File C4-45 November 2016 www.extension.iastate.edu/agdm

## **Labor and Machinery Sharing Agreement**

Labor and Machinery Sharing Agreement is one of your farm business choices (Information File Examining your Farm Business Choices). It is used in the farm business transfer process (Information File The Farm Business Transfer Process) when the younger party "spins-off" or establishes a separate farming operation. Although each party has a separate farming operation, they share labor and machinery.

This agreement is used when each party has a separate land base. They younger party may obtain a rented farm from land the older party previously rented or land that appeared on the rental market. Buying land may be an option in some situations.

Each party pays the production expenses, receives the income, and has final management control over his/her individual cropping operation. Livestock programs may be separate or mutually owned and operated.

Each party owns individual items of machinery. However, the younger party usually does not have a complete line of machinery and the older party typically needs additional labor. When both parties combine labor and machinery, they can efficiently operate both farms. As an alternative, the two parties may own the machinery together. *Information Files Joint Machinery Ownership* and <u>Farm Machinery Joint Ventures</u> provide information on machinery co-ownership.

A contractual agreement is developed whereby the older party pays the younger party for his/ her labor and machinery used on the older party's farm and vice versa. To simplify the exchange, the parties will often keep the relationship of the amount of land farmed to the amount of machinery owned approximately equal. For

example, if the older party's operation accounts for two-thirds of the total land farmed and owns two-thirds of the machinery, there may not be need for a cash machinery payment. Operating costs can be accounted for separately or ignored in the agreement to simplify bookkeeping. Both parties can provide fuel for machinery used on their own land, and pay for repairs on their own machinery. If these ratios are not equal, a machinery payment will need to be made. A labor payment may be needed.

Two methods for computing the labor and machinery costs on which payments can be based are discussed below.

## **Based on Custom Rates**

Custom rates (*Information File* <u>Iowa Farm Custom</u> <u>Rate Survey</u>) are an approximation of the cost of doing various field operations. Costs include labor, fuel, lubrication, repairs, and the cost of machinery ownership (depreciation, return on investment, insurance, and housing). Custom rates may also include a margin for profit.

### **Adjusting Custom Rates**

If the older party does an operation on the younger party's farm and provides the labor, fuel, and equipment, the custom rate can be used directly as an estimate of the cost of the operation. If the older party provides everything except the labor and/or fuel, a charge should be subtracted from the custom rate for these items. This can be done by either keeping track of the actual amount of labor and fuel used, or estimating the time required (*Information File Farm Machinery Selection*) and the fuel required (*Information File Fuel Required for Field Operations*).

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## Example 1.

The older party owns the planter and tractor and plants the younger party's crop. A \$20.00/ acre custom rate is charged. If the younger party provides the diesel fuel and labor, \$3.55/ acre would be deducted from the rate (.62 gal/ acre x \$2.50/gal. = \$1.55/acre) + (\$16/hr./ 8 acre/hr. = \$2.00/acre) = \$3.55.

Custom rates can be divided into their various cost components. For example, the cost of owning the tractor makes up about 25 percent of a tillage custom rate. Another 31 percent consists of fuel and repairs for the tractor for a total of 56 percent. Labor makes up 18 percent.

Table 1.	Tillage <sup>1</sup>	Planter	Combine
Power Unit			
Ownership	25%	19%	57%
Fuel and lub.	25%	16%	20%
Repairs	<u>6%</u>	<u>5%</u>	<u>10%</u>
Total	56%	40%	87%
Implement			
Ownership	17%	27%	
Repairs	<u>9%</u>	<u>17%</u>	
Total	26%	44%	
Labor	<u>18%</u> 100%	<u>16%</u> 100%	<u>13%</u> 100%

<sup>&</sup>lt;sup>1</sup>Includes chisel plow, tandem disk, field cultivator, rotary hoe, and cultivator.



## Example 2.

A typical custom rate for tandem disking is \$15.00 per acre. Using the percentages shown in Table 1, the costs can be estimated as follows:

Tractor ownership cost = \$3.75 ( $\$15.00 \times 25\%$ ), Tractor fuel, lubrication & repairs = \$4.65 ( $\$15.00 \times 31\%$ ),

Disk ownership =  $$2.55 ($15.00 \times 17\%)$ , Disk repairs =  $$1.35 ($15.00 \times 9\%)$ , Labor =  $$2.70 ($15.00 \times 18\%)$ 

The party receiving the service would pay the other party for only those components received.

# Based on Actual Cost Depreciation

A popular method of estimating depreciation is to multiply the current market value of the machine by 8 to 10 percent. For example, a \$50,000 machine would have an estimated annual depreciation of \$5,000. Newer machinery items may justify a higher percent while others may be lower. Income tax depreciation schedules are generally not very useful for estimating actual depreciation.

Depreciation per acre (per hour) can be estimated by dividing total depreciation by the total acres covered (hours used). For example, if the older party's machine has \$5,000 of depreciation and covers 1,000 acres, the depreciation per acre is \$5.00. If 400 of these acres are the younger party's operation, the younger party owes \$2,000 (400 acres x \$5.00) to the older party.

### Return on Investment

Money invested in machinery represents a cost. If the machinery is sold, the money can be invested elsewhere to earn a return, or it can be used to reduce debt thereby reducing interest expense. To estimate this cost, multiply the current machinery value by an interest rate (e.g., the current rate on CDs).

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### Other Costs

Other costs to include are repairs, fuel, lubrication, insurance, and housing. One percent can be added to the depreciation rate to cover insurance and housing. You may want to keep a separate listing of the repairs for each machine or allocate the total repair cost at the end of the year to each machine. Major repairs and overhauls should not be charged as a cost. These increase the value of the machine and show up as higher depreciation and return on investment in subsequent years. Fuel use can be estimated or the actual fuel use can be monitored. If the younger party provides the fuel or the labor, these costs would not be included.

Often, the younger party provides labor on more acres than he/she receives the use of machinery for. If the value of labor provided is roughly equal to the value of machinery loaned, no actual cash may change hands.



## Example 3

The older party's planter and tractor are used to plant the crops of both parties (1,200 acres). The 12-row planter has a current value of \$50,000. The tractor is worth \$100,000 and covers 3,000 acres annually. Assuming a 10 percent depreciation rate, 1 percent for insurance and housing, and a 5 percent return on investment, the costs are as follows:

	<u>\$/acre</u>
Tractor—\$100,000 x 16% ÷ 3,000 acres =	\$5.33
Planter—\$50,000 x 16% ÷ 1,200 acres =	6.67
Fuel and lub.— .6 gal/acre @ \$2.50/gal =	1.50
Repairs (tractor)— \$5,000 ÷ 3,000 acres =	1.67
Repairs (planter)— \$1,500 ÷ 1200 acres =	1.25
Labor— \$16.00/hr. ÷ 11 acres/hr. =	<u>1.45</u>
	\$17.87

The older party charges the younger party \$17.87 per acre for all costs. Fuel and labor would be subtracted if the younger party provides these costs.

#### ... and justice for all

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