

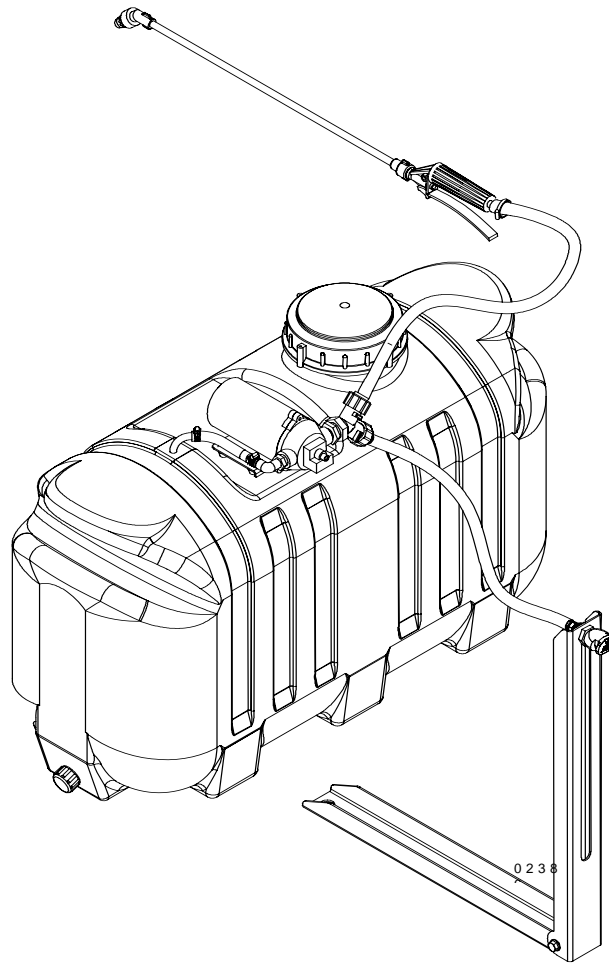


ATV BOOM KIT

ITEM #268195

M268195H.1

OWNER'S MANUAL



SHOWN ATTACHED TO ATV SPOT SPRAYER #268199 (NOT INCLUDED)

*Any Questions, Comments or Problems?
Call Customer Service 1-800-270-0810*

THANK YOU

Thank you for purchasing the North Star ATV Boom Kit. The assembly instructions that follow will help you attach the kit to your existing North Star Spot Sprayer. The numbers in parenthesis throughout the manual refer to the diagram number on the parts explosion and corresponding component list. Your new boom kit is designed for long life, dependability, and the top performance you demand. Please take time now to read through this manual so you can better understand the boom kit's operation, maintenance and safety precautions. The time you take now to thoroughly read and understand this manual will prolong your boom kit's life and prepare you for its safe operation. Enjoy the exceptional performance of your NorthStar ATV Boom Kit.

IMPORTANT

If this boom kit is used by anyone who is not the owner or is loaned or rented, make certain the operator:

- Is instructed in safe and proper operation of this boom kit and sprayer .
- Reads and understands the manuals pertaining to this boom kit and sprayer.

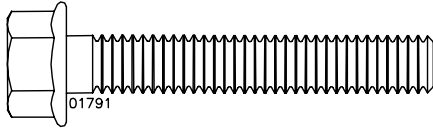
NOTICE

Northern Tool + Equipment reserves the right to make improvements in design and/or changes in specifications at any time without incurring any obligation to install them on units previously sold.

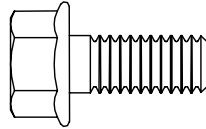
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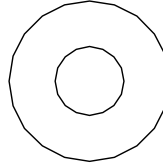
FASTENERS-268195



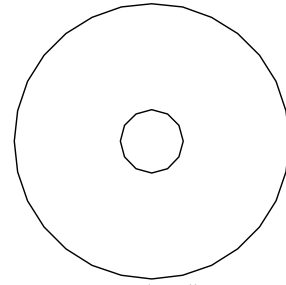
5/16 X 2"
Flange Bolt
Qty-1



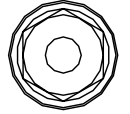
5/16 X 3/4"
Flange Bolt
Qty-2



5/16"
Flat Washer
Qty-2

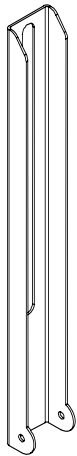


5/16"
Fender Washer
Qty-1



5/16"
Flange Nut
Qty-3

PARTS



Nozzle Arm
Qty-1



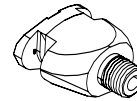
3/8" Hose Barb
Qty-1



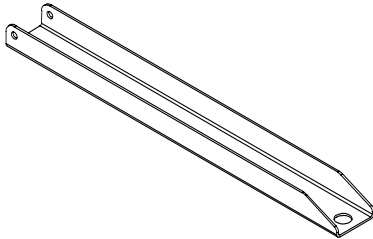
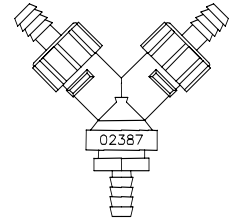
1 1/16" Nut
Qty-1



1/4" NPT x 1 1/16 Thread Boom Nozzle
Qty-1



3-Way Ball Valve
Qty-1



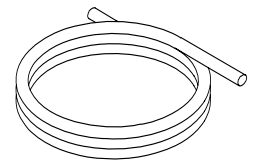
Boom Mount Pivot
Qty-1



3/8" Hose Clamp
Qty-4



3/8" x 4" Hose
Qty-1



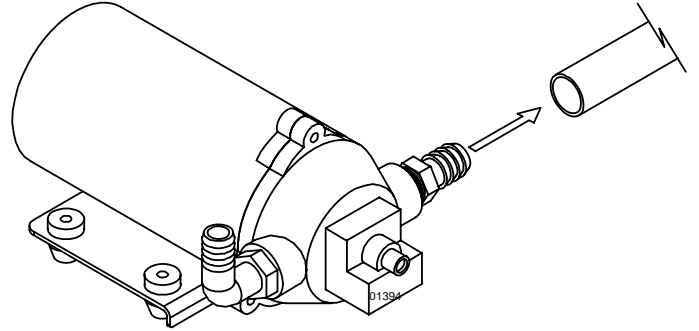
3/8" x 48"
Boom Supply Hose
Qty-1

**Any Questions, Comments or Problems?
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PRE-ASSEMBLY

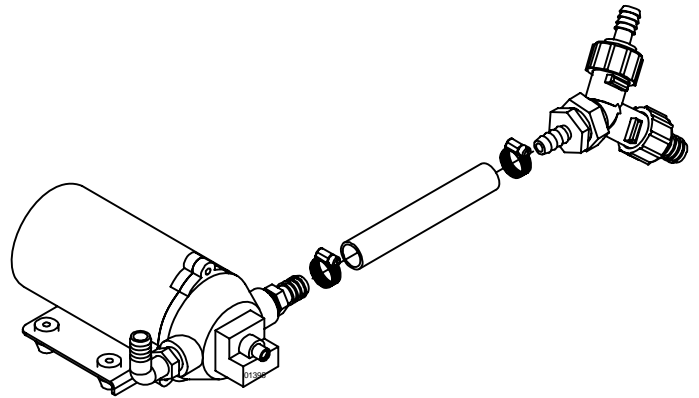
STEP 1:

Loosen the hose clamp on the existing gun hose. Remove the hose from the pump. Save the hose clamp for step 3.



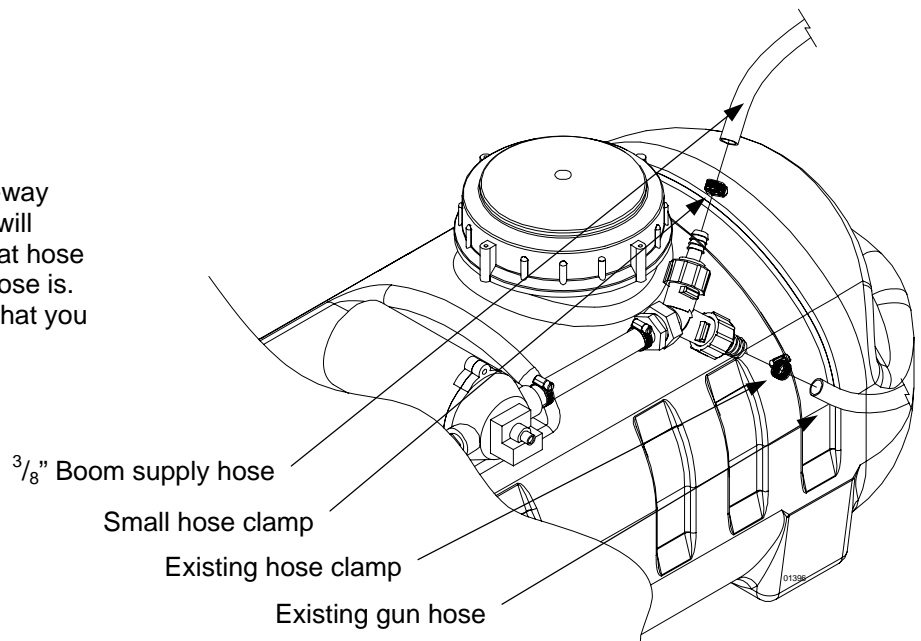
STEP 2:

Slide on one hose clamp onto one end of the supply hose. Push the hose onto the outlet of the pump. Slide another hose clamp onto the supply hose. Push the inlet hose barb of the three way ball valve assembly onto the free end of the supply hose. Tighten both hose clamps.



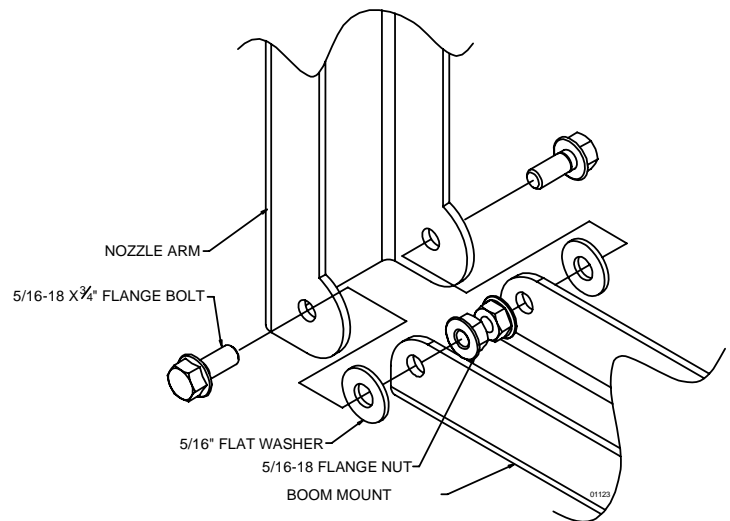
STEP 3:

Connect your existing gun hose to the 3-way valve with the existing hose clamp. You will need to use either the 3/8" or 1/2" flat seat hose barb depending on what size your gun hose is. You can discard the flat seat hose barb that you do not use.



STEP 4:

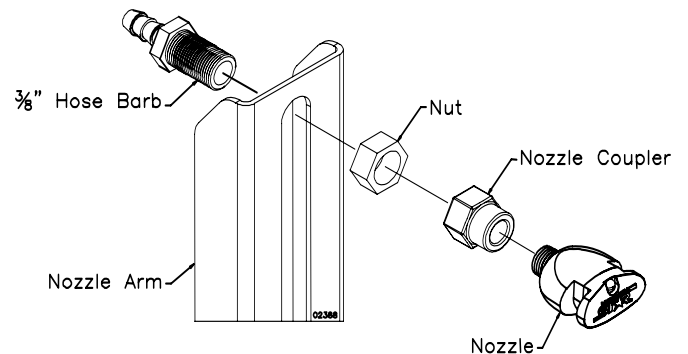
Attach the nozzle arm to the boom mount pivot with (2) 5/16-18 x 3/4" flange bolts, (2) 5/16 flat washers, and (2) 5/16-18 flange Nuts. **do not tighten bolts until STEP 5.**



STEP 5:

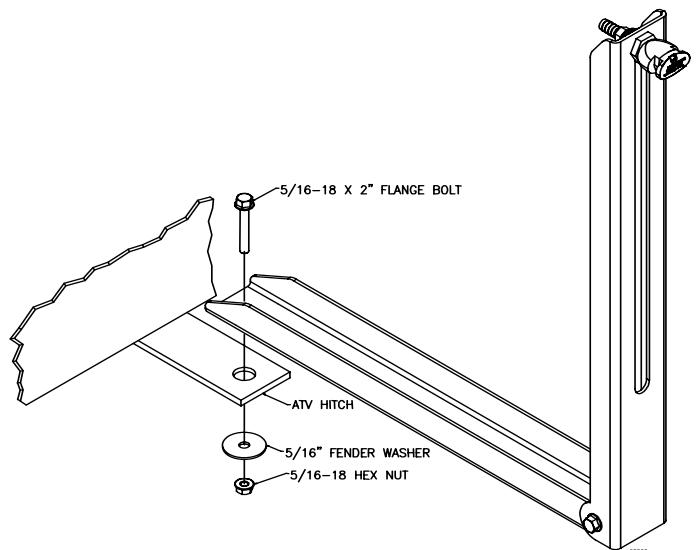
Attach the 3/8" hose barb to the nozzle arm with the nut as shown. **Do not tighten until STEP 6.**

Apply thread sealant on boom nozzle. Thread the 1/4" NPT x 11/16 thread fitting onto the 3/8" hose barb. Thread on the nozzle. Tighten finger tight, then 2-2.5 turns for each fitting. **NOTE: Be sure to point the boom nozzle towards the ground.**



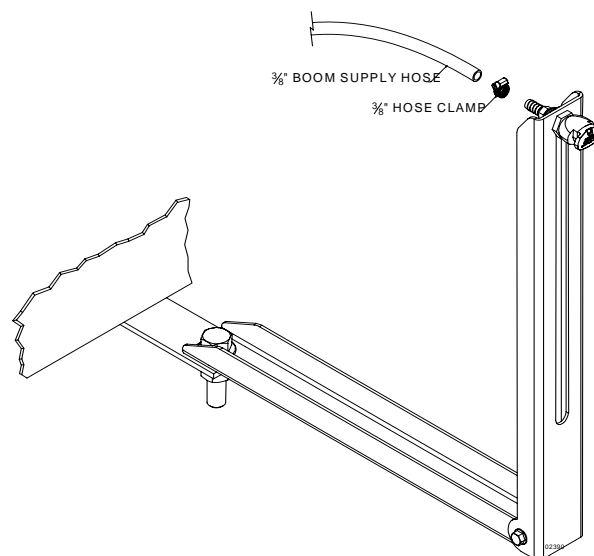
STEP 6:

Attach boom mount pivot to the ATV hitch with 5/16-18 x 2" flange bolt, 5/16" fender washer, and 5/16" hex nut(**do not tighten**). Adjust the position of the boom mount so that it is parallel with the back of the ATV, or perpendicular to the line of travel. Then tighten the bolted joint.



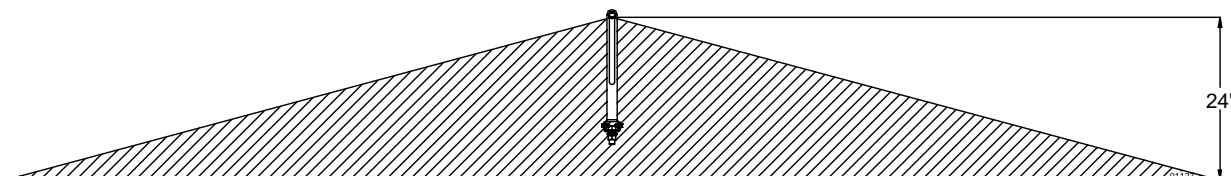
STEP 7:

Attach the 3/8" boom supply hose to the 3/8" hose barb and attach with the hose clamp. Complete the adjustment of the boom mount pivot by rotating the boom assembly until the upright of the nozzle arm is perpendicular to the ground. Tighten the 5/16-18 flange bolts(the pivot is to accommodate angled hitches).



STEP 8:

Loosen the nut on the 3/8" hose barb fitting and slide the Nozzle up or down on the upright until the nozzle is 24" above the ground.



STEP 9:

Attach the tank to the ATV as described in your spot sprayer manual. Attach the boom supply hose to the remaining hose barb on the y-valve.

REMOVING THE BOOM KIT

1. Make sure the pump is unplugged, and the valve to the boom supply hose is closed.
2. Unscrew the y-valve fitting connected to the boom supply hose.
3. Remove the 3/4" bolt attaching the boom kit to the ATV hitch.

OPERATING INSTRUCTIONS

1. With the unit turned **OFF**, check nozzles for debris or damage. Also check for worn hoses and system leaks. Repair before operating.
2. Unfold the left and right boom arms.
3. Once the water and chemicals are well mixed in your sprayer tank, open the valve that is attached to the boom supply hose. Use the valve to turn the boom on and off as desired (*If you have the 268180, you can also use the remote switch to turn the boom on and off*). If you use the spray gun while the boom is operating, you will not get the correct coverage from your boom.
4. Drive at the desired speed, as calculated by tables 1 and 2 on the next page.
5. To operate the spray gun, close the valve leading to the boom and make sure the valve leading to the gun is open.

BOOM KIT CALIBRATION

Below are some guidelines to help you calibrate your boom sprayer. This is a very important step in operating your boom sprayer so that you don't apply too much or too little chemical.

1. Use the suggested application rate (i.e. gallons per acre, 1000 sq.ft., or 100 sq.ft.)
2. Using **Table 1**, find an application rate that corresponds to your chemical manufacturers suggested application rate, and pressure at which your sprayer is operating.
3. Follow this application rate up the chart to find the speed at which to drive your ATV.

TABLE 1

| Spray Height | Tip # | Pressure (PSI) | Flow (GPM) | GALLONS PER ACRE - <i>Based on water</i> | | | | | | |
|--------------|--------|----------------|------------|--|-------|-------|-------|-------|-------|--------|
| | | | | 1 MPH | 2 MPH | 3 MPH | 4 MPH | 5 MPH | 7 MPH | 10 MPH |
| 24" | 1250FS | 20 | 1.5 | 61.3 | 30.6 | 21.3 | 16 | 10.6 | 8.6 | 6.1 |
| 24" | 1250FS | 30 | 1.7 | 70.6 | 34.6 | 23.9 | 17.3 | 14.6 | 10.6 | 7.1 |
| 24" | 1250FS | 40 | 2.0 | 82.6 | 41.3 | 27.9 | 21.3 | 16.0 | 12.0 | 8.3 |

| Spray Height | Tip # | Pressure (PSI) | Flow (GPM) | GALLONS PER 1000 SQ.FT. - <i>Based on water</i> | | | | | | |
|--------------|--------|----------------|------------|---|-------|-------|-------|-------|-------|-------|
| | | | | 1 MPH | 2 MPH | 3 MPH | 4 MPH | 5 MPH | 7 MPH | 10MPH |
| 24" | 1250FS | 20 | 1.5 | 1.41 | .70 | .48 | .36 | .24 | .19 | .14 |
| 24" | 1250FS | 30 | 1.7 | 1.62 | .79 | .54 | .39 | .33 | .24 | .16 |
| 24" | 1250FS | 40 | 2.0 | 1.89 | .94 | .64 | .48 | .36 | .27 | .19 |

| Spray Height | Tip # | Pressure (PSI) | Flow (GPM) | GALLONS PER 100 SQ.FT. - <i>Based on water</i> | | | | | | |
|--------------|--------|----------------|------------|--|-------|-------|-------|-------|-------|-------|
| | | | | 1 MPH | 2 MPH | 3 MPH | 4 MPH | 5 MPH | 7 MPH | 10MPH |
| 24" | 1250FS | 20 | 1.5 | .141 | .070 | .048 | .036 | .024 | .019 | .014 |
| 24" | 1250FS | 30 | 1.7 | .162 | .079 | .054 | .039 | .033 | .024 | .016 |
| 24" | 1250FS | 40 | 2.0 | .189 | .094 | .064 | .048 | .036 | .027 | .019 |

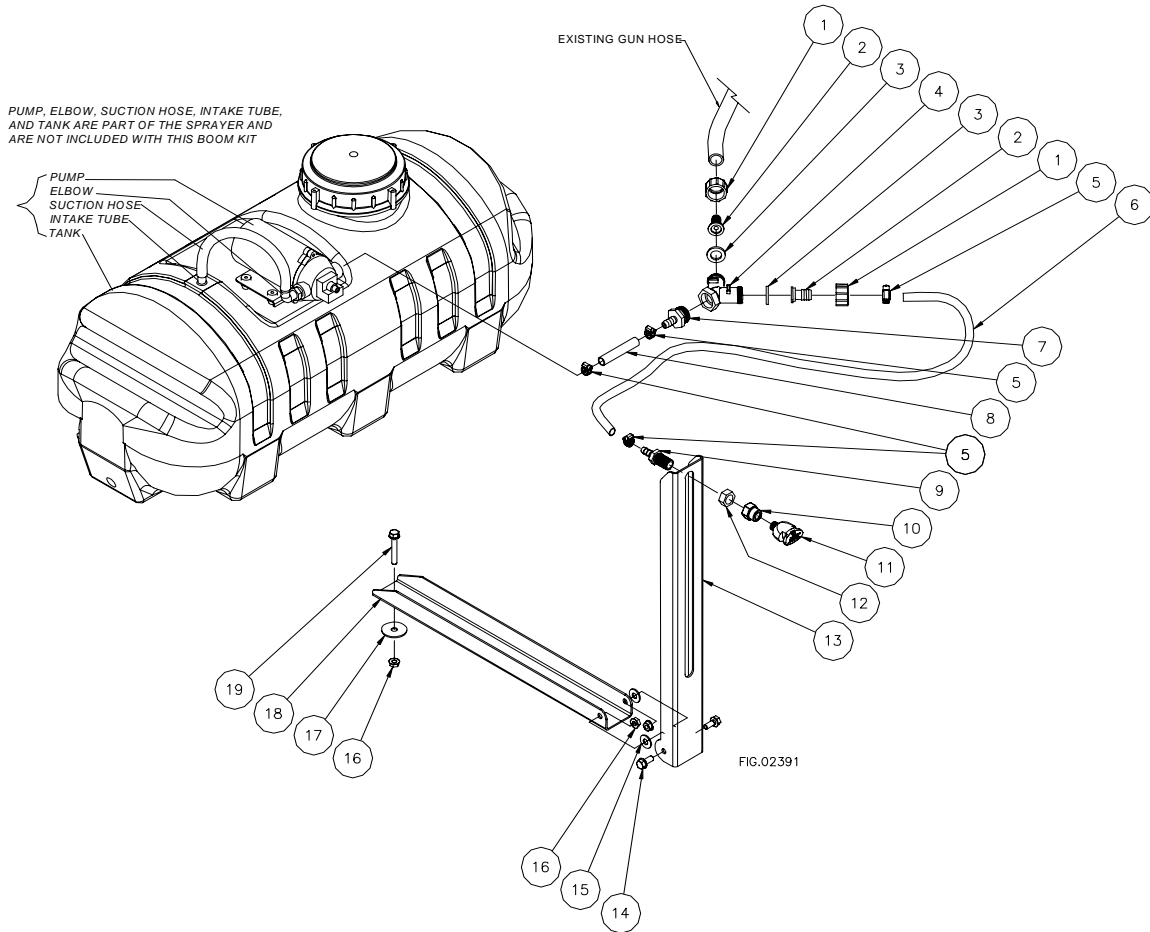
4. Use **Table 2** to choose the throttle setting on your vehicle.

TABLE 2

| Speed (MPH) | Time required in seconds to travel a distance of: | | |
|-------------|---|---------|---------|
| | 100 ft. | 200 ft. | 300 ft. |
| 1 | 68 | 136 | 205 |
| 2 | 34 | 68 | 102 |
| 3 | 23 | 45 | 68 |
| 4 | 17 | 34 | 51 |
| 5 | 14 | 28 | 41 |
| 7 | 9.5 | 19 | 29 |
| 10 | 7 | 14 | 20 |

5. The coverage area can be found by dividing tank size by the application rate.
Example: 15 gallons divided by 30 gallons/acre = 1/2 acre of coverage per tank.

Parts Explosion 268195 Rev. H.1



| Diag. # | Part # | Description | Qty. |
|---------|--------|--------------------------------------|------|
| 1 | 5213 | Female Garden hose Thread Swivel Nut | 2 |
| 2 | 5380 | 3/8" Flat Seat Hose Barb | 2 |
| 3 | 5232 | Rubber Washer | 2 |
| 4 | 5210 | 3 Way Ball Valve | 1 |
| 5 | 30746 | Hose Clamp | 4 |
| 6 | 30290 | 3/8" Boom Supply Hose | 48" |
| 7 | 5387 | 3/8" Hose Barb x 3/4" MGHT | 1 |
| 8 | 30290 | 3/8" Hose | 4" |
| 9 | 39198 | 3/8" Hose Barb | 1 |
| 10 | 38545 | 1/4" NPT x 11/16 Thread | 1 |
| 11 | 36576 | Broadcast Nozzle | 1 |
| 12 | 5230 | Nozzle Nut | 1 |
| 13 | 38571 | Boom Mount Plate | 1 |
| 14 | 82015 | 5/16-18 x 3/4" Flange Bolt | 2 |
| 15 | 82021 | 5/16 Flat Washer | 2 |
| 16 | 82019 | 5/16" Flange Nut | 3 |
| 17 | 82099 | 5/16" Fender Washer | 1 |
| 18 | 38572 | Boom Mount Pivot | 1 |
| 19 | 82018 | 5/16-18 X 2" Flange Bolt | 1 |

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Manufactured by
Northern Tool + Equipment Co.,
2800 SouthCross Drive West
P.O. Box 1499 Burnsville, MN 55337-0499