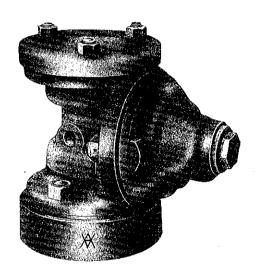
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Westinghouse Traction Brake Company

Pittsburgh, Pa., U. S. A.



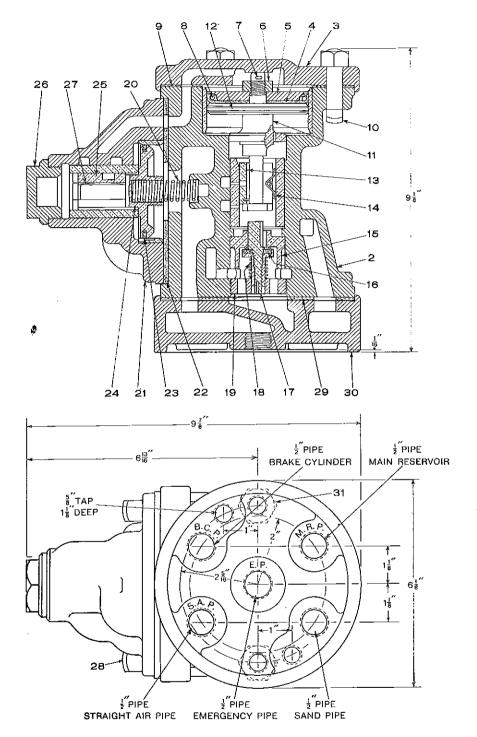
Emergency Valves Types "D" and "A"

Part Catalog No. T 3511=1

July, 1923

(Superseding Issue of July, 1917 and Supplements 2 and 6 to T-3511)

TYPE D-1 EMERGENCY VALVE



Net Weight, 41 lbs.

TYPE "D-1" EMERGENCY VALVE

The Type "D-1" Emergency Valve is designed for Two
Car Trains and has the following operating characteristics:
(1) Quick service and release. The Motorman's Valve
serves as a pilot valve to operate the Emergency
Valve which directly controls admission of air
to and from the Brake Cylinder.

(2) Maintenance of Brake Cylinder pressure against

leakage.

(3) Automatic application of the Brake following exhaust of air from, or rupture of, the Emergency

Pipe.

The Emergency Valve contains an Equalising Piston 11, and an Exhaust Slide Valve 13, also an Emergency Piston 24 and Slide Valve 25, communication between the Reservoir and the Brake Cylinder being controlled by Poppet Valve 17, which is opened or closed by movement of the Equalising Piston according to variations of pressure in the Straight hir Pipe and Brake Cylinder, or by the operation of the Emergency portion of the Valve. During service applications the Emergency Piston and Slide Valve are inoperative.

The Emergency Valve is attached directly to a pipe bracket to which all pipe connections are made; consequently the Emergency Valve may be removed for cleaning or repairs without breaking any pipe joints.

In the above sectional view the Emergency Valve is

shown in Release Position.

NOTE B-For Spring Identification Table, see page 9.

Prices will be quoted upon application.

TYPE D-1 EMERGENCY VALVE

The Type D-1 Emergency Valve is regularly furnished as standard for use with the SME Straight Air Brake Equipment with Emergency Feature for two Motor-Car or Motor-Car-Trailer Train Service.

Piece No. 70775—D-1 Emergency Valve with Floor Bracket having Vertical Pipe Connections, complete.

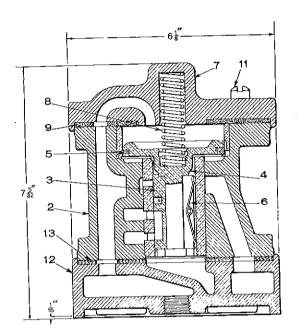
Pc. No.	Ref. No.	ı	Pc. No.	Ref. No.	
46772	2	Body, bushed	17315	19	Check Valve Cage Nut
17322	3	Cylinder Cap	*70748	20	Emergency Piston Spring
17553	4	Packing Leather	46776	21	Emergency Valve Case, bush-
17552	5	Piston Follower	,		ed
24702	6	Equalizing Piston Nut	47118	22	Emergency Valve Case
2958	7	Equalizing Piston Cotter			Gasket
6808	8	Packing Leather Expander	18033	23	Emergency Piston Ring
17323	9	Cylinder Cap Gasket	50324	24	Emergency Piston, complete
4879	10	Bolt and Nut for Cylinder Cap (3 Req'd)	00021		(includes 23)
17556	11	Equalizing Piston, complete	46739	25	Emergency Slide Valve
1,1990	11	(includes 6, 7 and 12)	17288	26	Emergency Valve Case Cap
10030	12	Equalizing Piston Ring			Nut
17781	13	Exhaust Slide Valve, com-	47350	27	Emergency Slide Valve Spring
		plete	10846	28	Bolt and Nut for Emergency
66725	14	Exhaust Slide Valve Spring			Valve Case (2 Req'd)
17318	15	Check Valve Cage	12094	29	Floor Bracket Gasket
64326	16	Check Valve Seat	70896	30	Floor Bracket, complete (in-
64324	17	Check Valve, complete (in-			cludes two of 31)
		cludes 16)	6352	31	3/8"x2" Stud with Hex. Nut
*17320	18	Check Valve Spring			(2 Req'd)

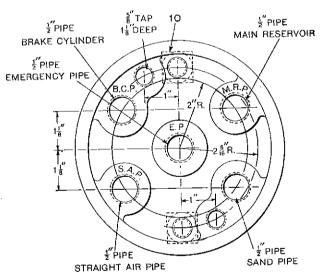
NOTE A-If D-I Emergency Valve without Floor Bracket is desired, orders should specify Pc. No.

NOTE B-For Spring Identification Table, see page 9.

Prices will be quoted upon application.

TYPE A-2 EMERGENCY VALVE





Net Weight, 273/4 lbs.

TYPE A-2 EMERGENCY VALVE

The Type A-2 Emergency Valve is regularly furnished as standard for use with the SME Straight Air Brake Equipment with Emergency Feature for Single Car or Motor-Car-Trailer Train Service.

Piece No. 70764. A-2 Emergency Valve with Floor Bracket having Vertical Pipe Connections, complete.

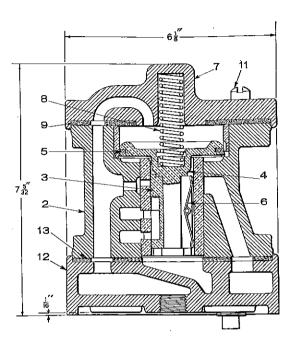
	Ref. No.	Body	Pc. No. *10923	Ref. No.	Piston Spring
12091	4	Douty	10923	0	r isour opring
12092	3	Slide Valve	10924	9	Cylinder Cap Gasket
12899	4	Piston (includes 5)	64220	10	Sq. Hd. Cap Screw (2 Req'd)
10030	5	Piston Ring	12898	11	Fil. Hd. Screw (2 Req'd)
6520	6	Slide Valve Spring	63186	12	Floor Bracket
10896	7	Cylinder Cap	12094	13	Floor Bracket Gasket

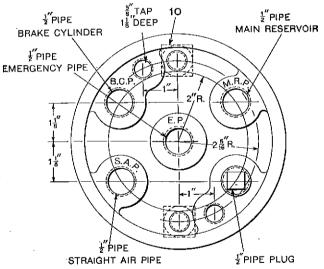
NOTE A-If A-2 Emergency Valve without Floor Bracket is desired, order should specify Pc. No. 12246.

*NOTE B-For Spring Identification Table, see page 9.

Prices will be quoted upon application.

TYPE A-3 EMERGENCY VALVE





Net Weight, 27¾ lbs.

TYPE A-3 EMERGENCY VALVE

The Type A-3 Emergency Valve is regularly furnished for use with Electro-Pneumatic SME Equipment.

Piece No. 64216. A-3 Emergency Valve with Floor Bracket having Vertical Pipe Connections, complete.

Pc. No.	Ref. No.	Description		Pc. No.	Ref. No.	Description	
64217	2	Body		10924	9	Cylinder Cap Gasket	
64219	3	Slide Valve	•	64220	10	Sq. Hd. Cap Screw (2 Req'd)	alve
12899	- 4	Piston (Includes 5)	;	12898	11	Fil. Hd. Screw (2 Reg'd)	
10030	5	Piston Ring	:	63186	12	Floor Bracket	
6520	6	Slide Valve Spring		12094	13	Floor Bracket Gasket	
10896	7	Cylinder Cap		33310		½" Pipe Plug	
*10923	8	Piston Spring	:				-)

*NOTE-For Spring Identification Table, see page 9.

Prices will be quoted upon application.

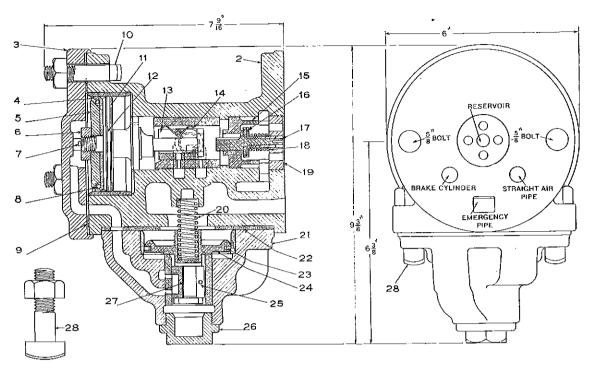
Orders must give PIECE NUMBER and NAME of part wanted.

Valves cgency Valves

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7

TYPE D EMERGENCY VALVE



Net Weight, 33 lbs.

The Type D Emergency Valve has been superseded by the D-1 Emergency Valve and is listed only for convenience in ordering repair parts.

Piece No. 17555. D Emergency Valve, complete.

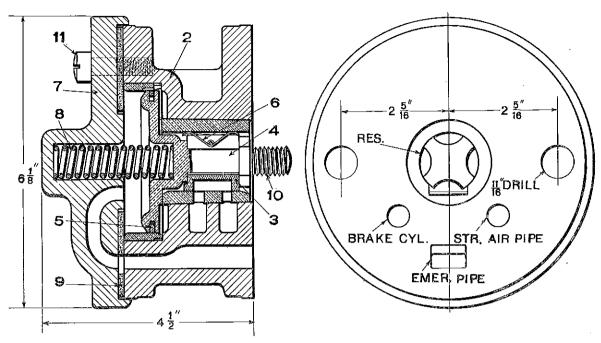
Pc. No. Ref. N 17460 2 17322 3 17553 4 17552 5 24702 6 2958 7 6808 8 17323 9	Body, bushed Cylinder Cap	*17320	Ref. No.	(VI 1 TT 1 0 1
17553 4 17552 5 24702 6 2958 7 6808 8			TO	Check Valve Spring
17552 5 24702 6 2958 7 6808 8		17315	19	Check Valve Cage Nut
24702 6 2958 7 6808 8	Packing Leather	*70748	20	Emergency Piston Spring
2958 7 6808 8	Piston Follower	17290	21	Emergency Valve Case,
6808 8	Equalizing Piston Nut			bushed
-	Equalizing Piston Cotter	47118	22	Emergency Valve Case
11020 0	Packing Leather Expander Cylinder Cap Gasket			Gasket
4879 10	Bolt and Nut for Cylinder	18033	23	Emergency Piston Ring
10,0	Cap (3 Req'd)	17559	24	Emergency Piston (includes
17556 11	Equalizing Piston (includes			23)
	6, 7 and 12)	17313	25	Emergency Valve
10030 12	Equalizing Piston Ring	17288	26	Cap Nut for Emergency
17781 13 17321 14	Exhaust Valve, complete Exhaust Valve Spring	1		Valve
17318 15	Check Valve Cage	17560	27	Emergency Valve Spring
64326 16	Check Valve Seat	10846	28	Bolt and Nut for Emergency
64324 17	Check Valve, complete (in-	:		Valve Case (2 Req'd)
	cludes 16)	8415	†	Emergency Valve Gasket
	Check Valve, complete (in-	9.415		Valve Case (2 Req'd)

^{*}NOTE A-For Spring Identification Table, see page 9.

Prices will be quoted upon application.

[†]NOTE B-Listed for convenience only. Not included in D Emergency Valve.

TYPE A-1 EMERGENCY VALVE



Net Weight, 161/2 lbs.

The Type A-1 Emergency Valve has been superseded by the Type A-2 Emergency Valve and is listed only for convenience in ordering repair parts.

Piece No. 10932. A-1 Emergency Valve, complete.

Pc, No.	Ref. No.		Pc. No.	Ref. No.	
10941	2	Body, bushed	#10923	8	Piston Spring
10894	3	Slide Valve	10924	9	Cylinder Cap Gasket
12896	4	Piston (includes 5)	12897	10	Stud and Nut (2 Req'd)
10030	5	Piston Ring	12898	11	Fillister Head Screw
8935	6	Slide Valve Spring			(2 Req'd)
10896	7	Cylinder Cap	8415	†	Emergency Valve Gasket

*NOTE A—The following table is shown to enable railway storekeepers and air brake men to identify the springs used in the Emergency Valves cataloged herein. This table does not represent a specification for the springs in question and should not be used as such. As a further assistance to storekeepers, the springs are packed in small lots with a tag attached to each lot bearing the proper piece number.

	NNNNNN	WWW.			SPR	ING IDENTIFICA	TION			
Pc. No.	Out, Dia. "A"	Dia. Wire	Free Height	No. Coils	Material	Name of Spring	Where Used			
70748 10923	1 9 // 3 2 // 8 2 //	.106"	23// 3,3//	13 15	Nickeled Steel Nickeled Steel	Emergency Piston Piston Spring	D and D-1 Emergency Valves A-1, A-2 and A-3 Emergency Valves			
17320	3 3 // 6 +	3"	7″	6	Brass	Check Valve	D and D-1 Emergency Valves			

†NOTE B-Listed for convenience only. Not included in A-1 Emergency Valve,

Prices will be quoted upon application.

Westinghouse Traction Brake Company

Pittsburgh, Pa., U. S. A.

Works at Wilmerding, Pa., and Milwaukee, Wis.

OFFICES:

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Columbus	-		-				-														-		South T		
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WASHINGTON,	D.	C.			-		-		-		-		-		-		-		-		-	-	Munse	y Bu	ilding



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. Westinghouse Air Brake Company, Pittsburgh, Pa.

> THE AMERICAN BRAKE COMPANY, St. Louis, Mo.

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Westinghouse Bremsen Gesellschaft, m.b.H., Hanover, Germany.

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