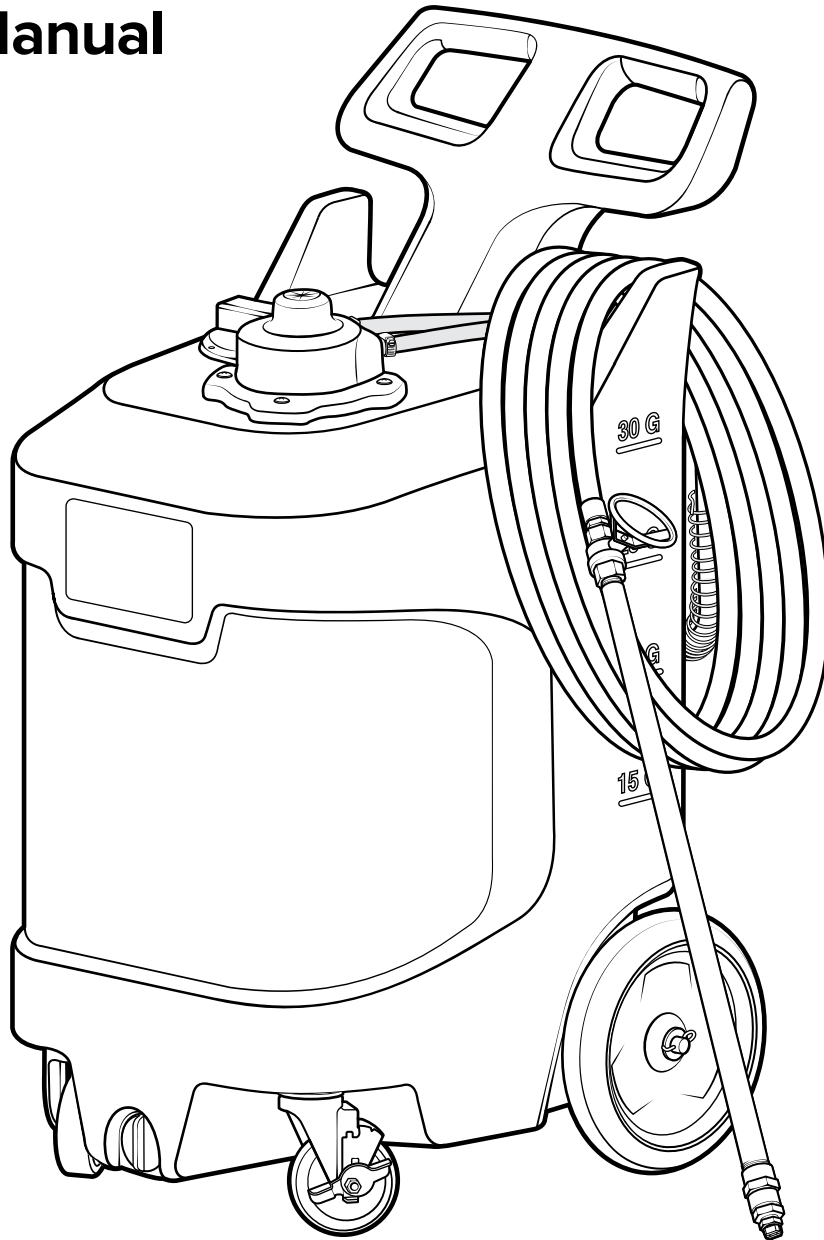


# 30 Gallon Gel Unit With Agitator

## Operation Manual

GI-30N-AM



READ ALL INSTRUCTIONS BEFORE USING OR  
SERVICING THIS UNIT. KEEP THIS MANUAL IN A  
LOCATION THAT IS READILY AVAILABLE TO USERS  
AND SERVICE TECHNICIANS.

English (Original Instructions)



Scan this code for  
operation manual



# Safety

## **WARNING**

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Using or servicing the unit without appropriate personal protective equipment (PPE) may result in serious injury such as burns, rashes, eye, throat or lung damage and death. Always wear PPE as indicated in the Safety Data Sheet (SDS) when using or servicing the unit. Protect eyes, skin, and lungs against drifting spray.



Chemical solutions may pose a health risk and death if they contact the skin or eyes, are inhaled or swallowed. Always read and follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and the SDS associated with the chemical solution before using the unit.



Pressure within the equipment may cause an unexpected release of the chemical solution and cause serious injury such as burns, rashes, eye damage, throat or lung damage and death. Always depressurize and clean the unit after each use. Release any remaining air pressure by opening the discharge ball valve. Never leave the unit unattended while pressurized.

Using the unit with fluid temperatures above 100°F (37.8°C) may result in scalding, burns, serious injury or death. DO NOT use a solution with a temperature above 100°F (37.8°C).

Operating the unit when damaged or leaking may result in exposure to chemical solutions, serious injury or death. Never use the unit if it is damaged or leaking.

Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.



Using incoming air pressure exceeding 100 psi (6.9 bar) may result in pressure buildup, explosion, serious injury or death. DO NOT exceed 100 psi (6.9 bar) incoming air pressure when operating the unit.

Use of hydrocarbons and flammable products may result in explosions, fire and serious injury or death. Never use hydrocarbons or flammable products with the unit.



Mixing an alkaline with an acid may result in a chemical reaction. Overheating of the mixture may cause it to splatter caustic compounds or release hazardous fumes, gas and vapors. Always flush the unit with fresh water thoroughly when switching from an alkaline to an acid or an acid to an alkaline.

## NOTICE

Servicing or modifying this unit with parts not listed in this manual may cause the unit to operate improperly. Do not use unauthorized parts when servicing the unit.

Use of an air lubricator before the unit may result in diminished performance and damage to the unit. Do not use an air lubricator before the unit.

Moisture in the air lines will damage the pump and diminish the pump life. The air must be filtered, clean, dry and free of moisture. If needed, install an air dryer before the unit.

## PROTECT THE ENVIRONMENT



Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations

# Product Overview

## Requirements

Compressed air requirements	40-80 psi (2.8-5.5 bar) with 15-18 cfm (424.8-509.7 l/min)
Liquid temperature range	40-100°F (4.4-37.8°C)
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or SDS for your product or contact our customer service department.

## Specifications

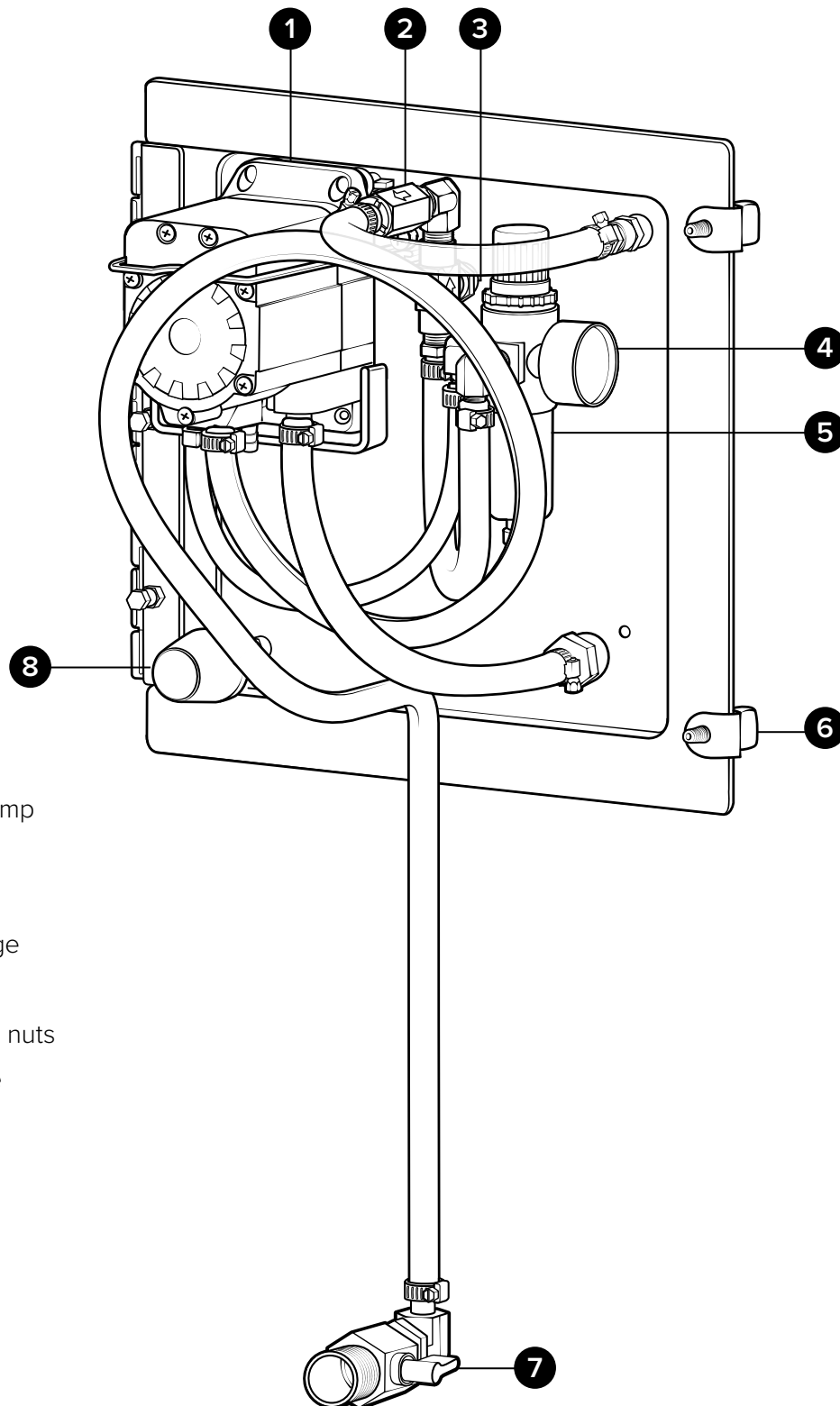
Power type	Compressed air
Chemical pickup type	Draws from pre-mixed solution
Number of products unit can draw from	One product
Suction line length/diameter	3.5 ft. (1 m) hose with 3/8 in. (9.5 mm) inside diameter
Capacity	30 gallons (113.6 liters)
Discharge line length/diameter	30 ft. (9 m) hose, with 1/2 in. (12.7 mm) inside diameter
Discharge wand/tip type	24 in. (60.9 cm) stainless steel wand with fan tip and ball valve. Tips included: ST4008SS, ST1510SS, and ST2520SS
Output distance*	6-10 ft. (1.8-3 m)
Output volume*	0.8-2 gal/min (3-7.6 l/min)
Flow rate*	2 gal/min (7.6 l/min)
Pump seals	Santoprene, Viton, or Kalrez
Wheel type	Two 10 inch (25.4 cm) non-marking wheels, two 5 inch (12.7 cm) casters, one with lock

\*Rates given are based on chemical with viscosity of water and factory air pressure settings. These rates can vary based on viscosity of product and fan tip size.

# Product Components

Get to know the GI-30N-AM components that you will need to use, adjust or assemble.

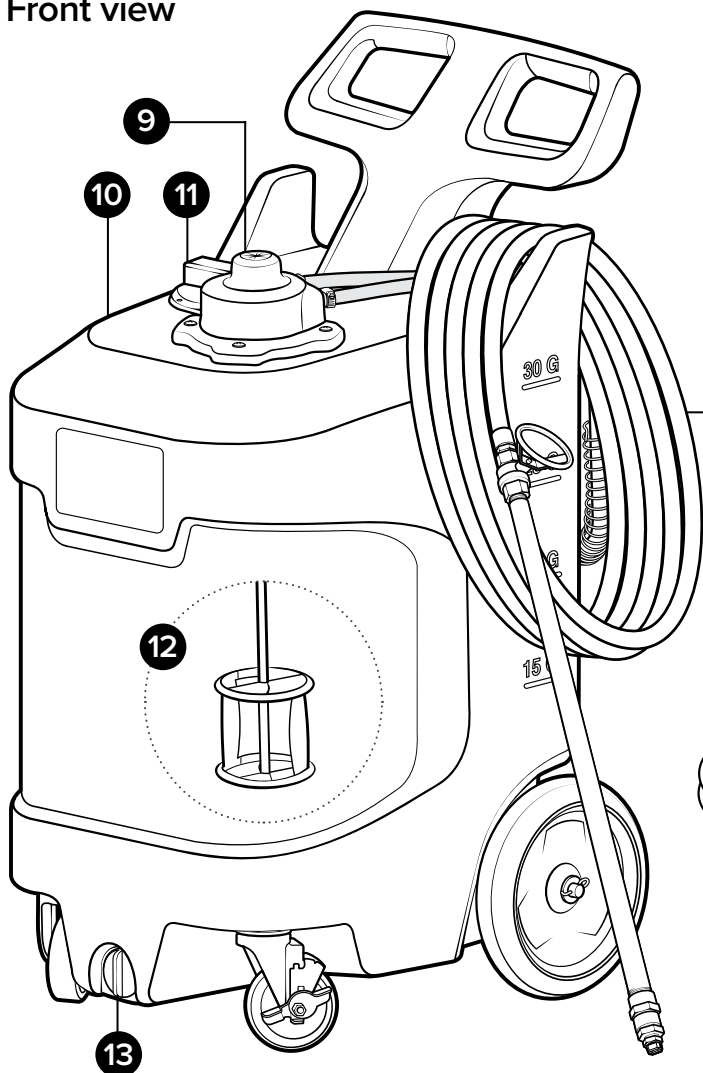
## Back plate assembly • Inside view



- 1. Quick-change pump
- 2. Check valve
- 3. Needle valve
- 4. Air pressure gauge
- 5. Air regulator
- 6. Back plate thumb nuts
- 7. Suction line valve
- 8. Muffler

# Tank Assembly

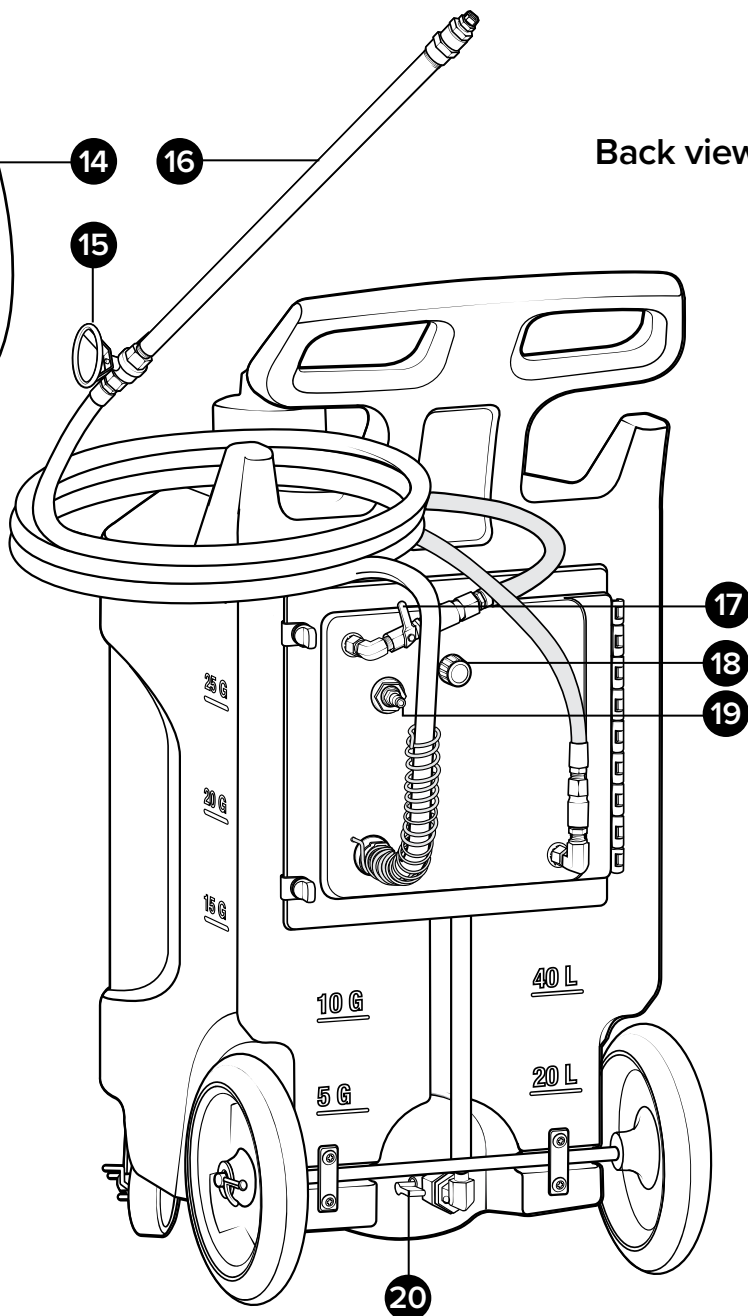
Front view



- 9. Air gel motor
- 10. Solution tank
- 11. Lid
- 12. Prop and shaft
- 13. Drain plug
- 14. Discharge hose

- 15. Discharge ball valve
- 16. Discharge wand
- 17. Air inlet valve
- 18. Needle valve
- 19. Air fitting
- 20. Suction valve

Back view



# Using your unit

## Operating Instructions

1. Verify drain plug is securely closed.
2. Following all instructions from the chemical manufacturer, fill tank with the pre-mixed solution.
3. Verify suction line valve at the base of the suction line is open, allowing fluid into the suction line.
4. With the discharge ball valve and air inlet valve in the closed position, plug an air line into the air fitting.
5. Ensure agitator is submerged in product. Activate the air motor by opening the air inlet valve.
6. While the air motor is running, adjust the needle valve as needed to increase or decrease motor speed.
7. Close the air inlet valve to stop the air motor.

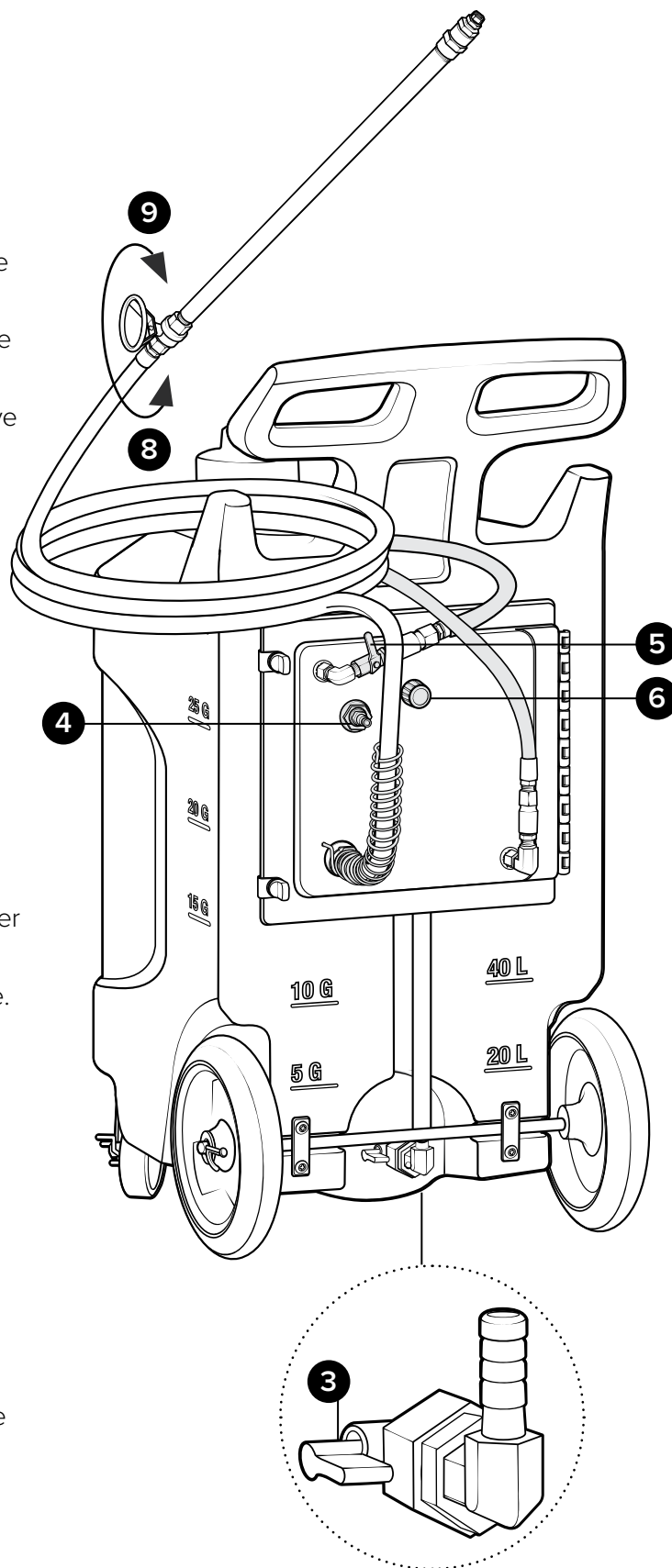
**NOTE:** It is not recommended to run the air motor agitator while applying product. Discontinue use of air motor agitator if solution level is below agitator propeller.

8. Begin dispensing product by slowly opening the discharge ball valve. Discharge ball valve should be completely open while dispensing.
9. Close the discharge ball valve to stop dispensing.

## After Use Instructions

**NOTE:** For proper handling and disposal procedures refer to chemical SDS.

10. Solution should be removed from unit after each use. This can be done in two ways:
  - a. Unthread drain plug from front of tank and drain solution into approved location.
  - b. Place discharge wand into approved container. Activate unit until all solution has been flushed.
11. After solution has been removed, disconnect air line from the air fitting.
12. Open discharge ball valve to relieve all remaining pressure.
13. Close ball valve after all pressure has been relieved. Store unit with discharge ball valve and air inlet valve closed.
14. Before using unit with another chemistry, thoroughly flush with water.



# Maintenance

## WARNING

Performing any maintenance with the unit pressurized, and connected to the air supply may result in serious injury or death. Always ensure that the unit has been depressurized, and disconnected from the air supply before conducting any maintenance. Servicing or modifying this unit with parts not listed in this manual may cause the unit to operate improperly. Do not use unauthorized parts when servicing the unit.

## Maintaining Your Unit

To keep your unit operating properly, periodically perform the following maintenance procedures:

**Note:** Disconnect couplers from the air fittings before opening the backplate and servicing the unit.

- Inspect the pump for wear and leaks.
- Inspect all hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace the filter located within the air regulator as needed. Clean by unthreading air regulator bowl from the air regulator.

- Check the suction line for debris. Clean as needed.
- Drain your air compressor tank on a regular basis to help extend pump life. An air source with a high moisture content will accelerate pump wear.

**Note:** If your air source has a high moisture content, install a water separator to the air fitting on the backplate.

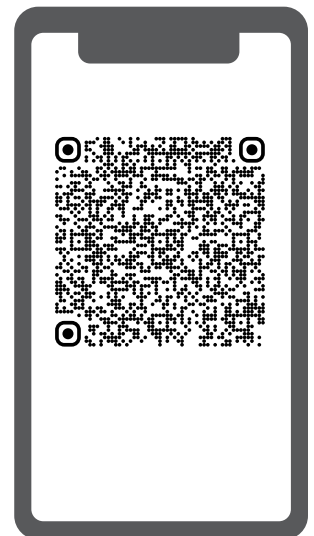
## Servicing Your Unit

To service your unit, refer to the service manual which includes:

- Troubleshooting procedures.
- Detailed parts breakdowns and illustrations.
- Part numbers of serviceable components and assemblies.



Scan this code for  
service manual

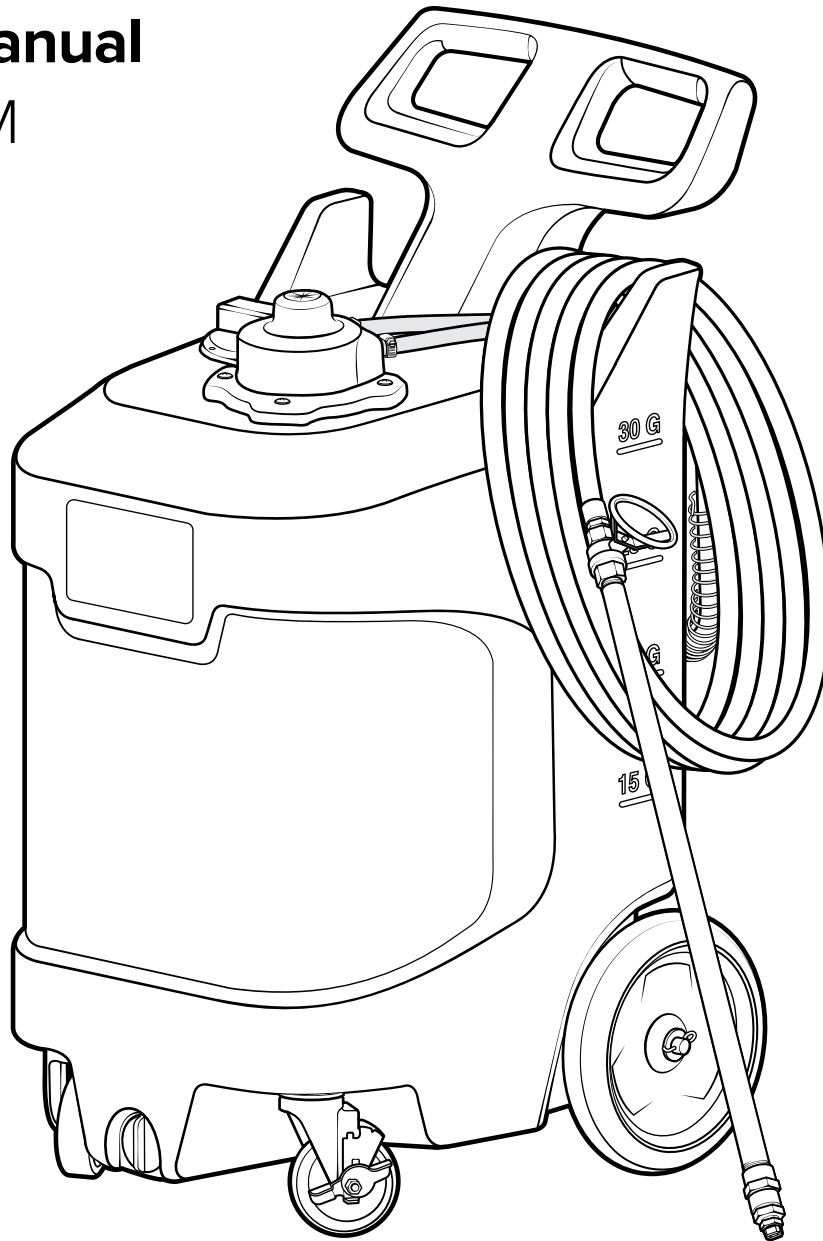




# 30 Gallon Gel Unit With Agitator

## Service Manual

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## Service Guide

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- Replace the filter located within the air regulator as needed. Clean by unthreading air regulator bowl from the air regulator.

- Check the suction line for debris. Clean as needed.
- Drain your air compressor tank on a regular basis to help extend pump life. An air source with a high moisture content will accelerate pump wear.

**Note:** If your air source has a high moisture content, install a water separator to the air fitting on the backplate. See Page 8 for more details. (Back plate assembly)

## Servicing Your Unit

Most repairs on the unit can be performed with the following tools:

- Crescent wrench (2x)
- $\frac{7}{16}$  in. (11 mm) open-ended wrench
- Flat head screwdriver
- Thread seal tape
- #2 Phillips head screwdriver
- #3 Phillips head screwdriver
- Hose cutters
- Knife

## Troubleshooting Your Unit

If your unit is not operating properly, try using these troubleshooting tips:

Issue	Solution
Agitator not mixing properly, or not at all.	<ul style="list-style-type: none"> <li>Check to ensure that the agitator is below the solution level. Agitator will not mix properly if solution level is too low.</li> <li>If solution level is correct, the air motor assembly may need to be replaced.</li> </ul>
Air regulator bowl or air filter has debris such as water, oil, or rust particles	<ul style="list-style-type: none"> <li>Clean by unthreading the air regulator bowl from the air regulator.</li> </ul>
Pump is cycling slower than normal	<ul style="list-style-type: none"> <li>Verify air supply meets the minimum air requirements for the unit.</li> <li>Inspect outlet side of system for build up. Clean as needed.</li> </ul>
Pump is cycling faster than normal	<ul style="list-style-type: none"> <li>Inspect suction line for debris build up. Clean as needed.</li> <li>Verify suction line ball valve is open.</li> <li>Inspect suction line for holes or kinks.</li> <li>Remove and inspect the inlet barb fitting. Verify the O-ring is in place and in good condition.</li> </ul>
Air passes through the pump without cycling	<ul style="list-style-type: none"> <li>The pump needs to be replaced.</li> </ul>
The unit operates at a reduced pressure	<ul style="list-style-type: none"> <li>Check suction line for debris or damage. Clean or replace as needed.</li> <li>Check the air compressor supplying the unit. If the pressure is less than 40 psi (2.8 bar), turn off the unit until the compressor can catch up.</li> <li>If the air supply is 50 psi (3.4 bar) or above, check the air gauge, which should read near 50 psi (3.4 bar). If the air gauge reads more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator.</li> </ul>

# Tank Assembly

Front view

**TNKA-30N-BK-AM:**

30 gallon natural tank assembly for portable gel units - includes black lid, drain plug, wheels, suction valve, and backplate thumb nuts

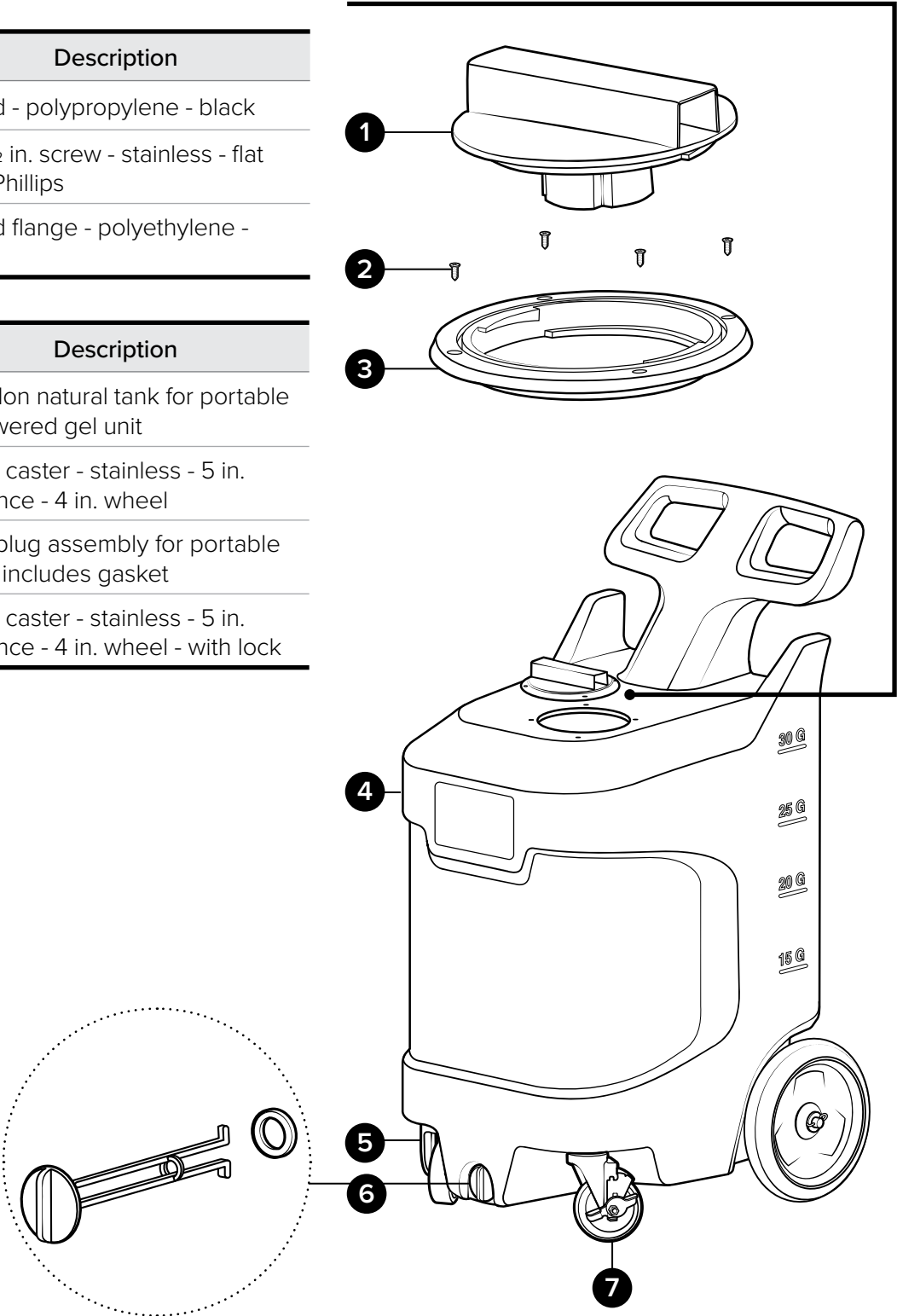
**LDA-5BK:**

Lid assembly - includes 5 in. black lid, lid flange, and mounting screws

Item number		Description
1	LD-5BK-LID	5 in. lid - polypropylene - black
2	S812-FH	#8 x ½ in. screw - stainless - flat head Phillips
3	LD-5BK-FLNG	5 in. lid flange - polyethylene - black

Item number		Description
4	TNK-30N-AM	30 gallon natural tank for portable air powered gel unit
5	CST5SS	Swivel caster - stainless - 5 in. clearance - 4 in. wheel
6	DPA	Drain plug assembly for portable units - includes gasket
7	CST5SS-L	Swivel caster - stainless - 5 in. clearance - 4 in. wheel - with lock

**LDA-5BK**



**TNKA-30N-BK-AM:**

30 gallon natural tank assembly for portable gel units - black lid - includes drain plug, wheels, suction valve, and backplate thumb nuts

**BPTNA:**

Back plate thumb nut assembly - includes bolt, thumb nut, and tether

Item number	Description	
1	BST1420118-VS	¼-20 x 1 ⅝ in. set bolt - stainless - Vibra-Seal
2	TN1420	¼-20 thumb nut - brass insert - assembled with tether

**VLVA-PVCV34:**

Suction valve assembly - includes valve, bushing, and elbow

Item number	Description	
3	PVCV34FM	PVC valve ¾ in. FPT x ¾ in. MPT
4	HHPB3414	Hex head poly bushing ¾ MPT x ¼ FPT
5	HBSSEL1438	Stainless hose barb ¼ MPT x ⅜ barb elbow

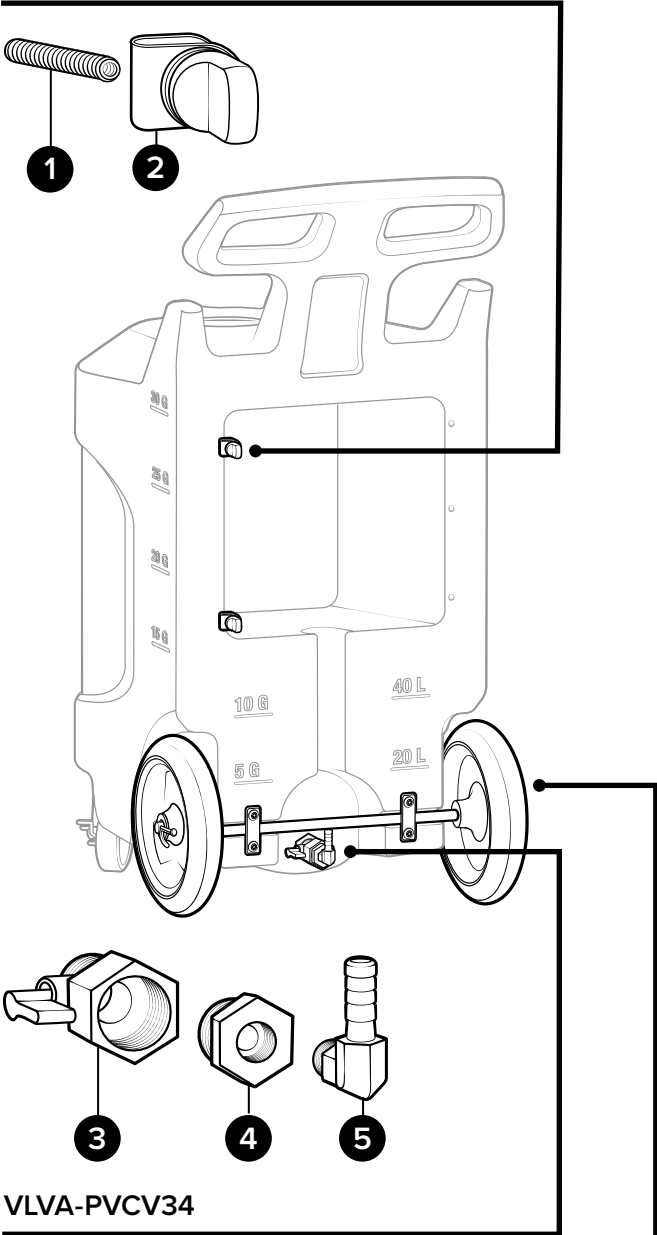
**WHLA-AXL1812:**

10 in. wheel assembly - includes 18.5 in. axle, axle plate, bolts, washers, and cotter pins

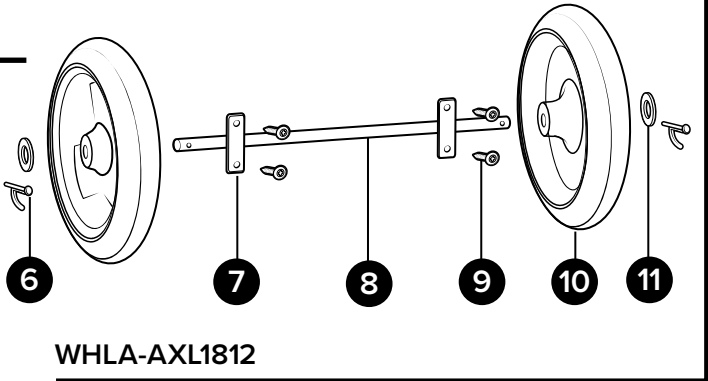
Item number	Description	
6	COT	Cotter pin - stainless - ⅛ in. x 1 in.
7	PLSS-AXL	Axle plate - stainless - 2.5 in. x 1 in. - 2 holes
8	AXL1812	Axle - stainless - 0.625 dia. x 18.5 in.
9	B142012-VS	¼-20 x ½ in. bolt - stainless - truss head Phillips - Vibra-Seal
10	W10	Wheel - non-marking - 10 in.
11	FW58	Flat washer for ⅝ in. pipe - stainless - 0.687 id x 1.5 od x 0.07 thk

Back view

**BPTNA**



**VLVA-PVCV34**



**WHLA-AXL1812**

# Back Plate Assembly

Inside view

**PA-GI12-AM:**

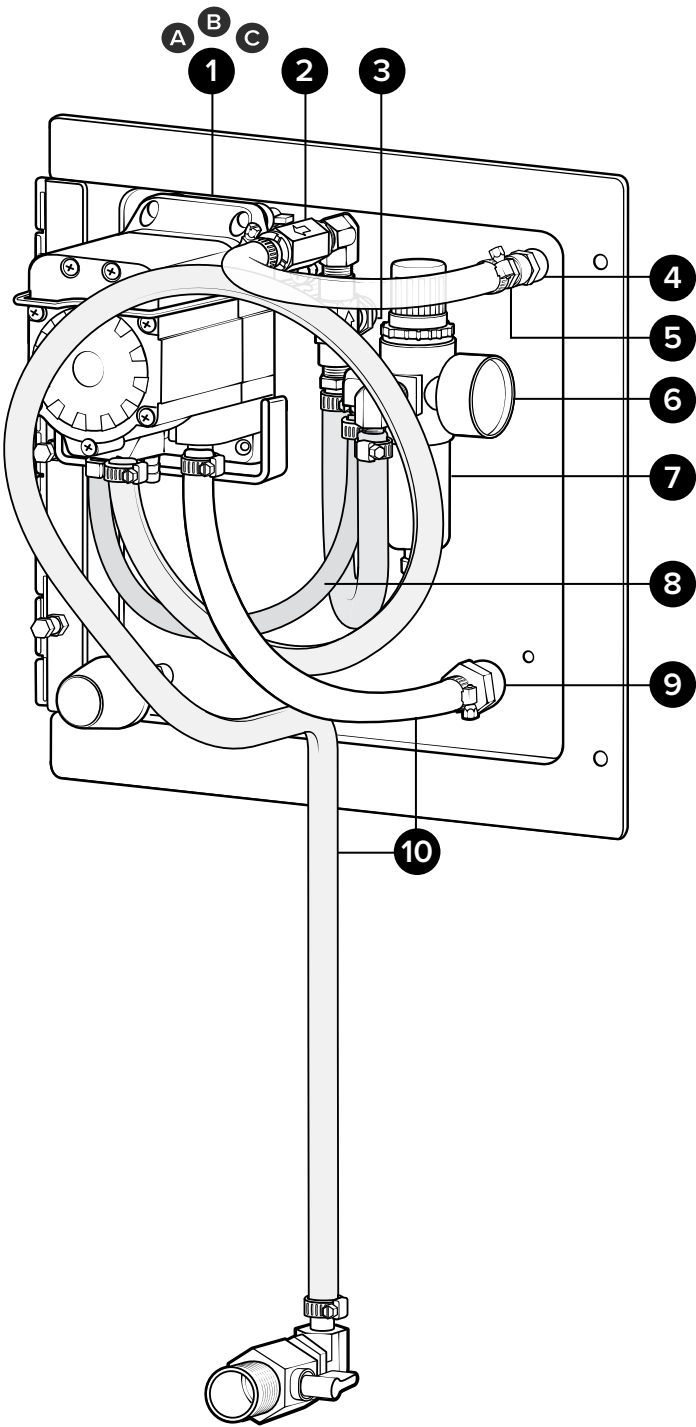
Plate assembly for portable gel air motor units with ½ in. hose - Santoprene pump

**Additional plate assembly pump options:**

PA-GI12K-AM: Kalrez pump

PA-GI12V-AM: Viton pump

Item number		Description
1	A P56	Pump with Santoprene seals - includes hose barbs, air fitting, and exhaust barb
	B P56K	Pump with Kalrez seals - includes hose barbs, air fitting, and exhaust barb
	C P56V	Pump with Viton seals - includes hose barbs, air fitting, and exhaust barb
2	CV1438	¼ MPT x ¾ barb - PVC check valve - SS spring
3	NV14	Needle valve - ¼ in. NPT - includes black knob
4	SC1414	Stainless pipe coupler - ¼ in. x ¼ in.
5	HBSS1438	Stainless hose barb ¼ MPT x ¾ barb
6	AG100	Air gauge - ⅜ in. NPT - 100 PSI dry model
7	R25	Air regulator - two ¼ in. FPT ports - two ⅜ in. FPT ports - includes filter and bowl
8	H14BL-F	¼ in. blue hose - hybrid TPE - available per ft.
9	HBFSS1238	Stainless steel hose barb ½ FPT x ¾ barb
10	H38BL-F	¾ in. blue hose - hybrid TPE - available per ft.



**PA-GI12-AM:**

Plate assembly for portable gel air motor units with ½ in. hose - Santoprene pump

**Additional plate assembly pump options:**

PA-GI12K-AM: Kalrez pump

PA-GI12V-AM: Viton pump

Item number		Description
1	SEL14M	Stainless elbow ¼ in. MPT x ¼ in. MPT
2	BVB14	Air inlet valve - ¼ in. FPT x ¼ in. FPT
3	AP14	Air fitting ¼ MPT x plug - nickel-plated brass
4	NV14-HNDL	Black knob for needle valve
5	TW14NPT	Tooth lock washer for ¼ in. NPT - stainless - 0.56 in. id x 0.96 in. od x 0.06 in. thk
6	SSA14	Stainless adaptor ¼ MPT x ¼ FPT
7	SSSFN12	Serrated flange nut - stainless - ½ in.
8	SSA14BKH	Bulkhead adapter - stainless - ¼ NPT x ¼ NPSM
9	FW12NPT	Flat washer for ½ in. NPT - stainless - 0.88 in. id x 1.5 in. od x 0.05 in. thk
10	HBSS1212	Stainless hose barb ½ MPT x ½ barb
11	SSE14	Stainless street elbow ¼ in.

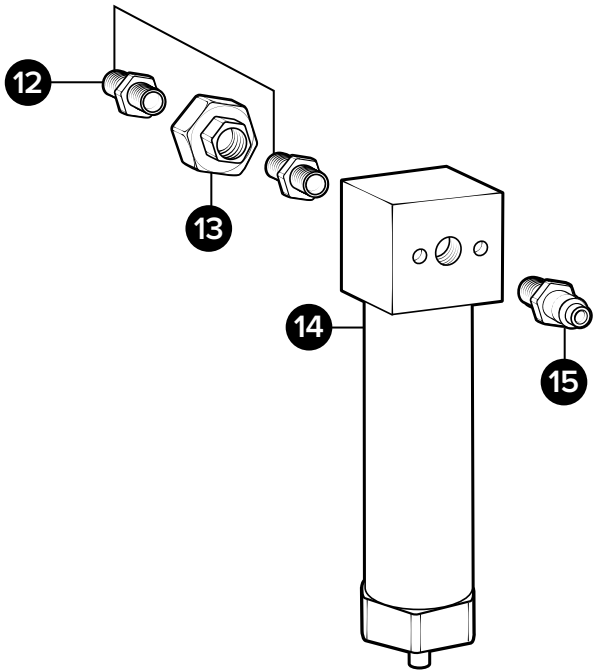
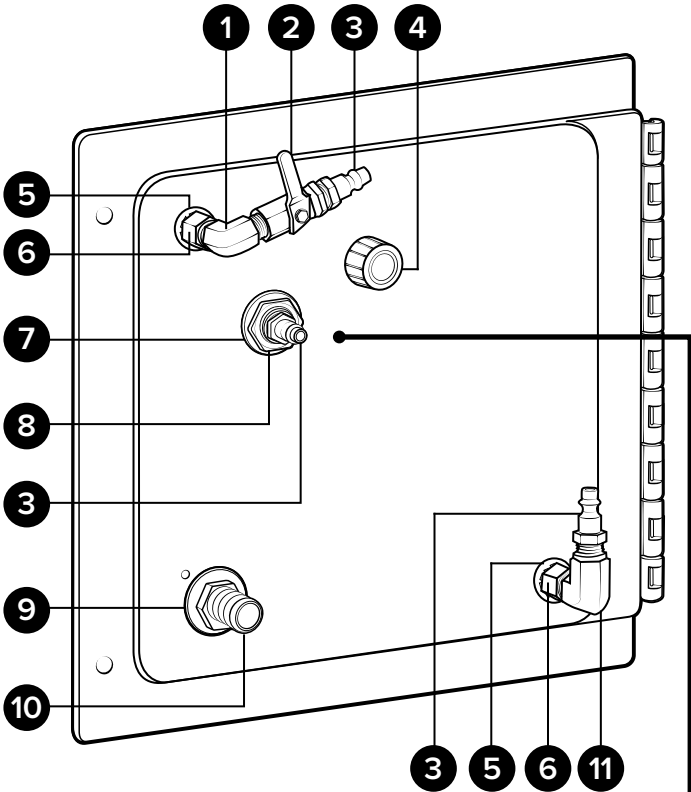
**Optional Components**

**WSA-20CFM:**

Water separator assembly - 20 CFM - ¼ in. FPT ports - includes air plug and union fittings

Item number		Description
12	SN1414	Stainless hex nipple ¼ MPT x ¼ MPT
13	SSU14	Stainless steel union - ¼ in. FPT
14	WS-20CFM	Water separator - 20 CFM - ¼ in. FPT ports
15	AP14	Air fitting ¼ MPT x plug - nickel-plated brass

**Back view**



**WSA-20CFM\***

*\*Optional assembly sold separately*

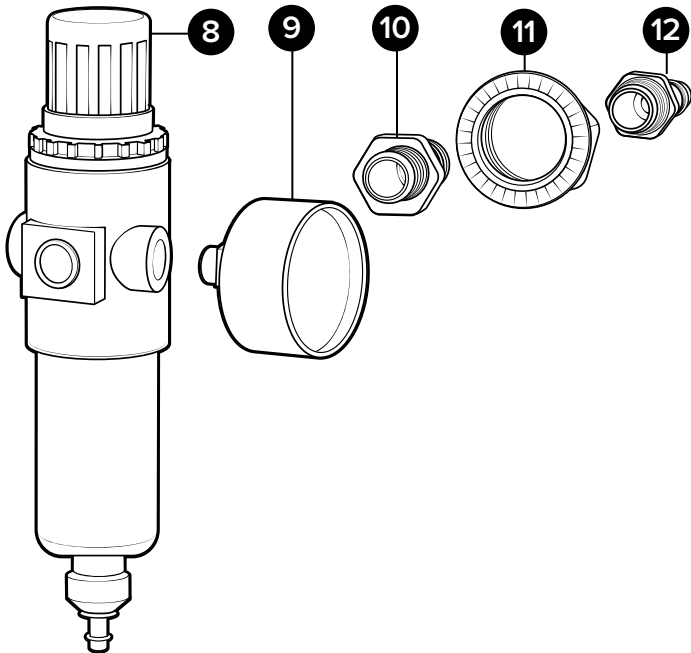
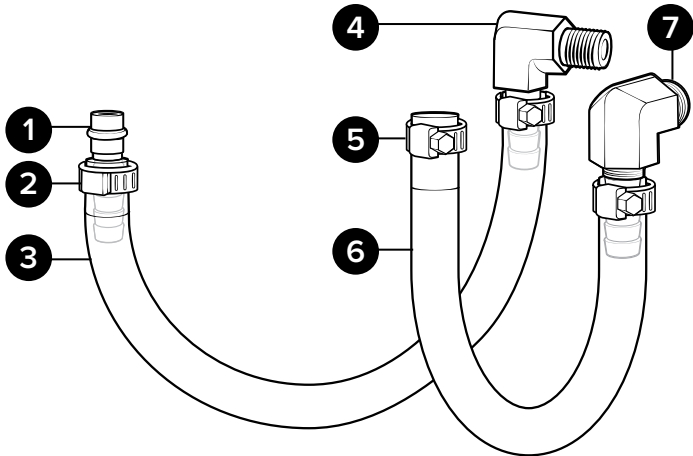
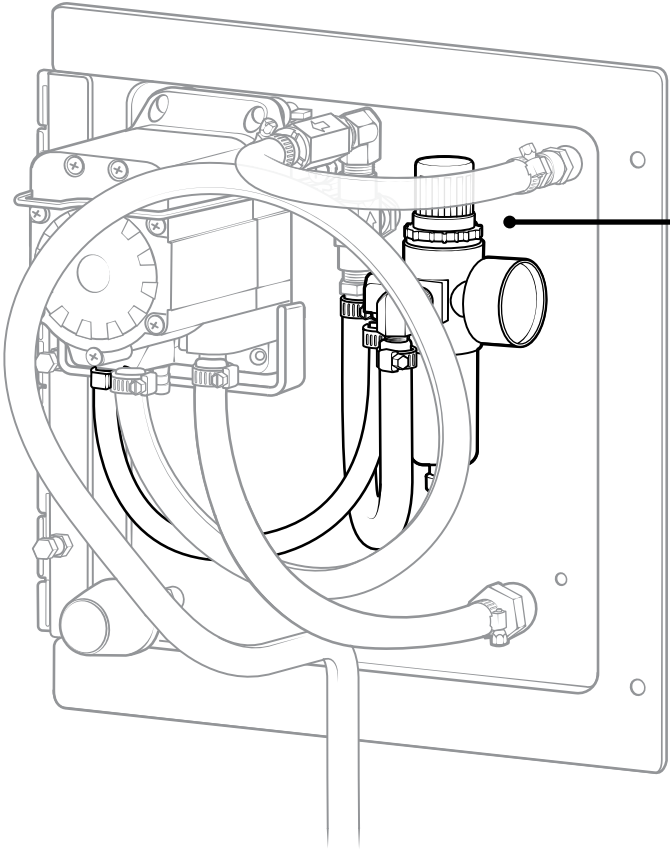


# Back Plate Sub-assemblies

## RGA-R25-PF:

Air regulator assembly for portable gel units - includes air gauge, pump barb, hose, bulkhead fittings, and air plug

Item number	Description	
1	HBB14P	¼ in. hose barb - brass - for G57/P56 air fitting with O-ring
2	EC14	Oetiker clamp for ¼ in. hose
3	H14BL-F	¼ in. blue hose - hybrid TPE - available per ft.
4	HBSEL1814	Stainless hose barb ⅛ MPT x ¼ barb elbow
5	SSC38	Stainless screw band clamp for ⅜ in. hose
6	H38BL-F	⅜ in. blue hose - hybrid TPE - available per ft.
7	HBSEL1438	Stainless hose barb ¼ MPT x ⅜ barb elbow
8	R25	Air regulator - two ¼ in. FPT ports - two ⅜ in. FPT ports - includes filter and bowl
9	AG100	Air gauge - ⅜ in. NPT - 100 PSI dry model
10	SSA14BKH	Bulkhead adapter - stainless - ¼ NPT x ¼ NPSM
11	SSSFN12	Serrated flange nut - stainless - ½ in.
12	AP14	Air fitting ¼ MPT x plug - nickel-plated brass



RGA-R25-PF

# Air Motor Assembly

**AIRMTRA-GEL-PRP:**

Air motor assembly for portable gel air motor units - includes air motor, coupling, and prop and shaft

**AIRMTRA-GEL:**

Air motor assembly - includes motor, plate, bolts, locknuts, screw band clamps, hose, hose barb, and quick connects

Item number		Description
1	GEL-MTR	Gel motor - air operated - lube free - includes 2x SS hose barbs
2	B1420114-PH	¼-20 x 1 ¼ in. bolt - stainless - pan head Phillips
3	PL-GEL-MTR	Plate for tank-30n (gel motor mount) - PL-4X8-¾-WHITE
4	LN1420	¼-20 locknut - stainless - nylon insert
5	SSC38	Stainless screw band clamp for ¾ in. hose
6	H38BL-F	¾ in. blue hose - hybrid TPE - available per ft.
7	HBSS1438	Stainless hose barb ¼ MPT x ¾ barb
8	QCB14F	Brass non check ¼ in. quick connect air plug - FPT

**CP1212:**

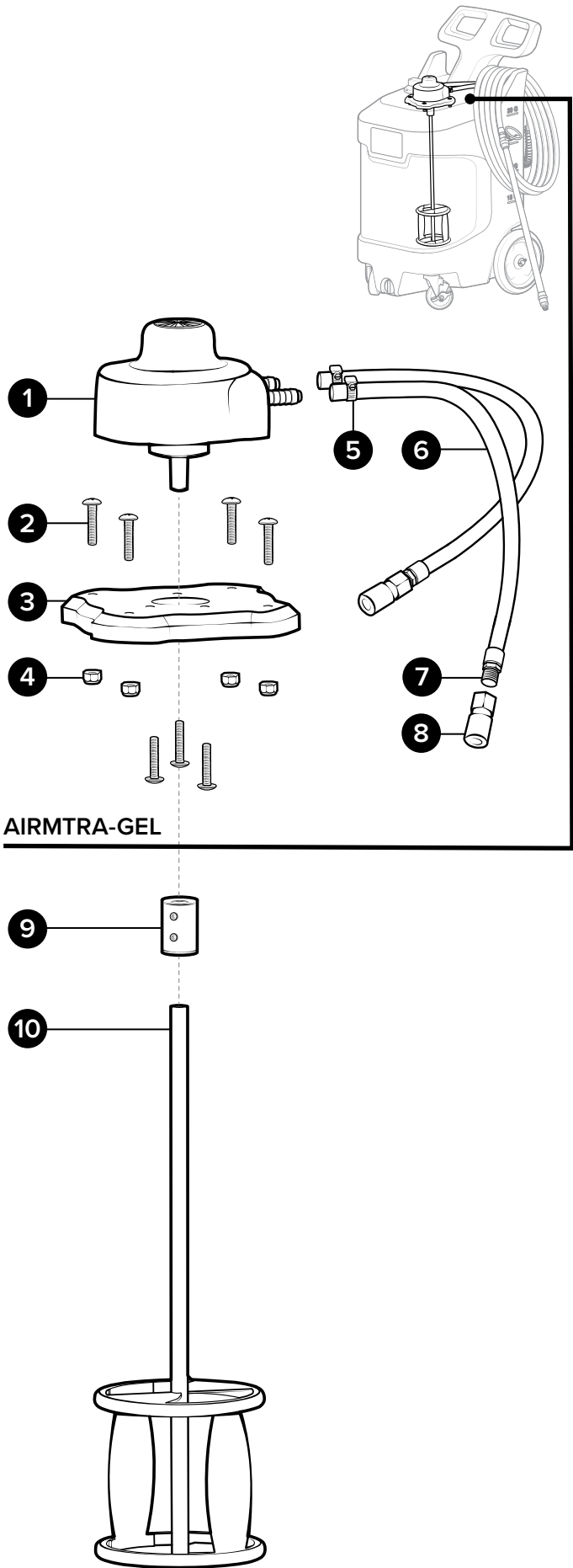
Stainless coupling

Item number		Description
9	CP1212	Coupling - ½ in. x ½ in. shafts - stainless

**GEL-PRP:**

Prop and shaft for gel air motor units - stainless

Item number		Description
10	GEL-PRP	Prop and shaft for gel air motor units - stainless



# Hose Assembly

**HA12BL-30:**

Hose assembly - 30 ft. of ½ in. blue\* hose - includes ferruled hose barb, and screw band clamp

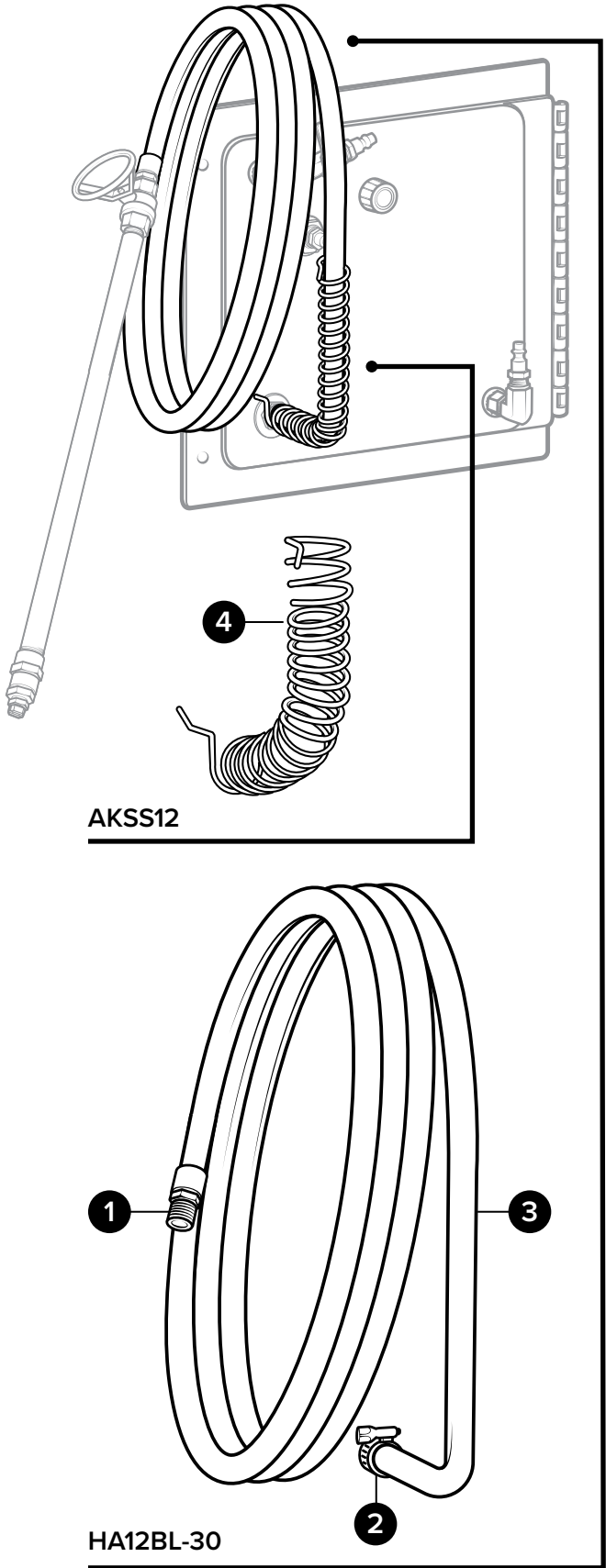
Item number		Description
1	HBSS1212	Stainless hose barb ½ MPT x ½ barb
2	SSC12	Stainless screw band clamp for ½ in. hose
3	H12BL-F	½ in. blue* hose - hybrid TPE - available per ft.

\* Additional colors available, see datasheet for options.

**AKSS12:**

Stainless anti-kink spring for ½ in. hose

Item number		Description
4	AKSS12	Stainless anti-kink spring for ½ in. hose



# Wand Assembly

## SSWA1224-ST-GEL:

Stainless wand assembly for portable gel units with ½ in. hose - includes 24 in. stainless wand, ST2520SS spray tip, stainless ball valve, coupler, and bushing

Item number		Description
1	SSC12	Stainless screw band clamp for ½ in. hose
2	HBSS1212	Stainless hose barb ½ MPT x ½ barb
3	BVSS12	½ in. stainless ball valve - welded nut
4	SSN1224	½ in. NPT SCH40S pipe nipple - stainless 24 in. long
5	SC1212	SS coupler ½ in. x ½ in.
6	HHSB1214	Hex head stainless bushing ½ MPT x ¼ FPT
7	ST4008SS	Spray tip - 40 degree fan - 0.8 GPM - stainless - ¼ MPT

## Additional Spray Tips

Additional spray tips can be found in parts package

Item number		Description
8	ST1510SS	Spray tip - 15 degree fan - 1.0 GPM - stainless - ¼ MPT
9	ST2520SS	Spray tip - 25 degree fan - 2.0 GPM - stainless - ¼ MPT

