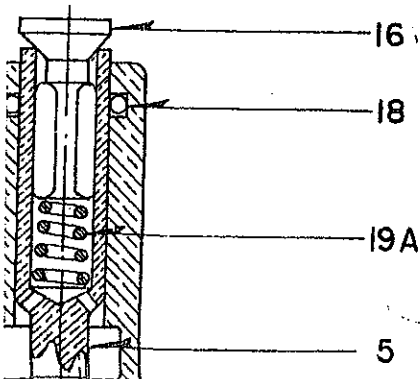
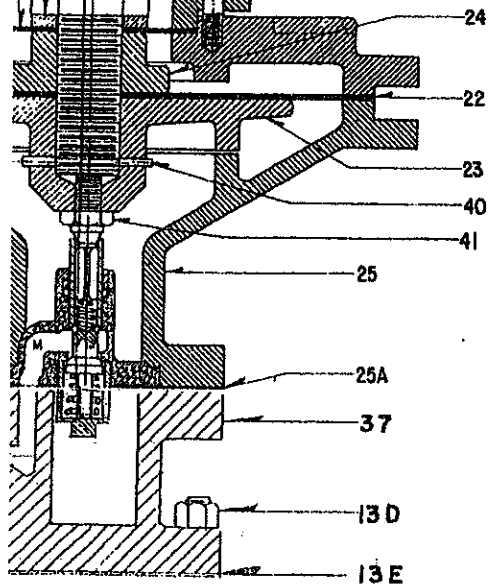


HYDRAULIC 3-WAY
PILOT VALVE



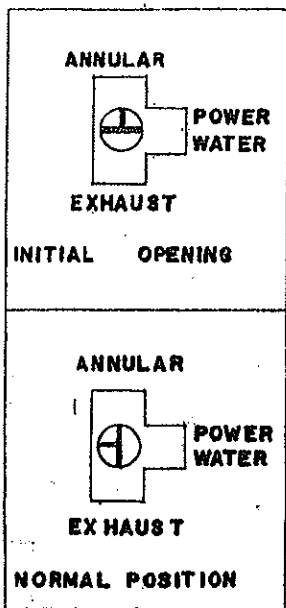
PARTS LIST	
0	ANGLE BODY
1	GLOBE BODY
2	PISTON
3	LINER
4	PISTON CUP
5	PISTON CUP FOLLOWER
6	PISTON CUP SCREWS
7	LINER CUP
8	LINER CUP FOLLOWER
9	LINER CUP SCREWS
10	SEAT RING
11	SEAT RING FOLLOWER
12	SEAT RING SCREWS
13	COVER
14	COVER BOLTS
15	COVER GASKET
16	INDICATOR ROD
17	INDICATOR GLAND
18	INDICATOR PACKING
19	INDICATOR BUSHING
20	INDICATOR LOCKNUT
21	SEAT CROWN
22	VENT TUBE BUSHING
23	VENT TUBE GLAND
24	VENT GLAND PACKING
25	COVER VENT PLUG
26	STRAINER
27	SWING CHECK VALVE
30	STOP VALVE
31	REGULATING VALVE
2A	STOP CHECK BAFFLE

ALTITUDE PILOT PARTS LIST	
13D	COVER SPOOL STUDS
13E	SPOOL GASKET
14	INTERNAL PILOT BODY
15	PILOT HI-PRESSURE VALVE
16	PILOT EXHAUST VALVE
16A	PILOT O-RING
19	HI-PRESSURE VALVE SPRING
19A	EXHAUST VALVE SPRING
20	PILOT STRAINER CAP
21	DIAPHRAGM CHAMBER STUDS
22	MAIN DIAPHRAGM
23	DIAPHRAGM DISC
24	DIAPHRAGM SPACER
25	DIAPHRAGM CHAMBER
25A	CHAMBER GASKET
26	DIAPHRAGM CHAMBER COVER
27	SPRING SUPPORT
28	SPRING GUIDE
29	SPRING
30	SPINDLE
31	AUXILIARY DIAPHRAGM
32	DIAPHRAGM CHAMBER BOLTS
33	ADJUSTING NUT
34	SPINDLE LOCKNUT WASHER
35	SPINDLE LOCKNUT
36	SPRING SUPPORT SCREWS
37	SPOOL
40	TAPERED PIN
41	DIAPHRAGM DISC TIT

NOTE:
WHEN ORDERING PARTS SPECIFY PART NUMBER,
NAME OF PART, SIZE OF VALVE FOR WHICH
REQUIRED AND MENTION SHAW SERIAL NUMBER
FROM VALVE IDENTIFICATION PLATE.

DWG 93012

3 WAY COCK POSITIONS

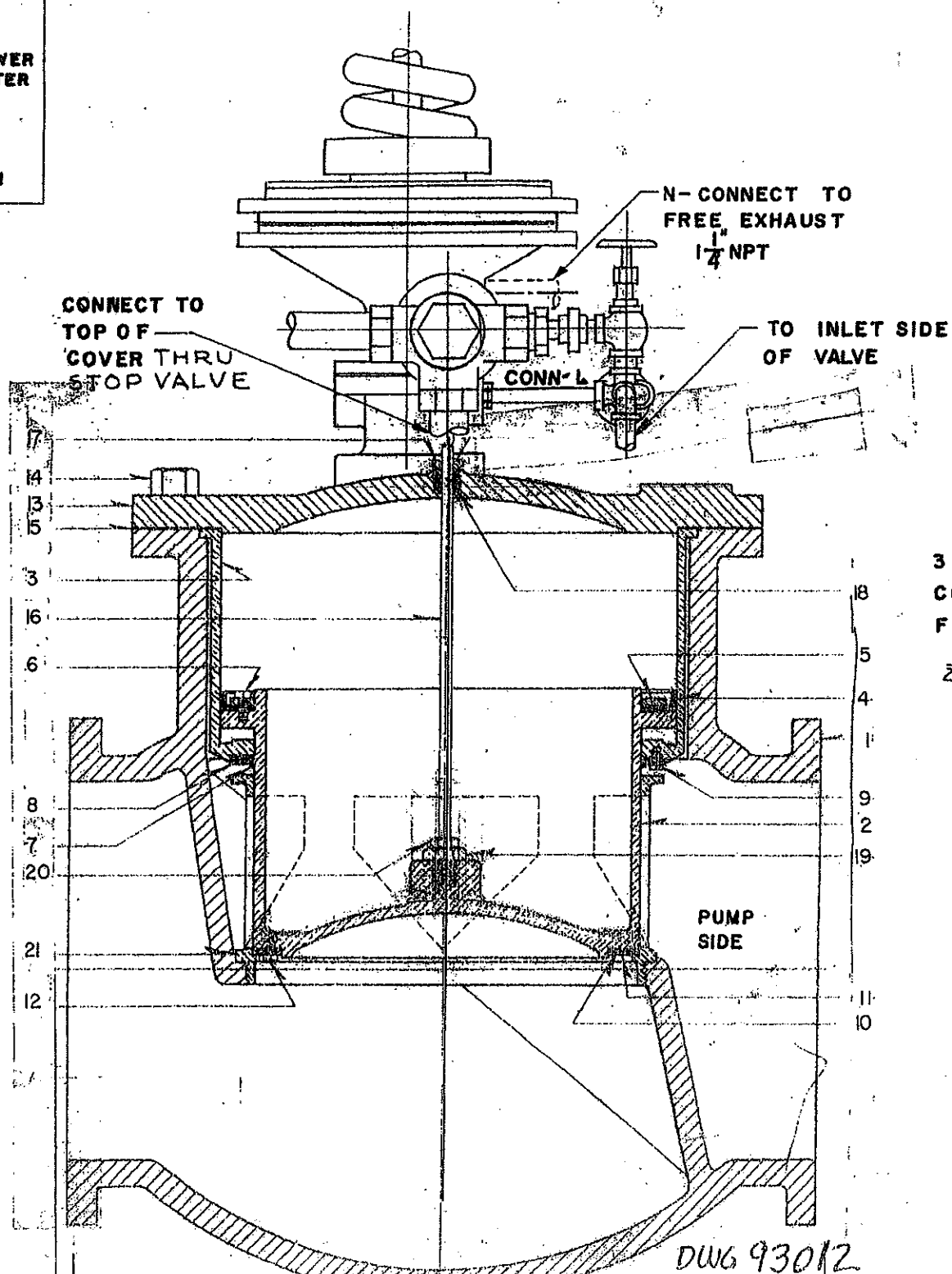


CONNECT TO
FREE EXHAUST
1" N.P.T. FOR 18", 20"
& 24" VALVES
2" N.P.T. FOR 30" &
36" VALVES

HYDRAULIC 3-WAY
PILOT VALVE

26 STRAINER

B



3 WAY
CONNE
FREE I
1/2" N.

TANK
SIDE

PUMP
SIDE

DWG 93012

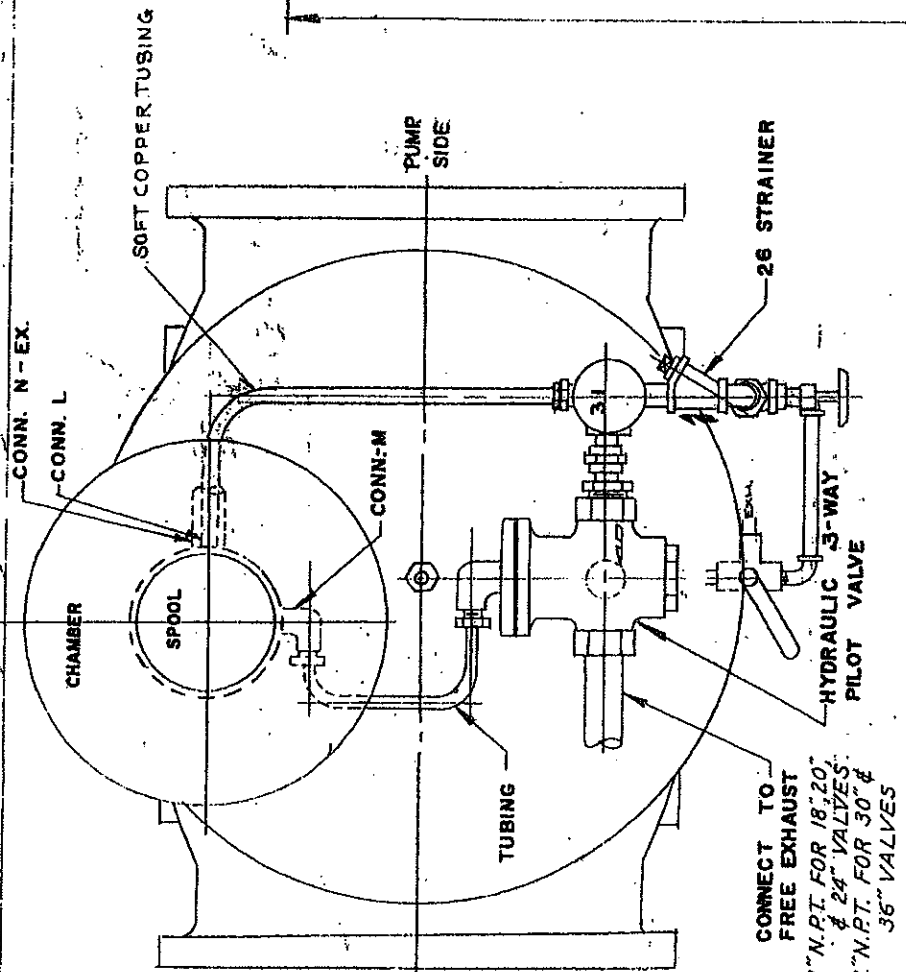
C

GENERAL DIMENSIONS

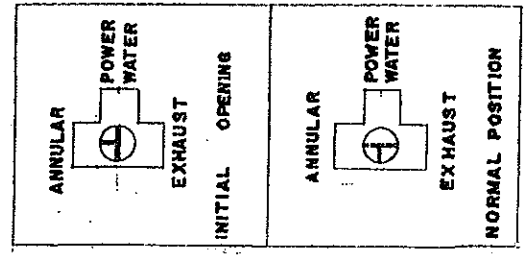
VALVE SIZE	18"	20"	24"	30"	36"
A FACE TO FACE	40	40	48	60	63
B CENTER TO TOP	58	58	64	78	86
C CENTER TO BOTTOM	20	20	22	24	30
D SIDE CLEARANCE	44	44	54	64	74

FLANGES PER A.S.A.

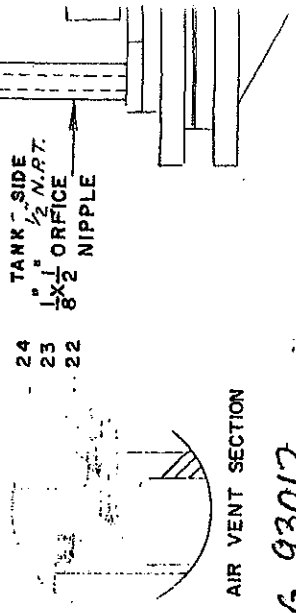
NOTE
 DOTTED PIPING NOT FURNISHED
 BY GAVSCO.



3 WAY COCK POSITIONS

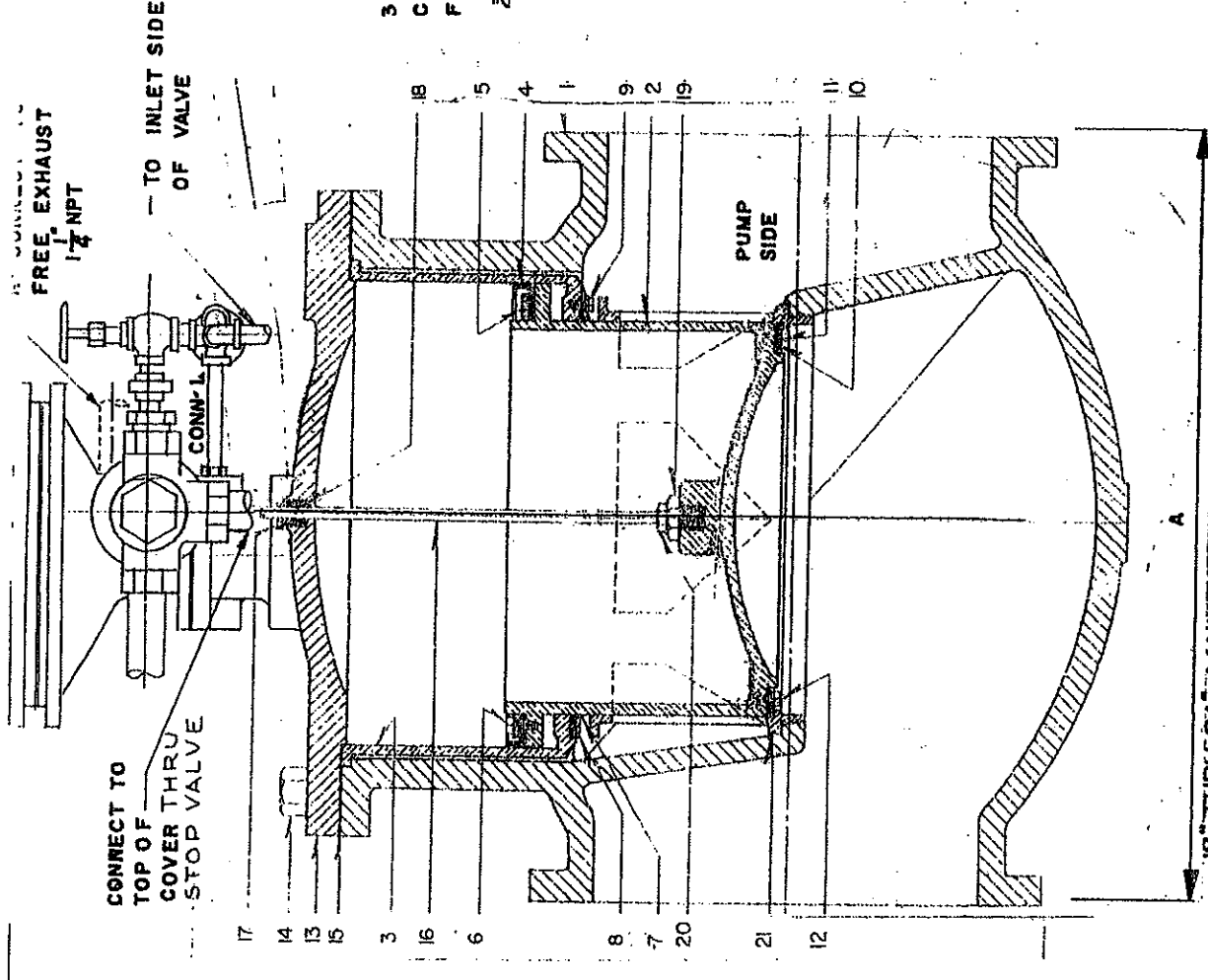
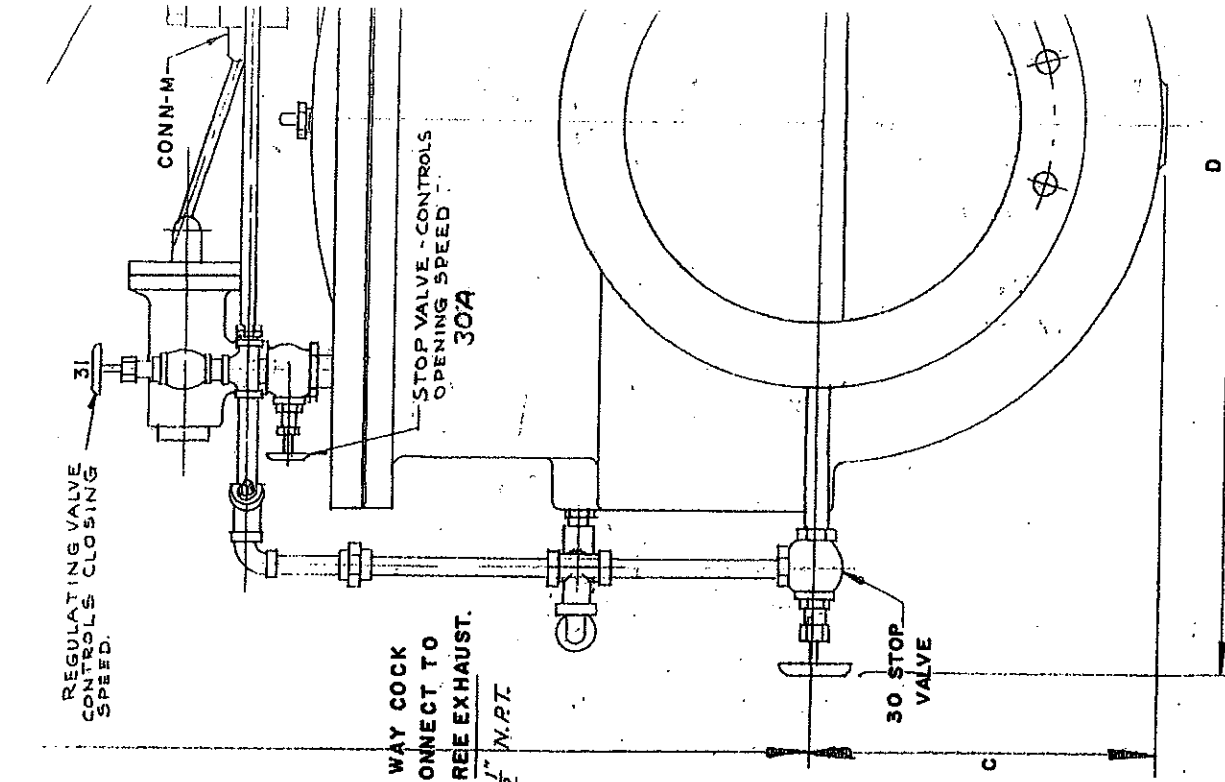


CONNECT TO
 FREE EXHAUST
 1" N.P.T. FOR 18", 20"
 & 24" VALVES
 2" N.P.T. FOR 30" &
 36" VALVES



AIR VENT SECTION

DWG 93012



DWG 193012

TO CONTROL PILOTS

COVER

O RING

TOP CUP

BOTTOM CUP

INLET

BOTTOM CAP

STEM SCREW

STEM WASHER

SCREWS

RENEWABLE SEAT

CONNECTS TO TOP OF PISTON

EXHAUST

STEM

LOWER GUIDE

SPRING

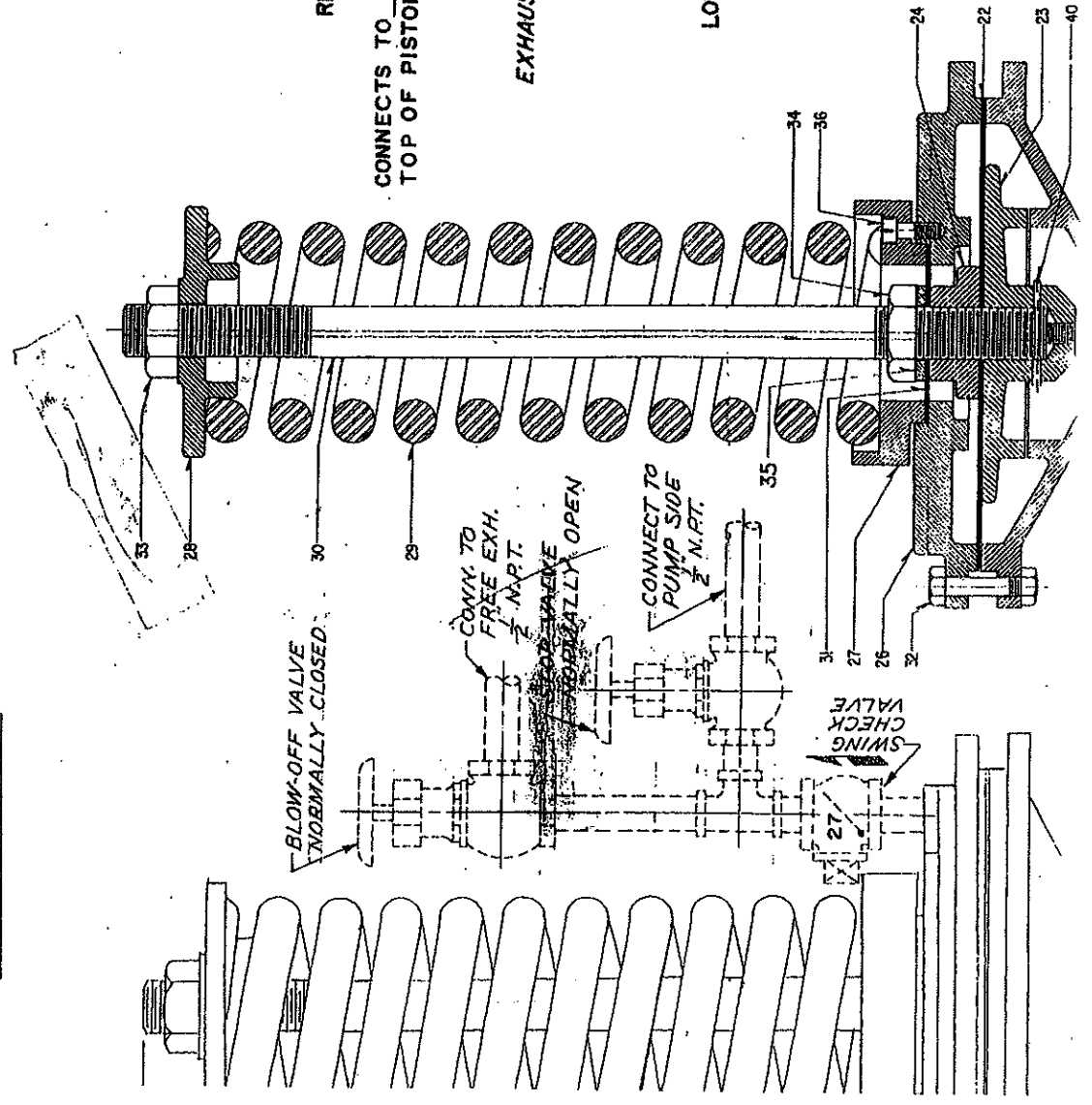
HYDRAULIC 3-WAY PILOT VALVE

PARTS LIST	
0	ANGLE BODY
1	GLOBE BODY
2	PISTON
3	LINER
4	PISTON CUP
5	PISTON CUP FOLLOWER

ALTITUDE PILOT PARTS LIST	
10	COVER SPOOL STUDS
11	COVER SPOOL
12	INTERNAL PILOT BODY
13	INTERNAL PILOT GASKET
14	PILOT HI-PRESSURE VALVE
15	PILOT EXHAUST VALVE
16	PILOT O RING
17	PILOT HI-PRESSURE VALVE SPRING
18	PILOT EXHAUST VALVE SPRING

DWG 93012

125 ASA ONLY -
SEE DWG. 93062



SWING CHECK VALVE

BLOW-OFF VALVE NORMALLY CLOSED

CONNECT TO FREE EXH. 1/2 N. FT.

BLOW-OFF VALVE NORMALLY OPEN

CONNECT TO PUMP SIDE 1/2 N. FT.

34

36

35

31

27

22

23

40

24

22

23

40

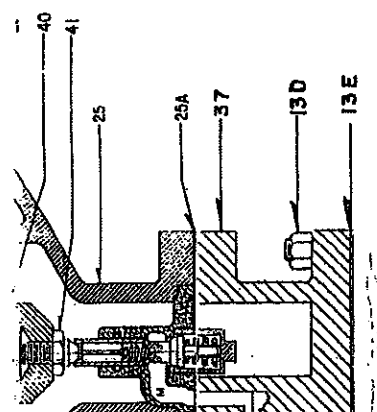
- 18 PILOT O-RING
- 19 HIGH PRESSURE VALVE SPRING
- 19A EXHAUST VALVE SPRING
- 20 PILOT STRAINER CAP
- 21 DIAPHRAGM CHAMBER STUDS
- 22 MAIN DIAPHRAGM
- 23 DIAPHRAGM DISC
- 24 DIAPHRAGM SPACER
- 25 DIAPHRAGM CHAMBER
- 25A CHAMBER GASKET
- 27 SPRING SUPPORT
- 28 SPRING COVER
- 29 SPRING
- 30 SPINDLE PIN
- 31 AUXILIARY DIAPHRAGM
- 32 DIAPHRAGM CHAMBER BOLTS
- 33 ADJUSTING NUT
- 34 SPINDLE LOCKNUT WASHER
- 35 SPRING LOCKNUT WASHER
- 36 SPRING SUPPORT SCREWS
- 37 SPOON
- 40 TAPERED PIN
- 41 DIAPHRAGM DISC TIT

NOTE: WHEN ORDERING PARTS, SPECIFY MAKE, MODEL, OR PART NO. OF VALVE FOR REFERENCE TO THIS DRAWING. PARTS NOT SHOWN ARE STANDARD.

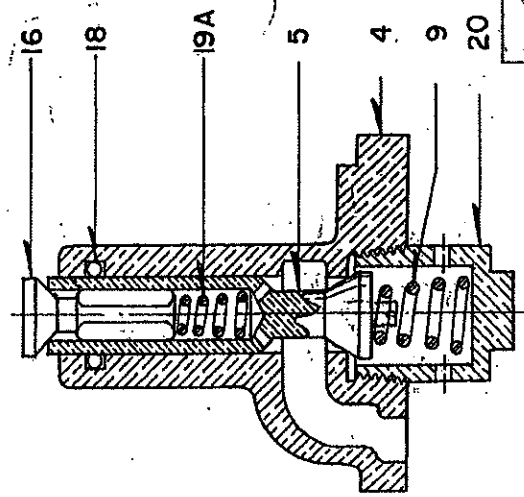
- 4 PISTON CUP FOLLOWER
- 5 PISTON CUP
- 6 PISTON CUP SCREWS
- 7 LINER CUP
- 8 LINER CUP FOLLOWER
- 9 LINER CUP SCREWS
- 10 SEAT RING
- 11 SEAT RING FOLLOWER
- 12 SEAT RING SCREWS
- 13 COVER
- 14 COVER BOLTS
- 15 COVER GASKET
- 16 INDICATOR ROD
- 17 INDICATOR GLAND
- 18 INDICATOR PACKING
- 19 INDICATOR BUSHING
- 20 INDICATOR LOCKNUT
- 21 SEAT CROWN
- 22 VENT TUBE BUSHING
- 23 VENT TUBE GLAND
- 24 VENT GLAND PACKING
- 25 COVER VENT PLUG
- 26 STRAINER
- 27 SWING CHECK VALVE
- 30 STOP VALVE
- 31 REGULATING VALVE
- 2A STOP CHECK BAFFLE

SERIAL NO. _____
 DATA REQUIRED _____
 WATER LEVEL ABOVE 0 _____
 MIN. & MAX. INLET PRESSURE _____
 DISTANCE TO RISER _____

FIGURE NUMBER
33DR-F8D 125 LB ASA STD.
35UR-F8D 250 LB ASA STD.
36VR-F8D 300 LB ASA STD.
38WR-F8D 400 LB ASA STD.



CONN. N EX.
 TO CONN. L
 POWER WATER
 CONNECT TO
 TO TOP OF
 3 WAY PILOT



ALTITUDE PILOT

24th FIG 33DR
 SN 701111

GOLDEN ANDERSON VALVE SPECIALTY CO.

18" - 3/8" GLOBE DOUBLE ACTING REVERSE FLOW ALTITUDE VALVE.

REVISION	DATE	BY	APP'D
① CHGD AUXILIARY PIPING	11/8/60		
② STOP VALVE 25-ADDED FROM			
③ NEEDLE VALVE REMOVED FROM			
④			

REFERENCE:

DRAWN	PC	6-25-59	SCALE	

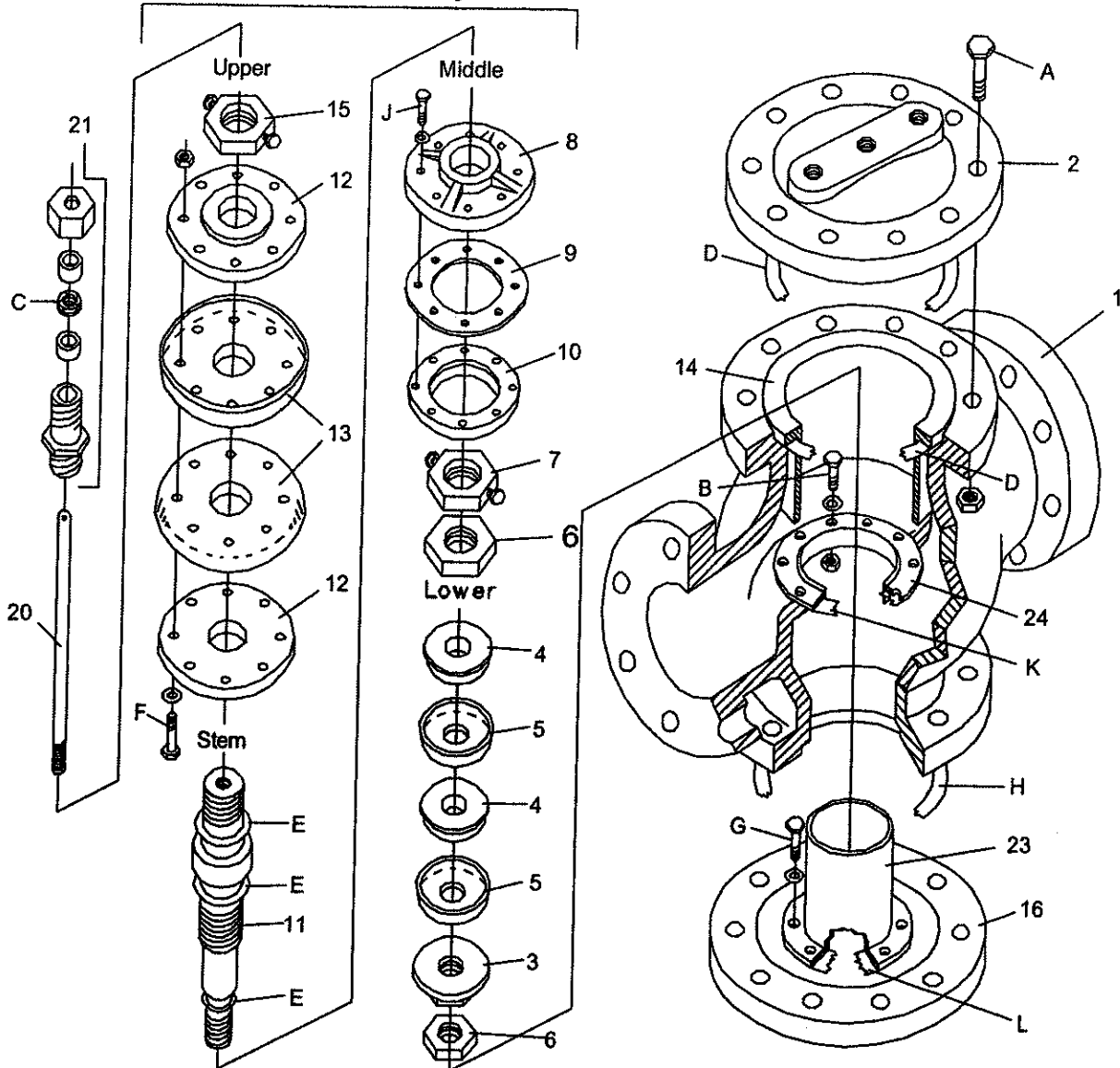
QUANTITY ORDERED: 93
 PART NUMBER: 93012

ROSS VALVE Mfg. Co., Inc.

6 OAKWOOD AVENUE - P.O. BOX 595 - TROY, NEW YORK, 12181 - TEL. (518) 274 0961

GLOBE VALVE & PISTON ASSEMBLY
WITH FLAT SEAT & PLAIN PACKING SUPPORT

Piston Assembly



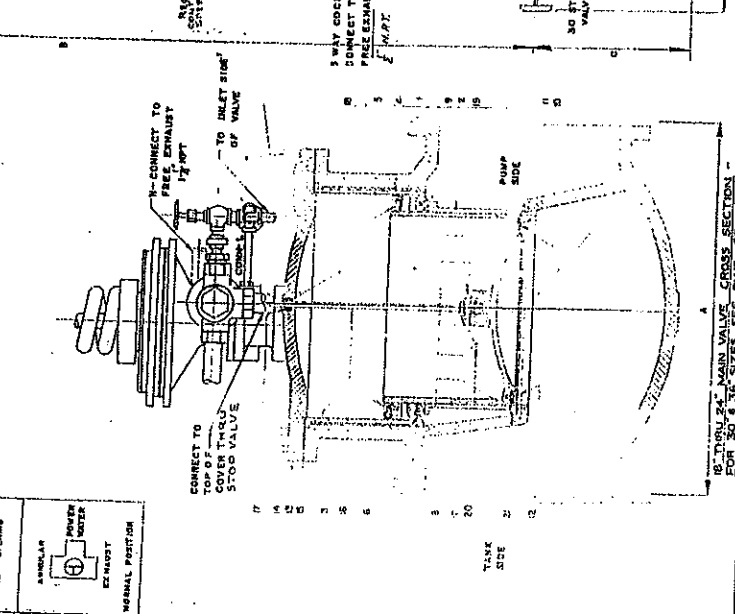
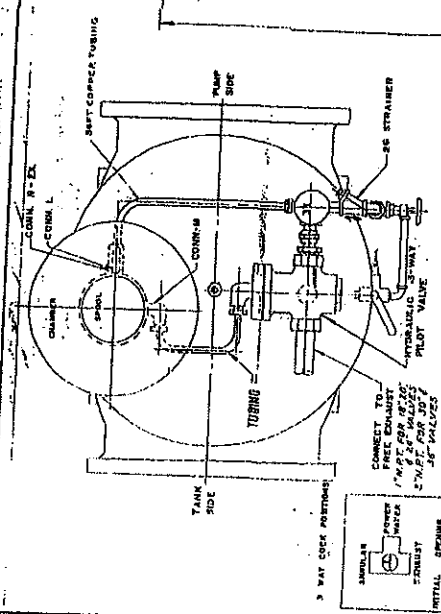
PART	DESCRIPTION	QUANTITY
1	SHELL	1
2	TOP CAP	1
3	BOTTOM STEM GUIDE NUT	1
4	PISTON CUP FOLLOWERS (SET OF 2)	1
*5	PISTON CUP PACKING	2
6	BOTTOM STEM LOCK NUT	2
7	STEM NUT W/ SET SCREWS	1
8	SEAT DISC	1
*9	SEAT PACKING	1
10	SEAT PACKING SUPPORT	1
11	STEM	1
12	MAIN CUP PLATES (SET OF 2)	1
*13	MAIN CUP PACKING	2
14	MAIN BUSHING	1
15	UPPER STEM NUT W/ SET SCREWS	1
16	BOTTOM CAP	1

PART	DESCRIPTION	QUANTITY
20	INDICATOR ROD	1
21	INDICATOR STUFFING BOX	1
23	BOTTOM CAP CYLINDER	1
24	SEAT RING	1
A	BOLT & NUT - TOP & BOTTOM CAP	VARY
B	BOLT, NUT & WASHER - SEAT RING	VARY
*C	PACKING - INDICATOR STUFFING BOX	1 SET
*D	GASKET - TOP CAP & MAIN BUSHING	2
*E	GASKET - STEM	3
F	BOLT, NUT & WASHER - CUP PLATES	VARY
G	BOLT & WASHER - BOTTOM CAP CYLINDER	VARY
H	GASKET - BOTTOM CAP	1
J	BOLT, NUT & WASHER - SEAT DISC	VARY
K	GASKET - SEAT RING	1
L	GASKET - BOTTOM CAP CYLINDER	1

* INDICATES WHICH ITEMS COME IN THE STANDARD VALVE REPAIR KIT.

GENERAL DIMENSIONS									
VALVE SIZE	18"	20"	24"	30"	36"				
A FACE TO FACE	40	40	60	80	87				
B CENTER TO TOP	38	38	58	84	79				
C CENTER TO BOTTOM	80	80	82	84	30				
D SIDE CLEARANCE	4 1/2	4 1/2	4 1/2	5 1/2	5 1/2				

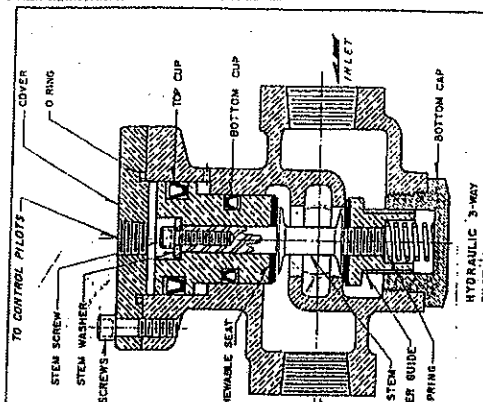
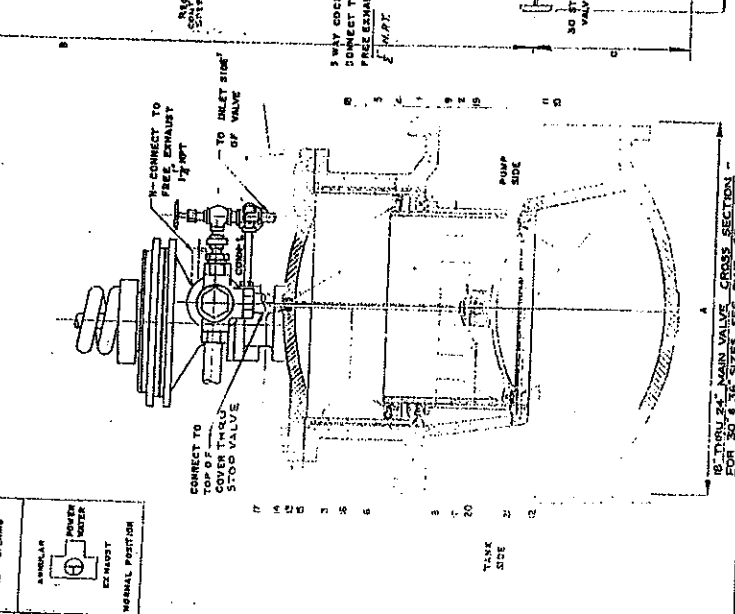
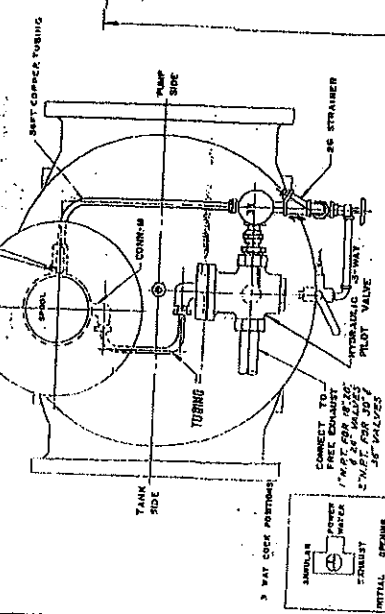
FLANGES PER ASA



USE ASA ONLY - SEE DRAWING 33062Z

GENERAL DIMENSIONS									
VALVE SIZE	18"	20"	24"	30"	36"				
A FACE TO FACE	40	40	60	80	87				
B CENTER TO TOP	38	38	58	84	79				
C CENTER TO BOTTOM	80	80	82	84	30				
D SIDE CLEARANCE	4 1/2	4 1/2	4 1/2	5 1/2	5 1/2				

FLANGES PER ASA



- PISTON LIST**
- 1. PISTON
 - 2. PISTON CUP FOLLOWER
 - 3. PISTON CUP
 - 4. PISTON CUP SCREWS
 - 5. LINER CUP FOLLOWER
 - 6. LINER CUP
 - 7. LINER CUP SCREWS
 - 8. SEAT RING FOLLOWER
 - 9. SEAT RING
 - 10. SEAT RING SCREWS
 - 11. COVER BOLTS
 - 12. COVER BOLTS WASHERS
 - 13. COVER BOLTS NUTS
 - 14. INDICATOR ROD
 - 15. INDICATOR ROD WASHER
 - 16. INDICATOR ROD SCREW
 - 17. INDICATOR O-RING
 - 18. INDICATOR LOCKWASHER
 - 19. INDICATOR LOCKWASHER WASHER
 - 20. INDICATOR LOCKWASHER NUT
 - 21. SEAT CROWN
 - 22. VENT TUBE BUSHING
 - 23. VENT TUBE
 - 24. VENT TUBE ISLAND
 - 25. COVER "VERT" PILOT
 - 26. STAINLESS STEEL
 - 27. STAINLESS STEEL
 - 28. STAINLESS STEEL
 - 29. STOP VALVE
 - 30. STOP VALVE
 - 31. REGULATING VALVE
 - 32. STOP CHECK VALVE
 - 33. STOP CHECK VALVE

NOTE: This valve may be used for any liquid or gas service where the inlet pressure is not in excess of 100 PSI.

SERIAL NO. _____

DATA REQUIRED: WATER LEVEL ABOVE & DISTANCE TO RISER

INLET PRESSURE _____

FLOW ALTIITUDE VALVE _____

ALTIITUDE PILOT _____

GOLDEN-ANDERSON VALVE SPECIALTY CO.

18" - 36" REAR DOUBLE ACTING REVERSE FLOW ALTIITUDE VALVE

18" - 36" MAIN VALVE - CROSS SECTION FOR 30" & 36" SIZES - SEE DRAWING 130-12

3 WAY COCK POSITION: ANNUAL, POWER WATER, TRIP, INITIAL SPONGES, NORMAL POSITION, EXHAUST

18" - 36" MAIN VALVE - CROSS SECTION FOR 30" & 36" SIZES - SEE DRAWING 130-12

3 WAY COCK POSITION: ANNUAL, POWER WATER, TRIP, INITIAL SPONGES, NORMAL POSITION, EXHAUST

18" - 36" MAIN VALVE - CROSS SECTION FOR 30" & 36" SIZES - SEE DRAWING 130-12

3 WAY COCK POSITION: ANNUAL, POWER WATER, TRIP, INITIAL SPONGES, NORMAL POSITION, EXHAUST

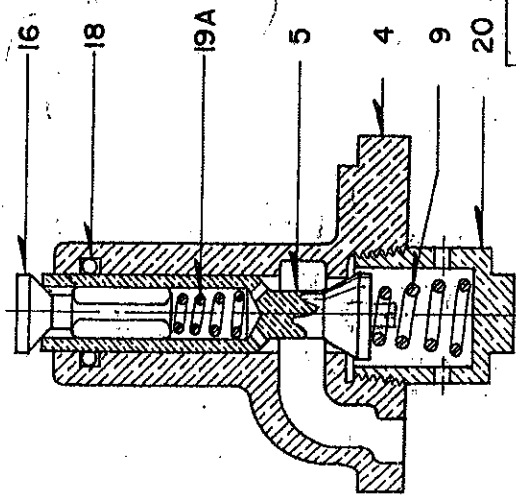
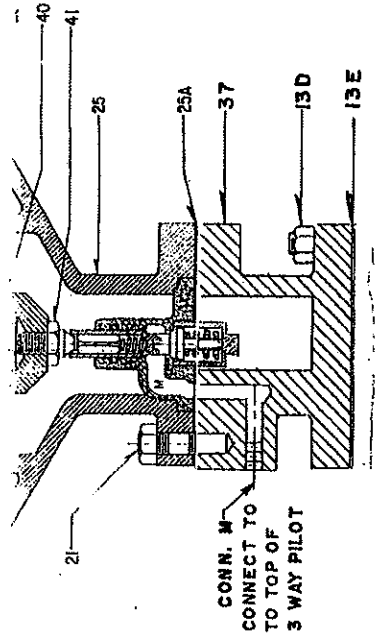
16	PISTON O RING
19	HI-PRESSURE VALVE SPRING
19A	EXHAUST VALVE SPRING
20	PISTON STRAINER CAP
21	DIAPHRAGM CHAMBER STUDS
22	MAIN DIAPHRAGM
23	DIAPHRAGM DISC
24	DIAPHRAGM SPACER
25	DIAPHRAGM CHAMBER
25A	CHAMBER GASKET
26	DIAPHRAGM CHAMBER COVER
27	SPRING SUPPORT
28	SPRING GUMMER
29	SPRING
30	SPINDLE
31	AUXILIARY DIAPHRAGM
32	DIAPHRAGM CHAMBER BOLTS
33	ADJUSTING NUT
34	SPINDLE LOCKWASHER
35	SPINDLE LOCKNUT WASHERS
36	SPRING SUPPORT SCREWS
37	SPRING
40	TAPERED PIN
41	DIAPHRAGM-DISC TIT

NOTE: THESE DIMENSIONS ARE FOR PART NUMBER 33DR-FBD 125 LB ASA STD. ALL OTHER PARTS OF THIS VALVE SHALL BE IDENTICAL UNLESS OTHERWISE SPECIFIED.

4	PISTON CUP
5	PISTON CUP FOLLOWER
6	PISTON CUP SCREWS
7	LINER CUP
8	LINER CUP FOLLOWER
9	LINER CUP SCREWS
10	SEAT RING
11	SEAT RING FOLLOWER
12	SEAT RING SCREWS
13	COVER
14	COVER BOLTS
15	COVER GASKET
16	INDICATOR ROD
17	INDICATOR GLAND
18	INDICATOR PACKING
19	INDICATOR BUSHING
20	INDICATOR LOCKNUT
21	SEAT CROWN
22	VENT TUBE BUSHING
23	VENT TUBE GLAND
24	VENT GLAND PACKING
25	COVER VENT PLUG
26	STRAINER
27	SWING CHECK VALVE
30	STOP VALVE
31	REGULATING VALVE
2A	STOP CHECK BAFFLE

SERIAL NO. _____
 DATA REQUIRED _____
 WATER LEVEL ABOVE ϕ _____
 MIN. & MAX. INLET PRESSURE _____
 DISTANCE TO RISER _____

FIGURE NUMBER
33DR-FBD 125 LB ASA STD.
33DR-FBD 250 LB ASA STD.
33DR-FBD 300 LB ASA STD.
33DR-FBD 400 LB ASA STD.



ALTITUDE PILOT

24" FIG 33DR
 5/1701111

GOLDEN-ANDERSON VALVE-SPECIALTY CO.

18" 3-1/2" GLOBE DOUBLE ACTING REVERSE FLOW ALTITUDE VALVE.

REVISION	DATE
① CHGD AUXILIARY PIPING 11/8/60	
② STOP VALVE 33-ASD33 TYP	
③ NEEDLE VALVE REMOVED 11/8/60	
④	

REFERENCES:

DRAWN	PC	6-25-59	SCALE	33DR	4	DRAWING NUMBER	93012
-------	----	---------	-------	------	---	----------------	-------

TO CONTROL PILOTS

COVER

O RING

STEM SCREW

STEM WASHER

SCREWS

TOP CUP

RENEWABLE SEAT

BOTTOM CUP

CONNECTS TO TOP OF PISTON

EXHAUST

STEM GUIDE

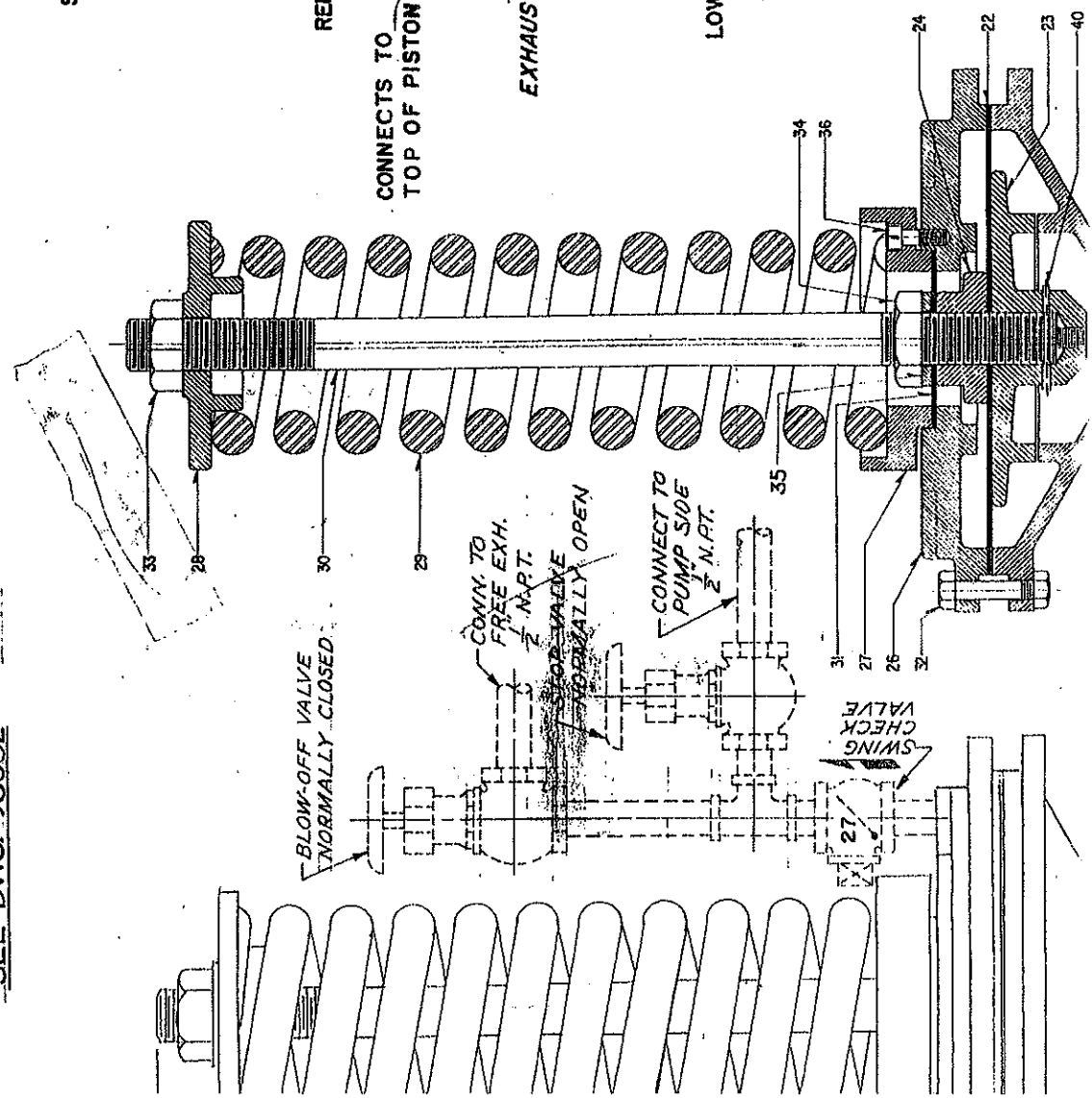
SPRING

BOTTOM CAP

INLET

HYDRAULIC 3-WAY PILOT VALVE

125 ASA ONLY -
SEE DWG. 93062

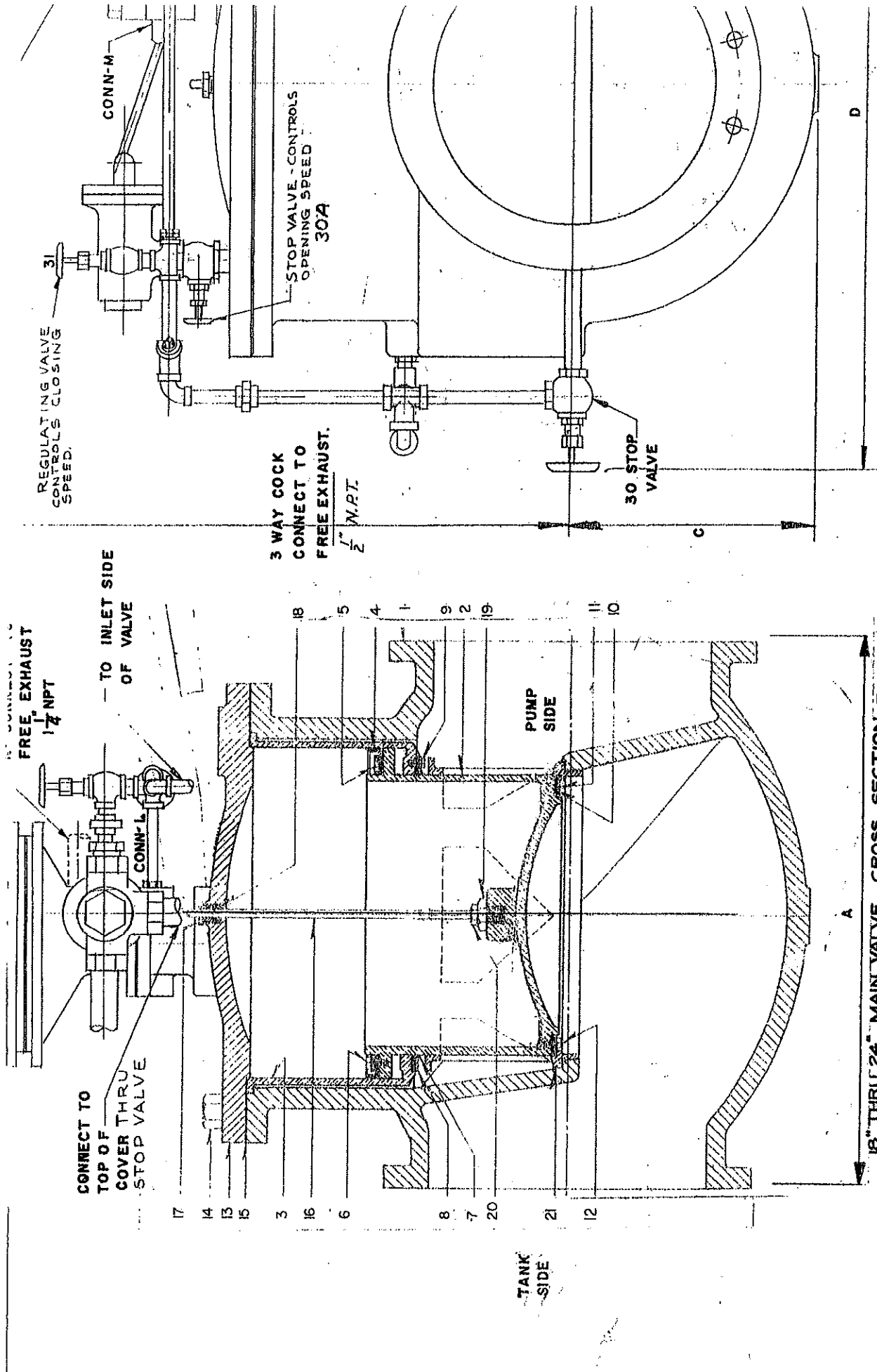


PARTS LIST

0	ANGLE BODY
1	GLOBE BODY
2	PISTON
3	LINER
4	PISTON CUP
5	PISTON CUP FOLLOWER

130	COVER SPOOL STUDS
131	COVER SPOOL GASKET
132	INTERNAL PILOT BODY
133	PILOT HI-PRESSURE VALVE
134	PILOT EXHAUST VALVE
135	PILOT O RING
136	HI-PRESSURE VALVE SPRING
137	EXHAUST VALVE SPRING

DWG 93012



18" THRU 24" MAIN VALVE CROSS SECTION
 FOR 30" & 36" SIZES SEE DWG. 9306Z & 9309Z

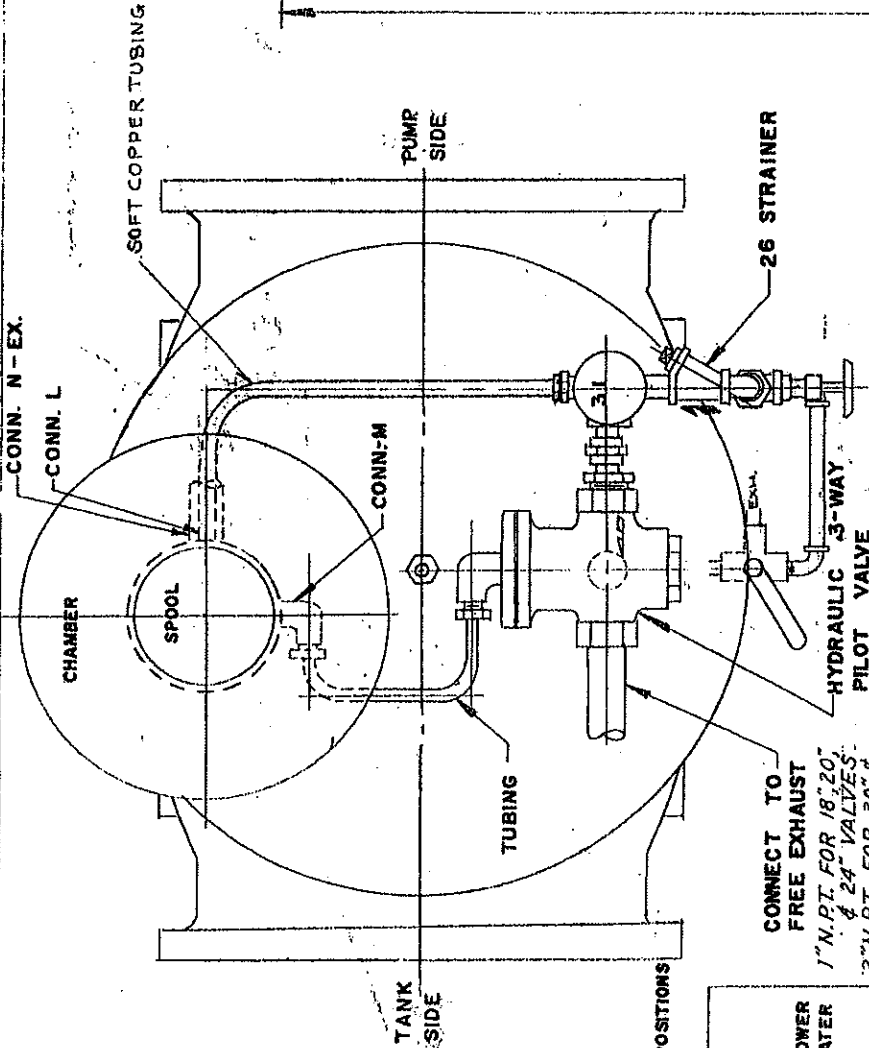
DWG 93012

GENERAL DIMENSIONS

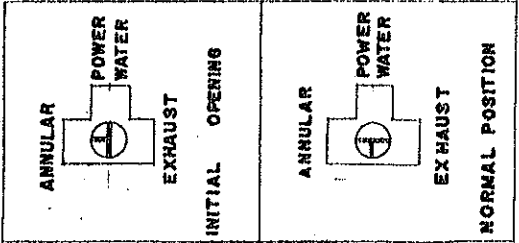
VALVE SIZE	18"	20"	24"	30"	36"
A FACE TO FACE	40	40	48	60	63
B CENTER TO TOP	58	58	64	78	86
C CENTER TO BOTTOM	20	20	22	24	30
D SIDE CLEARANCE	44	44	54	64	74

FLANGES PER. ASA.

NOTE
 DOTTED PIPING NOT FURNISHED
 BY 6AVS.CO.



CONNECT TO
 FREE EXHAUST
 1" N.P.T. FOR 18", 20"
 & 24" VALVES
 2" N.P.T. FOR 30" &
 36" VALVES



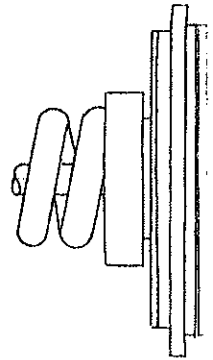
STOP VALVE
 NORMALLY OPEN

CONNECT TO
 TANK SIDE
 1" N.P.T.
 1/2" OFFICE
 8x2 NIPPLE



AIR VENT SECTION

N-CONNECT TO
 FREE, EXHAUST



DWG 93012