

BUILT TO A HIGHER STANDARD®

*American Standard*®

HEATING & AIR CONDITIONING

BUILT TO A HIGHER STANDARD.

# American Standard® Link

Module 2

# Agenda

- Module 1 Recap
- Audiences
- Dealer Experience
- Tools & Training
- Call to Action

# Module 1 Recap

# Introducing American Standard Link

**Designed to revolutionize the way installation, commissioning, and remote monitoring are conducted on variable speed systems**



Installation & Commissioning Ease

## **Built to be “plug and play”**

- American Standard Diagnostics mobile app for fast system setup
- Bluetooth mesh allowing connection to the equipment
- Standardized color-coded wiring
- Self-identification of equipment

Installation Accuracy

## **Helping technicians ensure a quality install**

- System auto-configures based on model & serial number
- Automated Charging via SmartCharge™
- Automatic System testing

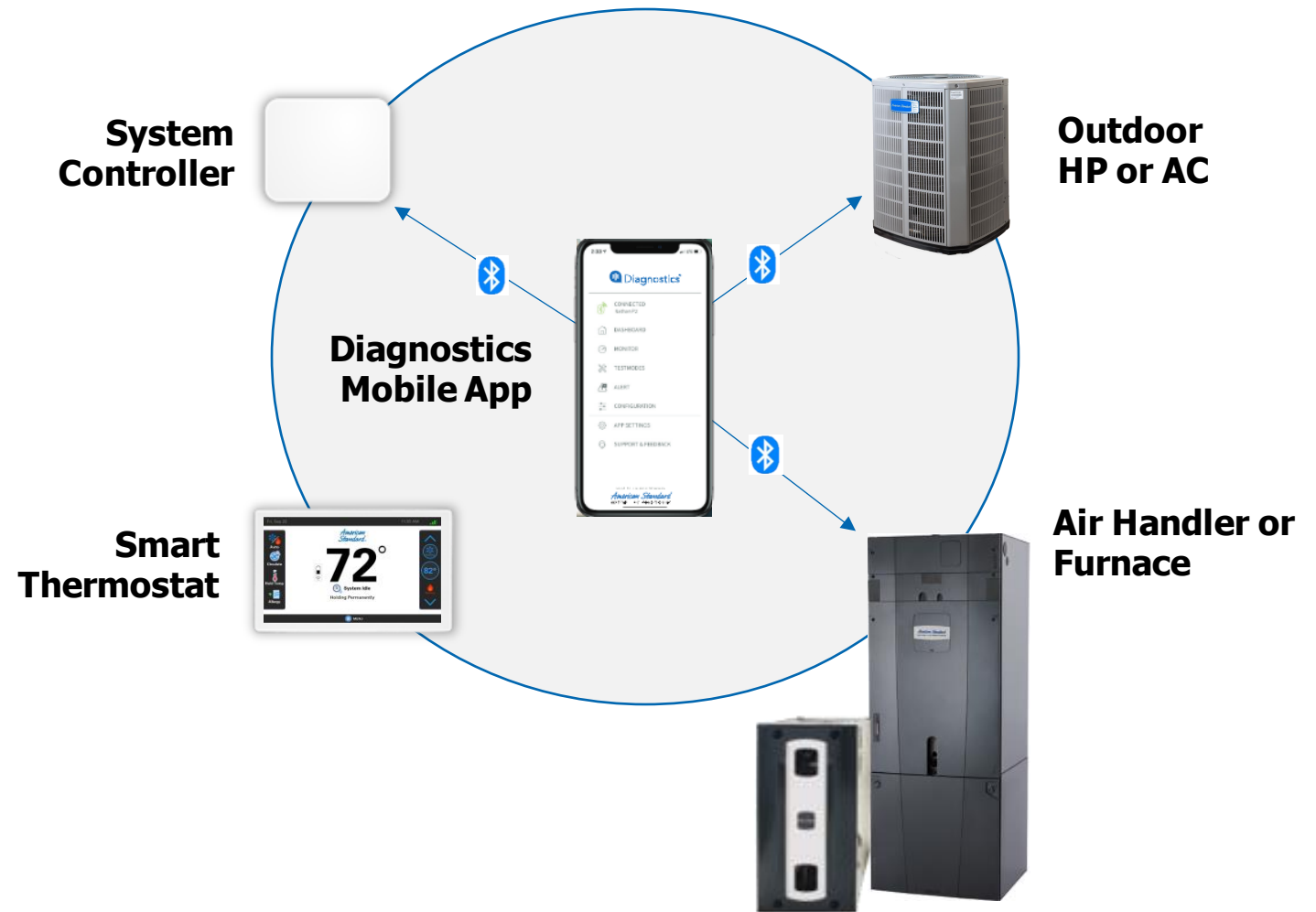
Enables Remote Monitoring

## **Enables quicker solutions and more efficient service calls**

- Expanded data provided by Link technology
- Continuous monitoring with American Standard Diagnostics
- Remote configuration
- Software updates automatically over WiFi



- State-of-the-art communications technology within our HVAC products
- Sensors embedded into equipment that monitor key performance criteria
- Data available via Bluetooth to technician's smart device
- Plus, connectivity to Smart Thermostat + American Standard Home



# Estimated Launch Timing

- Future extension into additional product lines
- Outdoor products are backwards compatible with legacy indoors/controls

2022

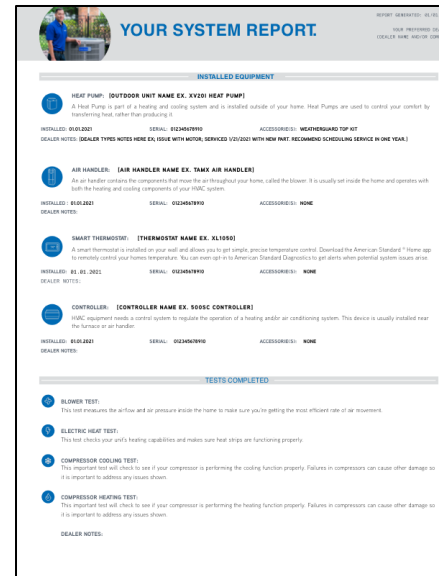
Launched	Q3
<ul style="list-style-type: none"><li>• Platinum 18HP</li><li>• Platinum 20HP</li><li>• Platinum 18AC</li><li>• Platinum 20AC</li></ul>	<ul style="list-style-type: none"><li>• TAMX</li><li>• System Controller</li><li>• Smart Thermostat</li><li>• S8V2-C Furnace</li></ul>

2023

Q1	Q2
<ul style="list-style-type: none"><li>• TEMC</li><li>• S9V2-C Furnace</li></ul>	<ul style="list-style-type: none"><li>• Zoning</li><li>• Platinum 19</li><li>• Platinum 17</li></ul>

# Features Making it Possible

- **Diagnostics mobile app:** provides guided configuration steps and the ability to view sensor data in real time from all components of the system - without relocating to the thermostat or having to rely on physical gauges
- **SmartCharge™:** automatically completes refrigerant charging process by providing verified measurements and instant feedback via the Diagnostics mobile app
- **System Reports:** modes of operation are tested, ensuring performance is consistent with standards and give both dealers and homeowners assurance that the install was successful





# Design Improvements

## CLII vs CAN Bus

- Our **fastest** communication speeds
- **Full system** connectivity and control with the mobile app
- Patent Pending **Automated Charging** (SmartCharge™)
- Remote software update capability for thermostat, plus indoor and outdoor equipment
  - Automatic wireless download through American Standard Home
- **Enables better remote diagnostics** with a richer data set



	American Standard Current	American Standard Link
Mobile Service tool name	American Standard Diagnostics	
Bus / Protocol	CLII	CAN
Protocol Speed	1 Kbps	50 Kbps
Automated Charging	●	●
System Verification	●	●
Remote Software updates	●	●
App Connectivity – System level	●	●
App Connectivity- Single unit	●	●
Auto-configuration	●	●
Remote Configuration	●	●
Equipment Self Identification	●	●
Remote Monitoring	●	●

# Audiences

# Primary Audience - Dealers



**Heavy Users**



**Light Users**

## PERSONAS

**Heavy Users** readily utilize technologies to improve their business, and successfully upsell system upgrades like IAQ and smart home by emphasizing end-user benefits. They're proactive about growth, operational efficiency and developing their brand – and may even be expanding into other services.

Motivation: Streamlining business operations

**Light Users** play in competitive markets and find that lead time, availability and price are extremely important to their customers. To get more sales, they may sacrifice chances to upsell variable speed equipment – their main focus is to move quickly.

Motivation: Implementing tools and/or technology that make selling and installing equipment upgrades less challenging and easier to justify to consumers

## MESSAGING

Variable speed systems with Link technology help high-functioning Dealers to reduce wasted time and operate at peak efficiency

- More accurate installations = fewer warranty claims, reduced callbacks
- Remote diagnostics = know issues before being onsite, fewer truck rolls

Variable speed systems with Link technology ensure a reliable install that will help prevent future issues

- More accurate installations = verified installation / Dealer Verification Report
- Remote diagnostics = limit emergencies
- Easier installations = guided installation to move quickly

# Delivering Peace of Mind for the Homeowner



## Verified installation

- Installer has all the data needed to quickly and accurately install and optimize performance of the HVAC equipment
- Homeowner System Report verifies quality install
- This means a **better overall experience with system installation and an improved peace of mind** that the homeowner is getting the comfort and efficiency they expect

## Increased reliability of the system over time

- Diagnostics can alert a homeowner's preferred dealer of even the slightest system changes
- Opting into remote monitoring means some issues may be resolved remotely by the dealer by viewing, editing, and adjusting thermostat settings
- The result is an **improved peace of mind over the life of the system**

# Dealer Experience

# System Configuration

Let's begin by comparing the difference of configuring a traditional system vs. configuring an American Standard Link System



# Older/Current Equip Config.

**Let's review a few different things that Installers must do today to properly configure a system:**

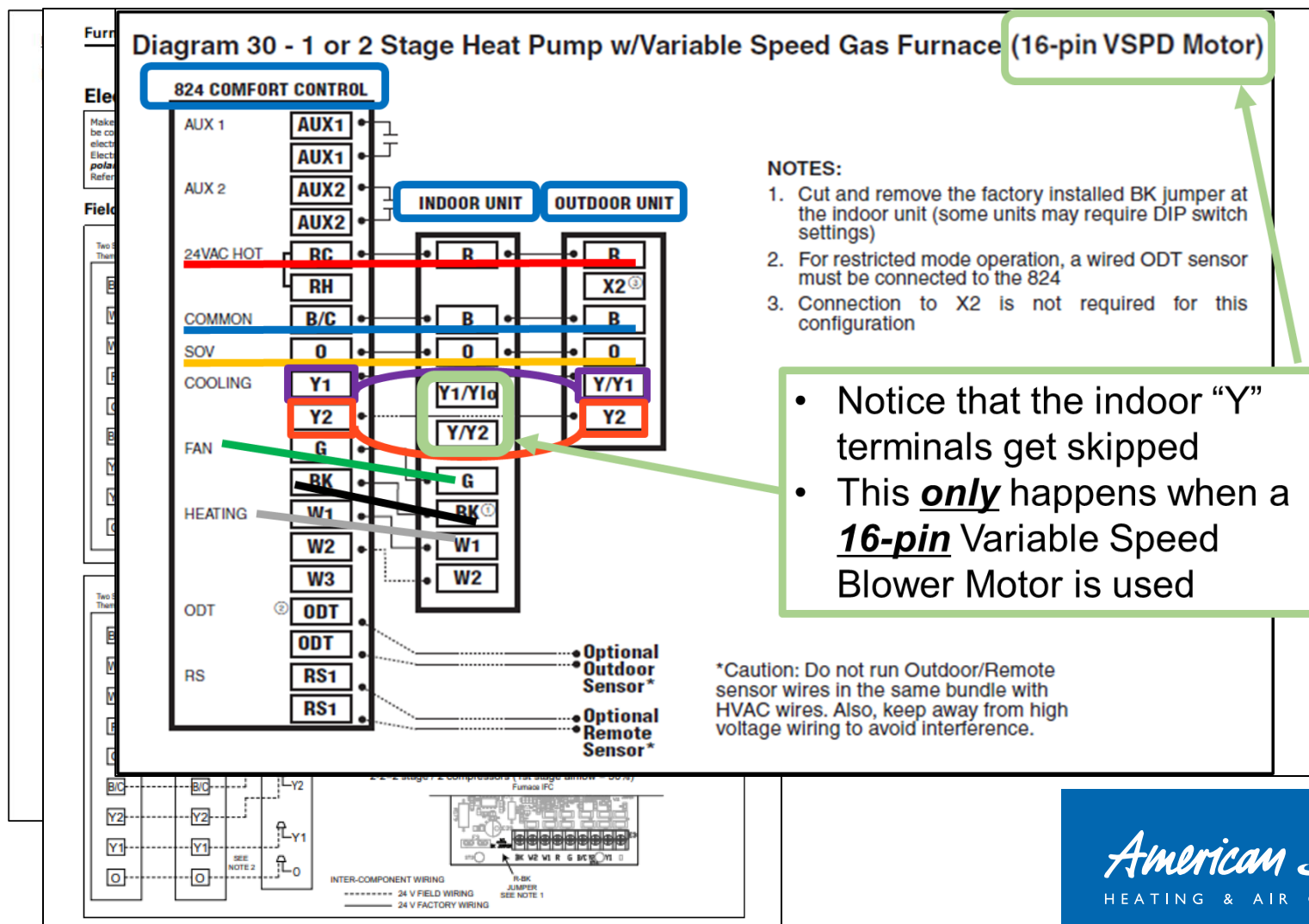
- Wire/Enable Equipment Correctly
- Measure Airflow
- Configure Airflow to correct CFM
- Run in correct mode for Charging
- Charge unit correctly



# Older/Current Equip Config.

Let's review a few different things that Installers must do today to properly configure a system:

## Wire Equipment Correctly:

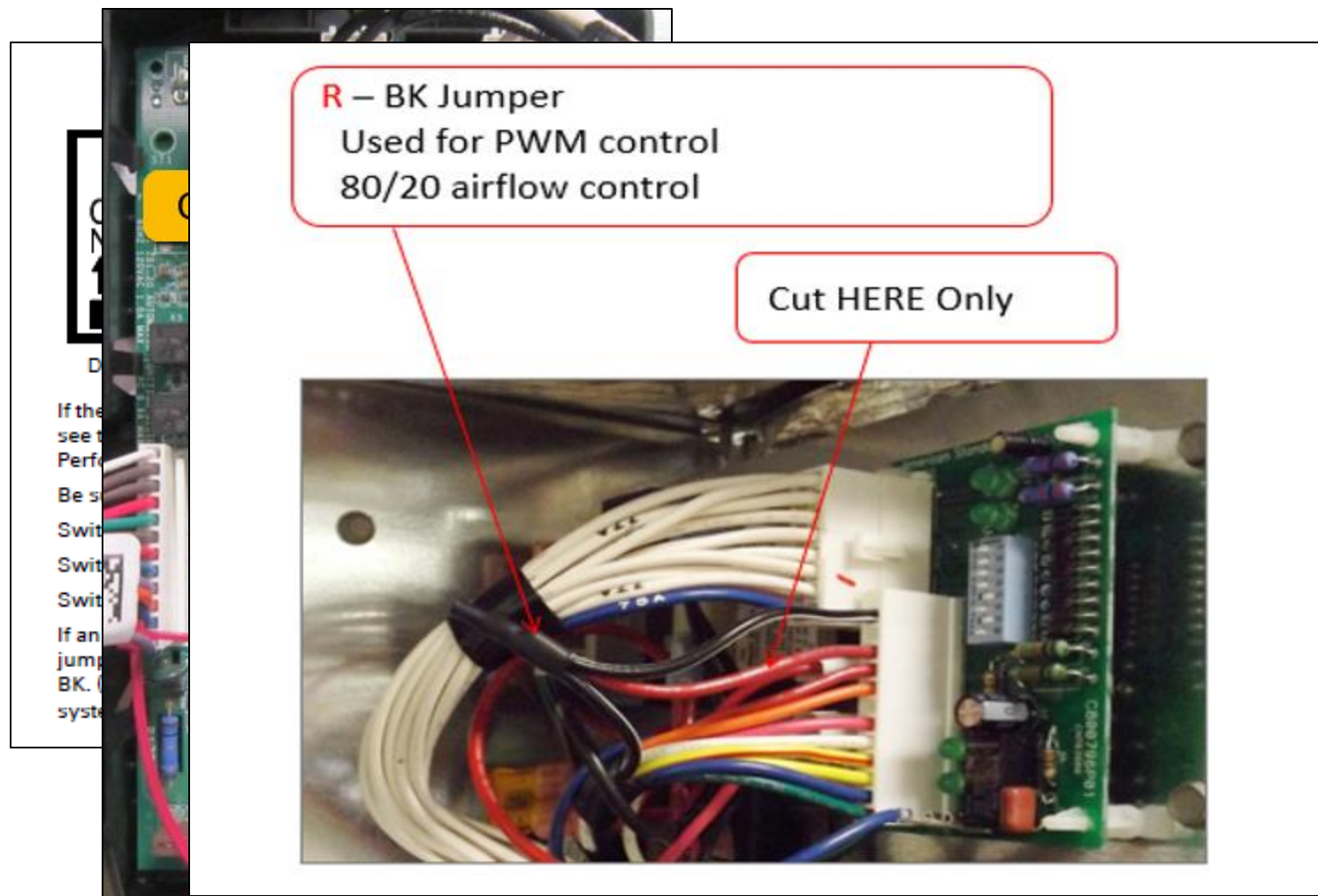




# Older/Current Equip Config.

**Let's review a few different things that Installers must do today to properly configure a system:**

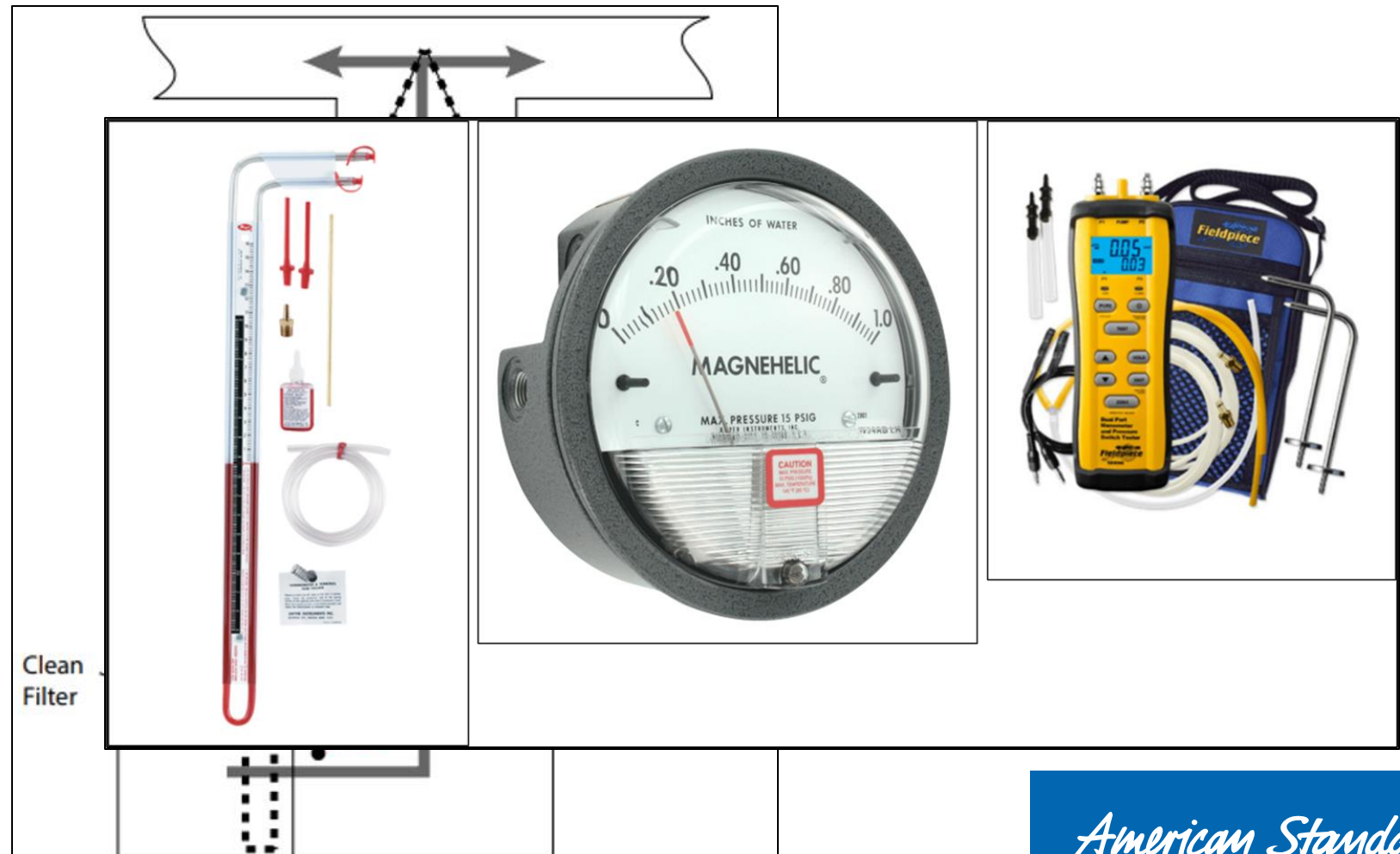
**Enable Equipment Correctly:**



# Older/Current Equip Config.

Let's review a few different things that Installers must do today to properly configure a system:

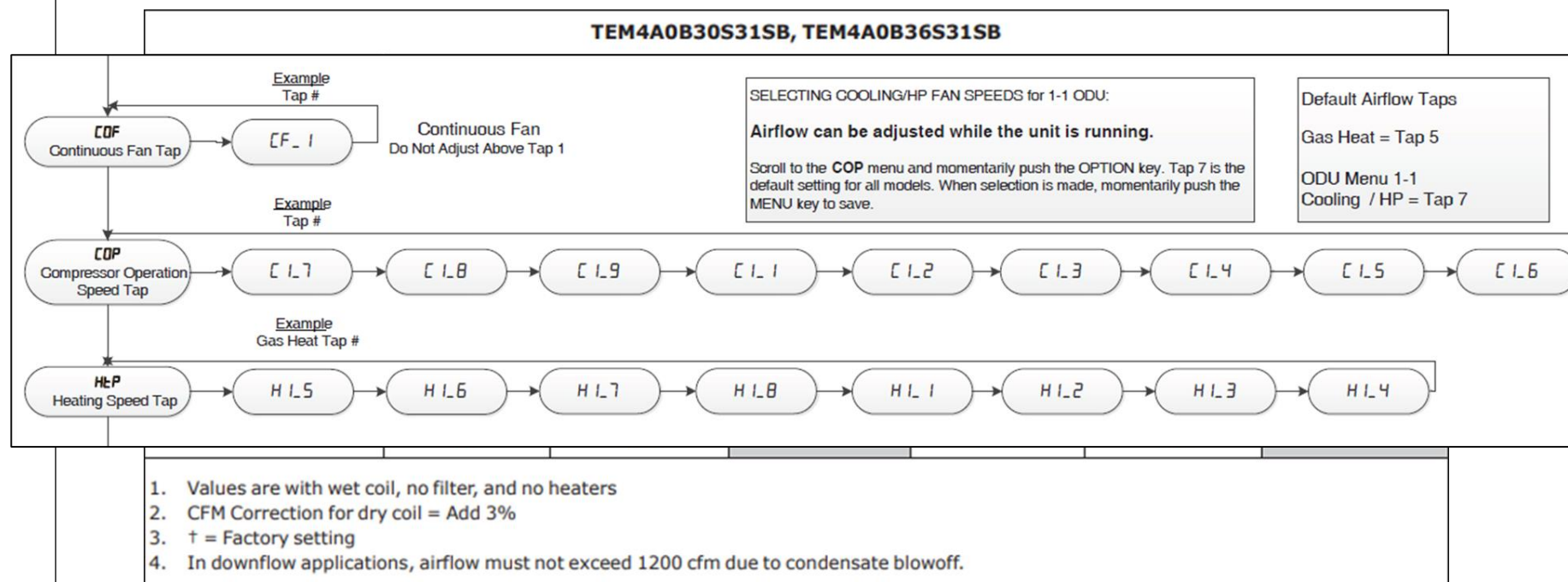
Measure Airflow:



# Older/Current Equip Config.

Let's review a few different things that Installers must do today to properly configure a system:

## Configure Airflow to correct CFM:



# Older/Current Equip Config.

**Let's review a few different things that Installers must do today to properly configure a system:**

Run in correct mode for Charging:

- Believe it or not, it doesn't always happen
- Critical step for validating the correct charge

# Older/Current Equip Config.

Let's review a few different things that Installers must do today to properly configure a system:

Charge System Correctly:

DISCHARGE PRESSURE (PSIG)	<b>REFRIGERANT</b>	
	LBS. — R-410 (O.D. UNIT) ⑤	6 LBS. - 1 OZ.
	FACTORY SUPPLIED	YES
	LINE SIZE - IN. O.D. GAS ⑥	3/4
	LINE SIZE - IN. O.D. LIQ. ⑥	5/16
<b>CHARGING SPECIFICATION</b>		
SUBCOOLING		11°F
<p><b>SUBCOOL CHARGING TABLE CORRECTIONS FOR LINE LENGTH AND RISE</b></p>		

# American Standard Link Configuration

Review of  
Configuration  
with...



## Step 1:

Wire Equipment  
(simple 2 & 4 wire wiring)

## Step 2:

Use the App



# American Standard Link is the Future

- Fully Configurable via Diagnostics App & DRC
- Faults/Alerts even easier to access than before
- Full Description and list of possible causes of Faults/Alerts displayed to the Technicians





# Reduce Warranty Dollars

- Avg Tech: \$22.00/hr
- Burden Rate = Hourly Rate x 2.7 (+/-)
- Avg Tech Burden Rate:  $\$22.00 \times 2.7 = \$60.00/\text{hr}$

## Warranty calls hurt Dealers!

- Warranty Burden begins as soon as the truck is dispatched, so we have time to a call + time at a call = 2 hours (minimum) **-\$120.00 minimum per Warranty Callback**
- How many of these calls will involve:
  - Return trips /w Parts?
  - Return trips with Supervisors?
  - Return trips with Tech Support?



# American Standard Link is the Future



- Configures itself
- Commissions itself
- Charges itself
- Diagnoses itself
- Protects itself
- Runs at reduced capacity as opposed to shutting down
- Reports on itself 30 days of data - ***LOTS of data!***
- Allows adjustments to itself remotely

*There's really not much more we could even imagine to ask of an HVAC System...*

# Tools & Training

# Tools & Training

## LMS

- Training

## MAX

- American Standard Link Moniker
- Moniker Guidelines
- Photography

## Equipment Label

- QR code for app download



Jessica Blair

## American Standard® Link

START COURSE

DETAILS



Introducing American Standard® Link: the latest innovation from American Standard Heating and Air Conditioning, which is rolling out by platform across the Variable Speed portfolio. To begin, click **Start Course** above or click one of the modules below.

**Wait!**  
**Are you connected?**



Use the American Standard® or Trane® Diagnostics app to get connected to this equipment.

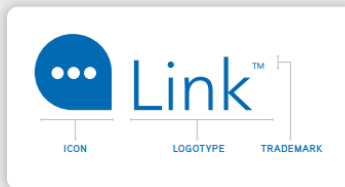
- ▲ Realtime alerts
- ✓ System verification
- ⚙️ System configuration
- 📶 Sensor monitoring



### MONIKER GUIDELINES AMERICAN STANDARD® LINK

BUILT TO A HIGHER STANDARD  
*American Standard*  
HEATING & AIR CONDITIONING

This is the American Standard Link Moniker design. Per best practice instructions on the following pages, this Moniker must always be utilized with the American Standard Heating & Air Conditioning logo to reinforce the branded service, but never shown as a side-by-side lockup. The icon is part of the moniker and should never be used separately from the logotype. The Moniker is currently available in American Standard Blue. Black or reversed can be used when necessary. The trademark symbol must always be shown.



CLEAR SPACE:  
Height/Width of icon

# Upcoming Resources



- Online Playbook
- Technical Literature
- Dealer Guide
- Overnight Expert
- Diagnostics Mobile App Setup
- Homeowner Guide
- Additional literature, including updates to existing pieces

## Learn More on the Module 3 Call!

# Call to Action

- ✓ Engage and ask questions
- ✓ Engage your team
- ✓ Identify Heavy User and Light User Dealers
- ✓ Complete and share the training
- ✓ Share feedback

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