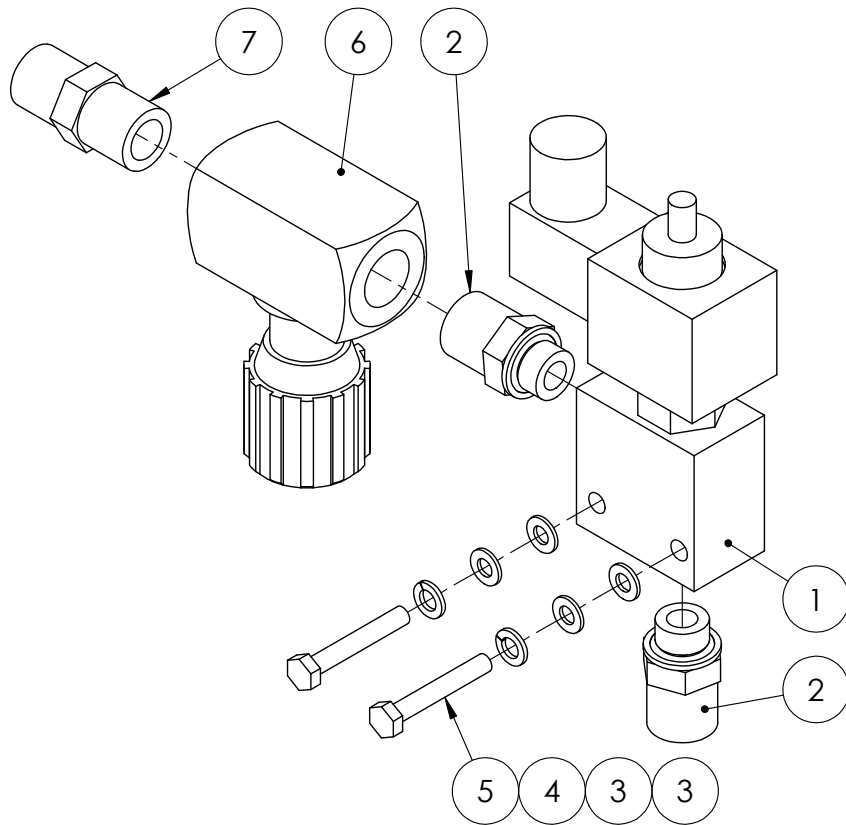


Chapter 18

HYDRAULICS

Boom Lower Solenoid

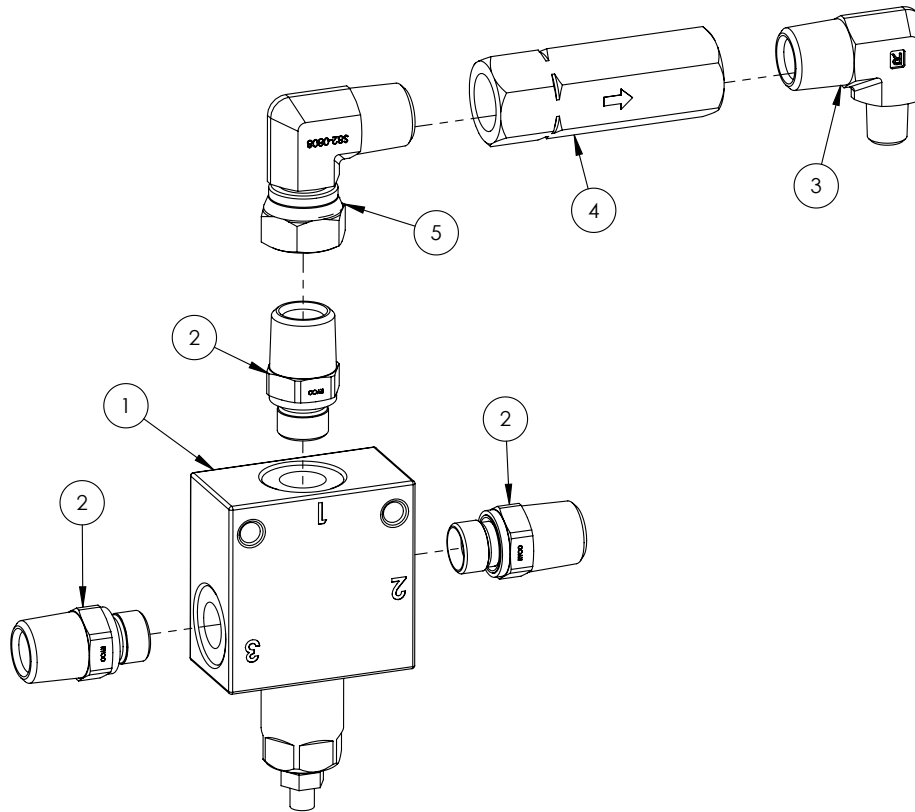


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5047344	Hydraulic Solenoid Boom Lower Limit Cartridge and Body	1
2	GA3500309	Hydraulic adaptor, Nipple, 1/2" BSPT male x 3/8" BSPP male	2
3	GA5004437	Washer 6mm Flat SS	4
4	GA5004447	Washer, 6mm, Spring, SS	2
5	GA5004081	Bolt M6 x 40 ZP GR8.8	2
6	GA5017393	Valve speed control 1/2" offset	1
7	GA3500223	Hydraulic adaptor, Nipple, 1/2" BSPT male x 1/2" BSPT male	1

SPARE PARTS

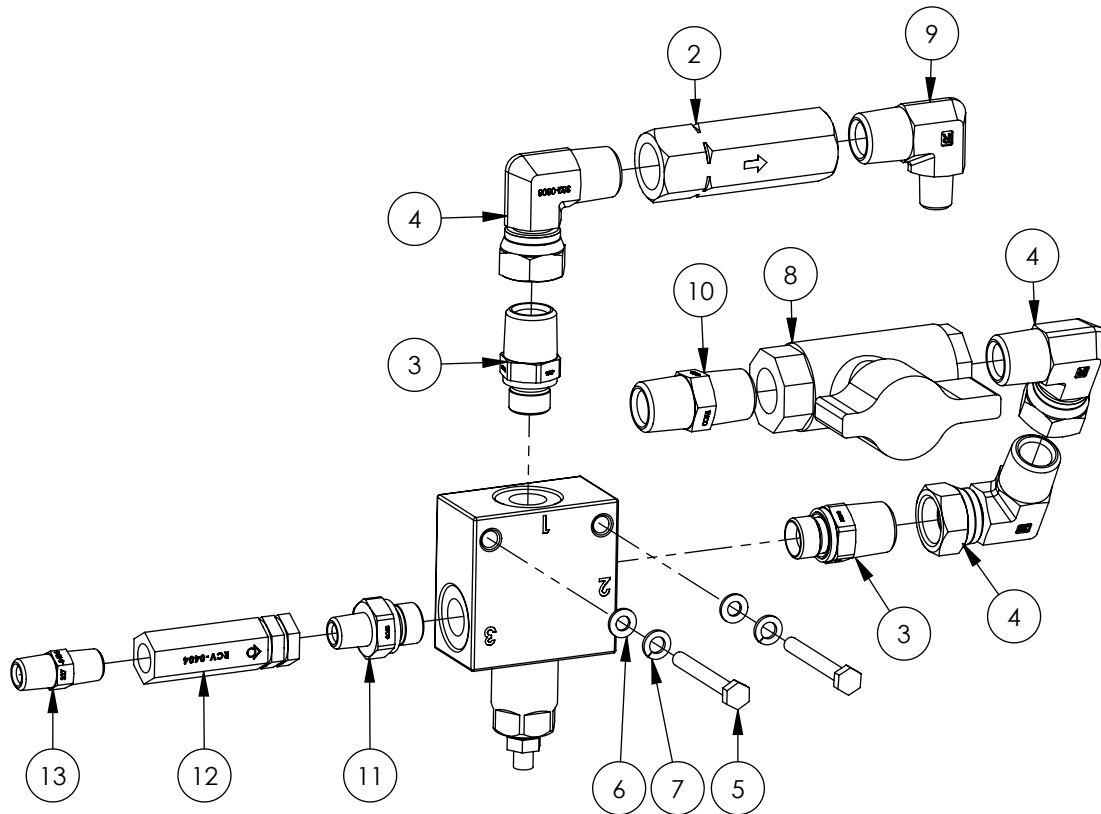
PART NUMBER	DESCRIPTION
GA5047650	Coil DIN class H 12V DC IP65/S8 (suit unloader after 3-3-2008 and boom lower spool), Bosch
GA5010039	Din Hirschmann Connector Std Black suit CTop 3
GA5048580	Din Hirschmann Connector K4LI2 LED.

Pressure Reducing Valve Assembly



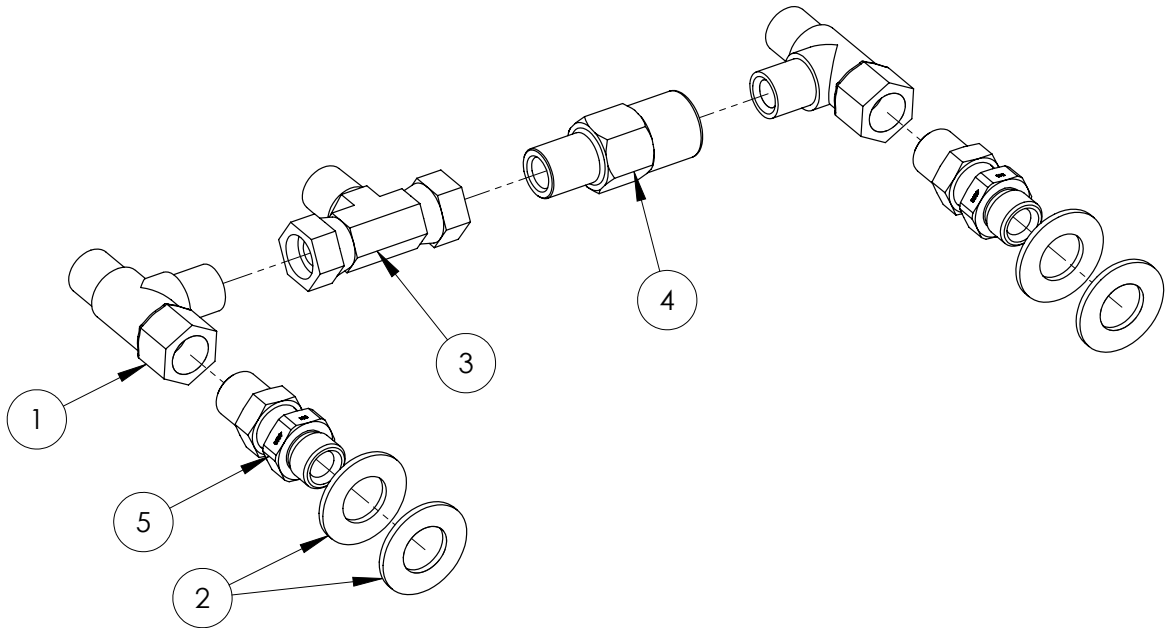
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5047708	Valve, Pressure reducing, Hydraulic, 10 - 140bar	1
2	GA3500309	Hydraulic adaptor, Nipple, 1/2" BSPT male x 3/8" BSPP male	3
3	GA3500260	Hydraulic adaptor, Elbow, 90 degree, 1/2" BSPT male x 1/4" BSPT male	1
4	GA5007060	Valve, Check, Hydraulic, 1/2 BSPP female inlet & outlet, 45L/min flow, Maximum 320bar	1
5	GA3500333	Hydraulic adaptor, Elbow, 90 degree, 1/2" BSPT male x 1/2" BSPP female swivel	1

Pressure Reducing Valve Assembly - Non-Spool



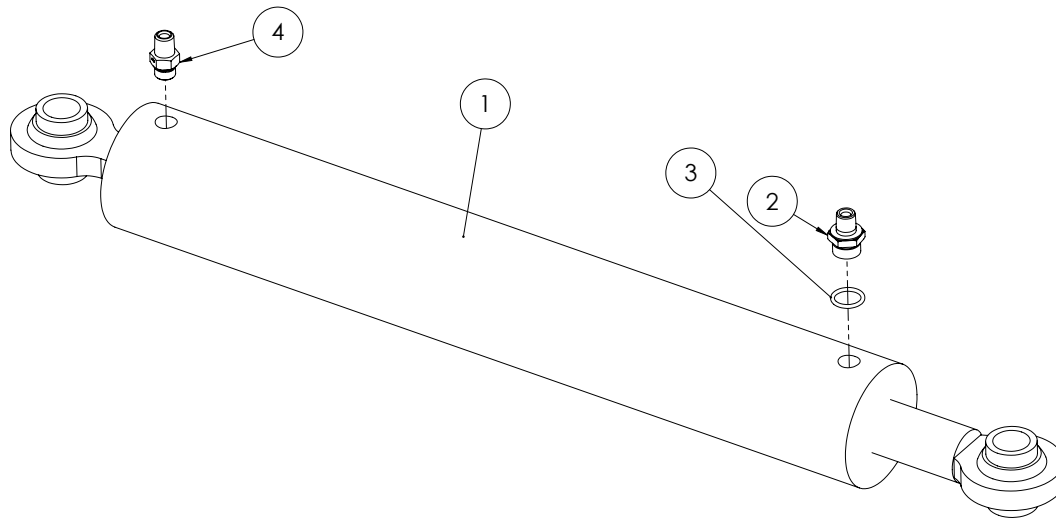
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5047708	Valve, Pressure reducing, Hydraulic, 10 - 140bar	1
2	GA5007060	Valve, Check, Hydraulic, 1/2" BSPP female inlet & outlet, 45L/min flow, Maximum 320bar	1
3	GA3500309	Hydraulic adaptor; Nipple, 1/2" BSPT male x 3/8" BSPP male	2
4	GA3500333	Hydraulic adaptor; Elbow, 90 degree, 1/2" BSPT male x 1/2" BSPP female swivel	3
5	GA5011419	Bolt M6 x 50 SS A2-70	2
6	GA5004437	Washer 6mm Flat SS	2
7	GA5004447	Washer; 6mm, Spring, SS	2
8	GA5000835	Valve, Ball, Hydraulic, 1/2" female thread inlet / outlet	1
9	GA3500260	Hydraulic adaptor; Elbow, 90 degree, 1/2" BSPT male x 1/4" BSPT male	1
10	GA3500223	Hydraulic adaptor; Nipple, 1/2" BSPT male x 1/2" BSPT male	1
11	GA3500307	Hydraulic adaptor; Nipple, 1/4" BSPT male x 3/8" BSPP male	1
12	GA5066400	Check Valve inline 1/4" BSPP	1
13	GA3500218	Hydraulic adaptor; Nipple, 1/4" BSPT male x 1/4" BSPT male	1

Hydraulic Accumulator Manifold



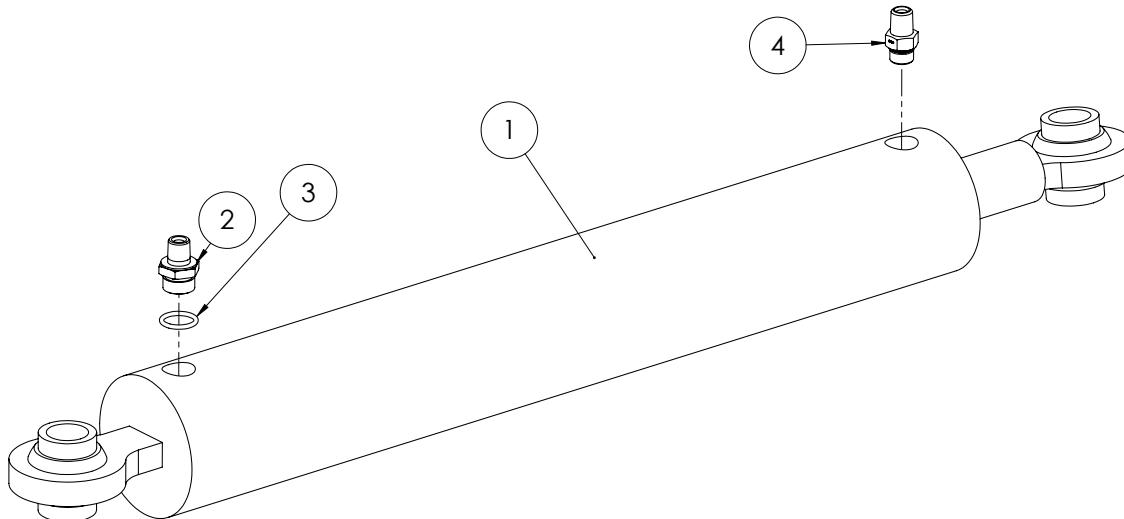
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA3500200	Hydraulic adaptor,Tee, 1/2" BSPT male x 1/2" BSPT male x 1/2" BSPP female swivel	2
2	GA5001045	Washer, 3/4", Flat ZP	4
3	GA3500336	Hydraulic adaptor,Tee, 1/2" BSPP female swivel x 1/2" BSPT male x 1/2" BSPP female swivel	1
4	GA4572110	Hydraulic adaptor, 1/2" BSPT male x 1/2" BSPT female	1
5	GAS99-603	Hydraulic adaptor, Bulkhead nipple, 1/2" BSP male x 1/2" BSP male	2

Hydraulic Cylinder - Delta - Fold RH



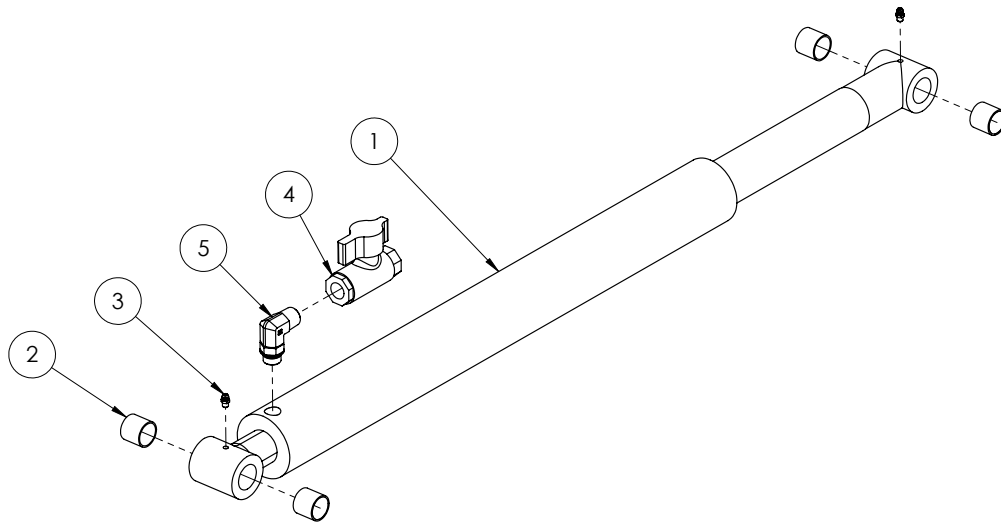
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5018555	Hydraulic cylinder SLPSP (TLD) 2 1/2" bore x 1 1/8" rod x 18" Stroke	1
2	L068A	Reducing restrictor nipple, 3/4" UNO x 1/4" BSPT, 1.5mm orifice	1
3	GA5078121	O-Ring BSPP 1/2"	1
4	GA3500359	Hydraulic adaptor; Nipple, 1/4" BSPT male x 3/4" UN male O-ring	1
-	GA5020730	Seal Kit SKSLP 2 1/2" bore x 1 1/8" rod, suit GA5018555	-

Hydraulic Cylinder - Delta - Fold LH



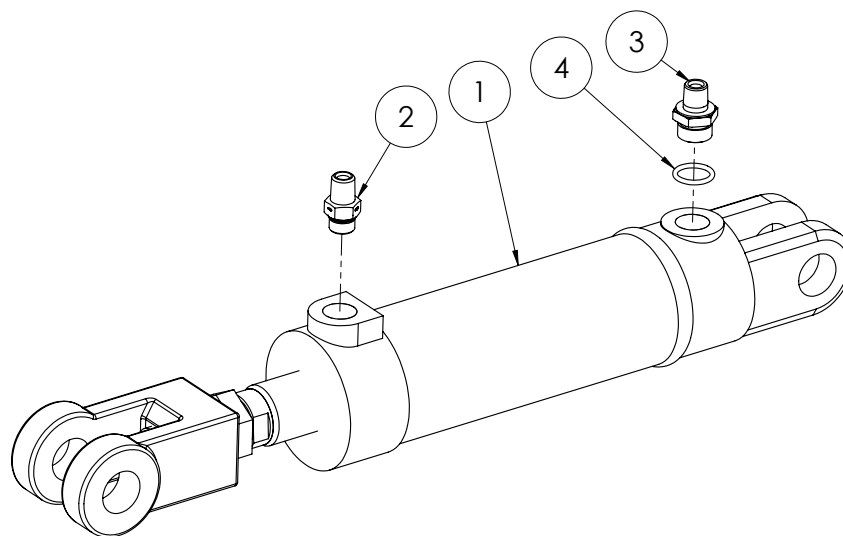
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5018557	Hydraulic Cylinder SLPSP 2 3/4" bore x 1 1/8" rod x 18" stroke	1
2	L068A	Reducing restrictor nipple, 3/4" UNO x 1/4" BSPT, 1.5mm orifice	1
3	GA5078121	O-Ring BSPP 1/2"	1
4	GA3500359	Hydraulic adaptor; Nipple, 1/4" BSPT male x 3/4" UN male O-ring	1
-	GA5051630	Seal kit SLMSP 2 3/4" bore x 1 1/8" rod, suit GA5018557	-

Hydraulic Cylinder - Delta - Boom Lift



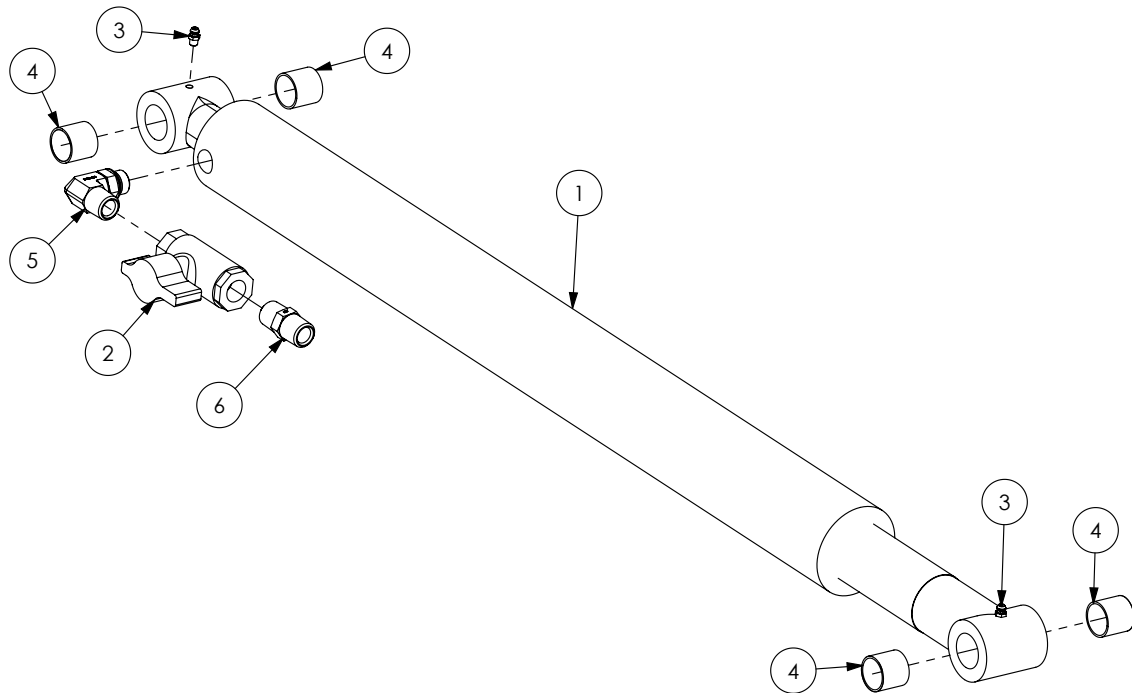
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5070082	Hydraulic cylinder - 2.5" bore x 2" rod x 21" Stroke	1
2	GA5065487	Glacier Bush 1" ID x 1" long	4
3	GA5012203	Grease nipple, Short, 1/4" UNF	2
4	GA5000835	Valve, Ball, Hydraulic, 1/2" female thread inlet / outlet	1
5	GA3500349	Hydraulic adaptor, Elbow, 90 degree, 1/2" BSPT male x 3/4" UN male O-ring	1
-	GA5052740	Seal kit, 2 1/2" bore x 2" rod, suit GA5070082	-

Hydraulic Cylinder - Delta - Wing Tilt



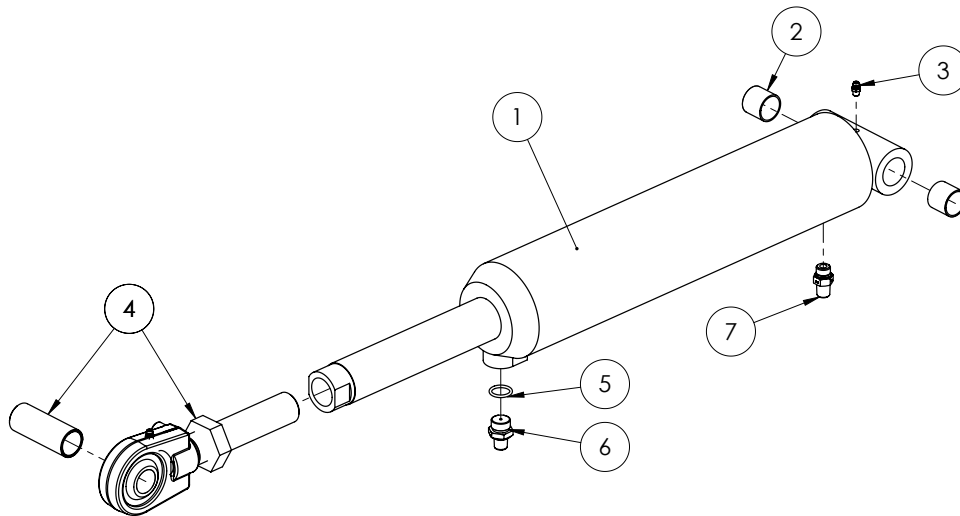
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5065054	Cylinder tilt 2.5" x 5" stroke 1 3/8" rod suit 2012 Delta	1
2	GA3500359	Hydraulic adaptor, Nipple, 1/4" BSPT male x 3/4" UN male O-ring	1
3	L068A	Reducing restrictor nipple, 3/4" UNO x 1/4" BSPT, 1.5mm orifice	1
4	GA5078121	O-Ring BSPP 1/2"	1

Hydraulic Cylinder - TriTech - Boom Lift



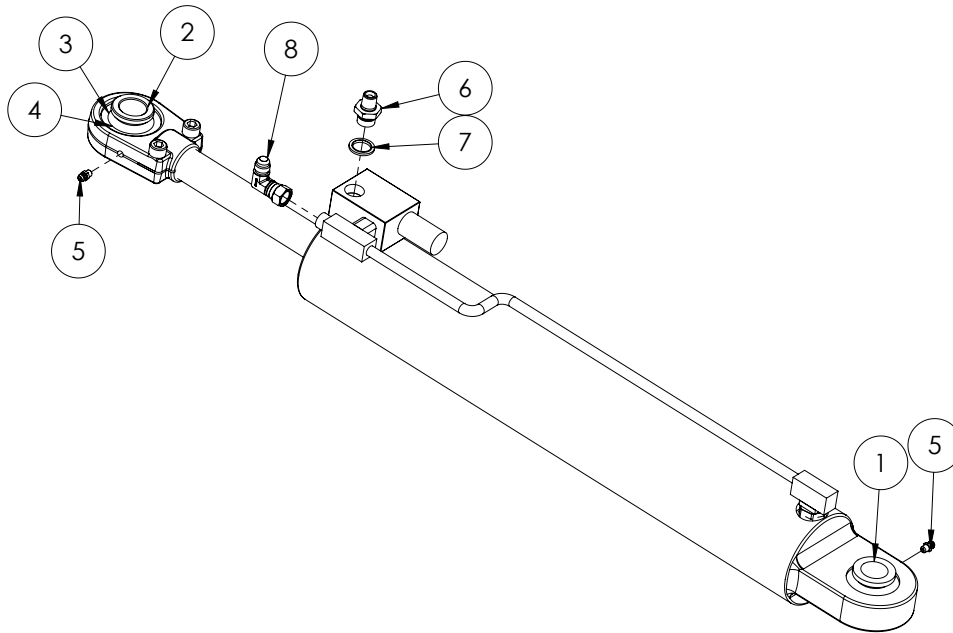
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5070082	Hydraulic cylinder - 2.5" bore x 2" rod x 21" Stroke (24-36m Boom)	2
	GA5070079	Hydraulic cylinder - 3" bore, 2.5" rod, 21" Stroke (36-42m Boom)	
2	GA5000835	Valve, Ball, Hydraulic, 1/2" female thread inlet / outlet	1
3	GA5012203	Grease nipple 1/4" UNF short	2
4	GA5065487	Glacier bush, 1" ID x 1 1/8" OD x 1" long	4
5	GA3500349	Hydraulic adaptor, Elbow, 90 degree, 1/2" BSPT male x 3/4" UN male O-ring	1
6	GA3500223	Hydraulic adaptor, Nipple, 1/2" BSPT male x 1/2" BSPT male	1
-	GA5055510	Kit, Rod Eye, Weld on, Suit lift cylinder 2007 onward	-
-	GA5052731	Seal kit, suit 3" bore x 2 1/2" rod, Suits GA5070079	-

Hydraulic Cylinder - TriTech - Wing Tilt



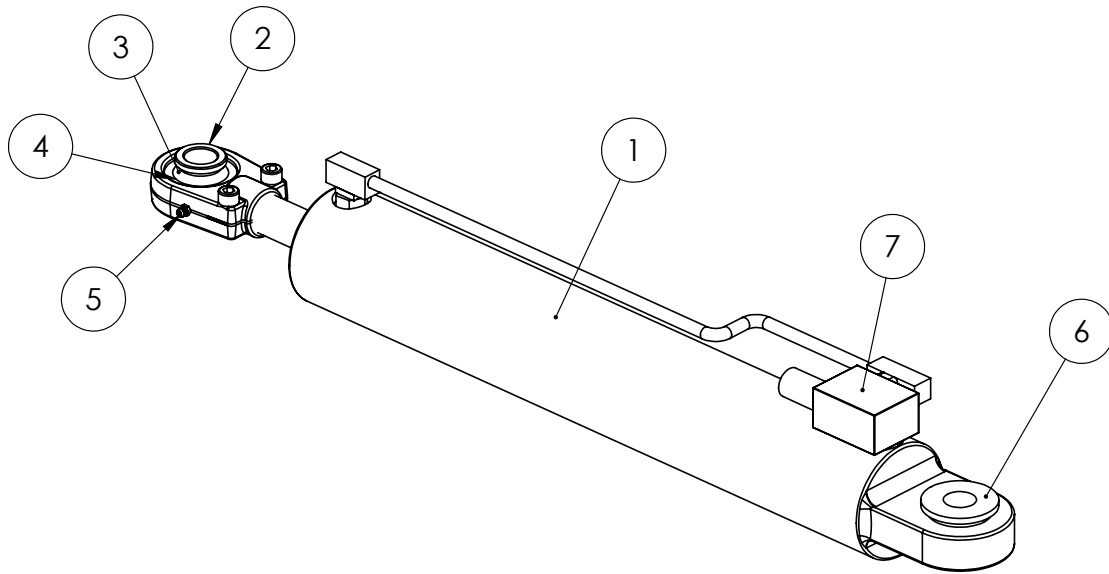
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
-	GA5052730	Seal kit, suit 3 1/2" bore x 1 3/4" Rod	-
1	GA5065051	Hydraulic cylinder, 3 1/2" bore x 1 3/4" rod x 5" stroke	1
2	GA5065487	Glacier Bush 1" ID x 1" long	2
3	GA5012203	Grease nipple, Short, 1/4" UNF	2
4	GA5052762	Hydraulic tilt cylinder adjusting rod end, Ball End with nut, suit 3 1/2" x 5" tilt ram GA5065051	1
5	GA5078121	O-ring BSPP 1/2"	1
6	L068A	Reducing restrictor nipple, 3/4" UNO x 1/4" BSPT, 1.5mm orifice	1
7	GA3500359	Hydraulic adaptor; Nipple, 1/4" BSPT male x 3/4" UN male O-ring	1

Hydraulic Cylinder - TriTech - Fold RH



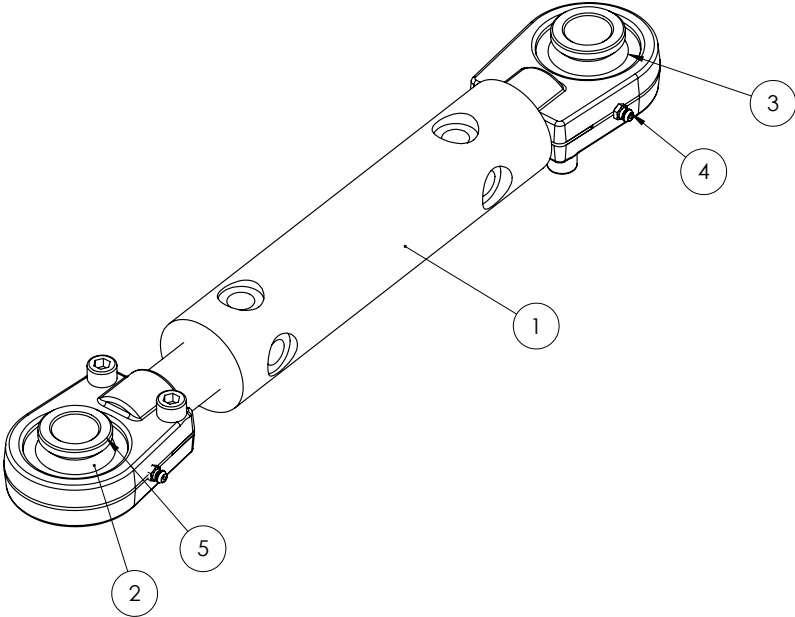
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
-	GA5018540	Hydraulic cylinder, 3" bore x 1 1/4" rod x 18" stroke (with external phasing valve)	-
-	GA5052680	Seal Kit, suit 3" bore x 1 1/4" rod	-
-	GA3500098	Rod, suit Hydraulic Fold Cylinder GA5018538, GA5018540, GA5018542	-
1	GA5021930	Bearing Bush - Large	1
2	GA5021925	Bearing Bush - Small	3
3	GA5067605	Bearing GEG 30 ES 2RS	2
4	GA5067610	Bearing Retaining clip set (2 per set)	2
5	GA5012203	Grease Nipple 1/4" UNF Short	2
6	GA4572545	Restrictor Nipple 1/4" BSPT to 3/8" UNO 1.5mm orifice	1
7	GA3500005	Hydraulic Seal, Bonded, 3/8", RL21, BSPP	1
8	GA3500002	Hydraulic Coupling, Elbow, 90 Degree, 9/16" male JIC, 9/16" Female Swivel JIC	1

Hydraulic Cylinder - TriTech - Fold LH



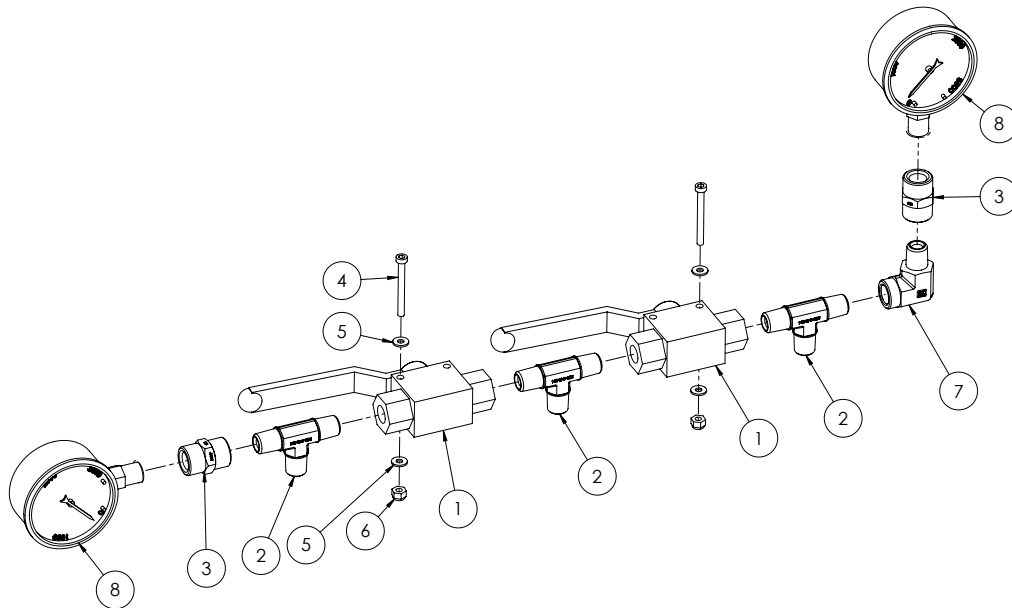
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5018542	Hydraulic Cylinder, 3 1/4" bore x 1 1/4" rod x 18" stroke, external phasing	1
2	GA5021925	Small bearing bush, Suit screw on rose end	3
3	GA5067605	Bearing, suit screw on rose end, GEG 30 ES 2RS	2
4	GA5067610	Circlip, suit bearing screw on rose end, RTW 55	2
5	GA5012203	Grease nipple, Short, 1/4" UNF	2
6	GA5021930	Large bearing bush, Suit screw on rose end	1
7	GA5022423	Relief Valve, (folding Phasing Cylinders GA5018540 and GA5018542)	-
-	GA5052685	Seal Kit, suit 3 1/4" bore x 1 1/4" rod	-
-	GA3500098	Rod, suit Hydraulic Fold Cylinder GA5018538, GA5018540, GA5018542	-

Hydraulic Cylinder - TriTech - Yaw



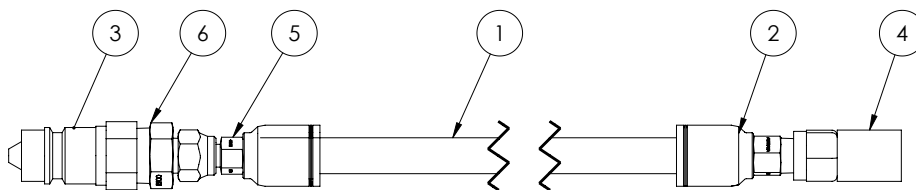
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5060817	Hydraulic cylinder, 2" bore x 1 1/4" shaft x 117,5mm stroke, Spherical bearing ends	1
2	GA5067605	Bearing, suit screw on rose end, GEG 30 ES 2RS	2
3	GA5067610	Circlip, suit bearing screw on rose end, RTW 55	2
4	GA5012203	Grease nipple, Short, 1/4" UNF	2
5	GA5021925	Small bearing bush, Suit screw on rose end, Hypower; R-10424	4
-	GA5052745	Seal Kit, heavy duty, 2" bore x 1 1/4" shaft	-

Hydraulic Yaw Control Valve Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5078083	Valve, Ball, Hydraulic, 1/4" BSPP female ports	2
2	GA3500269	Hydraulic adaptor,Tee, 1/4" BSPT male x 1/4" BSPT male x 1/4" BSPT male	3
3	GA3500211	Hydraulic adaptor, Socket, 1/4" BSPT female x 1/4" BSPT female	2
4	GA5049800	SHCS M4 x 40 ZP GR12.9	2
5	GA5020510	Washer 4mm Flat SS	4
6	GA5049025	Nut M4 Nyloc SS	2
7	GA3500209	Hydraulic adaptor, Elbow, 90 degree, 1/4" BSPT male x 1/4" BSPT female	1
8	GA5021455	Gauge, Pressure, Small face, 3500psi	2

Hydraulic Yaw Charge Line



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GA5049695	Hose, Hydraulic, 1/4", 2 wire, Black	1
2	GA3500394	Hydraulic crimp coupling, Straight, 1/4" hose x 1/4" BSPT male	1
3	GA5078000	Quick connect fitting, 1/2" male tip x 1/2" female thread	1
4	GA5077350	Adaptor, Direct Gauge, M16 x 2.0 female x 1/4" BSPP female	1
5	GA3500397	Hydraulic crimp coupling, Straight, 1/4" hose x 1/4" BSPP female swivel	1
6	GA3500221	Hydraulic adaptor, Nipple, 1/2" BSPT male x 1/4" BSPT male	1

Load Sense Turbo Valve



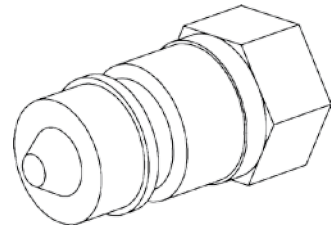
GA4902590 Complete Assembly

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
	GA5047677	Load sense turbo valve	1
	GA5078000	Quick connect fitting, 1/2" male tip x 1/2" female thread	2
	GA5078001	Quick release coupling, Ball check valve, Push/pull, Female body, 1/2" BSPP female	2
	GA3500308	Hydraulic adaptor; Nipple, 1/4" BSPT male x 1/2" BSPP male	2
	GA3500270	Hydraulic adaptor; Tee, 1/2" BSPT male x 1/2" BSPT male x 1/2" BSPT male	1
	GA3500399	Hydraulic crimp coupling, Straight, 1/2" hose x 1/2" BSPP female swivel	2
	GA3500397	Hydraulic crimp coupling, Straight, 1/4" hose x 1/4" BSPP female swivel	2
	GA3500310	Hydraulic adaptor; Nipple, 1/2" BSPT male x 1/2" BSPP male	1
	GA3500320	Hydraulic adaptor; Elbow, 90 degree, 1/4" BSPT male x 1/4" BSPP male O-ring	1
	GA3500203	Hydraulic adaptor; Reducing bush, 1/2" BSPT male x 1/4" BSPT female	1
	GA3500182	Hose, Hydraulic, 1/2"	1
	GA5049695	Hose, Hydraulic, 1/4", 2 wire, Black	1

Quick Release Couplings

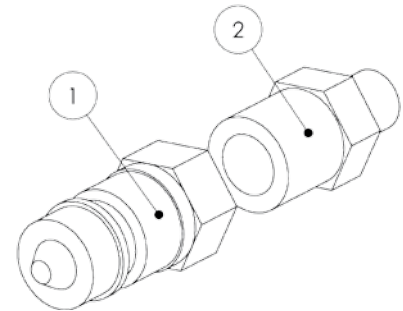
1/2" HYDRAULIC LINES

ITEM	PART NO	DESCRIPTION
1	GA5078000	Quick connect fitting, 1/2" male tip x 1/2" female thread



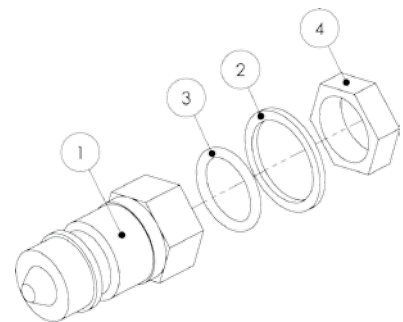
1/4" HYDRAULIC LINES

ITEM	PART NO	DESCRIPTION
1	GA5078000	Quick connect fitting, 1/2" male tip x 1/2" female thread
2	GA3500221	Hydraulic adaptor, Nipple, 1/2" BSP x 1/4" BSP



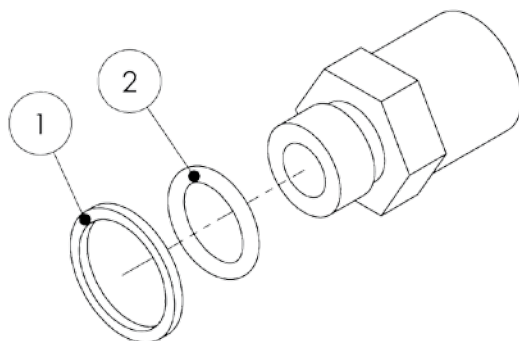
HYDRAULIC PUMP LINES

ITEM	PART NO	DESCRIPTION
1	GA5078000	Quick connect fitting, 1/2" male tip x 1/2" female thread
2	GA5076891	Ring Retaining BSPP 1/2"
3	GA5078121	1/2" Hydraulic O-Ring
4	35B-08	1/2" BSPP Lock Nut



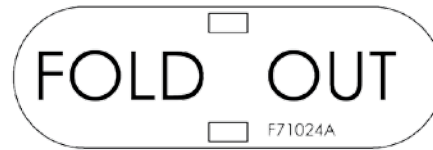
Note: Plastic Cover for when fittings are not in use: GA5052365.

Hydraulic O-Rings and Retaining Washers



ITEM	PART NO	DESCRIPTION
1	GA5076889	Ring Retaining 1/4" BSPP
	GA5076890	Ring Retaining BSPP 3/8"
	GA5076891	Ring Retaining BSPP 1/2"
	GA5076892	Retaining Ring BSPP 3/4"
	GA5078119	O-Ring BSPP 1/4"
2	GA5078120	O-Ring 3/8" BSPP
	GA5078121	O-Ring BSPP 1/2"
	GA5078122	O-Ring BSPP 3/4"

Hose ID Tags



PART NUMBER	DESCRIPTION
F71023A	ID Tag for Fold In
F71024A	ID Tag for Fold Out
F71025A	ID Tag for Boom Raise/Lower
F70134A	ID Tag for Left Hand Tilt
F70135A	ID Tag for Right Hand Tilt
F71018A	ID Tag for BiFold In
F71019A	ID Tag for BiFold Out
F71020A	ID Tag for Pressure
F71021A	ID Tag for Tank
F71022A	ID Tag for Load Sense
F71026A	ID Tag for Brakes

Hydraulic Hoses

PART NUMBER	DESCRIPTION
GA5067925	1/4" Hydraulic Hose, Tractor to fold cylinders
GA5067930	1/2" Hydraulic Hose, Tractor to Boom Lower Solenoid
GA5067940	1/2" Hydraulic Hose, Accumulator manifold to lift cylinders
GA5067945	1/4" Hydraulic Hose, Tractor to tilt cylinders

Raw Hide & Spiral Guard

RAWHIDE

PART NUMBER	DESCRIPTION
GA5053630	Rawhide hose protection 23mm
GA5053710	Rawhide Hose protector 31mm
GA5053640	Rawhide hose protection 36mm
GA5053705	Rawhide Hose protector 73mm
GA5053715	Rawhide Hose protector 56mm
GA5066710	Rawhide hose protection 93mm
GA5054375	Rawhide, Nylon sleeve, 102mm, Hook & loop closure

SPIRAL GUARD

PART NUMBER	DESCRIPTION
GA5015669	Spiral guard, Black