



1425 N.W. 88th Avenue, Miami, FL 33172  
 Phone: (305) 591-8935 • Fax (305) 591-1537  
 info@ludeca.com • www.ludeca.com

**Voelzow & Company, Inc.**

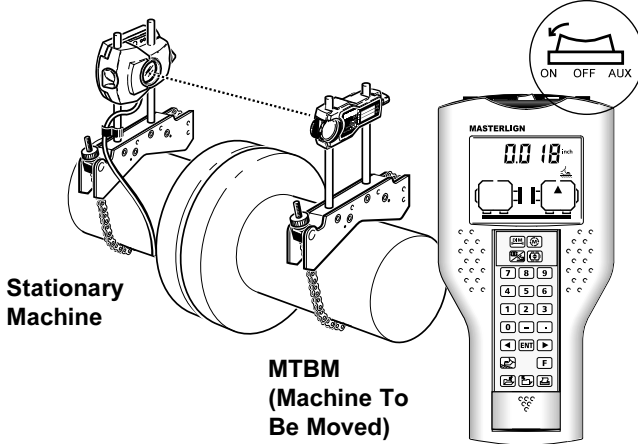
P.O. Box 158 • Wingate, NC 28174  
 704-233-9222 • Fax 704-233-9211  
 E-mail: nvoelzow@perigee.net  
 Web: www.LaserAlignment.net

# MASTERLIGN®

## Alignment of horizontal machines

File No. \_\_\_\_\_ Machine No. Type \_\_\_\_\_ Operator \_\_\_\_\_ Date \_\_\_\_\_

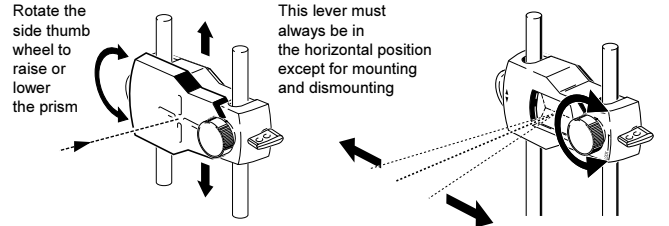
### 1. Mount MASTERLIGN® and switch on



**Resume:** You can resume where you last left off by pressing **[F]** **[ENT]**.

### 3. Measure

- Adjust prism so that laser beam strikes center of the prism cap cross hair.

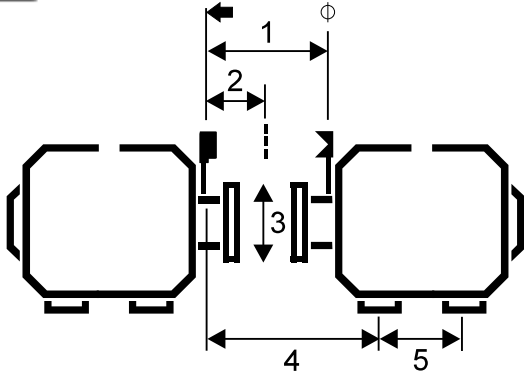


- Remove cap.
- Adjust prism until coordinates are close to 00.
- TURN will appear on the screen.
- Rotate shafts at least 75°.

- If *End* or *off* appear during rotation, turn shafts back until numbers reappear. (*InfiniRange*® then starts automatically.)
- Adjust beam close to 00 and press **[ENT]**.
- Proceed with measurement.

Note: You may initiate *InfiniRange* manually at any time by pressing **[F]** **[6]**. **Go to Step 4a or 4b**

### 2. Enter dimensions

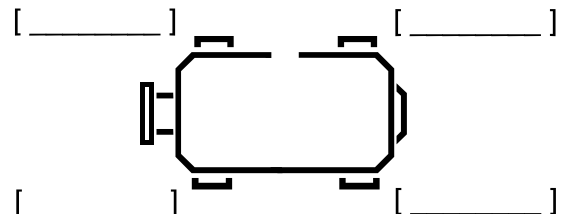


- 1. Laser to prism \_\_\_\_\_ **[ENT]**  
 (Arrow point to hash mark "φ" on prism)  
 (Center-to-center of support posts)
- 2. Laser to center of coupling \_\_\_\_\_ **[ENT]**  
 (Center of flex planes)
- 3. Working diameter \_\_\_\_\_ **10"** **[ENT]**  
 (Coupling diameter) (Default value)
- 4. Laser to front foot \_\_\_\_\_ **[ENT]**
- 5. Front foot to back foot \_\_\_\_\_ **[ENT]**

### Soft Foot

- Position shafts at either 90° or 270° (±4°).
- Adjust beam close to 00 if necessary. Press **[ENT]**. (Not necessary if "----" appears.)
- Press **[0]** then loosen the bolt, press **[ENT]** to record value then tighten bolt.
- Press **[←]** or **[→]** to move to the next foot.

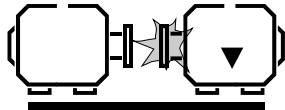
Follow this procedure for all remaining feet and correct soft foot if greater than 0.002".





### 4a. Coupling Results

#### Vertical Offset



(+) (-)

1. \_\_\_\_\_

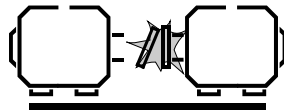
2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

#### Vertical Gap



(+) (-)

\_\_\_\_\_

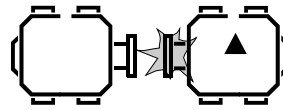
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Horizontal Offset



(+) (-)

\_\_\_\_\_

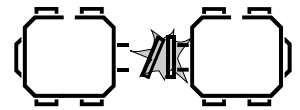
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Horizontal Gap



(+) (-)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

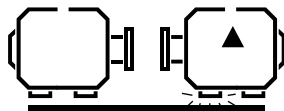
\_\_\_\_\_

\_\_\_\_\_



### 4b. Foot Corrections

#### Front Foot Shim



(+) add shims (-) remove shims

1. \_\_\_\_\_

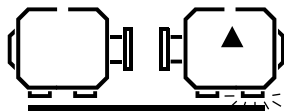
2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

#### Back Foot Shim



(+) add shims (-) remove shims

\_\_\_\_\_

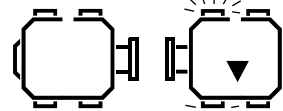
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Front Foot Move



(+) toward 3 o'clock (-) toward 9 o'clock

\_\_\_\_\_

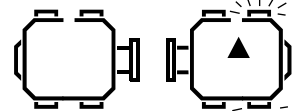
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Back Foot Move



(+) toward 3 o'clock (-) toward 9 o'clock

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



### 5. Move

- Rotate shafts until 45° appears (±4°).
- Adjust beam close to if necessary.
- When Enter appears press .
- Loosen bolts.
- Move machine horizontally into alignment.
- Retighten bolts.

### Tolerances for Shaft Alignment

RPM	Offset (mils)		Gap (mils/10")		Spacer Shaft (mils/inch)	
	Excellent	Acceptable	Excellent	Acceptable	Excellent	Acceptable
600	5.0	9.0	10.0	15.0	1.8	3.0
900	3.0	6.0	7.0	10.0	1.2	2.0
1200	2.5	4.0	5.0	8.0	0.9	1.5
1800	2.0	3.0	3.0	5.0	0.6	1.0
3600	1.0	1.5	2.0	3.0	0.3	0.5
7200	0.5	1.0	1.0	2.0	0.2	0.3

All Speeds: Maximum Soft Foot Reading 2 mils.  
Use OEM or in-house tolerances if available.