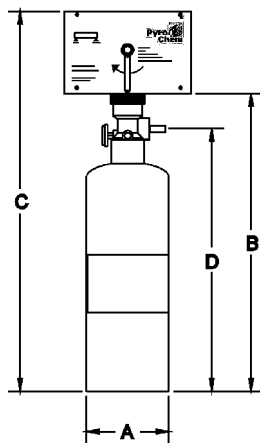


CHAPTER II COMPONENTS

CYLINDERS & VALVE

The Pyro-Chem Kitchen Knight II System has available three different size cylinders: the Models PCL-300 (P/N 551194), PCL-460 (P/N 551193), and PCL-600 (P/N 551196). Cylinder sizes are expressed in terms of extinguishing agent capacity

- ▶ (i.e., the PCL-300 uses 3.0 gallons (11.4 L) of extinguishing agent). The cylinder is manufactured, tested, and marked in accordance with DOT 4BW225. Cylinders come pre-filled with extinguishing agent and are charged with dry nitrogen to a
- ▶ pressure of 225 psig @ 70° F (15.5 bar @ 21 °C). Cylinder and valve assembly dimensions are shown in **Figure 2-1**.



Model No.	A in. (cm)	B in. (cm)	C in. (cm)	D in. (cm)	Max. Flow Point Capacity	Weight lbs. (kg)	Mounting Bracket Used
PCL-300	8.00 (20.3)	25.06 (63.7)	30.81 (78.3)	22.75 (57.8)	10	53 (24)	MB-15
PCL-460	10.00 (25.4)	25.06 (63.7)	30.81 (78.3)	22.75 (57.8)	15	83 (37.7)	MB-15
PCL-600	10.00 (25.4)	35.81 (91)	41.56 (105.4)	33.50 (85.1)	20	108 (48.9)	MB-1

Figure 2-1. Cylinder and Valve Assemblies.

002841PC

All cylinders utilize the same valve assembly (P/N 551175). It is a pressure sealed poppet type valve designed to provide rapid actuation and discharge of agent. See **Figure 2-2**.

Item	Part No.	Description	Item	Part No.	Description
1		Valve Body	9	550386	Shrader Valve Ass'y
2	550762	Cap & Seat Washer Sub-Assembly	10	550714	Valve Cap O-Ring
3	550705	Conical Spring	11	550715	Piston O-Ring
4	550707	Piston	12	550710	Valve Stem
5	550716	Neck O-Ring	13	551256	Pressure Regulator
▶ 6	551236	Pressure Gauge	14	551261	Seal
7	550028	Stem O-Ring	15	17851	6-32x3/8 Screw
8	550802	Valve Cap			

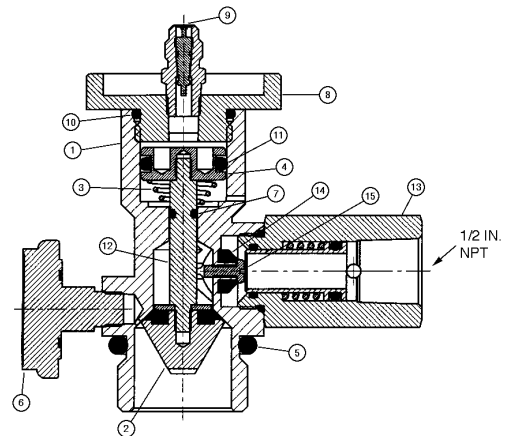


Figure 2-2. Valve Cross Section.

006212PC

VALVE REBUILDING EQUIPMENT

1. Wet Valve Seal Rebuilding Kit (P/N 550698).

After system discharge, the valve assembly must be rebuilt to ensure proper future operation. The Wet Valve Seal Rebuilding Kit (P/N 550698) should be used. It includes all components necessary to properly rebuild the valve. See **Figure 2-3**.

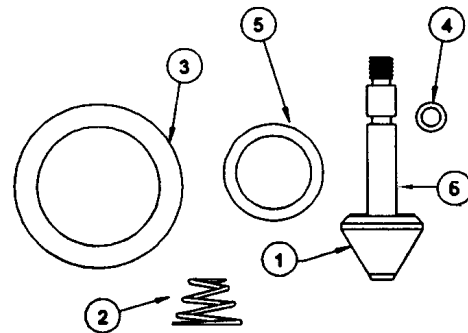


Figure 2-3. Wet Valve Seal Rebuilding Kit (P/N 550698).

002906PC

Item	Part Number	Description
1	550762	Cap & Seat Washer Sub-Assembly
2	550705	Conical Spring
3	550716	Neck O-Ring
4	550028	Stem O-Ring
5	550715	Piston O-Ring
6	550710	Valve Stem

2. Pressure Regulator Assembly (P/N 550985).

The pressure regulator assembly is available if the complete regulator requires replacement (i.e., possible thread damage).

3. Pressure Regulator Rebuilding Kit (P/N 551061).

After system discharge, the pressure regulator must be rebuilt to ensure proper future operation. The rebuilding kit (P/N 551061) should be used. It includes all components and instructions necessary to properly rebuild the regulator. See **Figure 2-3.1**.

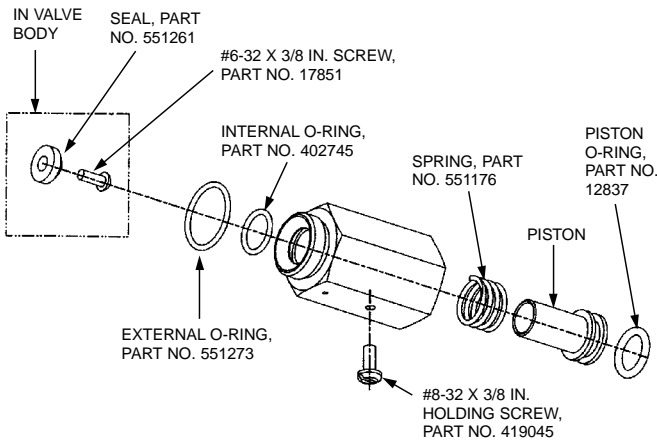


Figure 2-3.1.
006103PC

4. Model VT-1 (P/N 550788).

The Model VT-1 wet valve tool is designed to facilitate the rebuilding of the wet valve assembly. It should be used to hold the wet valve piston while unscrewing the cap and stem assembly. See **Figure 2-3.2**.

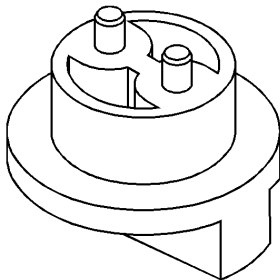


Figure 2-3.2. Model VT-1 Wet Valve Tool.
002907PC

CYLINDER BRACKETING

Vertical bracketing of the PCL-300 and PCL-460 is provided by the Model MB-15 bracket kit (P/N 550054). Vertical bracketing of the PCL-600 is provided by the Model MB-1 bracket kit (P/N 550053). These kits must be ordered separately with each cylinder/valve assembly. Cylinder installation instructions are provided in the installation section of this manual.

EXTINGUISHING AGENT (P/N 551188)

The agent used in Pyro-Chem Kitchen Knight II Systems is a potassium carbonate based solution that is extremely effective for grease related kitchen fires. This agent is available for cylinder recharging in 3.0 Gallon containers (Model PCL-300). For MSDS information, contact Pyro-Chem at 800-526-1079 or 715-732-3465 or www.pyrochem.com.

CAUTION

Precautions must be taken when handling and transferring wet agents as they are caustic in nature. Goggles must be worn at all times. If any agent gets into the eyes, they should be flushed with clean water for 15 minutes and a physician contacted. If any agent contacts the skin, it should be flushed with cold water to prevent irritation. The agent is electrically conductive. Care must be taken to thoroughly clean up any agent discharged around electrical appliances before turning the power on.

After system discharge, agent must be cleaned up immediately with hot, soapy water to prevent corrosion of effected surfaces.

MODEL MCH3 - MECHANICAL CONTROL HEAD (P/N 551200)

The Model MCH3 mechanical control head is a fully mechanical control head which can be connected to the PCL-300/460/600 cylinder valve. This control head will support a fusible link detection system, a remote mechanical pull station (Model RPS-M), and a mechanical or electric gas shutoff valve. A miniature electric switch (Model MS-SPDT, MS-DPDT, MS-3PDT, or MS-4PDT) can be ordered separately and field installed. It is equipped with a local manual control handle that allows for mechanical system actuation. Operation of the local manual control requires removing the pull pin and rotating the handle clockwise. The Model MCH3 control head can actuate a maximum of three (3) cylinders. See **Figure 2-4**.

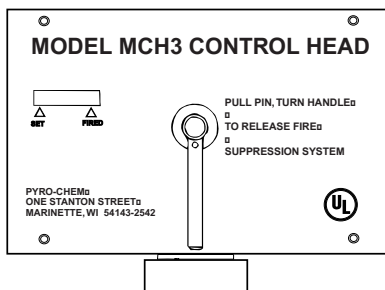


Figure 2-4. Mechanical Control Head.
004790PC

MODEL ECH3 – ELECTRIC CONTROL HEAD

The Model ECH3 electric control head is an electrically operated control head which can be connected to the PCL-300/460/600 cylinder valve. This control head will support an electric thermal detection system, a remote mechanical pull station (Model RPS-M), and an electric gas shutoff valve. It will not support a fusible link detection system. A miniature electric switch (Model MS-DPDT) is included. The Model ECH3 control head is available in both 120 VAC (Model ECH3-120, P/N 551202) and 24 VDC (Model ECH3-24, P/N 551201). It is equipped with a local manual control handle that allows for mechanical system actuation. Operation of the local manual control requires removing the pull pin and rotating the handle clockwise. The Model ECH3 control head can actuate a maximum of three (3) cylinders. See **Figure 2-5**.

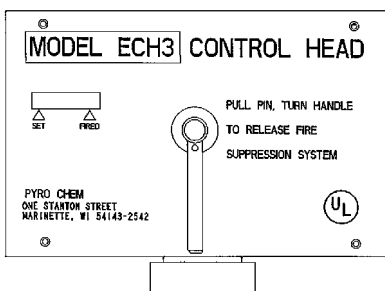


Figure 2-5. Electric Control Head.
004789PC

MODEL NMCH3 - MECHANICAL CONTROL HEAD (P/N 551203)

The Model NMCH3 Mechanical Control Head is a fully mechanical control head which can be connected to the PCL-300/460/600 cylinder valve. This control head will support a fusible link detection system, a remote mechanical pull station (Model RPS-M), and a mechanical or electric gas shut-off valve. A miniature electrical switch (Model MS-SPDT, MS-DPDT, MS-3PDT, or MS-4PDT) can be ordered separately and field installed. There is no local manual actuation for the Model NMCH. The Model NMCH3 control head can actuate a maximum of three (3) cylinders. **The Model NMCH3 can be used as a direct replacement for the Model MCH3.**

MODEL EN-MCU3 ENCLOSURE (P/N 551208)

The Model EN-MCU3 Enclosure is used for vertical mounting of a single PCL-300 or PCL-460. The EN-MCU3 also includes a mechanical control unit, eliminating the need for a Model MCH3 Control Head. See **Figure 2-6**. *The PCL-600 cannot be mounted in an EN-MCU3.*

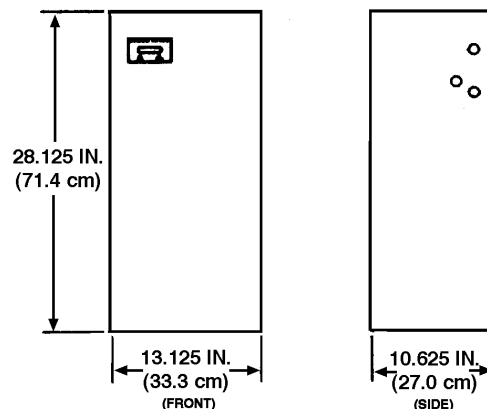


Figure 2-6. Model EN-MCU3 Enclosure.
002845PC

MODEL EN-S ENCLOSURE (P/N 550966)

The Model EN-S Enclosure is used for vertical mounting of a single PCL-300 or PCL-460 when it is used as a secondary agent cylinder in a system. The EN-S has no control mechanism, and must be used in conjunction with a Model EN-MCU3 Enclosure or a Model MCH3/ECH3 Control Head. *The PCL-600 cannot be mounted in an EN-S.*

MODEL MB-P2 – CONTROL HEAD MOUNTING BRACKET (P/N 550853)

The Model MB-P2 mounting bracket must be used to mount the Model MCH3, NMCH3, or ECH3 control heads if the control head is not mounted directly on a cylinder valve. See **Figure 2-7**.

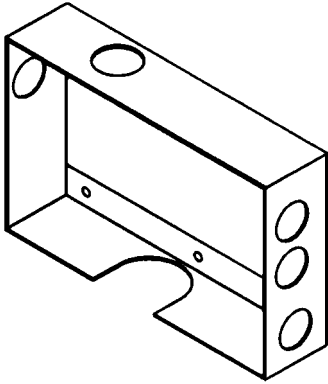


Figure 2-7. Model MB-P2 - Control Head Mounting Bracket.

002846PC

PNEUMATIC ACTUATING CYLINDERS

1. Model PAC-10 (P/N 550104).

The Model PAC-10 is a pneumatic actuating cylinder that can actuate a maximum of ten (10) agent cylinders simultaneously. The Model PAC-10 includes a DOT 4BA350 cylinder pressurized with dry nitrogen to 350 PSIG @ 70° F. (24.1 bar @ 21 °C), a brass valve with pressure gauge, and a wall mounting bracket. A Model MCH3, NMCH3, or ECH3 control head must be purchased separately and connected to the PAC-10 to open the valve. See **Figure 2-8**.

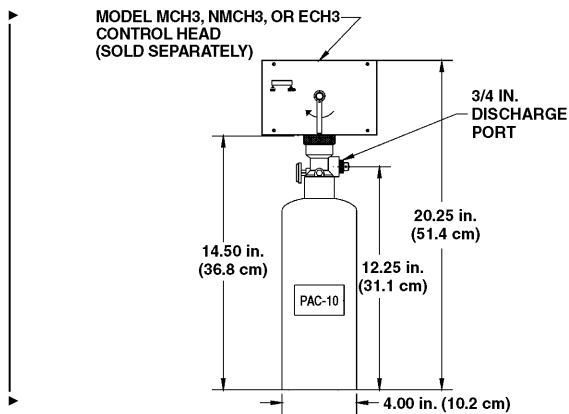


Figure 2.8. Model PAC-10 Pneumatic Actuating Cylinder.

002847PC

DETECTION EQUIPMENT

1. Model FLK-1 (P/N 550131).

- ▶ The Model FLK-1 fusible link kit includes a 10 in. (25.4 cm) steel bracket, two (2) 1/2" EMT connectors, two (2) cable crimps, and two (2) "S" hooks. Fusible links must be ordered separately. See **Figure 2-9**.

▶ 2. Model FLH-1 (P/N 550876).

- ▶ The Model FLH-1 fusible link hanger is an accessory designed to simplify the installation of fusible links in the fusible link line. It can be used with the Model FLK-1 fusible link kit (kits must be ordered separately). The Fusible Link Hanger makes it possible to install fusible links without cutting and crimping loops in the fusible link line for each link. They are available in packages of 25 (FLH-25) only. See **Figure 2-10**.

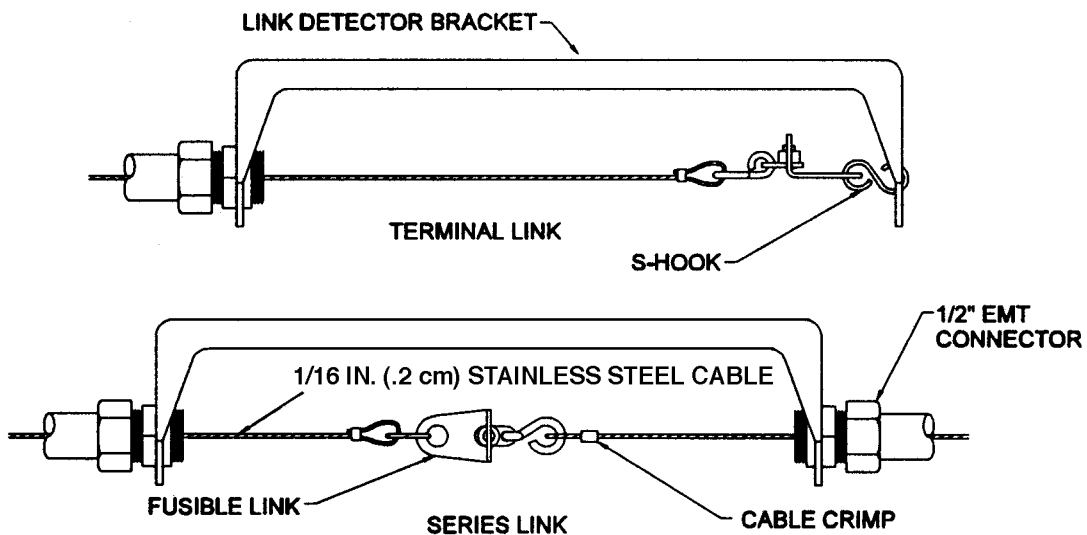


Figure 2-9. Model FLK-1 Fusible Link

002849PC

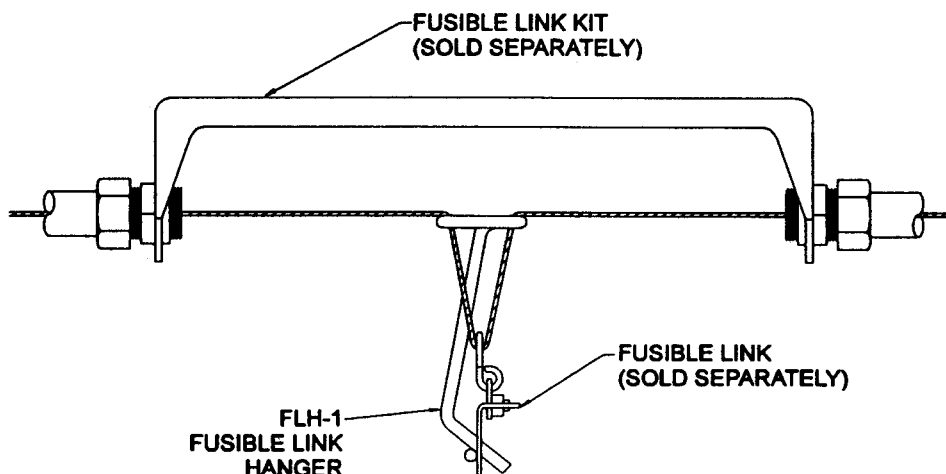


Figure 2-10. Model FLH-1 Fusible Link Hanger

002850PC

▶ 3. Fusible Links.

The fusible link is designed to separate at a specific temperature, releasing tension from the fusible link line, causing system actuation. See **Figure 2-11**.

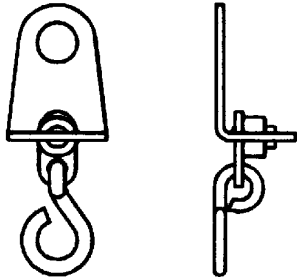


Figure 2-11. ML Style Fusible Link.

002851PC

After determining the maximum ambient temperature at the fusible link location, select the correct fusible link according to the temperature condition chart below:

Fusible Link Model No.	Maximum Ambient Temperature	Part Number
FL-165	95° F. (35° C.)	550368
FL-212	142° F. (61° C.)	550365
FL-280	210° F. (99° C.)	550366
FL-360	290° F. (143° C.)	550009
FL-450	380° F. (193° C.)	550367
FL-500	430° F. (221° C.)	56816

▶ 4. Thermal Detectors.

Fixed temperature thermal detectors are normally open, mechanical contact closure switches designed to operate at a factory preset temperature. They are available in four preset temperatures which meet NFPA standards and are UL Listed and FM Approved. After determining the maximum ambient temperature at the thermal detector location, select the correct thermal detector according to the temperature condition chart below:

Thermal Detector Model No.	Maximum Ambient Temperature	Part Number
TD-225	155° F. (68° C.)	13976
TD-325	255° F. (124° C.)	13975
TD-450	380° F. (193° C.)	13974
TD-600	530° F. (277° C.)	13971

MODEL RPS-M - REMOTE MECHANICAL PULL STATION (P/N 551074)

Remote manual control for the Model MCH3, NMCH3, or ECH3 control head is provided by the Model RPS-M remote mechanical pull station. It is connected to the system control head by stainless steel cable. This cable is enclosed in

▶ 1/2 in. (1.3 cm) EMT with corner pulleys at each change in direction. The remote mechanical pull station shall be located at the point of egress. See **Figure 2-12**.

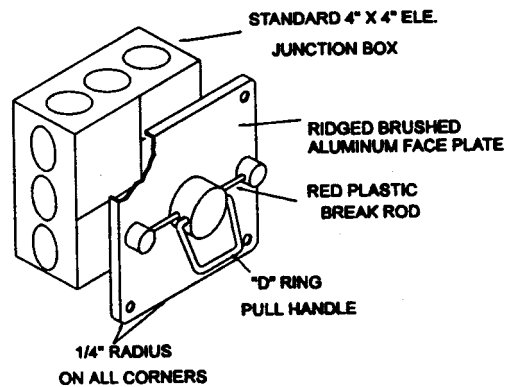
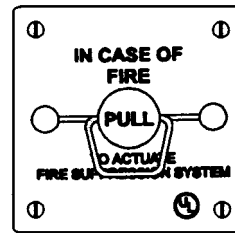


Figure 2-12. Model RPS-M Mechanical Pull Station.

002852PC

GAS SHUTOFF VALVES

1. Mechanical Gas Shutoff Valve.

A gas shutoff valve is required on all systems used to protect a gas fueled cooking appliance to stop gas flow in the event of system actuation. A mechanical gas valve can be used with the Model MCH3 control head. It is connected to the system control head by stainless steel cable. This cable is enclosed in 1/2 in. (1.3 cm) EMT with a corner pulley at each change in direction. The valves are rated for natural and LP gas (see **Figure 2-13**). Mechanical gas valves are available in the following sizes:

Model No.	Valve Size	Maximum Operating Pressure	Part Number
▶ GV-75	3/4 in.	5 psi (.4 bar)	550593
GV-100	1 in.	5 psi (.4 bar)	550594
GV-125	1-1/4 in.	5 psi (.4 bar)	550595
GV-150	1-1/2 in.	5 psi (.4 bar)	550596
GV-200	2 in.	5 psi (.4 bar)	551049
GV-250	2-1/2 in.	5 psi (.4 bar)	550185
▶ GV-300	3 in.	5 psi (.4 bar)	550186

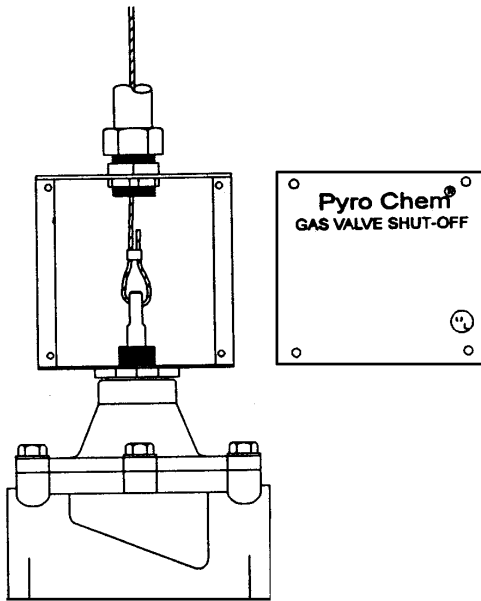


Figure 2-13. GV-Series Mechanical Gas Valve.
002853PC

2. Electric Gas Shutoff Valve.

A gas shutoff valve is required on all systems used to protect a gas fueled cooking appliance to stop gas flow in the event of system actuation. A UL Listed electric gas valve can be used with either the Model MCH3 or ECH3 control head. The valves are rated for natural and LP gas. Valves are available in 120 VAC. Electric gas valves are available in the following sizes:

Model No.	Valve Size	Maximum Operating Pressure	Part Number
▶ EGVSO-75	3/4 in.	50 psi (3.5 bar)	550358
▶ EGVSO-100	1 in.	25 psi (3.5 bar)	550359
▶ EGVSO-125	1-1/4 in.	25 psi (3.5 bar)	550360
▶ EGVSO-150	1-1/2 in.	25 psi (3.5 bar)	550361
▶ EGVSO-200	2 in.	25 psi (3.5 bar)	550362
▶ EGVSO-250	2-1/2 in.	25 psi (3.5 bar)	550363
▶ EGVSO-300	3 in.	25 psi (3.5 bar)	550385

Note: A UL Listed manual reset relay is required when using an electric gas valve. The Pyro-Chem Kitchen Knight II Model SM-120 solenoid monitor may be used for this purpose.

CORNER PULLEYS

1. Model SBP-1 (P/N 415670).

A corner pulley is used whenever a change in stainless steel cable direction is required. The Model SBP-1 corner pulley is equipped with a set screw fitting for connection to 1/2 in. (1.3 cm) EMT. See **Figure 2-14**.

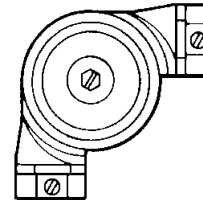


Figure 2-14. Model SBP-1 Corner Pulley.
000160

2. Model CBP-1 (P/N 423250).

A corner pulley is used whenever a change in stainless cable direction is required. The Model CBP-1 is a grease-tight corner pulley designed for areas likely to experience excessive deposit build-up. It is equipped with a compression fitting for connection to 1/2 in. (1.3 cm) EMT. See **Figure 2-15**.

Note: The Model CBP-1 is not a liquid tight seal for penetration of hoods and/or ducts.

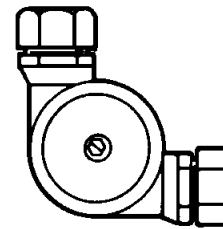


Figure 2-15. Model CBP-1 Corner Pulley.
000161

3. Model WBP-1 (P/N 550982).

A corner pulley is used whenever a change in stainless cable direction is required. The Model WBP-1 is a weather-proof corner pulley designed for areas likely to be exposed to moisture. It is equipped with female pipe threads for connection to 1/2 in. (1.3 cm) rigid conduit. See **Figure 2-15a**.

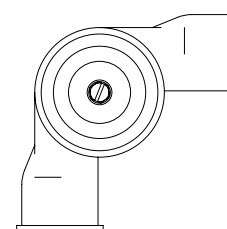


Figure 2-15a. Model WBP-1 Corner Pulley.
000161

TEE PULLEY (P/N 550166)

The Model TP-1 tee pulley is used to connect two mechanical gas valves or two remote mechanical pull stations to a single control head. The tee pulley replaces two standard 90° corner pulleys. See **Figure 2-16**.

CAUTION

The Tee Pulley must never be used to connect multiple fusible link lines to a single control head.

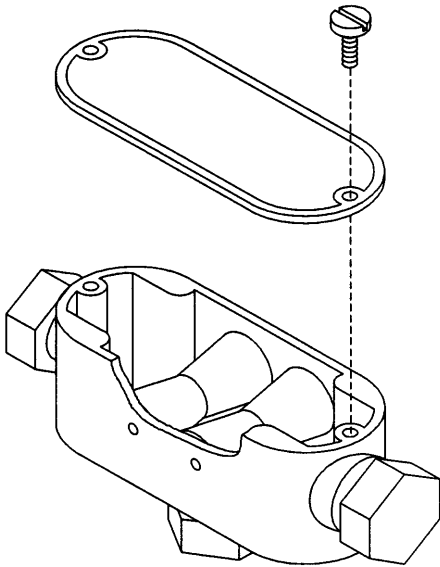


Figure 2-16. Model TP-1 Tee Pulley.

002857PC

ELECTRICAL SWITCHES

The electrical switches are intended for use with electric gas valves, alarms, contactors, lights, contractor supplied electric power shut-off devices and other electrical devices that are designed to shut off or turn on when the system is actuated.

NOTE

No electrical connections shall be made inside the control head. All electrical wiring shall exit the control head through the knock-out on the side of the box. All electrical connections must be made in an approved electrical box.

Switches are available in kits: One Switch Kit, Part No. 551154; Two Switch Kit, Part No. 551155; Three Switch Kit, Part No. 551156, and Four Switch Kit, Part No. 551157. Each switch has a set of single-pole, double-throw contacts rated at 21 amp, 1 HP, 125, 250, 277 VAC or 2 HP, 250, 277 VAC. Mounting hardware and 12 in. (30.5 cm) wire assemblies are provided with each kit.

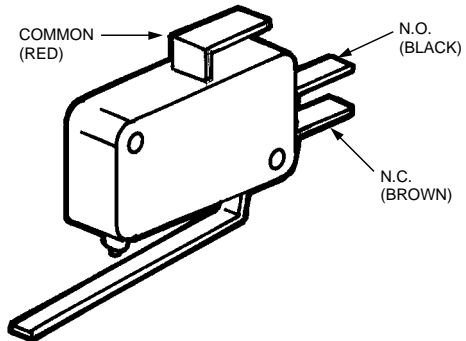


Figure 2-17. Model MS-SPDT Miniature Switch.

001612

MODEL SM-120/24 SOLENOID MONITOR

The Model SM-120/24 solenoid monitor is used in conjunction with the Model ECH3 control head to supervise the actuation and detection circuits. In the event of a problem in the circuit, a light on the monitor goes out. The Model SM-120 is used with the Model ECH3-120 control head. The Model SM-24 (P/N 550303) is used with the Model ECH3-24 control head. Two sets of NO/NC dry contacts are provided. The unit mounts directly to a three gang wall outlet box. The Model SM-120 (P/N 550302) acts as a reset relay when used with an electric gas valve. Electric gas valve wiring instructions are provided in the installation section of this manual. See **Figure 2-18**.

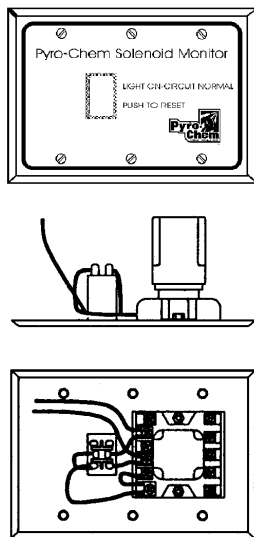


Figure 2-18. Model SM-24/120 Solenoid Monitor.

002860PC

PIPE AND FITTINGS

Pipe and fittings must be furnished by the installer. Schedule 40 stainless steel, chrome plated, or black pipe and fittings must be used. Galvanized pipe and fittings are not to be used.

NOZZLES

Nozzles have been developed for appliance, plenum, and duct applications. All nozzles have a specific flow point value and are supplied with blow-off caps to prevent clogging. Each nozzle is stamped with the model number. See **Figure 2-19**. Application limitations are provided in the design section of this manual.

Part No.	Description	Flow No.
551029	1H Nozzles, pack of ten (10)	1
551026	1L Nozzles, pack of ten (10)	1
551028	2H Nozzles, pack of ten (10)	2
551027	2L Nozzles, pack of ten (10)	2
551038	2D Nozzles, pack of ten (10)	2

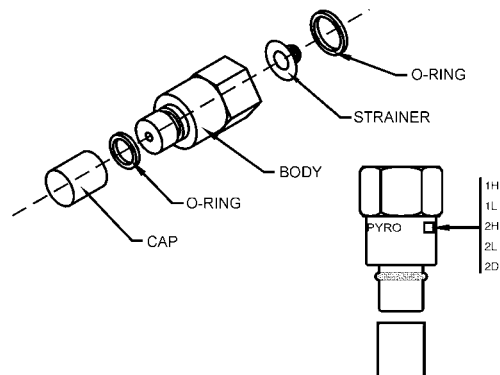


Figure 2-19.

006171PC

SWIVEL ADAPTOR (P/N 423572)

The Swivel adaptor consists of a swivel nut, swivel body, and swivel ball. All are chrome-plated. The swivel adaptor allows the nozzle to be rotated approximately 30° in all directions. Swivel Adaptors must be ordered as a Swivel Adaptor Shipping Assembly, Part No. 423572, which contains 25 swivel adaptors. See **Figure 2-20**.

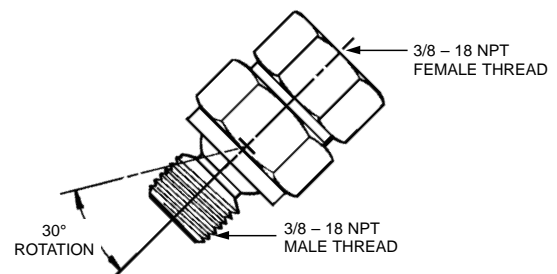


Figure 2-20

000003

COMPONENTS LIST

<u>MODEL NO.</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>MODEL NO.</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
PCL-300	3.0 GALLON CYLINDER ASSEMBLY	551194	EGVSO-300	ELECTRIC GAS SHUT-OFF VALVE 3"	550385
PCL-460	4.6 GALLON CYLINDER ASSEMBLY	551193	GV-75	MECHANICAL GAS SHUT-OFF VALVE 3/4"	550593
PCL-600	6.0 GALLON CYLINDER ASSEMBLY	551196	GV-100	MECHANICAL GAS SHUT-OFF VALVE 1"	550594
PAC-10	PNEUMATIC ACTUATING CYLINDER	550104	GV-125	MECHANICAL GAS SHUT-OFF VALVE 1-1/4"	550595
PCL-300	CANADIAN – 3.0 GALLON CYLINDER ASSEMBLY	551195	GV-150	MECHANICAL GAS SHUT-OFF VALVE 1-1/2"	550596
PCL-460	CANADIAN – 4.6 GALLON CYLINDER ASSEMBLY	551192	GV-200	MECHANICAL GAS SHUT-OFF VALVE 2"	551049
PCL-600	CANADIAN – 6.0 GALLON CYLINDER ASSEMBLY	551197	GV-250	MECHANICAL GAS SHUT-OFF VALVE 2-1/2"	550185
PAC-10	CANADIAN – PNEUMATIC ACTUATING CYLINDER	551125	GV-300	MECHANICAL GAS SHUT-OFF VALVE 3"	550186
MB-1	MOUNTING BRACKET (FOR PCL-600)	550053	MS-SPDT	MINI SWITCH - SINGLE POLE DOUBLE THROW	551154
MB-15	MOUNTING BRACKET (FOR PCL-300/460)	550054	MS-DPDT	MINI SWITCH - DOUBLE POLE DOUBLE THROW	551155
MB-P2	MOUNTING BRACKET (FOR MCH3 ECH3-24/120)	550853	MS-3PDT	MINI SWITCH – 3 POLE DOUBLE THROW	551156
MCH3	MECHANICAL CONTROL HEAD	551200	MS-4PDT	MINI SWITCH – 4 POLE DOUBLE THROW	551157
NMCH3	MECHANICAL CONTROL HEAD (NO HANDLE)	551203	CO2-6	6 x CO2 CARTRIDGE	551059
EN-MCU3	ENCLOSURE (FOR PRIMARY CYLINDER)	551208	CBP-1	COMPRESSION BEARING CORNER PULLEY	423250
EN-S	ENCLOSURE (FOR SECONDARY CYLINDER)	550966	SBP- 1	SCREW BEARING CORNER PULLEY	415670
ECH3-24	24VDC ELECTRICAL CONTROL HEAD	551201	WBP-1	WEATHER PROOF BEARING CORNER PULLEY	550982
ECH3-120	120VAC ELECTRICAL CONTROL HEAD	551202	TP-1	TEE PULLEY	550166
1H	WET NOZZLE (PACK OF 10)	551029	---	WET VALVE CAP	550831
1L	WET NOZZLE (PACK OF 10)	551026	---	CONICAL SPRING (WET VALVE)	550705
2H	WET NOZZLE (PACK OF 10)	551028	▶ ---	PRESSURE GAUGE (WET VALVE)	551236
2L	WET NOZZLE (PACK OF 10)	551027	---	PRESSURE REGULATOR ASSEMBLY	550985
2D	WET NOZZLE (PACK OF 10)	551038	---	WET VALVE REBUILDING KIT	550698
---	SWIVEL ADAPTOR (PACK OF 25)	423572	---	PRESSURE REGULATOR REBUILD KIT	551061
RPS-M	REMOTE MECHANICAL PULL STATION	551074	VT-1	VALVE TOOL (WET VALVE)	550788
▶ FLK-1	10 FUSIBLE LINK BRACKET KIT	550131	---	NECK O-RING (WET VALVE)	550716
FLH-25	25 x FUSIBLE LINK HANGER	550876	---	PISTON (WET VALVE)	550707
FL-165	FUSIBLE LINK 165°F	550368	---	PISTON O-RING (WET VALVE)	550715
FL-212	FUSIBLE LINK 212°F	550365	---	VALVE CAP O-RING (WET VALVE)	550714
FL-280	FUSIBLE LINK 280°F	550366	▶ RL-300	3.0 GALLON RECHARGE	551188
FL-360	FUSIBLE LINK 360°F	550009	PCL-300T	TEST TANK	551024
FL-450	FUSIBLE LINK 450°F	550367	PCL-460T	TEST TANK	550902
FL-500	FUSIBLE LINK 500°F	56816	PCL-600T	TEST TANK	550901
SM-24	24VDC SOLENOID MONITOR	550303	---	10 x WET NOZZLE CAP	551528
SM-120	120VAC SOLENOID MONITOR	550302	---	10 x WET NOZZLE STRAINER	551529
TD-225	THERMAL DETECTOR 225°F	13976	---	10 x WET NOZZLE O-RING	551530
TD-325	THERMAL DETECTOR 325°F	13975	---	VALVE STEM O-RING	550028
TD-450	THERMAL DETECTOR 450°F	13974	---	COMPLETE WET VALVE ASSEMBLY	551175
TD-600	THERMAL DETECTOR 600°F	13971	PCL-AK	RECHARGE ADAPTOR KIT	551240
EGVSO-75	ELECTRIC GAS SHUT-OFF VALVE 3/4"	550358	---	MEASURING STICK	551039
EGVSO-100	ELECTRIC GAS SHUT-OFF VALVE 1"	550359	WR-100	CRIMPS (100 PER PACKAGE)	550122
EGVSO-125	ELECTRIC GAS SHUT-OFF VALVE 1-1/4"	550360	---	FLUSHING SOLUTION (32-OZ.)	79656
EGVSO-150	ELECTRIC GAS SHUT-OFF VALVE 1-1/2"	550361			
EGVSO-200	ELECTRIC GAS SHUT-OFF VALVE 2"	550362			
EGVSO-250	ELECTRIC GAS SHUT-OFF VALVE 2-1/2"	550363			