

ITW Dynatec
An Illinois Tool Works Company
31 Volunteer Drive
Hendersonville, TN 37075 USA
Telephone 615.824.3634
FAX 615.264.5222
www.itwdynatec.com

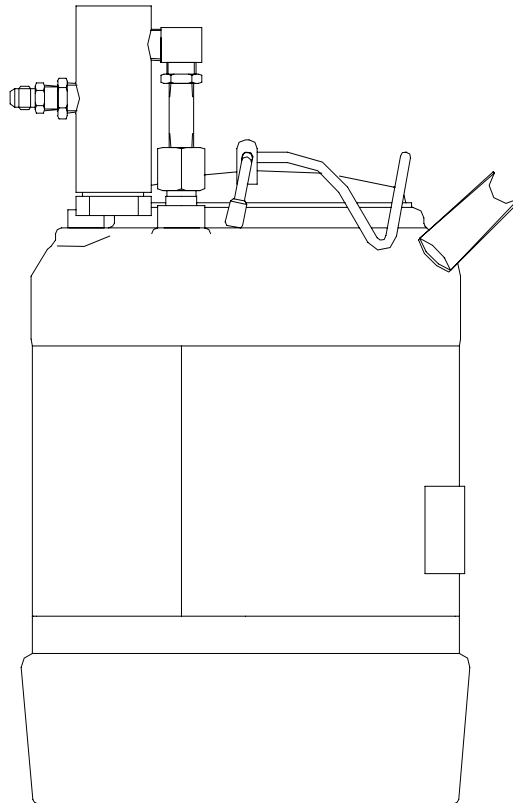
ITW Dynatec GmbH
Industriestrasse 28
D-40822 Mettmann, Germany
Telephone 49.2104.915.0
FAX 49.210.2104.915.111
ITW Dynatec K.K.
Daiwashinagawa Bldg., 7-15 Konan, 3-Chome
Minata-Ku, Tokyo 108 Japan
Telephone 81.3.3450.5901
FAX 81.3.3450.8405

OPERATIONS MANUAL
Manual #10-21
Revised 6/3/09



Adhesive Application Solutions ISO 9001 Certified

COLD GLUE PRESSURE TANKS OPERATOR'S MANUAL



IMPORTANT ! - READ ALL INSTRUCTIONS BEFORE OPERATING THIS EQUIPMENT

It is the customer's responsibility to have all operators and service personnel read and understand this information. Contact your ITW Dynatec customer service representative for additional copies.

NOTICE! Please be sure to include the serial number of your application system each time you order replacement parts and/or supplies. This will enable us to send you the correct items that you need.

ITW Dynatec Service Parts Direct Dial: 1-800-538-9540
ITW Dynatec Technical Service Direct Dial: 1-800-654-6711

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Chapter 1 INTRODUCTION

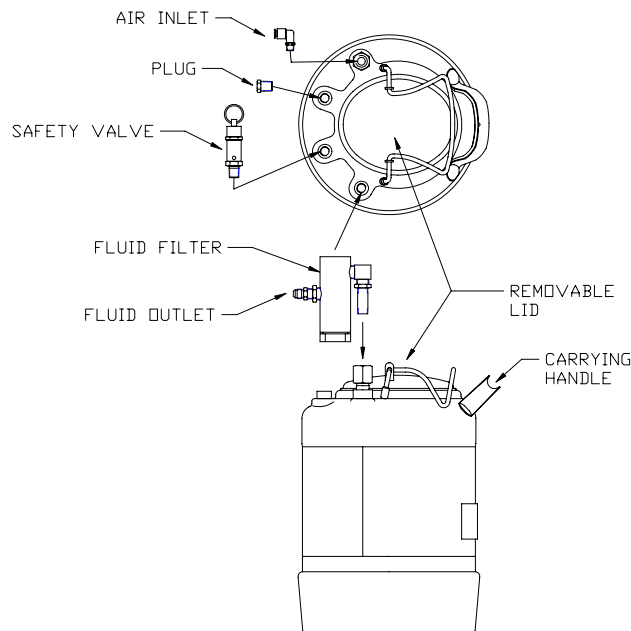
Product Description

The ITW Dynatec cold glue pressure tanks are designed for glue or flushing water applications in conjunction with extrusion applicator systems. They are characterized by a simple and sturdy design and are, therefore, maintenance-friendly. The glue pressure is produced with the aid of compressed air. The glue pressure level can be adjusted by controlling the compressed air with an inlet pressure regulator, either automatically or manually. There are three tank capacities available; one, five and ten gallon.

Function

The pressure tank is filled with glue, sealed so it is air-tight and then pressurized with compressed air. The pressure in the tank forces glue through a supply tube within the tank, out through connecting hoses/manifolds and delivered to the glue applicators.

Fittings and Connections



Technical Data

	1 Gallon (3.8L)	5 Gallon (19L)	10 Gallon
Maximum Inlet Air Pressure	130psi (8.9bar)	130psi (8.9bar)	115psi (7.9bar)
Maximum Operating Pressure (safety valve-limited)	110psi (7.5bar)	110psi (7.5bar)	110psi (7.5bar)
Operating Temperatures	See glue specifications	See glue specifications	See glue specifications
Height	13in (330mm)	27in (685mm)	30in (760mm)
Outside Diameter	10in (254mm)	10in (254mm)	13in (330mm)
Approximate Weight (empty)	12lbs (5.5Kg)	22lbs (10Kg)	36lbs (17Kg)

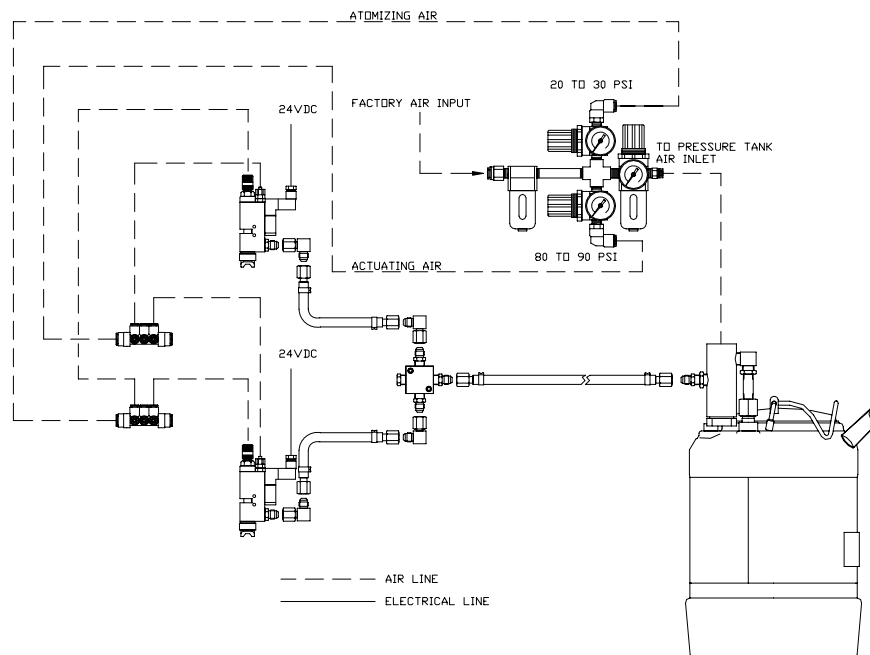
WARNING! HIGH PRESSURE

Under no circumstances should the safety valve be disabled or removed. The pressure vessel should be removed from operation should the safety valve become inoperable. Extreme danger is present when the maximum inlet air pressure is exceeded.

Chapter 2 INSTALLATION

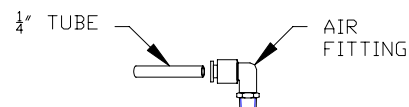
Be certain to install the pressure tank on a flat level surface. It should be located as close as possible to the extrusion applicators, but should not be installed in a location that will be hazardous for the operator to access during machine operation.

Sample Installation



Air Connection

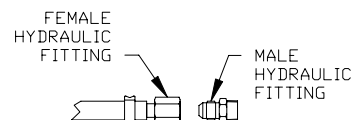
All pressure tanks use a 1/4" tube, quick-connect fitting for the air connection. 1/4" blue, polyurethane tubing is supplied as part of the system (when a complete system is supplied by ITW Dynatec) for use as supply tubing. Slide the tubing into the fitting until it is securely in place. Once installed, pull on the tubing to assure it is secure.



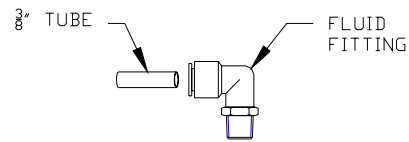
Fluid Connection

Two different fluid connection fittings are available as follows:

1/2UNF (5/16JIC) fluid fittings are typically provided with the use of 1/4" hydraulic hose. Screw the female hydraulic fitting to the male and tighten with a wrench. Note that the mating 37° flares on these fittings provide a positive hydraulic seal. There is no need for thread sealant when assembling these fittings.



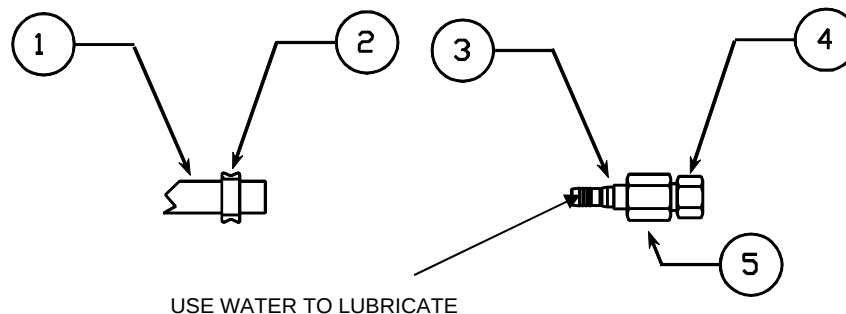
3/8" quick-connect tube fittings are available for the fluid connection. 3/8" clear, nylon tubing is supplied as part of the system (when a complete system is supplied by Dynatec) for use as the fluid lines. Slide the tubing into the fitting until it is securely in place. Once installed, pull on the tubing to assure it is secure.



Hydraulic Hose Assembly

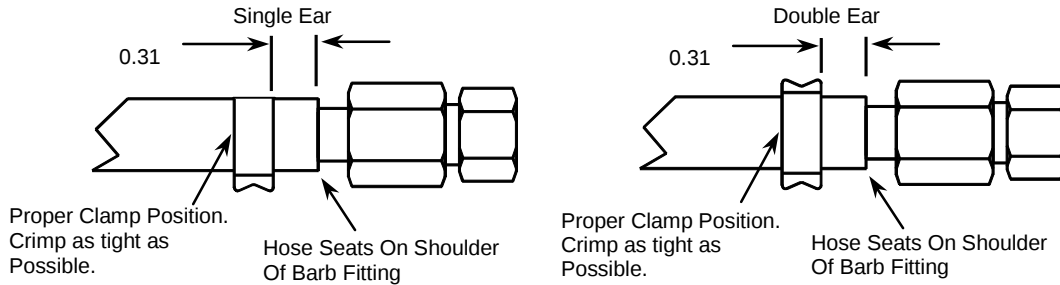
The hydraulic hose and fittings are provided in kit form for on-site assembly. This allows the cutting of the hose material to lengths appropriate for your installation. The following procedure should be used to correctly assemble the connector fittings to the hose:

1. Cut the end of the Hydraulic Hose so it is straight and square.
2. Place the Hose Clamp over the end of the Hydraulic Hose.
3. Slide the Hose Barb Fitting into the Hose Nut.
4. Use wrenches to tighten the Hose Fitting Plug into the Hose Nut.



Item	Description
1	Hose, Hydraulic
2	Clamp, Hydraulic Hose
3	Barb, SST
4	Plug, Hose Fitting
5	Hose Nut, STL

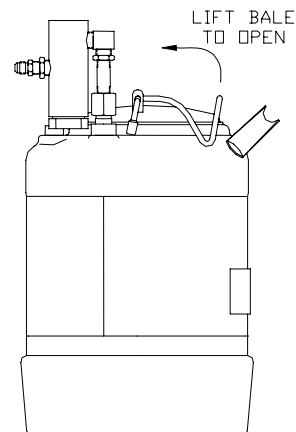
5. Lubricate the end of the Barb Fitting with water to ease its assembly into the Hydraulic Hose.
6. Push the Hydraulic Hose and Hose Clamp over the Barb Fitting until the end of the hose butts against the shoulder of the Barb Fitting.



7. Position the Hose Clamp 5/16" (8mm) back from the end of the hose.
8. Tighten the clamp as tightly as possible around the hose using the optional Crimp Tool (107571).
9. Remove the Hose Fitting Plug from the Hose Nut.
10. Repeat steps #1 through #9 for installation of each set of hose connection fittings.

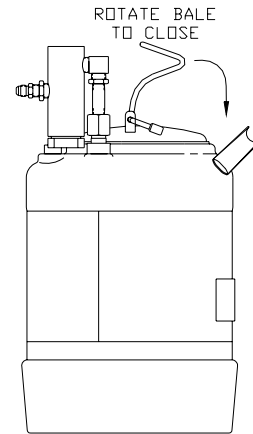
Opening and Filling the Pressure Tank

1. Relieve air pressure to the tank. Lift up on the ring of the safety valve to assure no pressure is present in the tank.
2. Rotate the bale on the lid of the pressure tank to loosen the lid from the tank.
3. Slightly tilt the lid to remove it from the pressure tank
4. Fill the tank with glue, but do not overfill. Leave approximately 3 inches (75mm) of air gap to the top of the lid to avoid getting glue into the fittings mounted into the top of the tank and on the lid when it is re-installed.



Sealing the Pressure Tank

1. Inspect the O-ring on the lid to assure it is properly in place, is clean and is not damaged.
2. Slightly tilt the lid and rotate into position so the O-ring seats against the underside of the tank mouth. Take care not to dip the lid into the glue in the tank.
3. Rotate the bale on the lid to secure it to the tank for an air-tight fit.
4. Pressurize the tank to the desired pressure. Check to assure there is no leaks around the lid seal.



Start Glue Application

1. Assure all fluid, air and electrical connections are properly installed.
2. Assure the air pressure to the tank is properly set. This may be done either manually with an air pressure regulator or automatically through a Pattern Control Unit using a Pressure Transducer.
3. Purge the glue through each applicator until all air is dispelled from the fluid lines and applicators.
4. Assure glue applicators are in their proper operating position and commence the gluing operation.
5. Adjust tank pressure, either manually or via the Pattern Control Unit to assure consistent glue application throughout the operating speed range of the parent machine.

Chapter 3 ROUTINE MAINTENANCE

The following procedures should be performed on a regular basis to help ensure the proper operation of the fluid delivery system.

Once Each Week

1. Filter Screen: Wash the filter screen with warm (not hot) water. Inspect for corrosion or clogging in the mesh material. Replace the filter screen as necessary.

NOTE: The filter assembly is designed with the Cap Nut (551-119) down. This is done so any debris that accumulates in the filter body is flushed from the system when the Cap Nut is removed. Inverting the Filter Body (551-117) so the Cap Nut is on the top is not recommended.

2. Purge Unused Applicators: Purge for approximately one minute each applicator that has not been used during the week. This helps ensure that the adhesive does not thicken inside the nozzle and impede operation when the applicator is required for use.
3. Clean the Pressure Tank: Dump any glue inside the tank and wash the Pressure Tank with warm water until all dried adhesive has been removed. Completely dry the container prior to filling with fresh adhesive.

NOTE: Care must be taken when dumping fluid from the Pressure Tank so that glue does not get in the safety valve as this could cause the valve to malfunction.

4. Completely purge the system with glue to remove any air introduced into the fluid delivery system

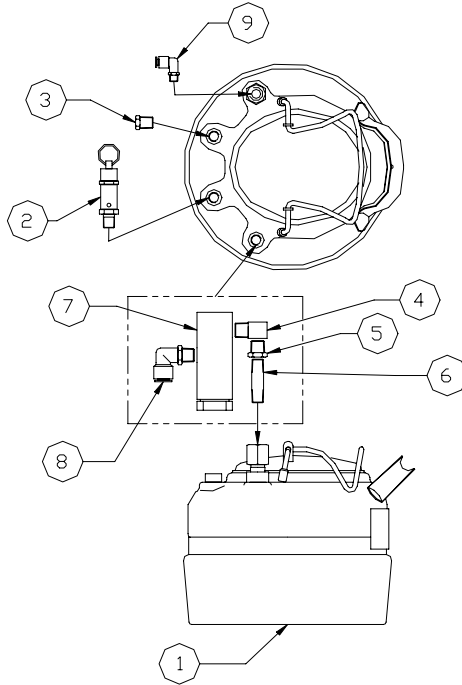
Once Each Quarter, When Changing to a Different Glue or For Prolonged Down Times

1. Perform the weekly maintenance functions.
2. After cleaning the Pressure Tank with water, flush the entire system with water (i.e. fluid lines and glue applicators) until clear water is observed throughout the system.
3. Place a 50% white vinegar and warm water solution into the tank.
4. Completely purge the system with an equal amount of vinegar/water being run through each applicator.
5. Rinse the vinegar/water solution from the tank and refill with fresh water.
6. Completely purge the system with an equal amount of water being run through each applicator to flush the vinegar solution from the system
7. Remove any water from the tank and completely dry the inside of the tank.

8. Pressurize the tank with no fluid inside of it and purge the water from the system out through each applicator.
9. At this point the system is clean and can be left in this state from prolonged periods of time.
10. When it is desired to put the system back into operation, place fresh adhesive into the tank and completely purge glue through the entire system.

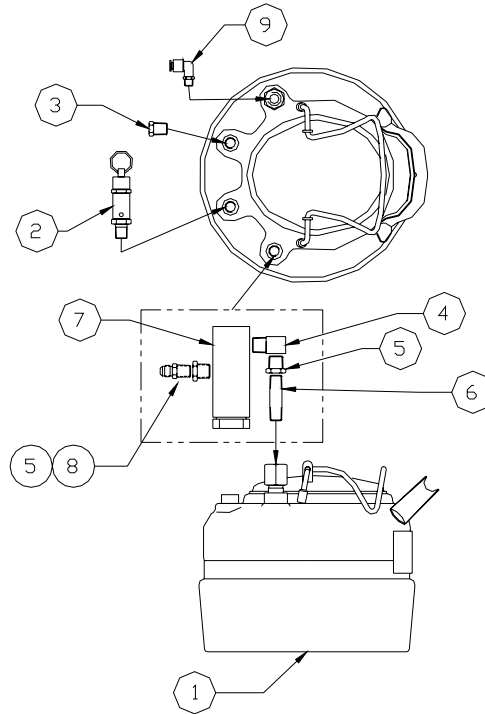
Chapter 4 REPLACEMENT PARTS

Pressure Tank Assembly, Tube Fluid Fitting



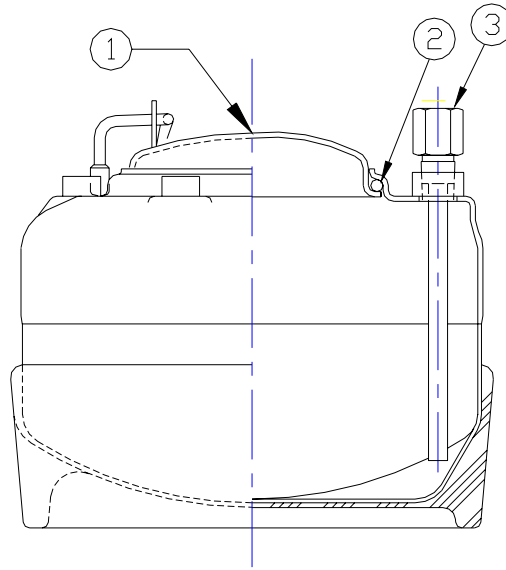
Item #	Part #	Qty	Description	1 Gallon (110099)	5 Gallon (110100)	10 Gallon (111003)
1	110096	1	Pressure Tank, 1 Gallon	X		
1a	110097	1	Pressure Tank, 5 Gallon		X	
1b	110098	1	Pressure Tank, 10 Gallon			X
2	110095	1	Safety Valve	X	X	X
3	108087	1	Hex Plug, 1/4NPT, SST	X	X	X
4	108076	1	Street Elbow, 3/8NPT, SST	X	X	X
5	108072	1	Reducer, 3/8 to 2/4NPT, SST	X	X	X
6	110943	1	Pipe Nipple, 2", 1/4NPT, SST	X	X	X
7	N07577	1	Filter Assembly, SST	X	X	X
8	N06501	1	Fitting, 90°, 3/8NPT x 3/8Tube	X	X	X
9	N06412	1	Fitting, 90°, 1/4 NPT x 1/4 Tube	X	X	X

Pressure Tank Assembly, Hose Fluid Fitting



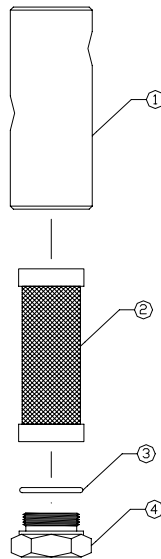
Item #	Part #	Qty	Description	1 Gallon (111001)	5 Gallon (111002)	10 Gallon (110101)
1	110096	1	Pressure Tank, 1 Gallon	X		
1a	110097	1	Pressure Tank, 5 Gallon		X	
1b	110098	1	Pressure Tank, 10 Gallon			X
2	110095	1	Safety Valve	X	X	X
3	108087	1	Hex Plug, 1/4NPT, SST	X	X	X
4	108076	1	Street Elbow, 3/8NPT, SST	X	X	X
5	108072	2	Reducer, 3/8 to 2/4NPT, SST	X	X	X
6	110943	1	Pipe Nipple, 2", 1/4NPT, SST	X	X	X
7	107577	1	Filter Assembly, SST	X	X	X
8	108070	1	Fitting, 5/16JIC x 1/4 NPT, SST	X	X	X
9	N06412	1	Fitting, 90°, 1/4 NPT x 1/4 Tube	X	X	X

Tank Replacement Parts



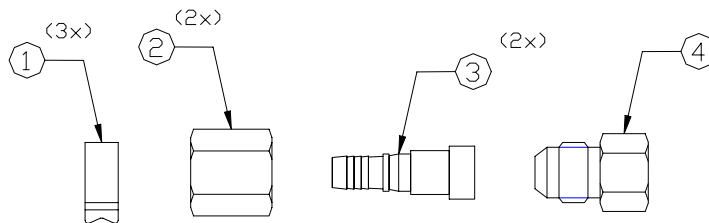
Item #	Description	1 Gal. Tank	5 Gal. Tank	10 Gal. Tank
1	Lid, Pressure Tank	111004	111004	111004
2	O-Ring, Pressure Tank Lid	111005	111005	111005
3	Dip Tube Assembly	111006	111008	111007

Filter Assembly (107577)



Item #	Part #	Qty	Description
1	551-117	1	Filter Body, SST
2a	551-112	1	Filter Screen, 50 Mesh, SST (standard)
2	551-118	1	Filter Screen, 100 Mesh, SST (option)
3	551-120	1	O-Ring
4	551-119	1	Cap, Filter Body, SST

¼" Hose Connector Kit (108091)



Item #	Part #	Qty	Description
1	107567	3	Hose Clamp
2	107568	2	Hose Adapter Nut
3	108082	2	Stem Fitting
4	107570	1	Plug