

CHAPTER 18

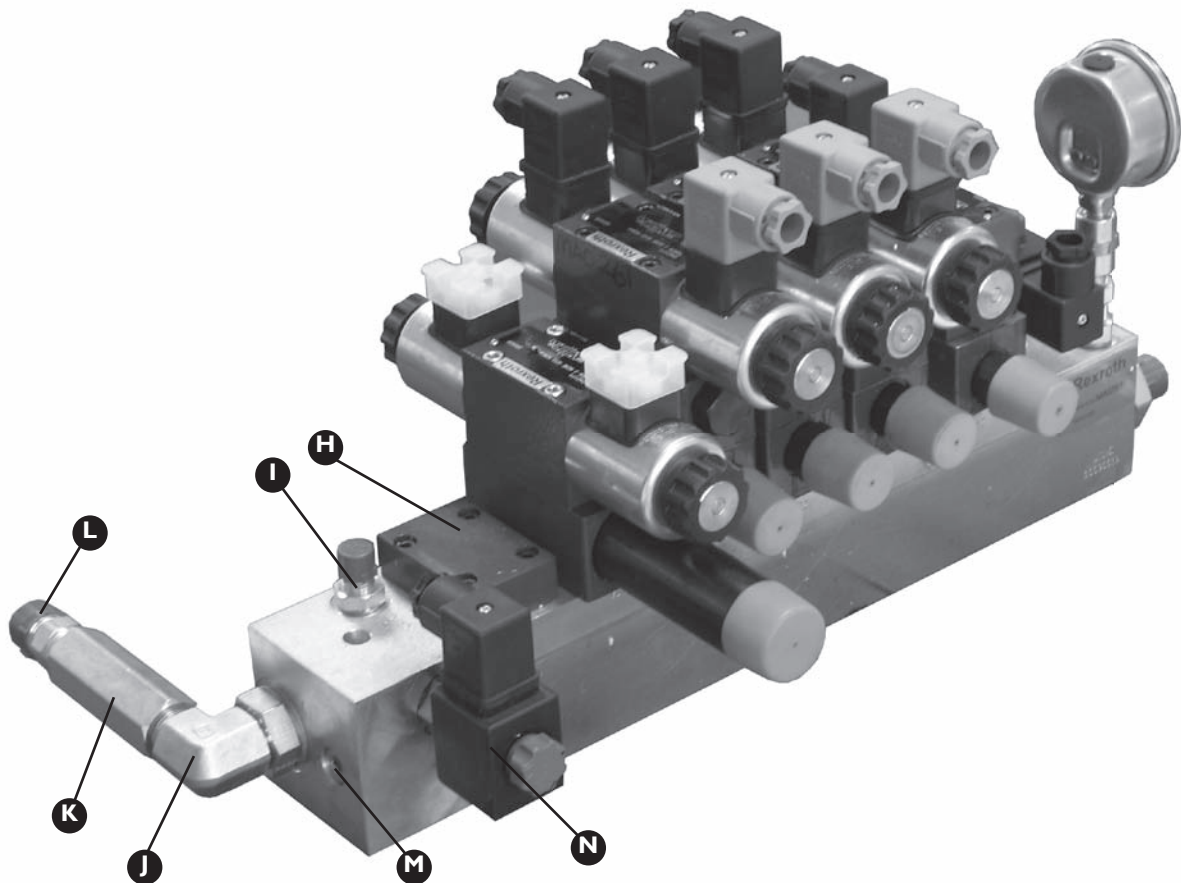
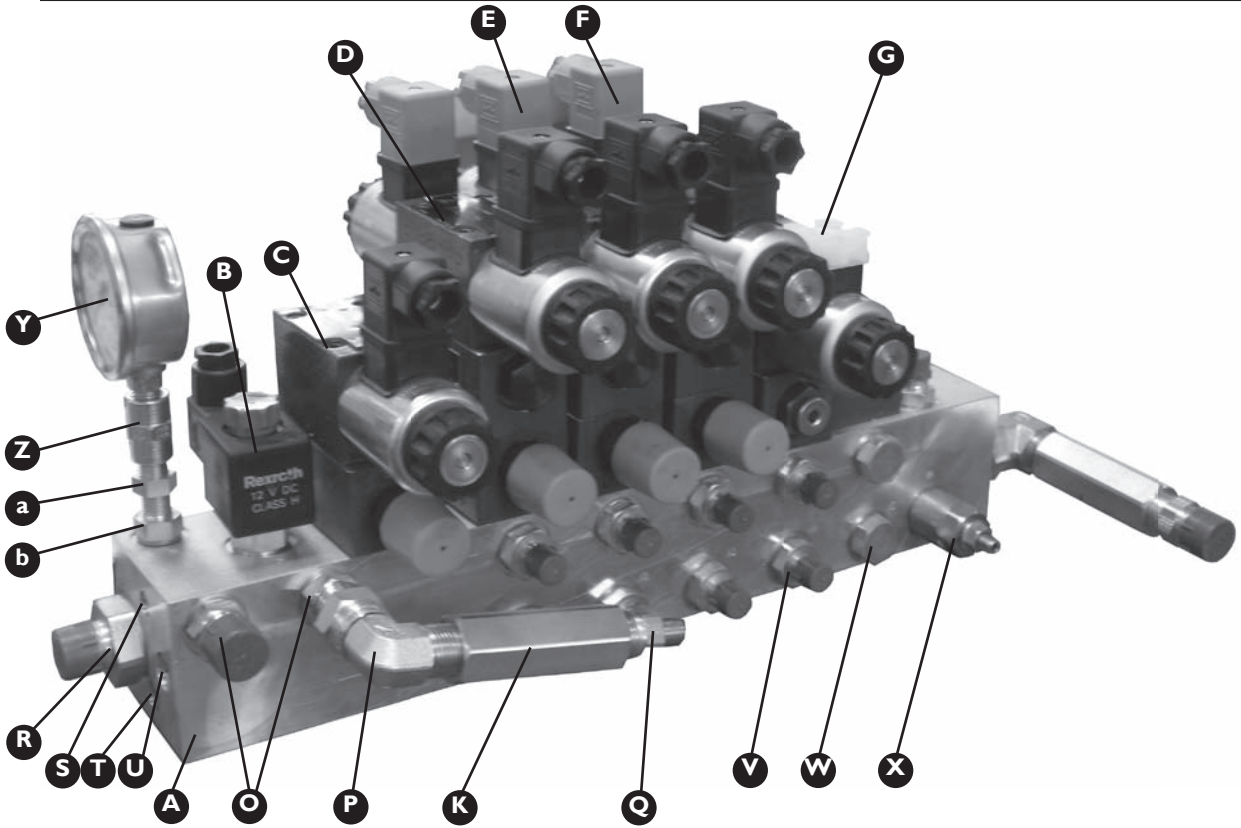
HYDRAULICS



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Revision No: 02 6/1/10

SPOOL VALVE BLOCK



SPOOL VALVE BLOCK

Item	Part No	Description	Quantity	Item	Part No	Description	Quantity
A	GA5047500	Spool Valve Block	1	O	S75-0806	1/2"BSPT - 3/8"BSPP Straight	
B	GA5047341 ^{#5}	Lift Down Controller	1			Hydraulic Nipple ^{#1}	2
C		Lift Up Hydraulic Stack	1	P	S82-0808	1/2"BSPT - 1/2"BSPP Swivel	
D	GA5047652	Boom Fold Hydraulic Stack	1			90° Hydraulic Elbow	1
E	GA5047652	Tilt Right Hydraulic Stack	1	Q	S27-0804	1/2"BSPT - 1/4"BSPT Straight	
F	GA5047652	Tilt Left Hydraulic Stack	1			Hydraulic Nipple	1
G	GA5047654	Bi-Fold Hydraulic Stack	1	R	S75-0812	1/2"BSPT - 3/4"BSPP Straight	
H		Hydraulic Stack Blank*	1			Hydraulic Nipple ^{#1}	1
I-1	S75-0404	1/4"BSPT - 1/4"BSPP Straight		S			
		Hydraulic Nipple ^{#1#2}	1	T			
	S73-04	1/4"BSPP Hydraulic Plug ^{#1#2}	1	U			
I-2	GA5047629	0.6mm Load Sense Orifice ^{#3}	1	V	S75-0406	1/4"BSPT - 3/8"BSPP Straight	
J	S77-0812	1/2"BSPT - 3/4"BSPP 90°				Hydraulic Nipple ^{#1}	8
		Hydraulic Elbow ^{#1}	1	W	S73-06	3/8"BSPP Hydraulic Plug ^{#1}	2
K	GA5007060	1/2" Hydraulic Check Valve	1	X	GA5047645 ^{#4}	Pressure Relief Valve	1
L	S27-0808	1/2"BSPT - 1/2"BSPT Straight		Y	GA5013423	3500PSI Pressure Gauge	1
		Hydraulic Nipple	1	Z	S26-0404	1/4"BSPT Female Socket	1
M				a	35B-04	1/4"BSPP Lock Nut	1
N	GA5047646	Open Centre Solenoid	1	b	S44-0404	1/4"BSPP Straight Hydraulic	
	GA5047647	Closed Centre Solenoid	1			Nipple [#]	1

* A blanking cap is shown in the picture, but this is the port used if the sprayer has steering. If so this cap is replaced the Steering Hydraulic Stack.

^{#1} This fitting is supplied with o-ring and retaining washer, but these parts can be purchased seperately. For these parts refer to page 18-4.

^{#2} Nipple is fitted to closed centre models and plug is fitted to open centre models.

^{#3} Not Fitted on open centre models.

^{#4} This part Number used from 3/3/08 on before this GA5047597 was used.

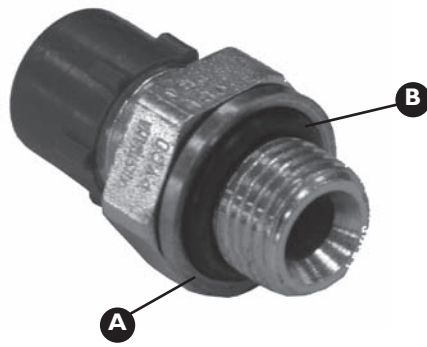
^{#5} This part Number used from 17/6/08 on before this GA5047510 was used.

COMPLETE SPOOL VALVE UNITS

Part No	Description
GA5047683	Manifold Assembly, Closed Centre, Lift-Fold-Tilts-Bi Fold-Unloader
GA5047684	Manifold Assembly, Closed Centre, Lift-Fold-Tilts-2 Blanks-Unloader
GA5047685	Manifold Assembly, Open Centre, Lift-Fold-Tilt-2 Blanks-Unloader
GA5047686	Manifold Assembly, Closed Centre, Lift-Fold-4 Blanks-Unloader
GA5047687	Manifold Assembly, Closed Centre, Lift-Fold-Bi Fold-3 Blanks-Unloader

Note: Complete Spool Valve Units come with all hydraulic stacks listed but no fittings in the block.

HYDRAULIC O-RINGS AND RETAINING WASHERS

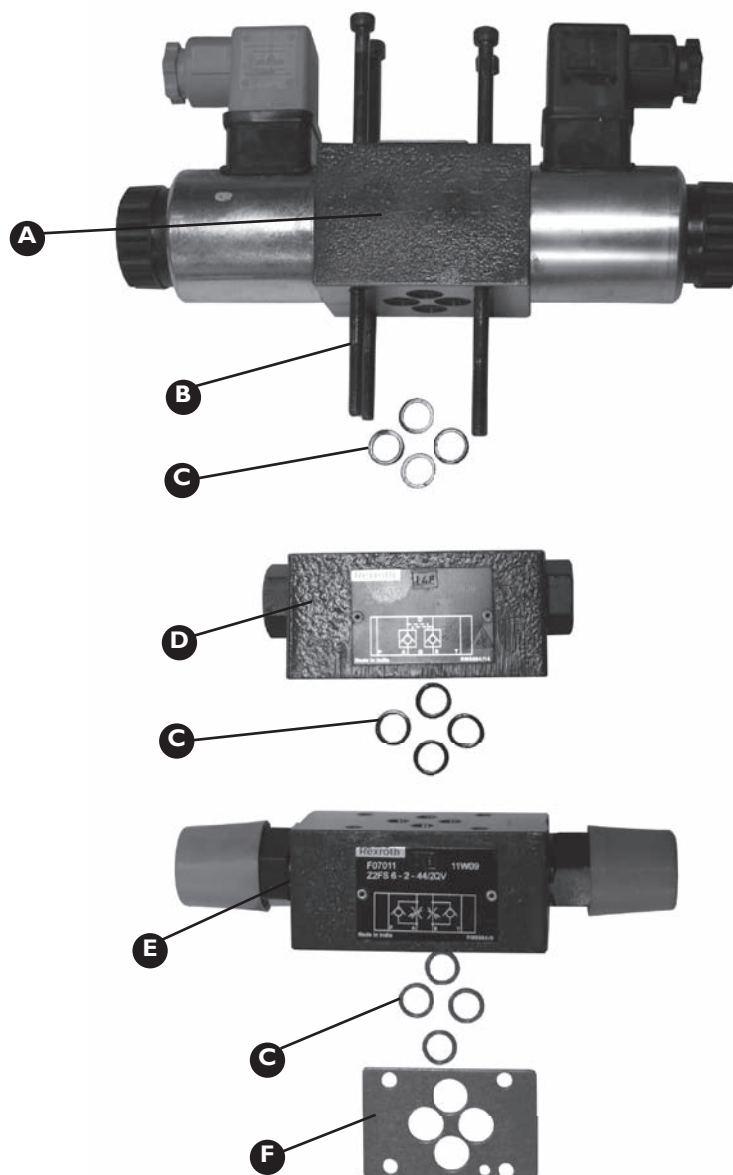


Item	Part No	Description
A	36B-04	1/4" Retaining Washer
	36B-06	3/8" Retaining Washer
	36B-08	1/2" Retaining Washer
	36B-12	3/4" Retaining Washer

Item	Part No	Description
B	RO-BP04	1/4" Hydraulic O-Ring
	RO-BP06	3/8" Hydraulic O-Ring
	RO-BP08	1/2" Hydraulic O-Ring
	RO-BP12	3/4" Hydraulic O-Ring

Note: O-Ring are only sold in packs of 10.

FOLD & TILT HYDRAULIC STACKS



Stack Assembly Part No: GA5047652

Item	Part No	Description	Quantity
A	GA5017387	12V J-Spool Solenoid*	1
B	GA5048570	M5 x 130 Cap Screw	4
C	GA5047627	Seal Replacement Kit ^{#1}	3
D	GA5017335	Modluar Check Valve*	1
E	GA5047581	Hydraulic Flow Controller* 1	1
F	GA5047615	O-Ring Retaining Plate	1

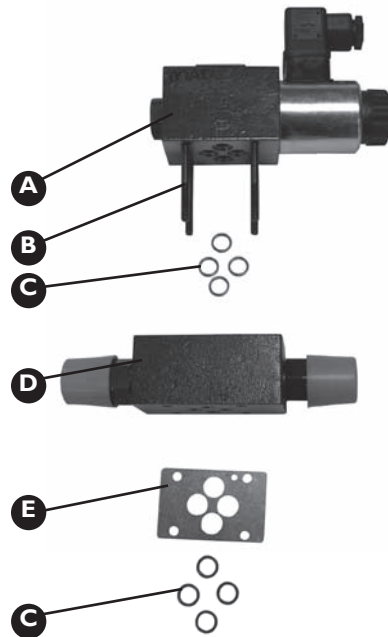
*When purchased these parts come with a seal kit when ordered

^{#1} Kit Contains 4 replacement O-Rings

LIFT UP HYDRAULIC STACK

Item	Part No	Description	Quantity
A	GA5017387	12V Single Acting J-Spool*	1
B	GA5067050	M5 x 90mm Cap Screw	4
C	GA5047627	Seal Replacement Kit#	2
D	GA5047594	Hydraulic Flow Controller* I	1
E	GA5047615	O-Ring Retaining Plate	1

*When purchased these parts come with a seal kit when ordered
 # Kit Contains 4 replacement O-Rings

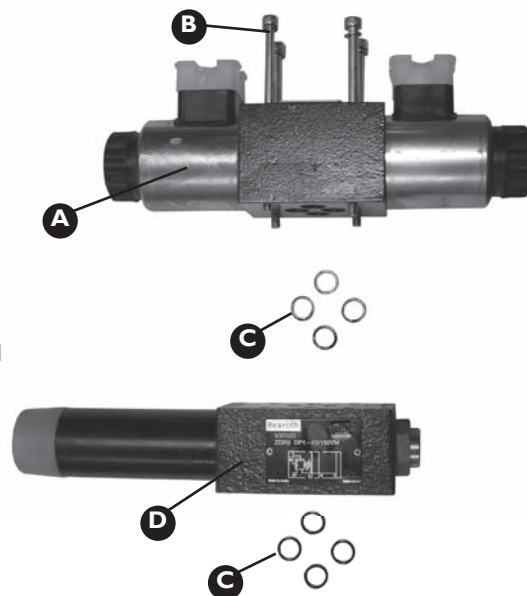


BI-FOLD HYDRAULIC STACK

Complete Stack Part No: GA5047654

Item	Part No	Description	Quantity
A	GA5017387	12V J-Spool Solenoid*	1
B	GA5067050	M5 x 90mm Cap Screw	1
C	GA5047627	Seal Replacement Kit#	2
D	GA5017373	Pressure Reducing Valve-*	1

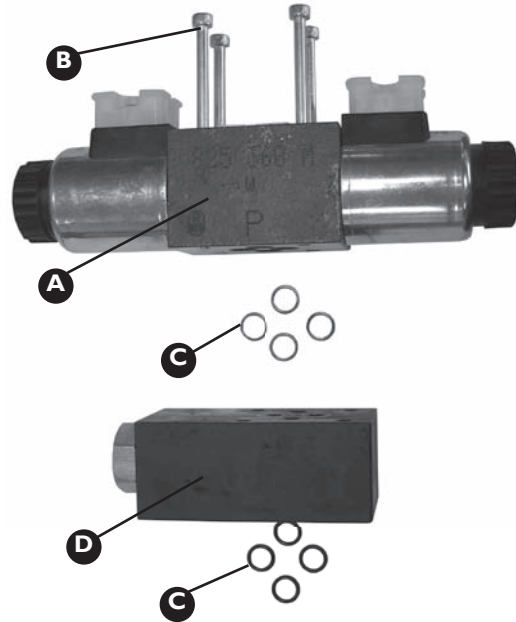
*When purchased these parts come with a seal kit when ordered
 # Kit Contains 4 replacement O-Rings



STEERING HYDRAULIC STACKS

Item	Part No	Description	Quantity
A	GA5047666	All Ports Blocked	
		Proportional Soleniod*	1
B	GA5067050	M5 x 90mm Cap Screw	4
C	GA5047627	Seal Replacement Kit#	2
D	GA5047661	Load Sense Check*	1

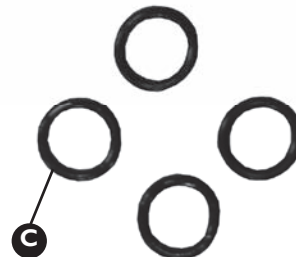
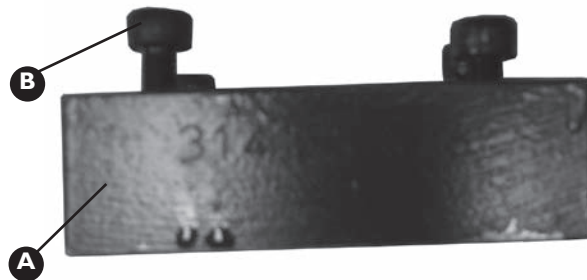
*When purchased these parts come with a seal kit when ordered
 # Kit Contains 4 replacement O-Rings



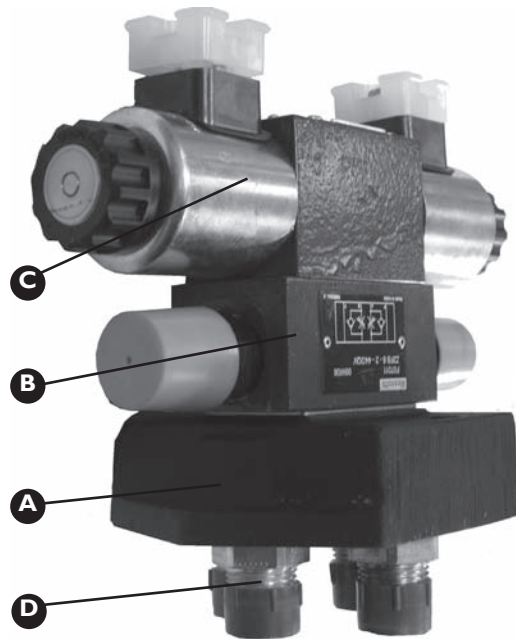
HYDRAULIC BLANKING CAP

Item	Part No	Description	Quantity
A	GA5047335	Blanking Plate*	1
B	GA5020520	M5 x 20mm Cap Screw	4
C	GA5047627	Seal Replacement Kit#	1

*When purchased these parts come with a seal kit when ordered
 # Kit Contains 4 replacement O-Rings



FILL PUMP SPOOL VALVE

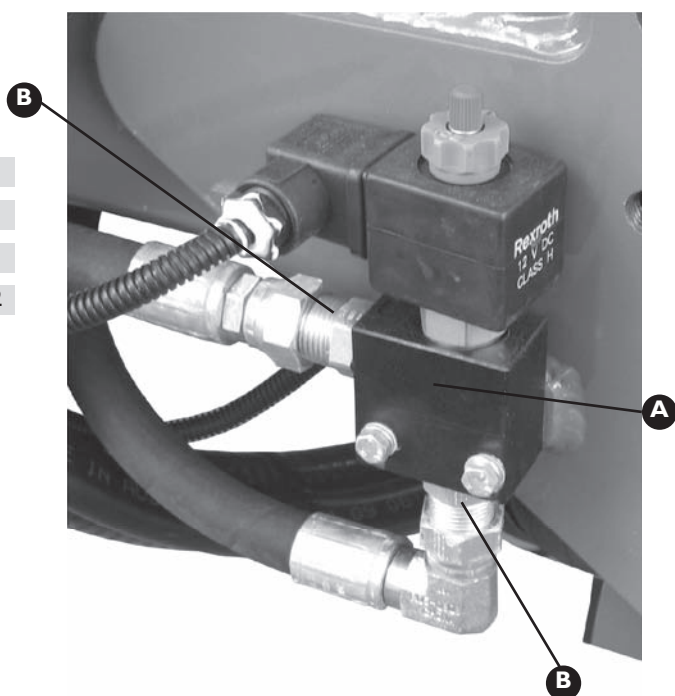


Item	Part No	Description	Quantity
A	GA5016139	Base Plate	1
B	GA5047583	Pressure/Flow Compensating Valve	1
C	GA5017387	C-Top	1
D	S75-0808	Hydraulic Fitting	4

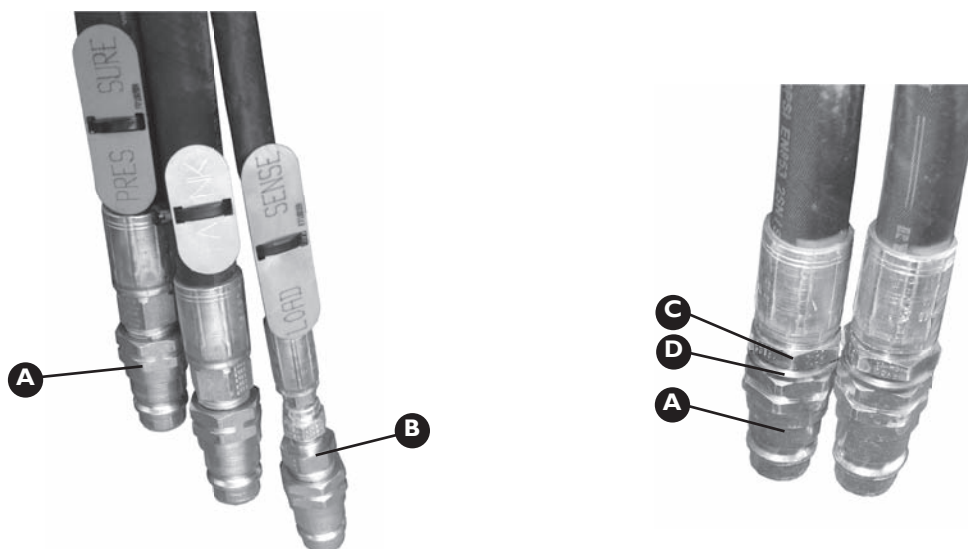
BOOM LOWER CONTROL SOLENOID

Item	Part No	Description	Quantity
A	GA5047344	Boom Lower Control Solenoid	1
B	S75-0806	3/8" x 1/2" Hydraulic Nipple	2

Note: Solenoid can be manually over ridden by turning screw on top of solenoid clockwise.



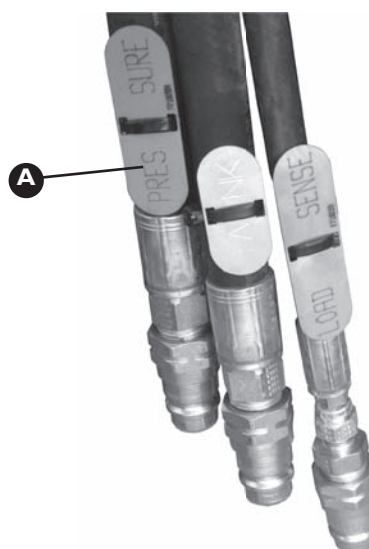
QUICK RELEASE COUPLINGS



Item	Part No	Description	Quantity
A	R81-08M	1/2"BSPP Female Push/Pull Quick Release Coupling	3
B	S27-0804	1/2"BSPT-1/2"BSPT Straight Hydraulic Nipple	1
C	35B-08	1/2"BSPP Lock Nut	2
D		Refer to page 18-4	

HOSE ID TAGS

Item	Part No	Description
A	F71020A	Pressure Tag
	F71021A	Tank Tag
	F71022A	Load Sense Tag
	F71023A	Fold In Tag
	F71024A	Fold Out Tag
	F71025A	Raise Lower Tag
	F71026A	Brakes Tag
	F71018A	Bi-Fold In Tag
	F71019A	Bi-Fold Out Tag
	F70134A	Tilt Left Tag
	F70135A	Tilt Right Tag
	TAG-FP	Fill Pump Tag



HYDRAULIC HOSES

Sprayers with Spool Valves

Part No	Description
GA5067890	1/2" Hydraulic Hose, Tractor to tee under right hand pod (can be used for pressure or tank)
GA5067906	1/2" Hydraulic Hose, Tee to Spool Block, Tank Line (6500L)
GA5067907	1/2" Hydraulic Hose, Tee to Spool Block, Pressure Line (6500L)
GA5067905	1/2" Hydraulic Hose, Tee to Spool Block, Tank Line (4-5000L)
GA5067892	1/2" Hydraulic Hose, Tee to Spool Block, Pressure Line (4-5000L)
GA5067891	1/4" Hydraulic Hose, Tractor to Spool Block, Load Sense Line (6500L)
GA5067893	1/4" Hydraulic Hose, Tractor to Spool Block, Load Sense Line (4-5000L)
GA5067899	1/2" Hydraulic Hose, Spool Block to Lift Accumulators
GA5067898	1/2" Hydraulic Hose, Lift Accumulators to Lift Cylinders
GA5067900	1/4" Hydraulic Hose, Spool Block to Right Fold Cylinder
GA5067901	1/4" Hydraulic Hose, Spool Block to Left Fold Cylinder
GA5067902	1/4" Hydraulic Hose, Cross Link between Left & Right Fold Cylinders

Sprayers without Spool Valves

Part No	Description
GA5067886	1/2" Hydraulic Hose, Tractor to Lift Limit Switch
GA5067887	1/2" Hydraulic Hose, Lift Limit Switch to Lift Accumulators
GA5067898	1/2" Hydraulic Hose, Lift Accumulators to Lift Cylinders
GA5067230	1/4" Hydraulic Hose, Tractor to Fold Cylinders
GA5067902	1/4" Hydraulic Hose, Cross Link between Left & Right Fold Cylinders

Fill Pump with Spool Valve

Part No	Description
GA5067910	1/2" Hydraulic Hose, Fill Pump Spool Valve to Fill Pump (2300mm Long)
GA5067903	1/2" Hydraulic Hose, Fill Pump Spool Valve to Fill Pump (2100mm Long)
GA5067909	1/2" Hydraulic Hose, Fill Pump Spool Valve to Tee under Right Pod

Fill Pump without Spool Valve

Part No	Description
GA5067888	1/2" Hydraulic Hose, Tractor to Fill Pump

Tilt with Spool Valves

Part No	Description
GA5067091	1/4" Hydraulic Hose, Spool Block to Tilt Cylinder (1100mm)
GA5067092	1/4" Hydraulic Hose, Spool Block to Tilt Cylinder (1350mm)

Tilt without Spool Valves

Part No	Description
GA5067230	1/4" Hydraulic Hose, Tractor to Tilt Cylinders

Bi-Fold Hoses

Part No	Description
GA5067126	1/4" Hydraulic Hose, Check Block to Bi-Fold Cylinders (4940mm Long)
GA5067127	1/4" Hydraulic Hose, Check Block to Bi-Fold Cylinders (4590mm Long)
GA5067128	1/2" Hydraulic Hose, Check Block to Gauges
GA5067129	1/4" Hydraulic Hose, Spool Block to Check Block
GA5067131	1/4" Hydraulic Hose, Link Hose (300mm Long)

Hydraulic Yaw

Part No	Description
GA5067132	1/4" Hydraulic Hose, Cylinder Link A (1170mm Long)
GA4903200	1/4" Hydraulic Hose, Cylinder Link B (1120mm Long)
GA5067133	1/4" Hydraulic Hose, Tap Assembly to Left Cylinder
GA5067134	1/4" Hydraulic Hose, Tap Assembly to Right Cylinder
GA5067136	1/2" Hydraulic Hose, Left Cylinder to Accumulator
GA5067137	1/2" Hydraulic Hose, Right Cylinder to Accumulator
GA5067138	1/4" Hydraulic Hose, Tap Assembly to Pressure Reducing Valve
GA5067253	1/2" Hydraulic Hose, Pressure Reducing Valve to Spool Valves (Tank/Pressure)

Hydraulic Yaw Hoses

Part No	Description
GA5067890	1/2" Hydraulic Hose, Tractor to tee under right hand pod (can be used for pressure or tank)
GA5067893	1/4" Hydraulic Hose, Load sense line (4-5000L)
GA5067891	1/4" Hydraulic Hose, Load sense line (6500L)
GA5067909	1/2" Hydraulic Hose, Pressure line to fill pump spool valve
GA5067910	1/2" Hydraulic Hose, Tank line to fill pump spool valve
GA5067892	1/2" Hydraulic Hose, Tee to spool valve pressure line (4-5000L)
GA5067907	1/2" Hydraulic Hose, Tee to spool valve pressure line (6500L)
GA5067905	1/2" Hydraulic Hose, Tee to spool valve tank line (4-5000L)

Hydraulic driven Spray Pump

Part No	Description
GA5067185-EF	Complete Hydraulic Drive Spray Pump Hose Assembly
HL-08-EF	1/2" Hydraulic Hose, Tractor to Needle Valve
HL-09	1/2" Hydraulic Hose, Needle Valve to Spray Pump

Tilt Assist Hoses

Part No	Description
GA5067151	1/4" Hydraulic Hose, Spool Block to Right Assist Cylinder
GA5067152	1/4" Hydraulic Hose, Spool Block to Left Assist Cylinder
GA5067153	1/4" Hydraulic Hose, Spool Block to Right Assist Cylinder
GA5067154	1/4" Hydraulic Hose, Spool Block to Left Assist Cylinder

Ultra Glide Hoses

Part No	Description
GA5067141	1/4" Hydraulic Hose, Spool Block Right Tilt to Ultra Glide (1100mm)
GA5067142	1/4" Hydraulic Hose, Spool Block Left Tilt to Ultra Glide (1000mm)
GA5067143	1/4" Hydraulic Hose, Spool Block Left/Right Tilt to Ultra Glide (600mm)
GA5067146	1/4" Hydraulic Hose, Load Sense to Ultra Glide (950mm)
GA5067147	1/2" Hydraulic Hose, Pressure Line to Ultra Glide (900mm)
GA5067144	1/2" Hydraulic Hose, Tank Line to Ultra Glide (800mm)
GA5067139	1/4" Hydraulic Hose, Ultra Glide to Right Tilt Cylinder (600mm)
GA5067148	1/4" Hydraulic Hose, Ultra Glide to Left Tilt Cylinder (500mm)
GA5067149	1/4" Hydraulic Hose, Ultra Glide to Right Tilt Cylinder (950mm)
GA5067094	1/4" Hydraulic Hose, Ultra Glide to Left Tilt Cylinder (1100mm)

Tilt Assist with Ultra Glide

Part No	Description
GA5067096	1/4" Hydraulic Hose, Ultra Glide to Right Assist Cylinder (350mm)
GA5067097	1/4" Hydraulic Hose, Ultra Glide to Left Assist Cylinder (110mm)
GA5067098	1/4" Hydraulic Hose, Ultra Glide to Right Assist Cylinder (1200mm)
GA5067099	1/4" Hydraulic Hose, Ultra Glide to Left Assist Cylinder (1400mm)