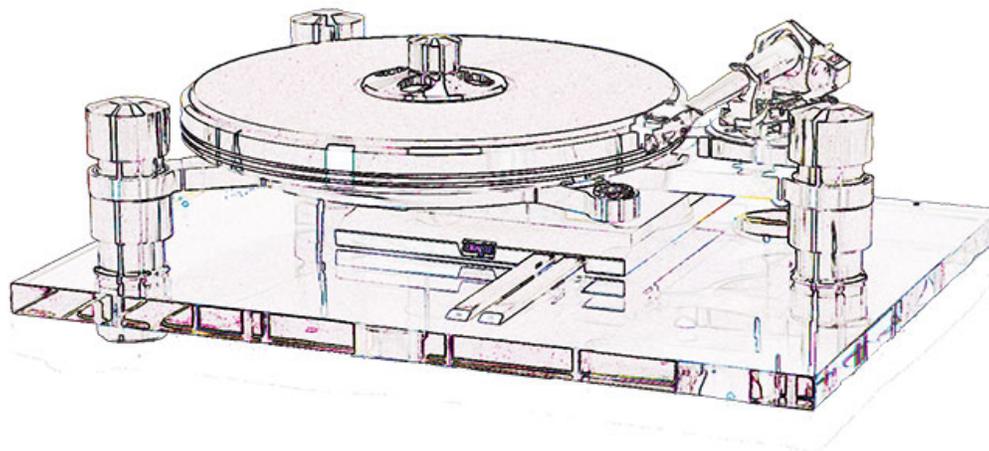


***TURNTABLE'S  
MAINTENANCE KIT***



**ORACLE AUDIO TECHNOLOGIES**  
6136 boulevard Bertrand Fabi, Suite 101  
Rock Forest. Quebec.  
Canada. J1N 2P3

Phone number: 819-864-0480  
Fax number: 819-864-9641

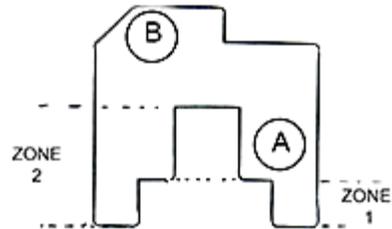
Email: [info@oracle-audio.com](mailto:info@oracle-audio.com)  
Website: [www.oracle-audio.com](http://www.oracle-audio.com)

*The Fine Art Of Playing Music...!*

## SUSPENSION ORACLE MKI FROM S/N: 1001-6798

### Tools required:

- spirit level
- 5/32" allen key (for s/n under 5694)
- suspension adjustment gauge



### Before you begin:

Install the tonearm, the platter the groove isolator mat and the record clamp on the floating sub-chassis before you begin the suspension calibration. Install the sub-chassis on the suspension towers. Do not install the phono cable and the drive belt for this operation.

### Section of gauge:

Zone 1). S/n: 1001 to 5694 use the (13/16") 22mm step on the gauge.

Zone 2). S/n: 55695 to 8135 use the (5/16") 8.5mm step on the gauge.

### Using the gauge:

1. Level the acrylic base using your spirit level.

The gauge will allow to precisely accomplish the exercises of calibrating section A and adjusting section B.

TECHNICAL BULLETIN

Subject: Oracle suspension on Delphi MKI & MKII & Premiere

One more step closer to an easy set up Oracle suspension system...!

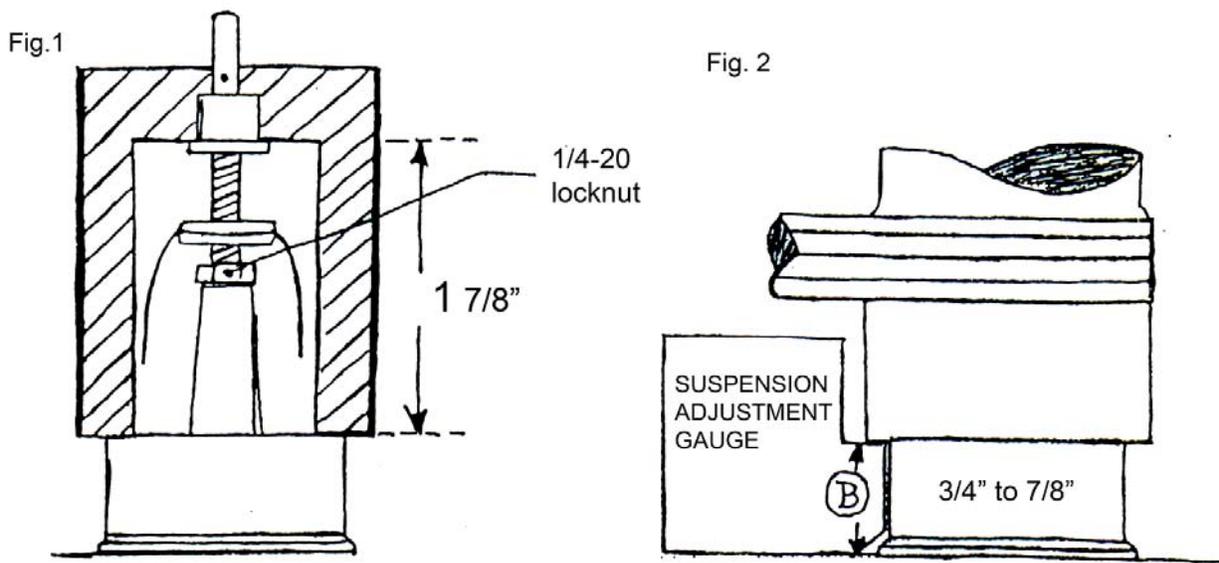
The suspension is the starting point of a poor or a great performance from a turntable like the Oracle.

In the past few years, we developed one tool to make the suspension calibration less of a shot in the dark. Today, we would like to introduce you with a change which has the benefit of putting you on the right track from the start and allowing no room for the interpretation and no room for error. With this new method, there is no more need to question if the suspension is optimized or the right springs were used.

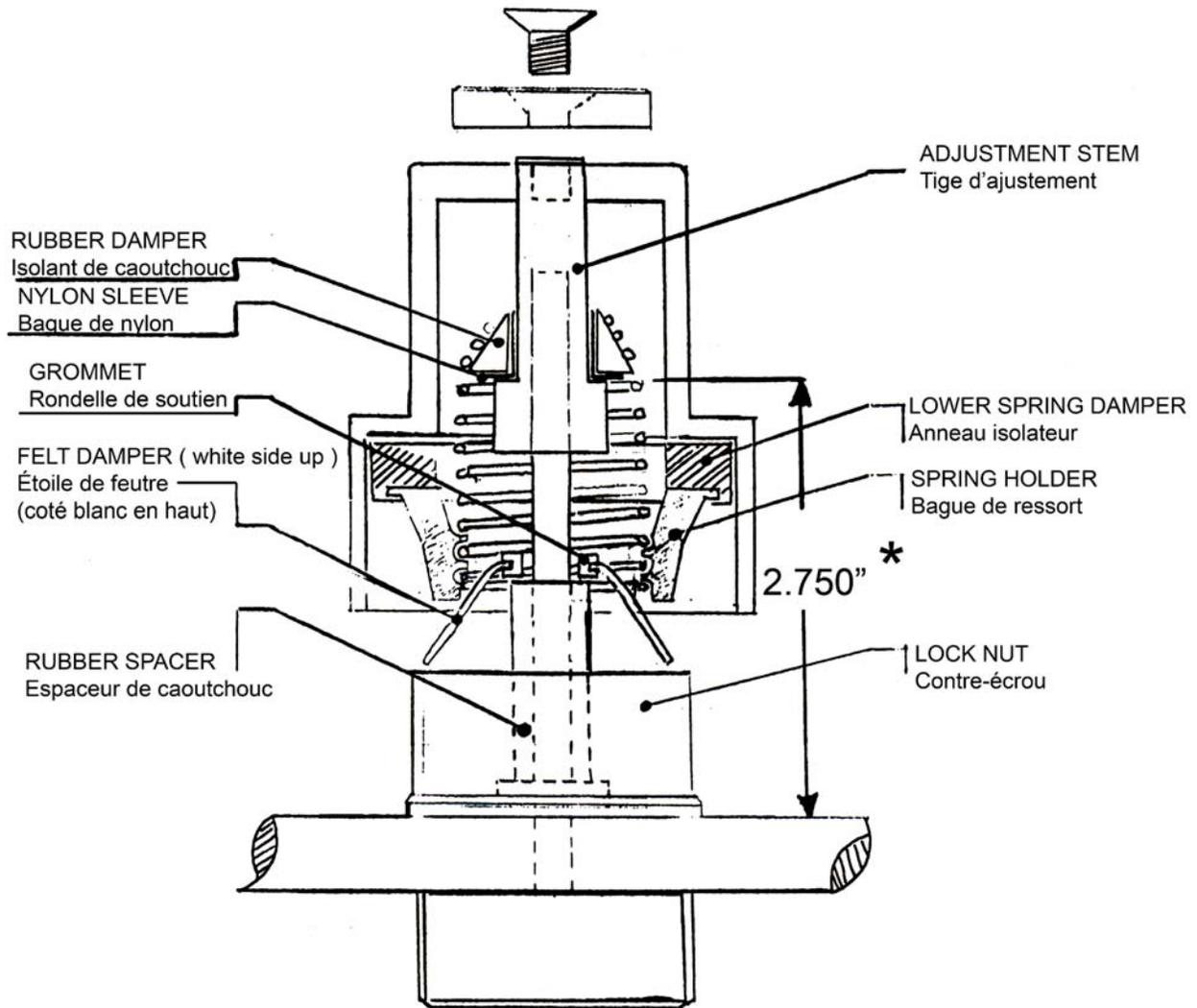
Referring to the technical handbook, you will find the applicable operational range for a spring. Once you understand this important aspect of the spring calibration, finding the right spring job can be done in a few minutes even without knowing the colour code of the spring.

The suspension height and level is pre-determined. Once all accessories, example: tonearms...etc. are installed on the subchassis and a set of spring is selected, the suspension gauge will be used to determine the proper spring calibration, which will be obtained by moving the spring in its support, as per the "B" side on the gauge. The "A" side is not required anymore with this new method.

Note: On some of the Delphi, the black sleeve at the top of the suspension housing can be removed to allow more room for vertical displacement.



note : The gauge shown in fig. 1 can be made with cardboard.



\* Adjust the height of the adjustment stem at 2.750" ( 69.85mm ) as the first procedure to calibrate the suspension.

## SUSPENSION CALIBRATION

Adjust the suspension to the proper height as per the section B of the gauge.

See illustration B on page 3.

This adjustment will be done again once the suspension are properly calibrated.

Remove the suspension height knob as follow:

Use a 5/32" allen key for the turntable with s/n: 1000 to 5694

For turntables with s/n: 5695 and up, simply pull straight up on the knob.

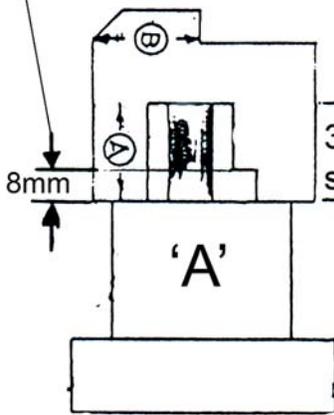
The section A on the gauge will allow to determine the colour code and the calibration of the spring to be used.

Compare the results with the illustration on graph. A and make the necessary adjustment, if required.

\* Please note that the counterweight under the sub-chassis, which is not supplied since turntables with s/n: 6212 is not required for a precise calibration of the suspension. The compensation is obtained by changing the positioning of the spring in its polyethylene support. In the event that the counterweight would be used for heavier tonearm, for instance the FR 64, it should be positioned precisely in the direction of the front left suspension tower before the beginning of the calibration operation.

# ORACLE AUDIO TECHNOLOGIES

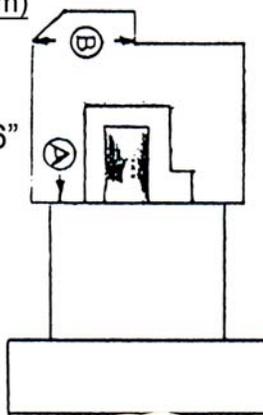
From S/N 6799 to 9044  
use 5/16" (8mm) section



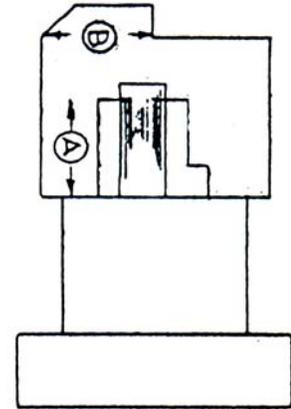
No adjustment required

From S/N 1001 to 6798  
use 3/4" to 13/16" section  
(19-20mm)

3/4 to 13/16"  
section



Read 1 below



Read 2 below

1. The spring used is too stiff

a). adjust the spring in its support as per instruction 1 of the following page

Or

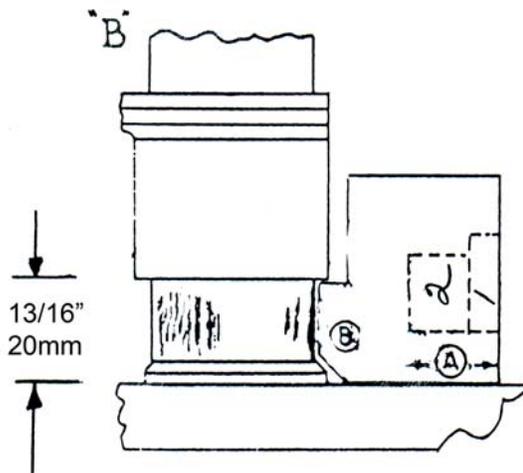
b). use a softer spring and proceed to the adjustment as per A.

2. The spring used is too soft

a). Adjust the spring in its support as per instruction 2 of the following page

Or

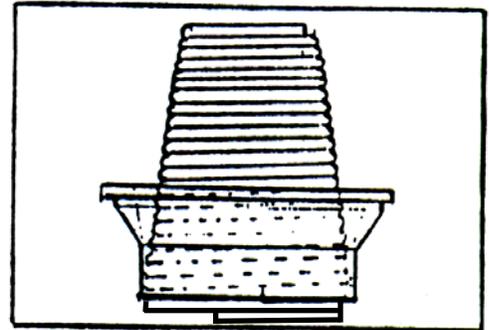
b). Use a stiffer spring and proceed to the adjustment as per A



1. Reposition the adjustment knobs on their suspension stems.
2. Adjust the suspension height as per section B of the gauge  
See the illustration

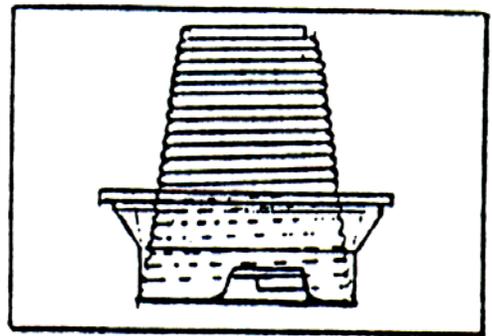
## STANDARD SETTING

The new standard spring setting shows about 2 coils of the spring below the sleeve

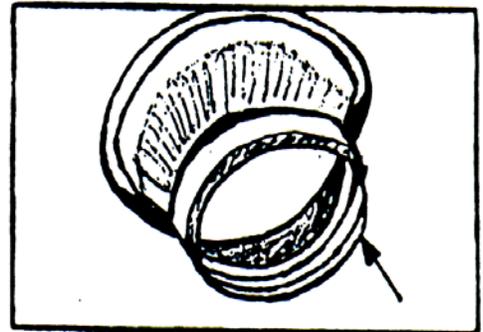


## 1. SOFTER SPRING SETTING

The spring can be turned further its holder to a maximum of 1/2 turn passed the beginning of the thread in the spring holder. This will result in a weaker ( softer ) spring since more of the coils are used. We redesigned the springs many years back and this extreme should never be reached. A softer spring calibration will have the impact of making the floating sub-chassis to sit lower.

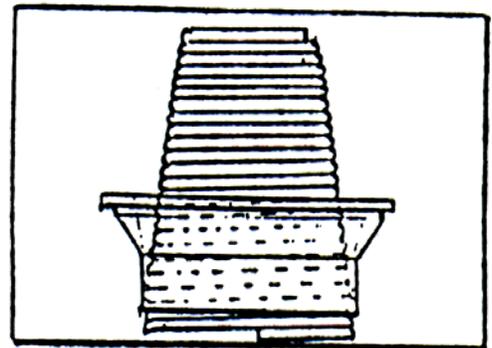


The beginning of the thread in the polyethylene Support.



## 3. STRONGER SPRING SETTING

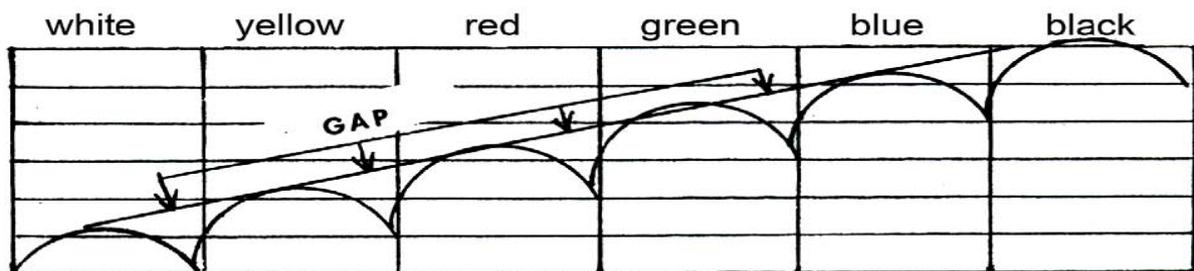
A maximum of 5 full spires of the spring can be left out of the bottom of the support. This will result in a stronger spring since less of it is being used. This will result in making the floating sub-chassis to sit higher.



## TECHNICAL UPDATE NEW SPRINGS AND THREADED SUPPORT

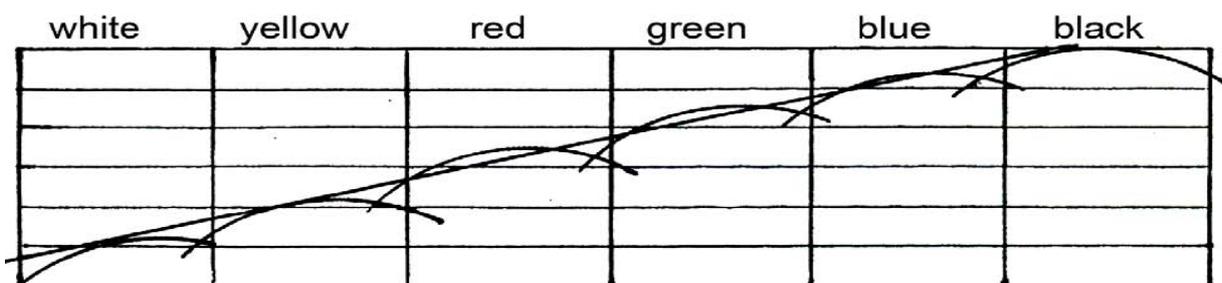
Oracle introduced a new threaded spring support to make set ups easier and more accurate. The earlier spring support was a press fit model. The reason for the change: "we had 7 different colour coded springs to choose from. Each single colour coded spring had its own operating range and between each of them there was a gap, as shown on graph 1.

GRAPH I



We re-evaluated the different suspension loads to be covered to accommodate all the tone arms that can be mounted on the Oracle. We came out with the following color coded springs, from the weakest to the strongest, white, yellow, red, green, blue, black (almost never used was required for the very heavy tone arms). The major difference is the spring support, which makes it possible to almost eliminate the gap between each spring as shown on graph II.

GRAPH II



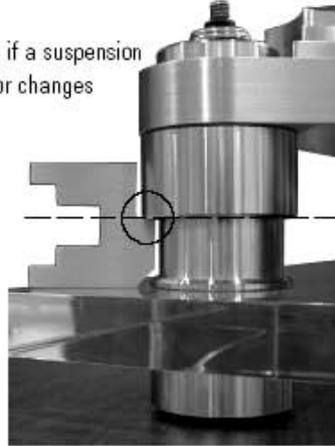
## SUSPENSION FINE TUNING

This picture indicates the **target setting** of the suspension system.

The tool supplied will help you determine if a suspension fine tuning is required. If no or only minor changes need to be performed, you might select to leave the system as is.

At this point, the suspension top covers can be installed and the player moved to its final playing location.

To complete the final leveling of the plinth, it will be necessary to use a spirit level. The leveling will be achieved by adjusting the height of the threaded feet under the plinth.



**NOTE** The reference to clockwise or counter-clockwise is determined by viewing the spring module from above.

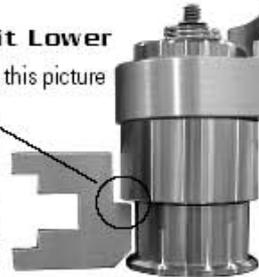
To proceed with minor changes to the suspension fine tuning, please read the following information.

### Make the Suspension Housing Sit Lower

If the suspension housing is sitting too high as on this picture



- With one hand apply a light down pressure to the main chassis while holding the suspension housing
- Rotate the spring counter-clockwise by very small increments until the suspension housing lightly rests against the step on the gauge

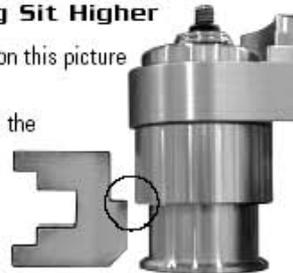


### Make the Suspension Housing Sit Higher

If the suspension housing is sitting too low as on this picture



- Gently raise the suspension housing with one hand
- Using needle nose pliers, insert the tip of the pliers near the end of the spring and hold it firmly



- While holding the spring to prevent it from turning, rotate by very small increments the suspension housing, counter-clockwise. This will move the spring further out of the spring calibration sleeve thus making the suspension housing sit higher.

**NOTE** Do not allow the pliers to contact the aluminium parts since this could damage the clear lacquer finish.

## TECHNICAL BULLETIN

Subject: Suspension upgrade on Delphi AC & MK 1.

The suspension of your Oracle AC or MK 1 unit uses sponge rubber dampers to isolate the spring assembly from the suspension housing. With time, these rubbers become dry and lose their damping properties. From the MKII version on, we have been using new sorbothane dampers instead. These dampers stand very well the test of time and provide a much better isolation. The replacement of these parts is quite an easy task.

1. Disassemble the suspension towers.
2. For each towers, remove the spring's plastic collar and sponge rubber.
3. Install the new plastic collar on the spring, allowing three turns of the spring to be visible at the bottom.
4. Install the sorbothane damper on the collar, taking care of properly installing the little flange inside the sorbothane's bottom groove.
5. Screw the 1/4 20 nut on the threaded stem.

Now proceed with the re-installation as on Fig,1 and adjust the suspension as follows.

Adjustment:

The following method will allow you to set and maintain your turntable suspension at peak performance.

Referring to the technical handbook, you will find the applicable operational range for a spring. Once you understand this important aspect of the spring calibration, finding the right spring for the right job can be done in a few minutes even without knowing the colour code of the spring.

The suspension height and level is now pre-determined. Once all accessories ,example ; tonearm... are installed on the subchassis and a set of spring is selected, the suspension gauge will be used to determine the proper spring calibration, which will be obtain by screwing or unscrewing the spring in it's support as per the "B" side on the gauge. The "A" side is not required anymore with this new method.

The suspension tower should be adjusted in a way that the distance between the adjustable stem shoulder and top of the suspension base part (see fig.1) is 47.6 mm ( 1 7/8 inch). Once the height is set, lock the stem in place with the 1/4 20 nut.

Once it is done, screw or unscrew the spring in it's plastic collar so that about 3 turns (+/- 2 turns) are visible at the bottom of the plastic collar, then check with the "B" side on the adjustment gauge and re-adjust the spring on it's collar in a way to have the proper distance between the bottom of the suspension housing and the acrylic base ( 20mm or .787 inches) see fig.2

If you need more than 5 visible turn of spring to get the ( 20mm or .787 inches) height then try a stronger spring. If on the other hand, there is barely 1 turn visible, then try a weaker one.

When, the three suspensions towers are set according to these instructions your suspension should be perfect.

Fig. 1

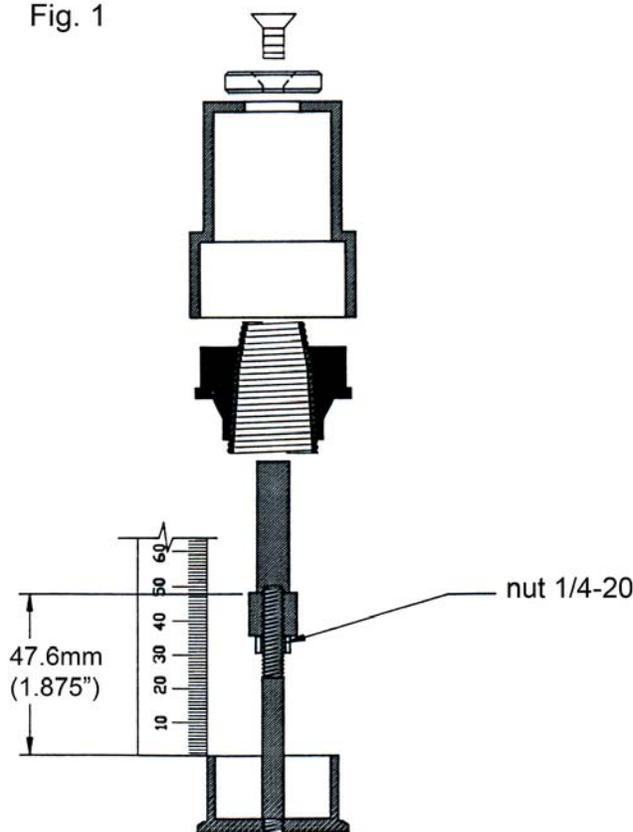
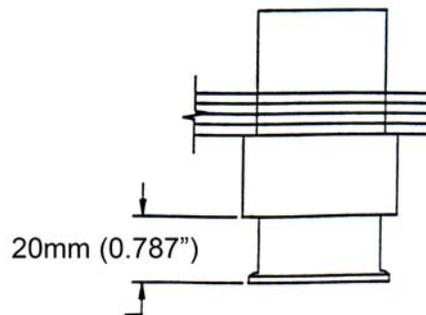


Fig. 2

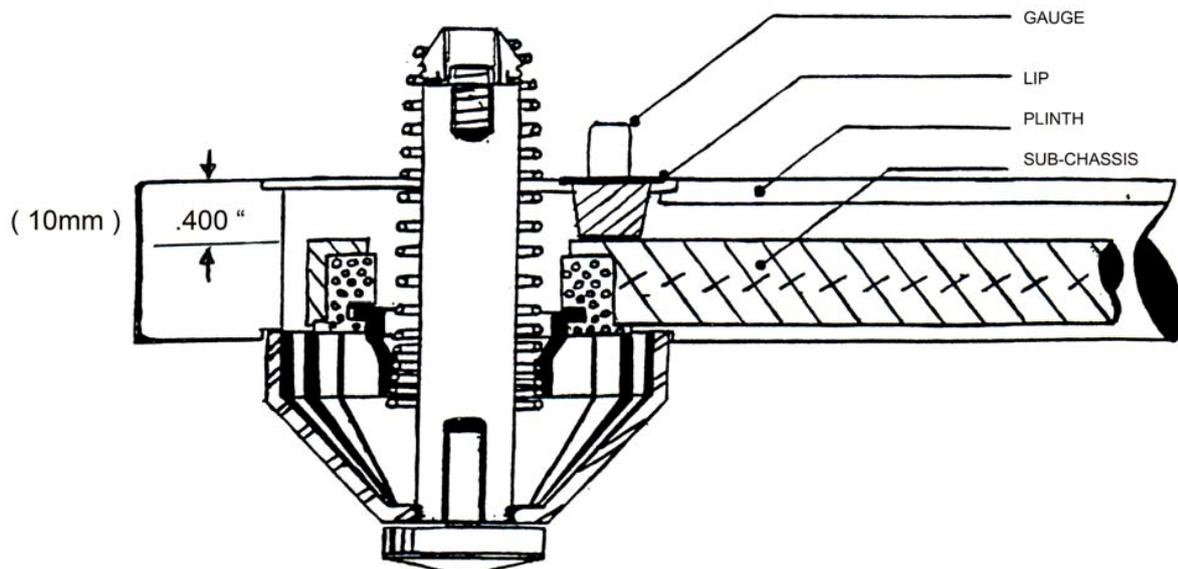


## USING THE SUSPENSION CALIBRATION GAUGE ALEXANDRIA MKIII & MK IV

- Remove the cover on the right suspension module
  - Place the mat, an old record and the clamp on the platter
  - Position the suspension gauge on the subchassis.
- If the lip is above or below the level of the plinth a suspension calibration will be required.

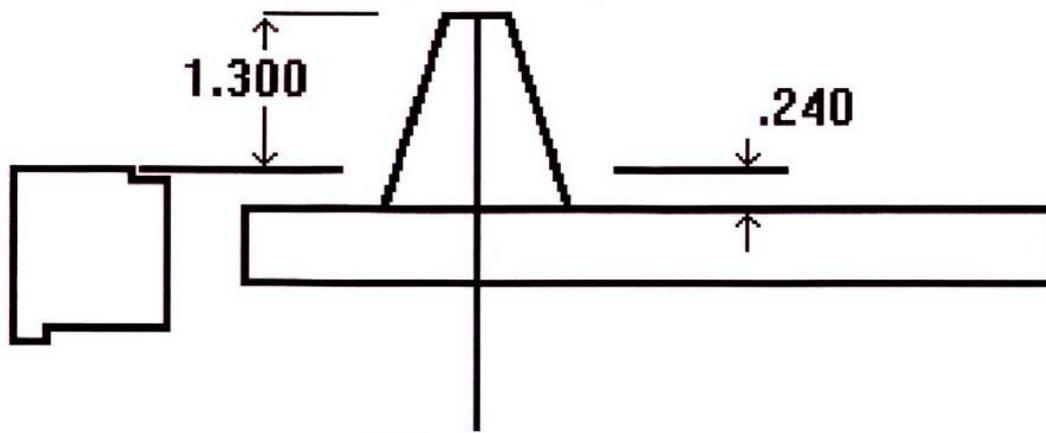
The correct approach to assess or calibrate the suspension system is the following:

- 1). Always start with the suspension module located near the tone arm then move to the rear left module and finally to the front left module.
- 2). Never remove more than one suspension cover at the time. When the assessment or calibration is completed install the suspension cover on that module before moving to the next.



---

## Alexandria Mk II



View of the Alexandria MkII important suspension calibration .

First adjust the 1.300" height by turning the adjustment stem. Then adjust the .240" height by changing the spring tension. As viewed from the top a clockwise rotation will make the spring stiffer. A counter clockwise rotation will make the spring softer. The platter, the mat, the tone arm, a record and the record clamp must be in place for an accurate calibration.

## Alexandria MK II suspension calibration

To dismantle the top plinth ...

- i ) Remove the 3 screws holding the top plinth to the base. They are located around the inner platter hub ( philips heads )
- ii ) From below the plinth, remove the 6 screws holding the bottom base to the wood trim
- iii ) Remove the 3 x 9/64th allen screws holding the tone arm to the sub-chassis
- iiii ) Remove the 2 philips head screws holding the RCA board to the rear of the plastic base. Gently slide the RCA board about 3mm (1/8") to the right, then slightly up and push it inside. You can now pull the arm up from above being careful to gently lead the RCA board through the arm mounting ring to prevent damaging the wires. You can now remove the top plinth.

Note : When re-installing the plinth, make sure you position the 33, 45 speed and on / off flaps so the LED align properly in the holes.

After dismantling the top plinth from the base of your Alexandria there are basic measurements that are important to properly adjust the suspension system.

1 ) We recommend you download the Delphi MK VI owner's manual for our web site, go to products, Delphi MK VI then select owner's manual in the upper right section of the screen. This will make you better understand how the suspension system works and is adjusted ... It is still the same procedure today as it was many years back.

2 ) With the plinth off ...

- a ) Adjust the height of the brass stem so the seat for the nylon grommet is at 61mm ( 2 and 13/32th inch ) from the bottom of the plastic base
- b ) Carefully assemble the suspension springs in the sub-chassis following the instructions you read in the Delphi owner's manual
- c ) Once each spring is where it should be, White or Grey at the front left, Yellow at the rear left and Red or Green on the right side,
- d ) Before re-installing the top plinth place the platter, mat, record and tone arm loosely on the sub-chassis arm mounting ring. This is done to simulate the proper load for the sub-chassis to allow you to properly calibrate the suspension.
- e ) adjust each spring so the distance between the top of the sub-chassis to the bottom of the turntable base is 38,1mm ( 1,5" ). This has to be precise on all 3 springs. To do so you will have to move the spring inside its holder to make the spring stiffer or softer. In doing so hold the brass stem with a flat blade screw driver to prevent it from moving from its set height of 61mm ( 2 and 13/32th inch ).

After the top plinth has been removed ...

- 1 ) remove the main bearing from the sub-chassis and clean it with isopropyl Alcohol. After completely dry re-install to the sub-chassis and add 2cc of lubricating oil.
- 2 Preventive checks ... with a flat ruler check for the flatness of the sub-chassis.

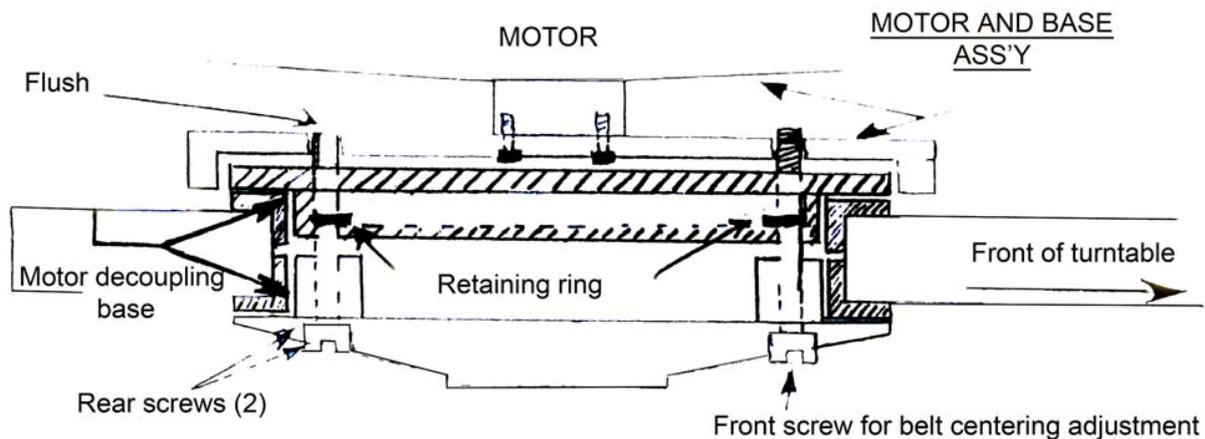
Once every step has been properly executed re-assemble the top plinth to the base of the turntable.

Install the tone arm guiding the RCA board through the sub-chassis mounting ring and insert it in the slot at the rear of the base following the reverse procedure described above.

## MOTOR INSTALLATION AND ADJUSTMENT FOR MODEL DELPHI AND ALEXANDRIA MKI - MKII

The motor mounting system is one of simplicity. It consists of two major assemblies. The motor and base assembly and the acrylic to motor decoupling base. The motor decoupling base is held in place by 3 screws which are locked in place by 3 retainer clips leaving the 3 holding screws free, to rotate without loosening of tightening the decoupling base. The motor base has 3 holes which are threaded to receive 3 screws holding the decoupling base. Those 3 screws are forming a triangle, 2 of them, being parallel to the rear of the acrylic base, and on the third one, pointing toward the front of the turntable.

The motor is set up on top of screws which are gradually screwed in the base. The 2 rear screws (parallel to the rear) should be screwed until the tip becomes flush to the top of the motor (see graph).



NOTE: If those screws are turned in too far, not enough motor angle adjustment will be provided. The front screw will be used for the fine adjustment of the belt tracking in the pulley of the motor. This adjustment should only be done once the acrylic base and subchassis are properly leveled.

The adjustment consists of making sure that the belt will ride on the center part of the motor pulley. **IMPORTANT:** Ignoring this adjustment could result in flutter problems since the belt touching either sides of the motor pulley would excite the speed regulation system. Turning the front screw from under the acrylic clockwise will make the belt go up on the pulley and counter clockwise will make it go down.

Turntable : Alexandria MK II

tonearm	left front	left rear	right side
Standard from factory	grey	white	red
Alphason	grey	white	red
Black widow	grey	white	red
Breuer 5A	grey	white	red
Denon 401	grey	white	red
Dynavector	does not fit on Alexandria TT		
Eminent Technology	does not fit on Alexandria TT		
Formula IV Mayware	grey	white	red
FR 12 , FR 14	grey	white	red
FR 64 (light mounting nut)	grey	white	red
FR 64 (steel mounting nut)	does not fit on Alexandria TT		
FT 4	grey	white	red
Grace 707 & 747	grey	white	red
Grado	grey	white	red
Hadcock	grey	white	red
Helius Aurus	grey	white	red
Jeff Rowland	does not fit on Alexandria TT		
Koetsu	does not fit on Alexandria TT		
Kuzma	grey	white	red
Linn Ittock	grey	white	red
Lurne	grey	white	red
Lustre GST-801 (alum.nut)	grey	yellow	green
Lustre GST-801 (steel nut)	grey	yellow	green
Luxman TA 1	grey	white	red
Magnepan Unitrac	grey	white	red
Micro Seiki MA-505	grey	white	red
Mission	grey	white	red
Prelude	grey	white	red
Premiere MMT	grey	white	red
Profile	grey	white	red
PV3	grey	white	red
Rega RB300	grey	white	red
Rocksan	grey	white	red
Saec 308 & 407/23	grey	white	red
Signet XK-50	grey	white	red
SME IV , V , 345	grey	white	red
Souther Linear	grey	white	red
Stax UA7 , UA9	does not fit on Alexandria TT		
Sumiko "The Arm"	grey	white	red
Sumiko VTA 16	grey	white	red
Syrinx	grey	white	yellow
Technics EPA-100	grey	white	red
Ultracraft AC 300	grey	white	red
Well Tempered	grey	white	yellow
Zeta	grey	white	red

## Turntable : Alexandria Mk III , Mk IV

tonearm	left front	left rear	right side
Standard from factory	grey	white	yellow
Alphason	grey	white	yellow
Black widow	grey	white	yellow
Breuer 5A	grey	white	yellow
Denon 401	grey	white	yellow
Dynavector	does not fit on Alexandria TT		
Eminent Technology	does not fit on Alexandria TT		
Formula IV Mayware	grey	white	yellow
FR 12 , FR 14	grey	white	yellow
FR 64 (light mounting nut)	grey	white	yellow
FR 64 (steel mounting nut)	does not fit on Alexandria TT		
FT 4	grey	white	yellow
Grace 707 & 747	grey	white	yellow
Grado	grey	white	yellow
Hadcock	grey	white	yellow
Helius Aurus	grey	white	yellow
Jeff Rowland	does not fit on Alexandria TT		
Koetsu	does not fit on Alexandria TT		
Kuzma	grey	white	yellow
Linn Ittock	grey	white	yellow
Lurne	grey	white	yellow
Lustre GST-801 (alum.nut)	grey	yellow	green
Lustre GST-801 (steel nut)	grey	yellow	green
Luxman TA 1	grey	white	yellow
Magnepan Unitrac	grey	white	yellow
Micro Seiki MA-505	grey	white	yellow
Mission	grey	white	yellow
Prelude	grey	white	yellow
Premiere MMT	grey	white	yellow
Profile	grey	white	yellow
PV3	grey	white	yellow
Rega RB300	grey	white	yellow
Rocksan	grey	white	yellow
Saec 308 & 407/23	grey	white	yellow
Signet XK-50	grey	white	yellow
SME IV , V , 345	grey	white	yellow
Souther Linear	grey	white	yellow
Stax UA7 , UA9	does not fit on Alexandria TT		
Sumiko "The Arm"	grey	white	yellow
Sumiko VTA 16	grey	white	yellow
Syrinx	grey	white	white
Technics EPA-100	grey	white	yellow
Ultracraft AC 300	grey	white	yellow
Well Tempered	grey	white	white
Zeta	grey	white	yellow

Turntable : Delphi Mk I, Mk II , Mk III Silver  
 Premiere Mk I, Mk II, Mk III Silver

tonearm	left front	left rear	right side
Standard from factory	white	yellow	green
Alphason	white	yellow	green
Black widow	white	yellow	green
Breuer 5A	white	yellow	green
Denon 401	white	yellow	green
Dynavector	white	red	blue
Eminent Technology	white	yellow	red
Formula IV Mayware	white	yellow	green
FR 12 , FR 14	white	yellow	green
FR 64 (light mounting nut)	white	yellow	green
FR 64 (steel mounting nut)	white	red	blue
FT 4	white	yellow	green
Grace 707 & 747	white	yellow	green
Grado	white	yellow	green
Hadcock	white	yellow	green
Helius Aurus	white	yellow	red
Jeff Rowland	white	red	blue
Koetsu	white	red	blue
Kuzma	white	yellow	green
Linn Ittock	white	yellow	green
Lurne	white	yellow	green
Lustre GST-801 (alum.nut)	white	red	blue
Lustre GST-801 (steel nut)	white	red	blue
Luxman TA 1	white	yellow	green
Magnepan Unitrac	white	yellow	green
Micro Seiki MA-505	white	yellow	green
Mission	white	yellow	green
Prelude	white	yellow	green
Premiere MMT	white	yellow	green
Profile	white	yellow	green
PV3	white	yellow	green
Rega RB300	white	yellow	green
Rocksan	white	yellow	green
Saec 308 & 407/23	white	yellow	green
Signet XK-50	white	yellow	green
SME IV , V , 345	white	yellow	green
Souther Linear	white	yellow	green
Stax UA7 , UA9	white	yellow	green
Sumiko "The Arm"	white	yellow	green
Sumiko VTA 16	white	yellow	green
Syrinx	white	yellow	red
Technics EPA-100	white	yellow	green
Ultracraft AC 300	white	yellow	green
Well Tempered	white	yellow	red
Zeta	white	yellow	green

Turntable : Delphi Mk IV Silver with counterweight. (if turntable does not have a counterweight, use the same spring combination suggested for the Delphi MkI, MkII, MkIII .)

tonearm	left front	left rear	right side
Standard from factory	yellow	yellow	green
Alphason	yellow	yellow	green
Black widow	yellow	yellow	green
Breuer 5A	yellow	yellow	green
Denon 401	yellow	yellow	green
Dynavector	yellow	red	blue
Eminent Technology	yellow	yellow	red
Formula IV Mayware	yellow	yellow	green
FR 12 , FR 14	yellow	yellow	green
FR 64 (light mounting nut)	yellow	yellow	green
FR 64 (steel mounting nut)	yellow	red	blue
FT 4	yellow	yellow	green
Grace 707 & 747	yellow	yellow	green
Grado	yellow	yellow	green
Hadcock	yellow	yellow	green
Helius Aurus	yellow	yellow	green
Jeff Rowland	yellow	red	blue
Koetsu	yellow	red	blue
Kuzma	yellow	yellow	green
Linn Ittock	yellow	yellow	green
Lurne	yellow	yellow	green
Lustre GST-801 (alum.nut)	yellow	red	blue
Lustre GST-801 (steel nut)	yellow	red	blue
Luxman TA 1	yellow	yellow	green
Magnepan Unitrac	yellow	yellow	green
Micro Seiki MA-505	yellow	yellow	green
Mission	yellow	yellow	green
Prelude	yellow	yellow	green
Premiere MMT	yellow	yellow	green
Profile	yellow	yellow	green
PV3	yellow	yellow	green
Rega RB300	yellow	yellow	green
Rocksan	yellow	yellow	green
Saec 308 & 407/23	yellow	yellow	green
Signet XK-50	yellow	yellow	green
SME IV , V , 345	yellow	yellow	green
Souther Linear	yellow	yellow	green
Stax UA7 , UA9	yellow	yellow	green
Sumiko "The Arm"	yellow	yellow	green
Sumiko VTA 16	yellow	yellow	green
Syrinx	yellow	yellow	red
Technics EPA-100	yellow	yellow	green
Ultracraft AC 300	yellow	yellow	green
Well Tempered	yellow	yellow	red
Zeta	yellow	yellow	green