But by what we have said, the inverse image $\rho^* \textcircled{H}$ of lines $L \in A$ such that E_L lies on a singular quadric is just the divisor $\tilde{D} \subset A \cong J(B)$, i.e., up to translation

$$\rho^* \textcircled{H} = \tilde{D} = m_2^* \textcircled{H}$$

it follows – at least in case B has no automorphisms other than the hyperelliptic — that, up to translation, the map ρ is simply multiplication by two.

∵ Given $L \in A$, $f_L : X - L \longrightarrow \mathbb{P}^3$ gives an embedding of B_L with its image E_L in $\mathbb{P}^3$. E_L nondegenerate. ⇒ By P177, there exists a linear system on B_L corresponding to the embedding above. ⇒ Since B_L is isormorphic to B, the linear system on B gives the embedding obtained from f_L.

Suppose E_L lies on a singular quadric Q. ⇒ By P800, L is special.

$\rho : J(B) \longrightarrow J(B)$ is given as follows:

$^\forall L \in J(B)$, $\rho(L) = [E_L \cap H - 2K_B - p_0]$

⇒ $\rho(L) = [p - p_0] \in \textcircled{H}$ if $L \in A$ s.t $E_L = 2K_B + p$ for some $p \in B$, i.e., E_L lies on a singular quadric.

If $\rho(L) = [E_L \cap H - 2K_B - p_0] = [E_L \cap H - 2D_0 - p_0] \in \textcircled{H}$, then $E_L \cap H - 2D_0 - p_0 = p - p_0$ for some $p \in B$. ⇒ $E_L \cap H = 2D_0 + p = 2K_B + p$ ⇒ E_L lies on a singular quadric ⇒ L is special.

⇒ $\rho^* \textcircled{H} = \tilde{D} = m_2^* B_{L_0} = m^*(\textcircled{H} + \tau)$, $\tau \in A$. $\tau = 0$ since $B_{L_0} \ni L_0 \Leftrightarrow 0 \in \textcircled{H}$.