



MODEL 50 POWER FLARE

OWNERS MANUAL

SERIAL NUMBER

ACAUTION: Read, understand and follow all Safety Rules and Operating Instructions in this Manual before using this product.



Contents

1.	Safety Symbols	4
2.	Safety Instructions	5
	Work Area Safety	5
	Personal Safety	5
3.	Unpacking and Assembly Instructions	6
4.	Operating Instructions	8
5.	Recommended Spare Parts for Olsen Model 50 Power Flare	10
6.	Maintenance Schedule of the Model 50 Power Flare	11
7.	Parts List	12
8.	Warranty	14
	Product Definition	14
	Materials and Workmanship	14
	Performance	14
9.	Tooling for the Model 50	15
	37 Degree Tooling For Olsen Model 50 Power Flare	15
	45 Degree Tooling For Olsen Model 50 Power Flare	
	37 Degree Metric Tooling for Olsen Model 50 Power Flare	
	45 Degree Metric Tooling For Olsen Model 50 Power Flare	
	90 Degree ORFS Flange Tooling For Olsen Model 50 Power Flare	
A	ppendix 1	
	Options for Model 50 Power Flare	
A	ppendix 2	
,	For More Olsen Manufacturing Company, Inc. Products Please Refer to Following Appendix Pages.	
E ;	gure 1: Electrical Connection	E
	gure 2: Model 50 Power Flare Operating Sketch	
	gure 3: Assembly Drawing Model 50	
c:	guro 4: Assambly Drawing Model 50 DRE	22



Model 50 Power Flare shown with optional Deburring Unit and Stand.

1. Safety Symbols

SAVE THESE INSTRUCTIONS! READ ALL INSTRUCTIONS AND DIRECTIONS!

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your CAREFUL ATTENTION AND UNDERSTANDING. The symbol warnings DO NOT by themselves eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

WARNING: BE SURE to read and understand all safety instructions in this manual, including all safety alert symbols such as "DANGER", "WARNING","CAUTION", before using this machine. Failure to follow all instructions listed below may result in electric shock, fire and or other serious personal injury.

SAFETY ALERT SYMBOLS: Indicates DANGER, WARNING, OR CAUTION May be used in conjunction with other symbols or pictographs.

DANGER Failure to obey this safety warning WILL result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

<u>MARNING</u> Failure to obey this safety warning CAN result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

<u>CAUTION</u> Failure to obey this safety warning MAY result in personal injury to yourself, to others or property damage. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

NOTE: EQUIPMENT AND/OR PROPERTY DAMAGE MAY RESULT IF THESE INSTRUCTIONS ARE NOT FOLLOWED.

2. Safety Instructions

WARNING: BE SURE to read and understand all instructions in this manual before using this electric power flare. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

WARNING: To avoid mistakes that could cause serious injury, DO NOT plug in this power flare machine until the following instructions have been read and understood.

Work Area Safety

- 1. ALWAYS avoid dangerous conditions. DO NOT use in wet or damp areas.
- 2. DO NOT operate in the presence of flammable liquids, gases, or dust.
- 3. ALWAYS keep bystanders and visitors at a safe distance while operating this power flare.
- 4. DO NOT use this machine in poor lighting. ALWAYS make sure to have adequate lighting.

Personal Safety

WARNING: The operation of this machine can result in FOREIGN OBJECTS BEING THROWN, which can result in personal injury or property damage. ALWAYS use proper safety equipment.

- 1. KNOW your machine. Read the operator's manual carefully. Learn the machine's applications and limitations, as well as the specific potential hazards related to this machine.
- 2. STAY ALERT. Watch what you are doing and use common sense when operating this machine.
- 3. DO NOT use this machine while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating this machine may result in serious personal injury.
- 4. DRESS PROPERLY. Do not wear loose fitting clothes, loose fitting or ragged sleeves, dangling neckties or necklaces, dangling bracelets, or large ornamental rings. ALWAYS wear steel toe, non-slip industrial shoes.
- 5. ALWAYS keep long hair pulled back and secured.
- 6. ALWAYS USE SAFETY GLASSES with side shields when operating this machine.
- 7. DO NOT reach over or across machine. ALWAYS move to the side of machine, for intended access.

READ OPERATING INSTRUCTIONS BEFORE PROCEEDING IN OPERATION OF OLSEN MODEL 50 POWER FLARE

3. Unpacking and Assembly Instructions

(REFER TO FIGURE 3: Assembly Drawing for Item # References)

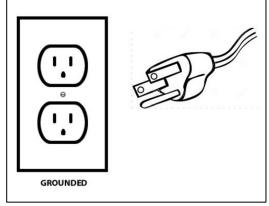
- 1. Uncrate Olsen Model 50 Power Flare Machine, and inspect for shipping damage
- 2. Report damage IMMEDIATELY to shipping carrier and to Olsen Manufacturing Company, Inc.
- 3. Check contents of shipment against packing list. If shortage is noted, IMMEDIATELY contact shipping carrier and Olsen Manufacturing Company, Inc.
- 4. Permanently secure Olsen Model 50 Power Flare Machine on sturdy, stable, flat surface or bench. Allow adequate clearance for Model 50 Knob, (item #8) and Die Set Advance Handle, (item #7) to rotate freely.
- 5. Secure to sturdy, stable, flat surface or bench, by mounting and securing three (3), 3/8" Cap Screws into mounting holes provided in the Model 50 Power Flare Base (item #1).
- 6. Install Model 50 Power Flare Die Set Advance Handle (item #7) into Model 50 Power Flare Knob (item #8) by threading together.
- Remove pipe plug from Model 50 Power Flare Gear Reducer (item #121), and replace with plastic vent plug provided. NOTE: MODEL 50 POWER FLARE UNIT, HAS BEEN FILLED WITH PROPER GEAR LUBRICANT AT THE FACTORY. DO NOT ADD ADDITIONAL LUBRICANT.

<u>MARNING</u> Failure to obey this safety warning CAN result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

- 8. Insert the Model 50 Power Flare three prong grounded plug into, 115 volt, 60 cycle, single phase, grounded power source.
 - a. This machine is equipped with a power cord having a grounding wire with a grounding plug. The machine must be grounded using a 3-hole properly grounded outlet. In the event of an electrical short circuit,

grounding reduces the risk of electrical shock.

- b. If the outlet is a standard 2-prong wall outlet, it is your personal responsibility and obligation to have it replaced with a properly grounded 3-prong wall outlet.
- Do not, under any circumstances, cut or remove the third (ground) prong from the power cord or use an adapter.
- d. Consult a qualified electrician if the grounding instructions are not completely understood, or if doubt exists as to whether the machine is properly grounded.



- 9. Do not use the machine for other than its intended use.
- 10. Model 50 Power Flare Unit is now ready to operate. DO NOT PROCEED TO OPERATE BEFORE READING OPERATING INSTRUCTIONS.

DANGER Failure to obey this safety warning WILL result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

4. Operating Instructions

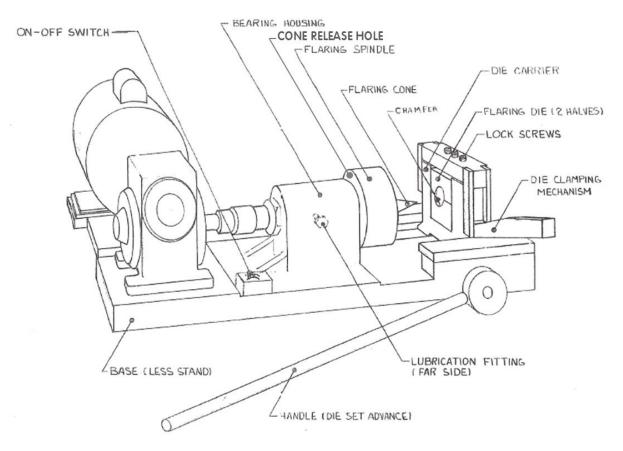


Figure 2: Model 50 Power Flare Operating Sketch

- 1. Select appropriate Flaring Cone as determined by the tube diameter and angle of flare.
- 2. Install the flaring cone by pushing the cone shank into the 1" diameter hole in the angled face of the Spindle. If the cone does do not seat completely, use only a rawhide or soft copper hammer to lightly tap into place.
- 3. Select appropriate Flaring Die according to tubing outside diameter and angle of flare desired.
- 4. Place the flaring die into the Die Carrier with chamfer toward the flaring cone.
- 5. With die clamp open, place tubing to be flared between the two die halves so the tubing is flush with the front (flaring cone side) of the die.
- 6. The size of the flare may be varied as follows: TO INCREASE—ADVANCE THE TUBING TOWARD THE FLARING CONE. TO DECREASE—MOVE THE TUBING AWAY FROM THE FLARING CONE.
- 7. Lock the Flaring Die and tube in the Die Carrier with the Die Clamping Mechanism. NOTE: CHECK THE THREE (3) LOCK SCREWS LOCATED ON THE CENTER OF THE TOP MEMBER OF THE DIE CLAMPING MECHANISM. THE LOCK SCREWS SHOULD BE ADJUSTED TO OBTAIN UNIFORM, EVEN CLAMPING PRESSURE.
- 8. Click ON/OFF Switch to turn on motor.

- 9. Advance the Die carrier toward the Flaring Cone, by rotating the Die Set Advance Handle counter-clockwise.
- 10. To produce proper flaring, it is necessary to keep the Flaring Cone clean and lubricated. Oil may be applied to the cone if needed while flaring is in process. Holding the cone against the tube for several revolutions after the flare is formed will produce a burnish action to the flare.
- 11. When desired flare is achieved, retract the Die Carrier by rotating the Die Set Advance Handle clockwise.
- 12. Turn the motor off using the ON/OFF switch.
- 13. Unclamp Die Carrier and lift Clamp Linkage up and away from Die Carrier. Lift upper Die half up and out of Die Carrier to remove tube. NOTE: TO CONTINUE TO PRODUCE SAME SIZE TUBE AND FLARE, REPEAT OPERATIONS 5 THROUGH 12.
- 14. Should replacement of Flaring Cone become necessary, proceed as follows to remove Flaring Cone: Rotate the Flaring Spindle until the Cone Release Hole is visible on the rear face of the Spindle. Next, place a drift into the Cone Release Hole and tap lightly until the cone is free enough to remove.
- 15. To install new Flaring Cone, push the Cone Shank into the 1" diameter hole in the angled face of the Spindle. If the Cone does not seat completely, use only a rawhide or soft copper hammer, to lightly tap into place.

For best flares, tubing must be cut square and all burrs removed.

5. Recommended Spare Parts for Olsen Model 50 Power Flare

Machine downtime can cost your company valuable time, dollars, late deliveries, and lost contracts. Olsen Manufacturing Company, Inc. works closely with you, our customer, helping to plan preventative maintenance. This will maintain efficiency by eliminating unnecessary down time. To ensure productivity and efficiency, always have on your shelf spare replacement parts and tooling specific to your needs.

RECOMMENDED SPARE PARTS FOR THE OLSEN MODEL 50 POWER FLARE

PART #	DESCRIPTION	LOCATION ON MACHINE	QTY TO STOCK
2002-124	BEARING	FLARE CONE POCKET	2
2002-125	BEARING CUP	FLARE CONE POCKET	2
2002-126	BEARING	ROLLER HEAD SHAFT	2
2002-127	BEARING CUP	ROLLER HEAD SHAFT	2
2002-136	PIN	CLAMP HANDLE ASSEMBLY	3

THESE RECOMMENDED SPARE PARTS ARE AVAILABLE TO ORDER THROUGH:

AN AUTHORIZED REPRESENTATIVE OR DISTRIBUTOR

6. Maintenance Schedule of the Model 50 Power Flare

DETAIL	INTERVAL (hours)	LUBRICANT	CAPACITY
Gear Reducer	4,000	Mobil 600 or Equivalent	15 ounces
Roller Head Shaft Bearing	2,000	All Purpose Grease	As Needed (fitting)
Flare Cone Bearings	2,000	All Purpose Grease	Hand Pack As Needed

Keeping your Olsen Model 50 Power Flare wiped down and free of debris will help keep the machine in excellent condition. Use all purpose lubricant (i.e. WD-40) applied to soft cloth to wipe machine clean.

Olsen Model 50 Power Flare Machines that are used in harsh environments should exercise maintenance schedule on a more frequent basis.

7. Parts List

DETAIL	DESCRIPTION	QTY
PART NUMBER		REQ
2002-01	MODEL 50 BASE	1
2002-02	DIE CARRIER	1
2002-03	ROLLER HEAD	1
2002-04	MODEL 50 BEARING LOCKNUT	1
200205-1	MODEL 50 SMALL 45 DEGREE FLARING CONE	
200205-2	MODEL 50 MEDIUM 45 DEGREE FLARING CONE	
200205-5	MODEL 50 SMALL 37 DEGREE FLARING CONE	
200205-6	MODEL 50 MEDIUM 37 DEGREE FLARING CONE	
200206-SIZE	MODEL 50 37/45/METRIC FLARING DIE	
2002-07	MODEL 50 HANDLE	1
2002-08	KNOB	1
2002-09	SHAFT	1
2002-10	MODEL 50 CLAMP HANDLE	1
2002-11	LINK	2
2002-12	MODEL 50 CLAMP BAR	1
2002-14	HINGE BLOCK	1
2002-15	MODEL 50 WAY CAP	2
2002-16	GEAR	1
2002-17	CLAMP BLOCK	1
2002-17	RACK	1
2002-18	MODEL 50 NUT	1
	5/16-18X2 SHCS	4
2002-116	SEAL TITE 15.5"	1
2002-117		
	5/16-18X1 SHCS	4
2002-119	MODEL 50 MOTOR	1
2002-120	MODEL 50 SWITCH	1
2002-120A	MODEL 50 SWITCH HEATER ELEMENT	1
2002-120B	MODEL 50 GUARD	1
2002-121	GEAR REDUCER	1
2002-123	COUPLING	1
2002-124	MODEL 50 CONE BEARING	2
2002-125	MODEL 50 CONE BEARING CUP	2
2002-126	MODEL 50 ROLLER HEAD BEARING	2
2002-127	MODEL 50 ROLLER HEAD BEARING CUP	2
2002-130	MODEL 50 KEY	4
2002-131	10-32X1/4 SSS WITH NYLON TIP	1
2002-132	GREASE FITTING	1
2002-133	1/4-20X5/8 SHCS	2
2002-134	MISC ELECTRICAL CONNECTORS	10
2002-136	PIN	3
2002-137	3/8-24X1 1/2 SSS	3
2002-138	3/8-16X1 SHCS	8
2002-139	10-32X1/4 SSS	2
2002-140	3/8-16X1 HHCS	4
2002-142	1/4-20X1/4 SSS WITH NYLON TIP	1
2002-144	5/16 LOCKWASHER	4
2002-145	10-24X3/8 SHCS	2
2002-147	MODEL 50 ELECTRICAL PLUG	1
2002-148	MODEL 50 ELECTRICAL CABLE	48"
2002-149	MODEL 50 ELECTRICAL FITTING	1
2002-150	MODEL 50 ELECTRICAL FITTING 90 DEGREE	1
2002-153	IDENTIFICATION PLATE	1
2002-154	DRIVE NAILS FOR IDENTIFICATION PLATE	2
2002-157	STANDARD SHIPPING CRATE	1

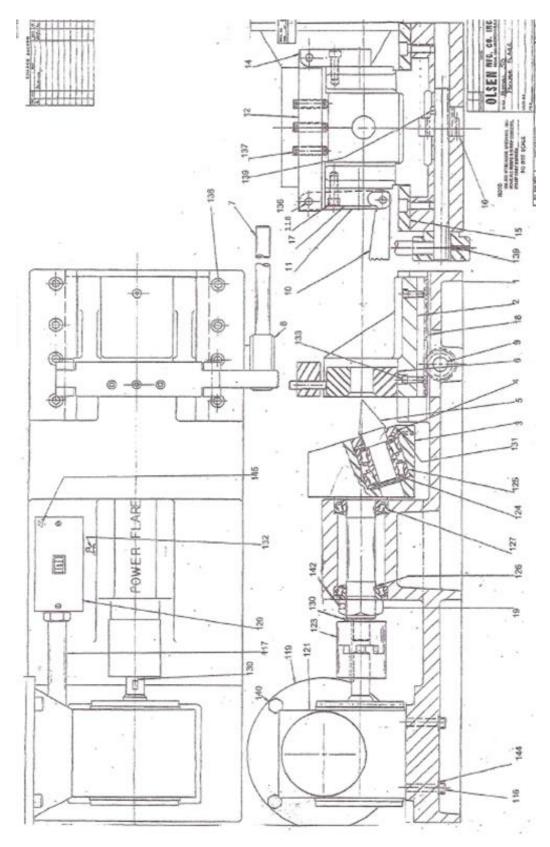


Figure 3: Assembly Drawing Model 50

8. Warranty

Product Definition

- The guarantees as stated applies only to those units and parts as designed and manufactured by Olsen Manufacturing Company, Inc. and do not include such products and/or components purchased by Olsen Manufacturing Company, Inc. and furnished in "as purchased form" by Olsen Manufacturing Company, Inc.
- 2. Such units defined as furnished in the "as purchased form" apply primarily to electric motors, gear boxes and bearings.
- 3. The services of a field engineer or installation personnel or their travel and expenses are not included in the guarantees stated.

Materials and Workmanship

- 1. All materials and workmanship are guaranteed for a period of one (1) year against defects. Such defective material and workmanship will be replaced on a no charge basis.
- 2. Any defective material and workmanship is subject to inspection by the factory or factory representative.
- 3. Any transportation, shipping, or labor required for the above inspections are chargeable to the user at the prevailing rates unless, said material and workmanship is determined defective.
- 4. Should such material and workmanship be determined defective, all transportation, shipping, or labor costs within the continental confines of the United States will be assumed by Olsen Manufacturing Company, Inc.
- 5. The above material and workmanship guarantee does not include replacement of items subject to normal wear in accordance with operation conditions.

Performance

- All Olsen Manufacturing Company, Inc. products recommended and sold by Olsen
 Manufacturing Company, Inc. or its representatives are guaranteed, for a period of sixty (60)
 days from date of receipt, to meet the requirements in performance for which it was purchased.
 Failure to meet such performance requirements will result in full refund of the purchase price
 upon receipt of the product within the stated period and subject to the below requirements.
- 2. The above performance guarantee is valid only if the product or products are installed, operated and maintained as instructed by the Olsen Manufacturing Company, Inc. or its representatives.

9. Tooling for the Model 50

37 Degree Tooling For Olsen Model 50 Power Flare

CONE PART NUMBER	DIE BLOCK	TUBE
CORE I ART HOWIDER	PART NUMBER	SIZE
	200206-02	1/8"
	200206-03	3/16"
	200206-04	1/4"
	200206-05	5/16"
200205-5 SMALL 37 DEGREE CONE	200206-06	3/8" 1/2" 5/8" 3/4" 7/8" 1"
	200206-08	
	200206-10	5/8"
	200206-12	3/4"
	200206-14	7/8"
200205-5 SMALL 37 DEGREE CONE 200205-6 MEDIUM 37 DEGREE CONE	200206-16	1"
	200206-18	1-1/8"
	200206-20	1-1/4"
	200206-22	1-3/8"
	200206-24	1-1/2"
20020F C MEDILINA 27 DECREE CONF	200206-26	1-5/8"
200205-6 MEDIUM 37 DEGREE CONE	200206-28	1-3/4"
	200206-30	1-7/8"
	200206-32	2"
20020F 7 LABOE 27 DEODEE CONF	Special Tooling Quoted	
200205-7 LARGE 37 DEGREE CONE	Upon Request	

45 Degree Tooling For Olsen Model 50 Power Flare

CONE PART NUMBER	DIE BLOCK	TUBE
CONL PART NOWIDER	PART NUMBER	SIZE
	200206-02-45	1/8"
	200206-03-45	3/16"
	200206-04-45	1/4"
	200206-05-45	5/16"
200205-1 SMALL 45 DEGREE CONE	200206-06-45	3/8"
	200206-08-45	1/2"
	200206-10-45	5/8"
	200206-12-45	3/4"
	200206-14-45	7/8"
	200206-16-45	1"
200205-1 SMALL 45 DEGREE CONE	200206-18-45	1-1/8"
200205-1 SMALL 45 DEGREE CONE 200205-2 MEDIUM 45 DEGREE CONE	200206-20-45	1-1/4"
200203-2 MEDIOW 45 DEGREE CONE	200206-22-45	1-3/8"
	200206-24-45	1-1/2"
	200206-26-45	1-5/8"
	200206-28-45	1-3/4"
200205-2 MEDIUM 45 DEGREE CONE	200206-30-45	1-7/8"
ZUUZUS-Z IVIEDIUIVI 45 DEGKEE CUNE	200206-32-45	2"
	Special Tooling Quoted	
	Upon Reque	st

37 Degree Metric Tooling for Olsen Model 50 Power Flare

	DIE BLOCK	TUBE
CONE PART NUMBER	PART NUMBER	SIZE
	2090-04	4mm
	2090-06	6mm
	2090-08	8mm
	2090-10	10mm
	2090-12	12mm
20020F F CMAN 27 DECDEE CONF	2090-14	14mm
200205-5 SMALL 37 DEGREE CONE	2090-15	15mm
	2090-16	16mm 18mm
	2090-18	18mm
	2090-20	20mm
	2090-22	22mm
	2090-24	24mm
200205-5 SMALL 37 DEGREE CONE	2090-25	25mm
	2090-28	28mm
200203-6 MEDIOW 37 DEGREE CONE	2090-30	30mm
	2090-32	32mm
	2090-35	35mm
200205-6 MEDIUM 37 DEGREE CONE	2090-38	38mm
	2090-40	40mm
	2090-42	42mm
	2090-50	50mm
200205-7 LARGE 37 DEGREE CONE	2090-60	60mm
200203-7 LANGE 37 DEGREE CONE	Special Tooling	Quoted
	Upon Requ	est

45 Degree Metric Tooling For Olsen Model 50 Power Flare

	DIE BLOCK	TUBE
CONE PART NUMBER	PART NUMBER	SIZE
	2090-04-45	4mm
	2090-06-45	6mm
	2090-08-45	8mm
	2090-10-45	10mm
200205-1 SMALL 45 DEGREE CONE	2090-12-45	12mm
200205-1 SWALL 45 DEGREE CONE	2090-14-45	14mm
	2090-15-45	15mm
	2090-16-45	16mm
	2090-18-45	18mm
	2090-20-45	20mm
	2090-22-45	22mm
200205-1 SMALL 45 DEGREE CONE 200205-2 MEDIUM 45 DEGREE CONE	2090-24-45	24mm
	2090-25-45	25mm
	2090-28-45	28mm
	2090-30-45	30mm
	2090-32-45	32mm
	2090-35-45	35mm
	2090-38-45	38mm
	2090-40-45	40mm
20020E 2 MEDILIM 4E DECREE COME	2090-42-45	42mm
200205-2 MEDIUM 45 DEGREE CONE	2090-50-45	50mm
	2090-60-45	60mm
	Special Tooling	Quoted
	Upon Requ	est

90 Degree ORFS Flange Tooling For Olsen Model 50 Power Flare

Tooling for 90 degree flanging is sold in sets, including 1 cone and 1 die block set.

SET ID NUMBER	DESCRIPTION
202003-04-049	1/4 x 049 WALL FLANGE TOOL SET
202003-04-065	1/4 x 065 WALL FLANGE TOOL SET
202003-04-083	1/4 x 083 WALL FLANGE TOOL SET
202003-04-095	1/4 x 095 WALL FLANGE TOOL SET
202003-04-109	1/4 x 109 WALL FLANGE TOOL SET
202003-04-120	1/4 x 120 WALL FLANGE TOOL SET
202003-06-049	3/8 x 049 WALL FLANGE TOOL SET
202003-06-065	3/8 x 065 WALL FLANGE TOOL SET
202003-06-083	3/8 x 083 WALL FLANGE TOOL SET
202003-06-095	3/8 x 095 WALL FLANGE TOOL SET
202003-06-109	3/8 x 109 WALL FLANGE TOOL SET
202003-06-120	3/8 x 120 WALL FLANGE TOOL SET
202003-08-049	1/2 x 049 WALL FLANGE TOOL SET
202003-08-065	1/2 x 065 WALL FLANGE TOOL SET
202003-08-083	1/2 x 083 WALL FLANGE TOOL SET
202003-08-095	1/2 x 095 WALL FLANGE TOOL SET
202003-08-109	1/2 x 109 WALL FLANGE TOOL SET
202003-08-120	1/2 x 120 WALL FLANGE TOOL SET
202003-10-049	5/8 x 049 WALL FLANGE TOOL SET
202003-10-065	5/8 x 065 WALL FLANGE TOOL SET
202003-10-083	5/8 x 083 WALL FLANGE TOOL SET
202003-10-095	5/8 x 095 WALL FLANGE TOOL SET
202003-10-109	5/8 x 109 WALL FLANGE TOOL SET
202003-10-120	5/8 x 120 WALL FLANGE TOOL SET
202003-12-049	3/4 x 049 WALL FLANGE TOOL SET
202003-12-065	3/4 x 065 WALL FLANGE TOOL SET
202003-12-083	3/4 x 083 WALL FLANGE TOOL SET
202003-12-095	3/4 x 095 WALL FLANGE TOOL SET
202003-12-109	3/4 x 109 WALL FLANGE TOOL SET
202003-12-120	3/4 x 120 WALL FLANGE TOOL SET
202003-14-065	7/8 x 065 WALL FLANGE TOOL SET
202003-14-083	7/8 x 083 WALL FLANGE TOOL SET
202003-14-095	7/8 x 095 WALL FLANGE TOOL SET
202003-14-109	7/8 x 109 WALL FLANGE TOOL SET
202003-14-120	7/8 x 120 WALL FLANGE TOOL SET
202003-16-065	1 x 065 WALL FLANGE TOOL SET
202003-16-083	1 x 083 WALL FLANGE TOOL SET
202003-16-095	1 x 095 WALL FLANGE TOOL SET
202003-16-109	1 x 109 WALL FLANGE TOOL SET
202003-16-120	1 x 120 WALL FLANGE TOOL SET
202003-18-065	1-1/8 x 065 WALL FLANGE TOOL SET

SET ID NUMBER	DESCRIPTION	
202003-18-083	1-1/8 x 083 WALL FLANGE TOOL SET	
202003-18-095	1-1/8 x 095 WALL FLANGE TOOL SET	
202003-18-109	1-1/8 x 109 WALL FLANGE TOOL SET	
202003-18-120	1-1/8 x 120 WALL FLANGE TOOL SET	
202003-20-065	1-1/4 x 065 WALL FLANGE TOOL SET	
202003-20-083	1-1/4 x 083 WALL FLANGE TOOL SET	
202003-20-109	1-1/4 x109 WALL FLANGE TOOL SET	
202003-20-120	1-1/4 x 120 WALL FLANGE TOOL SET	
202003-24-065	1-1/2 x 065 WALL FLANGE TOOL SET	
202003-24-083	1-1/2 x 083 WALL FLANGE TOOL SET	
202003-24-095	1-1/2 x 095 WALL FLANGE TOOL SET	
202003-24-109	1-1/2 x 109 WALL FLANGE TOOL SET	
202003-24-120	1-1/2 x 120 WALL FLANGE TOOL SET	
Special Tooling Quoted Upon Request		

Appendix 1

Options for Model 50 Power Flare

PART NUMBER	DESCRIPTION	QUANTITY REQUIRED
2047	TALL STAND USED WITH STANDARD MODEL 50	1
2037	SHORT STAND USED WITH MODEL 50 DEBURR	1
2074-02	TUBE STOP	1
	DEBURR UNIT	
2002-117a	Model 50 DB Seal-Tite 21" (Use in Place of 2002-117)	1
2002-157a	Model 50 DB Shipping Crate (Used in Place of 2002-157)	1
2036-158	Model 50 DB Sprocket	2
2036-165	Model 50 DB Pillow Block Bearing	4
2036-01	Model 50 DB Chain Guard	1
2036-02	Model 50 DB Sprocket Coupling (Used in place of 2002-123)	1
2036-04	Model 50 DB Deburr Base Box	1
2036-08	Model 50 DB Shaft	2
2036-156	Model 50 DB Roller Chain 32"	1
2036-157	Model 50 DB Master Link	1
2053-3 8	Deburr Tool Adapter (Holder)	2
	DEBURR TOOLS	
2038-09	Small ID 45 Degree	1
2038-10	Small ID Tool Shank	1
2038-11	Large ID 45 Degree	1
2038-12	Large ID Tool Shank	1
2039-08	Small OD 45 Degree	1
2039-09	Small OD Tool Shank	1
2039-10	Large OD 45 Degree	1
2039-11	Large OD Tool Shank	1
2039-12	Wooden Case for Deburr Tool Set	1

M5012150M OLSEN MODEL 50 POWER FLARE OWNER'S MANUAL

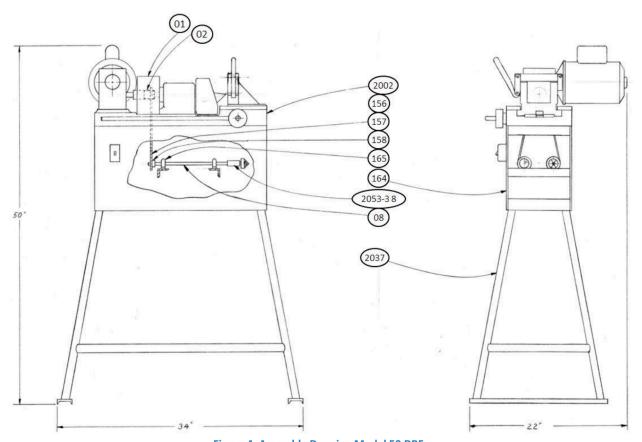


Figure 4: Assembly Drawing Model 50 DBF

