

Triple Seven

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QUEEN3

introduced

Introduction

Welcome

Welcome to the Triple Seven Team! We are excited that you have chosen to fly the Queen 3, as we are confident that this glider will be the next step in your piloting career. We wish you exciting flying adventures!

Triple Seven Mission

Our company's goal is to produce high-quality products and technologically innovative gliders of all types and classes. We are striving to develop state of the art paragliders, with the optimum compromise between safety and performance, produced in Europe.

Your success is our inspiration; our goal is your success.

Manual

This document contains complete product information and instructions to familiarize you with the main characteristics of your new glider. It includes instructions on how to use and maintain the wing. However, its purpose is not to serve as a learning material to pilot this kind of wing. As such, this is not a flying manual. Flying instructions can only be taught by flying schools and specially certified instructors.

You must take the time to read this manual carefully before the first flight, as a thorough knowledge of your equipment enables you to fly safely and to maximize your full potential. If you borrow or give your glider to another pilot, please pass this manual on with it.

If any use of Triple Seven equipment remains unclear after having read this manual, please contact your local paragliding instructor, your Triple Seven importer, or Triple Seven. This product manual is subject to changes without prior notice.

Please check www.777gliders.com for the latest information regarding our products. Welcome to the Triple Seven Team! We are excited that you to the Triple Seven Team! We are excited that you have chosen to fly the Knight 2, as we are confident that this glider will be the next step in your piloting career. We wish you exciting flying adventures!

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Designer’s thoughts

““It’s been a very exciting process to work on the Queen 3. The Queen line of EN C gliders embodies most of what I, as a paraglider designer, am passionate about in our sport; performance, fun in the air, ease of use, and passive safety.

The challenge of getting to combine these in the most sensible way is what makes my work interesting – and when I succeed, also satisfying! If you’re an EN C pilot I KNOW you will get a lot of satisfaction out of this new wing!”

Who is the Queen 3 for?

Our new EN C glider hits the sweet spot for very many pilots; you could be someone who’s stepping down from the CCC or EN D class, but who’s unwilling to let go of the performance advantage of your previous wings, or you could be someone stepping up from the EN B class, keen on the expanding horizons but wary of any added stress – either way the Queen3 is the ideal choice to make your forays into the skies both efficient, entertaining and safe.

The Queen 3 was certified without the use of collapse lines.



Before flight

Visual inspection

Before you rush to the first take-off we recommend that you take your time to unpack and test your equipment on a training slope. In this way you will have time and will not be distracted or rushed to prepare your equipment, and you will be able to do your first pre-flight check properly.
The place should be flat, free of obstacles, and with light wind. This will enable you to nicely inflate the wing and also familiarize yourself with it while ground handling. Your new glider will have been checked already by your Triple Seven dealer, however, as a pilot you want to do a proper pre-flight check yourself.

Prepare and spread out the glider like you normally would. While you are spreading out and walking along the glider, observe the fabric material for any abnormalities. When you are done with the inspection of the canopy, grab the risers and spread the lines, check if the risers and line maillons (carabiners) are properly closed. Identify and disentangle the A1, A2, B, C risers and the lines, including the brake lines. Connect the risers' main attachment points correctly to the harness, watch for any twists and make sure that the main carabiners are properly closed.

Harness

The Queen 3 has passed EN-C certification testing using a GH - ABS type harness. This certification allows the Queen 3 to be flown with most harnesses on the market, but keep in mind that changing the harness greatly influences the feeling of the glider, depending on the effectiveness of the harness weight shift. Check with the harness manufacturer or with your instructor whether your harness is of the proper type.

The length of the harness chest strap affects the distance between the main carabiners and the wing's handling as well as your stability in the harness. Tightening the chest strap increases your stability, but greatly increases the risk of twisting after a collapse. A tight setting also increases the tendency to maintain a deep spiral. As a rule of thumb, a more opened chest strap gives you more feedback from the glider, which is good for your climbing efficiency and increases safety in a flying incident. But we strongly recommend adjusting the length of the harness chest strap according to the lengths used during certification. This setting varies from 42cm to 50cm depending on the harness size.

Check the settings used during testing under the certification specimen section. We recommend making your first flight with the Queen 3 using a familiar harness. As a rule of thumb, if you want to experience the feeling of new equipment, change only one component at a time.

Accelerator settings

The Queen 3 speed system increases the speed of the glider by 20km/h with the accelerator at full travel. Before attaching the accelerator system to the Queen 3 risers, check that the speed system inside your harness is correctly routed and that all pulleys are set correctly. Make sure there are no knots or other obstacles that might make the accelerator get stuck during usage.

The length of the speed bar lines should be adjusted on the ground so that your legs are fully extended at the point of full accelerator travel. While setting the speed line lengths make sure they are long enough, so that the speed system does not accelerate the glider by itself. If in doubt how to properly set the accelerator system, please consult your instructor or Triple Seven dealer.

Brake line adjustments

The length of the brake lines has already been adjusted by the manufacturer and is the same as used during the certification test flights. The length is set and fine-tuned during the development of the glider, therefore generally there should be no need for adjustment. We recommend flying this setting for a while, and you can still change it afterwards if you wish to do so. If you change the length of the brake lines, do it in a step by step process of 2 cm at a time. Bear in mind that if you make the brake lines too short, they might be applied unintentionally whenthe speed system is engaged. The brake travel is greater than, up to 80 kg - 55 cm, from 80 kg to 100kg - 60 cm and over 100 kg - 65 cm.

Weight range

Each size of the Queen 3 is certified for its own weight range. The above mentioned weight includes the weight of the pilot and complete paragliding equipment, together with the glider, harness, all accessories and optional ballast. Every glider changes its characteristics when changing the take-off weight. We recommend that you always fly your glider in the specified weight range. To measure your take-off weight, step on a scale with all your equipment packed in the rucksack.

Lower half of the weight range
Flying the Queen 3, as any other glider, in the lower part of the weight range, causes the agility of the glider to decrease, and when flying through turbulence its tendency to collapse increases slightly compared to flying it in the upper wing loading range. However, reactions after a collapse are less dynamic and sink rate improves. Therefore, if you mainly fly in weak conditions, you might prefer this weight range.

Upper half of the weight range
Again, as with any other glider, flying the Queen 3 in the upper part of the weight range increases the stability and agility of the glider. Consequently, there is a slight increase in the glider's speed and even gliding performance, especially when flying into wind. If you normally fly in stronger conditions and you prefer relatively more dynamic flying characteristics, you should aim to load up for the higher weight range. Reactions after a collapse may be more dynamic in the upper half of the weight range.

Wing inflation

Still being on the training slope and having prepared and checked everything, inflate your wing and play with it to get a feel of your new glider while ground handling. By doing this you are making a final check of the canopy and lines, and that everything is in order. You will find that the Queen 3 inflates very easily and smoothly without excessive energy and with minimum pressure while moving forwards. For inflation and lifting the glider you may use only the A1 risers. Do not pull on the risers just with your hands, instead use your whole harness. Your hands should only accompany the rising movement of the wing. When the wing is above you, apply correct pressure on the brake lines and the glider will stay above you.

Modifications on the glider

Any modifications of the lines or risers' speed system cause the loss of the certification, as does flying the wing outside the weight range.

Preflight safety

Before flying the Queen 3, you should obtain all practical and theoretical training and the certification for flying this kind of wing. Pilots should be physically and mentally fit, using complete paragliding equipment and flying only in conditions suitable for their level of flying expertise.



Flying the Queen 3

First Flight

Now that you have already familiarised yourself with your new glider while ground handling on a training slope, you are ready for your first flight. For the first flight we recommend that you choose a familiar flying area and that you fly your new glider in calm conditions.

Preflight equipment check

Before every flight you need to do a pre-flight check and to inspect any other equipment. Learn to do this, as it takes no extra time. This procedure may vary, depending on the instructor, pilot or equipment settings. Some pilots have their wing always connected to the harness. However you should have a consistent method of checking and preparing your equipment and doing the final pre-flight check.

1. After the arrival on take-off, assess the suitability of flying conditions.
2. While walking around the canopy preparing and spreading out the wing, you should at the same time inspect the canopy.
3. After you check the lines and connect the risers to the harness, grab the lines and slide them through your fingers as you walk towards the canopy. In this way you double check that the lines are not tangled, stuck or damaged. If meanwhile the canopy moves, walk around and correct it again.
4. Inspect the harness, reserve, speed system and all connections.

Final preflight check

1. Strap into the harness. The leg straps should be the first to be connected on the take-off and the last ones to be released after the flight. Make sure you are strapped in correctly and wearing a helmet.
2. Check the risers for twists, and that the carabiners are properly closed. Check that the speed system is not affecting your risers – accelerating unintentionally.
3. Check the lines. The A riser lines should be on top, and all lines untangled. Check that none of the lines are lying over or below the canopy.
4. Check the canopy. The glider should be spread out in the shape of an arch and all cells open.
5. Check the wind, take-off and airspace. The wind should be favourable for take-off and the pilot's level of expertise. Airspace should be clear, together with the take-off area.

Inflation, control, take-off

The Queen 3 has easy take-off behavior and does not require any additional advice regarding the forward or reverse launch. Try to divide and practice the take-off procedure in three steps.

1. Inflating and raising the glider
2. Controlling the wing and wing check
3. Accelerating and take-off

It is always advisable to practice and improve proper launching techniques as this reduces unnecessary additional stress before the take-off.
Wind speeds up to 25 to 30km/h are considered strong and extra care is required for the flight. If you are launching in strong winds we recommend the reverse launch technique, with your brakes in the right hands at all times. Launch the glider with a gentle pull and then walk towards it if necessary to reduce the relative wind force. When the glider is above you, gently control the wing and take off.

Line knots or tangles

If you fail to observe a line knot or you find yourself flying with a knot before being able to prevent the unintentional, uncontrolled take-off, try to stay away from the ground or other pilots by flying away from the mountain, before taking any corrective action on the wing. This means that you weight shift and/or counter brake the opposite side of the wing and control the flying direction with the least amount of force needed for the wing to fly straight away from the mountain. Be careful not to apply too much brake or to fly too slowly to avoid a stall or spin. When you are at a safe distance away from the mountain and you have gained relative height by flying away, you may want to gently and briefly pull the lines that are tangled with the knot. If the knot is on the brake lines you might want to gently and briefly "pump" the appropriate brake line. Please note that by pulling the lines, the knot may get stuck in a worse position and the situation may escalate also to a stall or spin. Therefore, if you estimate that you can control the wing relatively safely and that the knot is not released by gently and briefly pulling the tangled lines, immediately fly to the landing zone and land safely.

Normal flight, best glide

Without any brakes applied and without using the accelerator, the wing flies at the so-called "trim speed". In calm air this is theoretically the best glide speed. The best speed glide depends on the glider's polar and air mass, vertical and horizontal speed. We recommend reading more about the theory of the best glide and McCready theory.

Minimum sink

If you apply brakes on both sides for about 10 -15 cm you will slow the glider to the theoretical minimum sink speed. But we do not recommend using this speed even for thermalling, as you achieve much better climbing and control by letting the glider fly with its "trim speed" and natural energy. With a proper take-off weight you will find that the glider has great climb, reactions and agility.

Accelerated flight

After you get comfortable flying the Queen 3, you can start practicing using the speed system, which will provide better performance while gliding against the wind and through a sinking air mass. The Queen 3 was designed to be stable through its entire speed range, but this requires the use of active flying techniques. Note that any glider becomes less stable while flying accelerated and that the risk of a collapse is higher in accelerated flight. Additionally, the reaction of the glider to a collapse in accelerated flight is more dynamic in comparison with the one which occurs at trim speed.

We recommend that you avoid accelerated flight near the ground, and that you are very careful when using the accelerator in turbulent conditions. Use a soft speed bar, which enables you to accelerate the glider by using only one leg. To control the direction use weight shift. To control the pitch change the amount of the speed bar. Do not use or pull the brakes while using the speed bar. Use the speed bar progressively when accelerating and instantly release when you feel a slight loss of tension, pressure or even a collapse. If you encounter a collapse while using the accelerator, release the speed bar immediately before taking any other corrective action. Always keep more distance from the ground when using the speed bar.

Active flying

This is a basic flying technique for any pilot. It implies permanent control and the correction of pitch and roll movements together with the prevention of any deflations or collapses. In a nutshell this means flying straight through active or turbulent air, so that the pilot keeps the glider above their head at all times, compensating and correcting any unwanted movements of the wing.

A few examples:

- While entering a strong thermal, the wing will stay a little bit behind relative to the pilot. The pilot should let the brakes up, allowing the wing to fly faster and to catch up.
- If the wing surges in front of the pilot, the pilot should counter brake until the surge is controlled and then release the brakes to let the glider fly normally again.
- If the pilot feels a loss of tension on the wing or a loss of pressure on the brakes on one side of the wing, they should smoothly apply brake on the side with loss of pressure and/or

weight shift to the opposite side until the pressure returns. After that, again release the brake and/or weight shift to the neutral position and let the glider fly normally.

The key in all cases is to avoid an over-correction and not to maintain any correction longer than necessary. After each input, let the glider fly normally again, to re-establish its flying speed. You can train or get a feeling for most of these movements safely on the ground while ground handling your glider. Good coordination of your movements and coordination with the wing on the ground will allow you a quick progression when flying actively in the air. The next step is to attend SIV courses where you should also get a better understanding of the full brake range and the glider's speeds.

Flying in turbulence

Wing deflations can occur in a strong turbulence. The Queen 3 is designed and tested to recover without pilot input in almost all situations, by simply releasing the brakes and letting the glider fly. To train and understand all the manoeuvres described, attend SIV courses.

Cascade of events
Many reserve deployments are the result of a cascade of over-corrections by the pilot. Over-corrections are usually not problematic because of the input itself or its intensity; but due to
the length of time the pilot continues to over-handle. After every input you have to allow the wing to re-establish its normal flying speed. Note that over-corrections are often worse than no input at all.

Asymmetric deflations
Strong turbulence may cause the wing to collapse asymmetrically. Before this occurs the brake lines and the feeling of the harness will transmit a loss of pressure to the pilot. This feedback is used in active piloting to prevent a collapse. If the collapse does occur, the Queen 3 will easily re-inflate without pilot reaction, but the wing will turn towards the collapsed side. To prevent this from happening, turn and actively recover the asymmetric collapse by weight shifting and applying appropriate brake input on the side that is still flying. Be careful not to over-brake your wing's flying side. This is enough to maintain your course and give the glider enough time to recover the collapsed side by itself. To actively reopen the collapsed side after course stabilisation, pull the brake line on the collapsed side firmly and release it. You can do this several times with a smooth pumping motion. After the recovery, release the brake lines for your glider to regain its trim speed. You must be aware of the fact that asymmetric collapses are much more dynamic when flying accelerated. This is due to the difference in weight and the inertia of the canopy and the pilot hanging below.

Symmetric deflations
Symmetric or frontal deflations normally reopen immediately by themselves without pilot input. The glider will then regain its airspeed accompanied by a small surge forwards. To actively control this event, apply both brakes slightly when the collapse occurs and then instantly release the brakes to let the glider fly. Be prepared to compensate for the glider's slight surge forward while returning to normal flying.

Wing tangle, cravat
A cravat is very unlikely to happen with the Queen 3, but it may occur after a severe deflation or in a cascading situation, when a wing tip may get caught in the glider's lines. A pilot should be familiar with the procedure of handling this situation with any glider. Familiarise yourself with the stabiliser main line ("stabilo" line, outside B-line on B riser) before launching. If a cravat occurs, the first thing to do is to try to keep the glider flying on a straight course. Do this by weight shifting and counter braking the untangled side. After that, grab the stabilo main line on the tangled side and pull it down until it becomes tight again. At this point the cravat normally releases itself.

Possible solutions of the cravat situations (consult your SIV instructor):
• Pulling the wing tip "stabilo" line
• Using a full stall, but it is essential to be very familiar with this manoeuvre. You will also want to have a lot of relative altitude.
• If you are in a situation where you have a cravat and you are low in rotation or even with twisted risers, then the only solution is the reserve parachute.

Negative spin
In normal flight you are far from negative spin. But, certain circumstances may lead to it. Should this occur, just release the brake lines progressively and let the wing regain its flying speed. Be prepared for the glider to surge forward, and to stop the surge with brake input if necessary.

Full stall
A full stall does not occur unintentionally on its own – it happens if you pull both brakes down 100% and hold them. The wing then performs a so-called full stall. Releasing the brakes improperly may lead to a massive surge of the glider with danger of falling into the canopy. This is a complex manoeuvre and as such outside the scope of this manual. You should practice and learn this manoeuvre only on a SIV course under professional tuition.

Deep stall
Generally when in deep stall, the wing has no forward motion and at the same time high sink speed. When in deep stall the wing is almost fully inflated. With the Queen 3 it is very unlikely to get into
this situation unintentionally. This could possibly happen if you are flying at a very low speed in turbulent conditions. Also the porosity of the material and line stretch on a very old glider may

increase the likelihood of a deep stall.

Fast descent techniques

Fast descent techniques should be familiar to any pilot, as they are important resources to be used in certain situations. These manoeuvres should be learned at your flying school as a part of paragliding pilot training. Nevertheless, we recommend practicing these manoeuvres on SIV courses under professional supervision.

Big ears

This is a safe method to moderately loose altitude while still maintaining forward speed. To do big ears, release any brake line loops around your wrist, set your leg on the speed bar, but do not push it. Now pull the outer A lines (the A2 risers in the drawing) on both sides. As long as you keep the A2 risers pulled, the wing tips stay folded and the sink speed increases. To regain normal flight, release the A2 risers, and if necessary apply the brakes with short impulse movements. Release big ears at least 100 meters above the ground. While using big ears, the wing speed decreases, which is why we also recommend using the accelerator half way in combination with big ears to maintain enough horisontal speed, and to additionally increase vertical speed. Be careful not to pull the brakes while flying with big ears! Steering is done by weight shift only. Always do the big ears first and then accelerate; not the other way around as you will risk getting a frontal collapse.

B line stall

While in the B-stall the glider has no horizontal speed and the sink rate increases to about -10m/s. To enter the B-stall reach for the B risers just above the maillons and pull both B line risers symmetrically down for about 20 cm. To exit the manoeuvre, simultaneously release both risers quickly. On exit the Queen 3 gently dives without deep stall tendencies.

Spiral dive

The spiral dive is the most demanding of all three manoeuvres (Big ears, B-stall, Spiral) and should only be trained gradually and always with plenty of altitude. The spiral dive should be practiced and learned on a SIV course under professional supervision. To enter the spiral, weight shift to the desired side and gradually apply the brake on the same side. Then let the wing accelerate for two turns and you will enter the spiral dive.

While in the spiral, you can control your descent rate and bank angle by applying more or less inner brake. Depending on how steep the spiral is you may need to use also outer brake. To exit the spiral dive we recommend that the pilot is in the neutral weight shift position. If you release the inner brake, the wing exits the spiral dive by itself.

The Queen 3 has no tendency to become stable in the spiral until -14m/s descent, but you should be aware of the procedure for exiting a stable spiral.

To exit a stable spiral dive, weight shift to the opposite side of the turn and apply the outer brake until feeling the deceleration of the wing rotation. Then release the outer brake and let the glider decelerate for the next couple of turns. To avoid a big pendulum movement after exiting the spiral, apply a short brake input on the inner side before the glider exits the spiral.

Warnings (Spiral dive):

- There is a possibility of losing consciousness while in the spiral dive. Never make a spiral with more than 16-18m/s descent speed.
- In fast spirals it may be necessary to apply the outer brake to begin exiting the spiral dive.
- If practicing the spiral dive low, a pilot may not have enough altitude or time to safely exit this manoeuvre.

Winch launch

The Queen 3 is easy to tow-launch using a winch and has no special characteristics to consider during this form of launching. To practice this launching technique special training is needed and you have to
be aware of the procedures and dangers, which are specific for towing. We do not recommend using any special towing device which accelerates the glider during the winch launch.

Aerobatics

The Queen 3 was not designed for aerobatics, therefore, these may not be performed on this glider. In addition to this, any extreme manoeuvres place unnecessary stress on the glider and shorten its lifespan.

Primary controls failure

If for any reason you cannot use the brake lines, you have to pilot the wing to the landing place by using weight shift. Weight shift should be enough to safely land the glider. You can also use the C risers to control and steer the wing. Be careful not to over-handle the glider by using the C riser technique when steering. By pulling the C risers too strong you can cause a stall or a negative spin. Land your glider at trim speed without using the C risers, to avoid over-handling the glider low above ground. We recommend using weight shift.

Flying in rain

If you are accidently caught-out in a rain shower, it is best to land immediately. If your wing becomes wet in the air it is advised to maintain accelerated flight using the speed bar and/or releasing the trimmers, even during the final approach. DO NOT use big ears as a descent technique, big ears increases drag, and with a wet wing this will further increase the chances of a parachutal stall occurring. Instead, lose height with gentle 360's and maintain your air speed at all times. If your wing enters parachutal stall when wet, immediately release the trimmers and accelerate the wing to regain airspeed.

Measurement and ranges (according to Table 8)				Classification
Symmetric control pressure	Symmetric control travel (cm)			—
	max. weight in flight up to 80 kg	max. weight in flight 80 kg to 100 kg	max. weight in flight greater than 100 kg	—
Increasing	Greater than 55	Greater than 60	Greater than 65	A
Increasing	40 to 55	45 to 60	50 to 65	C
Increasing	35 to 40	35 to 45	35 cm to 50	D
Increasing	Less than 35	Less than 35	Less than 35	F
Approximately constant	Greater than 55	Greater than 60	Greater than 65	B
Approximately constant	40 to 55	45 to 60	50 to 65	C
Approximately constant	35 to 40	35 to 45	35 to 50	F
Approximately constant	Less than 35	Less than 35	Less than 35	F
Decreasing	any	any	any	F

Landing

Similarly to the take-off, the Queen 3 landing characteristics are easy. In turbulent conditions it is advisable to apply about 15% of brake input, to increase stability and the feeling of the glider.
Before landing, adopt the standing position as this is the most effective and the safest way to compensate the touch down with your legs. Again we recommend training the landing manoeuvre, as it might be useful to be able to land in small places, especially in an unknown cross country terrain. Learn to evaluate the wind direction by observing the signs on the ground and also your drift while making turns. This is useful for cross country flying, when landing outside of your usual landing field. Another advice we suggest taking into account in stronger winds is to go higher for the landing fields and thus assuring that you reach them. Likewise, always look for possible alternatives downwind.

Maintenance

General advice

Careful maintenance of your glider and the following simple guidelines will ensure a much longer airworthiness and performance of your wing:

- Pack your glider after you land and do not unnecessarily expose it to UV radiation by leaving it on the landing site unpacked. The sun UV radiation degrades the cloth and line materials.
- Fold your glider like recommended under”packing instructions”.
- If the glider is damp or wet when you pack it, partially unfold it at home to allow it to dry. Do not dry it in direct sunlight.
- Avoid exposing the glider to violent shocks, such as the leading edge hitting the ground.
- Avoid dragging the glider on the ground or through rocky terrain as you might damage the lines or canopy.
- Avoid stepping on the lines or canopy, especially when they are lying on a hard surface.
- Avoid exposing the glider to salt water, as it damages the lines and the canopy material (wash with fresh water).
- Avoid bending your lines, especially in a small radius.
- Avoid opening your glider in strong winds without first untangling the lines.
- In general, avoid exposing your glider to very hot or humid environments, UV radiation or chemicals.

Packing instructions

It is important to correctly pack your glider as this prolongs its lifespan. We recommend that you fold the glider like an accordion, neatly aligning each cell profile with the next one and laying the leading edge reinforcements side by side. The wing should then be folded in three or two folds. The wing should be packed as loosely as possible. While packing be careful not to trap any grasshoppers inside your canopy as they will tear the canopy cloth. Adhering to these simple rules will make your glider last longer and ensure its best performance.

Storage

Correctly packed, store your glider in a dry place at room temperature. The glider should not be stored damp, wet, sandy, salty or with objects inside the cells of the glider. Keep your equipment away from any chemicals.

Cleaning

If necessary always clean your glider with fresh water and a cloth only, without using any cleaning chemicals. This includes the lines and canopy. More importantly, always remove any stones or sand from the canopy as they will gradually damage the material and reduce the glider’s lifespan.

Repair

To repair small damages (less than 5cm) on the canopy, you can use the rip stop tape. Greater damages, including stitches and lines, must be repaired by a qualified repair shop. Damaged lines should be replaced by a Triple Seven dealer. When replacing a line it should always be compared with the counterpart for adjusting the appropriate length. After replacing a line, the wing should be inflated before flying, to ensure that everything was done correctly. Major repairs, such as replacing panels, should only be carried out by a Triple Seven distributor or Triple Seven. If you are unsure about the damage or in any doubt please contact Triple Seven.

Checks and control

To ensure the wing’s airworthiness the Queen 3 should be periodically serviced and checked to guarantee that it continues to fulfil the EN certification results, and to extend your glider’s life span. We recommend a line check and trim inspection every 100 hours or 12 months, depending on what happens first. After that, the glider needs to be fully checked after 150 hours or 24 months of usage, whichever comes first. This inspection includes checking the suspension lines, line geometry, riser geometry and the permeability of the canopy material. A certified inspector can then define the check interval depending on the glider’s condition. Please note that the condition of the glider can vary considerably depending on the type of usage and environment. Salty coastal air or dunes will considerably affect your wing’s material. For more information please visit our website.

Packing the Queen 3

1. FOLD THE GLIDER LIKE HARMONICA





2. ALIGN THE CELLS





3. FOLD LEADING EDGE BACK TOWARD TRAILING EDGE AND ALIGN THE CELS






4. FOLD THE GLIDER IN THREE PARTS

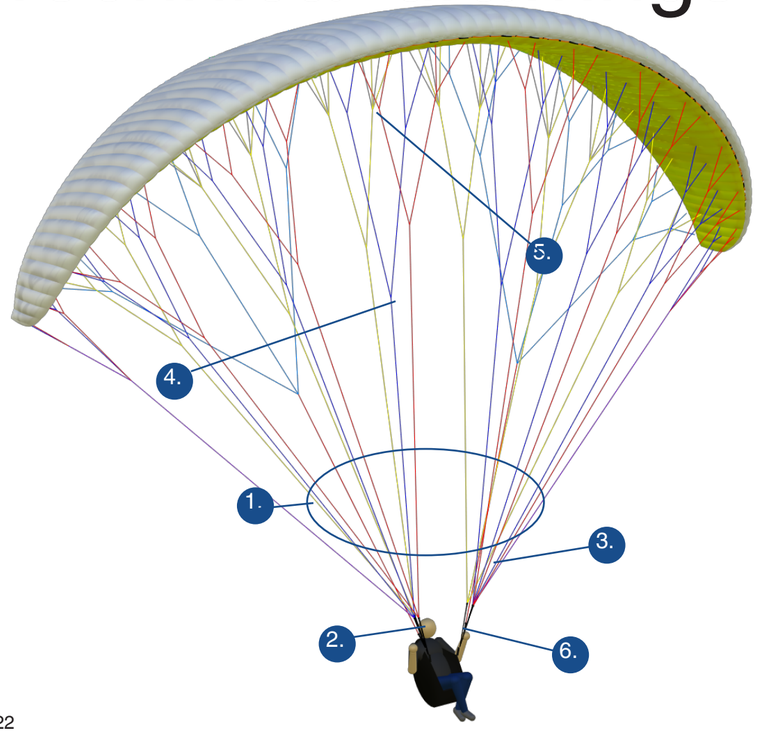




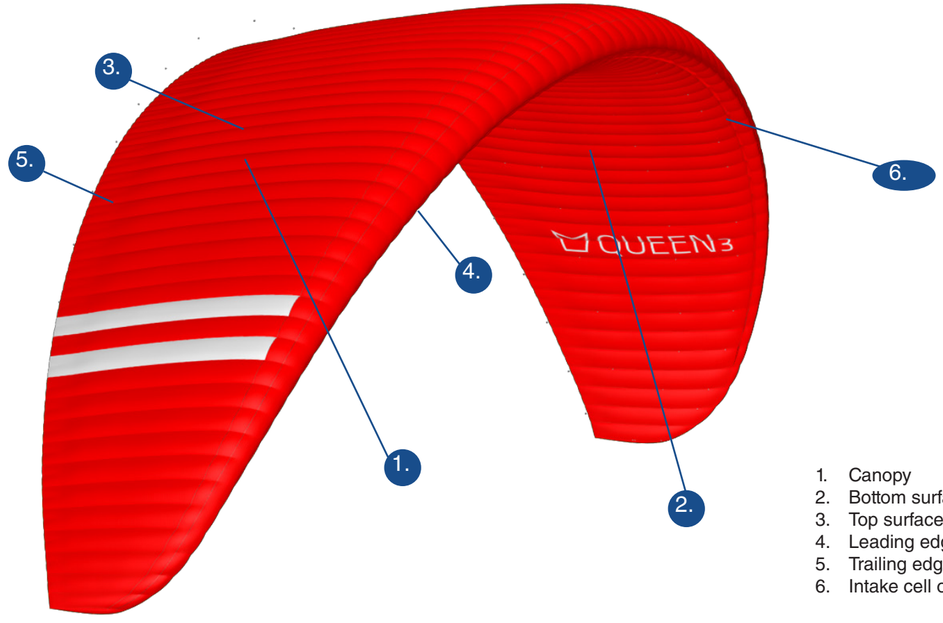

5. FINISHED



Technical drawings



1. Suspension lines
2. Risers
3. Main lines
4. Middle cascades
5. Upper cascades
6. Brake lines



1. Canopy
2. Bottom surface
3. Top surface
4. Leading edge
5. Trailing edge
6. Intake cell openings

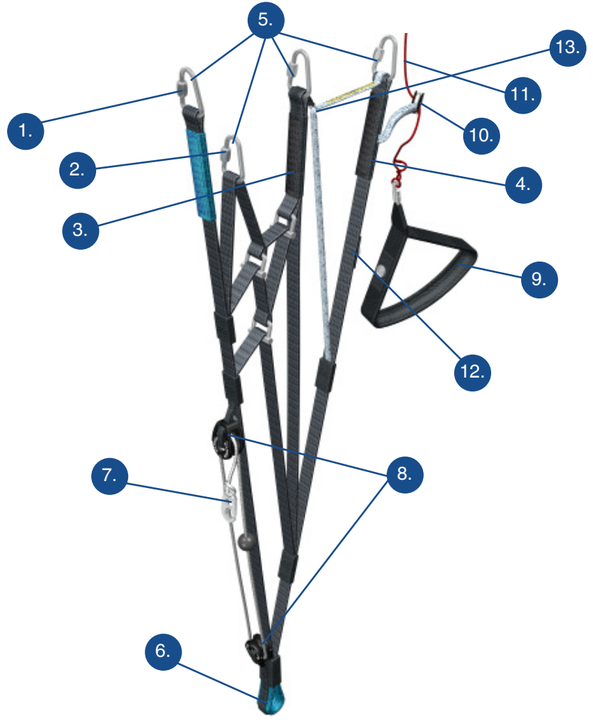
Technical data

		Queen 3 S	Queen 3	Queen 3 ML	Queen 3 L	
	Cell number	73	73	73	73	
Flat	Area (m2)	23	24.3	25.6	27.4	
	Span (m)	12.0	12.3	12.7	13.1	
	Aspect ratio	6.2	6.2	6.2	6.2	
Projected	Area (m2)	19.5	20.5	21.7	23.2	
	Span (m)	9.4	9.7	9.9	10.3	
Projected	Aspect ratio	5.2	5.2	5.2	5.2	
Trimmers	NO	Riser lengths (difference not more than ±5 mm from the lengths laid down in the				
Risers		A	A'	B	C	
Queen 3 S	Lenght mm	500	440	510	510	Standard
	Lenght mm	345	300	400	510	Accelerated
					Distance between pulleys 155 mm	
Queen 3 MS	Lenght mm	510	450	510	510	Standard
	Lenght mm	350	300	410	510	Accelerated
					Distance between pulleys 160 mm	
Queen 3 ML	Lenght mm	520	460	520	520	Standard
	Lenght mm	345	300	400	520	Accelerated
					Distance between pulleys 175 mm	
Queen 3 L	Lenght mm	530	470	530	530	Standard
	Lenght mm	360	320	420	530	Accelerated
					Distance between pulleys 170 mm	
In flight Weight			S	MS	ML	L
	Minimum kg		70	80	90	100
	Maximum kg		85	95	105	119
	Wing weight		4960	5200 g	5400	5700
Certification			C	C	C	C

Materials list

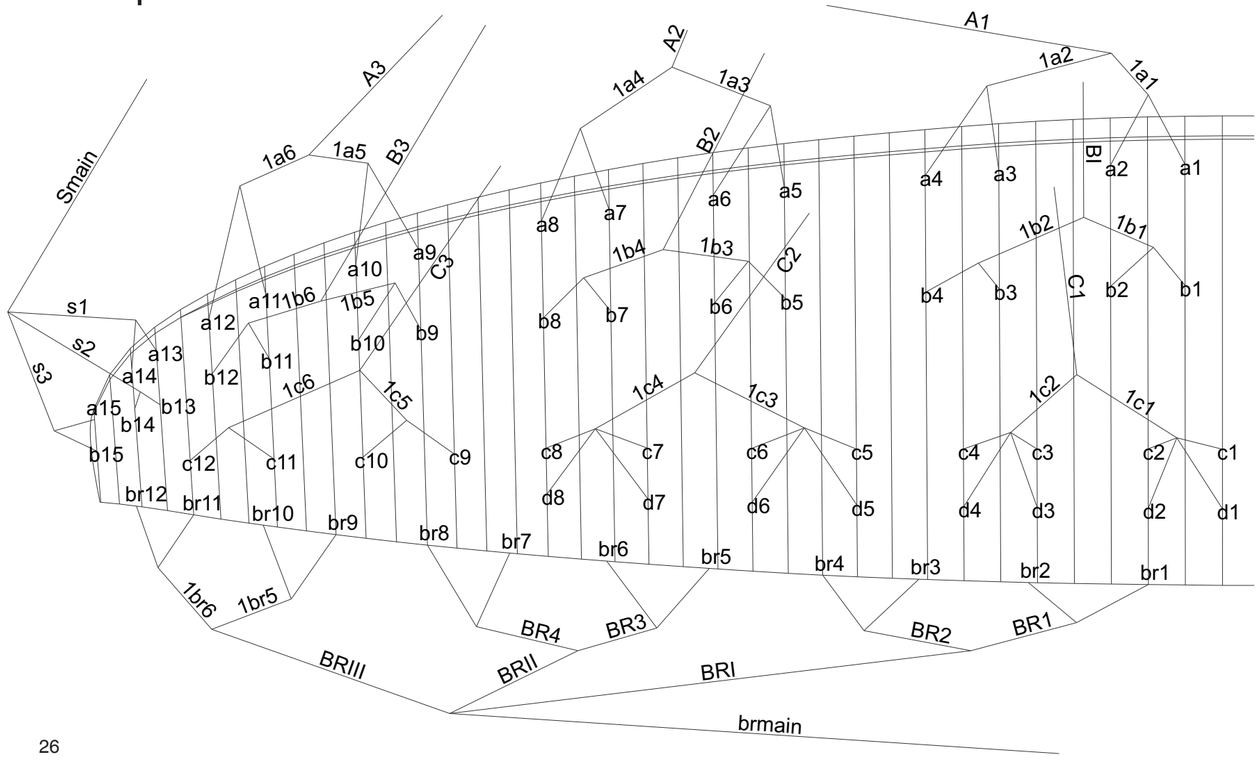
Queen 3	All sizes
CANOPY	FABRIC CODE
Leading edge	Porcher Skytex 38
Upper surface	Porcher Skytex 38
Bottom surface	Porcher Skytex 38
Profiles	Skytex Porcher 40 hard
SUSPENSION LINES	FABRIC CODE
Upper cascades	Liors DC (100, 60, 40)
Upper cascades	A-8000-U-050-000
Middle1 cascades	A-8000-U-120-000 (90, 70, 50)
Middle 2 cascades	A-8000-U-050-000 (90, 70)
Main	PPSL 200 (191, 125)
Main	A-8000-U-120-000 (90, 70, 50)
Main stabilo	A-8000-U-070-000
Brake upper	Liros DC 40
Brake middle 1	A-8000-U-050-000
Brake middle 2	A-8000-U-090-000
Brake main	TSL 220
RISERS	FABRIC CODE
Material	Liros 13 mm black nylon webbing
Pulleys	4x Harken PA18

Queen 3 riser design



1. A1 riser
2. A2 riser, (Ears)
3. B riser,
4. C riser
5. Maillons
6. Main attachment point
7. Speed bar attachment point
8. Speed bar pulleys
9. Brake handle
10. Brake line Tylaska ring
11. Main brake line
12. Clip for brake handle
13. BC system
14. Queen 3 has no trimmers or any other adjustable or removable device

Line plan


Smain
A3
A2
A1
1a6
1a5
B3
1a4
1a3
B2
1a2
1a1
BI
s1
s2
s3
a14
a15
b14
b15
a13
b13
a12
b12
a111
b11
b6
1b5
a10
a9
C3
b10
b9
1c6
1c5
c12
c11
c10
c9
br12
br11
br10
br9
br8
br7
1br6
1br5
BRIII
a8
a7
1b4
b8
b7
1b3
a6
a5
C2
b6
b5
1c4
1c3
c8
c7
c6
c5
d8
d7
d6
d5
br6
br5
br4
BR4
BR3
BRII
BRI
a4
a3
a2
a1
1b2
1b1
b4
b3
C1
b2
b1
1c2
1c1
c4
c3
c2
c1
d4
d3
d2
d1
br3
br2
br1
BR2
BR1
brmain

BC system exchange



Slide the blue socket on the riser downwards. You will find inside the line attached with the so called larksfoot loop.



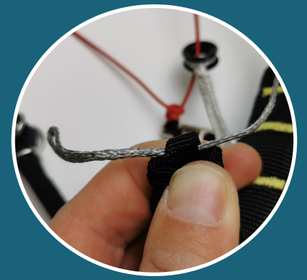
Larksfoot loop will loose the line once you release the tension of the loop. Once you do that, detach the line connection.



Once you detached the connection, you can now run the line through the ring system. It is worth of remembering the way it was routed through the system. This wil help you once you will be adding the new line back into the system.



You can now detach the old line easily. You will find the connection in the socket where you hold the BC system normally while flying. Detach the line completly. NEVER TURN THE RISERS ON THE TABLE ONCE YOU DO THIS.



Run a new line, that you should find in your repair kit, through the connection point.



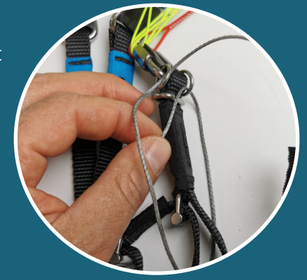
Tie the loop once it is run through the attachment point properly.



The first part needs to run through the ring that is closer to you accounting that you haven't turned the risers in the process.



After we ran the line through the first ring, we move the line down through the Tylaskaa ring. Running into the ring on our side, and leaving the ring on the side facing away from us.



From the Tylaskaa ring, we return back with the line to the ring that is pointed away from us. Run the line from the outside of the riser towards inside moving down to the blue socket.



Once you got the line through the system, you have to run the line again through the larksfoot loop. It is important that once you do that, you apply the tension to the lines, locking them into a proper position.



Once you've finished, readjust the blue socket over the larsfoot loop. Check the lines and try to move the BC system as in the air. This is necessary step before your next flight so you can be sure, the lines are not tangled in any way.





How to use the new BC system

is designed for easier and efficient use:

Double gearing system deducts the pullng force needed to engage the system.
While flying on bar it is important, that your hand slides down the riser and follows the BC system handle in a way, that when you engage the system, it starts pulling the B row with first mm of the pull.
In the repair kit, you will find also a spare line if one is needed in the future.
The system is to be considered as an added feature to a normal active flying with the brake imput.

Safety and responsibility

Paragliding is a dangerous and high risk activity, where safety depends on the person practicing it. By purchasing and using this equipment you declare that you are a certified paragliding pilot, and you accept all risks involved in paragliding activities, including serious injury and death. Improper use or misuse of paragliding equipment considerably increases the risks.

The designer, manufacturer, distributor, wholesaler and retailer cannot and will not guarantee your safety when using this equipment, nor accept responsibility for any damage, injury or death as a result of the use of this equipment. This equipment should only be used by qualified and competent pilots. You must not use this equipment if you are not trained.

You alone as a qualified and competent pilot must take full responsibility to ensure that you understand the correct and safe use and maintenance of this paragliding equipment, to use it only for the purpose that it was designed for, and to practice all proper safety procedures before and during its use.

Warranty

All Triple Seven products are fully warranted for 24 months, against material defects that are not the result of normal wear or accidental damage. Accidental damage is considered also damage caused while flying at SIV.

To fully use all Triple Seven maintenance and warranty services you need to register your glider within 30 days of purchase. Please contact us regarding any additional information.

Warranty online reference:

www.777gliders.com/warranty

Maintainance
Periodic inspection is advised after every 100h or 2 years of flying.

Disposal of the wing
Please dispose the wing by sending it back to your closest dealer or directly to us.
Spare parts
To obtain the spare parts, you can use info@777gliders.com

To obtain the spare lines you can do so via web page at
https://777gliders.com/ordering-spare-lines/

Registration information

To fully use all Triple Seven maintenance and warranty services you need to register your glider on our website. Wanting to provide good product support, we invite you to do so, even if you bought your glider second-hand.

Triple Seven Warranty & Product registration:

http://www.777gliders.com/tripleseven/support

Get involved

As a new Triple Seven pilot we invite you to contact us in case of any technical or practical issues regarding equipment or techniques. We also invite you to send us your flying photos, videos or even postcards. We would like to hear from you and your exciting adventures with your new glider! Finally, join our Facebook community and share the passion. Have fun!

Contact

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Online resources

For complete help, the latest news, product information and support go to:

Official website:
www.777gliders.com

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Ask questions, make suggestions

General questions:

info@777gliders.com


TRIPLE SEVEN