



Owner's Manual

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MAGNUM STEEL GUITARS

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MAGNUM STEEL GUITARS

The ***MAGNUM STEEL GUITAR*** is carried in a single case divided into two (2) sections for maximum protection. The guitar fits into the back section with the divider and blocking securing the guitar. The pedal bar and pouch containing the legs and pedal pull rods fit in the front section. This arrangement provides maximum protection against possible damage while transporting the ***MAGNUM STEEL GUITAR***.

ASSEMBLY & SETUP

Upon opening the case, **note** the position of the guitar in the case: *as you face the case*, notice that the changer is on the left side of the case, with the pedal bar side (*front of guitar*) to the back of the case, *and* the underside of the instrument facing upward. This position allows easy and convenient removal from the case. The guitar should *always* be put back into the case in this position.

Remove the pouch containing the legs and rods from the pedal bar section of the case and screw the legs snugly into the end-plates. **Please Note:** the FRONT legs are easily distinguished from the back legs as they do not have locking rings and the thread does **not** extend down below the larger part of the leg. Next, remove the pedal bar from its compartment with the pedal surfaces facing down and the pedals extending toward you. While maintaining the pedal bar in this position, place it at the bottom of each of the two (2) front legs by fitting the notched portion of the bar to the thinner portion of each leg. Next, slide the pedal bar locks outward and tighten the wing nuts. (*See Figure 1, Page 2.*)

Now, look at the pedal rods. The number tags on the bottom of the quick-disconnect end indicate which pedal they are adjusted for. Pedal number one (1) is farthest from the changer, or the extreme right. Hook the rod into the pedal rod pull hole (*See Figure 3, Page 5*) so that the hook faces toward the left end (changer) of the guitar. To attach the pedal disconnect to the pedal (*See Figure 1, Page 2*): first: depress the spring-loaded outer shell of the disconnect. Next: slide the pedal ball-joint into the exposed slot *and* release the outer shell. This will lock the ball-joint into place. Repeat this procedure for each of the other rods. Raise the knee levers to their respective vertical positions.

The guitar is now fully assembled. *Please refer to the next page for instructions on removing the guitar from its case.*

To remove the guitar from the case: lean over the guitar (or squat next to the guitar), *and* grasp one (1) of the front legs in one hand *and* one (1) of the rear legs in the other hand [hold these two (2) legs close to the body of the guitar]. Carefully lift the guitar straight up. Now, slowly allow the guitar to turn over to its vertical position, setting the front legs on the floor first *and* then allowing the back legs to settle onto the floor.

NECK SELECTOR

Double-neck guitars are equipped with a 2-position neck selector switch, which lets you select:

1. The *front* neck only: extreme *left* position; and
2. The *back* neck: extreme *right* position.

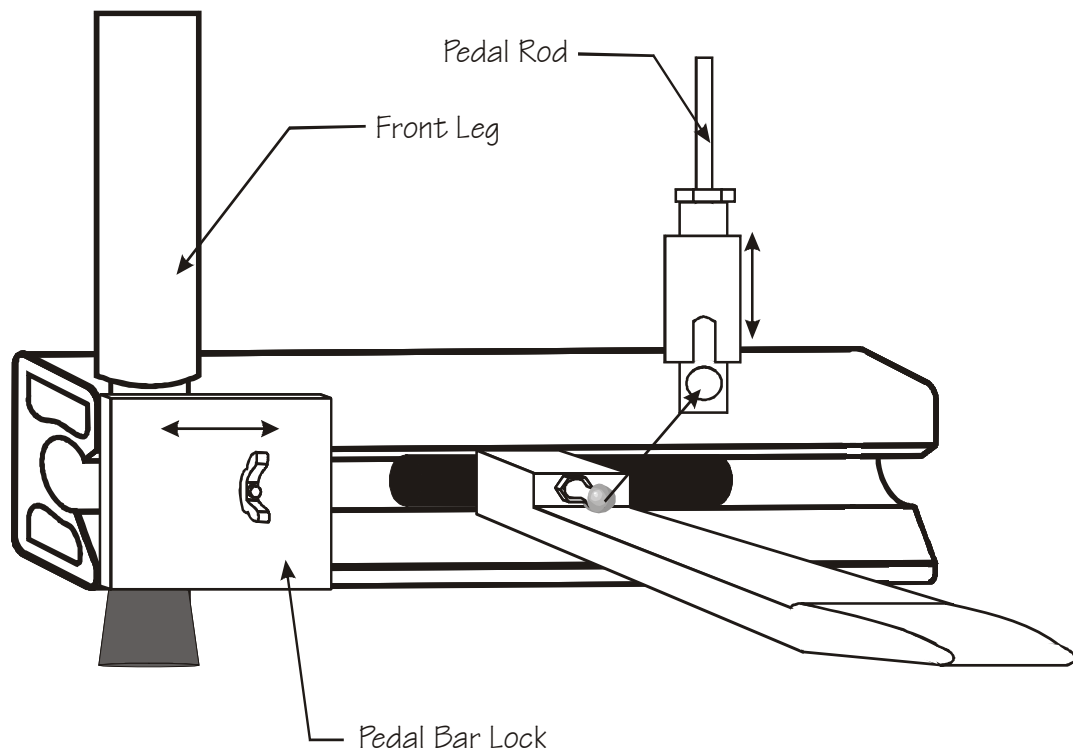


Figure 1

TUNING YOUR *MAGNUM STEEL GUITAR*

Tuning Pedals, Knee Levers & Open Strings

The following procedure is used for tuning your *MAGNUM STEEL GUITAR*. (*MAGNUM STEEL GUITARS* equipped with half-stops and/or tuneable splitters are described later.)

1. **Tuning the strings:** *Without* depressing any pedals, tune each string to the desired pitch by using the tuning keys. Work the pedals up and down occasionally while tuning to insure that the strings are properly stretched.
2. **Tuning the pedals & knee levers:** Depress the pedal to be tuned *and* note the movement of the tuning nuts on the right end-plate. The holes in the end-plate correspond to the string positions. There are six (6) holes for each string. The two (2) bottom rows lower string pitch and the four (4) top rows raise string pitch. To lower the string pitch further, use the tuning wrench on the two (2) bottom rows *and* turn the tuning nuts in a clockwise direction. Repetition of this procedure on the four (4) top rows of tuning nuts (and turning in a clockwise direction) raises the string pitch. With the pedal fully depressed, turn the proper tuning nut by using the tuning wrench provided, until the desired pitch is reached. Turning the nut clockwise will increase the movement of the string. Turning the nut counterclockwise will decrease the movement of the string. Repeat this procedure for the *knee levers*.

Note: A slight amount of slack is necessary in the linkage system to provide room for normal tuning. This slack has been pre-adjusted at the factory for your gauges and tuning(s). (See "Setup & Tuning Chart", Page 13.)

There should be slack in the pulling train. If the adjusting nut is turned too far in the clockwise direction, the string will not return to proper pitch after the pedal is released. If this happens, the tuning nuts should be turned in a counterclockwise direction until they no longer affect the pitch of the string when the pedal is not depressed *and* the total pedal travel should be readjusted. (See also **Pedal Stop Adjustment** on Page 5, Number 2.)

Tuning the "Half-Stop"

The "half-stop" on the 2nd string (E^b) string of the E^9 tuning is adjusted as follows:

1. Tune the open tuning with the key as usual.
2. Tune the full-tone change (E^b to C^\sharp) with the respective nylon hex nut.
3. Tune the half-tone lower "feel" by adjusting the nylon hex nut for the half-stop. This nut should be adjusted to contact the half-stop changer finger when the 2nd string reaches its half-tone change (E^b to D). (See Figure 2, Below.)

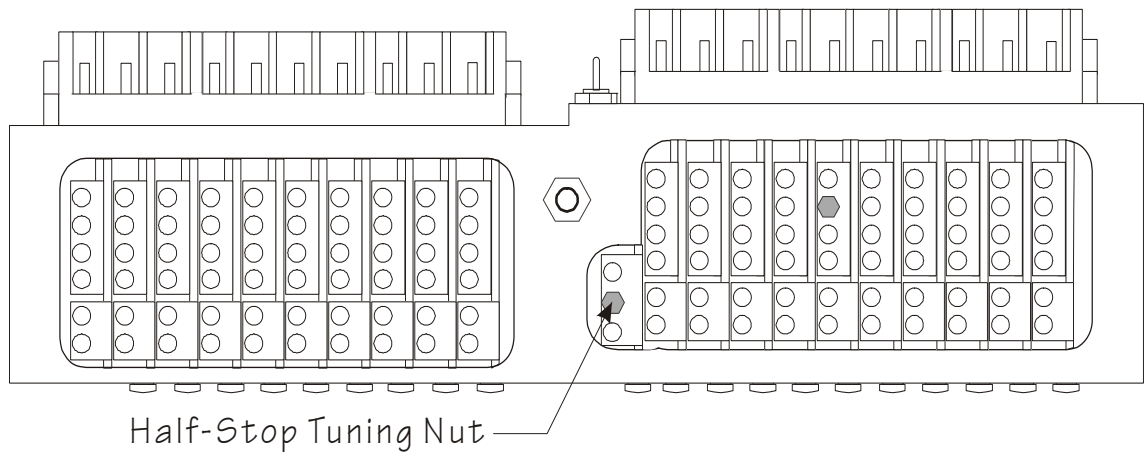


Figure 2

Tuning the Tuneable-Splits

This optional feature allows you to have a combination tuning on strings which are raised one (1) full tone and lowered one-half ($\frac{1}{2}$) tone (or vice versa).

The tuning procedure for guitars equipped with tuneable-splits is as follows:

1. Tune open tuning keys with the keys as usual.
2. Tune raises with the nylon nuts as usual.
3. When both the raise and lower function are engaged at the same time, the resultant note is tuned with the nylon nut that **lowers** the string. Turn clockwise to lower the note.
4. Finally, tune the lowered note alone with the respective **Black raise** nylon nut.

ADJUSTING YOUR *MAGNUM STEEL GUITAR*

1. **Pedal Height:** The height of the pedals from the floor can be adjusted by loosening the lock nut on the pull rod at the ball-joint connection. Once the lock nut has been loosened, the ball-joint can be screwed in or out as desired. The lock nut should then be re-tightened. (See Figure 1, Page 2.)
2. **Pedal Stop Adjustment:** To get more travel out of a pedal, the pedal stop must be readjusted under the guitar by using a 1/16" Allen Wrench for the pedal stop set screw. Turning the screw clockwise will decrease the travel of the pedal. Turning the screw counterclockwise will increase the pedal travel. (See Figure 3, below.)

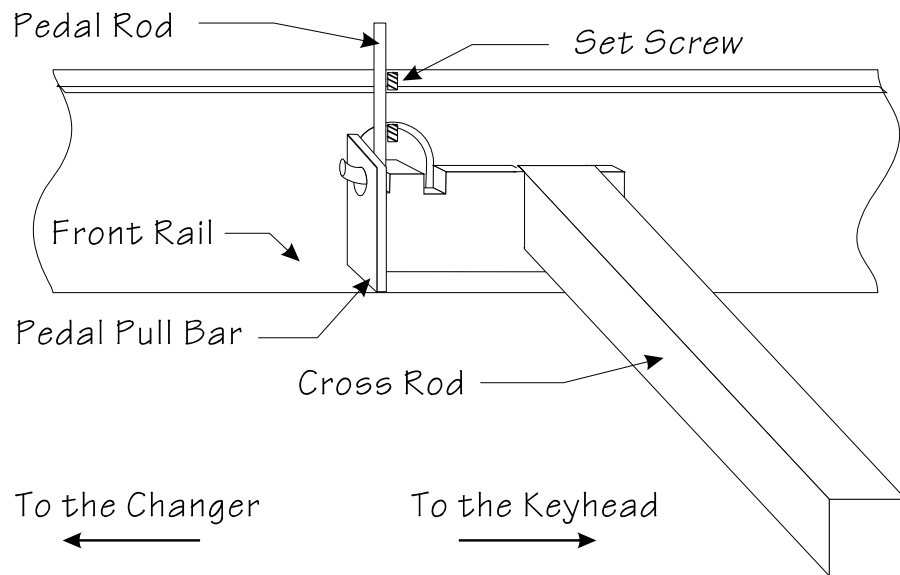


Figure 3

3. **Knee Lever Travel:** Knee Levers can have their amount of travel increased or decreased in either *or* both of the following ways (See Figure 4, below.):
 - (a) Adjust the stop adjustment screw; and/or
 - (b) Remove the retaining spring from the knee lever linkage rod, and change the position of the linkage rod in the pull finger until the desired amount of travel is obtained.

Please Note: Method (b) will change the ease of activation of the knee lever, as well as the amount, of travel.

4. **Knee Lever Tilt:** Each knee lever has an individual tilt adjustment screw. This screw does *not* affect the tuning or function of the knee lever; it only affects the position of the knee lever. Adjust the screw to bring the knee lever to the position you desire and re-tighten the locking nut. (See Figure 4, below.)

5. **Knee Lever Slack:** Knee lever "back-slack" is fixed and preset at the Factory. The slack stop is integral to the bracket and is NOT adjustable. (See Figure 4, below.)

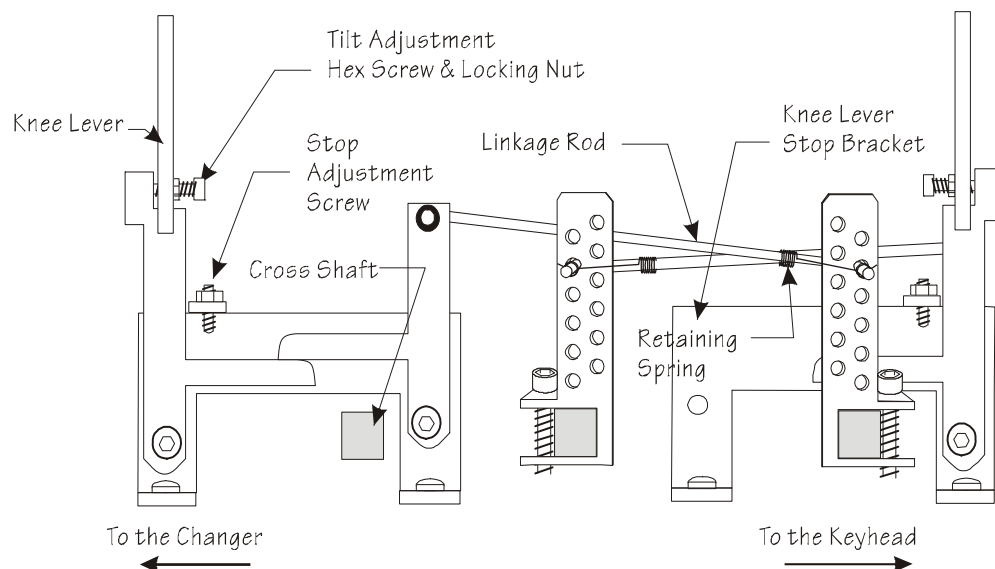


Figure 4

6. **Leverage Options:** Your **MAGNUM STEEL GUITAR** has more leverage options than many other pedal steel guitars available. All rods have been placed in pull and finger holes that give the most balanced and even pulls for your setup. The pull-finger has twelve (12) holes, which are used for balancing two (2) or more pulls, *and* for desired speed of pull. This design makes possible ten (12) different pull adjustments. If you want to relocate a pull-rod: merely remove the retaining spring, reposition the rod in the desired position of the pull finger, reinstall the retaining spring, reinstall the tuning nut, and re-tune.

(See Figure 5, below)

Please Note: Method 3(b) above will change the ease of activation of the knee lever, as well as the amount, of travel.

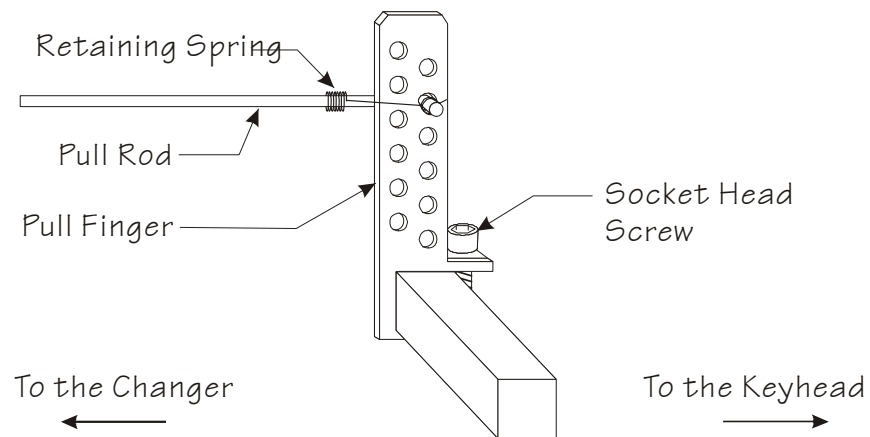


Figure 5

REVISING OR ADDING TO YOUR PEDAL SETUP

The **MAGNUM STEEL GUITARS'** all-pull system is designed to allow changes or additions with a minimum of effort. This is done by using a "pull finger" [the part with the twelve (12) holes] which can be inserted on the square crank shaft without removing anything else on that shaft. Once in place in the desired position on the shaft, insert the socket-head screw *and* tighten snugly, plus ¼-turn. **NOTE: Do NOT attempt to over-tighten this screw.**

Slip a Retaining Spring onto the pull rod, Insert the threaded end of the pull rod into the desired changer finger hole, insert the right angle bend into the desired one of the twelve (12) holes on the pull finger, *and* then lock the pull rod in position with the retaining spring. Finally, attach the nylon tuning nut and tune the new pull you just added to pitch. *(See Figure 6, Above.)* {If you order additional knee levers and pedals in the future, instructions for adding them will be sent to you at that time.}

GENERAL CARE & MAINTENANCE

Your new **MAGNUM STEEL GUITAR** is a precision instrument. Like any precision instrument, proper care and lubrication will greatly enhance the guitar's appearance, performance, and value. Generally, on laminate finishes, *never* use any type of abrasive cleaner. Laminate and wood can be cleaned and polished by using a good "show car" finish, like Meguiar's Mirror Glaze Professional® #7¹ and buffing with a soft, clean cloth. Satin-finished aluminum can be cleaned and polished with a good, non-abrasive cleaner, such as Windex or similar glass cleaner.

Note: When using any polishes or cleaners, **NEVER** apply them directly to any part of the guitar. Instead, apply the product onto a soft cloth and apply to the appropriate part of the guitar with the cloth.

Since your new **MAGNUM STEEL GUITAR** has been pre-lubricated and fully adjusted at the factory, it requires very little, if any, further adjustment except for personal "feel".

Lubrication must be done on all pivot points under the guitar, about two or two times per year. A light, high-grade machine oil is *recommended* and 30W motor oil is okay.

Lubrication

1. **Undercarriage:** Most moving parts in the pull system are on Delrin®, nylon or bronze bushings and have been lubricated as needed. *Lubricate several times each year with a light oil.*
2. **Changer:** The changer has been pre-lubricated during assembly. *Lubricate with lightweight machine oil (3-in-1 or equivalent) several times per year.*
3. **Roller Nut:** This area requires occasional lubrication to insure proper string return. A liquid Teflon®-based lube is recommended (a light machine oil also is okay). **WARNING: DO NOT use WD-40** (or the equivalent) on the rollers or any part of the guitar because this evaporates and leaves a gummy residue, which eventually causes the moving parts to stop moving freely.
4. **Pedals:** To keep the pedals working freely, use a small drop of light oil at each pedal-end at the pedal bar a couple times each year. **Please Note:** The ball joint connection at the pedal rod-end is *not* lubricated. If a slight squeak should occur in one of these, use a *small drop* of light oil.

¹Available at most auto parts stores. Or: Meguiar's, Inc., Irvine, CA 92714, USA.

Adjusting the Changer Return Springs

NOTE: Do NOT attempt this until you have exhausted all other possible remedies to this problem (such as lubrication, string ball ends stuck in mechanism, etc.)

The return springs for the lowering finger of the changer have been adjusted at the factory, and normally *require no further adjustment*. No helper springs are needed on

MAGNUM STEEL GUITARS.

The return spring must always be tight enough to hold the lowering finger against the stop bar while the raise finger makes its complete travel. If the lowering finger pulls away from the stop bar slightly: unhook the spring from the finger, cut one coil from the return spring, and then re-hook the spring on the lowering finger.

Strings

Unless you've specified otherwise, ***MAGNUM STEEL GUITARS*** come from the factory in the gauges listed in the two (2) charts below.

When replacing strings, we recommend using strings in the gauges listed in the chart below (*See Pages 11*). A deviation from these may require a slight adjustment of the nylon tuning nuts; or it might require relocation of a pull rod in the 12-hole pull finger. (*See also **Leverage Options** on Page 7, Number 6.*)

STRING GAUGES USED ON *MAGNUM STEEL GUITARS*'
Standard 10-String Tunings

E⁹			C⁶ (if D-10)		
String Number	Basic Tuning	String Gauge	String Number	Basic Tuning	String Gauge
1	F [#]	.012	1	D (or G)	.015 (or .012)
2	E ^b	.015	2	E	.014
3	G [#]	.011	3	C	.017
4	E	.014	4	A	.020
5	B	.017	5	G	.024W
6	G [#]	.022	6	E	.030W
7	F [#]	.026W	7	C	.036W
8	E	.030W	8	A	.042W
9	D	.034W	9	F	.054W
10	B	.036W	10	C	.068W

W = Wound

Limited One-Year Warranty

This new **MAGNUM STEEL GUITAR** is warranted to the Original Purchaser to be free from defects in both material and workmanship for a period of ONE (1) YEAR from Date of Original Purchase. Date of Original Purchase is determined by the date on your purchase receipt. The Original Purchaser must be an individual person. Names of bands, clubs, churches, groups, institutions, organizations, etc. are not acceptable as the Original Purchaser. Original Purchaser must register by mail, fax, or online to validate this warranty.

Should any part of your new **MAGNUM STEEL GUITAR** be defective, it will be repaired or replaced free-of-charge (except transportation), provided it has been operated according to the instructions in this Owner's Manual. Should any trouble develop during this one-year period, return the COMPLETE guitar, freight prepaid, to **World Class Steels, Inc. dba MAGNUM STEEL GUITARS** (hereinafter "WCSI") factory or to an Authorized Service Center. You may obtain the location of the Authorized Service Center nearest you by contacting the factory.

This Warranty does *not* apply to: guitar cases, strings, tunings, adjustments, or surface finishes. Additionally, this Warranty does *not* apply where repairs are required because of normal wear and tear. This Warranty is void if, in the sole judgment of WCSI:

1. Guitar has been damaged by abuse, accident, misuse, mishandling, the elements, or improper maintenance;
2. Repairs or alterations have been made or attempted by anyone other than the WCSI factory or Authorized Service Center; or
3. Adaptation or accessories, other than those provided or recommended by WCSI, have been made or attached.

In no event shall WCSI be liable for any indirect, incidental or consequential damages from the sale or use of the product. This disclaimer applies *both during and after* the term of this Warranty.

WCSI disclaims liability for any implied warranties, including, but not limited to, implied warranties of "merchantability" and "fitness for a specific purpose," after the one-year term of this Warranty.

This Warranty gives you specific legal rights, and you may also have other rights which vary by geographic location. Some areas do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some areas do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Limited Warranty ACTIVATION

Please mail this form to us within 45 days of receiving your new **MAGNUM STEEL GUITAR**.
Send to: Magnum Steel Guitars ♦ PO Box 851324 ♦ Mesquite TX 75185-1324 USA (* means required)

*Name: _____

*Address: _____

*Phone (day): _____ *Phone (evening): _____

CELL Phone: _____ FAX: _____

Email: _____ Web Site: _____

*Date of Purchase: _____ *Serial Number: _____

*Name of Dealer: _____

Location of Dealer: _____

Comments or Questions: _____

We thank you for purchasing a new **MAGNUM STEEL GUITAR** and wish you many years of enjoyment. Please feel free to contact us² in the future with any questions you may have.

Prefer to **activate your Warranty online?** You can!
Just follow the links from **www.MagnumSteelGuitars.com**

Join the **MAGNUM STEEL GUITAR™ OnLine Club!**

You are invited to be seen . . . on the
www.MagnumSteelGuitars.com Web Photos & Comments Page

- ❖ Send us a close-up PHOTO of you & your **MAGNUM STEEL GUITAR**, along with a brief note with any **comments** you wish!
- ❖ ideas to include in your note: how long you have been playing psg, your psg-learning experience, types of music you play or want to play on psg, your country, state or province, city, your email address, any feedback about the Dealer from whom you purchased **MAGNUM STEEL GUITAR**, anything else you want to say.
- ❖ If you prefer to **email** to us your comments & photo please feel free to do so.

ACCESSORIES, String Sets, and OverHeight and UnderHeight Kits, all specially suited for your **MAGNUM STEEL GUITAR**, are available either from your **Dealer** or from Magnum Steel Guitars directly (call us³ or purchase OnLine: www.MagnumSteelGuitars.com).

³Phone: (972) 475-2324 * FAX: (972) 412-7353 * email: PlayPSG@MagnumSteelGuitars.com
P.O. Box 851324 * Mesquite, TX 75185-1324 USA * 617 W. Kearney, Suite 101 * Mesquite, TX 75149 USA
Internet: www.MagnumSteelGuitars.com * www.steelguitar.com * www.SteelGuitarINFO.com

CONGRATULATIONS!

You are now the lucky owner of the best pedal steel guitar available anywhere in the world today!

With normal care and maintenance, your ***MAGNUM STEEL GUITAR*** should last a lifetime.

Please take a few minutes to *read* through and familiarize yourself with this Owner's Manual so you can become familiar with the general mechanics and care requirements of your new ***MAGNUM STEEL GUITAR***. We also recommend you watch the video that came with your steel guitar for a more detailed overview and explanation of the features, usage, and maintenance of your new steel guitar.

Also, you are invited to view and study the wide variety of useful topics on maintenance and adjustment to pedal steel guitars at **www.SteelGuitarINFO.com**.

For your convenience, your dealer and we are ready to assist you in answering any questions or helping you make any changes to your setup.

Once you have read through this Owner's Manual and reviewed the information available at www.SteelGuitarINFO.com, please feel free to call your Dealer or us with any questions you might still have.

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