

# WEATHERS

**Division of TelePro Industries, Inc.**

Cherry Hill Industrial Center  
Cherry Hill, New Jersey 08034

*the Townsend*

# Instructions Are Important

Please Read Carefully!



## 1. UNPACKING

A. It is possible that you will be shipping or transporting your turntable at one time or another. We *strongly* recommend that you take careful notice of how it is packed so you'll be able to repack it in the same manner.

B. Remove the turntable from the carton and place it near its ultimate location. Remove the packing material from the turntable and slip off the plastic bag.

C. Remove the turntable platter and lay it aside (upside down) carefully. Take off the platter support packing pieces.

D. Remove *COMPLETELY* the 3 *RED* shipping screws from the aluminum top plate — place the screws in the carton for future repacking.

E. Make sure that the left side of the on/off rocker switch in the Weathers nameplate (at the front right-hand corner of the aluminum top plate) is depressed. This will retract the drive wheel and allow you to replace the turntable platter into the spindle housing. Slip the platter spindle into the housing *CAREFULLY*.

## 2. CARTRIDGE INSTALLATION

A. If you have purchased your turntable with the Weathers LDM cartridge, it is already installed and you can disregard further instructions under this topic.

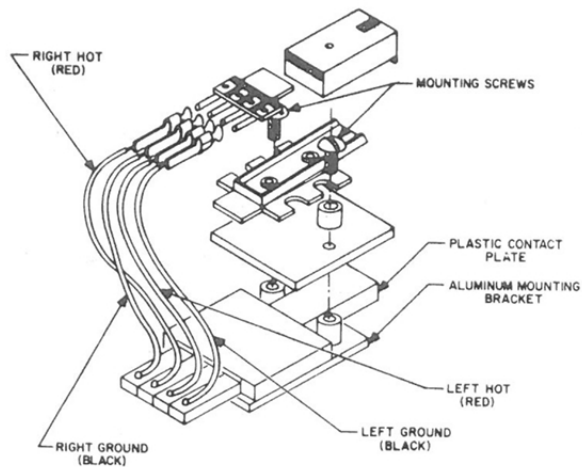


FIG. 1

B. All other cartridges can be installed by following our instructions in conjunction with the instructions supplied by the specific cartridge manufacturer.

C. The cartridge mounting bracket supplied by us has standard mounting centers and various lengths of screws and spacers for the different thicknesses of individual cartridges.

D. Remove the cartridge mounting bracket from the tone-arm by unscrewing the decorative nut on top of the tone-arm.

E. Select the screw which allows the threads to go completely thru the cartridge and at least  $\frac{1}{2}$  way thru the threaded aluminum mounting bracket. **DO NOT SELECT A SCREW WHICH WILL GO COMPLETELY THRU THE BRACKET.** This will interfere with the contacts on the bracket which mate with the printed circuit board on the underside of the tone-arm.

F. The female pin plugs can now be plugged onto the male cartridge pins. The red wires are hot and the black are ground. Refer to figure #1 for properly connecting right and left channels.

G. The position of the stylus for proper overhang is important. To adjust for *your* specific cartridge, slightly loosen the small hexagon nut on the mounting bracket. Move the cartridge and bracket until the stylus is exactly  $\frac{1}{8}$ " in from the end of the plastic contact plate, as shown in figure #2. Tighten the hexagon nut.

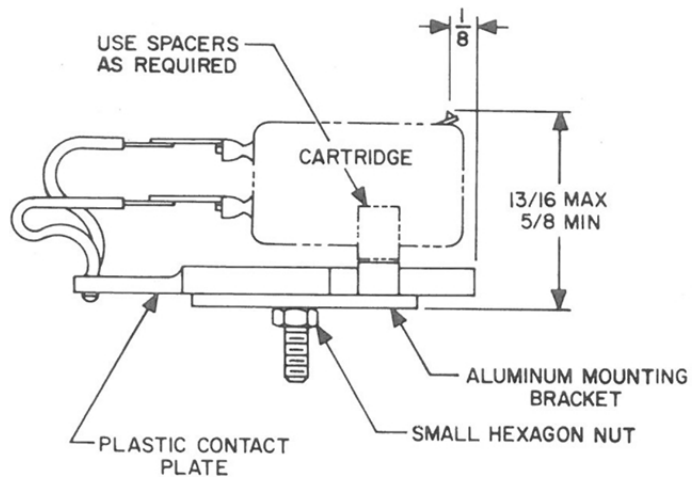


FIG. 2

H. The knob at the extreme rear of the tone-arm is for adjusting the stylus pressure. *Clockwise* rotation of this knob will *decrease* stylus pressure. *Counter-clockwise* rotation will *increase* stylus pressure. A stylus pressure gauge is necessary for measuring the *exact* pressure prescribed for specific cartridges. The Weathers top-rated stylus pressure gauge is available from your Hi-Fi Dealer.

### 3. CONNECTION

A. Attach the alligator clip (at the end of the output cables) to any convenient ground lug or chassis screw on your preamp-amplifier chassis.

B. Plug the output cables into the phono (MAG) input of the preamplifier or where specified by the cartridge manufacturer.

C. For the Weathers LDM cartridge, plug the output cables into the equalizers supplied, and plug the equalizers into the phono (MAG) input of the preamplifier. Where there is a choice between low and high level PHONO or MAG inputs, use the low level. Check your "Instruction Book" for your preamplifier. If the PHONO input is described as a "ceramic" or "hi-level," **DO NOT USE WITH THE WEATHERS LDM CARTRIDGE.** If it is indicated as a "lo-level" or "MAG" (Magnetic) input, it is okay to use. Red is the right channel and white is the left channel.

D. Plug the AC cord into any convenient AC outlet.

#### 4. OPERATION

A. To start the turntable, depress the *right*-hand side of the fingertip rocker switch in the Weathers nameplate (at the front right-hand corner of the aluminum top plate.) To stop the turntable, depress the other side of the rocker switch.

#### 5. SERVICE

A. The design simplicity of your new turntable will be beneficial to you when making minor adjustments.

B. Removal of the bottom cover from the turntable will reveal an AC interlock provided for your protection.

C. The tone-arm, turntable platter and drive motor are mounted to a Delta shaped unit via 3 bolts thru conical springs which constitute the suspension system. The conical springs are damped with soft rubber and adjustable by means of wing nuts. *Clockwise* rotation of these wing nuts will *raise* the tone-arm, platter and drive motor. *Counter-clockwise* rotation will *lower* same. The suspension system is adjusted at the factory and should not require re-adjustment.

D. The on/off switch is connected to the motor mounting bracket via a wire linkage. This linkage will engage the motor drive wheel in the ON position and disengage the motor drive wheel in the OFF position.

E. The motor drive wheel requires no adjustment since it is spring loaded and the amount of contact (pressure) on the turntable rim is determined by the tension of the spring. This spring should not be tampered with.

F. The tone-arm leads and the output cables are connected to a terminal board and a hum shield covers this terminal board.

G. A pronounced rise and fall of the edge of the turntable platter, occurring once per revolution, indicates a bent platter. Slight variations in the height of the platter's rim may give an exaggerated impression of the actual degree of rise and fall that is present, so the extent of the "wobble" should be determined at the upper edge of the platter. A small amount of slow rise and fall will not affect the unit's performance, but if it is felt that the wobble is excessive, remove the foam discusion which will expose 3 counter-sunk flat head screws near the center spindle. Allow the platter to turn in order to sight the high or rising side of the platter. Tighten the screw in line with this side and loosen the screws opposite. Careful adjustment of these 3 screws will allow you to bring the rise and fall to a reasonable tolerance.

H. Should your turntable require service which can't be accomplished by minor adjustments, write to TelePro Industries, Incorporated, Cherry Hill Industrial Center, Cherry Hill, New Jersey 08034. Instructions will be forwarded to you regarding proper procedure for having your turntable serviced by the factory or by a factory-authorized service station.

## 6. DESCRIPTION

Your Weathers turntable drive motor is a 600-RPM unit which requires a 60-cycle AC supply with a line voltage of between 70 and 125 volts.

Drive torque is transmitted directly from the motor shaft to the inside rim of the platter, via a soft rubber drive wheel whose size and contact pressure determines the unit's running speed. The simplicity of this drive system eliminates the intermediate idlers, belts and gears that are a source of noise and speed variation in many conventional turntables.

The 600-RPM speed of the motor means that, regardless of the turntable's running speed, any vibration from the motor will occur at 10 cycles per second, which is inaudible as well as being below the reproducing range of audio components. Careful control of manufacturing tolerance holds this 10 cycle rumble well below (-50 db) the point where it can cause disturbances in the associated amplifying equipment while higher-pitched rumble is nil due to the platter's friction-less ball and Delrin bearing system.

Although the aluminum platter is unusually light in comparison with typical high-quality turntables, its weight is many times that of the small rotating member in the drive motor. So the platter actually does a better job of filtering out motor speed variations than does a much heavier platter driven by a large motor with a heavy rotor assembly.

The unit's light weight permits it to be suspended on 3 light conical springs, which set the entire turntable assembly's natural vibrating frequency at around 5 cycles. This effectively isolates the turntable and tone-arm from any external source of vibration that might otherwise cause acoustic feedback or groove jumping. The spring suspension is lightly damped with soft rubber pads to inhibit sustained oscillation of the turntable when jarred.

Physical stalling of the turntable's platter will not damage anything; in fact, the unit is designed to take this kind of treatment.

## REPLACEMENT PARTS LIST

### TONE ARM AND ASSOCIATED PARTS

<i>Part No.</i>	<i>Description</i>
82-137	Tone Arm—Wood
82-123	Printed Circuit Board
82-158	Cushion-Printed Circuit Board
82-147	Knob-Cartridge Mounting Bracket
82-144	Pivot Assembly—Tone Arm
82-111	Housing—Tone Arm Pivot
82-185	Ball-Bearing—Tone Arm Pivot
82-117	Support Spring—Tone Arm Pivot
82-118	Bracket-Ball Retainer
82-134	Finger Lift—Tone Arm
82-121	Counterweight Yoke
82-148	Knob-Adjusting—Counterweight
82-136	Counterweight—Lead
82-133	Aluminum Dress—Tone Arm—Front
82-131	Aluminum Dress—Tone Arm—Rear
82-164	Pickup Lead—Tone Arm
82-156	Bracket—Cartridge Mounting

## REPLACEMENT PARTS LIST

### SUSPENSION PLATE AND CONNECTING PARTS

<i>Part No.</i>	<i>Description</i>
82-109	Drive Wheel—33 1/3 RPM—60 Cycle
82-112	Tone Arm Pivot—Horizontal
82-114	Tone Arm Base—Rubber
82-115	Shock Mount—Rubber Suspension
82-124	Spring—Conical Suspension
82-143	Suspension Plate—(Delta)
82-150	Spindle Housing Assembly
82-116	Shock Mount—Motor—Rubber
82-107	Motor—Synchronous Drive
82-122	Bail Wire—Motor
82-140	Spring—Tension—Motor
82-125	Yoke—Motor Mounting
82-167	Push Rod Block—Rubber

## REPLACEMENT PARTS LIST

### TOP PLATE AND ASSOCIATED PARTS

<i>Part No.</i>	<i>Description</i>
82-171	Woodbase and Aluminum Top Plate Assembly
82-149	Switch—on/off Assembly
82-146	Switch—on/off
82-145	Push Rod—on/off Assembly
82-138	Tone Arm Rest Post—Rubber
82-103	Nameplate—Weathers
82-152	Platter Assembly
82-151	Spindle and Flange Assembly
82-163	Discushion—Foam

### MISCELLANEOUS

<i>Part No.</i>	<i>Description</i>
82-128	Receptacle Bracket
82-106	Output Lead
82-129	Bottom Cover
82-162	Shield—Aluminum
82-160	Foot—Felt

## Important — Warranty

A. Your new turntable is guaranteed to be free of defects in materials and workmanship for a period of 1 year from the date of purchase.

B. If you fail to mail your warranty registration card within 10 days after purchase, your warranty will be void. This card must be on file at the factory in order to substantiate date and place of purchase.

C. The warranty is also voided if the turntable shows evidence of unauthorized tampering or unreasonable abuse. There will be *no* exceptions to this rule.

D. Any turntable returned to the factory without prior written authorization *from the factory* will be returned to the sender as received.