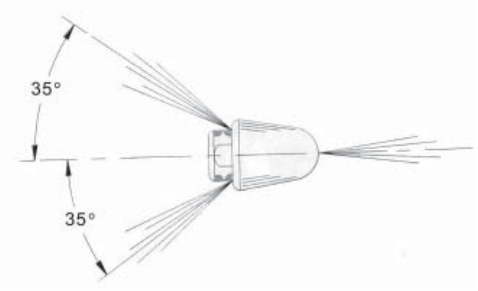
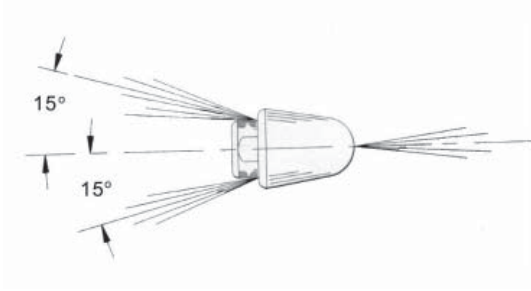
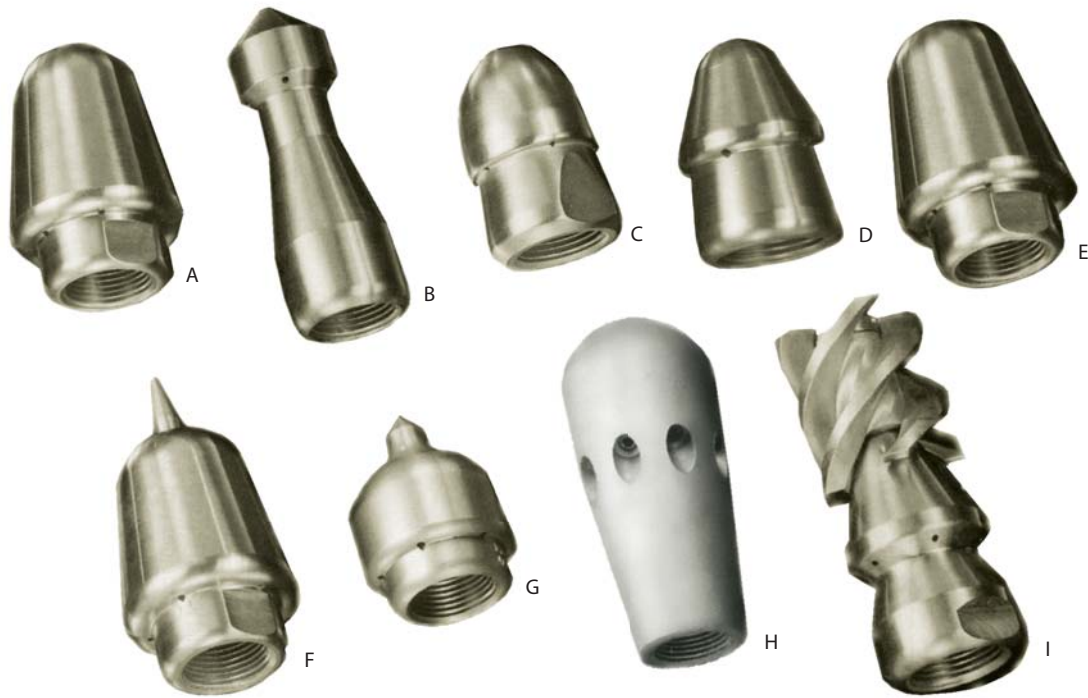


**SEWER JET NOZZLES**



**NOZZLE TIPS:**

1. Lesser degree nozzle has a greater thrust of rocket power than higher degree nozzle.
2. Higher degree nozzle has more cleaning power than lesser degree nozzle.
3. A nozzle designed with a front orifice should be used in almost all sewer line cases.
4. There are some nozzles with 15 and 35 degree orifices. These are recommended when cleaning prior to televising.
5. Nozzles wear out! With wear, the hole size of the orifice increases which decreases pressure. This can create pump and engine problems. Keep new nozzles on hand and use the proper nozzle for each sewer cleaning procedure.



	Type	Degree	Forward Jet	Rear Jet	Part No. for 1" hose	Part No. for 3/4" hose
A	Standard nozzle	15	No	6	WJ-1	WJ-12
A	Standard nozzle	35	No	6	WJ-2	WJ-13
A	Standard nozzle	15	Yes	5	WJ-4	WJ-14
A	Standard nozzle	35	Yes	5	WJ-5	WJ-15
B	Penetrating	14	Yes	5	WJ-7	WJ-17
C	Bullet	22	Yes	5	BN-1	BN-2
D	Snub Nose	15	Yes	5	SN-1	SN-2
E	Mini Dual Degree	15 - 35	No	12	MD-1	MD-2
F	Lance	20	Yes (3)	6	LN-15	LN-16
G	Sidewinder	Front - 45° Rear 18°	Yes (2)	6	S-1	S-2
H	Grease	22	Yes	8	GN-1	GN-2
I	Rotating Blade Spinner	30	Yes (7)	6	RBS-1	RBS-2

SEWER JET NOZZLES

**SEWER JET HOSE**

Part No.	Hose Size		Pressure		Bend Radius		Weight	
	ID	OD	Max Working (PSI)	Min Burst (PSI)	Kink	Min.	Pounds per 100 ft	Available Lengths
<b>S612</b>	¾"	1.14"	2,500	6,250	2.0	4.0	29	500 and 600 ft.
<b>S912</b>	¾"	1.15	3,000	7,500	2.0	4.0	30	500 and 600 ft.
<b>S616</b>	1"	1.41	2,500	6,250	3.0	6.0	38	500 and 600 ft.
<b>S916</b>	1"	1.47	3,000	7,500	3.0	8.0	46	500 and 600 ft.

**LEADER HOSE & HOSE GUIDE**


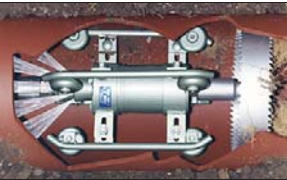
Part No.	Description
<b>LH-1</b>	1" x 10ft leader hose w/M&F fittings attached
<b>LH-5</b>	1" x 25ft leader hose w/M&F fittings attached
<b>LH-1A</b>	¾" x 10ft leader hose w/M&F fittings attached
<b>LH-5A</b>	¾" x 25ft leader hose w/M&F fittings attached
<b>BB-1</b>	3" x 36" hose guide with (2) rings attached

**EXTENSIONS**

Type	Diameter	Length	Part No. for 1" hose	Part No. for ¾" hose
Fin Style	2½"	14"	<b>FS-1</b>	<b>FS-2</b>
Tubular Style	2½"	14"	<b>MY-1</b>	<b>MY-2</b>
Football Style	4"	14"	<b>FO-1</b>	<b>FO-2</b>



SEWER JET HOSE, GUIDES & EXTENSIONS

**ROOT CUTTERS**

Type	Dia.	Length	Weight	Part No. Motor & Thruster only for 1" hose	Part No. Motor & Thruster only for 3/4" hose	
Mini Root and Grease Cutter	2 3/8"	9 1/2"	6	<b>WJ-49M1</b>	<b>WJ-49M34</b>	
Patriot 1 Root and Grease Cutter	3 3/4"	10 1/2"	13	<b>WJ-49P11</b>	<b>WJ-49P134</b>	
Patriot 2 Root and Grease Cutter	2 3/8"	9 1/2"	6	<b>WJ-49P21</b>	<b>WJ-49P234</b>	



Ask about kits for root cutters that include skids, roller assemblies, saws and hardware

**REPLACEMENT SAWS FOR ROOT CUTTERS**

Size	Part No. for Tapered Saw		Part No. for Flat Saw	
4"	<b>WJ-54</b>		<b>WJ-54F</b>	
6"	<b>WJ-56</b>		<b>WJ-56F</b>	
8"	<b>WJ-58</b>		<b>WJ-58F</b>	
10"	<b>WJ-510</b>		<b>WJ-510F</b>	
12"	<b>WJ-512</b>		<b>WJ-512F</b>	
15"	<b>WJ-515</b>		<b>WJ-515F</b>	
Standard root cutter hub	<b>WJ-49HU</b>		<b>WJ-49HU</b>	
Mini root cutter hub	<b>WJ-49MHU</b>		<b>WJ-49MHU</b>	


\*\*\* Hubs sold separately \*\*\*

**SEWER DYE**



Part No.	Description	
<b>FD-1</b>	Sewer dye tablets, 100 per bottle. Available in yellow green, red and blue	
<b>SD-1</b>	Powdered sewer dye, 1 lb. container. Available in yellow green, red and blue	
<b>SB-3</b>	3-minute single wick smoke bombs. Sold by the dozen	
<b>SB-3D</b>	3-minute double wick smoke bombs. Sold by the dozen	

ROOT CUTTERS & SEWER DYE




**SEWER RODS & TOOLS**

	Part No.	Description
	SR-536SP	5/16" x 36" super premium sewer rod
	SR-539SP	5/16" x 39" super premium sewer rod
	SR-131	Heavy duty root saw for 4" pipe / 5/16" rod
	SR-137	Square bar corkscrew for 4" pipe / 5/16" rod
	SR-148	Pick up tool for 5/16" sectional rod
	SR-157	Assembly wrench for 5/16" sewer rod
	SR-174B	18' lightweight hose guide with steel liner

**FLAT STEEL TAPE**


	Part No.	Description
	C539-100	3/4" x 1/8" x 100' flat steel tape with spearhead, ball rollerhead, handle and frame
	C539A-100	1" x 1/8" x 100' flat steel tape with spearhead, ball rollerhead, handle and frame
	B-10	1 3/4" rollerhead, split shaft for flat steel tape
	B-20	2 3/4" rollerhead, split shaft for flat steel tape

**MISCELLANEOUS WATER PRODUCTS**

	Part No.	Description
	HANDI 812	8' x 12" Handi Clam catch basin cleaner
	HANDI 1012	10' x 12" Handi Clam catch basin cleaner
	SI-5253	Heavy duty 24" manhole hook
	HW-1	Adjustable hydrant wrench (up to 1 5/8" pentagon nut)


**HOSE NOZZLES**

Part No.	Description	Type	
<b>BFN-150-I</b>	1½" NPSH	Brass	Adjustable
<b>BFN-150-N</b>	1½" NST	Brass	Adjustable
<b>RP-150-I</b>	1½" NPSH	Red Plastic	Adjustable
<b>RP-150-N</b>	1½" NST	Red Plastic	Adjustable
<b>BN-75G</b>	¾" GHT x 6"	Brass	Non-adjustable
<b>BN-100-I</b>	1" NPSH x 8"	Brass	Non-adjustable



**HOSE ADAPTERS**

Part No.	Description	Type
<b>AD-1</b>	1½" M NST -x- 1½" M NPT	Brass
<b>AD-9</b>	2½" F NST -x- 1½" M NPT	Brass
<b>AD-11</b>	2½" F NST -x- 2" M NPSH	Brass
<b>AD-18</b>	2½" F NST -x- ¾" M GHT	Brass



**HOSE COUPLINGS**

For fast positive connections for hose and pipe when handling water, petroleum products, chemicals and other liquid and dry materials. Available in ¾", 1", 1½", 2", 2½", 3", 4" and 6".

Part A	Part B	Part C	Part D	Part E	Part F	Dust Cap	Dust Plug
Hose Size	Aluminum Shank Couplings	Splicer	Rubber Washer	Combination Nipple	Round Hole Strainer		
1½" IPT	SC-150-AL	WM-150	RW-150	CN-150-S	RH-150		
1½" NST	SC-155-AL	WM-150	RW-155	N/A	N/A		
2"	SC-200-AL	WM-200	RW-200	CN-200-S	RH-200		
2½" IPT	SC-250-AL	WM-250	RW-250	CN-250-S	N/A		
2½" NST	SC-255-AL	WM-250	RW-255	N/A	N/A		
3"	SC-300-AL	WM-300	RW-300	CN-300-S	RH-300		
4"	SC-400-AL	WM-400	RW-400	CN-400-S	RH-400		
6"	SC-600-AL	WM-600	RW-600	CN-500-S	RH-600		

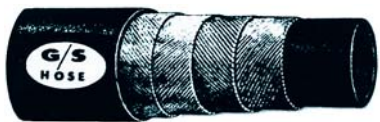
**UNIVERSAL COUPLINGS & GASKETS**

Hose End	Female End	Male End	Universal Gas-ket (50 per bag)	Clamp	Splicer
<b>UH-75</b>	<b>UF-75</b>	<b>UM-75</b>	<b>UG-1</b>	<b>UC-75</b>	<b>AM-75</b>

HOSE NOZZLES, ADAPTERS & COUPLINGS


## RANKING WATER SUCTION HOSE

For heavy duty suction and low pressure discharge service in the transfer of water, slurry and small solids in the construction, agriculture, and mining industries. Used for septic tank cleaning and sewage handling. Smooth rubber tube will not absorb water, reinforced with multiple textile plies and helix of high tensile steel wire. Tough black rubber cover resists abrasion and weather. Available with M&F fittings, M&M fittings, and Part C & Nipple.

	Size ID	Size OD	Max Working Pressure	Appx. Weight / Foot	Lengths Available
	1½"	1¾"	100 psi	0.80	10, 15, 20 and 25 ft
	2"	2¾"	80 psi	1.00	10, 15, 20 and 25 ft
	3"	3½"	60 psi	2.10	10, 15, 20 and 25 ft
	4"	4¾"	50 psi	3.30	10, 15, 20 and 25 ft
	6"	6¾"	50 psi	5.00	10, 15, 20 and 25 ft


## FLEXIBLU PVC WATER DISCHARGE HOSE

Blue PVC with textile reinforcement for low pressure, open end service. Use wherever lightweight, economical discharge hose is required. Available with M&F fittings and C&E quick couplings.

	Size ID	Max Working Pressure	Appx. Weight / Foot	Lengths Available
	1½"	80 psi	0.18	25, 50 and 100 ft
	2"	80 psi	0.23	25, 50 and 100 ft
	3"	80 psi	0.32	25, 50 and 100 ft
	4"	70 psi	0.45	25, 50 and 100 ft
	6"	60 psi	0.73	25, 50 and 100 ft


## MILL HOSE

Available in both single jacket or double jacket with rubber lining. For open end water discharge and light duty washdown service. Synthetic jacket resists rot and mildew. Ideal for filling water tanks on equipment. Available with M&F IPT or NST fittings attached.

	Size ID	Single Jacket Max Working Pressure	Double Jacket Max Working Pressure	Lengths Available
	1½"	80	175 psi	25, 50 and 100 ft.
	2½"	80	175 psi	25, 50 and 100 ft.


## CONTRACTORS WATER HOSE

Black EDPM rubber contractors grade water hose designed for rugged washdown service. M&F fittings attached.

	Part No.	Size ID	Thread	Max Working Pressure	Lengths Available
	750-C	¾"	GHT	150 psi	25, 50 and 100 ft
	1000-C	1"	IPT	200 psi	25, 50 and 100 ft

## JACK HAMMER HOSE

For air service in construction and industrial applications. Oil resisting tube is reinforced with two braids of high tensile yarn and an abrasion resistant red cover. Hose comes complete in 50 foot lengths with universal quick couplings attached on both ends.

	Size ID	Size OD	Working Pressure	Weight
	¾"	1¾"	250 psi	23

## VENTILATING BLOWER / EXHAUSTER

Model	Motor	Size	Dimensions	Weight	Material
UB20	½ HP 115V 60Hz	8"	14"H x 12"W x 13"D	16 lbs.	Polyethelyne shell / polypropylene turbo fan blade
UB20-DC	12V DC	8"	14"H x 12"W x 13"D	16 lbs.	Polyethelyne shell / polypropylene turbo fan blade



## UTILITY BLOWER HOSE

Used with portable blowers and heaters to provide ventilation and for smoke removal. Extremely flexible and light weight for easy storage and installation. Hose comes complete with cuffs and belts on both ends.

Part No.	Size
8X15	8" x 15 ft. hose
8X25	8" x 25 ft. hose



## RESCUE / RETRIEVAL SYSTEMS

Rescue systems are designed to raise or lower personnel to safety in an emergency without any possibility of a free fall. Rescue systems are typically used in confined space work, such as underground utility projects of tank maintenance.

Part No.	Description	Weight
8300030	7 ft. Aluminum tripod with Salalift II winch, winch bag, 60 feet of 1/4" galvanized cable	83 lbs.
8300040	9 ft. Aluminum tripod with Salalift II winch, winch bag, 60 feet of 1/4" stainless steel cable	92 lbs.
9503094	Bag for 7 ft. tripod	3 lbs.
9503095	Bag for 9 ft. tripod	3 lbs.
1101828	Delta™ Full body harness, back D-ring, parachute adjuster leg straps, shoulder D-rings (univ size) 420 lb. capacity	3 lbs.

