

2016 FM100 (ALL) REWORK KIT

BELOW IS THE LIST OF PARTS IN KIT 255943.

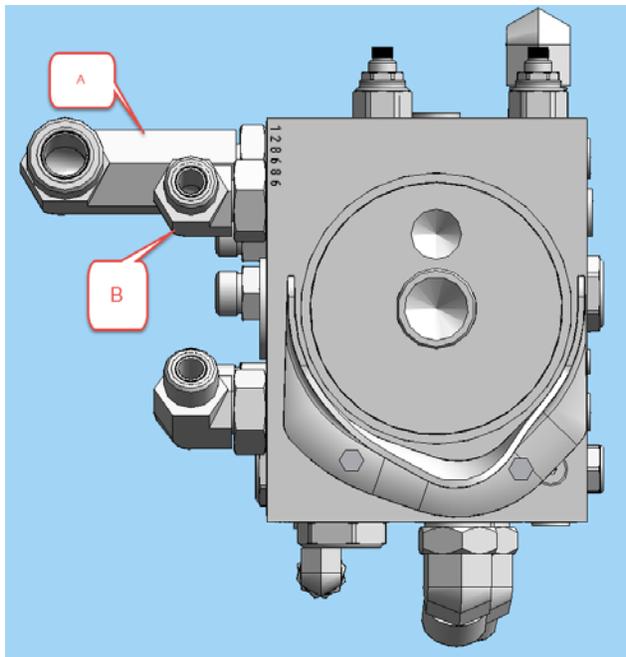
Part #	Description	QUANTITY
50180	BAG (FOR FOLLOWING INSTRUCTION)	1
214202	INSTRUCTION	1
287770	ASSY - MANIFOLD,DRIVE W FTNGS	1
202986	ELEMENT - HYDRAULIC FILTER	1
287907	HOSE - HYD, FLX SDR&R	2
287908	HOSE-HYD, FLX KR	1
287909	HOSE- HYD, FLX CD	1
287910	HOSE- HYD, FLX KP	1
135444	FASTENER - CINCH STRAP 8" LG	3
213743	FLANGE - OIL DRAIN SPOUT	1
136561	BOLT-HEX HD TFL M6X1X10-8.8-A3L	2
30753	FASTENER - CABLE TIE BLACK	1
287885	HOUSING - LH IDLER CUP ASSY	1
287883	HOUSING - RH IDLER CUP ASSY	1
287677	SUPPORT-IDLER ADJ WELDT LH	1
287678	SUPPORT-IDLER ADJ WELDT RH	1
287587	SPRING-COMPRESSION	2
248824	TUBE-HINGE PIVOT	2
287896	DRAPER-1988(78.3")WX1712 LG	1
213418	SUPPORT-LH ADAPTER LINK MACH	1
213419	SUPPORT-RH ADAPTER LINK MACH	1
287619	TUBE- STRUT	1
30630	BOLT-HEX HD TFL M12X1.75X30-8.8-A3L	1
184714	WASHER-FLAT REG M12-300HV-A3L	1
287620	TOOL - TEMPLATE, STRUT MOUNT HOLE	1
295333	GUIDE - FLOAT LOCK	2
287700	HANDLE ASSY - FLOAT LOCK	2
252564	WASHER - WAVE	4
276749	LOCATING TEMPLATE	1
252692	RESTRICTOR, #8 ORB X .035"	1
295211	PLATE-FRONT BAR OUTER	1
295212	FLAP-PAN FRONT	1
295213	PLATE-FRONT BAR INNER	1
295214	SUPPORT-PAN LIFTER	1
295215	SUPPORT-PAN SIDE SPRING LH	1
295216	SUPPORT-PAN SIDE SPRING RH	1
295218	SUPPORT-PAN FRONT SPRING RH	1
295219	SUPPORT-PAN FRONT SPRING LH	1
287939	RETAINER-FRONT SPRING	2
136050	BOLT-RHSN M8X1.25X35-8.8-A2L	4
135337	NUT-HEX FLG CTR LOC M8X1.25-8-A2L	4
184709	WASHER-FLAT LARGE M8-200HV-A2L	2
295261	FILLER-PAN CENTER	1
287778	RETAINER - CENTER FILLER	1
295265	TEMPLATE	1
291277	WIRE-FM100 GROUND	1
166161	TUBE-HEAT SHRINK	1
134013	TOOL-CONTACT REMOVAL	1
255134	DECAL-RH BASE DECAL, FD100	1
255132	DECAL-LH BASE DECAL, FD100	1
255322	DECAL-"30"	2
255323	DECAL-"35"	2
255324	DECAL-"40"	2
255325	DECAL-"45"	2

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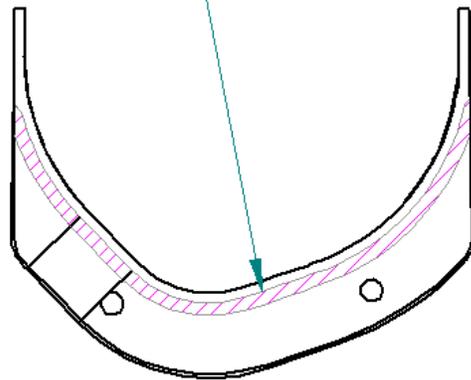
PLEASE FOLLOW FOLLOWING INSTRUCTIONS TO PERFORM THE REWORK.

A) The FM100 manifold needs to be changed out along with five hoses.

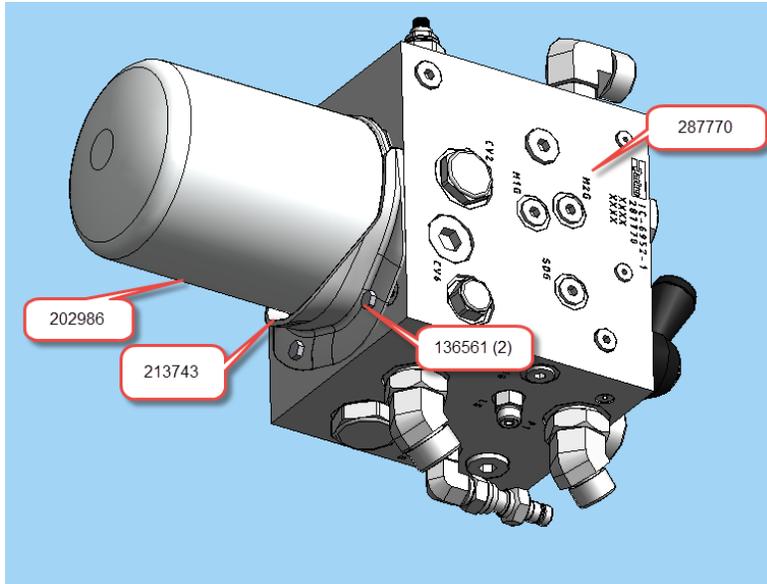
Change out manifold 213181 to kit supplied 287770 manifold. Take care when disconnecting hoses, fittings, and steel lines from old manifold to ensure no contamination. Prior to assembling 287770 manifold into adapter, add the oil drain spout with the 136561 bolts (2) as shown below. Before you install manifold you will need to remove fitting (A), turn fitting (B) 180 degrees and reinstall fitting (A). Install oil drain flange before oil filter. Apply silicone bead as shown below making sure no silicone enters O-ring groove. Remove old filter and replace with new filter supplied in kit.



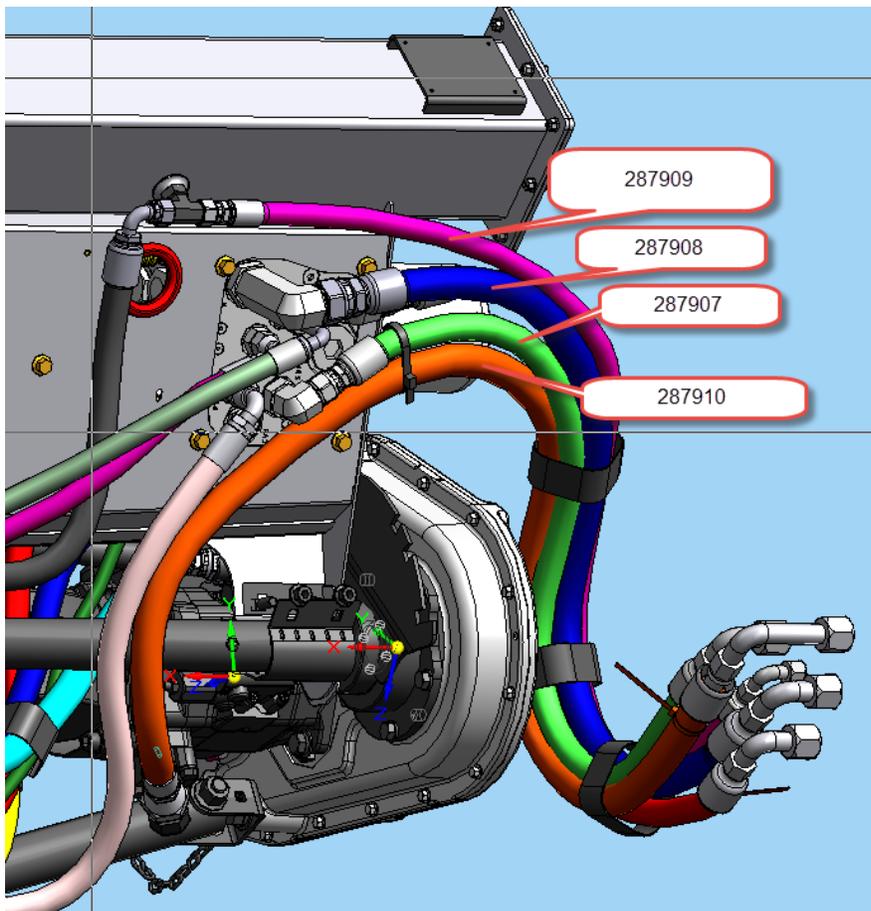
APPLY SILICONE BEAD
5MM FROM INSIDE
EDGE OF FLANGE



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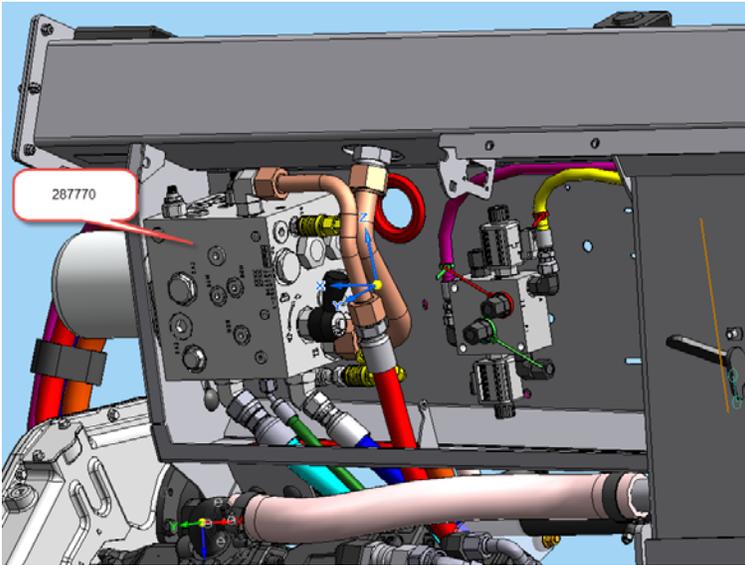
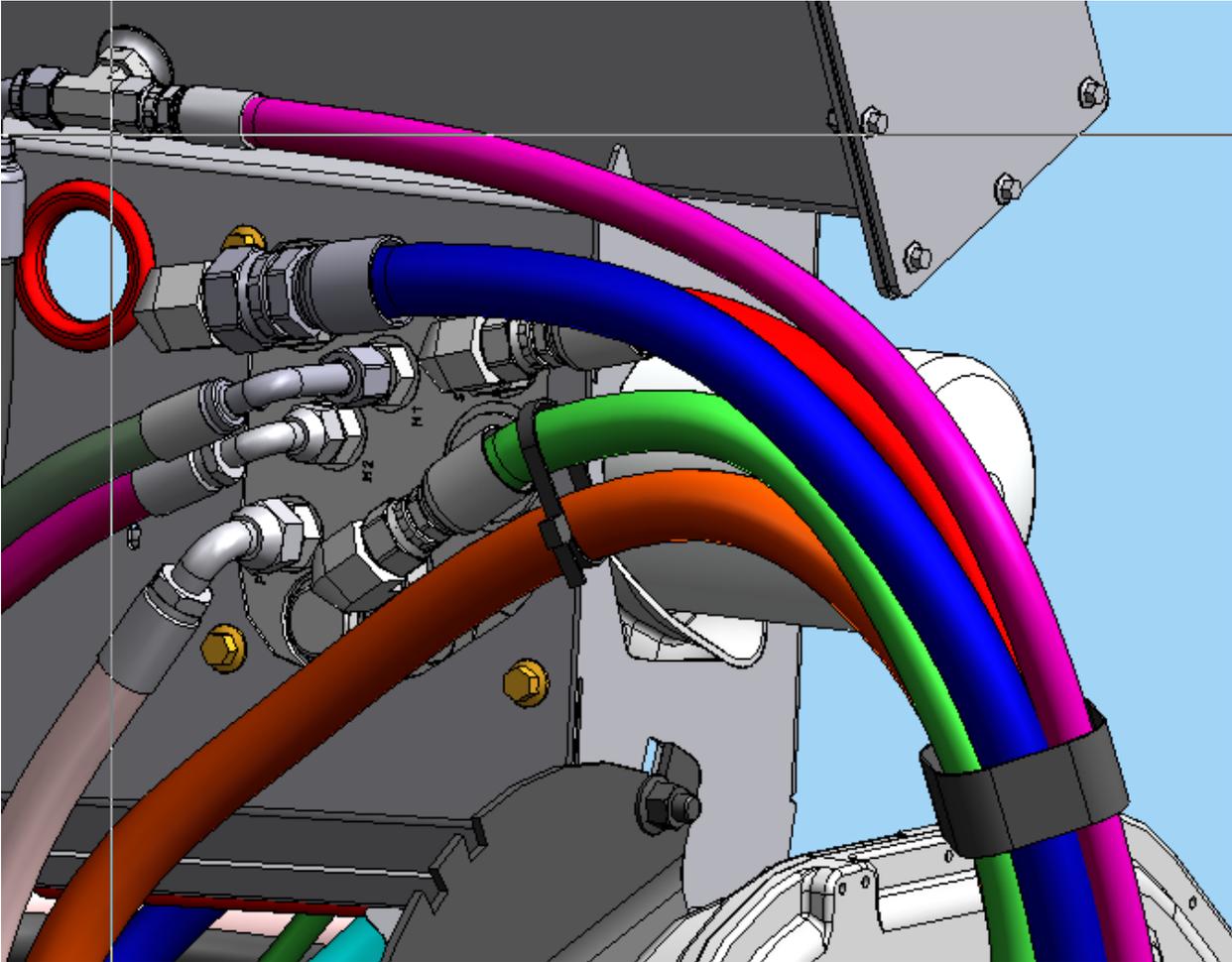


Change hoses 213240, 213242 to 287907 (2), 213241 to 287908, 213248 to 287910 and 213245 to 287909. Put same color cable tie to same location on replacement hoses. Assembly to manifold to be as shown in below images. Add the three 135444 cinch straps around the five hoses as shown below.



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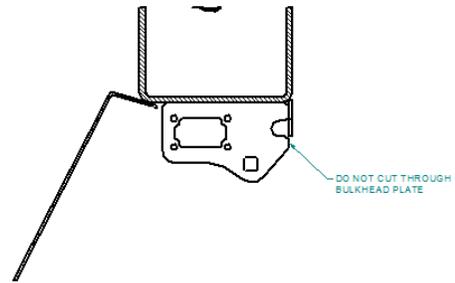
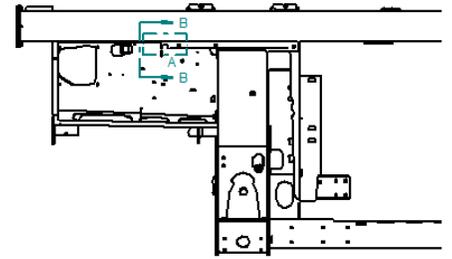
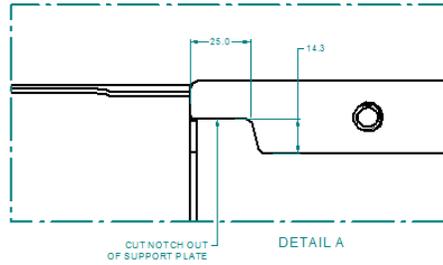
Cable tie (30753) hose 287907 to 287910 hose as shown below



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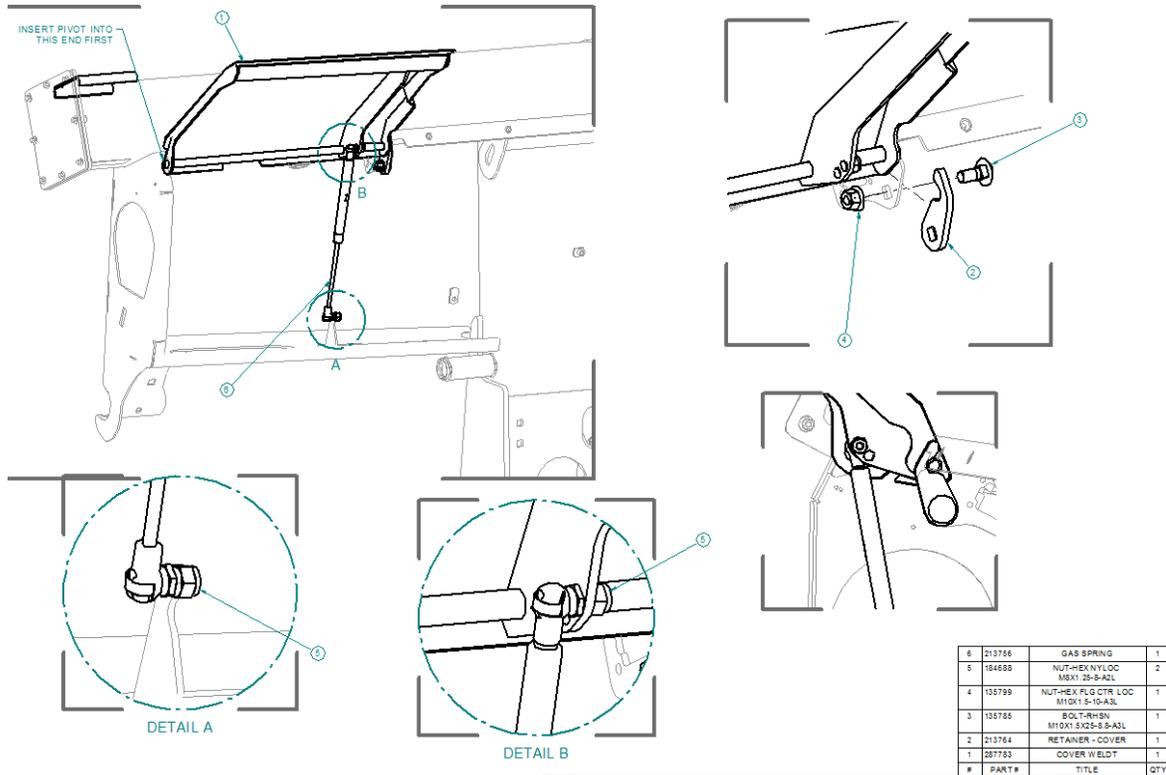
B) THE ADAPTER FRAME NEEDS A NOTCH CUT INTO IT AS SHOWN BELOW.

1. UNINSTALL HYDRAULIC COMPARTMENT COVER FROM FRAME.
2. CUT NOTCH AS PER INSTRUCTIONS.
3. REINSTALL HYDRAULIC COVER. SEE 213746 FOR INSTALLATION INSTRUCTIONS.



SECTION B-B

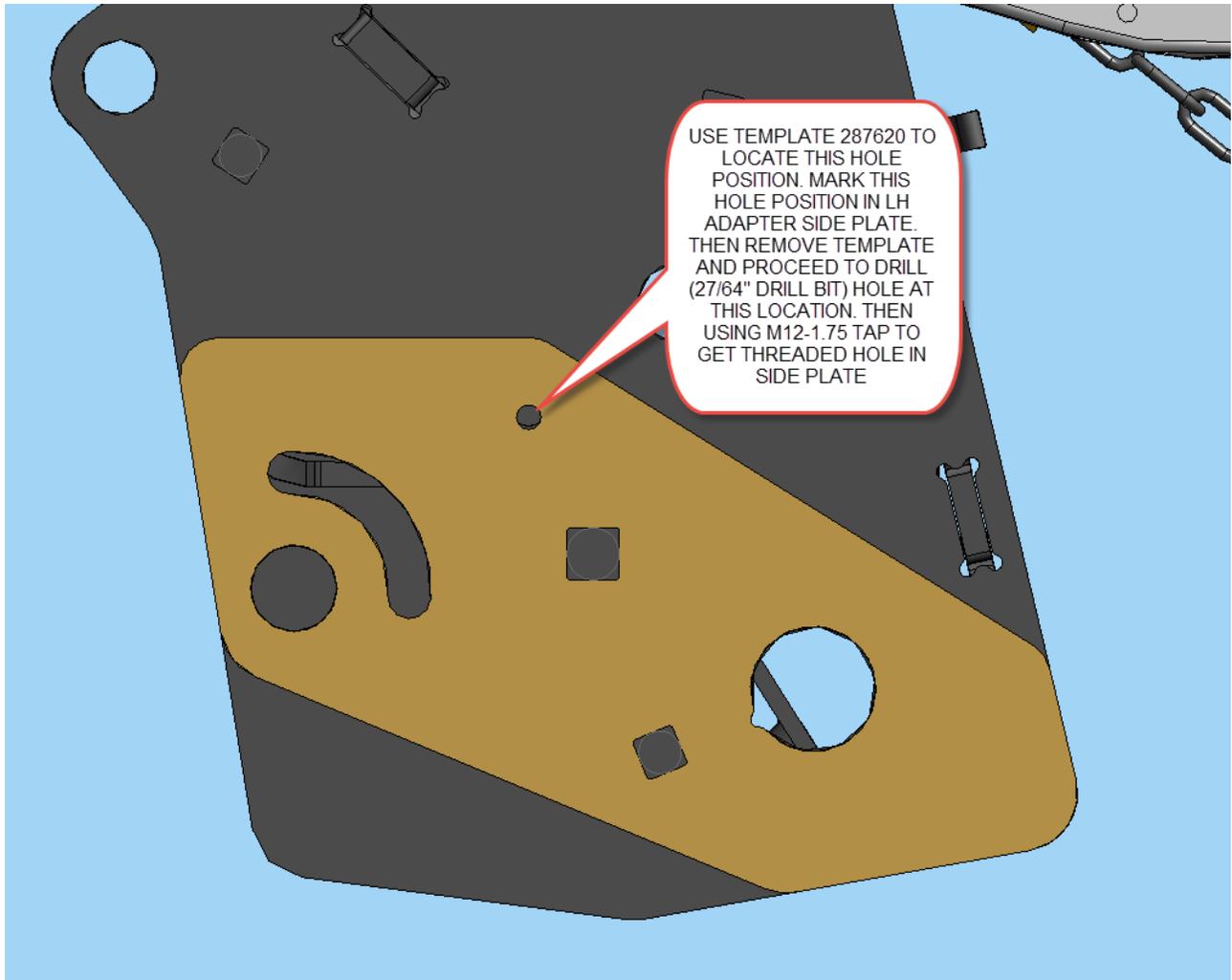
USE FOLLOWING DRAWING TO ASSIST YOU TO UNINSTALL HYDRAULIC COMPARTMENT COVER FROM FRAME AND REINSTALL HYDRAULIC COVER.



6	213756	GAS SPRING	1
5	184688	NUT-HEX NYLOC M10X1.25-8-A31	2
4	135799	NUT-HEX FLG CTR LOC M10X1.5-10-A31	1
3	135785	BOLT-HEX-DR M10X1.5X3.5-A31	1
2	213764	RETAINER - COVER	1
1	287783	COVER W/LDGT	1
#	PART#	TITLE	QTY

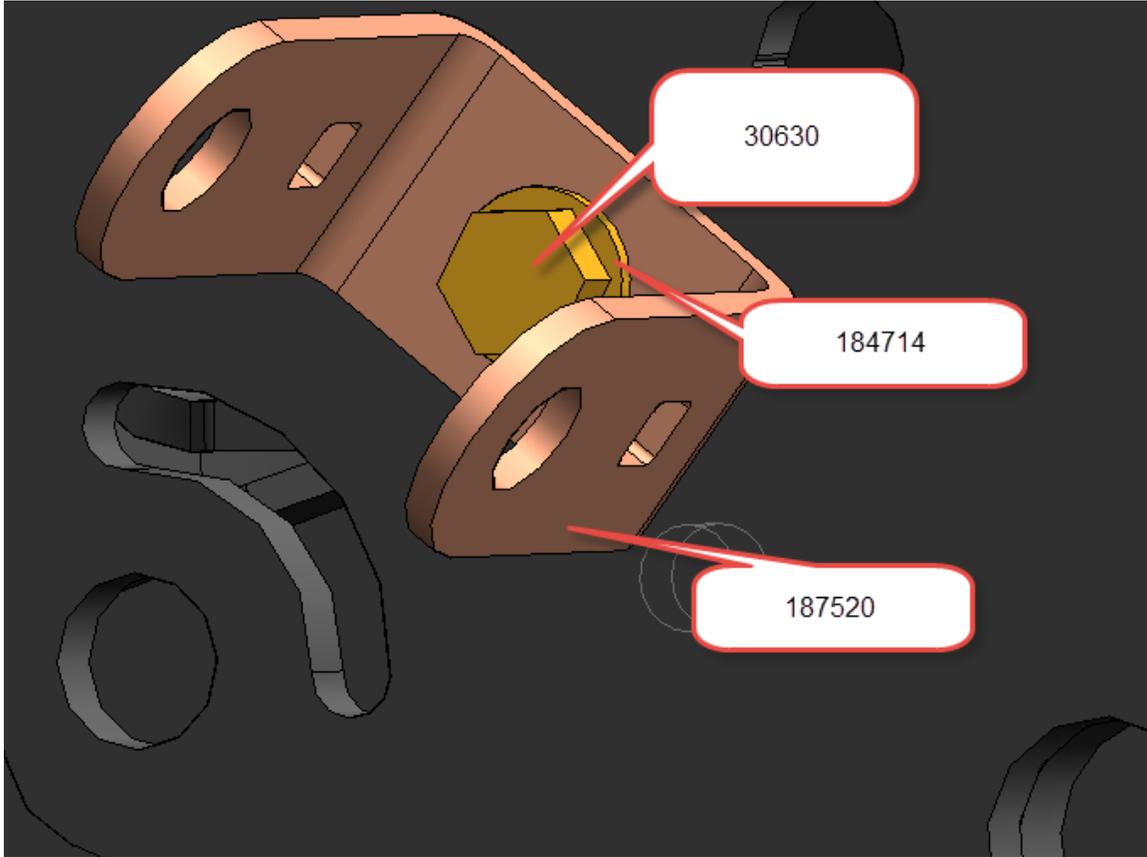
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- C) THE GEARBOX STRUT ANCHOR NEEDS TO BE RELOCATED. REMOVE OLD TUBE STRUT AND ANCHOR FROM ADAPTER FRAME. LEAVE ANCHOR AT GEARBOX AS IS. USING 287620 TEMPLATE SUPPLIED IN KIT, POSITION IT AS SHOWN ON ADAPTER FRAME.

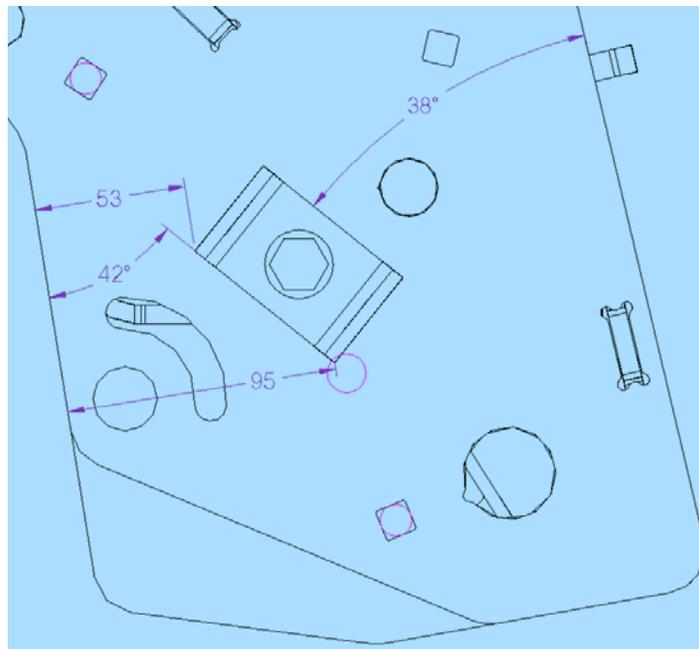


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THEN USING EXISTING ANCHOR 187520 REATTACH TO THE NEW THREADED HOLE POSITION USING 30630 BOLT (M12X1.75X 30) AND FLAT WASHER 184714. ORIENTATE THE ANCHOR AS SHOWN BELOW.

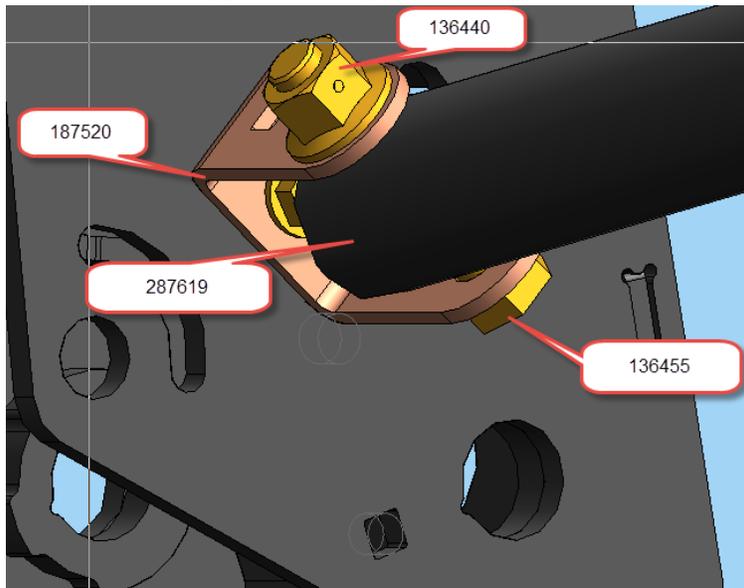


THE FOLLOWING SHOWN ANGLES OR DIMENSIONS WILL ENABLE YOU TO GET ANCHOR ORIENTATED CORRECTLY.

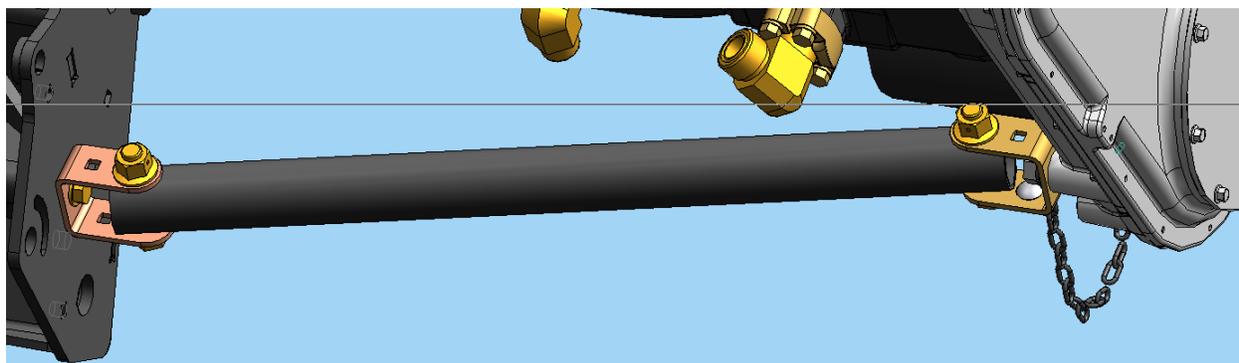
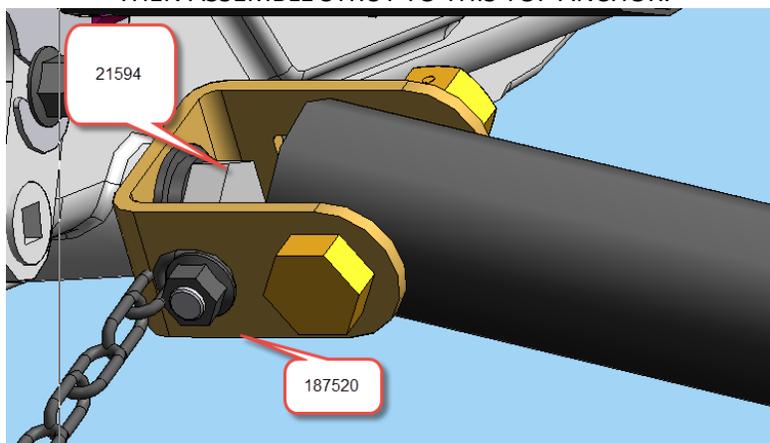


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ATTACH NEW TUBE STRUT 287619 SUPPLIED IN KIT. REUSE 136455 BOLT AND 136440 NUT TO CONNECT TUBE STRUT TO BOTTOM ANCHOR.



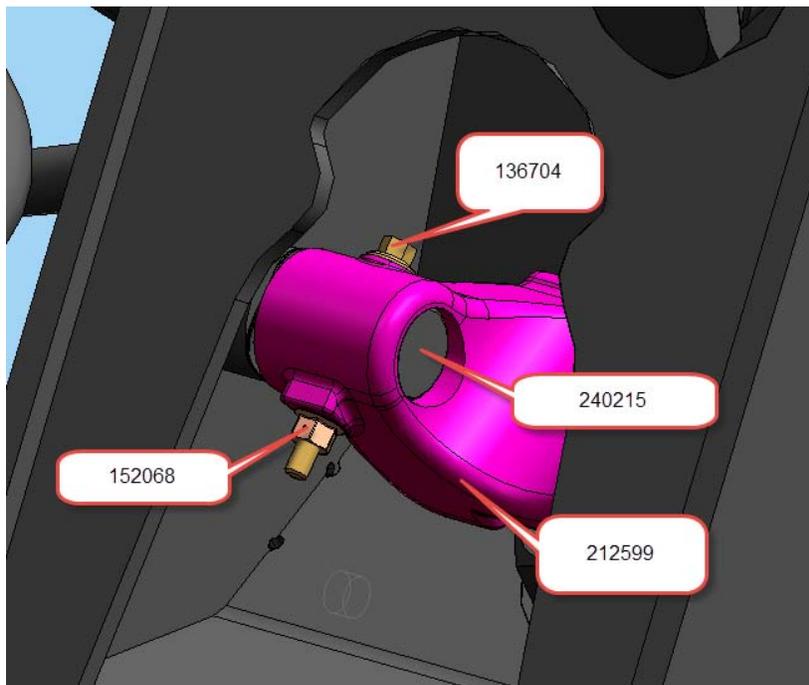
YOU WILL HAVE TO SLIGHTLY ALTER ORIENTATION OF TOP ANCHOR 187520 (AT GEARBOX) IN ORDER TO ATTACH STRUT. LOOSEN OFF 21594 BOLT, REORIENTATE ANCHOR, THEN TIGHTEN UP 21594 BOLT AND THEN ASSEMBLE STRUT TO THIS TOP ANCHOR.



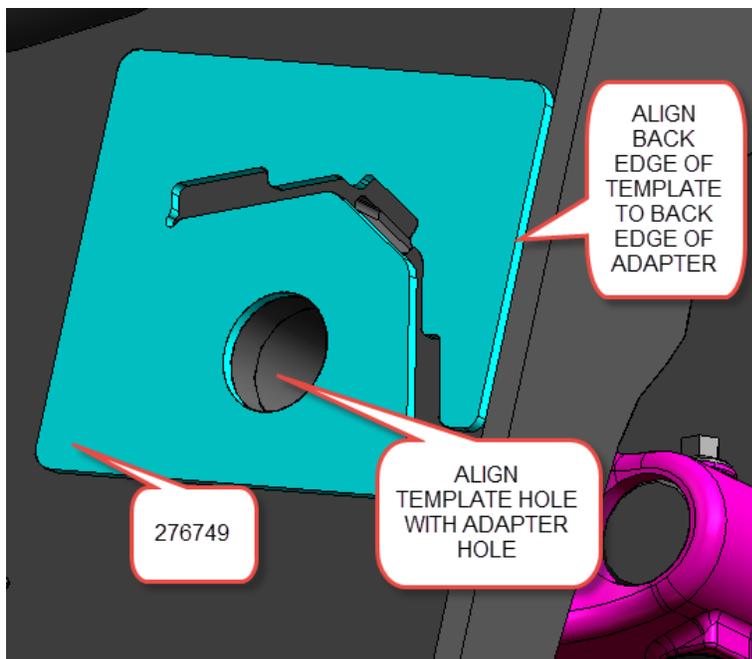
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D) THE FLOAT LOCK IS BEING IMPROVED BY THE ADDITION OF A WELDED GUIDE. THIS REQUIRES WELDING ON 295333 GUIDES TO OUTSIDES OF ADAPTER FRAME AS SHOWN BELOW.

STARTING ON LEFT SIDE OF ADAPTER, FIRST REMOVE 240215 LH PIVOT SHAFT WELDMENT BY REMOVING THE 136704 BOLT, 152068 NUT SECURING 212599 DOWNSTOP CASTING.

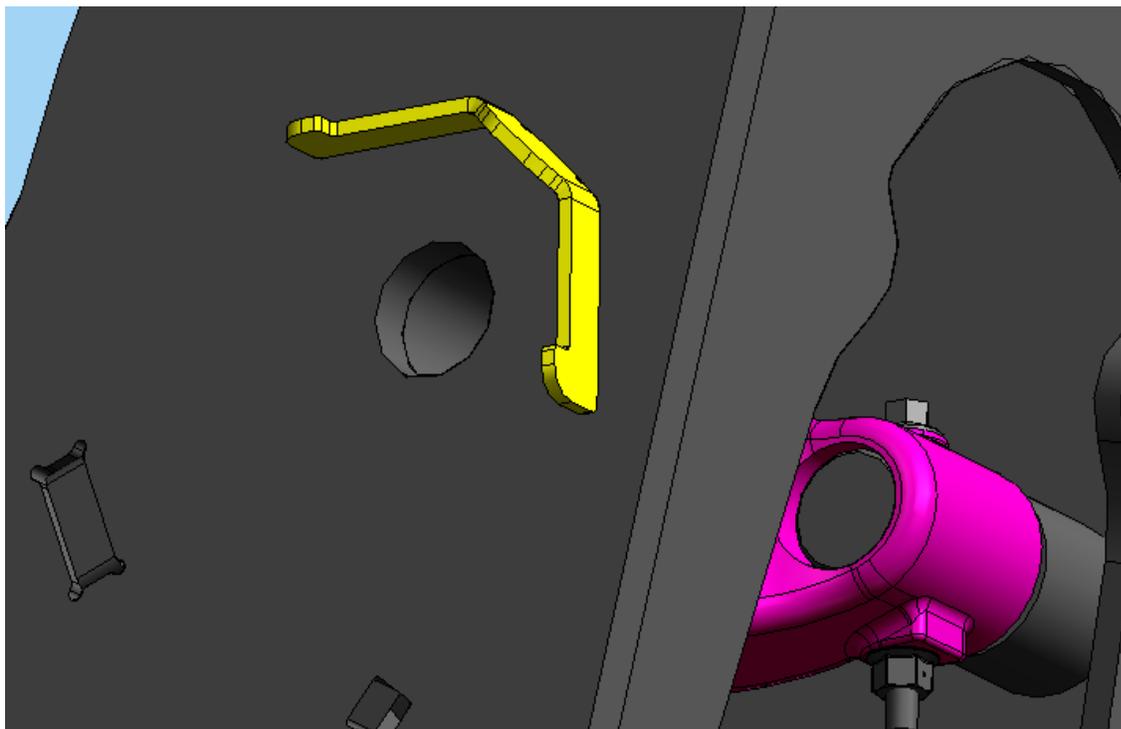
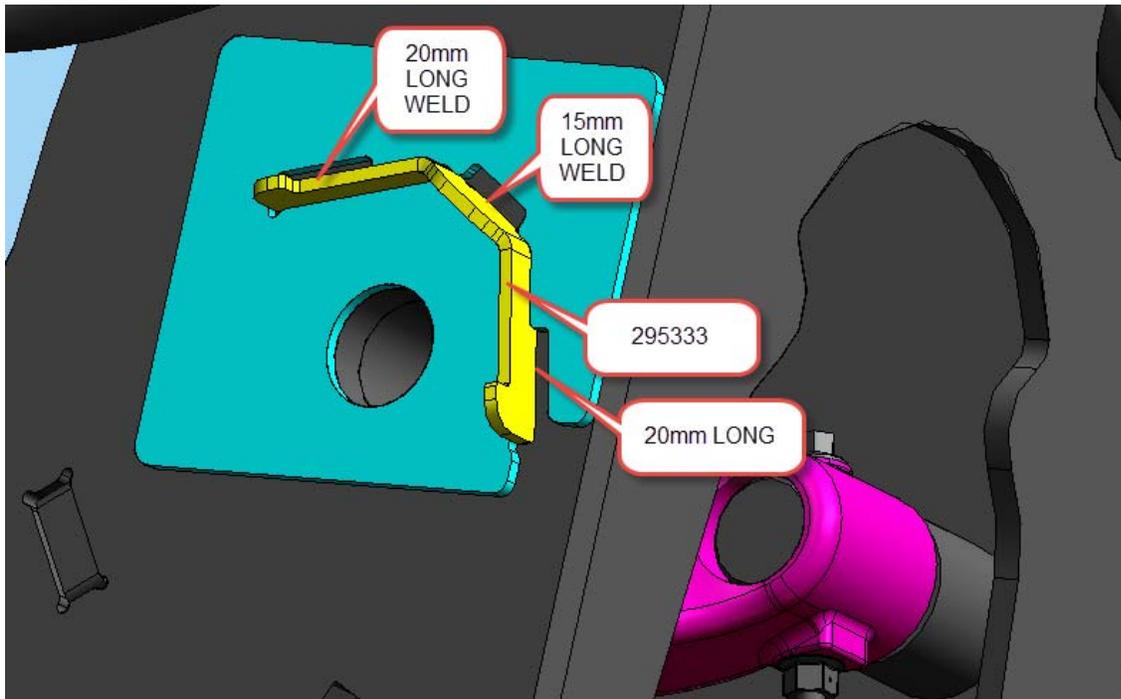


POSITION TEMPLATE 276749 AS SHOWN BELOW.



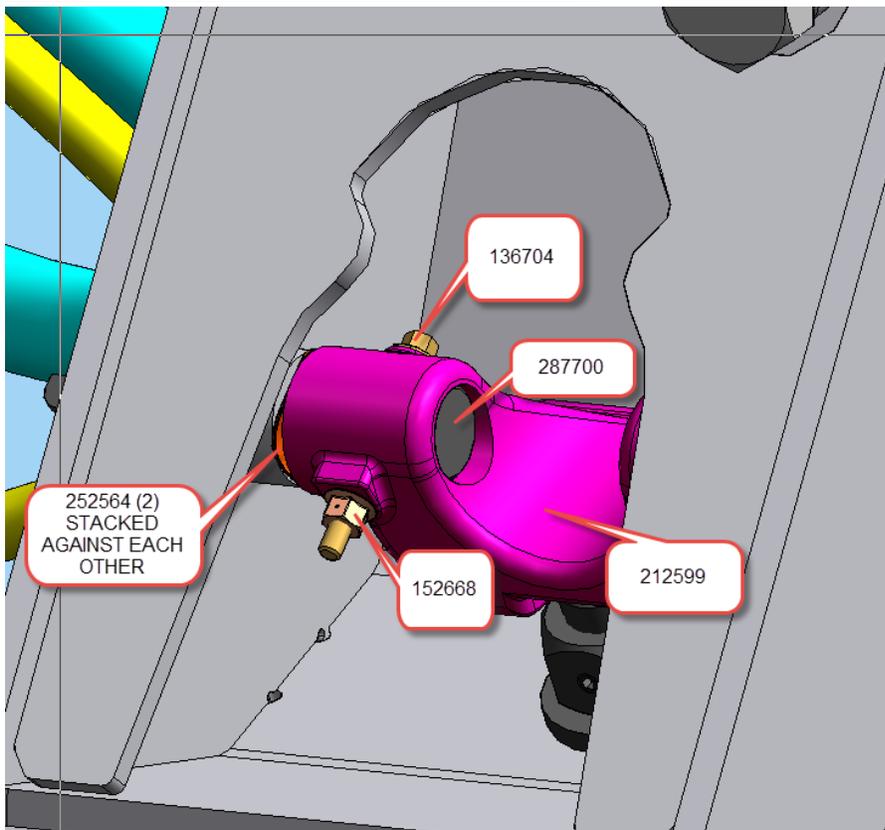
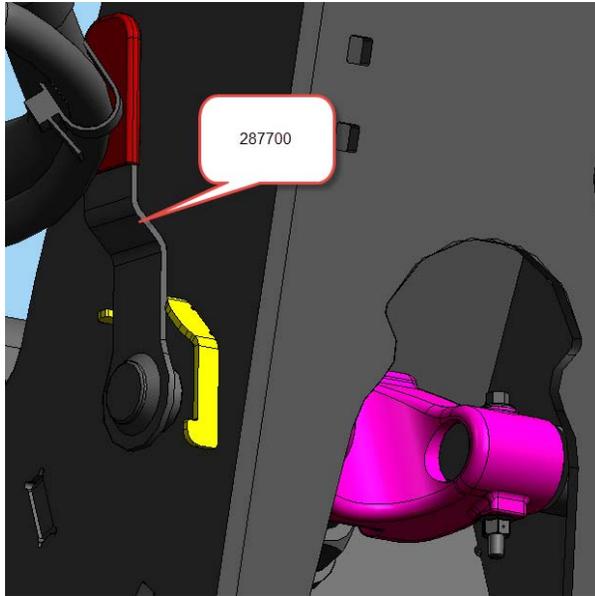
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USING TEMPLATE TO POSITION 295333 GUIDE, NOTE THAT TEMPLATE 276749 IS A LOCATING TEMPLATE ONLY. WELD GUIDE TO SIDE OF ADAPTER FRAME WITH THE THREE WELDS INDICATED BELOW. TEMPLATE HAS NOTCHES SHOWING POSITION OF THE THREE WELDS. SUGGEST TACK WELDING 295333 AT BOTTOM RIGHT CORNER PRIOR TO REMOVING TEMPLATE. REMOVE TEMPLATE BEFORE WELDING GUIDE TO ADAPTER FRAME.



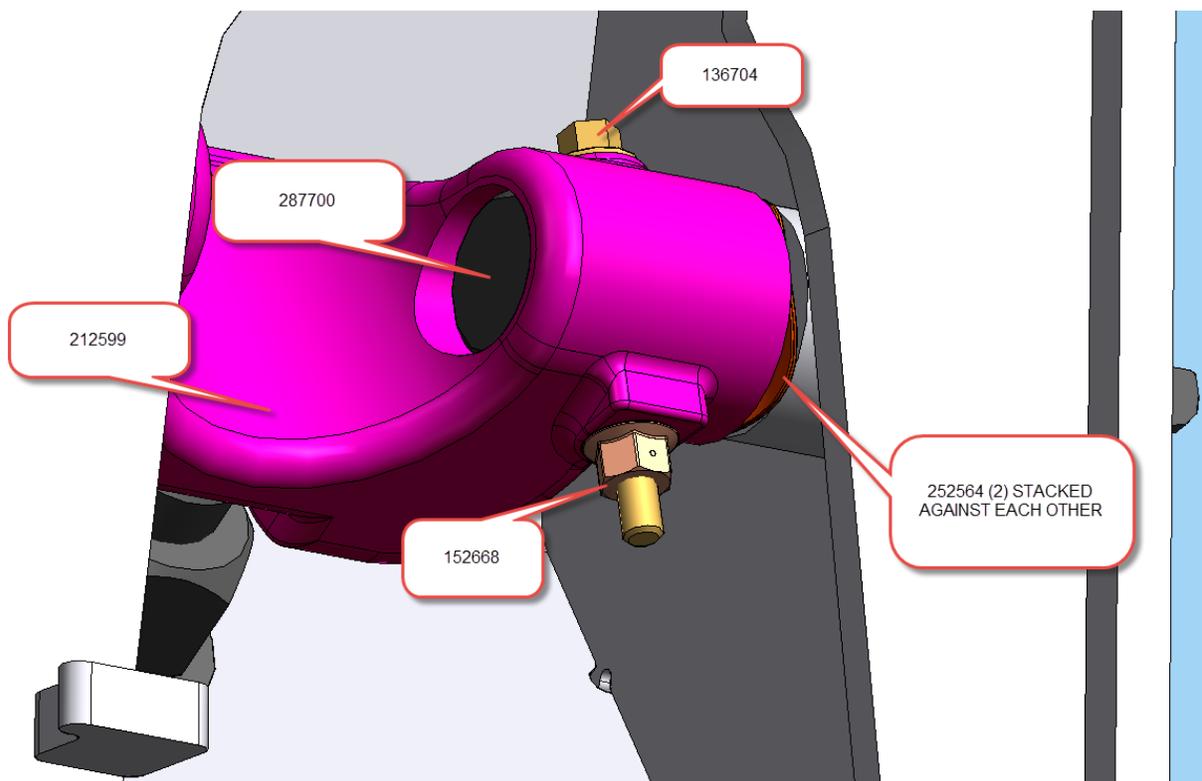
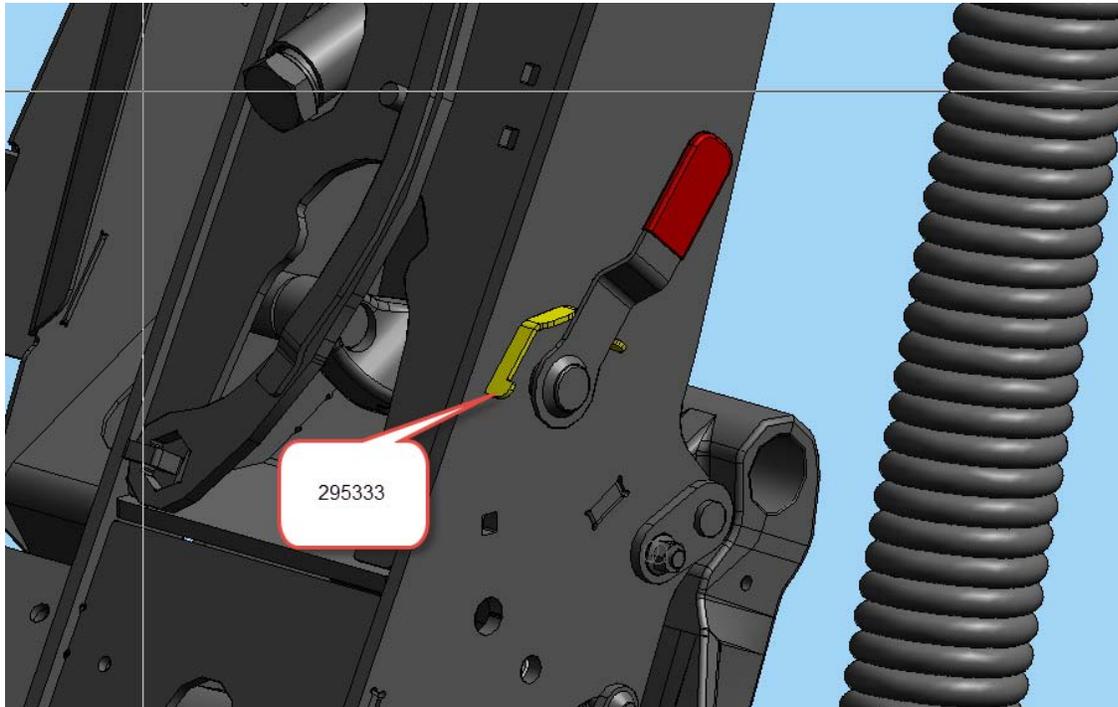
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ASSEMBLE NEW HANDLE ASSEMBLY 287700 SUPPLIED IN KIT AS SHOWN BELOW. ASSEMBLE WAVE WASHERS 252564 (2) (STACKED AGAINST EACH OTHER) SUPPLIED IN KIT BETWEEN TUBE (WELDED TO INSIDE OF FRAME) AND 212599 DOWNSTOP CASTING.



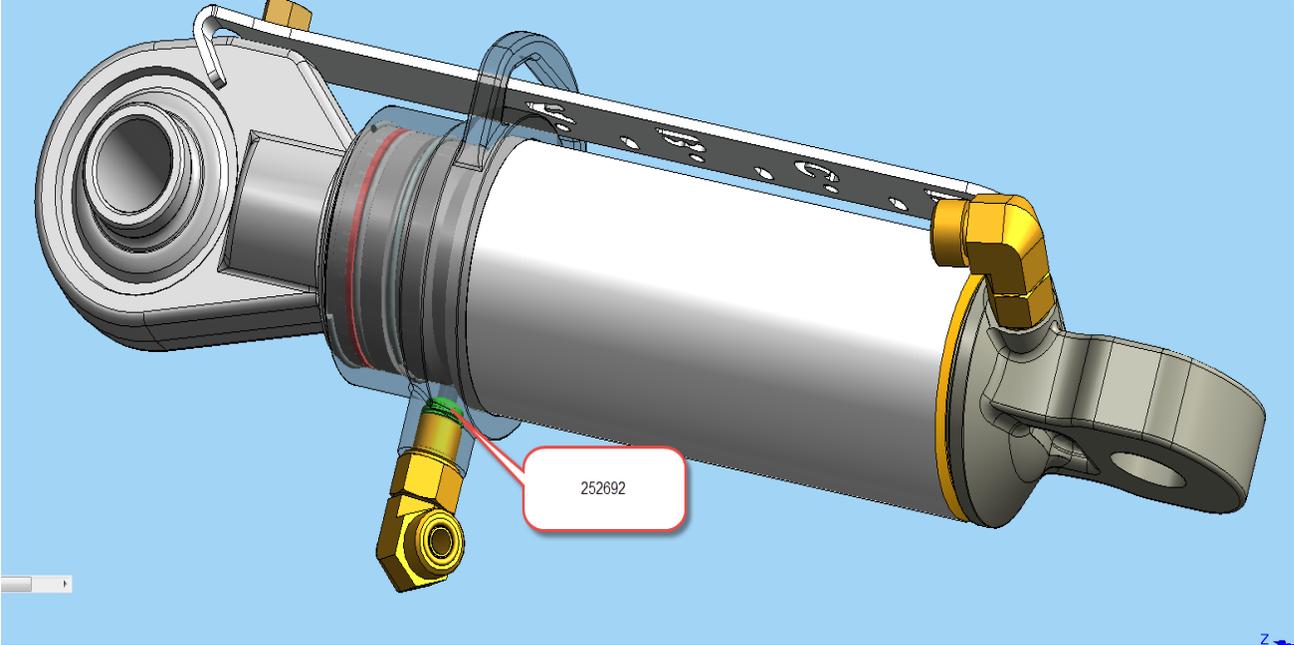
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REPEAT ABOVE PROCEDURE TO WELD ON FLOAT LOCK GUIDE 295333 TO THE RIGHT SIDE OF THE ADAPTER AS SHOWN BELOW. REPLACE RH PIVOT SHAFT WELDMENT 240247 WITH 287700 HANDLE ASSEMBLY. WAVE WASHERS 252564 (2) (STACKED AGAINST EACH OTHER) BETWEEN WELDED TUBE AND 212599.

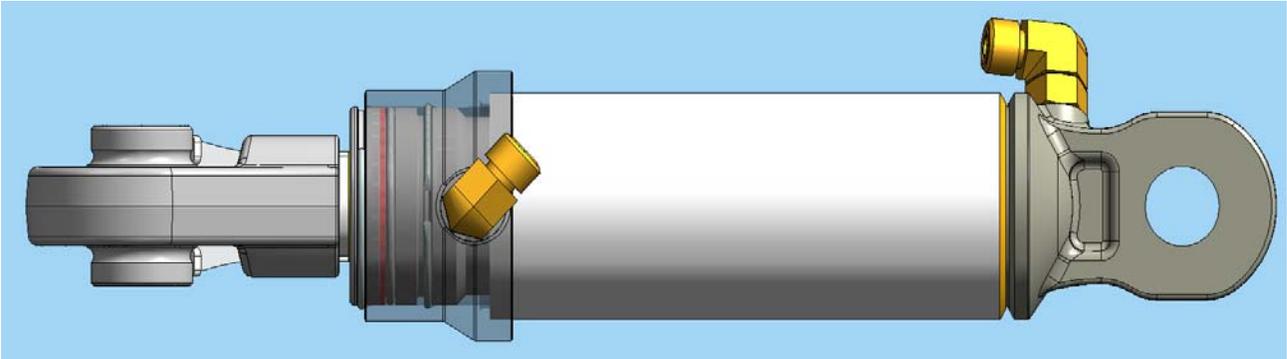


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E) TO SLOW DOWN TILT CYLINDER SPEED WE REQUIRE 252692 RESTRICTOR TO BE ADDED TO HYDRAULIC TOP LINK ASSEMBLY. THREAD 252692 RESTRICTOR INTO ROD END PORT OF CYLINDER UNDER ELBOW FITTING.



ENSURE ELBOW FITTING IS ORIENTATED AS SHOWN BELOW



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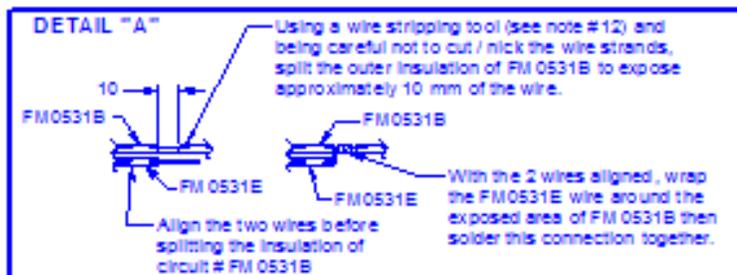
INSTRUCTIONS FOR REWORKING EXISTING HARNESS 213099 INTO NEW HARNESS 287650 ARE AS FOLLOWS.

FM100 Main Harness Rework Instructions - M D # 213099

1. Carefully remove the split loom behind the C2 connector and between the first branch take-offs to expose approximately 300 mm of the harness.
2. Locate circuit FM 0531B in the C2 connector (position F) and using the supplied extraction tool (Deutsch 0411-310-605 / MD 134013), remove the wire from the connector.
3. Place the 50 mm length of the heat shrinkable tubing over the FM0531B wire and position it as far along the wire (towards the take-offs) as possible.
4. Insert the FM0531B wire back into position F of the C2 connector.
5. Insert the FM0531E wire into position X of the C2 connector.
6. Strip approximately 25 mm of insulation from the end of the FM0531E wire.
7. Line up the end of the FM 0531E wire alongside the FM0531B wire and note the position of the newly stripped section of the FM0531E wire. The insulation "split" required for the FM0531B wire should start at the same point as the FM0531E wire. Once the "split" has been done make sure the heat shrink is placed as shown so that it can be re-positioned over the splice after the new circuit wire has been soldered in place.



8. To make the new splice, wrap the end of the exposed FM0531E wire around the exposed section of the FM0531B wire then complete the connection by soldering the wires together using the rosin core solder.



10. After the solder connection has cooled, re-position the heat shrink over the splice (centered) then apply heat to the tubing to shrink it down over the wires / splice and seal the connection.



11. Re-install the loom over the exposed harness section and using the electrical tape secure and seal the loom to the harness.
12. Recommended wire stripping tool - Stripmaster #444, (available from Waytek Wire) or the Katapult wire stripper / cutter # 11063W from Klein Tools.

Items / Tools Required:

Extraction Tool: Deutsch # 0411-310-605 / MD # 134013

Wire stripper: Strip Master # 444 (available from Waytek Wire) or Klein Tools Katapult wire stripper / cutter # 11063W

Soldering Iron

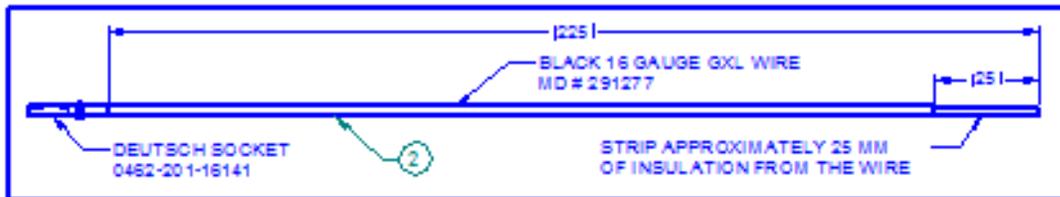
Rosin core solder

Black electrical tape

MD # 291277 - Ground wire (FM0531E) - 225 mm in length

MD # 166161 - Tube - Heat Shrink, Dual Wall, 3/16" I.D. X 50 mm long

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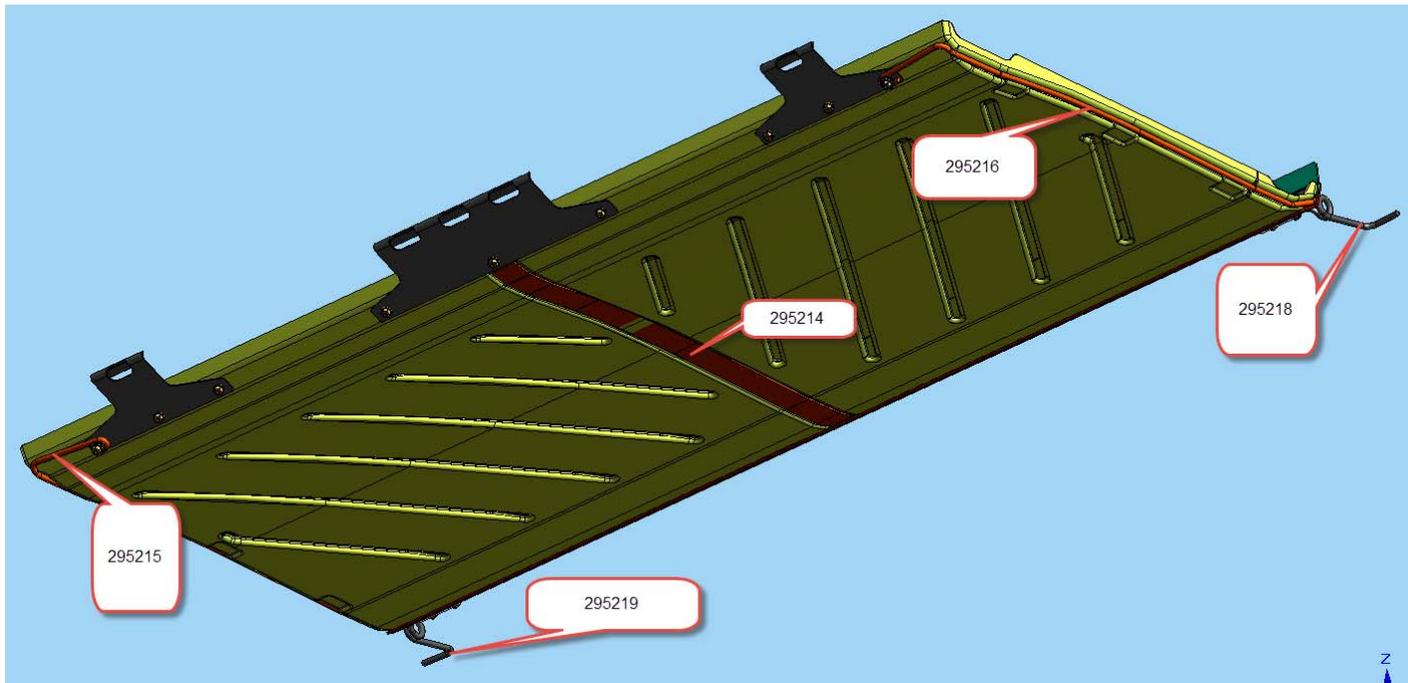
NOTES:

1. WHERE NOTED, THE HARNESS MUST BE CLEARLY AND PERMANENTLY IDENTIFIED WITH THE MANUFACTURERS NAME, MACDON PART NUMBER AND DRAWING ISSUE LEVEL.
2. THE LOOM SHOULD BE TERMINATED AS CLOSE AS POSSIBLE TO THE REAR OF THE STRAIN RELIEF BOOT SO THAT THERE ARE NO EXPOSED WIRES SHOWING AT THE REAR OF THE CONNECTOR. ELECTRICAL TAPE MAY BE USED TO SECURE THE LOOM TO THE STRAIN RELIEF BOOT.

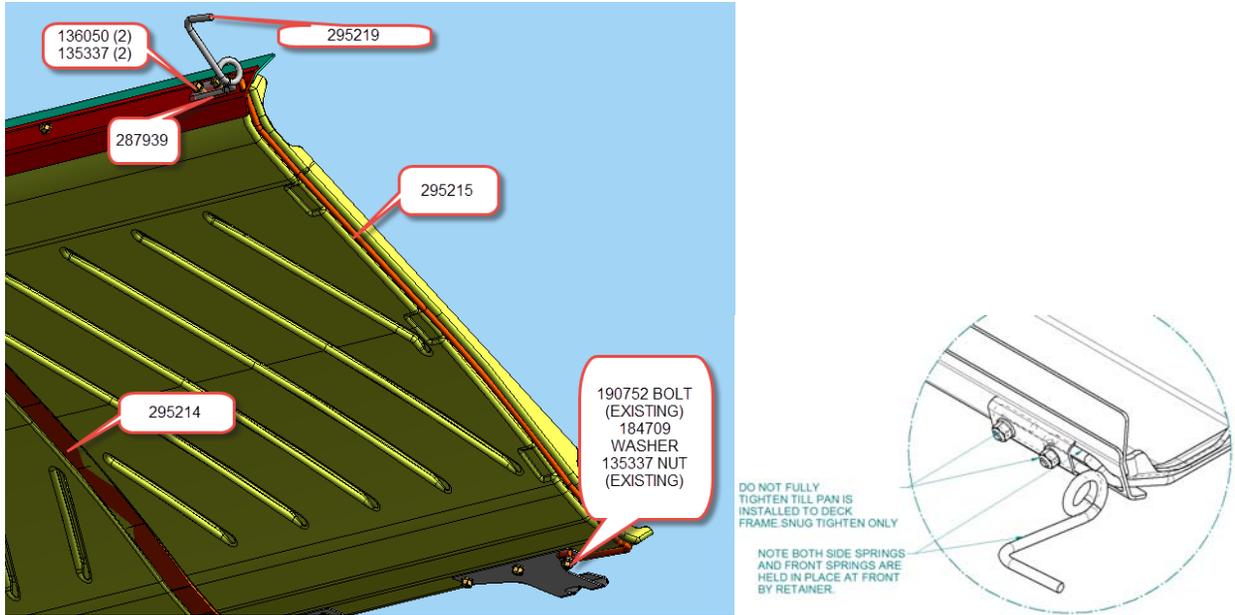


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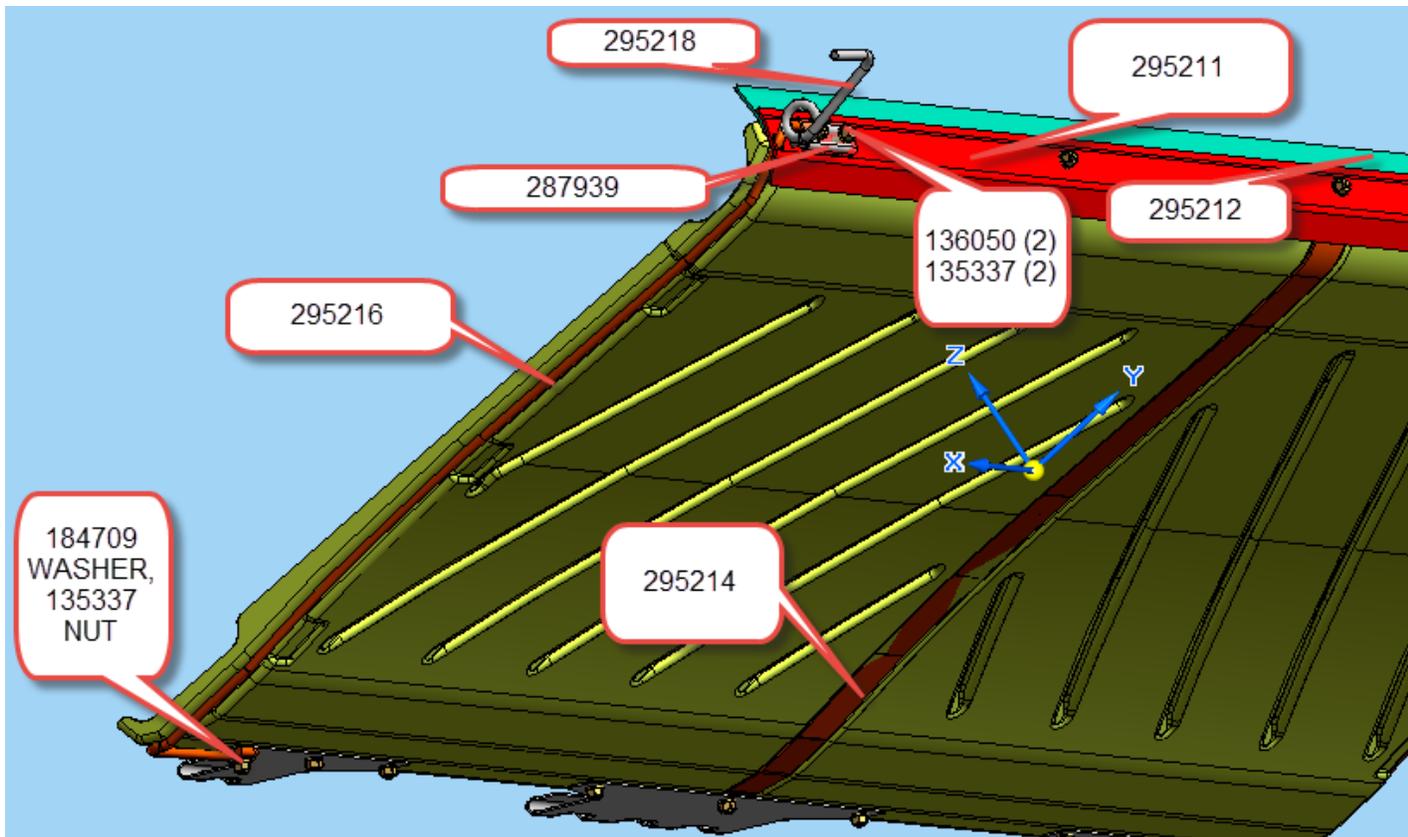
- G) THE FOLLOWING INVOLVES MAJOR CHANGES TO THE DECK PAN ASSEMBLY. REWORK CAN BE COMPLETED WITH ADAPTER IN HEADER PROVIDING CUTTERBAR IS WELL OFF THE GROUND (PUT BLOCKS UNDER CUTTERBAR). THE FRONT OF DECK HAS TO BE DROPPED TO COMPLETE REWORK SUCH AS ACCESS TO FRONT SKIDS AND IDLER CASTINGS. REPLACE ALL THE LIFTER AND SPRINGS TO THE NEW PARTS (SUPPLIED IN KIT) AS SHOWN BELOW. THE NEW PARTS INCLUDE FRONT BAR OUTER PLATE 295211, FRONT PAN FLAP 295212, FRONT BAR INNER PLATE 295213, PAN LIFTER SUPPORT 295214, LH AND RH PAN SIDE SPRINGS 295215, 295216, LH AND RH PAN FRONT SPRING 295218, 295219, FRONT SPRING RETAINER 287939 (2), BOLT136050 (4), NUT 135337 (4) AND WASHER 184709 (2)



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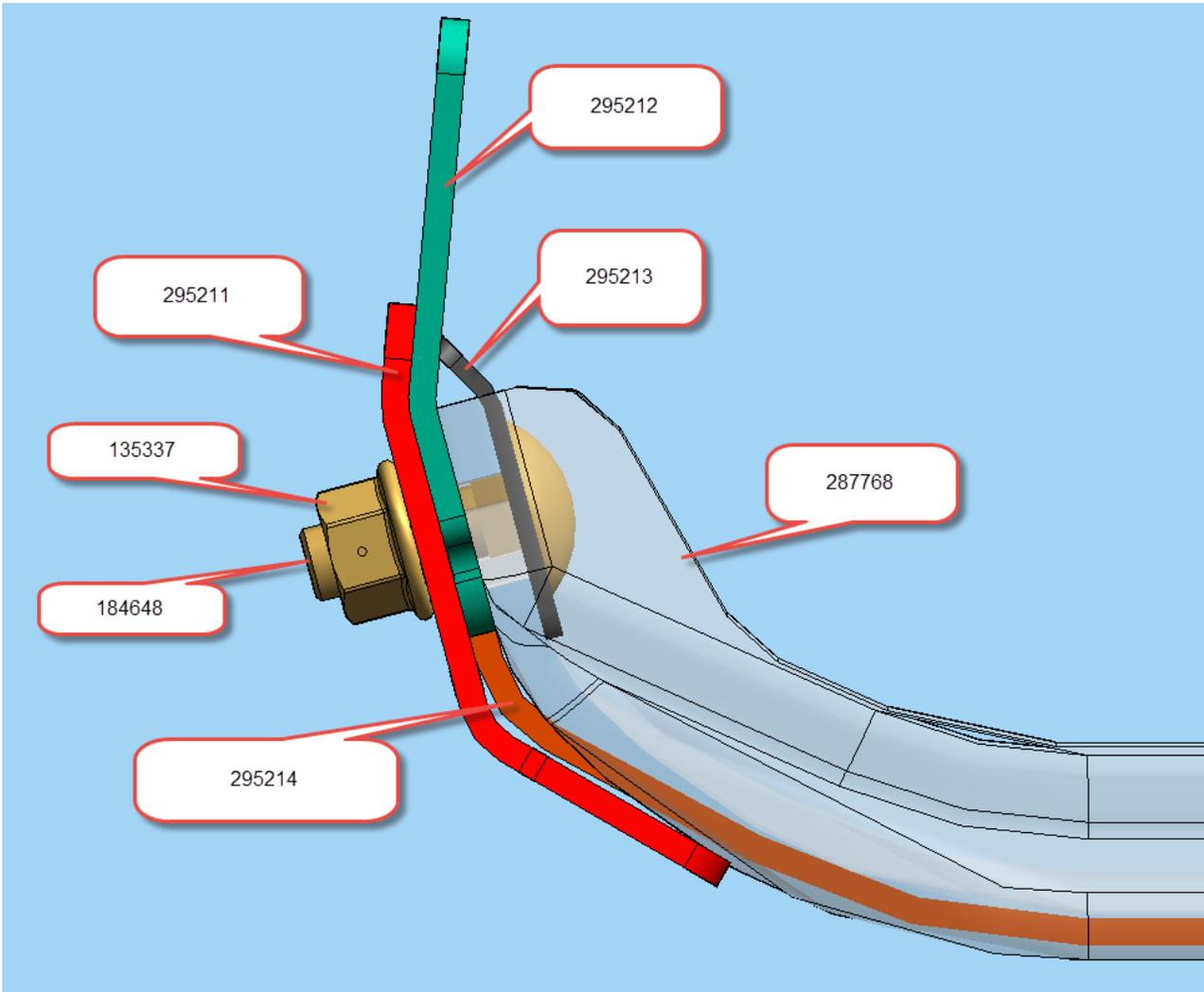
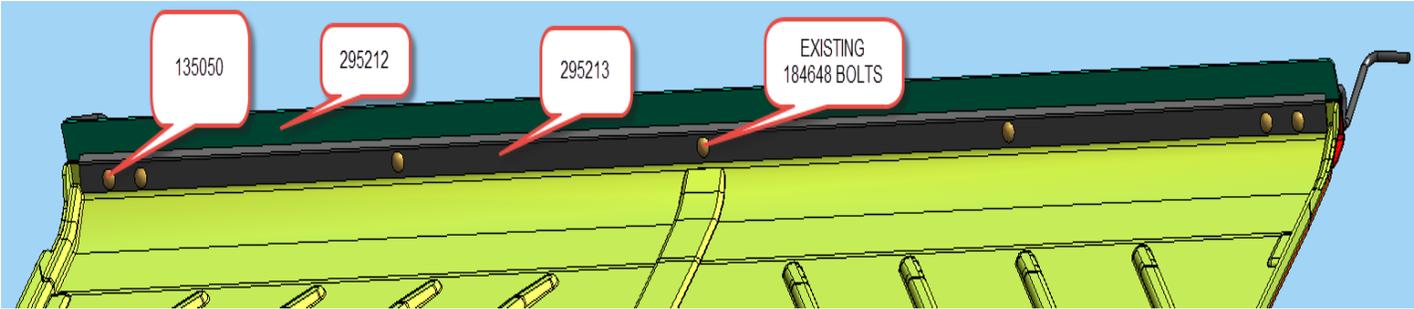


NOTE THAT WASHER 184709 SUPPLIED IN KIT GOES BETWEEN 135337 NUT AND 295215, 295216 SIDE SPRING AT THE REAR CONNECTION. LINE UP FRONT BAR OUTER PLATE 295211 WITH POLY PAN AND DRILL HOLES OUT IN POLY PAN.



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TIGHTEN THE THREE 135337 NUTS ON 184648 BOLTS TO 150 IN LBS.

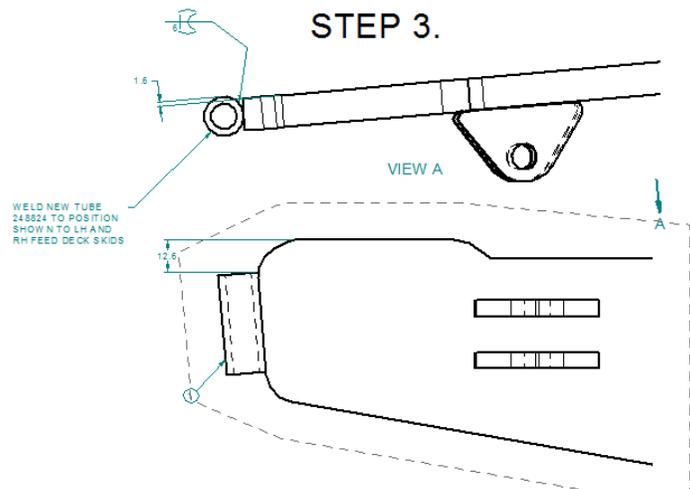
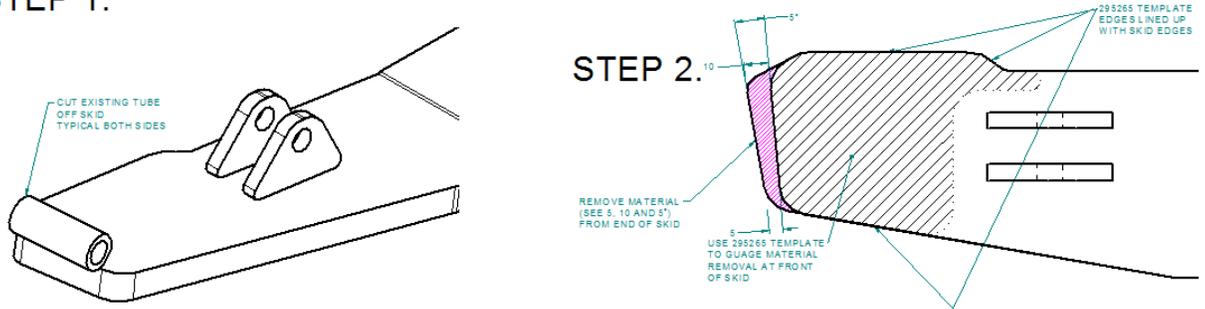


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H) THE FOLLOWING INVOLVES CHANGES TO FEED DECK ASSEMBLY. REMOVE EXISTING DRAPER FROM DECK ASSEMBLY.

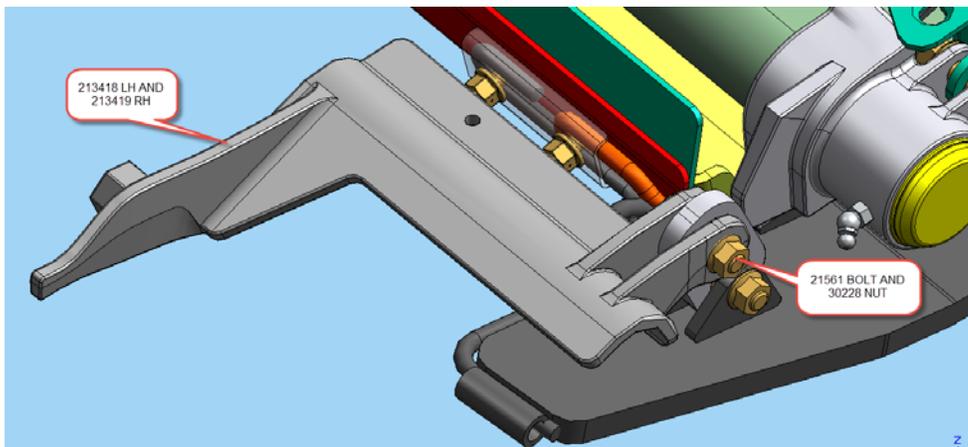
AT FRONT OF DECK CARRIER AS SHOWN BELOW, YOU NEED TO CUT OFF EXISTING TUBES, TRIM FRONT OF SKIDS USING TEMPLATE 295265 AND WELD ON NEW TUBES 248824. LEFT SIDE SHOWN BELOW. YOU NEED TO REWORK RIGHT SIDE ALSO.

STEP 1. REWORK TO FEED DECK CARRIER FRONT SKIDS



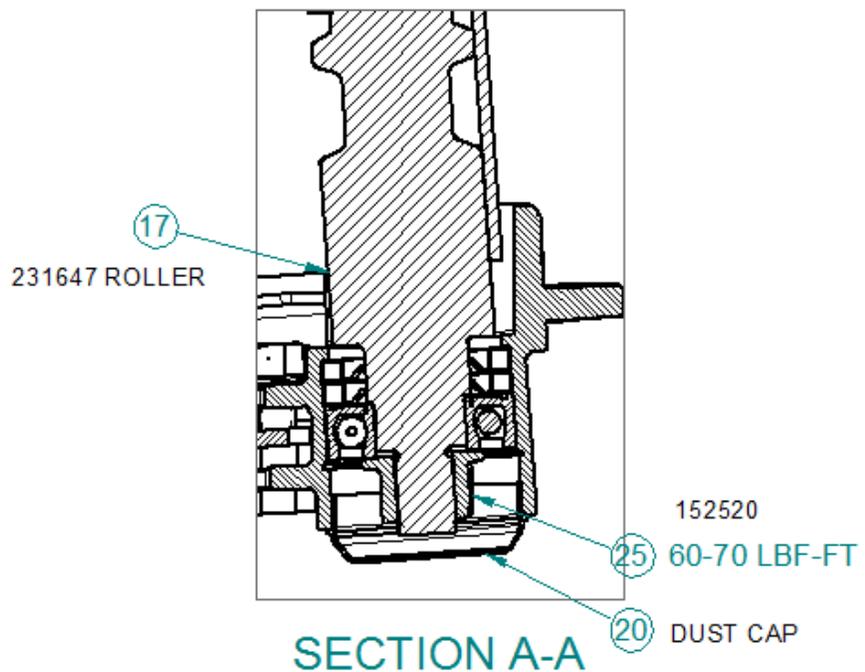
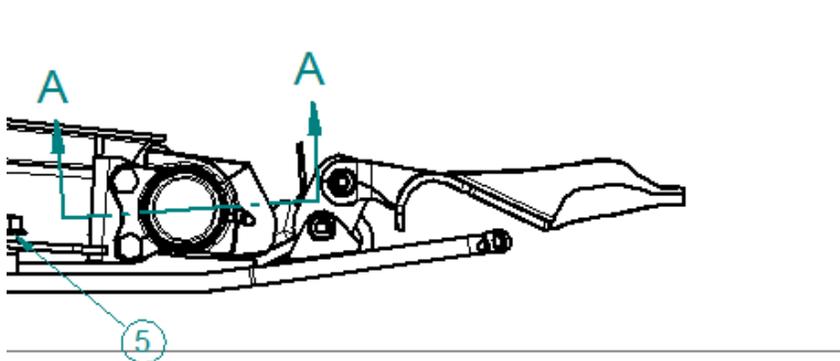
#	PART #	TITLE	QTY
1	248824	TUBE - HND8 PIVOT	2

THE LH AND RH SUPPORTS – ADAPTER LINK MACHINED NEED TO BE CHANGED TO THE NEW 213418 AND 213419.



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TO INSTALL THE NEW IDLER BEARING CUP ASSEMBLIES FOLLOW BELOW



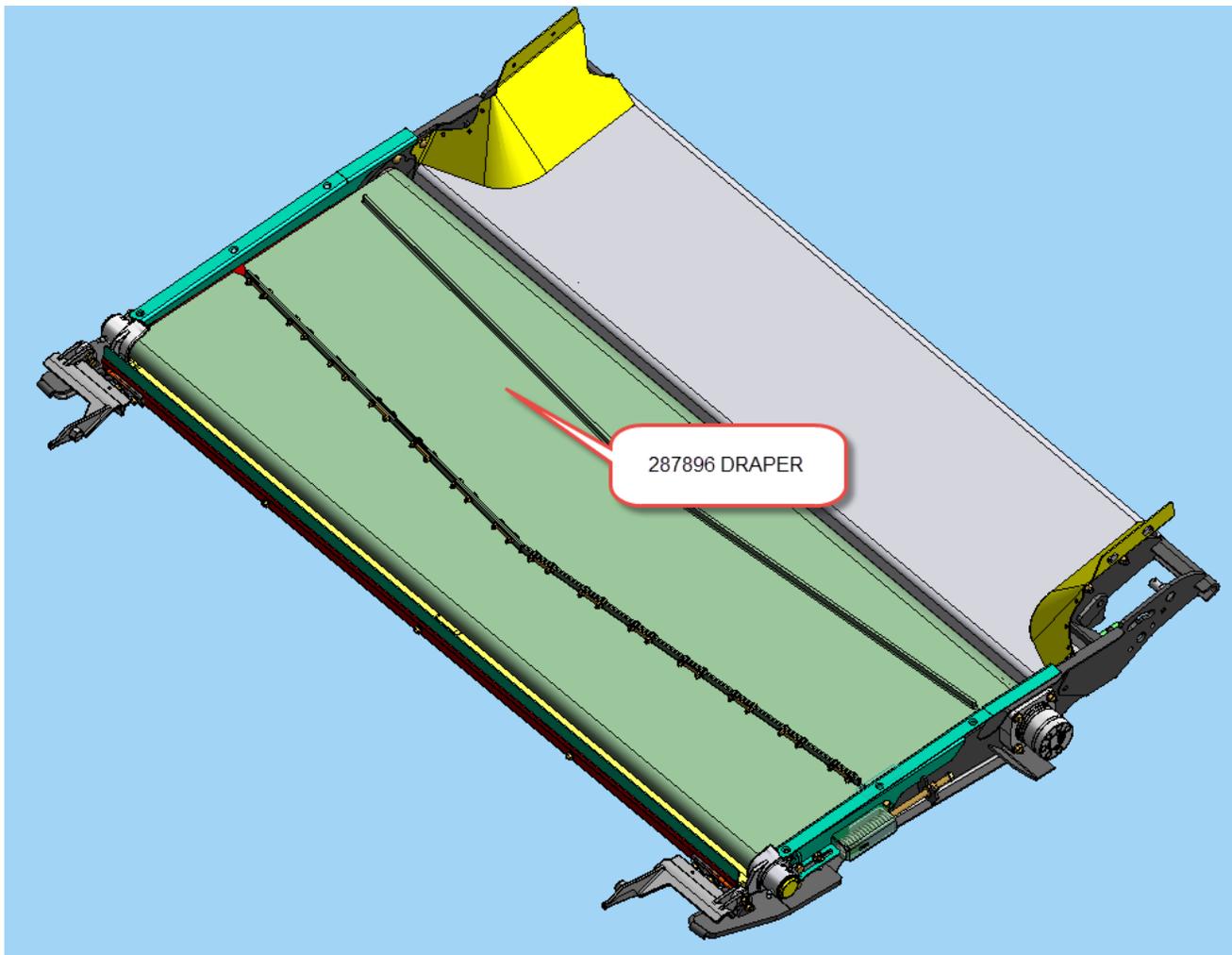
NOTE:

TO INSTALL BEARING CUP ASSEMBLIES;

1. APPLY OIL TO SHAFT SURFACE
2. TO PREVENT SEAL DAMAGE, ENSURE HOUSING IS SQUARE TO SHAFT, CAREFULLY ROTATE HOUSING TO ALLOW BOTH SEALS TO SLIDE ONTO SHAFT, DO NOT FORCE WITH HAND OR TOOL
3. AFTER BEARING AND BOTH SEALS ARE SEATED AROUND SHAFT, TURN ON NUT (152520) AND TIGHTEN.

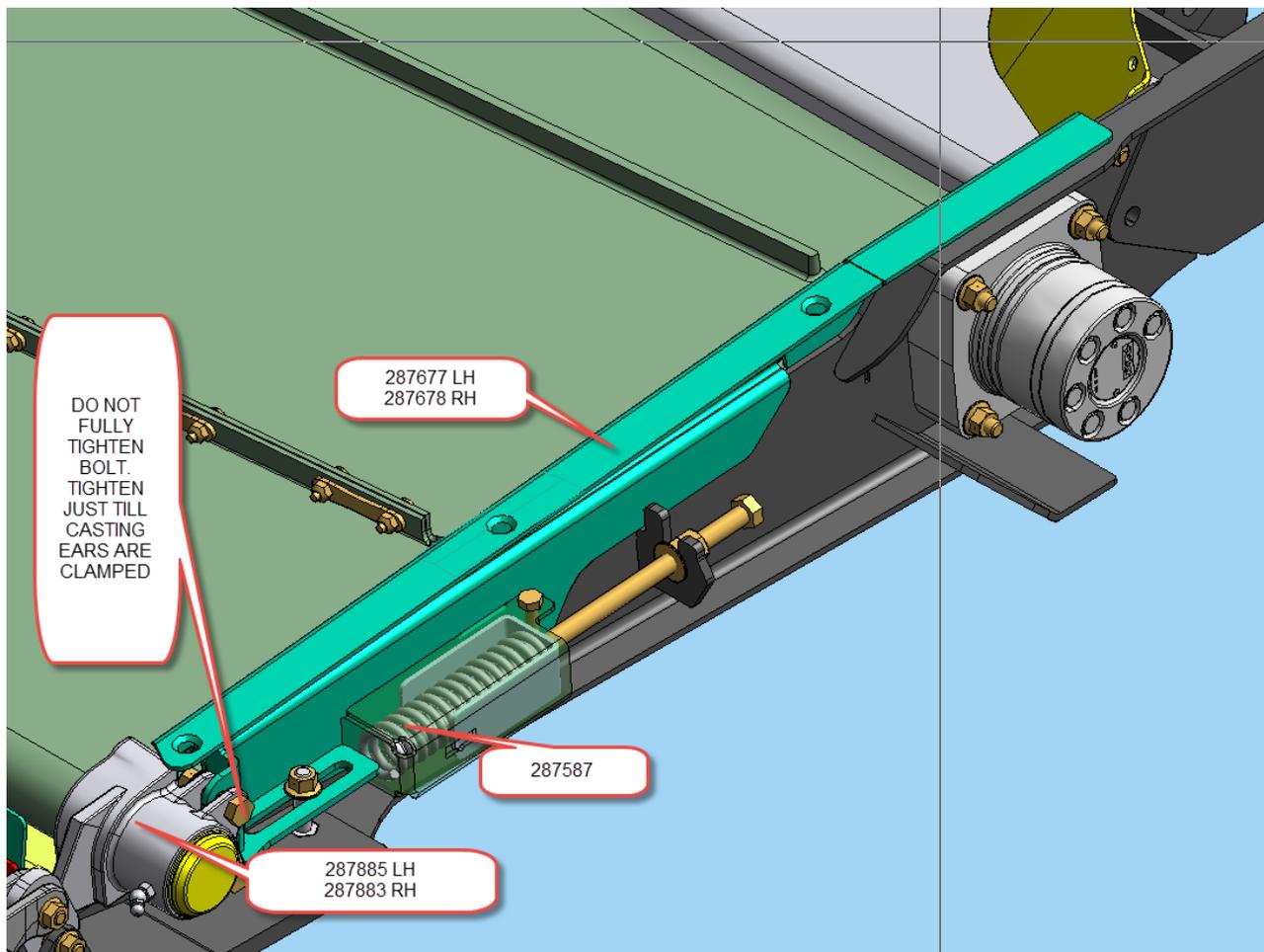
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INSTALL NEW FEED DRAPER AROUND REAR DRIVE ROLLER BEFORE YOU INSTALL FRONT IDLER ROLLER. ONCE FEED DRAPER IS BOLTED TOGETHER SLIDE IDLER ROLLER WITH NEW CASTINGS THROUGH DRAPER. ATTACH NEW IDLER GUIDES 287677 AND 287678 TO IDLER CASTING AND PLACE IN FRAMES. APPLY ABOUT 125 GRAMS OF TALCUM POWDER TO INSIDE OF FEED DRAPER. APPLY LIBERALLY TO "V" GUIDE AREA AND ACROSS ENTIRE WIDTH. INSTALL WITH EXISTING CONNECTORS AND HARDWARE. NOTE THAT CHEVRON CLEATS ON TOP MUST POINT TOWARDS FRONT.

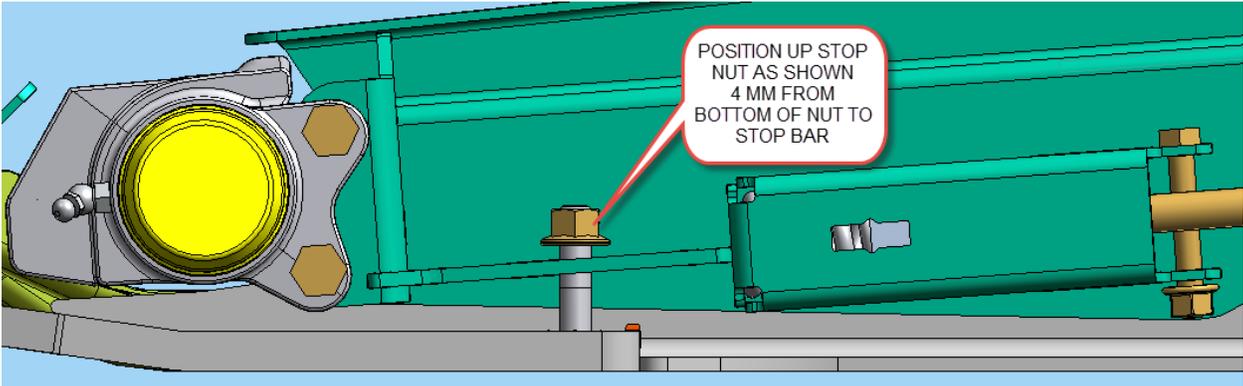
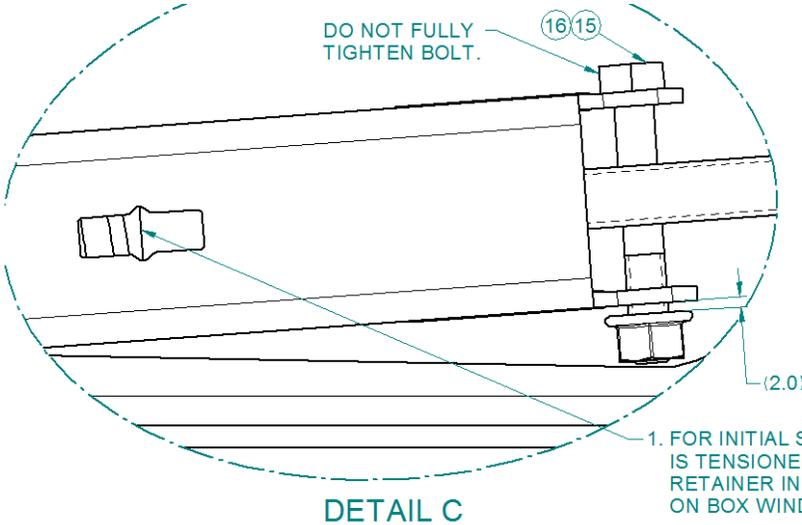


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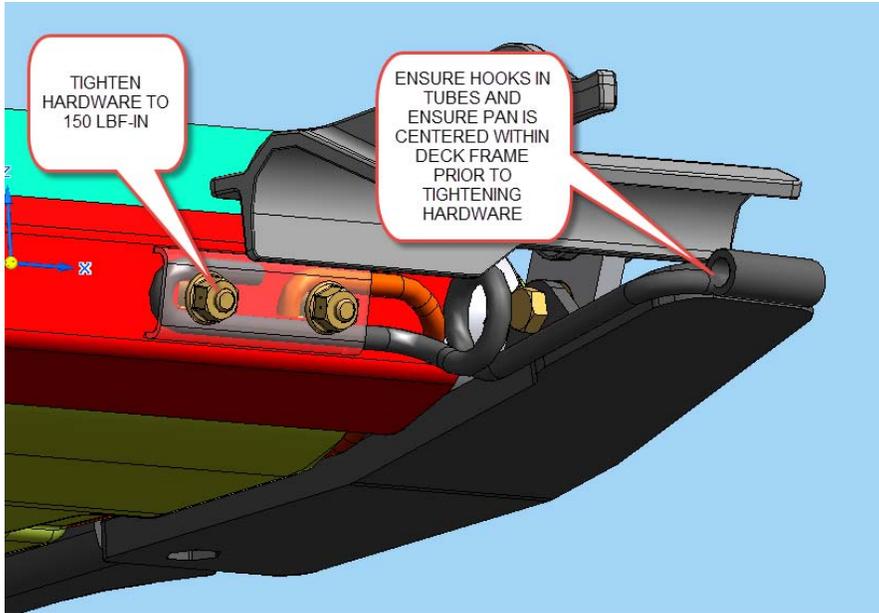
THE LH AND RH GUIDE -IDLER ADJUSTMENT NEED CHANGED TO THE NEW 287677 AND 287678 SUPPLIED IN KIT. THE COMPRESSION SPRINGS NEED CHANGED TO THE NEW 287587 SPRINGS. THE IDLER CUP ASSEMBLIES 248738, 248740 NEED TO BE CHANGED TO THE NEW 287885 AND 287883 IDLER CUP ASSEMBLIES.



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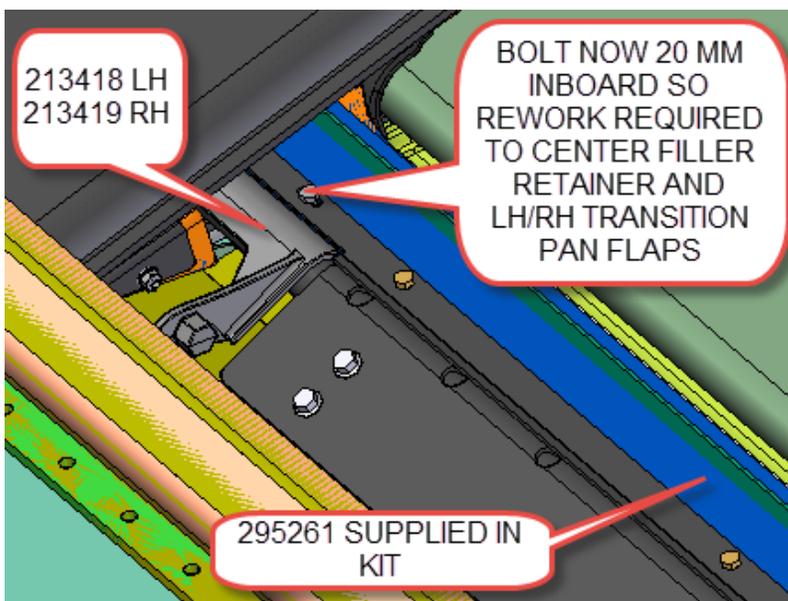


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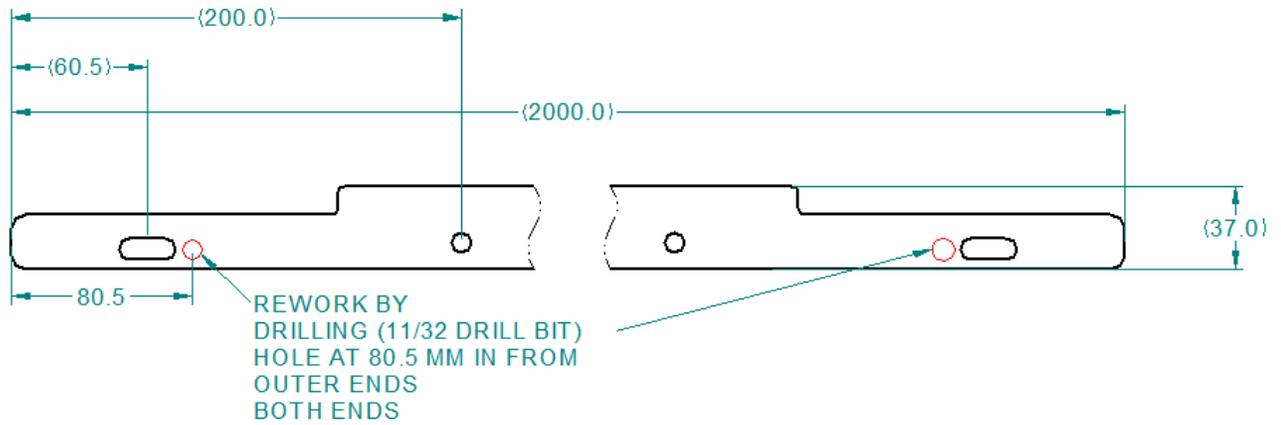
TO LATCH FLOAT MODULE TO THE HEADER MAKE SURE LATCH ASSEMBLY AND LINKS ARE BACK AWAY FROM THE HEADER. PLACE HEADER TILT AT POSITION (D) AND DROP HEADER AND MODULE TO THE GROUND UNTIL YOU ARE ABLE TO LATCH MODULE TO HEADER.

THE NEW ADAPTER LINKS HAVE BOLT SECURING CENTER FILLER RETAINER, CENTER PAN FILLER AND TRANSITION PAN FLAPS RELOCATED INBOARD 20 MM, REQUIRING REWORK AS FOLLOWS TO CENTER FILLER RETAINER AND LH AND RH TRANSITION PAN FLAPS. EXISTING CENTER PAN FILLER 240847 GETS REPLACED BY 295261 SUPPLIED IN KIT. NOTE BELOW IMAGE HAS RH CORNER FILLER HIDDEN TO BETTER SHOW PARTS UNDERNEATH.

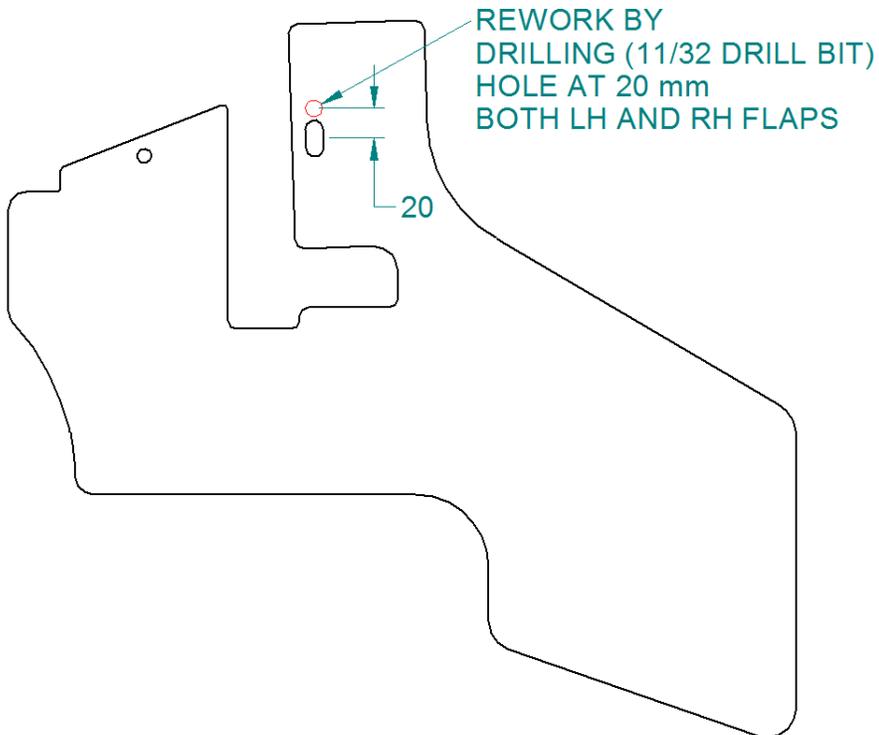


2016 FM100 (ALL) REWORK KIT

REWORK EXISTING CENTER FILLER RETAINER 213236 INTO 287778 BY DRILLING TWO HOLES AS SHOWN BELOW. OTHER OPTION INSTEAD OF HOLES IS TO LENGTHEN EXISTING SLOTS BY 13 MM .

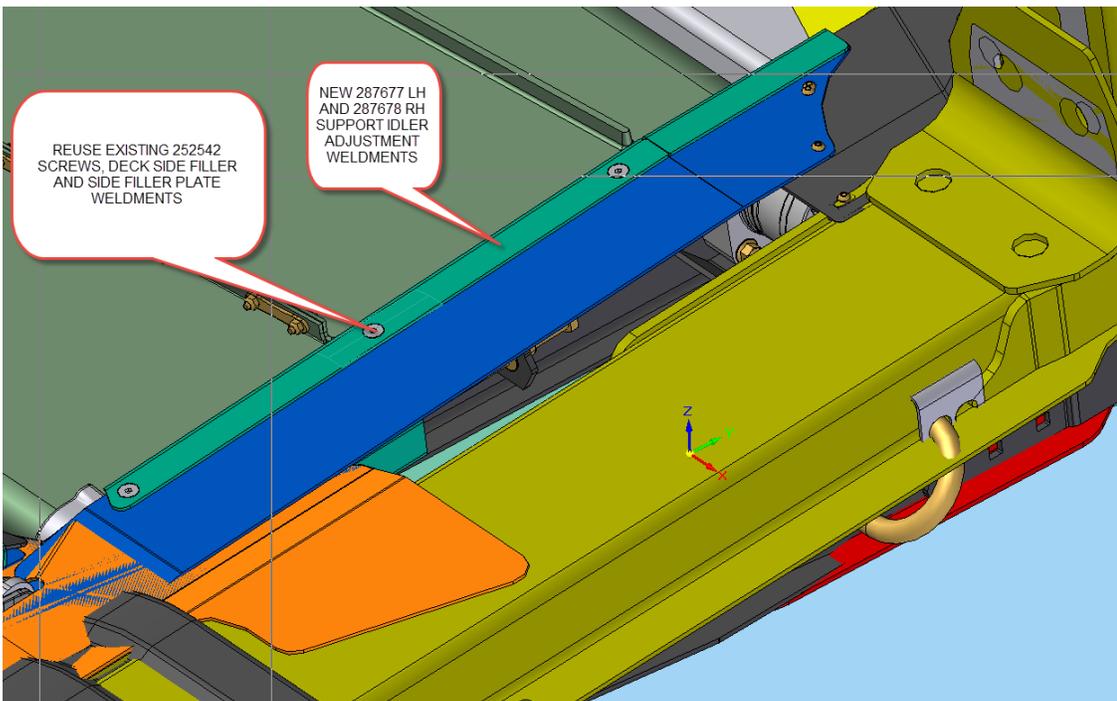
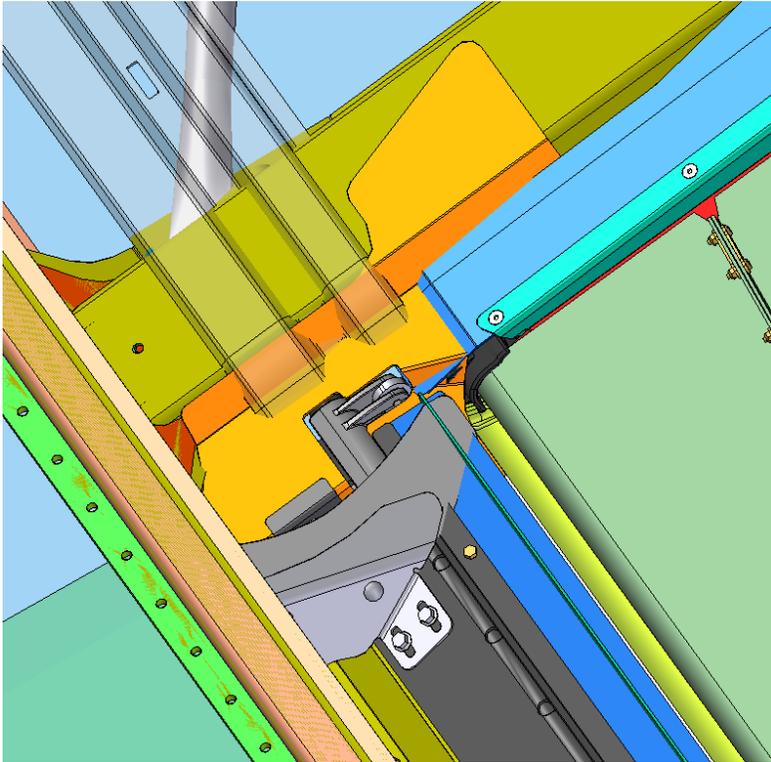


REWORK TRANSITION PAN FLAPS BY DRILLING HOLE (AS SHOWN BELOW) OR EXTENDING SLOT BY 13 MM.



2016 FM100 (ALL) REWORK KIT

BELOW IMAGE SHOWS CORNER FILLERS AND TRANSITION PAN FLAPS. SIDE DECK HIDDEN TO BETTER SHOW PARTS UNDERNEATH. NOTE THAT TRANSITION PAN FLAPS ARE ASSEMBLED BETWEEN PAN CENTER FILLER 295261 AND ADAPTER LINK SUPPORT.



2016 FM100 (ALL) REWORK KIT

THE HEADER SHIELD DECALS ARE TO BE REPLACED. REMOVE OLD DECALS AND REPLACE WITH NEW. THIS KIT HAS THE BASE DECAL AND THE SIZE DECAL. THE STRIPE AND FRONT DECALS ARE IN THE COMBINE SPECIFIC REWORK KITS.

