

INTERNATIONAL SHÔTÔKAN KARATE FEDERATION

Rokudan Examination Report

THE MAE-GERI

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« *Mae-Geri* » is a Japanese word for front kick. The front kick is the most commonly used kick and the mainstay of Shôtôkan karate. « *Keri-waza* » means kicking techniques with the legs which is a unique feature distinguishing Karate from other martial arts. It is especially important to understand the relationship between the feet, hips, arms and legs as they work together.

This report will present an overlook of the classification of the kicking techniques, a description of the basics of the technique in three different approaches, the most effective target area, the fundamental and basic principles in the efficient execution of the technique, the application of body power and energy and finally, the training method and preparatory exercises required for this technique

The feet are strong weapons that produce more power, speed and distance than hand techniques because foot techniques require the use of larger and longer muscle groups. Therefore, the hips have to be straight or in a horizontal position. The arms must be relaxed and close to the body. The legs support the whole body weight maintaining balance and stability.

Classification of kicking techniques

Foot techniques are classified in four (4) major categories which are: the front kicks (*Zempô-geri*), the side kicks (*Sokumen-geri*), the back kicks (*Kôhō-geri*) and the jumps kicks (*Tobi-geri*).

The focus of this thesis is that the front kick is utilized either to attack or to stop an opponent. The basic principles of execution regarding stance, posture, power and speed in harmony with the body and mind will be explored.

Basic technique

The front kick is, of all the kicking techniques, the easiest to learn, and the most natural to perform. Front kicks do not require any unnatural body extension because all the necessary angles are in the natural line for maximum power dealing with a target that is directly to the front.

By definition « *Mae* » means front and « *Geri* » means kick or technique using the lower body extremities. There are three (3) different ways to execute the front kick: a snap kick; a trust kick and a jump kick. It can be utilized from either a moving or a stationary position and from a variety of different stances and by either the back leg or the front leg. In a kicking situation, the foot and the knee are the body parts used in different ways to apply leg technique. These are: the instep (*Haisoku*), the back of the heel (*Ushiro kakato*), the bottom of the heel (*Kakato*), the ball of the foot (*Koshi*), the sword foot (*Sokuto*), the sole of the foot (*Teisoku*) and the knee (*Shittsui*).

The most commonly used kicking surface is the ball of the foot named « *Koshi* » and it travels in an arc to the target with a snap kick and curling the toes upward. The heel is in a straight line to the target and also, the toes are used by advanced karate-ka.

The kicking action involves the hips pushing forward by bending the knees and raising the leg straight up. The extension of the leg with a total immobilization at the moment of impact will complete the kick. Then add a snap action to withdraw the leg back to the starting position. Kicking is a technique that demands a good balance of execution because the total body weight is supported by only one leg and sometimes by no leg at all depending of the specific movement and with precise timing against an opponent.

The first kicking method is the front snap kick or « *Mae-geri keage* ». It can be done from a zenkutsu position (fig.1) by bringing the knee of the back leg high and close to the chest (fig. 2) with the foot and toes raised perpendicularly to the ground. The kicking is a snapping motion of the knee, ankle and toes, and the kicking leg must be in a vertical straight line (fig. 3) . It is necessary to relax the knee joint, keep it flexible and to withdraw the foot fully to a position beside the knee of the supporting leg and push the hips in the direction of the kick (fig. 4).



fig.1



fig. 2



fig. 3



fig. 4

A variation of the front kick is a kick with the front leg (fig. 5) known as « *Kizami-geri* » from a front stance or a back stance. It is important to have the back leg straight when doing a kick in « *Zenkutsu-dachi* » with the hips forward and grounded to the floor. In a back stance (fig. 6) or in « *Kokusu-dachi* » the supporting leg must be firmly grounded to the floor and the leg still bent with a strong ankle position.



fig. 5



fig. 6

The second way of kicking is the front thrust kick or « *Mae-geri kekomi* » (fig. 7-8) . It uses the same technique as the front snap kick but the knee is raised closer to the chest and the foot is thrust outward in a straight line to the target. The kicking surface is the ball or the heel of the foot while the targets generally aimed are the solar plexus, abdomen, groin and the knees.



fig. 7



fig.8

To achieve this technique we have to keep the supporting foot firmly grounded to the floor. While keeping a good posture and maintaining the height of the knee at an angle close to 90° of the upper body, a thrust of the hips in the direction of the kick will ensure a stable and effective technique.

The third method is the front jump kick or « *Tobi mae-geri*. » (fig. 9 to 11) . This jump kick is usually used as a surprise technique and can be done as a single or double kick. The front jump kick is essentially done the same way as the « *Mae-geri* » but with a push off action from the front leg and kicking with the rear foot. The starting motion requires' that the front leg be raised close to the chest to give the necessary impulse. During the withdrawal it is important for the kicking leg to land in a good position on the ground. The double jump kick or *Nidan-geri* is a variation of two quick front kicks in succession during the course of a leap.



fig. 9



fig. 10



fig. 11

Target areas and distance

There are four specific target areas: the upper level (*Jôdan*) from the head to the neck; the middle level (*Chûdan*) from the neck to the navel; the lower level (*Gedan*) from the navel to the knees; and below the knees (*Hiza-shita*).

The linear trajectory is another dimension to achieve a front kick and to provide a better range of distance depending on the position of a training partner. Short or long distance will always require the extension of the leg to be efficient. On a short distance, the target could be on the lower body part. On middle distance the target could be either the stomach or the face area. But the basic principle is to apply a front kick with the ankle and the sole of foot that are firmly anchor in the ground and the hips are straight.

Fundamental and basic principles

As mentioned previously, to execute a front kick it is necessary to combine all the required technical components. The four basic elements or principles are namely: stance, posture, power and speed.

The stance is the foundation of a good technique considering the distance between the feet from the inside of both heels, the hips are straight and parallel to the ground, the knee and toes pointing in the same direction, the ankle and the knee joints are in a flexed angle position to support the body movement.

While kicking, the foot must trace an upward semi-circular course on a vertical plane with the knee as a pivot with the feeling of stabbing the target or to break-up the partner position. To apply a kicking technique efficiently requires stability and balance by being relaxed in the execution of the technique. Also, the head should be straight and the shoulders relaxed in a natural position for a good posture. The pelvis should be forward to ensure proper muscle connection between the upper and lower body and, to provide support and generate maximum power on impact when applying the kicking technique.

When teaching basic drill for the front kick technique to beginners, it is recommended to stand with the feet together in « *Heisoku-dachi* » to keep stability and avoid body shifting problems. The leg is then raised; the knee is bent; the ankle is flexed and the toes are curled upward to the front direction with the withdrawal of the calf to the thigh at the end of the movement in a upright position. Finally, the speed of action will create the power of connection against an opponent and guarantee the snap back action described in Japanese by « *Hiki-ashi* ».

Application of body power and energy

To succeed in any karate techniques, we have to understand the close relationship of body expansion and contraction as related to the physical laws of force, energy and motion. It depends on muscular expansion and contraction, on mobilization of energy and on breathing control. Those actions of expansion and contraction alternate. The body expansion produces the necessary speed and the body contraction transforms the power into real kinetic energy.

It is particularly true in a kicking technique that the maximum velocity will be achieved when the muscular contraction stays the necessary time to launch the foot that goes on naturally like an inert mass and a second contraction will occur when the foot touches the target area. The power of « *Kime* » is the necessary time to contract the muscles immobilizing the body at the end and relaxing after. The power derives from the concentration of maximum force at the moment of impact, which in turn depends on the speed of the blow or the kick.

In karate, the rotational power is especially important to execute forms with sufficient speed, focus and balance. The notion of rotational power is related to the force used by the upper body to correctly deliver powerful techniques such as punches, blocks, strikes and of course the kicks.

The proper support of body rotation will play a crucial role in the correct execution of various types of karate techniques. In kicking techniques, the hips are pushed forward to provide a driving power by moving the weight forward onto the leg that is supporting the whole body to achieve maximum effect. In fact, the principle of action-reaction force is not unique to Karate and is present in our daily life style. In karate techniques like punching, striking and blocking reaction force is found by a fast withdrawal of the hand and in kicking by a solid fulcrum action on the ground.

The final but equally important notion is the breathing control. Exhaling produces contraction of muscles while inhaling tends to relax muscles. Breathing can also be exteriorized when exhaling by a cry emerging from the abdominal region, the « *Tandem* » and called a « *Kiai* », which is the result of an internal tension expressed vocally in an explosion of power.

Training and preparatory exercises

Another key aspect of training is the conditioning of the legs and entire body by warm-up, stretching and equipment training that will help to improve accuracy, speed and power. It is important to warm-up before a training session, particularly the pelvis and torso area, the lower back, the ankle and the whole leg area to prevent muscles like the quadriceps and the hamstrings to be tense and prone to injury. Rotation of the body and lateral movement will improve the flexibility and balance required by standing on one leg and will help stability by positioning the lower body in a starting position imitating the « *Hiki-ashi* » movement keeping the centre of gravity over the sole of the feet. Any specific warm-up exercise needs at least an active 20 seconds and between 7-10 repetitions of each exercise.

To improve the flexibility a proper program of stretching will develop the ability to execute low, middle and high range kick. A stretching exercise for hamstring muscles (fig.12) consist in lying down on your back, then bringing one knee to the chest. Pull the toes towards you and push the heel towards to the ceiling and hold for 1 to 2 minutes than repeat with the other leg. To stretch the quadriceps and psoas muscles (fig.13) : bend the front leg 90 degrees putting almost full weight on this leg. Lean forward to keep the other leg far back, stretching it out. Keep the back straight between the shoulder. Feel the stretching of the quadriceps in the forward leg and opposite calf and hold for 1 minute then change side.



fig. 12



fig. 13



fig. 14

To execute a proper kicking technique, it is indicated to practice the lateral pivot of the lower limb by working specifically on the hip, the knee and the ankle joints. For example, a good snap back motion of the front kick requires flexibility of the ankle and Achilles tendon. This can be improved with ankle joint exercises such as squats (fig.14).

To improve kicking techniques nothing can replace the actual movement. Heavy bag or air shield can be used for real kicking exercises. When practising kicks, it is important to add quality to quantity alternating from leg to leg from 10 to 25 kicks each side.

Another way of training is practising a different position such as in a horseman stance named « *Kiba-dachi* » or in back stance named « *Kokutsu-dachi* ». In *Kiba-dachi* one must maintain a balanced posture alternating front kicks from right to left without breaking the height of the stance and kicking in front to the target area. In *Kokutsu-dachi*, the drill consist in alternating from the front leg to the back leg in a chain of action-reaction movements using the heel of the foot firmly grounded on the floor.

Training recommendations

In retrospect, the most common mistakes seen during practice or training of a front kick drill are: 1) the *supporting* leg is too straight or too bent; 2) the posture of the body is incorrect; 3) the heel is not firmly grounded to the floor; 4) the body leans forward or backward when kicking; 5) the foot doesn't withdraw or make « *Hiki-ashi* » at the end.

Specific conditions have to be respected in order to apply good body rotation and to hold stable position. These are: 1) Maintain the hips at the same level;

2) Shoulders and the hips must turn simultaneously; 3) The trunk should stay perpendicular to the ground; 4) and finally, the hips should be fully turned at the end of each movement.

In conclusion, we can say that *Shôtôkan* front kick named « *Mae-geri* » is one of the most natural kicks. It requires an understanding of the principles of motion, the force of action-reaction and the use of body muscles in the correct sequence to succeed in a real fight situation. Combined with the upper level techniques such as straight punch or « *Oi-zuki* » and counter punch or « *Gyaku-zuki* », it offers a large number of attack or counter attack possibilities.

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