#### **SECTION 3 - SYSTEM COMPONENTS**

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# **SWIVEL ADAPTOR**

The Swivel Adaptor Assembly consists of a swivel nut, swivel body and swivel ball. All are chrome-plated. The swivel adaptor allows any 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 or Part No. 419385, which contains 9 Swivel Adaptors.

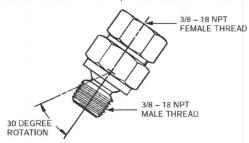


FIGURE 3-15

#### METAL BLOW-OFF CAP

The Metal Blow-Off Cap helps keep the orifice of the nozzle free of grease or other substances that could interfere with agent distribution.

- The Metal Blow-Off Cap Package (Part No. 439861) contains 10 blow-off caps.
- ► Also available is a 10 pack of Stainless Steel Blow-Off Caps (Part No. 439866).

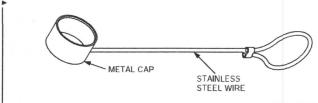


FIGURE 3-16 009475

## REDUCING COUPLING

The reducing coupling (Part No. 436228) is made of stainless steel material with 3/8 in. x 1/2 in. NPT inlet threads. If necessary, the reducing coupling can be utilized when installing the Agent Distribution Hose Line Kit (Part No. 435982). Two couplings are required per Agent Distribution Hose.

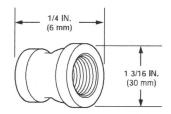


FIGURE 3-17

#### CONDUIT OFFSET ASSEMBLY

The conduit offset assembly (Part No. 435961) is used to change direction of the wire rope on detection, mechanical gas valve, and remote pull station lines. The conduit offset assembly can only be used in the area where the conduit attaches to the regulated release assembly. When using the conduit offset assembly, the maximum number of pulley elbows allowed is 16. The Conduit Offset Shipping Assembly (Part No. 436063) consists of 6 conduit offsets.

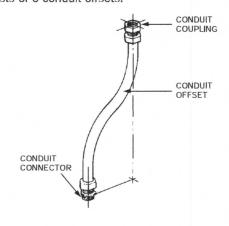


FIGURE 3-18

# "QUIK-SEAL" ADAPTOR

The "Quik-Seal" adaptor is a listed mechanical bulkhead fitting that produces a liquid-tight seal around both distribution piping and detection conduit which runs through restaurant hoods and ducts. The "Quik-Seal" adaptor accepts threaded pipe or conduit. The adaptor is available for 1/4 in. (Part No. 78196), 3/8 in. (Part No. 77285), 1/2 in. (Part No. 77287), or 3/4 in. (Part No. 77289) pipe or conduit sizes. When using with EMT conduit, a conduit connector must be installed in each end of the adaptor. The "Quik-Seal" Adaptor Shipping Assembly must be ordered as stated below:

Size	Shipping Assembly Part No.	Assembly	
1/4 in.	78196	24	3/4 in.
3/8 in.	77285	24	1 1/8 in.
1/2 in.	77287	24	1 1/8 in.
3/4 in.	77289	24	1 3/8 in.

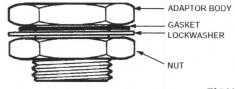


FIGURE 3-19

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## **GAS CARTRIDGES**

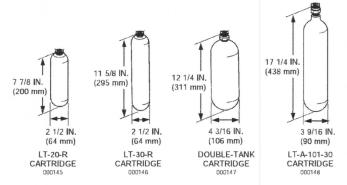
The R-102 system uses gas cartridges to store nitrogen or carbon dioxide expellant gases under pressure until the system is actuated, at which time the cartridge seal is punctured and the released gas expels liquid agent from one or more tanks through the discharge piping and out the discharge nozzles.

Four nitrogen gas cartridges and three carbon dioxide gas cartridges are available as shown in Figure 13.

Cartridges noted as TC/DOT are both Transport Canada (TC) and Department of Transportation (DOT) approved. Cartridges noted as DOT are Department of Transportation approved only.

Cartridge selection options are provided in Section 4 under Tank and Cartridge Requirements.

## NITROGEN GAS CARTRIDGES



### CARBON DIOXIDE CARTRIDGES

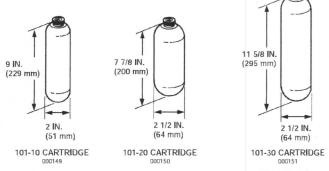


FIGURE 3-13

Additional cartridge shipping assemblies are available for European and Australian requirements.

Cartridge Description	European Part No.	Australian Part No.	TC/DOT Part No.
LT-20-R	428440	428948	423429
LT-30-R	428441	426553	423435
Double Tank	428446	426563	423493
LT-A-101-30	428442	426555	423491
101-10 - CO2	428443	N/A	423439
101-20 - CO2	428445	N/A	423441
101-30 - CO2	428444	N/A	423443

Note: For 101-10 cartridge, Part No. 15850 is DOT only.

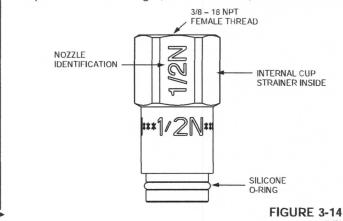
## **NOZZLES**

There are 11 types of discharge nozzles each designed to distribute the liquid agent in a uniform pattern throughout the hazard area:

1.	1/2N Nozzle	7.	245 Nozzle
2.	1F Nozzle	8.	260 Nozzle
3.	1W Nozzle	9.	290 Nozzle
4.	1N Nozzle	10.	2120 Nozzle
5.	2W Nozzle	11.	3N Nozzle
6.	230 Nozzle		

Although these nozzles are similar in appearance and have certain common parts, the tip of each nozzle is designed for a specific application and must only be used in those areas. See Nozzle Application Chart in Section 4 – System Design, for

- individual nozzle usage. Nozzles are shipped with metal blow-off caps included.
- A 25 pack of Nozzle O-rings (Part No. 439848) is also available.



### Nozzle Identification Chart

	Nozzle	Nozzle	Package	Nozzle Flow	
	Туре	Part No.	Quantity	No.	Nozzle Material
	1/2N Nozzle	439837	9	1/2	Chrome-Plated Body
	1F Nozzle	439836	9	1	Chrome-Plated Body
	1W Nozzle*	439839	25	1	Chrome-Plated Body
	1N Nozzle*	439838	25	1	Chrome-Plated Body
	2W Nozzle	439840	25	2	Chrome-Plated Body
١	230 Nozzle	439842	25	2	Chrome-Plated Body
	245 Nozzle	439843	25	2	Chrome-Plated Body
	260 Nozzle	439844	9	2	Chrome-Plated Body
١	290 Nozzle	439845	9	2	Chrome-Plated Body
	2120 Nozzle	439846	9	2	Chrome-Plated Body
	3N Nozzle	439841	9	3	Chrome-Plated Body
I	*Stainless steel v	ersions are a	vailable in the	1W nozz	e (Part No. 439864) and

## SILICONE LUBRICANT

the 1N nozzle (Part No. 439865).

Dow Corning Compound 111 (Part No. 78112) is available in a 5.3-ounce tube. Compound has excellent qualities for sealing and lubricating system components.