

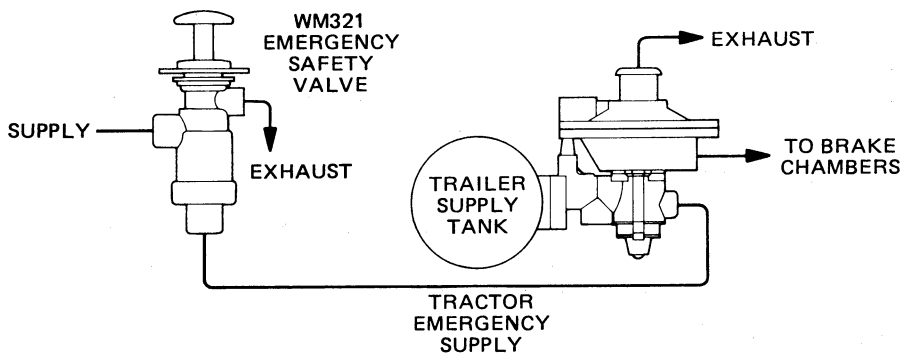
## PRODUCT DESCRIPTION

**DESCRIPTION** The WM321 is a panel-mounted, normally closed, three-way valve with a pull-to-open, push-to-close control knob. The WM321 requires a minimum supply pressure of 35 PSI (241,3 kPa) for operation, and automatically closes when supply pressure falls below that level.

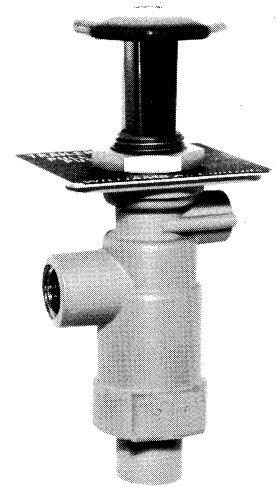
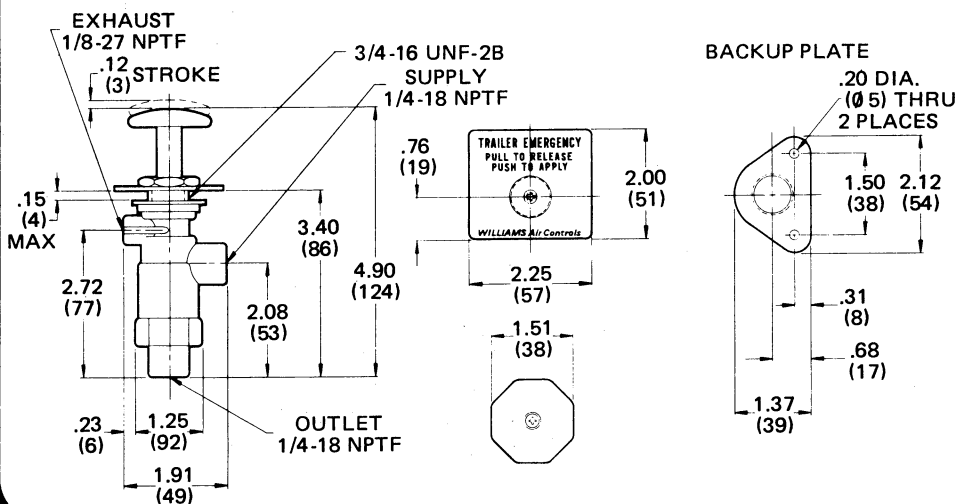
**OPERATION** When adequate supply pressure is present and the WM321's control knob is pulled out, air is allowed to flow from the valve's inlet to its outlet. If the knob is pulled out when the supply pressure is below the required level of 35 PSI (241,3 kPa), the flow is blocked where the piston seats on the exhaust tube and the valve remains closed. When the knob is manually pushed in or the supply pressure depletes to the 35-45 PSI (241,3-309,3 kPa) range, the valve closes and any pressure at the outlet is released through the exhaust port.

**APPLICATION** The WM321 can be used in any industrial or vehicular system capable of supplying the required minimum of 35 PSI (241,3 kPa) of air pressure to the valve. The WM321 is often used to provide manual and automatic application of trailer brakes in vehicular air brake systems. When the WM321's control knob is pulled out, the brakes are released. If the supply pressure drops to the automatic application range or if the knob is pushed in, the brakes are applied. This unit is typically used with a relay emergency valve such as the WM101 series where a "pull to release" function is desired.

## TYPICAL INSTALLATION

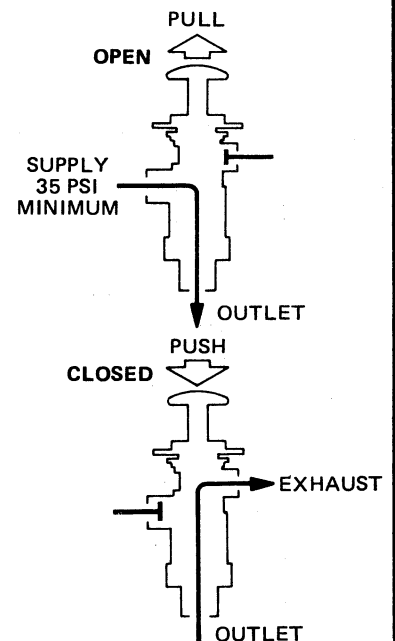


## EXTERNAL CONFIGURATION

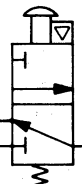


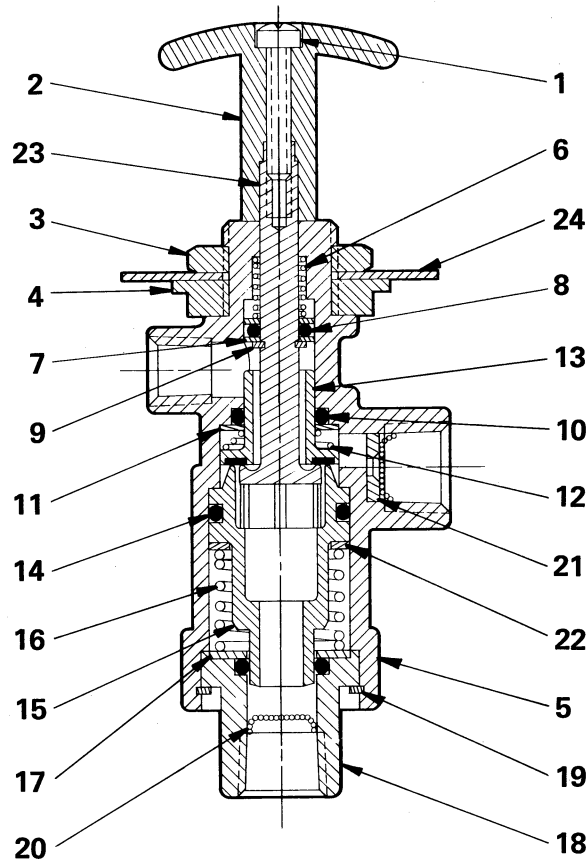
## EMERGENCY SAFETY VALVE

## FUNCTIONAL DIAGRAM



## I.S.O. SYMBOL





**PARTS IDENTIFICATION**

ITEM	DESCRIPTION	QTY.
1	SCREW (114989)	1
2	KNOB (105374)	1
3	NUT (114589)	1
4	MOUNTING COLLAR	1
5	BODY	1
6	SPRING	1
7	WASHER	2
* 8	O-RING	1
9	RETAINING RING	1
* 10	O-RING	2
11	WASHER	1
12	SPRING	1
* 13	EXHAUST SEAT TUBE	1
* 14	O-RING	1
15	PISTON	1
16	SPRING	1
17	WASHER	1
18	END CAP	1
19	RETAINING RING	1
* 20	SCREEN	2
21	RESTRICTOR	1
22	SHIM	1
23	STEM	1
24	ESCUTCHEON PLATE (103270)	1

Service this unit with repair kit number 114266.  
 \*Asterisk designates items included in repair kit.

**SPECIFICATIONS**

PORT SIZES: Inlet & Outlet . . . . . 1/4-18 NPTF  
 Exhaust . . . . . 1/8-27 NPTF  
 MAXIMUM OPERATING PRESSURE . . . . . 150 PSI (1034,2 kPa)  
 OPERATING TEMPERATURE\* . . -20°F to 200°F (-28,9°C to 93,3°C)  
 FLOW RATING:  
 Inlet to Outlet . . . . . 20 SCFM @ 100 PSI (0,6 m<sup>3</sup>/min @ 690 kPa)  
 Outlet to Exhaust . . . 25 SCFM @ 100 PSI (0,7 m<sup>3</sup>/min @ 690 kPa)  
 AUTO. APPLICATION PRESSURE . . . 35-45 PSI (241,3-309,3 kPa)  
 MOUNTING . . . Secured to Panel w/ Mounting Nut or Two Fasteners  
 MOUNTING ATTITUDE . . . . . Optional  
 MATERIALS: Body Castings . . . . . Die Cast Zinc Alloy  
 O-Rings . . . . . Buna N  
 Knob . . . . . Red Plastic  
 NET WEIGHT . . . . . 12 oz. (0,3 kg)  
 \*For continuous operation beyond this range, contact factory.

**TO ORDER, SPECIFY**  
**WM321**  
 Model Number  
**PART NUMBER 112215**