

HARVEST

by **MERIDIAN**



A1062 & A1072 AUGER ASSEMBLY MANUAL

Read & understand all instructions pertaining to this auger prior to use!



Safety Alert

Watch for this **ALERT** Symbol. It identifies potential hazards to Personal **SAFETY** and your **HEALTH**. It points out Safety precautions.

This **SAFETY** symbol means:

ATTENTION:

BE ALERT

Why is **SAFETY** important to you?

THREE BIG REASONS:

***ACCIDENTS DISABLE AND KILL**

***ACCIDENTS COST**

***ACCIDENTS CAN BE AVOIDED**

Failure to read this Auger manual before operation of the Auger is a misuse of the equipment and a needless risk to your **HEALTH** and **SAFETY**. Your life and limbs are worth keeping. Use this equipment with care.

Symbol

Signal Words:

DANGER, WARNING, CAUTION

The appropriate signal word for each message has been selected using the following guidelines below the Alert Symbol.



BE ALERT!

DANGER – Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING – Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

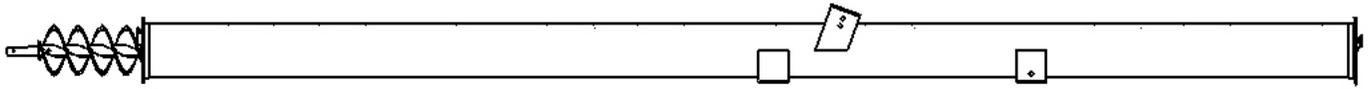
CAUTION – Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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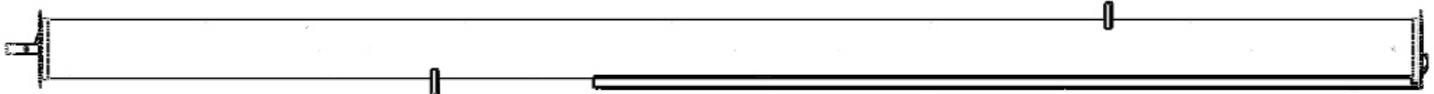
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Step 1

Tube Identification



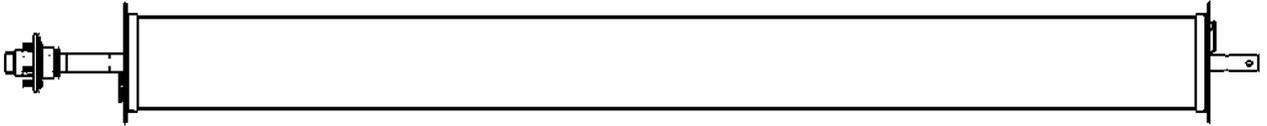
1st Tube A1062 & A1072



2nd Tube A1062 & A1072



3rd Tube A1062 & A1072



4th Tube, Discharge A1072

Step 2 (Tube & Flighting Assembly)

Place tubes on assembly stands as shown. Place stands 12" or less from the end of the tube. Placing stands further than 12" from end of the tube may cause damage to the tubes.

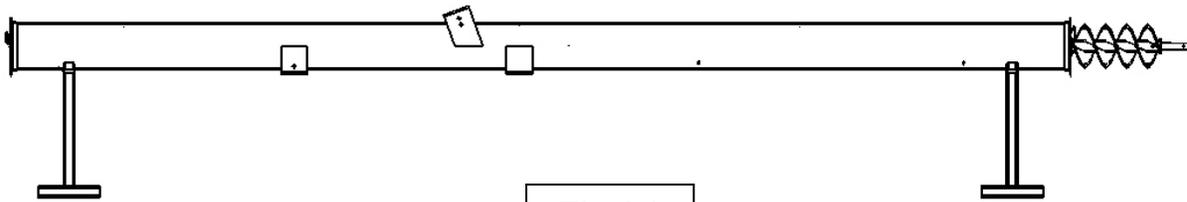


Fig. 2.1

Step 3

Slide the flighting together from the 1st & 2nd tube. Connect the flighting using (2) 1/2" x 2-1/2" hex bolts and top lock nuts. Align flighting as shown to make continuous. After connecting the flighting, slide the 1st & 2nd tube together putting in the top 2 & bottom (2) 1/2" x 1-1/2" flange bolts & nuts.

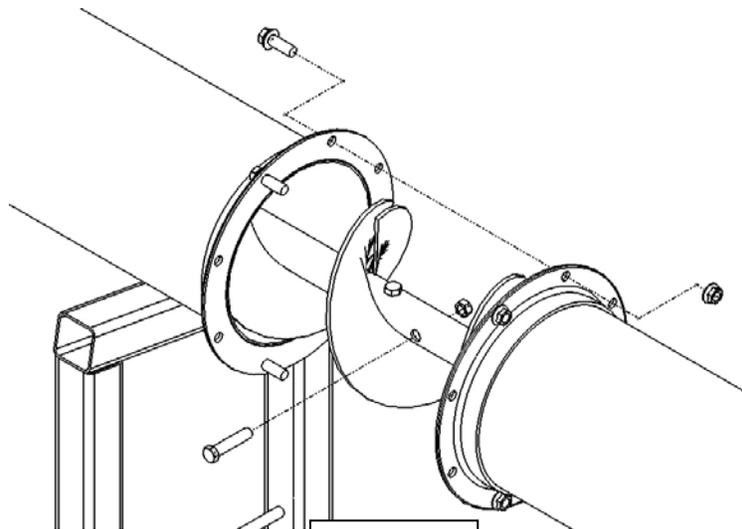


Fig. 3.1

Step 4

Place the left (10192) & right (10193) bolt on cable truss mount brackets onto the tubes & using (4) 1/2" x 1-1/2" flange bolts & nuts. (Note: The left bracket will have a small notch cut into the top of it) Tighten all 8 bolts around tube flange.

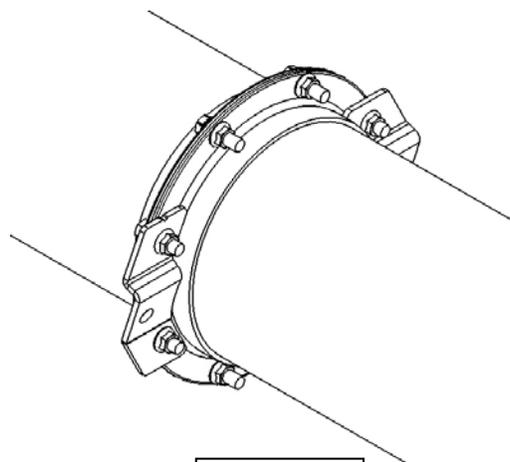
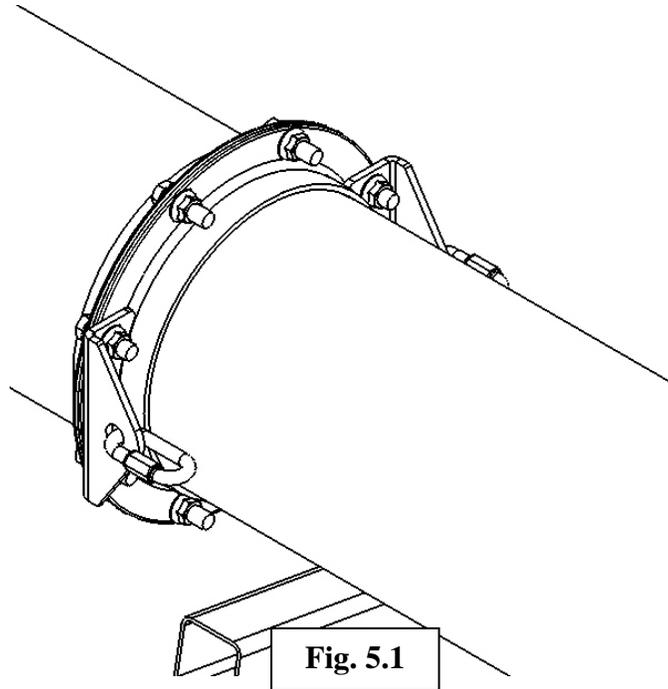


Fig. 4.1

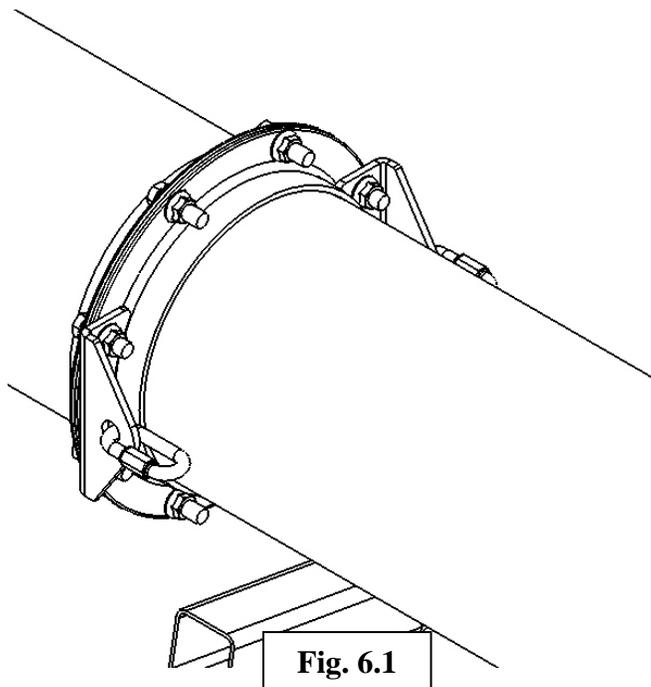
Step 5

Place the 3rd tube in front of the 2nd tube and connect the flighting as shown in Step 3. After the flighting is connected and secure, slide the 2nd & 3rd tube together as shown. Mount the cable attachment brackets (10171) to the left and right side of the flange on the 2nd tube. Tighten the tubes and brackets together using (8) 1/2" x 1-1/2" flange bolts & nuts. After the 8 bolts are tight, attached the 3/8" quick link to each bracket as shown. Tighten both quick links.



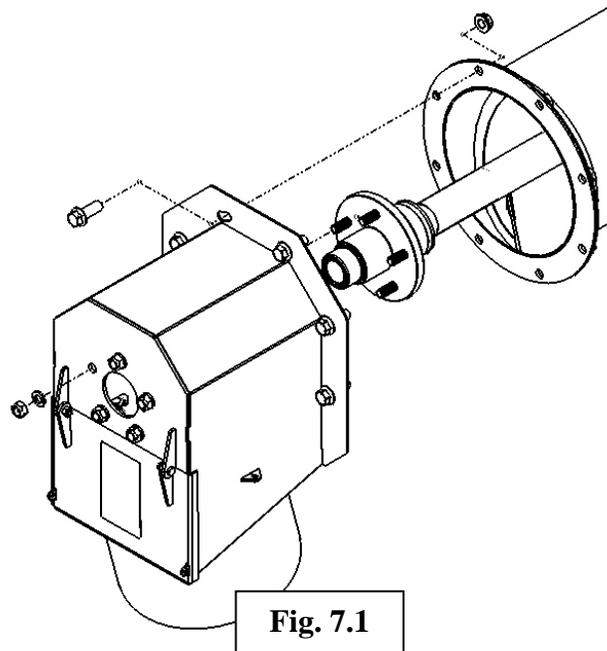
Step 6

Place the 4th tube in front of the 3rd tube and connect the flighting as shown in Step 3. After the flighting is connected and secure, slide the 3rd & 4th tube together as shown. Mount the cable attachment brackets (10171) to the left and right side of the flange on the 2nd tube. Tighten the tubes and brackets together using (8) 1/2" x 1-1/2" flange bolts & nuts. After the 8 bolts are tight, attached the 3/8" quick link to each bracket as shown. Tighten both quick links. This will be the last tube for a A1062.



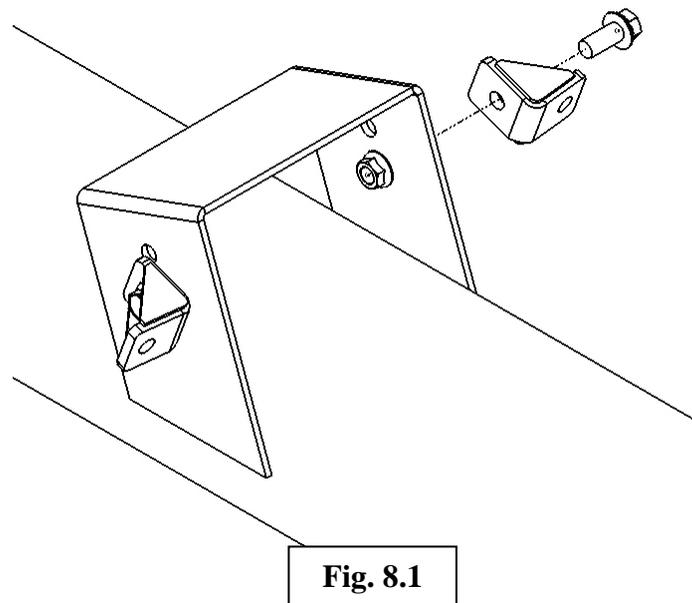
Step 7 (Discharge Head Assembly)

All tubes & flighting should now be assembled together. Now the discharge head should be attached. First align the 5 studs on the flighting with the 5 holes in the discharge head. Fasten the discharge head to the flighting using (5) 1/2" lock washers & (5) 1/2" lug nuts. Thread lug nuts on flat side against the lock washers. Tighten the 5 lug nuts. Next, fasten the discharge head to the tube using (2) 1/2" x 1-1/2" flange bolts & nuts & (6) 1/2" x 1-1/2" hex bolts & flange nuts. The flange bolts are used on the top 2 holes of the discharge head as shown. Tighten all 8 bolts mounting the discharge head to the tube. Tie red flag supplied in the kit to the discharge head. On an A1062 the cable mount brackets will be assembled with the discharge head.



Step 8 (Cable Mount & Truss Assembly)

In Step 9 the lower cable mount brackets will be installed. On the 1st tube bolt cable mount brackets (30976) to the left & right side of the hopper arm bracket as shown. These will be fastened using (2) 5/8" x 1-1/2" flange bolts & nuts. Be sure to angle the cable mount bracket slightly upwards as shown in figure 8.1.



Step 9

Next the cable truss uprights and cross brackets will be assembled on the 2nd & 3rd tubes. Start by placing the 2 upright truss brackets (10163) on the tube and fastening with a total of (12) 3/8" x 1" carriage bolts & flange nuts. Leave these a little loose for ease of assembling the cross member. Assemble the cross member (10174) using a total of (6) 3/8" x 1" carriage bolts & flange nuts as shown. After all carriage bolts are tightened, place the 3/8" cable clamps on the outside of the trusses as shown. Thread nuts on by hand but do not tighten. Repeat this step for the 2 top and 1 bottom truss mount brackets.

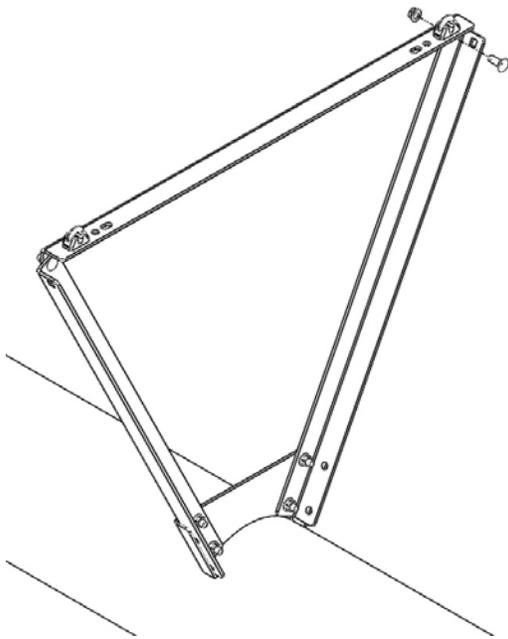


Fig. 9.1

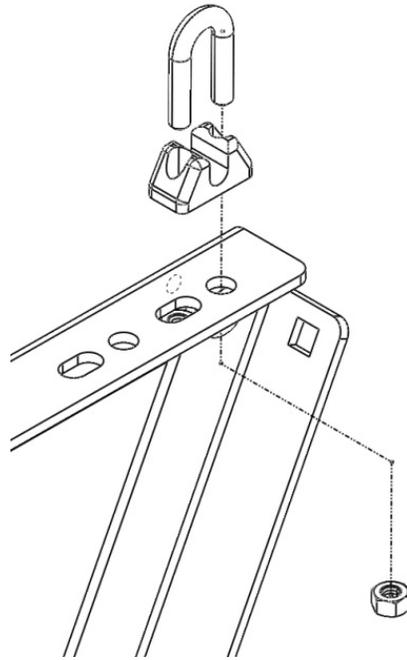


Fig. 9.2

Step 10 (Infeed Housing Assembly)

Loosen bolts and remove both access panels. Using a lifting strap, lift and slide the infeed housing over the bottom flighting on the 1st tube. Secure the infeed housing to the first tube using (6) 1/2" x 1-1/2" flange bolts and nuts & (2) 1/2" x 1-1/2" hex bolts & flange nuts. The (2) 1/2" x 1-1/2" hex bolts should be used on the bottom holes and orientated as shown in fig. 10.4.

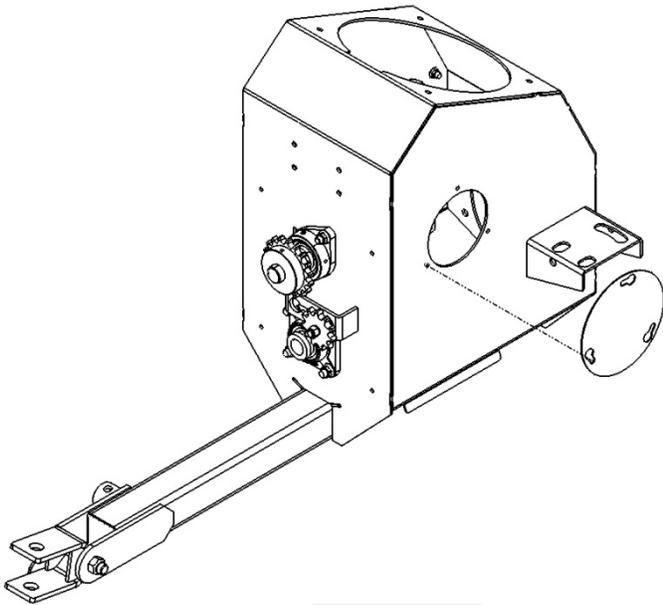


Fig. 10.1

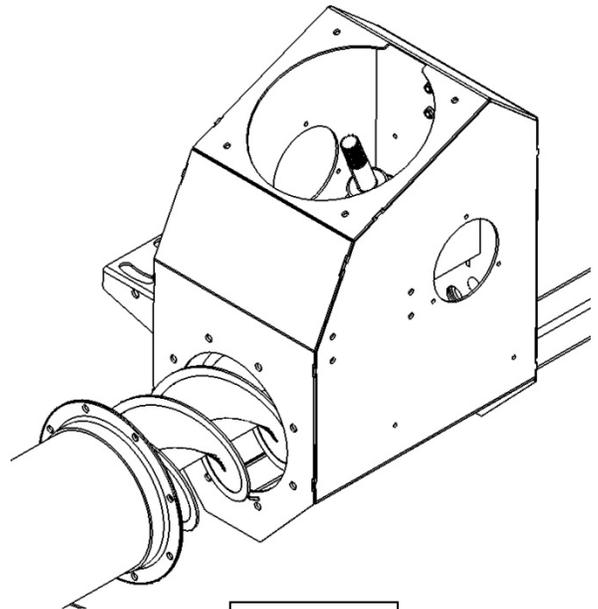


Fig. 10.2

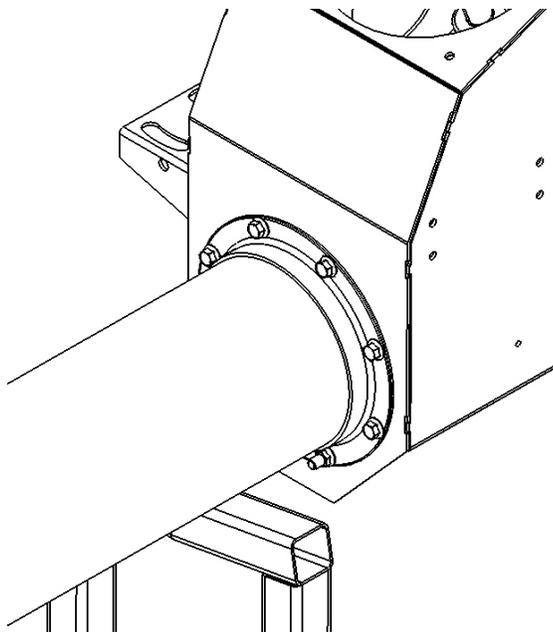


Fig. 10.3

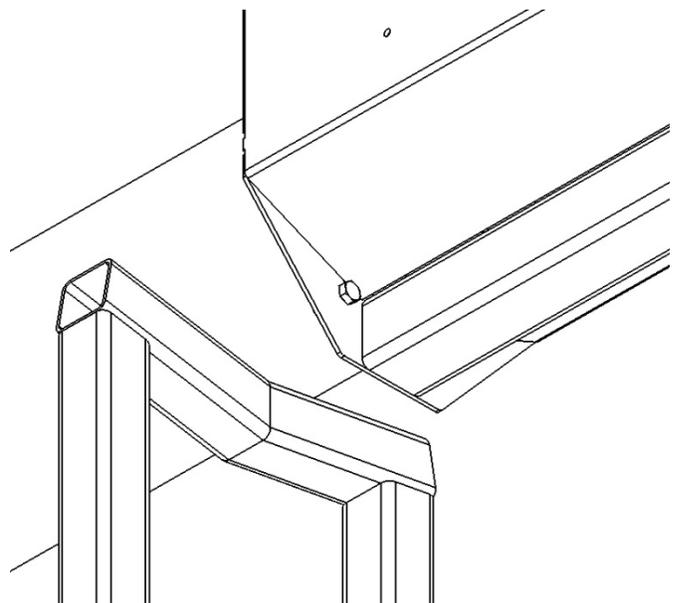


Fig. 10.4

Step 11

Next, locate the gearbox mounted inside of the infeed housing. Remove the 2 top plugs in the gearbox & replace the top one with the grease zerk & the bottom one with the breather provided.

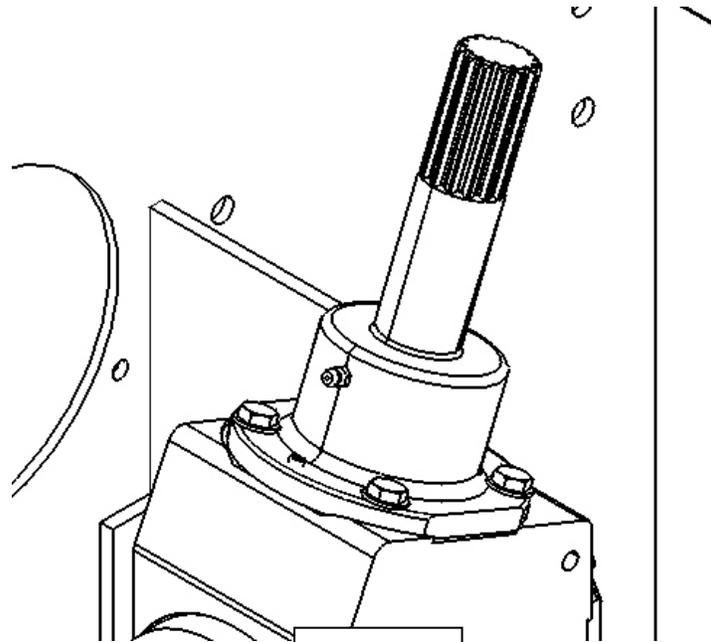


Fig. 11.1

Step 12

Next, slide the 4 bolt 1-1/4" cast flange bearing over the shaft making sure the grease zerk is located on the same side as the idler sprocket. (If the shaft has surface rust, clean first with an emery cloth) Secure the 4 bolt bearing to the infeed housing using (4) 1/2" x 1-1/2" carriage bolts & flange nuts as shown. When completed use a punch to rotate the shaft so the keyway is in an easy to access position.

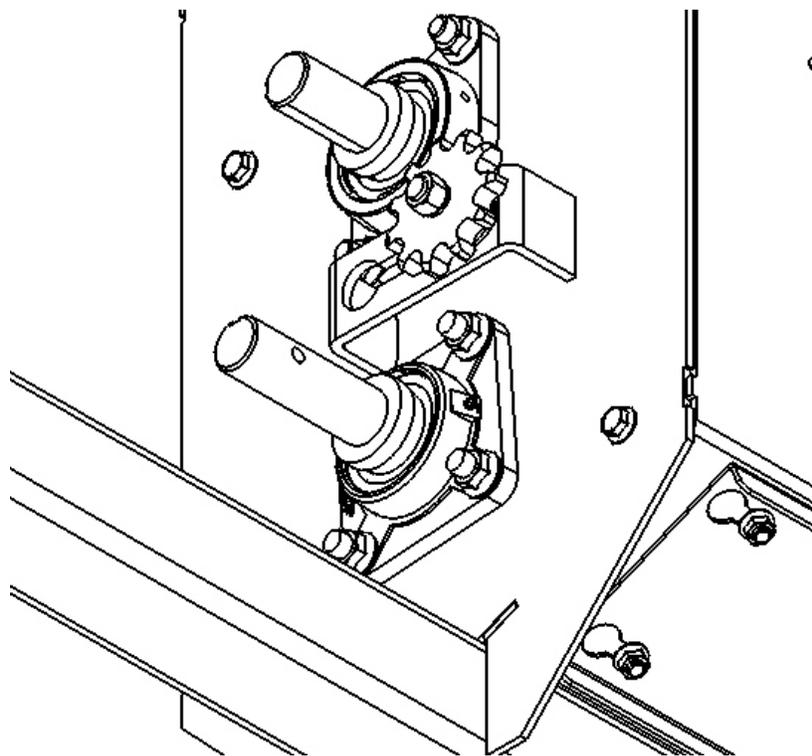


Fig. 12.1

Step 13

Next, insert (2) 1/4" x 1" square keys into the top & bottom shaft. Slide the 18 tooth sprocket onto the top shaft & the 20 tooth sprocket onto the bottom shaft as shown in fig. 13.1. Use a measuring tape & measure the distance from the center of each sprocket to the infeed housing. Once sprockets are aligned, apply lock-tite to set screws & tighten.

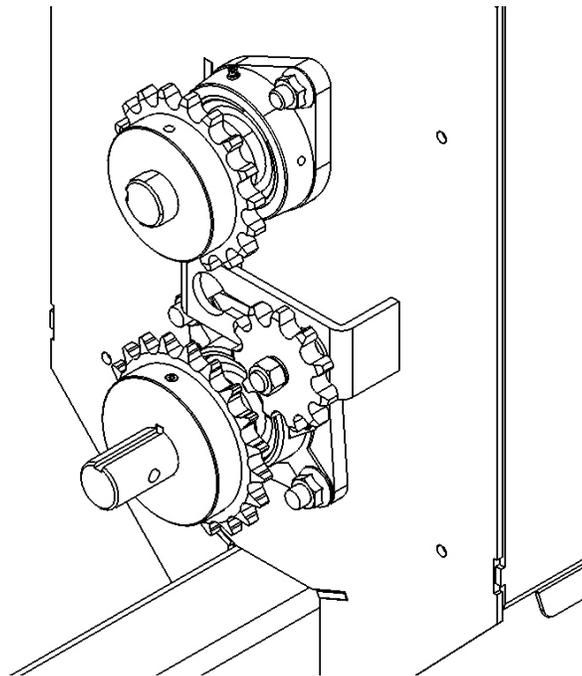


Fig. 13.1

Step 14

Locate the #60 chain, #60 half link, & #60 connector link. Attach the half link to the chain on one end & place the chain around the sprockets as shown in fig. 14.1. Secure chain with connector link. When connector link is installed & the loop has been completed, push the idler sprocket in the chain to achieve good tension. When proper tension is achieved tighten the idler sprocket. Now grease top & bottom bearings with multi-lith grease.

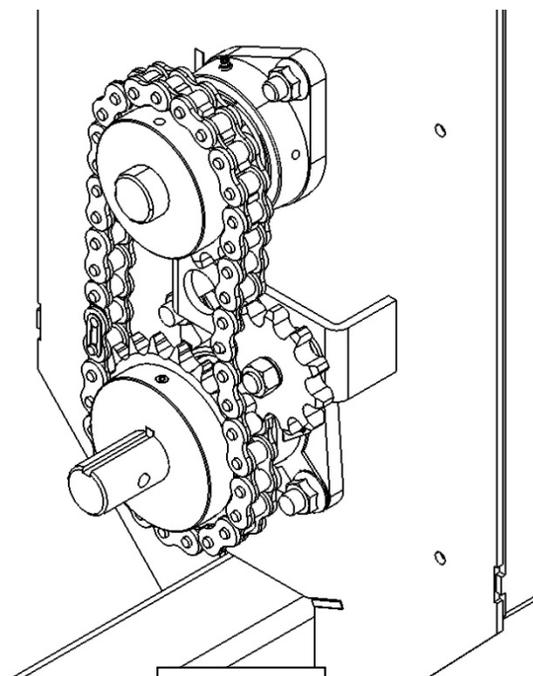


Fig. 14.1

Step 15

Next, insert a 1/4" x 1" square key into the bottom shaft. Slide PTO shaft onto lower drive shaft. Align holes in PTO shaft with hole in drive shaft. Using a punch will help in this application. Secure using a 5/16" x 3" hex bolt & top lock nut. Tighten set screw on PTO shaft.

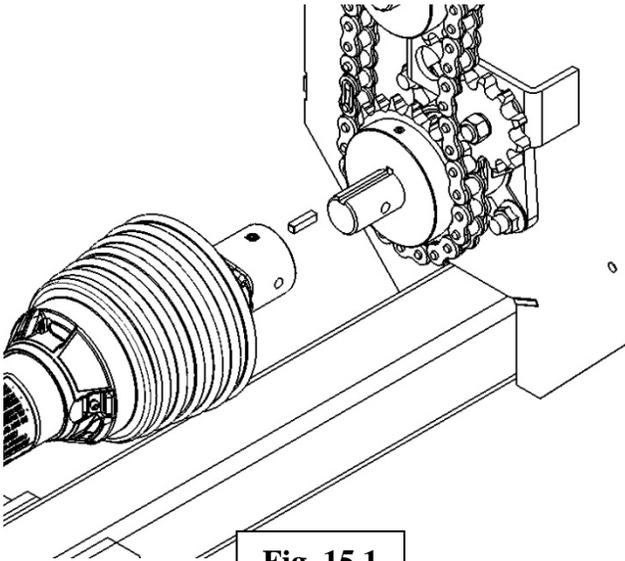


Fig. 15.1

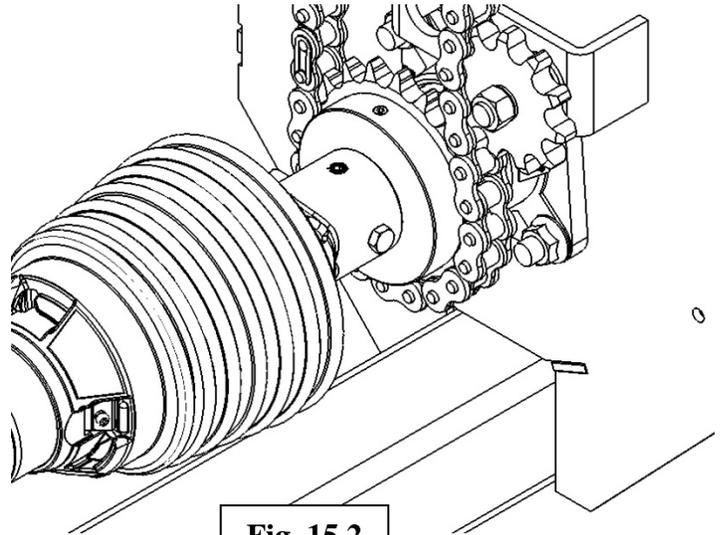


Fig. 15.2

Step 16

Next slide the chain guard over the PTO shaft and secure to the infeed housing (4) 3/8" x 3/4" flange bolts. Then place lower "U" shaped guard place onto guard and secure with (4) 3/8" x 3/4" flange bolts.

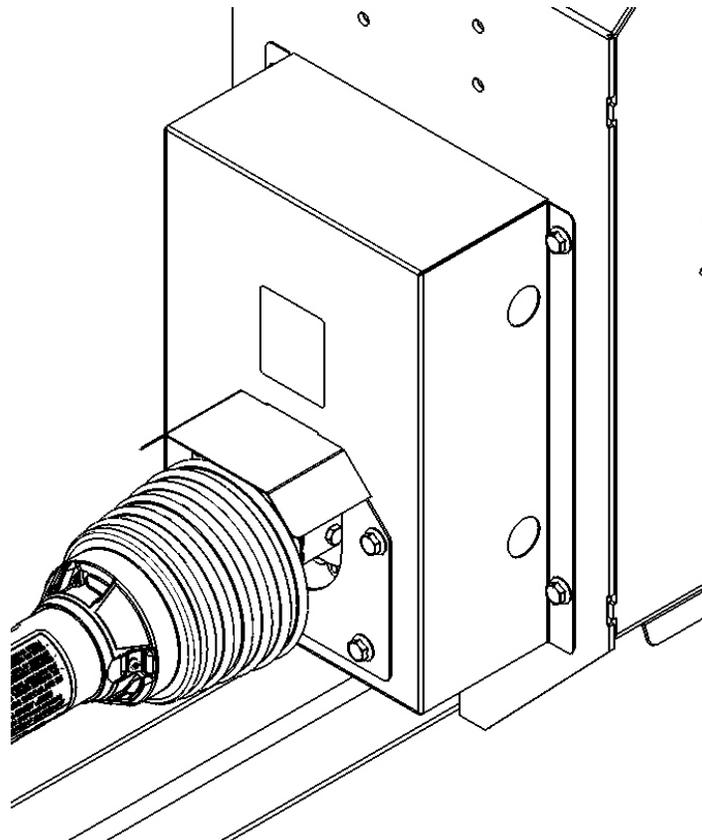


Fig. 16.1

Step 17

Locate the PTO support bracket & mount it to the infeed housing as shown in fig. 17.1 using (3) 3/8" x 3/4" flange bolts & flange nuts. Attach the PTO support chain to the bracket as shown using a 3/8" x 1" flange bolt & flange nut.

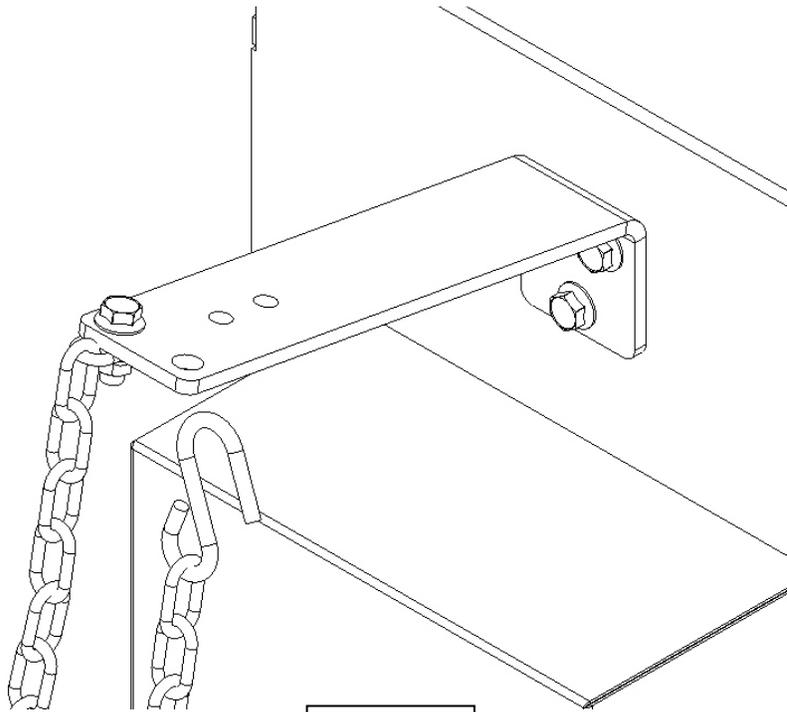


Fig. 17.1

Step 18

Locate the jack and slide it onto the jack mount tube located on the side of the tongue. Secure jack with pin.

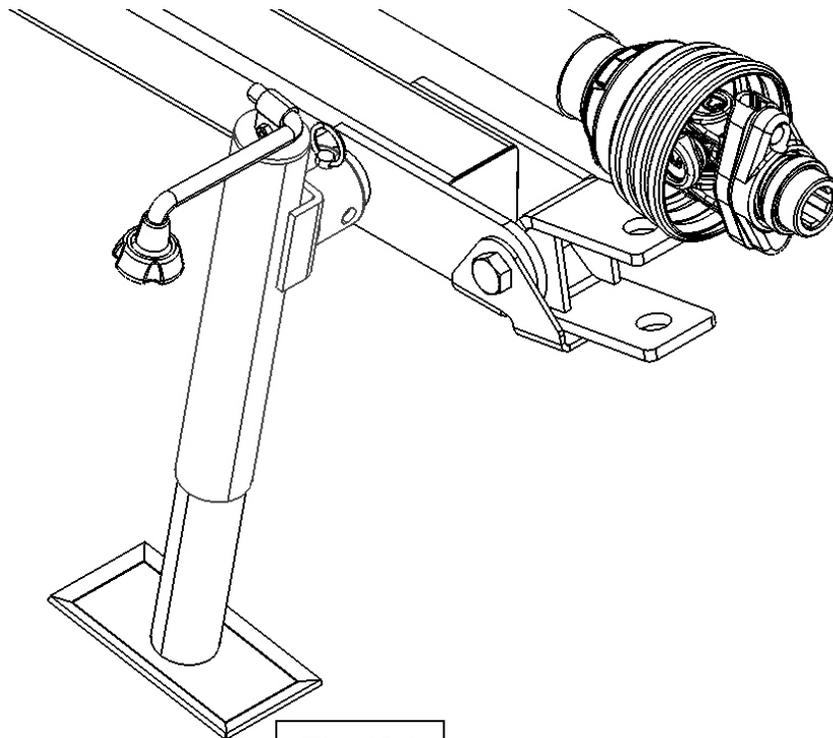


Fig. 18.1

Step 19

Next the hopper winch will be mounted. On the right side of the infeed housing there is a bracket with a pin through it. (Fig. 19.1) Remove pin & set aside. Remove bracket & attach to winch using (3) 3/8" x 1" carriage bolts & flange nuts as shown in fig. 19.2. Tighten bolts by hand only for now. Slide the winch handle onto winch with spring & nut. Tighten nut to secure handle. Place winch on top of bracket welded to the infeed housing and secure with the pin. Angle the winch so it is centered with the top bracket (hopper arm bracket) on the 1st tube as shown in figure 19.3. Tighten the (3) 3/8" x 1" carriage bolts.

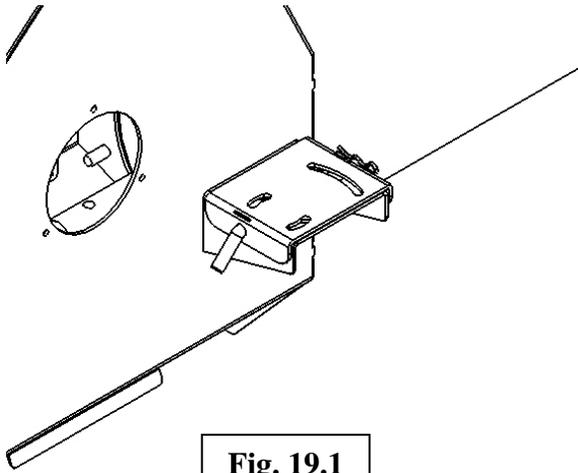


Fig. 19.1

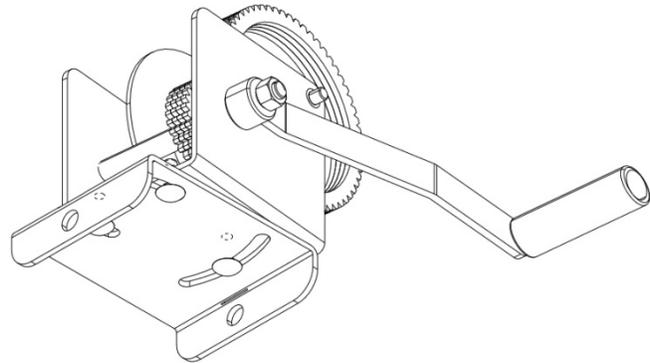


Fig. 19.2

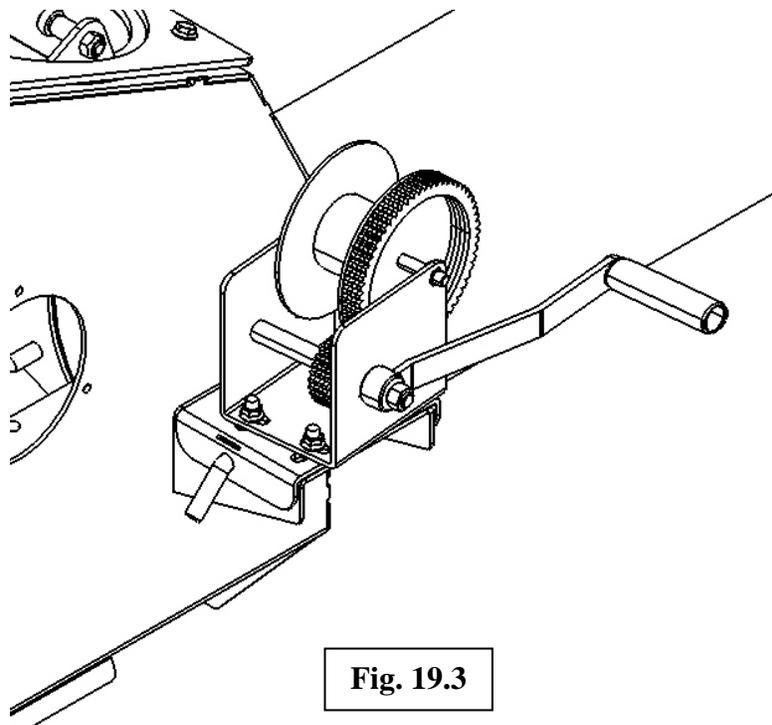


Fig. 19.3

Step 20

Next mount the left hand winch bracket (10131B) to the left side of the infeed housing. Attach the bracket using (4) 3/8" x 1" flange bolts & flange nuts.

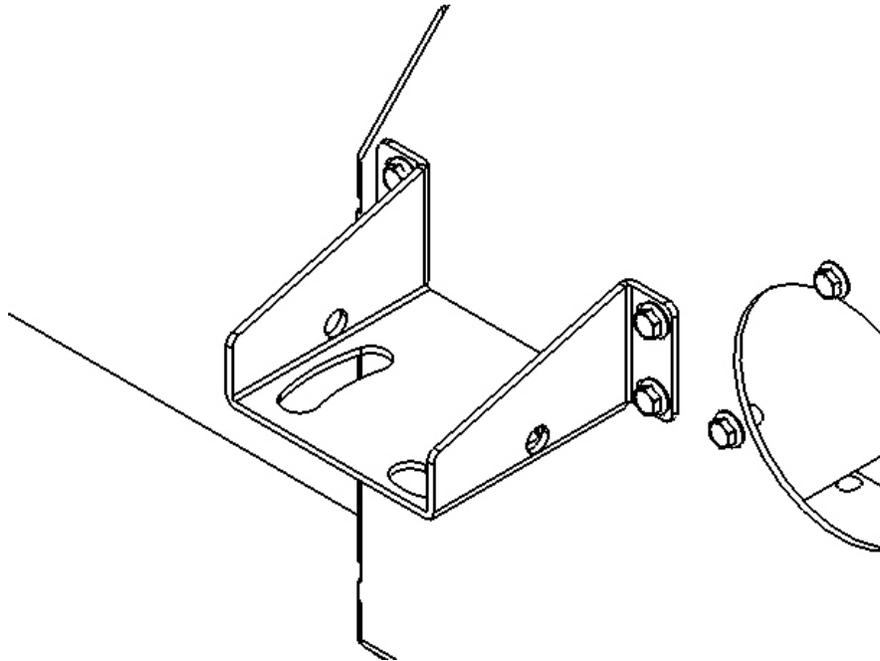


Fig. 20.1

Step 21 (Transport Arm Assembly)

After the left hand side winch mount bracket is secured assemble the hopper transport arm to the 1st tube. This will be done using (2) 1/2" x 7" bent pins as shown in figure 21.1.

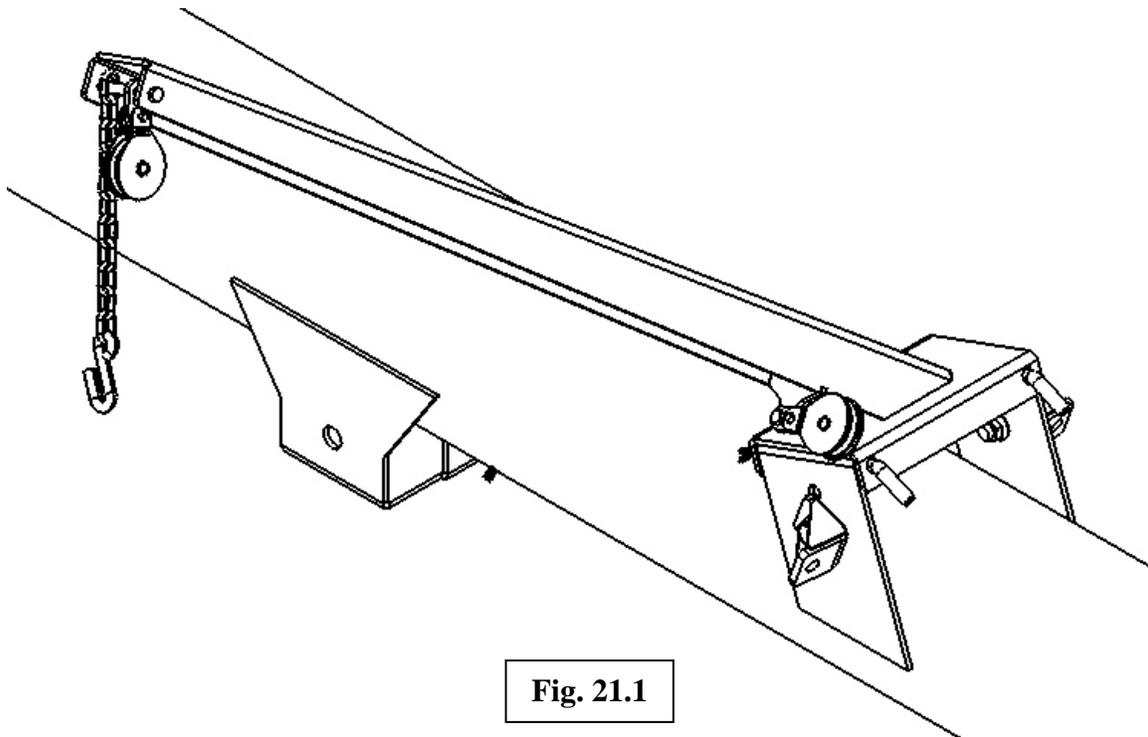


Fig. 21.1

Step 22

Next the hopper lift cable will be assembled. Insert cable through the upper then the lower pulley on the hopper transport arm. Pull cable back to the winch. Insert cable through hole on the side of the winch drum. Fasten to winch using the winch cable clamp & nut provided with winch.

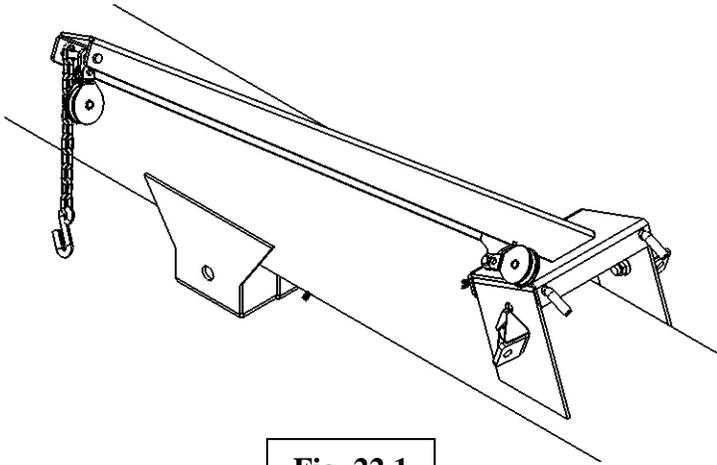


Fig. 22.1

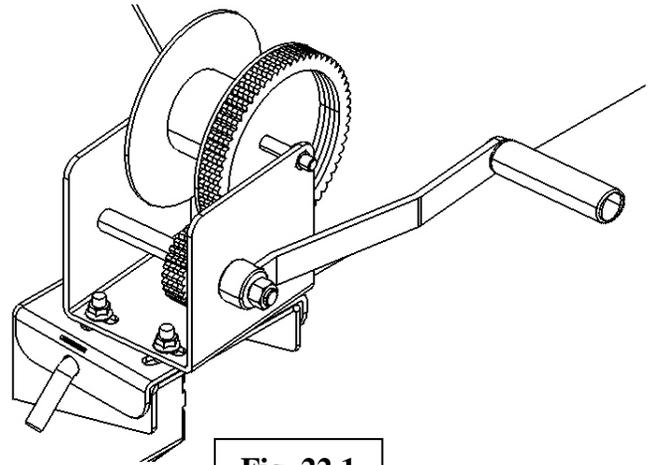


Fig. 22.1

Step 23 (Truss Cable Assembly)

First assemble all the eyebolts to the lower cable mount brackets. Assemble the eyebolts to the transport arm bracket & the connecting flanges of the 1st & 2nd tube. Attaching the eyebolts will include (4) 1/2" eyebolts, 1/2" external tooth lock washers & 1/2" hex nuts. Thread nut onto eyebolt so 1/2" is sticking out past the nut.

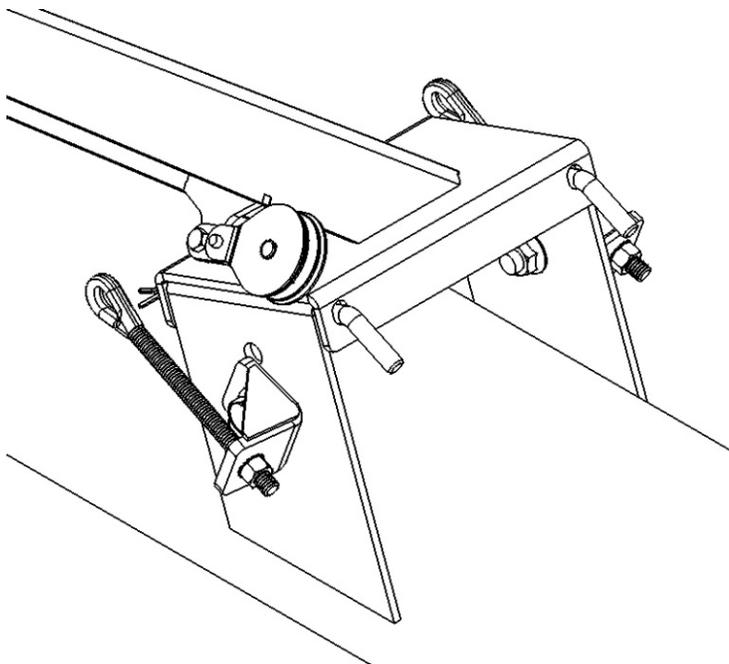


Fig. 23.1

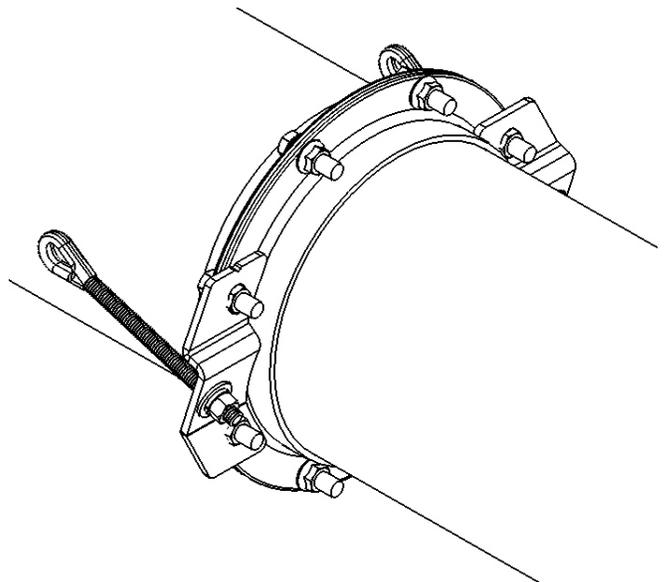


Fig. 23.2

Step 24

Take 1 short 29 foot cable & attach it to the eyebolt located in the middle of the first tube. Secure using (2) 3/8" cable clamps as shown if fig. 24.1. Pull cable to the bottom truss and through the cable clamp located on the truss. When the cable is through the cable clamp, continue pulling the cable to the quicklink located on the joint between the 2nd & 3rd tube. Secure using (2) 3/8" cable clamps as shown if figure 24.2. Repeat on opposite side of the auger. Always have saddles of the cable clamps on the "live" end of the cable.

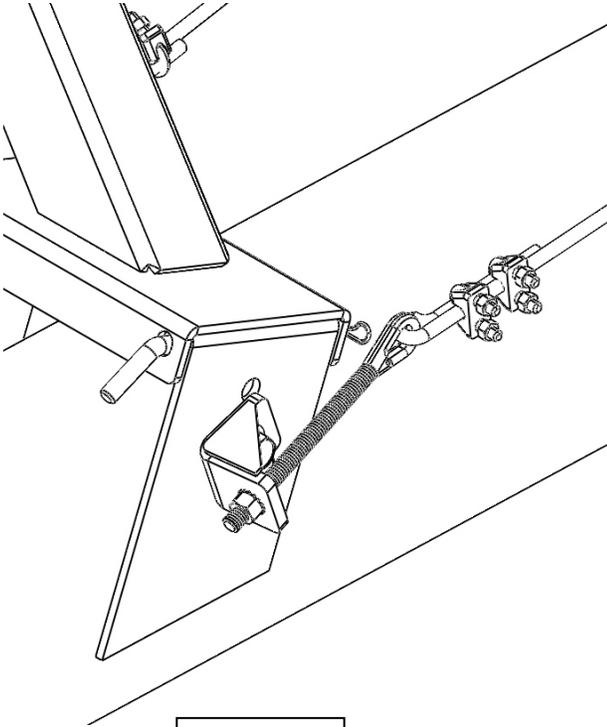


Fig. 24.1

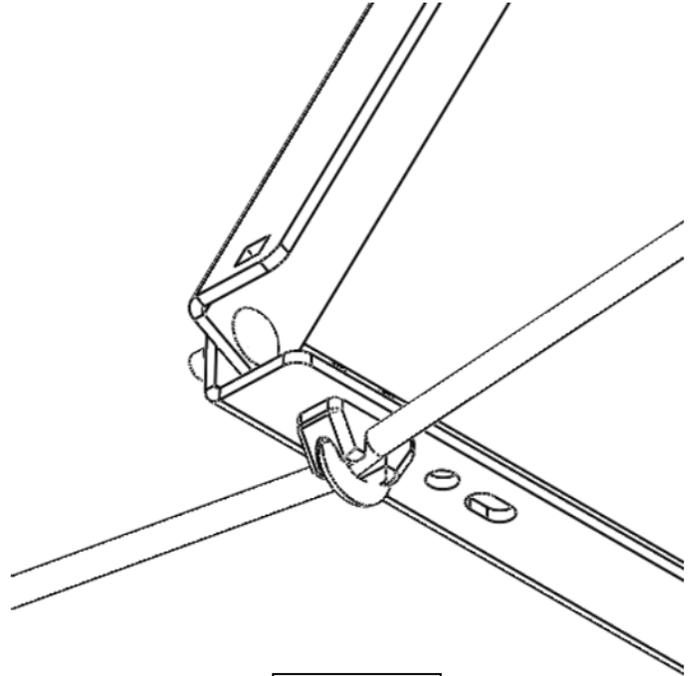


Fig. 24.2

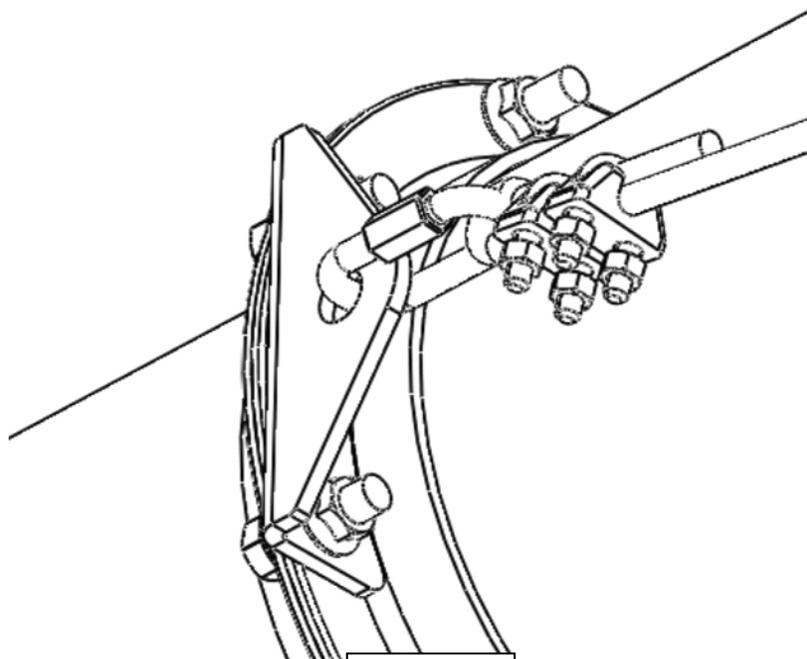


Fig. 24.3

Step 25

Locate the 41 foot cables. Attach cable to eyebolts on the left & right side cable truss mount brackets. Attach using the same process specified in step 24. Put the cable through the cable clamps located on the 2nd & 3rd truss. When the cable is through both cable clamps, continue pulling the cable to the quick link located on the joint on the end of the 3rd tube. Secure using (2) 3/8" cable clamps as shown in fig. 25.3. Repeat on opposite side of the auger.

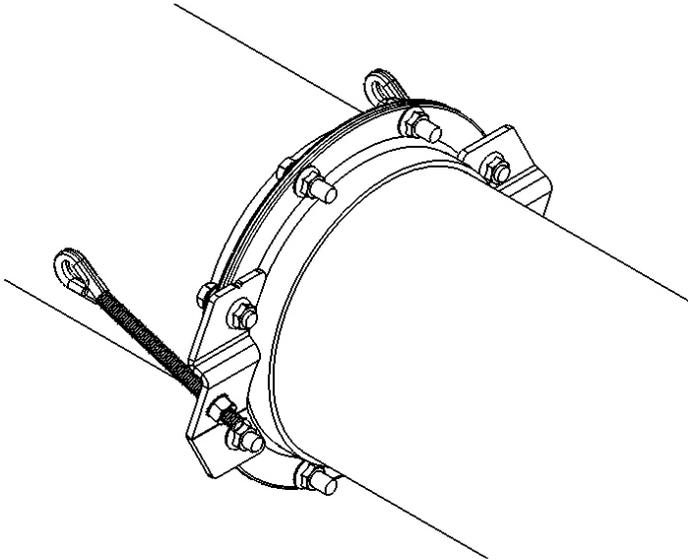


Fig. 25.1

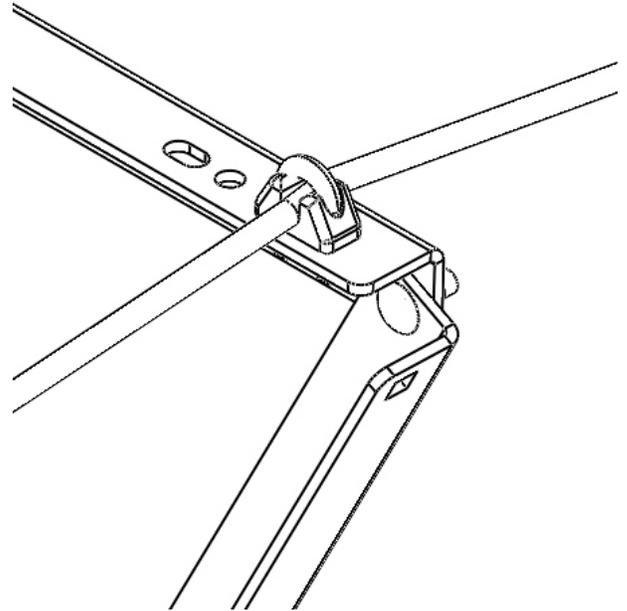


Fig. 25.2

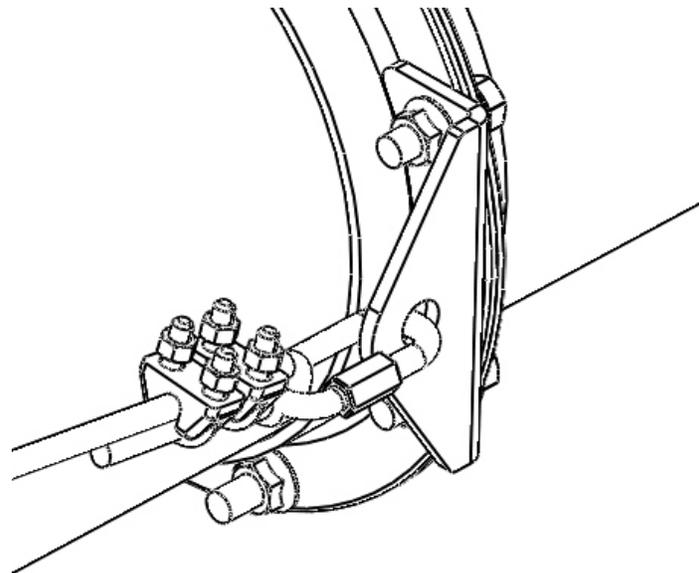


Fig. 25.3

Step 26

To tighten the cables, lifting the discharge end of the tubes is required. Place a lifting strap 2 feet from the end of the auger and lift the tubes approximately 3 feet. This will cause the tubes to curve upwards. Place a punch or pry bar into the eye of the eyebolt to hold it straight. Tighten the nut on the eyebolt about 3" or until the cable feels stiff. Do this for all the cables.

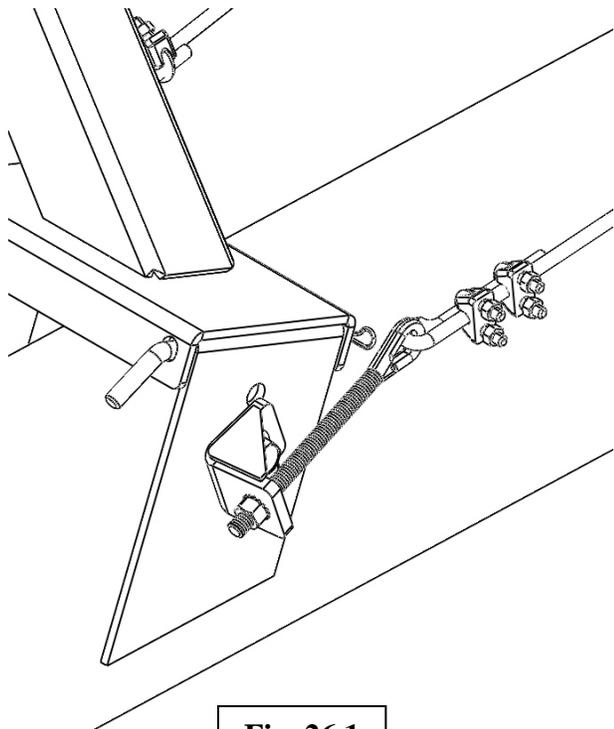


Fig. 26.1

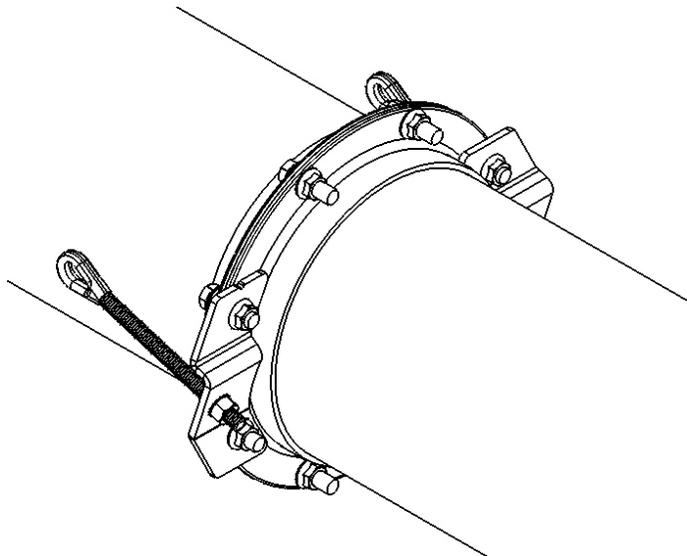


Fig. 26.2

Step 27

When all the eyebolts are tightened it is now time to tighten the truss cable clamps. Tighten each cable clamp that is mounted to each truss evenly. After the clamps are tightened, stabilize the auger and lower the discharge end of the auger. Once lowered, the auger should have a bow of 3" to 4" off of the assembly stand.

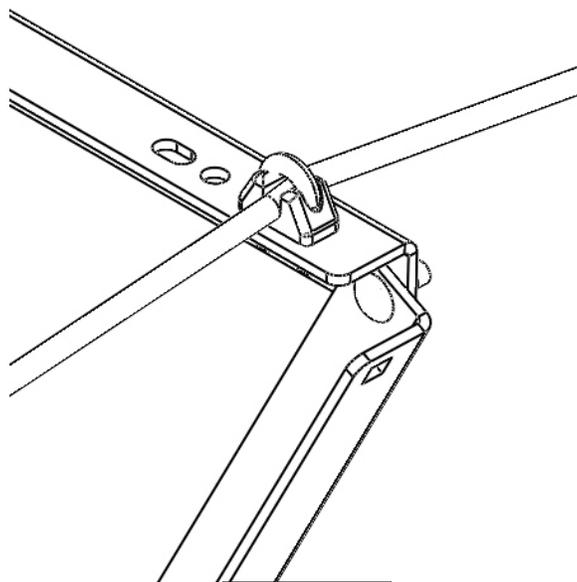


Fig. 27.1

Step 28

Next, attach the cylinder assembly to the cylinder mount brackets on the first tube as shown in Fig. 28.1. Secure the cylinder with a total of (8) 1/2" x 1-1/2" hex flange bolts & flange nuts.

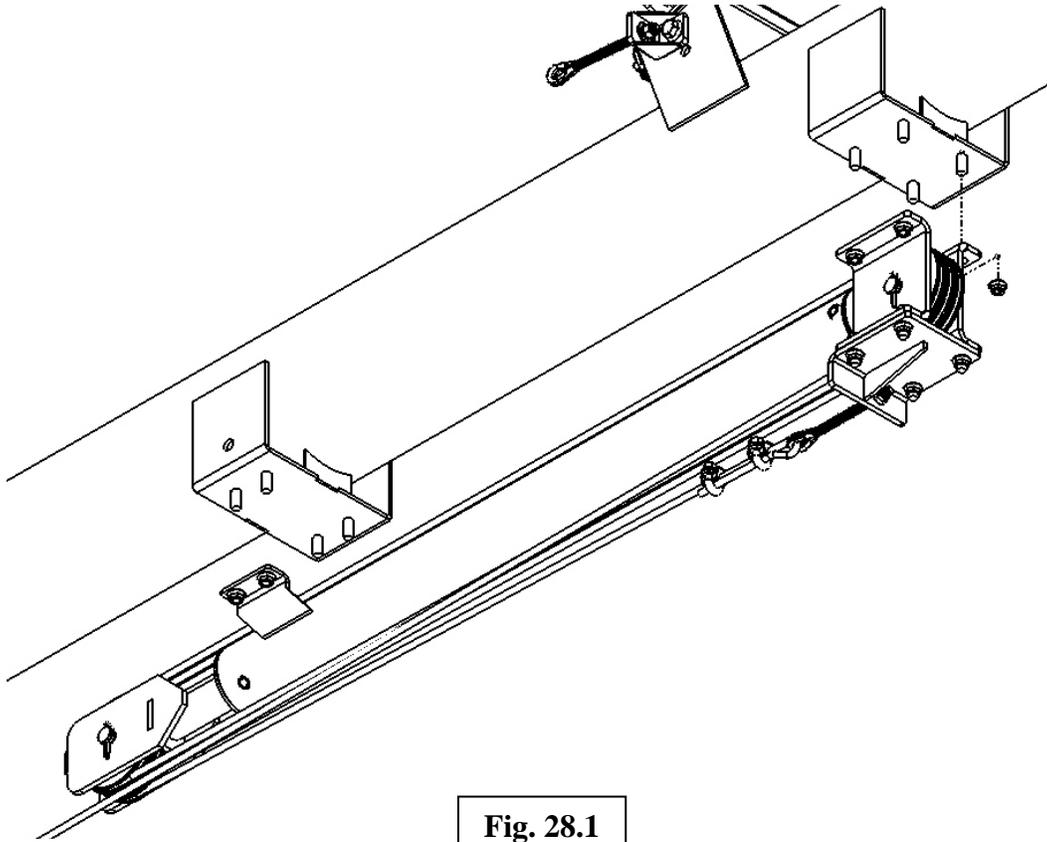


Fig. 28.1

Step 29 (Hydraulic Hose Assembly)

Locate the hydraulic kit and the quarter turn shut off valve. Attach the hoses and shut off valve to the left side of the infeed housing using (2) 1/2" hose "P" clamps & (2) 1/4" x 3/4" flange bolts & nuts as shown in figure 29.1. Run hose up left hand side auger tube attaching it the weld on studs using 1/2" hose "P" clamps & 1/4" flange nuts. Leave a little slack between each stud. Run the hose on the inside of the carriage mount bracket & connect to the cylinder using the elbow provided. (See Fig. 29.2)

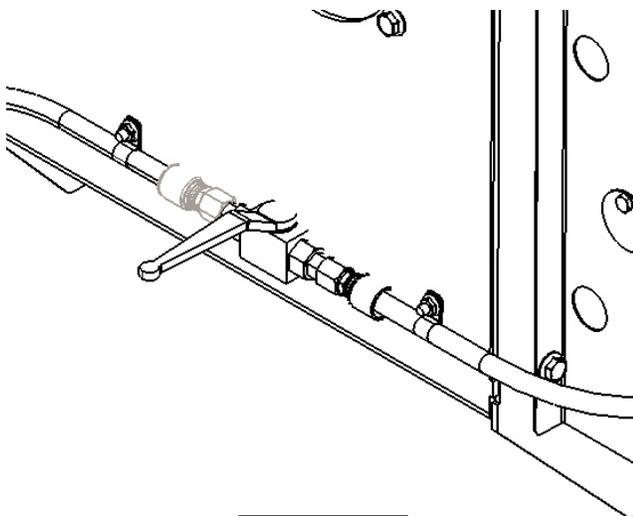


Fig. 29.1

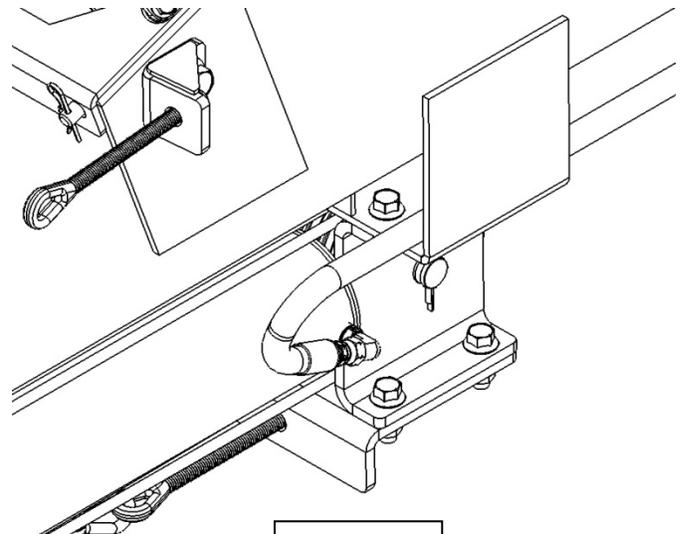
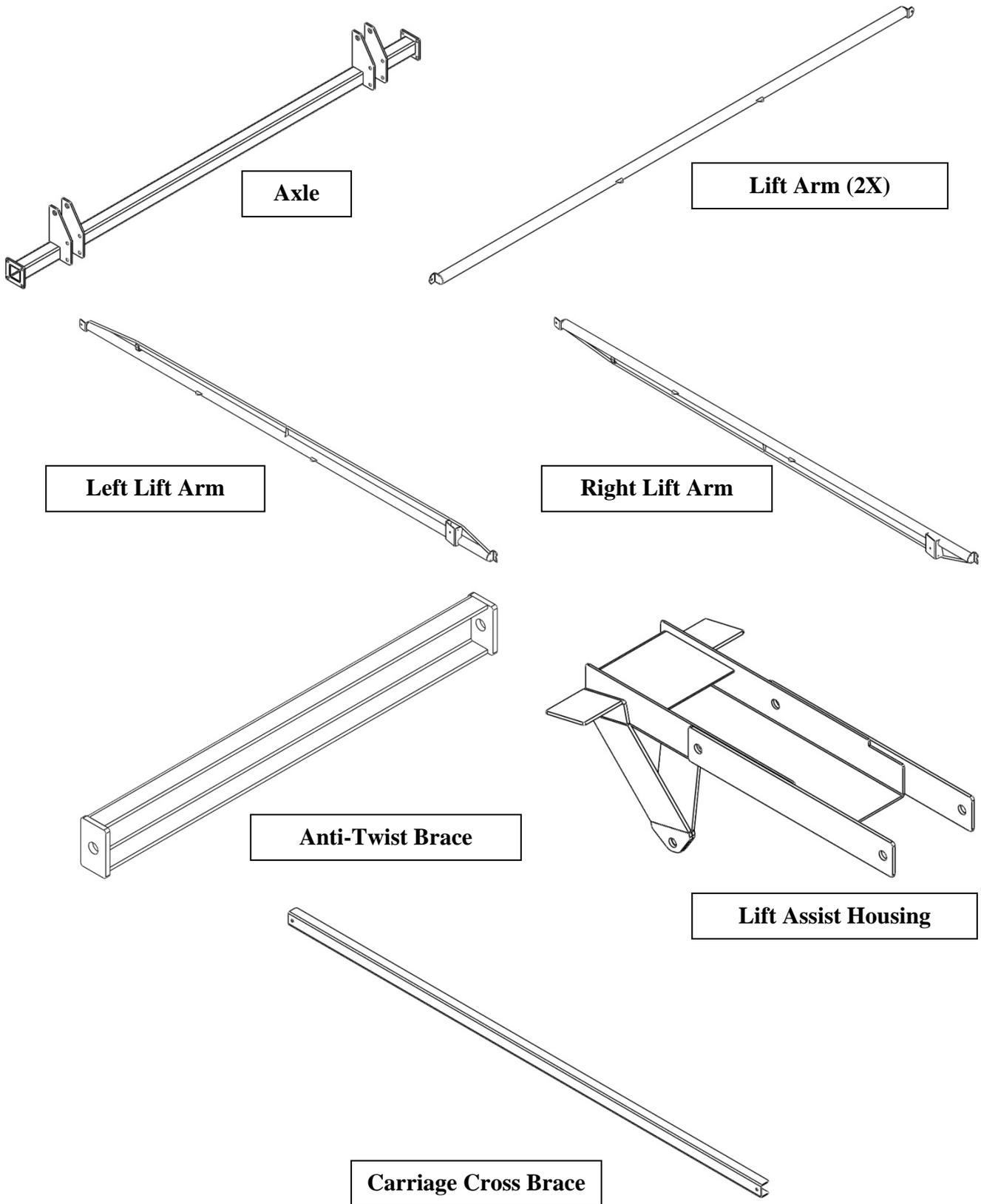


Fig. 29.2

Step 30 (Carriage Assembly)

Carriage Identification



Step 31

First, place the axle under the auger tubes in the middle of the tubes. Attach the carriage arms to the axle as shown in fig. 31.1. Fasten the carriage arms to the axle using (4) 1/2" x 1-1/2" flange bolts and nuts.

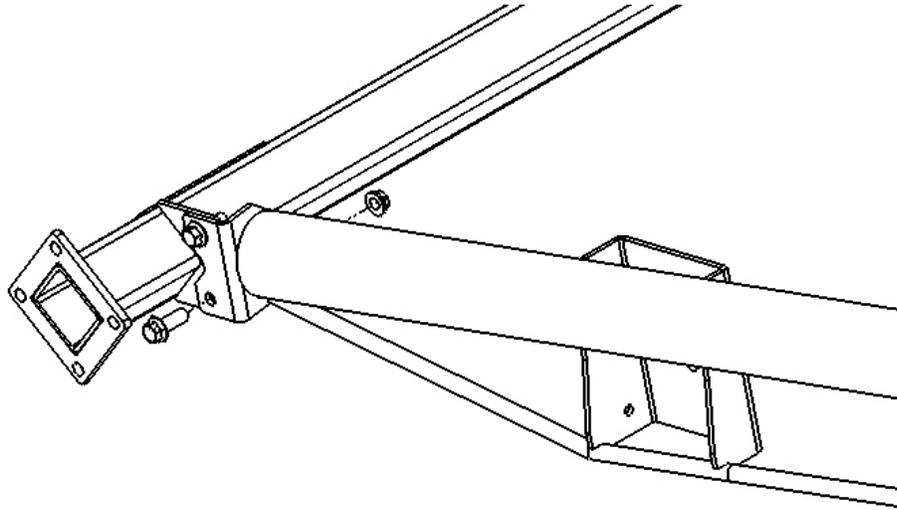


Fig. 31.1

Step 32

Next, take the anti-twist brace and the 2 anti-twist stabilizer straps and attach to the brackets located about 24" from the end of the carriage arms. Secure these parts with (2) 1/2" x 2 hex bolts & top lock nuts. Next place the (2) 4" wide inner stabilizer brackets between the 2 straps and secure with a 1/2" x 2" hex bolt & top lock nuts. Secure the 2 wide inner stabilizer brackets together using a 1/2" x 1-1/2" hex flange bolt & flange nut. Align the open hole in the inner stabilizer brackets with the holes on the end of the carriage arms as shown in Fig. 32.1.

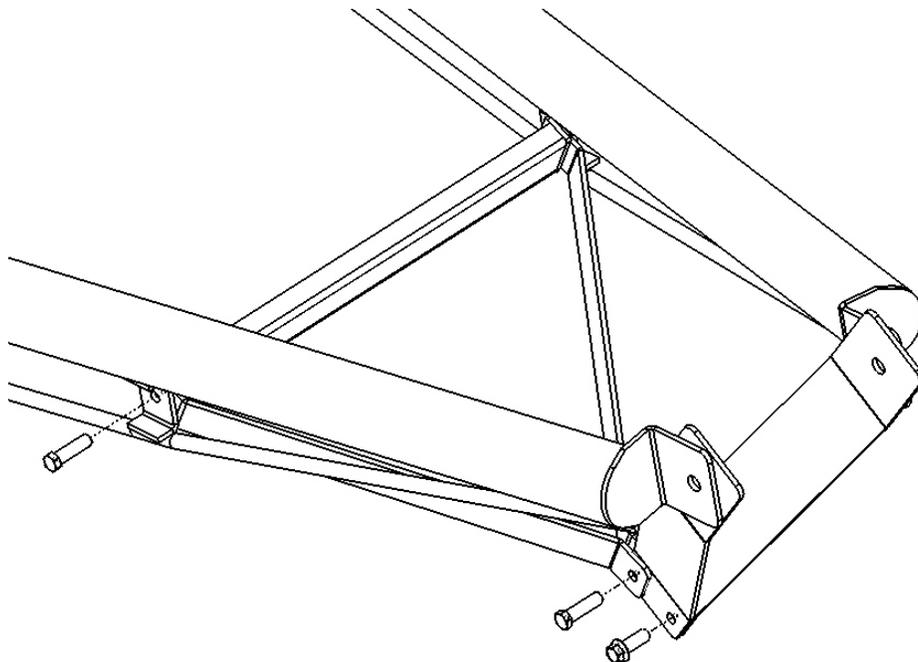


Fig. 32.1

Step 33

Next, attach the carriage arms and stabilizer brackets to the 1st auger tube. Secure using (2) 3/4" x 1-1/2" hex bolts & top lock nuts.

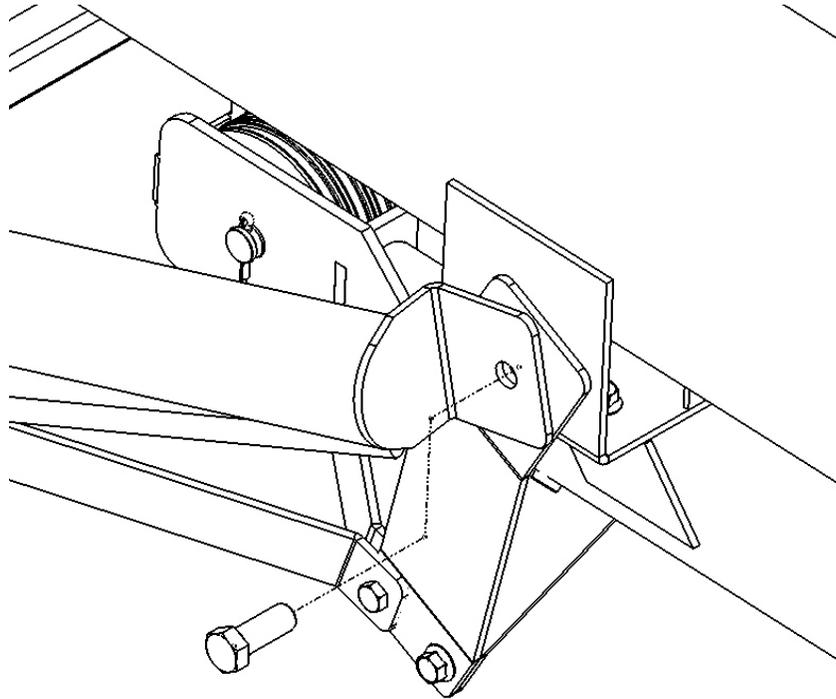


Fig. 33.1

Step 34

Next, slide the roller housing assembly onto the top of the track down past the holes located 58" from the end of the track for an A1072. Mount the roller stop & the 2 stop top plates onto the track. Secure with (2) 1/2" x 1-1/2" hex flange bolts & flange nuts. **(Note the lower holes in the track are the stop placement for a A1062)**

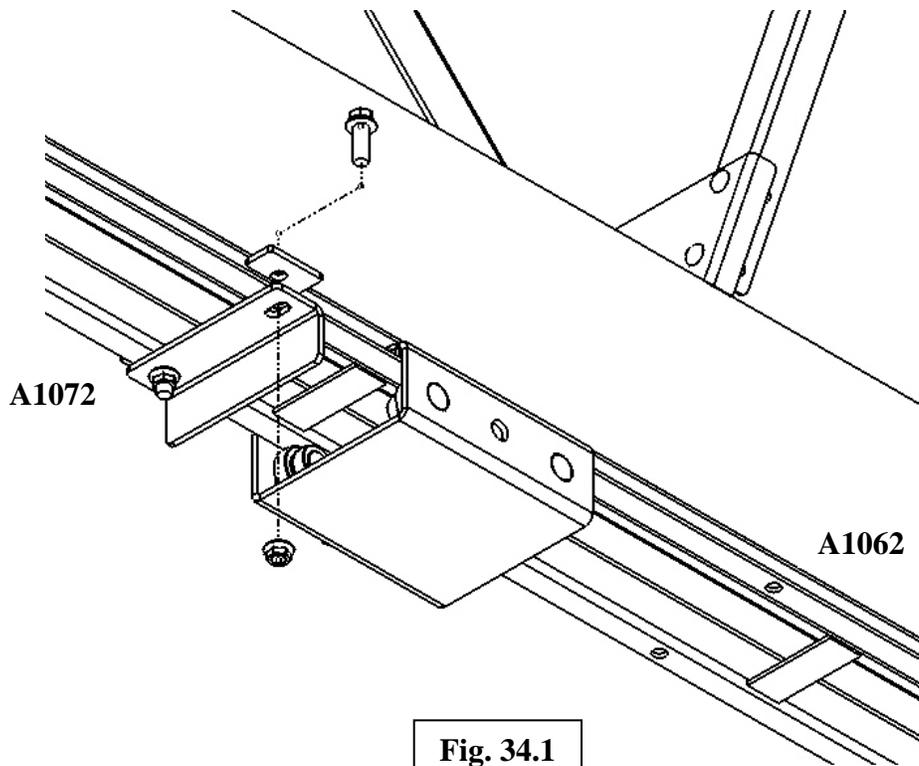


Fig. 34.1

Step 35

Next, take the lift assist housing and attach it to the roller housing assembly using a 3/4" x 10" hex bolt with a top lock nut. Be sure to orientate the housing as shown in Fig. 35.1.

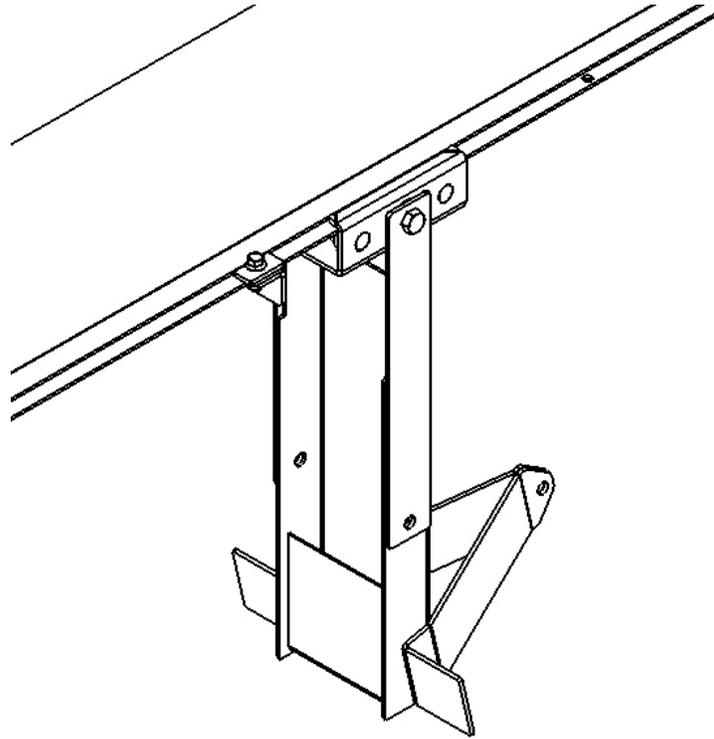


Fig. 35.1

Step 36

Next, locate the 2 lift assist side links and the cable lift thimble. Attach a link on each side of the bottom lift assist housing with the thimble in the middle. Secure all parts with (2) 1/2" x 2" hex bolts & top lock nuts.

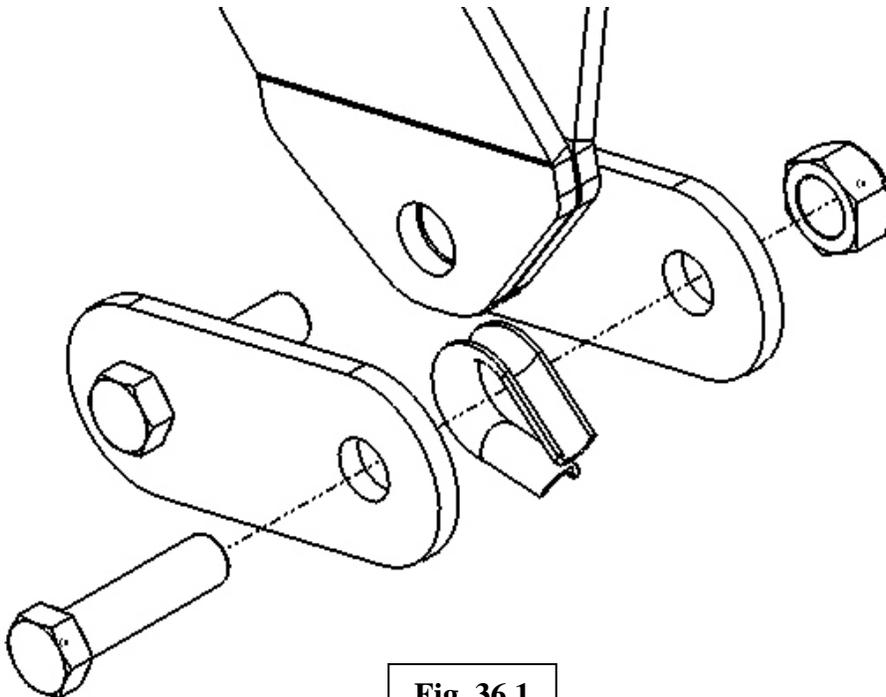


Fig. 36.1

Step 37

Next, locate the 2 hub & spindle assemblies. Attach each hub & spindle assembly to the axle. Secure each hub with (4) 1/2" x 1-1/2" hex flange bolt & flange nuts. Place each tire onto the hub and spindle and secure each with (5) 1/2" lug nuts. Tighten lug nuts evenly using a "star" pattern to 80-90 ft/lbs of torque.

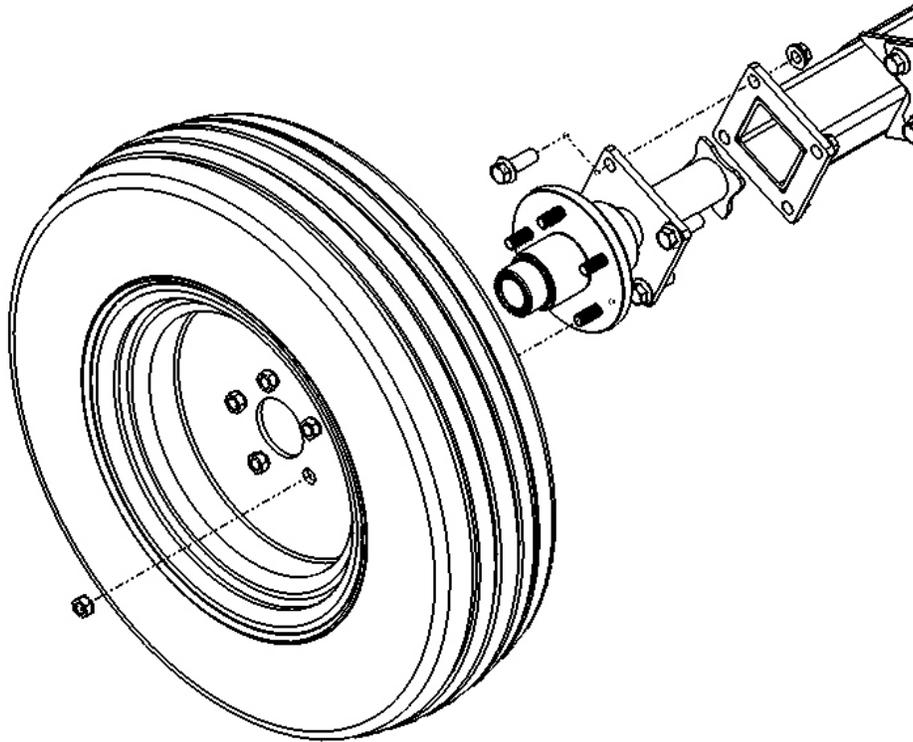


Fig. 37.1

Step 38

Next, attach the carriage cross brace to the each carriage arm using a total of (2) 3/8" x 1" hex flange bolts & flange nuts.

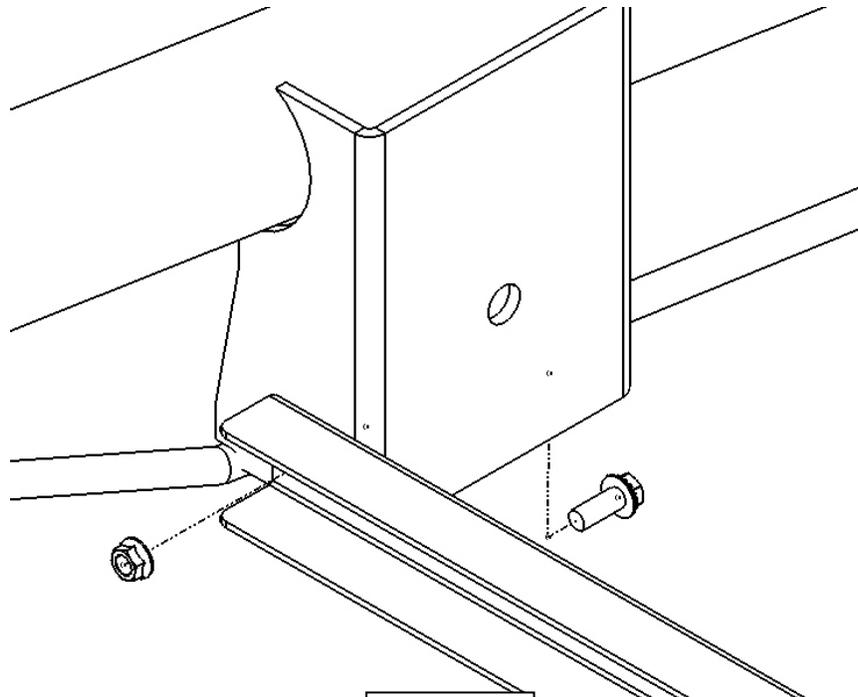
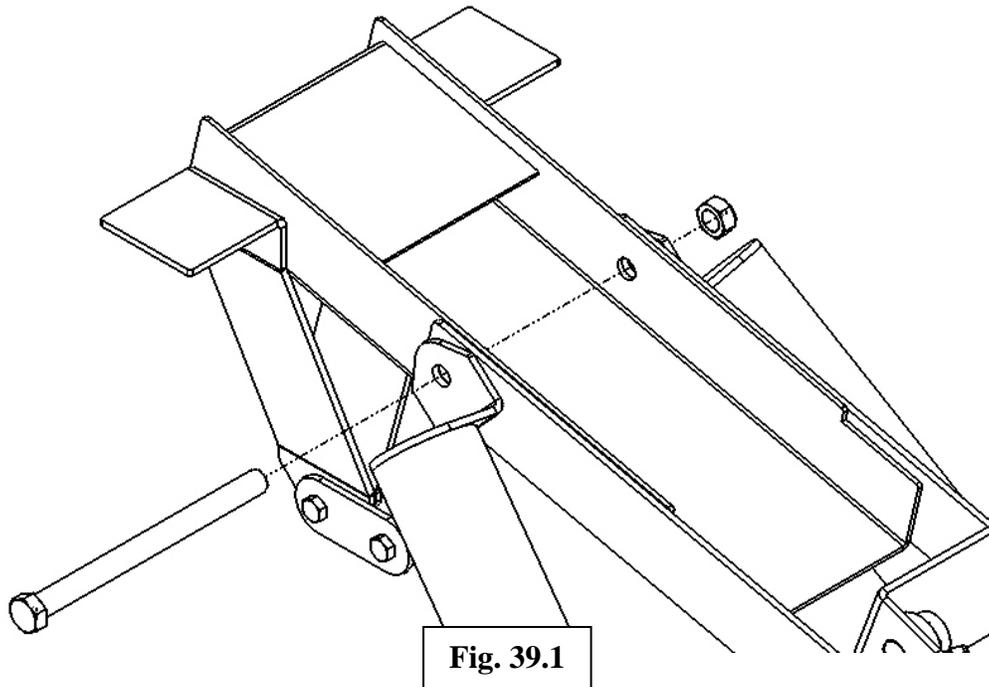


Fig. 38.1

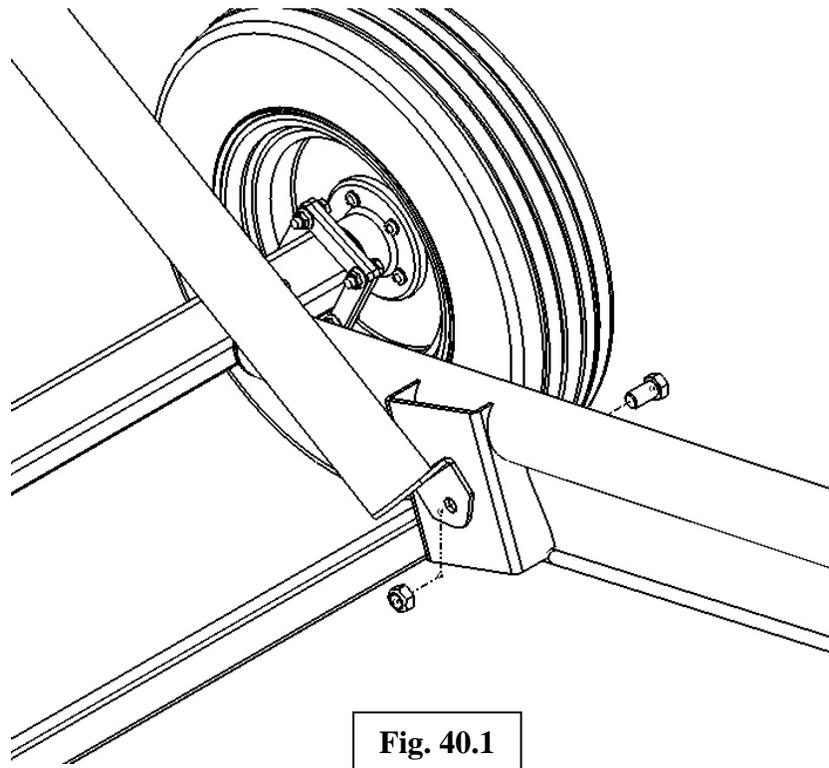
Step 39

Next, locate both lift arms. Attach the lift arms to the lift assist housing as shown in Fig. 39.1. Secure the lift arms using a 3/4" x 10" hex bolt & top lock nut.



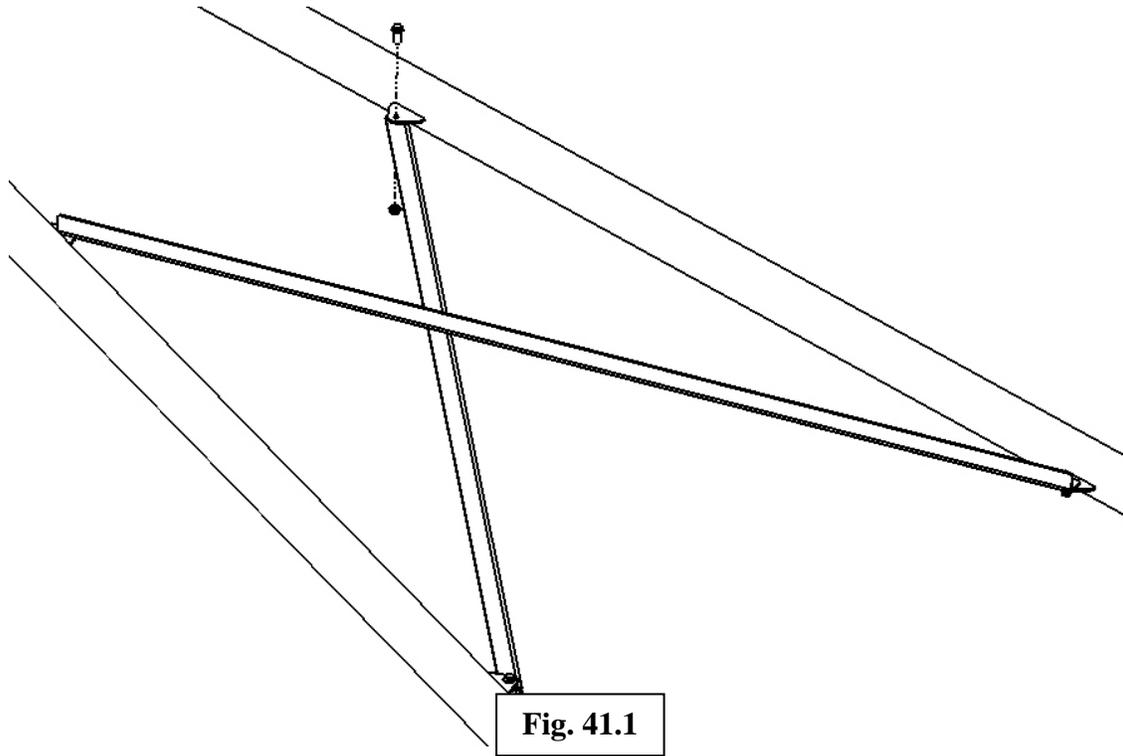
Step 40

Lift the tubes using a lifting strap and connect the lift arms to the carriage arms as shown in Fig. 40.1. Secure both carriage arms with a 3/4" x 1-1/2" hex bolt & top lock nut. The tubes and carriage should now be attached together and should be resting on the carriage stop bracket.



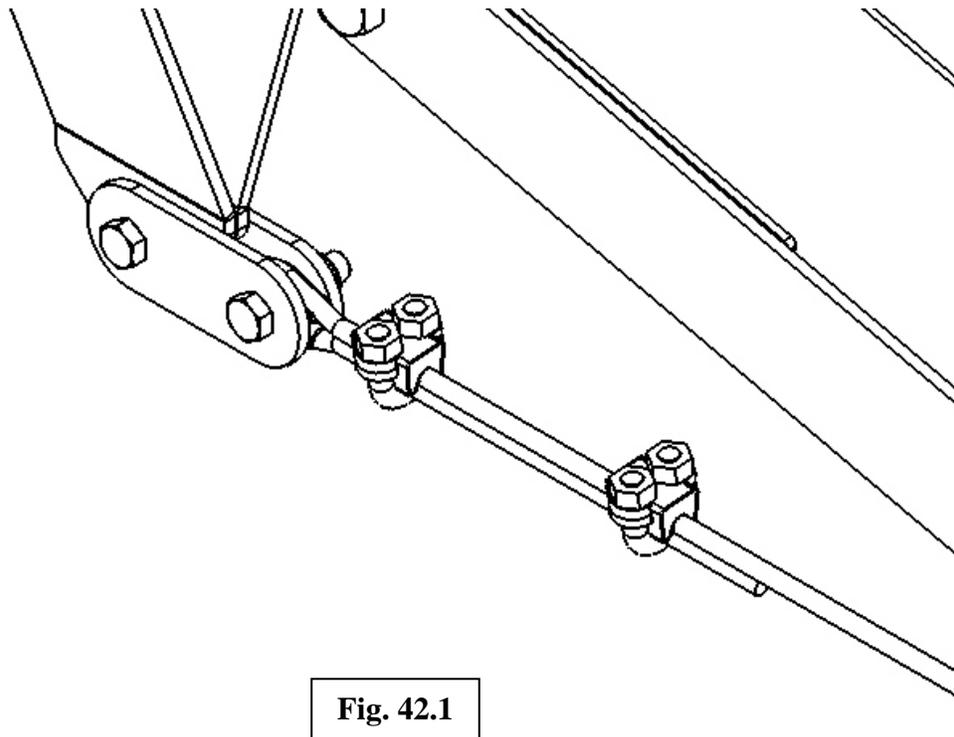
Step 41

Next, locate the (4) cross braces. Attach 2 to the carriage and lift arms. Secure all cross braces to the arms with a total of (4) 3/8" x 1" hex flange bolts & flange nuts.



Step 42

Next, take the loose end of the lift cable and pull up to the lift assist assembly and wrap it around the cable thimble as shown in Fig. 42.1. Secure the cable with (2) 5/16" cable clamps.



Step 43 (Swing Tube & Hopper Installation)

Locate the swing hopper swivel ring (30027A). Install the swing hopper swivel ring on the discharge head of the swing tube. Fasten the ring as shown in fig. 43.1 using (2) 1/2" x 5/8" shoulder bolt & 1/2" top lock nuts.

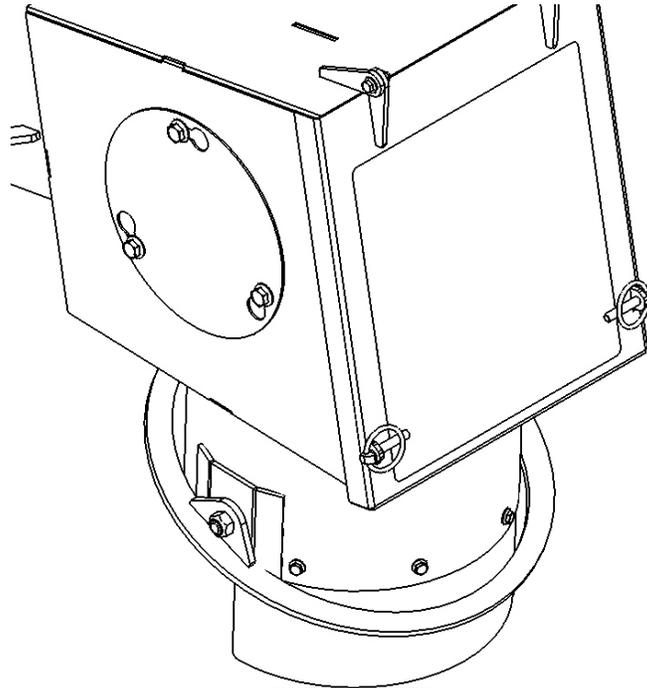


Fig. 43.1

Step 44

Lift the swing tube up and set on infeed housing as shown. Be sure to align the knuckle assembly in the swing tube with the lower gearbox in the infeed housing. Lower the other end of the swing tube onto the ground.

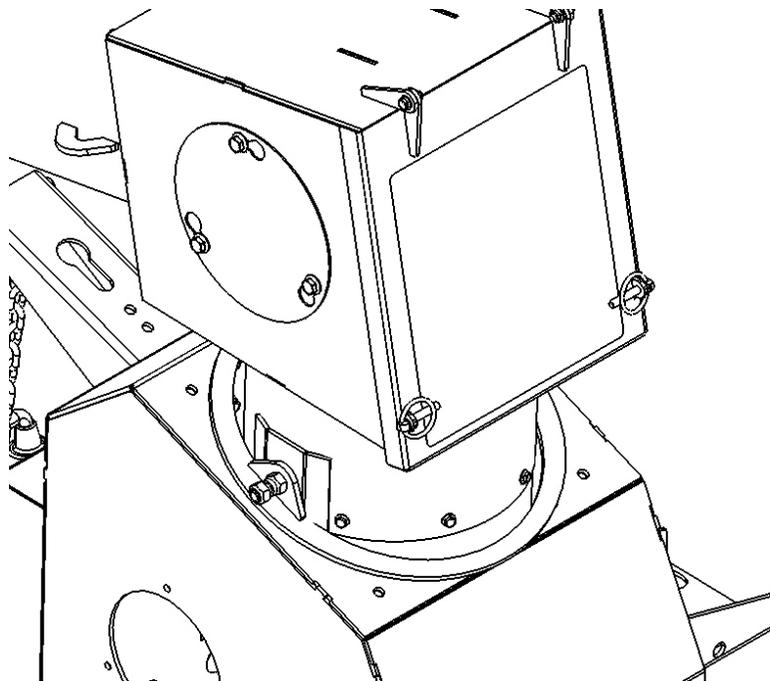


Fig. 44.1

Step 45

Locate the swing tube hold down plate & the 4 hold down spacers. Install the hold down plates & spaces using (4) 3/8" x 1-1/2" flange bolts & flange nuts. Tighten all 4 fasteners.

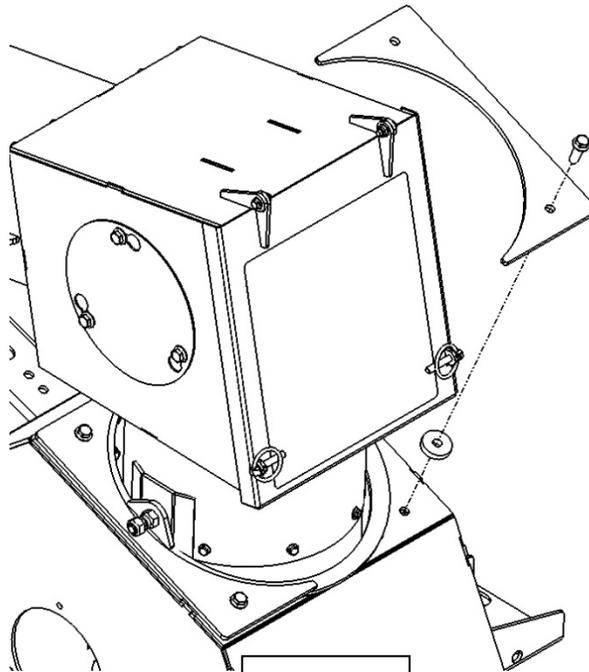


Fig. 45.1

Step 46

Next the wheel will be installed on the swing hopper. First, locate the 4 hopper tires (30104), 4 clevis pins, 4 spacer tubes (10186) & 4 lynch pins. Place the spacer tube through the first hole in the outside of the swing hopper. Slide the clevis pin through the tire and the spacer making sure the offset part of the rim is facing in towards the swing hopper as shown in fig. 46.1. Secure the spacer, tire, & clevis pin by placing a 3/16" lynch pin through the end of the clevis pin. Repeat for all 4 hopper tires. (For more ground clearance install the tire in the bottom hole.)

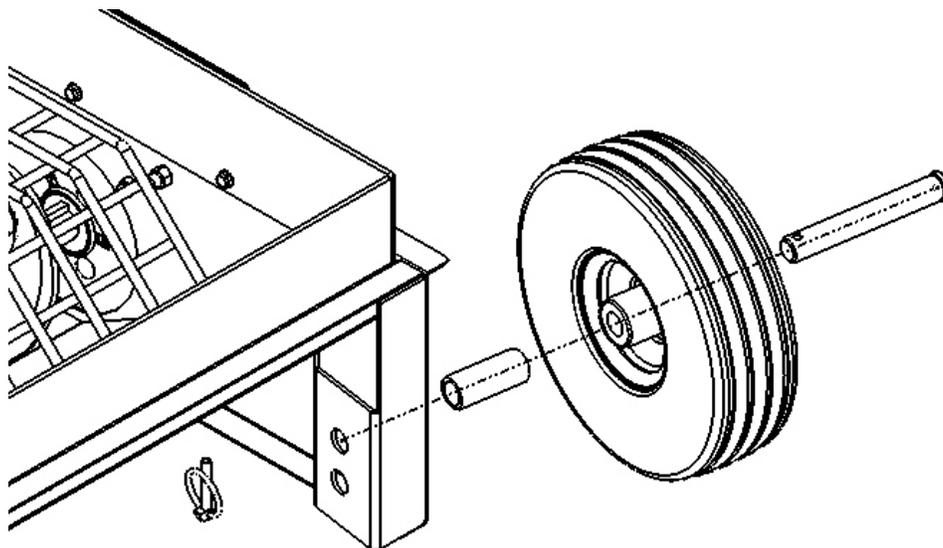


Fig. 46.1

Step 47

Next, install the upper transition flighting (30864) on the lower drive shaft attached to the swing tube flighting. To do this, slide a $3/8$ " x 1" square key into key way on swing tube flighting shaft. Slide upper transition flighting onto shaft aligning the key and keyway. To secure the transition flighting thread the set screw that is $5/16$ " x $1-1/4$ " into hole on knuckle (Fig. 47.1). After set screw is tightened, thread a $5/16$ " flange nut onto set screw and tighten to lock set screw in place.

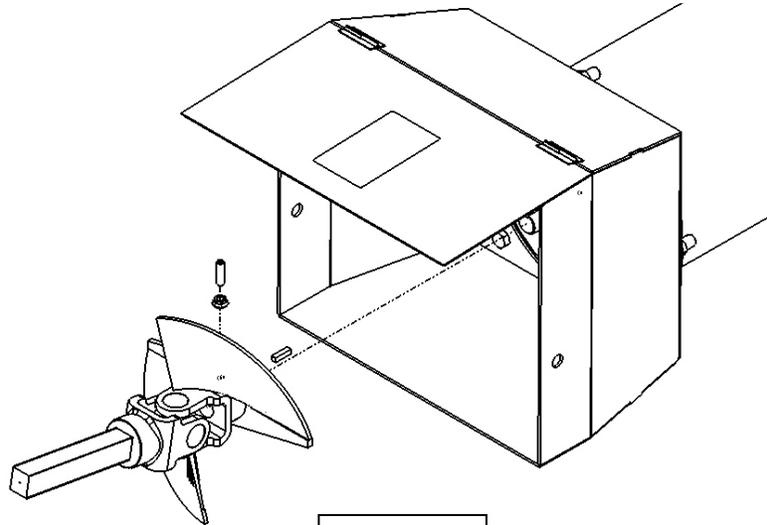


Fig. 47.1

Step 48

Next, install the swing hopper onto the swing tube. Slide the hopper transition onto the swing tube while inserting the square shaft of the upper transition flighting into the square tube on the lower transition flighting. Align the holes in the hopper and swing tube with a punch. With the access door open secure the hopper to the swing tube using (2) $1/2$ " x $1-1/2$ " flange bolts, (4) $1/2$ " washers, & (2) $1/2$ " top lock nuts. The washer will go between the bolt and the hopper & the nut and swing tube respectively.

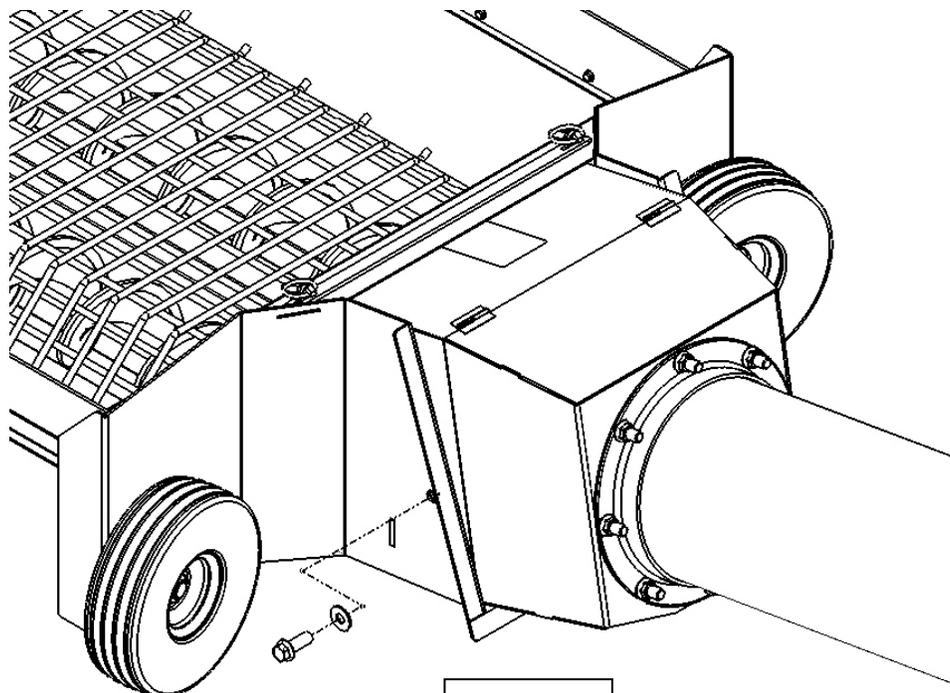


Fig. 48.1

Step 49

Next, install the manual canister. Mount the manual canister approximately 4 feet down the carriage arms below the anti-twist brackets. Secure to the tube using (2) #12 x 3/4" self tapping screws. Note that they canister lid will have to be removed to install 1 of the screws. After installation, reattach the canister lid.

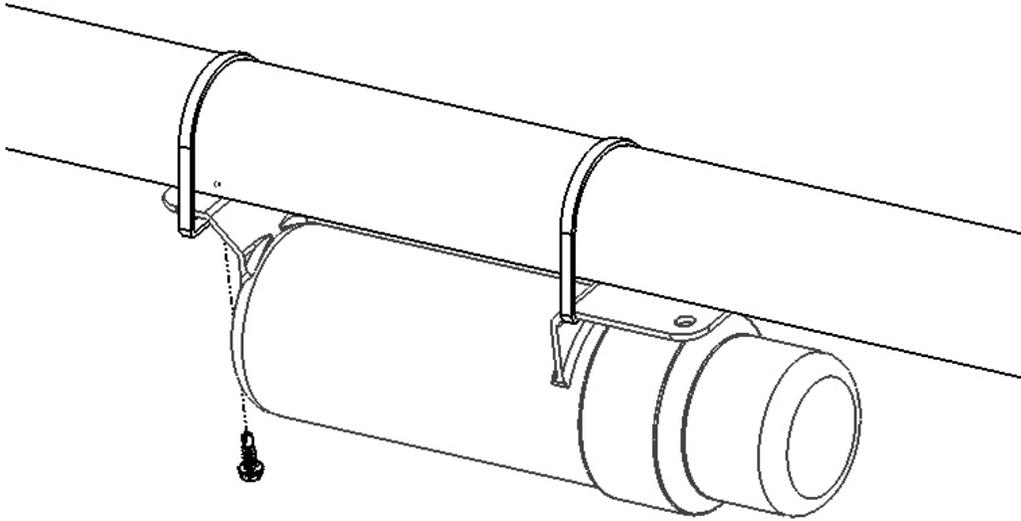


Fig. 49.1

This will complete the assembly for your Harvest by Meridian A1062 & A1072 grain auger.

For additional part numbers, information, & overall views please refer to the parts book drawings located at the end of this assembly manual or log onto www.harvestauger.com.