FRED C. GILBERT CO. 1615-A Bedford Way P.O. Box 5534 Oildale, CA 93388 Phone (805) 399-9569



# SERIES 4100

# Pump Catalog & Parts List



# ELECTRIC DRIVE CHEMICAL INJECTORS

## DESCRIPTION

The 4100 Series Terreteres Leienteres are positive displacement, plunger-type pumps which are gear-driven and utilize electric motors. V-belt or other rotating drives as the power source. The unit's gear drive is housed in a precision-bored, heavy cast iron case with anti-friction bearing? on the high speed shaft. The output gear, made ot high strength alloy Iron, is supported in a special hearing arrangement assuring extremely long life with maximum rigidity. The entire worm-gear drive mechanism runs in a lubricant bath for longer operating life. even under the most adverse operating conditions.

The units are available in three different gear ratios: 25:1, 50:1, 100:1 with an optional 10:1 gear reducer which provides the following ratios: 250:1, 500:1, 1000:1. There are also four different plunger sizes available: 1/8", 1/4", 3/8" and 1/2". Models with from one to eight pumping heads are available for injecting dissimilar additives or high volumes. Virtually trouble-free, the injector heads have a

built-in bleeder valve, external packing gland, and are completely protected to eliminate dust and grit. Horizontal plunger and vertical check arrangement facilitate priming and minimize possibility of air lock. Standard internal trim is stainless steel.

Accurate adjustment of the flow rate is controlled by the stroke length adjusting nut on each plunger. This manual adjustment may be made while the pump is running. The pump's plunger always returns to the same position at the end of the suction stroke. In low volume pumping, this action minimizes the effects of **entrained** vapors or gases in the fluid which could reduce pump displacement efficiency.

The **Texsteam** 4100 Series Injectors are easy to install. No expensive foundation or piping is required. These pumps will give you many years of economical and trouble-free service.



DOUBLE HEAD power unit with 10:1 gear reducer for volumes down to  $\frac{1}{2}$  pint per day.



DOUBLE HEADED power unit with electric motor drive. (Shipping weight—80 lbs.)



SINGLE HEAD power unit with electric motor drive. (Shipping weight—70 lbs.)



DOUBLE HEADED chemical injector with electric motor drive. (Shipping weight—110 lbs.)

## APPLICATION

The **Texsteam** 4100 Series can be used for chemical injection and for handling corrosive fluids. Because these units can be equipped with from one to eight heads, a wide range of additives may be accurately handled from one installation. This versatile pump has found wide acceptance for use in refineries, LACT units, salt water floods, tank batteries, process plants and in water treatment for boilers.

## MODELS AVAILABLE

The Texsteam 4100 Series pump is gear-driven and utilizes electric motors (standard or with variable speed drive), V-Belt, pneumatic motors or gasoline engines as a power source. Power units (less tank) and chemical injectors (with tank, suction piping and sight feed strainer) are available with from one to eight pumping heads in a choice of gear ratios (25:1, 50:1 or 100:1) and plunger sizes ( $\frac{1}{8}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ " or  $\frac{1}{2}$ ").

A gear reducer ahead of the gear box for low volumes to ½ pt. per day is available. The standard injector heads are supplied with ductile iron cylinders with stainless steel trim. All stainless steel is available as an option. PVC diaphragm and plunger heads for highly corrosive materials are also available. Metal-to-metal seats, Teflon packing, hastelloy ball checks and chrome-plated plungers are available as alternates to standard injector head parts. "O" ring type resilient check seats are standard on all heads.

### MODEL DESIGNATION:

- Indicates plunger size (1 × 1⁄4", ☺ is 1⁄8", 3 is 3⁄8", ≋ is 1⁄2")
- Always specify plunger size when ordering as a double check
- Indicates power unit model (without chemical tank). Absence of P indicates chemical injector model
- Indicates number of injector heads (2 through 8). Absence of Number indicates single head unit

 Indicates gear ratio (0 is 50:1, 2 is 100:1, 3 is 25:1)

## ELECTRIC MOTORS (order by Texsteam part number)

TXT Part No.	1/4 HP ELECTRIC MOTORS—High Starting Torque (1725 RPM, 60 Cycle)
TA-2266	Drip Proof—Single Phase, 115/230 Volt
TA-2272	Drip Proof—Three Phase, 220/440 Volt
TA-2264	Totally Enclosed—Single Phase, 115/230 Volt
TA-2268	Totally Enclosed—Three Phase, 208-220/440 Volt
TA 2265	Explosion Proof-Single Phase, 115/230 Volt
TA-2271	Explosion Proof—Three Phase, 208-220/440 Volt

## PERFORMANCE DATA

	MAXIMUM	VOLUME (	Expressed in	gallons per d	ay based on i	nput shaft-17	50 RPM))	
PLUNGER SIZE	DISCHARGE PRESSURE	4120 100:1 Ratio (	MODELS a 17.5 SPM	4100 M 50:1 Ratio (St	MODELS d.) @ 35 SPM	4130 MODELS 25:1 Ratio @ 70 SPM		
Single Head Units		Model No.	Max. GPD	Model No.	Max. GPD	Model No.	Max. GPD	
1/8''	3000 PSI	4122	11/4	4102	21/2	4132	5	
1/4''	1500 PSI	4121	5	4101	10	4131	20	
3⁄8″	1000 PSI	4123	12	4103	23	4133	46	
1/2''	500 PSI	4125	21	4105	40	4135	80	
Double	Headed Units	Model No.	Max. GPD	Model No.	Max. GPD	Model No.	Max. GP	
1/8''	3000 PSI	4122-2	21/2	4102-2	5	4132-2	10	
1/4 "	1500 PSI	4121-2	10	4101-2	20	4131-2	40	
3/8''	1000 PSI	4123-2	24	4103-2	46	4133-2	92	
1/2"	500 PSI	4125-2	42	4105-2	80	4135-2	160	

4123-2-P

3/8 11

## INSTALLATION

1. Remove pump from carton and inspect for possible damage in transit from factory. The cardboard carton was designed especially for this pump. If the pump has been damaged in transit, file claim with the carrier.

2. Bolt holes are provided for a permanent mounting (see drawing for dimensions).

3. Remove the gear box lid and fill gear box with 1% quarts of a good grade of lubricant. A lubricant tag is attached to the pump with a list of recommended oils. The oil level should be maintained even with the top of the guide rods.

4. Adjust the stroke length to the desired volume. A full stroke length (1'') will pump the maximum volume as shown in the data sheet. For approximately 50% volume use a  $\frac{1}{2}''$  stroke, etc. Full stroke length for PVC Diaphragm Head is  $\frac{1}{4}''$ .

5. Connect the suction line to pump head.

a. If a reservoir is furnished with the pump. the suction line is already connected. Fill the reservoir and open (all the way) the pump setting gauge valve. A strainer is furnished as a part of this unit.

b. If a power "nit model was purchased, a strainer should be piped into the suction line to prevent sand. rust or other particles from injuring the plunger and fouling the check valves.

6. Connect the discharge line. A  $\frac{1}{4''}$  line check is provided. This valve should be installed as close to the point of injection as possible. Note the arrow on the check valve indicates the direction of flow. The top connection on the pump head is the outlet and has a  $\frac{1}{4''}$  female pipe thread connection.

7. Mount motor if pump was ordered less motor, The pump input shaft speed should not exceed 1800 RPM and will operate the pump in either direction of rotation (CW or CCW). After careful alignment with shaft coupling (furnished on all pumps), bolt motor securely in place. Shaft alignment is very important. Misalignment will cause the bearings in the motor and pump as well as the coupling to wear out. Shim the motor if necessary. To check free rotation turn motor and pump over by grasping the coupling and rotating. A minimum of 1/16'' spacing should be allowed between coupling ends for expansion. The "se of an overload protector in the motor circuit is recommended.

**8.** Install the TA-1497 priming valve (included with pump. but shipped loose in carton) on the pump head.

9. Start motor and prime the pump head by opening the TA-1497 priming valve. After the pump discharges clear fluid without bubbles, slowly close the priming valve for normal operations. At this point make a visual check of the plunger drip, and using the TA-315 gland wrench that is included in the package. slowly tighten the gland to prevent excess drippage and waste of chemicals. Do not overtighten plunger packing. Keep TA-315 gland wrench handy for future packing adjustment. It may be necessary to readjust the packing the next day. A slight leak during the break-in is beneficial. Sufficient time should be allowed to let the packing "seat in." Do not tighten packing when pomp head is under load. (Discharge pressure should be atmospheric.)

If low volumes are being pumped, the pump head, the fluid discharge line and all other fittings up to the line check should be thoroughly purged of all air bubbles.

Check pump action by opening TA-1497 priming valve.

1. Check oil level in gear box at least once a week.

2. Check for excess chemical leakage around the packing gland. If it is impossible to tighten, replace the packing. If the plunger is badly scored, replace the plunger and packing. If excessive packing failure is experienced. consult your Texsteam representative.

3. Each Texsteam Series 4100 Pump has an adjustment for the required stroke length. To adjust stroke length **remove** TC-476 cover; loosen wing nut on end of TA-1924 adjustment bolt; **remove** TA-1595 adjusting nut to the desired stroke length as indicated on TA-1929 scale (maximum stroke 1").

## MAINTENANCE INSTRUCTIONS FOR ELECTRIC DRIVEN

**REPLACING SCALE ORSTROKE ADJUSTING ASSEMBLY** To replace scale or stroke adjusting assembly remove wing nut and washer, round head screw, and roil pin (holding plunger to stroke adjusting assembly). Then move the I-H-618 crosshead back and replace necessary parts.

#### DISASSEMBLY OF THE POWER MECHANISM

1. Disconnect and remove pump head from power unit. 2. Remove item #29 socket head cap screw, items #28 and #30 nut and washer, and item #5 part TA-1928 rod retaining plate. At this point TA-1925 crosshead bearing (steel rod) and TA-1926 guide rod can be pushed free of the TD 387 housing (either direction). When the rod ends are free of the housing, remove TA-3130 "O" ring and TA-3131"O" ring from the rod ends. The rods then can be withdrawn through the TB-618 crosshead and on out through side of gear box.

**TO REMOVE ITEM #31 BEARING FROM WORM GEAR** Take out TA-433 bearing bolt. TO REMOVE WORM GEAR ITEM #32 AND TB-619 BEARING FROM GEAR BOX

#### I. Remove cap X4-192 | from bottom of pump:

2. Remove item #37 hex-head machine screw, TA-459 spring washer and TA-1930 bottom thrust washer. You can now remove the worm gear item #32 and bearing TB-619 through the top of the housing TD-387.

3. Upon replacing be certain the gear roll pin item #39 is located in its proper place—holding the bearing TB-619 in proper alignment.

#### TO REMOVE THE WORM GEAR AND SHAFT ITEM #15 SHAFT END BEARING and/or OIL SEAL TA-2064

It is not necessary to remove crosshead, guide rods or worm gear in order to remove the drive shaft and its component parts.

## OPERA TING INSTRUCTIONS





TEM	DART NO.	NAME
1	TA-164	Hex Nut
2	TA-3303	Lockwasher-1/4" Steel
3	TA-167	Cut Washer
4	TA-1741	Spacer
5	TB-437	Base SH
6	TA-163	Cap Screw
7	TA-3116	Elbow
8	TB-436	Base
9	TA-664	Chemical Tank 430 S
10	TA-664	Chemical Tank 430 S
11	TA-425	Lockwasher
12	TA-300	Cut Washer
13	TB-431	Base DH
14	TA-144	Hex Nut
15	TA-677	Outlet Body
16	TA-391	Spring
17	TA-54	Ball
18	TA-2597	O-Ring
19	TA-678	Inlet Body
20	TB-871	Tank Gauge Ass'y.
21	TA-3118	Connector
22	TA-3116	Elbow
23	TA-3161	Polypropylene Tube
24	TA-3115	Valve Body
25	TA-3104	Retainer Nut
26	TA-3103	Strainer
27	TA-3106	U-Bolt
28	TA-2184	O-Ring
29	TA-577	Washer
30	TA-164	Nut
31	TC-393	Frame
32	TA-3102	Gauge Glass
33	TA-3101	Flat Washer
34	TA-3100	Spring
35	TA-3112	Handle Valve
36	TA-164	Nut
37	TA-3199	O-Ring
38	TA-3114	Stem Valve
39	TA-3113	Spring
40	TA-3328	Washer
41	TA-3107	O-Ring

DADTE LIET

CHEMICAL INJECTOR SERIES 4100

1 Disconnect flexible coupling and remove motor from base. If unit is equipped with container on base, it is best to remove entire gear box from base:

#### a. Remove item #8 truarc ring

#### b. Remove item #18 pipe ring (opposite side)

2. Insert proper size punch into recess on small end of item #15 shaft (small end under item #8 pipe plug). Carefully drive shaft out through opposite side of housing. Punch size should be small enough so not to drive against item #17 inner race (if it is desirable to remove item #16 needle bearing and item #5 inner race, it should be done after the shaft has been removed).

As the shaft is being driven out, care should be taken to see that the large worm gear turns. This will "walk" or disengage the year teeth

As the shaft emerges, from the side of housing, it will force out the oil seal TA-2064, seal cartridge TA-2033 and ball bearing item #9.

Withdraw the shaft from pump housing.

In order to remove ball bearing item #9 from shaft, it is necessary to remove one or both truarc rings item #14.

Upon replacing care should be taken to "walk" the two worm gears back together.

Be sure the two truarc rings item #14 are in place: also seal and seal housing are in properly (the seal lips and seal expander spring should face into the pump). Make sure the "O" ring TA-2090 is in its proper place.

The shaft assembly should be inserted into the pump until shaft bearing item #9 shoulders against the truare ring item #8 located near the inner edge of the hole into which the shaft is inserted



TEM	PART NO.	NAME	ITEM	PART NO.	NAME	ITEM	PART NO.	NAME
1	TD-387	Housing	. 16	TA-2286	Needle Bearing	32	TB-623	Worm Gear
2	TB-618	Crosshead	+ 17	TA-2287	inner Race	33	78-619	Series 4120 (100:1 Ratio) Bearing
* 3	TA-3131	O-Ring	18	TA-3309	1/2" C.I. Pipe Plug	34	TA-2457	O-Ring
+ 4	TA-3130	O-Ring	19	TA-1926	Guide Rod	35	TA-1930	Bottom Thrust Washer
5	TA-1928	Rod Retainer Plate	20	TA-3313	Round Head Slotted Screw	36	TA-1921	Сор
6	TA-1929	Adjustment Scale	21	TA-3312	Spring Lockwasher	37	TA-2501	Hex Head Cap
7	TA-1595	Adjustment Nut	22	TA-433	Bearing Bolt	38	TA-459	Spring Lockwasher
8	TA-3311	Truarc Ring	23	TA-3314	Wing Screw	39	TA-2337	Roll Pin
9	TA-2285	Ball Bearing	24	TA-1923	Cover Gasket	40	TA-1925	Crosshead Bearing
10	TA-2033	Seal Cartridge		TA-3315	Cut Washer	41	TA-2970	Wing Screw
11	TA-1653	Coupling (1/2" x 5/8")	26	TA-1596	Spacer			
"	TA-1836	Coupling (1/2" x 1/2")	27		· · · · · · · · · · · · · · · · · · ·	42	TC-476	Cover
12	TA-2064	Seal		TA-3319	3/4" C.I. Pipe Plug	43	TA-1924	Adjustment Bolt
13	TA-2096	O-Ring	28	TA-425	Lockwasher		TA-2328	Plunger Pin
14	TA-3310	Truarc Ring	29	TA-3317	Socket Head Cap Screw		<b>TB-478</b>	Injector Head Ass'y. – ½
	TA-1871	Worm & Shaft Ass'y.	* * 30	TA-3316	Nut			X
		Series 4130 (25:1 Ratio)	+31	TA-457	Ball Bearing	45	TB-485	Injector Head Ass'y 1/
15	TA-2250	Worm & Shaft Ass'y.		TB-621	Worm Gear		TB-483	Injector Head Ass'y. — 3/
		Series 4100 (50:1 Ratio)			Series 4130 (25:1 Ratio)		TB-484	Injector Head Ass'y. — ½
	TA-1755	Worm & Shaft Ass'y. Series 4120 (100:1 Ratio)	32	TB-616	Worm Gear Series 4100 (50:1 Ratio)	46	TA-458	Washer

\*Recommended spare parts

\*\*Nut to be 19/32 square (stove bolt nut)



1	PLUNGER SIZE	JNGER SIZE 1/8"		Sec. 2014	1/4''	CONE. 1		3/8''		1/2"		
ITEM NO.		Ductile	Stainless Steel	Ductile	Stainless Steel	Aluminum Bronze	Ductile	Stainless Steel	Aluminum Bronze	Ductile	Stainless Steel	Aluminur Bronze
-	HEAD ASSEMBLY NO.	TB-478-0	TB-481-0	TB-485-0	TB-345-0		TB-483-0	TB-577-0	-	TB-484-0	TB-350-0	
1	Injector Body	TC-277	TC-274	TC-275	TC-291	A Constant	TC-276	TC-425		TC-272	TB-349	
2	Yoke	TA-1457	TA-1457	TA-1457	TA-1457	A State of the state	TA-1457	TA-1457		TA-550	TA-550	
3	Top Bushing	TA-1496	TA-1496	TA-1496	TA-1496		TA-1496	TA-1496		TA-1496	TA-1496	
4	Ball Check Spring	TA-77	TA-77	TA-77	TA-77		TA-77	TA-77		TA-77	TA-77	
5	Large Top Ball—3/8''	TA-54	TA-54	TA-54	TA-54		TA-54	TA-54		TA-54	TA-54	
6	Top Seat	TB-737	TB-737	TB-737	TB-737		TB-737	TB-737	Sec.	TB-737	TB-737	Strates and
7	Small Top Ball—1/4"	TA-126	TA-126	TA-126	TA-126	STEEL	TA-126	TA-126	EL	TA-126	TA-126	E
8	Priming Valve	TA-1497	TA-1497	TA-1497	TA-1497	CONTINUED AINLESS ST	TA-1497	TA-1497	ED STI	TA-1497	TA-1497	ST
9	Lock Nut	TA-225	TA-225	TA-225	TA-225	SS	TA-225	TA-225	ILESS	TA-225	TA-225	SS
10	Plunger Packing Set	TA-1342	TA-1342	TA-1461	TA-1461	NLESS	TA-1456	TA-1456		TA-959	TA-959	L Z H
1]	Yoke Packing Set	TA-541	TA-541	TA-544	TA-544	AIP	TA-541	TA-541	AIN	TA-553	TA-553	AIN
12	Packing Gland			TA-1463	TA-1463	SIS	TA-957	TA-957	ST	TA-1219	TA-1219	DIS(
13	Packing Gland Nut	TA-1220	TA-1220	TA-1220	TA-1220	USE	TA-1220	TA-1220	SE	TA-1220	TA-1220	D JSE
14	Packing Nut	TA-810	TA-810	TA-842	TA-842		TA-810	TA-810	5	TA-549	TA-549	
15	Plunger	TA-1343	TA-1343	TA-844	TA-844	North States	TA-811	<u>T</u> A-811	1 Second	TA-2018	TA-2018	
16	Wiper (Felt)	TA-782	TA-782	TA-781	TA-781		TA-780	TA-780	1000	TA-782	TA-782	
17	Packing Spacer			TA-841	TA-1581	Contraction of the						
18	Bottom Ball	TA-54	TA-54	TA-54	TA-54		TA-54	TA-54		TA-54	TA-54	
19	Bottom Bushing	TB-736	TB-736	TB-736	TB-736	A State State	TB-736	TB-736		TB-736	TB-736	
20	Plunger Pin	TA-290	TA-290	TA-290	TA-290	Contraction of the	TA-290	TA-290		TA-290	TA-290	
21	Plunger Guide	TA-1338	TA-1338						35/8 . 1			
22	Packing Adapter (303SS)	TA-1339	TA-1339					1				
23	"O" Ring-Bung-N	TA-479	TA-479	TA-479	TA-479		TA-479	TA-479		TA-479	TA-479	22
TERN	ATE PARTS FOR HIGHLY CORRC	SIVE SERV	ICE						1999 - C.		a de la compañía de l	
6	Top Seat (metal-to-metal)	TA-806	TA-806	TA-806	TA-806		TA-806	TA-806	8.4. In	TA-806	TA-806	
19	Bottom Seat (metal-to-metal)	TA-771	TA-771	TA-771	TA-771		TA-771	TA-771		TA-771	TA-771	
10	Teflon Packing	TA-2062	TA-2062	TA-1642	TA-1642	State State	TA-1234	TA-1234	-	TA-1012	TA-1012	
15	Chrome Plated Plunger	TA-2251	TA-2251	TA-2253	TA-2253		TA-2249	TA-2249		TA-1991	TA-1991	
23	"O" Ring-Viton-A	TA-2580	TA-2580	TA-2580	TA-2580	NY SAMAGE	TA-2580	TA-2580	31 1	TA-2580	TA-2580	

\*Recommended spare parts \*\*TA-53 Bottom Ball must be used with the TA-771 Bottom Seat

PARTS LIST

9 1 (2 3 4 5) 6 1 (8) (23) 18) (19) (20) (22 (21 11 1.1 24 12 10 2 (13) (15) (17 14) 16 11

TB-738 DIAPHRAGM HEAD\*

ITEM	B/P NO.	NO. REQD.	ΝΑΜΕ	MATERIAL
1.	TB-739	1	Pump Body	PVC
2.	TA-2539	2	Ball 3/8"	Glass
3.	TB-740	1	Discharge Bushing	PVC
4.	TB-748	1	Seat, Top	PVC
5.	TA-2328	1	Pi", Plunger	Steel
8.	TA-2533	1	Adjustment Bolt	Steel
7.	-	1	No. 8-32 x 3/8 Lg. Rd. Hd. Scr.	Stl. Cad. Plated
8.	TA-2538	1	Adj. Scale	Steel
9.	-	1	No. 8-32 x 5/8 Lg. Wing or Thumb	Cad, Plated
			Scr.	
10.	-	6	1/4-20 x 2" Lg. Hex Hd, Cap Scr.	Stl. Cad. Plated
11.	TB-747	1	Bottom Bushing	PVC
12.	TB-743	1	Diaphragm Assy.	Buna-N
13.	TA-2534	1	Diaphragm Plate	Steel
14.	TB-745	1	Adapter	Steel
15.	TA-2535	1	Connecting Rod	Stainless Steel
16.	TA-1595	1	Adj. Nut	Steel
17.	TA-1 598	1	spacer	Steel
18.	TA-259	1	Nut	Brass
19.	TA-164	8	Nut	Steel, Cad. Plated
20.	I-A-107	1	Nut	Brass
21.	-	1	No. 8 Spring Lck, Washer	SST
22.	-	1	No. 8 Cut Washer	SST or Stl. Cad. Pl.
23.	TA-I 298	1	Outlet Tag	Таре
24.	TA-1 293	1	Inlet Tag	Таре
				t

Maximum Working Pressure 50 PSI



		JSE ON PUMP SERIES 12	<b>00,</b> 3700, 41		"SE ON PUMP <b>SE</b> I	<b>RIES 5100</b>		
PL	UNGER SIZE	1/4-	3,*"	1/2"	1/4-	3,8"	1/2"	MATERIAL
	Head Assy NO.	TB-868-7	TB-869-7	TB-870-7	TB-865-7	TB-866-7	TB-867-7	
1.	Plunger	TA-3095	TA-3096	TA-3075	TA-3089	TA-3092	TA-3098	Hastelloy C
2.	Packing Nut	TA-842	TA-810	TA-549	N/A	N/A	N/A	Brass
3.	Yoke Packing	TA-544	T A - 5 4 1	TA-553	N/A	N/A	N/A	Buna-N
4.	Wiper	T A - 7 8 1	TA-780	TA-782	N/A	N/A	N/A	Felt, Wool
5.	Gland Nut	TA-I 220	TA-1220	TA-3086	TA-3086	TA-3086	TA-3086	Stainless Steel
6.	Yoke	TA-1457	TA-1457	TA-550	N/A	N/A	N/A	Mall, Iron
7.	Packing	T A - 3 0 9 1	TA-3084	TA-3088	TA-3091	TA-3084	T A - 3 0 8 8	Viton
8.	Gland	TB-863	TB-863	TB-863	TB-863	TB-863	TB-863	Cast Forged Steel
9.	Screws	61283P024	61283P024	61283P024 61	283P024 61	283P024 612	83P024 Steel	, C a d . Plated
10.	Flange	TA-3083	TA-3083	TA-3083	TA-3083	TA-3083	TA-3083	Carbon Steel
11.	Ball	TA-2539	TA-2539	TA-2539	TA-2539	TA-2539	TA-2539	Glass
12.	Spring	61438P017	61438P017	61438P017	61438P017	61438P017	61438P017	Hastelloy C
13.	Adapter	T A - 3 0 8 1	T A - 3 0 8 1	TA-3081	TA-3081	T A - 3 0 8 1	I-A-3081	PVC
14.	O-Ring	TA-3080	TA-3080	TA-3080	TA-3080	TA-3080	TA-3080	Viton
15.	seat	TB-741	TB-741	TB-741	TB-741	TB-741	TB-741	PVC
16.	Bushing	TA-3076	TA-3076	TA-3076	TA-3076	TA3076	TA-3076	PVC
17.	strap	TA-3078	TA-3078	TA-3078	TA-3078	TA-3078	TA-3078	Stainless Steel
18.	Retainer	TR-3077	TR-3077	TR-3077	TR-3077	TR-3077	T R - 3077	Stainless Steel
19.	Nut	TA-3082	TA-3082	TA-3082	TA-3082	TA-3082	TA-3082	Stainless Steel
20.	O-Ring	TA-3079	TA-3079	TA-3079	TA-3079	TA-3079	TA-3079	Viton
21.	O-Ring	TA-2580	TA-2580	TA-2580	TA-2580	TA-2580	TA-2580	Viton
22.	Body	TB-864	TB-860	TB-861	TB-864	TB-960	TB-861	PVC
23.	Gland	TA.3090	TA-3085	TA-3087	TA-3090	TA-3085	T A - 3 0 8 7	PVC
24.	Spacer	TA-841	N/A	N/A	N/A	N/A	N/A	Brass

\*Maximum Working Pressure 500 PSI

TEXSTEAM PRODUCTS

