Mechanics of the Bite

SLEEVE PROGRESSIONS IN POLICE K9 TRAINING

Article by Jerr Bradshaw

When beginning bite mechanics with green dogs, it is crucial to choose the right equipment. Many trainers jump right onto a bite suit with the dogs, and I think rushing onto a suit is a mistake with most young green dogs in the first weeks of a class. A good bite suit for a police dog has little loose material, as we do not want the dog to become a clothes ripper, satisfied to bite the material and not close the grip around the person underneath. Therefore, it is not a good piece of equipment to start a dog.

I prefer to begin their bite mechanics training on sleeves. Sleeves are designed to teach the mechanics of biting. For police dogs, these mechanics include a full, hard, and firm (no side-to-side movement) grip, as well as countering/pushing behavior when on the grip. These are among the first lessons we teach our dogs in our training program when they arrive from Europe. We want a dog to counter (go from a less full to a more full grip position) and push into the grip as a way for the dog to resolve any conflict it might feel when biting. Dogs that pull excessively are pulling away from the fight, and often when faced with opposition from the decoy or environmental stress while biting (being dragged through a threshold for example), the pulling dog will simply let go or pop off the grip. Dogs that are taught to push when encountering stress will be much more successful in a street fight. This is a task much more easily taught on a sleeve. We can address any equipment fixation later in the training by teaching the dog to drop dead equipment and hunt the target areas on the man in a suit or hidden sleeve. This human-focused aggression training is explained in detail in my book Controlled Aggression (Lulu Press), where the goals of initial bite training, such as countering/pushing and full, firm, and hard grips, are explained in further detail as well.
Hundreds of sleeves are on the market. Some of them are different types of the bite bar sleeve, which is the basic bite-building sleeve. This sleeve will encourage full, firm, and hard grips and exercise the jaw when used properly. It is usually made of a plastic cylinder hinged at the elbow that has a wedge-shaped bite surface covered with soft leather attached to it. The sleeve is covered with a jute outer cover held on by straps at the shoulder guard, which is usually made of hard plastic. Some bite bar sleeves are hard IPO trial sleeves and compress very little. Some have a softer bite bar inside under the cuff to allow younger dogs to get satisfaction from biting the sleeve. To encourage the dog to target the middle of the forearm, some of them have a relatively softer compression sweet spot. These sleeves also have harder plastic nearer the hand and elbow to discourage biting low on the hand and up on the elbow.
By far, my favorite compression sleeves are the ones where the bite compresses the sleeve, and the sleeve, by design, exerts an outward force against the compression. This isometric exercise of the jaw muscles makes the grip harder and harder. As the sleeve wears out, you can go up in hardness to the next level of sleeve (the sweet spot requires more force to compress), forcing the dog to bite even harder. In police work, it is vital to have a hard grip that exerts pressure, because pain compliance is the goal of using a dog to make an apprehension. If the grip is weak rather than full, firm, and hard, the pain will not be sufficient to ensure suspect compliance. Thus, as trainers, we have failed in our mission and, quite possibly, put the handler and other officers in jeopardy.

The other purpose is to provide an easy gripping surface all the way back to the molars. The dog becomes conditioned over time to grip in full because the sleeve is comfortable to bite, due to the wedge-shaped design. Some bite bar sleeves are made with shorter, fatter wedges to get the dog to open his mouth wider (for example, compression sleeves often come with a “puff cuff” that makes the sleeve more challenging to grip and forces the dog to open his mouth wider). Others are made with longer, slimmer wedges to encourage easier gripping deep to the molars. Pick the right sleeve for the job. I prefer sleeves that teach the dog to progressively open his mouth wider as the weeks of training go forward so the dog becomes conditioned to open wide on impact.

When first testing green dogs for police work, my minimum standard is that the dog bites three-fourths to full on a fairly hard compression sleeve. For a police dog, a three-quarter grip that is hard, confident, and firm is just fine. I can work on teaching him to counter a little bit. However, I don’t want to waste time teaching the dog to bite up from a soft puppy or intermediate sleeve to a hard sleeve. Sometimes you may have no choice but to start there. I keep a few different styles of bite bar sleeves available to test with each dog. If the dog will go on the hard compression arm right away, I can use that for all his foundation training, maybe going up a step to the next level of sleeve. If the dog needs a little targeting work on the sleeve, I have softer bite bars to use to teach the proper targeting, and then I move to the hard compression arm as soon as I am satisfied with the grip.

If there is time to further develop the grip, the next step after compression sleeves is barrel sleeves. These sleeves are made of hard chrome leather and also have an outer jute cuff. Their purpose is to force the dog to open his mouth extremely wide to take the grip. If you have a three-quarter mouth biter, a compression sleeve with a thick cover or a barrel sleeve will help get him to open up his mouth. It is critical that the cuff on these sleeves be as tight as possible. A tip for using barrel sleeves is to sew up the back of the cuff tightly with an upholstery needle and waxed string every few sessions. The reason is that as the dog works on the barrel, the leather cylinder starts to crush, and the cuff can loosen. A lazy-gripping dog can then get the loose cuff material in his mouth and not work for the full grip. This will defeat the purpose of using a barrel sleeve.

A number of manufacturers make barrel sleeves, from barrels layered so hard they are impossible to crush unless you drive over them with a truck, to soft barrels that crush too quickly. I prefer medium hardness. This allows the dog to work his jaw muscles and make progress crushing the sleeve, but it stays firm enough to keep its cylindrical shape over time. Barrel sleeves usually last only a few months. As the barrel is crushed, it will collapse and form a natural bite bar. For solid-gripping, full-mouth dogs, it is fine to use when it wears down. But it will be less effective in forcing the dog’s mouth open as it is crushed. You can stretch its service a few extra months if as you see it start to lose its form, you remove the cuff and wrap a tight layer of duct tape over the middle of the cylinder, forcing the sleeve back into its round shape. This is helpful, as they are usually expensive.

One final caution on barrel sleeves: When they are new, they are not good for doing long send bites. If the dog doesn’t open up, he will slam his front teeth into the sleeve. Use the barrel sleeve on back-tie work and short sends only. Use a compression bite bar on longer sends.

A note about which arm to use. A good equipment selection should have both left- and right-arm sleeves. However, sleeves are like baseball mitts. You throw with your dominant
hand and catch with your off hand. So, if you are right-handed, throw with your right, catch with your left. In dog training, we should have distractions such as sticks, whips, can curtains, and jugs of rocks, in our dominant hand. Therefore, for someone right-handed, sleeves should be left-handed. Occasionally switch it up and give grips on a right-arm sleeve, or if you have left-handed decoys, allow them to work with the right-arm sleeve and hold distractions in the left hand. You use your off arm to work the sleeve because you use only big muscle groups, not your biceps, to keep action in the sleeve when the dog is on it. Your legs, back, and shoulder muscles make the sleeve move. You do not twist the sleeve around in the dog’s mouth with figure-8 type movements. Those moves went out of style 20 years ago because they serve only to injure the dog’s neck and back by moving his neck unnaturally. The dog that pushes and counters will bring the fight to you.

**Hidden Sleeve**
You can introduce a hidden sleeve when the dog is biting strong and confidently and pushing and countering. It requires a dog to bite with a big open mouth, so grip development should be done before its introduction. I recommend first introducing the hidden sleeve without it being covered with a shirt, and then once the dog shows he bites without hesitation, introduce the sleeve with a cover. Vary the clothing covers, starting with cotton material, which is easy to grip, then cycle through more slippery nylon woven covers, like a hockey jersey or raincoat cover. The dog should be comfortable biting all manner of surfaces. Most hidden sleeves are ambidextrous, so switch the sleeve from right to left, so the dog doesn’t try to anticipate what side to grip.

**Wedge Sleeves**
Preparing dogs for frontal attacks (sends) can also be done on another type of sleeve, a wedge sleeve. It allows us to place the sleeve on the side of the body (typically left side for a left bicep target frontal) and teach the dog to come through the send fluidly without needing to get the decoy’s entire body out of the way on a sleeve catch, which for some decoys can be a difficult skill to master. Wedges can be raised up progressively to simulate the high bicep target.
Belgian Arms

A Belgian arm is a sleeve that can be used to train a bicep/triceps target. Instead of going directly to the suit for this training, spending some sessions on the Belgian sleeve will allow the dog to learn exactly where we want him to put his mouth. The bite suit offers too many areas that are available to bite, and unless you are a really skilled decoy, putting a dog directly in the bicep on a suit can be difficult at first. Further, the intermediate step of the Belgian arm allows the dog to get used to being up close to the human’s face while biting in a stable fashion.

A suit is a much more defensive piece of equipment because it doubles or triples the physical size of a person to a dog; therefore, it can cause the dog’s grip to become unstable or at least busier. Teaching the foundation on the Belgian sleeve makes the transition to the suit target that much easier. It allows the dog to get more comfortable in the new target area before the whole suit is introduced. We will address bite suit selection and work in the next article in this series on bite work equipment, as well as more on the Belgian sleeve and leg sleeve targeting work you can do as the immediate prerequisite to the suit work. The nice thing about the Belgian arm is you can get the dog targeting properly and then slip it to the dog and do a number of quick, effective repetitions.

Leg Sleeves

A well-rounded biting dog for police patrol work should also have experience biting the legs. Leg sleeves are an easy way to take a dog used to a high or arm target and get him to go confidently into the legs as a secondary target. If a dog is first given the option of a whole suit when trying to teach the legs, the dog will gravitate to his normal high/arm targets. That’s the part of the human he associates with biting. By putting the dog on a back-tie, or having the handler hold the dog on a post-up, we can offer only the leg target with the sleeve and teach the dog he can bite there and be comfortable. Transitioning to the suit after some good experience on the leg sleeve with the dog can be as easy as using something, such as a dog bed or a cardboard box, to block the high target and forcing the dog to be able to get only to the legs. Once there, he should feel comfortable biting full and pushing from the work done with the leg sleeve. Additionally, it’s easy to allow the dog to grip the sleeve and slip it to the dog without having to address the out if you aren’t yet at a place in training where you wish to do the out. It can make the targeting easy and stress free.
**Conclusions**

For solid, quality green dogs, the sleeve phase of this training may be only 4-6 weeks of a standard class. In this time, the gripping, countering, and pushing behaviors can be taught, and then the dog can be moved to hidden sleeve and suit work for the bulk of his remaining training. As we start working on skills such as the out, redirect, and recalls, we can go back to the sleeve for training sessions to introduce the concepts, where we can quickly reward the dog with a slipped sleeve for correct work. Teaching initial building search work on a sleeve enables you to quickly reward the dog for locating the decoy with a bite, address bite mechanics, and then slip it, with young dogs, allowing for more repetitions per session, and bigger wins for the dogs. Once the dog is on the grip in any kind of scenario, the decoy can work the dog’s countering, pushing, and grip strength before allowing him to have the sleeve. Thus, in the first weeks of training, you can teach important concepts like building and area search as well as focus on the biting mechanics once the dog is on the grip. This creates much better efficiency when the class time is limited.

A proper police K9 bite suit should be thin, without much excess material, and tight to the decoy. We do not want big puffy suits in the kimono style that teach dogs to be satisfied with the material. We want them to feel the human underneath and to actually seek out that feeling, with a desire to crush the human underneath. This pain compliance can be the difference between a suspect in a hurry to give up and one that fights the dog and you. But to achieve this end result, the dog must already be conditioned to biting hard, full, and firm as well as conditioned to grip and counter and push. Once these biting mechanics are second nature, the power you will unleash on the suit and consequently in your deployments will be extreme. A proper bite suit is not the tool for grip building, but allows us rather to test the bite we have built with the sleeve work. Compression sleeves build jaw muscles and, subsequently, strength. So, don’t be in a rush to get the dogs on the suit before that crushing, pushing grip and basic targeting is conditioned properly. Also, don’t be afraid to occasionally go back to the hard compression sleeve or the barrel sleeve if you wish to challenge the dog’s grip. A hard, crushing, pushing, pulsing grip that seeks to fill the mouth beyond full will keep the strength in the gripping. But that must first be taught with the many sleeves we have at our disposal. Modern bite equipment is extremely well designed to achieve the results we are after. Use the right tool for the job, and the job becomes easier.
This article is meant to introduce different sleeve options for police dog training. Each piece of equipment discussed here was designed for a purpose, and learning from experienced and qualified professionals how to employ each piece of equipment is critical to its success. I highly recommend you seek out not just the right equipment but the instruction on the techniques for using the equipment most efficiently, safely, and effectively.

Jerry Bradshaw is the Canine Training Director of Tarheel Canine Training, Inc. in Sanford, NC. Tarheel Canine’s School for Dog Trainers holds police K9 instructor courses for police K9 trainers as well as civilians. Tarheel Canine trains dogs for police departments worldwide.

Email: jbradshaw@tarheelcanine.com