

40 INCH TELESCOPE PRIMARY MIRROR REMOVAL

(Old Way Using Crane)

Nickel Aluminizing Checklist

- 1.) All mirror removal tools in round room (see photos)
- 2.) Locking bar for upper truss to yoke (weight cabinet in dome)
- 3.) Service hoist in dome, check belt
- 4.) Have custodian clean 40" dome floor, round room and R.O.R.

TOOLS & EQUIPMENT needed for 40" mirror removal:

- 1.) Crane truck
- 2.) Pickup truck
- 3.) Mirror fixture with hanger
- 4.) Large shackle for mirror hanger to crane truck hook
- 5.) Ladder to remove panel over door
- 6.) Three 4 X 4 wood blocks
- 7.) Two large slings (for lifting mirror removal tools from round room)
- 8.) One small hydraulic jack
- 9.) Three 1/2" eye bolts with nuts
- 10.) Three equal length 1" wide slings

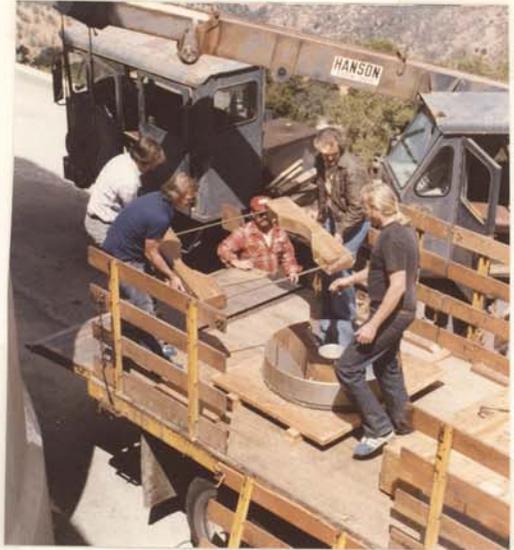
REMOVAL NOTES (use photos)

- 1.) Be sure to install dec and R/A tie bars
- 2.) Remove TUB encoder from bottom of cell, leave belt hooked to TUB
- 3.) Remove all stops and pointers for TUB
- 4.) When handling mirror try recabing hoist with snatch block and hook at mirror to slow speed to one half
- 5.) Check bottom mirror supports after replacing mirror
- 6.) Put earthquake clips back before reinstalling cell on telescope

Approximate man hours for removal of mirror and delivery to 120", not including preparation prior to removal.

Mike	4
Darrell	4
Barry	3
Bill Brown	2
Crane driver	1

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USE A BETTER
FIXTURE

40 INCH TELESCOPE PRIMARY MIRROR REMOVAL



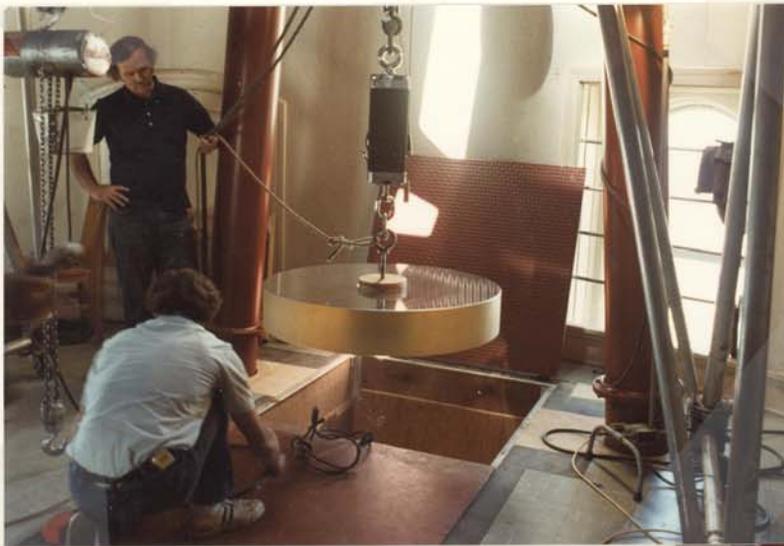
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Two-handed signals...



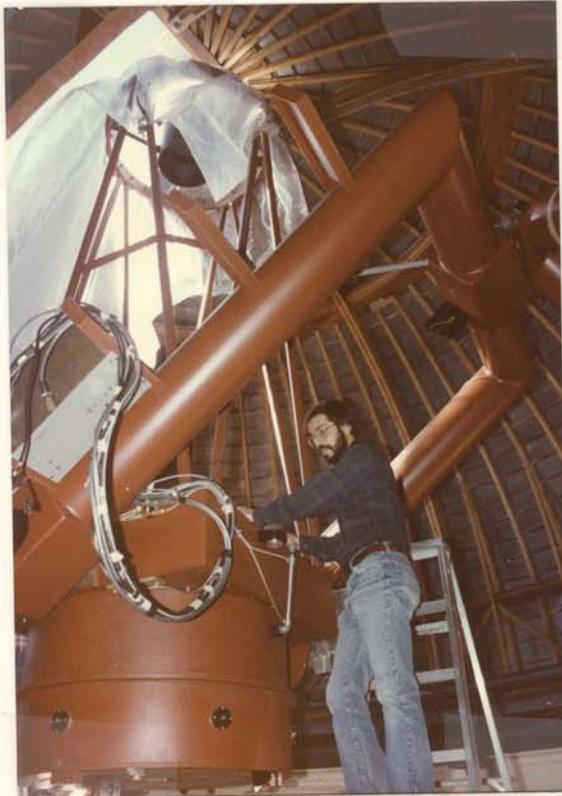
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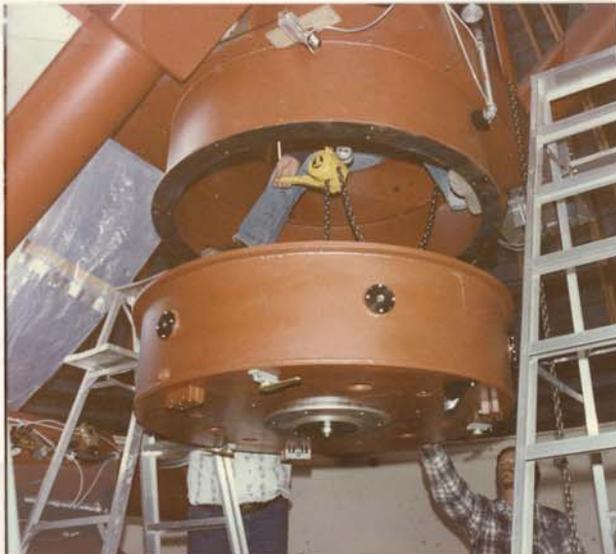
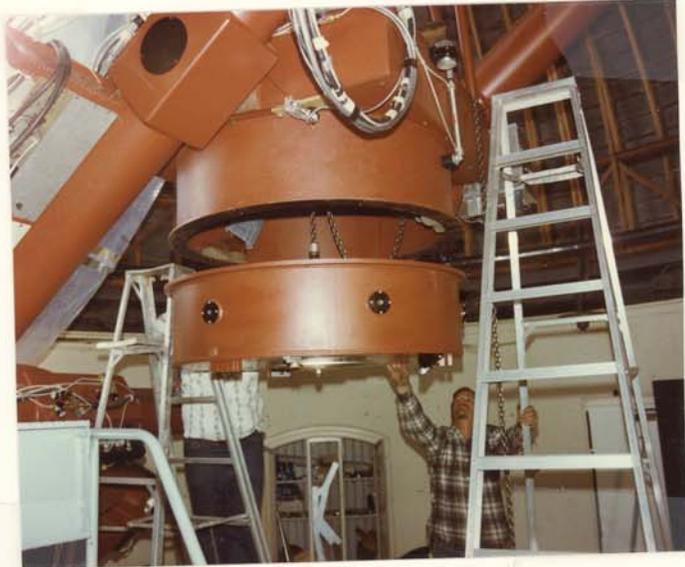
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MIRROR COVERS
OFF.



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EARTHQUAKE CLIPS

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FIXTURE

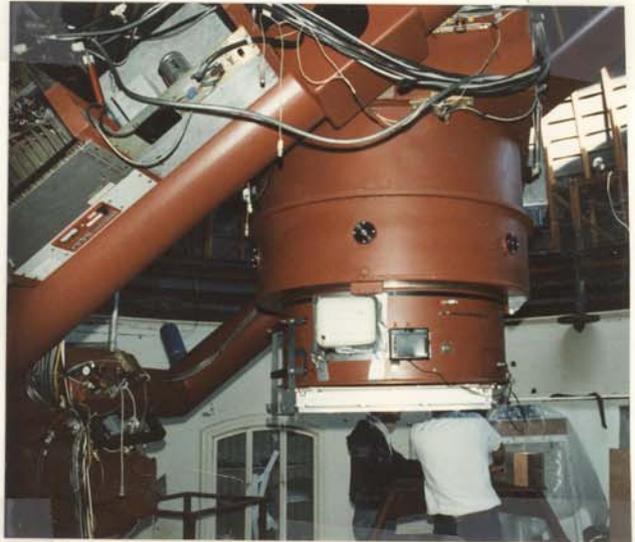
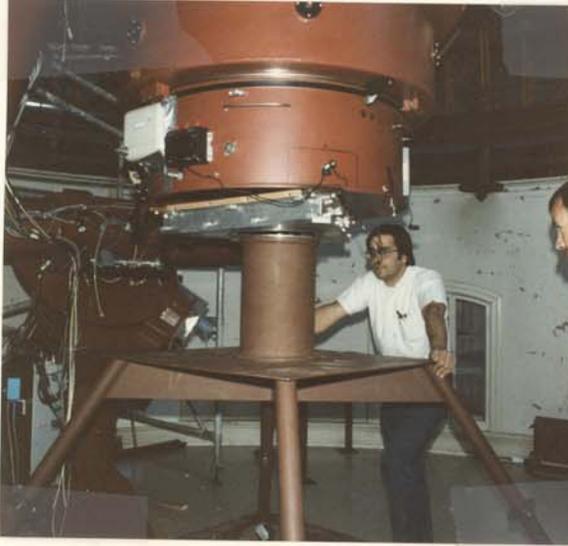


REMOVE
SECONDARY
FIRST!



DEC. TIEROD
install after secondary is
removed if it is going to be Alum.

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3-1/2" eye bolts
with nuts &
washers to lift
TUB. ↘



NOW WHAT ?

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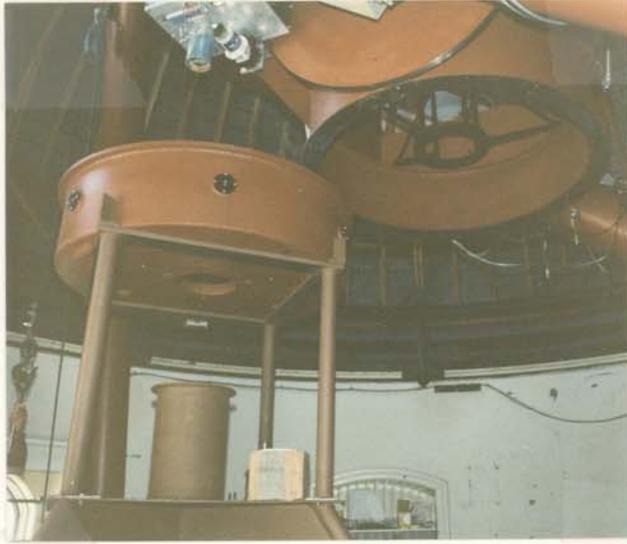


EAST TUB
ROLLER COMES
OFF NOW.

Remove inside &
outside bolts on
mirror cell.
Note match marks.



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BACK OFF 6
BLACK HOUSINGS
FOR SIDE SUPPORTS

EARTHQUAKE
CLIPS.
DON'T FORGET
TO RE-INSTALL
AT THIS STEP!
When mirror goes
back in check
bottom supports



40 INCH TELESCOPE PRIMARY MIRROR REMOVAL



OPEN BOTH HATCHES.



Remove panel above door



Push as close to door as possible



USE A BETTER NEW FIXTURE...



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*Bldg to edge
of tire on
Truck
6.5 feet*



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