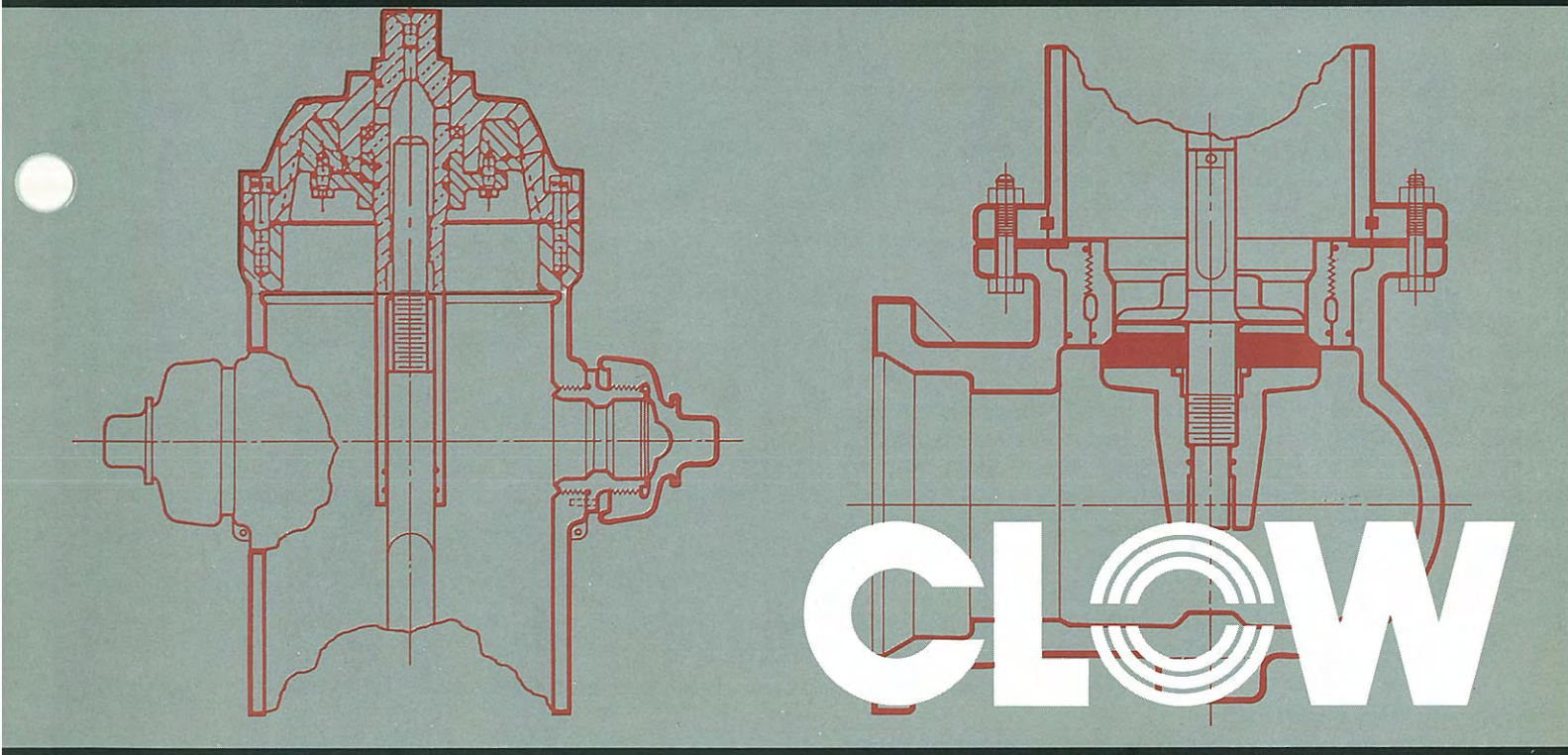


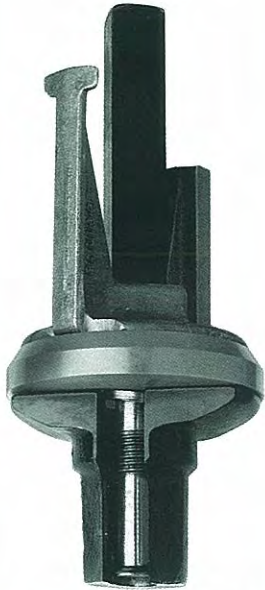
FIRE HYDRANTS



CLOW

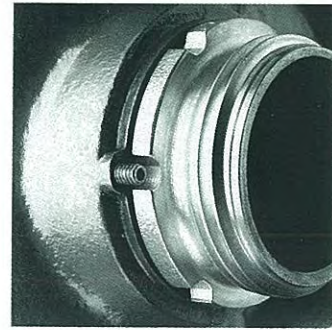
CLOW CANADA

BRIGADIER
SERIES M



Lower valve assembly

Clow Canada is committed to the manufacture and delivery of superior products, supported by superior services. Strict quality control measures govern every step of the manufacturing process, to ensure precision and consistency. We provide the knowledge, the technology and the products to serve industry's changing needs, efficiently and effectively. For more information about our products or services, please contact the Clow Canada sales office nearest you.

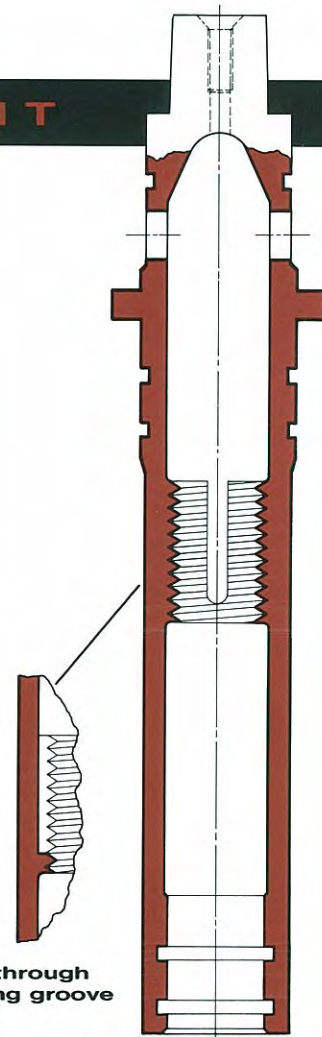


External allen screw locks nozzle into place

BRIGADIER FIRE HYDRANT

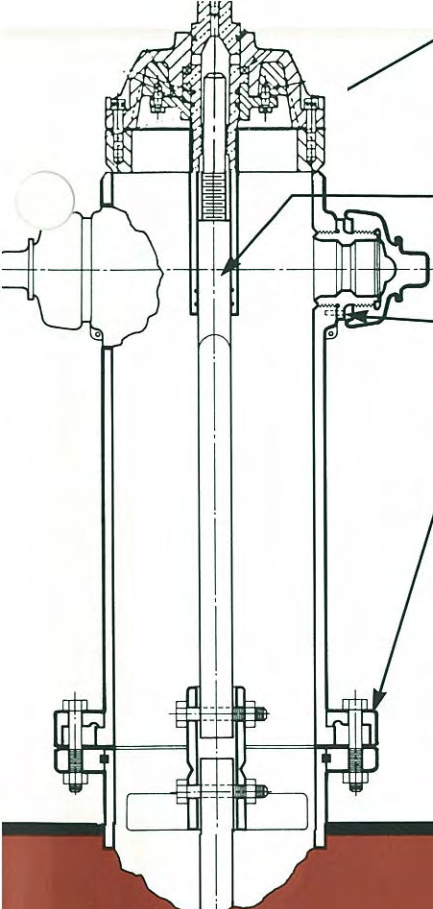
Clow Canada's Brigadier SERIES M incorporates several new design features and improved components for increased performance in firefighting, along with greater durability, economy and convenience. These hydrants are manufactured in Canada to the highest standards of quality — every unit is thoroughly tested before leaving the Clow factory. Lubrication is assured through the Brigadier's unique Hydra-lube™ mechanism. The Brigadier can be rotated to any position — during or after installation — without disturbing the working mechanism. The rugged Brigadier SERIES M stands up easily to traffic damage. It is designed for easy upkeep, repair and replacement of parts; its internal assembly can be removed and replaced in 20 minutes, without excavation. Alternative design options and accessories serve a wide range of municipal and industrial needs. The Brigadier's advantages include:

- **efficient compression-type hydrant**
- **factory-lubricated operating mechanism effectively O-ring sealed for long and efficient operation**
- **very low opening and closing torques**
- **automatic drainage**
- **positive sealing with O-rings at operating nut, operating housing, seat, bronze casing and seat**
- **durable and positive seating**
- **easy multiple positioning**
- **safety stem coupling and two safety segments**
- **internal parts easily removed — bury easily increased**
- **threaded hose and pumper nozzles — simple replacement if needed**
- **complete interchangeability with previous M-67 and M-59 model hydrants**
- **conforms to AWWA specifications**



Section through lubricating groove

Hydra-lube™ operating nut

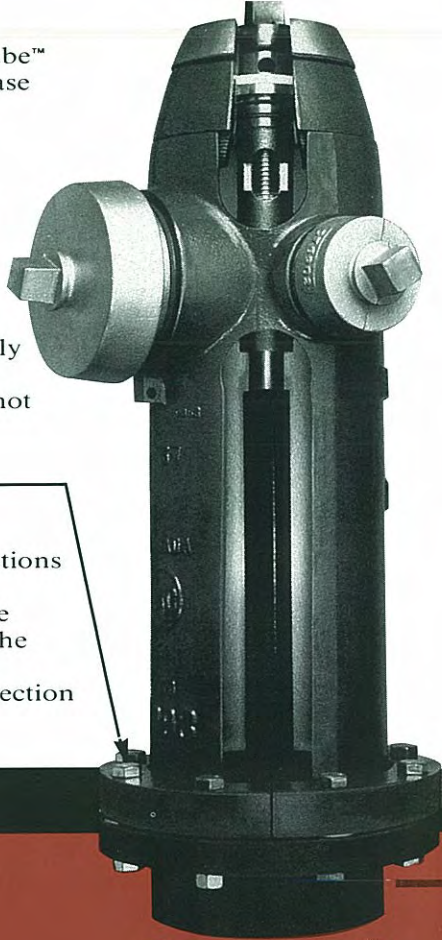


Hydra-lube™
 The Brigadier's innovative Hydra-lube™ system incorporates an internal grease channel for self-lubrication during operation.

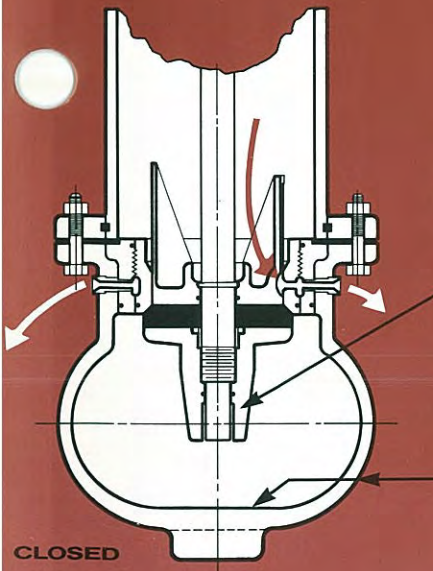
Stainless steel rod
 Stainless steel upper stem provides corrosion-free seating for O-rings.

Nozzles
 An external allen screw mechanically locks nozzles into place; this offers greater assurance that nozzles will not turn or back out.

Safety flanges
 The safety flange consists of four identical segments grooved on the underside. The strength of these sections is less than the strength of the intermediate section flange; if severe impact occurs, breakage will be at the safety segment. The hydrant body, working mechanism, intermediate section and connecting flange remain undamaged.



Ground line

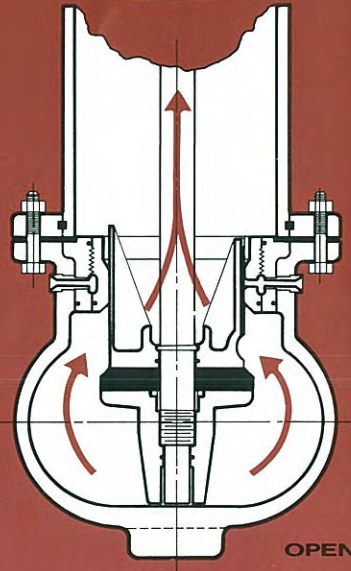


Automatic drain
 To prevent corrosion and freeze-up, the hydrant body is automatically drained quickly through the drip valve after each use.

Lower valve assembly
 The lower valve plate assembly is extended to fully encapsulate the lower rod threads. This allows for increased corrosion resistance and ease of disassembly.

Epoxy coating
 A durable epoxy coating on the interior and exterior of the elbow guards against corrosion.

CLOSED



OPEN

 Listed by Underwriters' Laboratories of Canada.



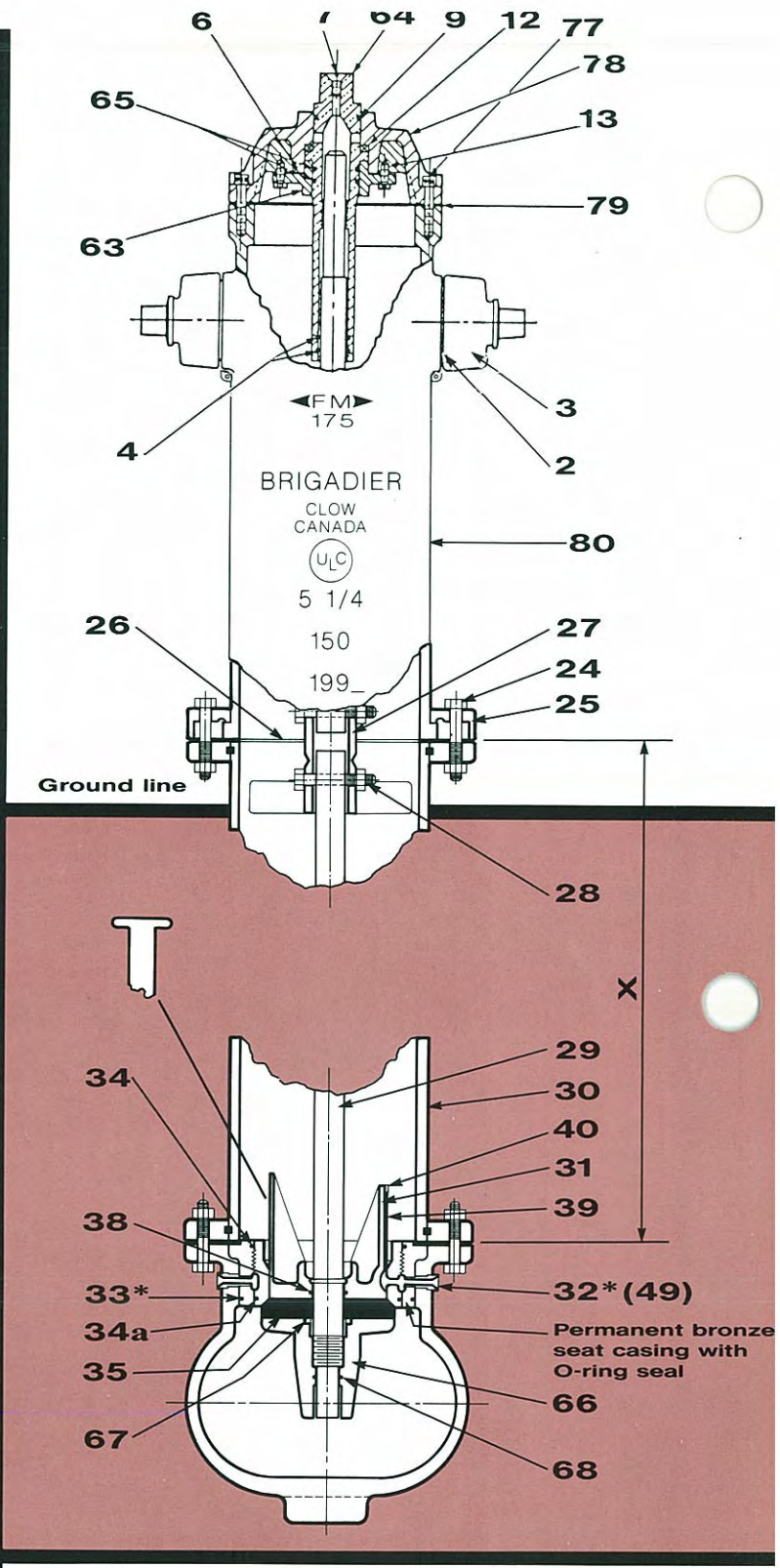
Factory Mutual Approved

CLOW
 CLOW CANADA

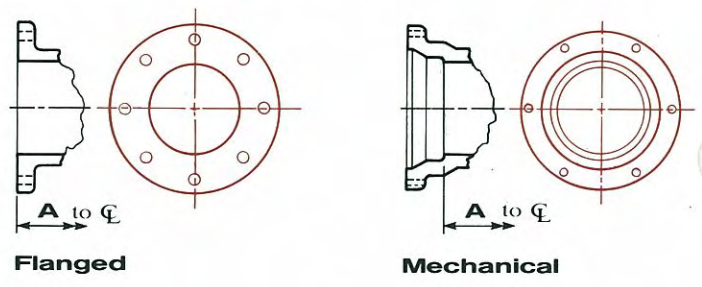
NO.	DESCRIPTION	MATERIAL
2	Hose nozzle	Copper alloy
3	Hose nozzle cap	Cast iron
4	Housing stem O-ring	Buna-N
5	Hose nozzle chain & S-hook	Steel
6	Housing joint gasket	Comp. sheet pack. (non asbestos)
7	Oil hole screw	Brass
9	Operating nut O-ring	Buna-N
•77/10*	Flat hd. cap screw ¼ 20nc × ¾ lg.	Stain. steel
11	Body cap cover	Cast iron
12	Operating nut bearing	Delrin
13	Cap screw	Steel
•78/14*	Body cap	Cast iron
•79/15*	Body cap O-ring	Buna-N
•80/16*	Body	Cast iron
17	Hose cap gasket	Red rubber
18	Pumper cap O-ring	Buna-N
19	Pumper nozzle cap	Cast iron
20	Pumper nozzle	Copper alloy
21	Pumper nozzle chain & S-hook	Steel
22	Nozzle pin	Brass
24	Intersection bolts & nuts	Steel
25	Safety flange (segments)	Cast iron
26	Intersection gaskets	Red rubber
27	Safety coupling	Cast iron
28	Safety coupling bolts & nuts	Steel
29	Operating stem lower	Steel
30	Intermediate section	Ductile
31	Drip valve	Copper alloy
32*	Drain hole lining	Brass
33*	Seat casing O-ring	Buna-N
34	Seat O-ring top	Buna-N
34a	Seat O-ring bottom	Buna-N
35	Main valve disc	Rubber
38	Main valve O-ring	Buna-N
39	Drip valve facing	Rubber
40	Holding clamp	Plastic
41*	Seat casing	Copper alloy
42	Main valve seat	Copper alloy
44*	Elbow (State inlet required)	Cast iron
45†	Guide plate assembly	Steel
46†	Interior wrench	Steel
47†	Holding nut	Copper alloy
48	Holding clamp screw	Brass
49	Drain hole plug	Brass
50	Intersection extension (see note)	Cast iron
51	Inter-extension stem	Steel
52	Coupling	Cast iron
53	Extension stem bolt & nut	Steel
55	Flange for intersection	Cast iron
56	Retaining ring (square)	Steel
57	Monitor bolt nut	Steel
58	Monitor elbow	Cast iron
59	Monitor gasket	Red rubber
61	Pumper cap gasket	Red rubber
62a	Hose nozzle O-ring	Buna-N
62b	Pumper nozzle O-ring	Buna-N
63	Operating nut retaining gland	Cast iron
64	Operating nut	Copper alloy
65	Operating nut O-rings	Buna-N
66	Lower valve plate	Cast iron
67	Lock washer	Stain. steel
68	Lower valve plate O-ring	Buna-N
69	Hose nozzle set screw	Stain. steel
70	Operating stem upper	Stain. steel

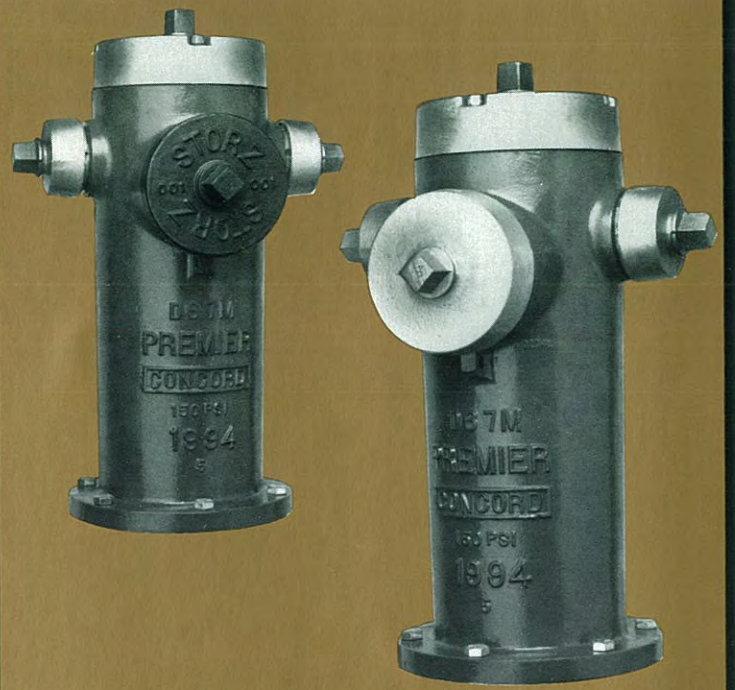
PARTS LIST

• BOLT DOWN: 77/78/79/80
 † SCREW DOWN: 10/14/15/16

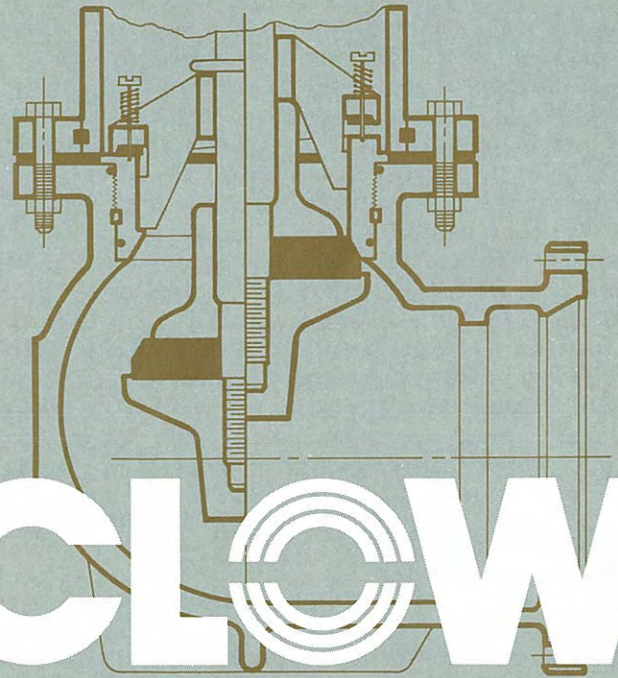
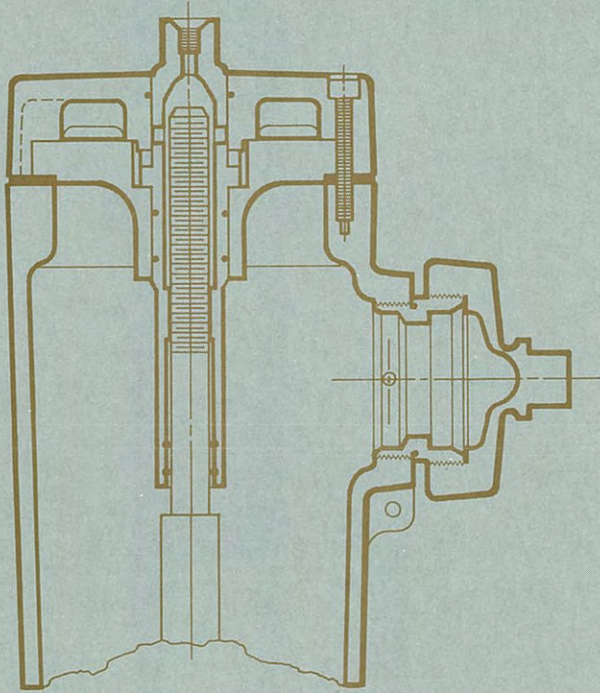


Hydrant end joints





FIRE HYDRANTS



CLOW

CLOW CANADA

PREMIER
SERIES D-67-M



Drain valve tripod,
valve seat and
lower valve assembly

Clow Canada is committed to the manufacture and delivery of superior products, supported by superior services. Strict quality control measures govern every step of the manufacturing process, to ensure precision and consistency. We provide the knowledge, the technology and the products to serve industry's changing needs, efficiently and effectively. For more information about our products or services, please contact the Clow Canada sales office nearest you.

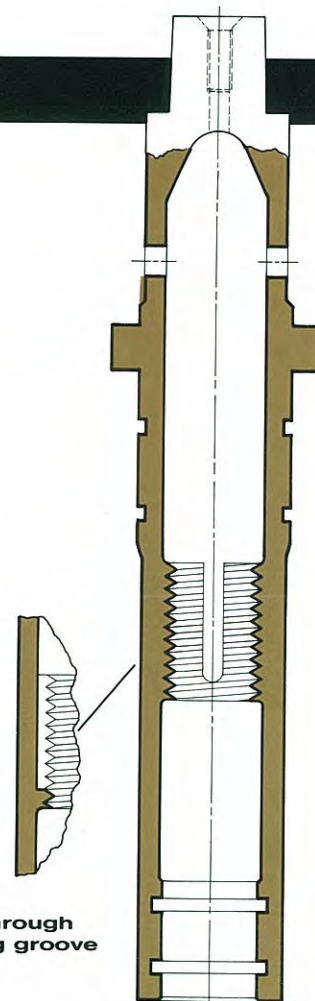


External allen screw
locks nozzle into place

PREMIER FIRE HYDRANT

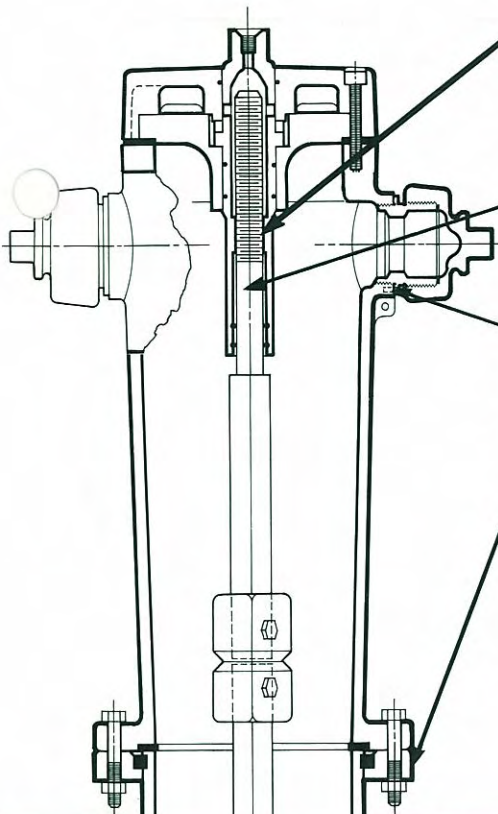
Clow Canada's Premier D-67-M incorporates several new design features and improved components for increased performance in firefighting, along with greater durability, economy and convenience. These hydrants are manufactured in Canada to the highest standards of quality — every unit is thoroughly tested before leaving the Clow factory. Lubrication is assured through the Premier's unique Hydra-lube™ mechanism. The Premier can be rotated to any position — during or after installation — without disturbing the working mechanism. The rugged Premier D-67-M stands up to traffic-accident damage. It is designed for easy upkeep, repair and replacement of parts; its internal assembly can be removed and replaced in 20 minutes, without excavation. Alternative design options and accessories serve a wide range of municipal and industrial needs. The Premier's advantages include:

- **efficient compression-type hydrant**
- **factory-lubricated operating mechanism effectively O-ring sealed for long and efficient operation**
- **very low opening and closing torques**
- **automatic drainage**
- **positive sealing with O-rings at operating nut, operating housing, seat, optional bronze casing and seat**
- **durable and positive seating**
- **easy multiple positioning**
- **safety stem coupling and safety flange**
- **internal parts easily removed — bury easily increased**
- **threaded hose and pumper nozzles — simple replacement if needed**
- **interchangeability with previous D-67-M model hydrants**
- **conforms to AWWA specifications**



Section through
lubricating groove

Hydra-lube™ operating nut

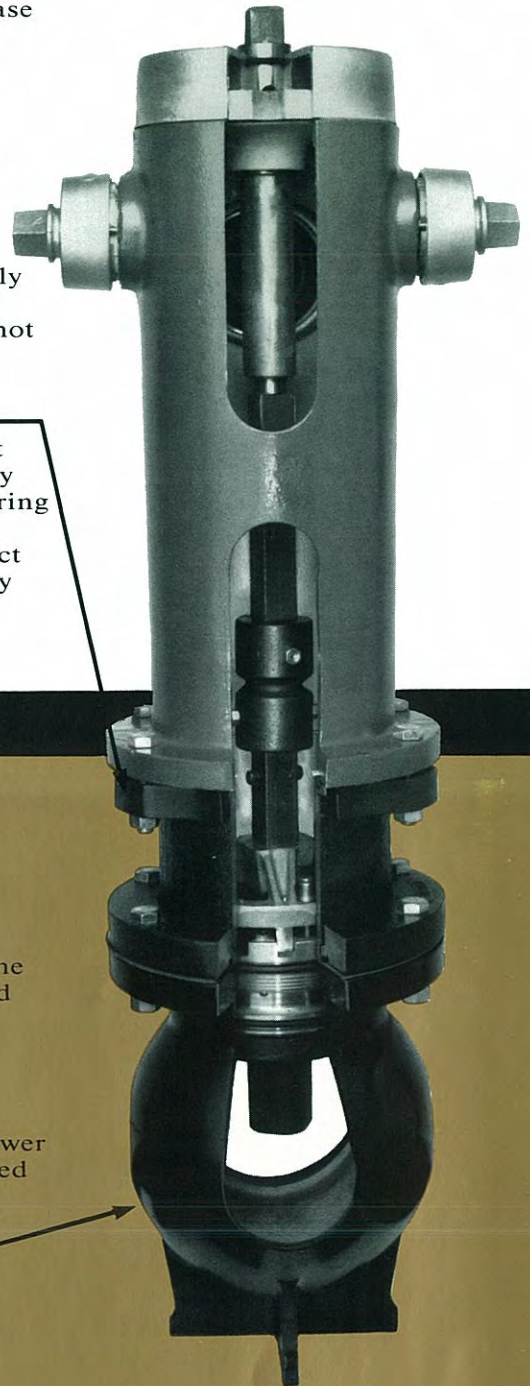


Hydra-lube™
 The Premier's innovative Hydra-lube™ system incorporates an internal grease channel for self-lubrication during operation.

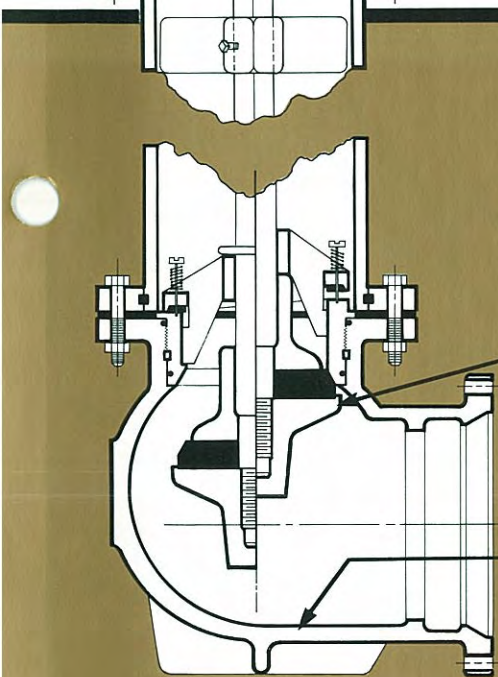
Stainless steel rod
 Stainless steel upper stem provides corrosion-free seating for O-rings.

Nozzles
 An external allen screw mechanically locks nozzles into place; this offers greater assurance that nozzles will not turn or back out.

Safety flange
 The Premier is equipped with a cast iron safety flange and grooved safety coupling. The safety flange is snap ring mounted onto a ductile iron intermediate section. If severe impact occurs, breakage will be at the safety flange and coupling. The hydrant body, working mechanism and intermediate section will remain undamaged.



Valve shown in closed position



Automatic drain
 To prevent corrosion and freeze-up, the hydrant body is automatically drained quickly through the drain tripod.

Lower valve assembly
 The lower valve plate assembly is extended to fully encapsulate the lower rod threads. This allows for increased corrosion resistance and ease of disassembly.

Epoxy coating
 A durable epoxy coating on the interior and exterior of the elbow guards against corrosion.

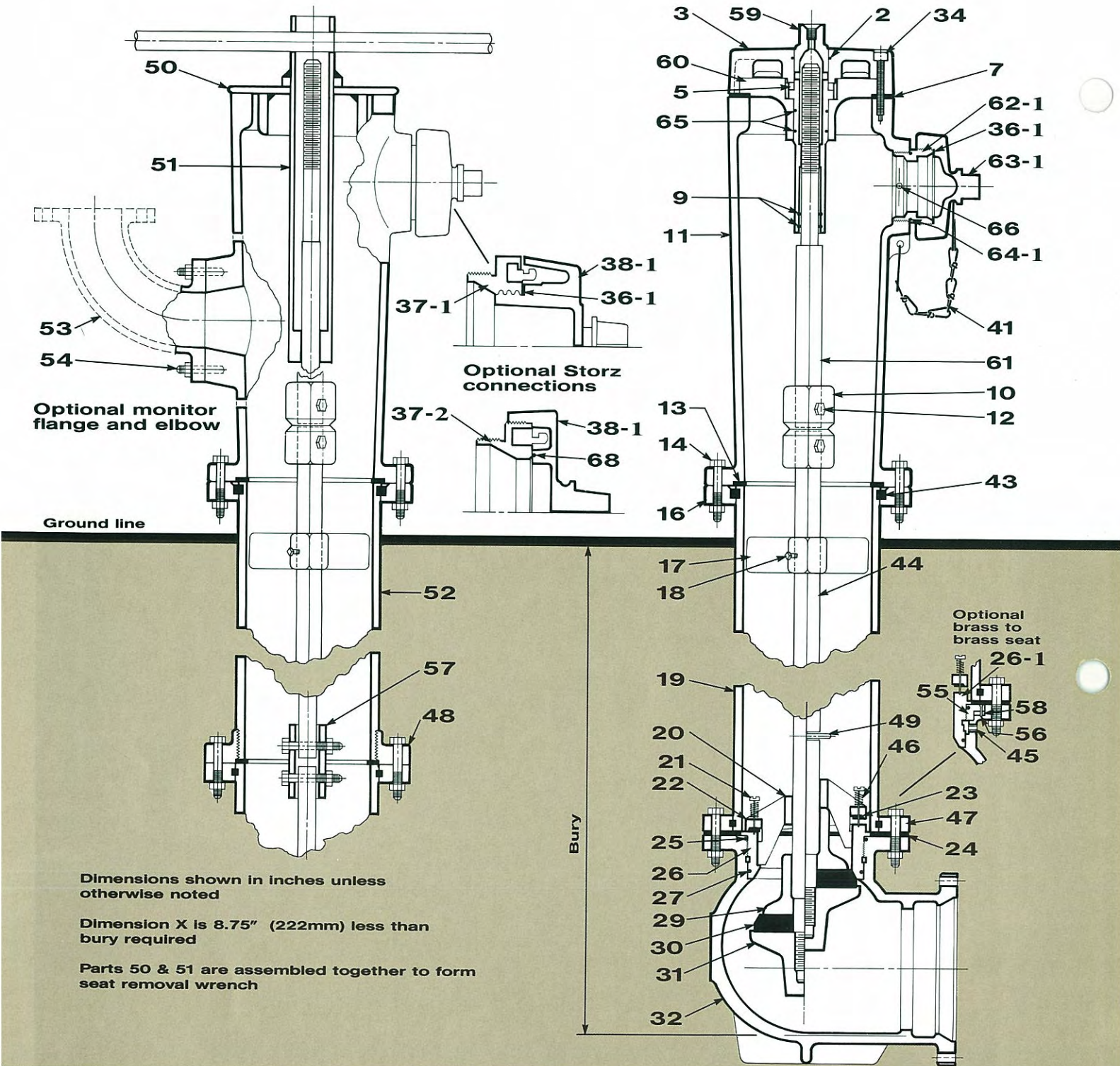
OPEN CLOSED

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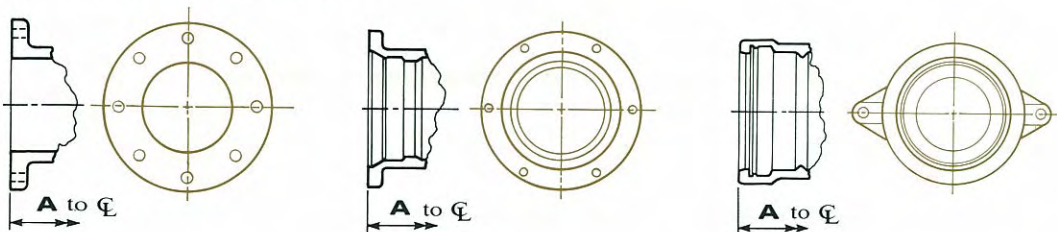
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PREMIER D-67-M DESIGN DETAILS

Hydrant end joints



Flanged

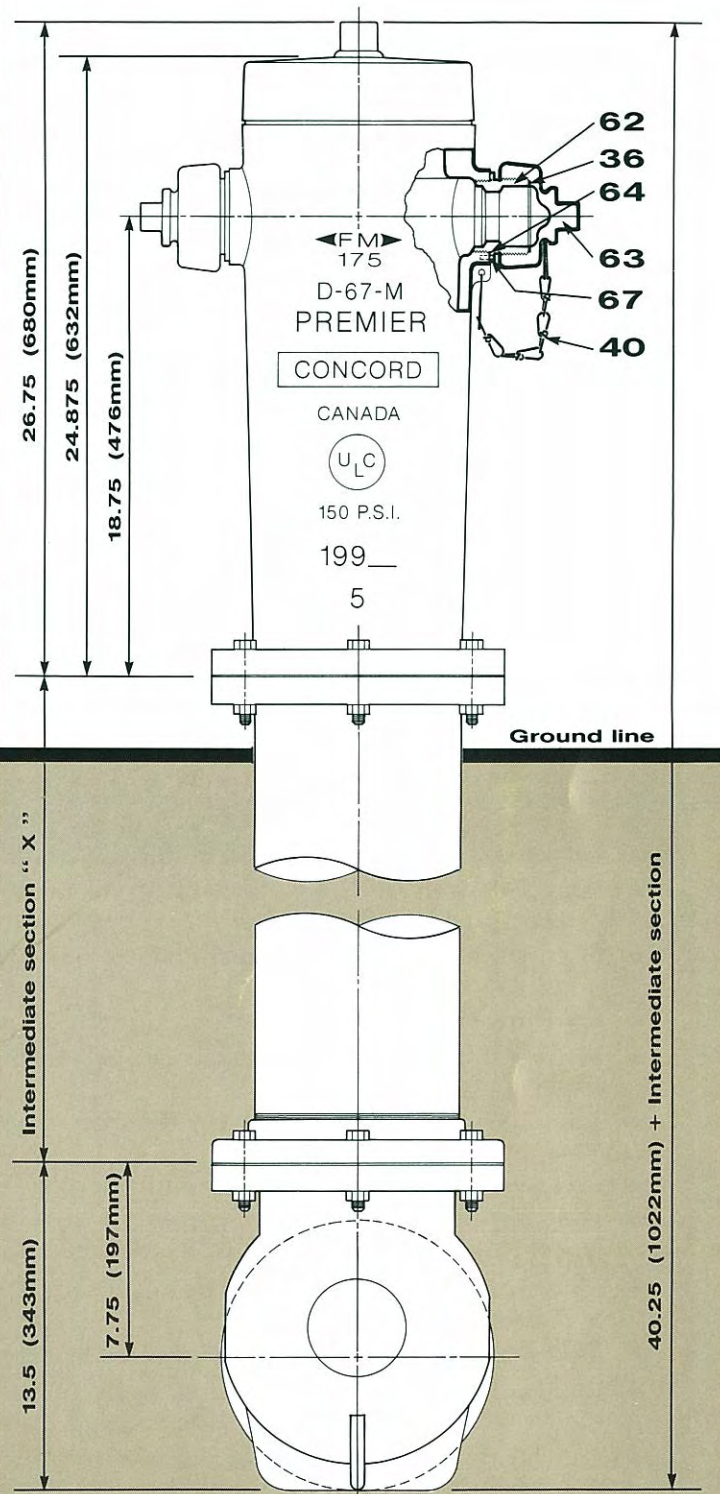
Mechanical

Join-tite

	4"	6"
Flanged	8.50"	8.50"
Mechanical	8.50"	
Join-tite	8.75"	

DIMENSION A

NO.	DESCRIPTION	MATERIAL
2	Bonnet operating nut O-ring	Buna-N
3	Bonnet	Cast iron
5	Operating nut bearing	Delrin
7	Bonnet gasket	Red rubber
9	Housing operating nut O-ring	Buna-N
10	breaking coupling	Cast iron
11	Body 2 hose 1 pumper	Cast iron
12	Hex. hd. bolt & nut	Steel gr. 5
13	Body gasket	Fibre (non asbestos)
14	Hex. hd. bolt & nut	Steel
16	Breaking flange	Cast iron
17	Stem guide	Cast iron
18	Stem guide set screw	Steel
19	Intermediate section	Ductile
20	Drain valve tripod	Bronze
21	Drain valve screw	Brass
22	Drain valve rivet	Copper
23	Drain valve rubber	Gum rubber
24	Gasket	Red rubber
25	Upper O-ring	Buna-N
26	Valve seat	Bronze
26-1	Valve seat (optional)	Bronze
27	Lower O-ring	Buna-N
29	Valve carrier	Cast iron
30	Valve rubber	Rubber
31	Valve retainer	Cast iron
32	Base	Cast iron
34	Bonnet allen screw	Stainless steel
36	Hose cap gasket	Red rubber
36-1	Pumper cap gasket	Red rubber
37-1	Pumper nozzle, Storz	Stainless steel
37-2	Pumper nozzle, Storz	Bronze
38-1	Pumper cap, Storz	Cast iron
40	Hose nozzle chain & S-hook	Steel
41	Pumper nozzle chain & S-hook	Steel
43	Retaining ring	Mild steel
44	Lower stem 1.25 sq.	Steel
45	Drain hole lining	Copper
46	Drain valve spring	Stainless steel
47	Floating flange	Cast iron
48	Threaded flange	Cast iron
49	Spiral pin h.d.	Stainless steel
50	Guide plate assembly	Steel
51	Interior wrench	Steel
52	Intersection extension	Ductile
53	Monitor elbow	Cast iron
54	Stud & nut	Steel
55	Seat ring	Bronze
56	Spiral pin	Stainless steel
57	Extension coupling	Cast iron
58	Ring gasket	Fibre (non asbestos)
59	Operating nut	Bronze
60	Operating nut retaining gland	Cast iron
61	Operating stem upper	Stainless steel
62	Hose nozzle	Bronze
62-1	Pumper nozzle	Bronze
63	Hose cap	Cast iron
63-1	Pumper cap	Cast iron
64	Hose nozzle O-ring	Buna-N
64-1	Pumper nozzle O-ring	Buna-N
65	Gland operating nut O-ring	Buna-N
66	Nozzle pin	Brass
67	Hose nozzle set screw	Stainless steel
68	Pumper cap O-ring	Buna-N



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PARTS LIST



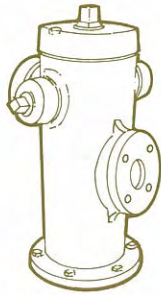
1 Storz Pumper,
2 Hose

1 Pumper,
2 Hose

PREMIER D-67-M SPECIFICATIONS

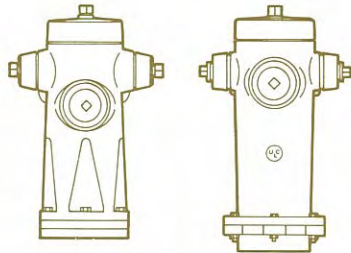
- Hydrant shall be manufactured in accordance with AWWA Standard C502, and shall be listed with ULC and FM.
- Hydrant shall be designed for 175 p.s.i. working pressure and tested to 350 p.s.i. hydrostatic pressure.
- Hydrant shall be backed by manufacturer's 5 year limited warranty.
- Hydrant shall be a compression type, dry barrel design with centre operating stem construction.
- The O-ring seating surface on the upper operating stem shall be constructed of stainless steel.
- Hydrant lower operating rod shall be 1-¼ inches in diameter.
- Hydrant shall have an internally lubricated bronze operating nut with O-ring seals. Operating nut shall be of the Hydra-lube™ design to ensure self-lubrication during operation.
- Hydrant hose nozzles shall be mechanically locked into place by an external allen screw, and have O-ring seals.
- Epoxy coating to be applied to interior and exterior of hydrant shoe for corrosion protection.
- Hydrant shall be manufactured with operating nut and integral thrust collar made of bronze. Delrin washer bearing shall be located above thrust collar for ease of hydrant operation.
- Hydrant shall have a lower valve assembly that fully encapsulates the lower operating rod threads. This allows for increased corrosion resistance and ease of disassembly.
- Hydrant shall have a main valve opening of 5 inches.
- Hydrant shall be a traffic model, complete with safety flange and stem coupling. Nozzle section must rotate 360 degrees.
- Intermediate section shall be ductile iron.
- Hydrant shall be the Clow Canada Premier as manufactured by Clow Canada.

Accessories/Alternatives/Options



Monitor flange

The Premier is available with monitor flange for use in industrial fire protection in pulp and paper mills, lumber yards or storage areas for inflammable materials. The hydrant's 3" (76mm) flanged outlet is faced and drilled to ANSI 125, suitable for connecting a long radius flanged elbow and standpipe for mounting a monitor nozzle.



D-67

D-67-M

Conversion kit

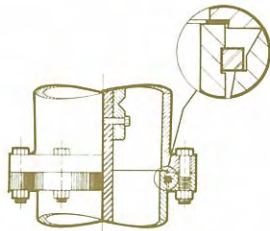
Previous D-67 and D-67-M models may be converted to incorporate important features of the Premier D-67-M — easily and without excavation by using the operating nut conversion kit.

Kit consists of:

- two-piece stainless upper stem
- Hydra-lube™ operating nut
- nut retainer gland and gasket
- Delrin thrust bearing

Specify D-67 kit (1-1/8" sq. stem) or D-67-M kit (1-1/4" sq. stem).

All Premier D-67-M components are interchangeable with previous D-67-M models.



Safety flange

Clow's Premier D-67-M is equipped with a cast iron safety flange and grooved safety coupling. The safety flange is snap ring mounted onto a ductile iron intermediate section. If severe impact occurs, breakage will be at the safety flange and coupling. The hydrant body, working mechanism and intermediate section will remain undamaged.



Storz connectors

The Premier is available with a complete line of integral 2-1/2" (65mm) and 4" (100mm) Storz quick connect couplings. The 2-1/2" coupling is bronze; the 4" is made type 316 stainless steel. Both come equipped with a cast iron cap. A complete line of retrofit stainless steel Storz couplings and adapters is available to convert existing D-67 and D-67-M hydrant models in most sizes. Some units are also available to retrofit different brands of discontinued hydrants.

Further details on Clow Canada's Premier D-67-M, options and/or accessories are available upon request.

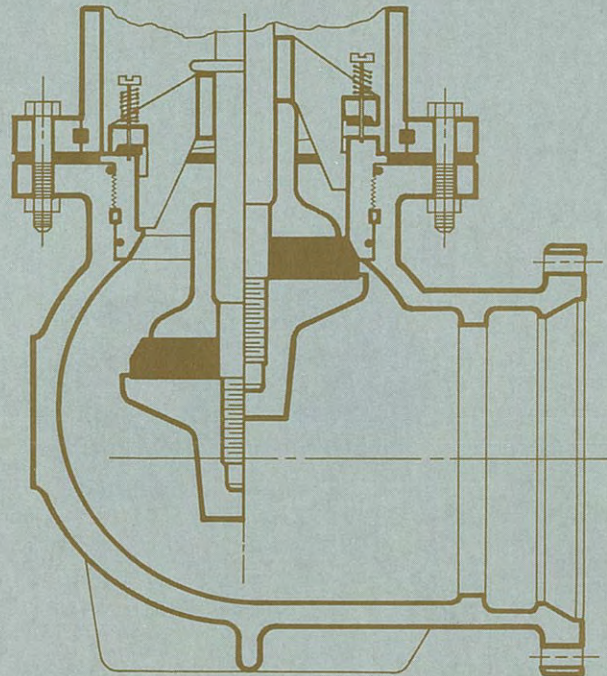
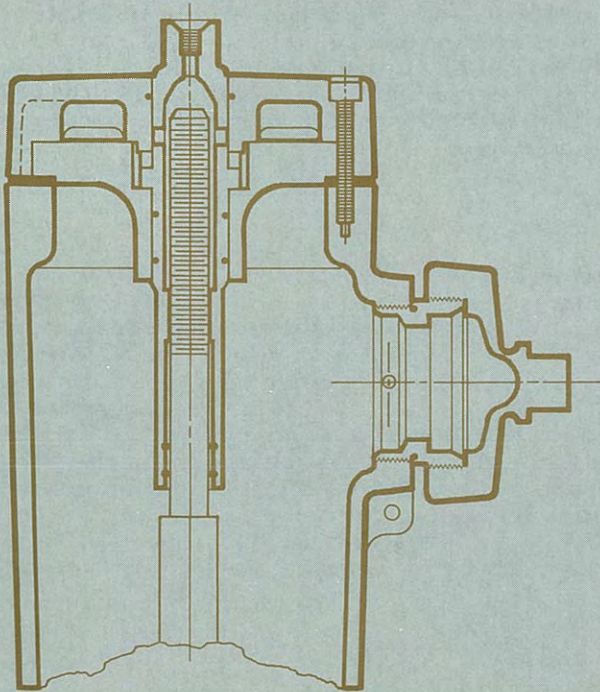
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CLOW CANADA

HAMILTON, ONTARIO
TOLL FREE NUMBER

1-800-561-9931

Tel. (905) 548-9604 Fax (905) 547-0113

SALES DESK



CLOW
CLOW CANADA

EASTERN CANADA

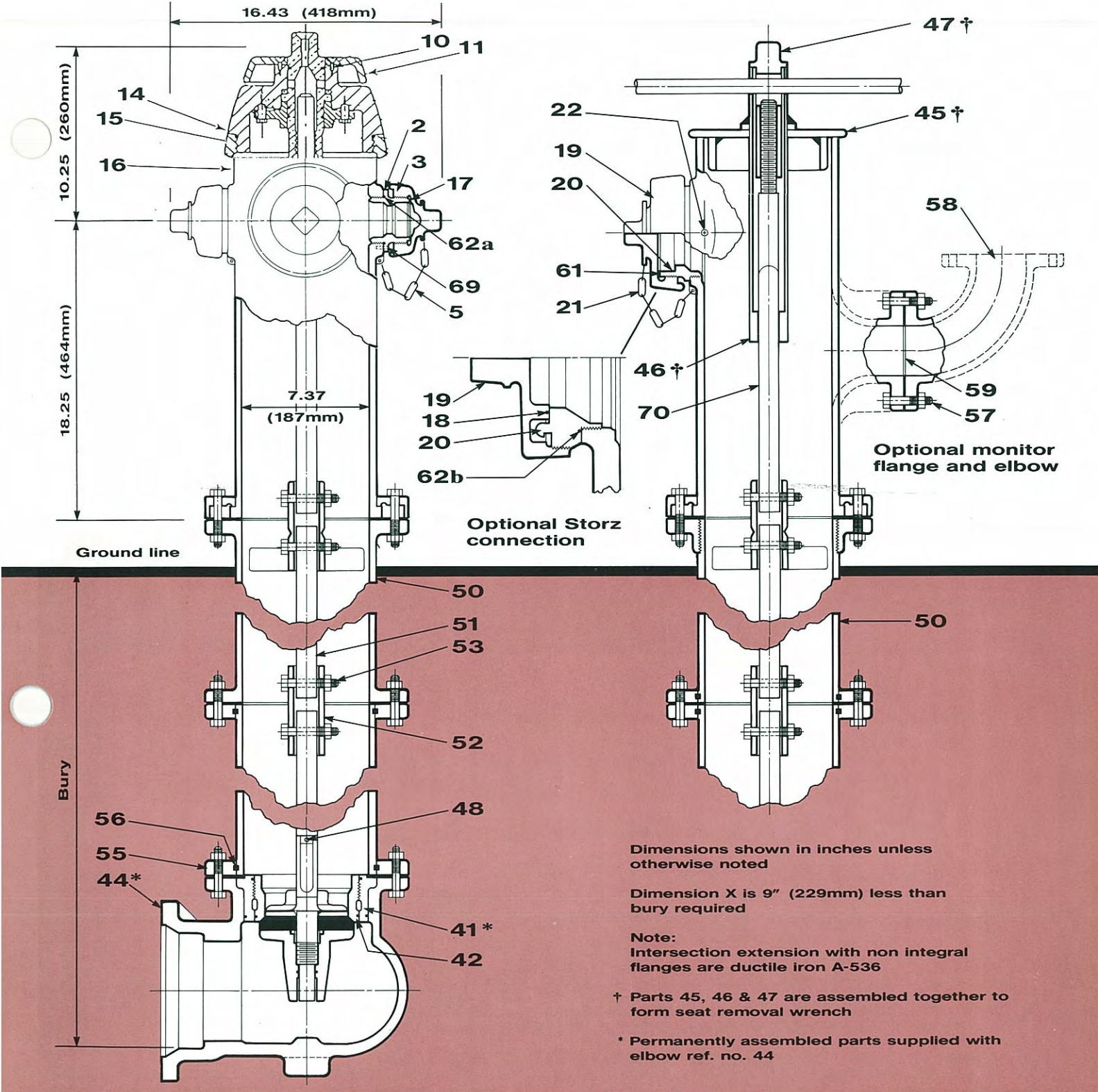
Grandview Industrial Park
P.O. Box 700
Saint John NB E2L 4B3
Tel. (506) 633-2541
Fax (506) 634-8936

WESTERN CANADA

801 Smelter Ave. S.E.
P.O. Box 1000
Medicine Hat AB T1A 7H1
Tel. (403) 527-3553
Fax (403) 527-7454

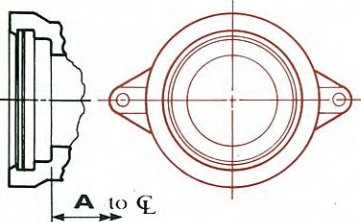
HEAD OFFICE

600 Kenilworth Ave. N.
P.O. Box 2849
Hamilton ON L8N 3R5
Tel. (905) 548-9604
Fax (905) 548-6885



BRIGADIER M

DESIGN DETAILS

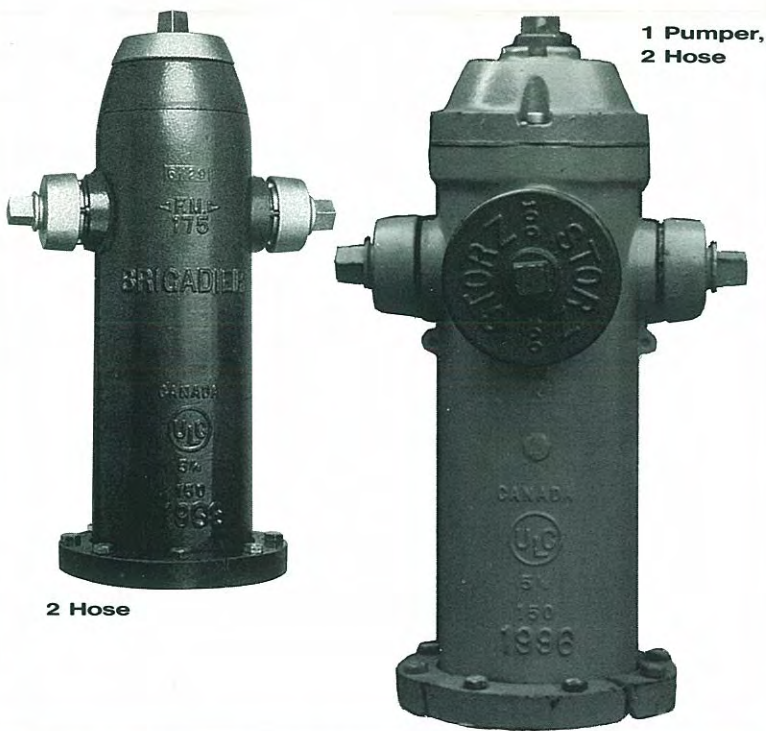


Join-tite

	4"	6"	8"
Flanged	8.25"	8.25"	
Mechanical	5.50"	6.00"	7.50"
Join-tite		4.62"	

DIMENSION A



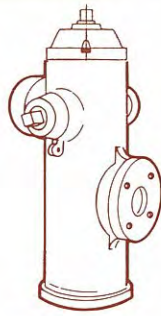


BRIGADIER M

SPECIFICATIONS

- Hydrant shall be manufactured in accordance with AWWA Standard C502, and shall be listed with ULC and FM.
- Hydrant shall be designed for 175 p.s.i. working pressure and tested to 350 p.s.i. hydrostatic pressure.
- Hydrant shall be backed by manufacturer's 5 year limited warranty.
- Hydrant shall be a compression type, dry barrel design with centre operating stem construction.
- The O-ring seating surface on the upper operating stem shall be constructed of stainless steel.
- Hydrant lower operating rod shall be 1-¼ inches in diameter.
- Hydrant shall have an internally lubricated bronze operating nut with O-ring seals. Operating nut shall be of the Hydra-lube™ design to ensure self-lubrication during operation.
- Hydrant hose nozzles shall be mechanically locked into place by an external allen screw, and have O-ring seals.
- Epoxy coating to be applied to interior and exterior of hydrant shoe for corrosion protection.
- Hydrant shall be manufactured with operating nut and integral thrust collar made of bronze. Delrin washer bearing shall be located above thrust collar for ease of hydrant operation.
- Hydrant shall have a lower valve assembly that fully encapsulates the lower operating rod threads. This allows for increased corrosion resistance and ease of disassembly.
- Hydrant shall be manufactured with a lower valve plate that bottoms out in the shoe for maximum opening.
- Hydrant shall have a main valve opening of 5-¼ inches.
- Hydrant shall be a traffic model, complete with safety flanges and stem coupling. Nozzle section must rotate 360 degrees.
- Intermediate section shall be ductile iron.
- Hydrant shall be the Clow Canada Brigadier as manufactured by Clow Canada.

Accessories/Alternatives/Options



Monitor flange

The Brigadier is available with monitor flange for use in industrial fire protection in pulp and paper mills, lumber yards or storage areas for inflammable materials. The hydrant's 3" (76mm) flanged outlet is faced and drilled to ANSI 125, suitable for connecting a long radius flanged elbow and standpipe for mounting a monitor nozzle.

Conversion kit

Previous M-67 models may be converted to incorporate important features of the Brigadier — easily and without excavation.

Kit consists of:

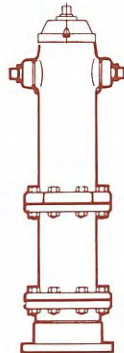
Operating nut conversion:

- two-piece stainless upper stem
- Hydra-lube™ operating nut
- nut retainer gland, gasket and fasteners
- Delrin thrust bearing

Lower valve plate conversion:

- Brigadier extended lower valve plate complete with O-ring and locking device
- valve disc (urethane or SBR)

All Brigadier components are fully interchangeable with previous M-67 and M-59 models

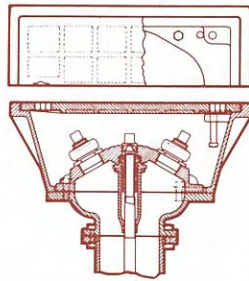


On-line hydrant

Clow's on-line fire hydrant is suitable for service in cold climates where buries are lengthy, and it is feasible and economical to bolt the hydrant directly on a tee installed on a main. An 8" (203mm) flanged spool piece replaces the conventional hydrant elbow; the spool piece flange has 8 holes of 7/8" (22mm) diameter, on a 9 1/2" (242mm) bolt circle diameter.

Flush hydrant

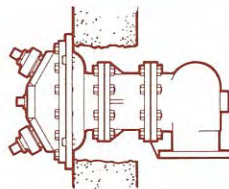
Clow provides a flush-type hydrant especially designed for areas which must be kept clear of all obstructions, such as airports. Nozzles and operating nut are located in a cast iron box, the top of which is level with the groundline. "Clow" and year of manufacture are cast on the cover, with special lettering supplied to order. Other industrial applications include places where the surface is kept clear of snow or ice by underground heating. This hydrant is available with two hose connections or one hose and one pumper connection. Surface box may have piped drain (which could be connected to elbow drain) or with drain plugged requiring pumping out after each use.



Wall hydrant

Clow's wall-type hydrant is of special interest where space is at a premium. The interior parts of the hydrant are located inside the building, and the hydrant protrudes from the face of the wall approximately 8" (203mm).

Note: When ordering, please specify wall thickness (X) and distance from outside of wall to centre of hydrant inlet (Y), as well as other required specifications.



Further details on Clow Canada's Brigadier options and/or accessories are available upon request.

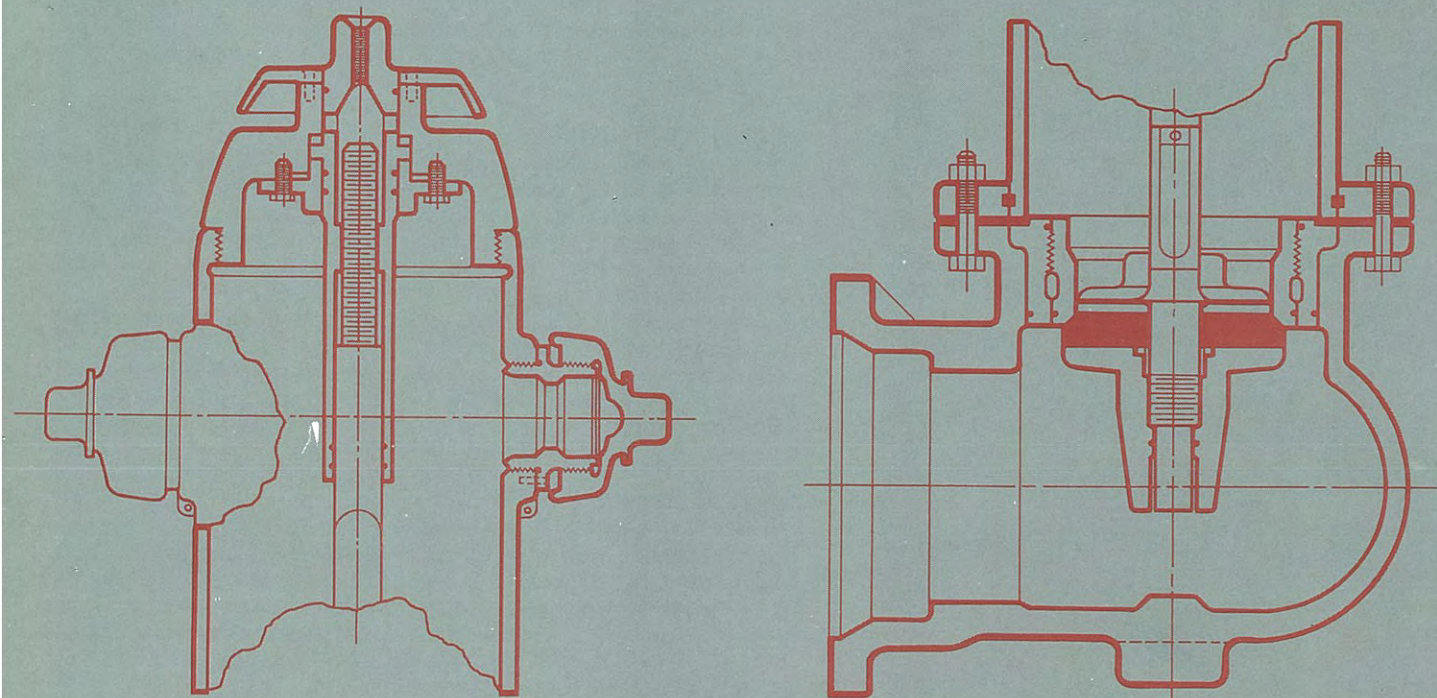
CLOW
CLOW CANADA

HAMILTON, ONTARIO
TOLL FREE NUMBER

1-800-561-9931

Tel. (905) 548-9604 Fax (905) 547-0113

SALES DESK



CLOW
CLOW CANADA

EASTERN CANADA

P.O. Box 700
Saint John, N.B. E2L 4B3
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WESTERN CANADA

801 Smelter Ave. S.E.
P.O. Box 1000
Medicine Hat, Alta. T1A 7H1
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P.O. Box 2849
Hamilton, Ont. L8H 3L5
Tel. (905) 548-9604
Fax (905) 548-6885



CLOW

CLOW CANADA

- Hydra-lube™ self-lubricating system
- Non-freeze operating nut
- Stainless steel upper rod
- Break flange feature
- Intermediate section of ductile iron
- 5 year warranty

HERITAGE

M-67 BRIGADIER

HERITAGE HYDRANT SPECIFICATIONS

- Hydrant shall be manufactured in accordance with AWWA Standard C502, and shall be listed with ULC and FM.
- Hydrant shall be designed for 175 p.s.i. working pressure and tested to 350 p.s.i. hydrostatic pressure.
- Hydrant shall be backed by manufacturer's 5 year limited warranty.
- Hydrant shall be a compression type, dry barrel design with centre operating stem construction.
- The O-ring seating surface on the upper operating stem shall be constructed of stainless steel.
- Hydrant lower operating rod shall be 1-¼ inches square.
- Hydrant shall have an internally lubricated bronze operating nut with O-ring seals. Operating nut shall be of the Hydra-lube™ design to ensure self-lubrication during operation.
- Epoxy coating to be applied to interior and exterior of hydrant shoe for corrosion protection.
- Hydrant shall be manufactured with operating nut and integral thrust collar made of bronze. Delrin washer bearing shall be located above thrust collar for ease of hydrant operation.
- Hydrant shall have a main valve opening of 5-¼ inches.
- Hydrant shall be a traffic model, complete with safety flange and stem coupling. Nozzle section must rotate 360 degrees.
- Intermediate section shall be ductile iron.
- Hydrant shall be the Clow Canada Heritage Brigadier as manufactured by Clow Canada.

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EASTERN CANADA

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