

On-Ice Conditioning

The on-ice conditioning drills included in this chapter are specific to the training of the three energy systems used to move the body in ice hockey: anaerobic alactic, anaerobic lactic, and aerobic. The chapter is structured with the anaerobic alactic drills at the beginning, anaerobic lactic drills coming next, and aerobic drills coming last. Also, the system each drill trains is indicated in its title. The following lists identify the characteristics of the three energy systems as well as recommendations for training each system. For best results, the drills included in this chapter should be run with these considerations in mind.

Anaerobic Alactic

- This system supplies energy for all-out efforts lasting up to 10 seconds and contributes for up to 30 seconds.
- The supply of energy provided by this system is limited.
- Training time should be 5 to 10 seconds per repetition for this energy system.
- Training intensity should be near maximal (95 percent).
- Rest time should be 30 seconds to 2 minutes between repetitions.
- Work-to-rest intervals should be 1:6 to 1:10.

Anaerobic Lactic

- This system supplies energy for efforts lasting longer than 10 seconds and contributes for up to 3 minutes.
- This is the predominant system for intense exercise of 30 to 60 seconds.
- Supplies of energy provided by this system are limited.

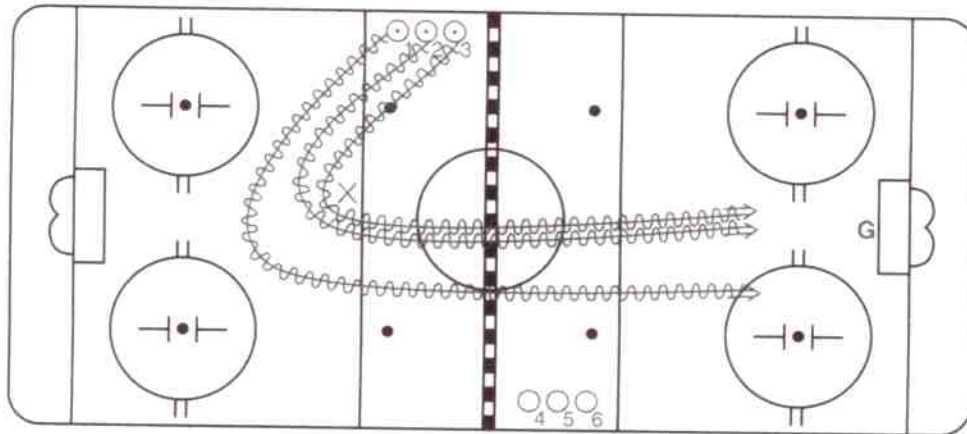
- This system produces lactic acid, which contributes to fatigue.
- Training intensity should be near maximal (95 percent) for this energy system.
- Recovery time should be 1.5 to 3 minutes.
- Work-to-rest intervals should be 1:3 to 1:6.

Aerobic

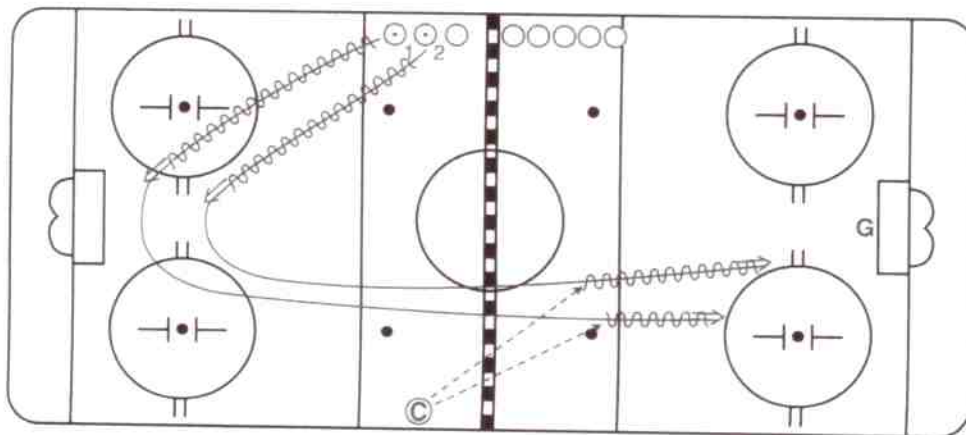
- This system is important for recovery in intermittent anaerobic sports such as ice hockey.
- This system can be trained using two methods: continuous long-distance or intermittent interval training.
- Long-distance work should range from 20 to 60 minutes.
- Interval exercise should range from 1 1/2 to 3 minutes.
- Work-to-rest intervals should be 1:1 to 1:2.
- Intensity should be submaximal, approximately 165 beats per minute (60 to 75 percent of maximum), as maximal heart rate is approximately 220 minus the age of the player.

All three energy systems need to be trained for ice hockey. However, during the season, the emphasis for on-ice conditioning should be on training the anaerobic alactic and lactic systems because ice hockey is a sport that requires short bursts of energy (with 5 to 40 seconds of work being the most common). Keep in mind that the aerobic system is also developed and maintained with short-interval work as well as continuous work. Therefore, an aerobic training effect will occur using anaerobic training intervals. Also note that lactic interval training drills also train the aerobic system and are more practical for on-ice conditioning as they train both systems and are more game specific.

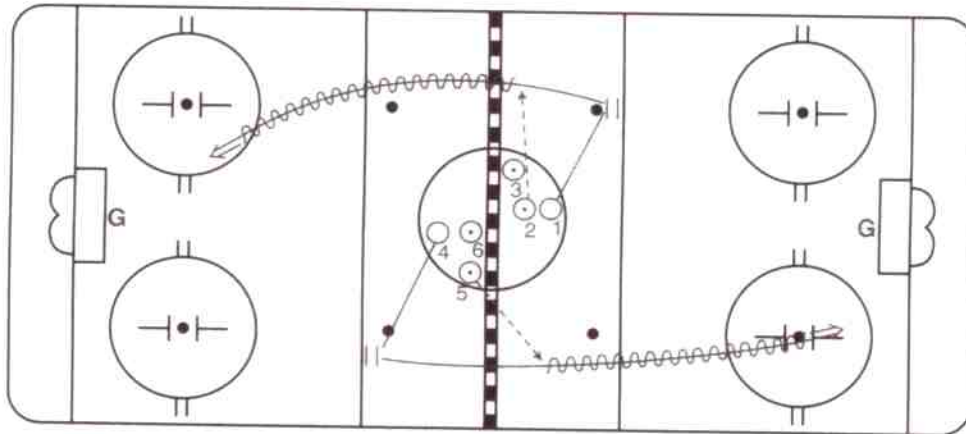
1. Players 1, 2, and 3 each have a puck.
2. The three players sprint around the cone in succession and shoot at the far end.
3. Players 4, 5, and 6 go next from the opposite side.
4. The drill is continuous with three players going each time.



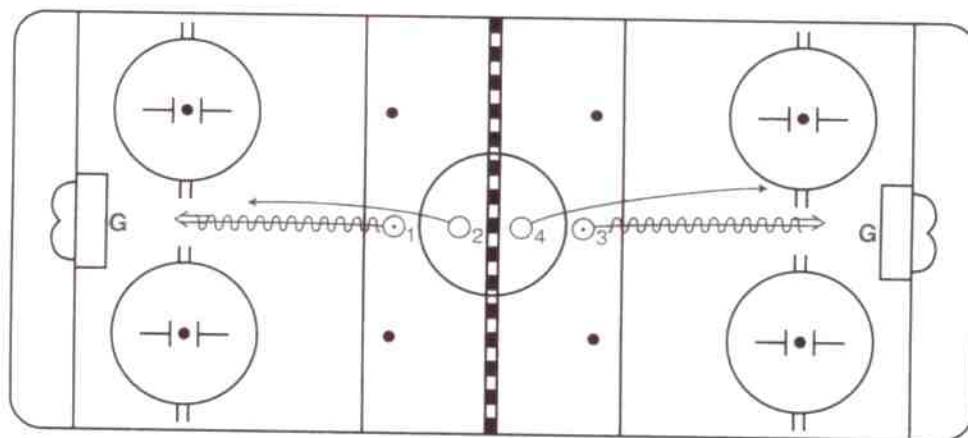
1. Player 1 and player 2 each have a puck.
2. Player 1 and player 2 skate over the blue line and shoot in succession, then loop back and skate to the opposite end to take a pass from the coach.
3. Player 1 and player 2 shoot at the opposite end.
4. Players go two at a time, and when the whole team is finished, they go in the opposite direction.



1. Player 1 skates out of the center circle, stops at the near blue line, skates to the far end, takes a pass from player 2, goes over the blue line, and shoots.
2. Player 2 goes next and takes a pass from the next player.
3. The drill goes in both directions from the center circle, with players 4 and 5 performing the same pattern in the opposite direction.



1. Player 1 is just outside the center circle in the middle of the ice with a puck.
2. Player 2 is at the center line.
3. Player 3 has a puck and is in the same position as player 1 but on the opposite side of the circle.
4. Player 4 is at the center line.
5. On the whistle, player 1 skates in for a shot on the net with player 2 chasing. Player 3 skates in for a shot on the net at the opposite end with player 4 chasing.
6. All players participate, alternating between puck carrier and chaser.

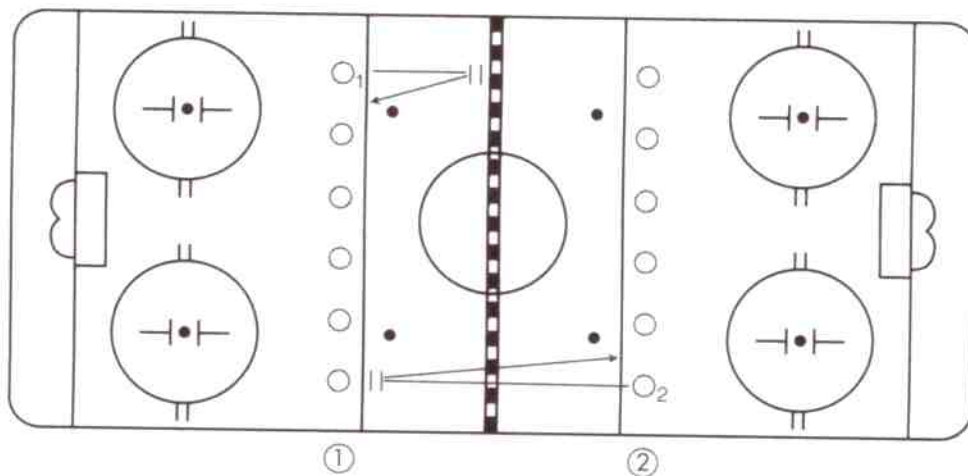


428 ALACTIC SPRINT BLUE TO RED, BLUE TO BLUE

1. Player 1 skates from the blue line to the center line, stops, and skates back to the blue line (see figure 1).
2. Each player in the line goes in succession.
3. Half the players line up on one blue line, the other half on the other blue line.
4. The players alternate from one side to the other.

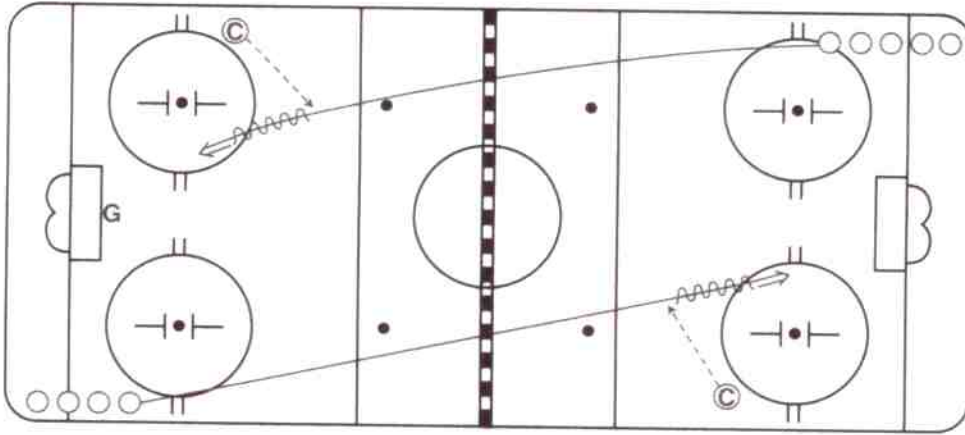
Variation

The drill is the same except that the players skate from blue line to blue line, stopping at the far blue line and then skating back (see figure 2).



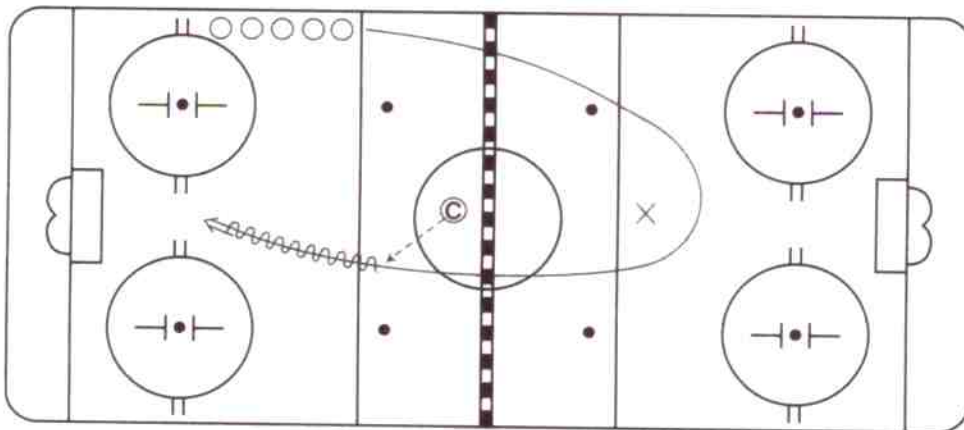
429 ALACTIC SPRINT LENGTH OF ICE, SHOOT

1. The players skate the length of the ice in succession, take a pass inside the blue line from the coach, and shoot.
2. The drill goes in both directions, with half the team going one way and the other half going the other way.



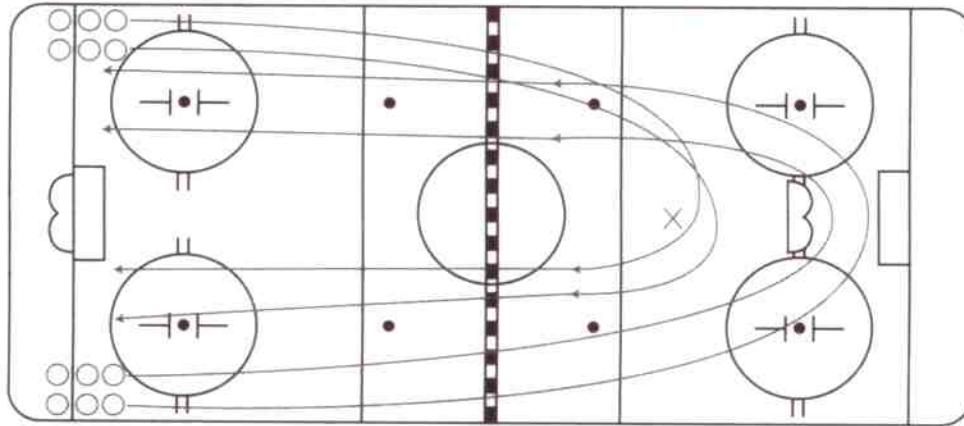
430 ALACTIC SPRINT, LOOP, AND SHOOT

1. The players skate from the blue line to the far blue line, skate around the cone, loop back in the opposite direction, receive a pass from the coach at the center circle, and skate over the blue line and shoot.
2. All the players go in one direction and then start at the other blue line and go in succession in the other direction.



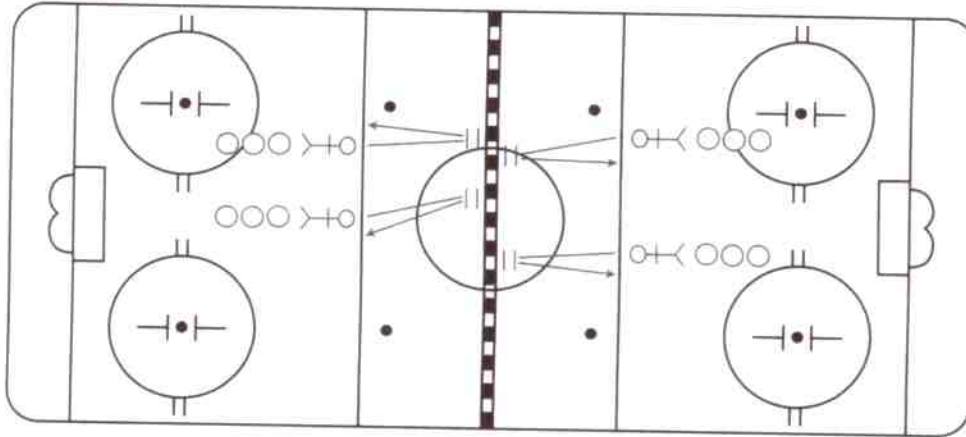
431 ALACTIC SPRINT IN FRONT AND BEHIND THE NET

1. Two players from each corner start at the same time.
2. Two players skate around the cone inside the blue line.
3. The opposite two players skate behind the net, which has been moved up to the hash marks of the two face-off circles.
4. The players skate back to the opposite corner from where they started (they will start from this opposite corner on their next turn).
5. The players from one corner always go around the cone, and the players from the other corner always go behind the net.



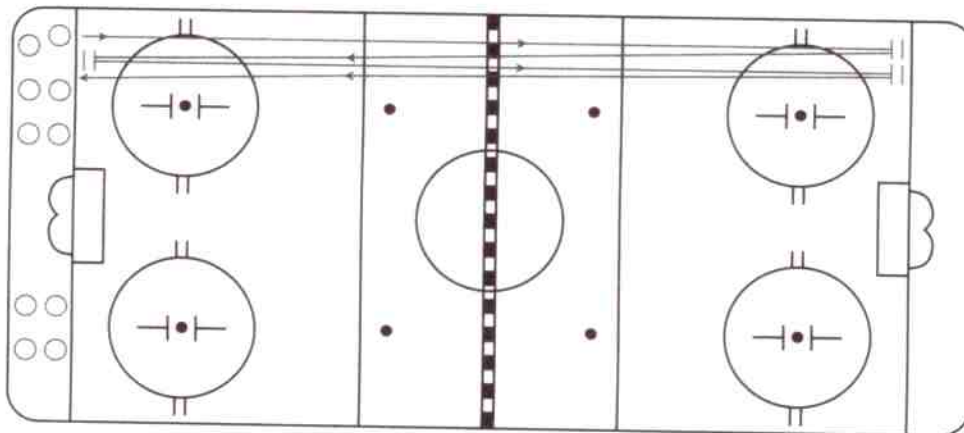
432 ALACTIC SPRINT BLUE TO RED AGILITY

1. Players are in two lines on each end of the rink.
2. The first player in each line is lying down at the blue line.
3. On the whistle, the players get up, sprint to the center line, stop, and skate back to the blue line.
4. The drill is done from both sides of the center line.

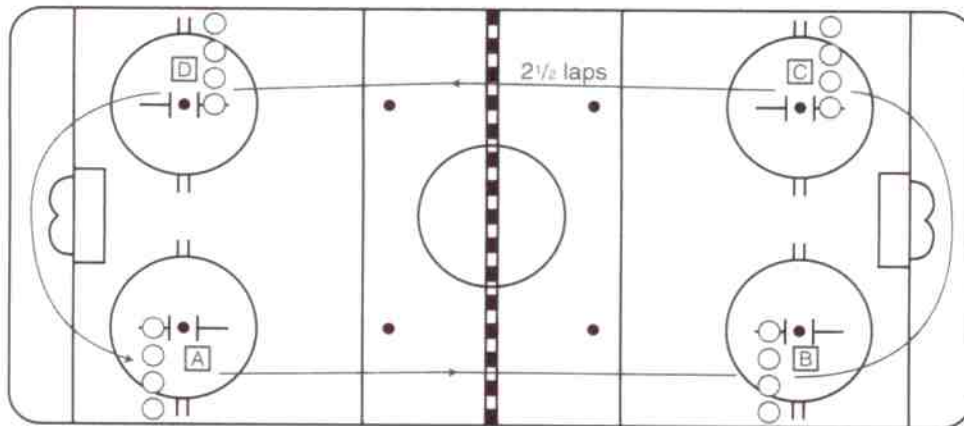


433 LACTIC DOWN AND BACK TWO TIMES

1. Players skate goal line to goal line four times, stopping at each end.
2. Divide players into four or five groups. One group skates while the others rest.



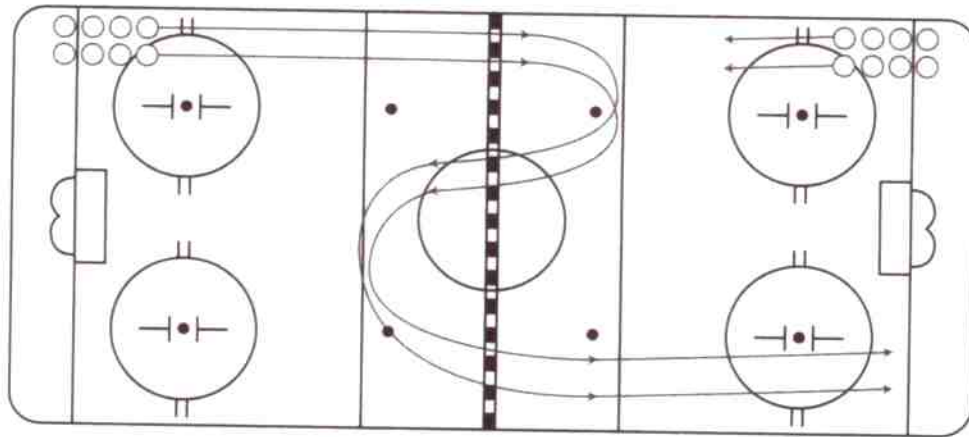
1. Players are in four groups.
2. The first group skates around the rink (going behind the nets) for 2.5 laps and ends where the next group starts.
3. The other three groups rest while one group skates.
4. Group A skates 2.5 laps and ends at group B.
5. As soon as group A reaches group B, group B skates 2.5 laps and ends at group C.
6. Group C then skates 2.5 laps and ends at group D.
7. Group D skates 2.5 laps, ending at group A.
8. Each group goes two times in one direction and two times in the opposite direction for a total of four to eight times.



1. The players are in two groups in opposite corners of the same side of the rink.
2. Each time, two players from one end skate to the far blue line, loop back to the near blue line, and skate to the opposite corner at the far end to complete an S pattern.
3. As soon as the two players from one corner turn at the far blue line, the next two players go from the opposite corner.
4. The players alternate from the corners until all the players have gone and ended in the opposite corners.
5. When all the players have gone twice, the two groups switch to the opposite corners at the same end and go two more times.

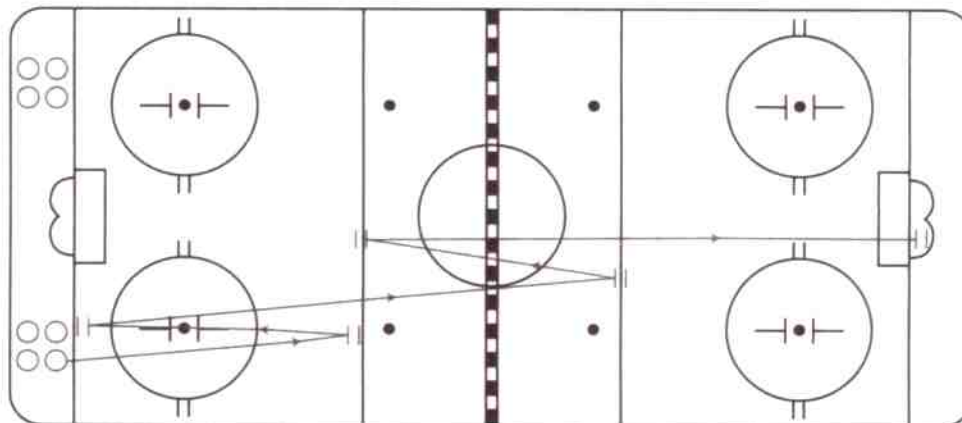
Variation

The players alternate skating forward and backward between the blue lines.

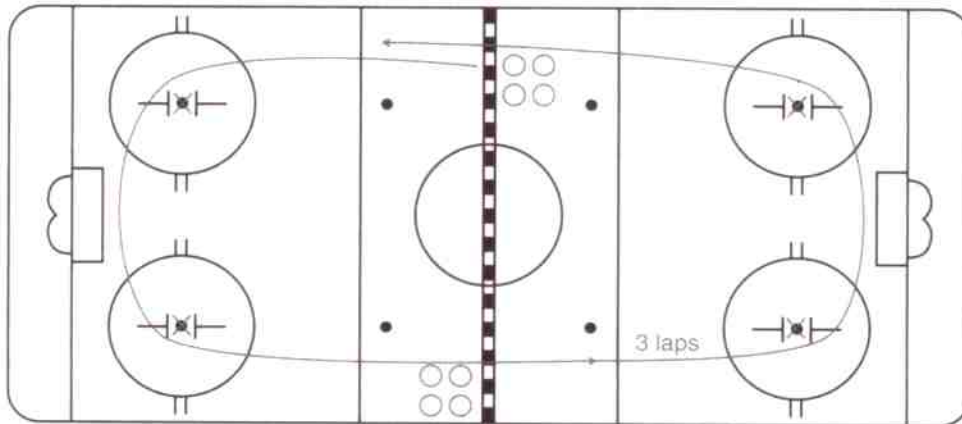


Players form four groups. The groups take turns skating the following sequence, starting at the goal line (one group goes while the other three groups rest):

1. Skate to the near blue line and stop.
2. Skate back to the goal line and stop.
3. Skate to the far blue line and stop.
4. Skate back to the near blue line and stop.
5. Skate again to the end of the rink and stop.
6. One group goes while the other three rest.

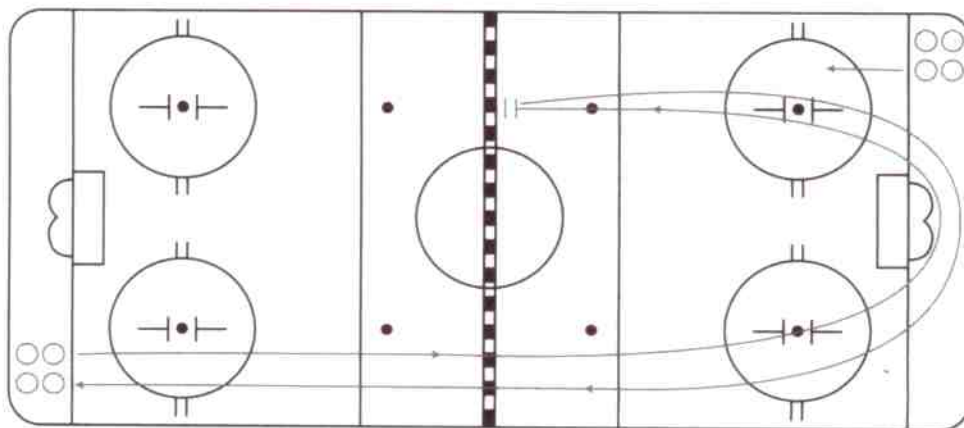


1. Four cones are placed at the face-off dots in the four defensive zones.
2. Players are in four groups.
3. Each group skates around the four cones three times.
4. One group skates while the other three groups rest.
5. The direction of the skate should be changed each time a group skates.

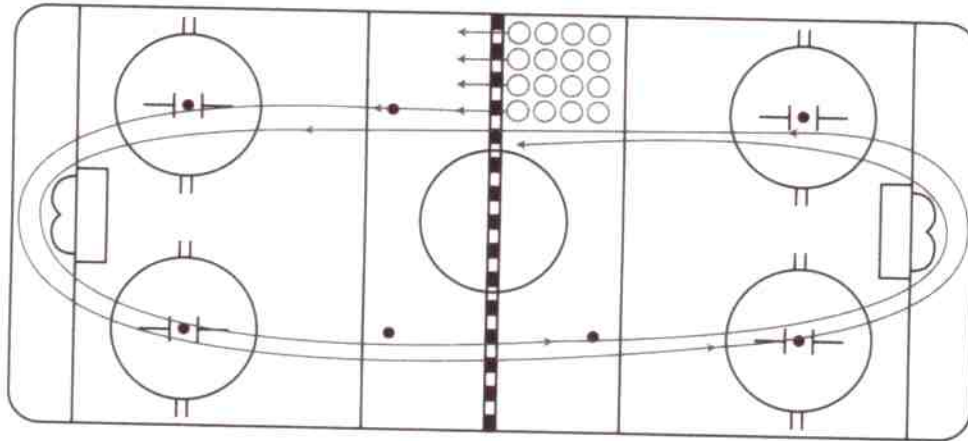


438 LACTIC ONE-AND-A-HALF PLUS ONE-AND-A-HALF

1. The players go two at a time.
2. The two players skate from the goal line, skate behind the far net to the center line, stop, skate back behind the same net, and return to the starting position at the goal line.
3. The two groups alternate from diagonally opposite corners.



1. Players are in four or five groups, with four players in each group.
2. Players do not have sticks.
3. The first player in each line skates two laps around the rink, going behind the nets, and passes a glove to the next player between the center line and the blue line like a baton in a relay race.
4. The direction of skating should be changed for each race.



1. The players skate in four or five groups from the goal line.
2. The players stop and change direction on each whistle from the coach. They end at the opposite end of the rink.

