

# **HD Self-Propelled Auger Kit**

# Portable Grain Auger Assembly Manual

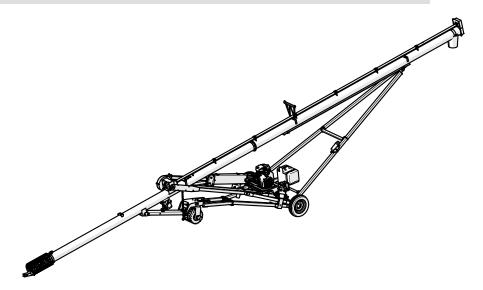
#### This manual applies to:

AGI Westfield STX2 8/10 (36/41/46/51)

AGI XTA 8/10 (36/41/46/51)

**AGI Hutchinson STX2 8/10 (36/41/46/51)** 

AGI Mayrath STX2 8/10 (36/41/46/51)







Part Number: 31121 R3

Revised: June 2025
Original Instructions

## **New in this Manual**

The following changes have been made in this revision of the manual:

Description	Section
Added elbow for hydraulic filter.	Section 3.7 – Install the Hydraulic Filter on page 18
Flipped bolts and nuts on the SP reach arms.	Section 3.14 – Install the Undercarriage on page 24

# **CONTENTS**

1. Introduction	4
2. Safety	5
2.1 Safety Alert Symbol and Signal Words	
2.2 General Safety Information	
2.3 Rotating Parts Safety	
2.4 Hydraulic Winch Safety	
2.5 Drives and Lockout Safety	6
2.5.1 Gas Engine Safety	6
2.5.2 Hydraulic Power Safety	7
2.6 Tire Safety	8
2.7 Personal Protective Equipment	8
2.8 Safety Equipment	
2.9 Safety Decals	9
2.9.1 Decal Installation/Replacement	
2.9.2 Safety Decal Locations and Details	10
3. Assembly	12
3.1 Assembly Safety	
3.2 Check the Shipment	
3.3 Before You Begin	
3.4 Hydraulic Fittings and Bolt Tightening	
3.5 Install the Hydraulic Pump	
3.6 Install the Hydraulic Oil Tank	
3.7 Install the Hydraulic Filter	
3.8 Install the Hydraulic Manifold	
3.9 Install the Ring Gear	19
3.10 Install the Over-Center Drive	20
3.11 Adjust the Pinion Gear	21
3.12 Install the Hydraulic Winch	
3.13 Connect the Lift Cable	23
3.14 Install the Undercarriage	
3.15 Install the Hydraulic Adapters	
3.16 Attach the Transport Chain	
3.17 Attach the Hydraulic Hoses	34
4. Appendix	41
4.1 Bolt Torque	
4.2 Fittings Torque Values	
5. AGI Limited Warranty	44

# 1. Introduction

Before assembling, please read this manual. Familiarize yourself with the process and the necessary precautions for efficient and safe assembly of this AGI HD Self-Propelled Auger Kit.

Everyone present at the assembly site is required to be familiar with all safety precautions.

Keep this manual available for frequent reference and review it with new personnel. Call your local distributor or dealer if you need assistance or additional information.

# 2. Safety

# 2.1. Safety Alert Symbol and Signal Words



This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury or death, carefully read the message that follows, and inform others.

**Signal Words:** Note the use of the signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.

**▲ DANGER** 

Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

**⚠ WARNING** 

Indicates a hazardous situation that, if not avoided, could result in serious injury or death.

**⚠** CAUTION

Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

# 2.2. General Safety Information

Read and understand all safety instructions, safety decals, and manuals and follow them when assembling the equipment.

 Only experienced personnel who are familiar with this type of assembly and installation should perform this work. Untrained assemblers/installers expose themselves and bystanders to possible serious injury or death.



- Do not modify the self-propelled auger kit in any way or deviate from the instructions in this manual without written permission from the manufacturer. Unauthorized modification or methods may impair the function and/or safety. Any unauthorized modification will void the warranty.
- Follow a health and safety program for your worksite. Contact your local occupational health and safety organization for information.
- Contact your local representative or AGI if you need assistance or additional information.
- Always follow applicable local codes and regulations.

# 2.3. Rotating Parts Safety

**⚠ WARNING** 

- Keep body, hair, and clothing away from rotating shafts, pulleys, belts, chains, and sprockets.
- Do not operate with any guard removed or modified. Keep guards in good working order.
- Shut off and lock out power source before inspecting or servicing machine.



# 2.4. Hydraulic Winch Safety

#### When Equipped:

- MARNING Keep away from rotating cable drum and winch cable. Do not touch or grab cable while winch is being operated or use hands to guide the cable.
  - Inspect cable and cable clamps before using hydraulic winch. Replace cable if frayed or damaged. Tighten cable clamps if necessary.
  - Check the cable anchor on the winch drum is tight.
  - Confirm hydraulic hoses are in good condition.
  - Do not continue to supply power to hydraulic winch after the self-propelled auger kit has reached full up position.
  - Make sure lift cable is seated properly.
  - Always keep a minimum of 3 cable wraps on the cable drum.

# 2.5. Drives and Lockout Safety

Inspect the power source(s) before using and know how to shut down in an emergency. Whenever you service or adjust your equipment, make sure you shut down the power source and unplug or remove the key (as applicable) to prevent inadvertent start-up and hazardous energy release. Know the procedure(s) that applies to your equipment from the following power source(s). Ensure that all personnel are clear before turning on power to equipment.



# 2.5.1 Gas Engine Safety

#### **⚠ WARNING** Power Source

- Keep guards in place and secure.
- Properly ventilate surrounding area.
- Never fill the fuel tank with the engine running, while smoking, or near an open flame. Always shut down and allow engine to cool before filling with fuel.
- Never overfill the tank or spill fuel. If fuel is spilled, clean it up immediately.
- Be sure to use the correct type and grade of fuel. Ground the fuel funnel or nozzle against the filler neck to prevent sparks that could ignite fuel vapors.
- Be sure to replace the fuel fill cap when you are done.

#### Lockout

- For engines with an electric start, remove the ignition key, the spark plug wire, or the spark plug.
- For engines with a rope or crank start, remove the spark plug wire or the spark plug.



31121 R3 6

## 2.5.2 Hydraulic Power Safety

#### **⚠ WARNING** Power Source

- Refer to the rules and regulations applicable to the power source operating the hydraulic system.
- Do not connect or disconnect hydraulic lines while system is under pressure.
- Keep all hydraulic lines away from moving parts and pinch points.
- Escaping hydraulic fluid under pressure will cause serious injury if it penetrates the skin surface (serious infection or toxic reaction can develop). See a doctor immediately if injured.
- Use metal or wood as a backstop when searching for hydraulic leaks and wear proper hand and eye protection.
- Check all hydraulic components are tight and in good condition. Replace any worn, cut, abraded, flattened, or crimped hoses.
- Clean the connections before connecting to equipment.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or adhesive. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.

#### Lockout

• Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.



31121 R3

# 2.6. Tire Safety



Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion that may result in serious injury or death.



- DO NOT attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Have a qualified tire dealer or repair service perform required tire maintenance.
- When replacing worn tires, make sure they meet the original tire specifications. Never undersize the replacement tire.
- DO NOT weld to the tire rim with the tire mounted on the rim. This action may cause an explosion which could result in serious injury or death.
- Inflate tires to the manufacturer's recommended pressure.
- Tires should not be operated at speeds higher than their rated speed.
- Keep wheel lug nuts tightened to manufacturer's recommendations.
- Never reinflate a tire that has been run flat or seriously under-inflated without removing the tire from the wheel.
   Have the tire and wheel closely inspected for damage before remounting.



# 2.7. Personal Protective Equipment

The following Personal Protective Equipment (PPE) should be worn when assembling the equipment.

#### **Safety Glasses**

Wear safety glasses at all times to protect eyes from debris.



#### **Work Gloves**

Wear work gloves to protect your hands from sharp and rough edges.



#### **Steel-Toe Boots**

Wear steel-toe boots to protect feet from falling debris.



#### **Coveralls**

• Wear coveralls to protect skin.



#### **Hard Hat**

• Wear a hard hat to help protect your head.



# 2.8. Safety Equipment

The following safety equipment should be kept on site.

#### Fire Extinguisher

 Provide a fire extinguisher for use in case of an accident. Store in a highly visible and accessible place.



#### First-Aid Kit

 Have a properly-stocked first-aid kit available for use should the need arise, and know how to use it.



# 2.9. Safety Decals

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See decal location figures that follow.
- Replaced parts must display the same decal(s) as the original part.
- Replacement safety decals are available free of charge from your distributor, dealer, or factory as applicable.

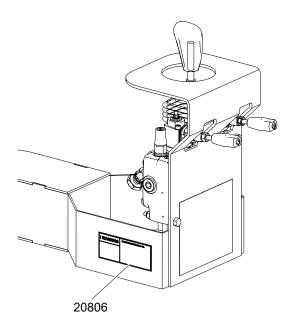
# 2.9.1 Decal Installation/Replacement

- 1. Decal area must be clean and dry, with a temperature above 50°F (10°C).
- 2. Decide on the exact position before you remove the backing paper.
- 3. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- 4. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- 5. Small air pockets can be pierced with a pin and smoothed out using the decal backing paper.

# 2.9.2 Safety Decal Locations and Details

Replicas of the safety decals that are attached to the self-propelled auger kit and their messages are shown in the figure(s) that follow. Safe operation and use of the self-propelled auger kit requires that you familiarize yourself with the various safety decals and the areas or particular functions that the decals apply to, as well as the safety precautions that must be taken to avoid serious injury, death, or damage.

Figure 1. Decal Locations (Hydraulic Steering)



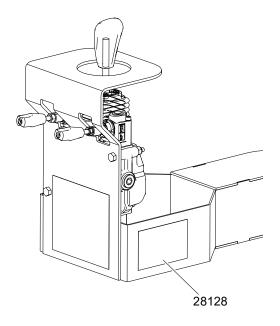


Figure 2. Decal Locations (Hydraulic Winch)

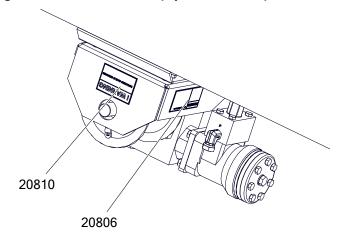


Table 1. Safety Decals

Part Number	Description	
20806	HIGH PRESSURE FLUID HAZARD Hydraulic fluid can cause serious injury if it penetrates the skin. If it does, see a doctor immediately.  Relieve system pressure before repairing, adjusting or disconnecting.  Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.	
20810	To prevent death or serious injury:  • Keep away from rotating cable drum and winch cable.  • Inspect lift cable periodically; replace if damaged.  • Inspect cable clamps periodically; tighten if necessary.	,
28128	TRANSPORT HAZARD  To prevent serious injury or equipment damage, before towing:  Lift up wheel frame completely and secure with safety chain.  Pull handle to disengage drive wheel motors.	

# 3. Assembly

# 3.1. Assembly Safety

- Do not take chances with safety. The components can be large, heavy, and hard to handle. Always use the proper tools, rated lifting equipment, and lifting points for the job.
- Do not stand on, under, or near any component that is not secured.
- Carry out assembly in a large open area with a level surface.
- Always have two or more people assembling the self-propelled auger kit.
- Make sure you have sufficient lighting for the work area.
- Tighten all fasteners according to their specifications. Do not replace or substitute bolts, nuts, or other hardware that is of lesser quality than the hardware supplied by the manufacturer.
- Stay away from overhead power lines and other obstructions during assembly. Contact with power lines can cause electrocution.



Ensure auger is in fully lowered position with intake end on the ground before proceeding with the assembly of the wheel move.

# 3.2. Check the Shipment

Unload the self-propelled auger kit parts at the assembly site and compare the packing slip to the shipment contents. Ensure that all items have arrived and that none are damaged. Take pictures of shipments prior to, or just after, unloading if there are any damages.

Report missing or damaged parts immediately to ensure that proper credit is received from AGI or your representative, and to ensure that any missing parts can be shipped quickly to avoid holding up the assembly process.

#### **Important**

Do not assemble or install damaged components.

# 3.3. Before You Begin

Before you assemble the self-propelled auger kit:

- Familiarize yourself with all the sub-assemblies, components, and hardware that make up the equipment.
- Have all parts and components on hand, and arrange them for easy access.
- Separate the hardware (bolts, nuts, etc.) and lay them out into groups for easier identification during assembly.
- If assembling inside, confirm the ceiling and door width/height provide enough clearance when installing the undercarriage and to remove the self-propelled auger kit from the building.
- Ensure there is adequate space to remove the assembled self-propelled auger kit from the assembly area.

# 3.4. Hydraulic Fittings and Bolt Tightening

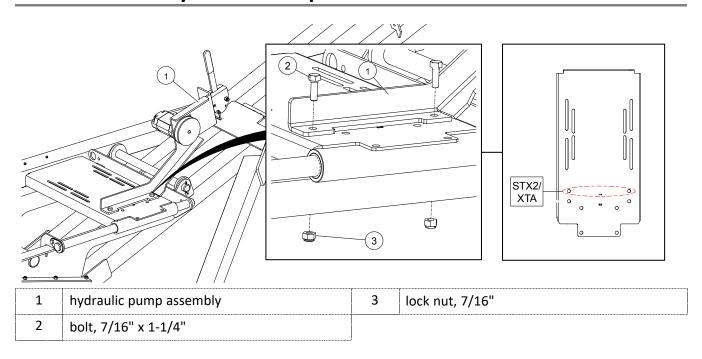
Remember the following basic considerations when tightening hydraulic fittings and bolts:

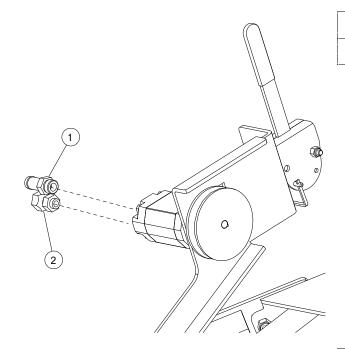
- Tighten all fasteners to the torque specified in Section 4.1 Bolt Torque on page 41. Do not replace or substitute bolts, nuts, or other hardware that is of lesser quality than the hardware supplied by the manufacturer.
- All hydraulic fittings should be torqued to the recommended specifications. See Section 4.2 Fittings Torque Values on page 42.

NOTICE

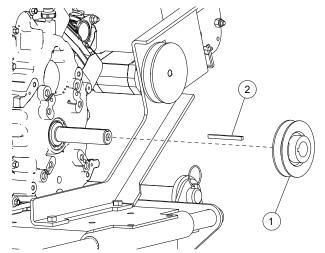
Do not overtighten fittings. Overtightening hose fittings can crack the fittings or motor body and will void the warranty.

# 3.5. Install the Hydraulic Pump

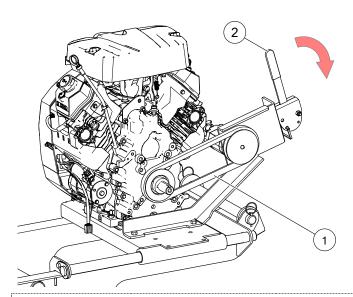




1	steel fitting, 3/4" HB x 10 MORB
2	steel fitting, 8 MORB x 1/2" FNPSM



1	pump pulley, 4-1/2" x 1-1/8" single	
2	square key, 1/4" x 3"	

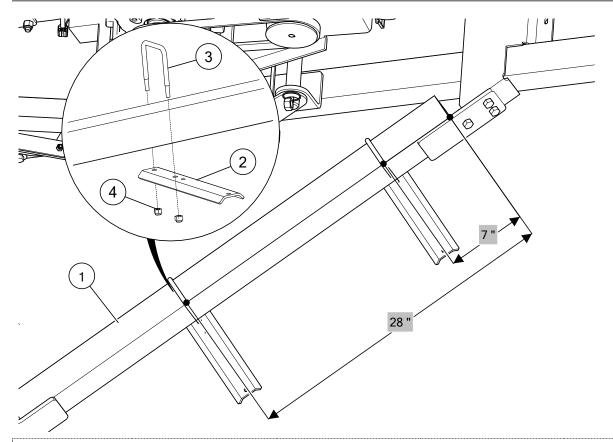


#### **Assembly Note:**

• Rotate the pump handle clockwise to apply tension to the pump belt and pull down the handle to lock the belt in place.

1	pump belt, BX35	2	pump handle	
---	-----------------	---	-------------	--

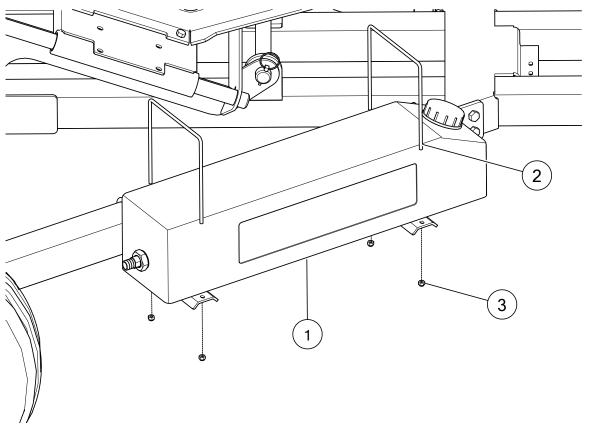
# 3.6. Install the Hydraulic Oil Tank



#### **Assembly Notes:**

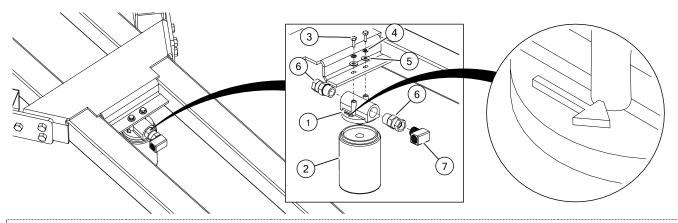
- Place the first hydraulic tank mount 7" from the end of the tube.
- Place the second hydraulic tank mount 28" from the end of the tube.

1	lower support frame, right	3	square U-bolt, 3/8" x 3-1/16" x 4"
2	hydraulic tank mount	4	lock nut, 3/8"



# Assembly Note: • Ensure the cap is located on the raised side. 1 hydraulic tank 3 lock nut, 1/4" 2 square U-bolt, 1/4" x 7-1/4" x 7-5/8"

# 3.7. Install the Hydraulic Filter

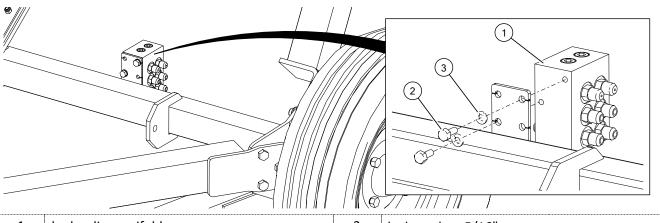


#### **Assembly Note:**

• The hydraulic hoses MUST be installed to ensure that the oil flows to the tank, in the same direction as the arrow on the filter head.

1	hydraulic filter head	5	flat washer, 1/4"
2	hydraulic filter	6	steel fitting, 3/4" MNPT x 1/2" FNPSM
3	bolt, 1/4" x 3/4"	7	elbow
4	lock washer, 1/4"		

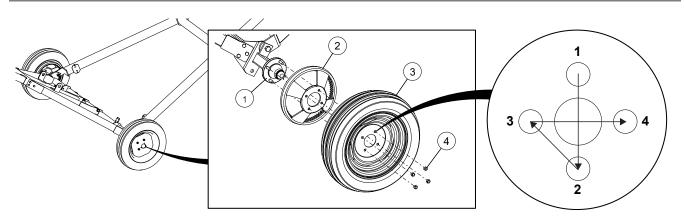
# 3.8. Install the Hydraulic Manifold



 1
 hydraulic manifold
 3
 lock washer, 5/16"

 2
 bolt, 5/16" x 3/4"
 3
 lock washer, 5/16"

# 3.9. Install the Ring Gear



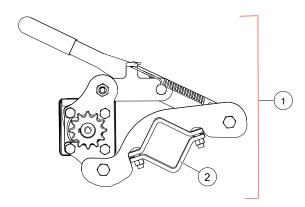
## **Assembly Notes:**

- Check that air pressure in the tires match pressure indicated on the tire sidewall.
- Torque the wheel nuts to 80 ft·lb ± 10 ft·lb (108.5 N·m ± 13.5 N·m) using the pattern shown.

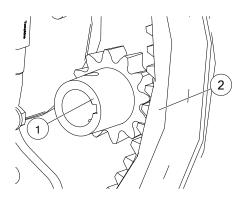
1	hub	3	wheel	
2	ring gear	4	wheel nut, 1/2"	

# 3.10. Install the Over-Center Drive

- 1. Position the axle cap of the over-center drive assembly squarely on the axle tube.
- 2. With the pinion gear flush with the ring gear, bolt the axle cap to the axle tube using four carriage bolts and lock nuts.



1	over-center drive assembly
2	bolt-on axle cap



1	pinion gear
2	ring gear

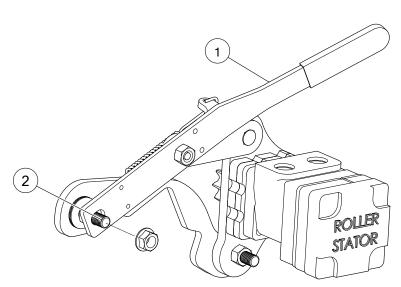
# 3.11. Adjust the Pinion Gear

NOTICE

Failure to ensure proper gear meshing will result in gear damage. The pinion gear should mesh with the ring gear to provide maximum tooth contact.

#### **Insufficient meshing**

- If the pinion gear will barely mesh with the ring gear, loosen the slot bolt jam nuts and slide the handle towards the tire until the pinion gear teeth mesh with the ring gear teeth without binding.
- If the pinion gear does not mesh fully with the ring gear, adjust the handle slot bolt (which bolts to the drive mount clamp) so full meshing of pinion gear is achieved when handle is in over-center position.

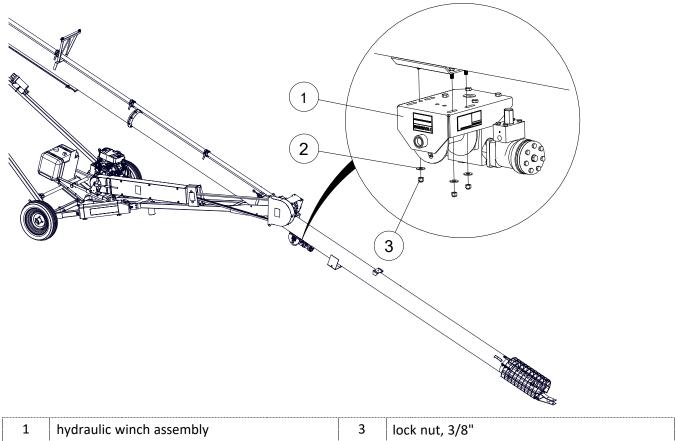


1	handle
2	handle slot bolt

#### **Gear teeth binding**

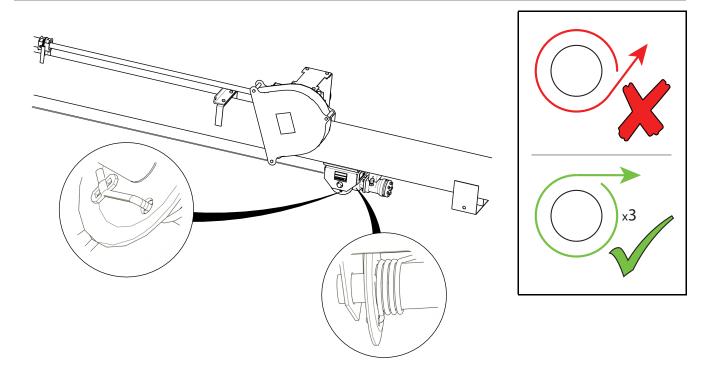
• If the handle will not 'lock' into over-center position, loosen the slot bolt nuts and slide the handle away from the tire.

# 3.12. Install the Hydraulic Winch



1	hydraulic winch assembly	3	lock nut, 3/8"
2	flat washer, 3/8"		

# 3.13. Connect the Lift Cable



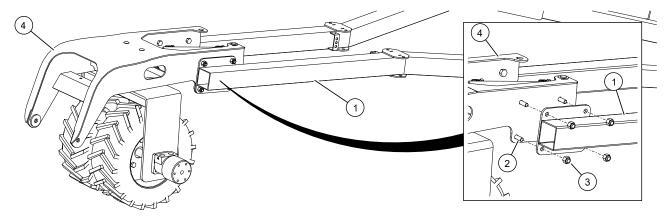
#### **Important**

Make sure there is a minimum of three wraps of cable on the winch drum when the auger is in transport position.

- 1. Pull cable to the winch.
- 2. Wrap the cable over and around the winch drum.
- 3. Thread the cable through the hole in the side of the winch drum and secure it using a cable clamp.

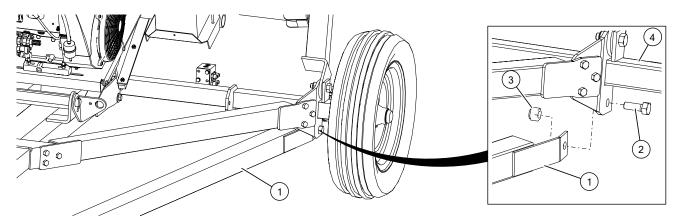
# 3.14. Install the Undercarriage

## Connecting the SP Reach Arms to the Mover Assembly



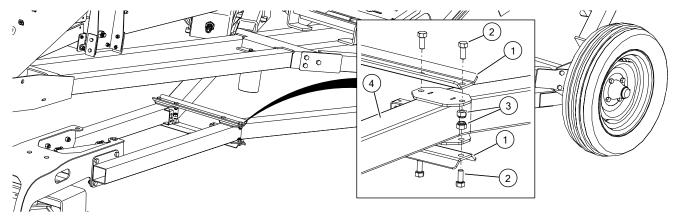
1	AWD SP reach arm	3	lock nut, 1/2"
2	bolt, 1/2" x 1-1/4"	4	AWD SP mover assembly

## Connecting the SP Reach Arms to the Axle



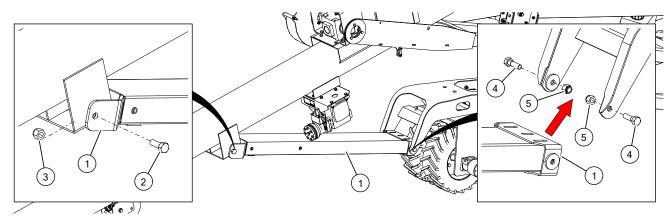
A	ssem	embly Note:				
•	Thi	This connection must rotate—do not overtighten.				
	1	AWD SP reach arm	3	lock nut, 3/4"		
	2	bolt, 3/4" x 2"	4	axle		

## **Installing the SP Reach Arm Tie Braces**



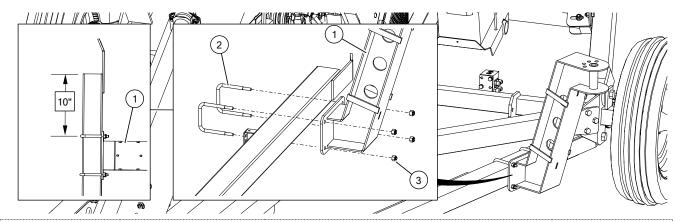
# Assembly Note: • This step is not required for the 36' model. 1 tie brace 3 lock nut, 7/16" 2 bolt, 7/16" x 1" 4 AWD SP reach arm

## Installing the Slider Assembly onto the Tube and Mover Assembly



Assen	nbly Note:				
• Th	These joints must pivot—do not overtighten.				
1	1 AWD mover slider assembly 4 bolt, 5/8" x 2"				
2	bolt, 3/4" x 2"	5	lock nut, 5/8"		
3	lock nut, 3/4"				

## **Installing the Controls Tower**

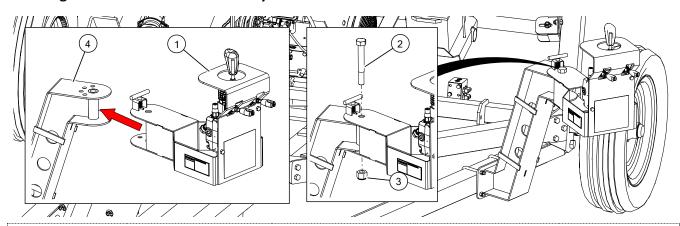


#### **Assembly Notes:**

- Install the tower 10" from the end of the SP reach arm tube.
- Install the tower on the right SP reach arm (looking from the intake, towards the discharge).

1	controls tower	3	lock nut, 3/8"
2	square U-bolt, 3/8" x 3-1/16" x 4"		

## **Installing the Mover Controls Assembly**

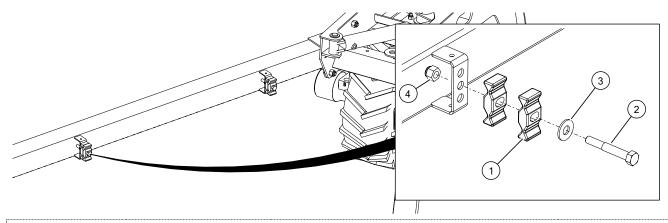


## **Assembly Note:**

• This connection must rotate—do not overtighten.

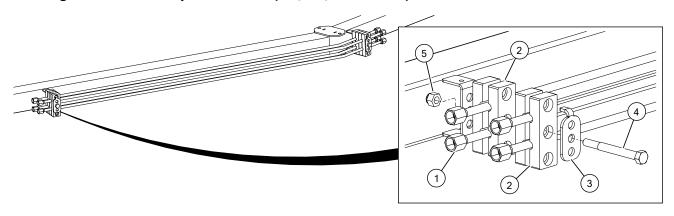
	s connection mast rotate ao not overtighten.		k nut, 3/4"	
1	mover controls assembly	3	lock nut, 3/4"	
2	bolt, 3/4" x 5-1/2"	4	controls tower	

#### Installing the Line Blocks (36' Model)



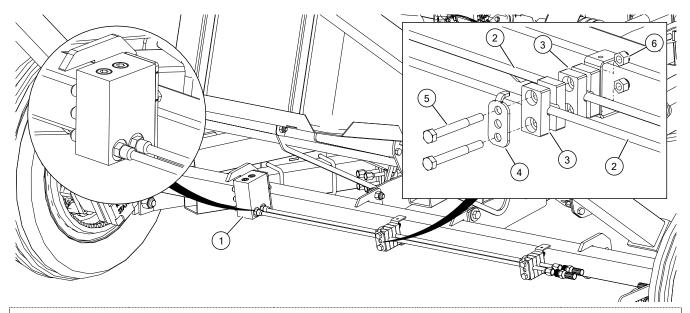
# Assembly Note: • Hand tighten the bolts and nuts. 1 line block 3 flat washer, 3/8" 2 bolt, 3/8" x 2-1/2" 4 lock nut, 3/8"

## Installing the Bent Steel Hydraulic Lines (41'/46'/51' Models)



# Assembly Notes: Install on the same side as the controls. Install clamp bracket with the bend tab pointing inside of the bolt hole. hydraulic steel line, bent double tube clamp hydraulic tube clamp bracket bolt, 3/8" x 3-1/2" lock nut, 3/8" hydraulic tube clamp bracket

# Installing the Straight Hydraulic Steel Lines onto the Axle



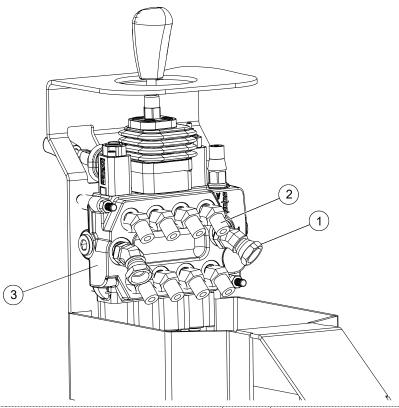
#### **Assembly Note:**

• Install the clamp bracket with the bend tab pointing towards the axle.

· 1113	instantine clamp bracket with the bend tab pointing towards the axie.		
1	hydraulic manifold	4	hydraulic tube clamp bracket
2	hydraulic steel line, straight	5	bolt, 3/8" x 3-1/4"
3	single tube clamp	6	lock nut, 3/8"

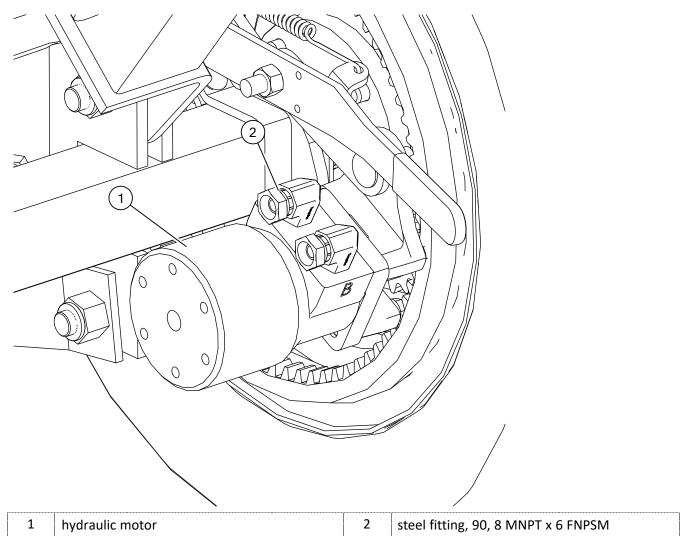
# 3.15. Install the Hydraulic Adapters

# Installing Adapters at the Valve

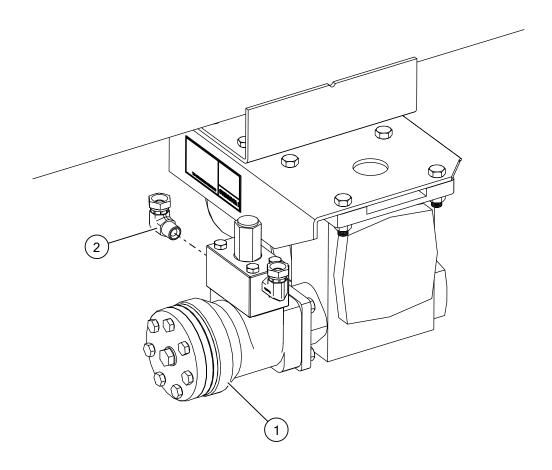


	-		
1	steel fitting, 45, 8 MORB x 1/2 FNPSM	3	hydraulic valve
2	steel fitting, 45, 6 MORB x 6 MJIC		

# Installing Adapters at the Hydraulic Motors

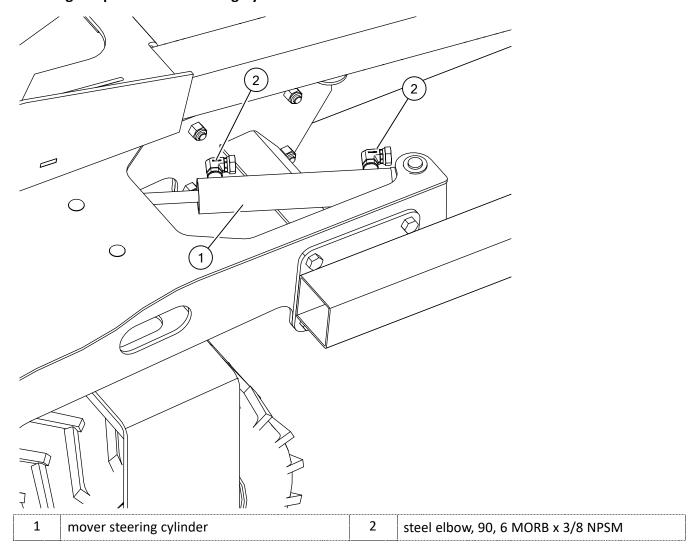


# Installing Adapters at the Hydraulic Winch

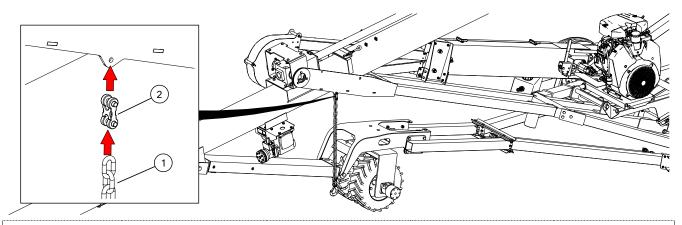


1	hydraulic winch	2	steel fitting, 90, 6 MNPT x 6 FNPSM	
---	-----------------	---	-------------------------------------	--

# **Installing Adapters at the Steering Cylinder**



# 3.16. Attach the Transport Chain



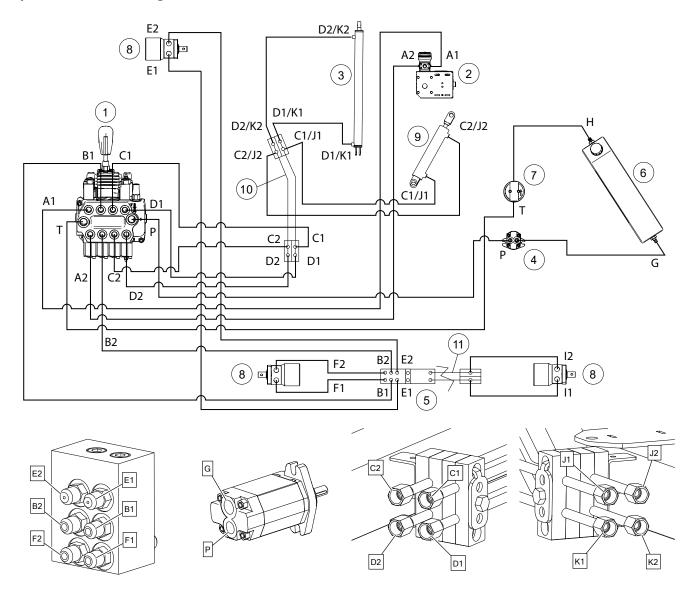
#### **Assembly Note:**

- If necessary, the transport chain assembly can be shortened.
  - Remove mid link from chain.
  - Attach mid link to the appropriate chain link

1 transport chain 2 mid link

# 3.17. Attach the Hydraulic Hoses

# **Hydraulic Hose Routing**



## **Hydraulic Components**

1	hydraulic valve	7	oil filter
2	hydraulic winch	8	drive motor
3	hydraulic cylinder, slider	9	hydraulic cylinder, steering
4	hydraulic pump	10	steel hydraulic lines, bent
5	hydraulic manifold	11	steel hydraulic lines, straight
6	oil tank		

#### Note

36' Model does not have straight steel tubes at "C1/C2" and "D1/D2", therefore, there are no connection points for J and K.

## **Hydraulic Hoses (36' Model Only)**

Item	Hose Ends	Length
A1/A2	3/8" MNPT x #6 FJIC	3/8" x 192"
B1/B2	#6 FJIC x #6 FJIC	3/8" x 60"
C1	#6 FJIC x 3/8" MNPT	3/8" x 87"
C2	#6 FJIC x 3/8" MNPT	3/8" x 96"
D1	#6 FJIC x 3/8" MNPT	3/8" x 137"
D2	#6 FJIC x 3/8" MNPT	3/8" x 156"
E1/E2	#6 FJIC x 1/2" MNPT	3/8" x 110"
F1/F2	#6 FJIC x 3/8" MNPT	3/8" x 18"
G	N/A	3/4" x 78"
Н	1/2 MNPT x 1/2 FNPSM	1/2" x 22"
11/12	#6 MJIC x 3/8" MNPT	3/8" x 18"
Р	1/2" MNPT x 1/2" MNPT	1/2" x 110"
Т	1/2" MNPT x 1/2" MNPT	1/2" x 110"

## Hydraulic Hoses (41', 46' & 51' Models)

lkaa	Hose Ends		Length					
Item		41'	46'	51'				
A1/A2	3/8" MNPT x #6 FJIC	3/8" x 218"	3/8" x 233"	3/8" x 248"				
B1/B2	#6 FJIC x #6 FJIC	3/8" x 60"						
C1/C2	#6 FJIC x #6 MJIC	3/8" x 54"						
D1/D2	#6 FJIC x #6 MJIC	3/8" x 54"						
E1/E2	#6 FJIC x 1/2" MNPT	3/8" x 155"						
F1/F2	#6 FJIC x 3/8" MNPT		3/8" x 18"					
G	N/A		3/4" x 78"					
Н	1/2 MNPT x 1/2 FNPSM		1/2" x 22"					
11/12	#6 MJIC x 3/8" MNPT		3/8" x 18"					
J1	#6 MJIC x 3/8" MNPT	3/8" x 18" 3/8" x 28						
J2	#6 MJIC x 3/8" MNPT	3/8" x 28" 3/8" x 3		3/8" x 32"				
K1	#6 MJIC x 3/8" MNPT	3/8"	x 66"	3/8" x 82"				

Item	Hose Ends	Length			
		41'	46'	51'	
K2	#6 MJIC x 3/8" MNPT	3/8" x 82"	3/8" x 90"	3/8" x 102"	
Р	1/2" MNPT x 1/2" MNPT		1/2" x 110"	_i	
Т	1/2" MNPT x 1/2" MNPT	1/2" x 110"			

#### **Hose Routing**



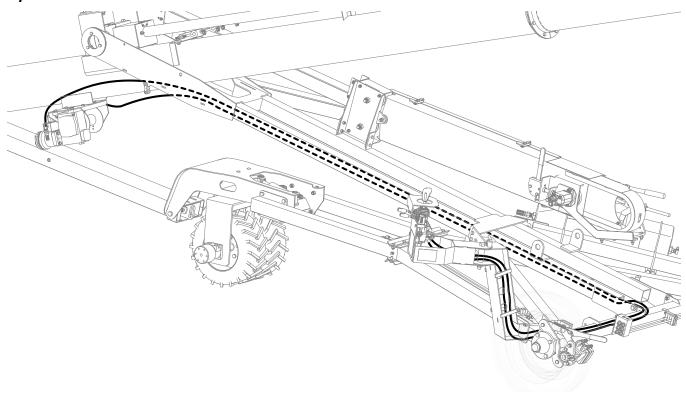
Serious operator injury could occur if the transport unit and hydraulic hoses are not assembled correctly. If necessary, disconnect the hoses and re-assemble.

The SP Transport unit MUST operate as indicated on the control panel decal. The auger MUST move in the direction that the handle is moved.

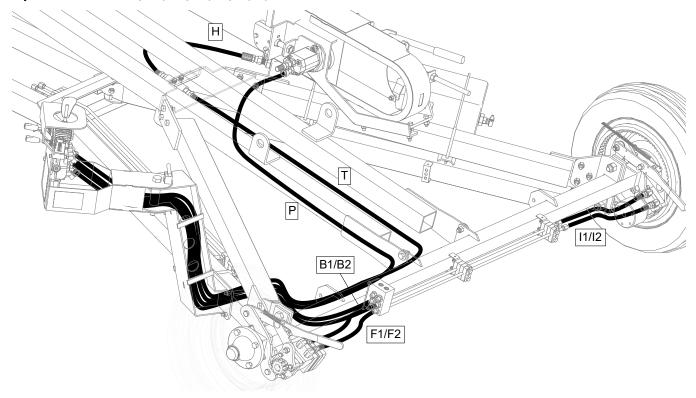
## **Assembly Notes:**

- Assemble hoses as illustrated.
- · Keep hoses free of dirt while assembling.
- · Keep pressure and return sides aligned.
- Tighten after being satisfied that the hoses are in the proper position.
- Check operation.
- Secure hoses in place with the cable ties supplied.

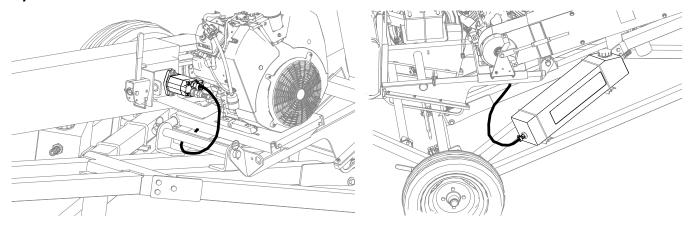
#### Hydraulic Hoses A1 & A2



# Hydraulic Hoses B1/B2, F1/F2, I1/I2, P, T & H



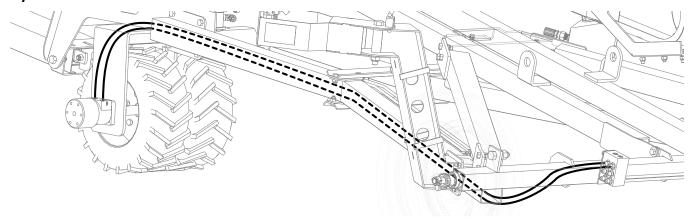
# **Hydraulic Hose G**



#### Note

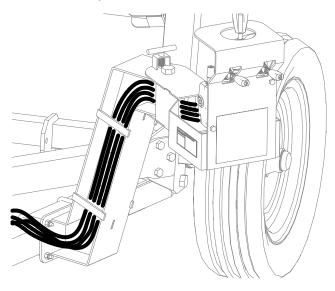
Route hose G under the engine slider assembly along the lower frame.

# Hydraulic Hoses E1 & E2

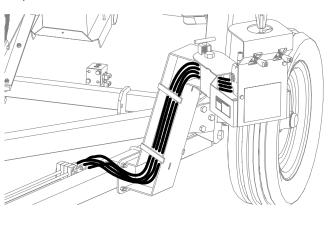


# Hydraulic Hoses C1/C2 & D1/D2 (from Valve)





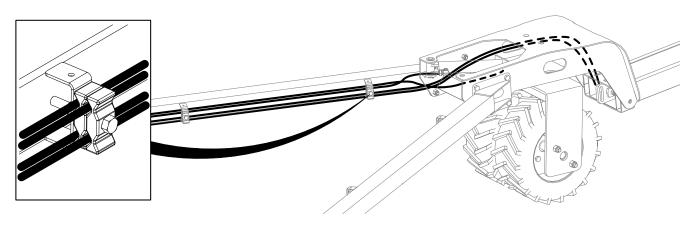
41', 46' & 51' Models



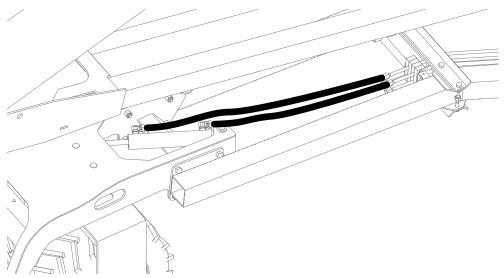
Note

There are no steel lines on the 36' Model.

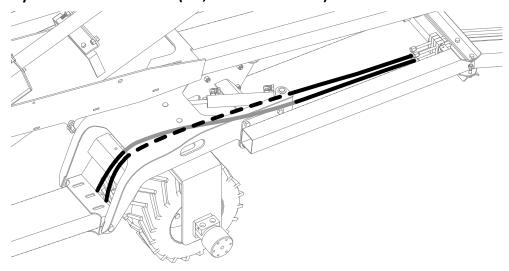
# Hydraulic Hoses C1/C2 & D1/D2 (36' Model Only)



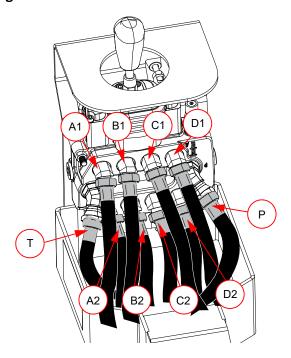
# Hydraulic Hoses J1 & J2 (41', 46' & 51' Models)



# Hydraulic Hoses K1 & K2 (41', 46' & 51' Models)



# **Hydraulic Steering Valve**



# 4. Appendix

# 4.1. Bolt Torque

Table 2 gives the correct torque values for various hardware. Tighten all bolts to the torque specified, unless otherwise noted. Check tightness periodically, using Table 2 as a guide. Replace the hardware with the same strength bolt, contact AGI if you are unsure.

Table 2. Recommended Bolt Torque<sup>1</sup>

	Dry or per Lubricated (Co					Recommended Torque (ft-lb)							
Size		Threads per inch (Course/ Fine)	Area of Bolt (sq in.)		Grade	2	Ć Grad		Grad		8.8 S		
			Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	
1/4"	Dry	20/20	0.0240	0.0264	5.5	6.3	8	10	12	14	6.3	7.8	
1/4	Lubricated	20/28	0.0318	0.0364	6.3	4.7	6.3	7.2	9	10	-	-	
5/16"	Dry	10/24	0.0524	0.058	11	12	17	19	24	27	11	11.8	
3/10	Lubricated	18/24	0.0524		8	9	13	14	18	20	-	-	
3/8"	Dry	16/24	0.0775	0.0878	20	23	30	35	45	50	20	22	
3/0	Lubricated	10/24	0.0775	0.0676	15	17	23	25	35	35	-	_	
7/16"	Dry	14/20	0.1063	0.1187	32	36	50	55	70	80	31	33	
7/10	Lubricated	14/20	0.1003	0.1167	24	27	35	40	50	80	-	_	
1/2"	Dry	13/20	0.1419	0.1599	50	55	75	85	110	120	43	45	
1/2	Lubricated	13/20			35	40	55	65	80	90	-	-	
9/16"	Dry	12/18	0.182	0.203	70	80	110	120	150	170	57	63	
3/10	Lubricated	12/10	0.102	0.203	55	60	80	90	110	130	-	-	
5/8"	Dry	11/18	0.226	0.256	100	110	150	170	210	240	93	104	
3/0	Lubricated	11/10			75	85	110	130	160	180	-	-	
3/4"	Dry	10/16	10/16	0.334	0.373	175	200	260	300	380	420	128	124
5, .	Lubricated	10, 10	0.554	0.554 0.575	130	140	200	220	280	310	-	-	
7/8"	Dry	9/14	0.462	0.508	170	180	430	470	600	670	194	193	
770	Lubricated	3/14	0.402	0.500	125	140	320	350	180	180	-	-	
1"	1" Dry	8/14	0.606	0.679	250	280	640	720	910	1020	287	289	
-	Lubricated	0,11	0.000	0.073	190	210	480	540	680	760	-	-	
1-1/8"	Dry	7/12	0.763	0.856	350	400	790	890	1290	1440	288	290	
, _	Lubricated	,,,,,			270	300	590	670	970	1080	-	-	
1-1/4"	Dry	7/12 0.	0.989	1.073	500	550	1120	1240	1820	2010	289	291	
	Lubricated	., ==	0.505	1.0,0	380	420	840	930	1360	1510	-	-	
1-1/2"	Dry	6/12	1.405	1.581	870	960	1950	2200	3160	3560	-	-	
<b>1</b> -1/2	Lubricated	0/12	1.403	1.361	650	730	1460	1640	2370	2670	-	-	

<sup>1.</sup> Torque value for bolts and cap screws are identified by their head markings. Established at 75% of yield strength of bolt given the cross-sectional area.

#### Note

Torque figures in table are valid for non-greased or non-oiled threads and head unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

# 4.2. Fittings Torque Values

These specifications are for carbon steel. With Zinc plating always lubricate threads and seals. For stainless steel, use the high value of the torque range of steel. For brass, use 70% of the torque value of steel. For mixed metals, use the torque of the lower of the two metals. Torque range is normally calculated +/- 10%.

Table 3. Pipe Rigid - Tapered Pipe Threads (NPTF, N/NF) - Carbon Steel

Pipe Size	Turns-from-finger	Max ft-lbs	Max N-m
1/8" (-2)	3/4 - 1 3/4	12	16
1/4" (-4)	3/4 - 1 3/4	25	34
3/8" (-6)	3/4 - 1 3/4	40	54
1/2" (-8)	1/2 - 1 1/2	54	73
3/4" (-12)	1/2 - 1 1/2	78	106
1" (-16)	1/2 - 1 1/2	112	152
1 1/4" (-20)	1/2 - 1 1/2	154	209
1 1/2" (-24)	1/2 - 1 1/2	211	286
2" (-32)	1/2 - 1 1/2	300	407

Table 4. Pipe Swivel - Straight Pipe Threads (NPSM, N/NFS) - Carbon Steel

Pipe Size	Max ft-lbs	Max N-m		
1/8" (-2)	12	16		
1/4" (-4)	25	3		
3/8" (-6)	40	54		
1/2" (-8)	54	73		
3/4" (-12)	78	106		
1" (-16)	112	152		
1 1/4" (-20)	154	209		
1 1/2" (-24)	211	286		
2" (-32)	300	407		
Note: seals on an internal male 30° seat				

Table 5. Stud End O-Ring Boss (ORB) SAE (U/UF) – Carbon Steel

Tube Size	Thread UNF-2A	Max ft-lbs	Max N-m
-2	5/16" - 24	6-7	8-9
-3	3/8" - 24	8-9	11-12
-4	7/16" - 20	13-15	18-20
-5	1/2" - 20	17-19	23-26

Table 5 Stud End O-Ring Boss (ORB) SAE (U/UF) – Carbon Steel (continued)

Tube Size	Thread UNF-2A	Max ft-lbs	Max N-m
-6	9/16" - 18	22-24	29-33
-8	3/4" - 16	40-43	49-53
-10	7/8" - 14	43-48	59-64
-12	1 1'16" - 12	68-75	93-102
-14	1 3/16" - 12	90-99	122-134
-16	1 5/16" - 12	112-123	151-166
-20	1 5/8" - 12	146-161	198-218
-24	1 7/8" - 12	154-170	209-231

Table 6. JIC 37° Flare Tube Fitting (J/JFS)

Tube Size	Thread UNF-2A	Torque ft-lbs	Torque N-m
-2	5/16 - 24	6-7	8-9
-3	3/8 - 24	8-9	11-12
-4	7/16 - 20	11-12	15-16
-5	1/2 - 20	14-15	19-21
-6	9/16 - 18	18-20	24-28
-8	3/4 - 16	36-39	49-53
-10	7/8 - 14	57-63	77-85
-12	1 1/16 - 12	79-88	107-119
-14	1 3/16 - 12	94-103	127-140
-16	1 5/16 - 12	108-113	147-154
-20	1 5/8 - 12	127-133	172-181
-24	1 7/8 - 12	158-167	215-226
-32	2 1/2 - 12	245-258	332-350

# 5. AGI Limited Warranty

This warranty relates to AGI Augers (the "Product") sold by AGI, (referred to herein as the "Seller") and applies only to the first user of the Product (meaning a purchaser directly from the Seller or from an authorized dealer or distributor of the Product, referred to herein as the "Buyer").

This warranty shall only be effective if properly registered with the Seller in accordance with information provided to the Buyer at the time of sale.

- 1. The Seller warrants to the Buyer that the Product is free from defects in material and workmanship **under normal and reasonable use**.
- 2. This warranty applies only to defects in materials and workmanship and not to damage incurred in shipping or handling, through normal wear and tear, or damage due to causes beyond the control of the Seller such as lightning, fire, flood, wind, earthquake, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration, improper assembly, improper installation, improper maintenance or improper repair of the Product.
- 3. The warranty period for the Product shall be two years from delivery of the Product to the Buyer where the Product is used in a normal farm operation. First year of warranty coverage of parts and labour, second year warranty coverage of parts only. Warranty period for the Product shall be 90 days from delivery of the Product to the Buyer where the Product is used in a commercial operation. In the event that any part incorporated into the Product is manufactured and sold to the Seller by a third party vendor, such part is only warranted to the extent of the warranty given by that third party.
- 4. The obligations set forth in this warranty are conditional upon the Buyer promptly notifying the Seller of any defect and completing reasonably required documentation and, if required, promptly making the Product available for correction. The Seller shall be given reasonable opportunity to investigate all claims and no Product shall be returned to the Seller or part disposed of until after inspection and approval by the Seller and receipt by the Buyer of written shipping instructions, with transportation charges prepaid.
- 5. Upon return of the Product, or such part of the Product that requires correction, the Seller shall, at the Seller's option, either repair or replace the Product or such part. The Seller shall replace or attempt to repair and return the Product or such part within a reasonable period of time from receipt of an approved warranty claim from the Buyer. If the Seller is unable to repair or replace the Product, the Buyer shall be entitled to a credit note in the amount of the purchase price for the Product.
- 6. The total liability of the Seller on any claim, whether in contract, tort or otherwise, arising out of, connected with, or resulting from the manufacture, sale, delivery, repair, replacement or use of the Product or any part thereof shall not exceed the price paid for the Product and the Seller shall not be liable for any special indirect, incidental or consequential damages caused by reason of the installation, modification, use, repair, maintenance or mechanical failure of the Product. Consequential or special damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.
- 7. Notwithstanding anything contained herein to the contrary, the foregoing is the Buyer's sole and exclusive remedy for breach of warranty by the Seller in respect of the Product. The Seller, for itself, its agents, contractors, employees and for any parent or subsidiary of the Seller, expressly disclaims all warranties, either express or implied, written or oral, including implied warranties of merchantability or fitness for a particular purpose and undertakes no obligation with respect to the conformity of the Product except as set out in the purchase agreement, if any, or marketing materials.
- 8. The foregoing warranty is the entire warranty of the Seller to the Buyer and the Buyer shall not be entitled to rely upon any representation or warranty contained in any marketing material of the Seller in respect of the Product. The Seller neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning the Product.

#### WARRANTY VOID IF NOT REGISTERED

AGI is a leading provider of equipment solutions for agriculture bulk commodities including seed, fertilizer, grain, and feed systems with a growing platform in providing equipment and solutions for food processing facilities. AGI has manufacturing facilities in Canada, the United States, the United Kingdom, Brazil, South Africa, India and Italy and distributes its products globally.



P.O. Box 39, Rosenort, Manitoba, ROG 1W0 Canada **P** 866.467.7207 (Canada & USA) or 204.746.2396 | **F** 866.768.4852 | **E** sales@grainaugers.com

AGGROWTH.COM aggrowthintl 

in f 

in f 

in

©Ag Growth International Inc. 2025 | Printed in Canada

If you have any comments or questions on this manual, or find an error, email us at <a href="mailto:comments@aggrowth.com">comments@aggrowth.com</a>. Please include the part number listed on the cover page in your message.