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INTERNAL REVENUE SERVICE
NATIONAL OFFICE TECHNICAL ADVICE MEMORANDUM

Taxpayer's Name:

Taxpayer's Address:

Taxpayer's EIN:

Years Involved:

Conferences Held:

Taxpayer=

Date a=

Date b=

Date c=

Date d=

Date e=

Date f=

Date g=

Date h=

ISSUE

Are the molds manufactured by Taxpayer "unique items" under §460(f)(2)(A) of the Internal Revenue Code resulting in the subject contracts being accounted for using the percentage-of-completion method of accounting under §460(b) ("PCM")?

FACTS

Taxpayer manufactures metal molds, wood molds, and fixtures for the production of plastic parts. Most of these molds are used by first-tier suppliers of vehicle subassemblies or manufacturing equipment for the automobile industry. Typical products include injection molds used to produce a variety of interior and exterior parts, such as instrument panel components and door panels.

Each mold is designed to produce a part that is used on one particular automobile model or car-body configuration. Thus, the molds produce parts that generally are not interchangeable between any two vehicle models. When one of Taxpayer's customers is not the successful bidder on a parts-supply contract with an original equipment manufacturer, however, Taxpayer's mold generally is usable by the successful bidder on that contract. Occasionally, Taxpayer will manufacture a second identical mold for a customer, but this typically occurs several months after the first mold is manufactured.

Taxpayer is responsible for designing, fabricating, and assembling a complete injection mold that the customer can use with its own processing equipment to make the parts. This entire process requires approximately 10 months, though some of this time is needed because of customer-caused delays (*e.g.*, engineering changes). Taxpayer contends that it can complete the typical mold in about 6 months if customer-caused delays do not occur. The first few months of the process are devoted to preparing a design for manufacturing. Using the customer's electronic CAD data, which describes the surfaces of the molded part, Taxpayer's CAD/CAM programmers develop a mold that will yield a product of the desired dimensions, quality, and production rate. Included in the mold design are specialized electro-mechanical devices for injecting raw plastic material into the mold and ejecting the cured part from the mold. A customer can specify some components (*e.g.*, valves, electrical components) that are compatible with its existing systems. Taxpayer also needs to verify how the mold equipment will be installed at the customer's plant to ensure that the mold's mechanical and electrical devices will properly interface with the customer's equipment. Once the design has been finalized, Taxpayer's employees prepare a complete set of engineered drawings and specifications and then order the necessary raw materials.

During the next several months, Taxpayer fabricates and assembles the mold. Fabrication and assembly are performed manually by employees highly experienced in the mechanical and electrical professions. They cut molds from stainless steel (production molds) or kirksite/aluminum (prototype molds). During this phase, machinists operate Computer Numerical Control ("CNC") milling machines and programmable boring mills. When machine cutting tools cannot cut the entire surface area of a mold, Taxpayer has to use an Electron-Discharge Machine ("EDM") that

literally removes material molecule by molecule. Before Taxpayer's employees can operate an EDM, however, Taxpayer has to design and fabricate the carbon electrodes that work with the EDM. Over time, these electrodes are consumed in the EDM process. Die makers perform the final finishing and checkout ("benching") of each mold. This process entails manually finishing and polishing the die surfaces to bring the mold into acceptable tolerances. To the extent that Taxpayer's manufacturing process is automated, Taxpayer does not have to reconfigure it each time a new mold is begun. Furthermore, Taxpayer's employees do not have to learn new techniques or receive special training to manufacture each mold.

The time required to design and fabricate a mold is decreasing because of technological changes, such as CAD/CAM, that permit Taxpayer to use customer-supplied computer data that describes the part to be made by the mold, and real-time machining, which eliminates the need for a worker to operate a CNC milling machine.

On Date a, Taxpayer filed a Form 3115, Application for Change in Accounting Method, for the taxable year beginning Date b, and ending Date c. Taxpayer sought the Commissioner's consent to change its method of accounting for long-term contracts from an impermissible hybrid method to the accrual-shipment method described in §1.446-1(c)(ii) of the Income Tax Regulations. In the application, Taxpayer represented that the average model contract has a duration of approximately four weeks, and a mold contract has a duration of approximately three to four months. On Date d, the Service issued a letter ruling granting consent for Taxpayer to change to the accrual-shipment method and to the method of reporting advance payments for goods according to §1.451-5(b)(1)(ii) (financial conformity rule), beginning with the taxable year ending Date c.¹

On Date g, Taxpayer had 32 open contracts whose total contract price exceeded \$100,000. Eight of these contracts had been in progress at Date h.

As part of the examination, the revenue agent requested assistance from an IRS engineer, whose report concluded that the molds manufactured by Taxpayer are unique items under §460(f). After considering the characteristics of "uniqueness" described in Sierracin Corp. V. Commissioner, 90 T.C. 341 (1988), acq. 1990-2 C.B. 1, and in the Service's action on decision in Sierracin ("Sierracin AOD"), the engineer based his conclusion on the following factors: (1) the molds are custom designed to meet the particular needs of the buyer (first-tier supplier) and would not be of use to another customer or be produced for Taxpayer's inventory, (2) mold pre-production costs

¹ Taxpayer changed its annual accounting period from the taxable year ending Date e to the taxable year ending Date f when it elected S corporation status.

ranged from 14.6 to 34.3 percent of the total cost (except for duplicate molds), (3) the manufacturing operation is considered nonautomated, and (4) the time to construct a machine is approximately 10 months, which is relatively long compared to the time to construct an item for inventory. Thus, the revenue agent tentatively proposed to require Taxpayer to change from the accrual-shipment method of accounting to the percentage-of-completion method of accounting mandated by §460. Taxpayer requested that the revenue agent submit a request for technical advice.

APPLICABLE LAW

Section 460(a) provides that in the case of any long-term contract, the taxable income from such contract shall be determined under the PCM (as modified by section 460(b)). The determination of whether the long-term contract rules apply is made on a contract-by-contract basis.

Section 460(b) provides generally that in the case of any long-term contract for which the PCM is used, the percentage of completion shall be determined by comparing costs allocated to the contract and incurred before the close of the tax year with the estimated total contract costs. Any income under the contract (to the extent not previously includible in gross income) shall be included in gross income for the taxable year following the taxable year in which the contract was completed.

Section 460(f) provides that the term "long-term contract" means any contract for the manufacture, building, installation, or construction of property if such contract is not completed within the taxable year in which such contract is entered into. Section 460(f) further provides, however, that a contract for the manufacture of property shall not be treated as a long-term contract unless such contract involves the manufacture of any unique item of a type that is not normally included in the finished goods inventory of the taxpayer, or any item that normally requires more than 12 calendar months to complete (without regard to the period of the contract).

ANALYSIS

In determining whether the molds are unique for purposes of section 460(f), we believe that the characteristics set forth by the court in Sierracin are relevant, even though that case was concerned with the application of the long-term contract method prior to section 460. As the Service stated in its Sierracin AOD (AOD CC-1990-16 (May 14, 1990)), the following characteristics generally distinguish unique items from non-unique items:

1. Custom Design. Items that are custom designed to fulfill the particular needs of a buyer are usually unique items unless they would be of use to

a number of potential buyers and share a basic design with items previously produced by the taxpayer.

2. Pre-Production Costs. Performance of a contract to produce unique items often requires the taxpayer to design the items, or to develop the production process, or both, prior to the beginning or during the actual production of the items. Therefore, performance of a contract to produce unique items often requires extensive research, development, design, engineering, retooling, or similar activities. Such activities are extensive if costs incurred or time required to perform these activities are significant compared to the total costs or time to perform the contract.
3. Nature of Manufacturing Operation. A unique item is generally produced in a nonautomated manufacturing operation or in a specialized manufacturing operation that must be developed or extensively modified in order to perform the contract.
4. Length of Production Period. If the production period of an item is relatively long, it is more likely to be a unique item.

Custom Design.

Many of the contracts obligate Taxpayer to manufacture a single mold to meet the needs of a particular customer. Though the process of creating and manufacturing molds generally is the same for each mold, the result of that effort (the mold itself) is unique because the mold is designed to produce a part that is used on one particular automobile model or car-body configuration. The molds are generally not interchangeable between car models or car manufacturers. Occasionally, a contract obligates Taxpayer to manufacture an additional mold for the same customer or to manufacture a mold for the second supplier of the same part. In both cases, the molds are designed to meet the needs of a particular customer. Furthermore, in the latter case, two molds to produce the same part can be different because of the two parts suppliers using different production equipment.

Pre-Production Costs.

A unique item typically requires activities related to research, development, design, engineering, retooling, etc. before the production process begins ("pre-production activities"). After reviewing Taxpayer's job cost detail reports, the Service's engineer determined that four cost categories relate to pre-production activities: (1) Design, (2) CNC Programming, (3) Parting Line and Laminate, and (4) Electrodes. Parting line and laminate activities involve the fabrication of tooling aids that are used to

trace and cut a shape from a steel block by controlling the path of the machine cutting head. Tooling aids were commonly used in 1993 and 1994, but have been gradually replaced by the CNC milling machines. As described previously, electrodes are needed when Taxpayer has to use an EDM because ordinary cutting tools cannot cut the entire surface area of a mold. The Service's engineer determined that Taxpayer's pre-production costs ranged from 14.6 to 34.3 percent of the total cost, with a mean of 21.7 percent. Taxpayer's pre-production costs are declining because of the new technologies discussed previously, but remain in the 10 percent range.

Nature of Manufacturing Operation.

Though mold-making is becoming more automated every year, it still requires a substantial amount of manual labor. As described previously, some fabrication (e.g., EDM preparation) and assembly (e.g., finishing, benching) is performed manually.

Length of Production Period.

The production period for Taxpayer's 1995 molds ranged from eight months to 17 months with a mean of approximately 10 months. While some of the production period may be related to customer change orders, such delays are a normal occurrence that should be considered in determining whether a contract is a long-term contract. See §1.451-3(b)(2)(i)(B) (completion determined on basis of all facts and circumstances); §1.451-3(b)(3)(iv)(A) (initial classification requires reasonable allowances for delay, rework, and change orders).

CONCLUSION

We conclude Taxpayer's molds subject to the typical contracts described above are unique items because (1) Taxpayer cannot reasonably expect to sell a finished mold to anyone other than the identified first-tier supplier, (2) Taxpayer incurs a significant amount of pre-production costs to produce a mold, (3) important parts of the Taxpayer's manufacturing operations are performed manually, and (4) Taxpayer's production period is relatively long. All four factors favor the Service's position that Taxpayer's molds are unique items under §460. Thus, Taxpayer must account for the related long-term contracts using the PCM.

The unique item determination must be made for each contract. Items with lower preproduction costs and shorter production periods than those discussed above might not be unique items under §460, and consequently, the related contracts would not be long-term contracts.

The consent agreement dated Date d, is modified to the extent it applies to Taxpayer's long-term contracts. Taxpayer must cease reporting the gross income from its long-term contracts under the accrual-shipment method of accounting described in §1.446-1(c)(1)(ii) and begin reporting this gross income under the PCM. Under the authority of §7805(b), the Service will not apply this modification retroactively. Taxpayer may continue reporting the gross income from its long-term contracts under the accrual-shipment method for any contract entered into before the date that this Technical Advice Memorandum is issued.

A copy of this Technical Advice Memorandum is to be given to the taxpayer. Section 6110(j)(3) of the code provides that it may not be used or cited as precedent.