

MONITORING THE FIELD

February, 1972

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PLASTIC IN-LINE RESTRICTORS

"Instrument worked perfectly, either the wrong instrument was returned or else improper readings were noted in the field." How often have you submitted an M.R.A. and received that reply?

With non-relay instruments, the problem is often directly related to improper installation of the plastic in-line restrictor; i.e., .007" — T-5210-100 (blue-green) or .005" — T-4004-9 (red).

If the compression nut is over-tightened, the output flow of the restrictor will be decreased. This decrease of flow will increase the sensitivity of the instrument and decrease the capacity of air to the controlled device, or to a controller in the case of a T-5210 — T-9000 combination.

The recommended installation of the in-line restrictor is "tighten the compression nut finger-tight plus ONE-HALF turn."

Exceeding finger-tight plus one-half turn will alter the characteristics of the restrictor as follows:

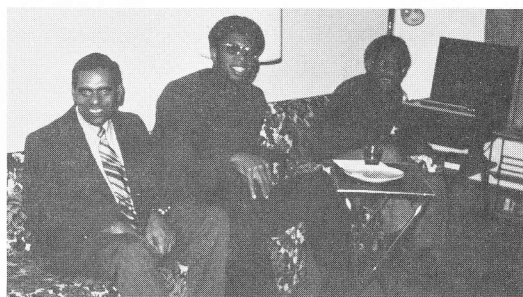
One-Half Additional Turn — 10%

One Additional Turn — 50%

One-and-One-Half Additional Turns — 75%

Two Additional Turns — Almost Total Loss of Air.

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D.V.S. Murty, Kareem Jabbar and Greg Smith
Enjoy Hors d'oeuvres at Murty's House

Entertain a celebrity in your own living room? One of Johnsonite D.V.S. Murty's friends is Kareem Jabbar (Lew Alcindor), star center on the world champion Milwaukee Bucks NBA basketball team. Murty's long-time friend Greg Smith, who was also on the Bucks team, first introduced him to Kareem. Murty is a native of India and when he and his wife entertain they often treat their guests to exotic Indian foods. Here at Johnson, Murty is a Senior Project Engineer in the Product Development Department. He is responsible for dampers, damper motors, air drying systems and humidifiers. Murty has a Master of Science degree in mechanical engineering from North Dakota State University in Fargo, North Dakota.

McQUAY FAN-COIL UNITS

McQuay-Perfex, Inc., Minneapolis, Minnesota, has announced that they will **no longer factory mount valves** in their fan-coil units. This decision was made because of an extensive number of coil damages incurred during shipment. Although McQuay will not factory mount valves, they will continue to furnish the piping packages which were designed for Johnson valves. It is important that the piping contractors and the McQuay representative know, prior to construction, which Johnson valves are to be used, so that the proper piping packages can be furnished by McQuay. Remember, have the valves shipped to the job site and not to the McQuay factory, and then advise the piping contractor of shipment.

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BACK PRESSURE REGULATORS

Back Pressure Regulators (BPR) are used in refrigeration systems to control the refrigerant pressure in the evaporating coil. A standard regulator will maintain a fixed pressure in the coil which in turn will produce a fixed temperature in the medium being cooled (water, air, etc.), if the load remains constant. Because this capacity must be set for full load conditions, it will produce temperatures too low for intermediate or light cooling loads. For this reason, compensated BPR's are available to automatically increase the evaporator coil pressure, and consequently, the temperature, with a decrease in cooling load. The temperature sensing of the controller is in the discharge of the medium being cooled. This provides for more stable and efficient temperature control.

The BPR's can be either electrically or pneumatically controlled. Our Penn Division has worked with two manufacturers of BPR's which now offer the Penn M-80 series motor for control of the electrically compensated regulators. Any of our electric thermostats which will control this Penn motor and are applicable for sensing the discharge medium can be used with the electrically compensated BPR.

The pneumatically compensated BPR's of these two manufacturers can also be controlled by Johnson thermostats. Thermostats which will operate in the medium being cooled will be capable of controlling the pneumatically compensated BPR.

For detailed application information, contact:

Hubbell Corporation
P. O. Box 700
Mundelein, Ill. 60060
Phone: 312-566-7330
Attn: Earl Hass

Refrig. Specialties Co.
2445 S. 25th Avenue
Broadview, Ill. 60153
Phone: 312-681-6300
Attn: Arthur Strong

ASHRAE PARTICIPATION

Congratulations to the Johnson men listed below who are office holders this year in their local ASHRAE Chapters. We also extend our congratulations to all of you who are committee members in your chapters. It is through efforts like this that our industry is strengthened, and the Johnson Service Company image is strengthened within the industry.

OFFICE	REGION	CHAPTER	OFFICER	JSC BRANCH
REGIONAL CHAIRMAN	II		J. B. (Joe) Klassen	Toronto
PRESIDENT	III V	Florida West Coast Central Indiana	A. Lee Bendall Phillip Pegram	Tampa Indianapolis
VICE-PRESIDENT	I IX X	Champlain Valley El Paso Oregon	Wesley Olson Charles Downs John C. Andrews	Burlington, Vt. El Paso Portland
SECRETARY	I I II II V VII	New York Rhode Island Northern Alberta Regina Akron East Tennessee	Thomas S. Brown Lionel Delaney John C. Badger Ronald McMaster Edward T. Hanlon Wayne O. Rose	New York Providence Edmonton Regina Akron Knoxville
TREASURER	I II VI IX	Boston Halifax Minnesota South Dakota	Barry S. Crafts James A. MacLean Larry J. Hink James R. Kelm	Boston Halifax Minneapolis Sioux Falls

NOTE: Lin Davidson of the Philadelphia Chapter was nominated Research Promotion Committeeman from Region III (JSC Philadelphia Branch Office).

"\$UCCESS\$ IS"

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...by and for the Johnson SERVICE Organization.

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The following branches each sold at least \$1 million worth of Service Sales during 1971.

New York Toronto Baltimore

Just ten short years ago, the total service sales program for the entire country was less than \$4 million, which further emphasizes the great sales effort extended by our Service Sales Departments.

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The offices listed below all met or exceeded their 1971 Service Sales Forecast. Congratulations for a job well done!

Tampa	Raleigh	Anchorage	Baton Rouge
Omaha	Roanoke	Cleveland	Albuquerque
Union	Norfolk	Charlotte	Cedar Rapids
Akron	Hartford	Baltimore	Chicago South
Tulsa	Columbia	Harrisburg	Oklahoma City
Orange	Appleton	Pittsburgh	CANADA:
Peoria	Columbus	Louisville	Halifax
Urbana	Knoxville	South Bend	Hamilton
Detroit	Nashville	Kansas City	Ottawa
Saginaw	La Crosse	Minneapolis	Toronto

MIDWEST REGION - BLUE TIE AWARD



Wendell Chismudy (center), Service Sales Manager for the Chicago South Office, receives congratulations from Ron Caffrey (right), Midwest Regional Manager, as Bill Rank, Chicago South Branch Manager looks on.

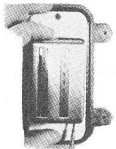
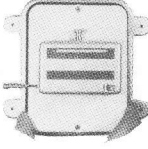

Wendell is being presented one of the first annual "Blue Tie Awards" established in the Midwest Region to recognize the imagination necessary to a successful sales operation. In addition to this award, he also received a blue tie which he can wear. The blue tie was introduced at the Dallas service sales meeting to identify midwesterners and now represents accomplishment of the goals established at that meeting.

The Chicago South Office reached 140% of service sales forecast for 1971 and turned in the best performance in the Midwest Region where eight other offices reached forecast.

T-400 ADAPTER KITS

Three new adapter kits are available to convert T-400 and H-400 series controllers to T-4000 and H-4100 series. Detailed installation instructions and a list of material required for the three adapter kits are contained in bulletins T-4000-A-1, -2 and -3. The table below shows the correct kit to use for a specific conversion.

CROSS-REFERENCE CHART T-400 and H-400 ADAPTER KITS

		
T-4000-600 Single Plastic Back	T-4000-601 Dual Plastic Back	T-4000-602 Single or Dual Metal Back
Original Controller	Recommended Conversion Kit	4000 Controller Replacement
T-400 T-401 T-402 T-403	T-4000-600 Plastic	T-4002 Vertical Mount Only
	T-4000-602 Metal	ALL T-4002 Series
H-102 H-103 H-105 H-107	T-4000-600 Plastic T-4000-602 Metal	ALL H-4100 Series
T-405	T-4000-601 Plastic OR T-4000-602 Metal	ALL T-4502 Series
T-423 T-432 T-445		ALL T-4752 Series
T-460 T-461		T-4502 with Index Switch
T-465		T-4512

IF THE ORIGINAL CONTROLLER IS NOT LISTED IN THIS TABLE, THERE IS NO SUGGESTED DIRECT REPLACEMENT.

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ARTHUR SMITH

Arthur Smith joined the Johnson Service Company Winnipeg Branch on February 9, 1907 as a steamfitter. He retired as an active employee in September of 1959. He was 89 years old when he passed away on November 2, 1971.

Mr. Smith held the company's second longest record of service, surpassed only by our past vice-president, A. J. Otto.

Art's record of service to our company speaks for itself. Those who knew him as a business associate and friend share his family's sorrow at this great loss.

SPOTLIGHT ON CONSTRUCTION



Kenneth R. House, Regional Construction and Test-Balance Coordinator, Southeast Region

The duties of Ken House are twofold; he coordinates the efforts of the Southeast Region's construction efficiencies, and assists in developing branch capabilities in the air and water balancing field (in conjunction with the Fluid Engineering Services Division of Johnson Service Company). Since air and water balancing is a relatively new field, he has spent time promoting test and balancing with engineers and also developed on-the-job training for branch personnel in the Southeast Region.

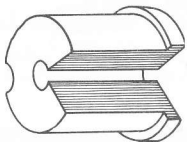
A well-rounded background enables Ken to provide expert staff assistance to all Southeast Regional offices. His 17 years with Johnson include positions as installation mechanic, service mechanic, service salesman and service manager. Before coming to Johnson he was a service and installation manager for Barber-Colman. He is continuously striving to keep up to date on the latest developments in the industry and has attended schools sponsored by the Trane Co., Carrier Corp., Taylor Instrument Co. and two different Pyrotronics schools. Ken is also manager of the Johnson "Branch Engineering and Installation Management Standards" (BEIMS) team that is reviewing engineering forms.

Ken is a member of the National Association of Power Engineers and a former member and past president of the Jacksonville, Florida section of I.S.A. He is presently an inactive member of Pipefitters Local 234 in Jacksonville.

On the personal side, Ken and his wife have four children and were recently made grandparents for the first time. An outdoorsman, his spare time interests include scuba diving, skin diving and hunting. He has also experimented in local politics and has found it to be both inspiring and frustrating, but always a rewarding experience. Ken feels that more people should become involved in the community, and says "it's amazing to find out what's going on around you."

TOOL TALK

Two NEW items have been added to the Construction Tools Catalog.



Rubber Barbed Tool
X-100-246
Page CT/161



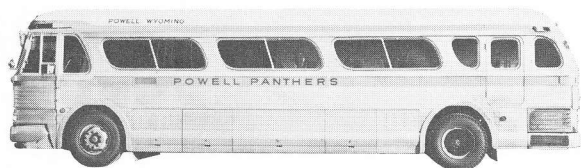
Dial Thermometer
X-100-243
Page CT/176

Rubber Barbed Tool: This tool will facilitate installation of polyethylene tubing onto barbed fittings. It is slotted for 1/4" poly tubing but can also be used for other sized tubing.

Universal Use Dial Thermometer: This is furnished with double-faced, pressure-sensitive tape so it can be mounted inside or outside a window, etc. This 1-3/4" diameter thermometer has a range of -40 to +120F. The thermometer was added to our tool line in response to numerous branch requests for a small, inexpensive instrument.

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CONTROL JOB ON THE MOVE



The Powell Panthers sports teams travel in style! The school district in Powell, Wyoming has a school bus with a Johnson T-400 controlling a hot water valve on a hot water radiator coil over which air is blown to heat the bus. Control air is supplied from the braking system. The school maintenance supervisor is quite impressed with the system which was converted from the original Honeywell grad-u-stat. Since all nine school buildings in Powell are Johnson controlled, it was only right to include the school bus.

This hot tip was sent to us by **Bob Brown, Resident Mechanic in Casper, Wyoming** (Denver Office). And just to prove that Wyoming weather conditions necessitated a heated bus, Bob sent along a "snow picture" (see below).



Bob Brown (extreme left) and wife **Carol** return from two-day 190 mile snowmobile ride from **Coulter Bay** via **Old Faithful** to **West Yellowstone, Montana**.

EFFICIENCY IS . . .

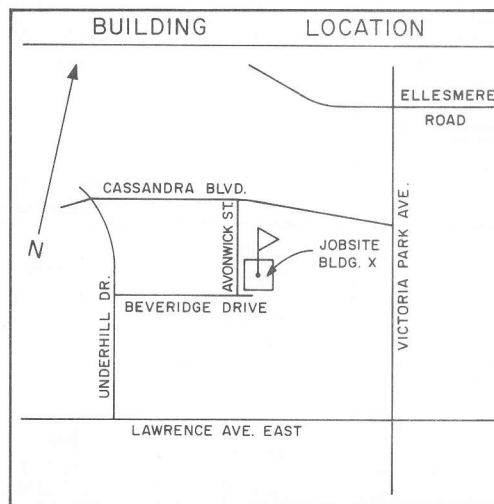
...JOB SITE LOCATION MAPS

To assist pipefitters, electricians, truckdrivers or servicemen locate a specific job site building within a large project, the **Toronto Branch Office** includes a job site location map along with the Control Drawing Title Sheet.

The map is especially helpful on a big job such as the Toronto International Airport. Everyone knows the way to the airport but the map gives specific instructions on how to quickly find the right building in the complex.

For city or town locations the map simply shows proximity to a main intersection. Pinpointing rural job site locations will sometimes require a little ingenuity.

The maps can be any size convenient to you. Including an arrow denoting "north" is helpful.



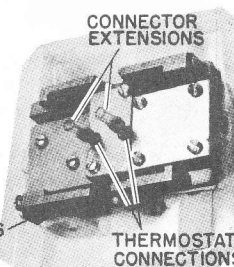
Job Site Location Map Used by Toronto Office

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ROOM CONTROLLER CONNECTOR EXTENSIONS

Instrument
As Furnished
From Factory

T-4000 SERIES
THERMOSTAT



CONNECTOR
EXTENSIONS
THERMOSTAT
CONNECTIONS

By now you've probably noticed that all new room controllers shipped from the factory have shorter, smaller diameter connectors. These connectors are designed for use with 5/32" O.D. polyurethane tubing. Connector extensions are furnished on all T-4000, T-5002, H-4100 and H-5100 connections and should not be removed unless specified. Bulletin T-4000-A.4 and the packing slips included with the instruments contain instructions and a list of material required for modified installation to existing pipeheads or existing 1/4" O.D. polyurethane or Mayon tubing.