~~So there exists~~

So $tp(b/\mathcal{M})$ contradicts over $d_\varphi' p(y)$.

$\Rightarrow \exists c \in \mathcal{M}$ & $\chi(y,z)$ s.t. $\models \chi(b,c)$ and

$\chi(y,c)$ contradicts $d_\varphi' p(y)$.

Let A = set of parameters used in $d_\varphi p$, then

$A \subseteq \mathcal{M}$, $|A| \leq |T|$.

By $|T|^+$-saturation $\exists b' \in \mathcal{M}$ st. $b' \equiv_{Ac} b$.

Then $\models d_\varphi p(b')$ & $\not\models d_\varphi' p(b')$ (because $\chi(b',c)$).

So $d_\varphi p$, $d_\varphi' p$ do not ~~st~~ define the same φ-type in $\mathcal{M}$.

(ii) Let B be any set. ~~[illegible]~~

We want to prove $p|_B$ is a complete consistent type.

~~consistent~~ Let A be, as above, the set of parameters.

consistent: if not, there are $\varphi_i(x,b_i) \in p|_B$ $i<n$ st.

$\bigwedge \varphi_i(x,b_i)$ is inconsistent.

By saturation, find $\bar{b}' \equiv_A \bar{b}$, $\bar{b}' \in \mathcal{M}$.

Then $\varphi_i(x,b_i') \in p$ $\forall i$ and $\bigwedge \varphi_i(x,b_i')$ is inconsistent

$\#$