



Canada Revenue
Agency

Agence du revenu
du Canada

Payroll Deductions Formulas for Computer Programs

83rd Edition

Effective July 1, 2006

Do not discard the January 1, 2006 publication.

Distribution of this publication

There is no automatic mailing of this publication. Combined with the reduction of printed quantities, this generates a substantial cost savings, eliminates sending paper to clients who do not require the publication, and reduces waste.

Clients can download a copy of this publication from our Web site, or receive one by calling **1-800-959-2221**. There is also an online ordering system on our Web site.

Payroll deductions information is available on the Canada Revenue Agency (CRA) Web site at www.cra.gc.ca/payroll.

T4127 printed version will be discontinued

We are phasing out the printed version of the *T4127 Payroll Deductions Formulas for Computer Programs*. The last printed edition will be issued for July 1, 2006. The T4127 will still be available on our website at which time you may print the document or download it to your personal computer.

We based this decision on the gradual reduction in recent years in the number of people ordering the printed version to be mailed to them. Also, with the increasing accessibility of technology such as the internet, many users have told us that they prefer to view and/or download the T4127 from our website rather than waiting for the guide to be mailed to them.

This change will result in cost savings and benefit the environment.

As always, we encourage feedback on any of our products so if you have further suggestions for improvements on how we can enhance our service in the delivery of this publication then please contact us by email at **TOD@ccra-adrc.gc.ca**.

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If your business has access to the Internet, the CRA can now notify you immediately of any changes. To get quick and easy access to the CRA's latest information and new publications including changes to payroll deductions, you can subscribe free of charge to any of the electronic mailing lists. The CRA will add more electronic mailing lists to its Web site in the future.

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Tables on Diskette

Changes will apply to the mail-out of the January 1, 2007, edition of *Tables on Diskette* (T4143), and to the July 2007 edition (if there is one).

To phase out the CD version of the tables, we are limiting copies of the 2007 edition.

Starting on January 1, 2007, you can use our new payroll deductions online calculator, free of charge, to calculate payroll deductions. The calculator will offer the same features as the current *Tables on Diskette*.

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La version française de cette publication est intitulée *Formules pour le calcul informatisé des retenues sur la paie* – 83^e édition.

What does this publication contain?

This publication contains the formulas you need to determine federal, provincial (except Quebec), and territorial income taxes, Canada Pension Plan (CPP) contributions, and Employment Insurance (EI) premium deductions. The formulas also allow you to calculate payroll deductions for special cases such as commission, pension income, bonuses, and retroactive pay increases.

The formulas used in this publication to calculate statutory deductions have been approved for purposes of the *Income Tax Act*, Canada Pension Plan, and *Employment Insurance Act* as well as their related regulations and any amendments proposed to these acts. The formulas are valid unless any adjustments are required because of changes to income tax rates, personal tax credits, Canada Pension Plan pensionable earnings, contributions, or rate, or to Employment Insurance insurable earnings, premiums, or rate.

For more information on income amounts that are subject to payroll deductions, see the employers' guide called *Payroll Deductions (Basic Information)*. If you have any questions about the formulas contained in this publication, contact your tax services office or tax centre. For the addresses and telephone numbers of your tax services office or tax centre, see the listings in the government section of your telephone book.

Employers who have an establishment in the province of Quebec

When we refer to the annual provincial or territorial tax deduction, factor "T2," in this publication, **this item does not apply to the province of Quebec**. Quebec administers its own provincial income tax and Quebec Pension Plan contributions. If you have any questions about the formulas for Quebec, contact the Ministère du Revenu du Québec, at the following address:

Ministère du Revenu du Québec
3800 Marly Street
Ste-Foy QC G1X 4A5

Telephone:..... 1-800-567-4692

Outside Canada:(418) 659-4692

What's new for July 1, 2006?

The information contained in this 83rd edition publication is effective July 1, 2006. For formulas and factors not included in this edition, see publication T4127, *Payroll Deductions Formulas for Computer Programs* - 82nd edition, effective January 1, 2006. Significant changes to the formulas and text in this publication appear with a shaded background.

Tax measures for July 2006

This publication reflects some income tax changes recently announced which, if enacted by the applicable legislature as proposed, would be effective July 1, 2006. At the time of publishing, these proposed changes had not been legislated. We recommend that you use the new payroll deductions tables and formulas in this publication for withholding, commencing with your first payroll in July 2006.

Federal changes included in this edition

Indexing for July 2006

There are no indexing changes required for July 1, 2006.

Federal tax rates and income thresholds

In the Budget 2006 announced on May 2, 2006, the lowest tax rate for 2006 will be 15.25%. Therefore, the tax rate for the lowest tax bracket is changed from 15% to 15.5% for taxable income up to \$36,378 for Option 1 formulas commencing July 1, 2006.

This changed rate of 15.5% will be used for the remainder of the 2006 tax year and will be used to calculate the federal non-refundable tax credit (factors K1, K2 and K4).

Effective July 1, 2006, the federal tax rates and income thresholds are changed as follows:

- 15.5% (formerly 15%) on income less than or equal to \$36,378;
- 22% on income greater than \$36,378, but less than or equal to \$72,756;
- 26% on income greater than \$72,756, but less than or equal to \$118,285; and
- 29% on income greater than \$118,285.

The lowest tax rate used to calculate the federal non-refundable tax credits (factors K1, K2 and K4) is changed to 15.5% (formerly 15%).

Option 1 – July 2006 federal tax rates and income thresholds		
Annual taxable income A More than – Not more than	Rate R	Constant K
\$ 0 – \$ 36,378	0.155	\$ 0
36,378 – 72,756	0.220	2,365
72,756 – 118,285	0.260	5,275
118,285 – and over	0.290	8,823

Federal personal amounts for July 1, 2006

As announced in the Budget 2006 of May 2, 2006, the basic personal amount for 2006 will be \$8,839.

In order to achieve this basic personal amount for 2006:

- up to June 30, 2006, source deductions will continue to be calculated using a basic personal amount of \$9,039; and then
- as of July 1, 2006, source deductions will be adjusted to reflect a basic personal amount of \$8,639 for Option 1.

The federal spouse or common-law partner amount and the amount for an eligible dependent for 2006 will be deemed to be \$7,505. In order to achieve this:

- up to June 30, 2006, source deductions will continue to be calculated using \$7,675; and then
- as of July 1, 2006, source deductions will be adjusted to \$7,335 for Option 1.

Currently, the non-refundable tax credit for pension income is calculated by using the lowest personal income tax rate for the year applied to the lesser of \$1,000 and eligible pension income. For 2006 and subsequent years, the budget proposes to increase the \$1,000 limit to \$2,000.

The Budget 2006 has introduced three new non-refundable personal tax credits for July 1, 2006. The first one is the Canada Employment Credit which will be designated as **K4** and will be calculated by using the lowest personal tax rate for the year and will apply on the lesser of:

- \$500; and
- the individual's employment income for the year.

The budget proposes that, for 2006, the amount on which the Canada Employment Credit will be calculated be set at \$500; however, since the measure only takes effect on July 1, 2006, the maximum amount for 2006 will be \$250. Please note that pension income is not eligible for this credit.

The second non-refundable tax credit introduced is the Textbook Tax Credit. It will be included on the TD1 form but will not affect the formulas in this publication. The credit will be calculated by using the lowest personal income tax rate for the year. The amount on which the credit is based will be:

- \$65 for each month the student qualifies for the full-time education tax credit; and
- \$20 for each month the student qualifies for the part-time education tax credit.

The third credit is the Tax Credit for Public Transit Passes. It will not be included on the TD1 form and will not affect the formulas in this publication. The credit will be calculated by using the lowest personal income tax rate for the year and will apply to the portion of the cost of passes that is in respect to transit after June 30, 2006.

Basic personal amount	\$8,639
Age amount.....	4,066
Pension income amount	2,000
Education amount for each month (full-time)	400
Education amount for each month (part-time)	120
Disability amount.....	6,741
Spouse or common-law partner amount.....	7,335
Amount for an eligible dependant	7,335
Caregiver amount.....	3,933
Amount for an infirm dependant age 18 or older	3,933

Federal labour-sponsored funds tax credit for 2006

No changes from the 82nd Edition, effective January 1, 2006.

Federal surtax for income not earned in a province or territory

No changes from the 82nd Edition, effective January 1, 2006.

Tax relief for Canadian Forces and police

No changes from the 82nd Edition, effective January 1, 2006.

Canada Pension Plan (CPP) and Employment Insurance (EI)

There are no changes to CPP or EI for July 1, 2006.

For CPP for 2006, the maximum pensionable earnings are **\$42,100**, and the basic exemption for the year is **\$3,500**. The contribution rate for employees is **4.95%**. An employee's maximum contribution for the year is **\$1,910.70**.

For EI for 2006, the maximum annual insurable earnings are **\$39,000** and the premium rate is **1.87%** for a maximum annual premium of **\$729.30** for the country except for Quebec and **1.53%** for a maximum annual premium of **\$596.70** for Quebec.

For complete details, see publication T4127, *Payroll Deductions Formulas for Computer Programs* – 82nd Edition, effective January 1, 2006.

Provincial and territorial tax changes effective July 1, 2006

Alberta

As announced in the provincial Budget 2006 of March 22, 2006, the basic personal amount for 2006 will be \$14,899.

In order to achieve this basic personal amount for 2006:

- up to June 30, 2006, source deductions will continue to be calculated using a basic personal amount of \$14,799; and then
- as of July 1, 2006, source deductions will be adjusted to reflect a basic personal amount of \$14,999 for Option 1.

The provincial spouse or common-law partner amount and the amount for an eligible dependent for 2006 will be deemed to be \$14,899. In order to achieve this:

- up to June 30, 2006, source deductions will continue to be calculated using \$14,799; and then
- as of July 1, 2006, source deductions will be adjusted to \$14,999 for Option 1.

The provincial tax rate applicable to all taxable income for Alberta for July 1, 2006, remains at 10%.

Listed below are some of the revised non-refundable personal tax credits amounts for the province of Alberta. Refer to Form TD1AB for complete information on personal amounts.

- The basic personal amount is revised to \$14,999 (formerly \$14,799).
- The spouse or common-law partner amount is revised to \$14,999 (formerly \$14,799).

Personal amounts will be multiplied by the province's tax rate of 10%.

Personal tax credits return (TD1 forms)

Federal Form TD1, 2006 Personal Tax Credits Return

The federal Form TD1 has been revised for July 2006. General re-filing of the 2006 federal Form TD1 is not necessary, but a new employee, a new pensioner, or an individual who wishes to change his or her federal claim amounts will have to complete the July 2006 federal Form TD1.

The federal claim codes are in Chart 1 of the publication *Payroll Deductions Tables* and in this publication under the heading "Federal, provincial, and territorial claim codes" on page 7.

A separate worksheet TD1-WS is available for employees or pensioners who want to calculate partial claims for some of the federal personal tax credits amounts.

Claim codes

Basic personal amounts and employment income from all sources

You are required to deduct tax according to the claim code that corresponds to the claim amount on line 12 of the TD1 form. If an employee states that his or her total expected income will be less than the "Total claim amount" on line 12 of a TD1 form, do not deduct any federal, provincial or territorial tax, as applicable. However, as an employer, if you know that the employee's statement is false, you must deduct federal and provincial or territorial tax from the employee's salary.

It is a serious offence to accept a TD1 form that you know contains false or misleading statements. If you are not sure whether or not a statement you receive on a TD1 form is false, contact your tax services office for advice.

Claim Code 0

This code represents **no claim** amount allowed. If the federal claim code is “0” because the employee is a non-resident, the provincial claim code must also be “0.”

Federal, provincial, and territorial claim codes

Some provincial claim code amounts will not correspond to the federal claim code amounts. You will not find claim code amounts on Form TD1. A listing of claim codes and amount ranges can be found below.

Only the federal and Alberta claim codes have changed from the January 1, 2006 Edition therefore only these two will be reproduced.

Option 1 – July 2006 federal claim codes			
Claim code	Total claim amount (\$)	Option 1, TC =	Option 1, K1 =
Code 0	No claim amount	\$ 0.00	\$ 0.00
Code 1	Minimum – 8,639.00	8,639.00	1,339.05
Code 2	8,639.01 – 10,486.00	9,562.50	1,482.19
Code 3	10,486.01 – 12,333.00	11,409.50	1,768.19
Code 4	12,333.01 – 14,180.00	13,256.50	2,054.76
Code 5	14,180.01 – 16,027.00	15,103.50	2,341.04
Code 6	16,027.01 – 17,874.00	16,950.50	2,627.33
Code 7	17,874.01 – 19,721.00	18,797.50	2,913.61
Code 8	19,721.01 – 21,568.00	20,644.50	3,199.90
Code 9	21,568.01 – 23,415.00	22,491.50	3,486.18
Code 10	23,415.01 – 25,262.00	24,338.50	3,772.47

Option 1 – July 2006 Alberta claim codes			
Claim code	Total claim amount (\$)	Option 1, TCP =	Option 1, K1P =
Code 0	No claim amount	\$ 0.00	\$ 0.00
Code 1	Minimum – 14,999.00	14,999.00	1,499.90
Code 2	14,999.01 – 17,179.00	16,089.00	1,608.90
Code 3	17,179.01 – 19,359.00	18,269.00	1,826.90
Code 4	19,359.01 – 21,539.00	20,449.00	2,044.90
Code 5	21,539.01 – 23,719.00	22,629.00	2,262.90
Code 6	23,719.01 – 25,899.00	24,809.00	2,480.90
Code 7	25,899.01 – 28,079.00	26,989.00	2,698.90
Code 8	28,079.01 – 30,259.00	29,169.00	2,916.90
Code 9	30,259.01 – 32,439.00	31,349.00	3,134.90
Code 10	32,439.01 – 34,619.00	33,529.00	3,352.90

Part A – Formulas to determine tax deductions on salary, wages, taxable benefits, pension income, commissions, and other non-periodic payments

Glossary

Factor	Meaning (refer to the formulas for complete details)
A	Annual taxable income
A1	Annual net income used to determine the Manitoba and British Columbia tax reduction
B	Bonus, retroactive pay increase, vacation pay when vacation is not taken, and accumulated overtime payment
C	Canada (or Quebec) Pension Plan contributions for the pay period
D	Employee's year-to-date CPP contribution with the employer
D1	Employee's year-to-date Employment Insurance premium with the employer
E	Total commission expenses deductions reported on Form TD1X
EI	Employment Insurance premiums for the pay period
F	Payroll deductions for employee contributions to a registered pension plan (RPP), a registered retirement savings plan (RRSP), or a retirement compensation arrangement (RCA)
F1	Annual deductions such as child care expenses and support payments, etc., authorized by a tax services office or tax centre
F2	Alimony or maintenance payments required by a legal document to be payroll-deducted
G	Gross commissions amount including gross salary
HD	Annual deduction for living in a prescribed zone as indicated on Form TD1
I	Gross remuneration for the pay period
I1	Total remuneration for the year reported on Form TD1X
IE	Insurable earnings for the pay period including insurable taxable benefits, bonuses, and retroactive pay increases
K	Federal constant
KP	Provincial or territorial constant
K1	Federal non-refundable personal tax credit
K1P	Provincial or territorial non-refundable personal tax credit
K2	Federal Canada (or Quebec) Pension Plan contributions and Employment Insurance premium tax credits for the year
K2P	Provincial or territorial Canada (or Quebec) Pension Plan contribution and Employment Insurance premiums tax credits for the year
K3	Other federal tax credits, such as medical expenses and charitable donations authorized by a tax services office or tax centre
K3P	Other provincial or territorial tax credits, such as medical expenses and charitable donations authorized by a tax services office or tax centre
K4	Canada Employment Credit
L	Additional tax deductions requested for the pay period
LCF	Federal labour-sponsored funds tax credit
LCP	Provincial or territorial labour-sponsored funds tax credit
M	Accumulated federal and provincial or territorial tax deductions (if any) to the end of the last pay period
M1	Year-to-date tax deducted on all payments included in B year-to-date
P	The number of pay periods in the year
PI	Pensionable income for the pay period, or the gross income plus any taxable benefits for the pay period
PR	The number of pay periods remaining in the year
R	Federal tax rate applicable to the annual taxable income A
S	Ontario, Manitoba or British Columbia provincial tax reduction
S1	Annualizing factor
T	Estimated federal and provincial or territorial tax deductions for the pay period

T1	Annual federal tax deduction
T2	Annual provincial or territorial tax deduction
T3	Annual basic federal tax
T4	Annual basic provincial or territorial tax
TB	Tax deductions on a bonus, retroactive pay increase, etc., payable now
TC	“Total claim amount” reported on federal Form TD1
TCP	“Total claim amount” reported on the provincial or territorial TD1 form
U1	Union dues for the pay period
V	Provincial or territorial tax rate for the year
V1	Surtax calculated on the basic provincial or territorial tax
V2	Additional tax calculated on taxable income (applies to Ontario Health Premium only)
Y	Additional provincial or territorial tax reduction based on applicable amounts reported on the provincial or territorial Form TD1
YTD	Year-to-date

Formula to calculate annual taxable income (A)

As the formula to calculate the annual taxable income and the explanatory variables have not changed, they have not been reproduced.

Formula to calculate basic federal tax (T₃)

$$\begin{aligned}
 T_3 &= \text{Annual basic federal tax} \\
 &= (R \times A) - K - K_1 - K_2 - K_3 - K_4 \\
 &\text{If the result is negative, } T_3 = \$0.
 \end{aligned}$$

R = Federal tax rate applicable to annual taxable income A.

Option 1 – July 2006 federal tax rates and income thresholds		
Annual taxable income A More than – Not more than	Rate R	Constant K
\$ 0 – \$ 36,378	0.155	\$ 0
36,378 – 72,756	0.220	2,365
72,756 – 118,285	0.260	5,275
118,285 – and over	0.290	8,823

A = Annual taxable income.

K = Federal constant to adjust the application of the federal tax rate to the annual taxable income A. The constant is the tax overcharged when applying the 22%, 26%, and 29% rates to the total annual taxable income A. See the “Option 1 – July 2006 federal tax rates and income thresholds” table above.

K₁ = Federal non-refundable personal tax credit
= $0.155 \times TC$

Note

The appropriate percentage for the remainder of the year is 15.5%. The appropriate percentage is the lowest percentage referred to in the “Option 1 – July 2006 federal tax rates and income thresholds” table above.

Where:

TC = The total claim amount reported on Form TD1. If Form TD1 is not filed by the employee or pensioner, TC is \$8,639, and for non-resident individuals, TC is \$0. If the claim code is E, T = \$0.

Note

If the province is Ontario, even if the claim code is E, the Ontario Health Premium is payable on annual income over \$20,000.

K2 = Canada Pension Plan contributions and Employment Insurance premiums federal tax credits for the year.

$$= [(0.155 \times (P \times C, \text{max. } \$1,910.70)) + (0.155 \times (P \times EI, \text{max. } \$729.30))]^*$$

For employees in Quebec only:

K2 = Quebec Pension Plan contributions, Employment Insurance premiums, and provincial parental insurance plan premiums federal tax credits for the year.

$$= [(0.155 \times (P \times C, \text{max. } \$1,910.70)) + (0.155 \times (P \times EI, \text{max. } \$596.70)) + (0.155 \times (P \times IE \times 0.00416, \text{max. } \$237.12))]^*$$

Where:

P = The number of pay periods in the year.

C = Canada (or Quebec) Pension Plan contribution for the pay period.

EI = Employment Insurance premium for the pay period

IE = Insurable earnings for the pay period

Note

* Where an employee has already contributed the maximum CPP or EI for the year with the employer, use the maximum CPP or EI deduction to determine the credit for the remainder of the year. Where, during the pay period in which the employee reaches the maximum, the CPP or EI, when annualized, is less than the annual maximum, then use the maximum annual deduction(s) in that pay period.

In either case, for the remaining pay periods in the year, $(P \times C)$ or $(P \times EI)$, as applicable, is replaced by the maximum annual deduction(s). This modification ensures that the employee will receive the maximum CPP and EI tax credit for the remaining pay periods in the year.

If you want to use a year-to-date method to calculate CPP and EI federal tax credits, $(P \times C)$ and $(P \times EI)$ can be modified as follows:

$(P \times C)$ is changed to the lesser of:

- (i) \$1,910.70; and
- (ii) Year-to-date C + $(PR \times C)$.

$(P \times EI)$ is changed to the lesser of:

- (i) \$729.30; and
- (ii) Year-to-date EI + $(PR \times EI)$.

For employees in Quebec only:

$(P \times EI)$ is changed to the lesser of:

- (i) \$596.70; and
- (ii) Year-to-date EI + $(PR \times EI)$.

Note

You can also use the year to date method to determine the provincial parental insurance premium credit for Quebec by using the lesser of the maximum premium for the year and the year to date premium plus the current premium times the pays remaining.

Where:

PR = The number of pay periods remaining in the year.

For employees remunerated by commission only:

$$K2 = [(0.155 \times (0.0495 \times (I1 - \$3,500)^*, \text{max. } \$1,910.70)) + (0.155 \times (0.0187 \times I1, \text{max. } \$729.30))]$$

* If the resulting amount is negative, substitute \$0.

For employees in Quebec only:

$$K2 = [(0.155 \times (0.0495 \times (I1 - \$3,500)^*, \text{max } \$1,910.70)) + (0.155 \times (0.0153 \times I1, \text{max. } \$596.70)) + (0.155 \times (0.00416 \times I1, \text{max } \$237.12))]$$

* If the resulting amount is negative, substitute \$0.

Note

The preceding is subject to rules in Part B and Part C of this document and the instructions contained in the employers' guide called *Payroll Deductions (Basic Information)*.

- I1** = Total remuneration for the year reported on Form TD1X. Total remuneration includes commission payments, salary (where applicable), non-periodic payments, and taxable benefits.
- K3** = Other federal tax credits, such as medical expenses and charitable donations requested by an employee or pensioner and authorized by a tax services office or tax centre. The employer or payer will be informed by a tax services office or tax centre of the amount to be used as K3, when applicable.

If the K3 amount is implemented after the employer's or payer's first pay period in the year, K3 must be adjusted by using the following formula:

$$(P \times K3) / PR$$

Where:

P = The number of pay periods in the year.

K3 = Annual federal tax credit authorized by a tax services office or tax centre.

PR = The number of pay periods remaining in the year.

- K4** = Canada Employment Credit
= The lesser of:
(i) $0.155 \times A$; and
(ii) $0.155 \times \$500$

Note:

Please note that pension income is not eligible for this credit.

Formula to calculate annual basic provincial or territorial tax (T₄)

As Alberta is the only province or territory to have a provincial/territorial change, we are only reproducing the Alberta calculation.

For Alberta only:

$$T2 = T4 + V1 - S - LCP$$

If the result is negative, $T2 = \$0$.

Where:

$$T4 = (V \times A) - KP - K1P - K2P - K3P$$

Where:

$$V = 0.10$$

$$KP = \$0$$

$$K1P = 0.10 \times TCP$$

Where:

TCP = The total of personal non-refundable tax credits amounts reported on Form TD1AB. If Form TD1AB is not filed, TCP is \$14,999.

K2P = $[(0.10 \times (P \times C, \text{max. } \$1,910.70)) + (0.10 \times (P \times EI, \text{max. } \$729.30))]$ *

* Where an employee reaches the maximum CPP or EI for the year with an employer, the instructions in the note for the K2 factor on page 11 also apply to the K2P factor. For employees remunerated by commission, use the federal K2 formula for commissions and replace the lowest federal rate in the K2 formula with the tax rate for the province.

K3P = Other annual provincial non-refundable tax credits, such as medical expenses or charitable donations authorized by a tax services office or tax centre. The tax office will inform the employer or payer of the amount of K3P when it applies and of how to implement the amount after the first pay period of the year.

V1, S, and LCP = \$0

Option 1 – Tax calculation examples for periodic payments

Steps to follow – for salary, wages, pensions, or other periodic payments

The growing complexity of determining tax deductions makes the employer's or payer's task of payroll preparation difficult. The following step-by-step method should provide an understandable approach to Option 1 based on the following examples.

Notes

The following example have been standardized to reflect the same income and deduction amounts for each province and territory. We trust this measure will simplify the process of reviewing and testing calculations.

In addition, the federal calculation has been shown only once, with the portion for each province and territory shown after. This method will avoid duplication and reduce the number of pages in this publication.

Changes in this section are not shaded.

Example – Assumptions and federal calculation

This example is for a married employee who has a dependent spouse and two dependent children (under 18). The total personal non-refundable tax credits amount on Form TD1 is \$15,974 (\$8,639 + \$7,335). For each province and territory we have assumed the maximum claims for these dependants, as shown on the provincial or territorial TD1 forms.

The employee's salary is \$57,200 annually, or \$1,100 on a weekly payroll (52 pay periods). Registered pension plan contributions are \$50 for the pay period, and \$20 is deducted for union dues. The employee bought, by payroll deductions, \$2,000 of approved shares of the capital stock of a prescribed labour-sponsored venture capital corporation.

Step 1

Determine A using the following formula:

$$\begin{aligned} A &= [P \times (I - F - F_2 - U_1)] - HD - F_1 \\ &= [52 \times (\$1,100 - \$50 - \$0 - \$20)] - \$0 - \$0 \\ &= [52 \times \$1,030] - \$0 - \$0 \\ &= \$53,560 - \$0 - \$0 \\ &= \$53,560 \end{aligned}$$

Determine C using the following formula:

$$\begin{aligned} C &= \text{The lesser of:} \\ &\quad \text{(i) } \$1,910.70 - D; \text{ and} \\ &\quad \quad = \$1,910.70 \\ &\quad \text{(ii) } 0.0495 \times [PI - (\$3,500 / 52)] \\ &\quad \quad = 0.0495 \times (\$1,100 - \$67.30) \\ &\quad \quad = 0.0495 \times \$1,032.70 \\ &\quad \quad = \$51.12 \end{aligned}$$

Determine EI using the following formula:

$$\begin{aligned} EI &= \text{The lesser of:} \\ &\quad \text{(i) } \$729.30 - D_1; \text{ and} \\ &\quad \quad = \$729.30 \\ &\quad \text{(ii) } 0.0187 \times IE \\ &\quad \quad = 0.0187 \times \$1,100 \\ &\quad \quad = \$20.57 \end{aligned}$$

Step 2

Determine K1, K2, K3, and K4 using the following formula:

$$\begin{aligned} K1 &= 0.155 \times TC \\ &= 0.155 \times \$15,974 \\ &= \$2,475.97 \end{aligned}$$

$$\begin{aligned} K2 &= [(0.155 \times (P \times C, \text{ max. } \$1,910.70)) + (0.155 \times (P \times EI, \text{ max. } \$729.30))] \\ &= [(0.155 \times (52 \times \$51.12, \text{ max. } \$1,910.70)) + (0.155 \times (52 \times \$20.57, \text{ max. } \$729.30))] \end{aligned}$$

$$\begin{aligned}
&= [(0.155 \times (\$2,658.24, \text{ max. } \$1,910.70)) + (0.155 \times (\$1,069.64, \text{ max. } \$729.30))] \\
&= (0.155 \times \$1,910.70) + (0.155 \times \$729.30) \\
&= \$296.16 + \$113.04 \\
&= \$409.20
\end{aligned}$$

$$K_3 = \$0$$

$$\begin{aligned}
K_4 &= \text{The lesser of:} \\
&\quad (i) \quad 0.155 \times A; \text{ and} \\
&\quad \quad = \$8301.80 \\
&\quad (ii) \quad 0.155 \times \$500 \\
&\quad \quad = \$77.50
\end{aligned}$$

Step 3

Determine the annual basic federal tax, $(R \times A) - K - K_1 - K_2 - K_3 - K_4$. Locate the corresponding values of R and K based on A from the "Option 1 – July 2006 federal tax rates and income thresholds" table on page 10 and calculate the basic federal tax:

A =	\$	53,560.00
Federal R	×	0.22
	\$	<u>11,783.20</u>
Less federal constant K	–	2,365.00
Federal tax	\$	<u>9,418.20</u>
Less federal tax credits, $K_1 + K_2 + K_3 + K_4$	–	2,962.67
Basic federal tax T ₃	\$	<u>6,455.53</u>

Step 4

Determine the federal labour-sponsored funds tax credit:

$$\begin{aligned}
\text{LCF} &= \text{The lesser of:} \\
&\quad (i) \quad \$750; \text{ and} \\
&\quad (ii) \quad 15\% \text{ of the purchase of approved shares.} \\
&\quad \quad 0.15 \times \$2,000 \dots\dots\dots
\end{aligned}$$

	–	<u>300.00</u>
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Annual federal tax deduction, except for employees in Quebec, outside Canada, and in Canada beyond the limits of any province (T ₁)	\$	<u>6,155.53</u>
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Example 1 – For Alberta

Step 5

Determine the basic provincial tax (T₄) using the following formula:

$$\begin{aligned}
&(V \times A) - KP - K_1P - K_2P - K_3P \\
(V \times A) &= 0.10 \times \$53,560 \dots\dots\dots \$ \quad 5,356.00 \\
KP &= \$0 \dots\dots\dots 0.00 \\
K_1P &= 0.10 \times \text{TCP} \\
&= 0.10 \times \$29,998 \dots\dots\dots - \quad 2,999.80 \\
K_2P &= [(0.10 \times (P \times C, \text{ max. } \$1,910.70)) + (0.10 \times (P \times EI, \text{ max. } \$729.30))] \\
&= [(0.10 \times \$1,910.70) + (0.10 \times \$729.30)] \\
&= \$191.07 + \$72.93 \dots\dots\dots - \quad 264.00 \\
K_3P &= \$0 \dots\dots\dots 0.00 \\
\text{Basic provincial tax for the year (T}_4\text{)} \dots\dots\dots & \$ \quad 2,092.20
\end{aligned}$$

Determine the annual provincial tax deduction using the following formula:

$$\begin{aligned}
T_2 &= T_4 + V_1 - S - \text{LCP} \\
V_1, S, \text{ and LCP} &= \$0 \dots\dots\dots 0.00 \\
\text{Net provincial tax deduction for the year (T}_2\text{)} \dots\dots\dots & \$ \quad \underline{\underline{2,092.20}}
\end{aligned}$$

Step 6

Total federal and provincial tax deductions for the year:

T ₁ (see federal portion of example) \$6,155.53 + T ₂	\$	<u>8,247.73</u>
T = Tax prorated for the pay period	\$	<u>158.61</u>

Option 2 – Tax formula based on cumulative averaging

Option 2 formulas are intended for employees whose remuneration fluctuates considerably from one pay period to the next. In the Option 2 formulas, the amount of tax to be deducted is based on the projected annual taxable income (including bonuses) compared to the amount of tax previously deducted in the year. Option 2 works well for employees who are employed for a full calendar year. If the employee's income is relatively stable for each pay period, there will not be a significant difference in the tax deductions with Option 2 compared to Option 1.

Formula to calculate basic federal tax (T₃)

$$T_3 = \text{Annual basic federal tax}$$

$$= (R \times A) - K - K_1 - K_2 - K_3 - K_4$$

If the result is negative, T₃ = \$0.

R = Federal tax rate applicable to the annual taxable income A. See the "Option 2 – July 2006 federal tax rates and income thresholds" table below.

Option 2 – July 2006 federal tax rates and income thresholds		
Annual taxable income A More than – Not more than	Rate R	Constant K
\$ 0 – \$ 36,378	0.1525	\$ 0
36,378 – 72,756	0.2200	2,456
72,756 – 118,285	0.2600	5,366
118,285 – and over	0.2900	8,914

A = Projected annual taxable income.

K = Federal constant to adjust application of the federal rate to the total annual taxable income A. See the "Option 2 – July 2006 federal tax rates and income thresholds" table above.

$$K_1 = \text{Non-refundable personal tax credit}$$

$$= 0.1525 \times TC$$

Note

0.1525 = The appropriate percentage for the year. The appropriate percentage is the lowest percentage referred to in the "Option 2 – July 2006 federal tax rates and income thresholds" table above.

Where:

TC = The total personal tax credits amounts reported on Form TD1. If Form TD1 is not filed by the employee or pensioner, TC is \$8,839, and for non-resident individuals, TC is \$0. If the claim code is E, T = \$0.

Note

If the province is Ontario, even if the claim code is E, the Ontario Health Premium is payable on annual income over \$20,000.

K₂ = Canada (or Quebec) Pension Plan contribution and Employment Insurance premium federal tax credits for the year.

$$= [(0.1525 \times (0.0495 \times ((S_1 \times I) + B - \$3,500)^*, \text{max. } \$1,910.70)) + (0.1525 \times (0.0187 \times ((S_1 \times I) + B), \text{max. } \$729.30))]$$

For employees in Quebec only:

$$K_2 = \text{Quebec Pension Plan contributions, Employment Insurance premiums, and provincial parental insurance plan premiums federal tax credits for the year.}$$

$$= [(0.1525 \times (0.0495 \times ((S_1 \times I) + B - \$3,500)^*, \text{max. } \$1,910.70)) + (0.1525 \times (0.0153 \times ((S_1 \times I) + B), \text{max. } \$596.70)) + (0.1525 \times (0.00416 \times S_1 \times I) + B), \text{max } \$237.12)]$$

Note

* If the result is negative, substitute \$0.

The above is subject to the rules contained in Part B and Part C of this publication and instructions contained in the employers' guide called *Payroll Deductions (Basic Information)*.

K3 = Other federal tax credits, such as medical expenses and charitable donations requested by an employee or pensioner and authorized by the tax services office or tax centre. The tax services office or tax centre will inform the employer or payer of the amount to be used with K3. If no amount has been authorized, K3 = \$0.

K4 = Canada Employment Credit

= The lesser of:

(i) $0.1525 \times A$; and

(ii) $0.1525 \times \$250$

Note:

Please note that pension income is not eligible for this credit.

Formula to calculate the federal tax payable (T₁)

T₁ = Annual federal tax deduction except for Quebec, outside Canada, and in Canada beyond the limits of any province.

= $(T_3 - LCF)^*$

* If the result is negative, substitute \$0.

For Quebec only:

T₁ = $(T_3 - LCF)^* - (0.165 \times T_3)$

* If the result is negative, substitute \$0.

For outside Canada or in Canada beyond the limits of any province only:

T₁ = $[T_3 + (0.48 \times T_3) - LCF]^*$

* If the result is negative, substitute \$0.

T₃ = Annual basic tax.

LCF = Labour-sponsored funds federal tax credit

= The lesser of:

(i) \$750; and

(ii) 15% of the amount deducted or withheld during the year for the acquisition by the employee of approved shares of the capital stock of a prescribed labour-sponsored venture capital corporation.

Note

If the shares are invested in an RRSP, then the amount invested can be used to determine the annual taxable income amount.

Formula to calculate provincial and territorial tax payable (T₂)

We have not repeated the entire explanation for the provincial and territorial variables. Effective July 1, 2006, the variables for Option 2 are the same as Option 1, except for factor K1P, which is as follows:

K1P = $0.10 \times TCP$

Where:

TCP = The total of personal non-refundable tax credits amounts reported on Form TD1AB. If Form TD1AB is not filed, TCP is \$14,899.

Option 2 – Step-by-step example when calculating tax deductions on non-periodic payments at the time of payment

On the following page, you will find an example for the province of Alberta of the result expected when using Option 2 when calculating separately the tax on regular salary and on non-periodic payments. A bi-weekly (26) pay period and the optional non-periodic payment formula are used in this example. The July change is shown beginning in pay period 14.

Option 2 – Examples when calculating the tax deductions on salary and non-periodic payments separately (continued)

Alberta

PP	Salary	I YTD	B Current	B YTD	A	K1 + K2 + K4	T1	K1P + K2P	T2	M1	(T1+T2- M1)/S1	M	T	TB
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	740	740			19,240.00	1,526.69	1,359.31	1,593.79	330.21		64.98		64.98	
2	740	1,480			19,240.00	1,526.69	1,359.31	1,593.79	330.21		129.96	-64.98	64.98	
3	740	2,220			19,240.00	1,526.69	1,359.31	1,593.79	330.21		194.94	-129.96	64.98	
4	740	2,960			19,240.00	1,526.69	1,359.31	1,593.79	330.21		259.93	-194.94	64.98	
4B		2,960	100	100	19,340.00	1,527.71	1,373.29	1,594.48	339.52		see*	-259.93		23.29
5	680	3,640		100	19,028.00	1,524.52	1,329.68	1,592.34	310.46	-23.29	310.93	-259.93	51.00	
6	510	4,150		100	18,083.33	1,514.85	1,197.65	1,585.91	222.42	-23.29	322.33	-310.93	11.40	
7	680	4,830		100	18,040.00	1,514.41	1,191.59	1,585.61	218.39	-23.29	373.34	-322.33	51.01	
7B		4,830	50	150	18,090.00	1,514.92	1,198.58	1,585.95	223.05	-23.29	see*	-373.34		11.65
8	680	5,510		150	18,057.50	1,514.59	1,194.04	1,585.73	220.02	-34.94	424.34	-373.34	51.00	
9	680	6,190		150	18,032.22	1,514.33	1,190.50	1,585.55	217.67	-34.94	475.35	-424.34	51.01	
10	680	6,870		150	18,012.00	1,514.12	1,187.68	1,585.41	215.79	-34.94	526.36	-475.35	51.01	
11	680	7,550		150	17,995.45	1,513.96	1,185.36	1,585.30	214.25	-34.94	577.36	-526.36	51.00	
12	485	8,035		150	17,559.17	1,509.49	1,124.39	1,582.33	173.59	-34.94	582.94	-577.36	5.58	
13	680	8,715		150	17,580.00	1,509.70	1,127.30	1,582.48	175.52	-34.94	633.94	-582.94	51.00	
14	340	9,055		150	16,966.43	1,536.11	1,051.27	1,588.29	108.35	-34.94	605.60	-633.94	0.00	
14B		9,055	500	650	17,466.43	1,541.32	1,122.31	1,591.69	154.95	-34.94	see*	-633.94		117.64
15	680	9,735		650	17,524.00	1,541.91	1,130.50	1,592.09	160.31	-152.58	656.67	-633.94	22.73	
16	680	10,415		650	17,574.38	1,542.44	1,137.65	1,592.43	165.01	-152.58	707.74	-656.47	51.07	
17	680	11,095		650	17,618.82	1,542.90	1,143.97	1,592.74	169.14	-152.58	758.81	-707.74	51.07	
18	680	11,775		650	17,658.33	1,543.32	1,149.58	1,593.00	172.83	-152.58	809.88	-758.81	51.07	
19	680	12,455		650	17,693.68	1,543.68	1,154.61	1,593.25	176.12	-152.58	860.96	-809.88	51.08	
20	680	13,135		650	17,725.50	1,544.01	1,159.13	1,593.47	179.08	-152.58	912.02	-860.96	51.06	
21	680	13,815		650	17,754.29	1,544.31	1,163.22	1,593.66	181.77	-152.58	963.10	-912.02	51.08	
22	680	14,495		650	17,780.45	1,544.58	1,166.94	1,593.84	184.21	-152.58	1,014.17	-963.10	51.07	
23	680	15,175		650	17,804.35	1,544.83	1,170.33	1,594.00	186.44	-152.58	1,065.25	-1,014.17	51.08	
24	680	15,855		650	17,826.25	1,545.07	1,173.43	1,594.16	188.47	-152.58	1,116.30	-1,065.25	51.05	
25	680	16,535		650	17,846.40	1,545.27	1,176.31	1,594.29	190.35	-152.58	1,167.38	-1,116.30	51.08	
26	680	17,215		650	17,865.00	1,545.47	1,178.94	1,594.42	192.08	-152.58	1,218.44	-1,167.38	51.06	
Total tax deducted for the year on regular salary														\$1,218.44
Total tax deducted for the year on non-periodic payments														152.58
Total tax deducted for the year on salary and non-periodic payments.....														<u>\$1,371.02</u>

*** Note**

Tax on the non-periodic payment is T1 + T2 amounts determined at line 4B, less T1 + T2 amounts determined at line 4. For other similar payments, such as lump-sum payments, the same principle will apply. The non-periodic payment tax calculation for pay period 14 has been used to determine the steps to follow. For more details, see the example that begins on page 17.

YTD = year-to-date