

*NEVER STOPPING.*

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*NEVER SETTling.*

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*It's Hard To Stop A Trane.®*

*NEVER STOPPING. NEVER SETTling.*

5.24.22

# Trane® Link: Module 2

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*It's Hard To Stop A Trane.®*

# *Agenda*

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



# Module 1

## Recap

# Introducing Trane Link

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

Installation & Commissioning Ease

Installation Accuracy

Enables Remote Monitoring

## Built to be “plug and play”

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

## Helping technicians ensure a quality install

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

## Enables quicker solutions and more efficient service calls

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



*Recap*



- 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 + Trane Home



*Recap*

# Estimated Launch Timing

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

2022

Launched	Q3
<ul style="list-style-type: none"><li>• XV18HP</li><li>• XV20HP</li><li>• XV18AC</li><li>• XV20AC</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>• XV19</li><li>• XV17</li></ul>

*Products*

# 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

**YOUR SYSTEM REPORT.**

REPORT GENERATED: 09/10/2021 12:24  
YOUR PREVIEW: Demo-12  
Test Account Only

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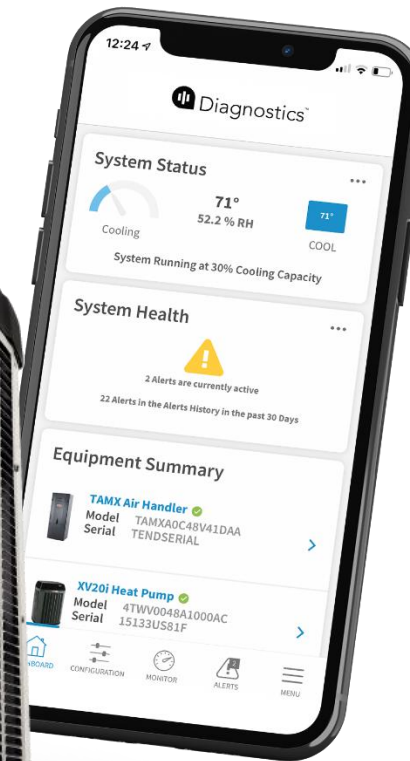
**INSTALLED EQUIPMENT**

Component	Model	Serial	Accessories
<b>HEAT PUMP: XV20i HEAT PUMP</b> A Heat Pump is part of a heating and cooling system and is installed outside of your home. Heat Pumps are used to control your comfort by transferring heat rather than producing it.	4TWV0048A1000AC	15133US81F	None
<b>AIR HANDLER: TAMX AIR HANDLER</b> An air handler contains the components that move the air throughout your home, called the blower. It is usually set inside the home and operates with both heating and cooling components of your HVAC system.	TAMXA0C48V41DAA	TENDSERIAL	None
<b>SMART THERMOSTAT: THERMOSTAT</b> A smart thermostat is installed on your wall and allows you to get simple, precise temperature control. Download the Trane® Home app to remotely control home temperature. You can even opt-in to Trane Diagnostics to get alerts when potential system issues arise.	None	None	None
<b>CONTROLLER: SC360 SYSTEM CONTROLLER</b> HVAC equipment needs a control system to regulate the operation of a heating and/or air conditioning system. This device is usually installed near the furnace air handler.	None	None	None

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**TESTS COMPLETED**

Test	Result
<b>BLOWER TEST:</b> This test measures the airflow and air pressure inside the home to make sure you're getting the most efficient rate of air movement.	Pass



*Recap*



# Design Improvements

- 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 Trane Home
- **Enables better remote diagnostics** with a richer data set



	Trane Current	Trane Link
Mobile Service tool name	--	Trane 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	●	●

*Recap*

# 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 a Trane Link System

*Dealer Experience*

# *Older/Current Equip Config.*

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

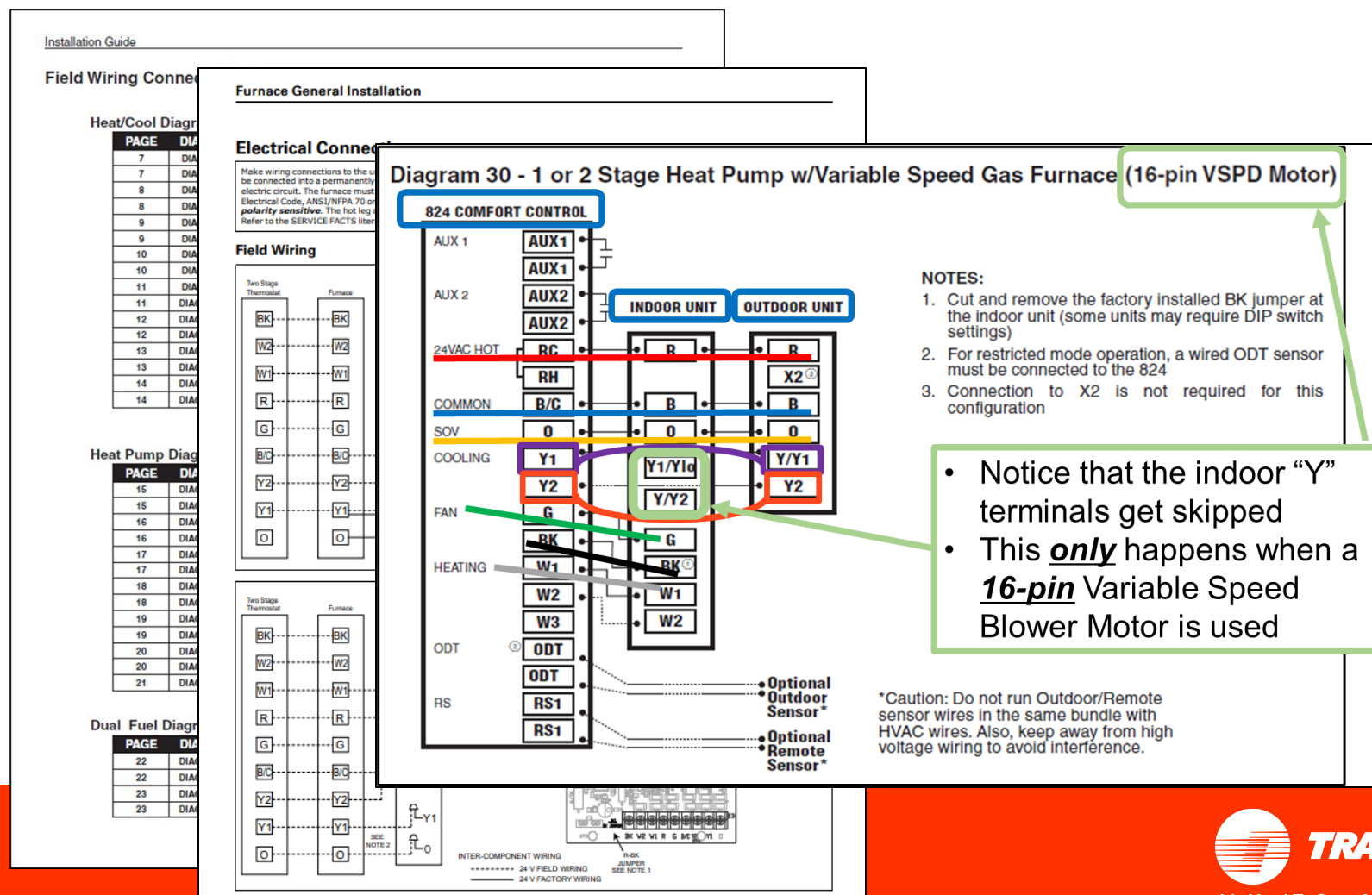
- Wire/Enable Equipment Correctly
- Measure Airflow
- Configure Airflow to correct CFM
- Run in correct mode for Charging
- Charge unit correctly



# Older/Current Equip Config.

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

## Wire Equipment Correctly:



Dealer Experience

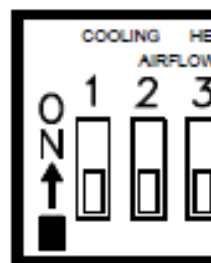


# Older/Current Equip Config.

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

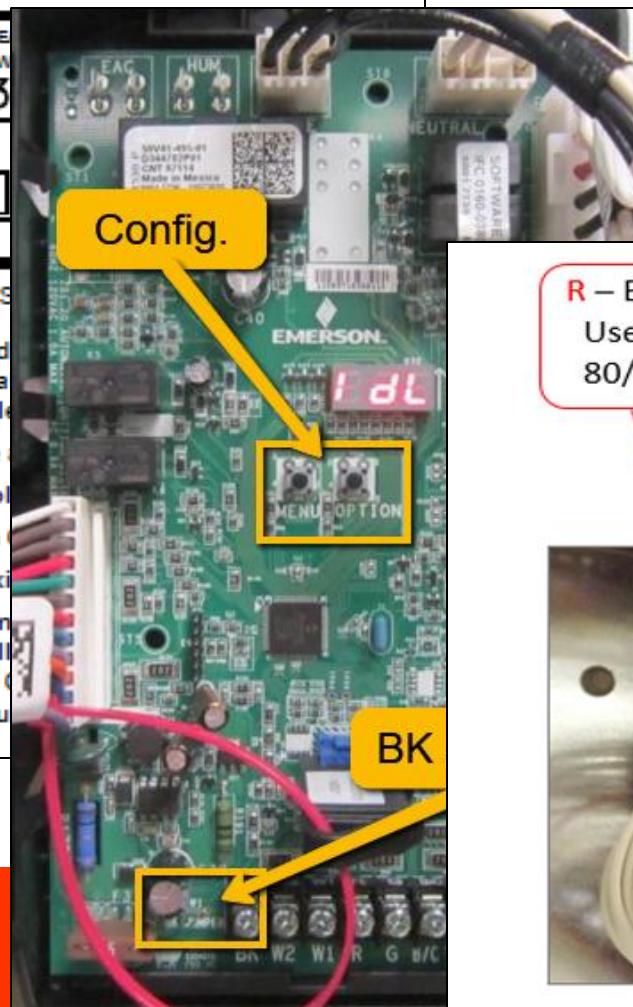
## Enable Equipment Correctly:

Figure 2. Dip Switches



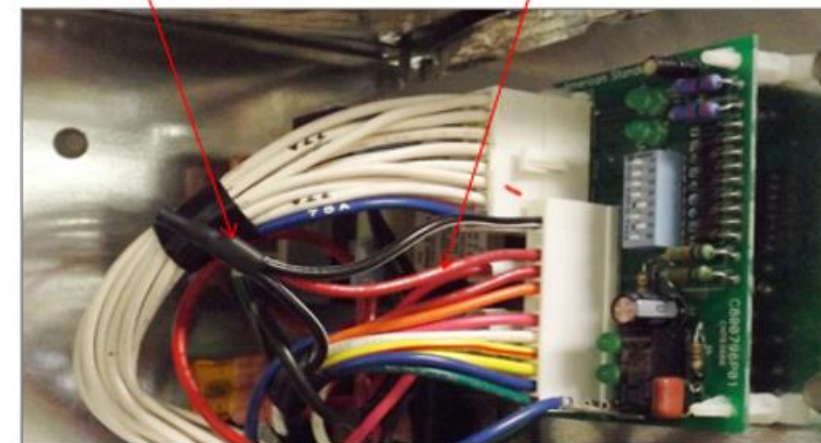
DIP SWITCHES

If the airflow need see the Airflow La Performance Table  
Be sure to set the  
Switches 1-4 Cool  
Switches 5-6 Fan  
Switches 7-8 Aux  
If an optional hum jumper and install BK. (Jumper R to C systems with a hu



R – BK Jumper  
Used for PWM control  
80/20 airflow control

Cut HERE Only

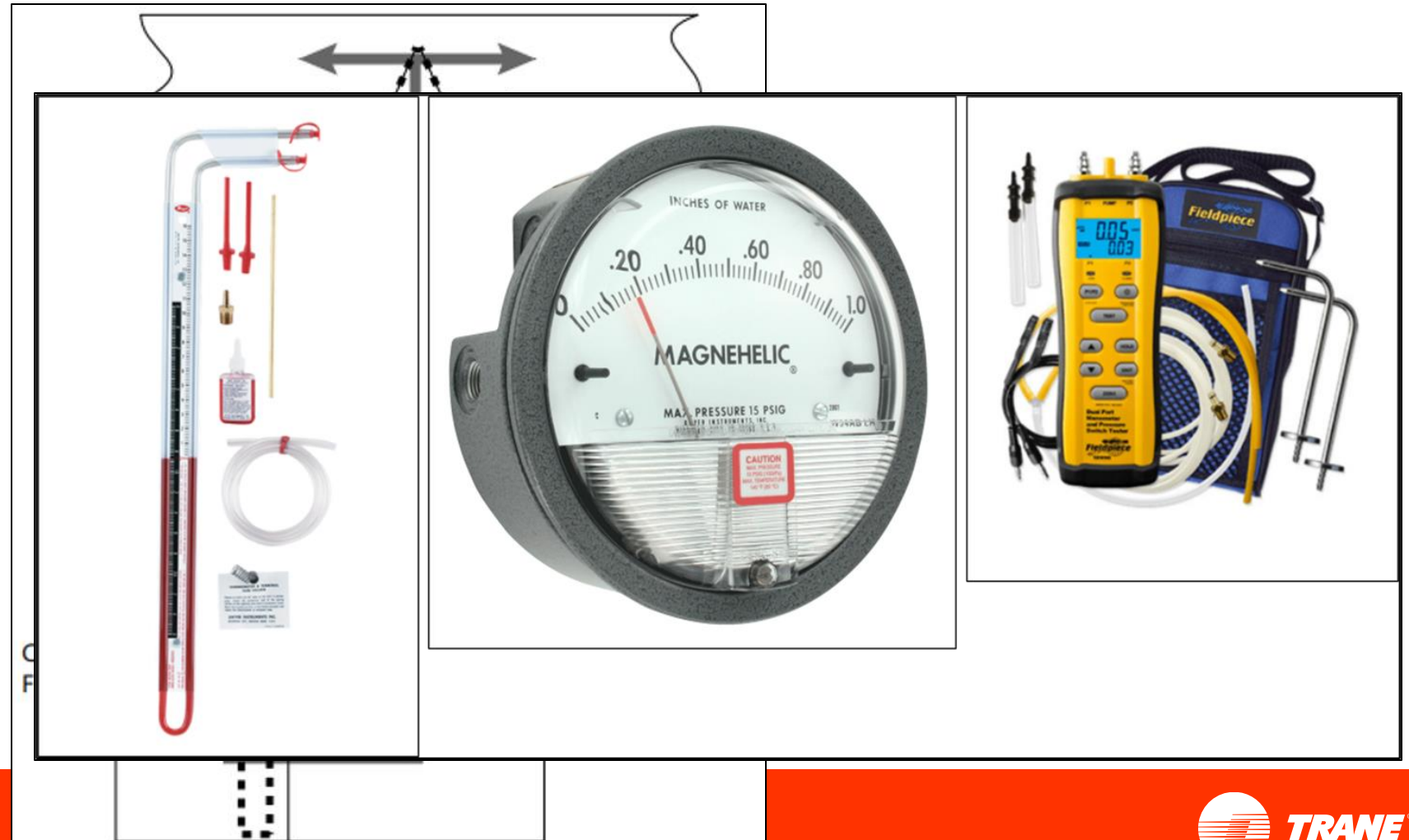


*Dealer Experience*

# Older/Current Equip Config.

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

Measure Airflow:

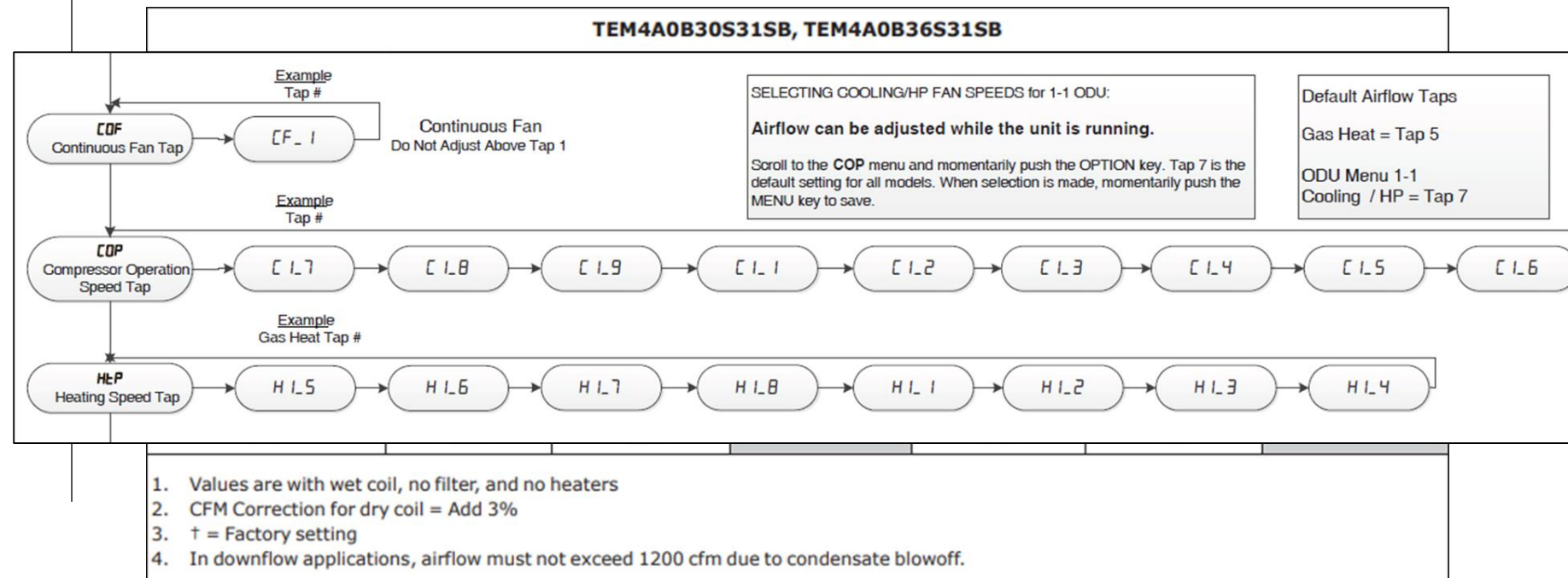


*Dealer Experience*

# 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:

### REFRIGERANT

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

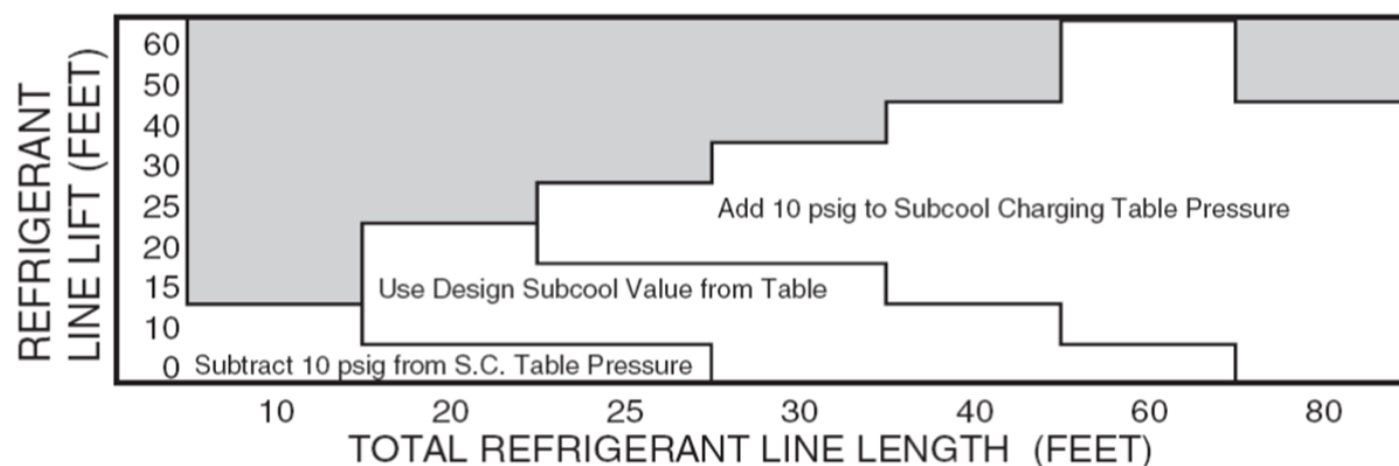
5/16

### CHARGING SPECIFICATION

SUBCOOLING

11°F

SUBCOOL CHARGING TABLE CORRECTIONS FOR LINE LENGTH AND RISE



*Dealer Experience*



# Trane Link Configuration

Review of  
Configuration  
with...



Step 1:  
Wire Equipment  
(simple 2 & 4 wire wiring)

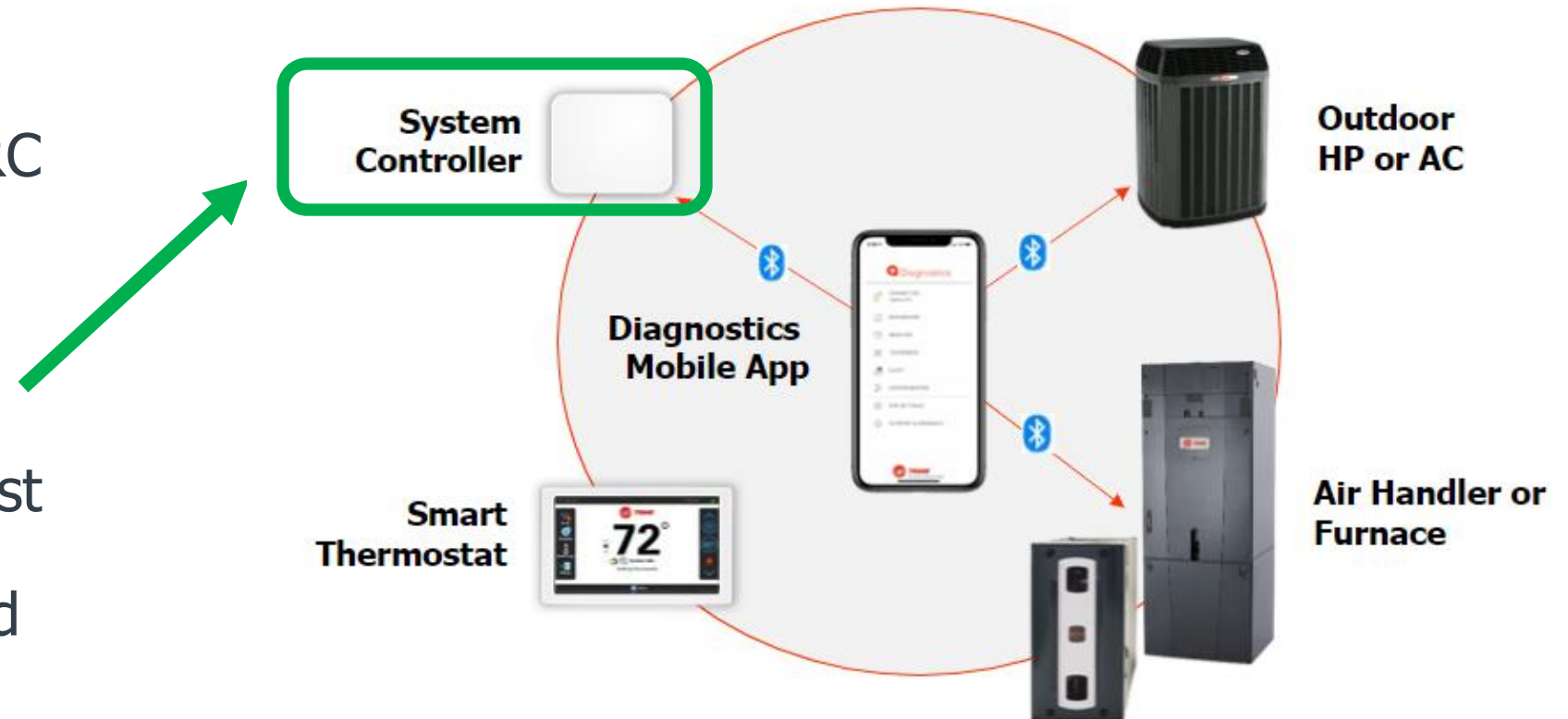
Step 2:  
Use the App



*Dealer Experience*

# Trane 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



*Dealer Experience*

# 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?



# Trane Link is the Future

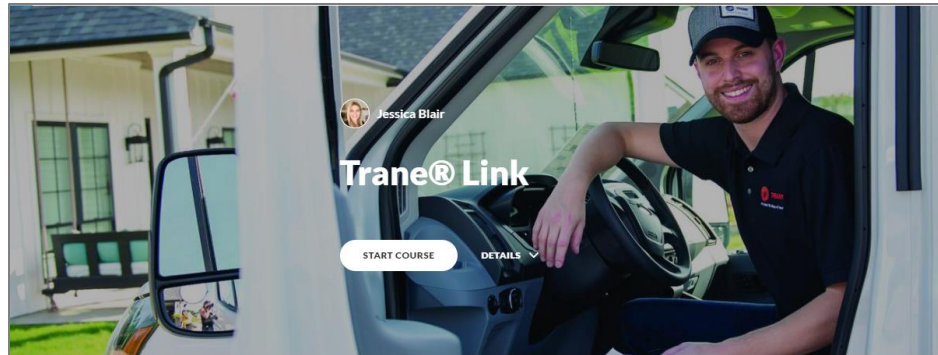


- Configures itself
- Commissions itself
- Charges itself
- Diagnoses itself
- Protects itself
- Runs at reduced capacity as opposed to shutting down
- Reports on itself 30 days of data – ***LOTS of data!***
- Allows adjustments to itself remotely

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

*Dealer Experience*

# Tools & Training



Introducing Trane® Link: the latest innovation from Trane, which is rolling out by across the Variable Speed portfolio. To begin, click **Start Course** above



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

SCAN WITH A PHONE CAMERA

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

- Realtime alerts
- System verification
- System configuration
- Sensor monitoring

0161568P01

**MONIKER GUIDELINES**  
**TRANE® LINK**

It's Hard To Stop A Trane.®

This is the Trane Link Moniker design. Per best practice instructions on the following pages, this Moniker must always be utilized with the Trane 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 Trane Red. Black or reversed can be used when necessary. The trademark symbol must always be shown.

ICON LOGOTYPE TRADEMARK

CLEAR SPACE:  
Height/Width of icon

## Tools & Training

### LMS

- Training

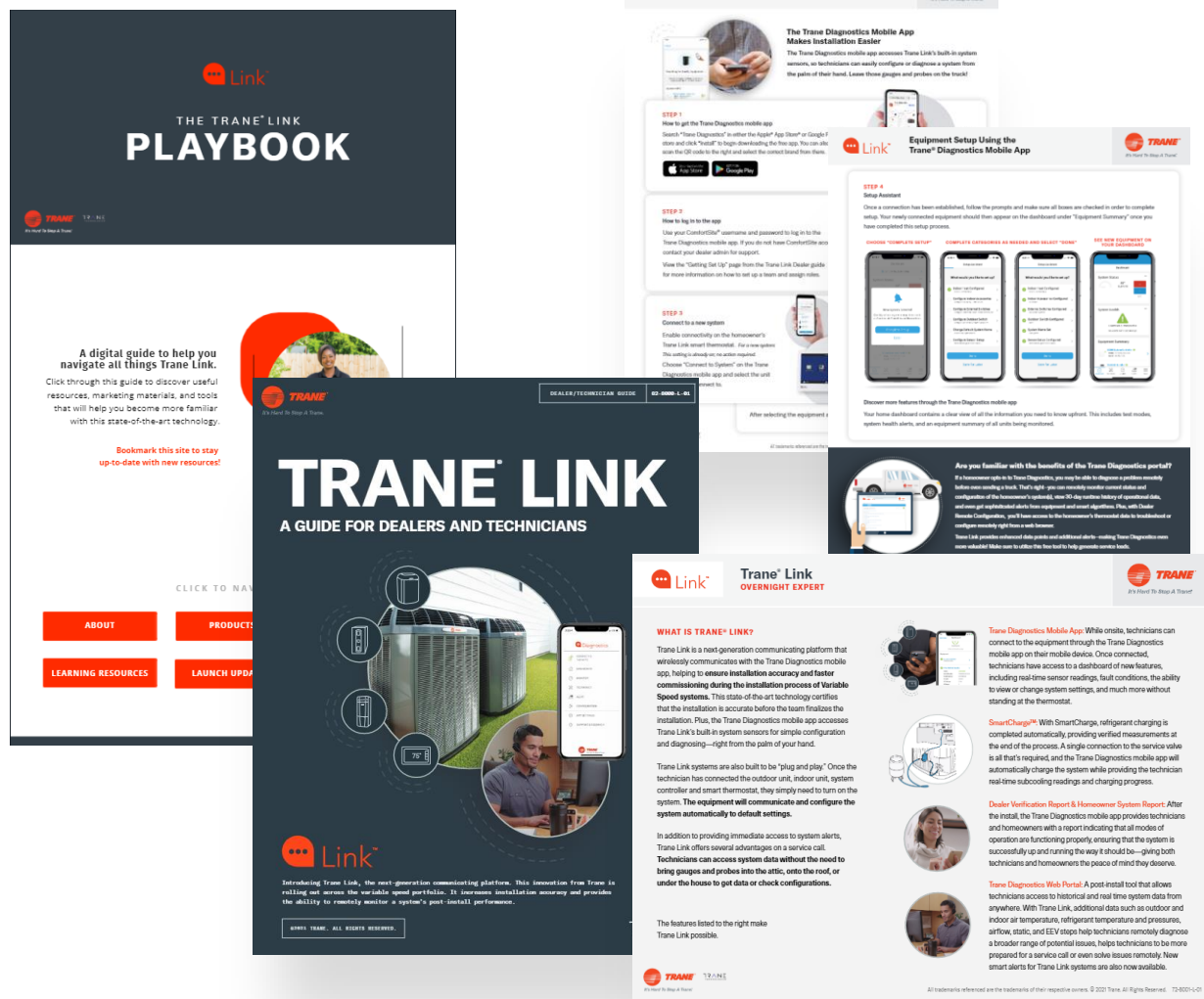
### MAX

- Trane Link Moniker
- Moniker Guidelines
- Photography

### Equipment Label

- QR Code for app download

# 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!

*Tools and Training*

# *Call to Action*

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