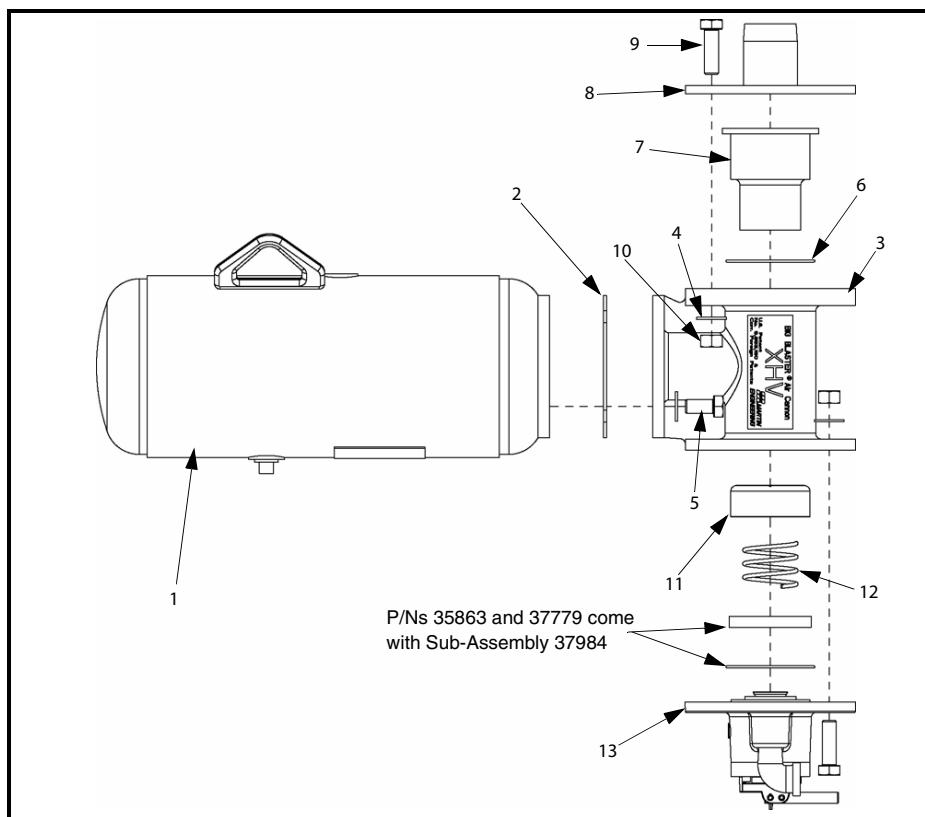
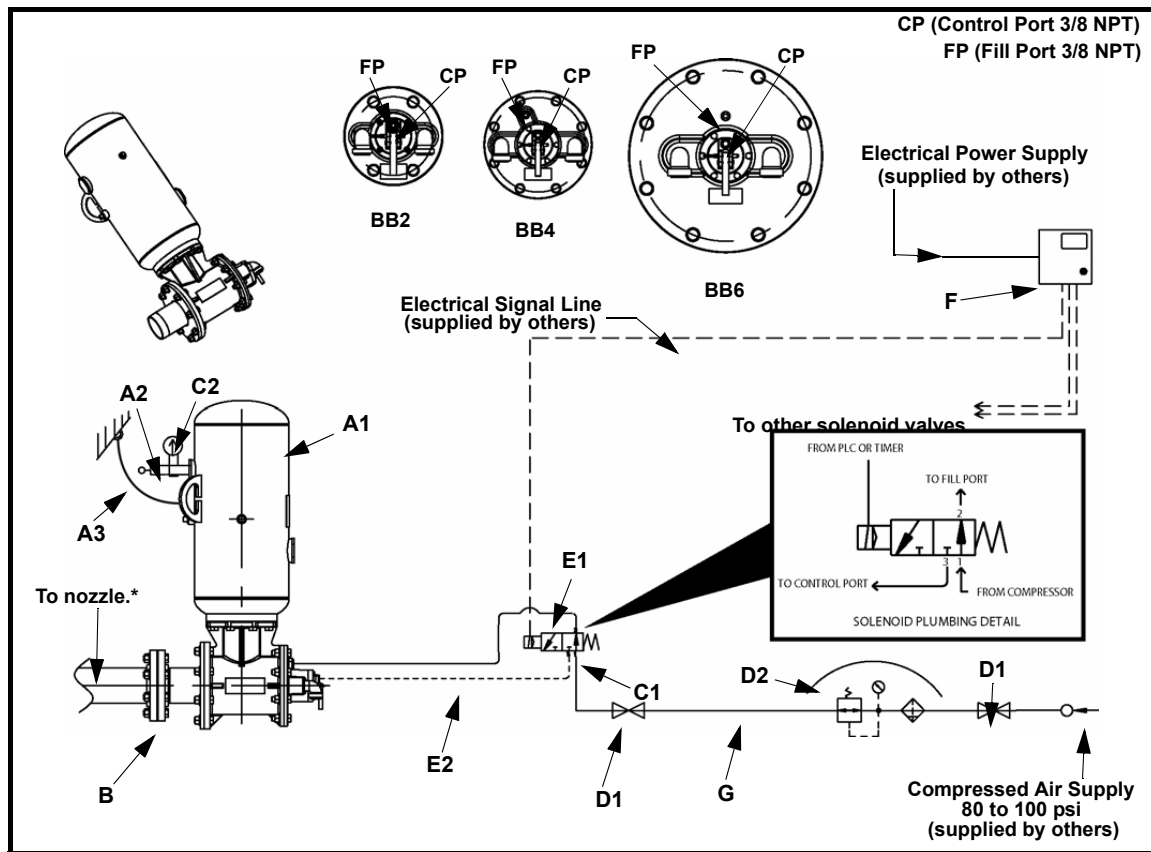




P/N 37864-XXXX* Martin® Tornado Air Cannon 2" Assembly

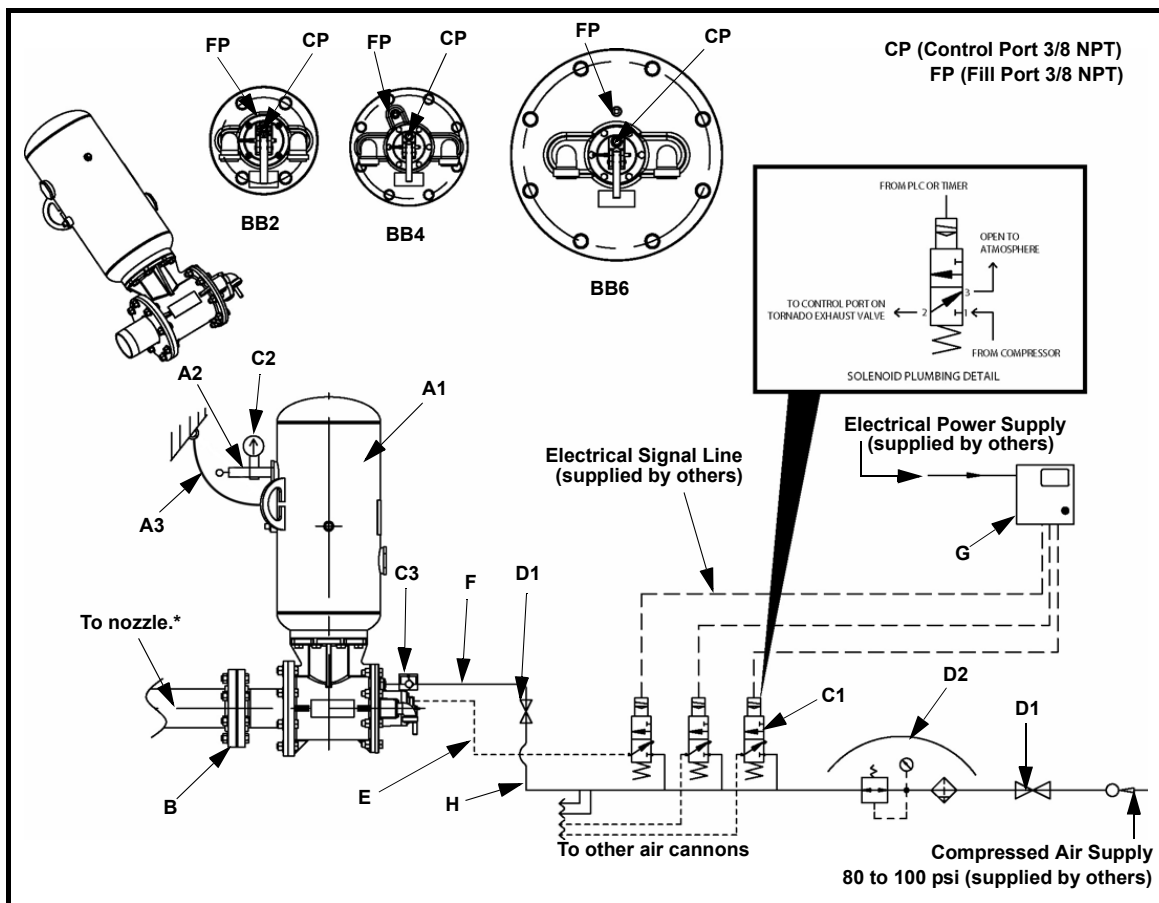
Item	Description	Part No.	Qty
1	Tank Weldment	21858 or 23128	1
2	Tank Gasket for 2.00 XHV	35872	1
3	Valve Body Assembly	35853-B	1
4	Washer Compression 5/8	11752	14
5	Screw HHC 5/8-11NC x 1-1/4 ZP	15798	4
6	O-ring 3-3/4 ID Viton	35863	1
7	Piston Seat for 2.00 XHV	35861	1
8	Discharge Weldment for 2.00 XHV	35860	1
9	Screw HHC 5/8-11NC x 2 ZP	18831	10
10	Nut Hex 5/8-11NC ZP	11772	10
11	Piston with Urethane for 2.00 Air Cannon	37961	1
12	Compression Spring	35865	1
13	2.00 Valve Cap Sub-Assembly	37984	1

*First XX indicates tank diameter; Last XX indicates tank length. Available sizes: 0812 and 0820.



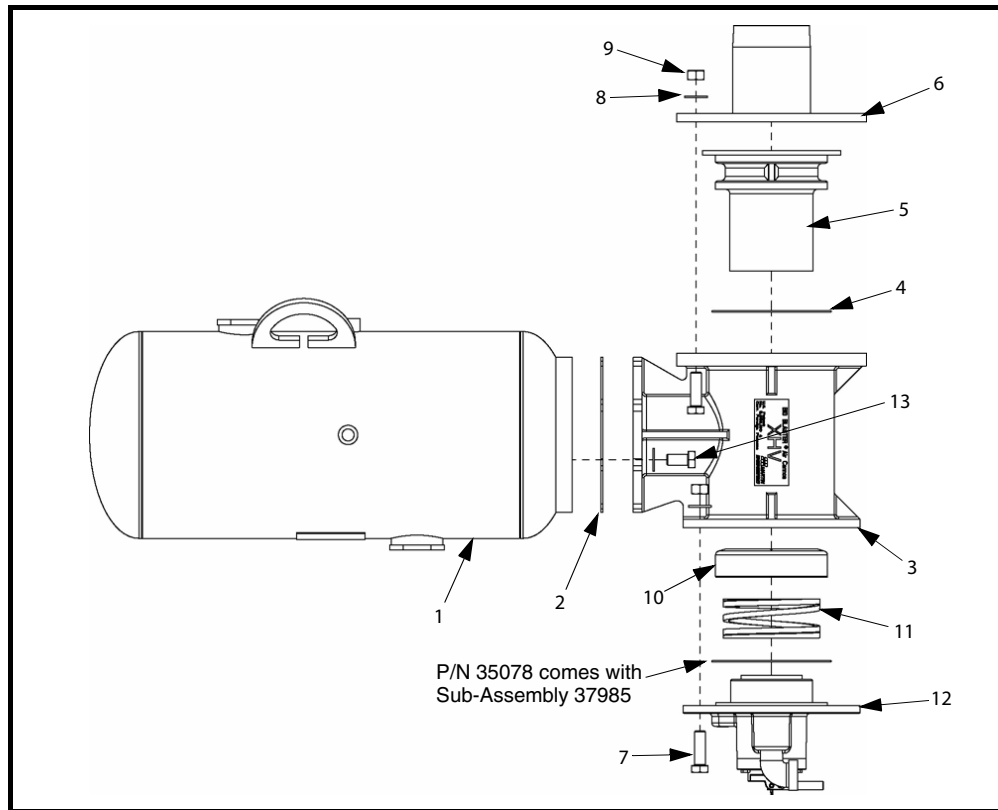
Plumbing Detail for Normally-Opened Solenoid Valve

Item	Description	Assembly and Kit Part Numbers
A1	Martin® Tornado Air Cannon	See Appendix A
A2	Safety Relief Valve See Appendix A	
A3	Safety Cable	
B	NPT Flange Assembly See Appendix A	See Appendix A
C1	3-Way 2-Position Solenoid Valve (normally opened)	37885-110
C2	Air Pressure Gauge	
D1	Lockout Valve	37890-XX
D2	Filter Regulator Unit	
E1	Air Fill Hose	37892
E2	Air Control Hose	
F	Controller/PLC 36756 or by others	36756 or by others
G	Air Supply Pipe 103008 or by others	103008 or by others



Plumbing Detail for Normally-Closed Solenoid Valve

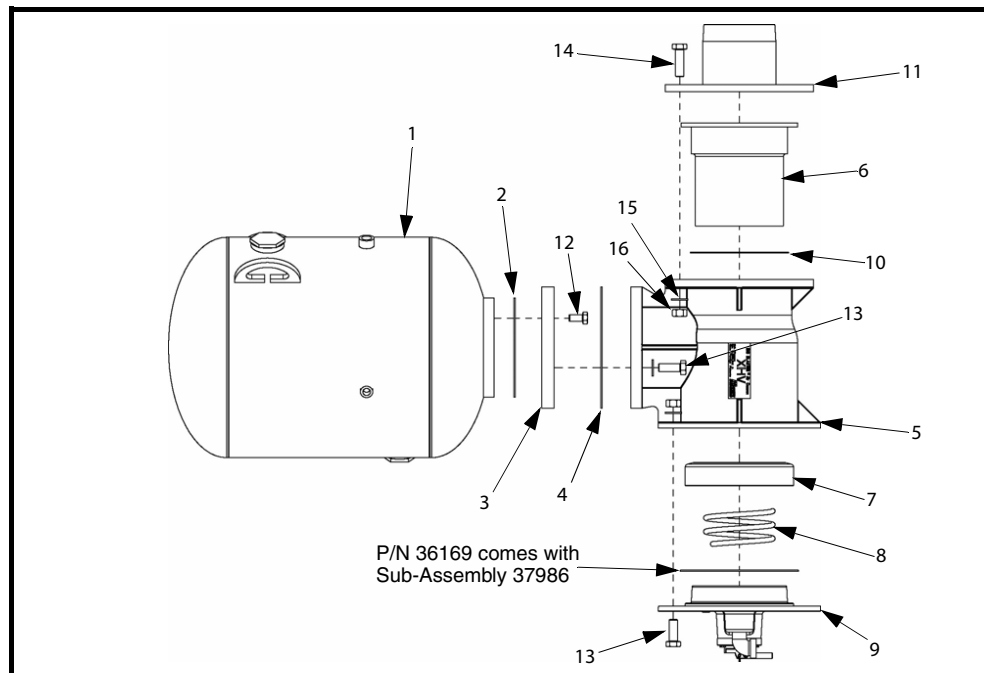
Item	Description	Assembly & Kit Part Numbers
A1	Martin® Tornado Air Cannon	See Appendix A
A2	Safety Relief Valve	
A3	Safety Cable	
B	NPT Flange Assembly See Appendix A	See Appendix A
C1	3-Way 2-Position Solenoid Valve (normally closed)	37886-110
C2	Air Pressure Gauge	
C3	Flow Control Valve	
D1	Lockout Valve	37890-XX
D2	Filter Regulator Unit	
E	Air Control Kit	33739
F	Air Supply Hose	37452
G	Controller/PLC	36756 or by others
H	Air Supply Pipe	103008 or by others



P/N 37798-XXXX* Martin® Tornado Air Cannon 4" Assembly

Item	Description	Part No.	Qty
1	Tank Weldment	31027-XXXX*	1
2	Tank Gasket 4.00 XHV	35080	1
3	Valve Body Assembly	35076	1
4	O-ring #166 6.737 ID x 0.094 CS	35078	1
5	Piston Seat	35075	1
6	Discharge Flange Weldment	35081	1
7	Screw HHC 5/8-11NC ZP	18831	16
8	Washer Compression 5/8	11752	24
9	Nut Hex 5/8-11NC ZP	11772	16
10	Piston with Urethane for 4.00 Air Cannon	37962	1
11	Compression Spring	35077	1
12	4.00 Valve Cap Sub-Assembly	37985	1
13	Screw HHC 5/8-11NC x 1-1/4 ZP	15798	8

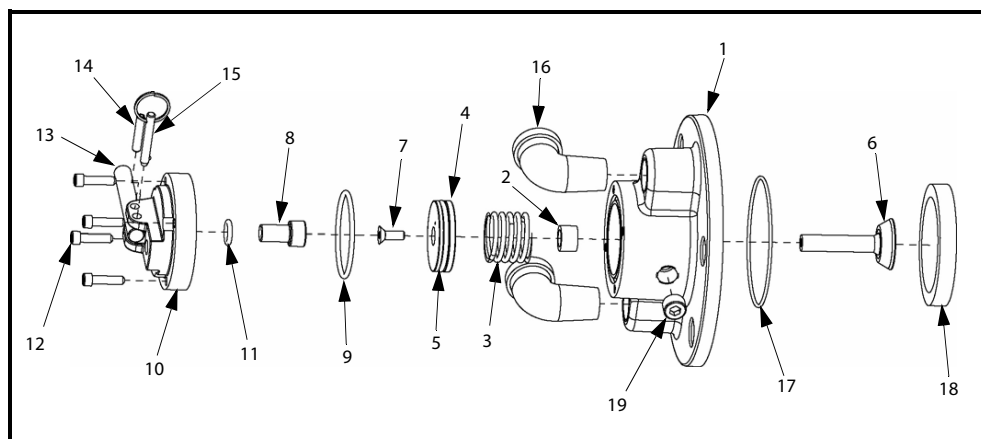
*First XX indicates tank diameter; Last XX indicates tank length. Available sizes: 1228, 2030, 2448, and 3060.



P/N 37853-XXXX* Martin® Tornado Air Cannon 6" Assembly

Item	Description	Part No.	Qty
1	Tank Weldment	31027-XXXX*	1
2	Tank Gasket	36263	1
3	Flange Transition	36261	1
4	Transition Gasket	36173	1
5	Valve Body Assembly	36114	1
6	Piston Seat	36113	1
7	Piston with Urethane for 6.00 Air Cannon	37963	1
8	Compression Spring	36167	1
9	6.00 Valve Cap Sub-Assembly	37986	1
10	O-ring #174 8.737 ID x 0.103 CS	36262	1
11	Discharge Flange Weldment	36170	1
12	Screw HHC 5/8-11NC 1-1/4 ZP	15798	8
13	Screw HHC 3/4-10NC 2 ZP	19135	16
14	Screw HHC 3/4-10NC 2-1/2 ZP	17770	8
15	Washer Compression	11754	24
16	Nut Hex 3/4-10NC ZP	11773	16

*First XX indicates tank diameter; Last XX indicates tank length. Available sizes: 2030, 2448, and 3060.

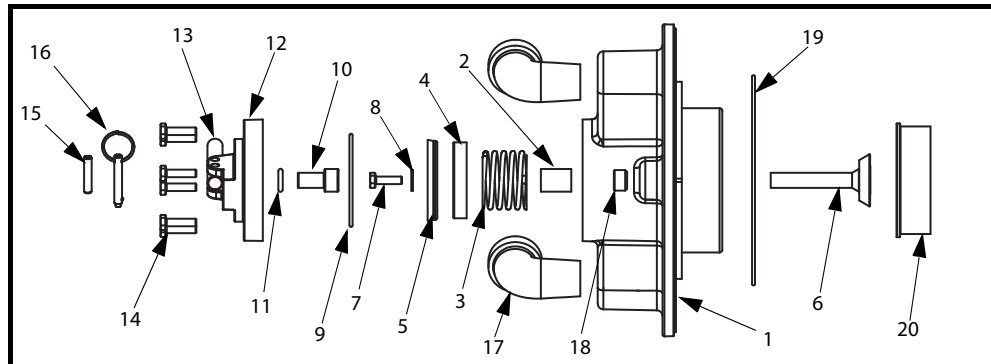


P/N 37984 Martin® Tornado Air Cannon 2" Exhaust Valve Assembly

Item	Description	Part No.	Qty	Kit
1	Valve Body Cap	37847	1	I
2	Sleeve Bearing	37287	1	I
3	Spring Compression	37860	1	I
4	Piston 2.00	37858	1	I
5	O-ring #225 1.86 ID x 0.139	M435	1	I
6	Air Inlet Valve Assembly	37857-U	1	I
7	Screw FSHC 1/4-20NC x 0.75	30453	1	I
8	Plunger 4.00 Pos QEV Valve	37791	1	II
9	O-ring #229 0.484 ID x 0.139 CS	37859	1	I & II
10	Top Cap 2.00 Pos QEV Valve	37861	1	II
11	O-ring #206 0.484 ID x 0.139 CS	37795	1	II
12	Screw SHC 1/4-20NC x 1	12627	4	
13	Handle 4.00 Pos QEV Cap	37792	1	II
14	Pin Slotted Spring	32403	1	II
15	Pin Quick Release	37796	1	II
16	Street Elbow 3/4 NPT Galvanized	13052	2	
17	O-ring 3-3/4 ID Viton	35863	1	I
18	2.00 XHV Piston Bumper	37779	1	
19	Plug 3/8 NPT Hex Socket	37987	1	

I = Parts included in Martin® Tornado Air Cannon 2" Exhaust Valve Actuator Assembly Rebuild Kit, P/N 38137-2 (Includes P/N 16345, Woodruff Key)

II = Parts included in Martin® Tornado Air Cannon Exhaust Valve Cap Lever Replacement Kit, P/N 38136-2

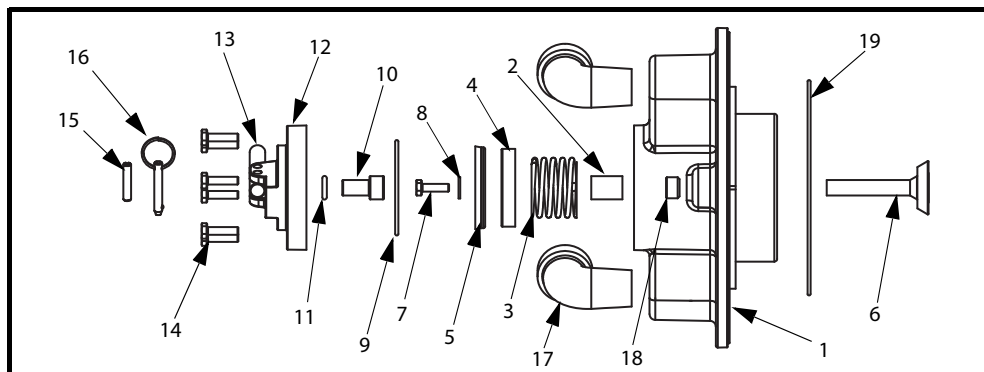


P/N 37985 Martin® Tornado Air Cannon Exhaust Valve

Item	Description	Part Number	Qty	Kit
1	Valve Body Cap	37775	1	
2	Bearing Sleeve	37287-1	1	I
3	Compression Spring 1.937 OD	34671	1	I
4	Piston	38635	1	I
5	Lip Seal Puck	38634	1	I
6	Air Inlet Valve	37790-B	1	I
7	Screw HHC 1/4-20NC x 7/8	11891	1	I
8	Washer Compression 1/4	11521	1	I
9	O-Ring #150 2.862 ID x .103 CS	37794	1	I & II
10	Plunger	37791	1	II
11	O-Ring #206 .484 ID x .139 CS	37795	1	II
12	Top Cap	37776	1	II
13	Handle	37792	1	II
14	Screw SHC 1/4-20NC x 1	12699	6	
15	Slotted Spring Pin 1/4 x 1-1/4 SS	32403	1	II
16	Quick Release Pin 1/4 x 1.63 ZP	37796	1	II
17	Street Elbow 1 NPT Galv	36124	2	
18	Hex Socket Plug 3/8 NPT	37987	1	
19	O-Ring #166 6.737 ID x .094 CS	35078	1	I
20	Urethane Bumper	37793	1	I

I = Parts included in Martin® Tornado Air Cannon 4" Exhaust Valve Actuator Assembly Rebuild Kit, P/N 38137-4 (Includes P/N 16345, Woodruff Key)

II = Parts included in Martin® Tornado Air Cannon Exhaust Valve Cap Lever Replacement Kit, P/N 38136



P/N 37986 Martin® Tornado Air Cannon Exhaust Valve

Item	Description	Part Number	Qty	Kit
1	Valve Body Cap	37848	1	
2	Bearing Sleeve	37287-1	1	I
3	Compression Spring 1.937 OD	34671	1	I
4	Piston	38635	1	I
5	Lip Seal Puck	38634	1	I
6	Air Inlet Valve	37790-B	1	I
7	Screw HHC 1/4-20NC x 7/8	11891	1	I
8	Washer Compression 1/4	11521	1	I
9	O-Ring #150 2.862 ID x .103 CS	37794	1	I & II
10	Plunger	37791	1	II
11	O-Ring #206 .484 ID x .139 CS	37795	1	II
12	Top Cap	37776	1	II
13	Handle	37792	1	II
14	Screw SHC 1/4-20NC x 1	12699	6	
15	Slotted Spring Pin 1/4 x 1-1/4 SS	32403	1	II
16	Quick Release Pin 1/4 x 1.63 ZP	37796	1	II
17	Street Elbow 1 NPT Galv	36124	2	
18	Hex Socket Plug 3/8 NPT	37987	1	
19	O-Ring #275 10.484 ID x .139 CS	36169	1	I

I = Parts included in Martin® Tornado Air Cannon 6" Exhaust Valve Actuator Assembly Rebuild Kit, P/N 38137-6 (Includes P/N 16345, Woodruff Key)

II = Parts included in Martin® Tornado Air Cannon Exhaust Valve Cap Lever Replacement Kit, P/N 38136