```
pdivisor_bound  THM

⊢  ∀a:ℕ, b:ℕ+. a | b & ¬b | a ⟺ a<b & a | b  by GenRepD
|
|\
| 1. a : ℕ
| 2. b : ℕ+
| 3. a | b
| 4. ¬b | a
| ⊢  a<b
| | by FwdThru Thm* ∀a:ℕ, b:ℕ+. a | b ⇒ a≤b    {divisor_bound} [3]
| |
| 5. a≤b
| ⊢  a<b  by Decide (a = b)
| |
| 6. a = b
| ⊢  a<b  by (HypSubst 6 4) THEN (Analyze 4) THEN RelRST
|
.\
. 1. a : ℕ
. 2. b : ℕ+
. 3. a<b
. 4. a | b
. ⊢  ¬b | a  by (Analyze 0) THEN (Assert (a ∼ b) THENA Analyze 0)
. |
. 5. b | a
. 6. a ∼ b
. ⊢  False
.   by FwdThru Thm* ∀a,b:ℕ. (a ∼ b) ⟺ a = b    {assoced_nelim} [-1]
END
```