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(Single Internal Mechanical Seal) Exploded View

Packing Arrangements

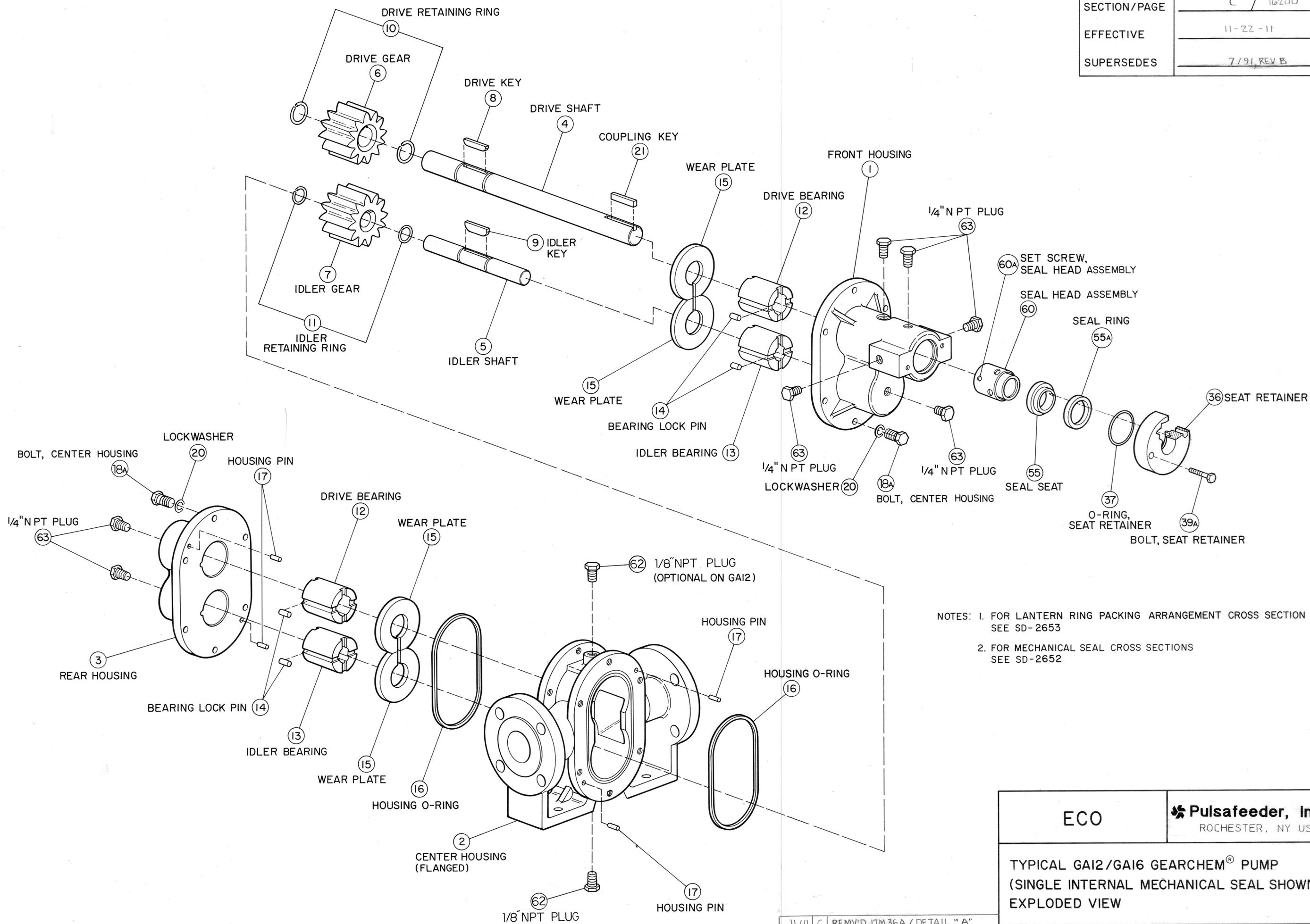
Bill of Materials

Cross Section with Lantern Ring Packing Box

Mechanical seal

Unmounted Pump

Flanged Unmounted Pump



NOTES: 1. FOR LANTERN RING PACKING ARRANGEMENT CROSS SECTION SEE SD-2653
 2. FOR MECHANICAL SEAL CROSS SECTIONS SEE SD-2652

ECO

Pulsafeeder, Inc.
 ROCHESTER, NY USA

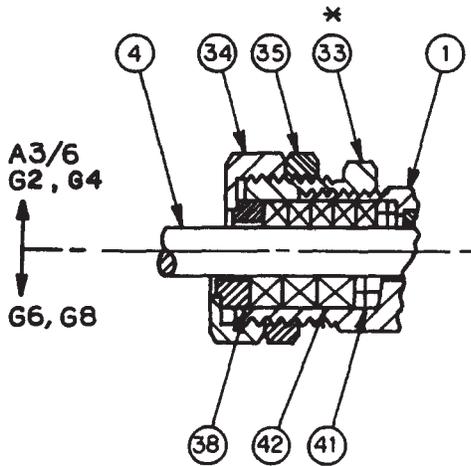
TYPICAL GAI2/GAI6 GEARCHEM® PUMP
 (SINGLE INTERNAL MECHANICAL SEAL SHOWN)
 EXPLODED VIEW

11/11	C	REMOVED ITEM 36A / DETAIL "A"
7/91	B	REVISED ITEM NUMBERS
6/85	A	REV NOTES & NOMENCLATURE

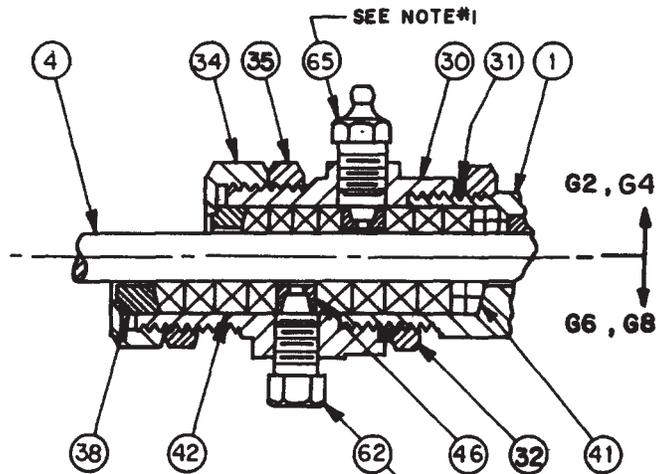
DWN. BY: B.R.
 DATE: 10-1-79

SD-2613 / REV. C

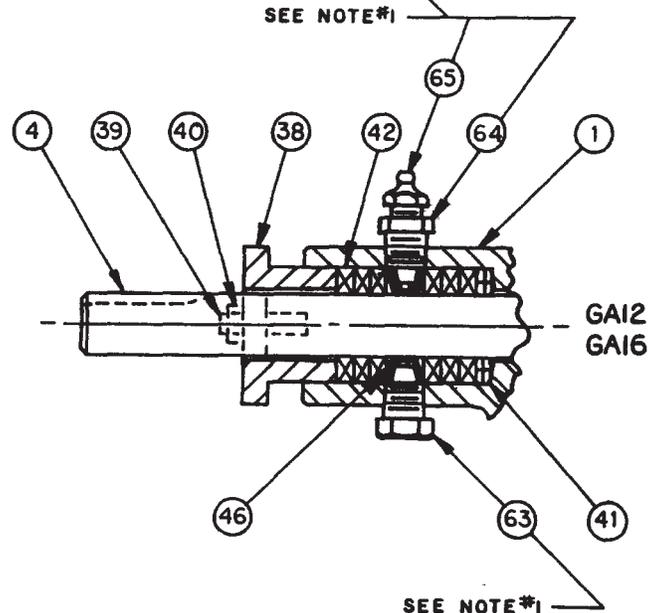
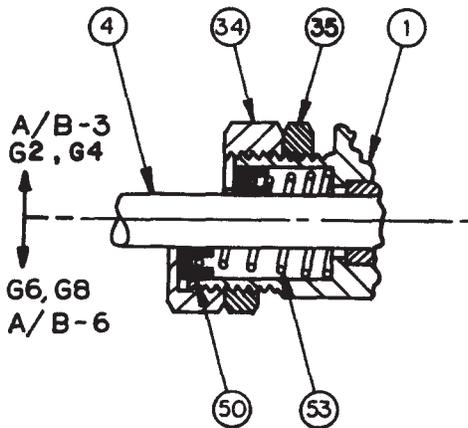
STANDARD STUFFING BOX



LANTERN RING STUFFING BOX



U-CUP LIP SEAL



65	GREASE FITTING
64	ADAPTOR, 1/4" TO 1/8" NPT
63	PLUG, 1/4" NPT
62	PLUG, 1/8" NPT
53	SPRING, U-CUP
50	LIP SEAL, U-CUP
46	LANTERN RING
42	PACKING RING
41	PACKING END RING
40	NUT, STUD
39	STUD, PACKING GLAND
38	PACKING GLAND
35	LOCK NUT
34	GLAND NUT
33	HOUSING EXTENSION
32	LOCK NUT, HOUSING
31	GASKET
30	PACKING BOX
4	DRIVE SHAFT
1	FRONT HOUSING
ITEM	PART NAME

- NOTES:
1. PARTS SHOWN 90° OUT OF POSITION.
 2. *ITEM 33 COMPONENT ONLY A3/6, G2/4.
 3. REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS & QUANTITY.

10/97	D	UPDATED ITED NUMBERS
7/91	C	UPDATED ITEM NUMBERS
7/88	B	ADDED G2 SERIES
8/87	A	ADDED PACKING END RING
SECTION / PAGE		C / 12201
EFFECTIVE		12 / 01 / 97
SUPERSEDES		01 / 01 / 93

ECO	Pulsafeeder, Inc. ROCHESTER, NY USA
PACKING ARRANGEMENTS FOR GEARCHEM/ROTARY PUMPS	
DWN BY: KRY	SD-2653
DATE: 6-19-85	
REV. C	

PARTS ARE ON MANUAL DRAWING

NOTES:

- 1.) PARTS SHOWN 90° OUT OF POSITION.
- 2.) * ITEM 33 COMPONENT ONLY A3/6, G2/4.
- 3.) REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS & QUANTITY.

65	GREASE FITTING
64	ADAPTOR, 1/4" TO 1/8"
63	PLUG, 1/4" NPT
62	PLUG, 1/8" NPT
50	LIP SEAL, U-CUP
46	LANTERN RING
42	PACKING RING
41	PACKING END RING
40	NUT, STUD
39	STUD, PACKING GLAND
38	PACKING GLAND
35	LOCK NUT
34	GLAND NUT
33	HOUSING EXTENSION
32	LOCK NUT, HOUSING
31	GASKET
30	PACKING BOX
4	DRIVE SHAFT
1	FRONT HOUSING
ITEM	PART NAME

ALL DIMENSIONS ARE IN INCHES

ECO

PULSAFEEDER
A Unit of IDEX Corporation

PACKING ARRANGEMENTS FOR
GEARCHEM/ROTARY PUMPS

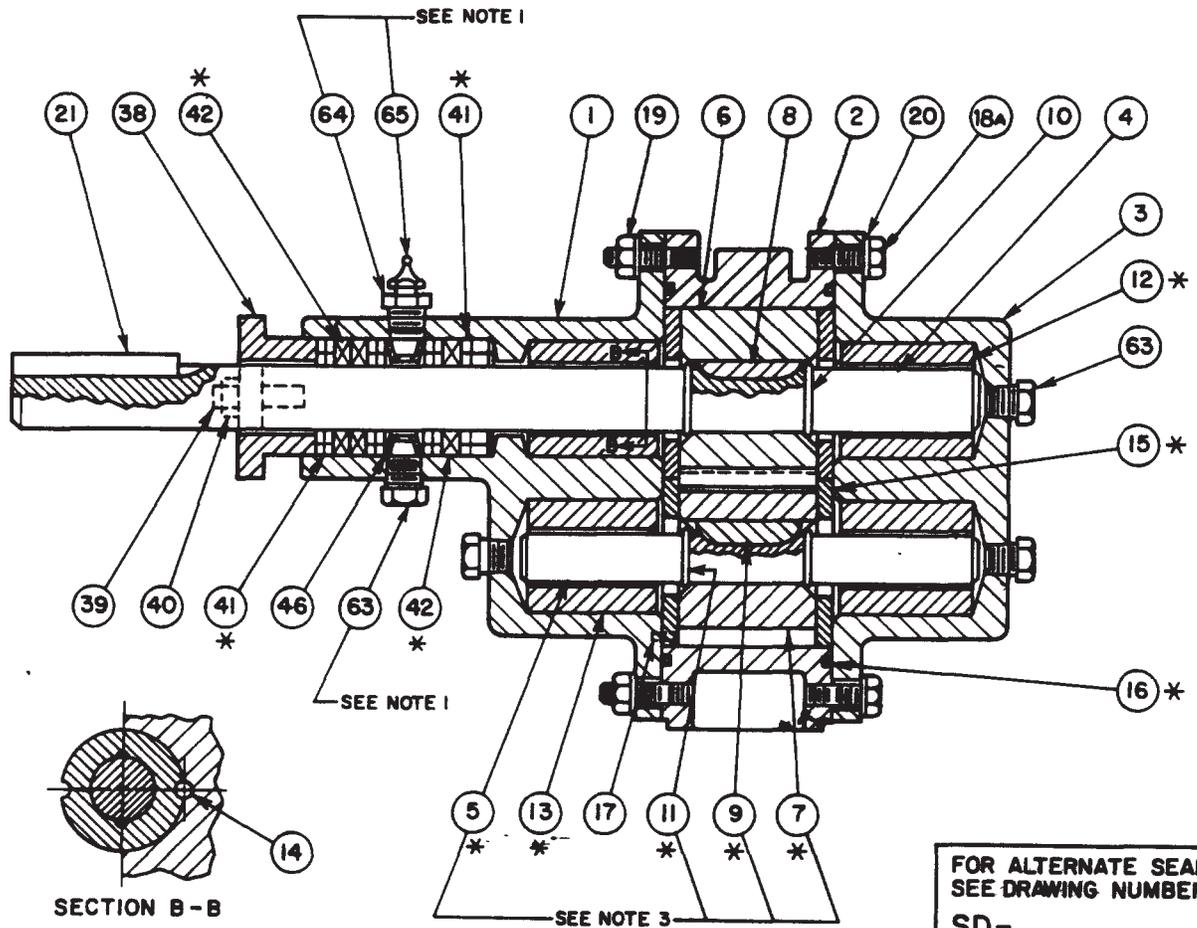
△	REMOVED ITEM NUMBER 53	/ /
REF	REVISION UPDATE	DATE

SECTION/PAGE	
EFFECTIVE	04/03/01
SUPERSEDES	12/10/97

DWN BY: KRY	SD-2653
DATE: 6/19/85	

ITEM	PART NAME	ITEM	PART NAME
1	FRONT HOUSING	17	HOUSING PIN
2	CENTER HOUSING	18A	HOUSING BOLT
3	REAR HOUSING	19	NUT, HOUSING BOLT
4	DRIVE SHAFT	20	LOCK WASHER
5	IDLER SHAFT	21	COUPLING KEY
6	DRIVE GEAR	38	PACKING GLAND
7	IDLER GEAR	39	STUD, PACKING GLAND
8	DRIVE KEY	40	NUT, PACKING GLAND STUD
9	IDLER KEY	41	PACKING END RING
10	DRIVE RETAINING RING	42	PACKING RING
11	IDLER RETAINING RING	46	LANTERN RING
12	DRIVE BEARING	63	PLUG, 1/4" NPT
13	IDLER BEARING	64	ADAPTOR, 1/4" TO 1/8" NPT
14	BEARING LOCK PIN	65	GREASE FITTING
15	WEAR PLATE		
16	HOUSING O-RING		

SECTION / PAGE	C / 12202
EFFECTIVE	01-01-93
SUPERSEDES	01-26-81



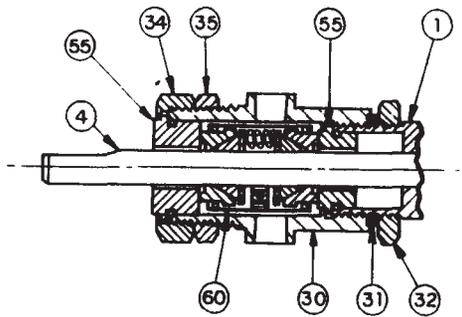
FOR ALTERNATE SEAL
SEE DRAWING NUMBER
SD-_____

- NOTES: 1. PARTS SHOWN 90° OUT OF POSITION.
 2. * RECOMMENDED SPARE PARTS, AVAILABLE AS OVERHAUL KIT.
 3. RECOMMENDED SPARE PARTS FOR NON-METALLIC IDLER GEARS ONLY.
 4. MECHANICAL SEALS ARE AVAILABLE.
 5. DRAIN PORT STANDARD (NOT SHOWN).

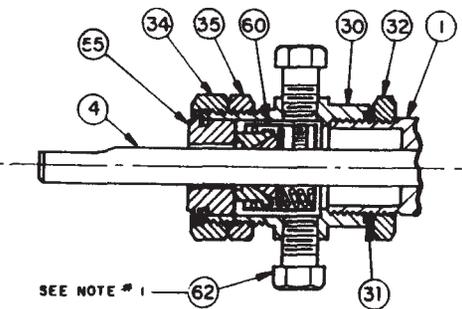
ECO PUMP CORPORATION SOUTH PLAINFIELD, N.J. U.S.A.	
GAI2 MODEL GEARCHEM® PUMP CROSS SECTION WITH LANTERN RING PACKING BOX	
DWN. BY: B.R.	SD-2605
DATE: 10-1-79	

ITEM	PART NAME
1	FRONT HOUSING
4	DRIVE SHAFT
30	SEAL HOUSING
31	GASKET
32	LOCK NUT, HOUSING
34	GLAND NUT
35	LOCK NUT
36	SEAT RETAINER W/PIN
37	O-RING, SEAT RETAINER
39A	BOLT, SEAT RETAINER
55	SEAL SEAT W/SEAL RING GA12, 16
55	SEAL SEAT W/O-RING G2, 4, 6, 8
59	PIN, PUMP END SEAT
60	SEAL HEAD ASSEMBLY
62	PLUG, 1/8" NPT
63	PLUG, 1/4" NPT

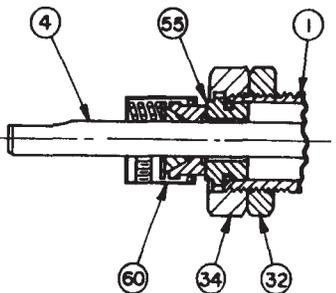
SECTION / PAGE	C / 8202
EFFECTIVE	02-01-96
SUPERSEDES	01-01-95



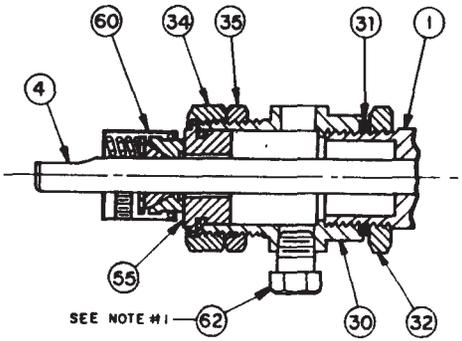
DOUBLE INTERNAL SEAL
A6, G2, G4, G6, G8



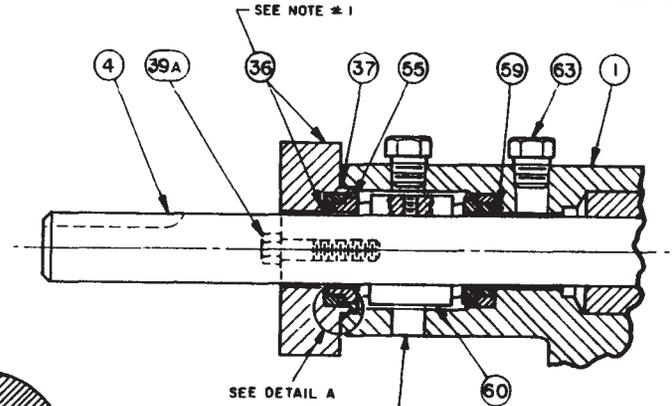
SINGLE INTERNAL SEAL
A6, G2, G4, G6, G8



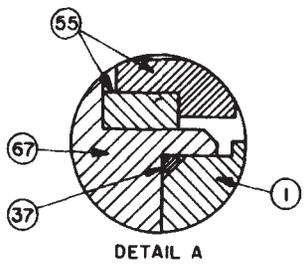
SINGLE EXTERNAL SEAL
A6, G2, G4, G6, G8



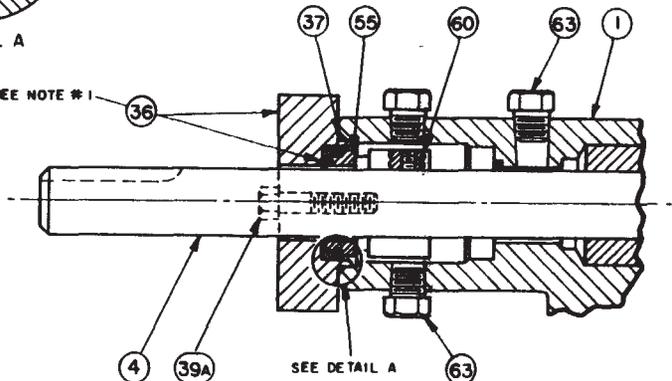
EXTERNAL SEAL FOR VACUUM SERVICE
G2, G4, G6, G8



DOUBLE MECHANICAL SEAL
GA12, GA16



DETAIL A

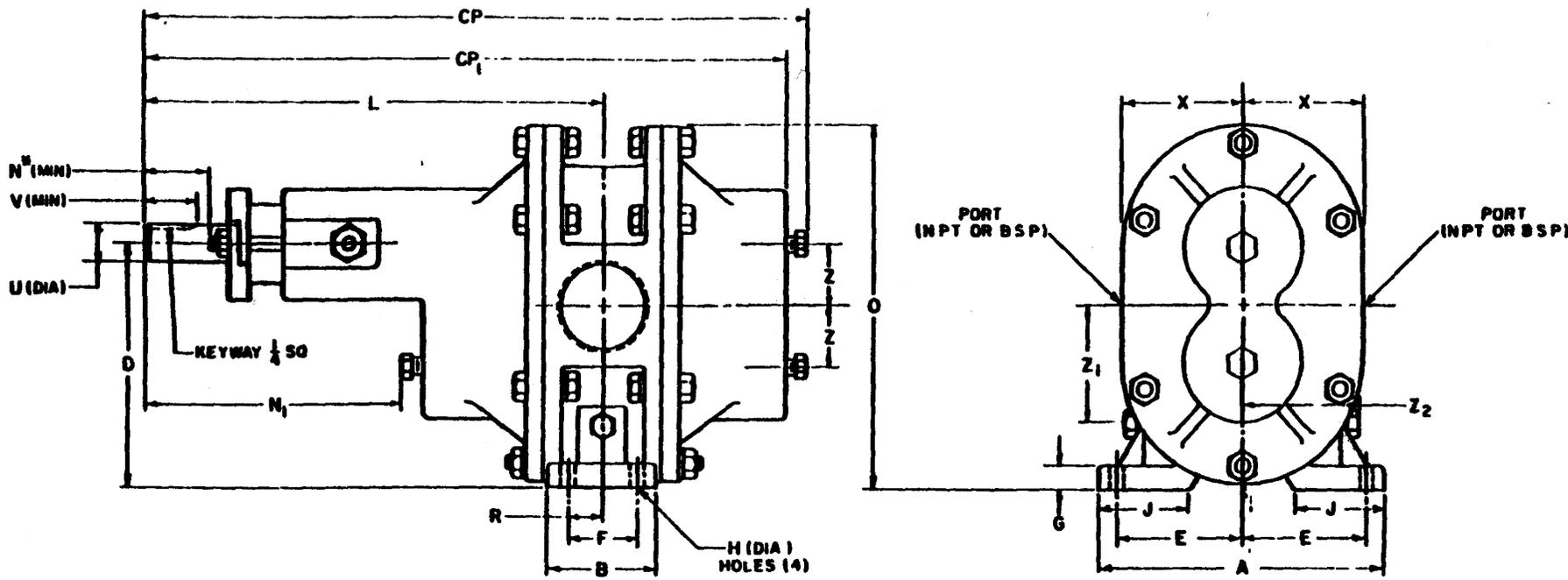


SINGLE MECHANICAL SEAL
GA12, GA16

- NOTES
1. PARTS SHOWN 90° OUT OF POSITION.
 2. REFER TO STANDARD SALES BILL OF MATERIAL FOR PART NUMBERS AND QUANTITY.
 3. FOR ALL DOUBLE MECHANICAL SEALS, CIRCULATE SUITABLE FLUID AT 25-30 PSI ABOVE PUMP DISCHARGE PRESSURE. FLUID TEMPERATURE & FLOW MUST BE ADEQUATE TO MAINTAIN A MAXIMUM TEMPERATURE OF 160°F IN SEAL HOUSING.

ECO	Pulsafeeder, Inc. ROCHESTER, NY USA
MECHANICAL SEAL ARRANGEMENTS FOR GEARCHEM/ROTARY PUMPS	
DWN BY: KRY	SD-2652
DATE: 6-19-85	

8/95	B	REM NIPPLE
7/91	A	UPDATED ITEM NUMBERS



NOTE SUCTION AND DISCHARGE PORTS DEPENDENT UPON DIRECTION OF ROTATION

PORTS	DIMENSIONS																				
	A	B	CP	CP ₁	D	E	F	G	H	J	L	N*	N ₁	O	R	U	V	X	Z	Z ₁	Z ₂
1 1/2	6	2 3/8	15 1/2	15 3/8	5	2 3/8	1 1/2	1/2	1/8	1 1/8	11 1/2	3 1/2	7	7 1/2	3/4	1	2	2 1/2	1 3/8	2 3/8	2 1/8
	152.4	60.3	393.6	384.1	127.0	66.6	38.1	12.7	8.7	47.5	285.8	82.5	177.8	190.5	19.1	25.4	50.8	63.5	30.1	65.0	61.9

3 3/8 (857MM) WITH MECHANICALLY SEALED PUMPS

ECO PUMP CORPORATION
SOUTH PLAINFIELD, N J USA

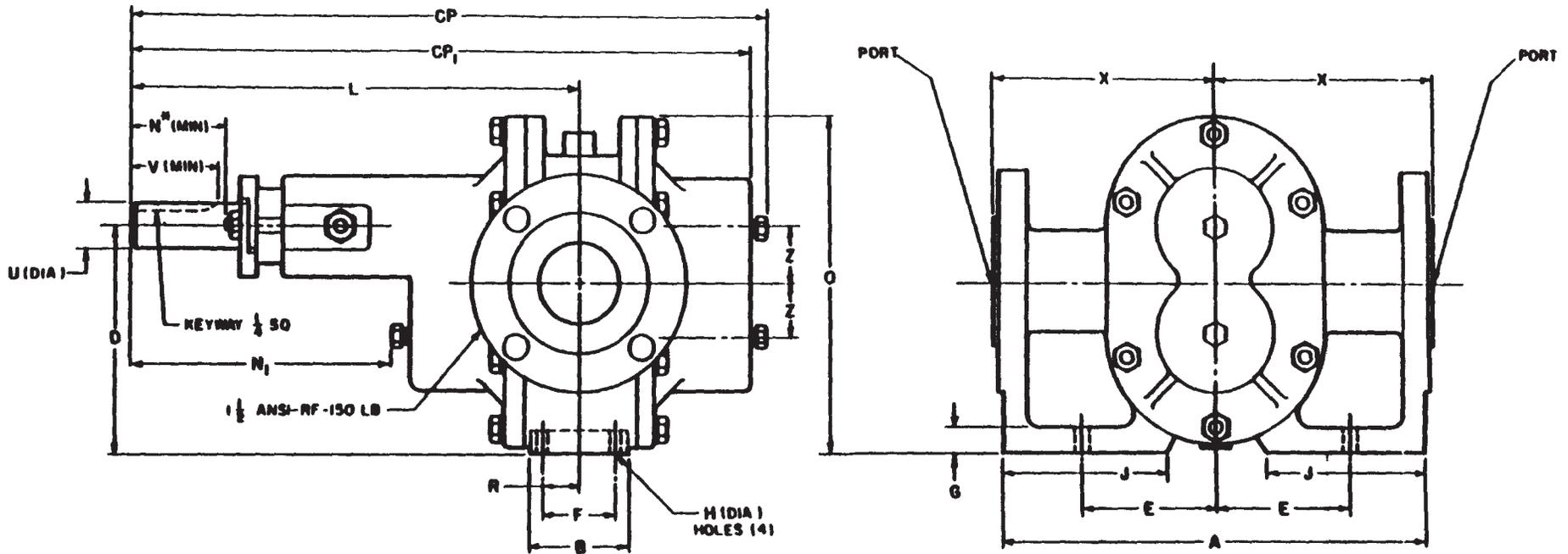
G12 SERIES - THREADED
UNMOUNTED PUMP

CUSTOMER _____
ECO ORDER NO. _____ PUMP MODEL _____
CERTIFIED BY _____

PO NO _____
ITEM NO _____
DATE _____

DWN BY _____
DATE _____

SD-2516



NOTE SUCTION AND DISCHARGE PORTS DEPENDENT UPON DIRECTION OF ROTATION

DIMENSIONS																			
PORTS	A	B	CP	CP ₁	D	E	F	G	H	J	L	N ^h	N ₁	O	R	U	V	X	Z
1 1/2	9 3/8	2 3/8	18 1/2	15 1/2	5	3 3/8	1 1/2	1/2	1 1/2	3 3/8	11 1/2	3 3/8	7	7 3/8	3/4	1	2	5	1 3/8
	238.7	59.7	393.8	394.1	127.0	92.0	38.1	12.7	8.7	95.2	285.8	82.6	177.8	190.5	19.1	25.4	50.8	127.0	30.1

N 3 1/2 (89.2MM) WITH MECHANICALLY SEALED PUMPS

ECO PUMP CORPORATION

G12 SERIES-FLANGED
UNMOUNTED PUMP

CUSTOMER _____

P.O. NO. _____

ECO ORDER NO. _____ PUMP MODEL _____

ITEM NO. _____

CERTIFIED BY _____

DATE _____

DWN BY
DATE

SD-2517