DISCONNECTING THE UNI-BAND (MAIN SPRING)

IMPORTANT: NEVER STAND IN FRONT OF A TRAP MACHINE. THE TRAP MACHINE MUST BE TURNED OFF AND THE SPRING RELEASED BEFORE ENTERING THE TRAP HOUSE. NEVER ATTEMPT TO MAKE ANY ADJUSTMENT WHEN THE THROW ARM IS COCKED.

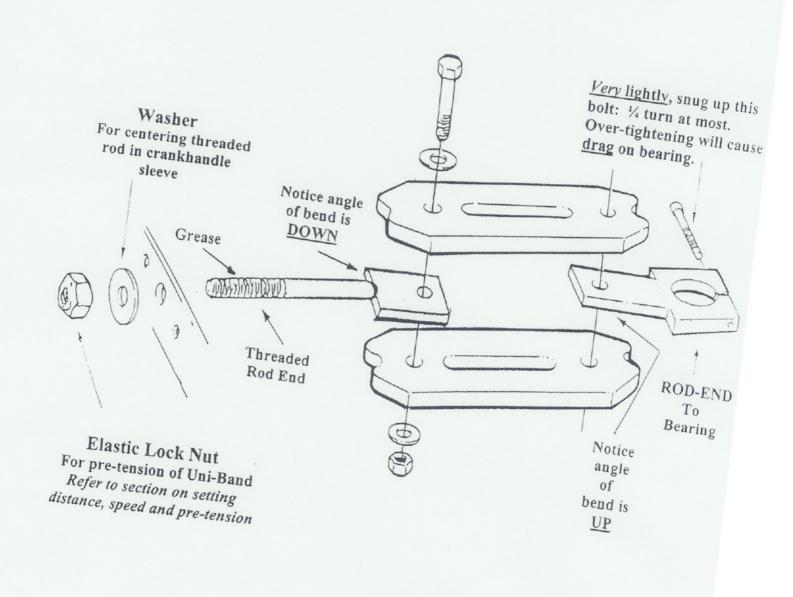
If your machine is a "G" series without a main shaft clutch system then follow these directions:

- 1. Release the throw arm and turn off the machine.
- 2. Reduce the main spring tension (unwind the crank handle).
- 3. You can now loosen the set screw on the connecting block of the Uni-Band. Pull back and down on the Uni-Band to remove it from the bearing. See Diagram 28. (If there is a high amount of pre-tension on the Uni-Band, you can create some slack by loosening the elastic lock-nut.)
- 4. The throw arm can now be freely moved around the throw plate.
- 5. Refer to diagrams 21 and 28, respectively, for re-assembly directions.

NOTE: When disconnecting the Uni-Bands from a main shaft clutch system please refer to that section.

ASSEMBLY/INSTALLATION OF THE UNI-BAND (Main Spring)

TOP



(Diagram 28)

INSTALLATION OF MAIN SHAFT CLUTCH

- 1. Release the throw arm and turn off the machine.
- 2. Move the throw arm so that it is 6 3/4" from the right hand corner of the throw plate. See Diagram 61.
- 3. Clamp a vise-grip onto the throw plate with the throw arm at 6 3/4" to prevent the throw arm from moving forward.
- 4. See Diagram 62. Do not loosen the throw arm crank bolt.
- 5. Remove the crank handle, the crank handle stand-off collar, the elastic lock-nut and the 7/16" washer. Completely remove the existing Uni-Band assembly from the machine by loosening the rod-end bolt (5/32" hex head wrench). See Diagram 28. Pull down on the rod-end to remove. Remove the small (1 9/16" OD) bearing and the two washers from the bottom of the throw arm crank.
- 6. Remove the clutch from the rod-end of the new Uni-Band assembly. Align the keyed bushing with the throw arm crank and use the included 3/8 24 x 1½" Grade 8 bolt and one washer to fasten it. See Diagram 60. Hold back on the throw arm and torque the bolt to 35 ft/lbs. minimum -- 40 ft/lbs maximum.
- 7. Put the threaded rod-end through the hole in the frame, then pull the rod-end onto the clutch. Refer to Diagram 60 for proper positioning of the clutch within the rod-end (note 1/16" gap). Lightly snug up the rod-end to the clutch using a 5/32" hex head wrench, while keeping the rod-end level to the clutch.
- 8. Put the 7/16" washer onto the threaded rod-end. Then screw on the elastic lock-nut. Refer to the section in the manual on Setting Distance and Speed, regarding spring tension and adjustment of the elastic lock-nut. Once the proper distance and speed have been set, re-attach the crank handle, stand-off collar and the crank handle.
- 9. Remove the vise grip from the throw plate.
- 10. Inspect the hydraulic hoses to make sure that the rod-end does not rub against them.

WARNING: Do not work on the hoses when the throw arm is cocked. The throw arm must be released and the machine turned off when performing any work on the Pat-Trap®.

11. Begin normal operation of the machine.

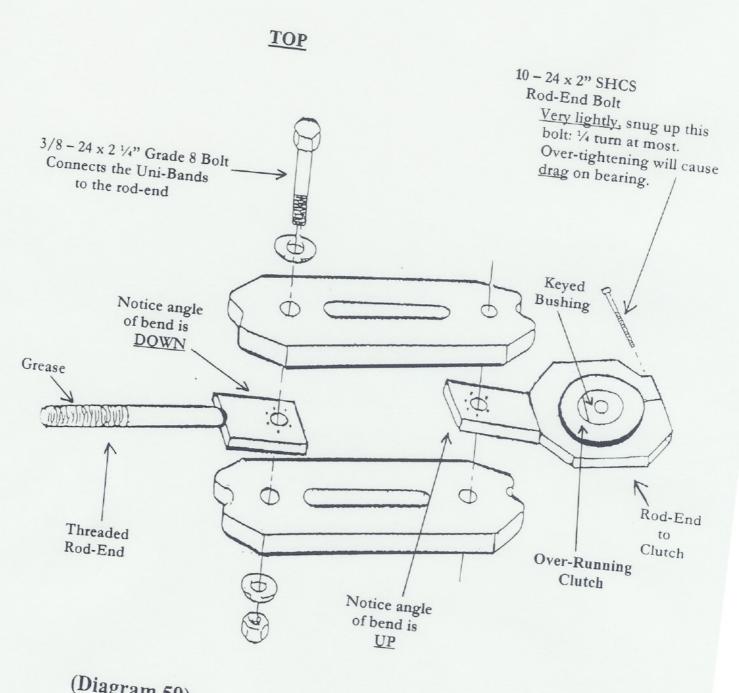
CHANGING A PAIR OF UNI-BANDS ON A MAIN SHAFT CLUTCH SYSTEM

- 1. Let off the crank handle tension.
- 2. Turn the machine on to cock the throw arm.
- 3. When the throw arm stops at the throw arm brake, turn the machine off without releasing the throw arm.
- 4. WHEN THE THROW ARM IS COCKED, BE SURE TO STAND BEHIND THE TRAP AND STAY CLEAR OF THE THROW ARM. To completely release the tension on the throw arm carefully, manually, release the throw arm by first looping a rope or cord around the end of the throw arm. Then, holding back on the rope at 90 degrees to the throw arm, slowly move the throw arm past the brake and guide it around to the front of the machine.
- 5. Move the throw arm so that it is 6 3/4" from the right hand corner of the throw plate. See Diagram 61
- 6. Clamp a vise-grip onto the throw plate with the throw arm at 6 3/4" to prevent the throw arm from moving forward.
- 7. See Diagram 62. Do not loosen the throw arm crank bolt.
- 8. Changing the Uni-Bands can be done without removing the threaded rod-end from the machine.
- 9. Remove the Uni-Band connecting bolts. Disconnect the rod-end from the clutch by loosening the rod-end bolt using a 5/32" hex head wrench; pull down on the rod-end to remove it. See Diagrams 59, 60 and 61
- 10. When re-assembling with the new pair of Uni-Bands, leave the 3/8 -24 x2 1/4" Grade 8 bolts slightly loose at first. Then, pull the rod-end onto the clutch. Refer to Diagram 60 for proper positioning of the clutch within the rod-end (note 1/16" gap). Lightly snug up the rod-end bolt using a 5/32" hex head wrench. Keep the rod-end level on the clutch. Refer to Diagram 59 for right side up.

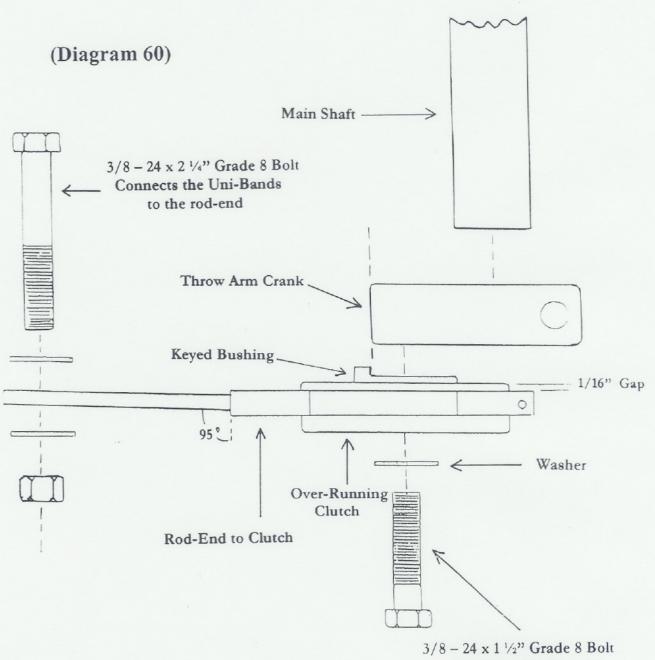
Align the Uni-Bands as follows: See diagrams 59, 60 and 61

- A. Keep the clamp in front of the throw arm at 6 3/4" (Step 2)
- B. With the rod-ends and Uni-Bands in alignment to one another, torque the bolts to 10 ft/lbs.
- C. Tension the Uni-Bands with ten turns of the crank handle.
- D. Use two 9/16" wrenches. Hold back on the bolt head (on top) while tightening the nut (on bottom)
- E. Put equal pressure on both of the wrenches and torque the bolts to 35 ft/lbs minimum 40 ft/lbs maximum
- 11. Remove the vise grip from the throw plate.
- 12. Refer to the section on Setting Distance and Speed, regarding minimum spring tension and adjustment of the elastic lock-nut.
- 13. Begin normal operation of the machine.

ASSEMBLY/INSTALLATION UNI-BAND (Main Spring) to the MAIN SHAFT CLUTCH



(Diagram 59)



Connects clutch to the throw arm crank

Torque to 35 ft/lbs – 40 ft/lbs maximum

DO NOT LOOSEN or REMOVE

Throw arm crank

(Back view)