

UNDERSTANDING YOUR 3-PAGE REPORT

The first part of the report contains personal details and our summary comments. These comments highlight the most important aspects for you to improve. Most of the issues will require a technical modification (movement pattern) but for some of them, a physical change (e.g., flexibility, stability or strength) may need to occur so that technical improvement can proceed.



3D Golf BioDynamics Swing Analysis			
First Name:	Jim	Last Name:	McLean
Date:	1-Apr-06	Test type:	Initial test
Mass:	175 lbs	Height:	72 "
		Handicap:	0
Summary			
<ol style="list-style-type: none"> 1. Jim, your shoulders are still too open at address and your pelvis is not bent forward sufficiently (again)! 2. Backswing move is awesome but you could get a little further behind the ball (i.e., increase lateral head sway) 3. Downswing move is fantastic - although you could be a little more efficient (check the timing sequence) 			

The issues are in priority order.

The rest of **Page 1** details your setup postures including alignment of the hips and shoulders, forward bending of the hips, upper torso and head, as well as the tilting (to the right or left) of the hips, upper torso and head. For each measurement, a corridor in which we would like to see your score fall is given. If your "number" falls in this range, it will be **green**; if it is close it will be **yellow**; if it is **red**, it is further away than ideal and may need to change. The images alongside are **NOT** you, they are included to help you assist the "numbers".

Setup Foundations			
Alignment			
	Corridor	You	
Hips	0 to 8°	6 Open	
Shoulders	5 to 12°	23 Open	
<small>Green = within corridor Yellow = just outside corridor Red = well outside corridor</small>			
Bending			
	Corridor	You	
Hips	12 to 20°	13 Forward	
Shoulders	35 to 45°	53 Forward	
Head	30 to 50°	54 Forward	
Tilting			
	Corridor	You	
Hips	0 to 3°	5 Right	
Shoulders	7 to 13°	15 Right	
Head	0 to 10°	4 Right	

Jim's hips are aligned perfectly in the corridor.

Jim's shoulders are too open at 23°.

Jim's upper torso (shoulders) are bent too far forward (i.e., his upper body is too "rounded"!).

Jim's tilt (bending to the right) is bit too high (tilted too much)!

Page 2 of the report deals with your backswing move: How far do you rotate your hips & shoulders?; How much coil (X-Factor) do you get in your torso?; Do your hips and head stay level?; Does your



Jim's hips and shoulders have rotated just the right amount on the backswing.

Jim's X-Factor Stretch has improved but is still a little

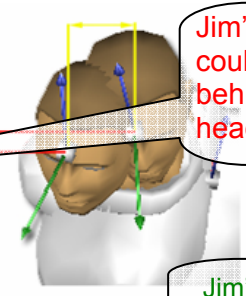
Rotations			
	Corridor	You	
Hip Turn	-20 to -52°	-45	Closed
Shoulder Turn	-60 to -95°	-91	Closed
X-Factor	-40 to -55°	-46	Closed
X-Factor Stretch	-10 to -25°	-8	Closed
Head Turn	-20 to -40°	-17	Closed

The difference between hip & shoulder turn (coil) = X-Factor. Jim's X-Factor is excellent at the top.

head move off the ball? Do you maintain your spine angle and are you staying

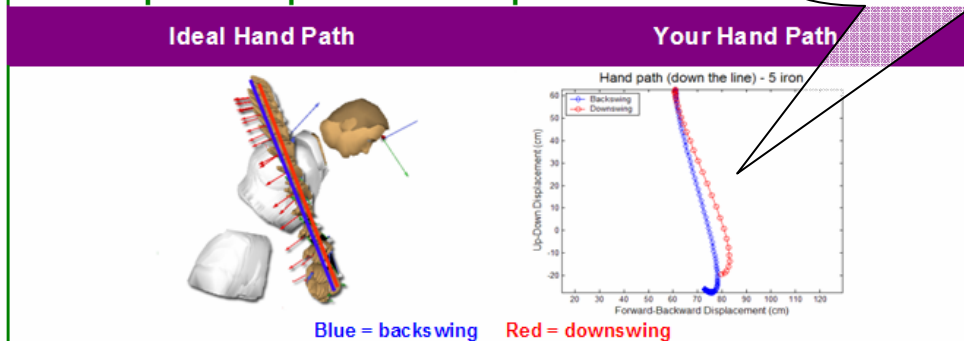
This panel examines head lateral (sway), vertical (up/down) and thrust (forward/backward) movements as well as vertical hip movement. These data give insight into how the weight is being loaded on the backswing, whether the spine angle is being maintained and if the base of support is stable.

Stability			
	Corridor	You	
Head sway (Address to top)	3 to 4½"	1.4	Away
Head lift (Address to top)	-1½ to ½"	1.1	Up
Head thrust (Address to top)	-½ to ½"	-0.1	Backward
Hip drop (Address to top)	-1½ to ½"	-2.0	Down



Jim's lateral head sway could be higher, so that he is behind the ball better. His head lifts a little too much

Jim's hand path shows a sound pattern (close to ideal).

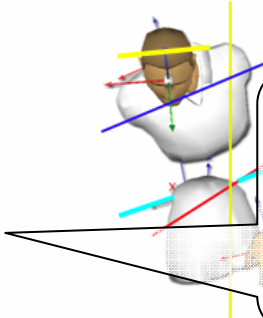


Page 3 of the report is all about your downswing and impact positions. We report on your dynamics in this section. Have your hips and upper torso “cleared” well (rotated far enough)?; Are your hips tilted to the right (RH golfer) sufficiently?; Did your head move back toward the target enough? Did your head drop or lift too much?

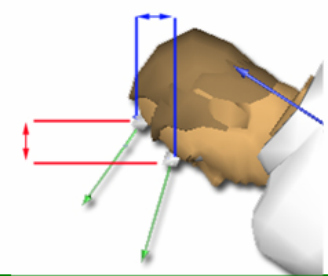
Downswing

Impact Zone			
	Corridor	You	
Hip Turn	25 to 45°	30	Open
Shoulder Turn	25 to 50°	34	Open
Head Turn	10 to 40°	18	Open
Hip Tilt	10 to 15°	16	Right

Spine Angle Control			
	Corridor	You	
Head drop <small>(Top to impact)</small>	-2½ to ½"	-0.5	Down
Head thrust <small>(Top to impact)</small>	-½ to ½"	-1.5	Backward



What a great impact position. Hips and shoulders well cleared, head rotated to the target and left hip higher than the right. The only issue is that his shoulders are more open than hips – this should be the other way around!



The final section deals with the speed of movement and efficiency of your downswing. Ideally, your speeds should fall into the corridors of success. Secondly, for the swing to be as efficient as possible, energy generated at the core of the body with the big muscles of the legs and hips must be transferred up through the shoulders, out to the hands and eventually to the club. Thus, the ideal sequence of peak speeds should be hips first, followed by shoulders and then hands. It is important to realize that to “crack the whip”, the hips and shoulders must actually decelerate prior to impact so that their energies can be delivered to the club!

Body Speeds		
	Corridor	You
Hips	380 to 550 deg/s	468
Shoulders	480 to 700 deg/s	657
Hands	17.9 to 21.5 ft/s	19.5

Timing Sequence <small>(order that peak speeds occur in downswing)</small>			
	Hips	Shoulders	Hands
Ideal	1	2	3
5-iron	1	1	3
Driver	0	0	0

Jim's hand path shows a sound pattern (close to ideal).

Here you can see that Jim's shoulders have reached their peak too early (at the same time as the hips) making his swing less efficient. No driver swings were collected – thus no sequence data are shown.