





By: Joey Rosato, Director of Sales and Marketing at Texas Truck A/C, Inc.

f there's one thing that the Texas Truck A/C, Inc. team has learned over the years, it's that investing in solid training practices yields major dividends when the hot season rolls around. In the mobile air conditioning repair business, technicians need time in service before achieving an expert level of knowledge in system diagnosis and repair, which is why we're here today to discuss training.

Proper training can limit the time period that any given mechanic spends in the novice stages of their career, and it may help them advance to expert performance levels in an expedited time period. This not only improves the services that your organization provides, but it allows employees to advance their careers at a faster pace. Additional benefits to proper training include the ability to build a culture centered around promoting from within, which inspires beginning technicians to grasp new information, and try to better their skillset in a given field. At Texas Truck A/C, our culture is focused on longevity and opportunity,



Figure 1: One of our ASE certified technicians completing the wiring on a bus AC system installation.

which are both things a strong preseason training program helps promote.

If your organization has yet to instill a training program, it can be tough to know where to start. You must first identify the core services of your operation and the knowledge necessary to complete those services independently. Once you've identified these primary services, you can move forward in the design of your training program. For example, we identified unit-specific



information and electrical troubleshooting training to be our core areas of focus, then proceeded from there. It is also recommended to select a strong team leader to facilitate the training program, because this individual will serve as a mentor to more inexperienced technicians. We found that selecting an in-house training facilitator promotes a strong team culture, which provides new employees

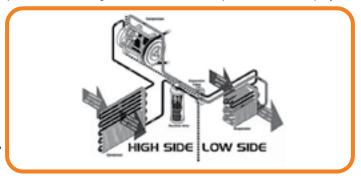


Figure 2: Pictured here is a diagram representing the basic flow of the automotive AC system

with a compelling example of the knowledge standard they should strive to obtain in the years to come.

Once you have elected the core areas of focus for your organization and selected a facilitator, you must determine training meth-

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ods that will suit your team best. We elected to go with a hands-on, informal presentation method that focused on information presented via PowerPoint by our facilitator, and featured hands-on training exercises (Figure 1). In our program, it is the duty of the facilitator to gather the necessary information from popular unit manuals, service documents and advice from vendors before preparing the presentations. Gathering this information does take a fair amount of research, but we found it to be well worth our time.

Next, to satisfy the hands-on aspect of our training sessions, we purchased electrical trainers from A-tech and other live-training aids that functioned in conjunction with the lessons being taught. These tools provided our technicians with the opportunity to acquire live experience in an environment that also allowed them to easily ask questions when confused. We found it extremely important to create this sort of comfortable environment for our training sessions, and recommend the same for other service operations. These training environments have yielded great dividends for our operation, and have become an annual fixture on our calendar, as they transform our weakest links into our strongest employees.

Before diving deeper into the specific training classes we conduct before each season, it's important to note that all technicians who go through this training have previously completed all new technician orientation and training requirements. Upon hire, all technicians at Texas Truck A/C receive a new employee orientation



Figure 3: We provide the latest MACS textbooks for our technicians to study during training.

presentation, which outlines company culture, job policies/procedures, specific duties and benefits. This introduction sets the tone for new technicians, and brings them onboard with a clear understanding of what will be expected of them in the months and years to come.

Next, new hires move directly into an industry-specific presentation on mobile air conditioning systems (Figure 2), to help them develop an industry understanding, enabling them to build on the base of air conditioning knowledge they already have. These two introductory presentations are paired with a hands-on air-conditioning training checklist, which is reviewed with a supervisor in a controlled environment before technicians encounter a live repair situation. After all these items are checked off, the technician can enter the live shop environment to begin gaining field experience before their first encounter with our preseason training program.

The aforementioned explanation of new hire training is important to note, because it illustrates an example of the body of knowledge technicians have a chance to gain before they are put through more advanced training. To begin our preseason training program, we use textbooks published by the MACS organization (Figure 3) that allow our technicians to dive deeper into mobile air conditioning systems and electronic controls. Once technicians have reviewed these textbooks, they are encouraged to bring newfound knowledge into the workplace for application and ask questions on any topics that may be confusing. We have also found that these textbooks serve as solid training material for ASE certification exams, which we require each of our technicians to pass as an ASE certified repair facility.

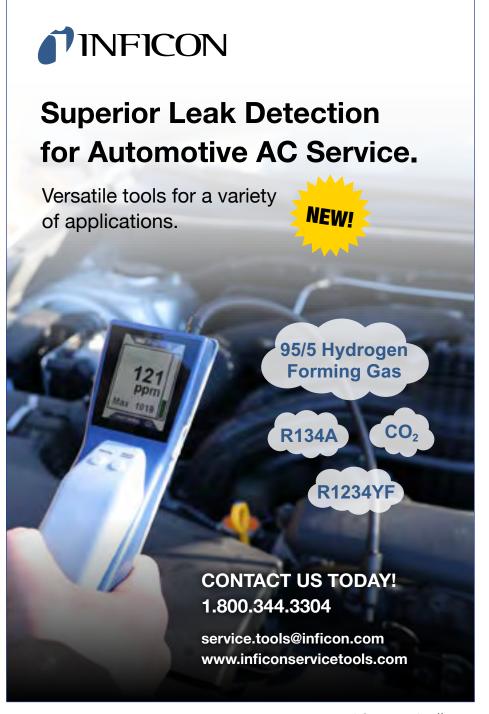
To further encourage the use of the knowledge gained in the study and review of MACS textbooks and test-prep information provided directly from the ASE organization, we bring technicians together for a group review session before taking their ASE certification exams. This session encourages sharing of knowledge among employees and creates an excellent opportunity for technicians to ask questions in an environment where they are comfortable. We find this to be a good way to kick-off our preseason training program, because it not only involves valuable technical training, but prepares technicians to pass required ASE certification exams as well. One of the prime goals of this section of our training program is to share how to properly diagnose an AC system with pressure gauge readings, a proven method to save time

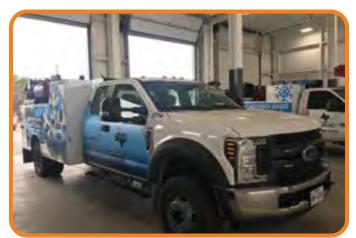
when diagnosing common poor AC performance issues.

After beginning our program with these reading and review sessions, we move into more technical training involving specific units that we regularly see come through our shop. This training involves a Power-Point presentation of information compiled by our facilitator and allows the techs in training to take notes. We found that small

group presentations of this format provided technicians with a comfortable environment to learn unit overviews, as well as to absorb specific diagnostic and repair procedures for popular systems. This presentation will look different for every business, but it's extremely important that your technicians are kept up to date on the latest unit and system information, so never-before seen repairs are minimized on the shop floor.

The information for this presentation is





collected from unit manuals found online or obtained from manufacturing vendors upon account setup. It is important to note that manufacturers can often be strong resources for your repair shop if you use them correctly. Frequently, vendors will be willing to send out a product expert to walk through installation, diagnosis and common repair procedures for their products. Thus, technicians are not left in the dark when working with new and sometimes unfamil-

iar products. These opportunities are low cost, and do not require much more than a call to your supplier to set up. The information shared is not only valuable for training current technicians, but will allow for the future in-house training of technicians on the same equipment, because key employees have taken notes on the presentation. This information may take some time to set up and compile, but common tips, tricks, and known unit failures are a small toolbox that all repair shops should aim to supply their technicians with; this will help eliminate wasted time on repairs that should be completed quickly.

One quick tip that our facilitator keyed in on during this year's preseason training program involved Thermo King APU units and their complex charging systems, which cease charging while the AC compressor cycles. This valuable technical tip has prevented our technicians from replacing perfectly good alternators due to a simple lack of knowledge on an unfamiliar charging system.

After completing these stages of training, we move into the final and most complex presentations, which cover electrical trouble-shooting through the study of electrical theory. To complete this class, we use hands-on training with Atech trainer circuit boards





Figure 4: Pictured here is the carrying case for our Atech electrical trainers.

(Figure 4) paired with textbooks and lectures by our facilitator. We have found this class to be the most difficult for many novice technicians, but also the most beneficial, because it covers topics that have proven to be some of the most difficult for a new technician to master. In the mobile air conditioning service world, electrical





issues can be the root of some of the most complex repairs, and occasionally are the most difficult problems to diagnose. System failures due to flaws in electrical circuitry are not always easy to find, but a strong base in training will provide technicians with an improved level of confidence when diving into murky wiring waters. This year our preseason program focused on effectively using voltage drop testing to identify poor wiring connections. This knowledge allows our technicians to quickly determine if there is a high resistance issue within a circuit and whether it exists on the power or ground side. This technique serves as an efficient method for locating faulty switches, bad relays, burned/corroded wires or bad connections.

After completing the electrical segment of our training program, we have reached the conclusion of our preseason training, and consider our team ready to enter the next hot season. This is when the fruits of the time harvested in training begin to blossom, as technicians will apply their newfound knowledge in real-time technical applications. Then, true breakthroughs occur. In many ways, the hot season to follow the training program can be considered the final stage of the process, providing a benchmark for knowledge that was retained. Additionally, it can be used as a base for the next preseason training program. The cycle between preseason and hot season forms a never-ending loop of the training process and real-time application. It may be tough to keep up with, but the effort made will not be in vain, as technicians are bound to advance and become valuable assets to your repair operation.

In summation, we've reviewed why training is important to any given repair operation, walked through new-hire training, then novice technician training and wrapped up with the transition into the next hot season. This composition is designed to provide an overview of training techniques we have found successful in supporting the growth of our operation. Our presentation may aid you in the creation of your very own preseason training program. Through the investment of a little time and bit of perseverance, you, too, can advance the knowledge of those working on your shop floor in the months directly ahead.

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Industry News

MAHLE Aftermarket launches digital Video Warehouse

MAHLE Aftermarket Inc. has launched the MAHLE Aftermarket Video Warehouse, which is a centralized digital



platform that includes product and training videos related to all products, services and educational tools offered by the company. The platform is designed for easier navigation than the company's still-operating YouTube channel. Simply link into the three key areas of Parts, Tools and Equipment and eLearning. While exploring the Parts section, users can search for products, features and benefits, or technical and training content associated with specific product lines. Similar detailed information on the full line of MAHLE Service Solutions shop equipment can be found in the Tools and Equipment section. Courses offered in the eLearning online product training section are free and suitable for parts specialists, automotive students, engine builders and automotive enthusiasts in general.

Access the MAHLE Aftermarket Video Warehouse by visiting https://videos.mahle-aftermarket.com.

Texas Truck A/C celebrates 25 years in business

Having opened for business in the Spring of 1996, long-time MACS Member company Texas Truck A/C, Inc. proudly celebrates its 25th anniversary. The company, which launched from a single service-van, has evolved to a state-of-the-art 12-bay service facility

complete with a full mobile-service truck fleet. Prosperity and growth are the results of a family-like culture



forged through the common goal of keeping customers cool. The CEO, Nick Rosato, extends a "thank you to all those, including the MACS organization, that have been a part of our journey from the beginning." He also says, "We're looking forward to the bright future ahead; here's to 25 more wonderful years!"

For more information on Texas Truck A/C, please visit https://www.texastruckac.com/.

VASA postpones Wire & Gas Convention until 2022

Due to ongoing uncertainty pertaining to the coronavirus, snap lockdowns and sudden surges of state border closures, VASA has made the difficult decision of further postponing its Wire & Gas conference

until 2022. The deferral also comes as a decision to honor the commitment of the convention's dele-



gates, sponsors, exhibitors and speakers by ensuring the event occurs without additional stress and inconvenience, promising it will be as good and successful as possible. The confirmed rescheduled dates are July 29-31, 2022, with the venue remaining the refurbished and rebranded JW Marriott Gold Coast Resort & Spa in Surfers Paradise, Queensland, Australia. Most speakers and sponsors have already recommitted to the new dates, so the 2022 event is sure to be as unmissable as originally planned.

VASA continues to work on details of the rescheduled event and plans to release more announcements in the future. The support of everyone involved is highly valued and much appreciated. For more information, please email editorial@vasa.org.au.

Automotive Video Innovations, Inc. (AVI), an industry leader in automotive aftermarket training, has named Katie Malone Vice-President.

According to Paul Louwers, CEO of AVI, "Katie Malone has been essential in AVI's growth during her tenure, and this promotion to our upper management staff is long overdue. Her work in managing our daily operations and her essential efforts in our corporate

sales division is directly responsible for our steady growth. She is the glue that holds AVI together, and I can't think of anyone more deserving."

Ms. Malone, who graduated from Manchester College in 2000 with a BS Degree in Environmental



Studies, has been employed by AVI since that year. Katie has progressively moved up through the ranks at AVI, giving her a unique perspective on all production phases. Previous positions at AVI held by Ms. Malone include Sales Representative, Sales Manager, Operations Manager in 2011, and now Vice President, working directly with President Paul Louwers.

"I am very honored to be recognized by the AVI staff for this position," Ms. Malone states, "and I look forward to working with Paul and the AVI management team to develop and present new timely training programs for AVI's clients and partners. I also am working on exciting and innovative ways to expand the AVI footprint into new educational arenas."

Mr. Louwers also plans on capitalizing on Malone's work in corporate relations. "Katie has become an essential member of one of our fastest-growing areas, specifically large client sales. This new title will give her the capability to act on concepts she has innovated and will continue to develop."

In Memoriam

Robert J. Chabot



Robert John Chabot of Irving, Texas, passed away on Saturday, February 27, 2021 at the age of 65. Mr. Chabot was a respected, knowledgeable and well-known automotive writer whose work was showcased in MOTOR and MACS

ACTION™ magazines. His talent for explaining automotive repair concepts will be missed by his readers. He is survived by his wife, Angie.

John Miller
John Miller was the owner of
The Air Shop in Santa Ana,
CA, and had been a member
and loyal supporter of MACS
since 1999. John was bom in
Trenton, MO, and his family
moved to East Los Angeles,
CA, early in his life.



John was drafted into the U.S. Army, served in the infantry and is a Vietnam War veteran. Following his service, he attended California State University at Long Beach and graduated with a degree in business management.

The car bug bit John on May 26, 1970, six days after his military discharge when he walked into California Auto Refrigeration to visit his cousin who worked at the parts counter. John met Pat Sherman, the store manager, and as John describes him, "...a really great man." John was offered a job installing A/C systems. He remembers fondly, "I fell in love with my work almost immediately, and I spent the next 32 years at California Auto Refrigeration, during which time I was allowed to become a partner in ownership." In 2002, John sold his partnership shares at California Auto Refrigeration to move on and buy Air Shop, Inc. in Santa Ana, CA. John purchased the business from Eddie Paskey, one of the original cast members of Star Trek. (For you Trekkies out there, Mr. Paskey played Lt. Lesley.)