

36 INCH TELESCOPE FLOOR HYDRAULIC FLUID

PETER P. STOLLENWEITZ
11-16-77

36" TELESCOPE DOME FLOOR HYDROLIC SYSTEM

THERE ARE FOUR 2 STAGE RAMS (10" DIA. & 8" DIA) THAT MOVE ^{THE} FLOOR UP AND DOWN. THE RAMS ARE POWERED BY A CENTRIFUGAL PUMP. THE HYDROLIC FLUID USED IS WATER WITH A 30:1 RAITO OF CHEVERON SOLUBLE OIL. THIS FLUID MUST BE TESTED FOR THE CORRECT WATER OIL RATIO EVERY 3 MONTHS AND REPLACED WITH FRESH FLUID AT LEAST EVERY 2 YEARS.

THE TESTING IS DONE IN THE FOLLOWING MANER:
USING A GRADUATED GLASS CYLINDER
POUR IN 250 ML OF FLUID AND CAREFULLY
ADD 4 TO 5 DROPS OF CONCENTRATED SULFURIC
ACID. STIR FOR 2-3 MIN. OIL WILL SEPERATE
AND FLOAT TO TOP. MEASURE AND ADJUST
ACCORDINGLY.

IF RAMS ARE STICKY TO THE TOUCH, THIS USALLY MEANS THE FLUID HAS TO MUCH OIL. THIS OIL ON THE RAMS WILL OXIDIZE AND CAUSE UNEVEN MOVEMENT. TO CORRECT THIS PROBLEM ADJUST RATIO OF OIL-WATER TO PROPER RAITO AND CLEAN RAMS OF OIL USING SUITABLE SOLVENT.

SOURCE OF OIL INFORMATION:

JOHN SKELLCHOCK (FUELS AND LUBRICANTS ENGINEER)
STANDARD OIL CO. OF CALIF-
WESTERN OPERATIONS INC.
EMERYVILLE CALIF
PH. (415) 654-8463