### **AERO-MOTIVE COMPANY**



A Woodhead Industries, Inc. Subsidiary

## <u>Safety</u>

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.
WARNING: Warnings are used when hazards exist which could result in serious injury, death or property damage if proper precautions are not taken.
CAUTION: Cautions are used as reminders of safety hazards which could result in personal injury or property damage if proper precautions are not taken.

### **Installation**

- A. Mounting. Reel may be mounted base up, base down, or in any position which allows main shaft to be horizontal. Reel should be mounted with centerline of drum in line with hose run.
- B. Installation of output hose. Insert hose between drum flanges, through hose clamp (8) and through slot in flange adjacent to hose clamp (8). Hose can then be connected to swivel (20). Allow for adequate slack between hose clamp and swivel so that all hose tension is removed from swivel and absorbed at the hose clamp.
- C. Installation of input hose. Input hose is installed at opposite end of main shaft from swivel.
- D. Secondary safety chain. A secondary safety chain should always be connected to reel and be properly secured to prevent reel from accidentally falling when mounted overhead.

## **Operation**

- A. Spring tension. After hose is installed on reel and before permanent connections are made at free end of hose, pretension reel by pulling hose out far enough to allow one full wrap of hose to be thrown back over spool. Hold spool from turning while hose is placed back over spool. One set up turn has now been applied. Repeat until desired tension is reached. After tension is set, pull hose out completely to insure enough spring travel remains for operating. Failure to test in this manner can lead to spring damage.
- B. Ratchet lock. Optional ratchet lock (A) is of gravity type and is furnished with counterweight fastened to ratchet dog. When mounted on wall or with the base down, counterweight (52) is left attached. When mounted base up, counterweight must be removed.
- C. Hose guide. Optional four roller hose guide (71) should always be mounted so that hose pays off from spool in a straight line through the guide. Hose <u>should not</u> be bent around guide at sharp angles nor should the guide be used as a sheave.

ORRECT ORRECT FIXED FOUR ROLLER GUIDES

# Service

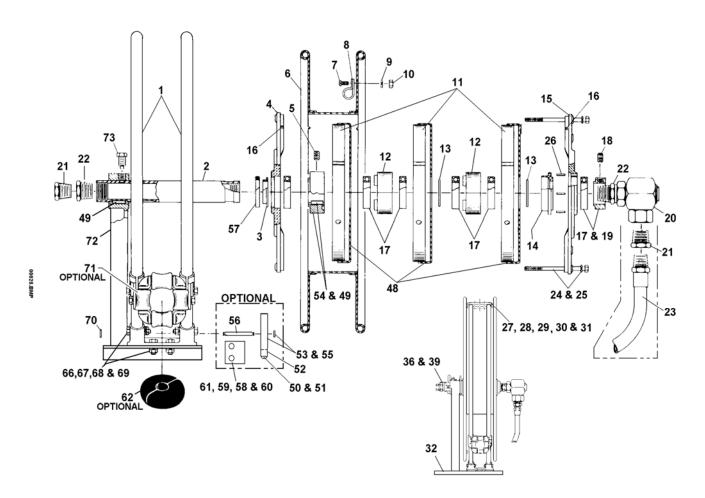
CAUTION: Before attempting any service, always cut off all supply input and remove all spring tension.

- A. Main motor springs
  - 1. If reel will not develop spring tension, it is possible a main spring(s) (11) has broken. To replace main spring(s), remove swivel (20) and collar (19). Remove bolts (25) and lift off end plate (15). Drive ring (14) may come off with end plate. Remove spacer (13).
  - 2. Drum and flange assembly (6) may now be removed exposing spring cups (48). Remove each spring and cup assembly as a single piece.
- CAUTION:

*N:* Never allow spring to be pulled by its center. Springs are riveted at the outer band and may be removed from cups as long as the rivet is intact. If rivet is broken, do not remove spring from the cup. Consult factory immediately.

- 3. Replace broken spring(s), apply a light coat of grease to spring, and reassemble by reversing the above, making sure all components are replaced in proper order. Be sure to apply spring tension to reel once it is completely assembled as described in "Spring tension".
- B. Swivel assembly. If leaks should develop in swivel (20), replace entire unit.

# **Replacement Parts**



Reference			
Number	Part Number	Qty.	Description
1	1-R	1	Guide rail, 41832 1100, D863
	2-R	1	Guide rail, 40729 1200, D865, 866, 883
	3-R	1	Guide rail, 40729-1, 49285-3 1400, D985
2	59480-3	1	Main shaft - 1200, 1400p; 3 spr D865=D985
	59480-5	1	Main shaft - 1200, 1400; 5 spr
	59480-7	1	Main shaft - 1100, 2 spr
	59480-8	1	Main shaft - 1100, 3 spr D863

69480-9     1     Main shaft -1100, 4 spr       4     40602.1     1     End plate       5     53.P-502     1     Set Server 34.P-18, 1/12       6     4204-2     1     Drum and finga - 1142, xxxxx       4204-3     1     Drum and finga - 1143, xxxxx       4204-4     1     Drum and finga - 1143, xxxxx.L       4204-5     1     Drum and finga - 1143, xxxxx.L       4204-6     1     Drum and finga - 1143, xxxxx.L       4204-1     1     Drum and finga - 1143, xxxxx.L       4204-1     1     Drum and finga - 1143, xxxxx.L       4204-1     1     Drum and finga - 1125, xxxxx.L       40621-7     1     Drum and finga - 1255, xxxxx.L       40621-7     1     Drum and finga - 145, xxxxx.L       40783-10     1     Drum and finga - 145, xxxxx.L       40783-2     1     Drum and finga - 147, xxxxx.L       40783-2     1     Drum and finga - 147, xxxxx.L       40783-2     1     Drum and finga - 147, xxxxx.L       63810216     1     Ciamp 147 10, hxxxxx.L       63810217 <t< th=""><th></th><th></th><th></th><th></th></t<>				
4     40002-1     1     End plate       5     63P-502     1     Set serve 38-16 x / 12       6     42904-3     1     Drum and flange - 1143 xxxxxx       42904-4     1     Drum and flange - 1143 xxxxxx       42904-5     1     Drum and flange - 1143 xxxxxx-1       42904-8     1     Drum and flange - 1143 xxxxxx-1       42904-9     1     Drum and flange - 1143 xxxxxx-1       42904-10     1     Drum and flange - 1143 xxxxxx-1       42904-11     1     Drum and flange - 1143 xxxxxx-1       40021-5     1     Drum and flange - 1125 xxxxx<1		59480-9	1	Main shaft - 1100, 4 spr
5     S52-502     1     Set serve 30-16 x /12       6     42904-3     1     Drum and flange - 1143-xx-xox       42904-4     1     Drum and flange - 1143-xx-xox       42904-5     1     Drum and flange - 1143-xx-xox.       42904-8     1     Drum and flange - 1143-xx-xox.       42904-8     1     Drum and flange - 1143-xx-xox.       42904-1     1     Drum and flange - 1143-xx-xox.       42904-1     1     Drum and flange - 1143-xx-xox.       42904-1     1     Drum and flange - 1143-xx-xox.       40621-7     1     Drum and flange - 1143-xx-xox.       40621-1     1     Drum and flange - 1255-xx-xox.       40621-1     1     Drum and flange - 1445-xx-xox.       40783-05     1     Drum and flange - 1445-xx-xox.       40783-1     1     Drum and flange - 1445-xx-xox.       40783-2     1     Drum and flange - 1445-xx-xox.       40783-4     1     Drum and flange - 1445-xx-xox.       40783-1     1     Drum and flange - 1445-xx-xox.       40783-1     Drum and flange - 1445-xx-xox.     D995	3	42919	1	Bearing
5     53P-602     1     Set serve 3/8-16 x/12       6     42904-3     1     Drum and flange - 1143-xx-xax       42904-3     1     Drum and flange - 1143-xx-xax       42904-3     1     Drum and flange - 1143-xx-xax       42904-3     1     Drum and flange - 1143-xx-xax-L       42904-3     1     Drum and flange - 1143-xx-xax-L       42904-1     1     Drum and flange - 1143-xx-xax-L       40621-7     1     Drum and flange - 1255-xx-xax       40621-1     1     Drum and flange - 1445-xx-xax-L       40783-07     1     Drum and flange - 1445-xx-xax-L       40783-1     1     Drum and flange - 1445-xx-xax-L       40783-2     1     Drum and flange - 1445-xx-xax-L       40783-4     1     Drum and flange - 1445-xx-xax-L       40783-1     1     Drum and flange - 1445-xx-xax-L       40783-1     Drum and flange - 1445-xx-xax-L       40783	4	40602-1	1	End plate
6     42904-2     1     Drum and flange - 1142-xx-xxx       42904-4     1     Drum and flange - 1143-xx-xxx       42904-5     1     Drum and flange - 1143-xx-xxx       42904-8     1     Drum and flange - 1143-xx-xxx-L       42904-8     1     Drum and flange - 1143-xx-xxx-L       42904-10     1     Drum and flange - 1143-xx-xxx-L       42904-11     1     Drum and flange - 1143-xx-xx-L       40221-5     1     Drum and flange - 1143-xx-xx-L       40221-7     1     Drum and flange - 125-xx-xx-L       4021-7     1     Drum and flange - 145-xx-xx-L       40783-407     1     Drum and flange - 147-xx-xx-L       40	5	53-P-502	1	
42904-3     1     Drum and flange - 1143-xx-xxx       42904-5     1     Drum and flange - 1163-xx-xxx       42904-8     1     Drum and flange - 1142-xx-xxx-L       42904-9     1     Drum and flange - 1143-xx-xxx-L       42904-10     1     Drum and flange - 1143-xx-xxx-L       42904-11     1     Drum and flange - 1143-xx-xxx-L       40621-7     1     Drum and flange - 1255-xx-xxx       40621-1     1     Drum and flange - 1255-xx-xxx       40783-07     1     Drum and flange - 1445-xx-xxx       40783-107     1     Drum and flange - 1445-xx-xxx       639810224		42904-2	1	Drum and flange - 1142-xx-xxx
42904-4     1     Drum and flange - 1163-xx-xxx       42904-8     1     Drum and flange - 1164-xx-xxx-L       42904-9     1     Drum and flange - 1143-xx-xxx-L       42904-10     1     Drum and flange - 1163-xx-xx-L       42904-11     1     Drum and flange - 1164-xx-xx-L       40221-5     1     Drum and flange - 1255-xx-xx       40221-7     1     Drum and flange - 1255-xx-xx-L       40221-1     1     Drum and flange - 1255-xx-xx-L       40221-2     1     Drum and flange - 1255-xx-xx-L       40221-3     1     Drum and flange - 1445-xx-xx       40273-01     Drum and flange - 1455-xx-xx       40783-405     1     Drum and flange - 1445-xx-xx       40783-70     1     Drum and flange - 1445-xx-xxx       40783-1     1     Drum and flange - 1475-xx-xxx       40783-1     1     Drum and flange - 1475-xx-xxx       40783-1     1     Drum and flange - 1475-xx-xxx       40783-1     Drum and flange - 1475-xx-xxx       40783-10224     1     Clamp 1/L Dose       C39810224     1     Clamp 1/L Dose  <		42904-3	1	
42904-5     1     Drum and flange - 1144-xx-xxxL       42904-9     1     Drum and flange - 1143-xx-xxxL - D863       42904-10     1     Drum and flange - 1143-xx-xxxL - D863       42904-11     1     Drum and flange - 1143-xx-xxxL - D863       42904-12     1     Drum and flange - 1145-xx-xxxL - D865       40621-7     1     Drum and flange - 1255-xx-xxxL - D865       40621-1     1     Drum and flange - 1255-xx-xxxL - D865       40621-2     1     Drum and flange - 1255-xx-xxxL - D865       40621-3     1     Drum and flange - 1445-xx-xxx       40783-407     1     Drum and flange - 1445-xx-xxxL       40783-107     1     Drum and flange - 1445-xx-xxxL       40783-107     1     Drum and flange - 1445-xx-xxxL       40783-11     Drum and flange - 1445-xx-xxxL     D985       40783-11     Drum and flange - 1445-xx-xxxL     D985       40783-11     Drum and flange - 1445-xx-xxxL     D985       63810215     1     Drum and flange - 1445-xx-xxxL     D985       63810214     Cserw, round Harde + 102-xt / 22     Cserw, round = 1445-xx-xxxxL     D985		42904-4	1	
42904-8     1     Drum and flange - 1142-xx-xxx-L       42904-10     1     Drum and flange - 1143-xx-xxx-L       42904-11     1     Drum and flange - 1163-xx-xxx-L       42904-11     1     Drum and flange - 1163-xx-xxx-L       40621-5     1     Drum and flange - 1253-xx-xxx-L       40621-7     1     Drum and flange - 1253-xx-xxx-L       40621-2     1     Drum and flange - 1443-xx-xxx-L       40783-407     1     Drum and flange - 1443-xx-xxx-L       40783-407     1     Drum and flange - 1443-xx-xxx-L       40783-707     1     Drum and flange - 1443-xx-xxx-L       40783-71     1     Drum and flange - 1445-xx-xxx-L       40783-74     1     Drum and flange - 1445-xx-xxx-L       40783-74     1     Drum and flange - 1475-xx-xx-L       40783-74     1     Drum and flange - 1475-xx-xx-L       7     2-P-408     Screw. round head #10-24x1/2       6     C33810214     1     Clamp 1/2 10 hose       C33810224     1     Clamp 1/2 10 hose     C33810224       10     151-P-25     1     Nut. HEX #140-24		42904-5	1	
42904-9     Drum and fiange - 1143-xxxxxL     De63       42904-11     Drum and fiange - 1163-xxxxxL     -D663       42004-11     Drum and fiange - 1253-xxxxxL     -D663       40621-5     Drum and fiange - 1255-xxxxL     -D665       40621-1     Drum and fiange - 1255-xxxxL     -D665       40621-1     Drum and fiange - 1255-xxxxL     -D665       40783-405     Drum and fiange - 1445-xx-xxx     -40783-405       40783-407     Drum and fiange - 1445-xx-xxx     -40783-407       40783-707     Drum and fiange - 1445-xx-xxx     -40783-407       40783-707     Drum and fiange - 1475-xx-xxx     -40783-407       40783-707     Drum and fiange - 1475-xx-xxxL     -985       40783-707     Drum and fiange - 1475-xx-xxxL     -787       7     2-P-408     Screw, round head #10-24x1/2       8     C39810214     Clamp 3/4" ID hose       C39810222     Clamp 3/4" ID hose       C39810222     Clamp 3/4" ID hose       C39810224     Clamp 3/4" ID hose       C39810220     AR     Main spring - xxxx-16-xx - D866       43782-110/210     AR     Mai				
42904-10     1     Drum and flange - 1163-xx-xxxL - D963       42904-11     1     Drum and flange - 1153-xx-xxxL       40621-5     1     Drum and flange - 1253-xx-xxxL       40621-1     1     Drum and flange - 1253-xx-xxxL       40621-2     1     Drum and flange - 1253-xx-xxxL       40621-3     1     Drum and flange - 1443-xx-xxxL       40783-407     1     Drum and flange - 1443-xx-xxxL       40783-707     1     Drum and flange - 1443-xx-xxxL       40783-707     1     Drum and flange - 1475-xx-xxxL       40783-707     1     Drum and flange - 1475-xx-xxxL       40783-707     1     Drum and flange - 1475-xx-xxxL       40783-707     1     Drum and flange - 1475-xx-xxL       67     2.9-408     Screw, round head +10-24x1/2       7     2.9-408     Screw, round head +10-24x1/2       8     C39810224     1     Clamp 1/21       10 </td <td></td> <td></td> <td></td> <td></td>				
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40621-7     1     Drum and flange - 1255-xx-xxxL       40621-2     1     Drum and flange - 1255-xx-xxxL       40783-407     1     Drum and flange - 1435-xx-xxx       40783-107     1     Drum and flange - 1435-xx-xxx       40783-107     1     Drum and flange - 1445-xx-xxx       40783-1     1     Drum and flange - 1475-xx-xxx       40783-1     1     Drum and flange - 1475-xx-xxx-       40783-1     1     Drum and flange - 1475-xx-xxx-       40783-1     1     Drum and flange - 1475-xx-xxx-1       40783-1     1     Drum and flange - 1475-xx-xxx-1       40783-1     1     Drum and flange - 1475-xx-xxx-1       6     C39810214     1     Clamp 30'' ID hose       C39810224     1     Clamp 30'' ID hose       C39810224     1     Clamp 14'' ID hose       10     151-P-25     Nut, HEX H0-24       11*     43782-110210     AR     Main				
40621-1     Drum and flange 1253-xx-xxxL - D865       40783-405     Drum and flange 1255-xx-xxxL       40783-405     Drum and flange 1443-xx-xxx       40783-707     Drum and flange 1443-xx-xxxL       40783-11     Drum and flange 1443-xx-xxxL       40783-22     Drum and flange 1443-xx-xxxL       40783-4     Drum and flange 1445-xx-xxxL       40783-4     Drum and flange 1445-xx-xxxL       40783-4     Drum and flange 1445-xx-xxxL       40783-4     Drum and flange 145-xx-xxxL       40783-4     Drum and flange 145-xx-xxxL       40783-4     Drum and flange 145-xx-xxxL       603810221     Clamp 1210 bose       C38810224     Clamp 1210 bose       C38810224     Clamp 1210 bose       43782-110/210     AR       43782-110/210     AR       43782-110/210     AR       43782-110/210     AR       43782-110/210     AR <t< td=""><td></td><td></td><td></td><td></td></t<>				
4062:1-2     1     Drum and flange - 1255-xx-xxxL       40783-407     1     Drum and flange - 1435-xx-xxx       40783-107     1     Drum and flange - 1435-xx-xxx       40783-11     1     Drum and flange - 1475-xx-xxx       40783-12     1     Drum and flange - 1475-xx-xxxL       40783-13     1     Drum and flange - 1475-xx-xxxL       40783-14     1     Drum and flange - 1475-xx-xxxL       7     2.P-400     1     Screw, round head #10-24x1/2       8     C39810214     1     Clamp 36' 10 hose       C39810221     1     Clamp 34' 10 hose     C39810224       C39810222     1     Clamp 34' 10 hose     C39810224       10     151-P-25     1     Lock washer #10       10     151-P-25     1     Lock washer #10       11     43782-105/205     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxxx-10-xxx       11     43782-110/210     AR     Main spring - xxxx-10-xxx <td< td=""><td></td><td></td><td></td><td></td></td<>				
40783-405     1     Drum and flange 1-1443-xx-xxx       40783-707     1     Drum and flange 1-1445-xx-xxx       40783-707     1     Drum and flange 1-1475-xx-xxx       40783-1     1     Drum and flange 1-1475-xx-xxx-1       40783-2     1     Drum and flange 1-1475-xx-xxx-1       40783-4     1     Drum and flange 1-1475-xx-xxx-1       40783-4     1     Clamp 147 10 hose       6     C33810214     Clamp 147 10 hose       C33810224     1     Clamp 127 10 hose       C33810224     1     Clamp 127 10 hose       C33810224     1     Clamp 110 hose       C33810224     1     Clamp 110 hose       3782-110/210     AR     Main spring -xxxx-10-xxx       43782-110/210     AR     Main spring -xxxx-10-xxx <td></td> <td></td> <td></td> <td></td>				
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7     2.P-408     1     Screw, round head #10-24x1/2       8     C39810214     1     Clamp 3/8' ID hose       C39810215     1     Clamp 3/8' ID hose       C39810224     1     Clamp 1/2' ID hose       C39810224     1     Clamp 1/2' ID hose       C39810224     1     Clamp 1''ID hose       9     101-P-15     1     Lock washer #10       10     151-P-25     1     Nut, HEX #10-24       11*     43782-102/10     AR     Main spring - xxxx-0-xxx - D866       43782-110/210     AR     Main spring - xxxx-10-xxx       43782-110/210     AR     Rotating hub - see Kit B       13     40119     AR     Spacer       14     40176     1     Drive ring       15     59490     1     End plate       16     230-P-105     2     Drive pin .094 x .375				
8     C39810215     1     Clamp 3/8' ID hose       C39810215     1     Clamp 3/8' ID hose       C39810219     1     Clamp 3/4' ID hose       C39810222     1     Clamp 3/4' ID hose       C39810224     1     Clamp 1/2' ID hose       G39810224     1     Clamp 1/1D hose       10     151-P-15     1     Lock washer #10       11*     43782-105/205     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxx-05-xxx - D865       43782-110/210     AR     Main spring - xxx-16-xxx - D865       43782-110/210     AR     Main spring - xxx-16-xxx - D865       43782-110/210     AR     Main spring - xxx-16-xxx - D865       43782-110/216     AR     Main spring - xxx-16-xxx - D865       43782-110/216     AR     Basing - see Kit B       13     40119     AR     Spacer       14     40176     1     Drive ing       15     59490     1     Colar, lock       20*     666-P-32     1     Swivel - xxx-xx-002, 003, 004 <tr< td=""><td>7</td><td></td><td></td><td></td></tr<>	7			
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C38810222     1     Clamp 3/4' ID hose       C38810224     1     Clamp 3/4' ID hose       9     101-P-15     1     Lock washer #10       10     151-P-25     1     Nut, HEX #10-24       11*     43782-105/205     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-116/216     AR     Main spring - xxxx-16-xxx - D865       43782-116/216     AR     Main spring - xxxx-16-xxx - D865       43782-116/216     AR     Main spring - xxxx-17-xxx       12     59741-1     AR     Rotating hub - see Kit B       13     40119     AR     Spacer       14     40176     1     Drive ring       15     59490     1     End plate       16     230-P-105     2     Drive pin .094 x .375       17*     40005     AR     Bearing - see Kit B       18     11-P-19     1     Set screw 3/8-16x 1/2       19     59479     1     Collar, lock       20*     666-P-32     R	0			
C39810222     1     Clamp 3/4 ID hose       9     1011-P.15     1     Lock washer #10       10     151-P.25     1     Nut, HEX #10-24       1*     43782-105/205     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxxx-05-xxx - D865       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       12     59741-1     AR     Rotating hub - see Kit B       13     40116     1     Drive ring       14     40176     1     End plate       16     230-P-105     2     Drive ring       17     40005     AR     Bearing - see Kit B       18     11-P-19     1     Set screw 3/8-16x1/2       19				
Signal     Clamp 1*1 ID hose       9     101-P-15     1     Lock washer #10       10     151-P-25     1     Nut, HEX #10-24       11*     43782-105/205     AR     Main spring - xxxx-10-xxx     D866       43782-110/210     AR     Main spring - xxxx-10-xxx     D885     D863       43782-110/210     AR     Main spring - xxxx-10-xxx     D865     D863       43782-110/210     AR     Main spring - xxxx-10-xxx     D865     D863       43782-110/210     AR     Main spring - xxxx-17-xx     D865     D863     D863       43782-110/210     AR     Rotating hub - see Kit B     D10				
9     101-P-15     1     Lock washer #10       10     151-P-25     1     Nut, HEX #10-24       11*     43782-105/205     AR     Main spring - xxxx-05-xxx - D866       43782-110/210     AR     Main spring - xxxx-05-xxx - D865, D863, D863       43782-110/210     AR     Main spring - xxxx-16-xxx - D865, D863, D863       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-110/210     AR     Main spring - xxxx-16-xxx - D865       43782-117/217     AR     Main spring - xxxx-16-xxx - D865       12     59741-1     AR     Spacer       14     40176     1     Drive ring       15     59490     1     End plate       16     230-P-105     2     Drive pin .094 x .375       17 *     40005     AR     Bearing - see Kit B       18     11-P-19     1     Set screw 3/8-16x1/2       19     59479     1     Collar, lock       20 *     666-P-32     1     Swivel - xxx-x-002, 003, 104				
10   151-P-25   1   Nut, HEX #10-24     11*   43782-105/205   AR   Main spring - xxxx-0-b866     43782-110/210   AR   Main spring - xxxx-10-xxx     43782-110/210   AR   Main spring - xxxx-10-xxx     43782-110/210   AR   Main spring - xxxx-10-xxx     43782-110/210   AR   Main spring - xxxx-16-xxx     43782-110/210   AR   Main spring - xxxx-17-xx     12   59741-1   AR   Rotating hub - see Kit B     13   40119   AR   Spacer     14   40176   1   Drive ring     15   59490   1   End plate     16   230-P-105   2   Drive pin .094 x .375     17*   40005   AR   Bearing - see Kit B     18   11-P-19   1   Set screw 3/6-16x1/2     19   59470   1   Collar, lock     20*   666-P-32   1   Swivel - xxx-xx-002, 003, 004     669-P-30   2   Reducer - xxx-xx-003, 1x3/8   Be3=D985     21   669-P-54   2   Reducer - xxx-xx-003, 1x3/8   Be3=D866	0			•
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1259741-1ARRotating hub see Kit B1340119ARSpacer14401761Drive ring15594901End plate16230-P-1052Drive pin. 094 x .37517 *40005ARBearing see Kit B1811-P-191Set screw 3/8-16x1/219594791Collar, lock20 *666-P-321Swivel - xxxx-xx-002, 003, 004666-P-381Swivel - xxxx-xx-002, 004, 1x1/2669-P-302Reducer - xxxx-xx-003, 1x3/8669-P-542Reducer - xxxx-xx-003, 1x3/87not required-xxx-xx-00822669-P-102Reducer - xxx-xx-002, 1/2x1/4not required-on all other models231Hose assembly - optional - specify length & ID & consult factory24101-P-306Lock washer 1/4 x .0622540143-326Bolt - 3 spring models40143-326Bolt - 3 spring models40143-336Bolt - 4 spring models40143-346Bolt - 5 spring models40143-356Bolt - 5 spring models40143-366Bolt - 6 spring models40143-376Bolt - 6 spr				
1340119ARSpacer14401761Drive ring15594901End plate16230-P-1052Drive pin .094 x .37517*40005ARBearing see Kit B1811-P-191Set screw 3/8-16x1/219594791Collar, lock20*666-P-321Swivel - xxx+xx-002, 003, 004666-P-362Reducer - xxx+xx-002, 004, 1x1/2669-P-302Reducer - xxx+xx-006, 1x3/4669-P-542Reducer - xxx+xx-006, 1x3/4669-P-502Reducer - xxx+xx-006, 1x3/4669-P-102Reducer - xxx+xx-002, 1/2x1/4not requiredon all other models231Hose assembly - optional - specify length & ID & consult factory24101-P-306Lock washer 1/4 x .0622540143-326Bolt - 2 spring models40143-366Bolt - 2 spring models40143-376Bolt - 5 spring models40143-386Bolt - 4 spring models40143-366Bolt - 5 spring models26230-P-1224Drive pin .156x.6252735P142Screw, 5/16-18x1-1/4 1200, 1400 only D865=D08528101-P-752Nut 5/16-18 - 1200, 1400 only D865=D08529151-P-752Nut 5/16-18 - 120031607932Tie bar 4 inch607942Tie bar 4 inch607932	10			
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16   230-P-105   2   Drivé pin .094 x .375     17*   40005   AR   Bearing see Kit B     18   11-P-19   1   Set screw 3/8-16x1/2     19   59479   1   Collar, lock     20*   666-P-32   1   Swivel - xxxx-xx-002, 003, 004     669-P-35   2   Reducer - xxx-xx-002, 004, 1x1/2     669-P-30   2   Reducer - xxx-xx-0008     669-P-54   2   Reducer - xxx-xx-006, 1x3/4 D863=D866     not required				
17*   40005   AR   Bearing see Kit B     18   11-P-19   1   Set screw 3/8-16x1/2     19   59479   1   Collar, lock     20*   666-P-32   1   Swivel - xxxx-xx-002, 003, 004     666-P-38   1   Swivel - xxx-xx-002, 004, 1x1/2     669-P-35   2   Reducer - xxx-xx-002, 004, 1x1/2     669-P-30   2   Reducer - xxx-xx-000, 1x3/8     669-P-54   2   Reducer - xxx-xx-006, 1x3/4 D863=D866     not required    xxx-xx-008     22   669-P-10   2   Reducer - xxx-xx-002, 1/2x1/4     not required    xxx-xx-008     23    1   Hose assembly - optional - specify length & ID & consult factory     24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models     40143-12   6   Bolt - 5 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x 625     27   35P14				•
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666-P-38     1     Swivel - xxxx-xx-006, 008 D863=D985       21     669-P-35     2     Reducer - xxxx-xx-002, 004, 1x1/2       669-P-30     2     Reducer - xxxx-xx-003, 1x3/8       669-P-54     2     Reducer - xxxx-xx-006, 1x3/4 D863=D866       not required      xxx-xx-008       22     669-P-10     2     Reducer - xxxx-xx-002, 1/2x1/4       not required      on all other models       23      1     Hose assembly - optional - specify length & ID & consult factory       24     101-P-30     6     Lock washer 1/4 x .062       25     40143-29     6     Bolt - 2 spring models       40143-32     6     Bolt - 3 spring models       40143-36     6     Bolt - 5 spring models       40143-12     6     Bolt - 5 spring models       26     230-P-122     4     Drive pin .156x.625       27     35P14     2     Screw, 5/161200, 1400 only D865=D085       28     101-P-14     2     Lock washer, 5/161200, 1400 only D865=D985       29     151-P-75     2     N				
21   669-P-35   2   Reducer - xxxx-xx-002, 004, 1x1/2     669-P-30   2   Reducer - xxxx-xx-003, 1x3/8     669-P-54   2   Reducer - xxxx-xx-006, 1x3/4 D863=D866     not required    xxx-xx-008     22   669-P-10   2   Reducer - xxxx-xx-002, 1/2x1/4     not required    on all other models     23    1   Hose assembly - optional - specify length & ID & consult factory     24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models     40143-32   6   Bolt - 4 spring models     40143-12   6   Bolt - 4 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31	20 *			
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not requiredxxx-xx-00822 $669$ -P-102Reducer - xxxx-xx-002, 1/2x1/4not requiredon all other models231Hose assembly - optional - specify length & ID & consult factory24 $101$ -P-306Lock washer $1/4 \times .062$ 25 $40143$ -296Bolt - 2 spring models40143-326Bolt - 3 spring models40143-366Bolt - 4 spring models40143-126Bolt - 5 spring models40143-126Bolt - 5 spring models26230-P-12242735P14228101-P-14229151-P-752306110523160793232H22110358132H221103581				
22   669-P-10   2   Reducer - xxxx-xx-002, 1/2x1/4     not required    on all other models     23    1   Hose assembly - optional - specify length & ID & consult factory     24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     40143-12   6   Bolt - 5 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1				
not required    on all other models     23    1   Hose assembly - optional - specify length & ID & consult factory     24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
23    1   Hose assembly - optional - specify length & ID & consult factory     24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models D863=D985     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200	22			
24   101-P-30   6   Lock washer 1/4 x .062     25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models D863=D985     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
25   40143-29   6   Bolt - 2 spring models     40143-32   6   Bolt - 3 spring models D863=D985     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				, , , , , , ,
40143-32   6   Bolt - 3 spring models D863=D985     40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
40143-36   6   Bolt - 4 spring models     40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200	25			
40143-12   6   Bolt - 5 spring models     26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
26   230-P-122   4   Drive pin .156x.625     27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
27   35P14   2   Screw, 5/16-18x1-1/4 1200, 1400 only D865=D085     28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
28   101-P-14   2   Lock washer, 5/16 1200, 1400 only D865=D985     29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				•
29   151-P-75   2   Nut 5/16-18 - 1200, 1400 only D865=D985     30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
30   61105   2   Spacer - 1200, 1400 only D865=D985     31   60793   2   Tie bar 4 inch     60794   2   Tie bar 7 inch     32   H22110358   1   Stand weldment 1200				
31     60793     2     Tie bar 4 inch       60794     2     Tie bar 7 inch       32     H22110358     1     Stand weldment 1200				
60794     2     Tie bar 7 inch       32     H22110358     1     Stand weldment 1200				
32 H22110358 1 Stand weldment 1200	31			
H22110359 1 Stand weidment 1400	32			
		H22110359	Т	Stanu weiument 1400

36	4026900001	1	Collar 1200,1400 only D865 = D985
39	00031P0030	1	Screw Hex Head 5/16 - 18 x 1 1/2 1200,1400 only D865 = D985
48	40696	1/spr	Spring cup
49	40773-2	2	Кеу
50	101-P-30	1	Washer 1/4x.062 see Kit A - optional - 1200, 1400 only
51	2-P-506	1	Screw, round head 1/4-20x3/4 See Kit A optional 1100 only
	30-P-110	1	Screw 1/4-20x3/4 - See Kit A, hex head optional - 1200 only D865=D985
	30-P-122	1	Screw 1/4-20x1-1/4 optional 1400 only
52	40029	1	Weight - Kit A optional - 1100 only D863
	43276-1	1	Brass weight - Kit A optional - 1200, 1400 only D865=D985
53	42907-1	1	Brass ratchet - Kit A optional - 1100 only D863
	43987-1	1	Brass ratchet - Kit A optional - 1200, 1400 only D865=D985
54	40185-1	1	Nonrotating hub - standard rot
01	40744-1	1	Nonrotating hub - Rev rot
55	580-P-95	1	Retaining ring - Kit A optional - 1100 only D863
00	580-P-30	1	Retaining ring - Kit A optional - 1200, 1400 only D865=D985
56	40027	1	Ratchet pin - Kit A optional - 1100 only D863
50	M24460099	1	Ratchet pin - Kit A optional - 1200, 1400 only D865=D985
57	42920	1	Seal
58	42920 230-P-134	2	Seal Sel-Lok pin - Kit A optional - 1200, 1400 only D865=D985
59	31-P-45	2	
60		2	Screw 5/16-18x1 - Kit A optional hex head
	101-P-14		Lock washer 5/16 - Kit A optional
61	M40570038	1	Block - Kit A - 1200, 1400 only D865=D985
62	ST-1	1	Hose stop430750 OD - optional
	ST2	1	Hose stop750875 OD - optional
	ST-3	1	Hose stop - 1.00 OD - optional
	ST-4	1	Hose stop - 1.25 OD - optional
	ST-5	1	Hose stop - 1.50 OD - optional
66	126-P-50	4	Flat washer 1/4
67	151-P-20	4	Nut 1/4-20
68	30-P-117	4	Screw, hex head 1/4-20 x 1
69	00101P0030	4	Lock washer 1/4 x .062
70	580-P-15	1	Retaining ring - Kit A optional - 1100 only D863
71	2-F	1	Roller guide - optional - Use 2FRE, 2FYE
72	H22110388	1	Stand - 1100-xx-xxx
	H22110388	1	Stand - 1100-xx-xxx-L D863
	59492	1	Stand - 1200-xx-xxx
	59494	1	Stand - 1200-xx-xxx-L D865=D883
	59889	1	Stand - 1400-xx-xxx
	59891	1	Stand - 1400-xx-xxx-L D985
73	40680	1	Screw, set
			SERVICE KITS
А	2-LA	1	Ratchet lock - 1100 - includes 50 through 53, 55, 56, 57 D863
	42906-1		
	2-LB	1	Ratchet lock - 1200, 1400 - includes 50 through 53, 55, 56, 57 D865=D985
	40712		
В	59744-1	1	Rotating hub assembly - includes one 12 and one 17 assembled

### \* Recommended spare parts

#### Aero-Motive Company

A Woodhead Industries Inc. Subsidiary PO Box 2678 Kalamazoo, MI 49003-2678 USA (269) 337 7700 / (800) 999 8559 FAX: (800) 333 6119 www.aeromotive.com techhelp@aeromotive.com

### Woodhead Connectivity LTD.

★ A Woodhead Industries Inc. Subsidiary Factory No. 9 Rassau Industrial Estate Ebbw Vale Gwent NP23 5SD United Kingdom 44-1495-356300 FAX: 44-1495-356301 sales@wdhd.co.uk

### Woodhead Asia PTE LTD.

A Woodhead Industries Inc. Subsidiary No. 4 Toh Tuck Link Level 3 Mezzanine Markono Logisitics Bldg. Singapore 596226 65-6-261-6533 FAX: 65-6-261-3588 sales@wasia.com.sg

### Woodhead Canada LTD.

A Woodhead Industries Inc. Subsidiary 1090 Brevik Place Mississauga Ontario L4W 3Y5 Canada (905) 624-1079 FAX: (905) 624-9151 www.woodhead.ca