

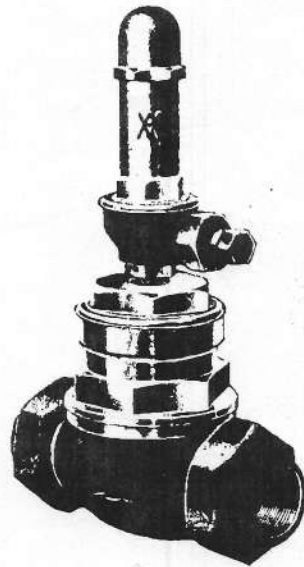


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Crown Metal Products Co.

WYANO, PA. — U.S.A.

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Area Code 412



Steam Compressor Governors—Type S

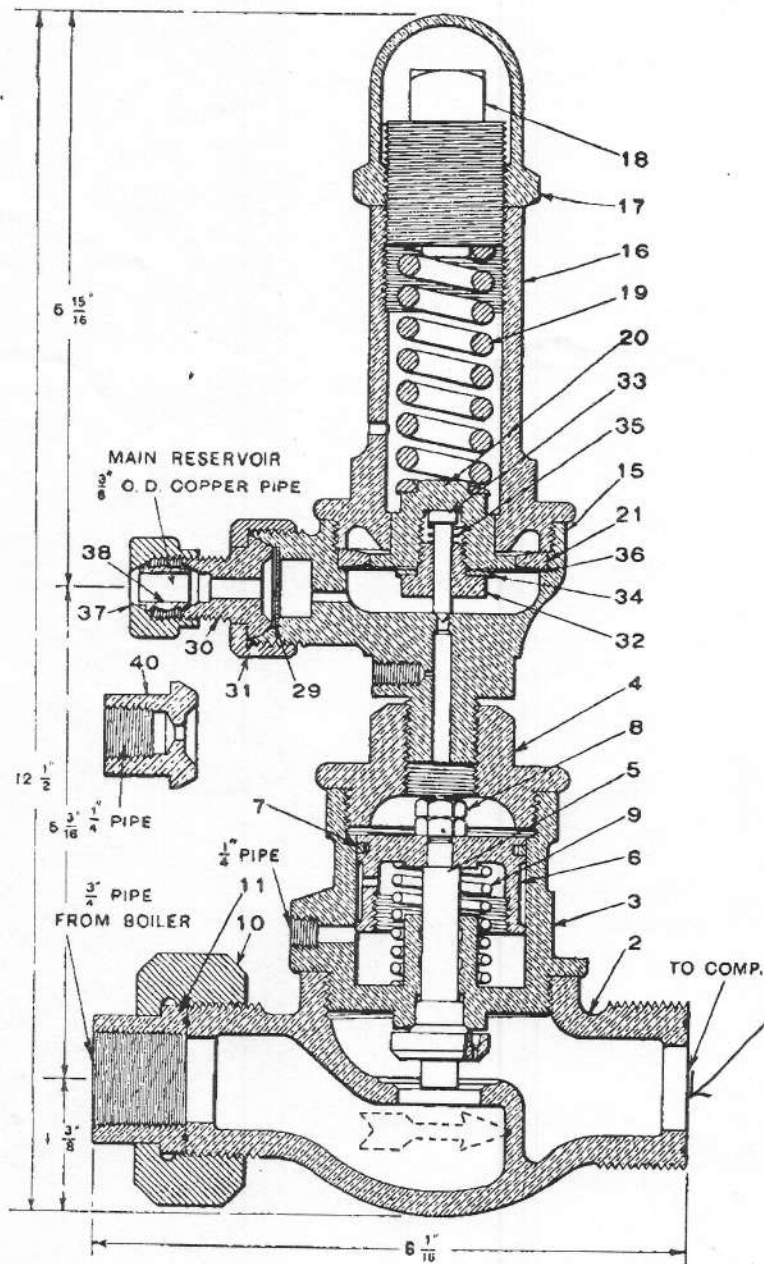
(Single Top)

Part Catalog No. 3205-1 December, 1936

(SUPERSEDING ISSUE OF OCTOBER, 1933)



TYPE S-3 (3/4-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR



UNION SWIVEL 2076
UNION NUT 2077

Net Weight, 11 lbs.

TYPE S-3 (3/4-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR

The Type S-3 Steam Compressor Governor is no longer regularly furnished with full sets of air brake equipment.

Piece No. 24973 Type S-3 Steam Compressor Governor, for 3/4" Iron Pipe and Air Connection for 3/8" Copper Tube (See Note A)

STEAM PORTION			DIAPHRAGM PORTION		
Pc. No.	Ref. No.	**No. Per Pkg.	Pc. No.	Ref. No.	**No. Per Pkg.
2468		1	17213	7	50
					Piston Ring for rebored cylinder, 1 7/8" dia.
2469	2	1	2022	8	Piston Nut (2 Req'd)
2476	3	1	*2027	9	Piston Spring
2471	4	1	2477	10	3/4" Union Nut
†2479	5		2478	11	3/4" Union Swivel
21154	5		20782	1	Diaphragm Portion, complete (See Note A)
21205	5		9033	15	2 Diaphragm Body (includes 29)
21206	5		2033	16	1 Spring Box
21155	5		2034	17	3 Check Nut
2472	6	1	2035	18	24 Regulating Nut
17278	6	1	*2036	19	14 Regulating Spring
17279	6	1	2043	20	1-3-6 Diaphragm, complete (includes 32, 33, 34, 35 and two of 36)
17280	6	1			
17281	6	1	1064	21	15 Diaphragm Ring
13206	7	50	2046	29	100 Strainer
15571	7	50	86767		Compression Coupling, complete (3/8" copper tube) (includes 30, 37 and 38) (See Note B)
15572	7	50	86766	30	Union Swivel (See Note A)
17212	7	50	15291	31	Union Nut
			2041	32	Diaphragm Nut
			2039	33	50 Diaphragm Valve
			2040	34	Diaphragm Washer
			*2042	35	100 Diaphragm Valve Spring
			2038	36	100 Diaphragm (2 Req'd)
			71728	37	Union Nut
			71727	38	Sleeve
			2045	40	1/4" PIPE, UNION SWIVEL

NOTE A—If 1/2" iron pipe is to be used for air connection, specify Piece No. 2467, for S-3 Steam Compressor Governor complete and Piece No. 2047, for Diaphragm Portion complete; then Union Swivel, Piece No. 2045, Ref. No. 40, will be substituted for Union Swivel, Ref. No. 30.

NOTE B—If repairs for Governors having old style swivel type copper pipe air connections are desired, orders should specify Union Swivel, Pc. No. 5384 instead of complete Compression Coupling, Pc. No. 86767, Ref. Nos. 30, 37 and 38.

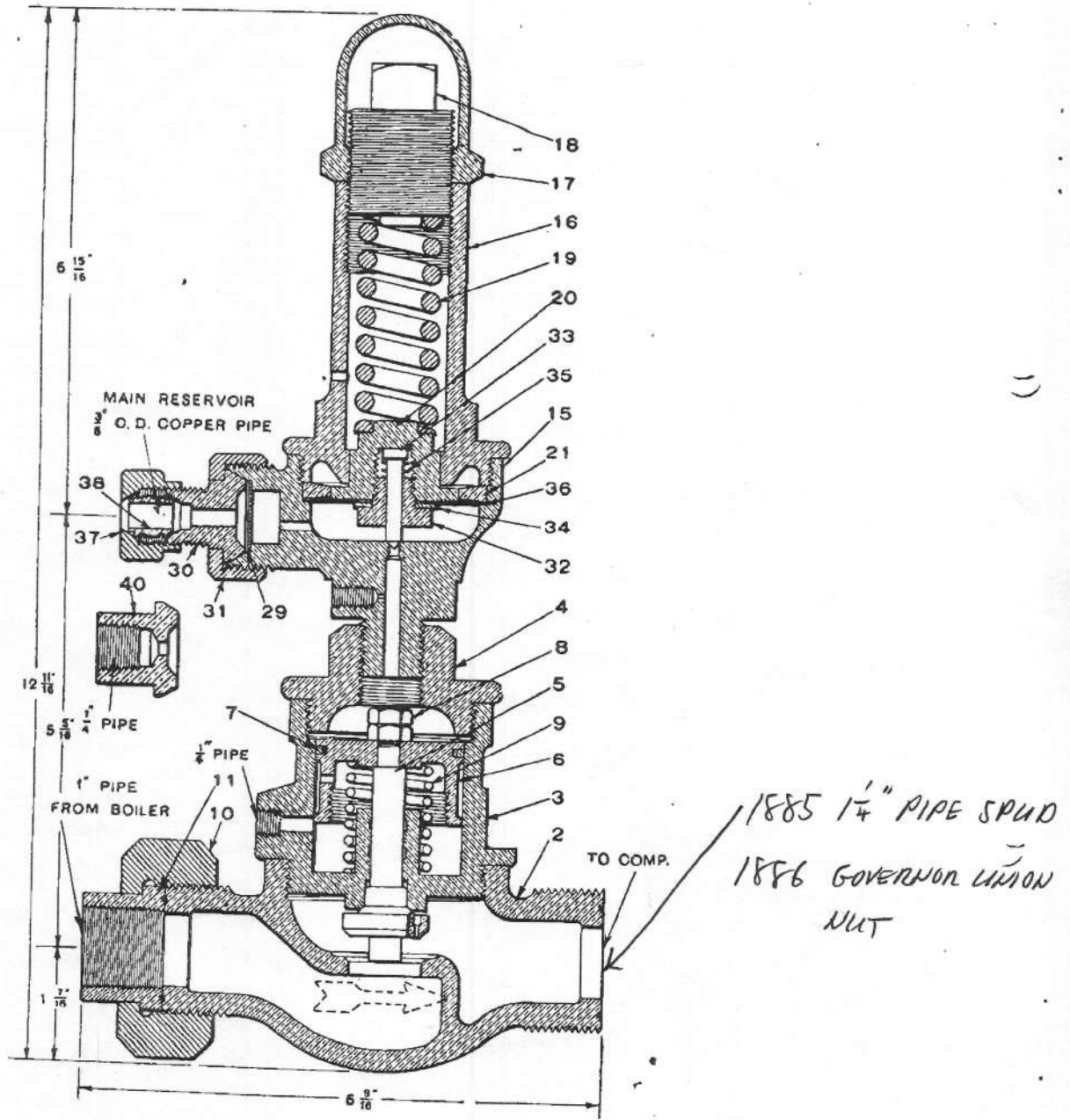
NOTE C—Steam Valve with 3/8" diameter stem is the size furnished with new governors and will be supplied also on repair orders, unless otherwise specified. Steam Valves listed with the larger diameter stem are for repair purposes when the guide portion of the cylinder body has been rebored.

***NOTE D**—For Spring Identification Table, see page 10.

****NOTE E**—Column headed "No. Per Pkg." indicates the items for which standard shipping packages have been established and the number contained in the package. Orders placed in these quantities and multiples thereof will facilitate shipments and provide convenient means for handling in storeroom stock.

Prices will be quoted upon application
Orders should give **PIECE NUMBER** and **NAME** of part wanted

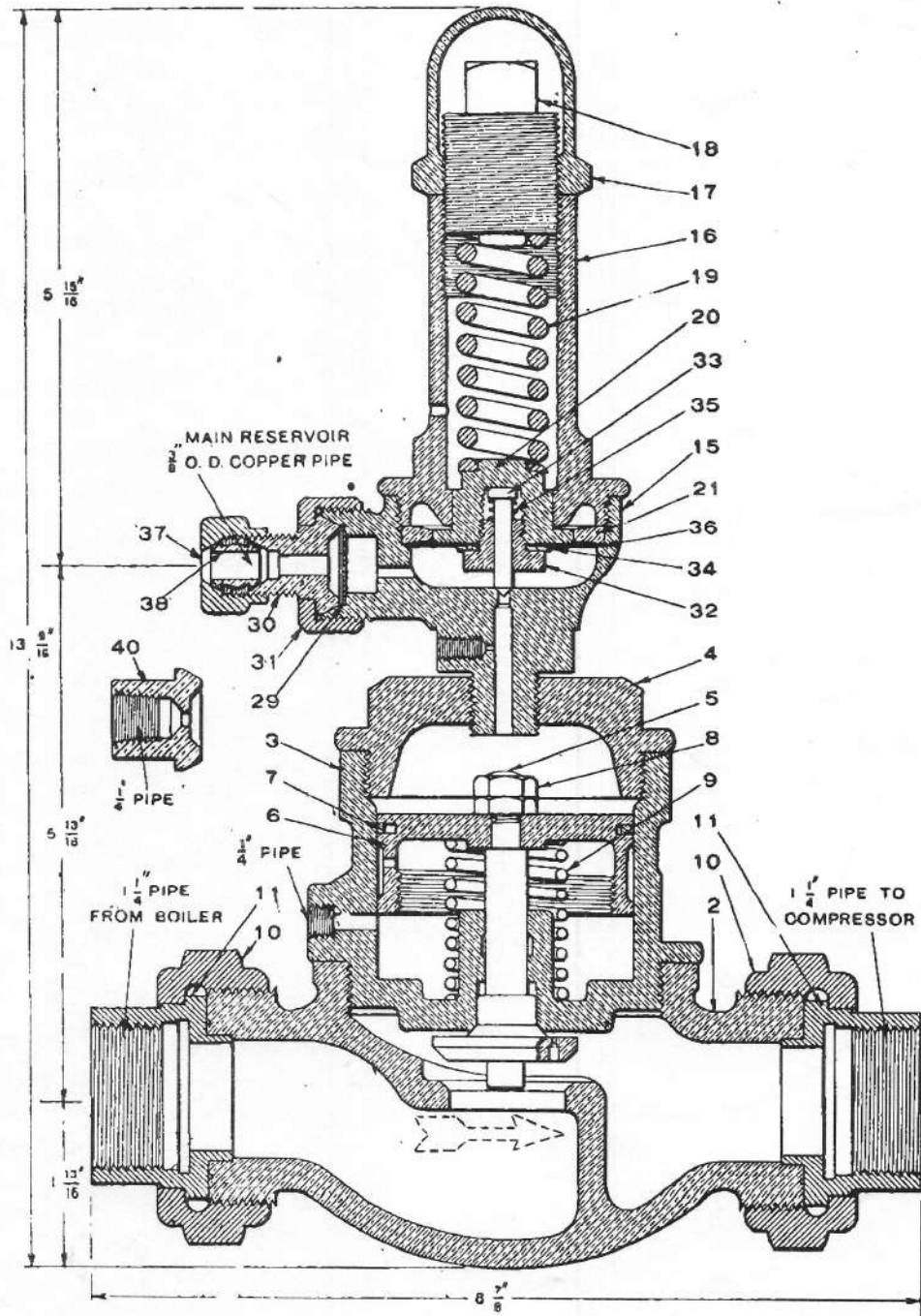
TYPE S-4 (1-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR



1885 $\frac{1}{4}$ " PIPE SPUD
1886 GOVERNOR UNION
NUT

Net Weight, 13 lbs.

TYPE S-5 (1¼-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR



Net Weight, 19½ lbs.

TYPE S-5 (1¼-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR

The Type S-5 Steam Compressor Governor is no longer recommended for use in connection with standard Locomotive Brake Schedules, having been replaced by the AD-5 Super Governor (Part Catalog 3205-4).

Piece No. 22084 Type S-5 Steam Compressor Governor, complete, for 1¼" Iron Pipe and Air Connection for 3/8" Copper Tube (See Note A).

STEAM PORTION			DIAPHRAGM PORTION		
Pc. No.	Ref. No.	**No. Per Pkg.	Pc. No.	Ref. No.	**No. Per Pkg.
17879		1	21601	7	50
					Piston Ring for rebored cylinder, 27/8" dia.
17668	2	1	17674	8	Piston Nut (2 Req'd)
17672	3	1	*17673	9	Piston Spring
17671	4	1	2154	10	1¼" Union Nut (2 Req'd)
†17670	5	24	2155	11	1¼" Union Swivel (2 Req'd)
26261	5	24	20782	1	Diaphragm Portion, complete (See Note A)
26262	5	24	9033	15	2 Diaphragm Body (includes 29)
40263	5	24	2033	16	1 Spring Box
40265	5	24	2034	17	3 Check Nut
17916	6	1	2035	18	24 Regulating Nut
21606	6	1	*2036	19	14 Regulating Spring
21607	6	1	2043	20	1-3-6 Diaphragm, complete (includes 32, 33, 34, 35 and two of 36)
21608	6	1	1064	21	15 Diaphragm Ring
21609	6	1	2046	29	100 Strainer
17554	7	50	86767		Compression Coupling, complete (3/8" Copper Tube) (includes 30, 37 and 38) (See Note B)
21598	7	50	86766	30	Union Swivel (See Note A)
21599	7	50	15291	31	Union Nut
21600	7	50	2041	32	Diaphragm Nut
			2039	33	50 Diaphragm Valve
			2040	34	Diaphragm Washer
			*2042	35	100 Diaphragm Valve Spring
			2038	36	100 Diaphragm (2 Req'd)
			71728	37	Union Nut
			71727	38	Thimble
			2045	40	1/4" PIPE, UNION SWIVEL

NOTE A—If 1/4" iron pipe is to be used for air connection, specify Piece No. 17856, for S-5 Steam Compressor Governor, complete, and Piece No. 2047, for Diaphragm Portion, complete; then Union Swivel, Piece No. 2045, Ref. No. 40, will be substituted for Union Swivel, Ref. No. 30.

If S-5 Governor with two waste pipe connections is desired, specify complete Piece No. 58305, and Cylinder Body, Piece No. 58306, will be substituted for body, Piece No. 17672, Ref. No. 3.

NOTE B—If repairs for Governors having old style swivel type copper pipe air connections are desired, orders should specify Union Swivel, Pc. No. 5384 instead of complete Compression Coupling, Pc. No. 86767, Ref. Nos. 30, 37 and 38.

NOTE C—Steam Valve with 1/8" diameter stem is the size furnished with new governors and will be supplied also on repair orders, unless otherwise specified. Steam Valves listed with the larger diameter stem are for repair purposes when the guide portion of the cylinder body has been rebored.

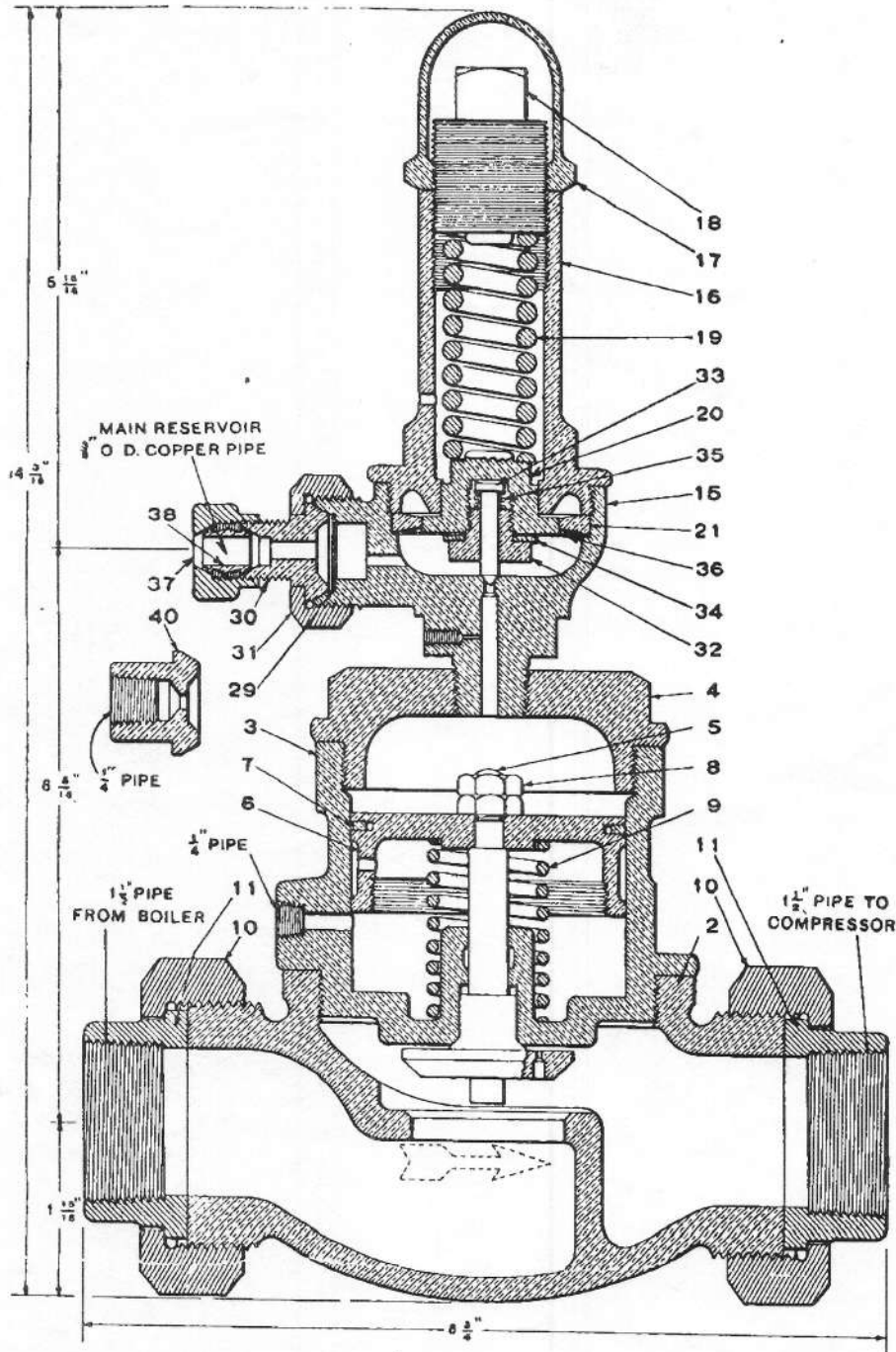
***NOTE D**—For Spring Identification Table, see page 10.

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Prices will be quoted upon application

Orders should give **PIECE NUMBER** and **NAME** of part wanted

TYPE S-6 (1½-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR



Net Weight, 23½ lbs.

TYPE S-6 (1½-INCH) SINGLE TOP STEAM COMPRESSOR GOVERNOR

The Type S-6 Steam Compressor Governor is no longer recommended for use in connection with Standard Locomotive Brake Schedules, having been replaced by the AD-6 Super Governor (Part Catalog 3205-4).

Piece No. 37456 Type S-6 Steam Compressor Governor, complete, for 1½" Iron Pipe and Air Connection for 3/8" Copper Tube (See Note A)

STEAM PORTION			DIAPHRAGM PORTION		
Pc. No.	Ref. No.	**No. Per Pkg.	Pc. No.	Ref. No.	**No. Per Pkg.
37507		1	38550	7	50
					Piston Ring for rebored cylinder, 3 1/8" dia.
37308	2	1	17674	8	Piston Nut (2 Req'd)
37307	3	1	*17673	9	Piston Spring
37309	4	1	2684	10	1 1/2" Union Nut (2 Req'd)
†37312	5	12	2683	11	1 1/2" Union Swivel (2 Req'd)
40272	5	12	20782	1	Diaphragm Portion, complete (See Note A)
40273	5	12	9033	15	2 Diaphragm Body (includes 29)
40290	5	12	2033	16	1 Spring Box
40275	5	12	2034	17	3 Check Nut
37457	6	1	2035	18	24 Regulating Nut
38551	6	1	*2036	19	14 Regulating Spring
38552	6	1	2043	20	1-3-6 Diaphragm, complete, (includes 32, 33, 34, 35 and two of 36)
38553	6	1	1064	21	Diaphragm Ring
38554	6	1	2046	29	Strainer
1804	7	50	86767		Compression Coupling, complete (3/8" Copper Tube) (includes 30, 37 and 38) (See Note B)
18284	7	50	86766	30	Union Swivel (See Note A)
13617	7	50	15291	31	Union Nut
38549	7	50	2041	32	Diaphragm Nut
			2039	33	50 Diaphragm Valve
			2040	34	Diaphragm Washer
			*2042	35	100 Diaphragm Valve Spring
			2038	36	100 Diaphragm (2 Req'd)
			71728	37	Union Nut
			71727	38	Thimble
			2045	40	1/2" PIPE, UNION SWIVEL

NOTE A—If ½" iron pipe is to be used for air connections, specify Piece No. 44448, for S-6 Steam Compressor Governor, complete, and Piece No. 2047, for Diaphragm Portion, complete; then Union Swivel, Piece No. 2045, Ref. No. 40, will be substituted for Union Swivel, Ref. 30.

NOTE B—If repairs for Governors having old style swivel type copper pipe air connections are desired, orders should specify Union Swivel, Pc. No. 5384 instead of complete Compression Coupling, Pc. No. 86767, Ref. Nos. 30, 37 and 38.

***NOTE C**—For Spring Identification Table, see page 10.

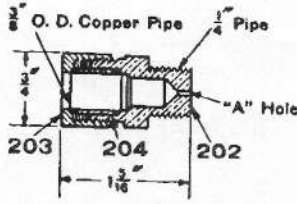
†NOTE D—Steam Valve with 1/4" diameter stem is the size furnished with new governors and will be supplied also on repair orders unless otherwise specified. Steam Valves listed with the larger diameter stem are for repair purposes when the guide portion of the cylinder body has been rebored.

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Prices will be quoted upon application

Orders should give **PIECE NUMBER** and **NAME** of part wanted

TYPE S SINGLE TOP STEAM COMPRESSOR GOVERNOR

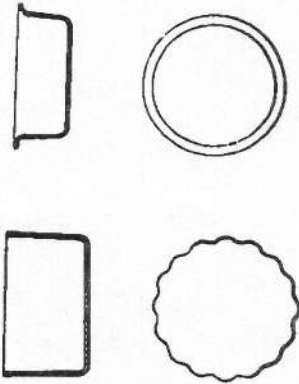


UNION STUD CONNECTION FOR END OF GOVERNOR PIPE

Ref. No.	Union Stud Connection, complete	Pc. No.
		71713 Weight 1/8 lb.
	Size of "A" Hole	1/8"
202	Union Stud	71730
203	Union Nut	71728
204	Union Thimble	71727

SHEET METAL THREAD PROTECTORS

Sheet metal thread protectors in the form of caps, plugs, and discs are used to close the openings in various devices, on shipment from our works, for the purpose of protecting threads from injury and preventing dirt from getting inside the apparatus. These are so satisfactory that we list below the protectors used with Type S Governors, believing that many railroads, on account of the small expense involved and the protection insured, will desire to use them when shipping valves from point to point, or when returning old valves to us for repairs.



- Piece No. 52771. For 1/8" Pipe Tap
- Piece No. 21128. For 1/4" Pipe Tap
- Piece No. 21196. For 3/4" Pipe Tap
- Piece No. 21197. For 1" Pipe Tap
- Piece No. 21257. For 1 1/4" Pipe Tap
- Piece No. 26476. For 1 1/2" Pipe Tap
- Piece No. 57392. For 1 3/8" External Thread
- Piece No. 57394. For 2 1/8" External Thread
- Piece No. 22526. For M. R. connection (1 1/8" disc)

PACKING AND SHIPPING—STANDARD PRACTICE

Type S Governors are packed as required; usually not over twelve in one box.

SPRING IDENTIFICATION

The following table is shown to enable railroad men, storekeepers and all Air Brake men to identify the various springs used in the Type S Governors cataloged herein. It is based on calculated figures and the actual spring will vary somewhat, due to small differences in wire diameter, coil diameter, number of turns, etc. This tabulation is intended for identification only and should not be used for any other purpose. It does not represent a specification for the springs mentioned.



SPRING IDENTIFICATION

Pc. No.	NOMINAL OUT. DIA. "A"	NOMINAL DIA. WIRE "B"	NOMINAL FREE HEIGHT "C"	* APPROX. NO. TURNS	MATERIAL	NAME OF SPRING	WHERE USED
2027	1"	.109"	2"	8	Steel	Piston Spring	S-3 and S-4 Governors
2036	1"	.220"	2 3/4"	9	Steel	Regulating Spring	S-3, S-4, S-5 and S-6 Gov's
2042	1 1/8"	.049"	1 1/8"	3	Brass	Diaphragm V. Spring	S-3, S-4, S-5 and S-6 Gov's
17673	1 1/8"	1/8"	2 1/2"	8	Steel	Piston Spring	S-5 and S-6 Governors

*NOTE: The number of turns for each spring to be counted from the extreme ends of the wire.

Prices will be quoted upon application
Orders should give **PIECE NUMBER** and **NAME** of part wanted