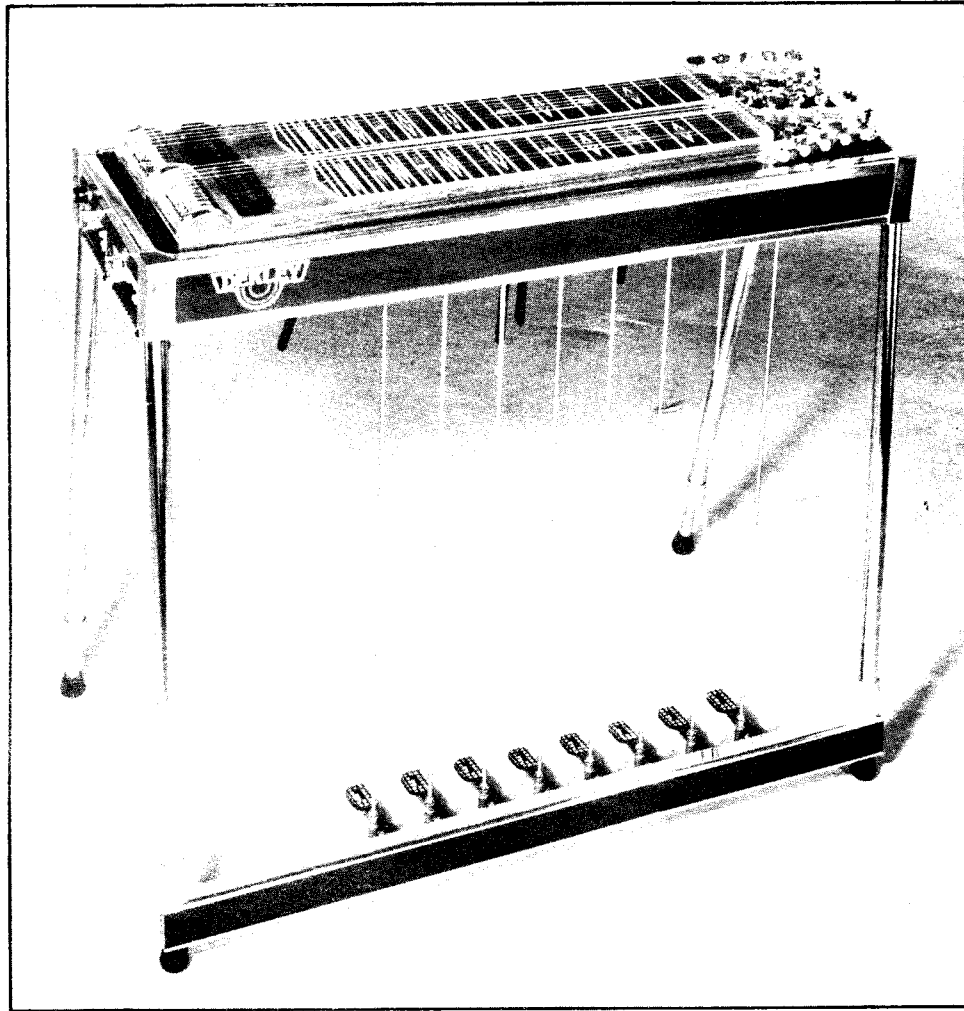




DEKLEY PEDAL STEEL GUITAR OWNERS MANUAL



All Models

IMPORTANT

CAREFULLY READ THE INSTRUCTIONS & FOLLOW THE
ILLUSTRATIONS PROVIDED, & SAVE FOR FUTURE REFERENCE.

DEKLEY CORPORATION, 6 E. Newberry Road, Bloomfield, Conn. 06002

ASSEMBLY

Upon opening the case, notice that the changer is on the left side of the case as you face it. The guitar should always be put back into the case exactly in this position.

Remove the leg pouch (SK 151) with the legs and rods from the pedal bar slot of the case and screw the legs snugly into the end plates. The legs (SK 134) with the holes in the smaller diameter portion screw into the threaded holes at the front of the guitar which is the side closest to the case hinges.

Remove the 10-32 wing nuts from the pedal bar mounting screws and mount the pedal bar assembly to the front legs. This is accomplished by putting the mounting screws through the holes in the front legs and tightening the wing nuts on the screws. Be sure the pedals are facing down. Slimline models have slide clamps.

Now look at the pedal rods (SK 114). The number stamped near the hooked end indicates which pedal they are adjusted for. Pedal number one is furthest from the changer, or the furthest to the right. Hook the rod into the crankarm (SK-120)* hole so that the hook faces toward the inside of the guitar. To hook the pedal disconnect (SK 131) to the pedal (SK 125), depress the spring loaded outer shell of the disconnect. Slide the pedal ball joint into the exposed slot and release the outer shell. This locks the ball joint in place. Repeat for the other rods. Raise the knee levers to their vertical positions.

*Pull link on slimline models.

The guitar is now fully assembled.

SET UP

To remove the guitar from the case, lean over the guitar and grasp a front leg in one hand and a rear leg in the other hand close to the body of the guitar. Carefully pick the guitar straight up. Now, slowly allow the guitar to turn over to its vertical position. Set the front legs on the floor and let the back legs settle to the floor.

HOOK UP TO AMPLIFIER

Any guitar amplifier may be used for your DEKLEY STEEL, provided it has a clean sound and can handle the high and low tonal ranges of a steel guitar. Use a high quality shielded guitar cable. Plug one end into the output jack of the guitar and the other end into the input jack of the amplifier. If a volume pedal, such as the DEKLEY LOW BOY (Model No. 801) is used, use a short shielded cable from the output of the guitar to the pedal input and a longer cable from the pedal output to the amplifier input. Should the volume pedal not be marked, try hooking it up both ways. Whichever way gives the most treble at low volume is correct. The volume pedal should sit under the changer end of the guitar, in a spot that is comfortable to use while still enabling you to use the knee levers on your right knee easily. All slimline double necks & universals come with tone control & bypass SW. Double necks have neck selector SW.

Find a comfortable, straight backed chair, drummers throne, etc. that will fit your physique. Choose one that will keep your thighs as horizontal as possible for the best leverage, and sit down at your new guitar. It is now ready to tune.

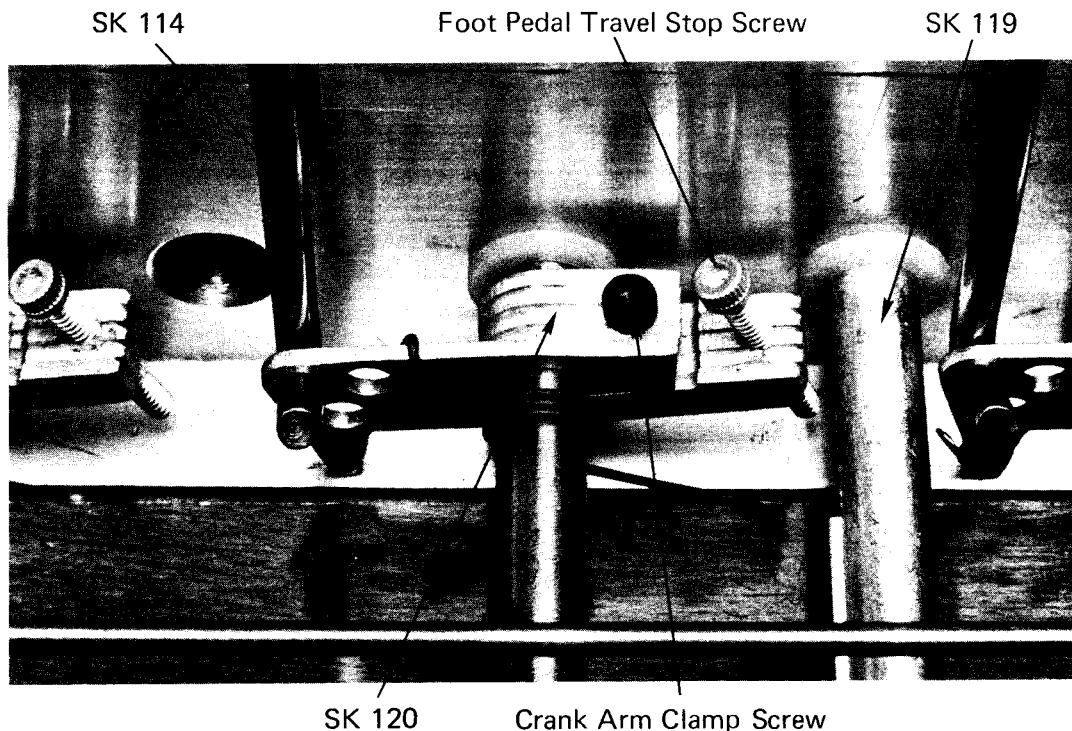
TUNING THE GUITAR

All DEKLEY guitars are pretuned and adjusted at the factory before they are shipped. As with any new guitar, some settling in of new strings will occur during shipping, so you can expect your guitar to be slightly out of tune. Our guitars are designed to stay in tune using the easiest methods and the highest quality components available.

The guitar should always be tuned to the open pitch of the strings first. Any device may be used as a reference, provided it is tuned to concert pitch. A piano or pitch pipe may be used. A tuning fork works well after you have become familiar enough with the tuning to tune the rest of the guitar from one note, preferably the "E" that a tuning fork produces. The beginner should tune to a piano or pitch pipe by matching the string sound to the note in the Copedant Chart provided. Adjust the machine head (SK137) corresponding to the string to be tuned.

Pedal and knee lever pitch changes are tuned with the nylon tuning nuts (SK124) located in the changer end of the guitar. They are adjusted by means of the 3/16" tuning wrench (SK153) furnished with your guitar. Clockwise rotation will sharpen the pitch of the raise changes (upper holes) and flatten the lower changes (bottom holes). The reverse is true when turning counterclockwise.

Both the foot pedals and knee levers have travel stops. The pedals have a 6-32 x 1" allen screw in the crankarm (SK120) while the knee levers use a set of stop collars mounted on a 1/8" rod and hooked to a puller which is mounted to a 3/8" keyed cross shaft (SK-119). See Figure 1 & 2. See Figure 1A for slimline models.



(Pre Slimline Models)

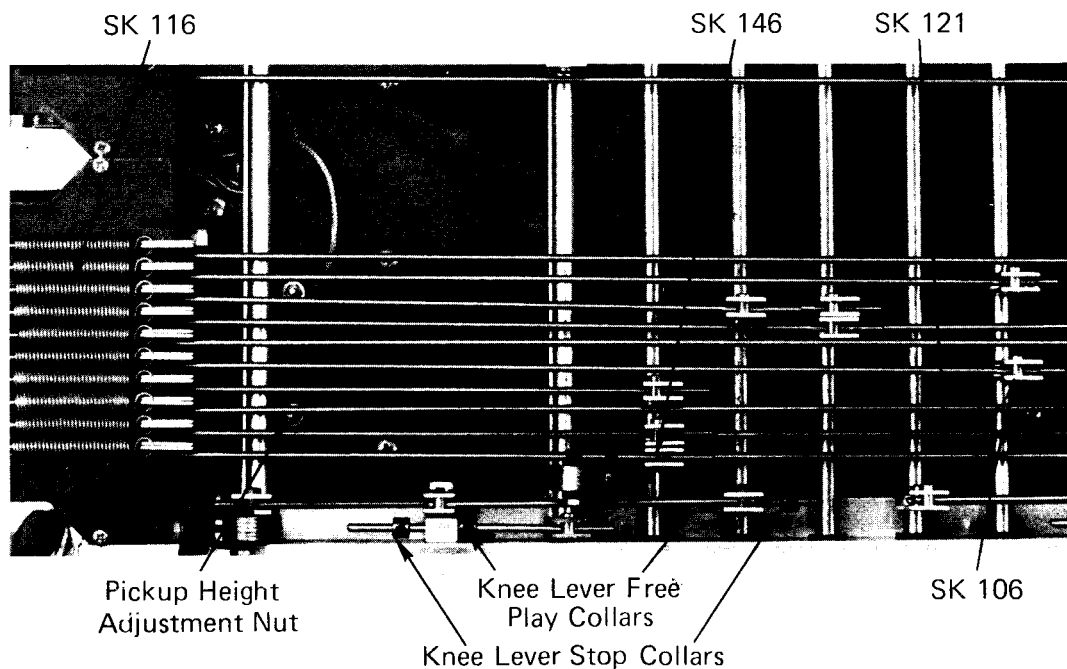


Figure 2 Pull Train Assembly

If more travel is desired on the knee levers, loosen the set screw in the stop collar which stops the travel action when the changer fingers are pulled away from their seats. Move the collars to where you obtain the desired travel. The other collar is used to adjust free play in the static position (non-activated). See Figure 2

NOTE: A little free play is necessary for knee levers and pedals.

Always tune the string which requires the farthest travel first. Light gauge strings travel farther than heavy gauge strings. Lower changes require more travel than raise changes. This applies if you are raising or lowering sets simultaneously to a half tone or full tone. Some changes may have a raise and a lower combined and the above rules will also be true.

Push your pedal or knee lever to the fully activated position and adjust the tuning nut (SK 124) associated with the longest pull change. When you have brought this string to pitch, check to insure that you have enough free play left. If you have too much free play, tighten the adjustment screw (crankarm) or move the collar that stops the knee lever action and start all over again. If you do not have enough free play, back off on the adjustment screw (crankarm) or move the collar (knee lever) and retune the activated change. Sometimes it may be necessary to reset the pull rod (SK 121) length in the brass pull bushings (SK 146) seated in one of the puller holes when you do not have enough thread adjustment in the tuning nut to bring the string to pitch.

NOTE: The four sets of holes in the pullers (SK 106) are provided to allow you to obtain the mechanical advantage and length of throw you desire. The easiest pull will always be closest to the cross shaft.

Now adjust the shorter pull and bring it up to pitch. Check the lower return springs (SK 116) attached to the lowering fingers. Insure that they return the fingers to the dead stop position after lowering. Also check to see that the lowering fingers do not pull away from their seat on a raise pull. If so, the springs may be tightened by the adjustment screws provided.

If you have changed your set up to a longer pull than factory set up, you may not have enough adjustment in the return spring to keep the lowering arm against the stop. To remedy this situation, remove the spring, screw the reducing bushing (SK 145) a couple turns into the spring and cut off two turns on the coil spring. Reinsert the spring, retune and check to insure that there is no pull away. A slight bit of pull away will not hurt as long as you are able to reach the pitch you need without excessive throw.

FOOT PEDAL ADJUSTMENTS

A shorter but harder pull may be obtained on the foot pedal travel by moving the ball joint away from its pivot point on the pedal bar. An extra tapped hole is provided.

Pedal (SK 125) height may be adjusted by loosening the #10 jam nut on the disconnect (SK 131), and screwing the disconnect in or out until you obtain the desired height. Retighten the jam nut. See Figure 3.

KNEE LEVER ADJUSTMENTS

Knee lever position may be adjusted by loosening the 6-32 jam nut at the base of the knee lever and turning the 6-32 x 1/2" allen head cap screw in or out, depending on the position desired, and retightening the jam nut. See Figure 4.

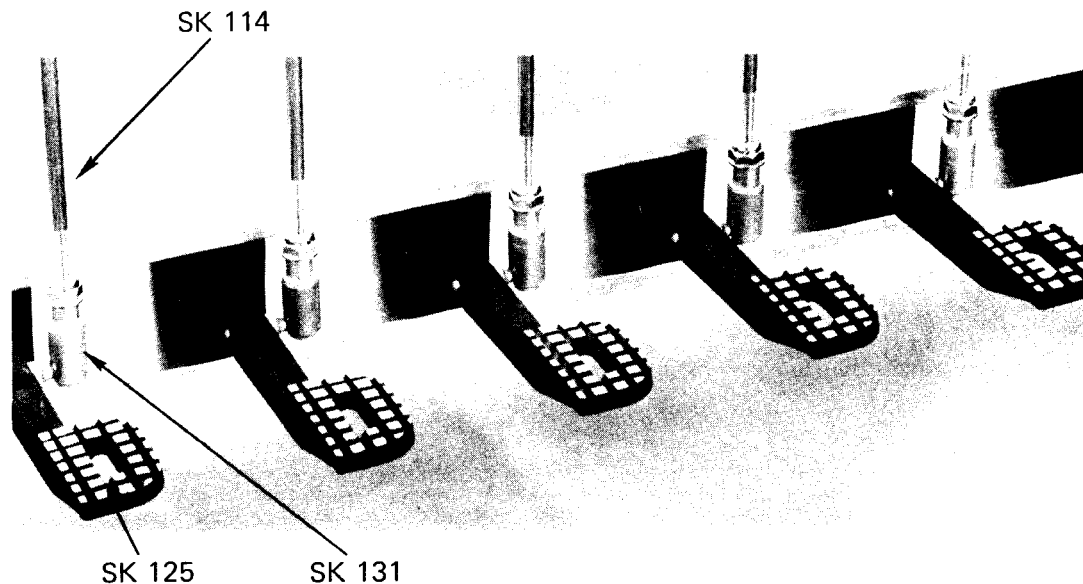
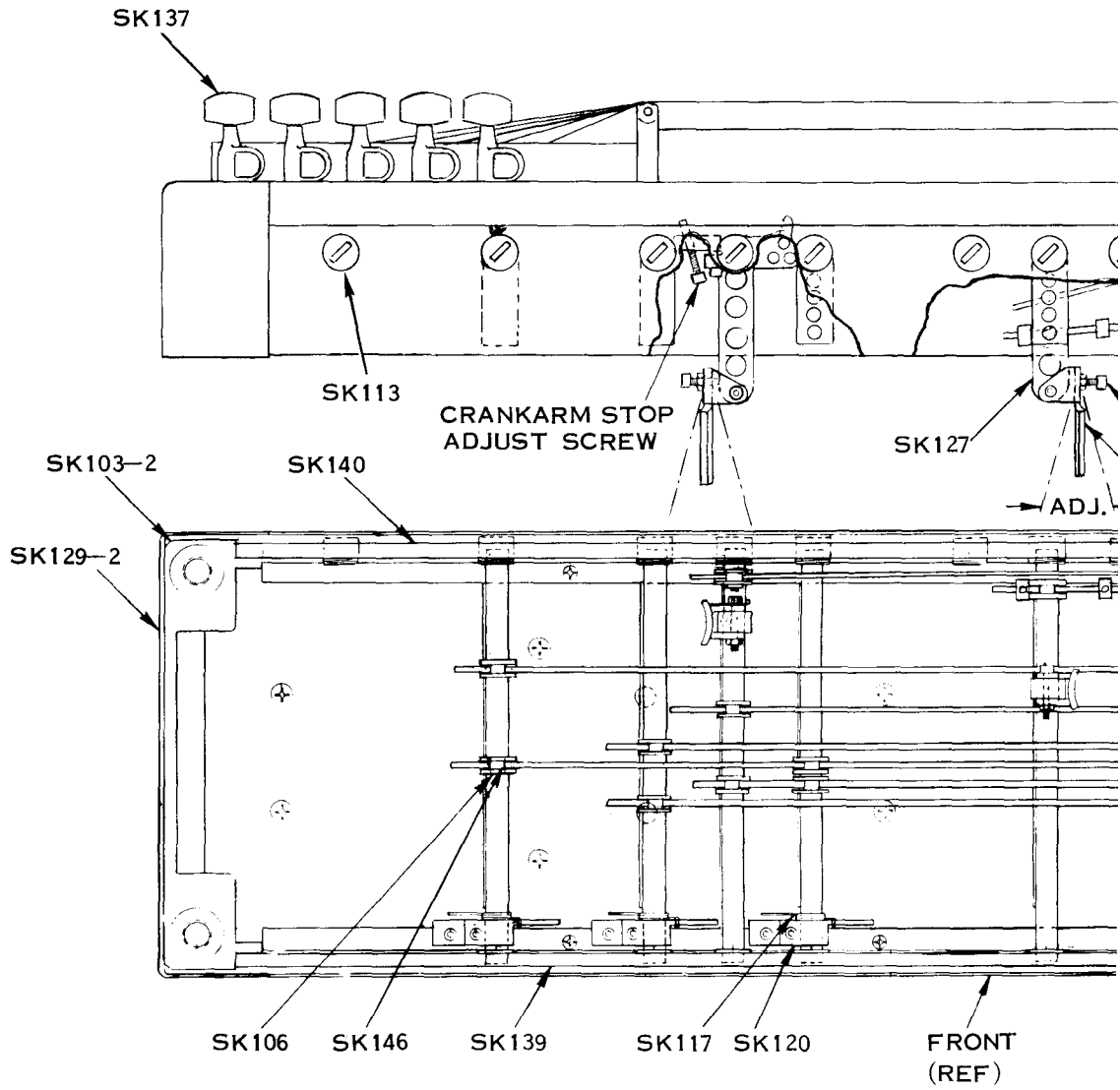
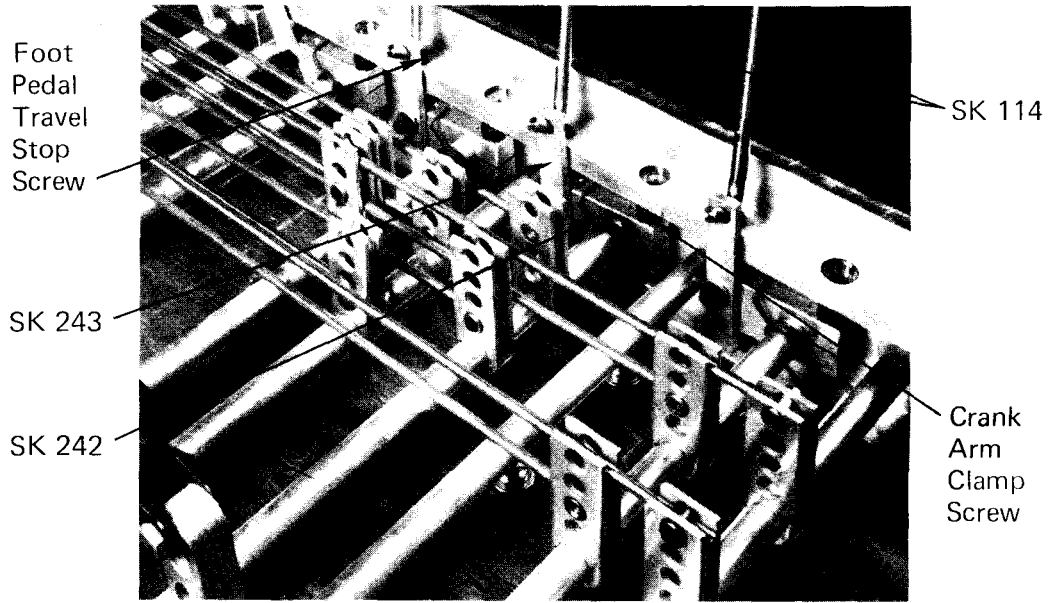
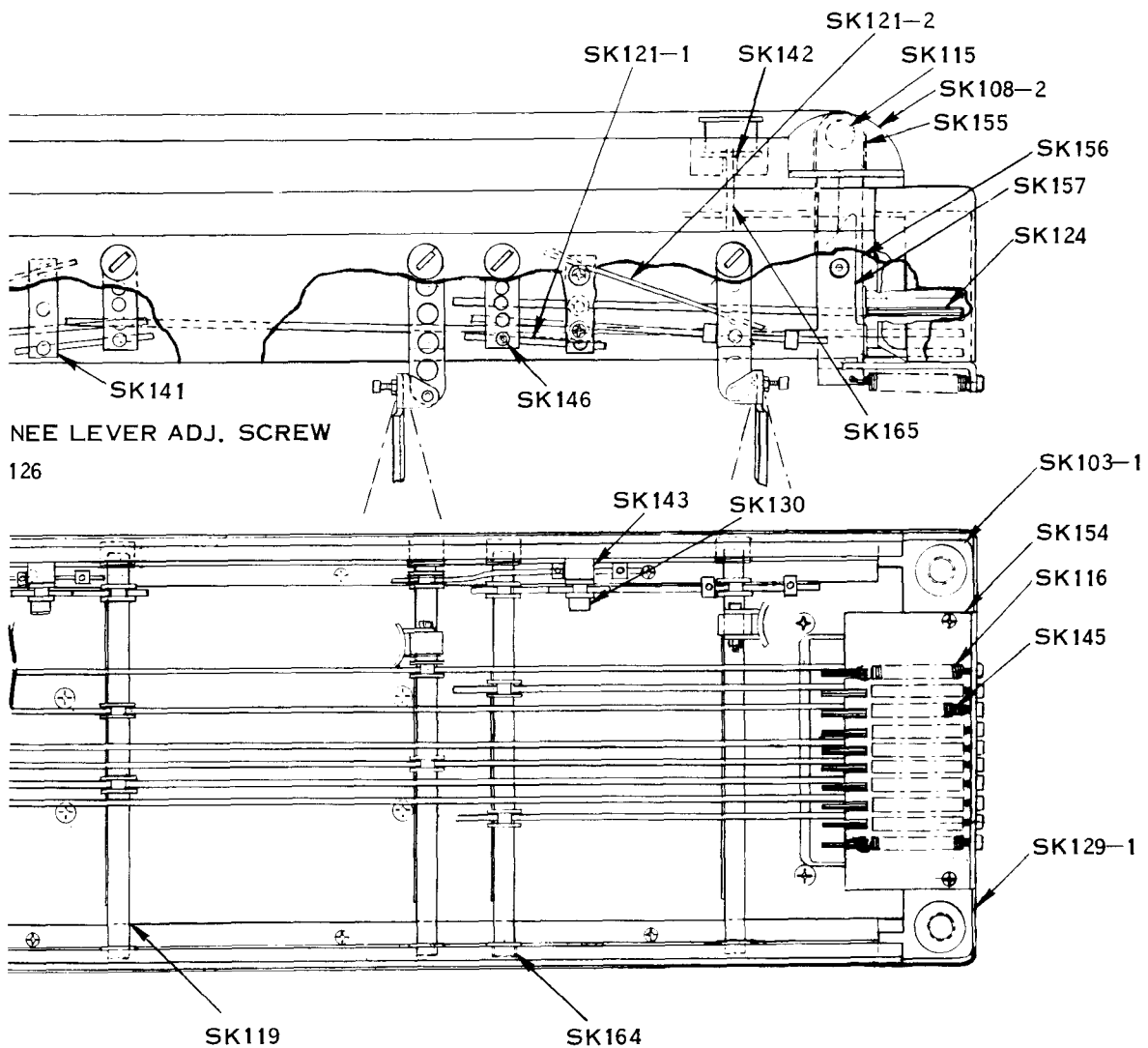
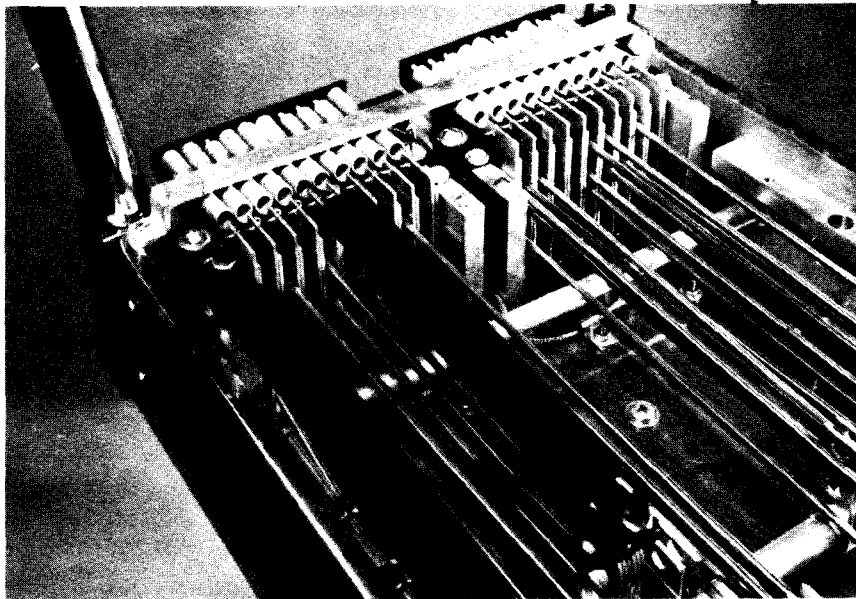


Figure 3 Pedal Bar Assembly





**BODY AND UNDERCARRIAGE ASSEMBLY
(PRE SLIMLINE MODELS)**

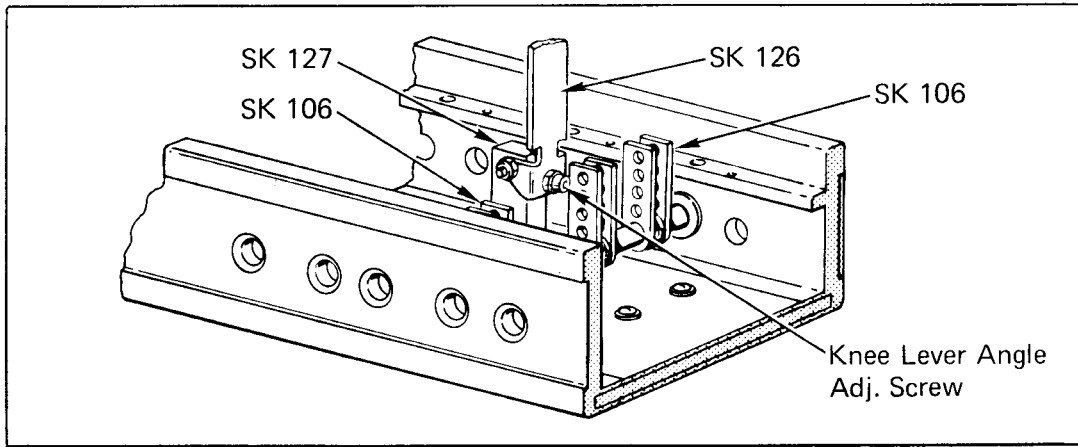


Figure 4 Knee Lever Assembly

PICKUP HEIGHT ADJUSTMENT

The ideal pickup distance from the strings is $\frac{3}{32}$ of an inch and has been pre-set at the factory. It may, however, be raised or lowered by turning the two nuts located on the underside of the body top directly beneath the pickup (SK 148).

CHANGE OVER OF PEDAL AND KNEE LEVER SETUPS

The DEKLEY Pedal Steel is one of the easiest guitars on the market to alter the pulling system. Our unique method of installing and removing the cross shaft assemblies makes it possible to swap pedal or knee lever changes in about fifteen minutes. For slimline models remove the backplate and follow the outlined procedure.

NOTE: All of the following should be done on a padded surface, such as an ironing board, with the changer to the left.

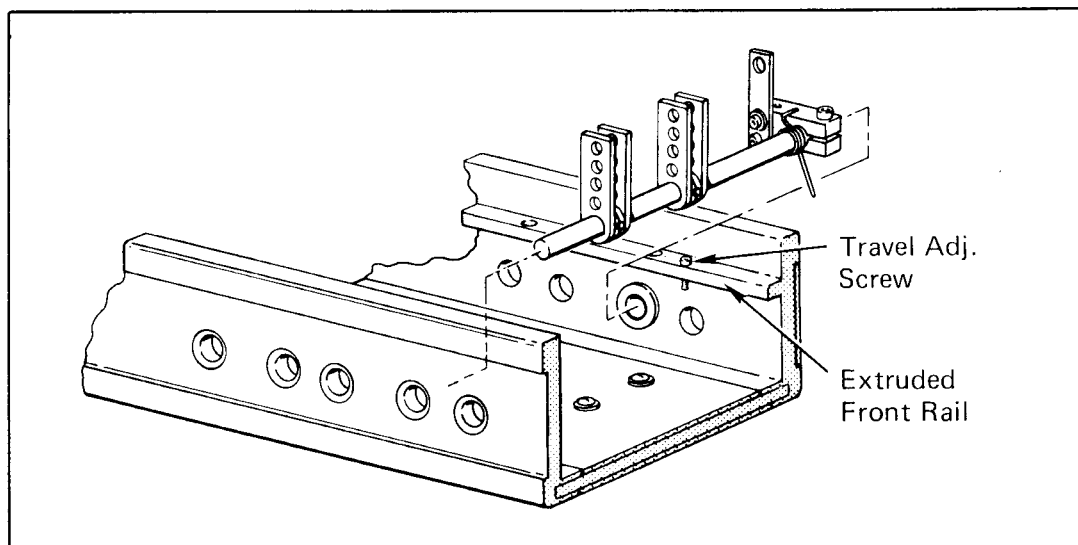


Figure 5 Cross Shaft Positioning

TO SWAP THE PULLS OF PEDALS ON OLD MODELS (*SEE NOTE BELOW FOR SLIMLINE MODELS)

If you want (for example) to swap pedal #3 with pedal #1 (from "Buddy Emmons" to "Jimmy Day" pedal setups), loosen the 8-32 x 3/16" setscrews in the brass pull rod bushings (SK 146) of the pullers involved. Back the tuning rods (SK 121) out of the bushings. Remove the bushings and set them aside. Remove the black nylon threaded plugs (SK 113) from the two shafts being changed and set them aside. Loosen the 6-32 x 3/4" allen cap screw from the clamping holes of the crankarm (SK 120) so that the pullers (SK 106) may be turned parallel to the crankarm. Slide the cross shaft assembly into the plug hole which will pull it out of the bearing hole. Carefully remove the assembly from under the existing pulling system. See Figure 5.

Note: Backplate on slimline models replace SK-113 nylon plugs for securing shafts.

The assembly may now be inserted under the pulling system of the other pedal hole, first into the plug hole, then ahead into the bearing hole in the front apron. Position the nylon screw plug on the cross shaft and tighten on shaft to a slightly loose fit. With the puller in vertical position and crank arm against the body, tighten the 6-32 x 3/4" crankarm clamp screw.

Swap the pull rods of the cross shaft assemblies one for the other. Replace the brass pull bushings (SK146) in the appropriate hole of the pullers and slide the appropriate rods into their respective bushings leaving approximately 1/16" to 1/8" clearance between the nylon tuning nut and the changer arm. Tighten the 8-32 x 3/16" setscrews onto the pull rods. The guitar is now ready to turn over and tune.

See Note Below.

TO SWAP THE PULLS OF KNEE LEVERS

You will notice that the left moving knee levers (LKL, RKL) are hooked up identically, as are the right moving knee levers (LKR, RKR). All knee levers may be interchanged. They are changed exactly the same as the pedal shafts except that the knee lever (SK126) may have to be removed from the knee lever extension (SK127) to facilitate removal of the cross shaft (SK119), and the 1/8" stop rod(s) will have to be removed.

***NOTE:** When there are many pull rods going over the puller shafts to be interchanged, whether foot pedal or knee lever, it is usually easier to interchange pulls using the following procedure. This is particularly true of all slimline models.

Loosen the 8-32 x 3/16" set screws in the brass pull rod bushings (SK-146) of the pullers involved. Back the tuning rods (SK-121) out of the bushings. Remove the bushings and set them aside. Loosen the 6-32 x 3/4" allen cap screw from the clamping holes of the crankarm (SK-120) so that the pullers (SK-106) may be turned parallel to the crankarm. Loosen the 6-32 x 1/8" set screws in the pullers and align the pullers with the desired pulls. Retighten the 6-32 x 1/8" set screws, raise the pullers to the vertical position and retighten the 6-32 x 3/4" allen cap screw in the clamping holes of the crankarm (SK-120). The pull rods and bushings may be replaced as described above, turned over, and tuned.

TO ADD OR SUBTRACT A PULL(s) (PEDAL OR KNEE LEVER)

Remove cross shaft assembly as explained before, loosen the 6-32 x 1/8" setscrew and slide the puller off. To add a pull, slide a puller on the cross shaft, replace the cross shaft assembly, align the puller with the pull rod being added and tighten the puller and pull rod bushing.

During and after making any changes, remember to check for binding anywhere that might create tuning problems later on.

CARE AND MAINTENANCE

Dust and dirt may be just wiped off. An occasional wiping with window cleaner or a small amount of denatured alcohol on a clean, lint-free rag should be all that is necessary to keep your DEKLEY looking as well as it does now.

The natural wood finish of your guitar is impregnated with Melamine*. This finish is extremely hard and durable but it will scratch if something hard and sharp enough comes in contact with it. Should this happen, simply sand the scratch out with very fine (500 or 600) sandpaper and buff the area with a high quality rubbing compound. The finish will be as good as new. *(And Polyester on Slimlines)

We have used nylon or delrin bushings for all moving parts wherever feasible. Both of these materials are self-lubricating, which means that little lubrication is required in the DEKLEY guitar. Lubricate twice a year, or more if the guitar is used constantly. We recommend a single drop of light machine oil on all moving parts. These include the pull rod bushings (SK 146), reversing bracket assemblies, cross shaft bushings, pedal shaft bushings, and nut rollers. The changer assembly should be lubricated where the arms hit the stop plate, the pivot area (rivets) and between the roller bridge arms on the changer cross shaft.

IMPORTANT NOTICE

When Ordering Replacement Parts for Your Pedal Steel Be Sure to Include the Correct Model and Serial Number. This is Especially Important When Ordering Knee Lever and Pedal Kits. Example:

- | | |
|--------------------|---------------------|
| A) 110-0007 | Manufactured Before |
| (Model) - (Serial) | Dec. 31, 1979 |
| B) 110S-0007 | Manufactured After |
| | Dec. 31, 1979 |

(A)	
Model Numbers Until 12/31/79	
010	Single Neck
110	Single Neck
112	Single Neck
120	Single Neck
122	Single Neck
210	Double Neck
212	Double Neck

(B)	
Model Numbers After 12/31/79 (S = Slimline)	
001	Single Neck (Student)
110S	Single Neck (Professional)
112S	Single Neck
112S-1	Single Neck
120S	Single Neck
122S	Single Neck
122S-1	Single Neck
212S	

TROUBLESHOOTING GUIDE

<u>PROBLEM</u>	<u>CAUSE</u>	<u>REMEDY</u>
String returns sharp on raise or flat on lower changes.	Insufficient travel (changer finger not returning to dead stop).	<p>Locate the offending changer finger.</p> <ol style="list-style-type: none"> 1. Try pushing it back to its dead stop. (If you cannot, see next paragraph) 2. Tighten the return spring. 3. Check for binding in the pull train. <ul style="list-style-type: none"> * Pedal shaft * Pedal rod * Cross shaft bearings * Pull rod bushings * Changer fingers * Slots in stop plate <p>NOTE: A little silicone spray may help free up any binding.</p>
		<p>Finger cannot be pushed to dead stop.</p> <ol style="list-style-type: none"> 1. Back off on tuning nut. Allow 1/16" free play between nut and changer finger. 2. Activate change and adjust stop screw (pedals) or collar (knee levers) to where string will reach desired pitch.
String won't raise or lower far enough.	Lower finger on raise, or raise finger on lower is moving away from dead stop along with finger being pulled.	<p>Check for binding in changer fingers</p> <ul style="list-style-type: none"> * carefully pry them apart slightly * place the raise rod in the top hole (or) * place lower rod in the bottom hole. This will give a slightly longer throw and better leverage.
String is tuneable but detunes while playing	String pulling train is sticking or slipping.	<ul style="list-style-type: none"> * The crankarm (SK 120) may be slipping on the cross shaft (SK 119). With crankarm against body and pullers vertical, tighten 6-32 x 3/4" allen cap screw securely. * tighten the tensioning screw on top of the machine head (SK 137). * change the string. It is possible for a new string to be defective. * check to see that the nut roller (SK144) turns freely. Rollers should be checked each time the strings are changed. <p>NOTE: Sticking problems can be solved with a little silicone spray. Binding can be fixed by removing the Rollers and Nut Shaft (SK128-1) and lightly sanding the shaft and the sides of the Nut Roller to remove any burrs.</p>