

## Horizontal Move Function at 7:30



*Can't set Optalign at 1:30 clock position?*

Normally the MOVE function requires you to set the system at the 1:30 clock position to monitor the MTBM as it is moved laterally. This note enables you to use the MOVE function with the system set at the 7:30 clock position instead of 1:30. This is useful when it is impossible to position the system at 1:30.

### Overview

- Take readings as in a regular alignment.
- Record horizontal moves paying special attention to the **direction** of the displayed moves.
- Retake readings as follows:


Position	Keystrokes
12:00	<b>M</b> , <b>6</b> , <b>ENT</b>
3:00	<b>M</b> , <b>9</b> , <b>ENT</b>
6:00	<b>M</b> , <b>0</b> , <b>ENT</b>
9:00	<b>M</b> , <b>3</b> , <b>ENT</b>

- , record horizontal feet corrections. The value of these corrections should be the same as in step "b", but with opposite sign.
- 
- Position laser and prism at the 7:30 clock position, **ENT**
- Zero coordinates (0 0). **ENT**
- Move in opposite direction from the signs and arrows shown on the display (and in the direction Optalign

suggested in step "b".) Continue moving until number shown in the display is close to 000.0.

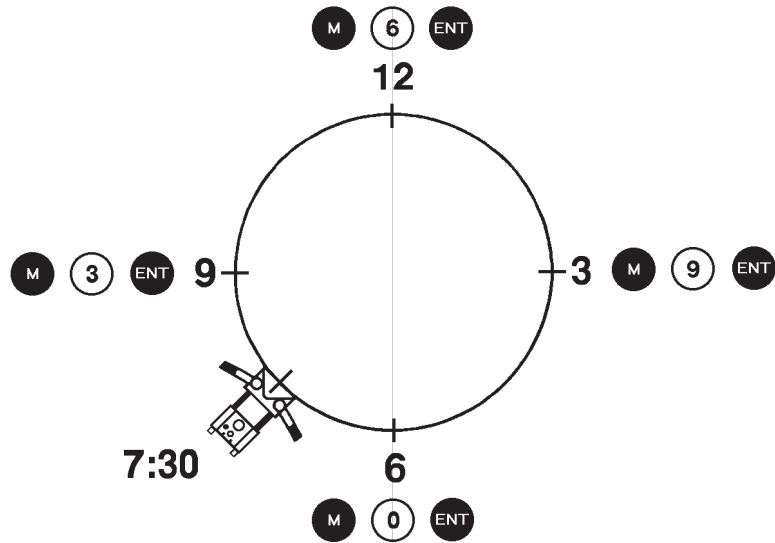
### Alternative

If turning the shafts is difficult or undesirable, the following alternative should be used.

- Take normal alignment readings.
- Record horizontal moves paying special attention to the sign of the displayed moves.
- Enter thermal growths as follows:
  - Skip vertical thermal growths, press **F**, **4**, **ENT**, **ENT**
  - Enter 2 times each horizontal move recorded in step "b" for the corresponding horizontal thermal growth.
- 
- Position laser and prism at the 7:30 clock position, press **ENT**.
- Zero coordinates (0 0), **ENT**
- Move in opposite direction from that shown on the Optalign screen. The move values will go to zero.
- Return the thermal growths to zero. **F**, **4**, **ENT**, **ENT**, **0**, **ENT**, **0**, **ENT**.

**LUDECA, INC.**  
1425 NW 88th Avenue  
Miami, FL 33172

Phone: (305) 591-8935  
Fax: (305) 591-1537



### Move at 7:30 Procedure

- 1) , ,
- 2) Enter machine dimensions.
- 3) , zero system at 12:00 o'clock.
- 4) Take readings, , , , etc.
- 5) , record feet corrections. *Pay special attention to the **direction** of the moves.*
- 6)
- 7) Record coupling results (VO, HO, VA, HA).

If, from the misalignment of the coupling, you decide to make a horizontal move, before making any moves:

- 8) Retake readings as follows: (see picture above)

Position	Keystrokes
12:00	,  ,
3:00	,  ,
6:00	,  ,
9:00	,  ,

- 9) , record feet corrections. These should be the same as in step 5 but with opposite sign.
- 10)

- 11) Position system at the 7:30 clock position, press .
- 12) Adjust screen values to zero (0 0)
- 13) Move in opposite direction from the signs and arrows shown on the display (and in the direction Optalign suggested in step 5). Continue moving until the number shown in the display is close to 000.0.
- 14) Recheck alignment and repeat steps 4 to 13 as necessary.

### Alternative Procedure

Follow steps 1 through 7 from Move at 7:30 Procedure then:

- 8) Press , , , then enter the following:
  - HF (from step 5) × 2,
  - HB (from step 5) × 2,
- 9) Press
- 10) Position system at the 7:30 clock position, press .
- 11) Zero coordinates (0 0),
- 12) Move in opposite direction from that shown on the Optalign screen. Values should approach 000.0.

VO = Vertical Offset  
 HO = Horizontal Offset  
 VA = Vertical Angularity  
 HA = Horizontal Angularity

VF = Front Foot shimming  
 VB = Back Foot shimming  
 HF = Front Foot Move  
 HB = Back Foot Move

13) Press **F**, **4**, **ENT**, **ENT**, then enter the following:

**0**, **ENT**, **0**, **ENT**

14) Recheck alignment. Repeat steps 1 through 14 as necessary.

### Example:

System RPM = 1800

After taking alignment readings in the regular way we obtain the following results:

VF = 1.0	VB = 1.0
HF = -8.0	HB = -33.5
VO = -1.0	HO = -4.5
VA = 0	HA = -36

Feet corrections show both front and back must be moved toward **9** o'clock (negative correction). Retake alignment readings in at least 3 clock positions as follows:

<u>Position</u>	<u>Keystrokes</u>
-----------------	-------------------

12:00	<b>M, 6, ENT</b>
-------	------------------

3:00	<b>M, 9, ENT</b>
------	------------------

6:00	<b>M, 0, ENT</b>
------	------------------

9:00	<b>M, 3, ENT</b>
------	------------------

Results

VF = -0.5	VB = -1.0
-----------	-----------

HF = 7.5	HB = 33.0
----------	-----------

Press **MOVE**, set system at **7:30** clock position **ENT**, (0 0) **ENT**.

Slide MTBM toward **9** o'clock. Numbers on the screen *will decrease* toward 000.0.

### Alternative Example:

System RPM = 1800

After taking alignment readings in the regular way we obtain the following results:

VF = 1.0	VB = 1.0
HF = -8.0	HB = -33.5
VO = -1.0	HO = -4.5
VA = 0	HA = -36

Enter thermal growth as follows: **F, 4, ENT, ENT, -16, ENT, -67, ENT**.

Press **MOVE**, set system at **7:30** clock position **ENT**. Zero coordinates (0 0) **ENT**.

Optalign will display:

HF = 16	HB = 67
---------	---------

Move in opposite direction from that shown on the Optalign screen.

Values will approach 000.0.