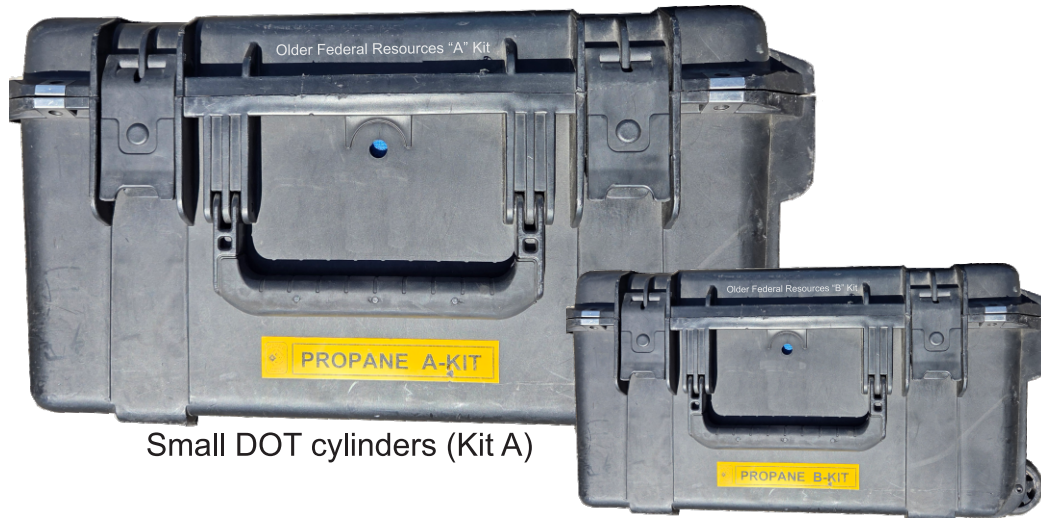


2026/07/31
Version 1.0.001

PROPANE A & B Kits



Small DOT cylinders (Kit A)

Residential ASME tanks (Kit B)



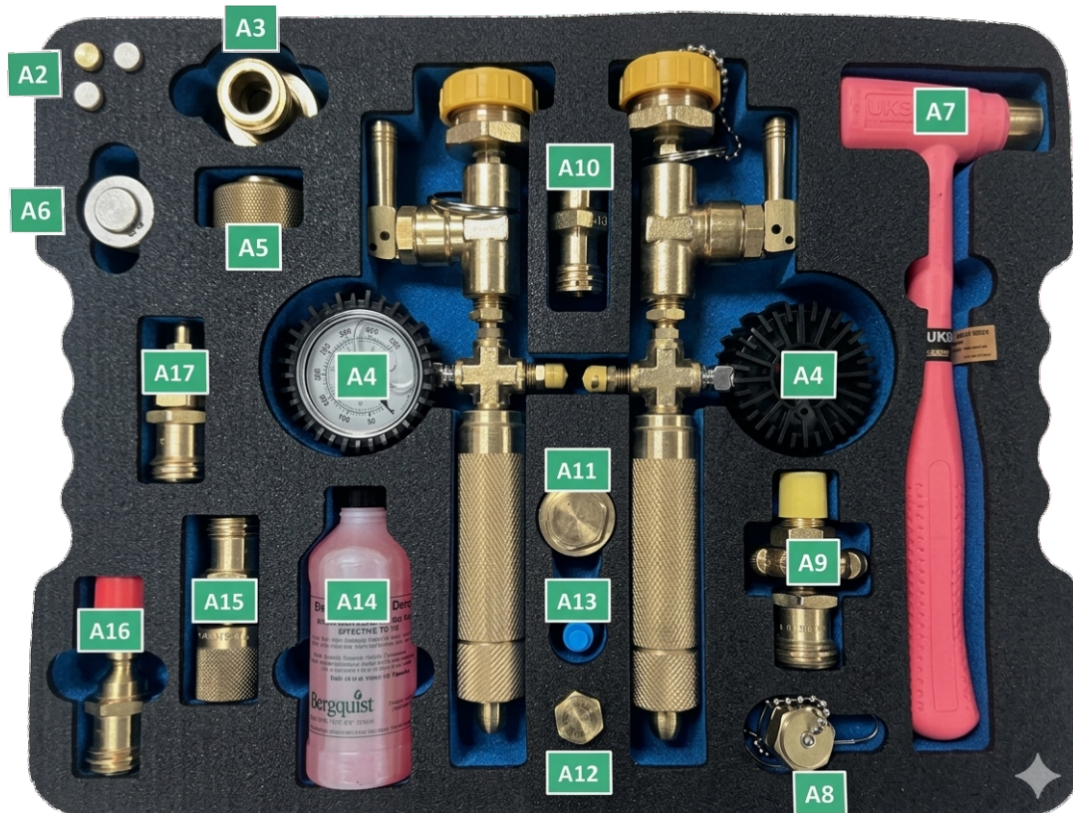
Tank/Cyl Connection Quick Reference Guide

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A2 - BLEEDER PLUG

A3 - 1 3/4" FEMALE ACME X 1 5/16" MALE ACME (QCC)

A4 - GAUGE ASSEMBLY 1 3/4" MALE ACME X 1 5/16" FEMALE ACME (QCC)

A5 - 1 3/4" CAP

A6 - 1 1/4" CAP

A7 - HAMMER

A8 - CGA555 CAP

A9 - POL X 1 5/16" MALE ACME

A10 - 3/8" FEMALE NPT X 1/4" MALE ACME

A11 - QCC CAP

A12 - POL PLUG

A13 - FULL PRESSURE 1/4" QUICK CONNECTOR X FEMALE POL

A14 - LEAK DETECTION SOLUTION

A15 - FORKLIFT X 1 5/16" MALE ACME (QCC)

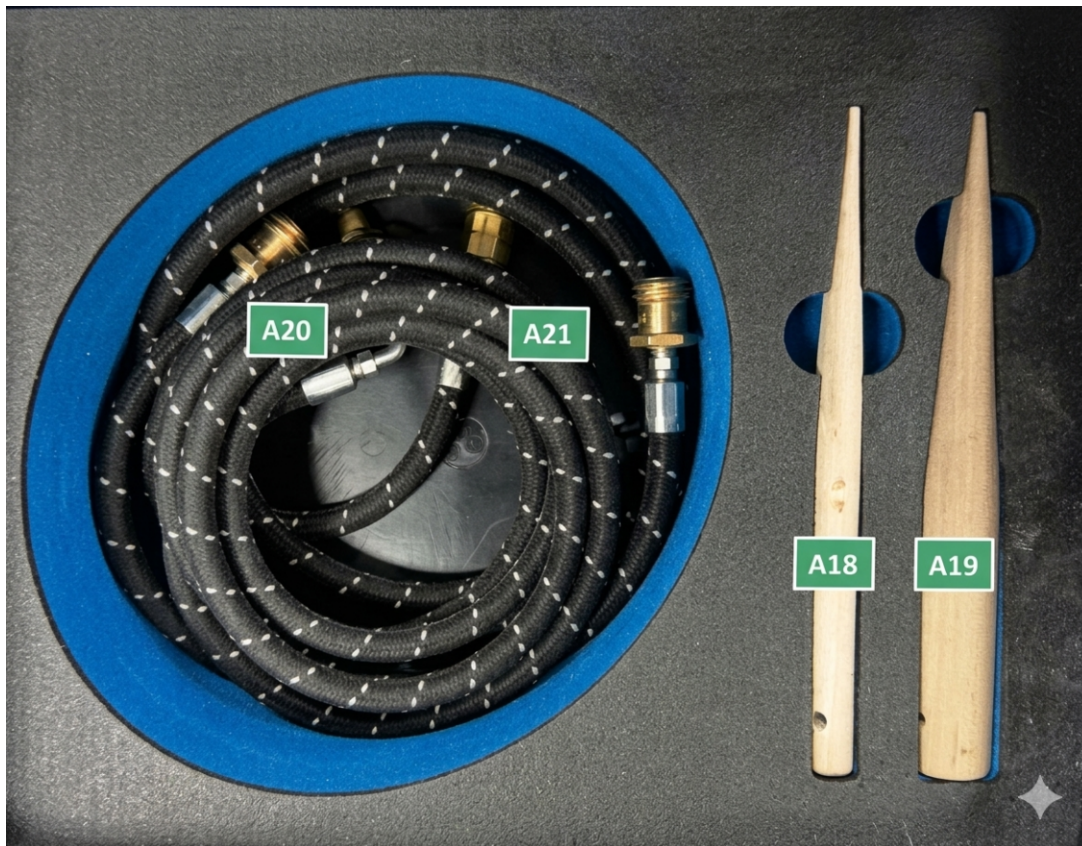
A16 - DISPOSABLE CYLINDER ADAPTER X 1 5/16" MALE ACME (QCC)

A17 - Liquid Withdrawal (CGA 555) X 1 5/16" MALE ACME (QCC)



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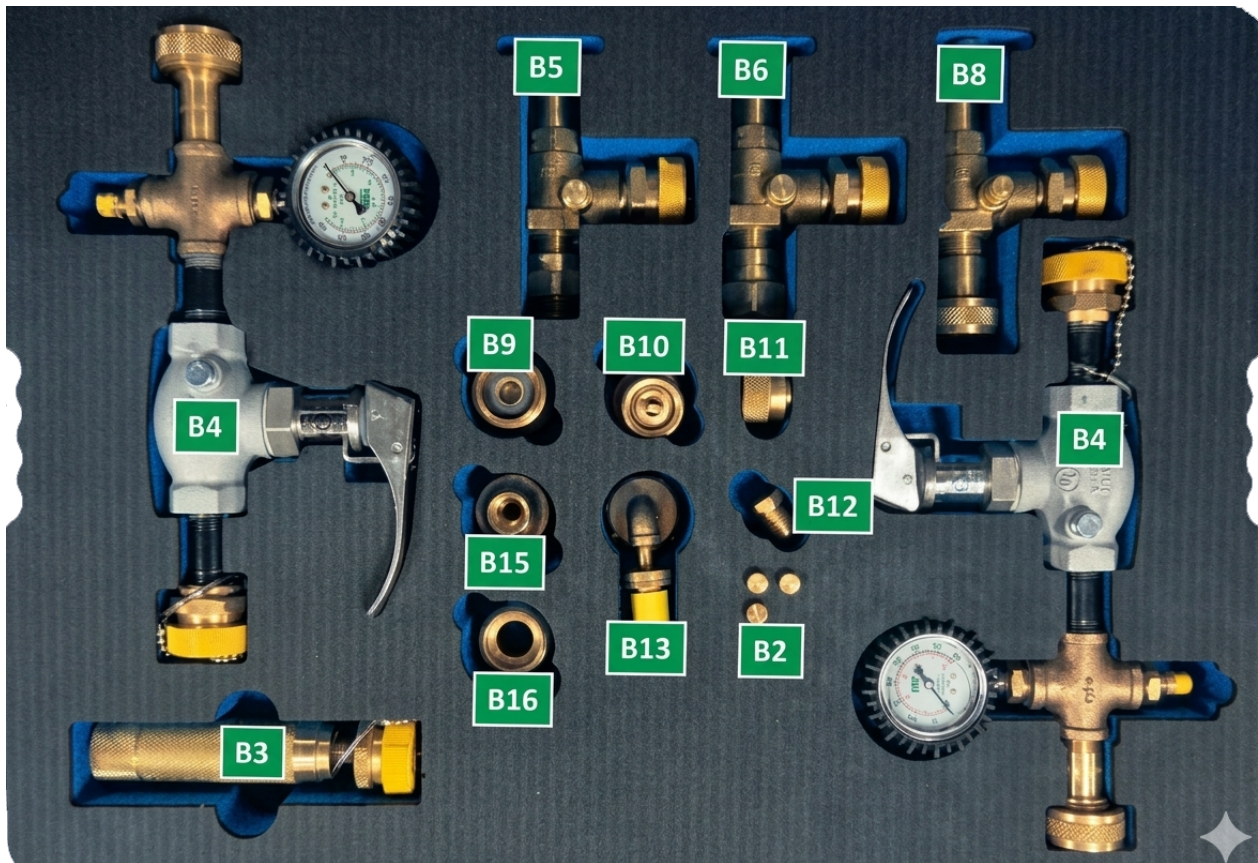


A18 - TAPER PLUG SMALL

A19 - TAPER PLUG MEDIUM

A20 - MALE QCC x STRAIGHT 3/8 FLARE with Female QCC ADAPTER

A21 - MALE QCC x 90 degree 3/8 FLARE with POL Adapter



B2 - BLEEDER PLUG

B3 - 1 3/4" MALE ACME X 1 5/16" FEMALE ACME (QCC)

B4 - GAUGE ASSEMBLY - 1 3/4" MALE ACME X 1 3/4" FEMALE ACME

B5 - **OLD STYLE LIQUID WITHDRAWAL** VALVE X 1 3/4" MALE ACME

B6 - **NEW STYLE LIQUID WITHDRAWAL** VALVE X 1 3/4" MALE ACME

B7 - HAMMER

B8 - **LIQUID FILL (VAPOR space) UNLOADING ADAPTER** X 1 3/4" MALE ACME

B9 - 1 3/4" FILL CHECK

B10 - 1 1/4" VAPOR RETURN X 1 3/4" MALE ACME

B11 - 1 1/4" CAP

B12 - POL PLUG

B13 - POL X 1 3/4" MALE ACME

B14 - LEAK DETECTOR (in the bottom of the case)

B15 - FEMALE POL X 1 3/4" FEMALE ACME

B16 - 1 3/4" MALE ACME X 1 3/4" MALE ACME



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B7 - HAMMER

B17 - MALE POL X 1 3/4" MALE ACME

B18 - TAPERED PLUG SMALL

B19 - TAPERED PLUG MEDIUM

B20 - TAPERED PLUG LARGE

B21 - 1 3/4" FEMALE ACME X 1 3/4" FEMALE ACME

B22 - 1 3/4" FEMALE ACME X 1 3/4" MALE ACME WITH VALVE

B23 - 1 1/4" VAPOR CONNECTOR X 1 3/4" MALE ACME WITH VALVE

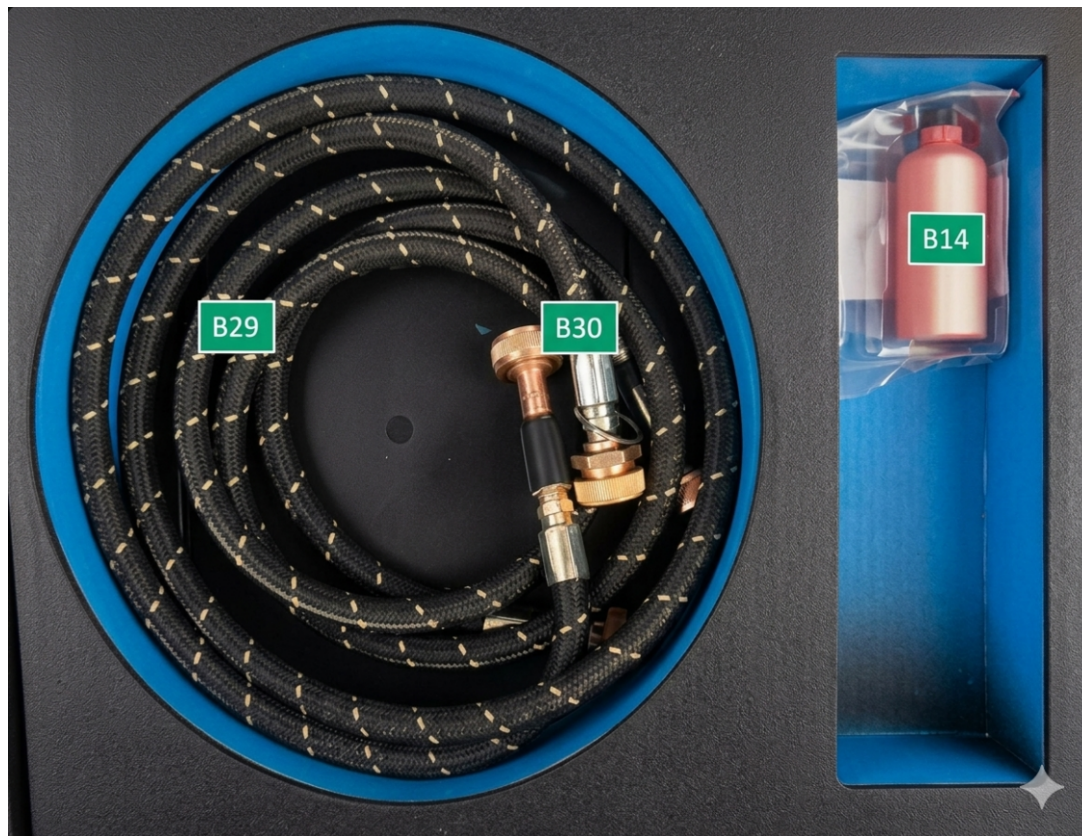
B24 - 3/4" MALE NPT PIPE X 1 3/4" MALE ACME WITH VALVE

B25 - 3/4" FEMALE NPT REDUCING COUPLING X 1/4" MALE NPT

B26 - 3/4" FEMALE NPT REDUCING COUPLING X 1/2" MALE NPT

B27 - 3/4" FEMALE NPT PIPE X 1" MALE NPT REDUCER

B28 - 3/4" FEMALE NPT PIPE X 1 1/4" MALE NPT REDUCER



B14 - LEAK DETECTION SOLUTION

B29 - 1-3/4 MALE ACME x 1-3/4 FEMALE ACME - 90 DEGREE

B30 - 1-3/4 MALE ACME x 1-3/4 FEMALE ACME - STRAIGHT ENDS

Propane Specialist Response Kit Users Guide

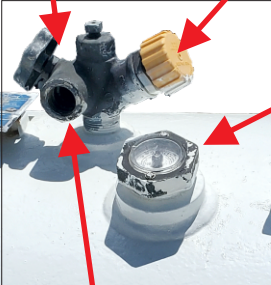
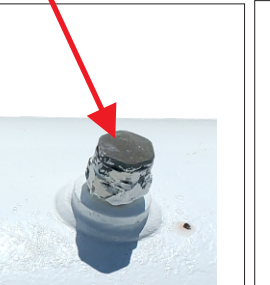
Component Application and Identification Guide

Page 7



COMMON Horizontal Residential Tank Connections

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

Vapor/Fill Valve 1 3/4" Male ACME See page "17" (FILL Valve)	Service Valve Vapor (P.O.L.)	Vapor Return 1-1/4" Male ACME	Liquid Volume Gauge 0-100%	OLD Style Liquid Withdrawal Valve	NEW Style Liquid Withdrawal Valve
					
 B8 "or"  B9	 B17 "or"  A9 "or"  B13 "or"  A21 "or"  A12	 Pressure Relief Device	 B5	 B6	
	 Vapor Return B10				

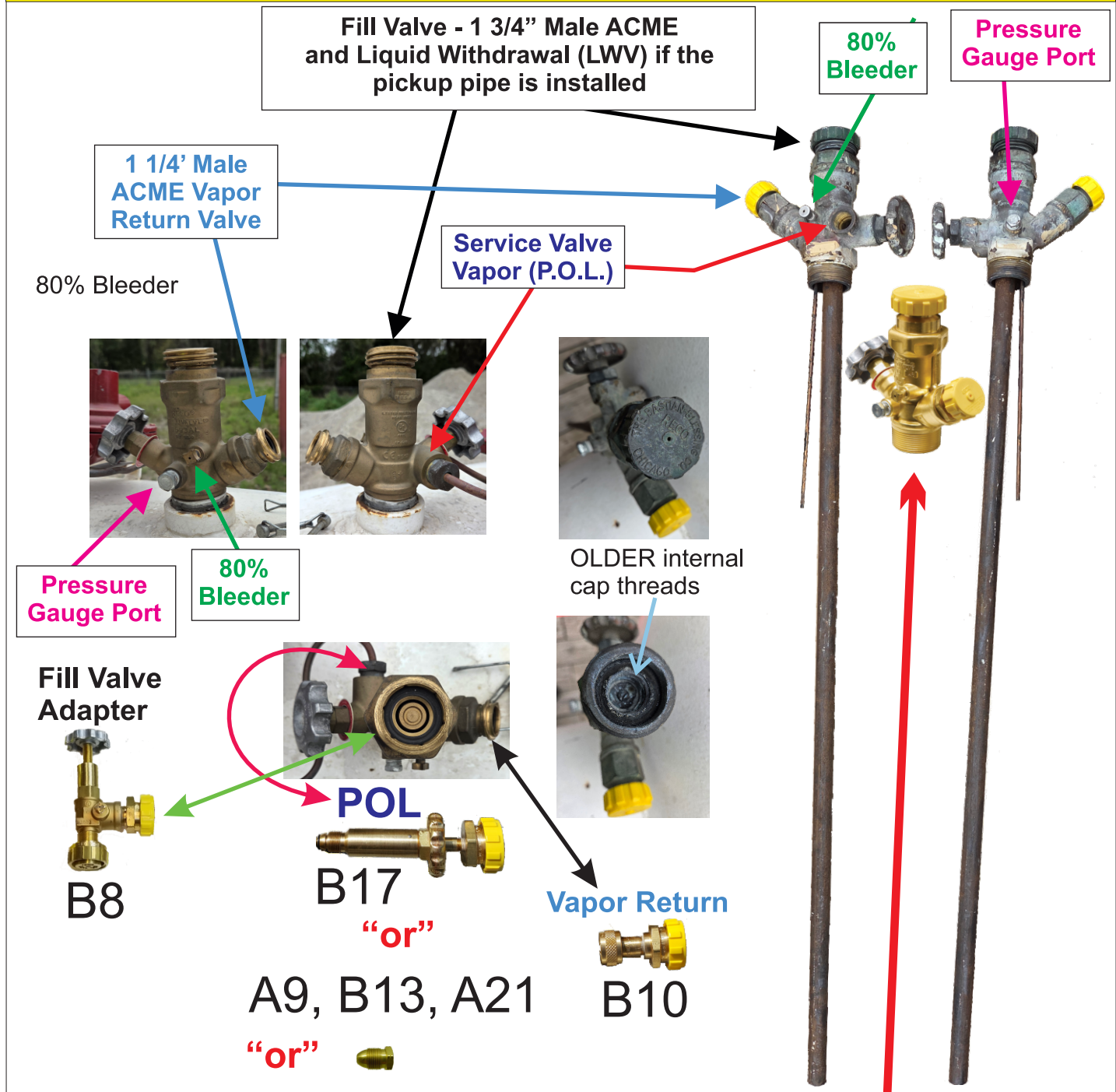
Propane Specialist Response Kit Users Guide

Page 8

Component Application and Identification Guide

1 1/2" Multi-Valve - Tanks with multi-valves are commonly the tank fill location and utilize a dip tube and double as the liquid withdrawal

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.



NOTE: Tanks with multi-valves may have had the dip tube removed and could be VAPOR service only.



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Propane Specialist Response Kit Users Guide

Component Application and Identification Guide

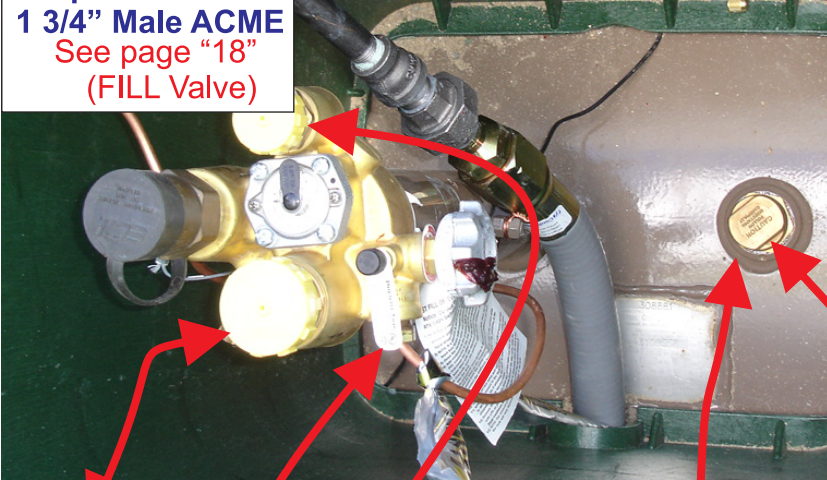
Page 9



COMMON Underground Tank Connections

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

Vapor/Fill Valve
1 3/4" Male ACME
See page "18"
(FILL Valve)



B6

New Style Liquid
Withdrawal B6
See page "16"

"or"

Old Style Liquid
Withdrawal B5
See page "16"



B8

"or"



B9



B10



B17

"or"

A9, B13, A21

"or"



A12



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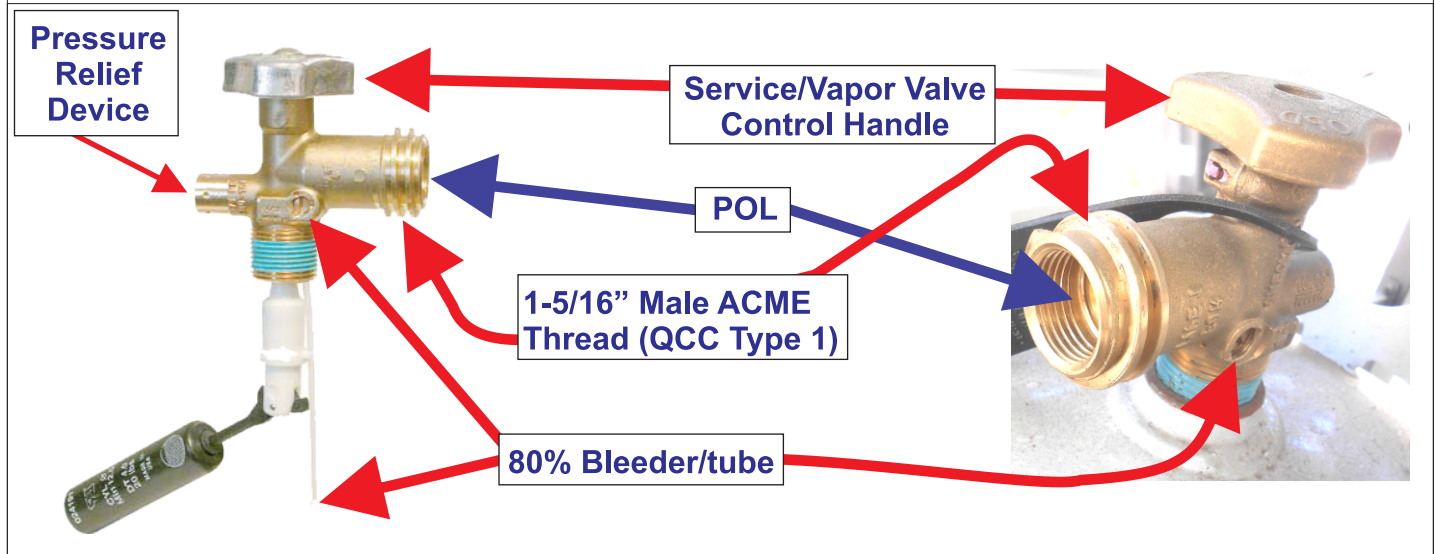


Propane Specialist Response Kit Users Guide

Component Application and Identification Guide

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

Overfill Protection Device (OPD) REQUIRED ON 4-40 POUND TANKS



B3

POL



B17

A9, B13,
A21 A12



Vapor Service Valve with POL Connection ONLY



**Commonly found
on 100 #, 420#,
and many other
tanks**



B17

A9, B13, A21

A12

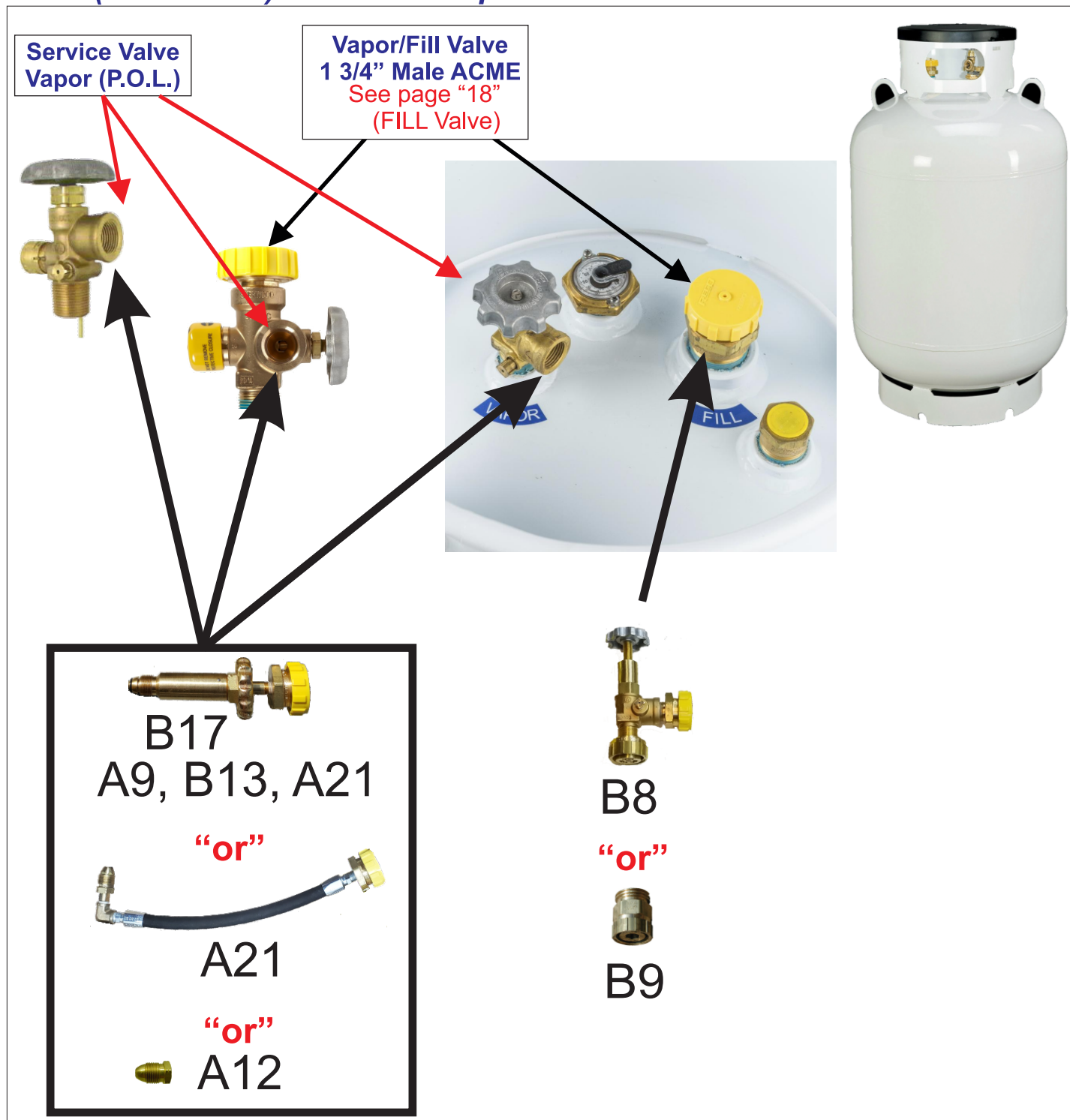


A21

Component Application and Identification Guide

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

420# (100 Gallon) Tank Valve options



Propane Specialist Response Kit Users Guide

Component Application and Identification Guide

Motor Fuel Tanks

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

Motor Fuel Connections



B8



A20 - A21



B17

A9, B13, A21



"or"

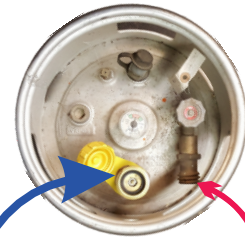
"or"

A12



Page ??

ForkLift Connections



A15

"and"



A4



B8



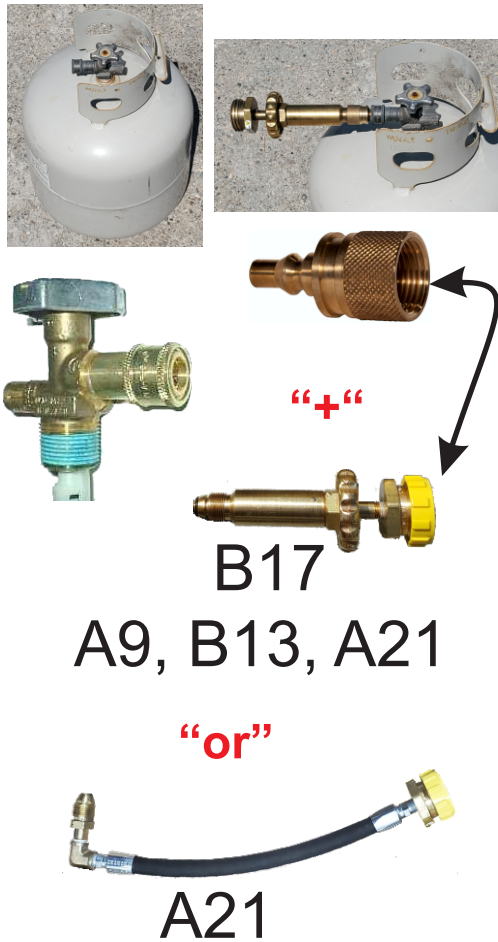
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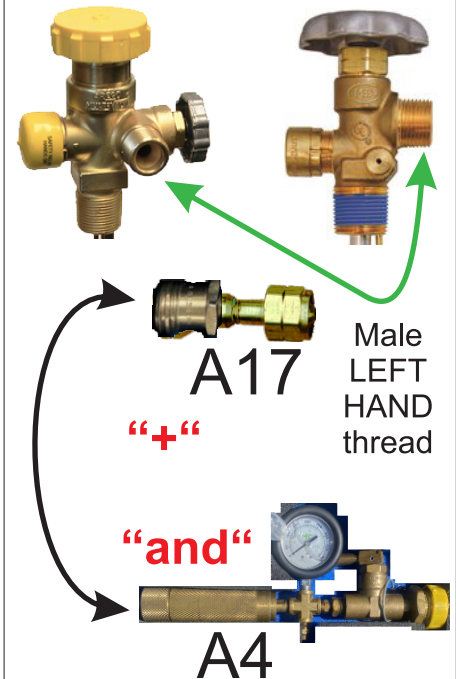
Specialty Tank Connections

Identified tank connection points may only need one of the items identified or multiple pieces to accomplish the task.

HIGH Pressure Quick Connection



Cylinder Liquid Withdrawal Connection (CGA 555)



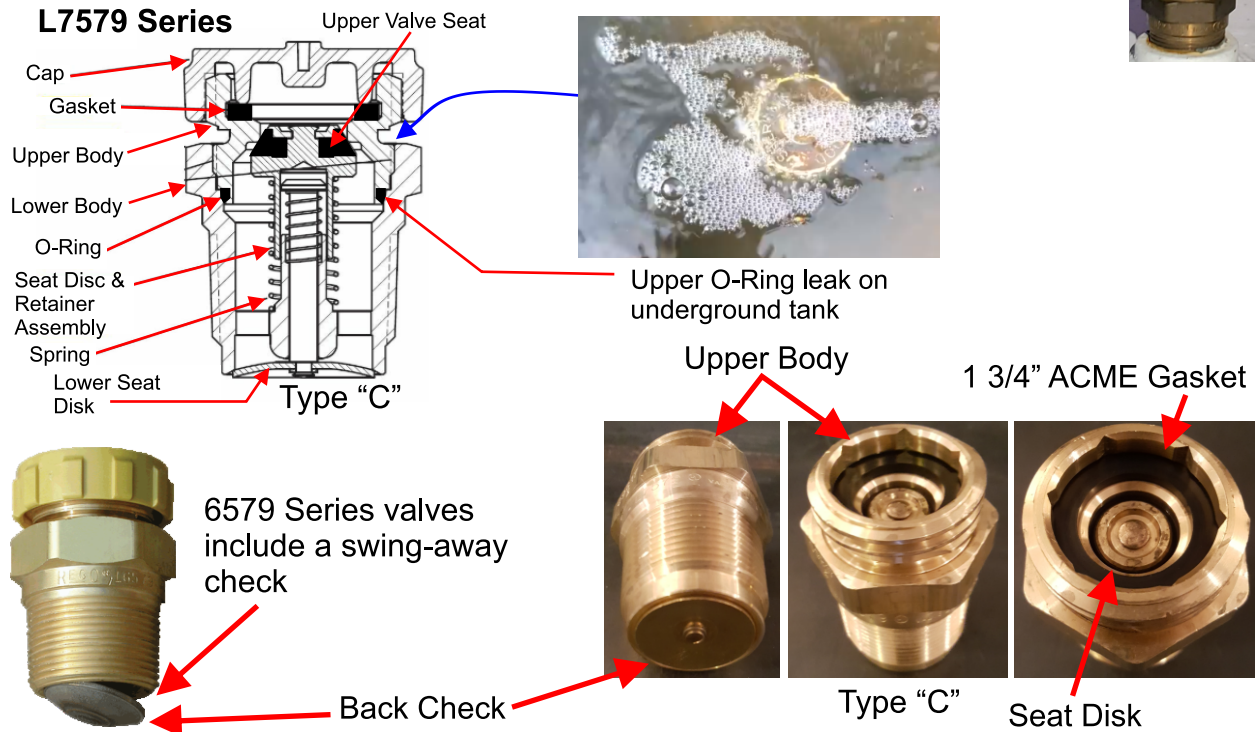
1-Pound Disposable Cylinder



Propane Fill Valves and Unloading Adapters

On most tanks and cylinders without a dedicated large bore vapor connection such as a Mc331, a 1-3/4" ACME connection that is commonly used as a filler valve would be a good choice for vapor flaring operations.

Note: Unloading adapters such as the REGO 3119a and the REGO 3121 are not valves. They are designed to open the tank connection only. A separate control valve assembly should be installed inline in case the tank valve does not reseal.



SPECIAL NOTE: when using the Rego 3121 or Marshal Excelsior 450 adapter verify that the valve stem is completely retracted (UP) prior to connecting it to the Double-Check Filler Valve. Failure to do so may cause an unwanted product release.

Screw Down to OPEN - Up to CLOSE

WARNING: In many makes of valves, the valve opening distance may be less than the plunger travel of the adapter. Do not force the handwheel if it appears that the Filler Valve is wide open (screwed down).



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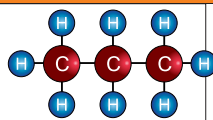
Propane Fact Sheet

DOT GUIDEBOOK
GUIDE # 115, 366-369, 375

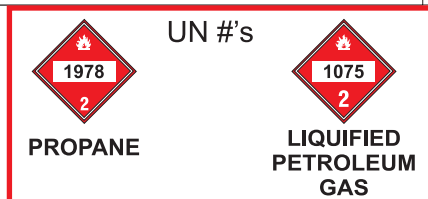
Page 22



Chemical Name: **Propane**
Chemical Family: **Hydrocarbon**
Chemical Formula: **C₃H₈**



CAS Registry No.: **74-98-6**
IDLH: **2200 ppm** (based on 10% LEL)
LEL: **2.15 (2)** UEL: **9.6 (10)**
Vapor Density: **1.52**
Specific Gravity: **0.5**
Vapor Pressure: **95 psig @ 60 Deg. F**
Boiling Point: **-44 Deg. F**
Freeze Point **-306**
Evaporation Rate: **Gas at normal ambient temperatures**
Flash Point: **-156 Deg. F**
Ignition Temp.: **900 - 1100 Deg. F**
Weight: **4.24 Lbs. per gallon @ 60 Deg. F**
Expansion Ratio: **270 - 1**
Solubility: **Not soluble in water**



NFPA -704

FIRE - Red

HEALTH
- Blue



REACTIVITY
- Yellow

SPECIAL HAZARDS - White

Color: **Colorless**
Odor: **Odorless, ALSO SEE BELOW**
Percent Volatile by Volume (%): **100**
Stability: **Stable**
Hazardous Polymerization: **Will not occur**
Decomposition Products: **CO, CO₂**
OSHA PEL: **1000 ppm**
ACGIH TLV: **1000 ppm**

STORAGE VESSALS

Propane and other Liquefied Petroleum Gases (LPG) are commonly shipped in container sizes from less than 1 ounce, to over 34,000 gallons (railcar). Cigarette lighters, hand held torches, spray cans, semi trailers and rail cars can all be used as a vessel to hold propane and other LPG's.

Normally small cylinders (less than 100 lbs.) are used to supply propane vapor and do not have a dip tube (80% liquid tube). If a cylinder that was designed to supply vapor only is inverted, liquid will be expelled from the vapor opening.

Pre-Plan your local area and know what's being transported, stored and how!

EMERGENCY RESPONSE

Warning : Danger! Compressed Flammable gas. Simple asphyxiate: death possible in higher concentrations (IDLH 2200 ppm). Contact with liquid causes cryogenic type burns, can be extreme, similar to frost bite.

If responding to a tank on fire: YOUR FIRST DECISION must be whether to apply water or evacuate the area. If an attack is made, apply water to the point of flame contact first and continuously then to other tank surfaces to assist in cooling the tank. Manage vapor leaks as needed. If possible use un-maned or remote nozzles. After the fire has been extinguished continue to apply water to the tank surface until the tank is cool. If possible you should NOT extinguish a flammable gas fire with-out shutting off the flow of gas first "unless" the flame is impinging on the vapor space. If the fire contacting the vapor space is extinguished, continually disperse product vapors until the hazard is removed.

If responding to a potential odor/leak: Arrive with your meter ready. Calibrated and warmed up, wear all of your PPE, test LOW medium and high in accordance with your departments SOP's and SOG's.

Identify if there is a basement, cellar or crawl space. Ask if there has recently been any service work of the gas system (this may help you locate small leaks quicker). A leak detection fluid may help identify small leaks that a meter reading in % of LEL cannot detect.

Liquid leaks produce visible clouds when sufficient humidity is present. may be able to be converted to a water leak using water injection.

PPE

***Respiratory:** SCBA for gas in unknown concentrations and concentrations above occupational exposure limits and firefighting.

***Hands:** Use cold-impervious, insulating gloves where contact with liquid may occur that will not freeze to objects.

***Eyes:** Possibility of liquid contact, wear splash-proof safety glasses and face shield.

***Skin and Body:** Where contact with liquid may occur, wear appropriate cold insulating protective clothing and face shield (SCBA). Structural PPE required for firefighting.

Extinguishing Media: Shut off source, Water Injection, Water spray, Class A-B-C or BC extinguisher.

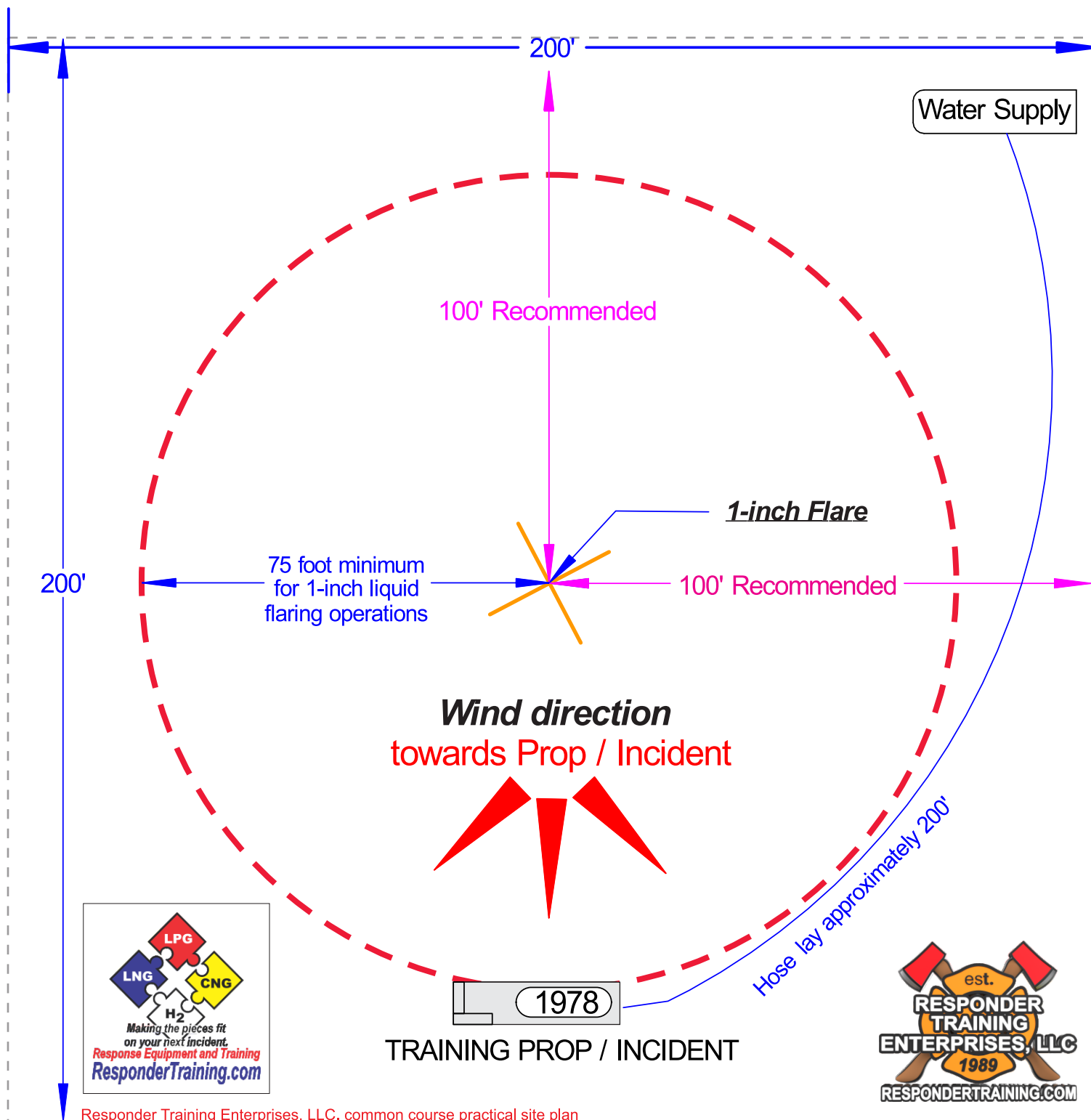
Product vapors will gather in low areas, check all low areas for gas vapor accumulations (ditches, sewers, river beds and structure), disperse product vapors with water fog or forced air.

CAUTION: Flammability limits (i.e., explosion hazard) should be considered when assessing the need to expose personnel to concentrations requiring respiratory protection.

Flaring Site Plan (training/incident)

Propane Response - 101 to Advanced Tactics Class practical site plan for **Liquid** Propane Flaring Operations using the **1-inch Responder Flare (AKA The Dragon Slayer)**.

Smaller flares with reduced flows or propane systems that can not supply full 1-inch liquid flows will not require the same size spacing.



Responder Training Enterprises, LLC, common course practical site plan

These are the "minimum" distances "commonly used" by Responder Training Enterprises, LLC, based on the radiated heat produced while burning **LIQUID** propane using our **1-inch flare**.