



### Maintenance Job Planning/Estimating Worksheet

Planner: Carl	Work Order#: 472464	Date: 05/02/21	
Job Contact: John	Job Location: Mixer #7	Equipment #: 26	
Job Description: Install spare gearbox (GB)			

### Job Scope

Seq#	Operation Description	Craft	# Crew	Estimated Hours	Account
10	Lock out equipment	GMM	4	0.25	
20	Remove oil piping	GMM	2	0.5	
30	Remove motor	GMM	2	1	
40	Break chain	GMM	1	0.25	
50	Unbolt/remove GB	GMM	2	1	
60	Set/Bolt/Align GB	GMM	4	0.5	
70	Re-install motor	GMM	2	0.5	
80	Tighten V-belts	GMM	1	0.5	
90	Install chain	GMM	1	0.25	
100	Install oil pump & piping	GMM	1	0.5	
110	Install guards	GMM	2	0.25	
120	Fill GB with oil	GMM	2	0.5	
130	Energize and test	GMM	1	0.25	
			<b>Total Estimated Hours</b>	<b>6.5</b>	

Materials Required				
Seq#	Material Data/Cat # or (Description)	Quantity/unit of measure (UOM)	Price/1	Sloc (storage location)
	Gearbox	1	50,000	
	G12050, 5" Bore STD Key		250	
	15 gal oil		100	
	Shim stock available		25	
	Chain lube		5	
		<b>Total cost \$</b>	<b>50,380</b>	

Safety Requirements							
Permit		Confined Space		Hot Work		Respirator	
SCBA		Asbestos Removal		Other			
Additional Comments:							

**Tools Needed:** 16 ton crane, 10 ton lifting straps, eye bolts (4)  $\frac{3}{4}$ ", 1-1/2 socket wrench,  $\frac{3}{4}$ " drive ratchet, 1-1/4 lug wrench, hammer, induction heater, laser alignment, assorted hand tools for piping and electric motor, 1-1/4 combo wrench

**Equipment needed:** 10 ton crane, laser alignment, induction heater, fork lift

**Operation notes 10:**