

SOLENOID VALVES

INSTALLATION INSTRUCTIONS

LINE STRAINER:

A strainer, with an 80-mesh or finer screen, should be installed in the line ahead of the solenoid valve. This will assure tight seating and reliable closing action.

FLUIDS:

Valves are intended for water, air, light oil, and other non-corrosive fluids. They should *not* be used for gasoline and other hazardous fluids. Maximum fluid temperature 200° F (93.3°C). Ambient temperature shall not exceed 120°F (48.8°C).

INSTALLATION:

Dema valves may be installed in either horizontal or vertical lines and in any position other than with the coil lower than the body.

MODEL NO.	WATTS AC	VOLTS AC	AMPERES				RATED WATTS	D C	
			INRUSH		HOLDING			VOLTS	AMP.
			50 Hz	60Hz	50 Hz	60 Hz			
401-P	10	24	1.8	1.5	1.0	0.75	15	12	1.0
		120	0.38	0.33	0.21	0.15		24	0.5
		208	0.22	0.19	0.12	0.09		32	0.4
		240	0.19	0.16	0.10	0.07		115	0.10
ALL OTHERS	15	24	3.7	3.0	1.6	1.2	18	12	1.5
		120	0.73	0.60	0.33	0.24		24	0.7
		208	0.41	0.35	0.19	0.14		32	0.6
		240	0.36	0.30	0.16	0.12		115	0.15

SERVICING:

1. Failure to open.
 - a. No power or low voltage.
 - b. Open circuit.
 - c. Burned-out coil (usually due to wrong voltage. See stamping opposite junction box).
 - d. Pressure differential too high (see M.O.P.D. on name plate).
 - e. Moving parts jammed by dirt or damaged solenoid stainless steel tube.
2. Failure to close.
 - a. Coil still energized.
 - b. Valve installed backward.
 - c. Dirt on valve seat or pilot seat.
 - d. Dirt in piston ring or groove (some models).
 - e. Moving parts jammed by dirt or damaged solenoid stainless steel tube.

RETURNS:

NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT DEMA'S WRITTEN PERMISSION. RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.

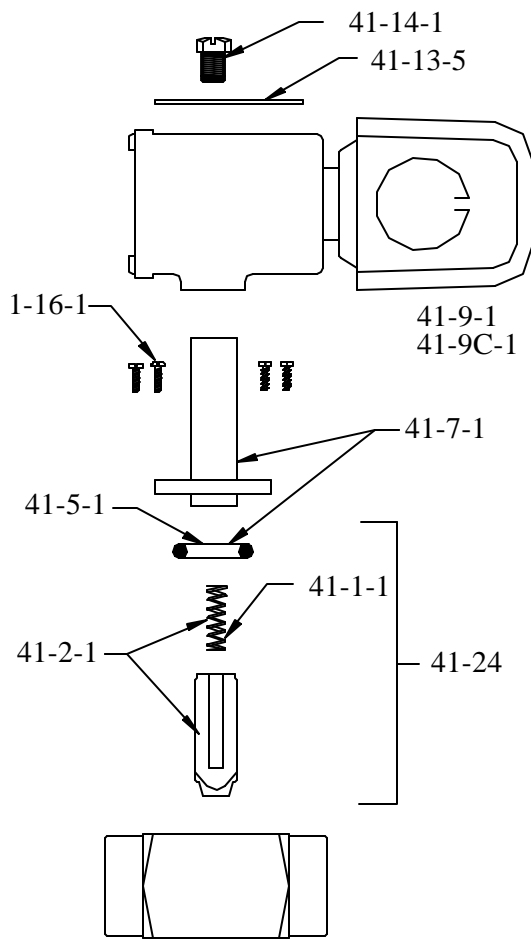
WARRANTY:

DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "o"- rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty will be void.

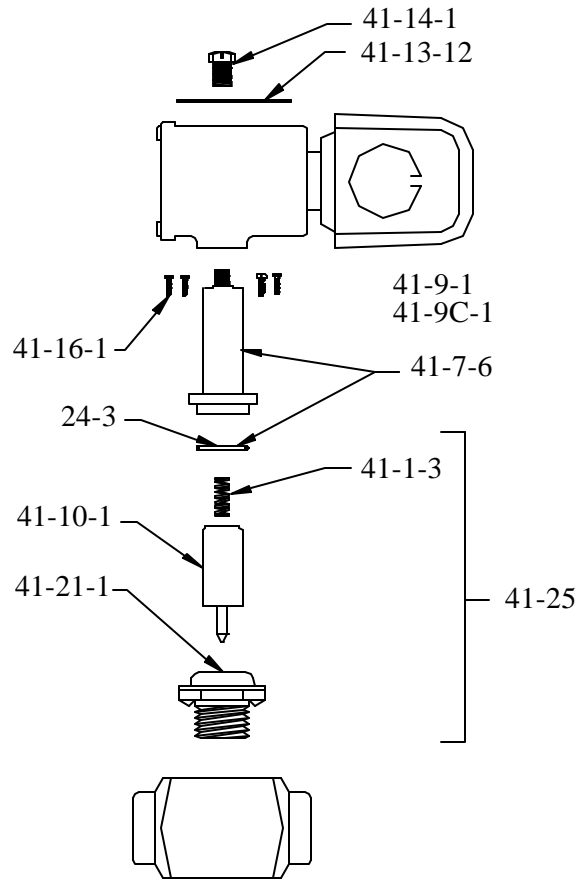
Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number, to return units for repair or replacement, must be granted in advance of return.

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SOLENOID VALVES, MODEL 401P AND 411P



MODEL 401P



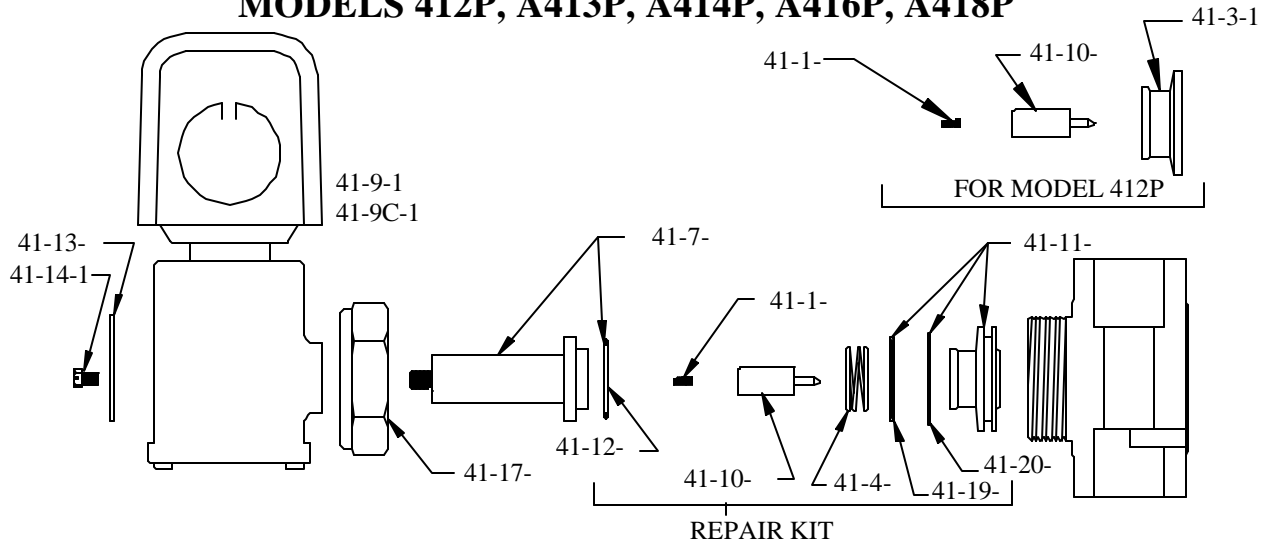
MODEL 411P

PART NO.	DESCRIPTION
24-3	O-RING
41-1-1	PLUNGER SPRING
41-1-3	PLUNGER SPRING
41-2-1	PLUNGER (INCLUDES SPRING)
41-2-10	OPTIONAL PLUNGER WITH TEFLON DISC (MODEL 401PT)
41-2-13	OPTIONAL PLUNGER WITH VITON DISC (MODEL 401PV)
41-5-1	O-RING
41-7-1	ENCLOSING TUBE & O-RING
41-7-6	ENCLOSING TUBE & O-RING
41-9-1	SOLENOID COIL (SPECIFY VOLTAGE) JUNCTION BOX AS SHOWN
41-9C-1	SOLENOID COIL (SPECIFY VOLTAGE) CONDUIT CONNECTION
41-9-2	SOLENOID COIL (SPECIFY VOLTAGE) JUNCTION BOX AS SHOWN
41-9-2	SOLENOID COIL (SPECIFY VOLTAGE) CONDUIT CONNECTION
41-10-1	PLUNGER
41-13-5	NAMEPLATE
41-13-12	NAMEPLATE
41-14-1	TOP PLUG SCREW
41-16-1	ENCLOSING TUBE SCREW (4 REQ'D)
41-21-1	VALVE SEAT
41-24	REPAIR KIT (401P)
41-25	REPAIR KIT (411P)

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SOLENOID VALVES, GENERAL PURPOSE

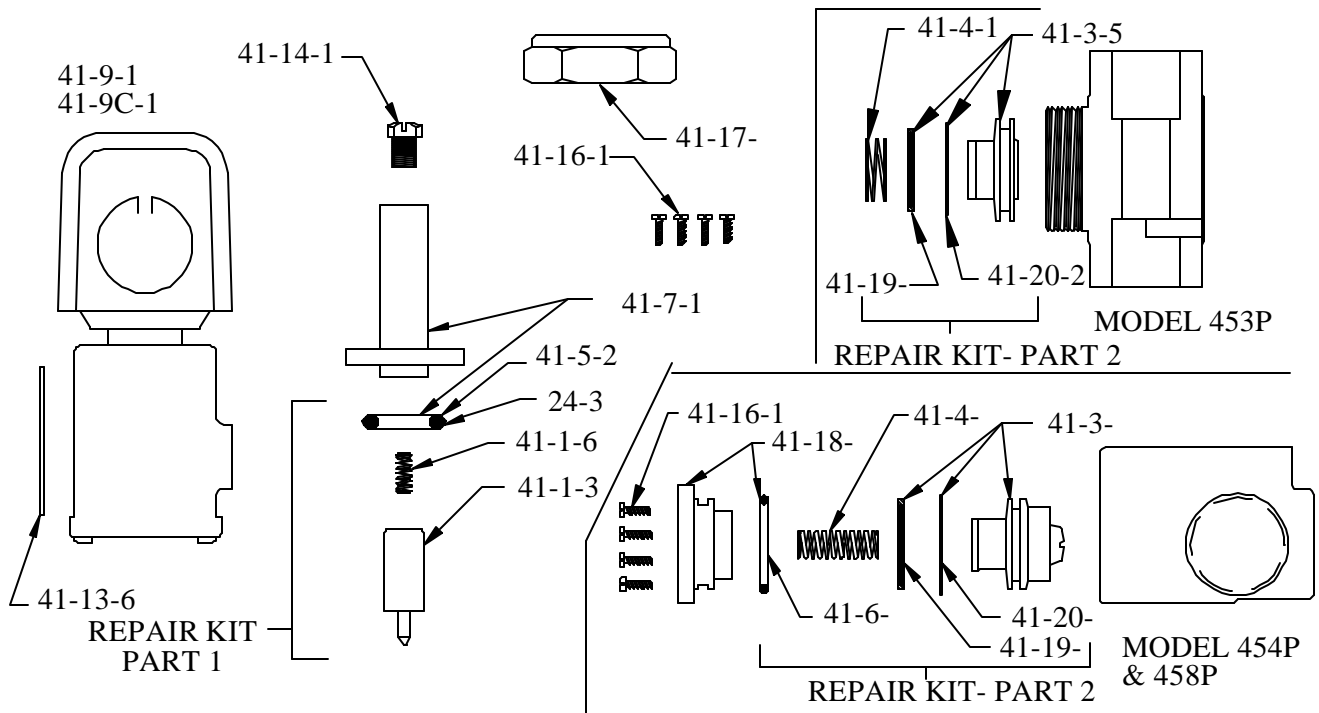
MODELS 412P, A413P, A414P, A416P, A418P



PART NO.	DESCRIPTION	VALVE MODEL NUMBER				
		412P	A413P	A414P	A416P	A418P
41-1-2	PLUNGER SPRING		*	*	*	*
41-1-3	PLUNGER SPRING	*				
41-3-1	PISTON ASSEMBLY	*				
41-4-4	CLOSING SPRING		*	*		
41-4-5	CLOSING SPRING				*	*
41-7-2	ENCLOSING TUBE WITH TETRASEAL RING		*	*		
41-7-3	ENCLOSING TUBE WITH TETRASEAL RING				*	
41-7-4	ENCLOSING TUBE WITH TETRASEAL RING					*
41-7-7	ENCLOSING TUBE WITH TETRASEAL RING	*				
41-9-2	COIL ASSEMBLY (SPECIFY VOLTAGE)	*	*	*	*	*
41-9C-2	OPTIONAL COIL ASSEMBLY WITH CONDUIT BOSS (SPECIFY VOLTAGE)	*	*	*	*	*
41-10-2	PLUNGER ASSEMBLY	*				
41-10-4	PLUNGER ASSEMBLY		*			
41-10-5	PLUNGER ASSEMBLY			*		*
41-10-6	PLUNGER ASSEMBLY				*	
41-11-2	PISTON ASSEMBLY WITH RING & BACKUP SPRING		*			
41-11-3	PISTON ASSEMBLY WITH RING & BACKUP SPRING			*		
41-11-4	PISTON ASSEMBLY WITH RING & BACKUP SPRING				*	
41-11-7	PISTON ASSEMBLY WITH RING & BACKUP SPRING					*
41-12-1	TETRASEAL RING		*	*		
41-12-2	TETRASEAL RING				*	
41-12-3	TETRASEAL RING					*
41-12-5	TETRASEAL RING	*				
41-13-7	NAMEPLATE	*				
41-13-8	NAMEPLATE			*		
41-13-9	NAMEPLATE		*			
41-13-10	NAMEPLATE				*	
41-13-11	NAMEPLATE					*
41-14-1	TOP PLUG SCREW	*	*	*	*	*
41-17-1	ENCLOSING TUBE LOCKNUT	*				
41-17-2	ENCLOSING TUBE LOCKNUT		*	*		
41-17-3	ENCLOSING TUBE LOCKNUT				*	
41-17-4	ENCLOSING TUBE LOCKNUT					*
41-19-1	PISTON RING		*	*		
41-19-3	PISTON RING				*	
41-19-4	PISTON RING					*
41-20-2	BACKUP SPRING		*	*		
41-20-2	BACKUP SPRING				*	
41-20-2	BACKUP SPRING					*
41-26	412P REPAIR KIT	*				
41-27	A413P REPAIR KIT		*			
41-28	A414P REPAIR KIT			*		
41-29	A416P REPAIR KIT				*	
41-30	A418P REPAIR KIT					*

**SOLENOID VALVES
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HIGH PRESSURE SOLENOID VALVES MODELS 453P, 454P, 458P



PART NO.	DESCRIPTION	VALVE MODEL NUMBER		
		453P	454P	458P
24-3	O-RING		*	*
41-1-6	PLUNGER SPRING RETURN	*	*	*
41-1-7	PLUNGER SPRING KICKOFF	*	*	*
41-3-5	PISTON ASSEMBLY WITH RING & BACKUP SPRING	*		
41-3-6	PISTON ASSEMBLY WITH RING & BACKUP SPRING		*	
41-3-8	PISTON ASSEMBLY WITH RING & BACKUP SPRING			*
41-4-1	CLOSING SPRING	*		
41-4-2	CLOSING SPRING		*	
41-4-3	CLOSING SPRING			*
41-5-2	O-RING	*		
41-6-1	PISTON BORE LID O-RING			*
41-6-2	PISTON BORE LID O-RING		*	
41-7-22	ENCLOSING TUB WITH O-RING	*		
41-7-23	ENCLOSING TUB WITH O-RING		*	
41-7-24	ENCLOSING TUB WITH O-RING			*
41-9-2	COIL ASSEMBLY (SPECIFY VOLTAGE)	*	*	*
41-9C-2	OPTIONAL COIL ASSEMBLY WITH CONDUIT BOSS (SPECIFY VOLTAGE)	*	*	*
41-10-10	PLUNGER ASSEMBLY		*	*
41-10-12	PLUNGER ASSEMBLY	*		
41-13-6	NAMEPLATE (SPECIFY MODEL NO.)	*	*	*
41-14-1	TOP PLUG SCREW	*	*	*
41-16-1	ENCLOSING TUB SCREW (4 REQ'D)		*	
41-16-3	PISTON BORE LID SCREW (4 REQ'D.)		*	
41-16-4	PISTON BORE LID SCREW (4 REQ'D.)			*
41-17-1	ENCLOSING TUBE LOCKNUT			*
41-17-5	ENCLOSING TUBE LOCKNUT	*		
41-18-1	PISTON BORE LID WITH O-RING		*	
41-18-2	PISTON BORE LID WITH O-RING			*
41-19-2	PISTON RING	*	*	
41-19-5	PISTON RING			*
41-20-2	BACKUP SPRING	*	*	
41-20-6	BACKUP SPRING			*
41-31	REPAIR KIT	*		
41-32	REPAIR KIT		*	
41-33	REPAIR KIT			*