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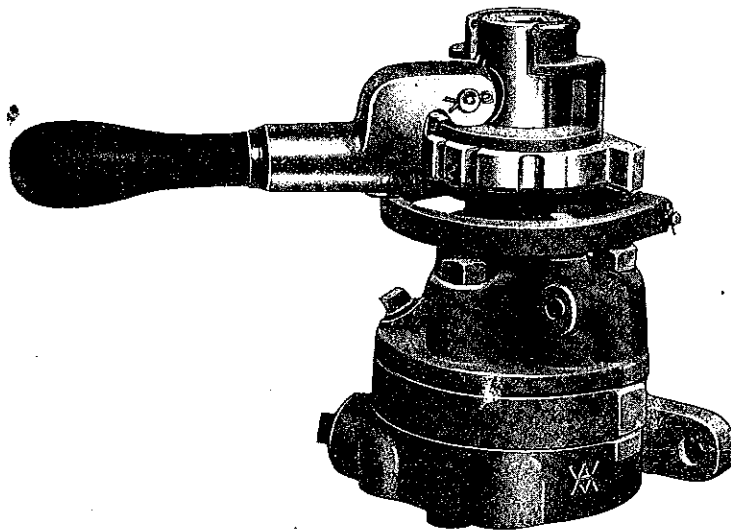
Safety Car Devices Company

of

St. Louis, Mo.

Works and Principal Commercial Office

Wilmerding, Pa.



M-28 Type Brake Valves

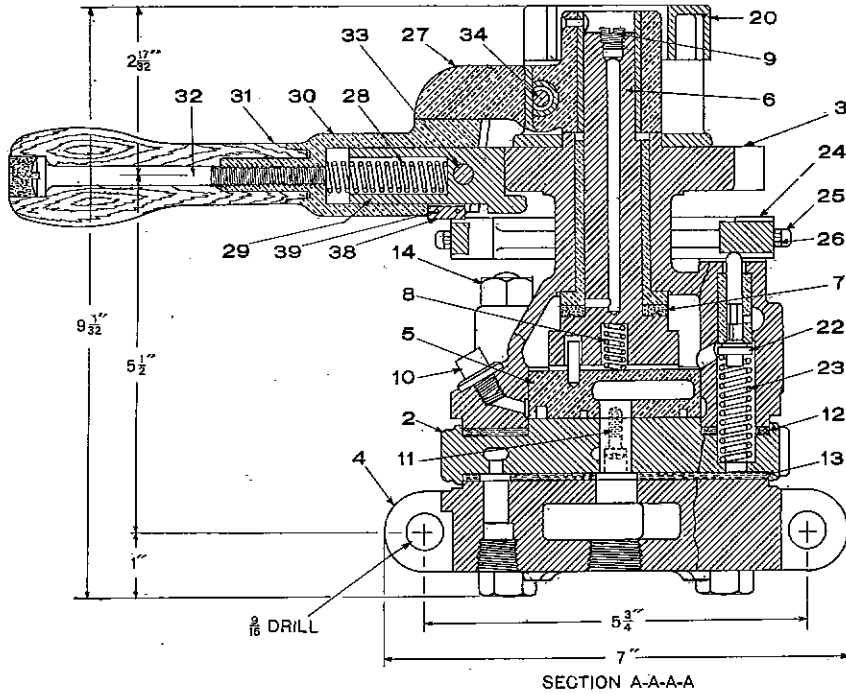
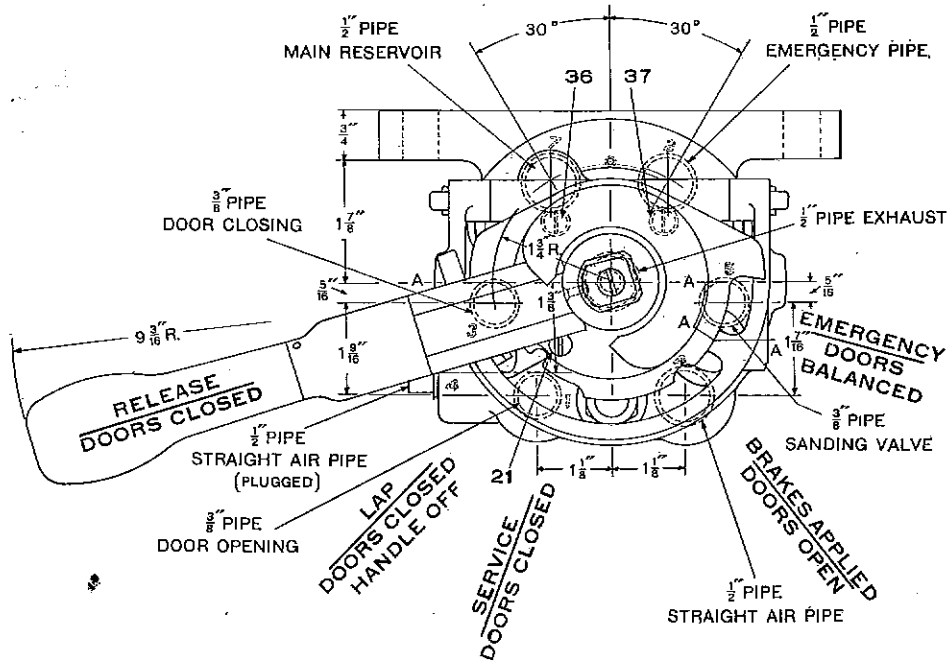
Part Catalog No. S 3507-6

April, 1928

(SUPERSEDES JANUARY, 1923, ISSUE AND TEMP. SUPPLEMENT NO. 2)

M-28, M-28-A and M-28-D BRAKE VALVE

(WITH SANDING FEATURE)



Net Weight, 23 lbs.

M-28, M-28-A and M-28-D BRAKE VALVE
(WITH SANDING FEATURE)

The M-28 Brake Valve is regularly supplied as standard for use with 8" Brake Cylinder with Safety Car Equipment.

The M-28-A Brake Valve is regularly supplied as standard for use with 10" Brake Cylinder with Safety Car Equipment.

The M-28-D Brake Valve is regularly supplied as standard for use with 10" Brake Cylinder when a "D" or "E" Relay Valve is used with Safety Car Equipment.

Piece No. 71075 M-28 Brake Valve less Handle, complete

Piece No. 80708 M-28-A Brake Valve less Handle, complete

Piece No. 85169 M-28-D Brake Valve less Handle, complete

Pc. No.	Ref. No.		Pc. No.	Ref. No.	
63778	2	Rotary Valve Seat, for M-28 and M-28-A	*63481	23	Sanding Valve Spring
81427	2	Rotary Valve Seat, for M-28-D	48453	24	Sanding Bail
71049	3	Body, complete (includes 10)	48474	25	Double Cottered Pin (includes two of 26)
66620	4	Pipe Bracket, complete (includes Pc. 33310)	4045	26	Cotter, (2 Req'd)
71029	5	Rotary Valve, for M-28	71039		Handle, complete (includes 27, 28, 29, 30, 31, 32, 33 and 34)
76117	5	Rotary Valve, for M-28-A	48464	27	Handle Socket (Bushed)
81467	5	Rotary Valve, for M-28-D	*63270	28	Handle Latch Spring
76119	6	Rotary Valve Key, complete (includes 9)	48465	29	Handle Latch
6760	7	Key Washer	71028	30	Handle Body (Bushed) (includes 38 and two of 39)
*13109	8	Key Spring	71031	31	Handle Grip
59071	9	Oil Screw	71034	32	Handle Grip Screw
6753	10	Oil Plug	48467	33	Handle Latch Stud
3380	11	Fil. Hd. Meh. Screw (2 Req'd)	68484	34	Fulcrum Pin
81027	12	Upper Gasket	2058	36	Round Head Mach. Screw (2 Req'd)
81028	13	Lower Gasket	7982	37	Lock Washer (2 Req'd)
25300	14	Hexagon Head Bolt and Nut (3 Req'd)	67677	38	Wearing Plate
71002	20	Handle Guard	26918	39	Wearing Plate Rivet Pin (2 Req'd)
18667	21	Handle Guard Screw	33310		½" Pipe Plug
63478	22	Sanding Valve			

NOTE A—If repairs for M-28 Brake Valve with "Handle Off" position between "Service (Doors Closed)" and "Service (Doors Open)" is desired, orders should specify as follows:

Pc. No.	Ref. No.	
63776	3	Body complete (includes 10)
63779	5	Rotary Valve
63479	20	Handle Guard

NOTE B—If repairs for M-28 Brake Valves with barrier between Lap and Service (Doors Closed) Positions are desired, orders should specify as follows:

Pc. No.	Ref. No.	
70787	3	Body complete (includes 10)
63779	5	Rotary Valve
63479	20	Handle Guard

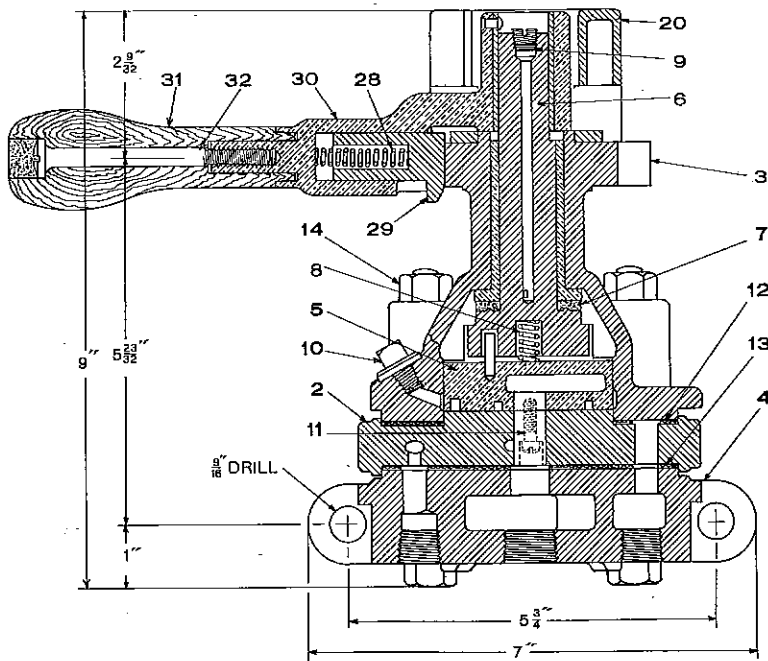
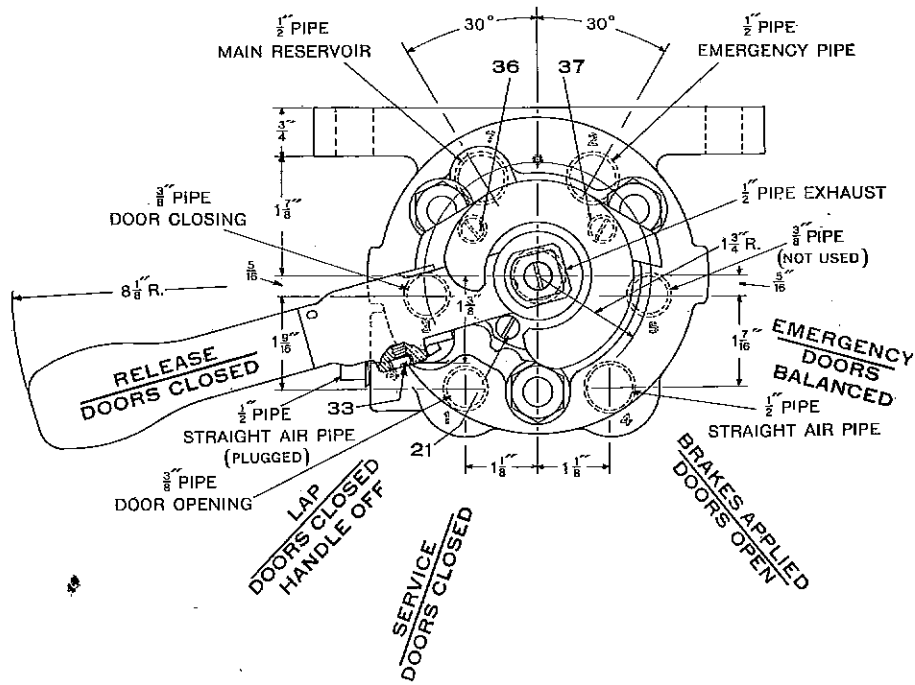
*NOTE C—For Spring Identification Table, see page 5.

Prices will be quoted upon application

Orders should give PIECE NUMBER and NAME of part wanted.

M-28 and M-28-A BRAKE VALVE

(WITHOUT SANDING FEATURE)



Net Weight, 20 lbs.

M-28 and M-28-A BRAKE VALVE

(WITHOUT SANDING FEATURE)

The M-28 Brake Valve is supplied when specially ordered for use with 8" Brake Cylinder, for Safety Car Equipment where the sanding feature is not required.

The M-28-A Brake Valve is supplied when specially ordered for use with 10" Brake Cylinder for Safety Car Equipment where the sanding feature is not required.

Piece No. 71078 M-28 Brake Valve less Handle, complete

Piece No. 80266 M-28-A Brake Valve less Handle, complete

Pc. No.	Ref. No.		Pc. No.	Ref. No.	
63778	2	Rotary Valve Seat	25300	14	Hexagon Head Bolt and Nut (3 Req'd)
71127	3	Body, complete (includes 10)	71024	20	Handle Guard
66620	4	Pipe Bracket, complete (includes Pc. 33310)	18667	21	Flat Head Machine Screw
71029	5	Rotary Valve, for M-28	72306		Handle, complete (includes 28, 29, 30, 31, 32 and 33)
76117	5	Rotary Valve, for M-28-A	* 1367	28	Handle Latch Spring
76119	6	Rotary Valve Key, complete (includes 9)	17897	29	Handle Latch
6760	7	Key Washer	72307	30	Handle Body (Bushed)
*13109	8	Key Spring	71031	31	Handle Grip
59071	9	Oil Screw	71034	32	Handle Grip Screw
6753	10	Oil Plug	17900	33	Handle Latch Screw
3380	11	Ov. Fil. Hd. Machine Screw (2 Req'd)	2058	36	Round Head Machine Screw (2 Req'd)
81027	12	Upper Gasket	7982	37	Lock Washer (2 Req'd)
81028	13	Lower Gasket	33310		1/2" Pipe Plug

NOTE A—If repairs for M-28 Brake Valve with "Handle Off" position between "Service (Doors Closed)" and "Service (Doors Open)" is desired, orders should specify as follows:

Pc. No.	Ref. No.	
63911	3	Body, complete (includes 10)
63779	5	Rotary Valve
63903	20	Handle Guard

*NOTE B—The following table is shown to enable railway storekeepers and air brake men to identify the various springs used in the M-28 Brake 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.



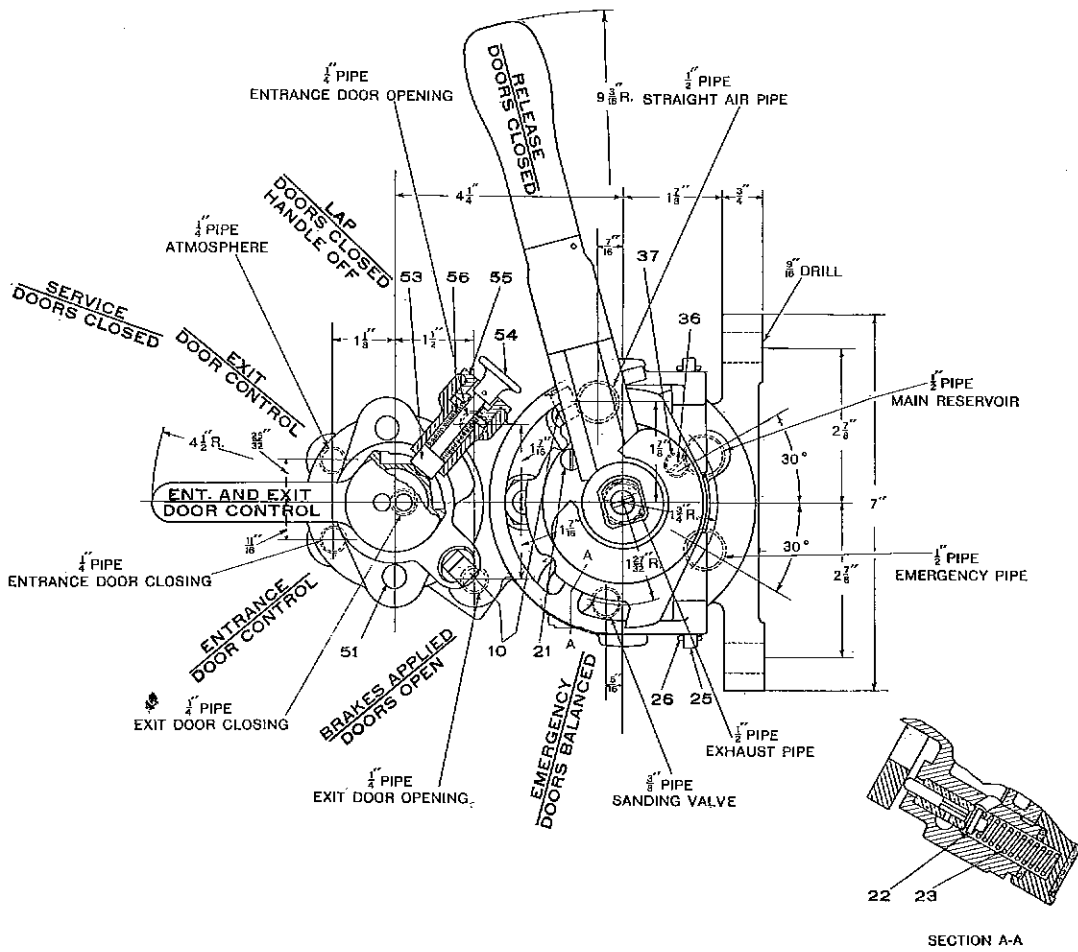
SPRING IDENTIFICATION

Pc. No.	OUT DIA. "A"	DIA. WIRE "B"	FREE HEIGHT "C"	No. COILS	MATERIAL	NAME OF SPRING	WHERE USED
1367	11/32"	.057"	1 3/4"	16	Steel	Handle Latch Spring	M-28 Brake Valve
13109	11/32"	.057"	1 1/8"	9 1/2	Steel	Key Spring	M-28 Brake Valve
63270	1/2"	.054"	2 7/8"	22	Nickel Steel	Handle Latch Spring	M-28 Brake Valve
63481	17/32"	.092"	1 3/8"	14	Nickel Steel	Sanding Valve Spring	M-28 Brake Valve
71060	23/32"	.047"	1 7/8"	9 1/4	Nickel Steel	Key Spring	Selector Valve
71072	25/32"	.054"	1 1/2"	14	Nickel Steel	Handle Stop Spring	Selector Valve

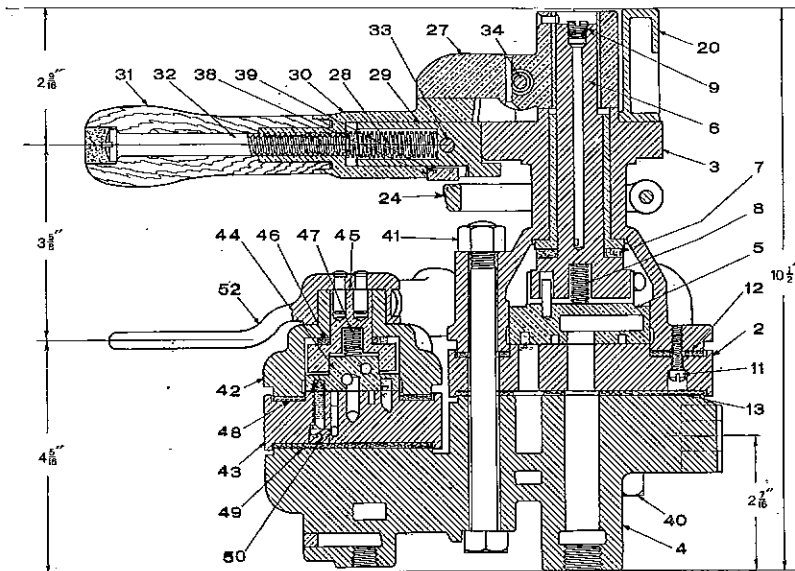
Prices will be quoted upon application

Orders should give PIECE NUMBER and NAME of part wanted.

MD-28, MD-28-A and MD-28-D BRAKE VALVE WITH SELECTOR VALVE
(WITH SANDING FEATURE)



SECTION A-A



Net Weight, 37 lbs.

MD-28, MD-28-A and MD-28-D BRAKE VALVE WITH SELECTOR VALVE

(WITH SANDING FEATURE)

The MD-28 Brake Valve is supplied when specially ordered for use with 8" Brake Cylinder with Safety Car Equipment.

The MD-28-A Brake Valve is supplied when specially ordered for use with 10" Brake Cylinder with Safety Car Equipment.

The MD-28-D Brake Valve is supplied when specially ordered for use with 10" Brake Cylinder when a "D" or "E" Relay Valve is used with Safety Car Equipment.

Piece No. 71048	MD-28 Brake Valve with Selector Valve, complete less Handles
Piece No. 80669	MD-28-A Brake Valve with Selector Valve, complete less Handles
Piece No. 81315	MD-28-D Brake Valve with Selector Valve, complete less Handles
Piece No. 71312	Door Selector Valve, complete, with Pipe Bracket, Gasket and Bolts
Piece No. 71913	Door Selector Valve, complete, with Pipe Bracket, Gasket and Bolts, less Handle
Piece No. 71056	Door Selector Valve, complete, less Pipe Bracket, Gasket and Bolts
Piece No. 71912	Door Selector Valve, complete, less Handle, Pipe Bracket, Gasket and Bolts

Pc. No.	Ref. No.		Pc. No.	Ref. No.	
63778	2	Rotary Valve Seat, for MD-28 and MD-28-A	71028	30	Handle Body (Bushed) (includes 38 and two of 39)
81427	2	Rotary Valve Seat, for MD-28-D	71031	31	Handle Grip
71049	3	Body, complete (includes 10)	71034	32	Handle Grip Screw
71053	4	Pipe Bracket	48467	33	Handle Latch Stud
71029	5	Rotary Valve, for MD-28	68484	34	Fulcrum Pin
76117	5	Rotary Valve, for MD-28-A	2058	36	Rd. Head Handle Guard Screw (2 Req'd)
81467	5	Rotary Valve, for MD-28-D	7982	37	Lock Washer (2 Req'd)
76119	6	Rotary Valve Key, complete (includes 9)	67677	38	Wearing Plate
6760	7	Key Washer	26918	39	Wearing Plate Rivet Pin (2 Req'd)
*13109	8	Key Spring	25336	40	1/2"x4 3/4" Hex. Hd. Bolt and Nut (2 Req'd)
59071	9	Oil Screw	25338	41	1/2"x5 3/4" Hex. Hd. Bolt and Nut
6753	10	Oil Plug (2 Req'd)	71056		Door Selector Valve, complete
3380	11	Fil. Hd. Mch. Screw (2 Req'd)	71055	42	Body (includes 10 and two of 51)
81027	12	Upper Gasket	71062	43	Valve Seat
81028	13	Lower Gasket	71058	44	Rotary Valve
71002	20	Handle Guard	71059	45	Rotary Valve Key
18667	21	Handle Guard Screw	12678	46	Key Washer
63478	22	Sanding Valve	*71060	47	Key Spring
*63481	23	Sanding Valve Spring	81716	48	Upper Gasket
48453	24	Sanding Bail	82576	49	Lower Gasket
48474	25	Double Cottered Pin (includes two of 26)	25461	50	Fil. Hd. Mach. Screw (2 Req'd)
4045	26	Cotter (2 Req'd)	13770	51	1/2"x4" Stud and Nut (2 Req'd)
71039		Handle, complete, (includes 27, 28, 29, 30, 31, 32, 33 and 34)	71067	52	Handle
48464	27	Handle Socket (Bushed)	71068	53	Handle Stop Pin
*63270	28	Handle Latch Spring	71069	54	Stop Pin Button
48465	29	Handle Latch	71071	55	Handle Stop Nut
			*71072	56	Handle Stop Spring

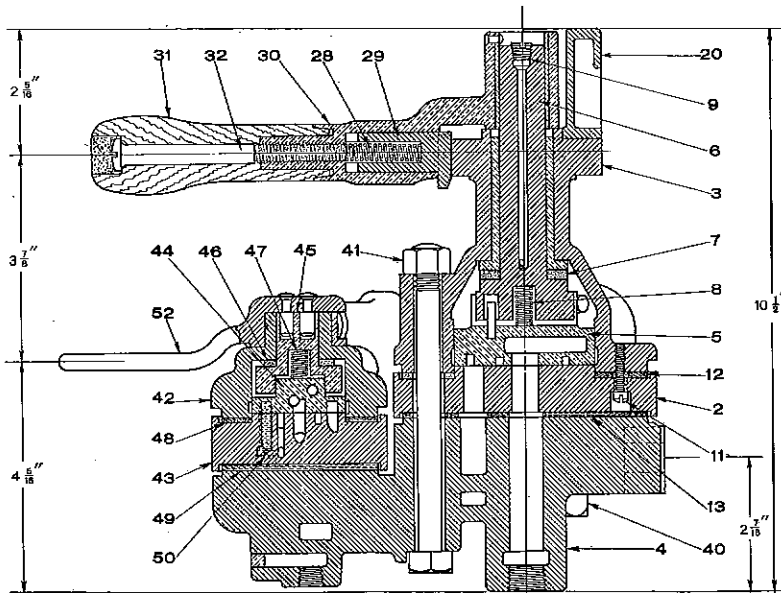
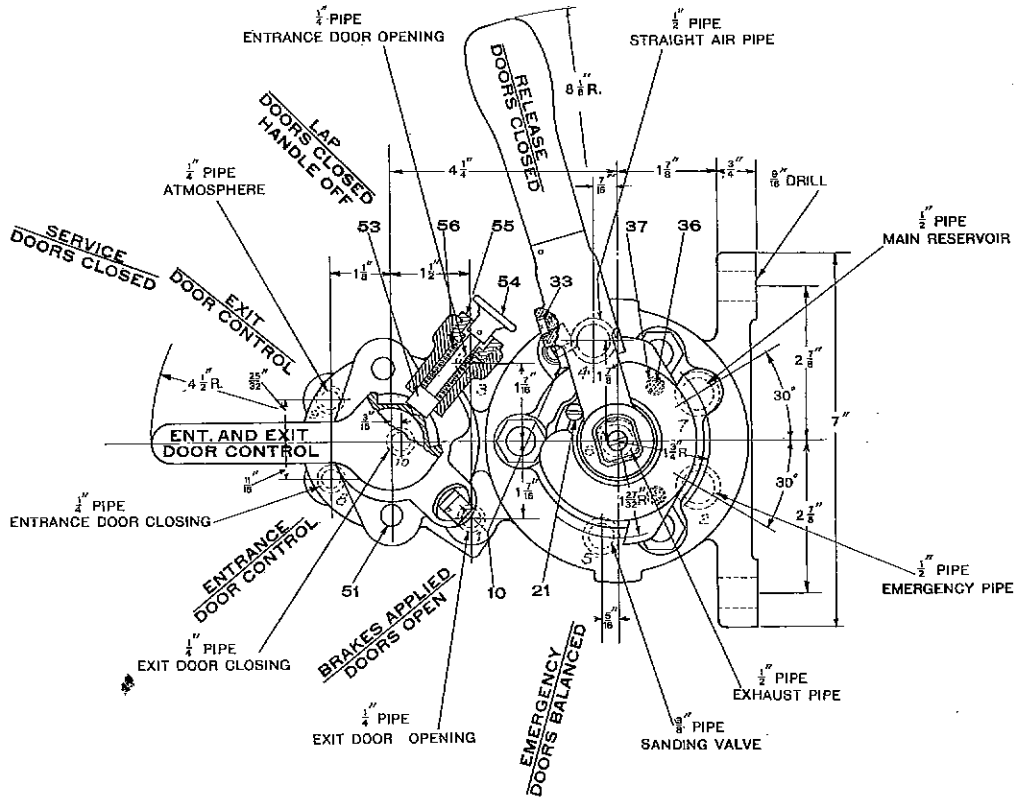
*NOTE—For Spring Identification Table, see page 5.

Prices will be quoted upon application

Orders should give PIECE NUMBER and NAME of part wanted.

MD-28 and MD-28-A BRAKE VALVE WITH SELECTOR VALVE

(WITHOUT SANDING FEATURE)



Net Weight, 35 lbs.

MD-28 and MD-28-A BRAKE VALVE WITH SELECTOR VALVE

(WITHOUT SANDING FEATURE)

The MD-28 Brake Valve is supplied when specially ordered for use with 8" Brake Cylinder for Safety Car Equipment where the sanding feature is not required.

The MD-28-A Brake Valve is supplied when specially ordered for use with 10" Brake Cylinder for Safety Car Equipment where the sanding feature is not required.

- Piece No. 72719 MD-28 Brake Valve with Selector Valve, complete, less Handles
 Piece No. 80897 MD-28-A Brake Valve with Selector Valve, complete, less Handles
 Piece No. 71312 Door Selector Valve, complete, with Pipe Bracket, Gasket and Bolts
 Piece No. 71913 Door Selector Valve, complete, with Pipe Bracket, Gasket and Bolts, less Handle
 Piece No. 71056 Door Selector Valve, complete, less Pipe Bracket, Gasket and Bolts
 Piece No. 71912 Door Selector Valve, complete, less Handle, Pipe Bracket, Gasket and Bolts

Pc. No.	Ref. No.		Pc. No.	Ref. No.	
63778	2	Rotary Valve Seat	2058	36	Rd. Hd. Handle Guard Screw (2 Req'd)
71127	3	Body, complete (includes 10)	7982	37	Lock Washer (2 Req'd)
71053	4	Pipe Bracket	25336	40	1/2"x4 3/4" Hex. Hd. Mch. Bolt and Nut (2 Req'd)
71029	5	Rotary Valve, for MD-28	25338	41	1/2"x5 3/4" Hex. Hd. Mch. Bolt and Nut
76117	5	Rotary Valve, for MD-28-A	71056		Door Selector Valve, complete
76119	6	Rotary Valve Key (includes 9)	71055	42	Body (includes 10 and two of 51)
6760	7	Rotary Valve Key Washer	71062	43	Valve Seat
*13109	8	Rotary Valve Key Spring	71058	44	Rotary Valve
59071	9	Oil Screw	71059	45	Rotary Valve Key
6753	10	Oil Plug (2 Req'd)	12678	46	Key Washer
3380	11	Fil. Hd. Mch. Screw (2 Req'd)	*71060	47	Key Spring
81027	12	Upper Gasket	81716	48	Upper Gasket
81028	13	Lower Gasket	82576	49	Lower Gasket
71024	20	Handle Guard	25461	50	Fil. Hd. Screw (2 Req'd)
18677	21	Handle Guard Screw	13770	51	1/2"x4" Stud and Nut (2 Req'd)
72306		Handle, complete (includes 28, 29, 30, 31, 32 and 33)	71067	52	Handle
*1367	28	Handle Latch Spring	71068	53	Handle Stop Pin
17897	29	Handle Latch	71069	54	Stop Pin Button
72307	30	Handle Body, (Bushed)	71071	55	Handle Stop Nut
71031	31	Handle Grip	*71072	56	Handle Stop Spring
71034	32	Handle Grip Screw			
17900	33	Handle Latch Screw			

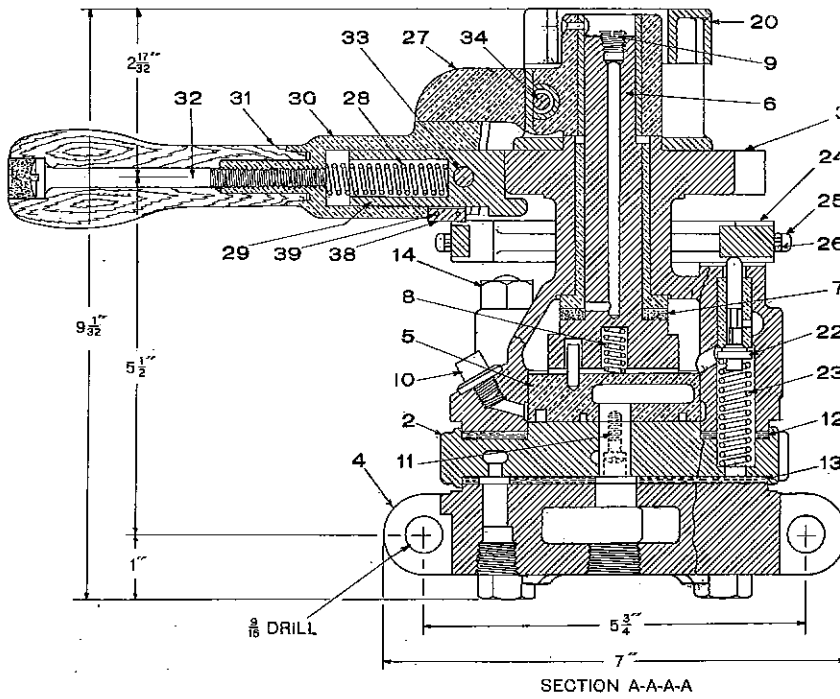
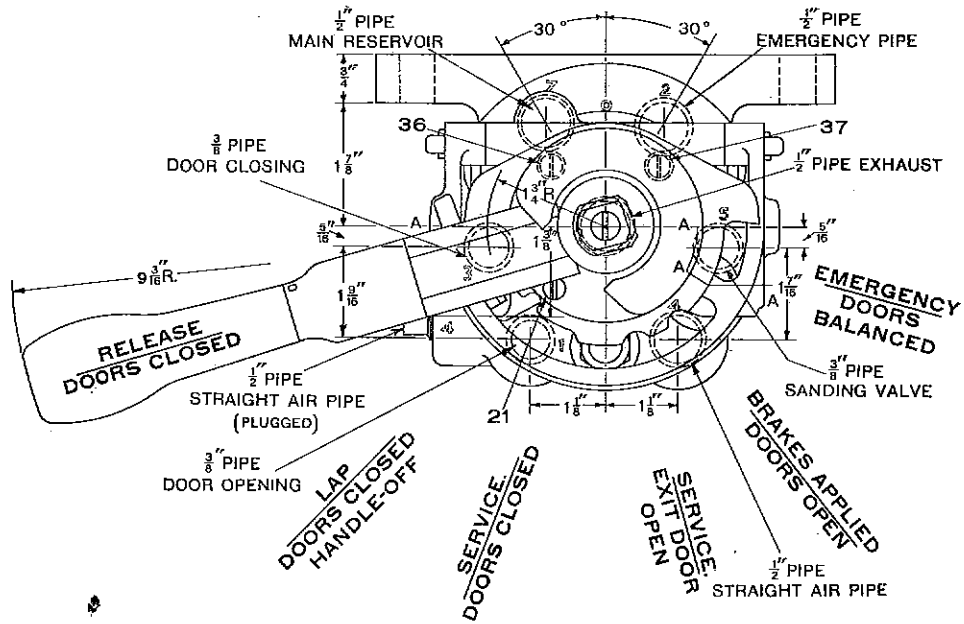
*NOTE—For Spring Identification Table, see page 5.

Prices will be quoted upon application

Orders should give PIECE NUMBER and NAME of part wanted.

M-28-B and M-28-AB BRAKE VALVE

(WITH SANDING FEATURE)



Net Weight, 24 lbs.

M-28-B and M-28-AB BRAKE VALVE

(WITH SANDING FEATURE)

The M-28-B Brake Valve is supplied when specially ordered for use with 8" Brake Cylinder with Safety Car Equipment where a separate door open position is desired to control a treadle door.

The M-28-AB Brake Valve is supplied when specially ordered for use with 10" Brake Cylinder with Safety Car Equipment where a separate door open position is desired to control a treadle door.

Piece No. 75337 M-28-B Brake Valve, less Handle, complete

Piece No. 82239 M-28-AB Brake Valve, less Handle, complete

Pc. No.	Ref. No.		Pc. No.	Ref. No.	
63778	2	Rotary Valve Seat	48453	24	Sanding Bail
75426	3	Body, complete (includes 10)	48474	25	Double Cottered Pin (includes two of 26)
66620	4	Pipe Bracket, complete (includes Pc. 33310)	4045	26	Cotter (2 Req'd)
75425	5	Rotary Valve, for M-28-B	71039		Handle, complete (includes 27, 28, 29, 30, 31, 32, 33 and 34)
82692	5	Rotary Valve, for M-28-AB	48464	27	Handle Socket (Bushed)
76119	6	Rotary Valve Key, complete (includes 9)	*63270	28	Handle Latch Spring
6760	7	Key Washer	48465	29	Handle Latch
*13109	8	Key Spring	71028	30	Handle Body (Bushed) (includes 38 and two of 39)
59071	9	Oil Screw	71031	31	Handle Grip
6753	10	Oil Plug	71034	32	Handle Grip Screw
3380	11	Fil. Hd. Mch. Screw (2 Req'd)	48467	33	Handle Latch Stud
81027	12	Upper Gasket	68484	34	Fulcrum Pin
81028	13	Lower Gasket	2058	36	Rd. Hd. Mch. Screw (2 Req'd)
25300	14	Hex. Hd. Bolt and Nut (3 Req'd)	7982	37	Lock Washer (2 Req'd)
71002	20	Handle Guard	67677	38	Wearing Plate
18667	21	Handle Guard Screw	26918	39	Wearing Plate Rivet Pin (2 Req'd)
63478	22	Sanding Valve	33310		1/2" Pipe Plug
*63481	23	Sanding Valve Spring			

*NOTE—For Spring Identification Table, see page 5.

Prices will be quoted upon application.

Orders should give PIECE NUMBER and NAME of part wanted.

S 3507-6

General Correspondence office 28 / 6 / 45

Westinghouse Brakes (plus) Pty. Ltd.

No. 192182

Dated 21 / 6 / 45
Safety Car Devices Company

of

St. Louis, Mo.

Works and Principal Commercial Office, Wilmerding, Pa.

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