

AVENGER X4md Specifications

General Specification:	
Sweep Width (All Brooms)	- 122" (???mm)
Overall Height	- ???"
Overall Length	- ???"
Transport Width	- ???"
Hopper Volume	- 4.3 cu.yd (?? Cu.M)
Dump Max Height	- 114" (???mm)
GVWR Suggested	- 19,5000 lbs (???? Kg)
Empty Weight	- 13,515 lbs (???? Kg)
Auxiliary Engine:	
Make	- Kubota
Model	- V2403-CR-T
Type	- Turbo 4 Cyl. Diesel — Tier 4f
Displacement	- 148.5 cu.in (2.434 liter)
Rated Output	- 65.2 hp (48.6 kW) @ 2700 rpm
Max Torque	- 146.4 lb-ft (198.5 Nm) @ 1600 rpm
Hydraulic System:	
Pump Type	- Tandem Gear Type
Pump Output	- 12 gpm (45 lpm) @ 1600 rpm
Pump Max P	- 3000 psi—Dual Relief Valve Protected
Tank Type	- Vented w/ 10 Micron Breather
Tank Capacity	- 35 gal (132.5 liter)
Filtration	- Return Type 10 Micron Tank Mounted
Filtration	- Suction Strainer 100 mesh in Tank
Cooling	- Air to Oil with / electric driven fan
Lines / Pipes	- Flexible Hose with Stainless Steel Lines
Main Valves	- Electric / Hydraulic Control D03 Type
Electric System (Sweeper Body):	
Type	- 12 Volt / Negative Ground
Integration	- Sweeper independent of chassis elect.
Control	- Single touch Start and Stop buttons for sweeper function controls. Illuminated control switches for other functions. Joystick control for hopper functions.
Switches	- Solid State illuminated control panel switches.
Display	- Multifunction digital display; - Oil Pressure - Engine Coolant Temperature - Engine Load - Hydraulic Oil Temperature - Hydraulic Oil Level - Water Tank level
Lighting	- Standard truck lighting per FMVSS regulations - Broom lights; 1 per GB and 1 each side MB - Work lights inside front and rear compartments and hopper
Main Broom:	
Size	- 60" (??? mm) wide x 35" dia. (??? mm)
Pressure Cont.	- Left / Right side independent hydraulic
Mechanical	- Spherical Ball Mount
Drive	- Hydraulic direct drive spline shaft
Adjustment	- Down pressure control from exterior
Skid Shoes	- Carbide runner with spherical ball mount
Gutter Brooms:	
Size	- Left & Right 34" Plate— 40" Sweep
Pressure Cont.	- Left / Right independent hydraulic
Mechanical	- Sleeve Bearing No Grease Required
Drive	- Hydraulic direct drive spline shaft
Adjustment	- Power curb tilt from cab, Pressure control from exterior
Elevator (Conveyor):	
Size	- 60" Inside Width x 68" center to center
Height Cont.	- Adjustable Sweep Height 4" to 8"
Mechanical	- Heavy duty wheel bearing direct mounted to each belt roller. - Mining type reinforced rubber drive belts with 9 squeegee.
Drive	- Reversable hydraulic direct drive spline shaft
Adjustment	- Belt tension air pressure valve from exterior
Center Drag Skid:	
Type	- Polypropylene bristle—free hanging
Configuration	- Split 2 section; Left / Right gutter brooms
Control	- Automatic raise with each gutter broom
Hopper / Scissors Lift:	
Volumetric Capacity	- 4.2 cu.yd (?? M Cu.)
Fill Capacity	- 3.0 cu.yd (?? M Cu.)
Dump Capacity	- 12,000 lbs (??? Kg)
Scissors Lift Capacity	- 9,000 lbs (??? Kg)
Dump Height (Variable)	- 16" to 114"
Safety	- Scissors multi-position height lock - Integrated lock valves on each cylinder.
Dust Suppression System:	
Tank Capacity (Total)	- 240 Gal (??? Liter) 150 gal rear, 90 gal front or - 290 Gal (??? Liter) 200 gal rear, 90 gal front
Tank Material	- Polypropylene Plastic
Pump(s)	- Pressure regulated 5 chamber diaphragm electric
Piping & Fittings	- Aluminum, Brass, Plastic

RSS Equipment



AVENGER X4md



The Avenger is the perfect machine to replace your mechanical dual engine sweeper.

The Avenger was designed from the ground up to sweep like a large 32,000 gvw machine in a small package.

The Weight of the empty machine along with front / rear weight distribution are very important considerations for sweeper design. The Avenger has front and rear water tanks to transfer weight to the front axle of the chassis as well as moving as much weight forward to reduce rear axle weight. This design allows increased holding capacity as well as carrying more water.

Volumetric capacity means nothing if you cannot fully load and dump the hopper. We have 4.2 cu.-yd hopper and high speed conveyor which loads to the front wall of the hopper. Loading 3.0 + cu.yd of material is not a challenge with the Avenger.

Sweep width means nothing if you cannot maintain main broom overlap and eliminate trailing. The 60" wide main broom and conveyor along with 40" gutter brooms provide the 10' sweep width of a large machine but can retract to under 8' for travel.

Broom contact pattern must be maintained on the road in order to pickup the debris and not require repeated passes. Hydraulic down pressure control on the Avenger allows both gutter brooms and main broom to float over most road surfaces and keep a constant contact pattern. The main broom can oscillate as much as 5" from left to right side in order to follow the road contour.

Conveyor speed is very important to carry material away from main broom at a speed that will throw to front of hopper. The 12" rollers and conveyor drive belt run at optimum speed to have each squeegee carry less material at a higher speed with very little pressure on the bottom pan. The rubber mining belt is less susceptible to wear than a chain system but has the strength to keep up with any sweeping conditions.

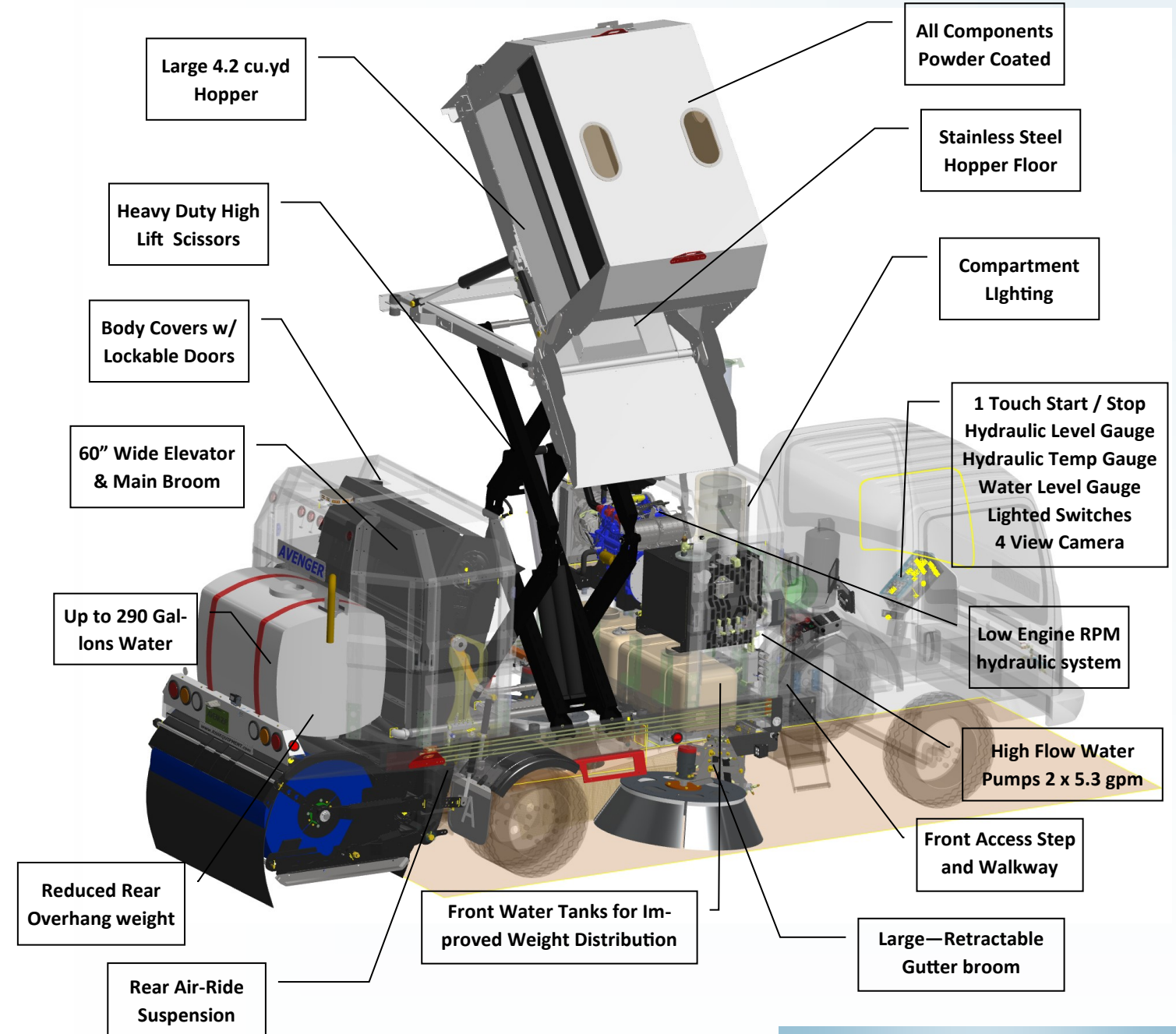
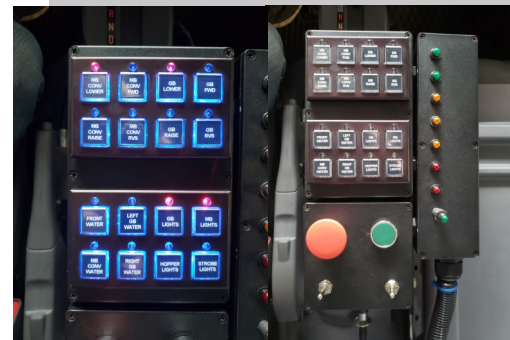
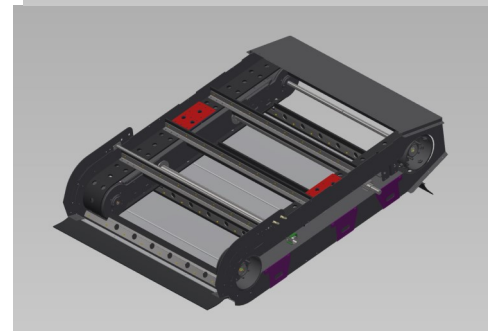
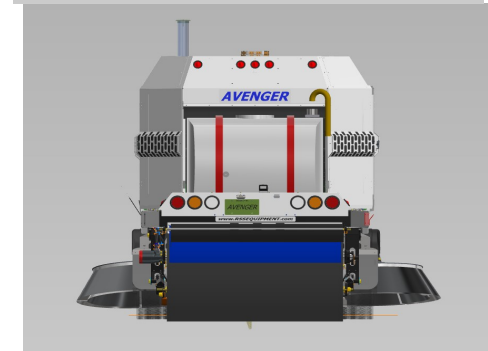
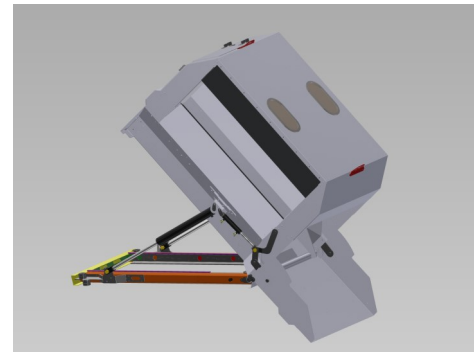
The Avenger was designed to run at a lower auxiliary engine rpm, this will reduce fuel consumption and noise generation. The hydraulic system was designed to run at 1600 to 1800 rpm providing high flow and pressure for optimum broom and conveyor rotation speeds. In heavy material just increase the engine rpm for increased digging power.

It is important for the operator to keep their eyes on the road as much as possible while sweeping. The Avenger was designed with as few controls as possible and single touch Start and Stop switches to allow the operator to have tactile control of the machine. Gutter broom tilt and hopper / scissors functions have easily identified shapes to allow control by touch only. When not in use, the illuminated control panel pivots away to a safe storage position and allows 3 passenger seating.

Steps, walkway, doors and covers provide easy and safe access to maintenance areas as well as allowing repairs to be carried out with minimal restrictions. Large easy to read hydraulic pressure gauges make trouble shooting a smoother process.

The Avenger is designed to be easily configured for any customer requirement so we have many standard features that are options or not even available on competitive sweepers. See diagram on next page for a partial list of standard features.

We believe that if you look at the way the Avenger is built you will see proof that we have built a small machine with the strengths to take on a the big machine. We have designed this machine with high quality components to have a long operational life and be cost effective to run for many years.



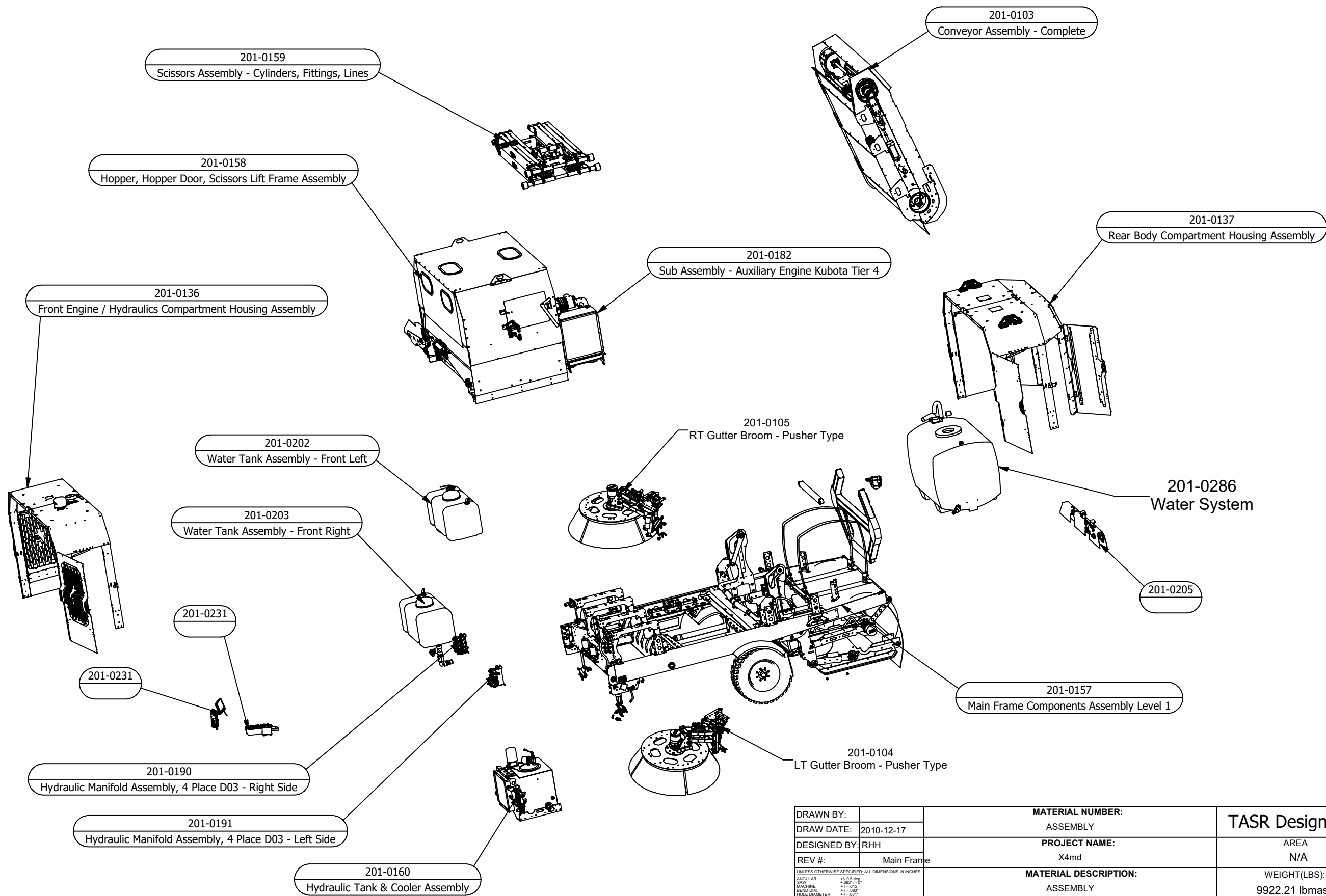
RSS Equipment Ltd.

230 F Hodsman Rd.
Regina, SK., Can.
S4N 5X4

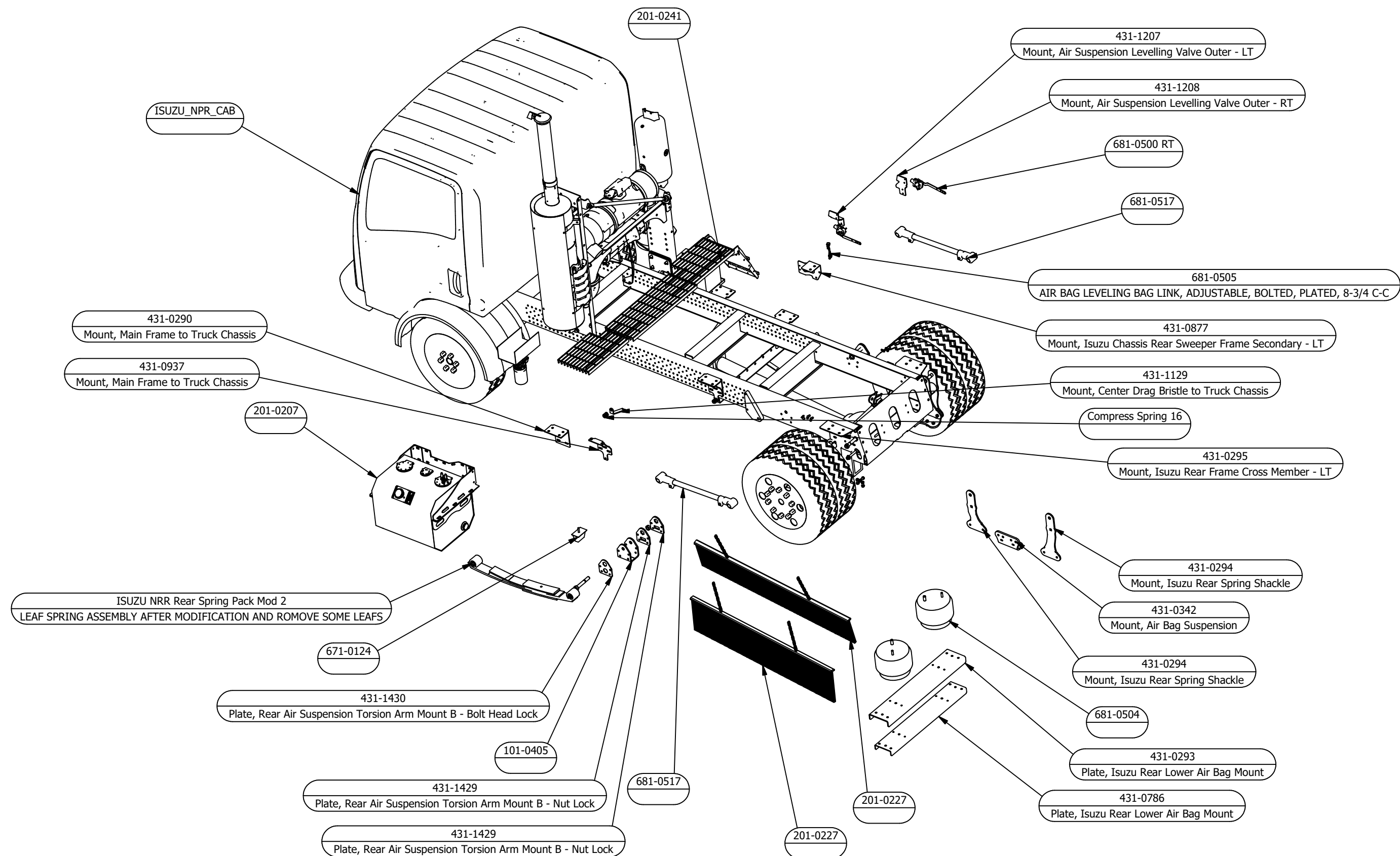
Phone: 306-559-7771
E-mail: sales@rssequipment.com

100 - X4md Body V3.0 Apr 9, 19

QTY:			PER X4	PER X6	COLOR:	REV. #	DATE	BY	REV. DESCRIPTION
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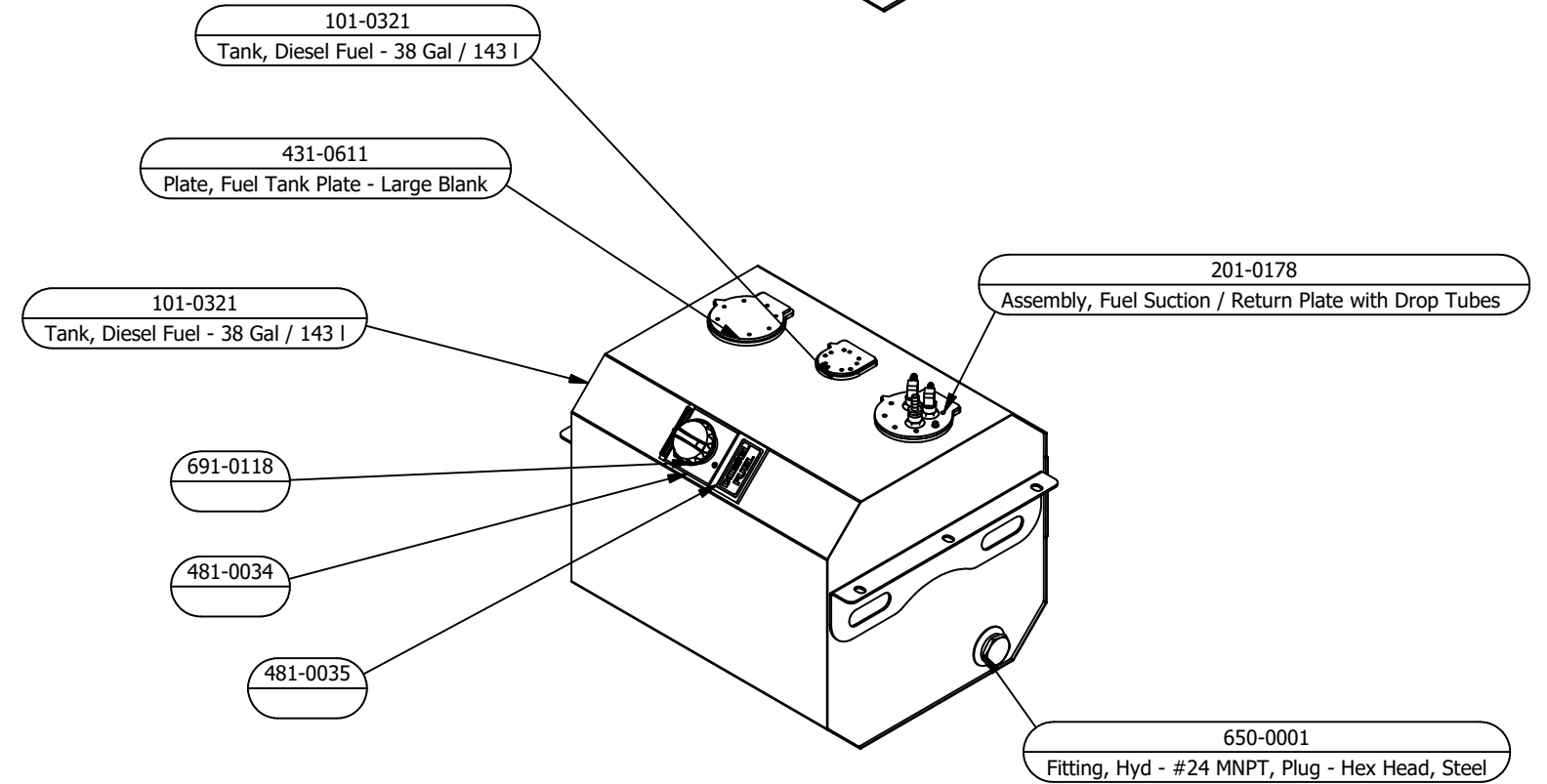
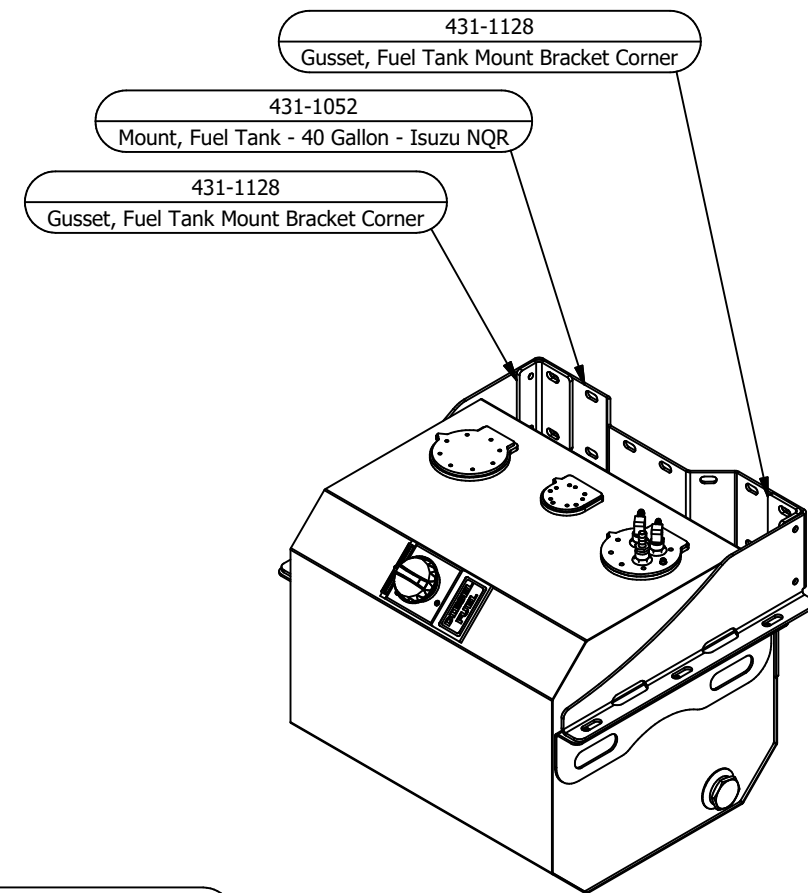
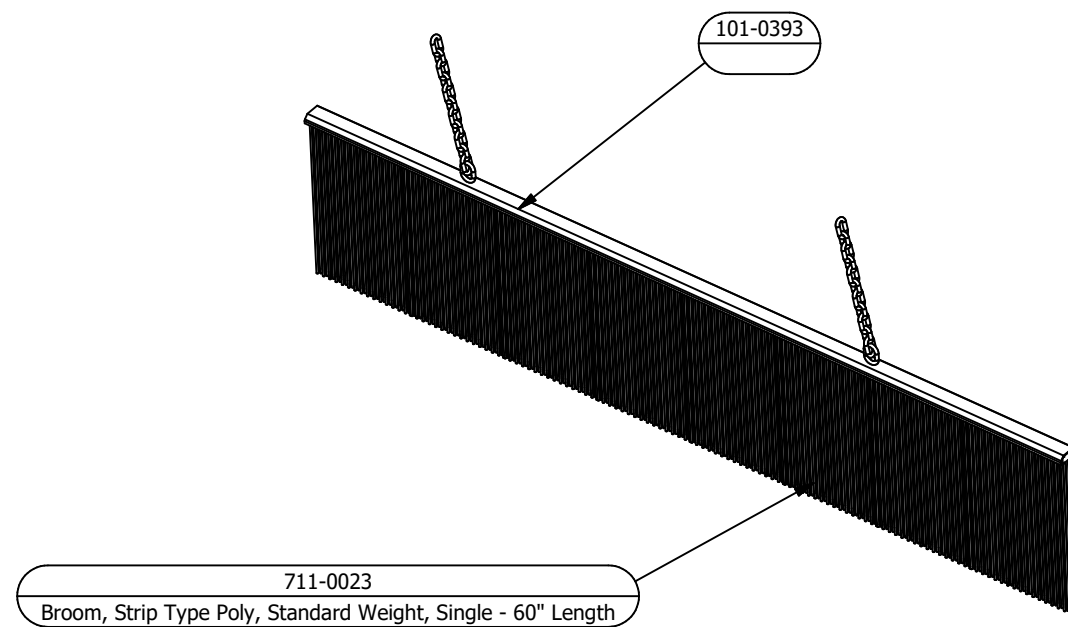
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DRAW DATE:	2010-12-17	ASSEMBLY	
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ANGULAR SHAFT MACHINE BEND DIA HOLE DIAMETER		ASSEMBLY	9922.21 lbmass
PART DESCRIPTION:			PART NUMBER:
X4md Main Frame Assy			100 - X4md Body V3.0 Apr 9, 19

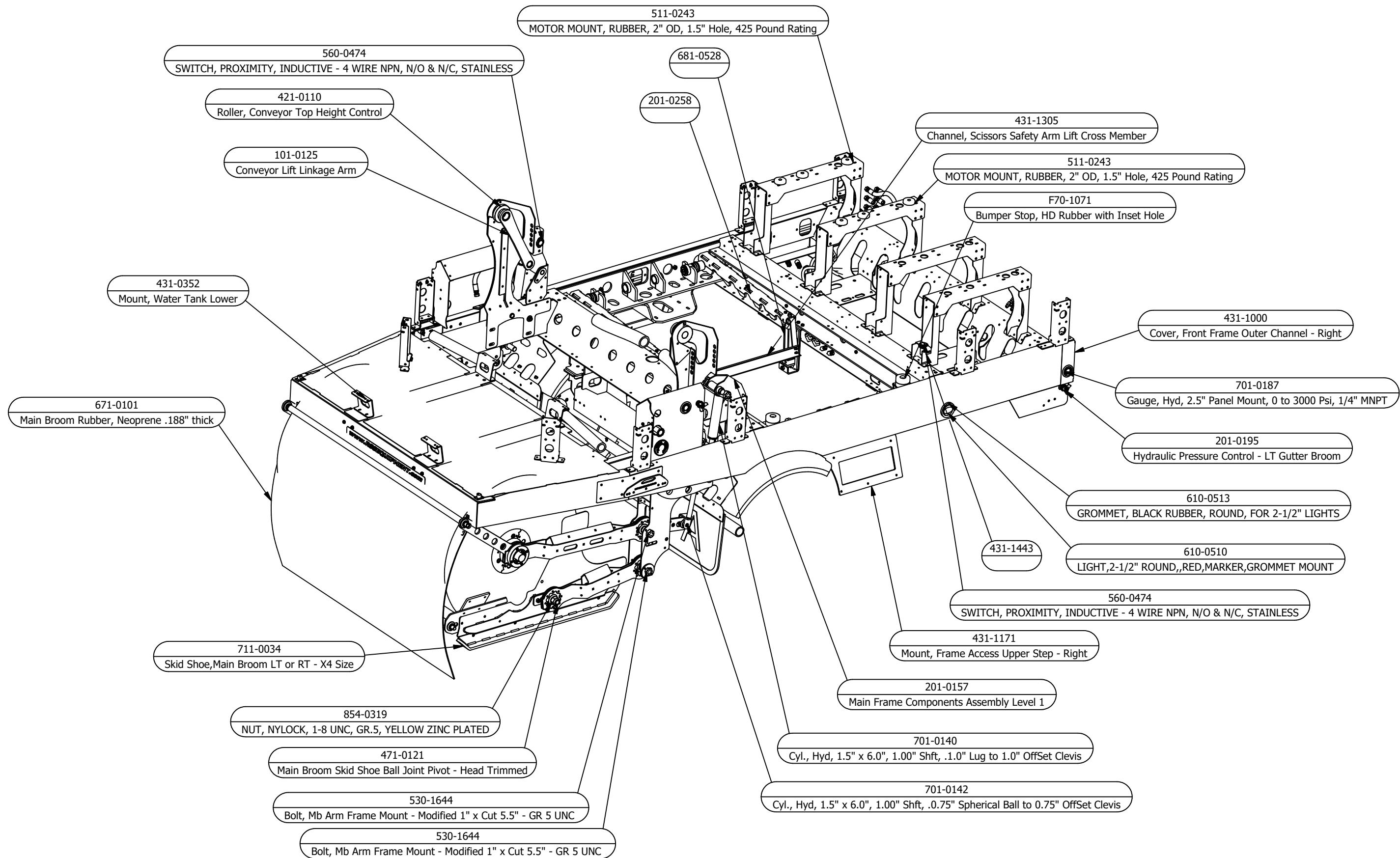


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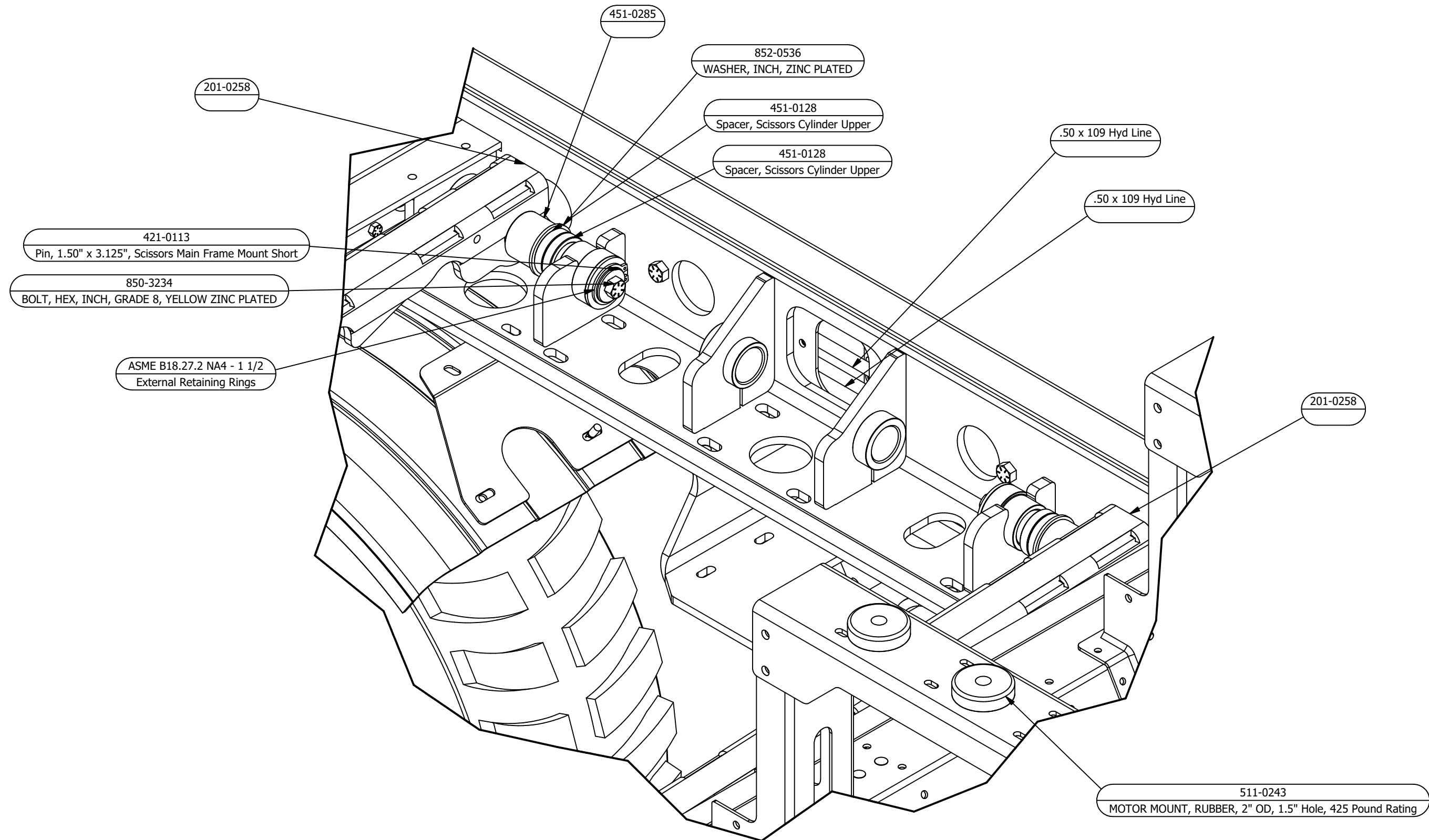




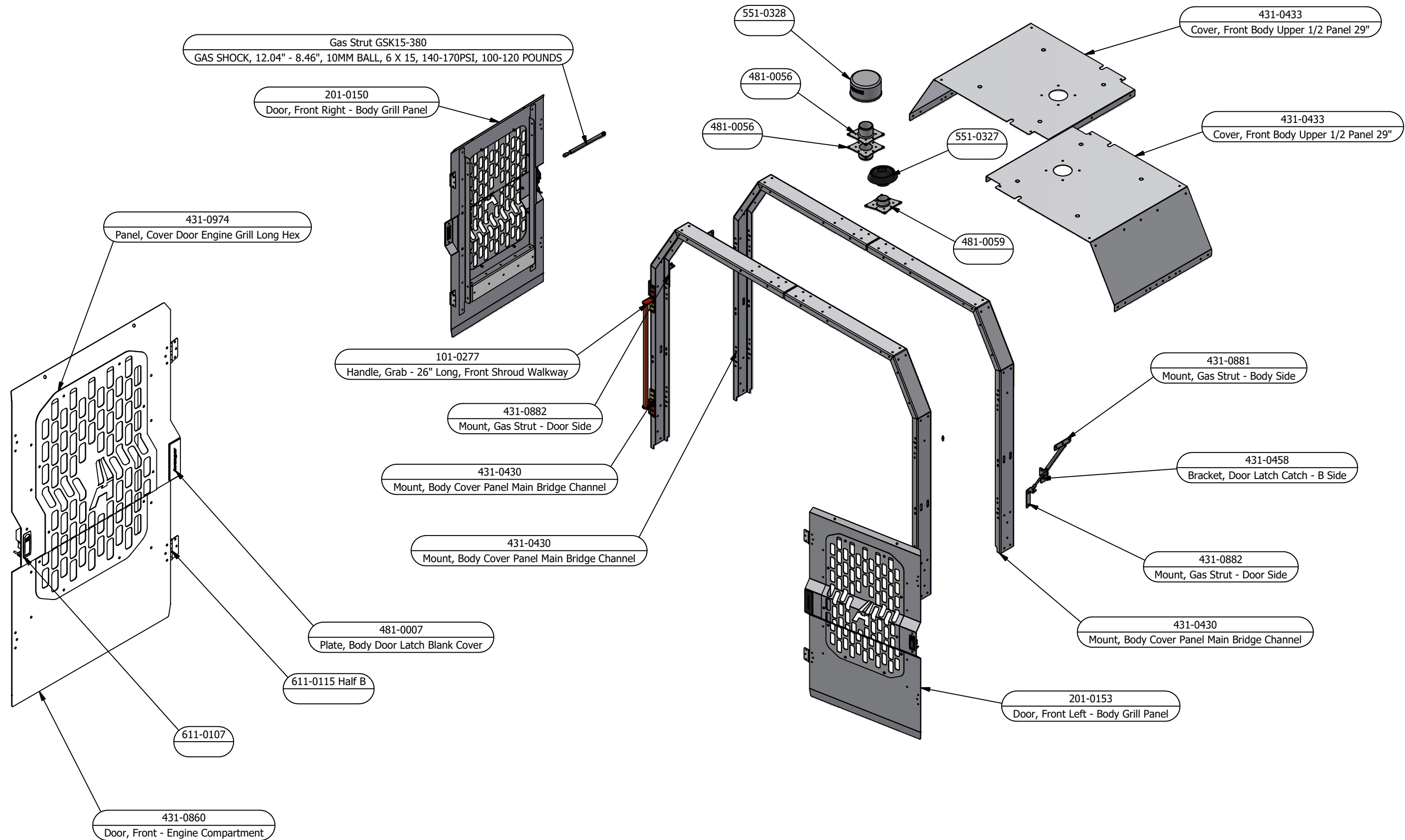
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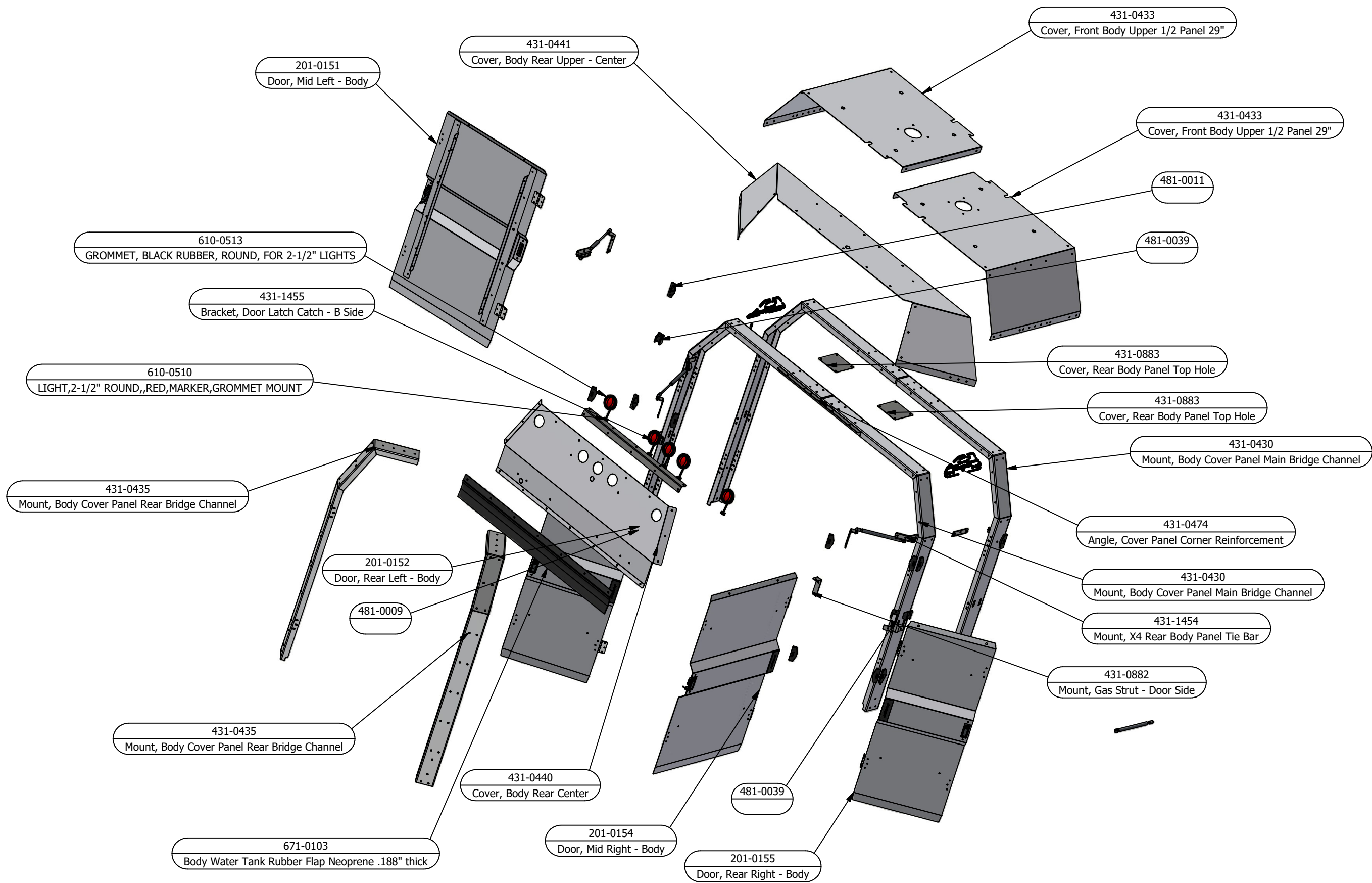
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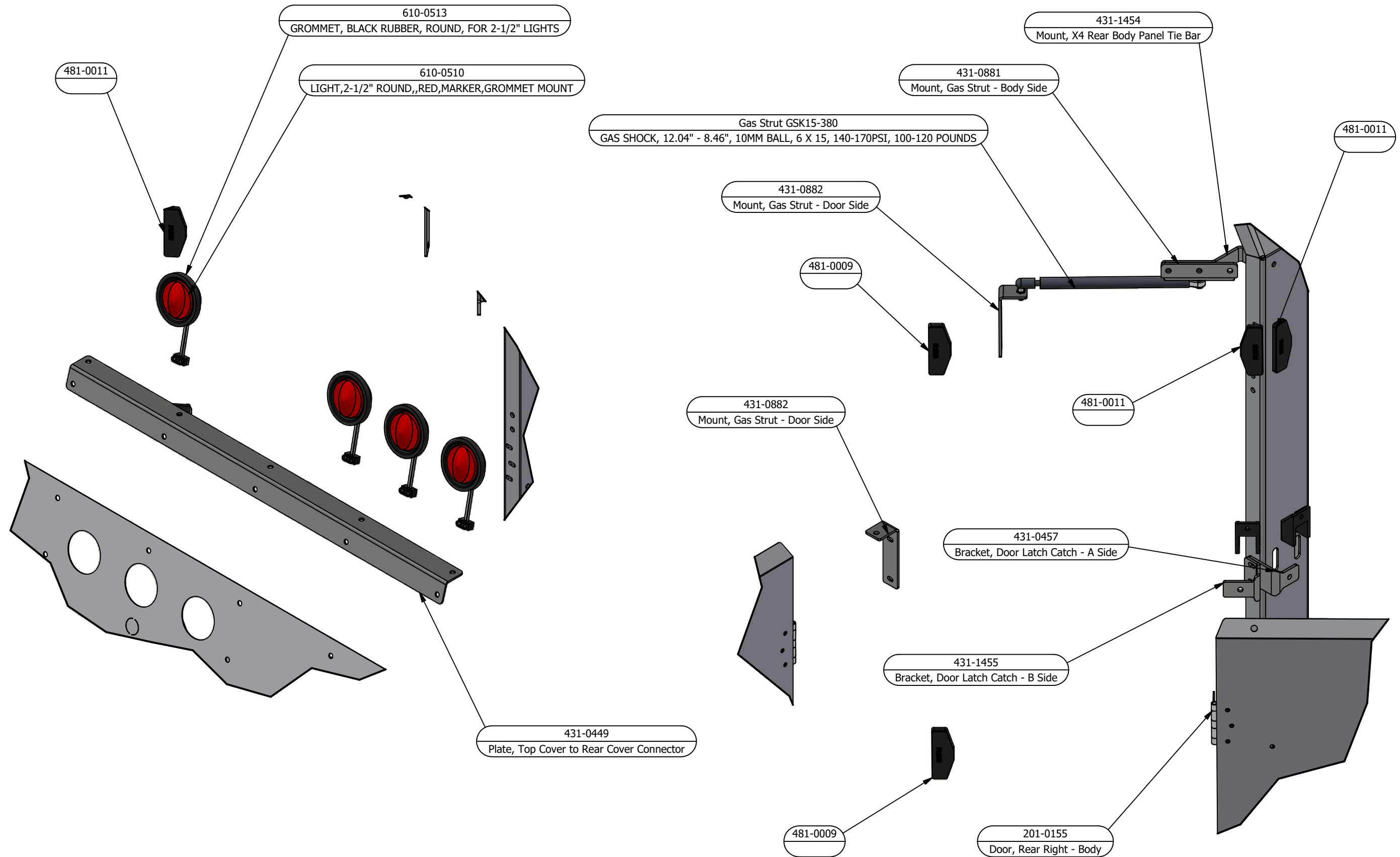




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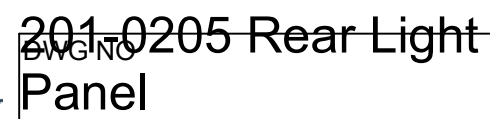
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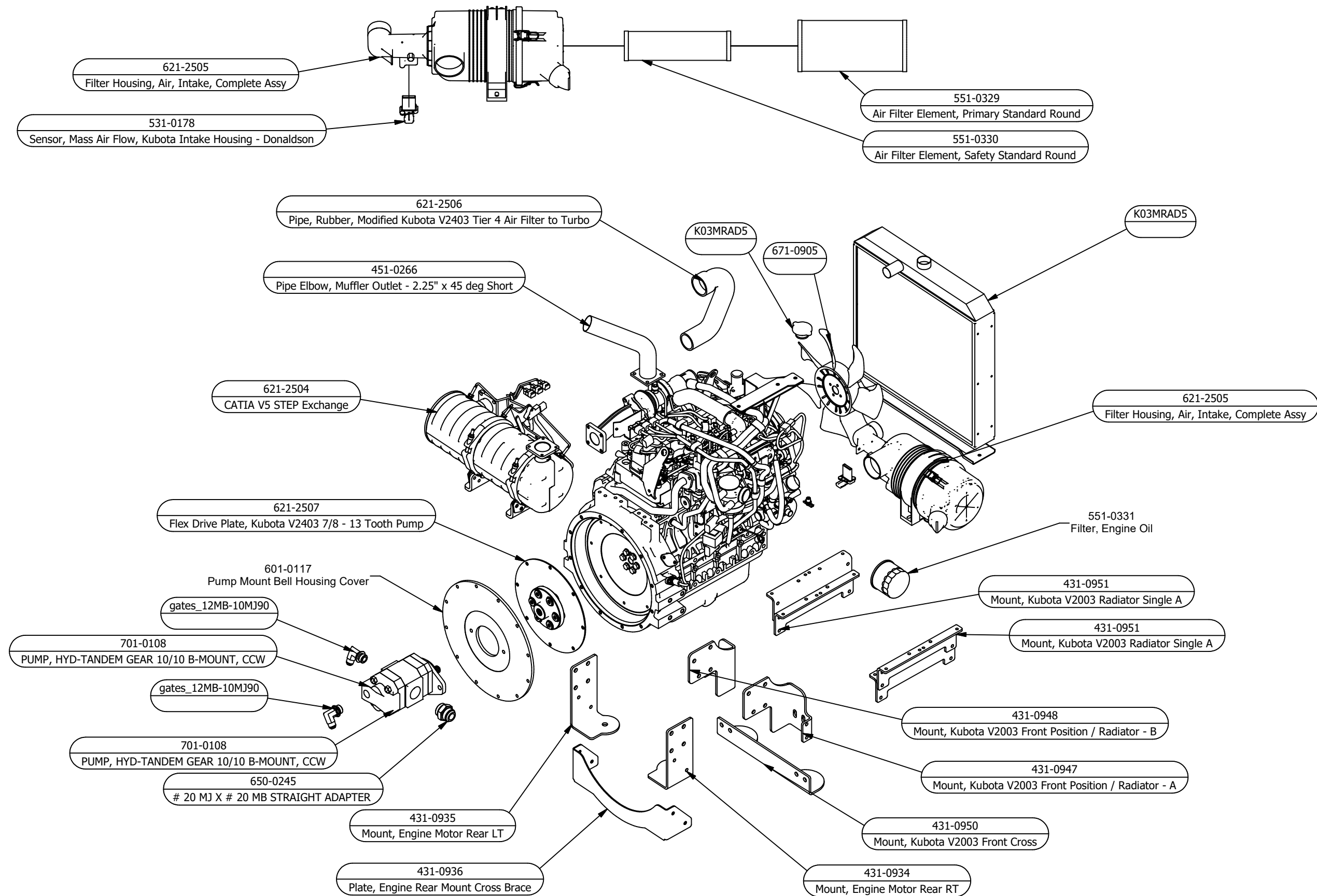


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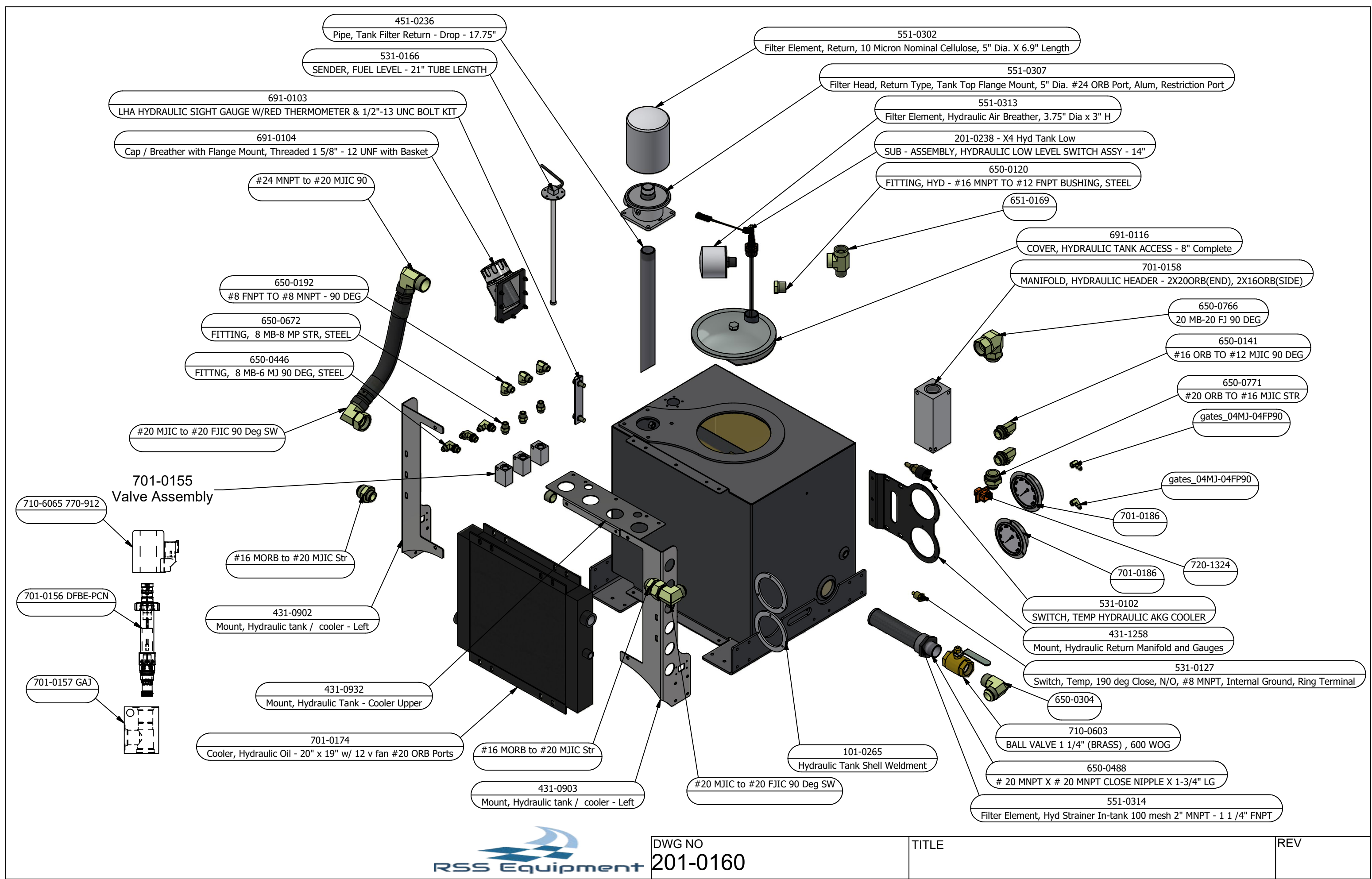




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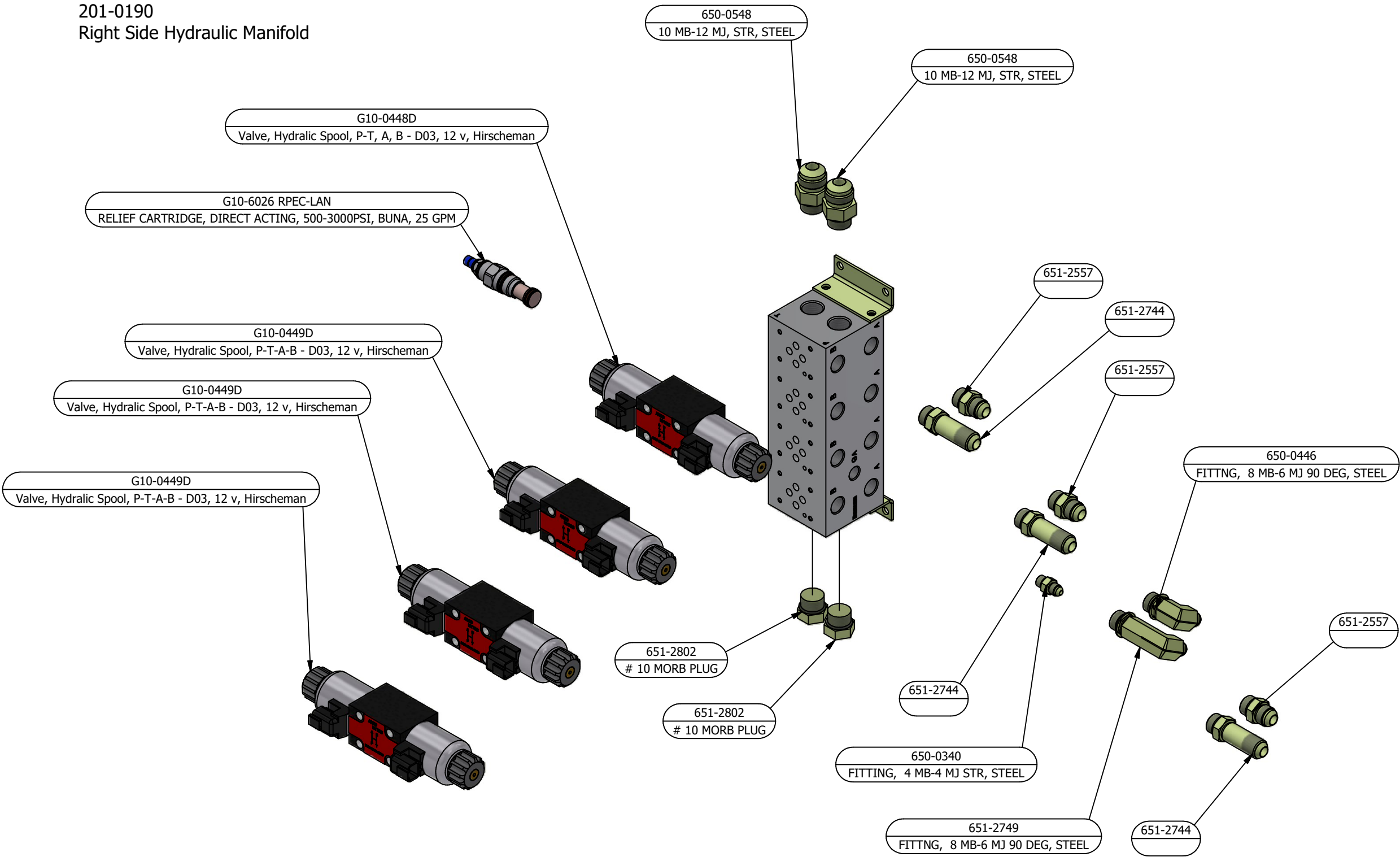


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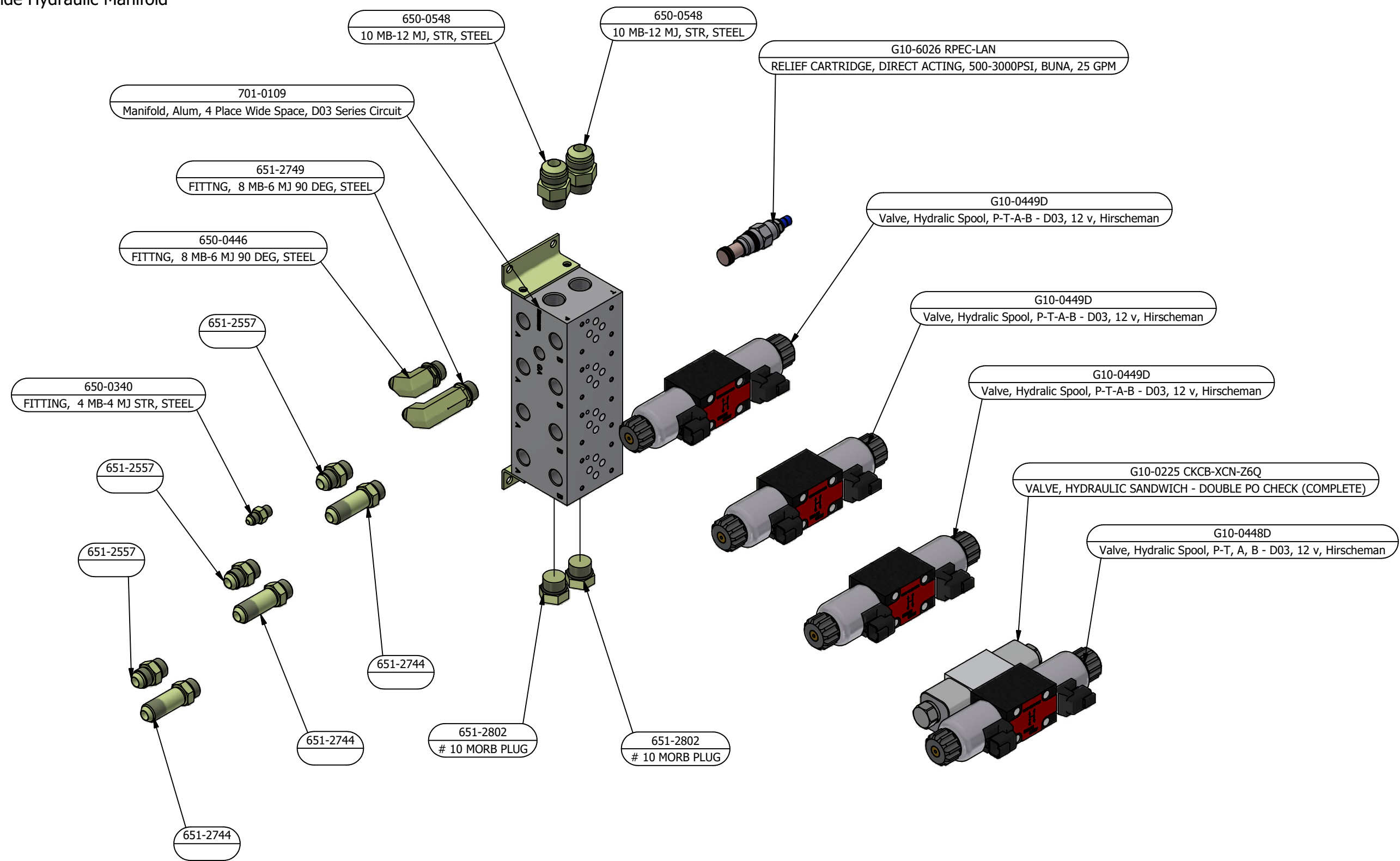


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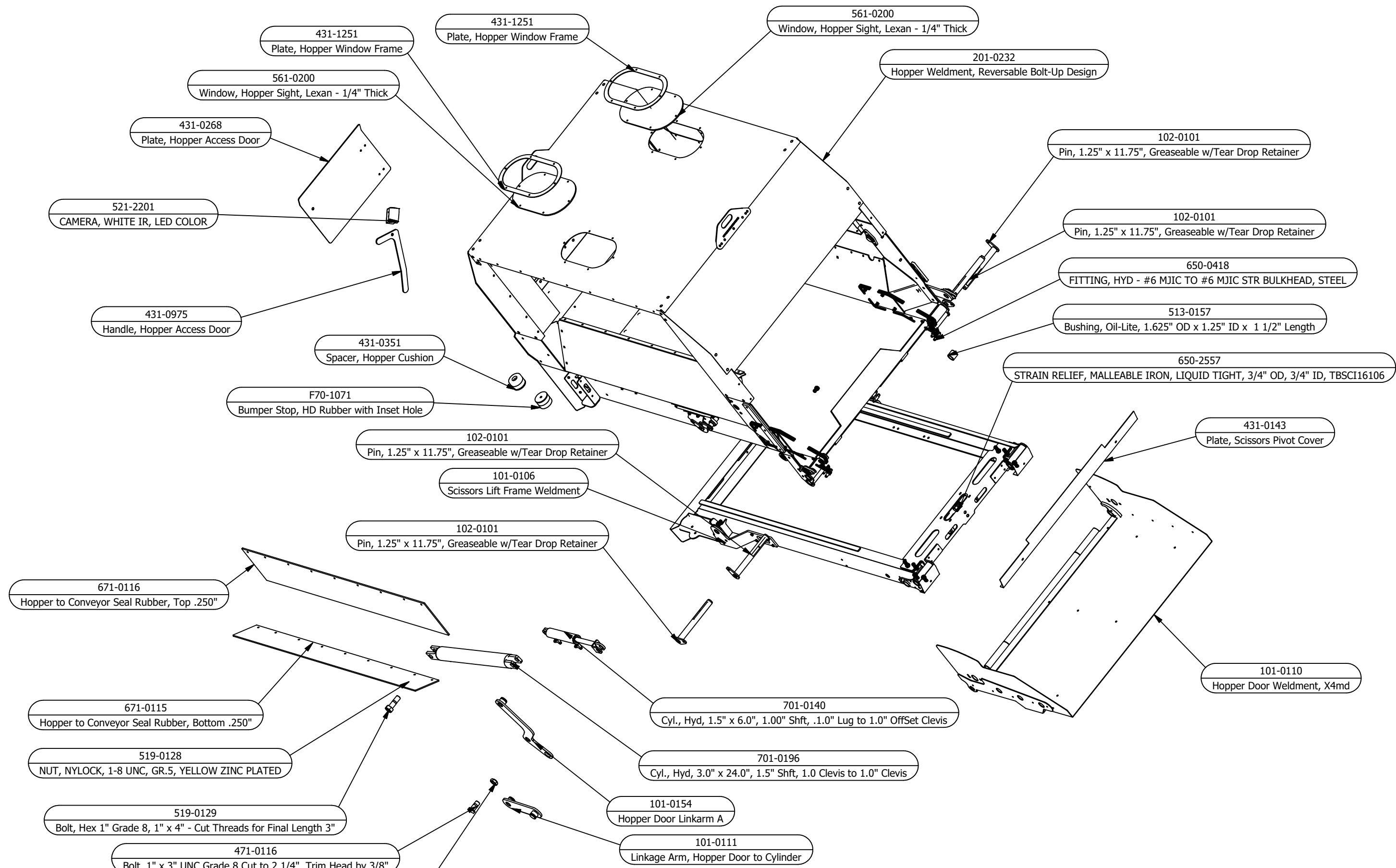
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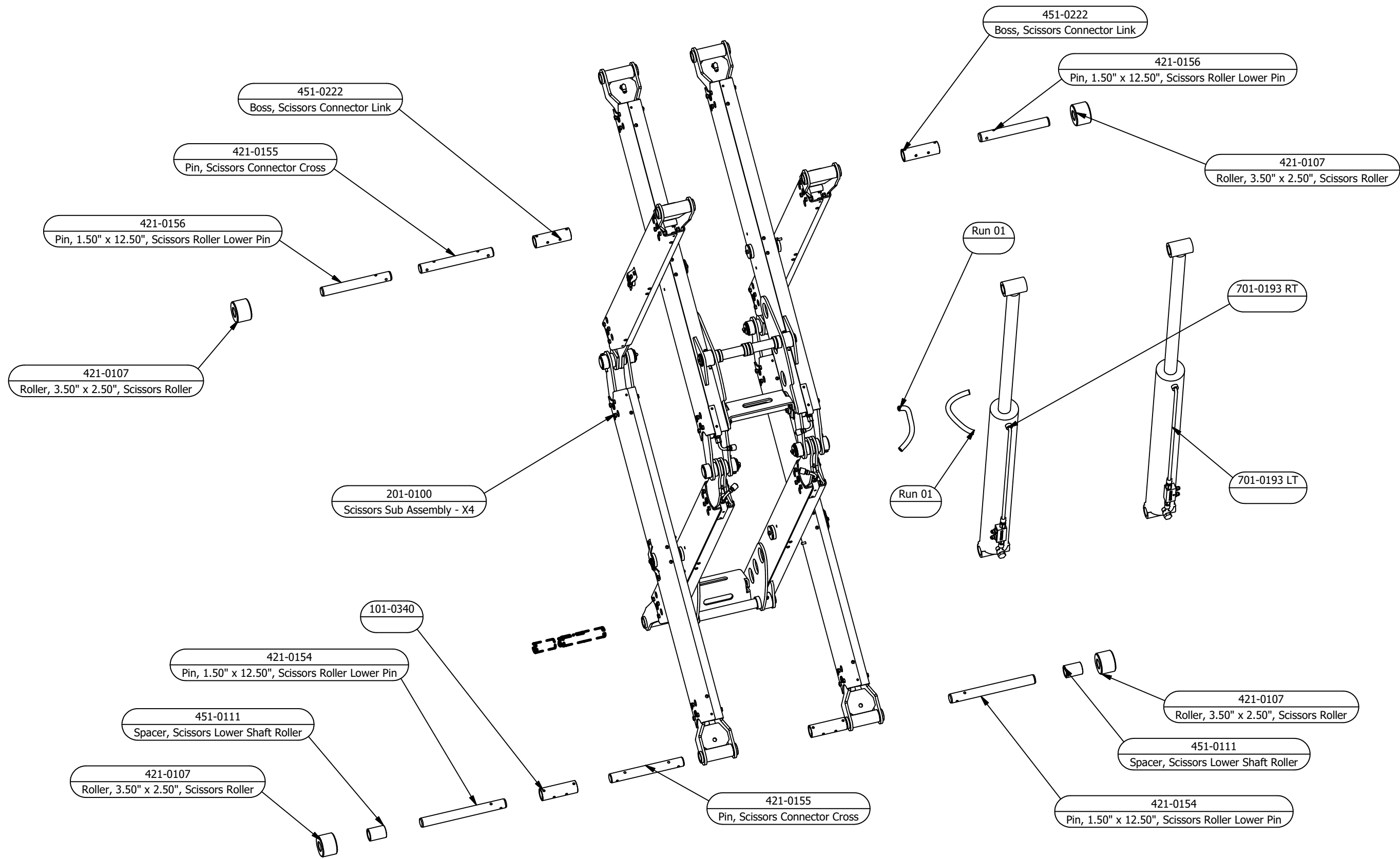
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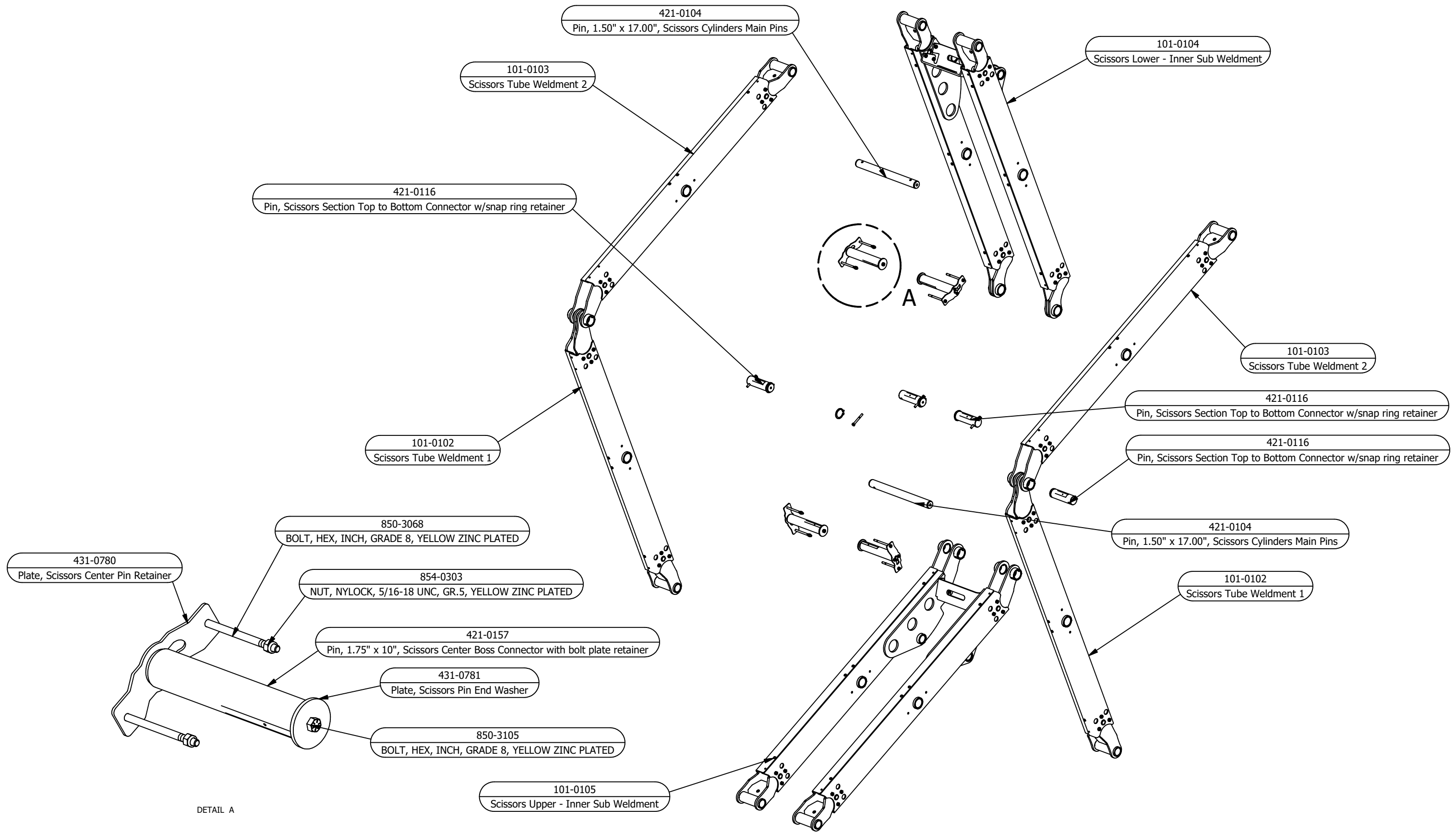
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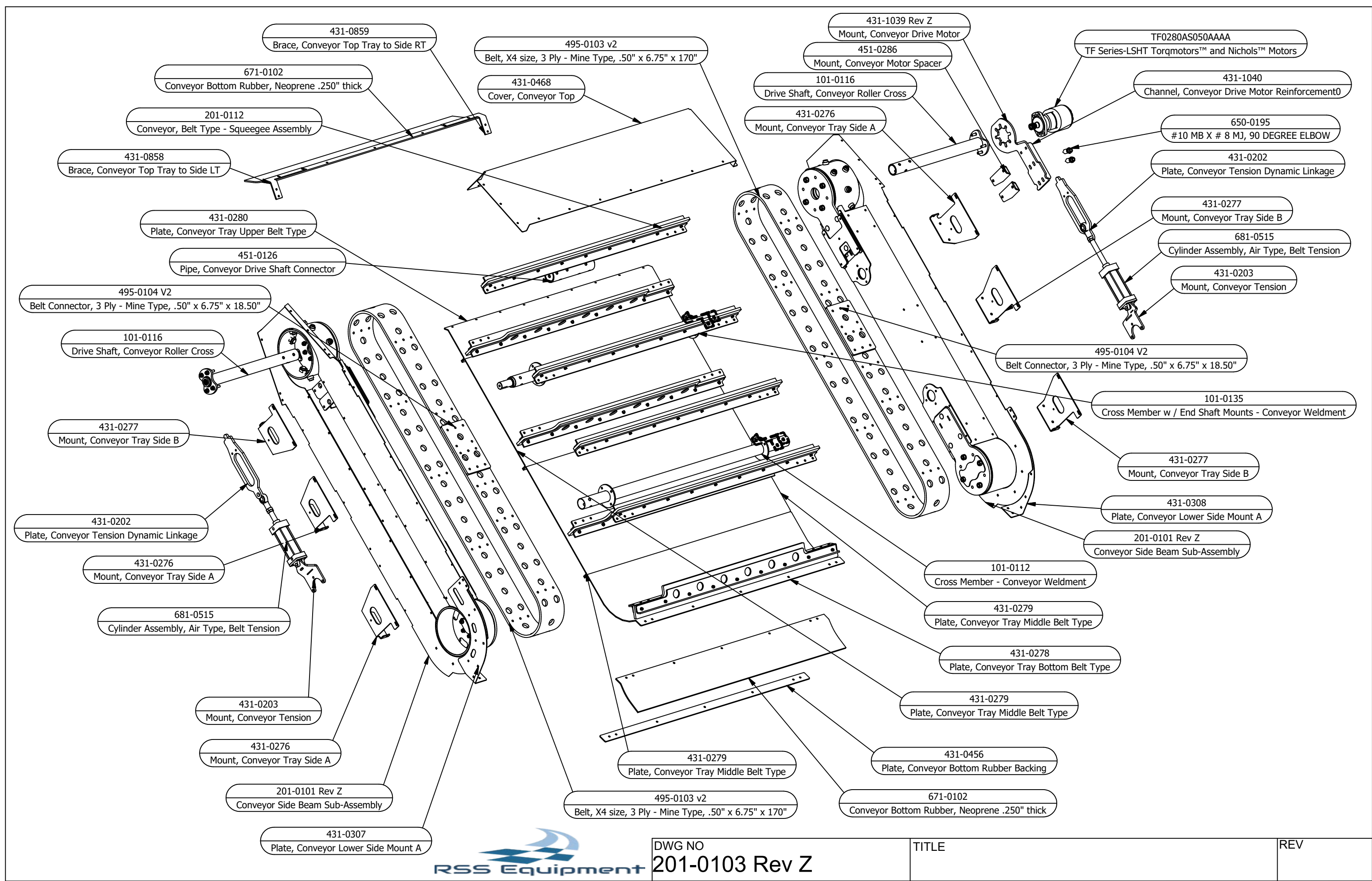
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201-0100 Scissors

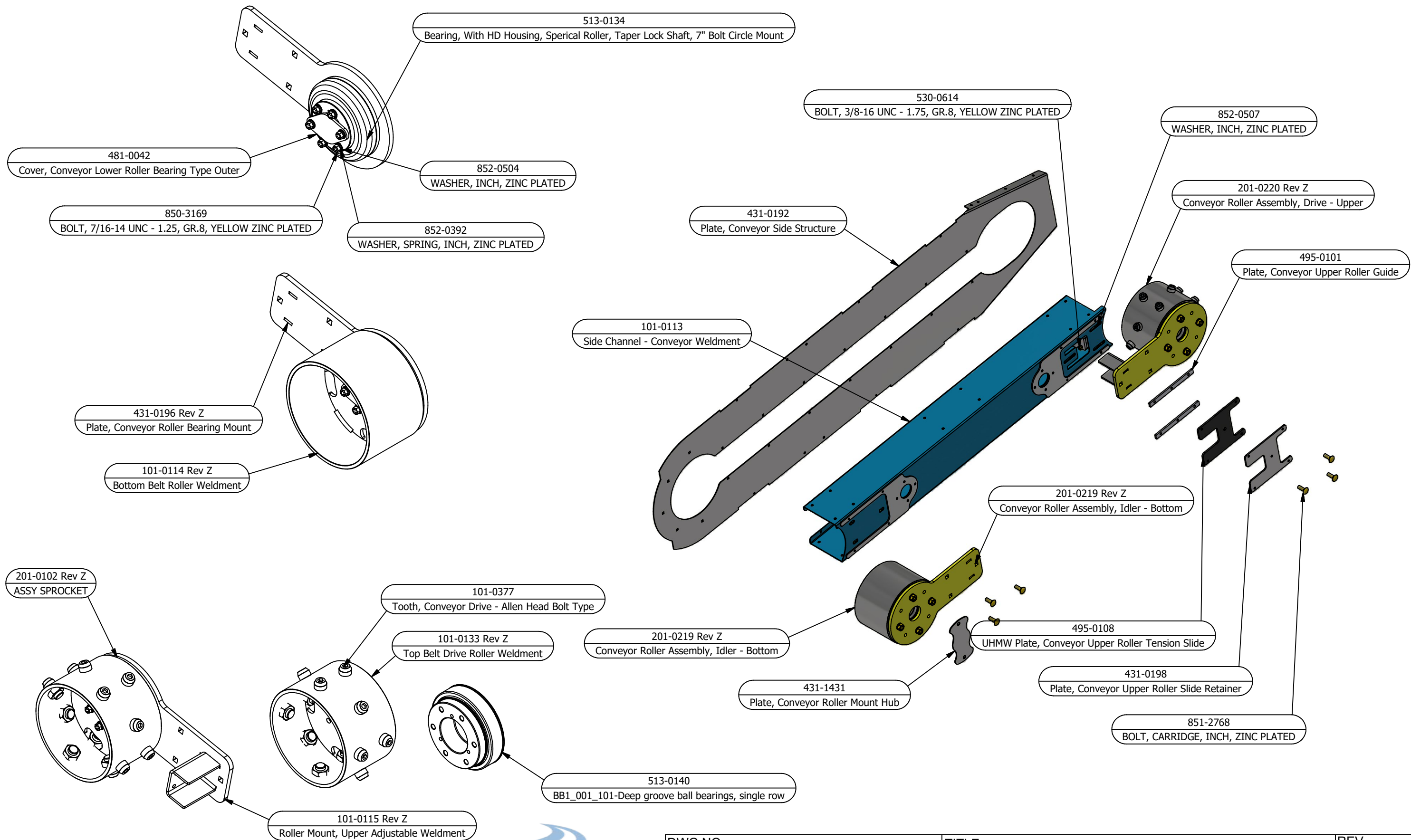
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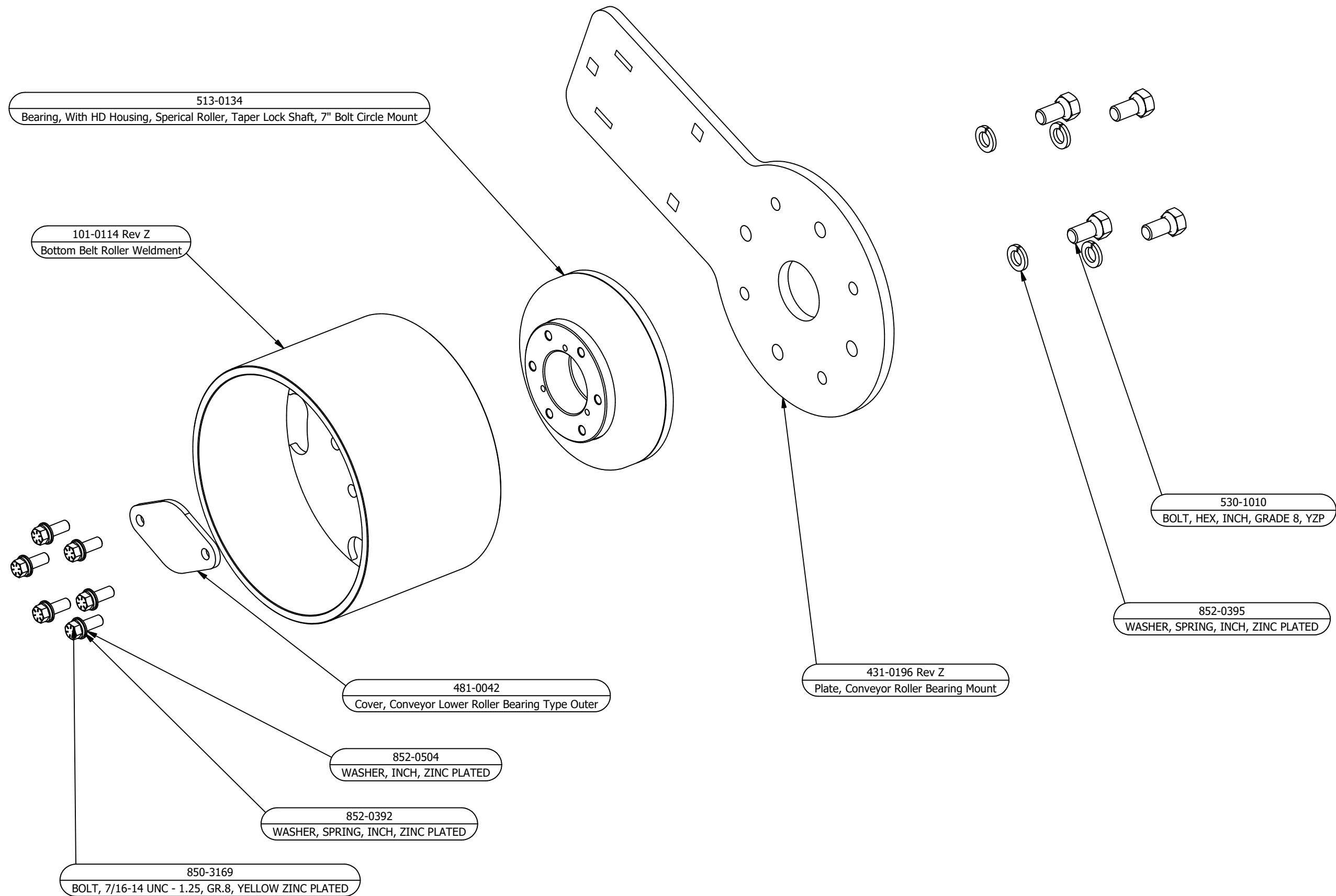
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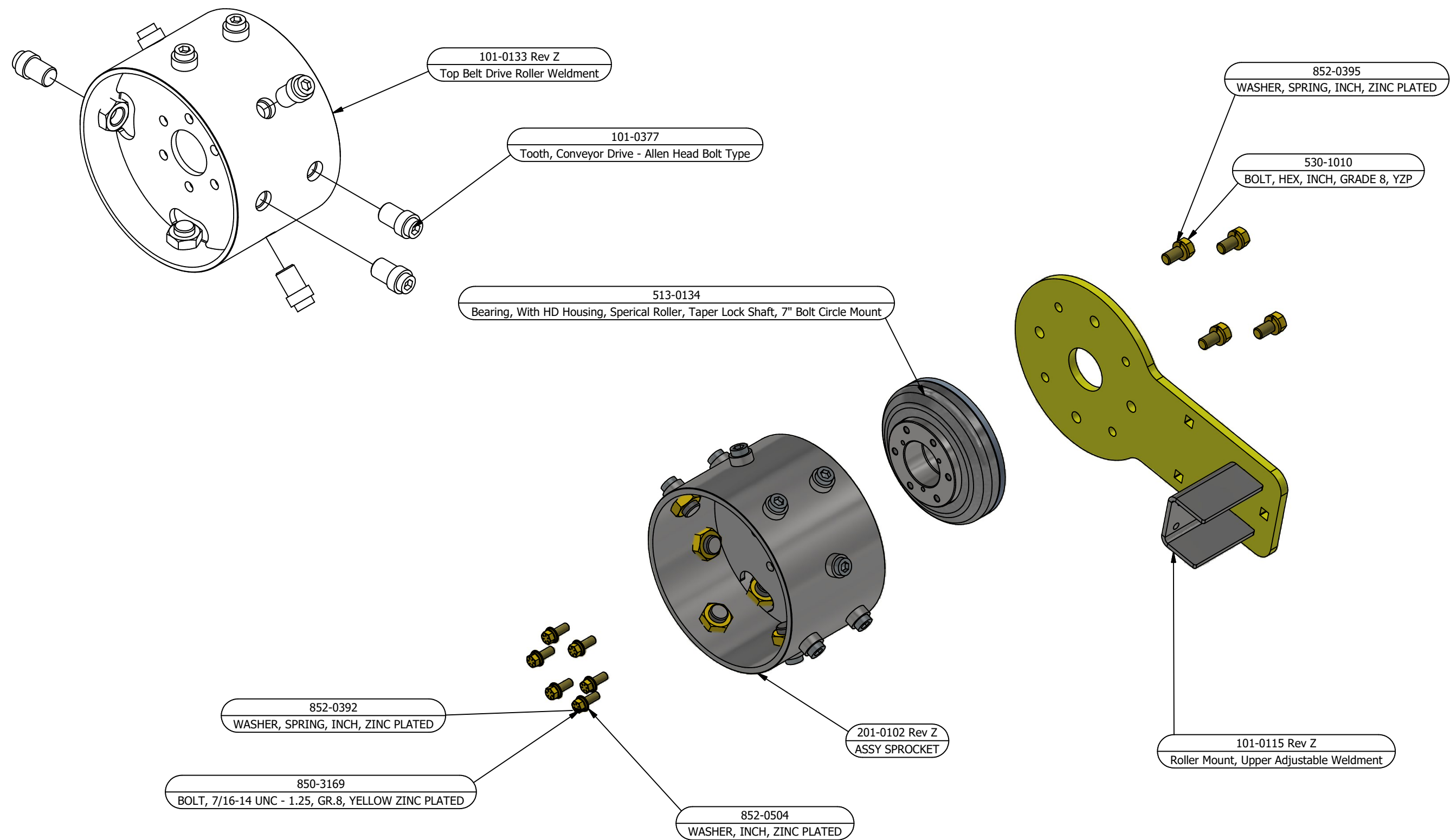
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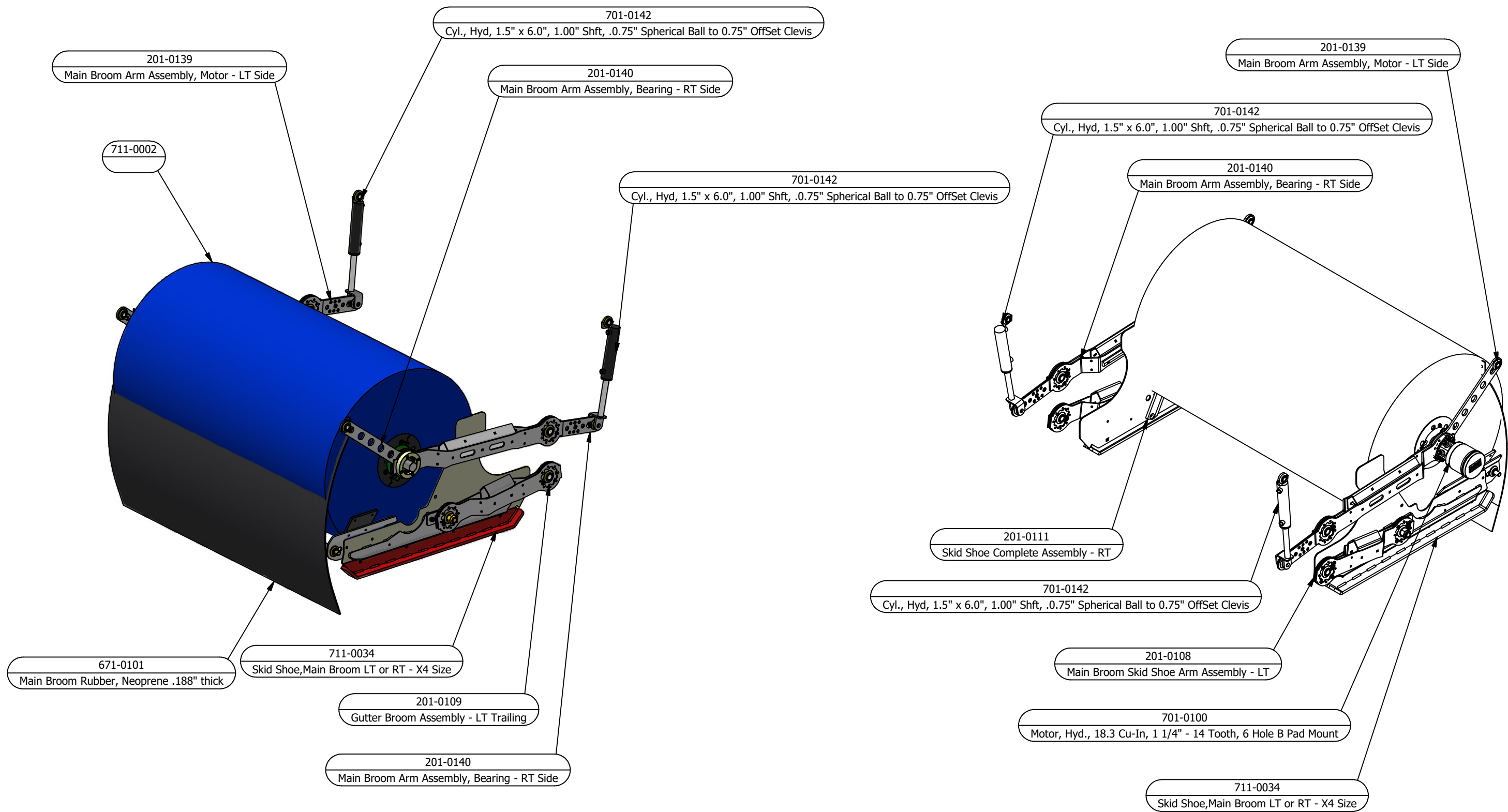
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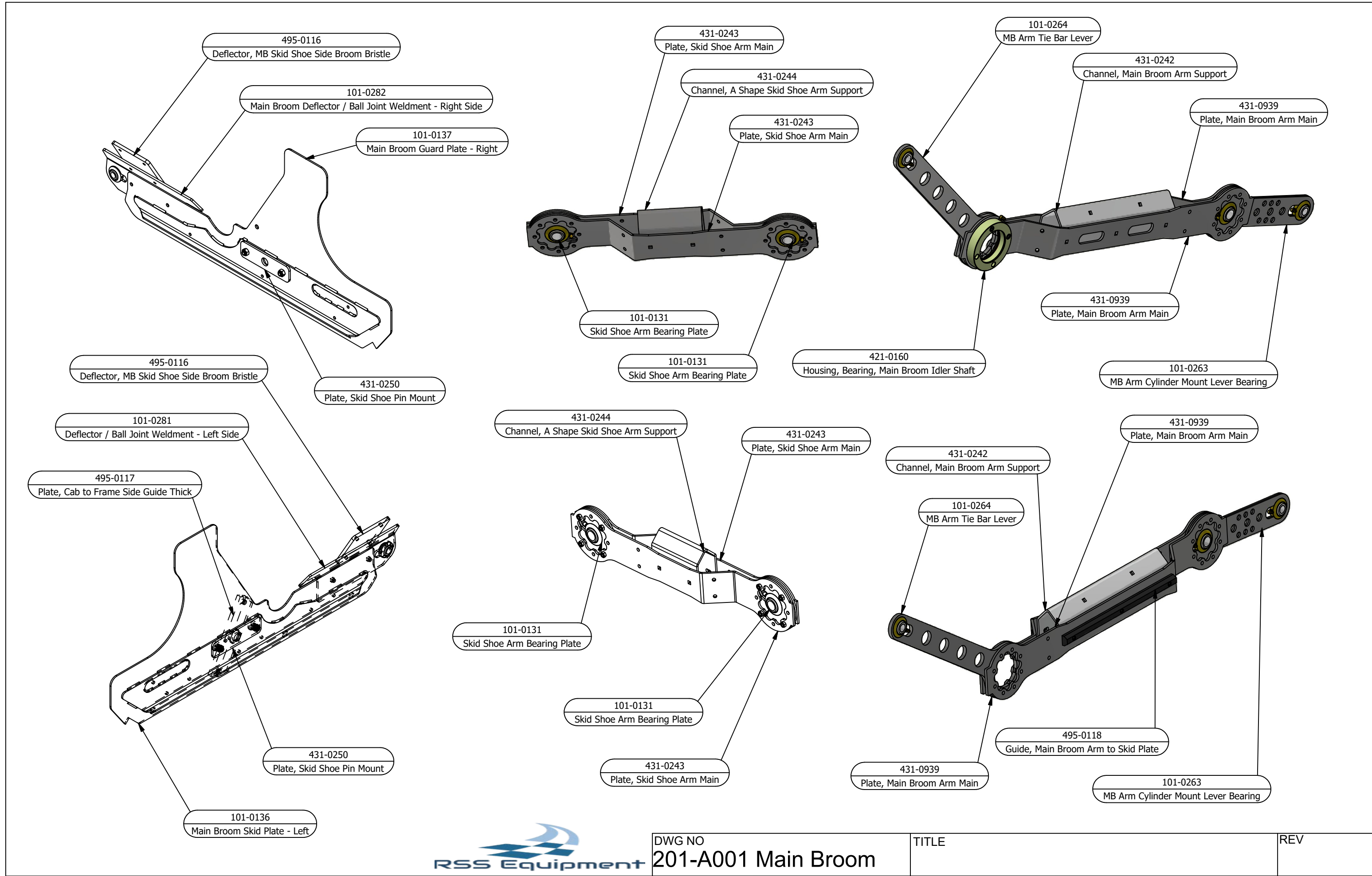
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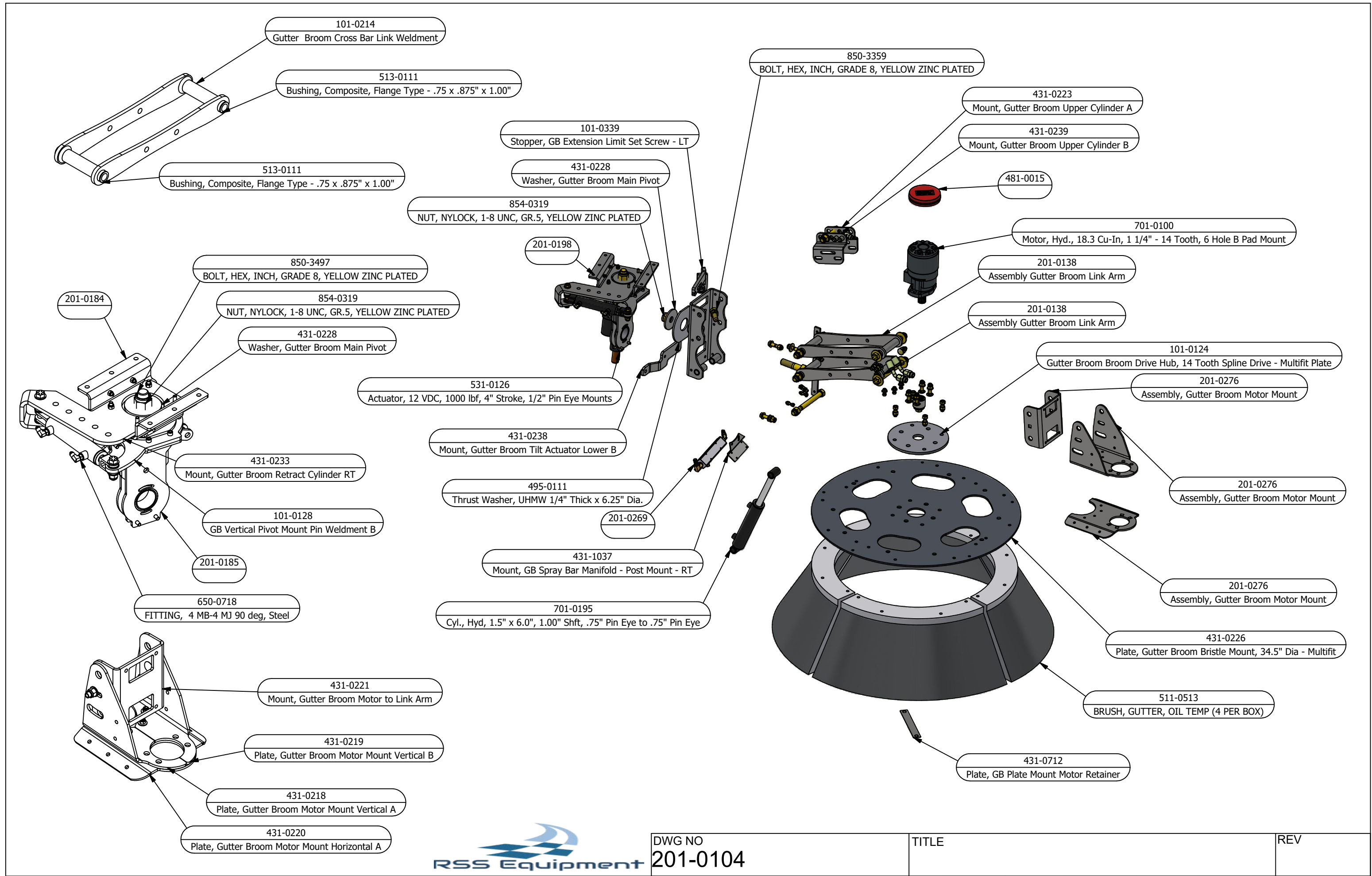
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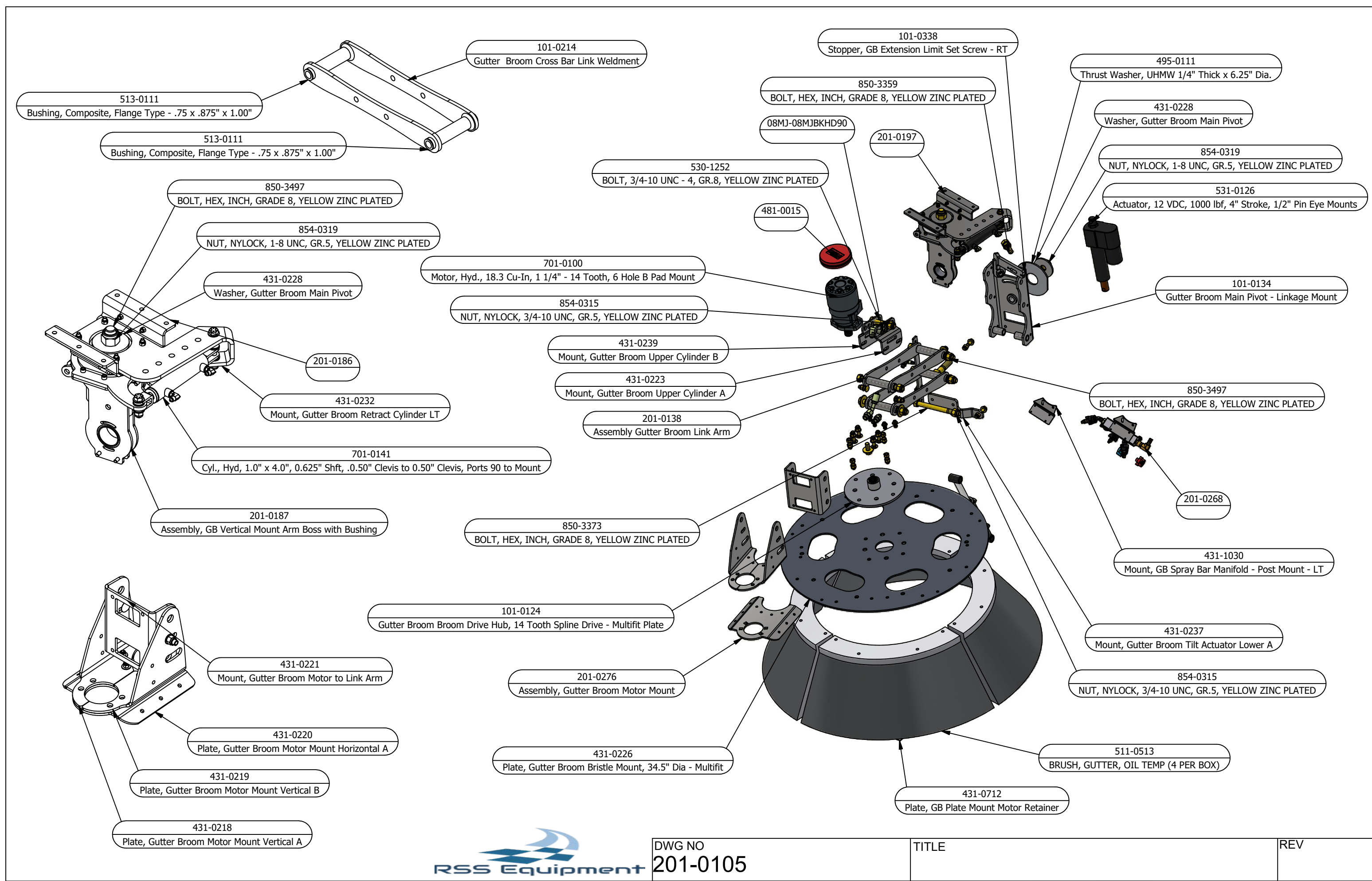
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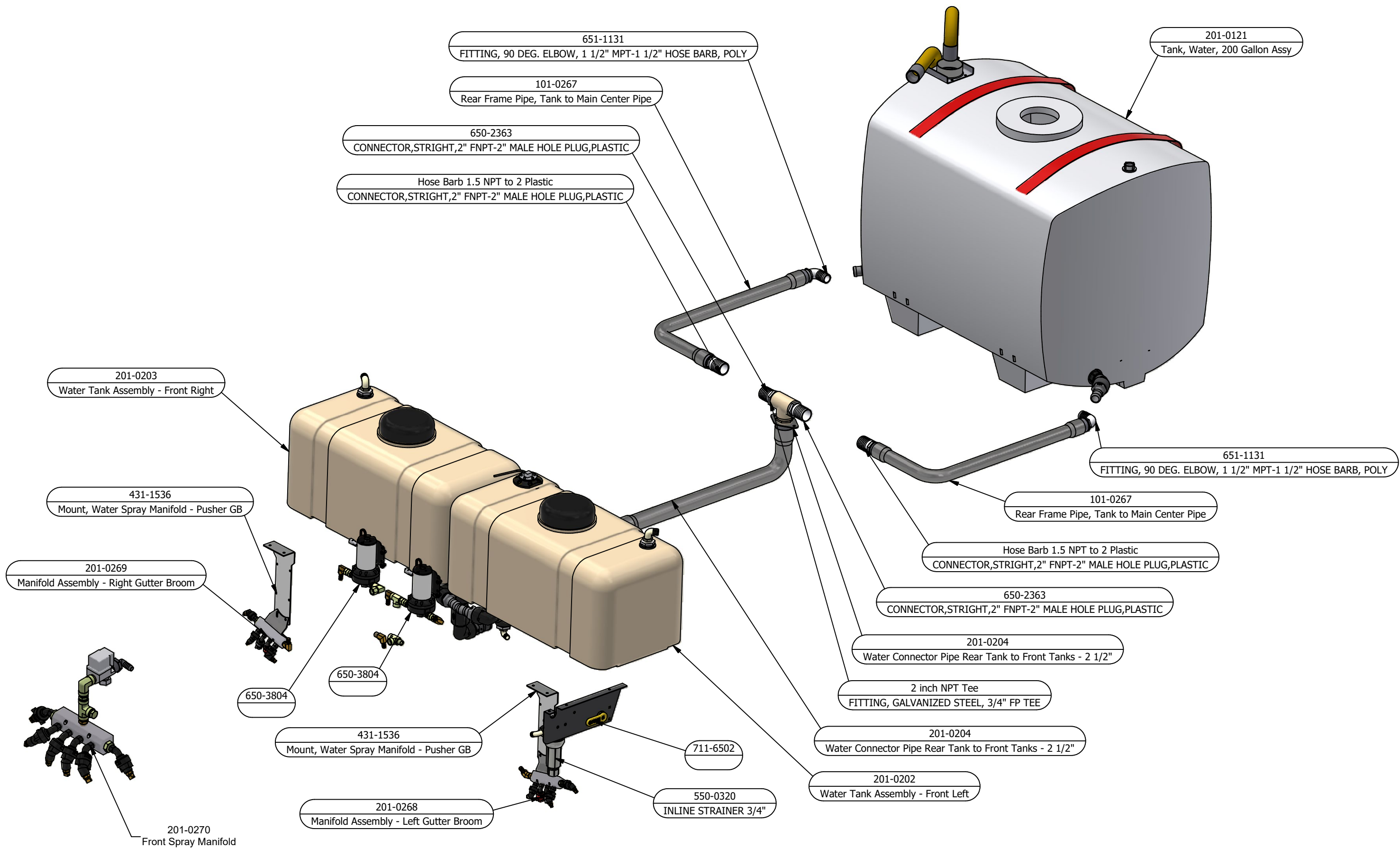
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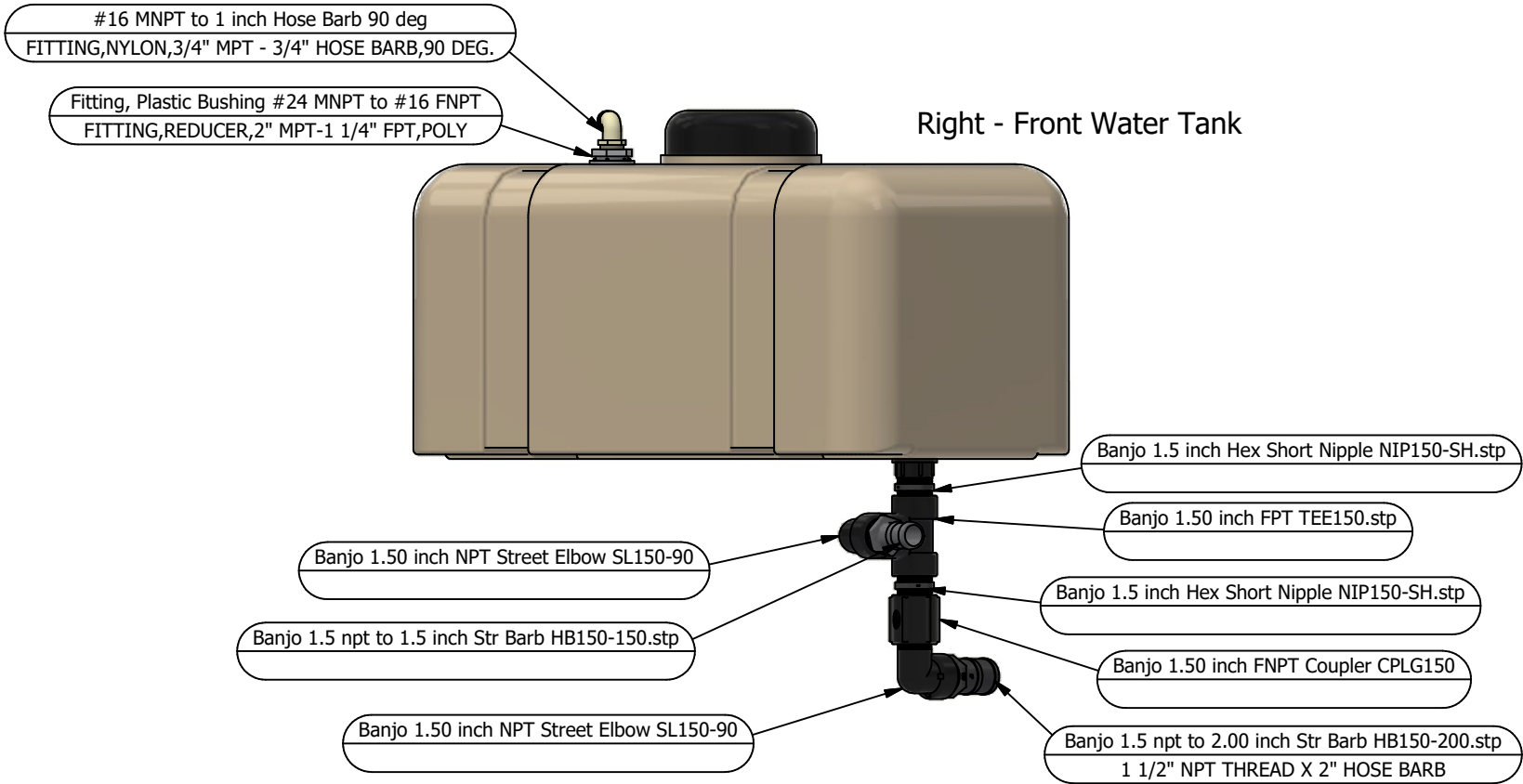
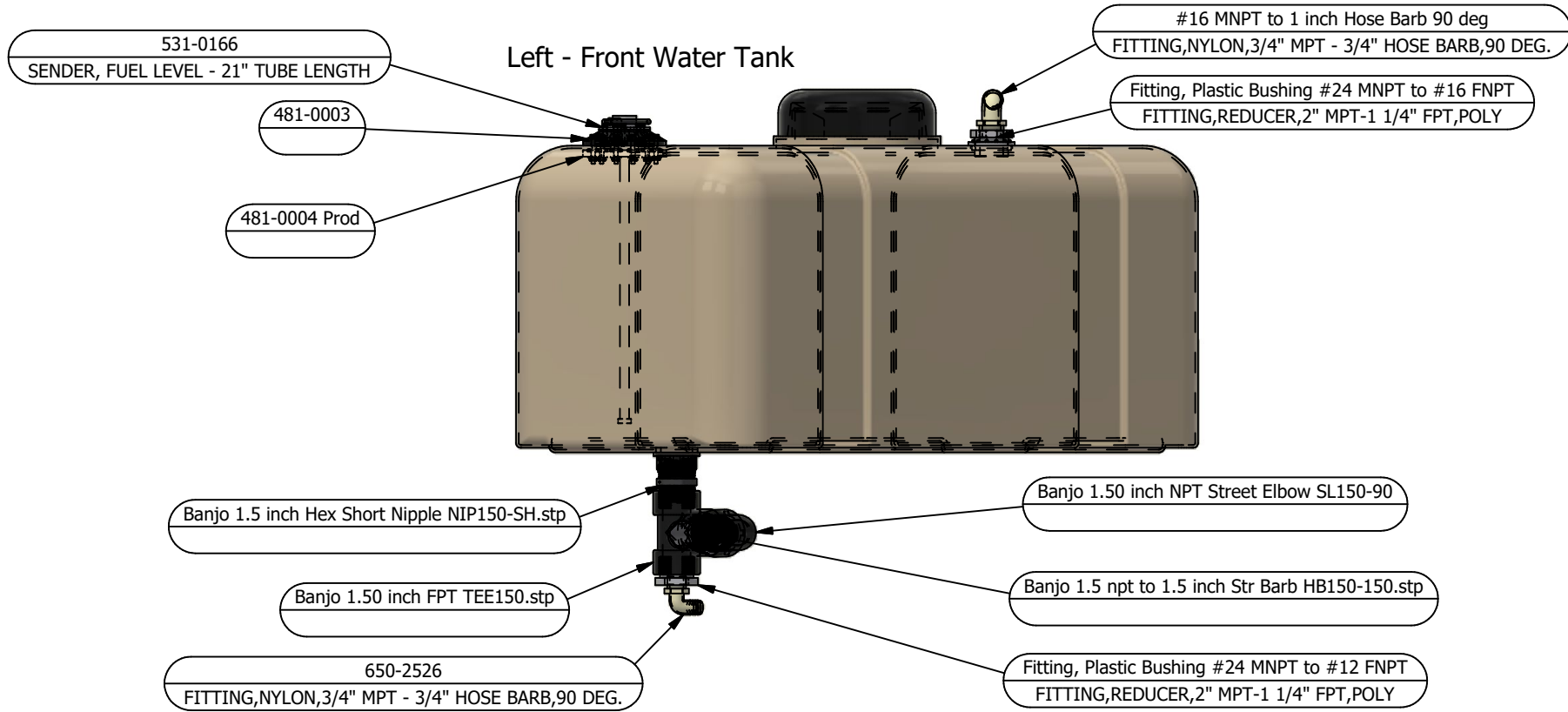
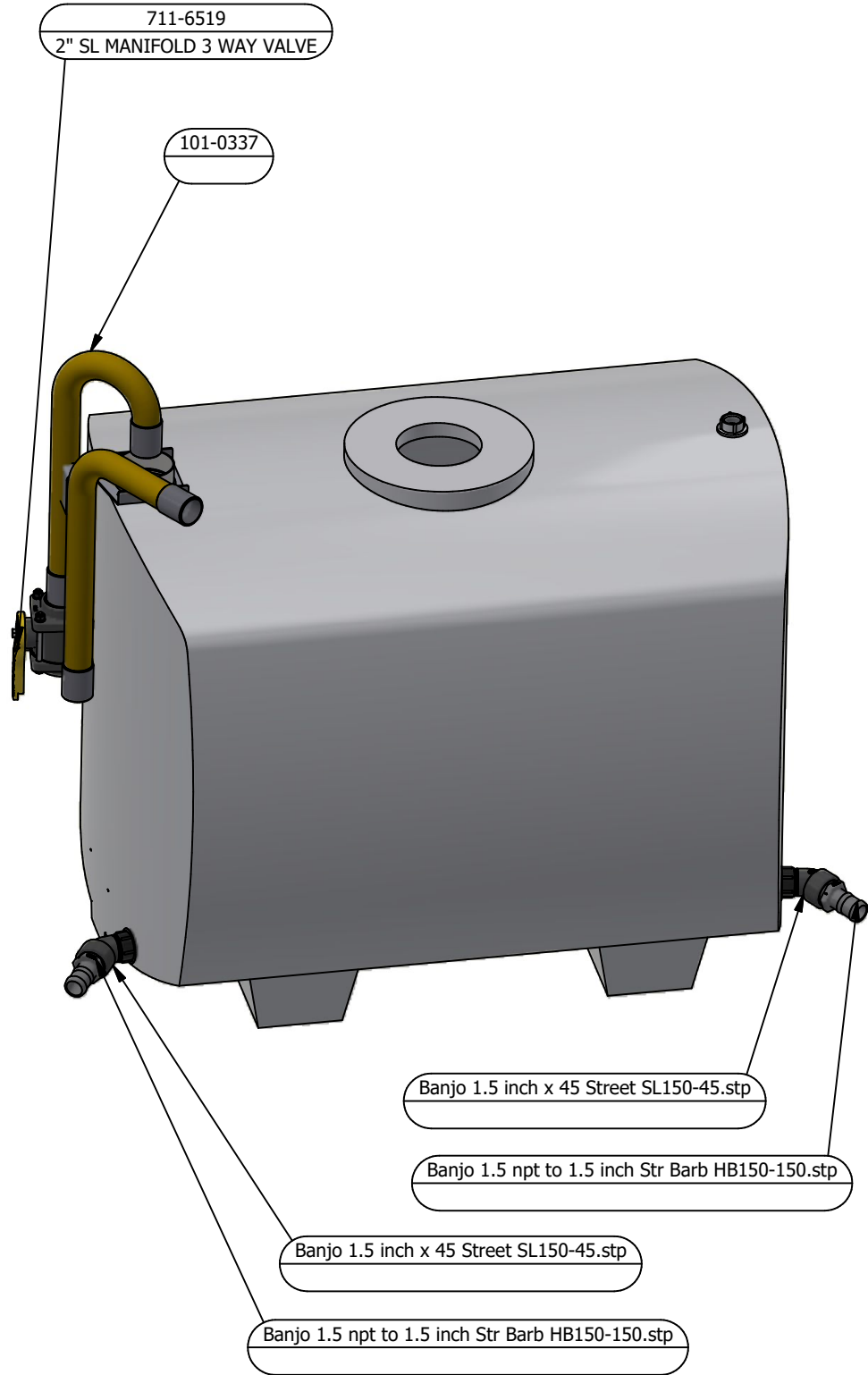
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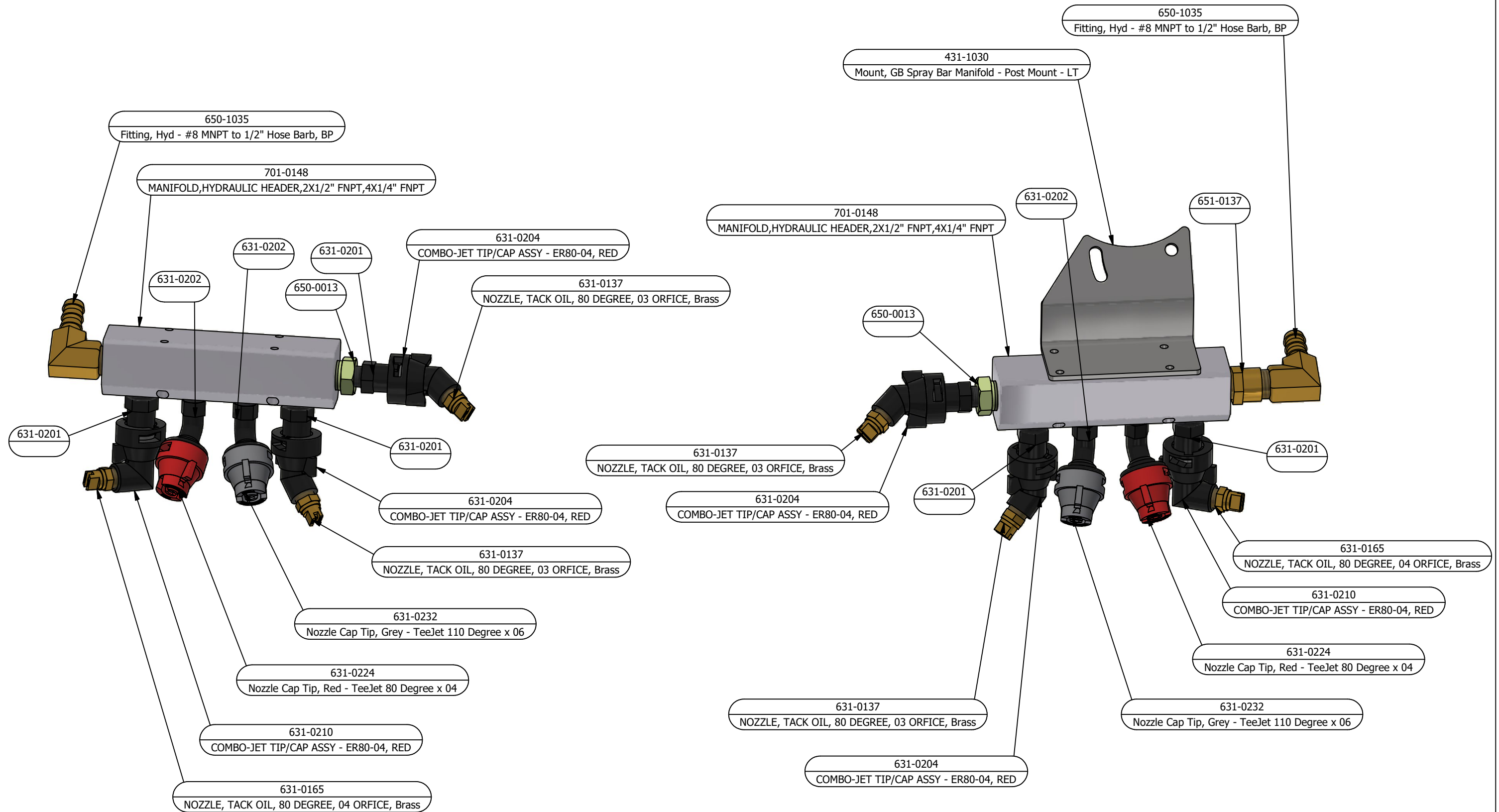
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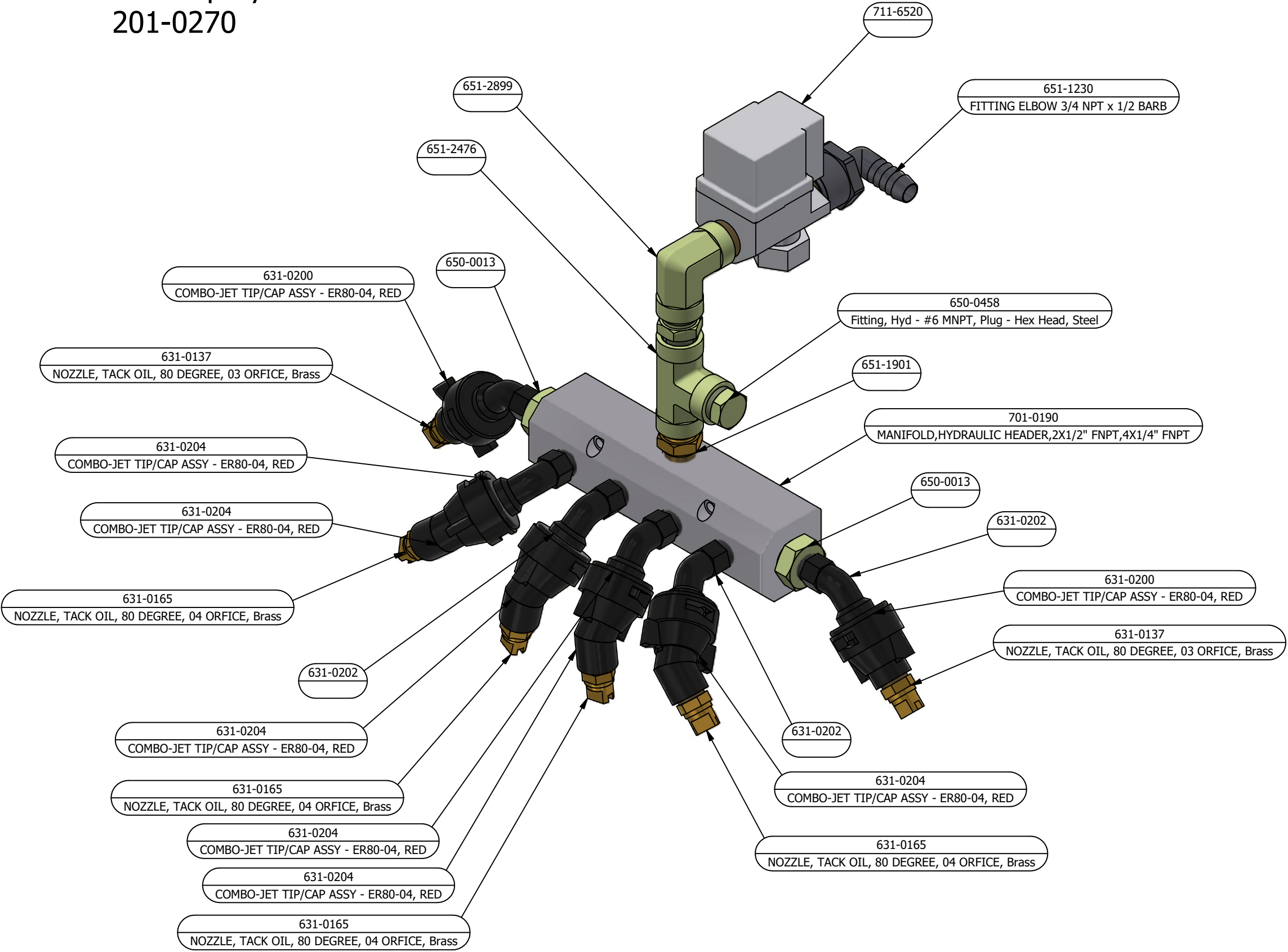


DWG NO
201-0286 Water System

TITLE

REV

Front Spray Bar
201-0270



DWG NO
201-0286 Water System

TITLE
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