## ITRC

## Industrial Tool Repair & Calibration An ISO 17025 Accredited Company

38130 Airport Parkway Unit # 1 Willoughby, OH 44094

BILL TO

ABC Fastening 12345 Main Street Detroit, MI 41544

Date	Estimate #
3/5/2016	4974

**Estimate** 

SHIP TO

ABC Fastening 12345 Main Street Detroit, MI 41544

			P.O. No.		Rep
					TMA
Item	Descrip	tion	Qty	Rate	Total
TOOL REPAIR Labor	TOOL REPAIRED BY ITRC CLECO 48ES1502ZA sn TG3 Labor Tool needs: 207323 handle sleeve F900185 switch act 207325 conn sleeve 916636 motor cover 207353 lock nut 542473 cover 542474 3rd idlers 3x 42.40 910663 brg half 910669 sleeve 320914 O-ring 541479 motor pinion	249 tag 11336 \$ 59.00 \$ 13.50 \$ 125.00 \$ 21.40 \$ 95.00 \$ 46.40 \$ 127.20 \$ 90.00 \$ 47.80 \$ 7.60 \$ 86.00		718.90 325.00	718.90 325.00
Email: itrcjohn@yahoo Phone: 440-622	5.com -9540		Tota	al	

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Item	Description	Qt	у	Rate	Total
	ENGINEERING REPORT-short form Tool received from Customer with note: "Tool making a grinding noise and torque is erratic". Tore tool all the way down. Found the 3rd idler gears were completely worn out. 2nd and 1st stage gearing and ring gears okay for now. With the fresh grease they should last another 250,000 cycles until next PM. Motor pinion sun gear is also worn out. This is a basic wear item and needs changed every 250,000 cycles. Grease in tool was completely burned up. Reason for tool breakdown is basic maintenance. Tool recommendations were not followed. Tool has over 500,000 cycles since last PM or even grease change. cycles: 1,250,148 cycles Cycles since last service: 501,276				
Email: itrcjohn@yahoo. Phone: 440-622-			Tot	al	\$1,043.90
			100		