Q inv Derivation

$$\begin{array}{|ccc|}\hline 6t^5 & 15t^4 & 20t^3 \\ 15t^4 & 40t^3 & 60t^2 \\ 20t^3 & 60t^2 & 120t \\ \hline\end{array}$$

$\frac{Q_c}{120}$

$6t^5$	$15t^4$	$20t^3$	1	0	0
$15t^4$	$40t^3$	$60t^2$	0	1	0
$20t^3$	$60t^2$	$120t$	0	0	1
$3t^4$	$8t^3$	$12t^2$	0	$1/5$	0
$6t^5$	$16t^4$	$24t^3$	0	$2/5\,t$	0
$-6t^5$	$-15t^4$	$-20t^3$	-1	0	0
0	t^4	$4t^3$	-1	$\frac{2}{5}t$	0
$6t^5$	$18t^4$	$36t^3$	0	0	$\frac{3}{10}t^2$
$-6t^5$	$-15t^4$	$-20t^3$	-1	0	0
0	$3t^4$	$16t^3$	-1	0	$\frac{3}{10}t^2$
0	$-3t^4$	$-12t^3$	3	$\frac{-6}{5}t$	0
0	0	$4t^3$	2	$\frac{-6}{5}t$	$\frac{3}{10}t^2$
0	t^4	$4t^3$	-1	$\frac{2}{5}t$	0
0	0	$-4t^3$	-2	$\frac{6}{5}t$	$-\frac{3}{10}t^2$
0	t^4	0	-3	$\frac{6}{5}t$	$-\frac{3}{10}t^2$
$3t^5$	$8t^4$	$12t^3$	0	$1/5\,t$	0
0	$-8t^4$	0	24	$\frac{-64}{5}t$	$\frac{24}{10}t^2$
$3t^5$	0	$12t^3$	24	$\frac{-63}{5}t$	$\frac{24}{10}t^2$
0	0	$-12t^3$	-6	$\frac{18}{5}t$	$\frac{-9}{10}t^2$
$3t^5$	0	0	18	$\frac{-45}{5}t$	$\frac{15}{10}t^2$
t^5	0	0	6	$-3t$	$\frac{1}{2}t^2$

$$\begin{array}{|ccc|}\hline 6t^{-5} & -3t^{-4} & \frac{1}{2}t^{-3} \\ -3t^{-4} & \frac{8}{5}t^{-3} & -\frac{3}{10}t^{-2} \\ \frac{1}{2}t^{-3} & -\frac{3}{10}t^{-2} & \frac{3}{40}t^{-1} \\ \hline\end{array}$$

$$Q^{-1}_{a,b} = \frac{120}{Q_c}t^{-5} \begin{vmatrix} 6 & -3t & \frac{1}{2}t^2 \\ -3t & \frac{8}{5}t^2 & -\frac{3}{10}t^3 \\ \frac{1}{2}t^2 & -\frac{3}{10}t^3 & \frac{3}{40}t^4 \end{vmatrix} = \frac{3}{Q_c}t^{-5} \begin{vmatrix} 240 & -120t & 20t^2 \\ -120t & 64t^2 & -12t^3 \\ 20t^2 & -12t^3 & 3t^4 \end{vmatrix}$$