



Soft Foot

- Position shafts at either 90° or 270° (±4°).
 - Adjust beam close to $\square\square$ 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".



InfiniRange® (Measurement Range Extension)

- If *End* or *oFF* appear during rotation, turn shafts back until numbers reappear. (*InfiniRange* then starts automatically.)
- Adjust beam close to $\square\square$ and press **ENT**.
- Proceed with measurement.

Note: You may initiate *InfiniRange* manually at any time by pressing **F 6**.



'Results' Default

- Factory default is Coupling Results.
- Press **▶** to toggle between $\square\square$ and .
- Press **ENT** to confirm selection.

Storing and Printing Data

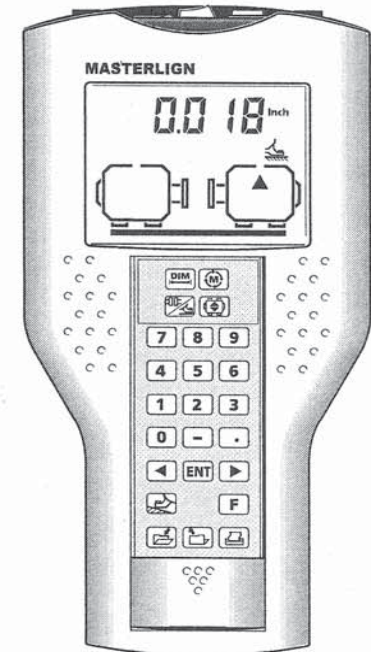
- Saves file
- Opens file
- Prints a report

Visit us at: www.LaserAlignment.Net

MASTERLIGN®

Quick Reference

Version 1.1x



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

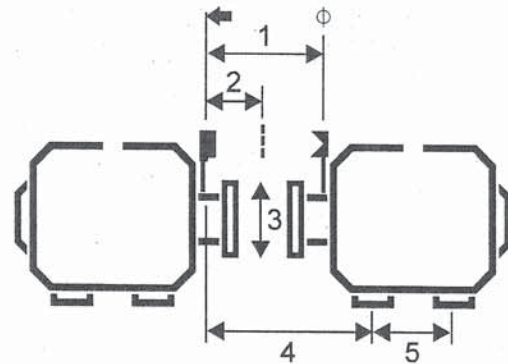
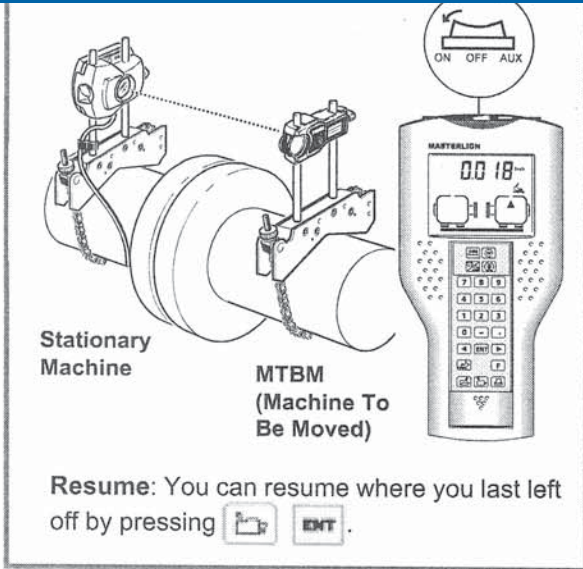
LUDECA, Inc.

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



Advanced Test Equipment Rentals

www.atecorp.com 800-404-ATEC (2832)



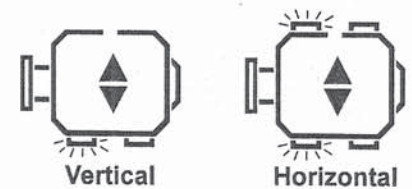
- 1. Laser to prism (Arrow point to hash mark "φ" on prism) (Center-to-center of support posts)
- 2. Laser to center of coupling (Center of flex planes)
- 3. Working diameter **10"** (Coupling diameter) (Default value)
- 4. Laser to front foot
- 5. Front foot to back foot

Coupling Results

- Press until appears. Press **ENT** or or to toggle through offset and angular misalignment.
 - (+) Positive coupling offset
 - (-) Negative coupling offset
 - (+) Positive coupling gap
 - (-) Negative coupling gap
- Repeat sections 3 and 4 to establish repeatability.

Foot Corrections

- Press until appears. Press **ENT** or or to toggle through vertical shimming and horizontal move corrections.



Arrows show direction of move or shimming. Apply correction to blinking foot.

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.



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°.



5. Move

- Rotate shafts until 45° appears (±4°)
- Adjust beam close to 00 if necessary.
- When *Enter* appears press **ENT**.
- Loosen bolts.
- Move machine horizontally into alignment.
- Retighten bolts.
- Repeat Sections 3 and 4.

Order No. 01-199-01

©1999 LUDECA, INC. Masterlign and InfiniRange are registered trademarks of Prueftechnik AG.



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

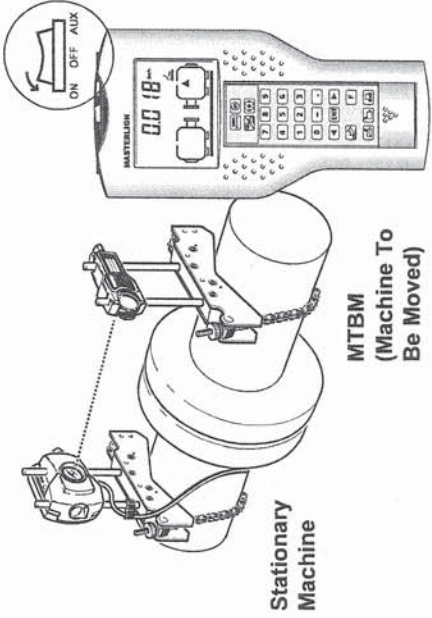
MASTER
Alignment of horizontal

File No. _____ Machine No. Type _____

Operator _____

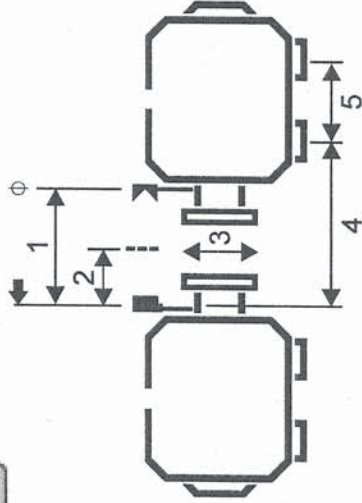
Date _____

1. Mount MASTERALIGN® and switch on



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

2. Enter dimensions

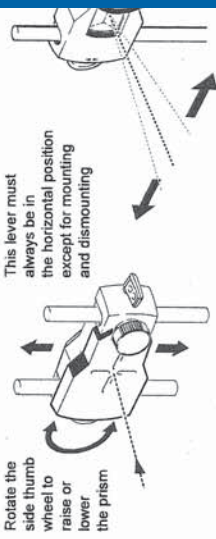


- 1. Laser to prism
 (Arrow point to hash mark "φ" on prism)
 (Center-to-center of support posts) **[ENT]** _____
- 2. Laser to center of coupling
 (Center of flex planes) **[ENT]** _____
- 3. Working diameter
 (Coupling diameter) **[ENT]** 10"
 (Default value)
- 4. Laser to front foot **[ENT]** _____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



3. Measure

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



- Remove cap.
- Adjust prism until coordinates are close to 0000.
- *E* *U* *R* *N* will appear on the screen.
- Rotate shafts at least 75°.

- If *E* *n* *d* or *a* *F* *F* appear during rotation, turn back until numbers reappear. (*InfiniRange* starts automatically.)

- Adjust beam close to 0000 and press **[ENT]**.
- Proceed with measurement.

Note: You may initiate *InfiniRange* manually at any time by pressing **[F 6]**.

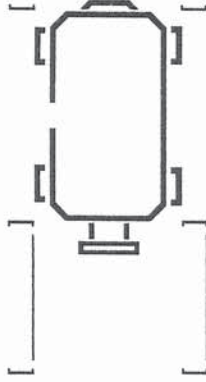
Go to Step _____



Soft Foot

- Position shafts at either 90° or 270° (±4°).
- Adjust beam close to 0000 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 continue until all feet are within 0.002".



Advanced Test Equipment Rentals
www.atecorp.com 800-404-ATEC (2832)

4a. Coupling Results



Vertical Offset	Vertical Gap	Horizontal Offset	Horizontal
(+) (-) (0)	(+) (-) (0)	(+) (-) (0)	(+) (-) (0)
1. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

4b. Foot Corrections



Front Foot Shim	Back Foot Shim	Front Foot Move	Back Foot Move
(+) (-) (0)	(+) (-) (0)	(+) (-) (0)	(+) (-) (0)
1. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



5. Move

- Rotate shafts until 45° appears ($\pm 4^\circ$).
- Adjust beam close to 00 if necessary.
- When ENT appears press ENT.
- 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.