HOW AN INSTALLER SAVED MY CABLE SYSTEM

Gregg A. Nydegger

Cardinal Communications, Inc.
Seymour, Indiana 47274

ABSTRACT

Installs, upgrades, downgrades and service calls: these are basics of cable life. Done well, they pay the bills. Done poorly, they eventually do in any cable system.

These four tasks are the ideal starting point in every maintenance and preventive maintenance program. What follows below are proven suggestions on using these basic activities to keep systems running well.

INTRODUCTION

Across the country today, cable TV trucks will roll down the roads. Many new droplines will be installed, many pay units added (a few disconnected), and many service calls will be solved.

AND many causes and signs of future service calls will go unheeded or unnoticed.

Why? Sometimes it is a lack of training. If an installer does not know what he is looking for, he certainly will not find it. Often it is a lack of concern. "Job security for the technicians," or "Let somebody else do it" are heard many times. Sometimes it is simply time pressure. "I know something should be done, but I'm already 45 minutes late for my next install."

All the reasons add up to one thing: money. It costs plenty to send a truck back to the same address several times. It costs more if some of these are overtime trips after hours by the on-call technician. It costs when downgrades or total disconnects result from poor or frequently interrupted service.

Obviously then, getting the job done right originally, maintenance and preventive maintenance are not things to be taken lightly. They always have had and always will have an impact on the bottom line. Here are some suggestions to help ensure this impact is positive by taking full advantage of installs, upgrades, downgrades, and service calls.

NEW INSTALLS

One of the most crucial times in the life of a cable system has to be when a new install is performed. The distance between tap and television, whether 50 or 250 feet, and the manner in which the dropwire traverses it, have a direct bearing on future troubles and maintenance.

The old adage, "Why not do it right the first time," should be every installer's motto (and every other cable employee's motto for that matter). Taking the easy way out does not pay off in most businesses and it certainly does not in cable TV.

Foresight is a key word in installs. Encourage installers to consider how well their work will be holding up (as far as physical appearances go) and performing technically five, ten or more years from now. Many installs would have been done differently if only the installers had realized they might be technicians someday and have to maintain and service their old work. Many installs would have been done differently if only the managers and chief technicians knew how much trouble and expense would be involved in maintaining and servicing them.

Foresight should apply to so many aspects of installs. Here are a couple areas that come to mind.

1. Trees--How many droplines are thoughtlessly run through trees only to be torn down during windstorms. Granted, some houses set in the middle of a forest and it is impossible to get a clear shot. In those cases the drop is hung and you cross your fingers when the wind blows. (Then again, these drops could be buried.)

But houses like that are the excep-

tion. Usually there is only one tree to contend with. What then? Mid-span around it! Sure, the installer may spend an extra 15 minutes doing it that way and use an extra 30 or 40 feet of cable. But it is more than worth that to avoid a future service call to replace broken cable.

One last thought on trees. Those cute, little sapplings are in the yard when a house is originally wired for cable usually grow to become giant cable-eaters. The smart installer keeps this in mind as he routes the drop.

2. Street and alley clearance---- There are huge creatures that lurk in the dark (and even the daytime) that seemingly exist only to tear down drop cables. Garbage trucks, moving vans, cement trucks, dump trucks, etc. will play havoc with low-hanging droplines. Often it appears like an installer will run wire to the lowest point on the house so he can work everything from a step ladder.

Once again a little extra time spent on the install pays off. It takes more wire, stapling, and time to attach at the peak of the house (or at least someplace higher than the lowest point), but it keeps the phones from ringing every time the garbage trucks hit the streets.

Clearance may seem like such an elementary and simple thing. Yet, I know of systems where the technicians complain that certain drops are torn down every two or three months. Do they ever raise them? Heck no! They just put them back up. That is not only lack of foresight, but also lack of common sense.

Common sense and clear thinking play a big role in installs. Installers should be asking themselves questions like, "What's the best splitter location?" Many times the wiring will come together in a crawl space and the splitter lays on the dirt floor. That is fine as long as the crawl space is constantly dry. But how many are? Countless splitters are laying in puddles, pretending to be sponges, and soaking up water. Presto! Service calls! If the splitters had only been stapled up to floor joists, the outcome would have been different.

"Should this drop be RG59 or RG6?" If all drops were 75 feet long, this would be a moot question. But, for those drops 125 feet long or longer, RG6 can make a difference. Murphy's law says that the houses with the longest drops will have the most outlets on cable. Many installers run RG59 for miles and then complain to the technicians about "the taps running low."

A final word on new installs. Give the installers time to do the job right. Overbooking only leads to frustrated workers and poorly done, sloppy installs. Quality work takes time.

WIRE-IN INSTALLS, SERVICE LEVEL CHANGES, AND SERVICE CALLS

These three activities lie at the heart of a good maintenance and preventive maintenance program. Why? They put cable employees in contact with a lot of miles of existing drop cable. (I use the term drop meaning the wire from the tap to where it attaches at the back of the television. If just that part of the drop from tap to ground block is well cared for, then that part from ground block to TV will be a system's downfall.)

Too many systems equate maintenance only with caring for the trunklines and feederlines. Often systems even over emphasize trunklines to the detriment of feederlines. A proper maintenance program, however, must put the right focus and attention on all three types of lines: trunk, feeder, and drop. It makes no difference what wonderful shape two of the three are in if the other one is allowed to degrade into unsatisfactory condition.

How to use these activities wisely

Make sure your employees are not wearing blinders. I wonder how often a scene like the following is repeated daily: The cable employee gets out of the truck, walks to the house (as he does this his eyes are busy scanning the work order), and is met at the door by the subscriber. The installer goes directly to the TV, wires up the converter quickly, and heads out to the pole. Once there he locates the drop he wants, hooks it up or changes traps, etc., and hurries back to the house to see if everything is working okay. Then he is off to the next job.

On the surface this sounds okay. The job was completed and all was well. Or was it? The employee never really paid attention to anything other than the limited things he was there for. He had on "blinders."

An employee need not be like the Greek's mythical creature Argus and have a head with 100 eyes. Two eyes are all it takes if they are used wisely. What should employees be looking for and what kinds of questions should they be asking themselves?

Was the install done right the first time? Do not prolong the agony of a poorly done install. If time permits,

redo it. If it does not, at least get a time scheduled so someone can get the install done properly.

Does the drop look like it has been well maintained? Have past service calls been done correctly? There are countless drops that are simply spliced to death. I have seen drops of 100 to 125 feet that have over 10 splices in them. Sure, somebody had come to these houses in the past and "fixed" the cable, but he sure did not do it right!

Someone has said that putting a splice in a drop is like scheduling your next service call for that address. There is a lot of truth in that. Many times the most cost-effective (in the long run) and technically sound choice is to change out the drop instead of splicing it. Make sure that service calls are not really a disservice to the cable.

More questions. Are there limbs hanging heavily on the cable? Are the staples or siding clips loose causing the cable to hang low and look ugly? Is the P-hook fastened to the house securely? Do the ground block and wire look okay? These sound like a lot of time-consuming questions, but actually just walking out the drop on the outside of the house (which should only take two or three minutes) will answer them quickly.

Now, some questions for inside the house. If the cable comes into a basement, does the wire look okay? Stapling holding up? Is the wire routed too closely to furnace ducts or hot water pipes? Here is a big question: Has the subscriber cut into the cable to hook up illegal outlets. Time and time again a close check of the inside wiring will turn up all sorts (and kinds!) of extra connections radiating signal in all directions and costing the cable company money in lost revenues.

How about the transformer on the back of the set? Is it on the right terminals? Is it a new, modern kind? If not, change it. For approximately 50¢ or less, you will get better balance ratios, better isolation, etc.

By far one of the most important questions should be: How do the fittings look? Many systems are filled with the old, two-piece varieties. These were great in their time, but the hex-crimp, one-piece fittings do a superior job. Good advice would be to change out all old fittings: at the tap, at the ground block, behind the set, on the converter jumper, etc. I am convinced this alone will save countless service calls and cut down significantly on signal leakage.

In short, when a cable employee is at a residence doing upgrades, downgrades, service calls or whatever, he should be looking for anything that could affect the future performance of that install.

SIGNAL METERS

Signal meters have to be one of the best maintenance and preventive maintenance tools in the industry. Unfortunately, many meters seldom leave the comfort of their trucks. If the pictures look good after an install or upgrade, that is satisfactory for a lot of installers. "If the picture's good, that means the signal's good, right?"

Wrong!!! Good pictures can still hide many things. Here again an employee should be asking questions and using his meter. Are the signals flat across the band? Or are there suckouts? Peaks? Are signals excessively tilted? Are they too low? Just borderline? Too high? These could be indications of amplifiers at the wrong levels, damaged cables, tap values wrong, etc.

Signal readings should be written down if at all possible for every work order and attention called to them if anything abnormal appears. Often signal readings will catch developing feederline or trunkline problems before they become catastrophic. Problems are just like tooth cavities. The best time to find them is while they are small, if you cannot prevent them altogether.

PICTURE QUALITY

Even if an employee is at a residence to install only a pay service, he should still look through all other channels. Installers and technicians are literally the eyes and the ears of a cable system. If they are trained to know what to look for, they often will spot troubles long before the subscribers do.

What should they be looking or listening for? Beats, distortion, electrical noise, fundamental pick-up, hum bars, buzzing in the sound, etc.

Once again, anything abnormal or degrading to picture quality should be reported at once. What look to be minor problems can suddenly blossom into major problems. Nip them in the bud!

CONCLUSION

Installs, upgrades, downgrades, and service calls will always consume the major portion of cable employees' time. However, if employees will but stop, look, and listen while going about these tasks,

cable systems will benefit greatly. And on-call technicians will sleep at night.