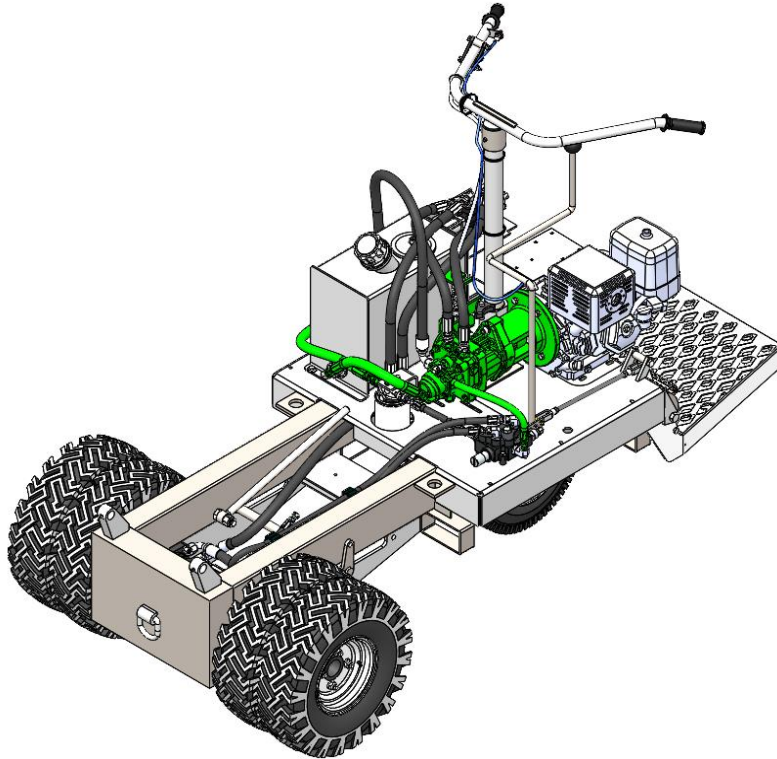


CONVERSION TO HYDRO-GEAR PUMP SYSTEM

This document is for assisting the technician in installing kit part #809939 for converting the WBH16 from Eaton to a Hydro-Gear pump.



Safety First:

- ✓ To avoid injury, read and understand Operator's Manual before working on this machine.
- ✓ Follow safety lock-out tag-out procedures:
 - Remove ignition key
 - Disconnect battery cables
- ✓ Intended for experienced qualified technicians only
- ✓ **DO NOT** open hydraulic lines or loosen fittings while the engine is running, hydraulic oil can penetrate the skin, blind and cause burns
- ✓ Always wear safety glasses and appropriate attire

Tools Needed:

- Sockets and ratchet set
- Needle nose pliers
- Wrench set
- Hand grinder or Sawzall
- Hand drill
- 3/8" drill bit



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Conversion Kit Part #809939 Parts List

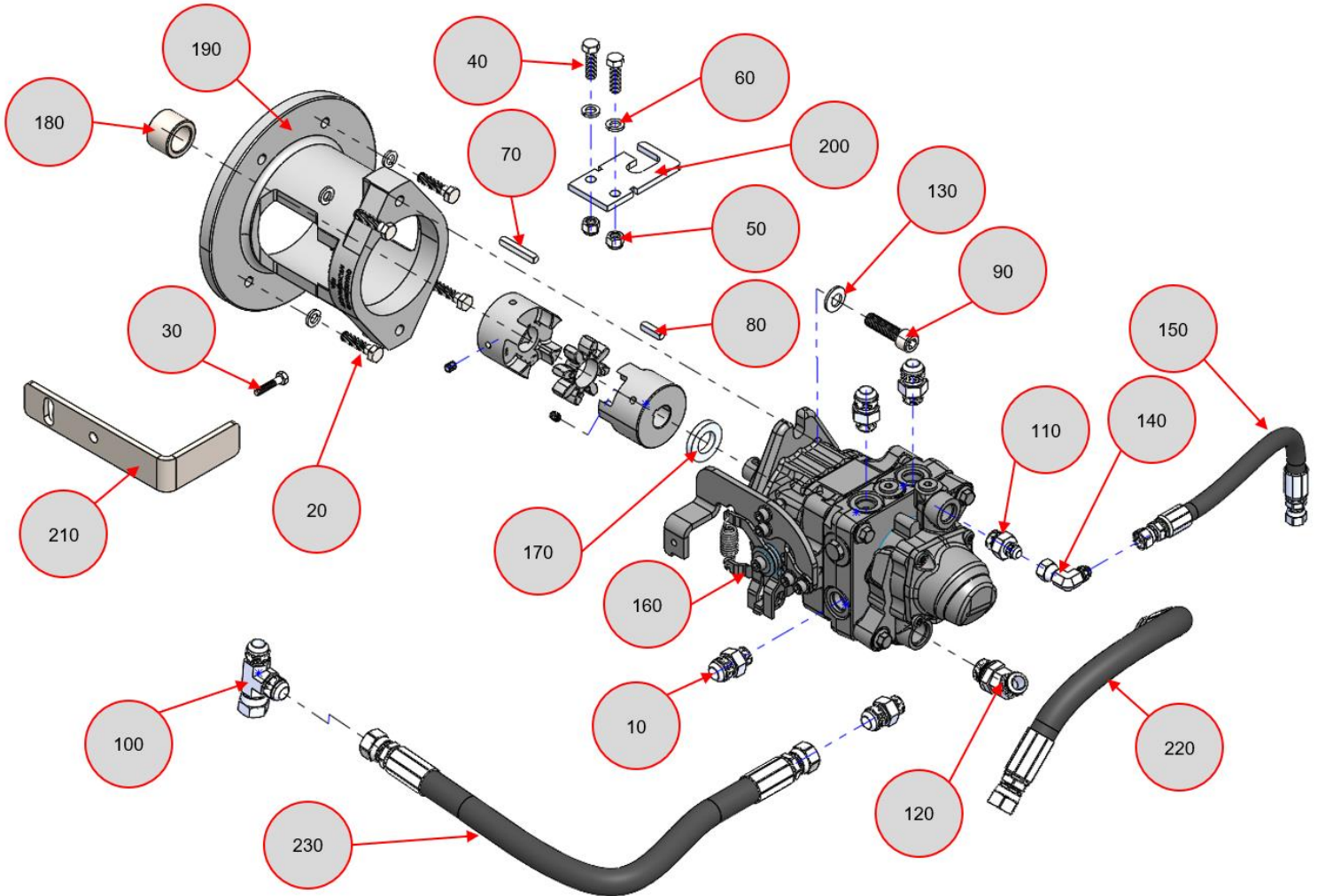
Reference following page for corresponding parts item # bubble callouts

Item #	Part No.	Description	QTY
10	CIP3314	Adapter 10-8 F5OX-S (CAD)	4
20	CIP492313J	Hex Head Bolt 3/8"NC X 1.1/2" G5 G.	4
30	CIP492358J	Hex/H Bolt 1/4"NC X 1.1/4" G5 G.	1
40	CIP492376J	Hex Head Screw 3/8"NC X 1.1/4" G5 G	2
50	CIP492583J	Nylon Insert Nut 3/8" NC G8 G. (CAD,2D)	2
60	CIP492624J	LOCK WASHER 3/8" G. (CAD,2D) DH	6
70	CIP500194	Key 1/4" X 45 MM (CAD,2D)	1
80	CIP502625	Key 1/4" X 25MM (CAD,2D)	1
90	CIP510717J	S/C SCR, 1/2-13 X1-3/4 G8.8, ZINC PLT DH	2
100	CIP512189	Adapter 10 R6X-S (CAD,PDF)	1
110	CIP512190	Adapter 6-8 F5OX-S (CAD,PDF)	1
120	CIP514230	Adapter 10 V5OX-S (CAD,PDF)	1
130	CIP519337J	Belleville Washer 1/2" G. 25.2-13-2.5MM	1
140	CIP519967	Adapter 6 C6X-S (CAD,PDF)	1
150	CIP808648	Hose 6-6-6 (376.5 mm)	1
160	CIP808770	Pump ASSY. with Activation Lever	1
170	CIP809826	Pump-Coupling Spacer	1
180	CIP809845	Engine-Coupling Spacer	1
190	CIP809988	Coupling-Housing Kit for Engine and Pump	1
200	CIP810078	Throttle Cable Bracket	1
210	CIP810079	Neutral Stopper	1
220	CIP810080	Hose 10-10-10 (392 mm)	1
230	CIP810081	Hose 10-10-10 (583 mm)	1

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CONVERSION TO HYDRO-GEAR PUMP SYSTEM

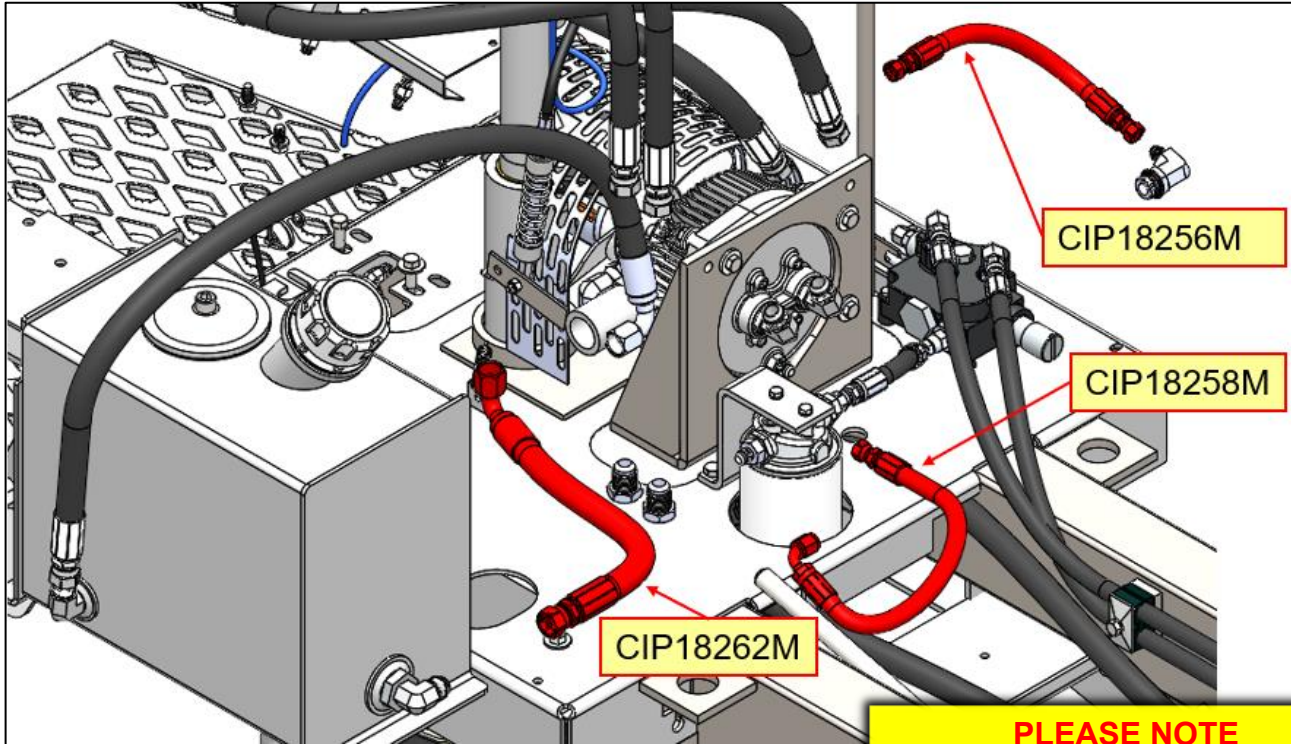
Conversion Kit Part #809939 Parts Illustration



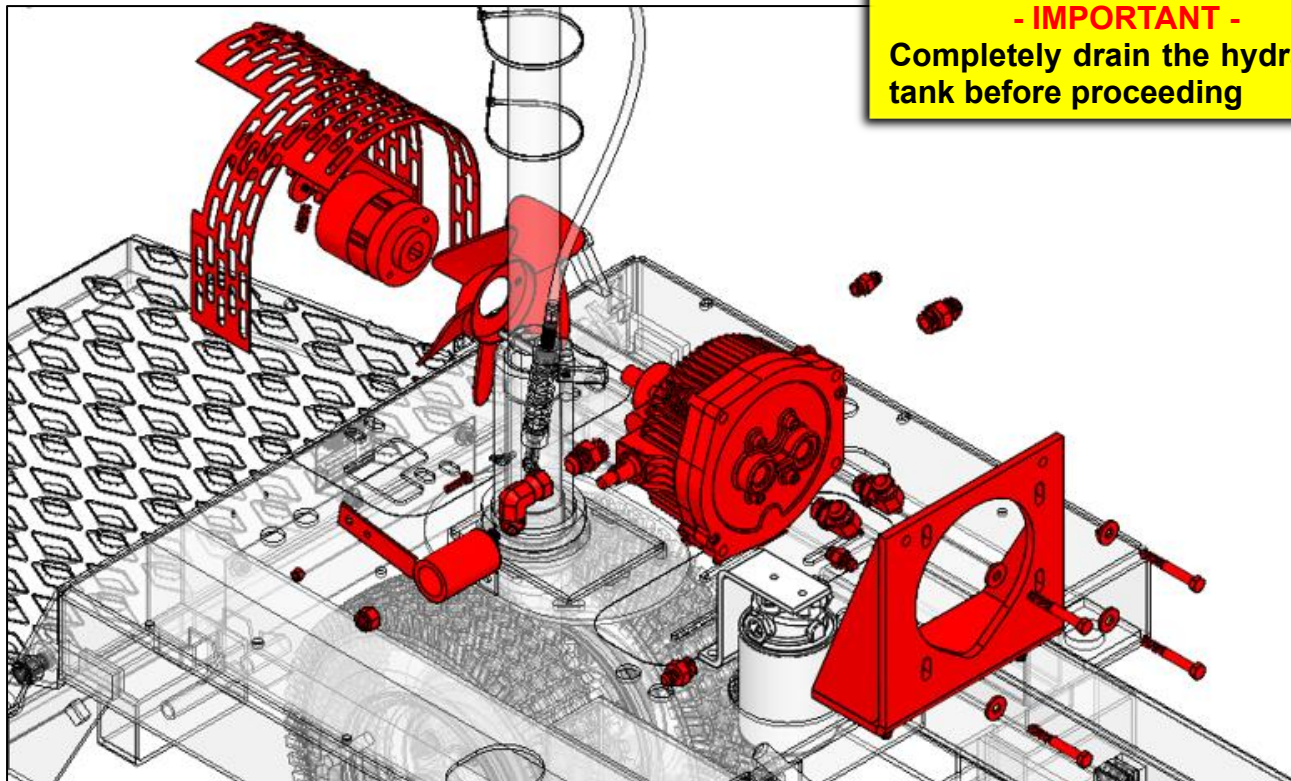
© COPYRIGHT 2024, MULTIQUIP INC, Rev. 0 (09032024)

CONVERSION TO HYDRO-GEAR PUMP SYSTEM

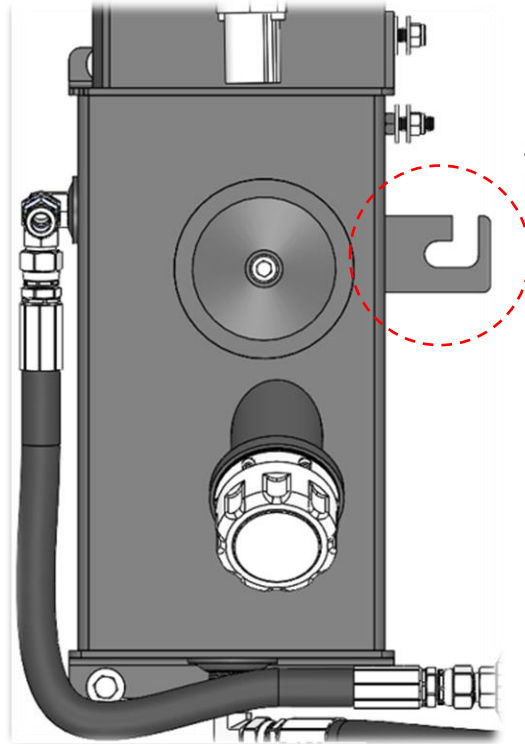
Remove the Following Red Highlighted Existing Hoses and Components



**PLEASE NOTE
- IMPORTANT -
Completely drain the hydraulic
tank before proceeding**

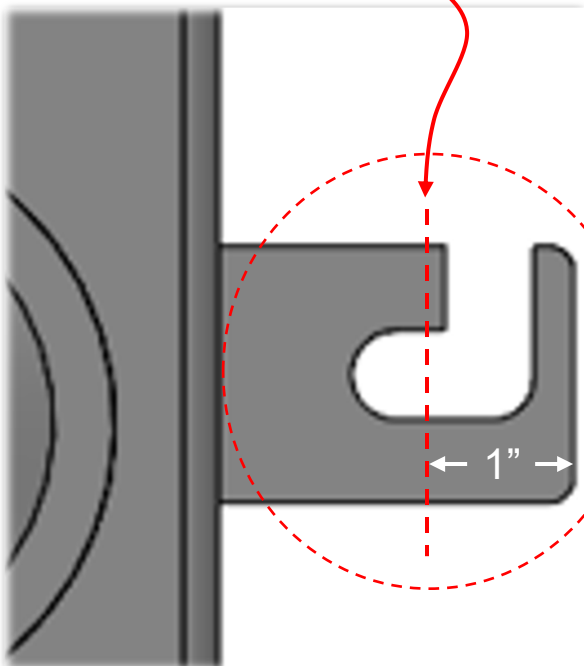


CONVERSION TO HYDRO-GEAR PUMP SYSTEM

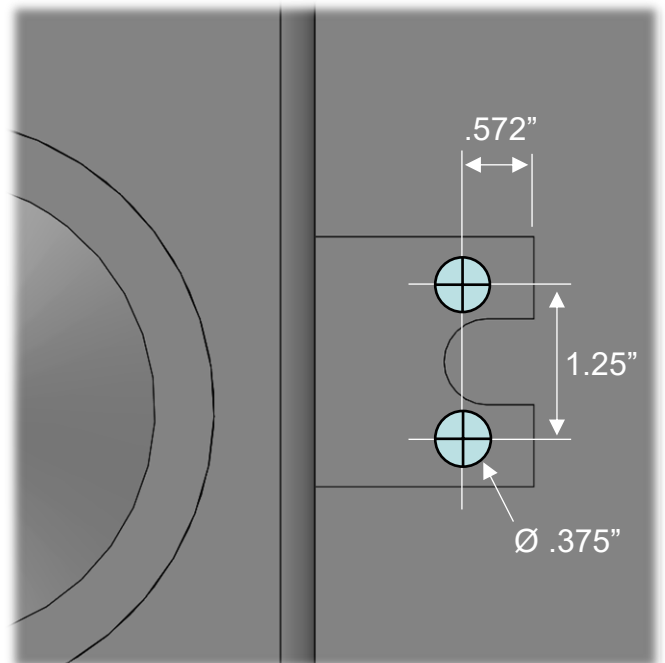


Speed control cable
bracket modification

Cut with grinder or Sawzall

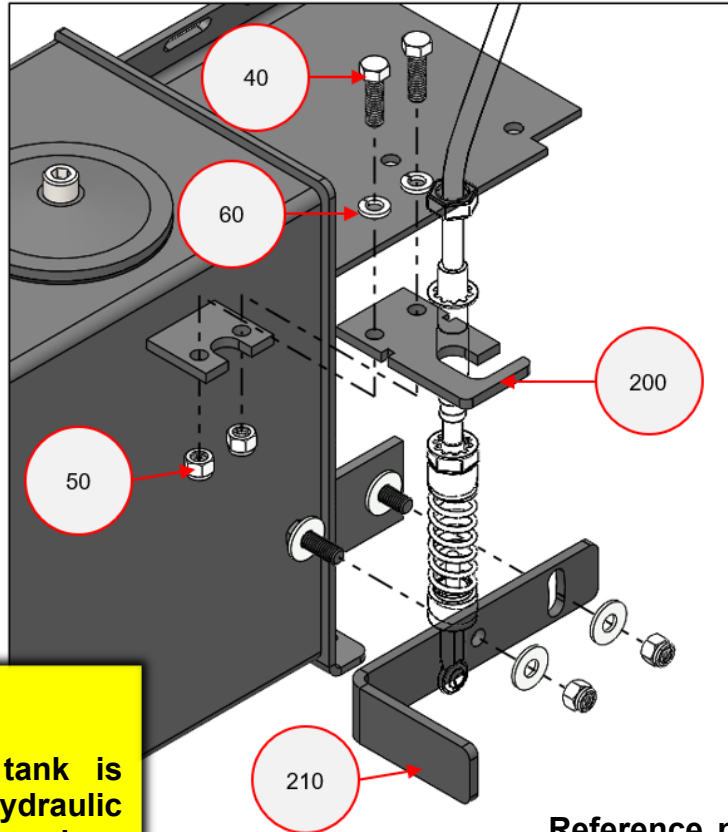


Drill two holes into cable support bracket
to following specified dimensions.



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

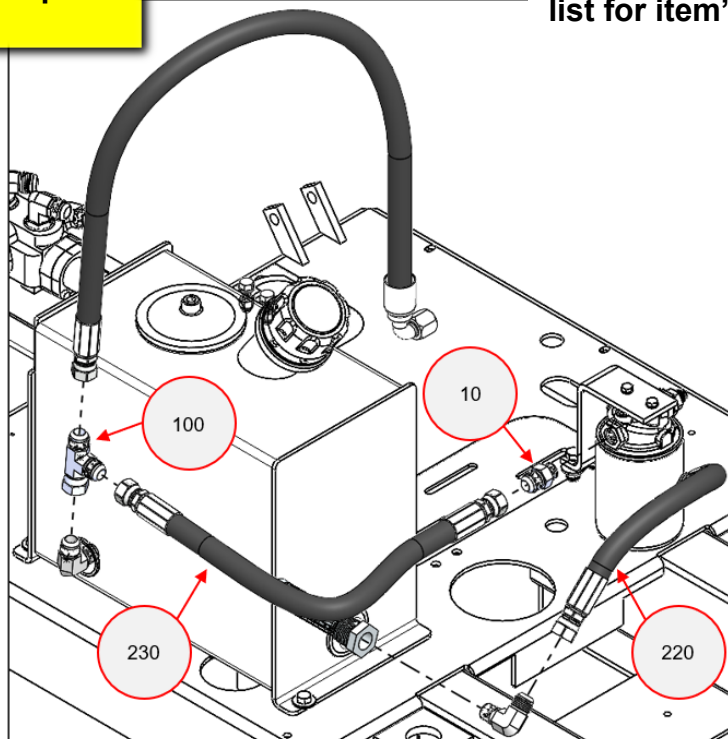
**Begin Kit Installation
(New Parts)**



**PLEASE NOTE
- IMPORTANT -**

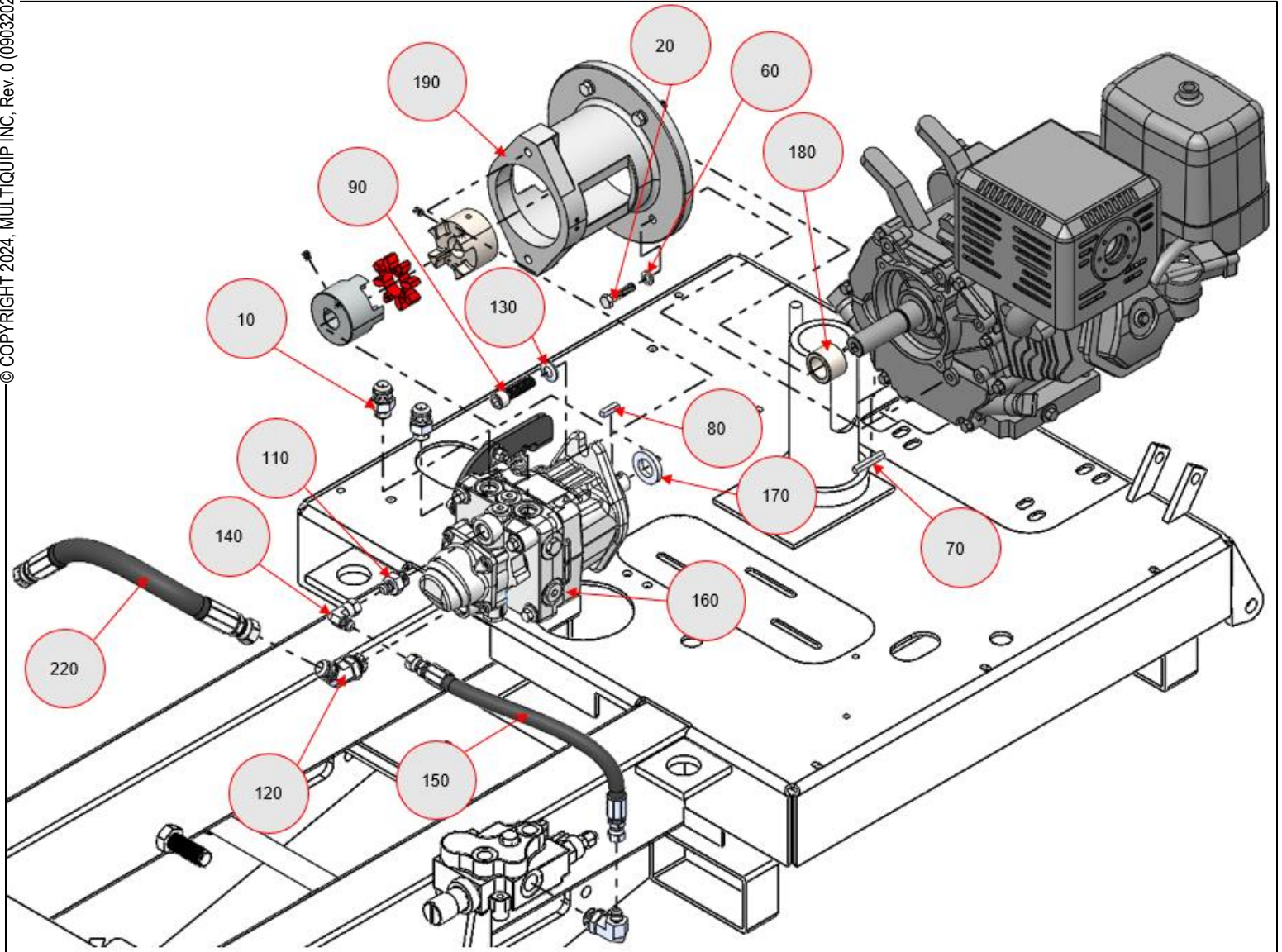
While the hydraulic tank is empty, remove the hydraulic tank screen to clean or replace as needed

Reference page #2 parts list for item's description



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

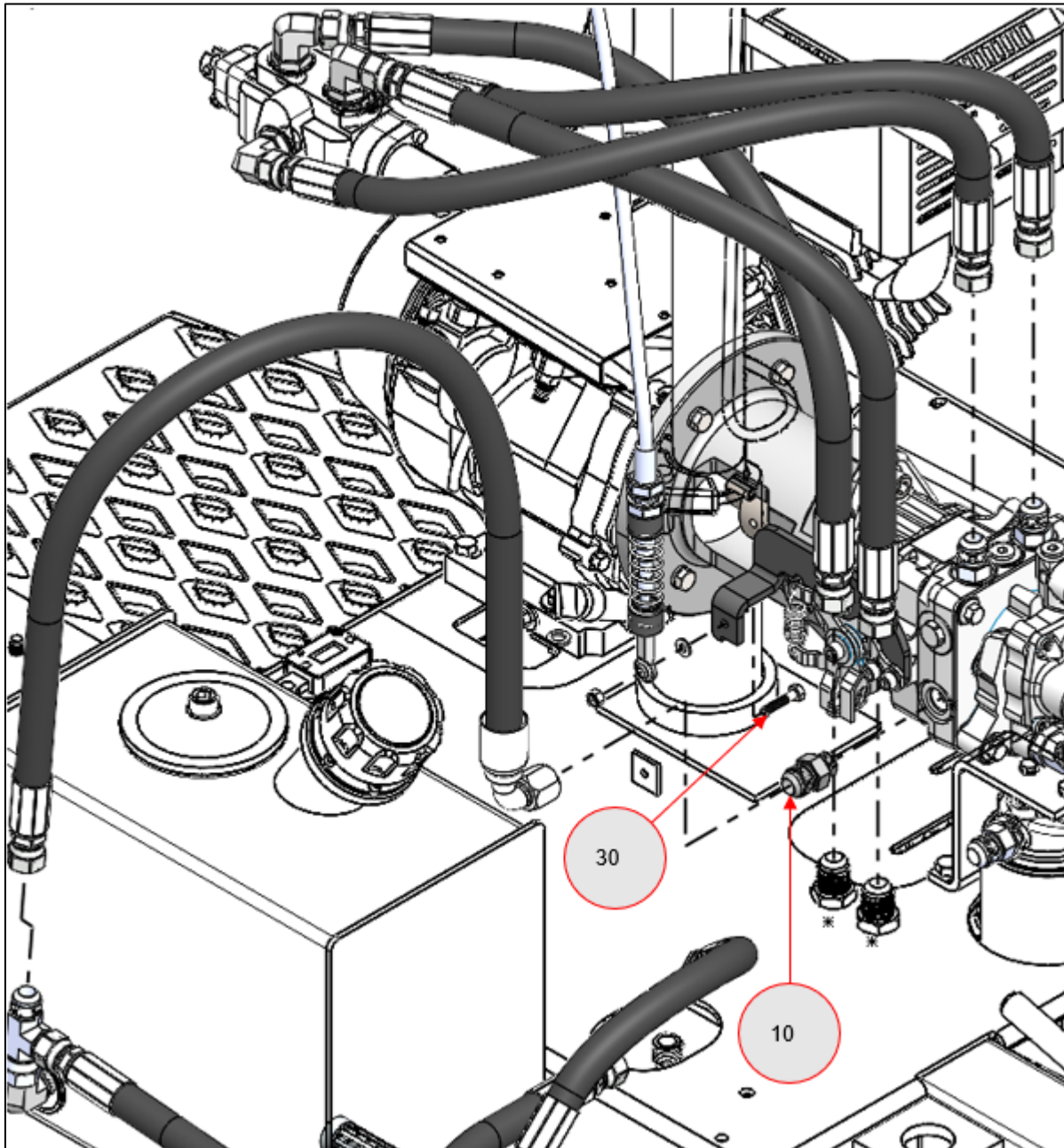
Kit installation continued (New Parts)
Reference page #2 parts list for item's description



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CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Kit installation continued (New Parts)
Reference page #2 parts list for item's description



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Pump – Neutral Lever Adjustment

Step 1: (A) Loosen the speed control cable jam nuts from hydraulic tank bracket (B).

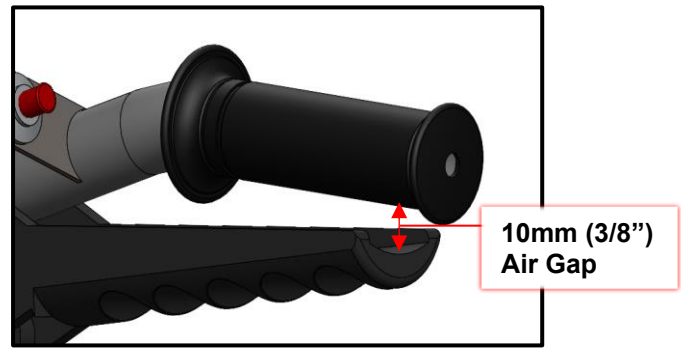
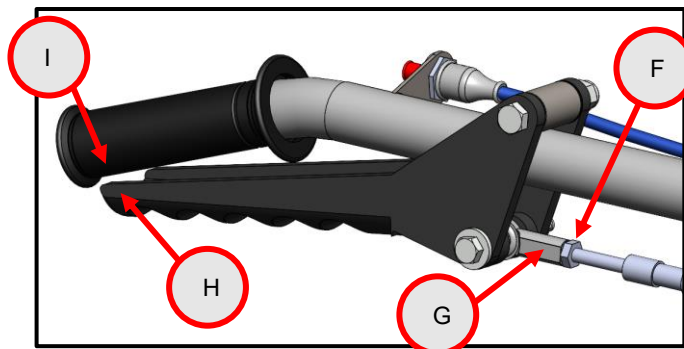
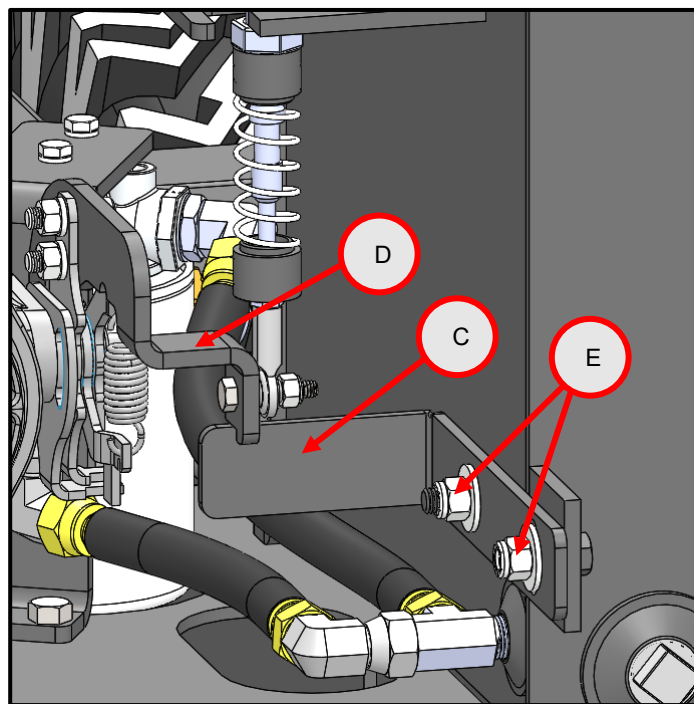
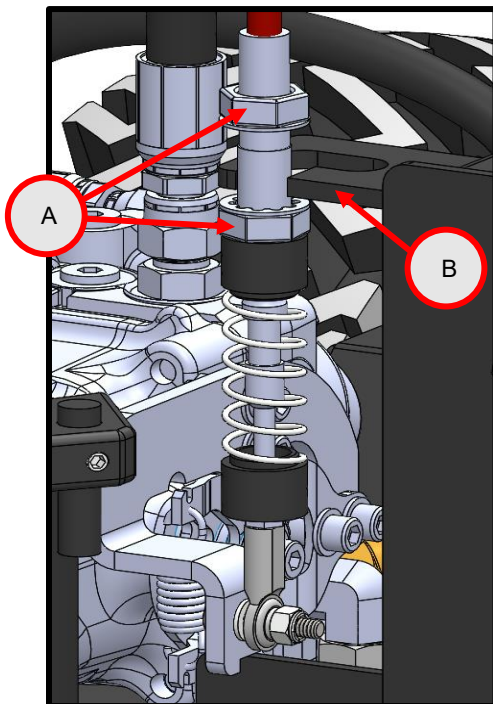
Step 2: Adjust speed control cable jam nuts until pump activation lever is set to neutral position.

Step 3: Loosen nuts (E) and adjust stop (C) until it contacts pump lever (D), **re-tighten nuts (E)**.

Step 4: Loosen jam nut (F) and rotate rod (G) to set the speed lever (H) gap distance from the rubber grip (I) as shown on the image.

- Make sure to re-tighten the jam nut (F)
- With the lever squeezed closed, verify the pump lever is fully activated.

IMPORTANT: Make sure the pump lever has full movement without obstruction(s)



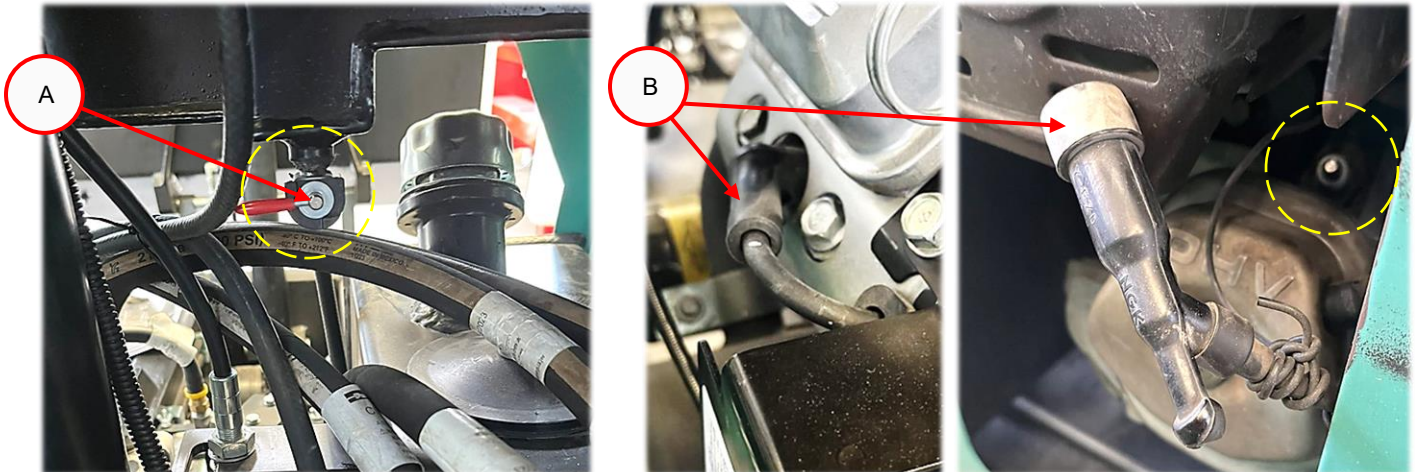
CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Bleeding Air from Hydro-Gear Pump

Important Preliminary Steps

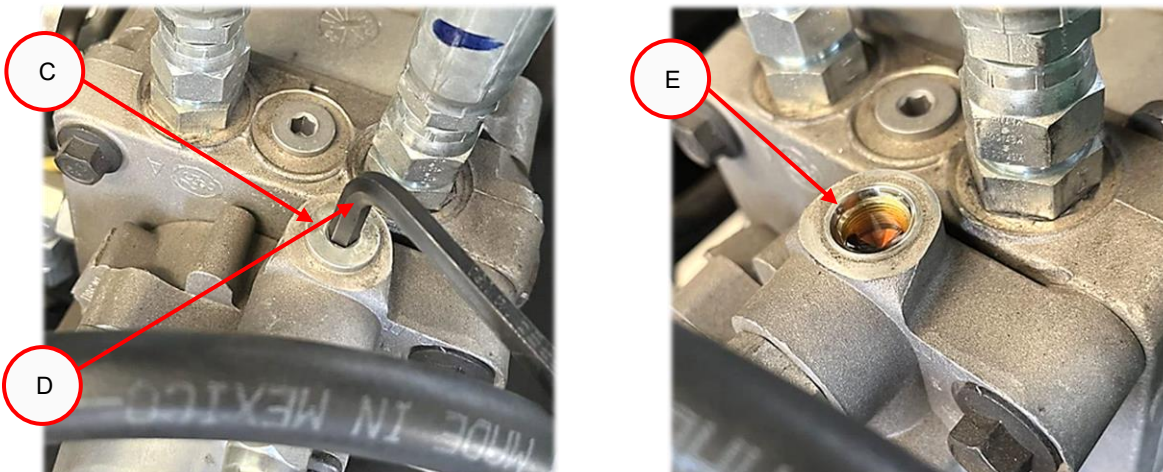
- ✓ Fill oil reservoir with 5 gallons of SAE 15W-40 motor oil to level with the (black line) on sight glass
- ✓ Place machine off the ground on jack stands
- ✓ Shut off gasoline fuel valve
- ✓ Disconnect engine spark plug wire
- ✓ Proceed with the following pump and hydraulic system air purging procedure

Step 1: Shut off the fuel valve (A) and disconnect engine spark plug wire (B)



Step 2: Remove auxiliary pump port plug (C) using a 1/4" Allen key (D)

Step 3: Fill the auxiliary pump with SAE 15W-40 oil through the opened port (E)



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Bleeding Air from Hydro-Gear Pump

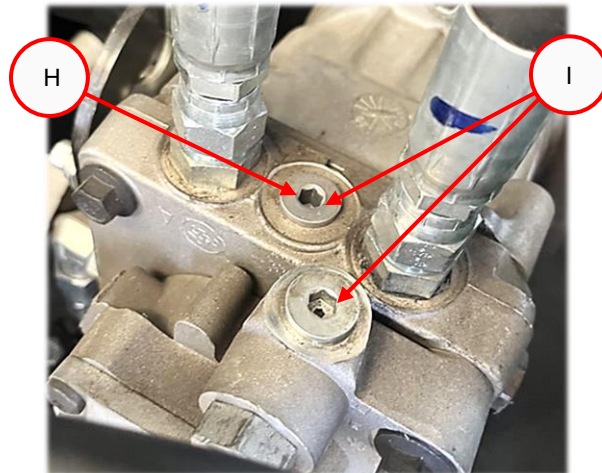
Step 4: Pull the engine's starter rope multiple times to rotate the pump and purge air from the auxiliary pump (F)

Step 5: Once the air is purged/no air bubbles are visible, install the port plug back in place (G)



Step 6: Remove main pump port plug (H) and fill with oil as in step 3, then follow the same procedures described in steps 4 and 5

Step 7: Once the air has been purged from both pump ports, verify both port plugs are tight (I)



CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Bleeding Air from Hydraulic System

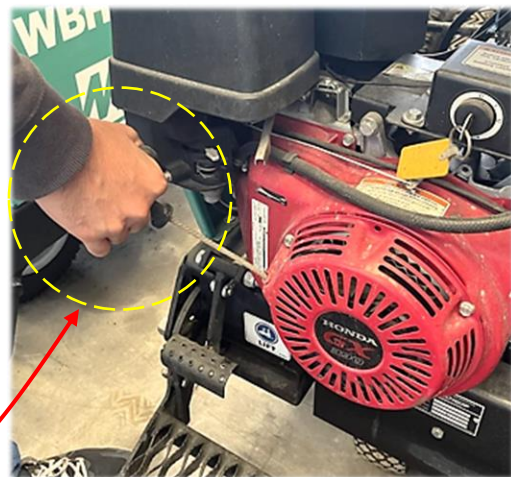
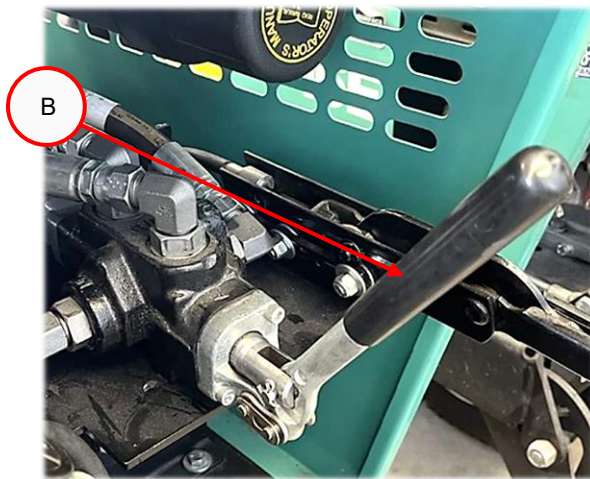
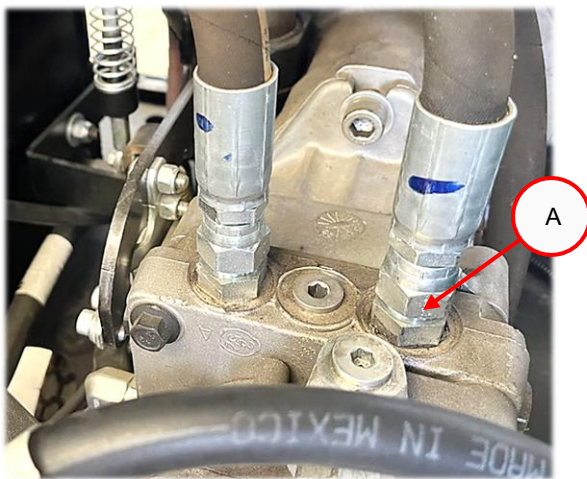
IMPORTANT: FIRST BLEED THE HYDRO-GEAR PUMP BEFORE PERFORMING THIS PROCEDURE

Step 1: Slightly crack open/loosen hose fitting (A)

Step 2: Activate the directional valve lever to either forward or reverse (B)

Step 3: Activate/squeeze the travel lever (C) and while activated, pull the engine starter rope multiple times (D) or use electric start to purge air from the (cracked) hose fitting.

Step 4: Once air is completely purged (no bubbles), tighten the hose fitting (A)

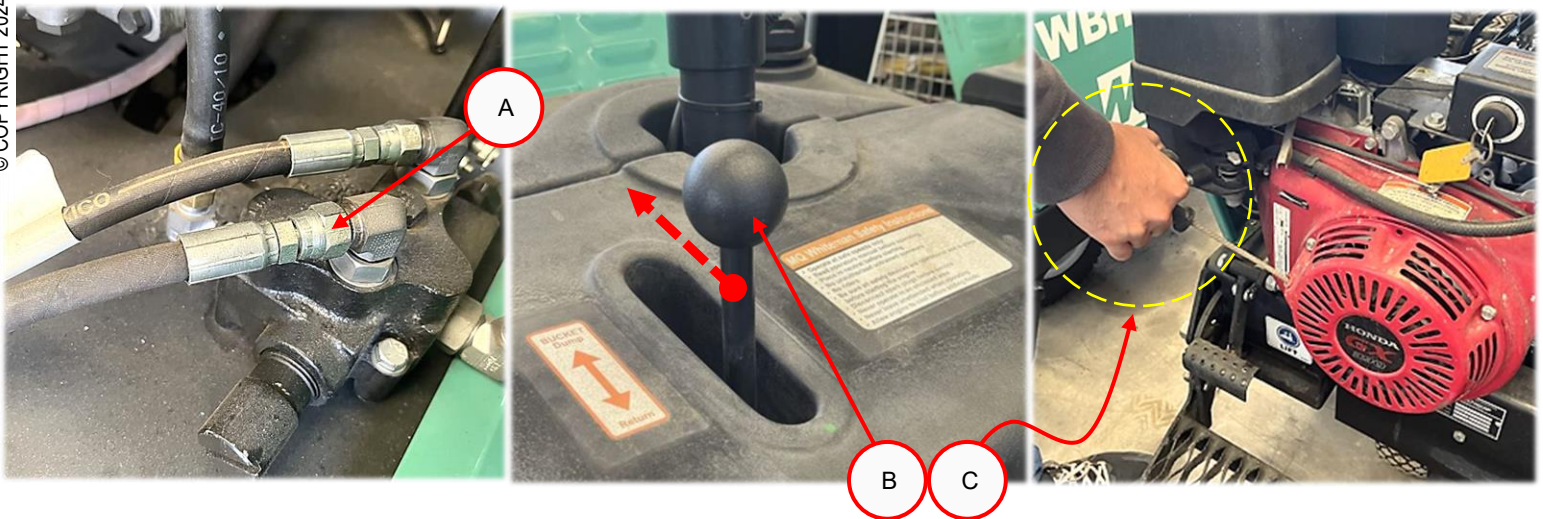


CONVERSION TO HYDRO-GEAR PUMP SYSTEM

Bleeding Air from Hydraulic Cylinder

IMPORTANT: FIRST BLEED THE HYDRO-GEAR PUMP BEFORE PERFORMING THIS PROCEDURE

- Step 1:** Slightly crack open/loosen hose fitting (A) at the dump valve
- Step 2:** Activate the dump lever (B) to the forward/dump position and hold
- Step 3:** Pull the engine starter rope multiple times (C) or use electric start to purge air from the (cracked) hose fitting.
- Step 4:** Once air is completely purged (no bubbles), tighten the hose fitting (A)



Once installation is completed and the hydraulic system is purged of air

1. Open the fuel valve
2. Reconnect the spark plug cap
3. Start the engine
4. Place the directional control lever in the forward position and check for wheel movement.
5. If wheel movement/creep is noticed, proceed with instructions on page #9 “**Pump – Neutral Lever Adjustment**”
6. Remove machine from jack stands, installation is completed.