

Instructions for adjusting Flair air panels

The Purpose of the air panel system

The Flair system was designed by David Kempel, Canterbury England. They have withstood the test of time; we have used these panels for more than 10 years, and have had only one air panel become defective, which I believe was a cause of human error in over-inflating.

We only use these panels in the pommel of saddles for horses with narrow withers, or for those horses that have developed deep shoulder holes due to the vertical movements of upper-level dressage movements, where the serratus ventralis under the scapulas have become torn, forcing the scapulas outward. Often times, it is those horses that once that condition occurs, they lack the ability for a fluid 'forward' – so what got them to an FEI frame, then blocks them from getting that important gait again.

What air panels can do for horses that can't move their shoulders (scapulas)



Before and After

The picture of the horse to the left is commonly seen in Hunter/Jumper barns. It also can be seen in dressage facilities where improper saddles are sold or fitted. The foam, felt, or improperly fitted wool saddle will prevent the scapulas from moving; over time this will create a frame as shown in the picture to the left. If the horse can't move their shoulders, they soon lose their top-line, followed by the inability to carry the weight of the rider – then sacrum, stifle, hock, suspensory, bowed tendons issues force the horse into downward spiraling state of compensations that can and will cause a permanent lameness. The picture to the right is this same horse six months later – with the ability for that horse being ridden in a saddle with air panels, it now has the ability to build the correct musculature to once again have self-carriage, and then with correct work, have the ability to carry the weight of the rider and compete successfully in any discipline.

Get to know your horse.

With your horse standing in cross-ties on level ground, look over the back of your horse to the area behind the shoulders.



This is where it can be difficult. I'm doing three pictures here to keep you from becoming confused – the center picture I'll keep from drawing any lines. By looking at the very small right shoulder, you would think that the right wither would be the most shallow. However, it is the left shoulder that has become the most compromised (popping) and has torn muscles under the scapula, that have forced it outwards. This is a very common trait for an FEI horse with a weak right hind (notice the lack of musculature on the right glute muscles.)

In the two pictures, it becomes the disparity of the two red lines that tells the story about the wither that will be the most shallow, or a deeper shoulder hole; the red lines of the left shoulder tell us that the left shoulder is not mechanically working, and the green lines of the right shoulder tell us that there isn't a compensation taking place – therefore, the left shoulder hole is deeper.

What does it mean? It means that we inflate the left air panel more than the right to keep the saddle level on the pommel, and also keep the left tree point from interfering with the natural biomechanical movement of the left scapula as it moves under the saddle.

When I delivered the saddle, I took into consideration the asymmetry of the horse at both the withers and also the hind-quarters. In this case, it becomes the left pommel that requires more air, and the right cantle that will require more wool (if you notice in addition to the glutes and hamstrings having less muscular bulk, the top-line, or longissimus is less developed on the right side). This will make the saddle fall into the weaker right side, forcing the rider to sit left, collapse right, the horse will brace on the left rein, over-develop the left iliocostalis, move in a scoliotic frame, inward rotation of the right hind, outward movement of the left fore and on and on.

So as the horse becomes able to move correctly without the interference of the saddle blocking their natural biomechanical movement of the shoulders, and the ability to use their hind-quarters more effectively, the horse is going to go through some big muscular/skeletal changes – the horse is going to narrow first at the withers as the latissimus dorsi starts to develop, or what Dr. Deb Bennett says, “coming up in the withers” – the air panels will require more air. As the horse starts to develop the top-line, the next phase will require removing some air, or me returning and perhaps widening the tree.

Preparing the saddle for the adjustment.

You are probably at this point because the saddle may appear to be too wide and sitting very close to the wither. If I or one of our fitters can't get to you, the following instructions will allow you to adjust the panels back to where the horse is comfortable, and you don't feel like you are falling on the fore.

You will need the following items to complete these steps.

A soccer ball air pump – can be found at Walmart or any store that carries sporting equipment.
Cost about \$6

Some kind of a clamp – here I have used trunk clamps, smooth locking forceps, or anything else that you can use to clamp the plastic tubes. Cost about \$3

A needle-nose pliers, or any tool that can retrieve the plug from under the cantle flap.

A scissors

On a table, place the pommel face down, with the underside of the saddle facing you.



Under the flap at the back of the saddle (cantle) and between the wool panels, there will be the two plugs that will need to be removed by using either a needle-nose pliers, or your fingers. Pull these and the tubes free of the panels.



Once the tubes have been removed from under the panels, clamp off the tube that you will be adjusting. I always like to take the stronger side of the horse first, as in the picture of the horse on the previous page that would be the right side. Clamp off the hose before you remove the plug; the panels have already been adjusted once, you just need to add a small amount of air to get the saddle fitting correctly again.



With the tube still clamped, remove the plug from the tube of the panel to be adjusted. Insert the pump stem about the distance between the two vertical lines to the right | |. Once the pump has been inserted, remove the clamp. With this style of a pump, add only one complete stroke.



After the panel has been inflated, re-clamp the tube. Remove the pump, and then a very important step - cut off the end of the tube that was expanded by the air pump - usually about the distance of the 2 lines to the right - | |. Put the black plug back into the tube - make sure it is fully inserted.



When adding air to the saddle representing the weaker side of the horse, make sure that there is more air in that panel than the panel that is on the stronger side – this will insure that the pommel is level, and that the weaker side shoulder will be free to develop the correct biomechanical movement.



Once both panels have been adequately inflated, where the saddle seems balanced on the horse's back; off the wither, and not falling into one side, replace the plugs back under the flap on the cantle, and push the tubes under the panels.

It is important to remember that there are two things that you don't want to do – don't under-inflate the panels where the saddle may sit on the sensitive wither, or over-inflate to the degree where the air panels could be damaged.

This may seem to be quite complex, but with just a small amount of common sense, anyone can do this.