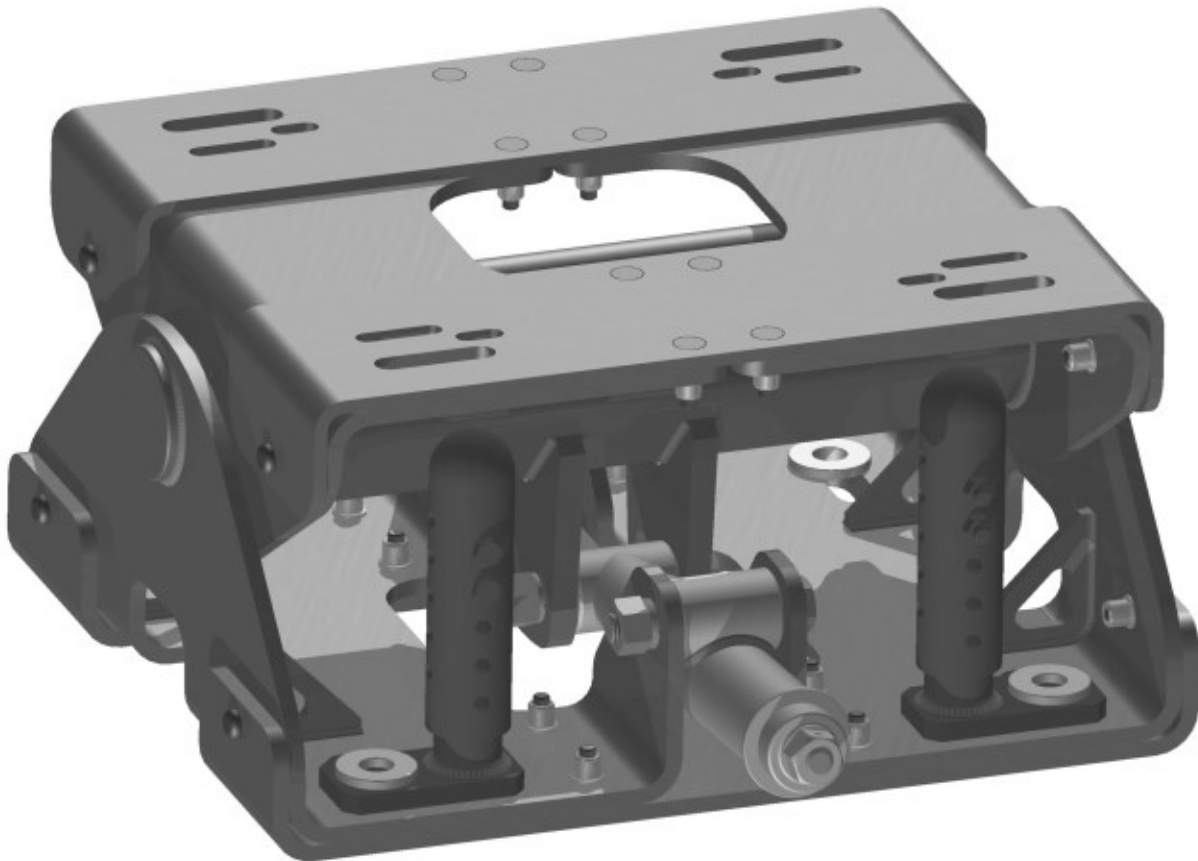


**RCM L100 /T100
COMPENSATING MOTOR BASE
MANUAL**



IMPORTANT

**READ ENTIRE INSTALLATION GUIDE BEFORE
BEGINNING WORK.**

INSTALLATION GUIDE

RCM L100 / T100 MOTOR BASE

Table of Contents

<u>Description</u>	<u>Page</u>
1. Important Pre-Installation Information	3
2. Assembly	4
3. Repair Parts List	5
4. Motorbase Mounting / Installation	6
5. Changing Belts	8

IMPORTANT PRE-INSTALLATION INFORMATION

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Installation and Service should only be performed by qualified personnel.

All owner/employer safety rules must be strictly followed when working on this equipment. Please read and become familiar to this entire installation guide before beginning any work. Before working on equipment, turn off and lock out/tag out energy source and bleed off all stored energy sources.

If equipment will be installed in an enclosed area, gas levels and/or dust content must be tested before using a cutting torch or welding equipment. The use of a cutting torch or welding equipment in an area with gas or dust may cause an explosion.

Attempting to lift equipment alone could result in serious injury. Components are heavy and require multiple persons or a hoist to lift.

Failure to remove tools from the installation area before turning on the energy source can cause serious injury to personnel.

LOVEJOY, INC. hereby disclaims any liability for injuries or damage resulting from use or application of this product contrary to the instructions and specifications contained herein. The instructions that appear in this installation guide cannot cover every condition or situation that may occur in the field. Please consult Lovejoy for conditions or situations not addressed in this manual.

MATERIALS REQUIRED: Only standard hand tools are required to adjust the tension of this motor base. Only use a ratcheting type wrench by hand.

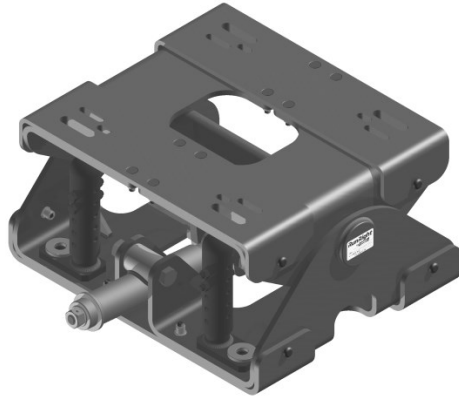
DO NOT USE AN IMPACT WRENCH. The use of an impact wrench will permanently damage the adjusting unit.

Recommended Adjusting Tool:

1x—Ratchet wrench with 1-13/16" (46mm) socket

Please note, Lovejoy, Inc. recommends bolting, rather than welding, for easier accessibility and maintenance. Excessive heat will affect or destroy the rubber or polymer elements. The use of UNC Grade 5 or Metric Grade 8.8 bolts or better are recommended.

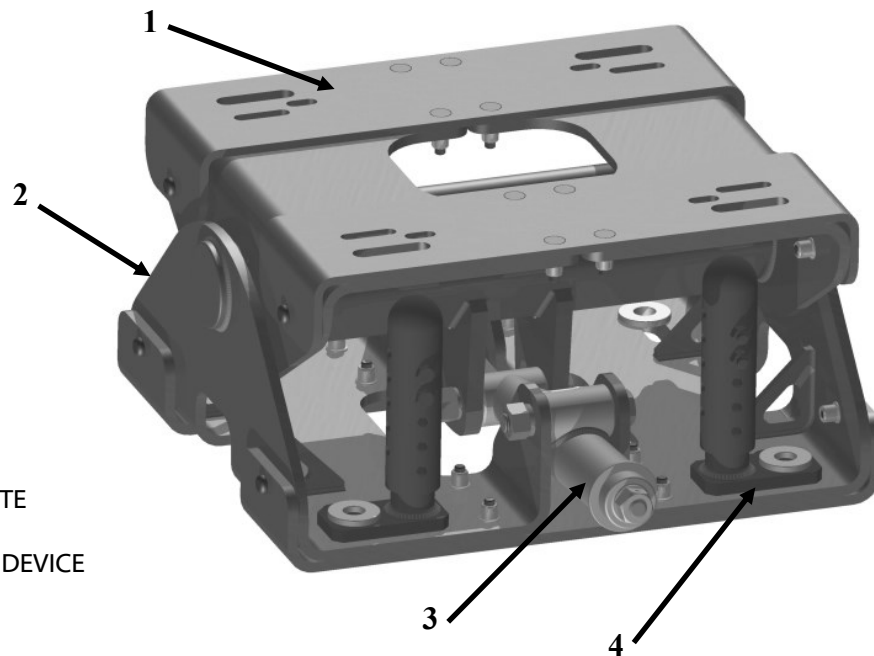
2. ASSEMBLY



MOTOR BASE
TYPE RCM L100

Motor base arrives completely assembled and ready to install.

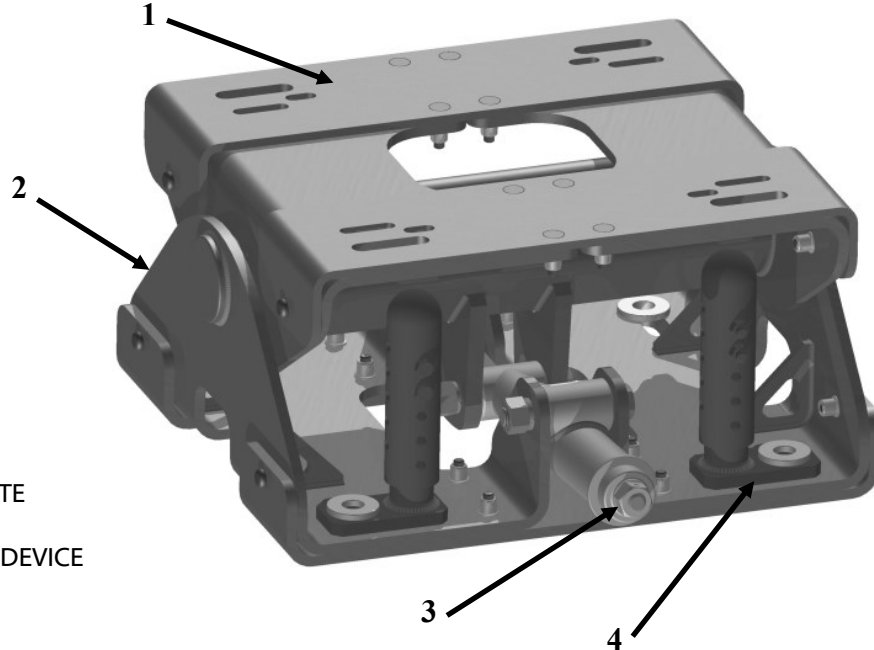
Safety Stops are attached during installation.



1. MOTOR TOP PLATE
2. SIDE SUPPORTS
3. PRETENSIONING DEVICE
4. SAFETY STOPS

* If additional travel is required for the Motor Top Plate, the pretensioning device (3) may be bolted onto the 2nd set of holes of the pretensioning plates attached to the rubber suspension elements.

3. REPAIR PARTS



- 1. MOTOR TOP PLATE
- 2. SIDE SUPPORTS
- 3. PRETENSIONING DEVICE
- 4. SAFETY STOPS

The only parts that are field serviceable on the RCM L100 Motor Bases are the Pretensioning Assemblies (3) , and the Safety Stop Assemblies (4), as shown above .

- #3 TD100 ADJUSTER ASSEMBLY — ORDER UPC #68514486048
- #4 RCM L100 SAFETY STOP DEVICE — ORDER UPC #68514483477

Entire motor base assembly must be returned to the Lovejoy Factory for any other service.

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Extreme Caution must be used when replacing the TD100 Adjuster Assembly. Remove all tension from the belt drive before attempting to remove the tensioner(s).

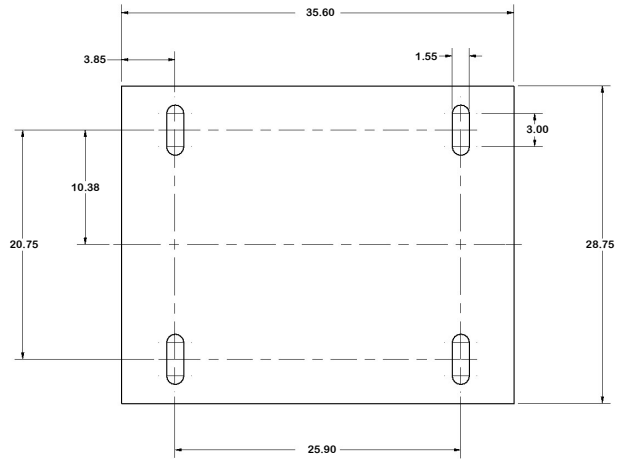
With the Adjuster Assembly removed, THERE IS NOTHING preventing the motor base top plate & motor from pivoting, possibly causing serious injury.

Take appropriate steps (wooden blocks or jack stands) to ensure that the motor base top plate cannot pivot (tilt) while changing the tensioners.

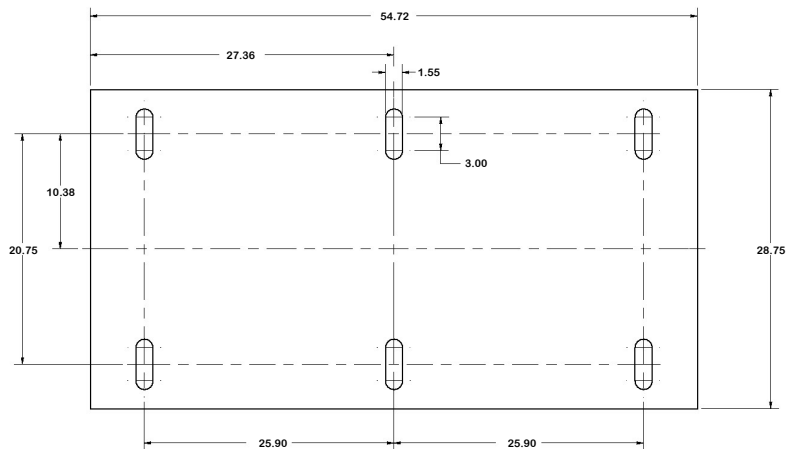
4. MOTOR BASE MOUNTING / INSTALLATION DATA

A) MOTOR BASE FOOT PRINT

RCM L100



RCM T100



4. MOTOR BASE MOUNTING / INSTALLATION DATA

B) INSTALLATION

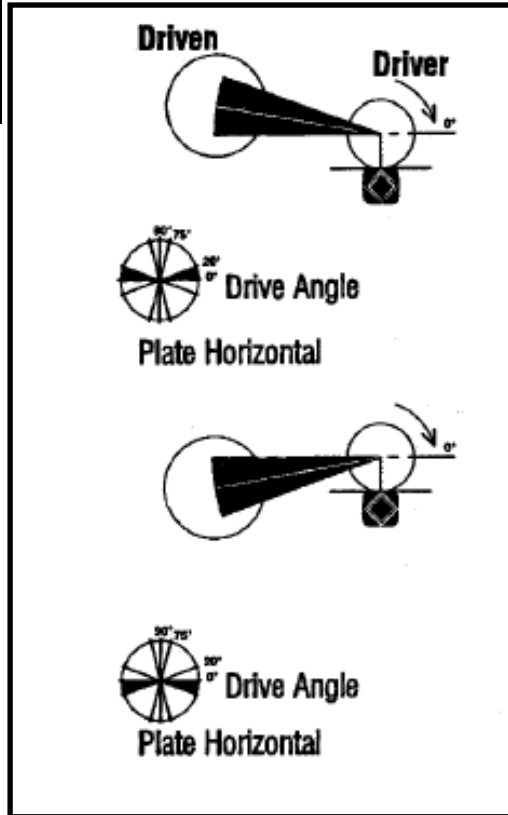
⚠ WARNING
Failure to observe the following warnings could create a risk of death or serious injury.

Follow all appropriate Lock-Out/Tag-Out procedures.

It is recommended that the belt guards be installed before making the test run.

1. Determine proper mounting positions.
2. RCM L100 Bases come standard with **“Center Mounted”** holes provided in the top plate. If an **“Offset Mount”** is required, consult factory.
3. Bolt (DO NOT WELD) the motor base to a sufficient machine frame or foundation. The Safety Stops (#4) are installed using 2 of the motor base mounting bolts.
4. Bolt motor onto the Top Plate (#1) of the motor base using the motor manufacturers recommended bolt size.
5. Align the pulleys using a straight edge.
6. Turn the Adjusting Bolt(s) (#3) on the TD100 Adjuster, tilting the Top Plate/Motor toward the driven pulley allowing easy installation of the belts. Place the belts on the pulley.
7. With the belts in place, turn the Adjusting Bolt(s) (#3) tilting the Top Plate/Motor away from the driven pulley until the belts begin to see tension.
8. Double check setup and configuration for proper alignment.
9. Continue turning Adjusting Bolt(s) (#3) until proper belt tension as recommended by the belt manufacturer has been achieved.
10. Adjust the height of the Safety Stops (#4) to within 2” of touching the Top Motor Plate.
11. Make a test run for at least 2 minutes to ensure all is operating properly. It is recommended that the belt guards be installed before making the test run.
12. Remove power from the drive and re-install any and all belt and/or machine guards that were not previously installed before the test run.

Typical Mounting Positions



5. CHANGING BELTS

⚠ WARNING

Failure to observe the following warnings could create a risk of death or serious injury.

Follow all appropriate Lock-Out/Tag-Out procedures.

DO NOT REMOVE OLD BELTS BY CUTTING THEM.

It is recommended that the belt guards be installed before making the test run.

- 1) Shut down drive and lockout the power source.
- 2) Remove belt guards
- 3) Make a note of the pretension angle shown on the deflection decal or mark current angle with a paint pen. This will give you a preliminary target tension when installing the new belts.
- 4) Using 46mm (1-13/16") socket wrench, back off the adjusting screw(s) until all tension is removed from the belts. Continue backing off the adjusting screw(s), tilting the motor towards the driven equipment, allowing for the safe removal of the old belts.
- 5) Install new belts
- 6) Using the 46mm (1-13/16") socket wrench(s), turn the adjusting screw(s) until the tension begins to be applied to the belts.
- 7) Double check pulley alignment. The motor base should not require any realignment of the drive pulleys.
- 8) Continue turning adjusting screw(s) until the the angle indicator (s) are have returned to the previously painted reference mark.
- 9) Install belt guards. Make a brief 5 minute test run of drive.
- 10) Check belt test force as recommended by the belt supplier. Readjust tension as required to achieve recommended test force.
- 11) Re-Install all belt guards.
- 12) Remove lockout from power source.
- 13) Return drive to service.