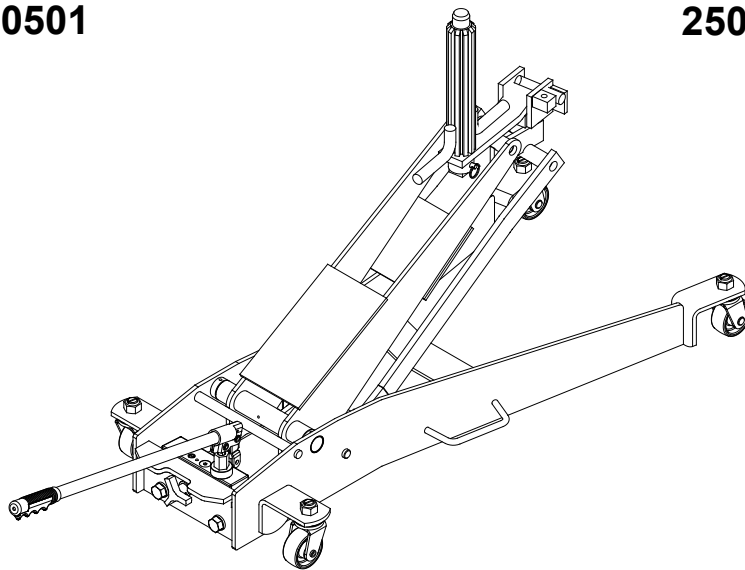


# OMEGALIFT™ EQUIPMENT



## Clutch Handler & Flywheel Adapter

Model  
40500  
40501

Capacity  
500 lb.  
250 lb.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

 <b>WARNING</b>	
To avoid <b>crushing and related injuries</b> :	
	<b>NEVER</b> work on, under or around a load supported only by a hydraulic jack. <b>ALWAYS</b> use adequately rated jack stands.

Read this manual and follow all the Safety Rules and Operating Instructions before using this product.

## SAFETY and GENERAL INFORMATION

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this jack before using. The owner and operator of this equipment shall have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be conveyed in the operator's native language before use of this jack is authorized. If any doubt exists as to the safe and proper use of this jack, remove from service immediately.

**Inspect before each use.** Do not use if broken, bent, cracked or damaged parts are noted. Any jack that appears damaged in any way, or operates abnormally shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue use until jack has been checked by a factory authorized service center (contact distributor or manufacturer for list of authorized service centers). It is recommended that an annual inspection be done by Labels and Operator's Manuals are available from manufacturer.

## PRODUCT DESCRIPTION

Clutch Handler is designed for clutch/ removal and installation. Intended use: to remove, install and transport (in lowest position) both 14" and 15-1/2" clutches and The two most common spline sizes, 1-3/4" and 2" diameter, are included with this product. The head plate enables clutch to be positioned in either horizontal position for clearing underneath vehicle or vertical position for installation and removal. The spline sleeve rotates 360 degrees, turns side to side and vertically tilts for precise clutch alignment. Model 40501 is designed to be used in conjunction with Omega Clutch handler, 40500 only. Refer to Figure 4 to ensure all parts are included before use.



**WARNING: NEVER use for any purpose other than those uses outlined above!**

## SPECIFICATIONS

Model	Capacity	Jack Size (L x W)	Min. Height	Max. Height	Spline Dia.	Pilot Shaft Dia.
40500	500 lb.	44-1/2" x 22-1/2"	16-1/2"	42"	1-3/4" & 2"	1"

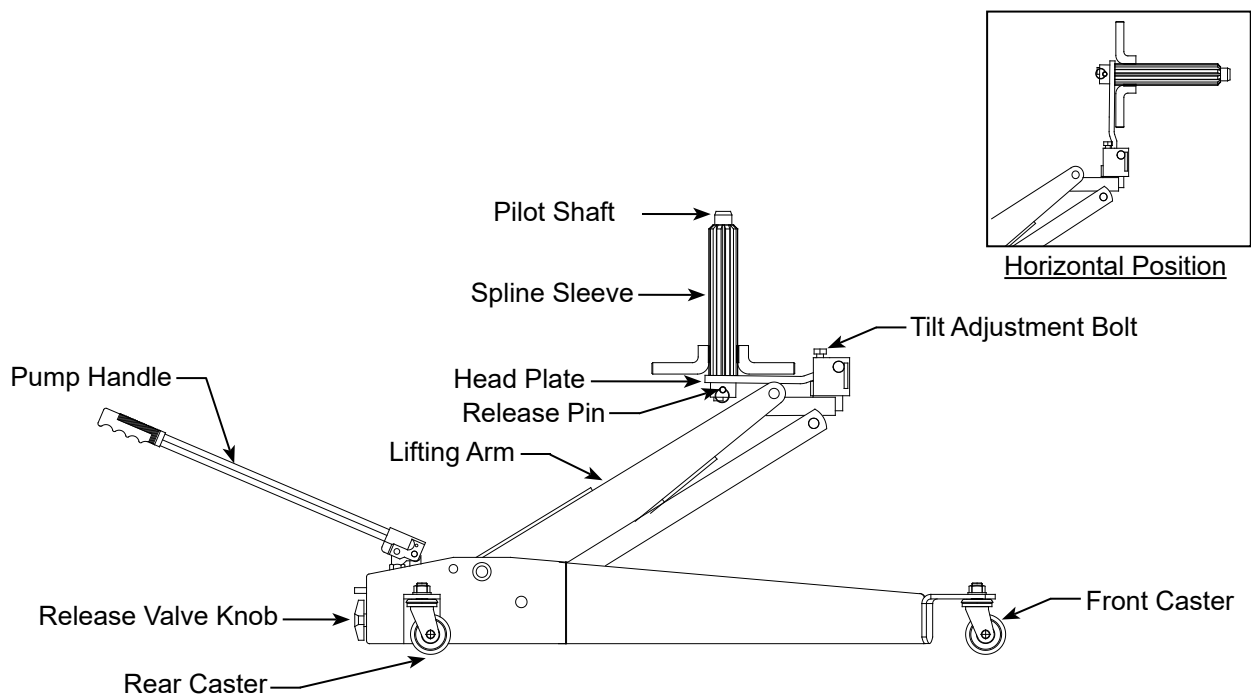


Figure 1 - Model 40500 Components

## PREPARATION

1. Verify that the product and the application are compatible, if in doubt contact your local Omega Technical Service.
2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the potential hazards associated with its use.
3. To familiarize yourself with basic operation, locate and turn the release valve knob (see Fig 1):
  - a. *Clockwise* until firm resistance is felt to further turning. This is the '**CLOSED**' release valve position used to **raise** the lifting arm.
  - b. *Counter-clockwise*, but no more than 1/2 turn from the closed position. This is the '**OPEN**' release valve position used to **lower** the lifting arm.
4. With lifting arm fully lowered and release valve closed, pump the operating handle. If lift arm responds immediately jack is ready for use. If jack does not respond, open release valve and pump 6 to 8 full strokes to purge air. Close release valve and recheck operation
5. Ensure that jack rolls freely, that the pump and release valve operate smoothly. Raise and lower the unloaded jack throughout the advertised lift range before putting into service. Replace worn or damaged parts and assemblies with factory authorized replacement parts only.

### Bleeding/ Venting Trapped Air

With the release valve in the OPEN position (3b.) and saddle fully lowered, locate and remove the oil plug/screw. Pump 6 to 8 full strokes. This will help release any pressurized air which may be trapped within the reservoir

## ⚠ WARNING

- **Study, understand, and follow** all printed materials provided with/on this product before use.
- **Do not** exceed rated capacity.
- Use only on hard, level surface.
- Do not allow any part of your body under the lift arm or load while the jack is supporting a load.
- Only attachments and/ or adapters supplied by the manufacturer shall be used. Never use any other part of the jack as a lifting surface.
- Use of this jack is limited to the removal, installation
- Adequately support the vehicle before starting repairs.
- No alterations shall be made on this product.
- Failure to heed these markings may result in personal injury and/or property damage.

## OPERATION

### Removing a Clutch

1. Follow vehicle manufacturers instruction for removing clutch.
2. Select the correct size spline sleeve. Place the spline on the adapter shaft, then attach to the head plate with the release pin & retaining pin provided.
3. Close the release valve by tightening the release valve knob. Pump the handle to raise the lifting arm and align the spline sleeve with the clutch.
4. Tilt the head plate with the tilt adjustment bolt to align it with the clutch bore. Slide the spline sleeve into the clutch.
5. Remove the clutch mounting bolts and back the jack

**⚠ WARNING:** *Be sure all tools and personnel are clear before lowering load. **Slowly open the release valve!** The more you turn the knob counter-clockwise, the faster the load will come down. **Maintain control** of the rate of speed at which the load lowers at all times!*

### Transporting the Clutch while on Jack

Be sure the adapter shaft is in the vertical position and the jack is fully lowered before transporting, as shown in Figure 2.

### Loading and Unloading a Clutch from the Jack

1. To load or unload a clutch from the jack, be sure the adapter shaft is in the vertical position, as shown in Figure 2.
2. Add or remove one piece of the clutch at a time.

### Installing a Clutch

1. Raise the clutch into the horizontal position for installation and tilt the clutch using the tilt adjustment
2. Put the jack and clutch into position so that the spline shaft engages the pilot bearing in the                      Install and tighten the clutch mounting bolts referring vehicle manufacturer's instructions.

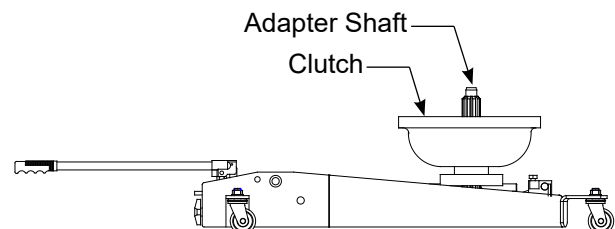


Figure 2 - Illustration of Lowest Position with Clutch

## OPERATING with Optional Flywheel Adapter

### Install the flywheel adapter

1. Keep jack in lowest position. Remove the release pin, then remove the spline sleeve and adapter shaft.
2. Install the adapter assembly, then secure with the quick release pin.

**Note:** Flywheel adapter assembly includes adapter, a shorter adapter shaft, and a C-clip (Fig. 3).

### Removing a Flywheel

1. Remove all the attaching bolts to crankshaft bolts) except for the three bolts pointed in Figure 4.
2. Install the wheel adapter as shown in Fig. 4. Close the release valve knob fully. Pump the handle to raise the lifting arm and align the adapter to the
3. Center the adapter to the and bolt the adapter to the Leave room to access the remaining three flywheel attaching bolts retained
4. Ensure the release valve knob of the jack is closed tightly before removing the last three flywheel attaching bolts.

5. Back the jack and away from the engine

6. Then while supporting the remove the

### Loading and Unloading a Flywheel from the Jack

1. To load or unload a from the jack, be sure the jack is in lowest position.
2. While supporting the remove the from the adapter.

### Installing a Flywheel

1. Close release valve knob, pump the handle and raise the into position shown in Figure 4 for installation. Adjust the using tilt adjustment
2. Install and tighten the attaching bolts.

**Note:** Tighten the attaching bolts gradually. Each bolt should be tightened to the torque in a crisscross method. Refer to vehicle service manual for the tightening sequence and torque.

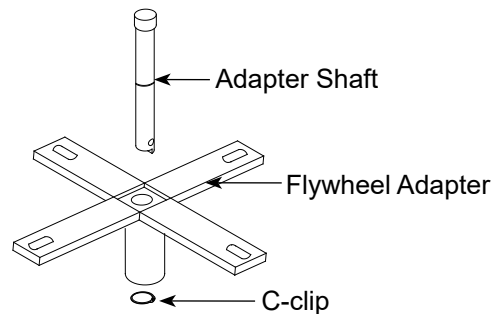


Figure 3 - Flywheel adapter assembly components

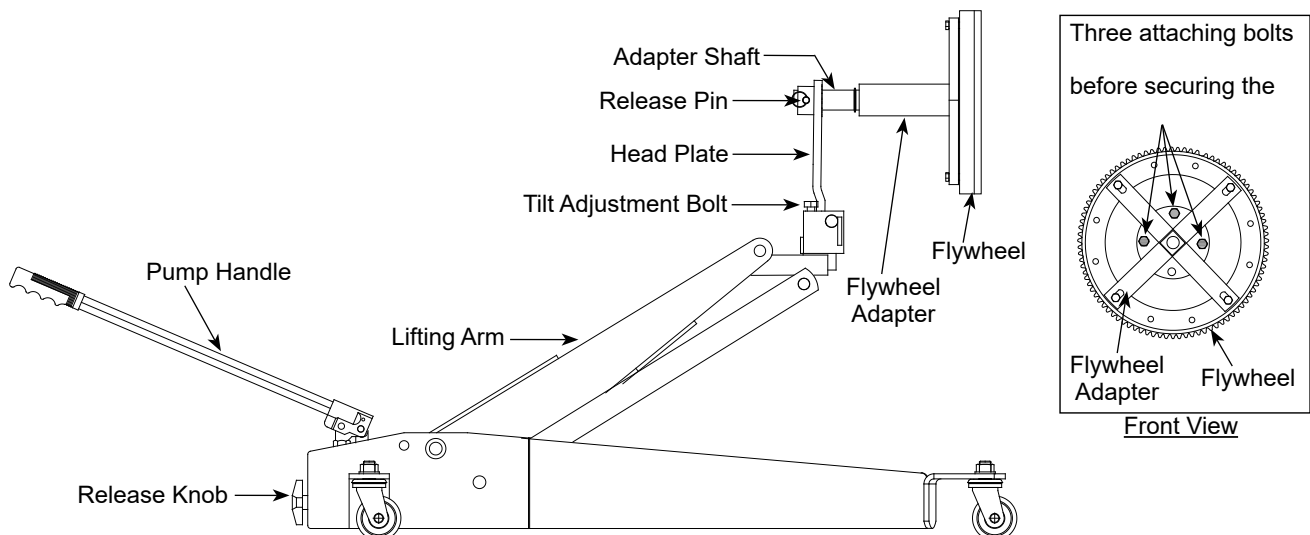


Figure 4 - Flywheel Adapter Operational Illustration

## MAINTENANCE

**Important:** Use only good grade hydraulic jack oil. Avoid mixing different types of \_\_\_\_\_ and NEVER use brake \_\_\_\_\_ turbine oil, transmission \_\_\_\_\_ motor oil or glycerin. Improper \_\_\_\_\_ can cause premature failure of the jack and the potential for sudden and immediate loss of load. We recommend premium hydraulic jack oil.

### Adding oil

1. With lifting arm fully lowered set jack in its upright,
2. Fill with oil until ~3/16" above the inner cylinder as

### Changing oil

For best performance and longest life, replace the \_\_\_\_\_

- 1.
2. Lay the jack on its side and drain the \_\_\_\_\_ into a suitable container.

**Note.** Dispose of hydraulic \_\_\_\_\_ in accordance with local regulations.

3. Fill with oil until ~3/16" above the inner cylinder as seen from the oil \_\_\_\_\_ hole. Reinstall oil \_\_\_\_\_ plug.

### Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, casters and pump assemblies move freely.

### Cleaning

Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

**Note:** Never use sandpaper or abrasive material on these surfaces!

### Storage

When not in use, store the jack with lifting arm fully lowered.

## TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"> <li>• Release valve not tightly closed</li> <li>• Load is too heavy</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure release valve tightly closed</li> <li>• Consider higher capacity jack</li> </ul>
Jack will lift, but not maintain pressure	<ul style="list-style-type: none"> <li>• Release valve not tightly closed</li> <li>• Hydraulic unit malfunction</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure release valve tightly closed</li> </ul>
Jack will not lower after unloading	<ul style="list-style-type: none"> <li>• _____</li> <li>• Linkage binding</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure load is removed, then</li> <li>• Clean and lubricate moving parts</li> </ul>
Poor lift performance	<ul style="list-style-type: none"> <li>• Fluid level low</li> <li>• Air trapped in system</li> </ul>	<ul style="list-style-type: none"> <li>• _____</li> <li>• See Page 3 for bleeding/ venting trapped air</li> </ul>
Jack will not lift to full extension	<ul style="list-style-type: none"> <li>• Fluid level low</li> </ul>	<ul style="list-style-type: none"> <li>• _____</li> </ul>

# REPLACEMENT PARTS

(refer to page 6 & 7)

Not all components of the jack are replacement items. When ordering parts, give Model number, serial number and parts description.

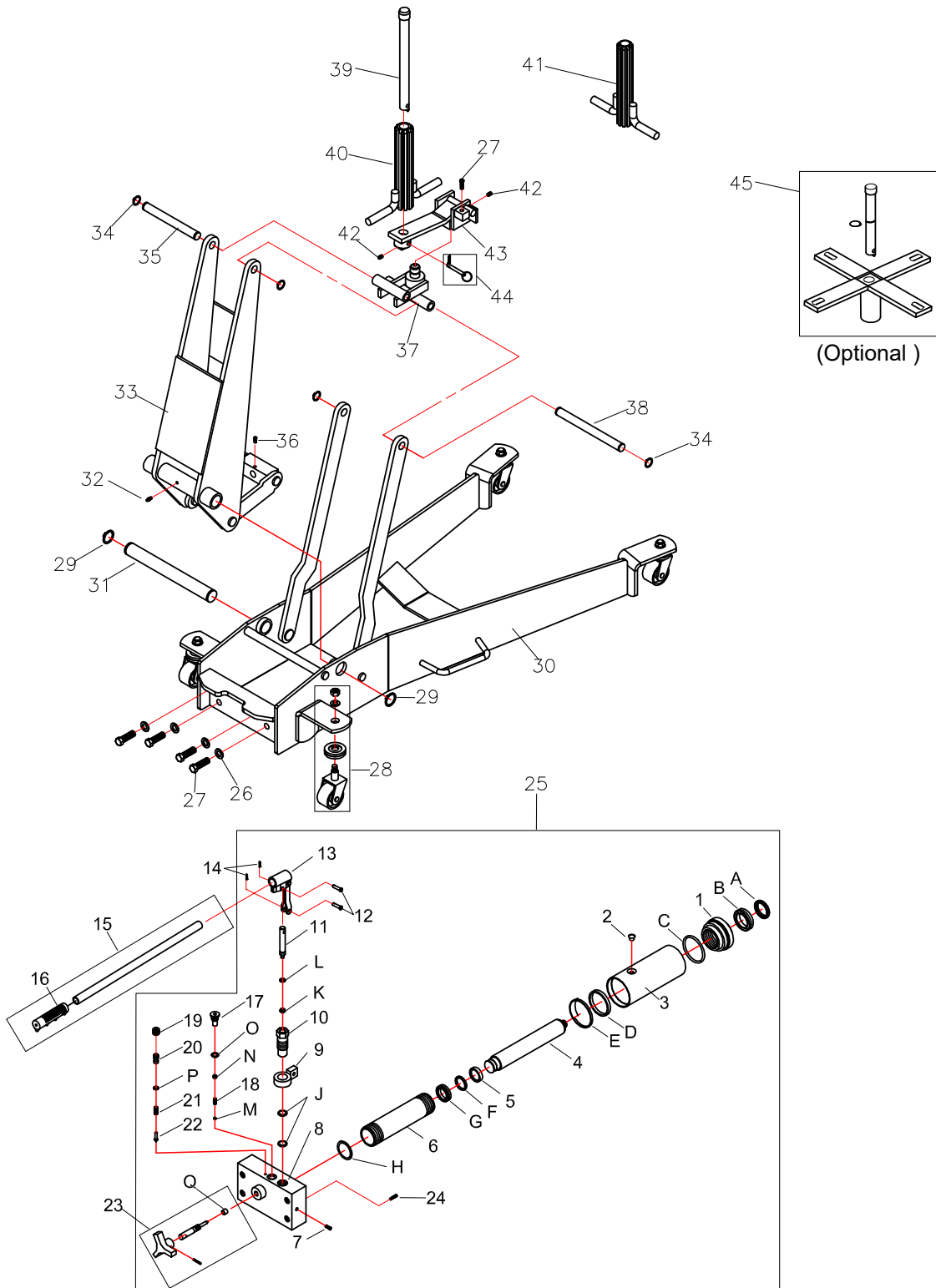


Figure 5 - Replacement Parts Illustration for Model 40500

## Replacement Parts List for Model 40500

Item	Part No.	Description	Qty.
1	N/A	Top nut	1
2	5905-00100-100	Filler Plug	1
3	N/A	Reservoir	1
4	N/A	Piston Rod	1
5	N/A	Ram Bearing	1
6	N/A	Cylinder	1
7	N/A	Screw	1
8	N/A	Base	1
9	4200-01006-000	Handle Sleeve Seat	1
10	4200-01002-000	Pump Cylinder	1
11	4200-01401-000	Pump Piston	1
12	5405-07027-000	Pin	2
13	4200-01300-000	Handle Sleeve	1
14	N/A	Retaining Pin	2
15	4500-02000-000	Handle Assembly	1
16	BL80-20002-000	Handle Grip	1
17	N/A	Screw	1
18	N/A	Spring	1
19	N/A	Screw	1
20	N/A	Safety Valve Screw	1
21	N/A	Safety Spring	1
22	N/A	Needle	1
23	G410-90009-K02	Release Valve Assy.	1
24	N/A	Filter	1
25	G410-70000-000	Hydraulic unit	1
26	N/A	Lock Washer	4
27	5102-12035-000	Bolt	5
28	G410-90009-K01	Caster Assembly	4
29	N/A	Snap Ring	2
30	N/A	Chassis	1

Item	Part No.	Description	Qty.
31	N/A	Lift Arm Axle	1
32	5701-00006-000	Grease Fitting	1
33	N/A	Lift Arm	1
34	N/A	Snap Ring	4
35	N/A	Lift Arm Axle	1
36	N/A	Bolt	1
37	N/A	Spline Adapter Seat	1
38	N/A	Parallel Link Axle	1
39	G410-00001-000	Pilot Shaft	1
40	G410-10000-000	Spline Sleeve, 2"	1
41	G410-80000-000	Spline Sleeve, 1-3/4"	1
42	N/A	Bolt	2
43	G410-20000-000	Spline Adapter	1
44	G410-90009-K04	Release Pin	1
45	40501	Flywheel Adapter Assembly	-
*	42000S-102	Seal Kit (Hyd Unit)	-

(*) Seal Kit Contents:		
Item	Description	Qty.
2	Filler Plug	1
A	Seal	1
B	U-cup	1
C	O-ring	1
D	Back-up Ring	1
E	Seal	1
F	Back-up Ring	1
G	U-cup	1
H	Copper Gasket	1
J	O-ring	2
K	Seal	1
L	O-ring	1
M	Steel Ball	1
N	Steel Ball	1
O	O-ring	1
P	O-ring	1
Q	Oil Seal	1