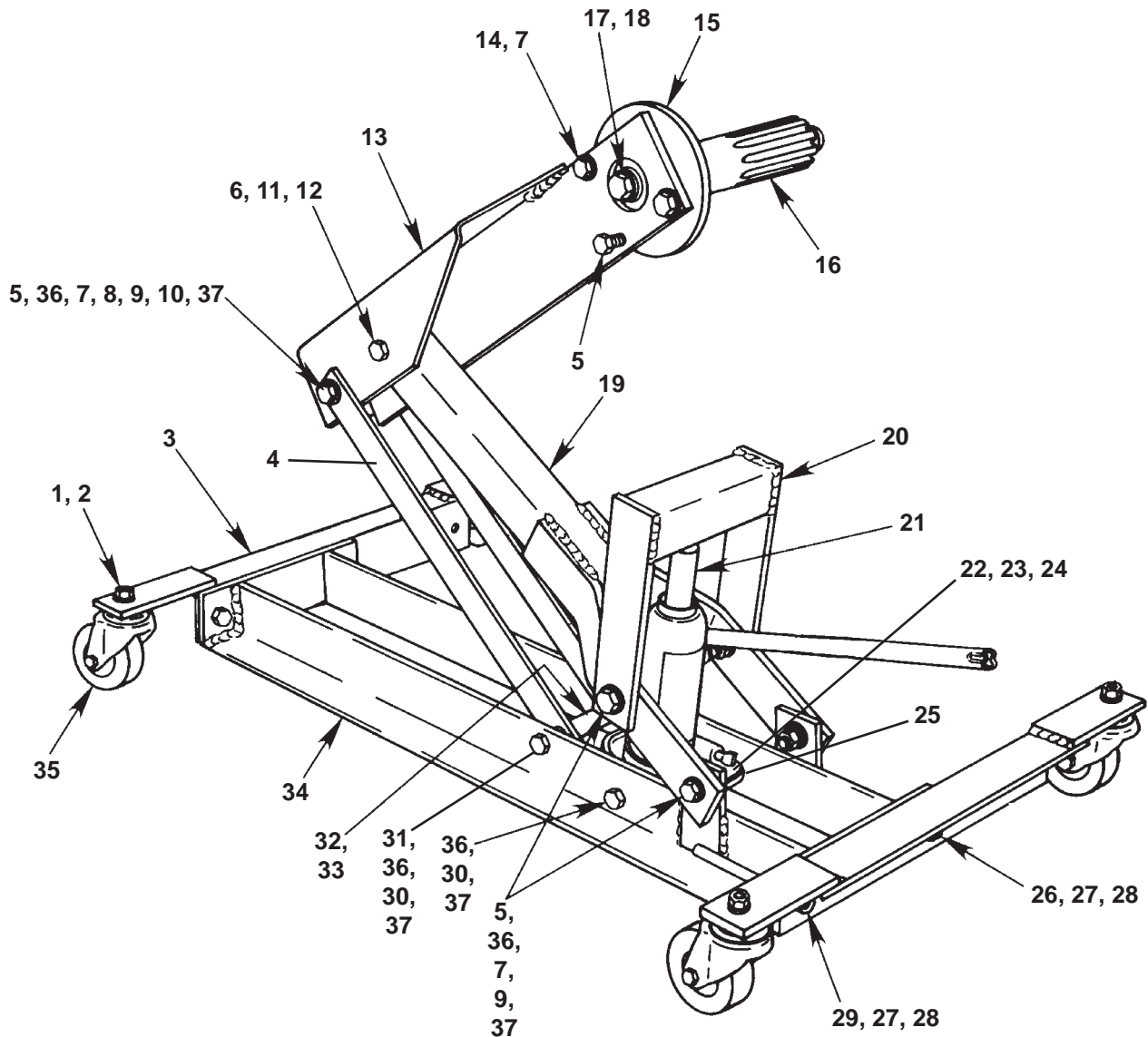


Heavy-Duty  
**Clutch Handler**

Max. Capacity: 150 lbs.

The OTC Heavy-Duty Clutch Handler and Flywheel Adapter are designed for the removal and installation of the 14" and 15-1/2" double disc clutches and/or flywheel assemblies found on many heavy-duty vehicles. Refer to Form No. 105665 for instructions about using the flywheel adapter (OTC No. 218174).

**Parts List**



## Parts List & Operating Instructions

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Item No.	Part No.	No. Req'd	Description
1	540573	4	Nut (M12 x 1.75)
2	545602	4	Lockwasher (12 mm)
3	542035	2	Leg Weldment
4	542187	2	Strap
5	540891	7	Cap Screw (.500-13 x 38 mm)
6	540570	1	Locknut
7	541036	8	Plain Washer
8	542617	2	Washer
9	545515	6	Bushing
10	540785	2	Washer
11	542610	1	Cap Screw (.500-13)
12	542184	1	Tube
13	542036	1	Upper Lift Arm Weldment
14	541038	2	Cap Screw (.500-13 x 25.4 mm)
15	542616	1	Plate
16	545765	1	Splined Shaft (2" dia.)
17	542608	1	Cap Screw (.625-11)
18	542613	1	Lockwasher (.625)
19	542034	1	Lower Lift Arm Weldment
20	542027	1	Jack Yoke Weldment
21	545240	1	Hydraulic Bottle Jack
22	542607	2	Cap Screw (M6-1)
23	542612	2	Nut (M6-1)
24	542614	2	Lockwasher
25	542026	1	Jack Mount Weldment
26	542609	3	Cap Screw (.437-14)
27	542615	4	Lockwasher (.437)
28	542611	5	Nut (.438-14)
29	545518	1	Handle Holder Stud
30	545516	2	Cap Screw (.500-13)
31	12330	2	Washer
32	542185	1	Tube
33	542186	1	Tube
34	542037	1	Cross Frame Weldment
35	540568	4	Swivel Caster
36	10208	8	Nut (.500-13)
37	541030	8	Lockwasher
<b>Parts Included But Not Shown</b>			
	545621	1	Trade Name/Warning Decal
<b>Optional Accessories</b>			
	48625	1	Splined Shaft (1-3/4" dia.)
	218174	1	Flywheel Adapter (see Form #105665)

## Safety Precautions



**CAUTION:** To prevent personal injury and/or damage to the equipment,

- Study, understand, and follow all instructions before operating this clutch handler.
- Wear eye protection that meets ANSI Z87.1 and OSHA standards.
- Wear steel-toe shoes that meet ANSI Z41 and OSHA standards.
- If the operator cannot read English, operating instructions and safety precautions must be read and discussed in the operator's native language.



- Inspect the clutch handler before each use. Do not use the clutch handler if damaged, altered, or in poor condition.
- Never exceed the rated lifting capacity of the clutch handler.
- Never move the clutch handler with the load any higher off the ground than necessary.
- Use clutch handler on a hard, level surface.
- Move the clutch handler cautiously around corners because it could tip.
- Lowering the lift arm too quickly could cause equipment damage. **SLOWLY** turn the hydraulic control valve counterclockwise to release hydraulic pressure.
- Use only those adapters and replacement parts provided by the manufacturer.
- Never modify the unit or adapters.
- Stay clear of the clutch handler's pinch points as you raise and lower the lift arm.
- Use only approved hydraulic fluid.

## Assembly Instructions

(Item numbers refer to the parts list illustration.)

1. Bolt legs (Item #3) to handler using three cap screws (#26), one threaded handle holder (#29), four washers (#27), and nuts (#28).
2. Bolt swivel casters (#35) to legs using four washers (#2) and nuts (#1).
3. Thread two cap screws (#14) through upper lift arm and tighten.
4. Thread adjusting screw (#5) into upper lift arm.
5. Free up swivel bearing in upper lift arm by applying a penetrating lubricant to race and working bearing up and down and side-to-side with a punch or screwdriver.
6. Insert one cap screw (#17) with washer (#18) through swivel bearing in upper lift arm. Slide plate (#15) over cap screw. Thread splined shaft (#16) onto cap screw and tighten.
7. Measure distance between plate (#15) and cap screws (#14). If distance is less than 1/16", remove two cap screws (#14), and insert a washer (#7) between each cap screw (#14) and upper lift arm. Wrench tighten. See Figure 1.

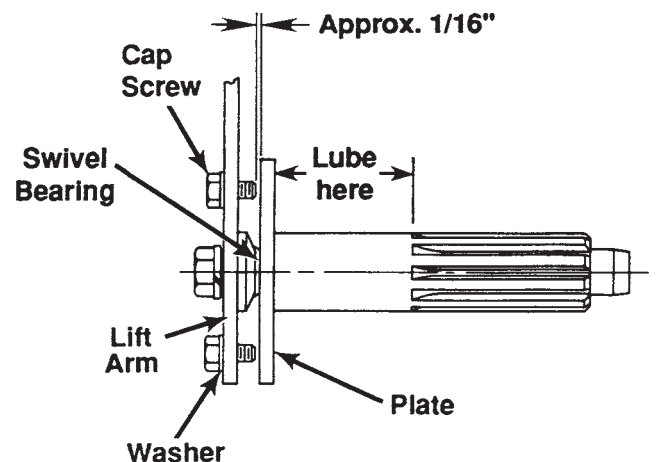


Figure 1

## Operating Instructions

### Clutch Removal

1. Attach the correct splined input shaft (2" or the optional 1-3/4" diameter) to the clutch handler.
2. Sparingly apply lubricant to the area of the splined input shaft shown in Figure 1.
3. If there isn't enough clearance to roll the clutch handler under the vehicle, raise the vehicle's front end. Position the clutch handler under the vehicle.
4. Use the adjusting screw to change the angle of the input shaft so it matches the angle of the vehicle clutch assembly. See Figures 2 and 3.
5. Remove the jack handle from the holder and insert it into the jack. Operate the jack to raise the upper lift arm to the correct height, and insert the input shaft into the clutch assembly. Turn the large center cap screw clockwise to rotate the spline shaft and engage the clutch discs. If necessary, use the adjusting screw to further improve the alignment of the input shaft. The splines must completely engage the clutch assembly before you remove the clutch assembly.
6. Remove the mounting bolts on the pressure plate.
7. Pull the clutch handler and clutch assembly away from the flywheel.
8. Slowly release pressure to lower the clutch assembly to the floor, keeping clear of the clutch handler's pinch points as it closes.

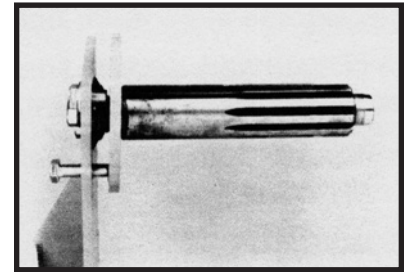


Figure 2

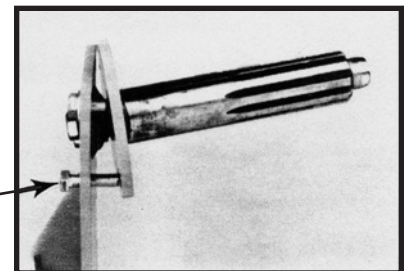


Figure 3

Adjusting  
Screw

### 15-1/2" Clutch Installation

1. Sparingly apply lubricant to the area of the input shaft shown in Figure 1.
2. Position the pressure plate, clutch, discs, and spacer onto the clutch handler's input shaft. **Important: The input shaft must pass completely through all components of the clutch assembly.**
3. If there isn't enough clearance to roll the clutch handler under the vehicle, raise the vehicle's front end. Position the clutch handler under the vehicle.
4. Use the adjusting screw to change the angle of the clutch assembly to match the flywheel. See Figure 4.
5. Operate the jack to raise the upper lift arm to the correct height. Roll the clutch handler forward to insert the input shaft pilot into the flywheel pilot bearing.
6. Bolt the clutch to the flywheel.
7. Slightly release pressure of the upper lift arm. **Note: If it is difficult to remove the clutch handler from the clutch assembly, adjust the alignment of the input shaft by using the adjusting screw.**
8. Back the handler away and slowly release pressure to lower the upper lift arm to floor level.

Adjusting  
Screw

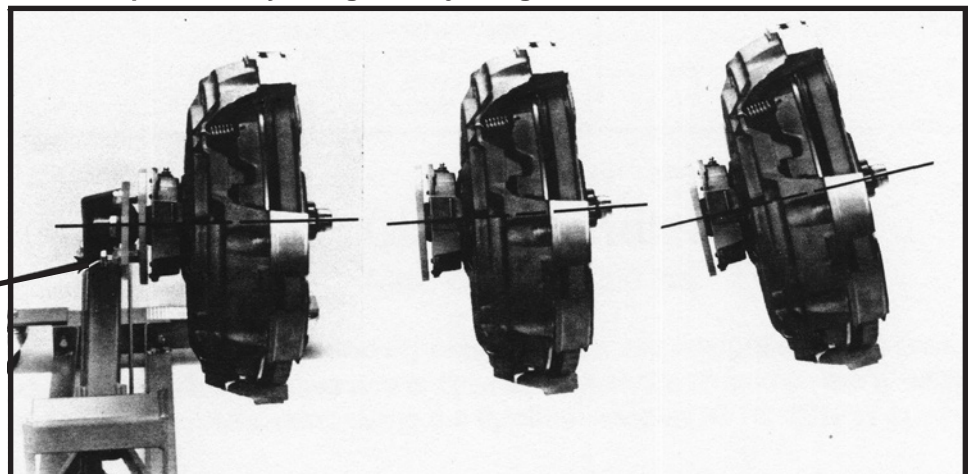


Figure 4

## 14" Clutch Installation

1. Sparingly apply lubricant to the area of the input shaft shown in Figure 1.
2. Place the new front clutch disc and intermediate plate into the pot type flywheel. See Figure 5.
3. Load the pressure plate and new rear disc on the clutch handler spline shaft.
4. If there isn't enough clearance to roll the clutch handler under the vehicle, raise the vehicle's front end. Position the clutch handler under the vehicle.
5. Use the adjusting screw to change the angle of the clutch assembly to match the flywheel. See Figure 4.
6. Operate the jack to raise the upper lift arm to the correct height to engage the front disc spline. Roll the clutch handler forward to insert the spline shaft. Turn the large center cap screw clockwise to rotate the spline shaft for correct engagement of the clutch disc. **Note: The front clutch disc in the flywheel is slightly lower than the center line of the pilot bearing. It may be necessary to raise the upper lift arm to correctly align the spline shaft with the pilot bearing. See Figure 6.**
7. Bolt the clutch to the flywheel.
8. Slightly release pressure of the upper lift arm. **Note: If it is difficult to remove the clutch handler from the clutch assembly, adjust the alignment of the input shaft by using the adjusting screw.**
9. Back the handler away and slowly release pressure to lower the upper lift arm to floor level.

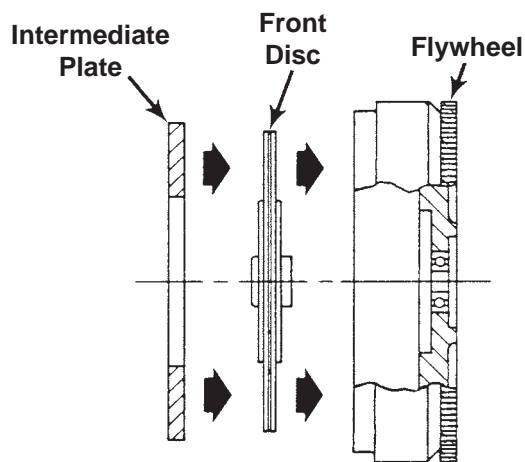


Figure 5

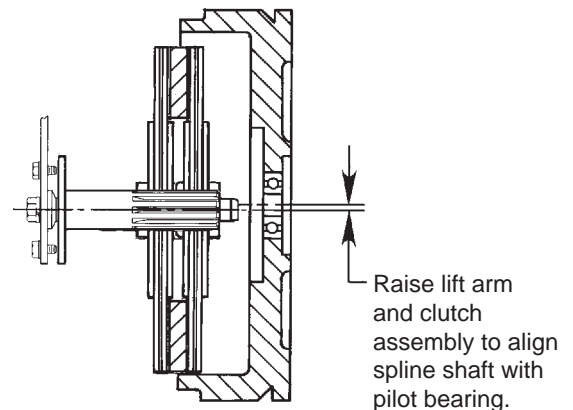


Figure 6

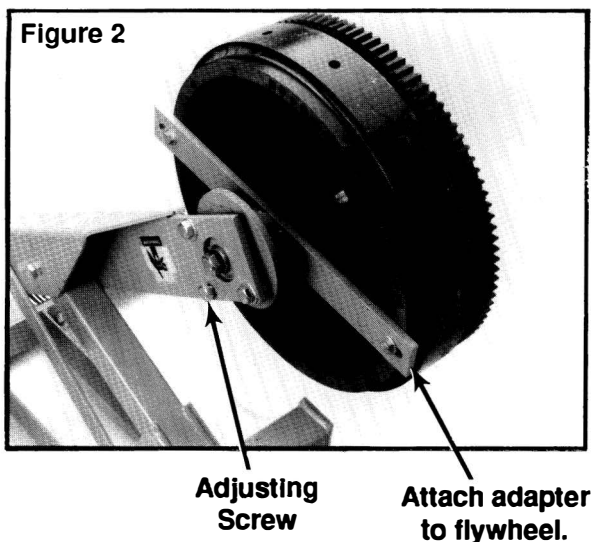
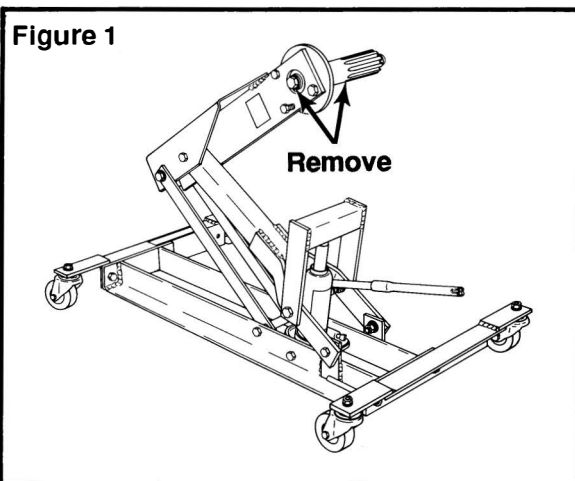
## Heavy Duty Flywheel Adapter

Max. Capacity: 200 lbs.

The OTC Flywheel Adapter is used with the OTC Clutch Handler (No. 5015 or 5015A) for the removal and installation of the 14 in. and 15-1/2 in. flywheel assemblies found on many heavy-duty vehicles. Refer also to the operating instructions included with the clutch handler (105657 for the 5015; 545622 for the 5015A).

### Safety Precautions

- ⚠ WARNING:** To prevent personal injury and/or damage to the equipment,
- Never exceed the rated lifting capacity of the clutch handler.
  - Never move the clutch handler with the load any higher off the ground than necessary.
  - Move the clutch handler cautiously around corners because it could tip.
  - Release pressure slowly.
  - Use only those adapters provided by the manufacturer; never modify the unit or adapters.
  - Stay clear of the clutch handler's pinch points as you raise and lower the upper lift arm.
  - Wear eye protection that meets ANSI Z87.1 and OSHA standards.



### Operating Instructions

1. Remove the bolt and splined shaft from the clutch handler as shown in Figure 1.
2. Bolt the flywheel adapter to the clutch handler using the bolt and washer that were removed in Step 1.
3. If there isn't enough clearance to roll the clutch handler under the vehicle, raise the vehicle's front end. Position the clutch handler under the vehicle.
4. Use the adjusting screw to change the angle of the flywheel adapter so it matches the angle of the flywheel assembly. See Figure 2.
5. Remove the jack handle from the holder and insert it into the jack. Operate the jack to raise the upper lift arm to the correct height.
6. Attach the adapter to the flywheel using the correct bolts and washers. (Two sizes of bolts are supplied with the flywheel adapter: 3/8 x 1" and 7/16 x 1".)
7. Remove the mounting bolts holding the flywheel to the crankshaft.
8. Pull the clutch handler and flywheel assembly away from the crankshaft.
9. Slowly release pressure to lower the flywheel to the floor, keeping clear of the clutch handler's pinch points as it closes.