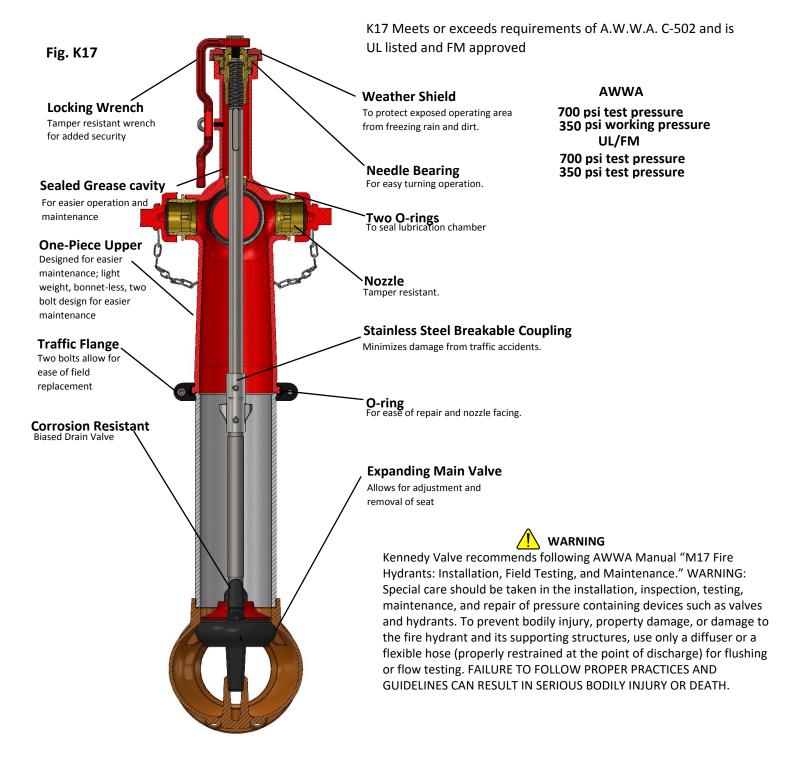
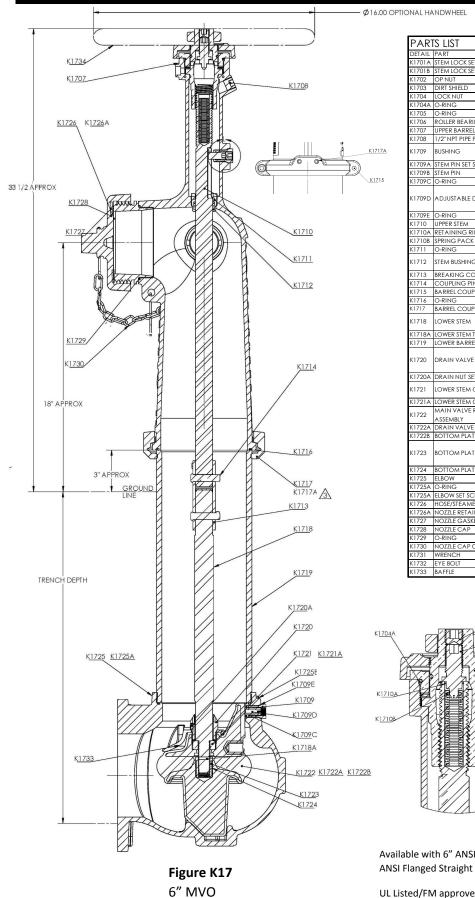
Fire hydrants have been used in fire protection for over 100 years. A.W.W.A. C502 was developed in 1913 as a standard for the manufacture and use of dry barrel hydrants. Kennedy has established itself as a leader in the industry with manufacturing experience dating back to 1905. Many of the early hydrants are in use today.



## K17 Hydrant Technical/Dimensional Data (AWWA-UL/FM)



	PART	MATERIAL	ASTM SPEC (OR AS STATED)				
	STEM LOCK SET SCREW	STAINLESS STEEL	ASIM SPEC (OR AS STATED) A276 (410)				
	STEM LOCK SET SCREW	STAINLESS STEEL	A276 (410)				
K1701B	OP NUT	BRONZE	B584 C86300/C86700				
K1702	DIRT SHIELD	CAST IRON	A126 CLASS B				
K1703	LOCK NUT	BRONZE	B584 C87850				
	O-RING	RUBBER	D2000				
K1704A	O-RING	VITON	D2000				
K1705	ROLLER BEARING ASSEMBLY	STEEL	52000				
K1708	UPPER BARREL	DUCTILE IRON	A 534 CRADE 70 50 05				
K1707	1/2" NPT PIPE PLUG	LOW CARBON STEEL	A 536 GRADE 70-50-05				
		NI-ALUMINUM BRONZE	ASTM B150 C63000 OR ASTM A536 GR 70-50-				
K1709	BUSHING	OR DUCTILE IRON	05 OR GR. 65-45-12				
K1709A	STEM PIN SET SCREW	STAINLESS STEEL	A276 (410)				
	STEM PIN	STAINLESS STEEL	A276 (410)				
	O-RING	BUNA RUBBER	D2000				
KI/U/C	O-KING	ALUMINUM BRONZE;	52000				
00717	ADJUSTABLE DRAIN VALVE	MANGANESE BRONZE;	ASTM B150 C62300 OR C62400;ASTM B138				
K1709D	ADJUSTABLE DRAIN VALVE		C67300;ASTM A276 S30400;B505 C95400				
K17005	O-RING	STAINLESS STEEL BUNA RUBBER	D2000				
K1709E							
	UPPER STEM	STAINLESS STEEL	A 276 S30400 OR S31600				
	RETAINING RING	STEEL	SAE 1070-1090 HIGH CARBON STEEL				
	SPRING PACK	SPRING STEEL	-				
K1711	O-RING	BUNA-N RUBBER	D2000				
K1712	STEM BUSHING	DUCTILE IRON OR	ASTM A536 GR 70-50-05 OR 65-45-12 PLATED;				
		ALUMINUM BRONZE	OR ASTM B505 C95400				
K1713	BREAKING COUPLING	STAINLESS STEEL	ASTM A743 CA15 (410SS)				
K1714	COUPLING PINS	STAINLESS STEEL	302HQ OR 410SS				
K1715	BARREL COUPLING BOLTS	STEEL (ZINC PLATED)	ASTM A 307\SAE GRADE 2 OR 410S.S.				
K1716	O-RING	BUNA-N RUBBER	D2000				
K1717	BARREL COUPLING W SET SCR	DUCTILE IRON	A536 GRADE 70-50-05 & 18-8 STAINLESS				
K1718	LOWER STEM	CRS OR STAINLESS STEEL	ASTM A 108 CRS OR ASTM A 276 S30400 OR S31600				
K1718A	LOWER STEM THREAD LOCK	NYLOC					
K1719	LOWER BARREL	DUCTILE IRON	ANSI/AWWA C151/A21.51				
		DI OR STAINLESS OR	ASTM A 536 GR 70-50-05 OR 65-45-12: ASTM				
K1720	DRAIN VALVE RETAINING NUT	ALUMINUM BRONZE OR	A 276 \$30400; ASTM B505 C95400 OR C86300				
		MANGANESE BRONZE	A 278 330400, A31M B303 C73400 OK C88300				
K1720A	DRAIN NUT SET SCREW	STAINLESS STEEL					
K1721	LOWER STEM COLLAR	ALUMINUM BRONZE OR	B505 C95400 OR ASTM A 276 S30400				
K1721A	LOWER STEM COLLAR PIN	HARDENED STEEL	ASME B18.8.2				
	MAIN VALVE RUBBER						
K1722	ASSEMBLY	EPDM RUBBER	KENNEDY VALVE COMPOUND # 101				
K1722A	DRAIN VALVE	DUCTILE IRON	ASTM A 536 GRADE 70-50-05 OR 65-45-12				
	BOTTOM PLATE	DUCTILE IRON	ASTM A 536 GRADE 70-50-05 OR 65-45-12				
K1723	BOTTOM PLATE BUSHING	NI-ALUMINUM BRONZE OR MANGANESE	B505 C95500HT OR ASTM B150 C63000 OR				
	1	BRONZE	B505 C86300				
K1724	BOTTOM PLATE PIN	STAINLESS STEEL	18-8 STAINLESS				
K1725	ELBOW	DUCTILE IRON	ASTM A536 GRADE 70-50-05				
K1725A	O-RING	BUNA-N RUBBER	D2000				
	ELBOW SET SCREWS	STAINLESS STEEL	18-8 STAINLESS				
K1726	HOSE/STEAMER NOZZLE	BRONZE	ASTM B584 C 87850/C86700/C86300				
K1726A	NOZZLE RETAINING SCREW	STAINLESS STEEL	18-8 STAINLESS				
K1727	NOZZLE GASKET	NEOPREME	D2000				
K1728	NOZZLE CAP	CASTIRON	A 126 CLASS B				
K1729	O-RING	BUNA-N RUBBER	D2000				
K1730	NOZZLE CAP CHAINS	ZINC PLATED STEEL	A 108				
	WRENCH	DUCTILE IRON	ASTM A 536 GRADE 70-50-05 OR 65-45-12				
K1731							
K1731 K1732	EYE BOLT	ZINC PLATED STEEL	7/31/07/330 OKABE 70-30-03 OK 03-43-12				

K1701A

K<u>1701</u>B K1702 <u>\_K170</u>3 <u>K170</u>5 <u>K1704</u> <u>K1706</u>

Available with 6" ANSI FLG, 6" MJ, 6" ANSI Flanged Straight Shoe

UL Listed/FM approved

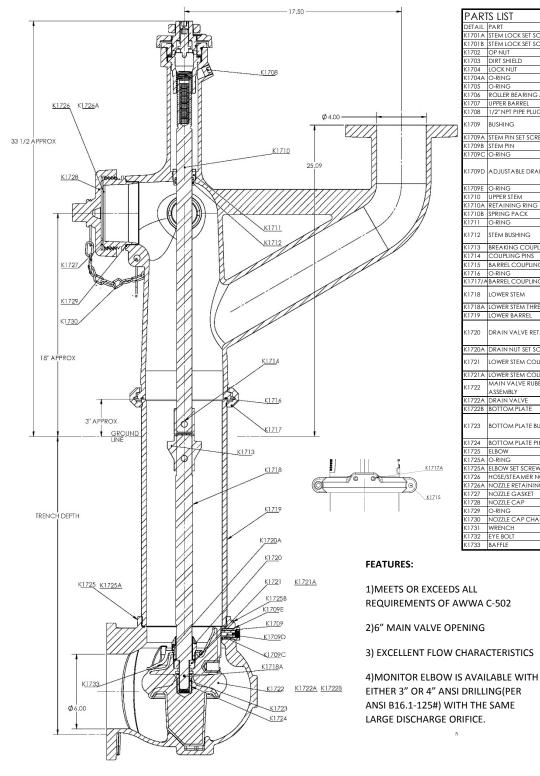
K1709E K1709 <u>K1709A</u> K1709B

K1709C

- Andrew	
MARKINGS	
FRONT	BACK
KENNEDY	KENNEDY
ELMIRA, NY	ELMIRA, NY
U.S.A	U.S.A
YEAR	6
K17	350 CWP
UL/FM	PN16
AWWA	DN150
	DI
	PATENTS

Kennedy/K17 2

## K17 Monitor Hydrant Technical/Dimensional Data (AWWA-UL/FM)



K1718   LOWER STEM   CRS OR STAINLESS STEEL   S31400     K1718A   LOWER STEM THREAD LOCK   NYLOC   NSI/AWWA C151/A21.51     K1719   LOWER BARREL   DUCTILE IRON   ANSI/AWWA C151/A21.51     K1720   DRAIN VALVE RETAINING NUT   DI OR STAINLESS OR   ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR C8630     K1720   DRAIN NUT SET SCREW   STAINLESS STEEL   ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR C8630     K1721   LOWER STEM COLLAR   ALUMINUM BRONZE OR S.S.   B505 C95400 OR ASTM A 276 S30400     K1721   LOWER STEM COLLAR PIN   HARDENED STEEL   ASTM A 536 GRADE 70-50-05 OR 65-45-12     K1722   MAIN VALVE RUBBER   EPDM RUBBER   KENNEDY VALVE COMPOUND # 101     K1722A   DRAIN VALVE   DUCTILE IRON   ASTM A 536 GRADE 70-50-05 OR 65-45-12     K1723   BOTTOM PLATE   DUCTILE IRON   ASTM A 536 GRADE 70-50-05 OR 65-45-12     K1724   BOTTOM PLATE IN   STAINLESS STEEL   B505 C95500HT OR ASTM B150 C63000 OR B505 C95500HT OR ASTM B150 C63000 OR B505 C86300     K1724   BOTTOM PLATE IN   STAINLESS STEEL   18-8 STAINLESS     K1725   LEIDOW   DUCTILE IRON   ASTM A 536 GRADE 70-50-05 C8 65-45-12     K1725   LEIDOW   DUCTILE IRON   ASTM M 536 GRADE 70-50-05 C8 65-45-12     K1724<		T211 2T						
11701.4       STEM LOCK SET SCREW       STAINLESS STELL       A276 (410)         11702       OP NUT       BRONZE       BS64 C68/30/C68/700         11702       OP NUT       BRONZE       BS64 C68/30/C68/700         11704       LOCK SET SCREW       STAINLESS STELL       A276 (410)         11704       LOCK NUT       BRONZE       BS64 C68/30/C68/700         11704       LOCK NUT       BRONZE       BS64 C68/30/C68/700         11705       O-RING       VITON       D2000         11707       UPER BAREL       DUCTILE IRON       A536 CRADE 70-50-05         11707       UPER BAREL       DUCTILE IRON       A536 CRADE 70-50-05         11707       UPER BAREL       DUCTILE IRON       A536 CRADE 70-50-05         11707       JEFER BAREL       DUCTILE IRON       AST GR A54-12         11707       BUSHING       OP DUCTILE IRON       AST GR A54-12         11708       STEM ENIN       STAINLESS STELL       A276 (410)         11709       DAJUSTABLE DRAIN VALVE       STAINLESS STELL       A276 (410)         11700       DEFENIN       STAINLESS STELL       A276 (300, AST A270, S0400, AST A270, S0400, AST A270, S0400, AST A270, S0400, AST A270, S0400								
17010       STEM LOCK SET SCREW       STAINLESS STELL       A276 (410)         1702       DE NUT       BRONZE       B584 C68/30/C86/700         1703       DIRT SHIELD       CAST IRON       A126 CLASS B         1704       O-KING       RUBBER       D2000         1704A       O-KING       RUBBER       D2000         1705       O-RING       SEMER       DICTILE IRON       A536 GRADE 70-50-05         1707       IVIER BARRIE       DUCTILE IRON       A536 GRADE 70-50-05         1707       UPER BARREL       DUCTILE IRON       A5276 (410)         1707       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         17070       ADJUST ABLE DRAIN VALVE       MAINARUBER       D2000         17070       ADJUST ABLE DRAIN VALVE       MAINARUBER       D2000       C67/300-ASTM A276 330400 ASTM A276 330400 ASTM A276 530400 ASTM A350 GR 70-50-05 CR 41055         17100       DPRE STEM       STAINLESS STEEL       A276 (410)       A276 (410)         17100       ADJUST ABLE DRAIN VALVE       MAINARUBER       D2000       C67/300-AS								
1702       OP NUT       BRONZE       BS84 CBx300/CB4700         17103       DIET SHELD       CAST IRON       A122 CLASS B         17103       DIET SHELD       CAST IRON       A122 CLASS B         17104       LOCK NUT       BRONZE       BS84 CB7830         17105       O-RING       WITON       D2000         17105       O-RING ASSEMBLY       STEL       A533 GRADE 70-50-05         17107       UPRE BARREL       DUCTILE IRON       A533 GRADE 70-50-05         17107       UPRE BARREL       DUCTILE IRON       A533 GRADE 70-50-05         17107       BUSHING       OR DUCTILE IRON       A534 GRADE 70-50-05         17108       ISTEM PIN       STAINLESS STEEL       A276 (410)         17109       DATINESS STEEL       A276 (410)       C47300-ASTM B138         17100       DPER STEM       STAINLESS STEEL       A276 330400 OR 531600         171700       DPER STEM       STAINLESS STEEL       A276 330400 OR 531600         171700       PER STEM       STAINLESS STEEL       A276 330400 OR 531600         171710       PER STEM       STAINLESS STEEL       A276 330400 OR 531600         171710       REARING C								
11703       DIRT SHELD       CAST IRON       A124 CLASS B         K1704       LOCK NUT       BRONZE       BS84 C87850         K1704A       O-RING       RUBBER       D2000         K1705       O-RING       RUBBER       D2000         K1705       O-RING       RUBBER       D2000         K1706       ROLLER BEARING ASSEMBLY       STELL       ASSA GRADE 70-50-05         K1707       UPPER BARREL       DUCTILE IRON       ASSA GRADE 70-50-05         K1709       SIEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         K1709       SIEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         K1709       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE: STAINLESS STEEL       ASTM B150 C63000 OR C62400-ASTM B138         K1709D       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE: STAINLESS STEEL       ASTM B150 C63000 OR 65-45-12 RATE         K17100       UPPER STEM       STAINLESS STEEL       ASTM B150 C63000 OR 65-45-12 RATE         K17100       MENA RUBBER       D2000       K1710A         K17100       RING       STAINLESS STEEL       ASTM A536 GR 70-50-05 OR 65-45-12 RATE         K1710       DERING       STAINLESS STEEL								
11704       LOCK NUT       BRONZE       B594 C67850         11704A       O-RING       RUBBER       D2000         11705       O-RING ASSEMUT       STEEL       DUCITLE IRON       A536 GRADE 70-50-05         11707       UPRE PARREL       DUCITLE IRON       A536 GRADE 70-50-05       STAINALSS STEEL       A276 (410)         11707       UPRE PARREL       DUCITLE IRON       A536 GRADE 70-50-05       STAINALSS STEEL       A276 (410)         11709       BUSHING       OP DUCTLE IRON       DS OR GR. 65-45-12       STAINALSS STEEL       A276 (410)         117099       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)       STAINLESS STEEL       A276 (410)         117099       DAJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       GSTAIN A276 S30400 OR S31 600       STAINLESS STEEL       A276 S30400 OR S31 600         117100       RETAINING RING       STEEL       SAE IO70-1090 HIGH CARBON STEEL       -         117101       BYRING PACK       SPRING STEEL       A276 S30400 OR S31 600       STAINLESS STEEL       A210 AND A90 ASIG C70-50-05 OR 65-45-12 PLATE         11710       BYRENE COUPLING       STAINLESS STEEL       A210 AND A90 ASIG C70-50-05 OR 65-45-12 PLATE       STAINLESS STEEL       AS								
11704A       Q-RING       PUBBER       D2000         K1705       Q-RING       VITON       D2000         K1706       ROLLER BEARING ASSEMBLY       STEEL       AS36 GRADE 70-50-05         K1707       UPPER BARREL       DUCTILE IRON       A S36 GRADE 70-50-05         K1709       BUSHING       OR DUCTILE IRON       A S36 GRADE 70-50-05         K1709       BUSHING       OR DUCTILE IRON       A S36 GRADE 70-50-05         K1709       STEM PIN SET SCREW       STAINLESS STEEL       A 276 (410)         K1709A       STEM PIN SET SCREW       STAINLESS STEEL       A 276 (410)         K1709C       ORING       BUNA RUBBER       D2000         K1709D       ADJUSTABLE DRAIN VALVE       MAGANESE BRONZE: STAINLESS STEEL       ASTM B150 C62300 OR C62400:ASTM B138         K1700P       ORING       BUNA RUBBER       D2000       K17100         K17100       PERESTEM       STAINLESS STEEL       ASTEID AST600       C67300:ASTM A 276 S30400 OR S31600         K17110       ORING       STAINLESS STEEL       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17110       DERING PACK       SPEING STEEL       -       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE								
17105       Q-RING       VITON       D2000         17106       ROLLER BEARING ASSEMBLY       STEEL       STEEL         17107       IVPER BARRE       DUCTILE IRON       A 536 GRADE 70-50-05         17107       IVPER BARRE       DUCTILE IRON       A 536 GRADE 70-50-05         17107       BUSHING       NI-ALUMINUM BRONZE       ASTM B150 C63000 OR ASTM A 536 GR 70-5         171078       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         171079A       STEM PIN       STAINLESS STEEL       A276 (410)         171079B       STEM PIN       STAINLESS STEEL       A276 (410)         171079A       ADJUSTABLE DRAIN VALVE       STAINLESS STEEL       A276 (530400 OR 531600         17100       MPRE STEM       STAINLESS STEEL       A276 S30400 OR 531600         17110       MPRE STEM       STAINLESS STEEL       A276 S30400 OR 531600         17110       MPRE TAINING RING       STEEL       A276 S30400 OR 531600         17110       MPRE TAINING RING       STEEL       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         17110       MPRE TAINING RING       STEEL       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         17110       MPRE TAINING RING								
11706       ROLLER BEARING ASSEMBLY       STEEL         11707       UPPER BARREL       DUCTILE IRON       AS36 GRADE 70-50-05         11708       I/X PMP PIPE PLUG       LOW CARBON STEEL       STM BI50 C-33000 OR ASTM A536 GR 70-5         11709       BUSHING       OR DUCTILE IRON       50 SG RA, 65-45-12         11709       ASTM BIST C-2000       ASTM BIST C-2000       ASTM A536 GR 70-5         11709       OR INCL       BULNA RUBBER       D2000         11709       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       ASTM BIST C-2000         11700       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       ASTM BIST C-2000         11700       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       ASTM BIST C-2000         11700       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       ASTM BIST C-2000         11710       APPER STEM       STAINHESS STEEL       A276 (30400 OR 531400         11710       APPER STEM       STAINHESS STEEL       A276 (30400 OR 531400         11710       APPER STEM       STAINHESS STEEL       A276 (30400 OR 531400         11710       APPER STEM       STAINHESS STEEL       A276 (30400 OR 65-45-12 PLATE         117118       BUNAN R								
L1707       UPPER BARREL       DUCTILE IRON       A536 GRADE 70-50-05         K1708       1/2" NPT NIPE PLUG       LOW CARBON STEEL       ASTM B150 C63000 OR ASTM A536 GR 70-5         K1709       BUSHING       OR DUCTILE IRON       05 OR CR. 65-45-12         K17098       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         K17090       ASTM B150 C62300 OR C62400; ASTM A536 GR 70-50         K17097       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:         K17096       ORING       BUNA RUBBER       D2000         K17096       O-RING       BUNA RUBBER       D2000         K1709       O-RING       STAINLESS STEEL       SZC 530400 OR 531600         K17100       UPPER STEM       STAINLESS STEEL       AZZ 5 330400 OR 531600         K17100       BYRING PACK       SPRING STEEL       -         K1710       O-RING       BUNA-N RUBBER       D2000         K1710       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17110       O-RING       BUNA-N RUBBER       D2000         K17111       O-RING       BUNA-N RUBBER       D2000         K17112       STEEL       ASTM A 473 CA15 (41055)				D2000				
K1708       1/2" NPT PIPE PLUG       LOW CARBON STEEL         K1709       BUSHING       NI-ALUMINUM BRONZE       ASTM B150 C63000 OR ASTM A536 GR 70-50         K1709A       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         K1709D       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       ASTM B150 C62300 OR C62400-ASTM B138         K1709D       ADJUSTABLE DRAIN VALVE       BUNA RUBBER       D2000       ASTM B150 C62300 OR C62400-ASTM B138         K1709D       ADJUSTABLE DRAIN VALVE       BUNA RUBBER       D2000       ASTM B150 C62300 OR C62400-ASTM B138         K1709D       ADJUSTABLE DRAIN VALVE       STAINLESS STEEL       A276 530400 OR 531600       E61710         K17100       UPPER STEM       STAINLESS STEEL       A276 530400 OR 531600       E61710         K17110       O-RING       BUNA-NUBBER       D2000       CASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17110       O-RING       BUNA-NUBBER       D2000       RASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17112       O-RING       BUNA-NUBBER       D2000       CASTM 6505 C9-5400         K17113       BREAKING COUPLING STAINLESS STEEL       ASTM A 743 CA15 (410SS)       K1714         K1714       COUPLING PINS								
K1709       BUSHING       NI-ALUMINUM BRONZE OR DUCTILE IRON       ASTM B150 C63000 OR ASTM A536 GR 70-5 05 OR CR. 65-45-12         K1709A       STEM PIN SET SCREW       STAINLESS STEEL       AZZ6 (410)         K1709C       OR OLCTILE IRON       ASTM B150 C6200 OR C62400-ASTM A536 GR 70-5         K1709C       O-RING       BUNA RUBBER       D2000         K1709D       AJUSTABLE DRAIN VALVE       STAINLESS STEEL       AZZ6 (410)         K1709D       AJUSTABLE DRAIN VALVE       STAINLESS STEEL       AZ76 (300-C62400-ASTM A276 S30400 OR C62400-ASTM B138         K17100       LIPRESTEM       STAINLESS STEEL       A276 S30400 OR S31400       K17100         K17100       REFERISM       STAINLESS STEEL       AZ76 S30400 OR S31400       K17110         K17101       REFERISM       STAINLESS STEEL       AZ76 S30400 OR S31400       K17110         K17110       REFERISM       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17112       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17113       BREAKING COUPLING SITS STEEL       ASTM A536 GR ADE 2 OR 410SS.       K17114         K1713       BREAKING COUPLING SOLTS       STEEL JZINC FNATE       ASTM A 536 GR ADE 70-50-05 <td></td> <td></td> <td></td> <td colspan="5">A536 GRADE 70-50-05</td>				A536 GRADE 70-50-05				
N1/07       Distrikg       OR DUCTILE IRON       05 OR CR. 63-45-12         K1709A       STEM PIN SET SCREW       STAINLESS STEEL       A276 (410)         K1709B       STEM PIN       STAINLESS STEEL       A276 (410)         K1709D       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE; STAINLESS STEEL       A276 (410)         K1709D       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE; STAINLESS STEEL       ASTM B150 C62300 OR C62400-ASTM A276 S30400-B055 C79400         K1709E       O-RING       BUNA RUBBER       D2000       C47300-ASTM A276 S30400 CR S31 600         K1710       UPFER STEM       STAINLESS STEEL       A276 530400 OR S31 600       C4101         K1710       DEPRING PACK       SPRING STEEL       -       C         K1711       O-RING       BUNA-N RUBBER       D2000       CA STM A533 GR 70-50-05 OR 65-45-12 PLATE         K1711       O-RING       BUNA-N RUBBER       D2000       CA STM A533 GR 70-50-05 OR 65-45-12 PLATE         K17113       BEAKING COUPLING STAINLESS STEEL       ASTM A533 GR 70-50-05 OR 65-45-12 PLATE       OR ASTM B505 C95400         K17113       BEAKING COUPLING BNIS       STAINLESS STEEL       ASTM A 743 CA STM A 276 S30400 OR S31         K17114       OUPLING PINS       S	K1708	1/2" NPT PIPE PLUG		A STAL B 150 C (2000 OD A STAL A 52 ( OD 70 50				
11706 A       STEM PIN SET SCREW       STAINLESS STEEL       A226 (410)         K1709B       STEM PIN       STAINLESS STEEL       A276 (410)         K1709C       O-RING       BUNA RUBBER       D2000         K1709D       ADJUSTABLE DRAIN VALVE       ANGANESE BRONZE; STAINLESS STEEL       ASTM B150 C62300 OR C62400:ASTM B138 C67300:ASTM A276 S30400 OR S31600         K17100       UPPER STEM       STAINLESS STEEL       A275 S30400 OR S31600         K17101       UPPER STEM       STAINLESS STEEL       A275 S30400 OR S31600         K17100       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K17110       SPRING PACK       SPRING STEEL       -         K17110       SPRING PACK       SPRING STEEL       -         K17112       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K1714       COUPLING DOLTS       STEEL [ZINC PLATED]       ASTM A 307 SAE CRADE 2 OR 4105S.         K1714       COUPLING BOLTS       STEEL [ZINC PLATED]       ASTM A 307 SAE CRADE 2 OR 410S.         K1716       O-RING       BUNA-N RUBBER       D2000       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1716       O-RING       BUNA-N RUBBER <td< td=""><td>K1709</td><td>BUSHING</td><td></td><td></td></td<>	K1709	BUSHING						
R1709B       STEAN PIN       STAINLESS STEEL       A276 (410)         K1709C       O-RING       BUNA RUBBER       D2000         K1709C       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE: MANGANESE BRONZE: AISTIMESS STEEL       ASTM B150 CA2300 OR CA2400-ASTM B138 C67300:ASTM A276 S30400.DR S31600         K1710       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K1710       JUPER STEM       A276 S30400 DR S31600         K17110       O-RING       BUNA-N RUBBER       D2000         K1710       JUPER STEM       A276 S30400 DR S31600       K1710         K1710       BUNA-N RUBBER       D2000       CR ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K1711       O-RING       BUNA-N RUBBER       D2000       CR ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K1711       O-RING       STAINLESS STEEL       ASTM A736 CA1 51 (4105S)       STAINLESS STEEL       ASTM A736 CA1 51 (4105S)         K1714       COUPLING BOLTS       STEEL (ZINC PLATED)       ASTM A 307/SAE GRADE 2 OR 4105S.       STAINLESS STEEL       ASTM A 307 CAS CR ASTM A 276 S30400 OR         K1717       BARREL COUPLING W/SET SCR       DUCTILE IRON       ASTM A 307 CAS CR ASTM A 276 S30400 OR         K1717       BARREL COUPLING W/SET SCR <td></td> <td></td> <td></td> <td></td>								
E1709C       O-RING       BUNA RUBBER       D2000         K1709D       A JUSTABLE DRAIN VALVE       ALUMINUM BRONZE: STAINLESS STEEL       ASTM B150 C6/200 OR C6/2400-ASTM B138 C67300:ASTM A276 S0400:BS05 C95400         K1710       UPPER STEM       STAINLESS STEEL       A276 S30400:BS05 C95400         K1710       UPPER STEM       STAINLESS STEEL       A276 S30400 OR S31600         K1710 A RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K1711 O-RING       BUNA-N RUBBER       D2000         K1712 STEM BUSHING       DUCTILE IRON OR       ASTM A536 GF 70-50-05 OR 65-45-12 PLATE         K1711 O-RING       BUNA-N RUBBER       D2000         K1712 STEM BUSHING       DUCTILE IRON OR       ASTM A743 CA 15 (41055)         K1714       COUPLING FINS       STAINLESS STEEL       30240 OR 41055         K1715       BARREL COUPLING BOLTS       STEEL (2INC PLATED)       ASTM A743 CA 15 (41055)         K1716       O-RING       BUNA-N RUBBER       D2000       K17174         K1716       O-RING       BUNA-N RUBBER       D2000       K17174         K1716       O-RING       BUNA-N RUBBER       D2000       K17174         K1716       O-RING       BUNA-N R								
K1709D       AD JUSTABLE DRAIN VALVE       ALUMINUM BRONZE; MANGANESE BRONZE; MANGANESE BRONZE; STAINLESS STEEL       ASTM B150 C.62300 OR C.62400: ASTM B138 C.67300;ASTM A276 S30400 OR S050 C.95400         K1709E       O-RING       BUNA RUBBER       D2000         K17170       UPFR STEM       STAINLESS STEEL       AZS 630400 CR S31600         K17100       REFAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K17101       BYERNS PACK       SPRING STEEL       -         K17110       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17112       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K17113       BREAKING COUPLING       STAINLESS STEEL       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K1713       BREAKING COUPLING DOITS       STEEL (ZINC PRATED)       ASTM A 536 GR ADE 2 OR 410SS.         K1714       COUPLING BUTS       STEEL (ZINC PRATED)       ASTM A 307/SAE GRADE 2 OR 410SS.         K1716       DARREL COUPLING BUTS       STEEL (ZINC PRATED)       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1717/A BARREL COUPLING W/SET SCR       DUCTILE IRON       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K17170       LOWER STEM THREAD LOCK       NYLOC								
K1709D       ADJUSTABLE DRAIN VALVE STAINLESS STEEL       ASIM B130 C28/300 CR 62/400/351M B138 C47302/ASIM A276 S30400/805 C C9400         K170PE       O-RING       BUINA RUBBER       D2000         K1710       UPPER STEM       STAINLESS STEEL       A276 S30400 CR 52/400/805 C C9400         K1710       REFAINING RING       STEEL       A276 S30400 CR 53/400         K1710       REFAINING RING       STEEL       A276 S30400 CR 53/4500         K1711       O-RING       BUINA-N RUBBER       D2000         K1711       O-RING       BUINA-N RUBBER       D2000         K1711       O-RING       BUINA-N RUBBER       D2000         K1711       STEIN BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         K1713       BREAKING COUPLING STAINLESS STEEL       302HQ OR A10SS       K1714         K1714       COUPLING PINS       STAINLESS STEEL       302HQ OR A10SS         K1714       O-UPLING PINS       STAINLESS STEEL       302HQ OR A10SS         K1714       O-UPLING PINS       STAINLESS STEEL       3230 GR ADE 70-50-05         K1716       O-RING       BUINA-N RUBBER       D2000         K1717       ILOWER STEM       CRS OR STAINLESS ST	K1709C	O-RING		D2000				
K1709D       ADJUSTABLE DRAIN VALVE       MANGANESE BRONZE:       C67300:ASTM A276 \$30400:B505 C95400         K170F       O-RING       BUNA RUBBER       D2000         K1710       RETAINING RING       STEEL       A276 \$30400:DR \$31600         K17100       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K17100       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K17110       O-RING       BUNA-N RUBBER       D2000         K1711       O-RING       BUNA-N RUBBER       D2000         K1711       O-RING       BUNA-N RUBBER       D2000         K1711       O-RING       STAINLESS STEEL       ASTM A536 CR 70-50-05 OR 65-45-12 PLATE         K1711       COUPLING PINS       STAINLESS STEEL       302HQ OR 4105S         K1714       COUPLING BOLTS       STEEL (ZINC PLATED)       ASTM A 307/SAE GRADE 2 OR 410SS.         K1717       BARREL COUPLING W/SET SCR       DUCTILE IRON       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1717       BARREL COUPLING W/SET SCR       DUCTILE IRON       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1718       LOWER STEM THREAD LOCK       NTUNC       STAIN A 533 GR 70-50-50 CR 65-45-12; ASTM				ASTM B150 C62300 OR C62400: ASTM B138				
STAINLESS STEEL       20200         K170PE       O-RING       BUNA RUBBER       D2000         K1710       UPFER STEM       STAINLESS STEEL       A276 530400 OR 531600         K1710a       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         K1710       O-RING       BUNA-N RUBBER       D2000         K1711       O-RING       BUNA-N RUBBER       D2000         K1712       STEM BUSHING       BUCTILE IRON OR       ASTM A533 GR 70-50-05 OR 65-45-12 PLATE         K1713       BREAKING COUPLING       STAINLESS STEEL       32740 OR 41055         K1714       COUPLING PINS       STAINLESS STEEL       32740 OR 41055         K1715       BARREL COUPLING BOLTS       STEEL (2014 OR 41055       ASTM A 307 (SAE GRADE 2 OR 4105.S.         K1716       O-RING       BUNA-N RUBBER       D2000       ASTM A 108 CRS OR ASTM A 276 S30400 OR 531600         K1716       I-OWER STEM       CRS OR STAINLESS STEEL       ASTM A 108 CRS OR ASTM A 276 S30400 OR 531600         K17178       LOWER STEM THREAD LOCK       NYLOC       ASTM A 108 CRS OR ASTM A 276 S30400 OR 65-45-12; ASTM A 108 CRS OR ASTM A 276 S30400 OR 65-45-12; ASTM A 108 CRS OR 70-50-05 OR 65-45-12; ASTM ANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM ANGANESE BRONZE   <	K1709D	ADJUSTABLE DRAIN VALVE						
K1710       UPPER STEM       STAINLESS STEEL       A226 \$30400 OR \$31400         K1710A       RETAINING PACK       SPRING STEEL       SAE 1070-1090 HIGH CARBON STEEL         K17110       O-RING       BUNA-N RUBBER       D2000         K17112       STEM BUSHING       DUCTILE IRON OR       ASTM A533 GR 70-50-05 OR 65-45-12 PLATE         K17112       STEM BUSHING       DUCTILE IRON OR       ASTM A533 GR 70-50-05 OR 65-45-12 PLATE         K1713       BREAKING COUPLING       STAINLESS STEEL       ASTM A743 CA15 (41055)         K1714       COUPLING FINS       STAINLESS STEEL       ASTM A743 CA15 (41055)         K1715       BARREL COUPLING BOLTS       STEEL (2INC FLATED)       ASTM A 307 (SAE GRADE 2 OR 4105.S.         K1716       O-RING       BUNA-N RUBBER       D2000       K1718         LOWER STEM THREAD LOCK       NYLOC       AS34 GR ADE 70-50-05       ASTM A 108 CRS OR ASTM A 276 530400 OR 531400         K17170       LOWER BARREL       DUCTILE IRON       A 536 GR 70-50-05 OR 65-45-12; ASTM A08 CRS OR ASTM A 276 530400 OR C6830         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 108 CRS OR ASTM A 276 S30400         K1721       LOWER STEM COLLAR       S.LUMINUM BRONZE OR MAS 353 GRADE 70-50-05 OR								
k1710A       RETAINING RING       STEEL       SAE 1070-1090 HIGH CARBON STEEL         k1710B       SPRING PACK       SPRING STEEL       -         k17110       O.NIG       BUINA-N RUBBER       D2000         k17112       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         k17112       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         k17113       BREAKING COUPLING       STAINLESS STEEL       ASTM A733 CA15 (4105S)         k1714       COUPLING PINS       STAINLESS STEEL       ASTM A743 CA15 (4105S)         k1715       BARREL COUPLING BOLTS       STEEL (2INC PLATED)       ASTM A 307/SAE GRADE 2 OR 4105S.         k1716       O-RING       BUNA-N RUBBER       D2000       STAINLESS STEEL         k1716       O-RING       BUNA-N RUBBER       D2000       STM A 108 CRS OR ASTM A 276 530400 OR         k1717       BARREL COUPLING W/SET SCR       DUCTILE IRON       ASTM A 108 CRS OR ASTM A 276 530400 OR         k1718       LOWER STEM THREAD LOCK       NYLOC       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM         k1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM         k1								
k17108       SPRING PACK       SPRING STEEL       -         k1711       O-RING       BUNA-N RUBBER       D2000         k1712       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         k1713       BREAKING COUPLING       STAINLESS STEEL       OR ASTM A536 GR 70-50-05 OR 65-45-12 PLATE         k1713       BREAKING COUPLING       STAINLESS STEEL       ASTM A730 CA15 (41055)         k1714       COUPLING PINS       STEEL (21NC PLATED)       ASTM A 307-SAE GRADE 2 OR 4105.5.         k1715       BARREL COUPLING BUTS       STEEL (21NC PLATED)       ASTM A 307-SAE GRADE 2 OR 4105.5.         k1718       LOWER STEM       CRS OR STAINLESS STEEL       ASTM A 108 CRS OR ASTM A 276 S30400 OR         k1718       LOWER STEM       CRS OR STAINLESS OR       ASTM A 108 CRS OR ASTM A 276 S30400 OR         k1719       LOWER BARREL       DUCTILE IRON       ASTM A 336 GR 70-50-05 OR 65-45-12; ASTM ANGANESE BRONZE         k1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR       ASTM A 336 GR 70-50-05 OR 65-45-12; ASTM ANGANESE STEEL         k1721       LOWER STEM COLLAR PIN       HANCANESE BRONZE       ASTM A 536 GRADE 70-50-05 OR 65-45-12; ASTM ASSEMDYZE         k1722       ADRAIN VALVE RUBAR       FADMINUM BRONZE OR	K1710	UPPER STEM	STAINLESS STEEL	A 276 \$30400 OR \$31600				
K1711       O-RING       BUNA-N-RUBBER       D2000         K1712       STEM BUSHING       DUCTILE IRON OR       ASTM A536 GR 70-50-05 OR 65-45-12 PLATE ALUMINUM BRONZE       OR ASTM 8505 C75400         K1713       BREAKING COUPLING       STAINLESS STEEL       ASTM A743 CA 15 (41055)         K1714       COUPLING PNS       STAINLESS STEEL       ASTM A743 CA 15 (41055)         K1715       BARREL COUPLING BOLTS       STEEL (ZINC PLATED)       ASTM A 307\SAE GRADE 2 OR 4105.S.         K1716       O-RING       BUNA-N RUBBER       D0000       ASTM A108 CRS OR ASTM A 276 S30400 OR 531400         K1718       LOWER STEM       CRS OR STAINLESS STEEL       ASTM A108 CRS OR ASTM A 276 S30400 OR 531400         K1718       LOWER STEM THREAD LOCK       NYLOC       ASTM A 108 CRS OR ASTM A 276 S30400 OR 65-45-12; ASTM A 276 S30400 OR 65-45-12; ASTM A 276 S30400, ASTM B505 C95400 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR C8630         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR S.S.         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.         K1721       LOWER STEM COLLAR PIN       HARDENED STEEL         K1722       ADSTM VALVE RUBBER       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101<				SAE 1070-1090 HIGH CARBON STEEL				
K1712   STEM BUSHING   DUCTILE IRON OR   ASTM A 536 GR 70-50-05 OR 65-45-12 PLATE     K1713   BREAKING COUPLING   STAINLESS STEL   ASTM A 743 CA 15 (41055)     K1714   COUPLING PINS   STAINLESS STEL   ASTM A 743 CA 15 (41055)     K1714   COUPLING PINS   STAINLESS STEL   ASTM A 743 CA 15 (41055)     K1714   COUPLING PINS   STAINLESS STEL   ASTM A 743 CA 15 (41055)     K1716   ARREL COUPLING BOLTS   STELL JINC FLATED)   ASTM A 1005 CR 50 GR 50				-				
K1712       STEM BUSHING       ALUMINUM BRONZE       OR ASTM BS0S C95400         K1713       BREAKING COUPLING       STAINLESS STEEL       ASTM A743 CA 15 (41055)         K1714       COUPLING PINS       STAINLESS STEEL       ASTM A743 CA 15 (41055)         K1715       BARREL COUPLING BOLTS       STEEL (2000 CR 41055)       ASTM A 307,SAE GRADE 2 OR 4105.5.         K1716       O-RING       BUNA-N RUBBER       D2000       ASTM A 307,SAE GRADE 2 OR 4105.5.         K1717       BARREL COUPLING W/SET SCR       DUCTILE IRON       AS3A GRADE 70-50-05       ASTM A 108 CRS OR ASTM A 276 S30400 OR S4104.5.         K1718       LOWER STEM       CRS OR STAINLESS STEEL       S16.00       ASTM A 108 CRS OR ASTM A 276 S30400 OR 545.12; ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM AGAN CRS OR ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM AGAN CALLERON       ANSI/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MAGANES BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM AGAN CALLERON         K1721       LOWER STEM COLLAR       S.S.       S.S.       S.S.         K1721       LOWER STEM COLLAR S.S.       S.S.       BS05 C95400 OR ASTM A 276 S30400         K1722       ASTSMENCULAR S.S.       S.S.       BS05 C95400 OR ASTM A 276 S30400         K1722       LO	K1711	O-RING						
ALUMINUM BRONZE       OR ASTM BSOS C55400         K1713       BREAKING COUPLING       STAINLESS STELL       ASTM ASOS C55400         K1714       COUPLING PINS       STAINLESS STELL       302HO GR 4105S         K1715       BARREL COUPLING BOLTS       STEEL (ZINC PLATED)       ASTM A 307/SAE GRADE 2 OR 410SS         K1716       O-RING       BUNA-N RUBBER       D2000         K1717/BARREL COUPLING W/SET SCR       DUCTILE IRON       AS34 GRADE 70-50-05         K1718       LOWER STEM       CRS OR STAINLESS STEEL       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1718       LOWER STEM       CRS OR STAINLESS OR       ASTM A 108 CRS OR ASTM A 276 S30400 OR         K1720       DRAIN VALVE RETAINING NUT       AUDITILETRON       ANSI/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       AUMINUM BRONZE OR       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM         K1720       DRAIN VALVE RETAINING NUT       AUMINUM BRONZE OR       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM         K1721       LOWER STEM COLLAR PIN       HANGANESS STEEL       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM         K1721       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-50-05 OR 65-45-12; ASTM         K1722       ASTM VALVE RUBBER	K1712	STEM BUSHING	DUCTILE IRON OR	ASTM A536 GR 70-50-05 OR 65-45-12 PLATED;				
K1714   COUPLING PINS   STAINLESS STEEL   302HQ OR A10SS     K1715   BARREL COUPLING BOLTS   STEEL (ZINC PLATED)   ASTM A 307\SAE GRADE 2 OR 410SS.     K1716   O-RING   BUNA-N RUBBER   D2000     K1717   BARREL COUPLING W/SET SCR.   DUCTILE IRON   AS34 GRADE 70-50-05     K1718   LOWER STEM   CRS OR STAINLESS STEEL   ASTM A 108 CRS OR ASTM A 276 S30400 OR     K1718   LOWER STEM   CRS OR STAINLESS STEEL   ASTM A 108 CRS OR ASTM A 276 S30400 OR     K1718   LOWER STEM   CRS OR STAINLESS OR   ASTM A 108 CRS OR ASTM A 276 S30400 OR     K1720   DRAIN VALVE RETAINING NUT   ANSI/AWWA C151/A21.51     DI OR STAINLESS OR   ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM     K1720   DRAIN VALVE RETAINING NUT   ALUMINUM BRONZE OR     K1721   LOWER STEM COLLAR   ALUMINUM BRONZE OR     K1722   ADRAIN VALVE RUBBER   EPDM RUBBER     K1722   MAIN VALVE RUBBER   EPDM RUBBER     K1722   ASSEMBLY   EPDM RUBBER     K1722   BOTTOM PLATE   DUCTILE IRON     K1723   BOTTOM PLATE   DUCTILE IRON     K1724   BOTTOM PLATE   DUCTILE IRON     K1725   BOTTOM PLATE   BONZE     K1724   BOTTOM PLATE BUSHING   OR MANGANESE <tr< td=""><td></td><td></td><td></td><td colspan="5"></td></tr<>								
K1715       BARREL COUPUNG BOLTS       STEEL (ZINC PLATED)       ASTM A 307\SAE GRADE 2 OR 410S.S.         K1716       O-RING       BUNA-N RUBBER       D2000       ASTM A 307\SAE GRADE 2 OR 410S.S.         K1717       ARREL COUPUNG W/SET SCR       DUCTILE IRON       AS3G GRADE 70-50-05         K1718       LOWER STEM       CRS OR STAINLESS STEEL       ASTM A 108 CRS OR ASTM A 276 S30400 OR S31400         K1718       LOWER STEM THREAD LOCK       NYLOC       ANSI/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 S30400 OR C6830         K1720       DRAIN NUT SET SCREW       STAINLESS STEEL       ALUMINUM BRONZE OR S.S.       B305 C95400 OR ASTM A 276 S30400         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B305 C95400 OR ASTM A 276 S30400         K1721       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722       ASSMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722       BOTTOM PLATE BUSHING       BONZE       BS05 C95500H OR ASTM B150 C63000 OR 8505 C956300 OR 65-45-12								
1717.1       O-RING       BUNA-N-RUBBER       D2000         K1717/J BARREL COUPLING W/SET SCR       DUCTILE IRON       A536 GRADE 70-50-05         K1717/J BARREL COUPLING W/SET SCR       DUCTILE IRON       A536 GRADE 70-50-05         K1718       LOWER STEM       CRS OR STAINLESS STEEL       SATM A 108 CRS OR ASTM A 276 530400 OR         K1718       LOWER STEM THREAD LOCK       NYLOC       SATM A 108 CRS OR 65-45-12: ASTM         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 CR 70-50-05 OR 65-45-12: ASTM         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 CR 70-50-05 OR 65-45-12: ASTM         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 530400         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       BS05 C95400 OR ASTM A 276 530400         K1722       MAIN VALVE RUBBER       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1724       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 6	K1714	COUPLING PINS	STAINLESS STEEL	302HQ OR 410SS				
k1717/A BARREL COUPLING W/SET SCR     DUCTILE IRON     A536 GRADE 70-50-05       k1718     LOWER STEM     CRS OR STAINLESS STEL     ASTM A 108 CRS OR ASTM A 276 S30400 OR       k1718     LOWER STEM     DUCTILE IRON     ASTM A 108 CRS OR ASTM A 276 S30400 OR       k1718     LOWER STEM THREAD LOCK     NYLOC     S1600       k1719     LOWER STEM THREAD LOCK     NYLOC     ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM       k1720     DRAIN VALVE RETAINING NUT     ALUMINUM BRONZE OR     ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM       k1720     DRAIN VALVE RETAINING NUT     ALUMINUM BRONZE OR     S.S.       k1721     LOWER STEM COLLAR PIN     HARGENEE     B505 C95400 OR ASTM A 276 S30400       k1722     MAIN VALVE RUBBER     FDM RUBBER     KENNEDY VALVE COMPOUND # 101       k1722     ASSEMBLY     EPDM RUBBER     KENNEDY VALVE COMPOUND # 101       k1722     BOTTOM PLATE     DUCTILE IRON     ASTM A 536 GRADE 70-50-05 OR 65-45-12       k1722     BOTTOM PLATE     DUCTILE IRON     ASTM A 536 GRADE 70-50-05 OR 65-45-12       k1722     BOTTOM PLATE     DUCTILE IRON     ASTM A 536 GRADE 70-50-05 OR 65-45-12       k1722     BOTTOM PLATE     DUCTILE IRON     ASTM A 536 GRADE 70-50-05 OR 65-45-12	K1715	BARREL COUPLING BOLTS	STEEL (ZINC PLATED)	ASTM A 307\SAE GRADE 2 OR 410S.S.				
K1718       LOWER STEM       CRS OR STAINLESS STEEL       ASTM A 108 CRS OR ASTM A 276 S30400 OR S31600         K1718       LOWER STEM THREAD LOCK       NY LOC       S31600         K1719       LOWER STEM THREAD LOCK       NY LOC       ASTM A 108 CRS OR ASTM A 276 S30400 OR S31600         K1720       DRAIN VALVE RETAINING NUT       DI OCTILE IRON       ANSJ/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANCANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR 68-63         K1721A       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 S30400         K1721A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-5005 OR 65-45-12         K1722A       DRAIN VALVE RUBBER SEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-5005 OR 65-45-12         K1722B       BOTTOM PLATE BUSHING       OR MANGANESE BRONZE       B505 C95500HT OR ASTM B150 C-63000 OR B505 C95500HT OR ASTM B150 C-63000 OR B51725A IO221 RETAINING SCREW       STAINLESS STEEL<	K1716	O-RING	BUNA-N RUBBER	D2000				
K1718       LOWER STEM       CRS OR STAINLESS STEEL       S31 600         K1718A       LOWER STEM THREAD LOCK       NYLOC       NSI/AWWA C151/A21.51         K1719       LOWER BARREL       DUCTILE IRON       ANSI/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       DI OR STAINLESS OR ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 S30400; ASTM B505 C95400 OR C8630         K1720       DRAIN NUT SET SCREW       STAINLESS STEEL       B505 C95400 OR ASTM A 276 S30400         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 S30400         K1721       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722       MAIN VALVE RUBBER       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722       DRAIN VALVE RUBBER       DUCTILE IRON       ASTM A 533 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 533 GRADE 70-50-05 OR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MAINGANESE       B505 C95500HT OR ASTM B150 C63000 OR B505 C95500HT OR ASTM B150	K1717/J	ABARREL COUPLING W/SET SCR	DUCTILE IRON					
K1719       LOWER BARREL       DUCTILE IRON       ANSI/AWWA C151/A21.51         K1720       DRAIN VALVE RETAINING NUT       DI OR STAINLESS OR ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 530400; ASTM B505 C95400 OR C8630;         K1720       DRAIN NUT SET SCREW       STAINLESS STEEL       A 276 530400; ASTM B505 C95400 OR C8630;         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 530400;         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 530400         K1722       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1722       MAIN VALVE RUBBER ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DEAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE BRONZE       B505 C95500HT OR ASTM B150 C63000 OR BS05 C86300         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725A       EIBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       HOM PLATE PIN<	K1718	LOWER STEM	CRS OR STAINLESS STEEL	ASTM A 108 CRS OR ASTM A 276 S30400 OR S31600				
K1720       DRAIN VALVE RETAINING NUT       DI OR STAINLESS OR ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 530400; ASTM B505 C95400 OR C8630 (X1720A)         K1720A       DRAIN NUT SET SCREW       STAINLESS STEEL       ASTM A 536 GR 70-50-05 OR 65-45-12; ASTM A 276 530400; ASTM B505 C95400 OR C8630 (X1721A)         K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C95400 OR ASTM A 276 530400         K1721       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-500 S0 R 65-45-12         K1722       ASISEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722a       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-500 S0 R 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-500 S0 R 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-500 S0 R 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C 63000 OR B505 C86300         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS	K1718A	LOWER STEM THREAD LOCK	NYLOC					
K1720       DRAIN VALVE RETAINING NUT       ALUMINUM BRONZE OR MANGANESE BRONZE       ASTM A 536 GR 70-50-05 OR 65-45-12: ASTM A 276 530400; ASTM B505 CP 5400 OR 6543         K1720A       DRAIN NUT SET SCREW       STAINLESS STEEL       A276 530400; ASTM B505 CP 5400 OR 6543         K1721A       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 CP 5400 OR ASTM A 276 530400         K1721A       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 CP 5400 OR ASTM A 276 530400         K1721A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM A 536 GRADE 70-500 SO GR 65-45-12         K1722A       DRAIN VALVE RUBBER       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-500 SO GR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-500 SO GR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       B505 CP 5500HT OR ASTM B150 C63000 OR B505 CP 5500HT OR ASTM B150 C6400 OK K1726A 1002LE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1725A       HOES/STEAMER NOZZLE       BRONZE       ASTM A 536 CRADE 70-50-05	K1719	LOWER BARREL	DUCTILE IRON	ANSI/AWWA C151/A21.51				
K1720       DRAIN VALVE RETAINING NUT       ALLUMINUM BRONZE OR       A 276 530400; ASTM B505 C95400 OR C8630         K1720A       DRAIN NUT SET SCREW       STAINLESS STEEL       B505 C95400 OR ASTM A 276 530400;         K1721       LOWER STEM COLLAR       S.S.       B505 C95400 OR ASTM A 276 530400;         K1721A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM B505 C95400 OR ASTM A 276 530400;         K1721A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASTM B 188.2         K1722       ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE BUSHING       NI-ALUMINUM BRONZE       B505 C95500HT OR ASTM B150 C63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM 6536 CR4DE 70-50-05         K1724       HOSTOTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725			di or stainless or	A STAA & 534 CP 70 50 05 OP 45 45 10: A STAA				
K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C 95400 OR ASTM A 276 S30400         K1721 A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1721 A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1722 ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C 95500HT OR ASTM B150 C 63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       ORIG       BUNA-N RUBBER       D2000         K1725A       ORIG       BUNA-N RUBBER       D2000         K1726A       HOSE/STEAMER NOZIZE       BRONZE       ASTM A 536 CRA200/C86300	K1720	DRAIN VALVE RETAINING NUT		A 276 S30400; ASTM B505 C95400 OR C86300				
K1721       LOWER STEM COLLAR       ALUMINUM BRONZE OR S.S.       B505 C 95400 OR ASTM A 276 S30400         K1721 A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1721 A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1722 ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C 95500HT OR ASTM B150 C 63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       ORIG       BUNA-N RUBBER       D2000         K1725A       ORIG       BUNA-N RUBBER       D2000         K1726A       HOSE/STEAMER NOZIZE       BRONZE       ASTM A 536 CRA200/C86300	K1720A	DRAIN NUT SET SCREW	STAINLESS STEEL					
International State       State         K1721A       LOWER STEM COLLAR PIN       HARDENED STEEL       ASME B18.8.2         K1722A       MAIN VALVE RUBBER       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DEANIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 64-45-12         K1723       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C 95500HT OR ASTM B150 C 63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       I8-8 STAINLESS       B505 C 68300         K1725A       EIBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05       K1726 NO2/LE RETAINING         K1725A       FLOW PLATE PIN       STAINLESS STEEL       I8-8 STAINLESS       K1726 HOSE/STEAMER NOZZLE       BORONZE       ASTM A 536 GRADE 70-50-05         K1725A       HOSE/STEAMER NOZZLE       BRONZE       ASTM A 536 GRADE 70-50-05       K1726 NOZZLE RETAINING SCREW       STAINLESS         K1726       HOSE/S								
K1722       MAIN VALVE RUBBER ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722A       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE BUSHING       OR MAINGANESE       BS05 C95500HT OR ASTM B150 C63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1726A       IDSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 8750/C86700/C86300         K1726A       NOZZLE FAMER NOZZLE       BRONZE       ASTM B584 C 8750/C86700/C86300         K1726A       NOZZLE GASKET       NEONES STEEL       18-8 STAINLESS         K1727       NOZZLE GASKET       NEOPREME       D2000         K1728       NOZZLE CAP       CAST IRON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1729	K1/21	LOWER STEM COLLAR	S.S.	B202 C72400 OR ASTM A 276 530400				
K1722       ASSEMBLY       EPDM RUBBER       KENNEDY VALVE COMPOUND # 101         K1722       DRAIN VALVE       DUCTILE IRON       ASTM A 536 GRADE 70-50:05 OR 65-45-12         K17228       DRTIOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50:05 OR 65-45-12         K1728       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50:05 OR 65-45-12         K1728       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50:05 OR 65-45-12         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       BS05 C 95500HT OR ASTM B150 C 63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50:05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1725A       O-RING SCREWS       STAINLESS STEEL       18-8 STAINLESS         K1726       NOZZLE GARKET       NEOPREME       D2000         K1727       NOZZLE GAR       CASTIR MESSA C 27850/C86700/C86300         K1726       NOZZLE CAP       C ASTIR RON       A124 C LASS B         K1727       NOZZLE GAP       C ASTIR MESSA C 27850/C86700/C86300       K1728         K1728       NOZZ	K1721A	LOWER STEM COLLAR PIN	HARDENED STEEL	ASME B18.8.2				
K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C63000 OR         K1724       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C63000 OR         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       I8-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1726A       ELBOW SET SCREWS       STAINLESS STEEL       I8-8 STAINLESS         K1726A       INOZILE GRANG SCREW       STAINLESS STEEL       I8-8 STAINLESS         K1727       NOZILE GRANKIN NOZILE       BRONIZE       ASTM M 6534 C 8750/C86700/C86300         K1727       NOZILE GRANKING SCREW       STAINLESS STEEL       I8-8 STAINLESS         K1727       NOZILE GARKET       NEOPREME       D2000         K1727       O-RING       BUNA-N RUBBER       D2000         K1729       O-RING       BUNA-N RUBBER       D2000         K1729       O-RING       BUNA-N RUBBER       D2000         K1729       O-RING       BUNA-N RUBBER	K1722		EPDM RUBBER	KENNEDY VALVE COMPOUND # 101				
K1722B       BOTTOM PLATE       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12         K1723       BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C63000 OR         BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C63000 OR         BOTTOM PLATE BUSHING       OR MANGANESE       B505 C95500HT OR ASTM B150 C63000 OR         BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1726A       ELBOW SET SCREWS       STAINLESS STEEL       18-8 STAINLESS         K1726A       HOSENTEAMER NOZZLE       BRONZE       ASTM MESS4 C 47550/C86700/C86300         K1726A       NOZZLE EATAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1727       NOZZLE EASKET       NEOPREME       D2000         K1727       NOZZLE CAP       CASTI RON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A	K1722A	DRAIN VALVE	DUCTILE IRON	ASTM A 536 GRADE 70-50-05 OR 65-45-12				
K1723       BOTTOM PLATE BUSHING       NI-ALUMINIUM BRONZE OR MANGANESE       BS05 C 95500HT OR ASTM B150 C 63000 OR B505 C 86300         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       ELBOW       DUCTILE IRON       ASTM A 536 GRADE 70-50-05         K1725A       ELBOW SET SCREWS       STAINLESS STEEL       18-8 STAINLESS         K1726       HOGS/TEAMER NO27LE       BRONZE       ASTM M 584 C 37850/C86700/C86300         K1726       HOGZIE CAPC       C ASTI MESS STEEL       18-8 STAINLESS         K1726       HOGZIE CAPC       C ASTI MOD       A 124 C LASS B         K1727       NOZZLE GAR ET       NEOPREME       D2000         K1727       NOZZLE GAP       C ASTI RON       A 124 C LASS B         K1728       NOZZLE CAP       C ASTI RON       A 124 C LASS B         K1729       O-RING       BUNA-N RUBBER       D2000								
BRONZE       BRONZE         K1724       BOTTOM PLATE PIN       STAINLESS STEEL       18-8 STAINLESS         K1725       ELBOW       DUCTILE IRON       ASTM A536 GRADE 70-50-05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1725A       O-RING       BUNA-N RUBBER       D2000         K1725A       O-ROS       STAINLESS STEEL       18-8 STAINLESS         K1726       HOSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 87850/C86700/C86300         K1726       HOSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 87850/C86700/C86300         K1726       NOZZLE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1727       NOZZLE GASKET       NEOPREME       D2000         K1728       NOZZLE CAP       CAST IRON       A124 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A108         K1731       WENCH       DUCTILE IRON       ASTM A 536 GRADE 70-50-05 OR 65-45-12			NI-ALUMINUM BRONZE OR MANGANESE	B505 C95500HT OR ASTM B150 C63000 OR				
K1725       ELBOW       DUCTILE IRON       ASTM A536 GRADE 70-50-05         K1725A       O-RING       BUNA-N RUBBER       D2000         K1725A       IEKOW SET SCREWS       STAINLESS STEEL       18-8 STAINLESS         K1726       HOSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 87850/C86700/C86300         K1726       HOSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 87850/C86700/C86300         K1726       HOZZLE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1727       NOZZLE GASKET       NEOPREME       D2000         K1728       NOZZLE CAP       CAST IRON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1731       WRENCH       DUCTILE IRON       A 35M A 536 GRADE 70-50-05 OR 65-45-12		1						
K1725A       O-RING       BUNA-N RUBBER       D2000         K1725A       EIBOW SET SCREWS       STAINLESS       IEB-STAINLESS         K1726       HOSC/STEAMER NOZZLE       BRONZE       ASTM 8584 C 87850/C86700/C86300         K1726       HOSC/STEAMER NOZZLE       BRONZE       ASTM 8584 C 87850/C86700/C86300         K1726       HOSC/STEAMER NOZZLE       BRONZE       ASTM 8584 C 87850/C86700/C86300         K1726       NOZZLE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1727       NOZZLE GAP       CAST IRON       A 126 CLASS B         K1728       O/ZUE CAP       C AST IRON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1730       NOZZLE CAP CHAINS       DUCTILE IRON       A STM A 536 GRADE 70-50-05 OR 65-45-12								
K1725A       ELBOW SET SCREWS       STAINLESS STEEL       18-8 STAINLESS         K1726       HOSE/STEAMER NOZIZLE       BRONZE       ASTM 8584 C 87850/C86700/C86300         K1726       HOZZLE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1726       NOZIZE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1727       NOZIZE RETAINING SCREW       STAINLESS STEEL       18-8 STAINLESS         K1728       NOZIZE RATAINING SCREW       STAINLESS STEEL       12-8 STAINLESS         K1729       NOZIZE GAP       C ASTIRON       A126 CLASS B         K1729       O-RING       BUNA-H RUBBER       D2000         K1730       NOZIZE CAP CHAINS       ZINC PLATED STEEL       A108         K1731       WENCH       DUCTILE IRON       A 354 GRADE 70-50-05 OR 65-45-12								
K1726       HOSE/STEAMER NOZZLE       BRONZE       ASTM B584 C 87850/C86700/C86300         K1726A       NOZZLE RETAINING SCREW       STAINLESS STEL       18-8 STAINLESS         K1727       NOZZLE GASKET       NEOPREME       D2000         K1728       NOZZLE GASKET       CAST IRON       A126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A108         K1731       WRENCH       DUCTLE IRON       A35M A 536 GRADE 70-50-05 OR 65-45-12								
K1726A       NOZZLE RETAINING SCREW       STAINLESS       18-8 STAINLESS         K1727       NOZZLE GASKET       NEOPREME       D2000         K1728       NOZZLE CAP       CAST IRCN       A126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP       CHAST IRCN       A126 CLASS B         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A108         K1731       WENCH       DUCTILE IRCN       A35M A 536 GRADE 70-50-05 OR 65-45-12								
K1727       NOZILE GASKET       NEOPREME       D2000         K1728       NOZILE CAP       CASTI RON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1731       WRENCH       DUCTILE IRON       A STM A 536 GRADE 70-50-05 OR 65-45-12								
K1728       NOZZLE CAP       CAST IRON       A 126 CLASS B         K1729       O-RING       BUNA-N RUBBER       D2000         K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1731       WRENCH       DUCTLIE IRON       A 33M A 536 GRADE 70-50-05 OR 65-45-12								
X1729       O-RING       BUNA-NRUBBER       D2000         X1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         X1731       WERNCH       DUCTILE IRON       A 31M A 536 GRADE 70-50-05 OR 65-45-12								
K1730       NOZZLE CAP CHAINS       ZINC PLATED STEEL       A 108         K1731       WRENCH       DUCTILE IRON       A STM A 536 GRADE 70-50-05 OR 65-45-12								
K1731 WRENCH DUCTILE IRON ASTM A 536 GRADE 70-50-05 OR 65-45-12		O-RING						
				A 109				
	K1730							
	K1730 K1731	WRENCH	DUCTILE IRON					
K1733 BAFFLE DUCTILE IRON ASTM A 536 GRADE 70-50-05 OR 65-45-12	K1730 K1731 K1732	WRENCH EYE BOLT	DUCTILE IRON ZINC PLATED STEEL	ASTM A 536 GRADE 70-50-05 OR 65-45-12				

### MARKINGS

BACK
KENNEDY
ELMIRA, NY
U.S.A
6
350 CWP
PN16
DN150
DI
PATENTS

Available with 6" ANSI FLG, 6" MJ, 6" ANSI Flanged Straight Shoe

UL Listed/ FM approved

Figure K17 6" MVO

## **Ordering Information**

## K17 Hydrant

When ordering, indicate the following:

- 1. Quantity and threading details of hose nozzles.
- 2. Threading details of steamer nozzle.
- 3. Size and type of inlet connection (mechanical joint, flanged)
- 4. Depth of bury (from bottom of pipe to ground line).

### Parts

When ordering parts, indicate the following:

- 1. Part number
- 2. Part description
- 3. Type of hydrant

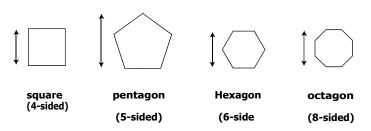
**ELBOW** – We must have the size and type of connection to main.

**OPERATING STEM NUT** – Give direction to open (cast on cap) and size and shape of operating nut. 4-sided nut give flat to flat dimension. 5-sided nut give point to opposite flat dimension. 6-sided nut give flat to flat dimension to eliminate any doubt as to where the measurement was taken. \*

Note: Hydrants are UL/FM approved for 11/2P and 11/4" sq. nut sizes.

**CAP** – Give direction the hydrant opens. This is indicated by an arrow cast on the cap. Indicate the direction the arrow points. **NOZZLE CAP GASKET** – Indicate size of nozzle and whether hose or steamer.

**NOZZLE** – Give exact threading details, outside (major) diameter, pitch diameter, root (minor) diameter and exact number of threads per inch (TPI) or send in a gauge or sample in good condition



- Color (National standard yellow will be furnished unless otherwise indicated).
  - 7. Size and shape of operating nut.
  - 8. Direction to open.

#### K17 Weight

	Depth of Trench										
	2'0"	2'6"	3'0"	3'6"	4'0"	4'6"	5'0"	5'6"	6'0"	6'6"	7'0"
K17 Weight (lbs)	175.4	192	208.6	225.2	241.8	258.4	275	291.6	308.2	324.8	341.4

NOZZLE CAP CHAIN –Tell us the nozzle type, hose or steamer. NOZZLE CAP – Exact threading and nut size and shape. UPPER BARREL – Furnish all information cast on the barrel and the number of hose and steamer connections.

**STEM** – Furnish the direction the hydrant opens as cast on the cap and furnish the depth of trench (distance from groundline to bottom of connecting pipe). If the stem can be measured, complete overall dimensions including diameter will help. The diameter should always be measured on the smooth (unthreaded) portion. \* **LOWER BARREL** – Furnish depth of trench (distance from

groundline to bottom of connecting pipe) or dimension from flange face to flange face (overall). The outside and inside diameters are also, a help.

### National Standard Hose Coupling Thread Specifications (NST)

A. nominal inside diameter		<b>2</b> <sup>1</sup> /2"	3"	3 <sup>1</sup> /2"	4"	4 <sup>1</sup> /2"
		-	-		-	-
number of threads per inch		7 <sup>1</sup> /2	6	6	4	4
B. Major diameter nozzle thread	Max.	3.0686	3.6239	4.2439	5.0109	5.7609
	Min.	3.0366	3.5879	4.2079	4.9609	5.7109
C. Pitch diameter nozzle thread	Max.	2.9820	3.5156	4.1356	4.8485	5.5985
	Min.	2.9660	3.4976	4.1176	4.8235	5.5735
D. Minor diameter nozzle thread	Max.	2.8954	3.4073	4.0273	4.6861	5.4361
E. Diameter pilot nozzle		2.8500	3.3540	3.9730	4.6100	5.3570
F. Length of thread – nozzle		1"	<b>1</b> <sup>1</sup> /8"	1 <sup>1</sup> /8"	1 <sup>1</sup> /4"	1 <sup>1</sup> /4"
G. Face to start of second turn		<sup>1</sup> /4"	<sup>5/</sup> 16"	<sup>5/</sup> 16"	<sup>7/</sup> 16"	<sup>7/</sup> 16"
H. Major diameter coupling thread	Min.	3.0836	3.6389	4.2639	5.0359	5.7859
i. Pitch diameter coupling thread	Max.	3.0130	3.5486	4.1736	4.8985	5.6485
	Min.	2.9970	3.5306	4.1556	4.8735	5.6235
J. Minor diameter coupling thread	Max.	2.9424	3.4583	4.0833	4.7611	5.5111
	Min.	2.9104	3.4223	4.0473	4.7111	5.4611
K. Depth of coupling		<sup>5/</sup> 16"	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>1</sup> / <sub>16</sub> "	1 <sup>3</sup> / <sub>16</sub> ""	1 <sup>3</sup> / <sub>16</sub> "

- Hydrants shall be UL listed and FM approved.
- Hydrants shall conform to A.W.W.A. Standard C-502 latest revision and as specified herein.
- Hydrants shall be of the adjustable compression type, closing with line pressure.
- Hydrants shall be of the traffic model breakaway type, with two bolt design.
- Hydrant upper shall be of one-piece construction.
- Hydrant stem coupling shall be of stainless-steel construction.
- Hydrant shall possess a self-locking operating nut wrench.
- Operating nut shall be of one-piece bronze construction.
- A dirt shield shall be provided to protect the operating mechanism from grit buildup and corrosion due to moisture.
- A thrust roller bearing shall be supplied between the operating nut and stem lock nut to facilitate operation.
- Nozzles shall be of the tamper resistant, thread-in type with O-ring seals and stainless-steel retaining screws.
- An O-ring shall be provided to seal between the upper and lower barrels.
- The main valve shall be adjustable of EPDM rubber.
- Hydrant drain valve shall momentarily force flush with each operation. Drain way shall be of bronze. Drain valve facing shall be of EPDM rubber.
- The Hydrant shall experience a pressure drop of less than 2.0 psi when flowing 1000GPM

For all your valve requirements, contact a Kennedy Distributor near you or:

# **Kennedy Valve**

Division of McWane

1021 E. Water Street Elmira, New York 14902-1516 607-734-2211

FAX: 800-952-4771

#### Installation

1. When hydrants are received from manufacturer they should be handled carefully to avoid breakage and damage to flanges. Keep hydrants closed until they are installed. Protect stored hydrants from the elements, if possible.

2. Before installation of hydrants clean piping and elbow of any foreign matter.

3. Install hydrants away from the curb line enough distance to avoid damage from or to overhanging vehicles. A setback of 2 ft. from the curb line to the point on the hydrant nearest the curb is recommended. The pumper outlet nozzle should face the street. Make sure that the outlet nozzles are high enough above the ground line for hose attachment and that there are no obstructions to prevent operation. In setting up a hydrant, the elbow should be placed on a flat stone or other solid foundation. It is good practice to brace the side of the base opposite the inlet to oppose the stress due to pressure tending to force the hydrant off the end of the lateral. Hydrants must be firmly supported underground all around the standpipe, especially where there is no concrete sidewalk to help support them. This is particularly important since the proper working of the Safety Breakable Section in severe impact depends upon unyielding support of the underground standpipe.

4. The bottom and lower part of the hydrant should be surrounded with broken stone or coarse gravel so that water released from the standpipe by the drain valves may escape quickly. The stone-filled area should contain a volume of water at least twice that held by the hydrant barrel.

5. Both drainage stone and earth fill above the stone should be tamped to give firm support to the hydrant barrel.

6. It is recommended practice to install an auxiliary or secondary gate valve in the lateral between the hydrant and the main. This permits inspection and repair of hydrant without shutting down mains. Check the hydrant and auxiliary valve for perpendicular setting.

7. After the hydrant is installed and the line as well as the hydrant have been hydrostatically tested, the hydrant should be flushed and then checked for proper drainage.

A. A nozzle cap should be removed, then the hydrant opened fully. This will flush out any dirt or sediment which may have accumulated during installation. After the hydrant is flushed, close it, replace the nozzle cap, then open the hydrant again and inspect all joints for leaks: Close the hydrant again, remove a hose cap and/ or steamer cap to test your hose thread for proper fit.

B. Before replacing the hose cap and/or steamer cap, check the inside of the hydrant for drainage. This can be accomplished by placing the palm of the hand firmly over the nozzle outlet. Drainage rate should be sufficiently rapid to create a suction.

Note: In certain areas ground water stands at levels above that of hydrant drains. In such cases it is recommended that hydrant drains be plugged at the time of installation. If drains are plugged, hydrants in service in cold climate areas should be pumped out after usage. Mark such hydrants to indicate the need for pumping out after usage. **Operation** 

The K17 hydrant requires a minimum of torque to be operated. It is possible to damage the hydrant by forcing it beyond the limits of the operating nut travel with excessive torque; therefore, the following steps are recommended:

1. CHECK DIRECTION OF OPENING as marked on the dirt shield.

2. TO OPEN, DO NOT FORCE THE HYDRANT IN THE

OPENING DIRECTION BEYOND FULL OPEN as indicated by sudden resistance to turning. If water does not flow when the hydrant is open, it is probably due to a closed valve upstream from the hydrant.

3. WHEN USING HYDRANT, hydrant should be opened full. Partially opened hydrant may allow substantial leakage through the drain valves. This may prevent the hydrant from draining properly when it is shut down. Operation of hydrant in this manner over a period could also undermine the hydrant and/or the water main.

4. TO CLOSE, turn the operating nut. Approximately 2 ½ turns before the hydrant closed, there will be a slight increase in the torque required to close the hydrant, continue to close the hydrant until a sudden stop has been felt. Always shut off hydrant slowly. In old water mains where corrosion has taken its toll, or even on new mains where high pressure is maintained, closing the hydrant too rapidly could cause a water hammer resulting in damage to the main. IT IS NOT NECESSARY to **OPEN** or **CLOSE** the hydrant with great force. When that position has been reached, back off the operating nut in the opening direction one quarter turn to take the strain off the operating parts of the hydrant and to make it easier to open the hydrant when needed again.

#### Maintenance

It is recommended the hydrant be inspected twice yearly, in the spring and fall. In extremely cold weather it is advisable to inspect hydrant after each use. Maintenance and adjustments are easy and economical with the K17 Hydrant. All parts which are susceptible to damage or rough treatment can be reached without excavation or expensive equipment. The main valve can easily be replaced by one man. Inspection or renewal are practical without disturbing the standpipe, pavement or mains. Inspection should cover the following points:

1. Physical examination noting condition of operating nut, nozzle caps and drains, and general appearance.

2. Use an Aquaphone and listen for leakage through main Valve To check for leakage at seals loosen one hose cap one half turn.

3. Check ease of operation while fully opening hydrant. When all the air has escaped through the hose cap and the hydrant is full, re-tighten the hose cap and check for leakage at joints, packing or seals, and outlet caps.

4. Close hydrant and remove one nozzle cap. Observe drainage.

5. Open hydrant completely, flush hydrant and observe flow. Care should be taken that the water coming from hydrant will not cause any damage to surrounding area.

6. Close hydrant slowly to insure tight closure.

7. Clean and lubricate all nozzle threads. Replace caps, tighten with spanner wrench, then back off slightly so that the caps will not be excessively tight, but have sufficient frictional resistance to prevent removal by hand.

8. Lubricate stem threads through the opening covered by a pipe plug (K1708). Always use factory specified food grade oil.

9. Clean the exterior of the hydrant and repaint, if necessary.

10. Be sure any auxiliary valves are in the wide-open position.

11. Keep complete records on inspection and location of all hydrants in the system.

Kennedy/ K17 6

#### **Problems and Solutions**

Various problems which occur in the field are described below with hints on how to solve them.

*Stem Binding:* Rap the hydrant dome with hammer or spanner wrench. This often will unbind the stem.

*Poor Drainage:* It is possible dirt or pebbles may have plugged the drain hole. Presence of water or ice standing in barrel can be checked using a plumb bob.

To correct:

1. Screw nozzle caps on tightly to prevent leakage.

2. Open hydrant slowly until you hear water entering barrel of hydrant. This will allow water to enter the hydrant with drain valve in an open position. When enough pressure builds up in the barrel any dirt or foreign objects causing the blockage should be forced out.

3. After a few minutes, resume turning the operating nut until the hydrant is fully opened.

4. Slowly shut off hydrant.

5. Remove one of the nozzle caps.

6. Observe through nozzle port to make sure water in barrel is receding. Drainage should be sufficiently rapid to create a suction if palm of hand is placed over a nozzle outlet during drainage.

7. Check again for seat leakage with the Aquaphone. Poor Shutoff: DO NOT exert extra torque forcing hydrant to close. Trouble may be a stone lodged between the seat and the main valve. Forcing closure may damage the hydrant. Stones or other foreign objects are the usual causes of this problem. To correct this problem, remove one or both nozzle caps and open hydrant fully to flush out any foreign material.

Care should be taken that water coming from hydrant will not cause any damage to surrounding area. Attach a canvas apron if necessary, to direct the flow into the street.

Shut off hydrant slowly until fully closed. Put your ear to nozzle opening to hear if water has stopped coming through main valve.

#### **Removing Nozzles**

Instructions to remove threaded nozzles:

۲<u>و-----</u>



K1736-Nozzle Install Tool

1. Remove nozzle cap (K1728).

K1735-Steamer Install Tool

2. Remove nozzle retaining screw (K1726A) using a 1/4" Hex Allen Wrench and turning counter-clockwise. It is recommended to use a new coated set screw when re-installing.

3. Insert nozzle removing wrench (K1736) into nozzle (K1726) and engage nozzle lugs with slots in wrench. Hose nozzles have internal lugs, steamer nozzles have slots on the outside which accept the steamer nozzle socket (K1735)

4. Use a 1" diameter bar to turn the nozzle wrench in a **clockwise**\* direction and remove the nozzle. Note: Nozzles are held in upper with a **left-hand thread.** 

5. Remove the old nozzle "O"-Ring (K1729)

6. Inspect the nozzle seating surface in the upper barrel (K1707) and remove any dirt or sediment.

7. Lubricate the new "O"-Ring and place on nozzle.

8. Insert new nozzle and use nozzle wrench (K1736) and 1" diameter bar to turn nozzle. Apply approximately 300 ft\*lbs in for both the steamer and hose nozzle in the counter-clockwise direction. Ensure Oring is seated in counterbore.

10. Install new coated set screw(K1726) into upper barrel tapped hole. Apply 15 ft\*lbs. of torque.

11. Inspect nozzle cap gasket (K1727) and replace if necessary.

12. Install nozzle cap and tighten.

#### Directions for repairing breaking couplings on K17



K1737-Main Valve Wrench

1. Turn off water supply

2. Remove broken barrel couplings(K1717) and stem breaking coupling(K1713)

A. Remove the broken stem breaking coupling (Item K1713) from the lower stem and remove the lower coupling pin (K1714)

B. Remove the broken barrel couplings (K1717) rings. Lay the hydrant upper on the ground.

3. Remove stem from hydrant upper.

A. Unscrew the upper stem (Item K1710) from the operating nut (Item K1702) by holding the stem stationary and turning the operating nut in the direction to open.

B. Remove broken upper stem breaking coupling (Item K1713) and the upper coupling pin.

4. Install new stem coupling.

A. Place the new stem breaking coupling (K1713) on the upper stem and secure with the upper coupling pins provided (K1714).

B. Slide the upper stem and coupling assembly over the lower stem. Push in the lower coupling clevis pin and fasten with the bridge pins.

C. The keyway must face in the opposite direction of the intended direction of the pumper nozzle. Tighten or loosen the main valve with the main valve wrench (K1737) until the stem is in the proper orientation.

#### 5. Reassemble hydrant.

A. Remove the stem pin (K1709B) by unscrewing it from the barrel. Do not discard.

B. Check the "O"-Ring (Item K1716) on the bottom of the hydrant upper barrel. Replace if damaged

C. Set the hydrant upper barrel over the stem and orient the nozzles in the direction required. Re-install the stem pin (K1709B) ensuring proper engagement within the slot in the upper stem. If engaged properly, the upper barrel will be able to rotate a few degrees, but not able to rotate a full revolution.

D. Close the hydrant to draw down the upper barrel onto the lower pipe. Ensure the upper barrel O-ring (K1716) is covered by the lower barrel.

E. Place barrel coupling rings (K1717) over upper and lower barrel. Tighten the socket head bolts (K1715) evenly. Tighten barrel coupling set screws (K1717A) evenly.

6. Cycle open and close the valve to ensure proper function. Close valve to stop and turn on water supply. Kennedy/ K17 7

#### Main Valve replacement:

#### 1. Shut off Water Supply.

A. Shut off water supply to hydrant by closing the gate valve controlling flow of water to the hydrant. Remove a nozzle cap and open the hydrant a maximum of three turns.

#### 2. Removal of Hydrant Upper.

A. Remove the stem pin(K1709B) fully from the bushing(K1709) after first removing the set screw (K1709A)

B. Remove the barrel coupling bolts(K1715) with a 3/8" Allen wrench or socket.

C. Remove the barrel couplings (K1717)

D. Turn the operating nut (K1702) in the direction to open and hold the barrel to keep it from rotating as the operating nut unscrews and lifts the cap. Turn until the operating nut walks off the stem (K1710).

E. Lift the upper barrel (K1707) straight up and off. The main valve (K1722) and stem assembly should drop to the bottom of the elbow after removal.

#### 3. Removal of Stem and Main Valve Assembly



K1738-Drain Nut Wrench

A. Slide the seat removing wrench over the upper stem (K1710) and down into the upper barrel. Slide the wrench over the lugs of the breaker coupling(K1713)

B. Turn the seat removal wrench in the counter clockwise direction until the main valve(K1722) can pass through the elbow. This will take approximately 6 turns. After approximately 3 to 5 turns, the force required to turn the wrench will decrease considerably, this does not guarantee the main valve is able to be removed. Continue to turn the wrench, in effect "stretching" the main valve to a smaller diameter.

C. Access the upper stem through the hole in the seat removal wrench. Lift upwards to remove the main valve. If considerable resistance is still felt, loosen the main valve an additional turn, and lift upward again.

D. Remove the seat removal wrench and lift the entire main valve/stem assembly out through the lower pipe.

E. To fully remove the main valve, first loosen the set screw(K1721A) in the drain nut (K1721).

F. Loosen the drain nut with the drain nut wrench(K1738). If the main valve was "stretched" during removal, rotate it relative to the lower stem(K1718) in the clockwise direction until resistance is no longer felt. Secure the lower stem in a vise if possible when performing this step.

G. Once the drain nut is removed, rotate the main valve in a counter-clockwise direction to un-screw it from the lower stem.

4. Inspect and Replace, if Necessary, Hydrant Components.

5. Reassemble Hydrant.

A. Inspect and clean the threads of the drain valve nut and lower stem with a wire brush.

B. Install the new main valve on the lower stem. Installation is the reverse of disassembly. Tighten the drain nut approximately ½ turn. Make sure to screw on the new main valve in a hand-tight arrangement. Ensure the baffle (K1733) is installed. Tighten the drain nut set screw (K1721A)

C. Lower the full stem assembly into the lower barrel. Make sure the "fin" of the main valve is facing opposite the inlet pipe. Allow the main valve to drop into the bottom of the elbow.

D. Slide the seat removal wrench over the stem and lugs of the breaker coupling.

E. Turn the wrench approximately 4 <sup>3</sup>/<sub>4</sub> turns to "expand" the main valve. This will correlate to approximately 170 ft\*lbs.

F. Remove the wrench and check the position of the slot in the upper stem. This slot must face opposite the intended direction of the steamer face. If slot is in the wrong position, further tighten or loosen the main valve until it is. Use the seat removal wrench to adjust the stem position.

G. Double check the O-rings in the bottom of the neck of the upper barrel(K1712). Replace if damaged. Double check the O-ring at the bottom face of the upper barrel (K1716). Wipe any debris with a clean rag, replace if damaged.

H. Install the upper barrel by guiding the upper stem through the stem bushing(K1711). The slot in the upper stem will be within the neck portion of the barrel by the time the upper stem contacts the op nut.

I. Turn the op nut and allow the threads to catch. Draw the upper barrel down until the bottom face contacts the upper face of the lower barrel.

J. Rotate the upper barrel until the bushing (K1709) is aligned with the slot in the stem. Peer through the hole in the bushing to locate this position. Screw in the stem pin(K1709B) until a sudden stop is reached. Back off the screw ½ turn. The stem pin must sit deep within the bushing and engage the slot in the stem. Verify engagement by rotating the upper barrel, it should not be able to turn more than 1/16 rotation without feeling resistance.

K. Re-install the backing set screw(K1709A). Tighten firmly.

L. Remove the op nut set screw(K1701A), back off the op stop(K1701B) as far is it can from the top side of the pentagon (it cannot come out this way). A 3/8" Allen wrench or socket can be used to accomplish both.

M. Draw up the main valve into the closed position, tighten until some resistance is felt. Check the O-ring (K1716) on the bottom face of the upper barrel, ensure that it is completely covered by the mating face of the lower barrel.

N. Install barrel couplings(K1717) and tighten bolts (K1715) to approximately 50 ft\*lbs.

O. Further close the hydrant until the pentagon is aligned enough to allow the locking wrench(K1731) to slip over the op nut and eyebolt in the neck of the upper barrel.

P. Tighten the Op nut stop (K1701B) with a 3/8" Allen key or socket until a sudden stop is felt. Do not torque against this stop, once a sharp increase in resistance is felt, immediately stop tightening. Then tighten the backing set screw (K1701A) to approximately 125 ft \*lbs.

Q. Ensure a nozzle or steamer cap is removed (K1728) and open the gate valve upstream. Check for any leaks through the main valve. If this is the case, close the gate valve, back

off the stop (K1701B) and further close the main valve, making sure to maintain alignment with the locking wrench.

R. Cycle hydrant to check for free operation.

S. Close hydrant wait for hydrant to drain, then reinstall nozzle cap and tighten