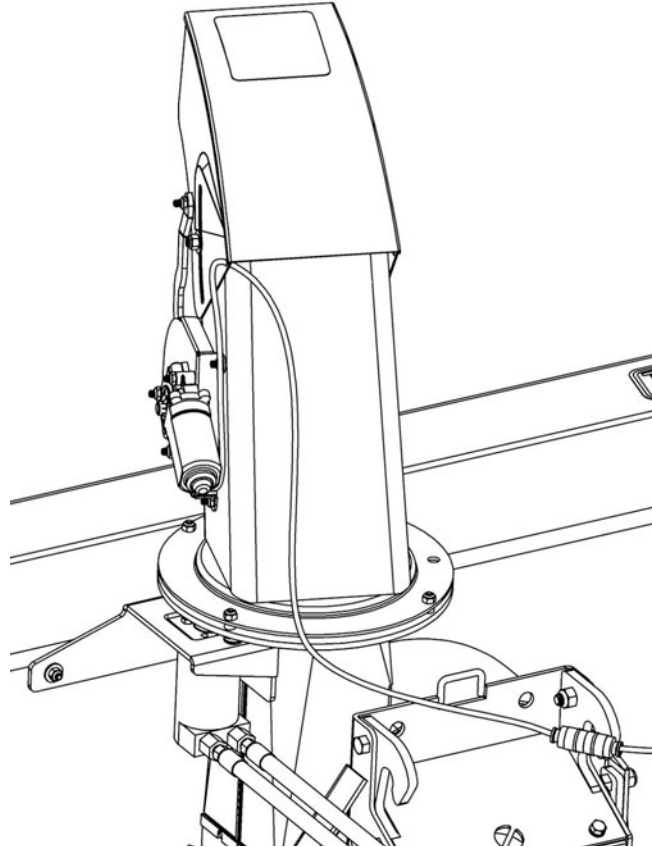




**OWNER'S MANUAL**  
*Model Number*

**700559**



***BERCO***  
***ELECTRIC DEFLECTOR ADJUSTMENT KIT***  
***For***  
***SNOWBLOWERS WITH HYDRAULIC ROTATION***

- \* ASSEMBLY
- \* OPERATION
- \* REPAIR PARTS
- \* MAINTENANCE

**CAUTION:**  
**READ & FOLLOW ALL SAFETY RULES & INSTRUCTIONS BEFORE  
OPERATING YOUR EQUIPMENT**



# LIMITED WARRANTY

## Conditions and Products Covered:

BERCOMAC guarantees any part of the product or accessory manufactured by BERCOMAC and found in the reasonable judgment of BERCOMAC to be defective in material and or workmanship will be repaired or replaced by an authorized dealer without charge up to our maximum labor rates and pre-established times. For replacement parts only standard ground freight services are covered. This warranty extends to the original retail purchaser only and is not transferable to any subsequent purchasers.

## Warranty Period

(from date of the original retail purchase)

- Residential use: 1 year
- Semi-commercial, professional or rental use: 90 days

**Exceptions Noted Below;** the following items are guaranteed by the original manufacturer and have their own warranty, conditions and limited time:

- Tire Chains: 90 days
- Engines: Will vary as per the manufacturer  
Please refer to the engine manufacturer's warranty statement included with the unit. BERCOMAC is not authorized to handle warranty adjustments on engines.

## Items and Conditions NOT Covered:

This warranty does not cover the following:

- Pick-up or delivery charges or in-home services fees.
- Any damage or deterioration of the unit, parts and or finish of these due to normal use, wear and tear, or exposure.
- Cost of regular use or maintenance service or parts, such as gas, oil, lubricants, tune-up parts, and adjustments.
- Any part or accessory which has been altered, modified, misused, neglected, accidentally damaged or not properly installed, maintained, stored or repaired not in accordance with the instructions in the owner's manual.
- Repair due to normal wear and or any wear items such as shear pins, bolts, belts, etc.
- Expedited freight fee services for replacement parts.
- Shear bolts and shear pins are to be considered as a preventive measure not as an assured protection, any damages resulting from the lack of shear bolts breakage are not covered.

NOTE: All warranty work must be performed by an authorized dealer using original (manufacturer) replacement parts.

**NOTE:** Bercomac reserves the right to change or improve the design of any part or accessory without assuming any obligation to modify any product previously manufactured.

## Instructions for Obtaining Warranty Services:

Contact dealer where equipment was purchased or any other BERCO service dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at [www.bercomac.com](http://www.bercomac.com). Don't forget to bring your proof of purchase (sales receipt) to the BERCOMAC dealer.

## Owner's Responsibilities:

BERCOMAC's defective equipment or part must be returned to an authorized dealer within the warranty period for repairs. In the event that defective merchandise must be returned to manufacturer for repairs, freight fees are prepaid and a written authorization from BERCOMAC must be obtained by dealer prior to the shipment. This warranty extends only to equipment operated under normal conditions. To validate a warranty claim, it is the user's responsibility to maintain and service the unit as specified in the owner's manual or to have the unit serviced at their dealer at their expense.

## General Conditions:

The sole liability of BERCOMAC with respect to this warranty shall be strictly and exclusively repair and replacement as mentioned herein. BERCOMAC shall not have any liability for any other costs, loss or damage, including but not limited to, any incidental or consequential loss or damage.

In particular, without being limited to, BERCOMAC shall have no liability or responsibility for:

- Travel time, overtime, after hours time or other extraordinary repair charges or relating to repairs and or replacements outside of normal business hours.
- Rental of like or similar replacement equipment during the period of any, repair or replacement work.
- Any communicating or travel charges.
- Loss or damage to person or property other than that covered by the terms of this warranty.
- Any claims for lost revenue, lost profit or any similar costs as a result of damage or repair.
- Attorney's fees.

BERCOMAC's responsibility in respect to claims is limited to making the required repairs or replacement without charge up to our maximum labor rates and pre-established times and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any product or accessory.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

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# INTRODUCTION

**TO THE PURCHASER**

This new accessory was carefully designed to give years of dependable service. This manual has been provided to assist in the safe operation and servicing of your attachment.

**NOTE:** All photographs and illustrations in the manual may not necessarily depict the actual models or attachment, but are intended for reference only and are based on the latest product information available at the time of publication.

Familiarize yourself fully with the safety recommendations and operating procedures before putting the machine to use. Carefully read, understand and follow these recommendations and insist that they be followed by those who will use this attachment.



**THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.**

**DANGER:** Signals an extreme hazard that will cause serious injury or death if recommended precautions are not followed.

**WARNING:** Signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

**CAUTION:** Signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed.

Record your attachment serial number and purchase date in the section reserved below (there is no serial number on the subframe). Your dealer requires this information to give you prompt, efficient service when ordering replacement parts. Use only genuine parts when replacements are required.

If warranty repairs are required please present this registration booklet and original sales invoice to your selling dealer for warranty service.

**This manual should be kept for future reference.  
Please check if you have received all the parts for your kit with the list of the bag and the list of the box.**

<b>SERIAL NUMBER :</b> (IF APPLICABLE)	
<b>MODEL NUMBER:</b>	
<b>PURCHASE DATE :</b>	

## SAFETY PRECAUTIONS

Careful operation is your best insurance against an accident. Read this section carefully before operating the tractor and attachment. All operators, no matter how experienced they may be, should read this and other manuals related to the tractor and attachments before operating. It is the owner's legal obligation to instruct all operators in safe operation.

### **TRAINING**



This symbol, "Safety Alert Symbol", is used throughout this manual and on the attachment safety labels to warn of the possibility of personal injury. Please take special care in reading and understanding the safety precautions before operating the attachment or the tractor.

1. Read the snowblower owner's manual carefully. Be thoroughly familiar with the controls and proper use of the attachment.
2. Keep hands and feet away from the chute and all other moving parts.

### **WHENEVER YOU SEE THIS SYMBOL**



**IT MEANS:**

**WARNING!**

**BECOME ALERT !**

**YOUR SAFETY IS INVOLVED!**

## ASSEMBLY

### **TOOLS REQUIRED:**

- 1 Ratchet
- 2 Wrenches 7/16", 1/2"
- 1 Wrench (for the nuts on the posts of the battery on the vehicle)
- 1 Socket 7/16"
- 1 Wire stripper
- 1 Flat screwdriver
- 1 Drill
- 1 Bit 9/32"
- 1 Square head screwdriver #2
- 1 Cross head screwdriver #2
- 1 Pair of snips

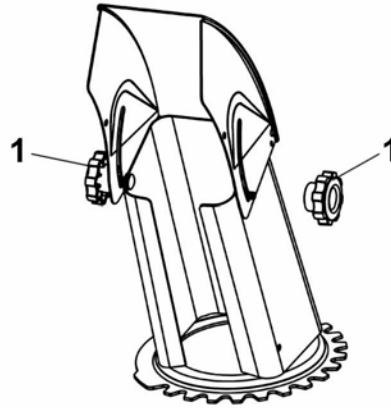
# ASSEMBLY

## STEP 1 INSTALLATION OF THE ELECTRIC DEFLECTOR ADJUSTMENT KIT :

Remove the two knobs (item 1) from the deflector and replace them by two 5/16" nylon insert lock nuts.

Leave the two 11/32" nylon washers under the nylon insert lock nuts.

DO NOT TIGHTEN COMPLETELY so that the deflector moves freely.

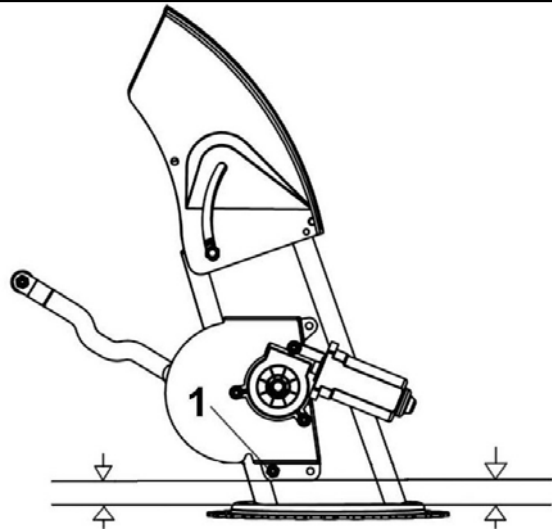


Remove knobs and replace with lock nuts

Install the assembled electric motor on the chute with a 1/4 x 1/2" screw and a nylon insert lock nut (item 1) (nut on the outside).

Place the base of the motor bracket parallel with the base of the chute.

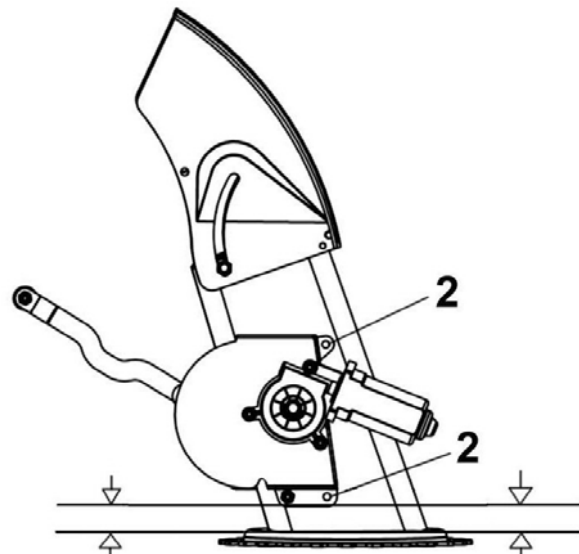
Tighten the screw firmly.



Install motor

Drill two 9/32" holes (item 2) in the chute by using the bracket as a template.

**BE CAREFUL, BEFORE DRILLING THE HOLES, MAKE SURE THAT THE BASE OF THE MOTOR BRACKET IS PARALLEL WITH THE BASE OF THE CHUTE.**

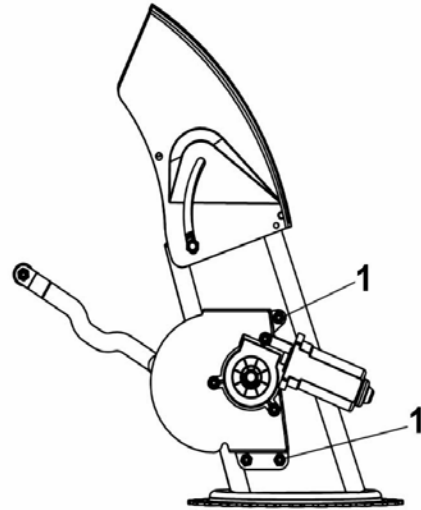


Drill holes

## ASSEMBLY

Secure the bracket with two 1/4 x 1/2" screws and nylon insert lock nuts (item 1) (nuts on the outside).

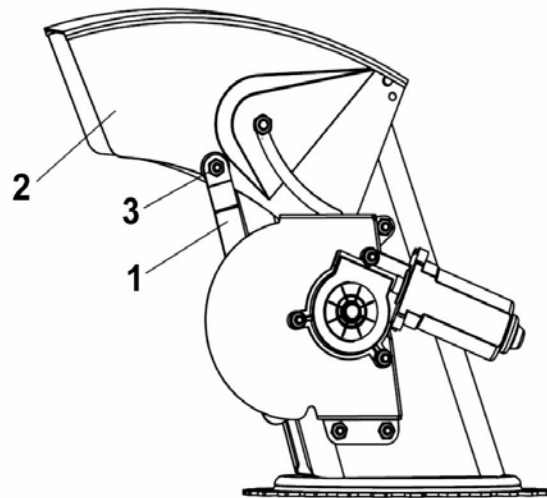
Tighten the screws firmly.



Secure with screws

Install the arm (item 1) on the deflector (item 2) with a 1/4 x 3/4" bolt (item 3) (the head inside the chute), a 5/16" flat washer between the arm and the deflector and a nylon insert lock nut on the outside.

DO NOT TIGHTEN COMPLETELY so that the deflector moves freely.



Install arm

# ASSEMBLY

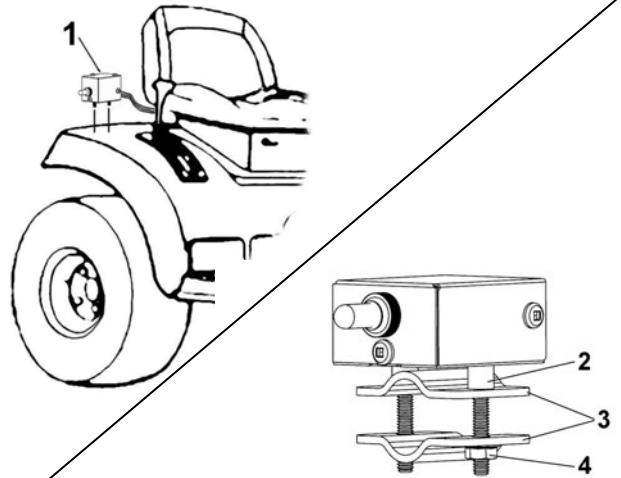
## **STEP 2** **INSTALLATION OF THE ELECTRIC CONTROL BOX:**

**NOTE:** Choose the ideal place to install the control box (item 1).

We suggest putting it on the right fender of the tractor, close to the driver's seat, the switches towards the outside and secure the control box (item 1) with two 1/4 x 1/2" bolts and flange nuts (item 4).

You may install it elsewhere with the spacers (item 2), support brackets (item 3), flange nuts and / or any other bolts supplied.

It is also possible to install the switch without the control box in the dashboard or on the lever of the tractor's hydraulics.



Install control box on tractor

Turn the chute to its maximum towards the right.

Secure the wires of the deflector motor (item 1) with a tie wrap around the motor.

Tie the wires with another tie wrap in the hole at the base of the deflector (item 2) as shown.

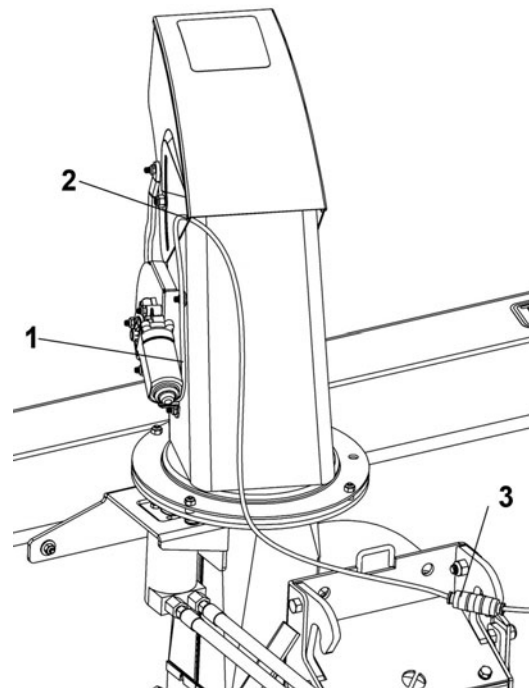
Install the connector (item 3) by cutting the wires to the desired length one at a time.

Make sure to install the same wire to the male pole and to the corresponding female pole.

It is recommended to place the connector as close as possible to the vehicle.

The reason for the connector is to facilitate dismounting the snowblower.

Connect the red and black wires with a round eyelet on the battery's posts respecting the colors.



Install the connector

## TROUBLESHOOTING

(For identification, see the parts breakdown)

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Electric motor does not work.	Overheating of the motor.	These motors are equipped with an internal protector. Wait 10 minutes before using.
The deflector works in the opposite direction.	Wires are inversed.	Change the black wire with the white wire of the electric motor to the switch.



# TORQUE SPECIFICATION TABLE

## GENERAL TORQUE SPECIFICATION TABLE USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

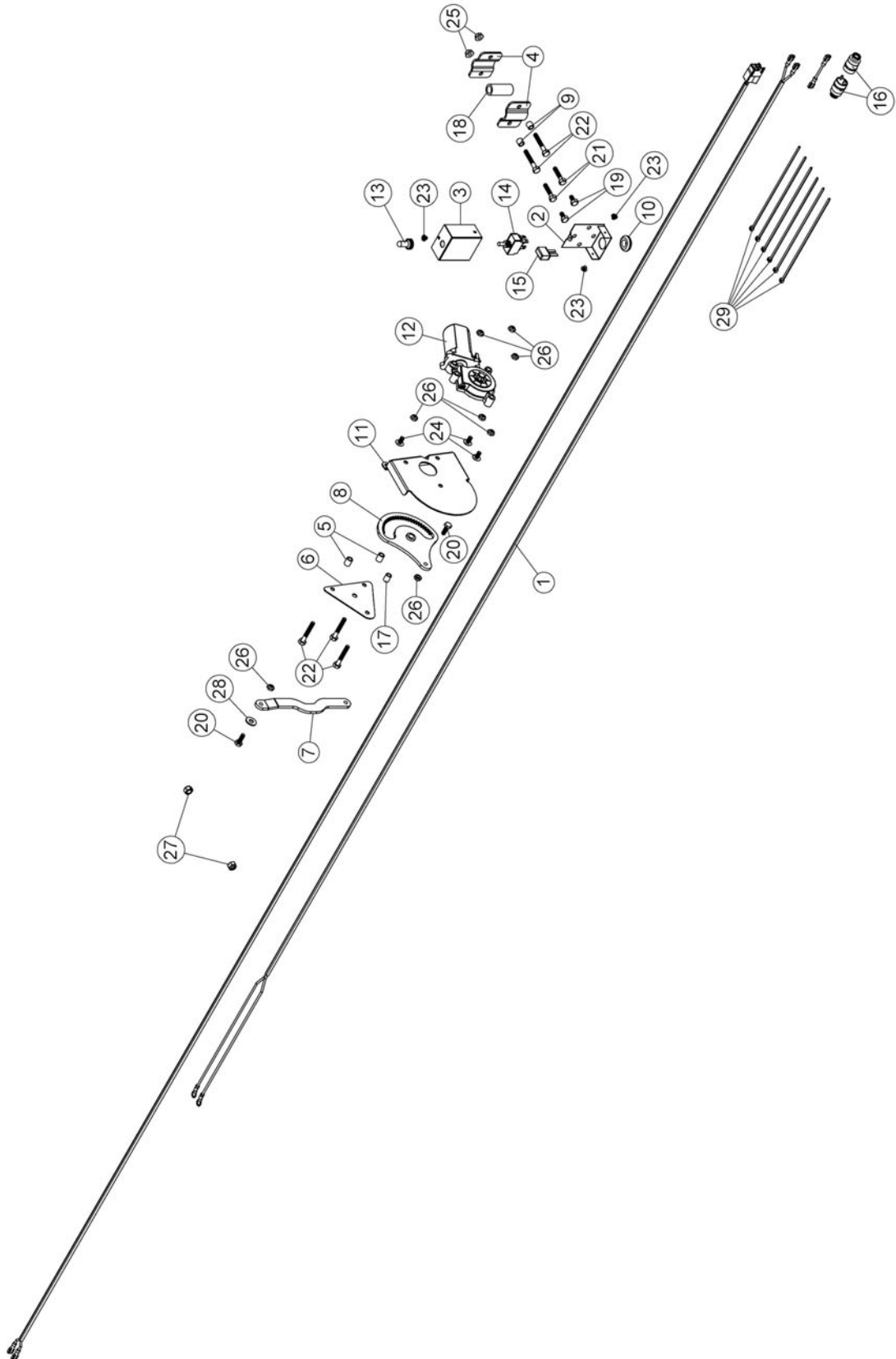
**NOTE:** These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

\* Thick nuts must be used with grade 8 bolts

SEE Grade No.		2				5				8 *			
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING MARKS WILL VARY		TORQUE				TORQUE				TORQUE			
BOLT SIZE		FOOT POUNDS		NEW TON-METERS		FOOT POUNDS		NEW TON-METERS		FOOT POUNDS		NEW TON-METERS	
Inches	Millimetre	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4"	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16"	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8"	9.53	20	23	27.1	31.2	35	42	47.5	57	45	54	61	73.2
7/16"	11.11	30	35	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2"	12.7	45	52	61	70.5	80	96	108.5	130.2	110	132	149.2	179
9/16"	14.29	65	75	88.1	101.6	110	132	149.2	179	160	192	217	260.4
5/8"	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358
3/4"	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8"	22.23	160	200	216.8	271	400	480	542.4	650.9	600	720	813.6	976.3
1"	25.4	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5

METRIC BOLT TORQUE SPECIFICATIONS							
		COARSE THREAD			FINE THREAD		
Size Screw	Grade No.	Pitch (mm)	Foot Pounds	Newton-Meters	Pitch (mm)	Foot Pounds	Newton-Meters
M6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-
	7T		5.8 - 9.4	7.9 - 12.7		-	-
	8T		7.2 - 10	9.8 - 13.6		-	-
M8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 17	16.3 - 23
	7T		17 - 22	23 - 29.8		19 - 27	25.7 - 36.6
	8T		20 - 26	27.1 - 35.2		22 - 31	29.8 - 42
M10	4T	1.50	20 - 25	27.1 - 33.9	1.25	20 - 29	27.1 - 39.3
	7T		34 - 40	46.1 - 54.2		35 - 47	47.4 - 63.7
	8T		38 - 46	51.5 - 62.3		40 - 52	54.2 - 70.5
M12	4T	1.75	28 - 34	37.9 - 46.1	1.25	31 - 41	42 - 55.6
	7T		51 - 59	69.1 - 79.9		56 - 68	75.9 - 92.1
	8T		57 - 66	77.2 - 89.4		62 - 75	84 - 101.6
M14	4T	2.00	49 - 56	66.4 - 75.9	1.50	52 - 64	70.5 - 86.7
	7T		81 - 93	109.8 - 126		90 - 106	122 - 143.6
	8T		96 - 109	130.1 - 147.7		107 - 124	145 - 168
M16	4T	2.00	67 - 77	90.8 - 104.3	1.50	69 - 83	93.5 - 112.5
	7T		116 - 130	157.2 - 176.2		120 - 138	162.6 - 187
	8T		129 - 145	174.8 - 196.5		140 - 158	189.7 - 214.1
M18	4T	2.00	88 - 100	119.2 - 136	1.50	100 - 117	136 - 158.5
	7T		150 - 168	203.3 - 227.6		177 - 199	239.8 - 269.6
	8T		175 - 194	237.1 - 262.9		202 - 231	273.7 - 313
M20	4T	2.50	108 - 130	146.3 - 176.2	1.50	132 - 150	178.9 - 203.3
	7T		186 - 205	252 - 277.8		206 - 242	279.1 - 327.9
	8T		213 - 249	288.6 - 337.4		246 - 289	333.3 - 391.6

# PARTS BREAKDOWN ELECTRIC DEFLECTOR KIT



## PARTS LIST ELECTRIC DEFLECTOR KIT

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Wire assembly	Fils assemblés	1	105919
2	Box cover	Couvercle de la boîte	1	105920
3	Box	Boîte	1	105921
4	Support bracket	Fixation du support	2	103068
5	Spacer	Espaceur	2	103361
6	Plate	Plaque	1	103363
7	Arm	Bras	1	103364
8	Lever	Levier	1	103365
9	Spacer	Espaceur	2	103368
10	Rubber grommet	Oeillet de caoutchouc	1	103369
11	Bracket	Support	1	103375
12	Electric motor	Moteur électrique	1	103378
13	Rubber boot	Capuchon de caoutchouc	1	103379
14	Switch	Commutateur	1	103381
15	Breaker	Disjoncteur	1	103382
16	Connectors	Connecteurs	1	104276
17	Oil lite bushing	Coussinet imprégné d'huile	1	103362
18	Rubber spacer	Espaceur de caoutchouc	1	105962
19	Hex. bolt 1/4" n.c. x 1/2"	Boulon hex. 1/4" n.c. x 1/2"	2	O/L
20	Hex. bolt 1/4" n.c. x 3/4"	Boulon hex. 1/4" n.c. x 3/4"	2	O/L
21	Hex. bolt 1/4" n.c. x 1 1/4"	Boulon hex. 1/4" n.c. x 1 1/4"	2	O/L
22	Hex. bolt 1/4" n.c. x 1 3/4"	Boulon hex. 1/4" n.c. x 1 3/4"	5	O/L
23	Metal screw pan head #8 x 1/4"	Vis à métal tête pan #8 x 1/4"	3	O/L
24	Machine screw T.H. 1/4" n.c. x 1/2"	Vis mécanique T.H. 1/4" n.c. x 1/2"	3	O/L
25	Flange nut 1/4" n.c.	Écrou à bride 1/4" n.c.	2	O/L
26	Nylon insert lock nut 1/4" n.c. (thin)	Écrou à garniture de nylon 1/4" n.c.(mince)	8	O/L
27	Nylon insert lock nut 5/16" n.c.	Écrou à garniture de nylon 5/16" n.c.	2	O/L
28	Flat washer 5/16" hole	Rondelle plate 5/16" trou	1	O/L
29	Tie wrap 8"	Attache de nylon 8"	6	O/L

O/L = Obtain Locally



***WHEN PERFORMANCE  
& DEPENDABILITY  
ARE NON NEGOTIABLE!***

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