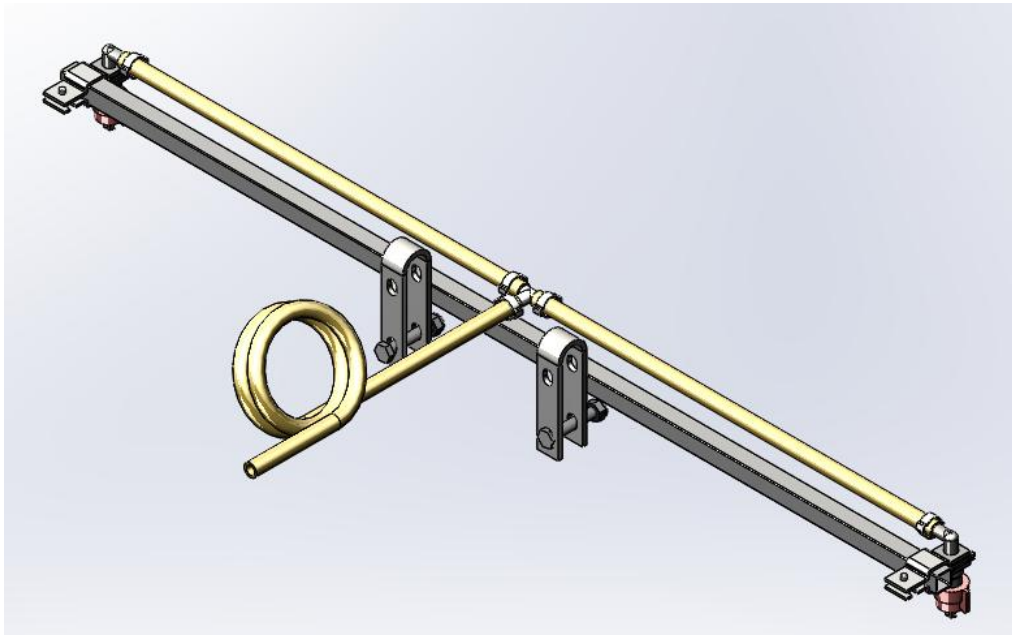


# In-Ex



## **IN-EX™ SPRAY BOOMS**

In-Ex™  
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**2M Part Number 1034**  
**3M Part Number 1035**  
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## **SAFE OPERATING INSTRUCTIONS**

### **An important message for owners and operators of In-Ex attachments/accessories.**

Your safety is In-Ex's primary concern. It is important that you understand that any loads or attachments whether fastened to or placed on a vehicle or ATV will alter the stability and handling characteristics of that vehicle or ATV.

We take this opportunity to remind you about the simple, basic and common sense rules of safety when using spray tanks or other equipment. **NEVER EXCEED THE LOAD LIMIT CAPACITY OF THE ATV OR OTHER VEHICLE.** Spray tanks or other equipment must be filled to a level where the gross weight is within the load limit of the ATV or other vehicle.

### **EXERCISE EXTREME CAUTION WHEN OPERATING ON HILLY OR UNDULATING TERRAIN. PLEASE BE CAREFUL!**

Failure to follow these rules can result to severe injury or death to operators or bystanders.

## **WARRANTY**

### **1 WARRANTY AND LIABILITY**

#### **Use of the equipment**

- 1.1 You must satisfy yourself as to the suitability of the equipment for your intended use(s) of the equipment.

#### **Your relationship with the retailer**

- 1.2 Where you consider you have a warranty claim (or any other claim) in relation to the equipment, you must contact the retailer who sold you the equipment, not C-Dax directly. The retailer is responsible for liaising with C-Dax in respect of your claim.

#### **Warranty**

- 1.3 C-Dax warrants to the original purchaser that the equipment is sold free from defects in materials and workmanship for a period of 12 months from date of first retail sale (6 months from date of first retail sale if the equipment is sold in the U.K.) subject to the terms set out below.
- 1.4 C-Dax will at its option repair or replace the defective equipment (or part of the equipment) or notify the retailer of the equipment to refund the purchase price for such defective equipment to you in the event of a breach of this warranty, subject to the terms set out below.

#### **Liability**

- 1.5 Except for the warranty set out in clause 1.2 above, all warranties and representations (including those expressed or implied by law) in respect of the equipment or advice relating to the equipment provided to you by C-Dax are excluded to the extent permitted by law.
- 1.6 Notwithstanding anything else in this manual, C-Dax's maximum liability to you (in the event that such liability exists) in respect of any breach of warranty, any matter set out in this manual, or for defective equipment or advice relating to the equipment provided is limited at C-Dax's option to:
- (a) repairing or replacing the equipment (or part of the equipment); or
  - (b) notifying the retailer of the equipment to refund the price for the equipment paid by you.
- 1.7 Notwithstanding anything else in this manual, in no event will C-Dax be liable, whether in contract, tort (including negligence) or otherwise:

- (a) where you have altered or modified the equipment, misused or misapplied the equipment, or the equipment has been subjected to any unusual, excessive or non-recommended use, service or handling (including as set out in this manual);
- (b) where the equipment is not transported, stored, handled or used in accordance with any directions given by C-Dax (or the retailer) to you (including as set out in this manual);
- (c) where the equipment:
  - (i) has been subject to neglect, accident or hireage, or the damage arises from fair wear and tear, battery damage or chemical attack;
  - (ii) has been built to a customer's specifications; or
  - (iii) has been dismantled, repaired or serviced other than by an authorised service agent of C-Dax;
- (d) for loss or damage caused by any factors beyond C-Dax's control; or
- (e) for any loss of profit or revenue, or for any special, indirect, incidental or consequential damage, loss or injury of any kind suffered by you.

1.8 Where C-Dax elects to repair or replace the equipment it will use reasonable endeavours to do so as soon as practicable but will not be liable for any delay in doing so.

1.9 You agree that the transactions entered into between you and the retailer (and C-Dax) are for the purposes of trade and that, having regard to all relevant circumstances of the transactions, it is fair and reasonable that the provisions of the Consumer Guarantees Act 1993 (NZ) do not apply to those transactions to the fullest extent permitted by law.

### Description

The In-Ex™ Spray boom range is a light robust range of pressure nozzle booms with models of 2, 3, and 5 metre spray width which can be securely attached to and quickly removed from ATV carrier frames using the supplied mounting bracket.

### Boom Mounting (All models)

Mount the boom attachment brackets loosely to the boom using the M8 screws and nyloc nuts in one of the two mounting holes that best suit the ATV carrier.

5M boom, mount between the lugs on the mounting bracket. 2&3M booms, mount above or below the lug on the mounting bracket.

Fit the boom to the ATV carrier upstand rails and place the two M6 screws and nyloc nuts through the holes in the mounting brackets to secure the boom to the carrier.

Tighten all fasteners to secure boom to ATV.

### Hose Connection

The In-Ex™ booms require a connection to the sprayer delivery line.

Cut the sprayer delivery line from the pump in an easily accessible position, and install the quick release valve with the 10mm hose shank (for sprayers with a pressure regulator, connect to the delivery hose from the regulator).

Connect the boom delivery hose to the male quick release connector with the 10mm hose shank.

Connect the second male quick release connector with the 10mm hose shank to the remainder of the sprayer delivery line for use when handgun spraying. Secure with the hose clamps provided.

### Operation

Place water in the tank, switch the pump on and allow air to be expelled from boom. Ensure all hose connections are secure, and nozzles are spraying evenly.

### Calibration

You will need to calibrate your pressure nozzle boom sprayer to ensure the accurate application of chemical, or liquid fertiliser. To calibrate your sprayer you will need:

- nozzle calibrator or an accurate measuring flask.
- watch or clock with seconds, or a stopwatch.
- tape measure.
- calculator.

Metric Version (litres, metres, kph)

1. Measure time taken to travel 100m at the speed used for spraying.  
**NOTE:-** Maximum Recommended Spraying Speed is 12 Kph.
2. Run Sprayer and record output from each nozzle (in mls) for the same time it took to travel 100m. Calculate average flow per nozzle.  
ie. Add individual nozzle output and divide by number of nozzles.  
**NOTE:-** Check any nozzle tip that is out by ± 5%  
Discard any nozzle tip that is out by ± 10%
3. Litres/ha =  
$$\frac{\text{Average Nozzle output (ml/nozzle)} \times 100}{1000 \text{ (nozzle spacing mm)}}$$
4. Chemical to add to tank

Litres of Chemical =

**Water in Tank (L) x Label chemical rate/ha**  
**L/ha (application Rate)**

### Maintenance

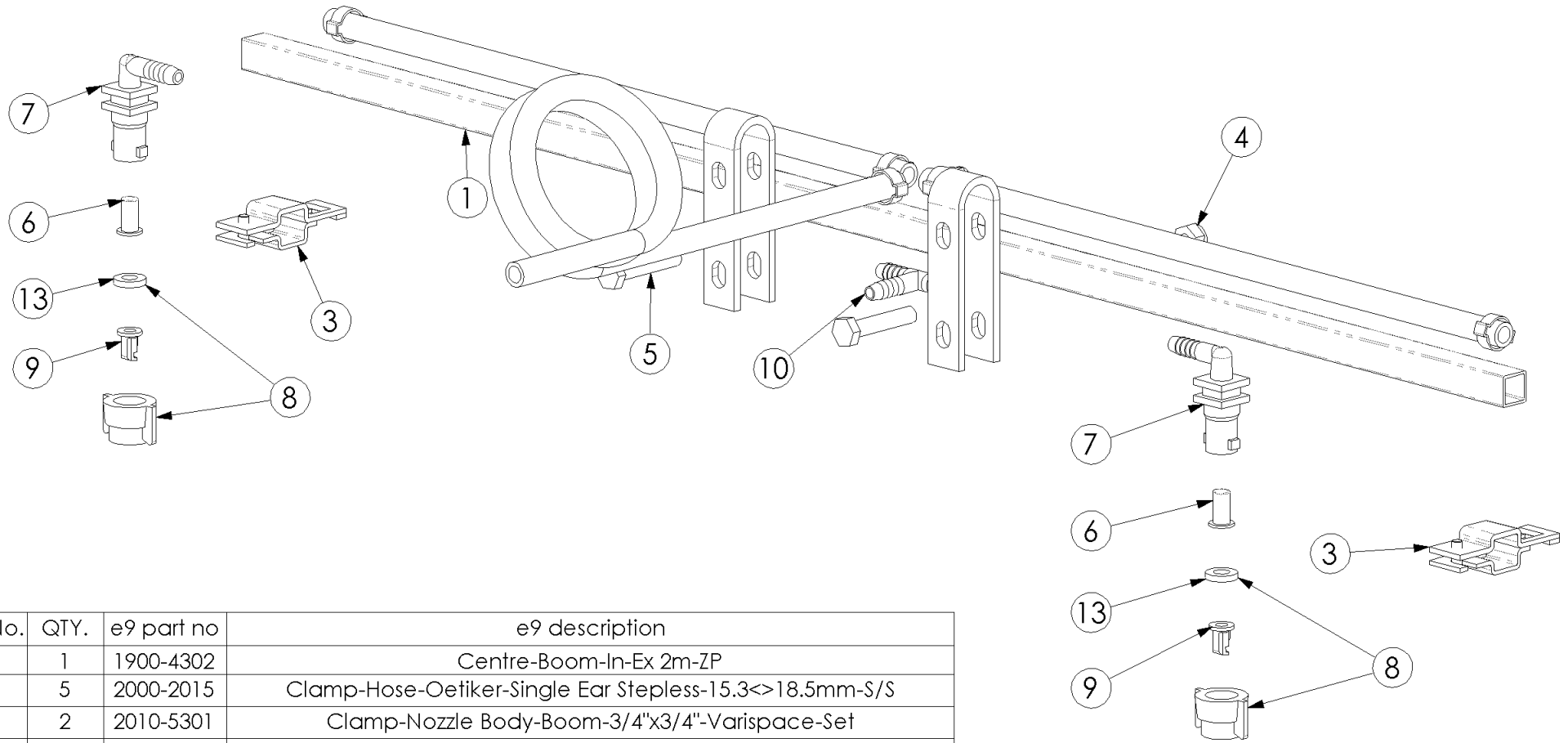
Flush out spray lines and nozzles after use with clean water.

Remove nozzle tips and clean check valve strainers after use.

Inspect nozzle tips after use for damage or wear, replace as required.

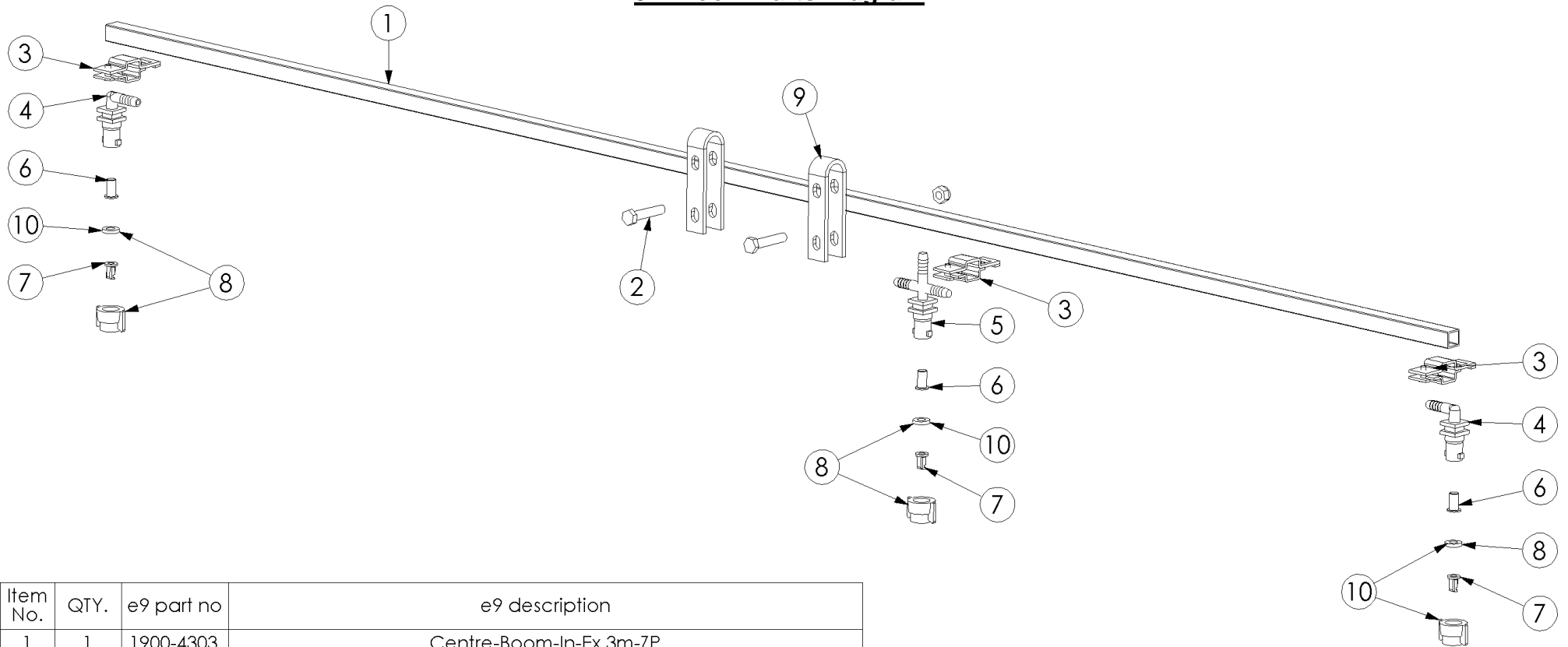
Apply grease to breakaway joints (5M model only) as required.

## 2M Boom Parts Diagram



Item No.	QTY.	e9 part no	e9 description
1	1	1900-4302	Centre-Boom-In-Ex 2m-ZP
2	5	2000-2015	Clamp-Hose-Oetiker-Single Ear Stepless-15.3<>18.5mm-S/S
3	2	2010-5301	Clamp-Nozzle Body-Boom-3/4"x3/4"-Varispace-Set
4	2	3170-0010	Fastener-Nut-Nyloc-M10-ZP
5	2	3290-1050	Fastener-Set Screw-Hex-8.8 Grade-M10x50-ZP
6	2	3400-5410	Filter-Nozzle-Tip-Incl Check Valve-50Mesh-5PSI-SS Ball-Plastic
7	2	5300-2200	Nozzle Body-Teejet-Dry Boom-1 Way-Elbow-Shank 10mm-Black-Nylon
8	2	5300-2800	Nozzle Cap-Cone-QC-Red-incl gasket
9	2	5300-5700	Nozzle-Tip-Deflector-DEF05-Single
10	1	6200-9140	Pipe-Fitting-Tee-10 Shankx10 Shankx10 Shank-Plastic
11	1	4100-0010	Hose-Spray-Delivery-40 Bar-10mm ID-Yellow (3m)
12	2	4100-0010	Hose-Spray-Delivery-40 Bar-10mm ID-Yellow (3m)
13	1	3700-9250	Gasket-Washer-Nozzle Tip Sealing-10x19x3.5mm-Rubber

### 3m Boom Parts Diagram



Item No.	QTY.	e9 part no	e9 description
1	1	1900-4303	Centre-Boom-In-Ex 3m-ZP
2	2	3290-1050	Fastener-Set Screw-Hex-8.8 Grade-M10x50-ZP
3	3	2010-5301	Clamp-Nozzle Body-Boom-3/4"x3/4"-Varispace-Set
4	2	5300-2200	Nozzle Body-Teejet-Dry Boom-1 Way-Elbow-Shank 10mm-Black-Nylon
5	1	5300-2100	Nozzle Body-Teejet-Dry Boom-3 Way-Shank10x10x10-Black-Nylon
6	3	3400-5410	Filter-Nozzle-Tip-Incl Check Valve-50Mesh-5PSI-SS Ball-Plastic
7	3	5300-5500	Nozzle-Tip-Deflector-DEF04-Single
8	3	5300-2800	Nozzle Cap-Cone-QC-Red-incl gasket
9	2	3170-0010	Fastener-Nut-Nyloc-M10-ZP