

Things to do to put magnet together

Please keep a running tab of all polarized target work to do in the foreseeable future. Lets keep things moving and make the most of our time at Fermilab. Anyone can add tasks here. Once a task is complete please comment on its completion and leave enough information for someone else to find the item, continue the work, or know the situation status. When possible make an entry in the ECL logbook about that task being complete with the nessisary details. If you purchased and received the item post here where it can be found.

Do Immediately	Additional Information	Task Finished Result	Person of task
Fridge sensors	1KOhm Ruthenium Oxide		
Preparation for the dock survey	setup tooling table and position magnet and detail survey layout with crew	http://dbweb5.fnal.gov:8080/ECL/spin_quest/E/show?e=359	
Determine and measure true path for all cables coming from target cave and order all cable needed	Front Penetration Racks on Cryo platform Counting House Side Penetration Racks on Cryo platform Counting House		
Replace Black BUNA-N O-rings	Measure existing O-rings and find PTFE (Teflon) equivalents <ul style="list-style-type: none"> Run/bypass valves Shell to magnet Shell to turret Turret to fridge Electrical feedthroughs Bottom can Red pop-off valve 		
After replacing seals setup safety walk through with	Setup Operational Readiness Clearance (through Rick)		
Buy a flaring tool for copper tubing			
Assemble and test microwave system	Needs to be shipped from UVa - 7 /17/19 Borrow gore cable from UVa Need waveguide too		
Get Liverpool NMR Q-meter (and ancillary equipment) from LANL			
Setup temp full microwave system for testing here			
Setup sensors on stick	Check with lakeshore		
Stink test in the target loading area	with "special" spray		
Setup and test manometer			
Setup external magnet sensors with data going into slow controls data stream			
Shim Microwave actuator bushings for hard stop and top target. Microwave table and magnet should be in place and use the information from initial survey to measure			
Setup LANL NMR system for testing in counting house target area			
Setup UVA NMR system for testing in counting house target area			
Make material filling station	tub and accessories for fill the target insert		
Finalize microwave control system with stepper motor			
Setup actuator with potentiometer and controls			

Things to do when not working on the immediate things	Additional Information	
Setup Polarized Target Drone	Drone to control inside the cave	

Setup Target Rack	Stepper motor drives and power supplies ADC for position readbacks Microwave EIP Lakeshore 218 x2 Level Probe Readout Turbo readout and Controller IV gauge readout Teledyne Hastings readout 4He & 3He manometers Possibly Microwave Power Supply Target Insert Lakeshore Fridge Lakeshore External Magnet Lakeshore	
Get hoses for microwave (EIO)	Either hard plastic or rubber	
Target Controls Computer	Josh will find it	
All cabling from target to racks and counting house	need lengths and to order cables	
setup target operator station		
setup target loading station		
Finalize NMR	testing still needed	
Target handler and alarm system		
Setup NMR VI		
Annealing controls		
Setup and test Main Gate Valve		
Test Air-core cable with EIP/microwave		
Setup Insert and leak check and electronics check, sensors, coils, SMA		
Setup Nuc and oscilloscope and PDP		
Setup Roots stack controller and power		
Get some dewars: transfer, storage, insert		