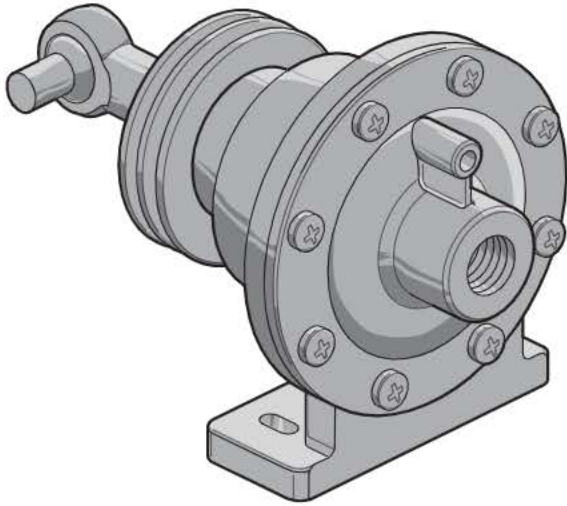
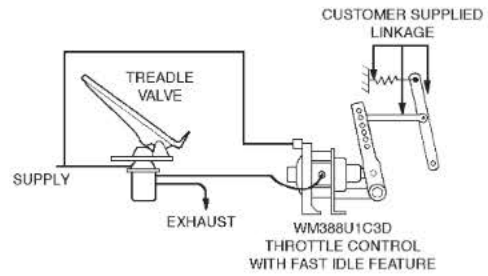
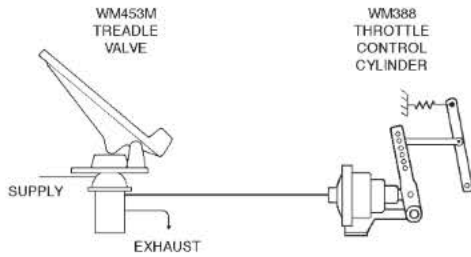


# WM388 & WM642 Series Pneumatic Throttle Control Cylinders

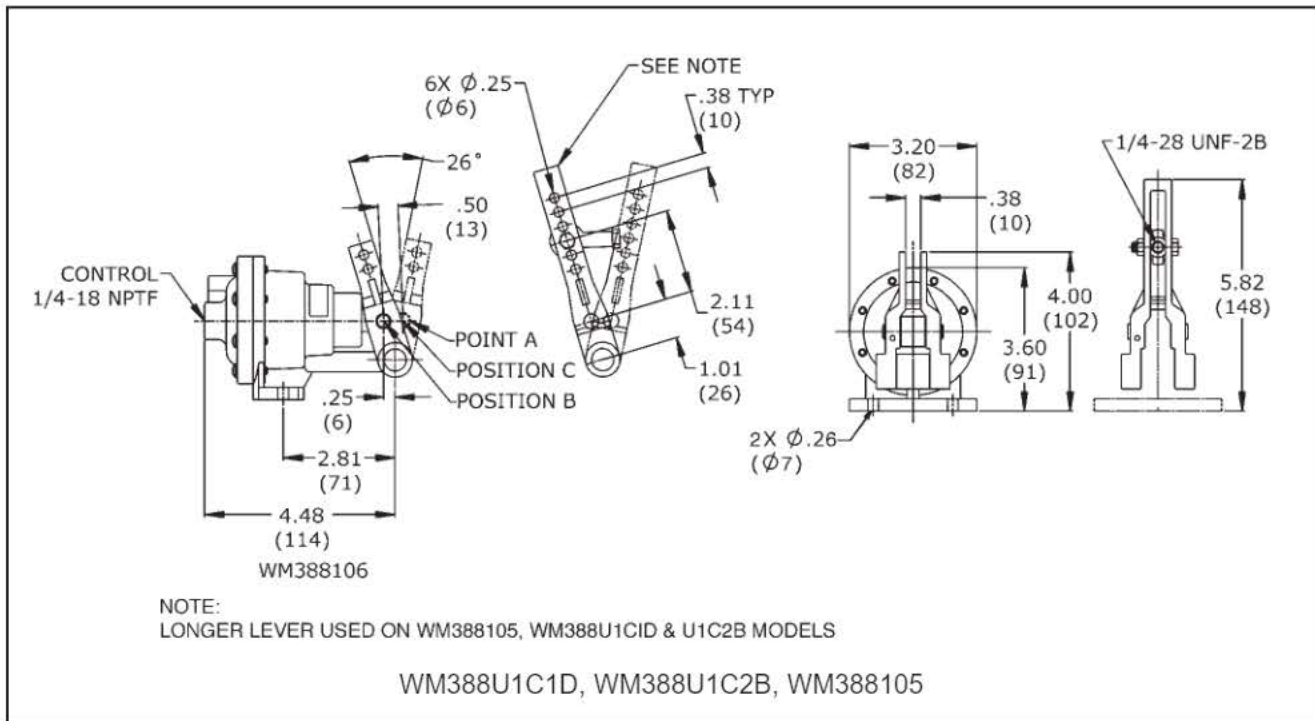


## Features and Specs

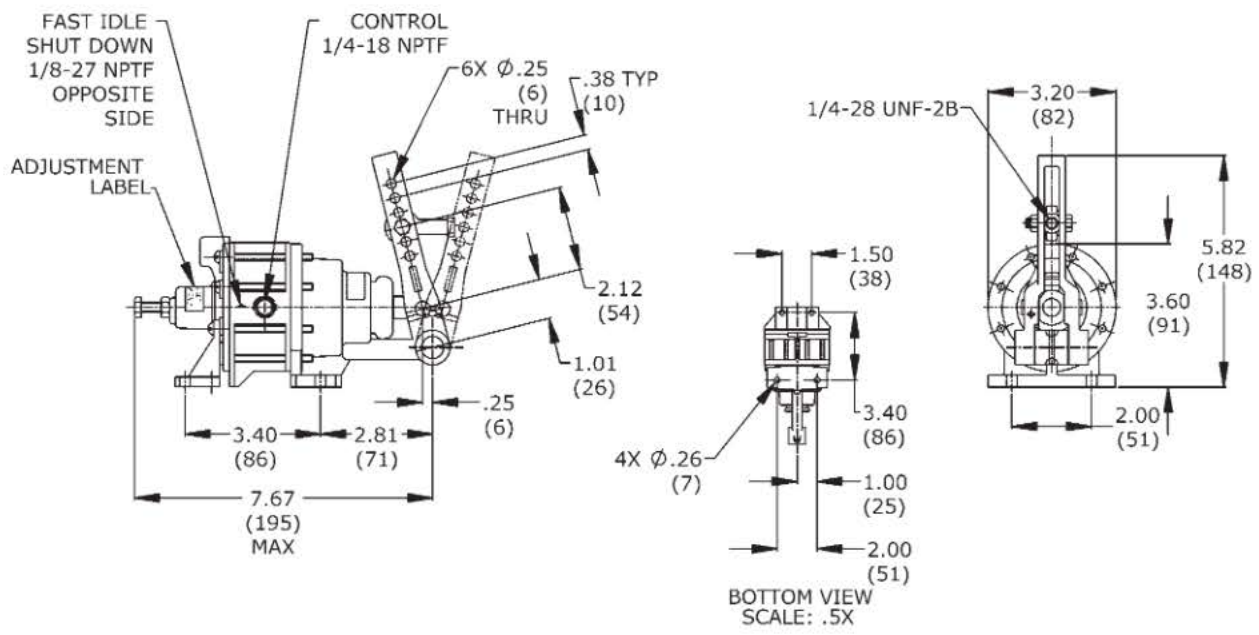
- Models for on and off-highway
- Weight: WM388U1A1A: 1 lb, 5 oz (0,6 kg)  
WM388105, U1C1D & U1C2B: 1 lb, 12 oz (0,8 kg)  
WM388U1C3D: 2 lb, 12 oz (1,2 kg)  
WM642F5: 2 lb, 8 oz (1,1 kg)
- Port size: 1/4-18 NPTF (control)  
1/8-27 NPTF (fast idle) (WM388U1C3D only)
- Maximum supply pressure: 150 PSI (1034 kPa)
- Operating temperature: -40°F to 200°F (-40°C to 93°C)  
WM388U1C2B only: -20°F to 200°F (-29°C to 93°C)



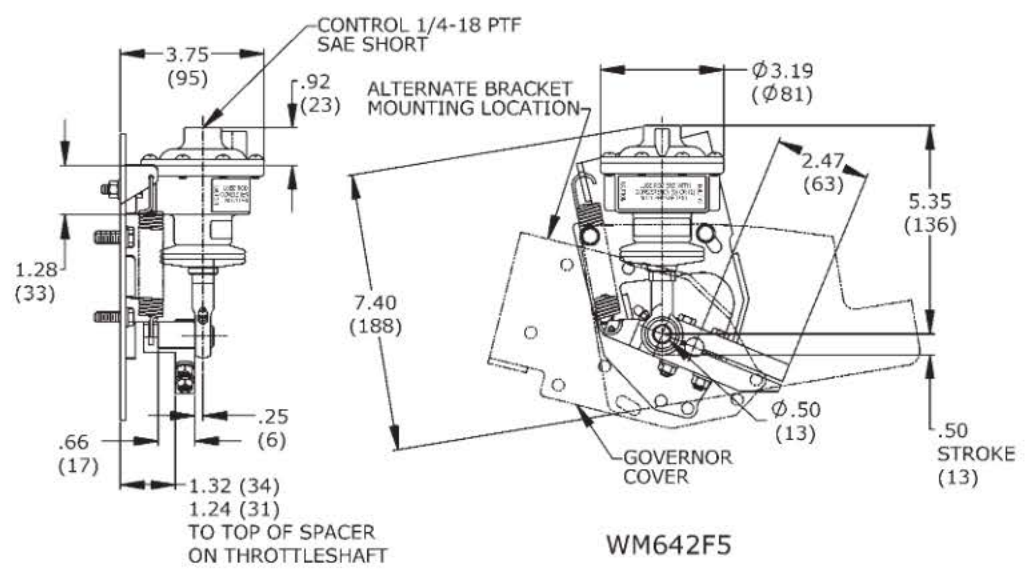
## Dimensional Data



**Dimensional Data (continued)**



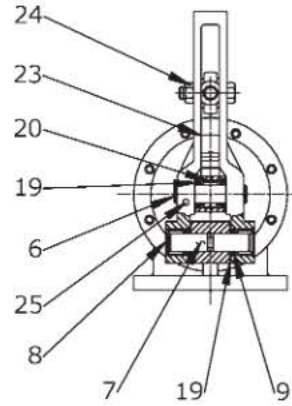
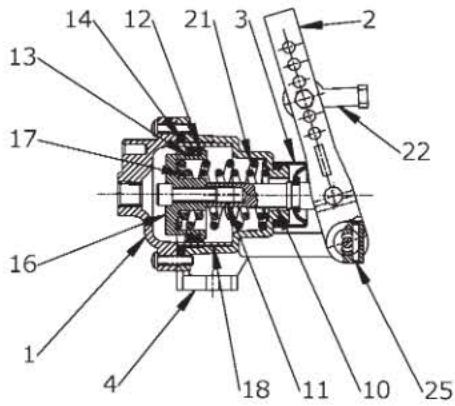
WM388U1C3D



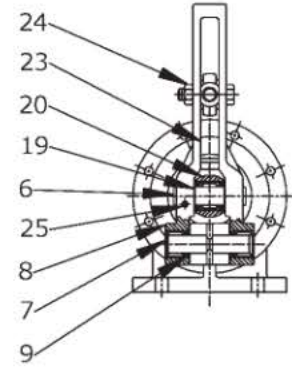
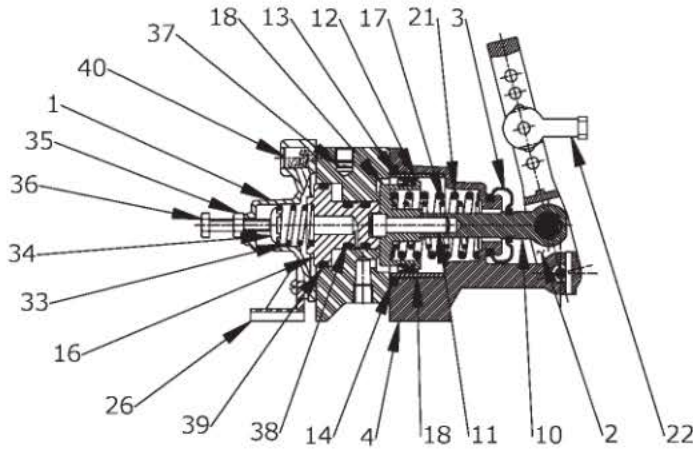
WM642F5

WM388U1A1A & WM642F5

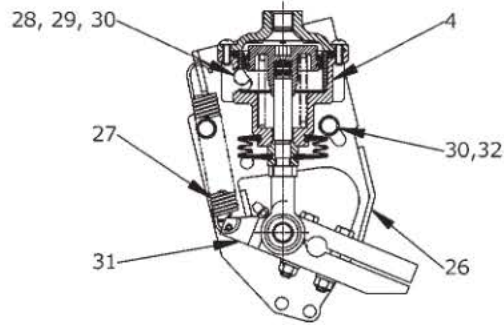
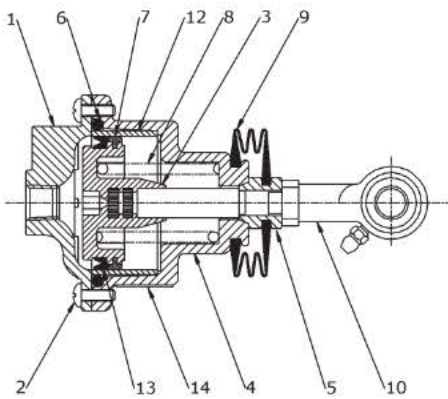
# Cross Section & Parts



WM388U1C1D, WM388U1C2B, WM388105



WM388U1C3D



WM388U1A1A, WM642F5

## Cross Section & Parts (continued)

Item	Part No.	Description	WM388U1C1D	WM388U1C2B	WM388105	WM388U1C3D	WM388U1A1A	WM642F5
1	118510	Cylinder Cover	1	1	1		1	1
1	119669	Cylinder Cover				1		
2	118198	Lever	1	1	1	1		
3	103214	Boot	1	1	1	1		
3	117204	Boot					1	1
4	---	Body	1	1	1	1		
4	---	Body					1	1
6	---	Pin	1	1	1	1		
7	---	Pin	1	1	1	1		
8	---	Needle Bearing	2	2	2	2		
9	---	O-ring	4	4	4	4		
10	118506	Rod End	1	1	1	1		
10	117456	Rod End					1	1
11	118508	Screw	1	1	1	1		
12	---	Wear Ring	1	1	1	1	1	1
13	---	U-Cup	1	1	1	1	1	1
14	---	O-Ring	1	1	1	1	1	1
16	---	Piston	1	1	1	1		
16	---	Piston					1	1
17	117885	Spring	1		1	1		
17	117877	Spring		1				
17	118572	Spring					1	1
18	---	Shell	1	1	1	1		
18	---	Shell					1	1
19	---	Washer	4	4	4	4		
20	---	Needle Bearing	1	1	1	1		
21	117883	Spring	1	1	1	1		
22	117855	Rod End	1	1		1		
23	114836	Screw	1	1		1		
24	114592	Nut	1	1		1		
25	118114	Pin	2	2	2	2		
26	105181	Bracket				1		
26	119050	Bracket						1
27	117404	Spring						1
28	114833	Screw						2
29	114535	Nut						2
30	---	Washer						5
31	---	Lever Assembly						1
32	114722	Screw						3
33	101631	Spring				1		
34	101700	Spring Cap				1		
35	114535	Nut				1		
36	114683	Screw				?		
37	---	Retaining Ring				1		
38	---	O-Ring				2		
39	---	O-Ring				1		
40	---	Filter Element				1		

Serviceable items are identified above.

## Service Kit Information

Service Kit	Part Number	Item Numbers
Repair kit for WM388U1C1D & WM388U1C2B	117775	3, 12, 13, 14, 18
Repair kit for WM388U1A1A, WM642F5	117612	3, 10, 12, 13, 14, 17, 18
Repair kit for WM388U1C3D	130203	3, 12, 13, 14, 18, 37, 38, 39, 40
Lever & body assembly kit for WM388U1C1D, WM388U1C2B, WM388105, WM388U1C3D	119153	2, 4, 7, 8, 9, 10, 19, 20, 25

## To Order

To order a WM388 or WM642 model, select part number from the chart below.

Model	Part Number	Pressure Range	FMVSS-124 Compliance	Special Features
WM388U1C1D	117888	0-25/35 PSI (w/o external spring)*	Yes, with customer supplied external spring*	Long lever w/rod end
WM388U1C2B	117886	0-55/60PSI	No	Long lever w/rod end
WM388105	117985	0-25/35 PSI (w/o external spring)*	Yes, with customer supplied external spring*	Long lever w/o rod end
WM388U1C3D	119667	0-25/35 PSI (w/o external spring)*	Yes, with customer supplied external spring*	Integral fast idle cylinder
WM388U1A1A	117402	0-25/35 PSI (w/o external spring)	Yes, when used in WM642 kit	
WM642F5	119151	0-55/60 PSI (w/spring supplied in kit)	Yes	Kit for Detroit Diesel V-71 & V-92TT

\*Customer supplied external spring must be installed so it acts on centerline of cylinder rod.

Required external spring forces: 10 lbs at idle, 72 lbs at full throttle.