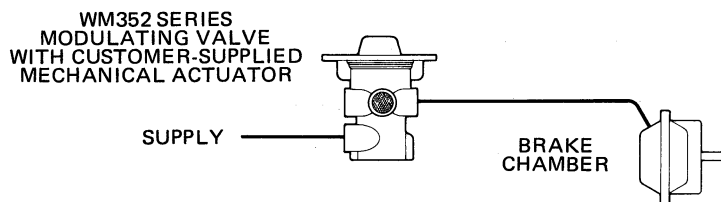
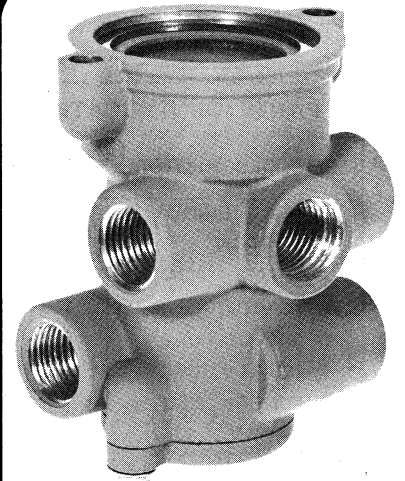
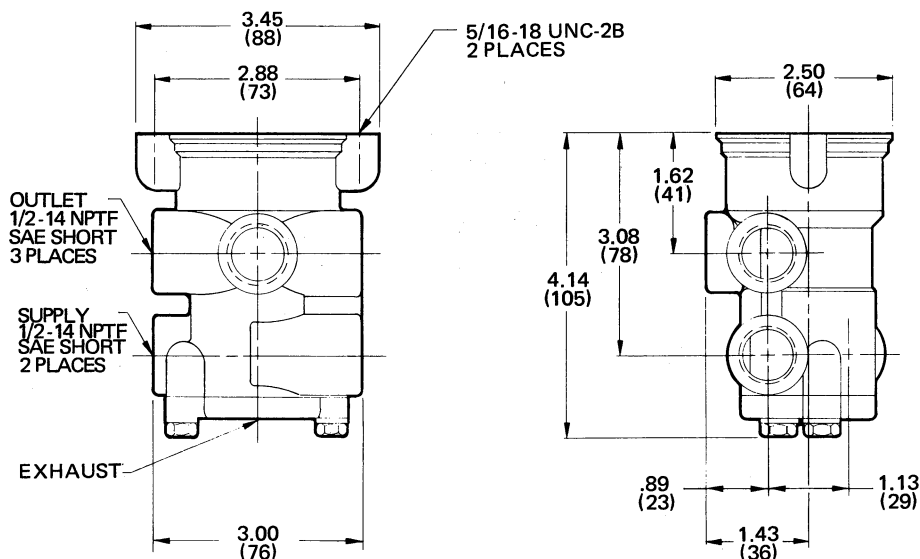
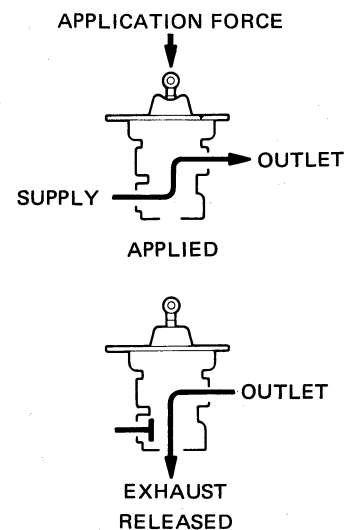
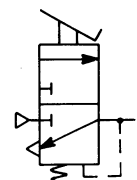


**PRODUCT DESCRIPTION**

**DESCRIPTION** The WM352 series valves are three-way pressure modulators that frequently serve as sub-assemblies in other Williams Air Controls products. A spring and push rod assembly (not included) are required to actuate the valve and to provide output compensation. The WM352 series is specifically designed for pneumatic braking systems that incorporate relay valves.

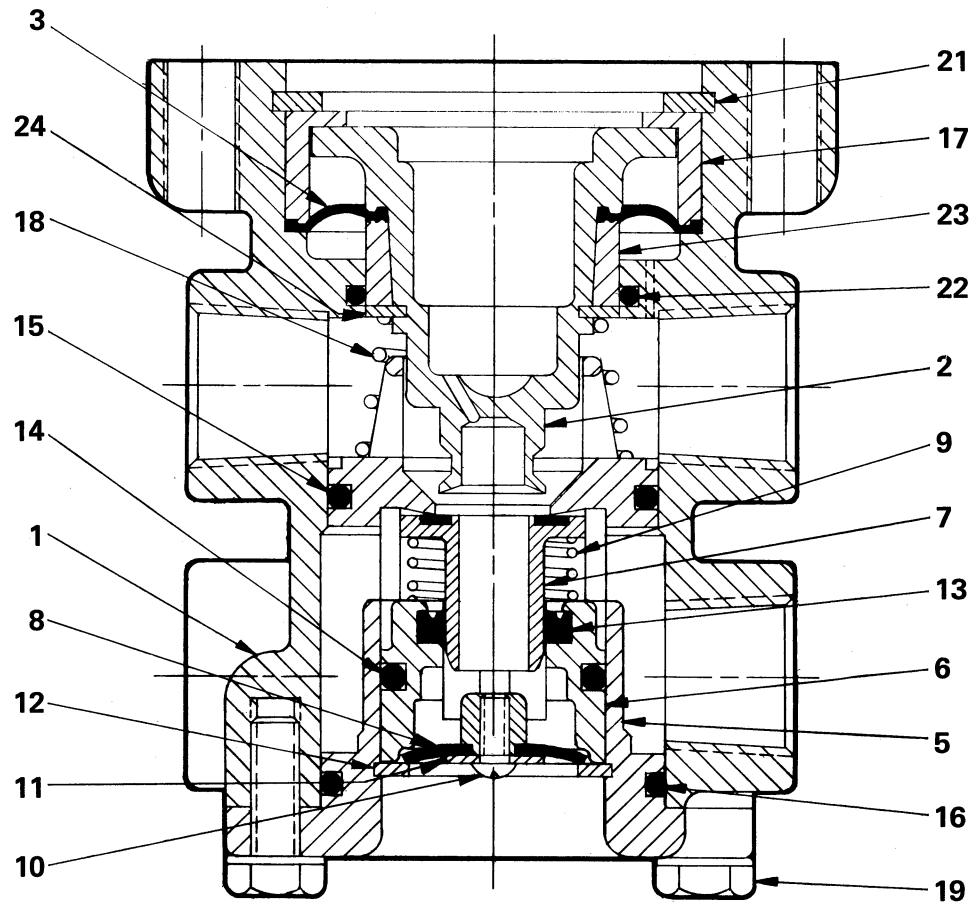
**OPERATION** When the mechanical actuator depresses the valve's balance piston, the piston seats to prevent pressure from escaping through the exhaust port. Further movement against the piston causes a path to open from the supply port to the outlet port. The outlet pressure balances against the spring in the actuating assembly. The valve achieves a balanced condition and the piston closes the supply port to maintain this condition. Additional piston movement or a change in downstream pressure will cause a new balance point to be established. When the mechanical actuator is released, the piston unseats and outlet pressure is discharged through the exhaust port.

**APPLICATION** The WM352 is used in several Williams Air Controls treadle valves to modulate pressure delivery to industrial or vehicular braking systems. These valves also serve as sub-assemblies for the WM400 and WM401 pressure regulators. As a treadle valve or regulator component, the WM352 valve is supplied with an actuating assembly. However, when the WM352 valve is purchased separately, the customer must supply a spring-actuator.

**TYPICAL INSTALLATION**

**EXTERNAL CONFIGURATION**

**HIGH FLOW  
MODULATING  
VALVE**
**FUNCTIONAL DIAGRAM**

**I.S.O. SYMBOL**


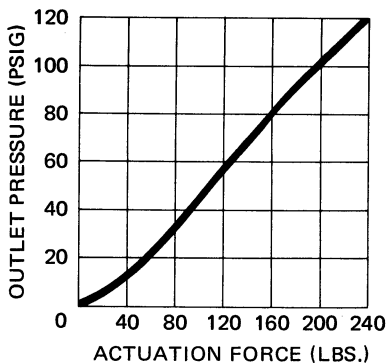
PARTS IDENTIFICATION			
ITEM	DESCRIPTION	QTY.	
		A & D	F
1	VALVE BODY	1	1
2	PISTON	1	1
* 3	DIAPHRAGM	1	1
5	CARTRIDGE BODY	1	1
6	GUIDE TUBE	1	1
* 7	SEAT TUBE	1	1
* 8	CHECK DISC	1	1
9	SPRING	1	1
10	SCREW	1	1
11	WASHER	1	1
12	RETAINING RING	1	1
* 13	U-CUP	1	1
* 14	O-RING	1	1
* 15	O-RING	1	1
* 16	O-RING	1	1
17	CLAMP RING	1	1
18	SPRING	1	1
19	SCREW	2	2
21	RETAINING RING	1	1
* 22	O-RING	1	1
23	CLAMP RING	1	1
24	RETAINING RING	1	1

Service this unit with repair kit number 114299. This repair kit also contains parts to service the cartridge assembly. To replace only the cartridge assembly (Items 5-16), order part number 101979. \*Asterisk designates parts included in repair kit 114299.



**SPECIFICATIONS**

PORT SIZE . . . . . 1/2-14 NPTF  
 MAXIMUM OPERATING PRESSURE . . . . . 200 PSI (1379,0 kPa)  
 OPERATING TEMPERATURE\* . . . -20°F to 200°F (-28,9°C to 93,3°C)  
 FLOW RATING . . . . . 160 SCFM @ 100 PSI (4,5 m<sup>3</sup>/min @ 690 kPa)  
 ACTUATION FORCE . . . . . Refer to Graph of Force vs. Output Pressure  
 MOUNTING . . . . . With Two 5/16-18 Fasteners  
 MOUNTING ATTITUDE . . . . . Optional  
 MATERIALS: Valve Body . . . . . Die Cast Aluminum Alloy  
 Cartridge Body & Piston . . . . . Die Cast Zinc Alloy  
 Diaphragm . . . . . Fabric-Reinforced Buna N  
 Seals . . . . . Buna N  
 NET WEIGHT . . . . . 1 lb. 8 oz. (0,7 kg)  
 \*For continuous operation beyond this range, contact factory.



<b>TO ORDER, SPECIFY</b>		
<b>WM352</b> _____		
Model Number		Suffix
<b>PART NUMBER</b> _____		
<b>SELECT SUFFIX &amp; PART NUMBER BELOW</b>		
SUFFIX	PART NUMBER	SUB-ASSEMBLY APPLICATIONS
WM352 A	112468	WM353A,B,C,D,E & F; WM392,WM392A & D; WM399A & J; WM400A & C; WM401A,B,C & D
WM352 D	112471	WM399L & N
WM352 F	117983	WM305D & D1