—	—
227872	227403	228670, 228902, 229096, 229461	227322	286527	280604

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