

NOVICE TRAINING AND SAFETY PROGRAM

I. Introduction

This is a guide to a training course for novice drivers. With this outline, plus your own innovations, a fairly complete course can be offered to the novice.

Purpose of the Program

- To instruct drivers in the basic procedures of Quarter Midget racing.
- To promote driver safety from a driver's viewpoint.
- To offer all drivers an opportunity to improve their driving techniques through non-competitive And competitive practice sessions with qualified adult supervision.
- To train newcomers in driver safety.
- This class is not here to teach you how to win. It is here to teach you how to race. For this reason this class should not be ran in a point's series.

II. General Information

1. Instructor's Guide

- A. In training the novice driver, it is well to keep in mind that the period of concentration is limited to not more than ten to fifteen minutes at a time. Therefore, it is recommended that each phase of instruction be limited to that time and then followed by either a short rest period or an actual on-the-track practice session. The latter is the most desired by the novice driver.
- B. Before any novice driver is allowed on the track, the instructor should assure himself that every precaution for the new driver's safety has been taken. A safety check on every car should be made to insure that all safety equipment is included and in working order. Special attention should be directed to the on/off switch (i.e., proper location, proper sequence of operation, etc.), safety belt, brakes, roll bar (pinned and at least the minimum required distance above driver's head). New owners are often uneducated regarding safety equipment requirements, so check carefully.
- C. The novice driver should be completely briefed on the procedures to be followed in stopping the car in the event of trouble or discomfort with the speed of the car. It is recommended that every novice driver have a full knowledge of all flags and hand signals *before* being allowed on the track in the car. Include in your briefing a review of the meanings of the red, yellow, and black flags and where you want the drivers to stop on the red flag. Instruct the novice driver that the steering wheel is his/her "*best friend*" and that he/she should only take their hands off of it when operating the on/off switch. Show him/her that they cannot "hold up" the car, by gently rolling them over on their side while belted in the car. Some drivers are very apprehensive of this procedure, so it may be necessary to assure them that they are safe. Be sure to tell the novice driver that you are not interested primarily in speed on the first day or two of training, but merely to getting them used to the car in motion. Let them set their own speed, but have them remain consistent with it; not "letting up" in the corners. (Occasionally, with younger drivers, it has been found that limiting the accelerator pedal travel for the first few times on the track has been very helpful in bringing along a timid driver).
- D. At all times, the instructor should keep in mind that he is dealing with children and keep all explanations as simple as possible. (A small blackboard can be useful in explaining track situations). The novice driver is in need of confidence both in himself as a driver and in his car. A small amount of praise, whenever possible, will bring results far beyond the instructor's expectations. This also applies to having a great deal of patience when the driver has had repeated errors or cannot seem to grasp the subject matter being covered. Younger drivers will require additional attention and additional patience. In order to hold the attention of novices, it is necessary to meet them half way by becoming a "pal", but remaining far enough aloof to command their respect. Find time to know your students, find out what their fears are and appreciate them as being quite real. At the same time, try to alleviate them by logical explanations. Pass your confidence on to them.
- E. Mothers and fathers should be encouraged to attend the oral sessions and to ask questions whenever they are in doubt on any particular item or point. Parents should not, however, be allowed into the track area while their child is driving. This has been found to lead to self-consciousness on the part of the driver and tends to prevent them from concentrating on doing their best. Many times the distraction of a parent cheering will cause the driver to lose concentration, resulting in an accident.

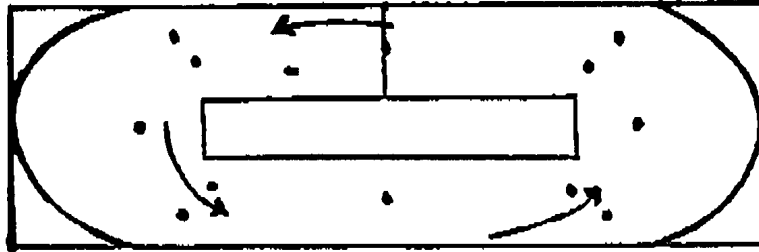
2. Hints That May Help

A. Pylons

The use of pylons has proven to be an immense help in training the novice driver. It is recommended that pylons be used in the first session on the track to establish the basic pattern. Twelve pylons may be used to facilitate this lesson. (See Illustration #1). One pylon is placed on each side of the track in the straight-aways, about 7-8 paces out from the white line/wall and in the center of the straight-aways. One pylon should be

placed on each corner, about the width of a car from the line and in the center. Place 8 pylons, 2 each as shown in Illustration #1. Instruct the novice driver that they are to drive to the outside of the pylons in the straight-aways, between the gate pylons, and as close to the line in the corners, inside the pylon. The driver will automatically be setting a pattern that will eliminate the usual "line pinching" so common with most beginners. It is also most helpful to "walk" your novices through whatever pattern you are trying to teach.

Illustration No. 1



B. Reactions to Sudden Hazards

By the third session, the novice should be able to react to sudden hazards appearing in front of the car. This has been accomplished with some success by the instructor standing on one of the corners or elsewhere on the track, with a pylon held out of sight of the driver. As the car approaches, the pylon is flipped into the path of the oncoming car. (NOTE: Care must be exercised that the pylon does not hit the car or the driver). This practice will enable the instructor to judge the reflex ability of the driver and point out to the novice that he/she must be constantly alert while on the track.

NOTE: It is helpful if sometime during your previous oral sessions, a pylon is shown to the class at close range and carefully pointed out that it is made of soft rubber and will not harm them.

C. Reflections

The above are offered as aids in the instruction of the novice driver. You may have a few of your own demonstrations. However, remember that caution must be exercised at all times; that nothing should be done that will cause the loss of confidence of the driver, for example, by making a test too difficult. Even if a driver fails a test the first few times, point out the mistakes in a friendly manner, and always find "something good" in what they did and praise them for that.

III. Flags, Hand Signals and Safety

1. Flags

A. Every driver and car owner/handler must know the meaning and color of each flag. A driver should not be allowed on the track until he/she has demonstrated that they know their flags and their meanings. Point out that flags and hand signals are the only way to communicate with the driver when the car is in motion.

Color and meaning of the QMA flags now in use throughout the nation:

RED	Stop Immediately
YELLOW	Caution, Slow Down, No Passing
GREEN	Start, Increase Speed, Go
BLACK	Disqualified, Go To Pits
WHITE	One Lap To finish.
CHECKERED	The race is finished
BLACK & YELLOW flags together	All Cars Slow Down And Exit Track

2. Hand Signals Used and Their Meanings

A. Hand signals are as important as flags and care should be taken that all novice drivers are able to recognize those listed below. Give examples of the use of each hand signal:

1. Finger drawn across throat in slashing motion...Turn off switch and stop.
2. Hand held flat in downward motion...Slow down.
3. Thumb and index finger in open/close motion...Give it more throttle.
4. Any flag held in furred position, with one or more fingers held above it...Take number of laps indicated by fingers, then take action required by flag.
5. Arms extended to the front in an opening & closing motion...Move in or out as indicated.
6. Finger pointing to top of head...Think about what you're doing.
7. Hand or flag pointing to rear end...Move to the back of the pack.

3. The Car and Safety

A. Safety Equipment and Its Purpose

1. Switch Location and purpose.
2. Brake Operation and purpose.
3. Safety Belt Reasons for use, how tight?
4. Helmet What type, why & when worn, how snug?
5. Visor What type, why & when worn.
6. Jacket What type, why they are required.
7. Roll Bar Purpose; height, describe why they must be pinned.
8. Gloves Purpose; what type used.
9. FireWall Purpose; explain why it should be extended below belly pan. (Check all new cars To be sure that belly pan has been removed under the engine.)
10. Bumpers Purpose; explain why it's important not to have any broken parts.
11. Nerf Bars Purpose; explain why it's important not to have any broken parts.

B. Car Safety, Dos and Do Nots

1. The car is definitely not a toy. It is not to be played with in the usual sense of the word.
2. Obey the flagperson. He is in charge out on the track. Do not take signals from the pit area **during an event**. (Explain why: disqualification, taking eyes away from track can cause accidents, etc.)
3. Keep in mind what you are doing...not what you did last week or what you will do tomorrow.
4. Do not watch or wave to the spectators, mother or father. Keep your eyes on what is happening on the track in front of you.
5. Do not chew gum or candy while driving. If involved in an accident, you could choke.
6. Before leaving the pit area for the track, always check your safety equipment to be sure it is in operating condition. Check your roll bar; be sure it is pinned. Be sure your visor is clean and pulled down. Your helmet must be tight. Be sure your safety belt, neck collar, and gloves are tight. When checking your belts try to pull the lap belt first then the drivers' right side shoulder belt then the drivers left side shoulder belt. When tightening your lap belts snug them up enough that you cannot get your finger under them and on your shoulder belts no more than one or two fingers under the belts.
7. When leaving the pit area and coming out onto the track follow these simple rules:
 - a. Look for other cars already on the track; do not break into flow of traffic – stay above white line.
 - b. If flagperson is on duty, await their signal before coming out onto the track.
 - c. Do not drop into the flow of traffic already on the track. Let the pack go by before dropping down to run your pattern.
 - d. Do not “play” with other drivers on the track. “Fooling around” can cause accidents.
 - e. Tell your handler, should they attempt to refuel you on the track, they **must** refuel in the pits.
 - f. If someone is standing in the on chute or pit lane area – **STOP** – do not run him or her over.
8. Always keep your switch in the “off” position when the car is not in use.
9. Do not remain in the car during refueling operation.
10. Drivers should be cautioned to keep elbows and hands inside the car at all times.
11. When leaving the track to enter the pit area:
 - a. Look quickly behind you for other cars before turning out of the traffic pattern.
 - b. Hold left hand up on the inside to signal to other drivers that you are pulling out and going to pits.
 - c. After leaving the traffic pattern, move up to the wall and follow it around until you reach the entrance.
 - d. The car handler should be waiting at the pit entrance for his driver.
 - e. Upon reaching the pit entrance, drive slowly to pit position, turn off switch and apply brake. Be sure to allow room for any other cars that may also want to exit the track.
 - f. Watch out for other drivers, handlers and cars as you go to your pit position.

C. Safety in the Pit Area

1. Fuel and safety habit:
 - a. Before practice or racing make sure all fire extinguisher are in their proper location.
 - b. Whenever a car is being refueled, the driver is to leave car and stand to one side – this applies at all times.
 - c. NO smoking while refueling.
 - d. There will be no refueling on the track or in the “infield” or hot chute. Refuel in the pit area only. Except AA & Half's
2. Playing and/or roughhousing: No playing in the pit area or out on the track. Drivers, etc, could be hit by cars.
3. Always stay near your car unless you have permission from your handler to leave the area. Always tell your handler where you will be...you could miss an event.

4. When watching the program always remain “behind” the fence. Do not sit on exposed walls at the entrance to the track or pit area.
5. Do not attempt to help push a car off/onto the track. Let the adult care handler or owner tend to that chore.

IV. On Track Training Procedures

1. Set up pylons/cones – See illustration 1 on page 2.
2. Test your student’s knowledge of the meanings of the flags. Explain the basic hand signals to your students.
3. Track Walk. Explain: (Instructor/Driver only).
 - a. Staging area line-up, point out driver/handler only line, never drive into staging area, etc.
 - b. Describe hot chute/pit area parking according to number.
 - c. Begin walking out onto track “on chute”, point out flagging positions for practice/qualifying, point out white “blend line” **STAY ABOVE!!**
 - d. Join pattern through gate pylons, point out where instructor would like student to drive: around outside of straightaway pylon, through next gate, below turn pylon, etc. During walk ask driver where they think they should go next to see if they are getting the idea. If needed walk 1 or 2 more times around.
 - e. Show driver how to leave the track. Demonstrate the hand signal and where to drive, high in turns, etc. When leaving track have hand on switch ready to stop.
 - f. Show where to park/stop to get ready for qualifying, and where to stop to leave pits – “pit gate”.
4. Suit up driver: In car talk. After belting in:
 - a. Describe steering wheel as the driver’s best friend, “buddy”. “You never let go of your buddy unless you need to turn car on or off.” (And, of course, to hold a checkered flag.)
 - b. Tip car over on side – ask driver to hold up the car – show them that they **cannot** hold up car, **SO DON’T LET GO OF YOUR BUDDY**, your hand could be smashed.
 - c. Point out gas and brake pedals – demonstrate.
 - d. Point out switch and its function – Ask driver to look you in the eyes and remove hand from steering wheel to turn switch on. Hands back on wheel. Drill your driver several times until driver can confidently switch on & off. Example:
 - Switch on (no peeking) – hands back on wheel.
 - Switch off (no peeking) – hands back on wheel.
 - Switch on (no peeking) – hands back on wheel.
 - Switch off (no peeking) – hands back on wheel.
 (No fair if you peek.)
 - e. Ask driver if they are ready to drive! And ask if they have any questions?
 - f. Retest them on flags and hand signals.
 - g. Disengage drive axle spline if possible and tell driver you are going to push them around the track without engine running, to see if they remember where to drive.
 - h. Push around track. Ask if they have any questions. See if they are ready to try with engine running. Explain: When handler starts pushing and taps you on the head, turn switch on, Drive! **PUSH THEM OFF.**
5. Drive pattern through and around pylons. As driver’s speed and pattern improves, begin removing pylons, remove gate pylons in pairs first, leaving straightaway and corner pylons for last. Once all pylons are removed and driver shows he/she can run pattern, stop them and praise them for what they have accomplished. “You are doing great; see, you are so good you don’t need the cones anymore.”
6. Take a break – many kids will be pooped by this point and need time to think about what they have accomplished. This is a good stopping point: For lessons during the week after school – this may be the end of the first lesson. For lessons on weekend – (with more than one student) you could switch to next driver and go through the drills with them.
7. Possibly Second Session: Experienced driver required.
 - a. Suit up and review switch drill, flags, and hand signals.
 - b. Have student drive along to see if he/she remembers what was learned in the first session. If you get a positive, then proceed to passing game. If you get a negative response, place corner and straightaway pylons to help reinforce last session. Usually the pattern will come back to the driver quickly.
 - c. Test reactions to sudden hazards on track (as described in Part II, paragraph 2.b.) in order to see if driver is ready to have another car on the track with them. Remember to remind driver that the cones are made of soft rubber; do not let them know you will be throwing one out in front of them.
 - d. The Passing Game: At this point an experienced driver is necessary. Have both cars stop in the turn, single file, and describe how you want the rear car to pass the front car, on the inside coming out of the turn. (The handlers can demonstrate by pretending they are cars and passing each other). Emphasize that they cannot pass on the outside, and how that would cause an accident if tried.
 - e. Start the passing game by instructing the experienced driver to be the first to pass, and to slow down once they have passed the student. The student will likely be slow and tentative, and this will make it easier for the two

- cars to drive single file. Once the experienced driver has passed the student, have them slow down so the student may pass. Continue this exercise until the student is passing with confidence. In many cases this will be a good time to stop – Ask if they would like a break. Having achieved confidence with another car on the track, many students will realize they want to continue training. Some students, especially the very young, may not want to continue. Emphasize that they are the “boss” in the car and they don’t have to drive if they don’t want to. Ask them if they would like to go home and think about it some more, and come back another time.
- f. End the session by asking the parents if they think they would like to continue training and if so that we would like them to join the club. Have them contact the membership director.
8. Third Session: Experienced driver required.
 - a. Review all that has been learned so far to reinforce the ideas of pattern, passing, flags, and hand signals (on track also). Stop the cars at start/finish line.
 - b. Describe the line-up flags, crossed for start, vertical for restart. Describe “lining-up” by placing the student on the pole and indicating where on the track you want them to drive, low in turns and straights, leaving room on the outside for the #2 car. Emphasize that the pole car controls the pace and needs to watch where they are going, not the other car! Tell them to be steady on the speed, don’t speed up and slow down.
 - c. Describe the line-up flags again to reinforce.
 - d. Describe the switch position signals and what to do, i.e., pole car moves forward, outside car falls in behind to switch positions, outside car becomes pole car.
 - e. Qualify the student in a practice session and have them exit the track. If they make a mistake, give them another chance to qualify, reinforce what they have learned. If successful tell them that the training is complete. They may need to come back one more time for full review and graduation. Or if you feel they are ready to race –

WELCOME THEM TO NOW BEING A RACER.

V. Progress Schedule

1. First Session
 - a. Introductions and registration.
 - b. Safety checks on all cars and equipment.
 - c. Oral and demonstration session on flags and hand signals.
 - d. Track walk.
 - e. Oral session on track and pit area safety practices.
 - f. Practice session, one car at a time, with pylons to learn pattern.
 - g. Use this session to become acquainted with drivers.
2. Second Session
 - a. Review of flags and hand signals.
 - b. Oral session of safety equipment. Reiterate the drivers’ responsibility towards helmet, safety belt, neck collar, etc. Let them know they are in charge too.
 - c. Review and practice pattern.
 - d. Flag exercise... use of various flags while car is in motion.
 - e. Test reactions to sudden hazards on track as described in Part II, paragraph 2.b.
 - f. Describe passing, have experienced driver on hand to play passing game.
3. Third Session
 - a. Review all previous lessons: flags, hand signals, safety equipment, passing, etc...
 - b. Explain line-up flags, procedure, and how to switch positions.
 1. Cover the role the “pole car” plays in setting the pace.
 2. Describe how “outside car” must speed up a bit in corners.
 3. Explain the re-start, how to find your position again.
 - c. Practice line-up and switching positions.
 - d. Practice safety procedures on track and pit area, procedures for leaving the track after a practice session and during a program.
 - e. Explain and practice qualifying procedures (if progressing). Use of a stopwatch helps for realism.
4. Fourth Session
 - a. Review and practice all previous sessions: Line-up, switching positions, exiting procedures, qualifying, etc.
 - b. Have a 10-15-lap race with other experienced drivers. (Always let your student be the one to carry the checkered flag at the finish of the race.)
 - c. Graduation and presentation of certificate.

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