



SC REVENUE RULING #91-19

**SUBJECT:** Dental Prosthetic Devices - Dental Labs  
(Sales and Use Tax)

**TAX MANAGER:** John P. McCormack

**EFFECTIVE DATE:** July 1, 1990

**SUPERSEDES:** All previous documents and any oral directives in conflict herewith.

**REFERENCE:** S.C. Code Ann. Section 12-36-2120(28) (Supp. 1990)  
S.C. Code Ann. Section 12-36-120 (Supp. 1990)

**AUTHORITY:** S.C. Code Section 12-4-320 (Enacted June, 1991)  
SC Revenue Procedure #87-3

**SCOPE:** A Revenue Ruling is the Commission's official interpretation of how tax law is to be applied to a specific set of facts. A Revenue Ruling is public information and remains a permanent document until superseded by a Regulation or is rescinded by a subsequent Revenue Ruling.

Question:

What guidelines can the Commission provide with respect to sales and use tax and the procedures used by dental laboratories in the manufacture of dental prosthetic devices and certain other tangible personal property?

Facts:

There are approximately 110 dental labs in the state, with only 4 or 5 of these considered "full service" labs. A full service lab is one that performs all the functions of a lab. Today, most labs specialize in one of three main areas: ceramics, dentures, or crowns and bridges.

Not only do labs specialize in these areas, but a dentist may "subcontract" the various stages of production to several labs. The average dentist uses the services of 4 or 5 different labs due to their specialties and due to a lab's abilities with respect to various stages of production within a specialized area.

Also, due to the nature of the business, most labs bill the various stages of production of a prosthetic device because the dentist may use another lab to finish the job or the dentist's patient may not return to complete the procedure. In addition, there is a cash flow concern; in that, the patient may not re-visit the dentist for months.

### DENTURES:

The following outlines the process of manufacturing dentures (prosthetic devices):

1. The dentist takes an impression of the patient's teeth and sends the impression to the lab.
2. The impression is then used by the lab to create a study cast. The study cast may be created by the dentist. In either case, the study cast is used by the dentist to evaluate the proper tooth preparation and the design of the prosthetic device to be constructed. The dentist may ask the lab for a suggested design of the prosthetic device.
3. The dental lab will then create a custom trays using the study cast. This enables the dentist to make an accurate impression of the patient's tissue and teeth.
4. Once it is determined how the prosthetic device will be designed, the impression taken by the dentist is used by the lab to create a master cast. The master cast impression is taken after the dentist has prepared the teeth for the prosthetic device. The design for the prosthetic device was based on the evaluation of the study cast. The master cast is also used for quality assurance.
5. A working cast is then made by the lab from the master cast. The working cast is used to create the prosthetic device.
6. The lab, at the request of the dentist, will create occlusion rims. Occlusion rims (also known as bite blocks) are wax blocks mounted on base plates used to establish the relationship between the patient's upper and lower jaws. Also, these wax blocks are used to determine the proper amount of jaw separation. The occlusion rim is marked by the dentist to show the lab how to cut out the wax from the blocks and insert the artificial teeth. This procedure creates a try-in.
7. A try-in (also known as the "diagnostic wax-up") is a wax mock-up wherein the lab sets the artificial teeth in wax. The try-in is sent to the dentist by the lab so that it may be inserted in the patient's mouth to be evaluated for fit, function, and aesthetics.
8. Using what is known as the "lost wax procedure", the lab uses the try-in to create the final dentures. This procedure essentially replaces the wax with an acrylic.

The lab may also bill the dentist for "attachment labor - denture". This is usually a more labor intensive design of a denture which is billed as such to the dentist.

Again, the lab usually bills the dentist at each stage of production.

Dental labs also manufacture surgical trays. A surgical tray is a cast of the patient's tissue (made from an impression taken by the dentist). It is used by the dentist in surgery, with respect to the tissue, to ensure a proper fit.

### CROWNS:

With respect to crowns (prosthetic devices), the above steps used in manufacturing dentures are followed, except on a more limited scale. However, two other steps need to be addressed:

1. An epoxy cast or model is created from an impression and used to create a crown. Casts are made from many material (gypsum, metal); however, epoxy is used in some cases because of its hardness, stability, and easy usage. It is usually billed separately due to its cost. Epoxy is much more expensive than gypsum.
2. A trial wax-up is the same as the try-in (dentures) except it is the term usually associated with crowns.

### RELINE:

If, over time, the patient's dentures become loose due to the supporting bone and tissues changing shape or shrinking, the existing denture may be refitted. This procedure is known as reline, rebase, reline jig or soft reline ("reline").

Essentially the existing denture's acrylic is modified or rebuilt for a proper fit. The procedure is an economical method to restore fit and function. Impressions and models must still be used to ensure a proper fit.

### NIGHT GUARDS:

Also, labs construct night guards. These are clear items worn over the patient's teeth to re-open or re-position the lower jaw. At first, night guards were only worn at night, but now they are usually worn 24 hours a day. Night guards are used by patients who have worn down tooth structure by grinding their teeth, and who have pain resulting from the change in the lower jaw's position as a result of worn teeth.

### ETCHING:

Etching is a chemical process whereby the lab etches the laminate veneer (prosthetic device) that will be affixed to a tooth. The dentist performs the same process on the remaining portion of the tooth in the patient's mouth. This process ensures proper bonding of the veneer to the tooth structure. Some labs break this process out on the bill to the dentist when manufacturing the veneer. This break out of the process on the bill may be because the lab does not specialize in etching and sub-contracts the work to another lab.

### Discussion:

Code Section 12-36-2120 exempts from the sales and use tax the gross proceeds of sales, or sales price of:

(28) medicine and prosthetic devices sold by prescription; hypodermic needles, insulin, alcohol swabs, and blood sugar testing strips sold to diabetics under the authorization and direction of a physician; and dental prosthetic devices;

SC Revenue Ruling #90-1 defined the term "dental prosthetic device" to mean "an artificial device or part which replaces a missing part of the body. The term does not include devices which straighten or support a part of the body." The ruling held that crowns, bridges, veneers and dentures were dental prosthetic devices.

In addition, dental labs have long been considered manufacturers and are therefore entitled to various exemptions and exclusions afforded manufacturers under the sales and use tax law. Code Section 12-36-120 defines the terms "wholesale sale" and "sale at wholesale" to mean a sale of:

\* \* \* \*

(2) tangible personal property to a manufacturer or compounder as an ingredient or component part of the tangible personal property or products manufactured or compounded for sale;

(3) tangible personal property used directly in manufacturing, compounding, or processing tangible personal property into products for sale;

\* \* \* \*

The term "used directly", as used in Code Section 12-36-120, is defined in Regulation 117-174.30 to mean "that the materials or products so used come in direct contact with and contribute to bring about some chemical or physical change in the ingredient or component properties during the period in which the fabricating, converting or processing takes place."

In summary, with respect to the procedures addressed in the Facts, dental labs may purchase tax-free the ingredients and component parts of the tangible personal property they manufacture for sale and those items "used directly" in the manufacturing process.

Conclusion:

The guidelines that the Commission can provide with respect to sales and use tax and the procedures used by dental laboratories in the manufacture of dental prosthetic devices and certain other tangible personal property, are as follows:

DENTURES:

A review of the Facts indicates dental labs are merely billing the various stages of producing dentures (prosthetic devices). In other words, a lab's invoicing of the study cast, master cast, occlusion rims, etc. constitute the total gross proceeds charged in the sale of the end product - an exempt prosthetic device.

Charges by dental labs to dentists for the following constitute one charge, made in stages by one or several labs, for dentures which are exempt from the sales and use tax under Code Section 12-36-2120(28). Therefore, the following charges, by one or several dental labs when manufacturing dentures, are not subject to the sales and use tax:

1. Study casts
2. Custom trays
3. Master casts
4. Working casts
5. Occlusion rims (Bite blocks)
6. Try-ins
7. Attachment labor - dentures

Dental labs must demonstrate that these items are used in the manufacture of dentures, and not in the manufacture of other items.

It should be noted that purchases by labs of the materials to make working casts are excluded from the tax as items "used directly" in manufacturing. Working casts come in direct contact with and contribute to bring about a physical change in the dentures. In addition, all materials purchased by labs which become an ingredient or component part of the dentures sold are excluded from the tax. (See Code Section 12-36-120 and Regulation 117-174.30.)

Charges by dental labs to dentists for surgical trays constitute sales of tangible personal property subject to the tax, as such are not prosthetic devices and are used by dentists in surgery.

#### CROWNS:

Again, a review of the Facts indicates the dental labs are merely billing for the various stages of producing crowns (prosthetic devices). In other words, a lab's invoicings of the study cast, master cast, occlusion rims, etc. constitute the total gross proceeds charged in the sale of the end product - an exempt prosthetic device.

Charges by dental labs to dentists for the following constitute one charge, made in stages by one or several labs, for crowns which are exempt from the sales and use tax under Code Section 12-36-2120(28). Therefore, the following charges, by one or several dental labs when manufacturing crowns, are not subject to the sales and use tax:

1. Study casts
2. Custom trays
3. Master casts
4. Working casts
5. Epoxy casts
6. Occlusion rims (Bite blocks)
7. Try-ins or Trial wax-ups

Dental labs must demonstrate that these items are used in the manufacture of crowns, and not in the manufacture of other items.

It should be noted that purchases by labs of the materials to make working casts and epoxy casts are excluded from the tax as items "used directly" in manufacturing. These casts come in direct contact with and contribute to bring about a physical change in the crowns. In addition, all materials purchased by labs which become an ingredient or component part of the crowns are excluded from the tax. (See Code Section 12-36-120 and Regulation 117-174.30.)

RELINING:

Charges by dental labs to dentists for relines do not constitute sales of tangible personal property to dentists, but constitute sales of services. The labs are considered the users or consumers of the acrylic used to reline the dentures.

Note: Since labs purchase acrylic also as an ingredient or component part of the dentures they manufacturer, the labs may purchase all acrylic tax-free and pay the tax on the acrylic used in relines based upon the fair market value of the acrylic used. Acrylic used in the manufacture of dentures, as previously stated, is not subject to the sales and use tax as an ingredient or component part. (See section on "DENTURES".)

NIGHT GUARDS:

Charges by dental labs to dentists for night guards constitute sales of tangible personal property subject to the tax, as such are not prosthetic devices.

ETCHING

Charges by dental labs to dentists for etching constitutes a service associated with the sale of tangible personal property (veneer).

However, the sales of veneers are exempt from the tax as prosthetic devices and charges for etching would therefore not be subject to the tax.

SOUTH CAROLINA TAX COMMISSION

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S. Hunter Howard, Jr., Chairman

s/A. Crawford Clarkson, Jr.  
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Columbia, South Carolina  
October 16, 1991