



655 EISENHOWER DRIVE
OWATONNA, MN 55060-0995 USA
PHONE: (507) 455-7000
TECH. SERV.: (800) 533-6127
FAX: (800) 955-8329
ORDER ENTRY: (800) 533-6127
FAX: (800) 283-8665
INTERNATIONAL SALES: (507) 455-7223
FAX: (507) 455-7063

Form No. 560935

Parts List &
Operating Instructions
for:

5237

High Lift Transmission Jack




Max. Capacity: 453.59 kg (1,000 lbs.)



Description:
Use to install and remove vehicle
transmissions for repair.

Explanation of Safety Signal Words

The safety signal word designates the degree or level of hazard seriousness.

-  **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

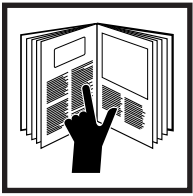
© Service Solutions U.S. LLC

Sheet No. 1 of 6

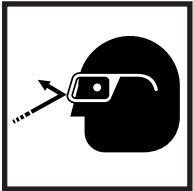
Issue Date: Rev. C October 23, 2017

Safety Precautions

⚠ WARNING: To help prevent personal injury and/or equipment damage,



- Study, understand, and follow all safety precautions and operating instructions before using this transmission jack. If the operator cannot read these instructions, operating instructions and safety precautions must be read and discussed in the operator's native language.



- Wear eye protection that meets ANSI Z87.1, CE EN166, AS/NZS 1337, and OSHA standards.



- Only qualified operators may install, operate, adjust, maintain, clean, inspect, or transport this transmission jack.
- A load must never exceed the rated lifting capacity of the jack.
- Do not lift or support the vehicle with this jack. Place support stands under the vehicle before starting repairs.

- Only use the jack on a hard, level surface.

- Center the load on the jack saddle. Off center loads can damage the seals in the hydraulic cylinder and cause jack failure.

- Never move the jack with a load any higher off the ground than necessary. Slowly and carefully move the jack around corners because the load could tip. Stay clear of a lifted load.

- Lower the jack slowly and carefully while watching the position of the load.

- Do not use this transmission jack for anything other than its intended purpose.

- No alteration shall be made to this product.

- Inspect the condition of the transmission jack before each use. Do not use if damaged, altered, or in poor condition.

- Do not use adapters with this jack unless supplied by OTC.

- Use only anti-wear hydraulic jack oil with a 215 SUS viscosity rating at 37.78° C (100° F). The use of alcohol, hydraulic brake fluid, or transmission oil could damage seals and result in jack failure.

This guide cannot cover every situation, so always do the job with safety first.

Setup Instructions

1. Remove the transmission jack from the pallet, and attach the casters using the hex nuts provided.
2. Remove the hex nuts holding the head assembly plate, and replace them with the wing nuts provided.
3. **Remove the shipping oil plug**, and replace it with the vented oil plug provided.
4. The transmission jack is shipped with hydraulic oil in the cylinder reservoir. Before using the jack for the first time, press the release pedal to open the release valve, and operate the foot pump eight full strokes to distribute the oil.

Operating Instructions

1. Follow the vehicle's recommended service procedure for removal of the component.
2. Position the jack under the vehicle.
3. Raise the jack by operating the foot pump until the saddle touches the component.
4. Adjust the support brackets to fit the component.
5. Use the tilt crank to align the saddle with the component.
6. Finish raising the jack to the component. Secure the strap assembly around the component.

Maintenance

1. Use only anti-wear hydraulic jack oil. The use of alcohol, hydraulic brake fluid, or transmission oil could damage the seals in the cylinder and result in jack failure.
2. Check the oil level periodically:
 - a. Lower the jack to its lowest position.
 - b. Remove the filler plug.
 - c. Add hydraulic oil (215 SUS viscosity at 37.78° C [100° F]) until the oil level is within 50.8 mm (2 inches) to 63.5 mm (2.5 inches) of the filler hole opening.
 - d. Install the filler plug.
3. Lubricate the foot pump pivot points as needed with SAE 30 motor oil to prevent premature wear.
4. Keep the jack clean and well lubricated to prevent foreign matter from entering the hydraulic system.

Bleeding Air from the Jack

1. Lower the jack to its lowest position.
2. Remove the reservoir filler plug. Add hydraulic oil (215 SUS viscosity at 37.78° C [100° F]) until the oil level is within 50.8 mm (2 inches) to 63.5 mm (2.5 inches) of the filler hole opening.
3. Remove the foot pedal and piston assembly by removing the button head screws.
4. Fill the foot pedal piston bore and rod internal spring cavity with hydraulic oil.
5. Plug the rod internal spring cavity, and quickly install the rod into the rod bore. **Note:** This must be done quickly to ensure the cavities are filled with oil and not air.
6. Using the button head screws, reattach the foot pedal assembly.
7. Pump the foot pedal to extend the cylinder to a full stroke, and then retract. Repeat this two or three times.
8. Check the hydraulic oil level and add more if needed.

Inspection and Maintenance



CAUTION: To prevent personal injury,

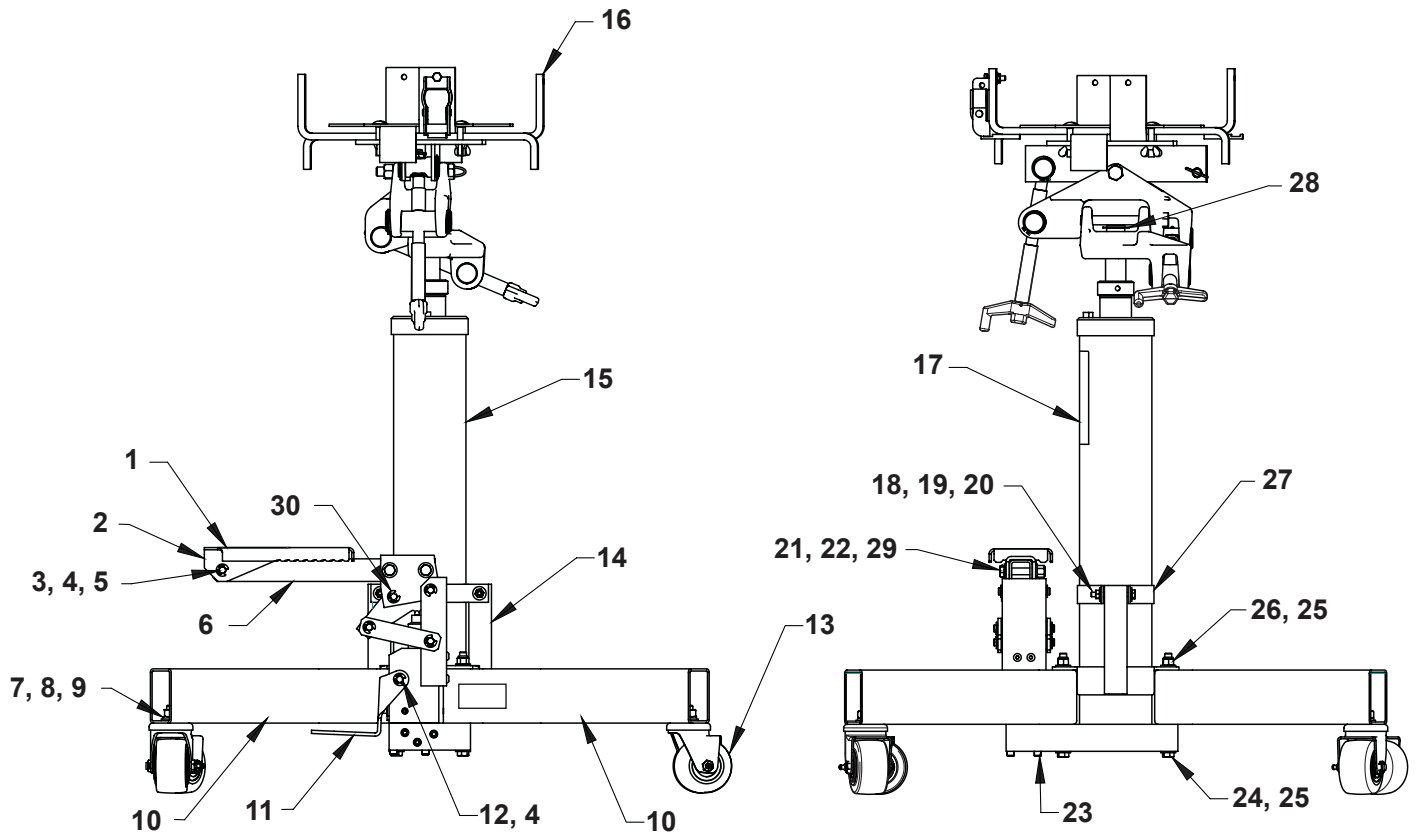
- Only qualified personnel shall perform inspections to this transmission jack.
- Before each use, an approved inspector must inspect the transmission jack for bends, cracks, dents, elongated holes, or missing hardware. If damage is found, discontinue use.

Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment.

Trouble	Cause	Solution
Jack fails to extend or extends partially.	1. Low oil level.	<i>1. Fill to correct oil level.</i>
Incomplete or spongy cylinder response when foot pedal is pumped.	1. Low oil level. 2. Air in system.	<i>1. Fill to correct oil level. 2. Bleed air from system.</i>
Abnormal leakage through unit breather.	1. Low oil level.	<i>1. Fill to correct oil level.</i>
Jack fails to extend when foot pedal is pumped.	1. Release valve malfunction. 2. Contamination. 3. Cylinder packing failure.	<i>1. Pump foot pedal with release valve open. 2. Disassemble and clean unit. 3. Install repair kit.</i>
Cylinder creeps.	1. Load exceeds maximum lifting capacity. 2. Release valve is leaking.	<i>1. Reduce load. 2. Flush release valve by pumping foot pedal with release valve open.</i>
Cylinder doesn't retract when release pedal is activated.	1. Light load. 2. Cylinder is binding.	<i>1. Unit requires 35 lbs. to return. 2. Disassemble unit; replace defective parts.</i>
Cylinder doesn't extend.	1. Contamination. 2. Bad packing.	<i>1. Disassemble and clean unit. 2. Install repair kit.</i>
Cylinder extends when foot pedal is pressed, and retracts as foot pedal retracts.	1. Release valve malfunction. 2. Contamination.	<i>1. Flush release valve by pumping foot pedal with release valve open. 2. Disassemble and clean unit.</i>

Parts Lists



Item No.	Part No.	No. Req'd	Description
10	556826	2	Leg Base
15	556840	1	High Lift Transmission Jack
16	556830	1	Head Assembly

Caster Kit 565522

Item No.	No. Req'd	Description
7	4	Flat Washer — 12.7 mm x 3 mm (.500 in. x .120 in.)
8	4	Metric Hex Nut — M12 x 31.8 mm (1.25 in.)
9	4	Lockwasher — for 12.7 mm (1/2 in.) bolt
13	4	Swivel Caster

Foot Pedal Kit 565523

Item No.	No. Req'd	Description
1	1	Grip Pad
2	1	Pedal
3	2	Round Hole Washer
4	2	Retaining Ring
5	1	Clevis Pin
6	1	Pedal Lever
21	2	Hex Locknut — .376-16
22	2	Hex Head Cap Screw — 3/8-16 X 55.88 mm (2.25 in.)
29	4	Washer, .375

Hardware Kit 565524

Item No.	No. Req'd	Description
17	1	Logo Decal
18	4	Washer — for 6.35 mm (.25 in.) bolt
19	2	Hex Locknut — 1/4-20
20	2	Bolt — 1/4-20 x 55.88 mm (2.25 in.)
23	3	Socket Head Cap Screw — 1/4-20 x 50.8 mm (2 in.)
24	4	Hex Head Cap Screw
25	12	Plain Washer — for 9.53 mm (.375 in.) bolt
26	4	Hex Nut
28	1	External Retaining Ring — for 25.4 mm (1 in.) dia. shaft
N/A	1	Breather Filter
30	1	Clevis Pin

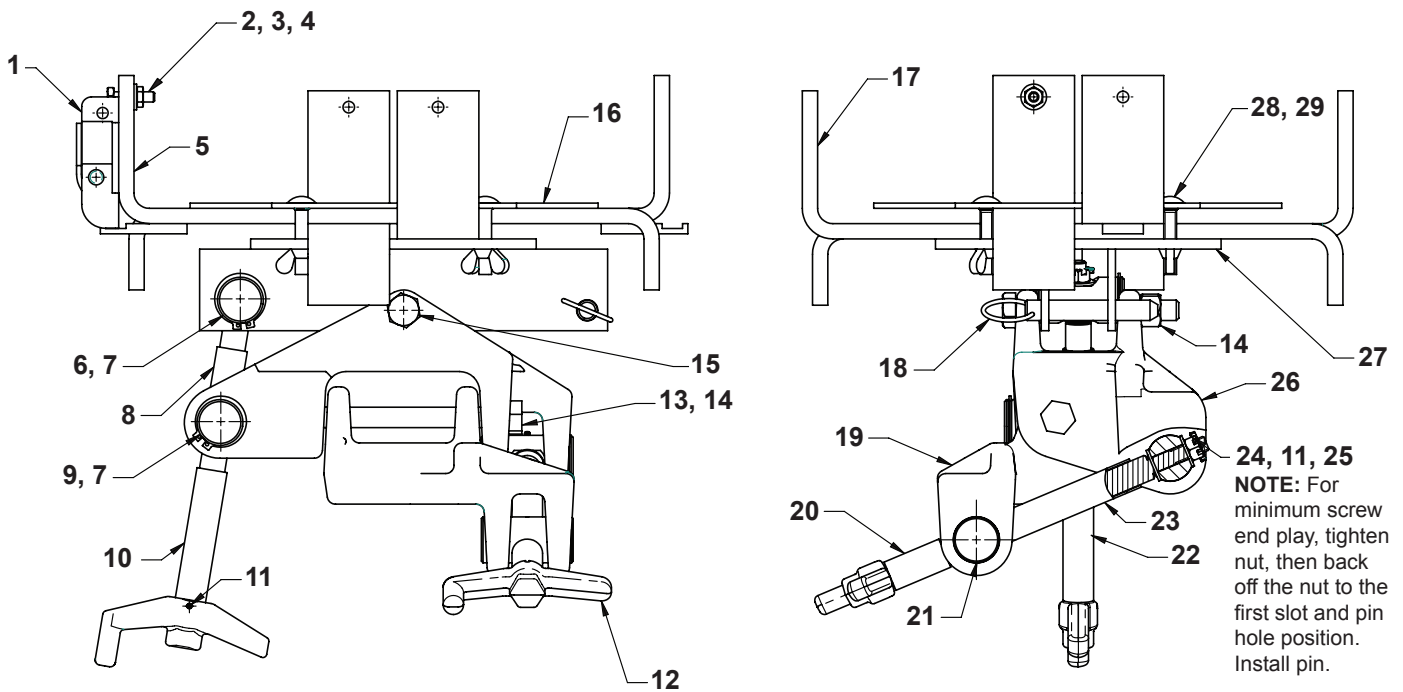
Support Kit 565525

Item No.	No. Req'd	Description
14	1	Support Bracket
18	4	Washer — for 6.35 mm (.25 in.) bolt
19	2	Hex Locknut — 1/4-20
20	2	Bolt — 1/4-20 x 55.88 mm (2.25 in.)
27	2	Support Strap

Release Pedal Kit 565526

Item No.	No. Req'd	Description
4	2	External Retaining Ring — for 9.53 mm (.375 in.) dia shaft
11	1	Foot Pedal
12	1	Clevis Pin

Head Assembly



Item No.	Part No.	No. Req'd.	Description
19	314154	1	Pivot
26	440400	1	Pivot Linkage
27	63007	1	Plate

Strap Kit 565527

Item No.	No. Req'd	Description
1	1	Strap Assembly
2	1	Hex Hd. Cap Screw — 1/4-20 x 25.4 mm (1 in.)
3	1	Hex Jam Nut — 1/4-20
4	1	Flat Washer — for 6.35 mm (.25 in.) bolt

Head Crank Kit 565528

Item No.	No. Req'd	Description
6	2	Pivot Shaft
7	4	External Retaining Ring — for 28.6 mm (1.125 in.) shaft
8	1	Spacer
9	1	Pivot Shaft
10	1	Spacer
11	4	Roll Pin — 3.35 mm (.132 in.) dia. x 19.mm (.75 in.)
12	2	Crank
20	1	Spacer
21	1	Pivot Shaft
22	2	Threaded Rod — NOTE: Apply lubricant (OTC #12387) to the threads of both screws.
23	1	Spacer
24	2	Slotted Hex Nut — 3/8-16
25	4	Thrust Bearing Washer — for 9.56 mm (.375 in.) bolt

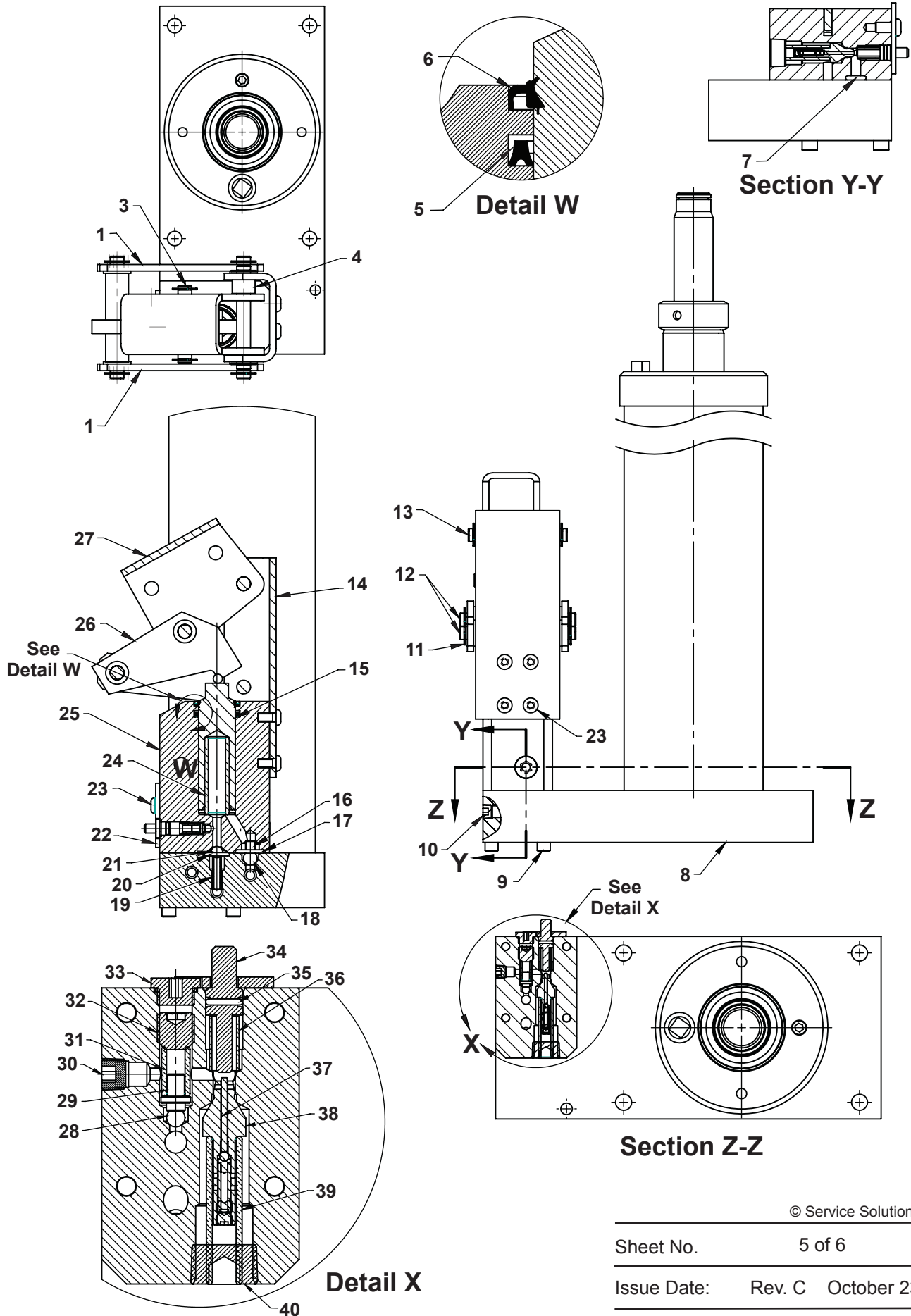
Head Hardware Kit 565529

Item No.	No. Req'd	Description
11	4	Roll Pin — 3.35 mm (.132 in.) dia. x 19.mm (.75 in.)
13	1	Hex Hd. Screw — 1/2-13 x 15.24 cm (6 in.)
14	2	Hex Locknut — 1/2-13
15	1	Hex Hd. Cap Screw — 1/2-13 x 101.6 mm (4 in.)
18	1	Cotterless Hitch Pin
24	2	Slotted Hex Nut — 3/8-16
25	4	Thrust Bearing Washer — for 9.56 mm (.375 in.) bolt
28	4	Carriage Bolt — 5/16-18 x 44.5 mm (1.75 in.)
29	4	Wing Nut — 5/16-18

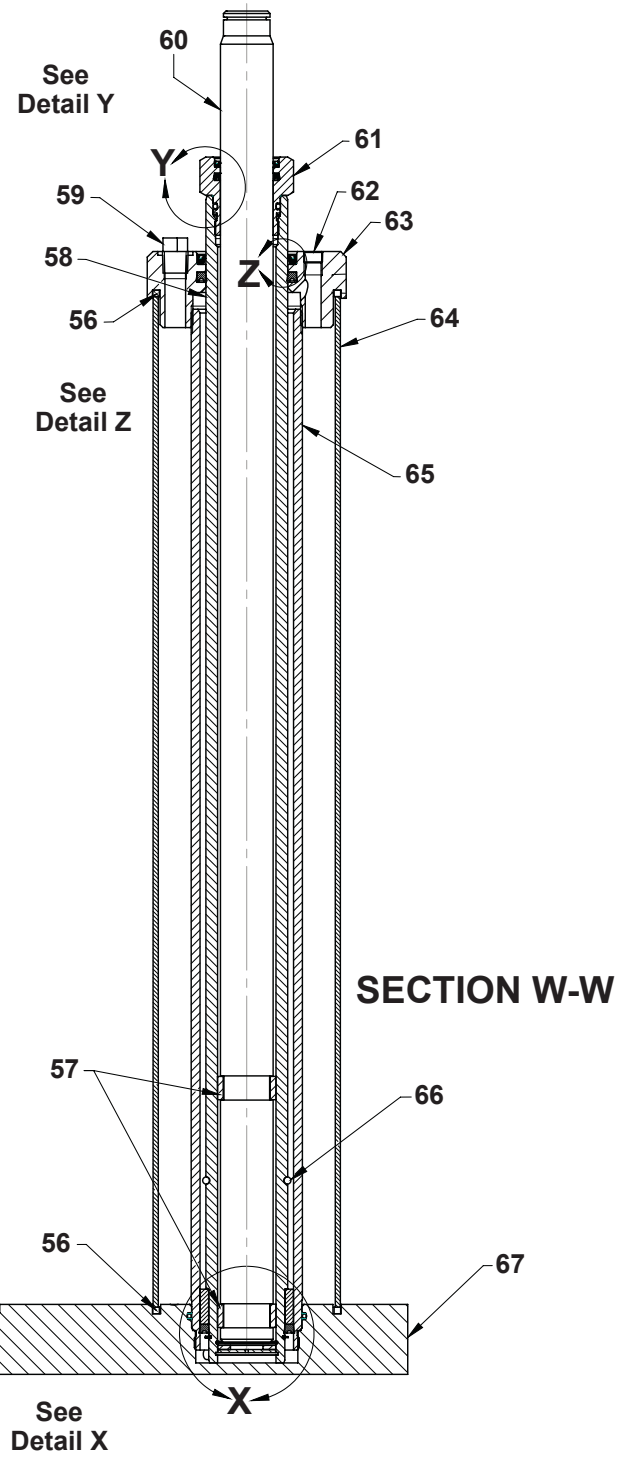
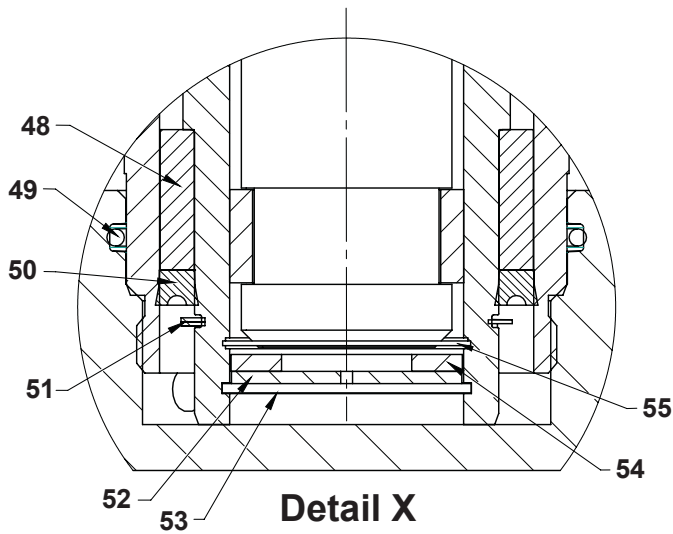
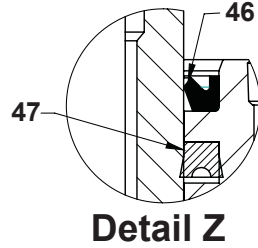
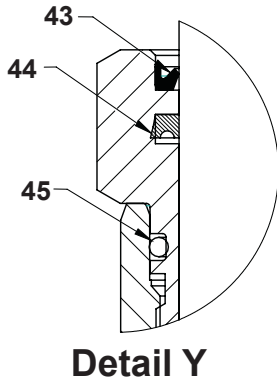
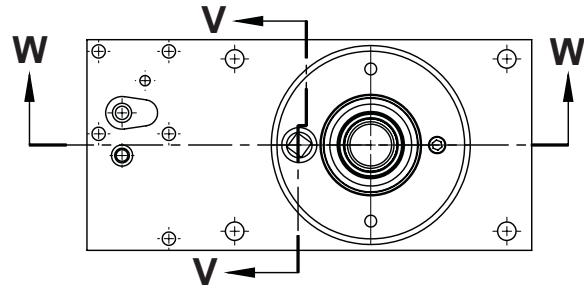
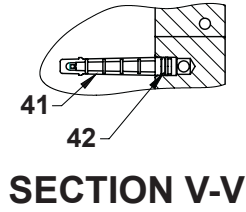
Bracket/Plate Kit 565530

Item No.	No. Req'd	Description
5	2	Bracket
16	1	Top Plate
17	2	Adapter Bracket

Jack Assembly



Cylinder Assembly



Linkage Kit 565531

Item No.	Part No.	No. Req'd	Description	Item No.	No. Req'd	Description
8	556838	1	Cylinder	1	2	Link
15	558479	1	Pump Piston	3	1	Clevis Pin
25	558480	1	Valve Block	4	1	Spacer
29	556823	1	Ball Guide	11	8	External Retaining Ring — for 9.525 mm (.375 in.) shaft
30	15130	1	Internal Drive Hex Plug	12	2	Clevis Pin
58	421484	1	Piston Rod	13	1	Clevis Pin
60	556834	1	Shaft	14	1	Bracket
61	421531	1	End Rod	23	4	Button Hd. Screw — 1/4-20 x 7.87 mm (1/2 in.) lg.
63	556832	1	Reservoir Rod Cap	26	1	Link
64	351436	1	Reservoir Tube	27	1	Link
65	421485	1	Cylinder Tube			
66	212013	1	Internal Retaining Ring — for 40.13 mm (1.58 in.) hole			
67	556831	1	Cylinder Manifold Block			

Hydraulic Internal Kit 565532

Item No.	No. Req'd	Description
48	1	Piston Head
51	1	External Retaining Ring — for 41.28 mm (1.625 in.) shaft
52	1	Spacer
53	1	Internal Retaining Ring — for 31.75 mm (1.25 in.) hole
54	1	Washer — 31.75 mm x 17.78 mm (1.25 in. x .70 in.)
55	1	Internal Retaining Ring — for 32.77 mm (1.29 in.) hole

Seal Kit 561420

Item No.	No. Req'd	Description	Item No.	No. Req'd	Description
5	1	U-cup — 3.175 mm x 25.4 mm (1.25 in. x 1.00 in.)	32	1	Self-locking Socket Set Screw
6	1	Rod Wiper — 3.175 mm x 25.4 mm (1.25 in. x 1.00 in.)	33	1	Threaded Fitting
7	1	O-ring — 12.7 mm x 7.87 mm (.50 in. x .31 in.)	34	1	Release Valve Button
10	4	Plug Fitting — 3.175 mm (1/8 in.) thread size	35	1	O-ring — .37 x .25
16	1	Spring — 6.6 mm x 16 mm x 0.51 mm (.26 OD x .63 x .02)	36	1	Compression Spring
17	1	O-ring — 20.6 mm x 15.8 mm (.81 in. x .62 in.)	38	1	Metering Poppet Assembly
18	1	Ball — 9.56 mm (.375 in.) dia.	39	1	Spring — 9.14 mm x 38.1 mm x 1.524 mm (.36 OD x 1.5 x .06)
19	1	Spring — 6.1 mm x 28.7 mm x 1.02 mm (.24 OD x 1.13 x .04)	40	1	Plug Fitting — 3/8 thread size
20	1	O-ring — 23.62 mm x 19.05 mm (.93 OD x .75 in.)	41	1	Filter Screen
21	1	Ball — 7.9 mm (.3125 in.) dia.	42	1	O-ring — 8.64 mm x 5.59 mm (.34 OD x .22 ID)
22	1	Plate	43	1	Rod Wiper — 35.05 mm x 28.7 mm (1.38 OD x 1.13 in.)
23	1	Button Hd. Screw — 1/4-20 x 7.87 mm (1/2 in.) lg.	44	1	U-cup — 35.1 mm x 28.7 mm (1.38 OD x 1.13 ID)
24	1	Spring — 17 mm x 109.47 mm x 2.54 mm (.67 OD x 4.31 x .10)	45	1	O-ring — 36.58 mm x 31.75 mm (1.44 in. x 1.25 in.)
28	1	Metal Ball — 4.78 mm (.188 in.) dia.	46	1	Rod Wiper — 54.10 mm x 44.45 mm (2.13 in. x 1.75 in.)
31	1	Spring	47	1	U-cup — 54 mm x 44.45 mm (2.13 OD x 1.75 ID)
			49	1	O-ring — 65 mm x 60.45 mm (2.56 OD x 2.38 ID)
			50	1	U-cup — 50.8 mm x 41.4 mm (2.00 OD x 1.63 ID)
			56	2	Square O-ring Seal
			57	2	Wear Ring
			59	1	Square External Drive Plug
			62	1	Hex Internal Drive Plug