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**Bolens**

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**Tractor**

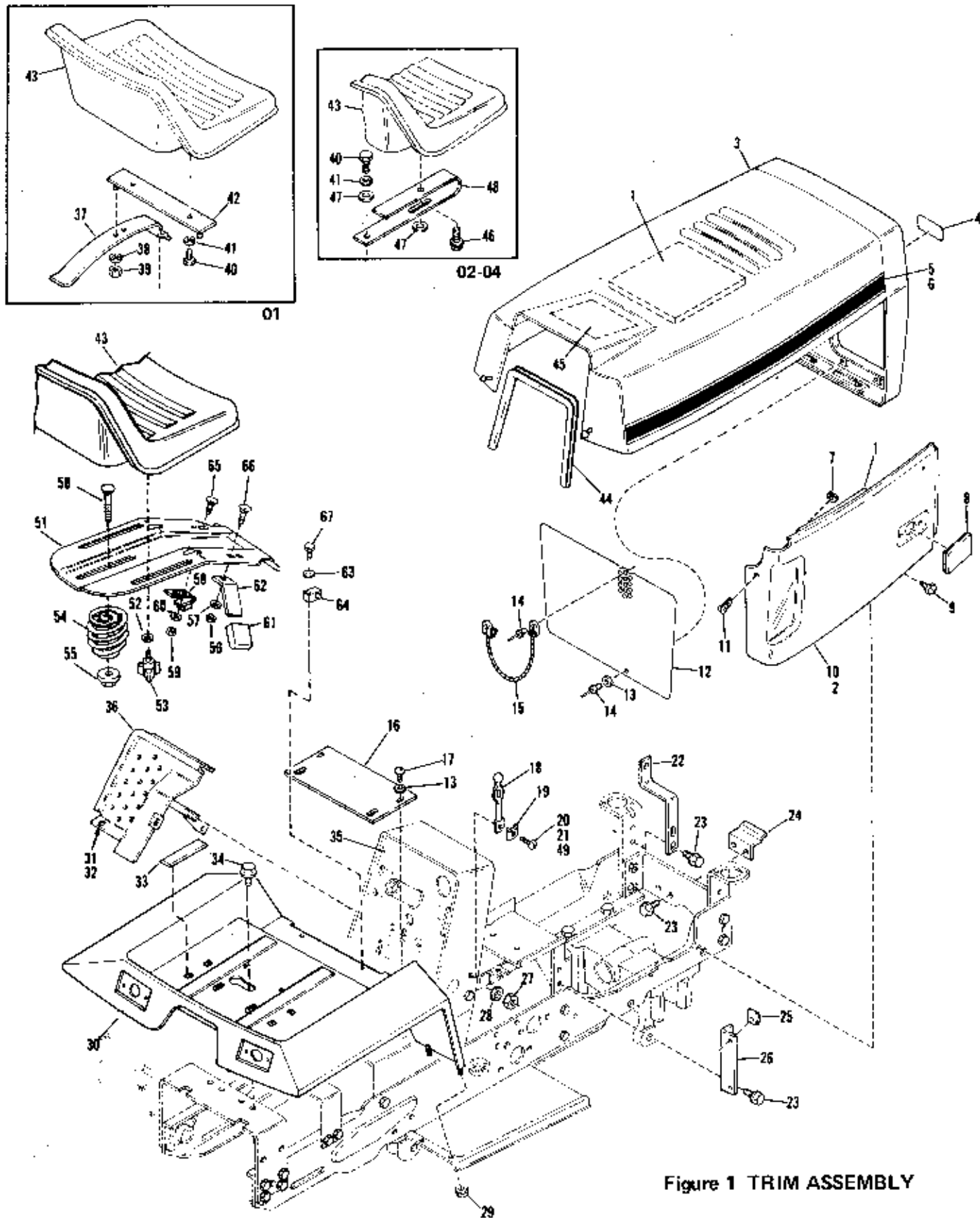
**16HP**

**Model 1666 (QT-16)**

Serial Numbers 0100101  
thru 0599999

**Parts List**

# BOLENS 16 HP TRACTOR



| REF. NO. | PART. NO. | DESCRIPTION  | NO. REQ'D. | REF. NO. | PART. NO. | DESCRIPTION  | NO. REQ'D. |
|----------|-----------|--|------------|----------|-----------|--|------------|
| 1        | 1726212   | Acoustical Foam . . . . .                                    | 3          | 36       | 1725286   | L.H. Pedal . . . . .                               | 1          |
| 2        | 1724854   | L.H. Side Panel . . . . .                                    | 1          | 37       | 1725598   | Spring Leaf (1) . . . . .                          | 2          |
| 3        | 1724852   | Grille and Hood Assy. (1) . . . . .                          | 1          |          | 1726439   | Spring Leaf (2) . . . . .                          | 2          |
|          | 1727176   | Grille and Hood Assy. (2) . . . . .                          | 1          | 38       | ● 1100242 | Lockwasher, 5/16 (3)(4) . . . . .                  | 4          |
|          |           | (3)(4) . . . . .   | 1          | 39       | ● 1182563 | Nut, 5/16-18 (3)(4) . . . . .                      | 4          |
|          | 1734625   | Grille and Hood Assy. (5) . . . . .                          | 1          | 40       | ● 1100068 | Capscrew, 3/8-16 x 5/8 (1) . . . . .               | 4          |
| 4        | 1727437   | (Logo) Decal (2)(3)(4)(5) . . . . .                          | 1          |          |           | (2)(3)(4) . . . . .                                | 4          |
| 5        | 1725526   | R.H. (Identification) Decal (1) . . . . .                    | 1          | 41       | ● 1100243 | Lockwasher, 3/8 (1)(2)(3) . . . . .                | 4          |
|          | 1727202   | R.H. (Identification) Decal (2)(3)(4)(5) . . . . .           | 1          | 42       | 1725656   | Support Assembly (1) . . . . .                     | 1          |
|          |           |  | 1          |          | 1727007   | Support Assembly (2) . . . . .                     | 1          |
| 6        | 1725527   | L.H. (Identification) Decal (1) . . . . .                    | 1          | 43       | 1723525   | Seat (1)(2)(3) . . . . .                           | 1          |
|          | 1727203   | L.H. (Identification) Decal (2)(3)(4)(5) . . . . .           | 1          |          | 1733028   | Seat (4) . . . . .                                 | 1          |
|          |           |  | 1          |          | 1733027   | Seat (5) . . . . .                                 | 1          |
| 7        | 1725410   | Stud Retainer . . . . .                                      | 4          | 44       | 1726932   | Hood Trim (2)(3)(4)(5) . . . . .                   | 1          |
| 8        | 1725489   | Reflector . . . . .  | 2          | 45       | 1725624   | (Service Instruction) Decal (1)(2)(3)(4) . . . . . | 1          |
| 9        | ● 1724492 | Slotted Hex Screw, 1/4-20 x 1/2 . . . . .                    | 6          |          | 1733889   | (Service Instruction) Decal (5) . . . . .          | 1          |
| 10       | 1724853   | R.H. Slide Panel . . . . .                                   | 1          | 46       | 1186345   | Whiz-Lock Screw, 3/8-16 x 3/4 (3)(4) . . . . .     | 2          |
| 11       | 1725409   | 1/4 Turn Stud . . . . .                                      | 4          | 47       | ● 1107383 | Flat Washer, 3/8 (3)(4) . . . . .                  | 6          |
| 12       | 1725613   | Grille Screen . . . . .                                      | 1          | 48       | 1728753   | Seat Spring (2)(3)(4) . . . . .                    | 2          |
| 13       | ● 1185418 | Flat Washer, 7/32 . . . . .                                  | 7          | 49       | 1728772   | Pop Rivet, 3/16 (3)(4)(5) . . . . .                | 2          |
| 14       | 1185878   | Pop Rivet, 3/16 x 3/8 . . . . .                              | 6          | 50       | ● 1186130 | Carriage Bolt, 3/8-16 x 1-1/4 (5) . . . . .        | 1          |
| 15       | 1725637   | Lanyard . . . . .  | 1          | 51       | 1734115   | Seat Support Assy. (5) . . . . .                   | 1          |
| 16       | 1727164   | Cover (2)(3)(4)(5) . . . . .                                 | 1          | 52       | ● 1100256 | Flat Washer, 3/8 (5) . . . . .                     | 2          |
| 17       | 1185712   | Thread Cutting Screw, No. 10-24 x 1/2 (2)(3)(4)(5) . . . . . | 2          | 53       | 1734269   | Seat Knob (5) . . . . .                            | 2          |
| 18       | 1727127   | Latch (2)(3)(4)(5) . . . . .                                 | 2          | 54       | 1733960   | Spring (5) . . . . .                               | 1          |
| 19       | 1727126   | Clip (2)(3)(4)(5) . . . . .                                  | 2          | 55       | 1735125   | Nut And Washer (5) . . . . .                       | 1          |
| 20       | ● 1118172 | Screw, No. 10-24 x 5/8 (2) . . . . .                         | 2          | 56       | ● 1110107 | Locknut, 5/16-18 (5) . . . . .                     | 1          |
| 21       | 1185985   | Keps Nut, No. 10-24 (2) . . . . .                            | 2          | 57       | 1705905   | Bowed Washer (5) . . . . .                         | 1          |
| 22       | 1724889   | Panel Support (1)(2) . . . . .                               | 2          | 58       | 1734515   | Actuator Bracket (5) . . . . .                     | 1          |
|          | 1727739   | Panel Support (3)(4)(5) . . . . .                            | 2          | 59       | ● 1186229 | Hex Nut, 1/4-20 (5) . . . . .                      | 1          |
| 23       | 1186308   | Whiz-Lock Screw, 1/4-20 x 1/2 . . . . .                      | 12         | 60       | ● 1100241 | Lockwasher, 1/4 (5) . . . . .                      | 1          |
| 24       | 1724887   | Grille Support . . . . .                                     | 2          | 61       | 1735054   | Handle Grip (5) . . . . .                          | 1          |
| 25       | 1725411   | 1/4 Turn Receptacle . . . . .                                | 4          | 62       | 1735517   | Seat Support Stand (5) . . . . .                   | 1          |
| 26       | 1724890   | Rear Panel Support . . . . .                                 | 2          | 63       | ● 1100242 | Lockwasher, 5/16 (5) . . . . .                     | 2          |
| 27       | ● 1186235 | Nut, 5/8-11 . . . . .  | 1          | 64       | 1735265   | Pivot Block (5) . . . . .                          | 2          |
| 28       | ● 1100247 | Lockwasher, 5/8 . . . . .                                    | 1          | 65       | ● 1186067 | Carriage Bolt, 1/4-20 x 1/2 (5) . . . . .          | 1          |
| 29       | 1186391   | Flange Nut, 5/16-18 . . . . .                                | 4          | 66       | ● 1186098 | Round Head Bolt, 5/16-18 x 3/4 (5) . . . . .       | 1          |
| 30       | 1725401   | Rear Fender Assy. (1) . . . . .                              | 1          | 67       | ● 1100808 | Hex Head Capscrew, 5/16-18 (5) . . . . .           | 2          |
|          | 1729345   | Rear Fender Assy. (3)(2) . . . . .                           | 1          | NI       | 1735222   | Black Spray Paint                                  |            |
|          | 1733032   | Rear Fender Assy. (4) . . . . .                              | 1          | NI       | 1735223   | White Spray Paint                                  |            |
|          | 1734530   | Rear Fender Assy. (5) . . . . .                              | 1          |          |           |  |            |
| 31       | ● 1186067 | Carriage Bolt, 1/4-20 x 1/2 . . . . .                        | 2          |          |           |  |            |
| 32       | 1186389   | Whiz-Lock Nut, 1/4-20 . . . . .                              | 2          |          |           |  |            |
| 33       | 1721369   | Wear Strip (1)(2) . . . . .                                  | 2          |          |           |  |            |
| 34       | 1186327   | Whiz-Lock Screw, 5/16-18 x 2 . . . . .                       | 2          |          |           |  |            |
| 35       | 1725498   | (Instrument Panel) Decal (1) . . . . .                       | 1          |          |           |  |            |
|          | 1727204   | (Instrument Panel) Decal (2)(3)(4)(5) . . . . .              | 1          |          |           |  |            |

- (1) Serial Numbers 0100101 thru 0199999
- (2) Serial Numbers 0200101 thru 0299999
- (3) Serial Numbers 0300101 thru 0399999
- (4) Serial Numbers 0400101 thru 0499999
- (5) Starting With Serial Number 0500101



| REF. NO. | PART NO. | DESCRIPTION   | NO. REQ'D.           | REF. NO. | PART NO. | DESCRIPTION                                | NO. REQ'D.                            |           |
|----------|----------|---|----------------------|----------|----------|--|---------------------------------------|-----------|
| 1        | 1806648  | Spring (2)(3)(4)(5)                                   | 1                    | 46       | 1733031  | Bracket (4)(5)                             | 1                                     |           |
| 2        | 1725048  | Snaplock Hose Clamp (1)                               | 1                    | 47       | 1725399  | Extension Spring (1)(2)(3)                 | 1                                     |           |
|          | 1727918  | Strap (2)(3)(4)(5)                                    | 1                    |          | 1701322  | Extension Spring (4)(5)                    | 1                                     |           |
| 3        | 1724893  | Fuel Tank   | 1                    | 48       | 1725088  | Idler Pulley Screw (1)(2)(3)               | 1                                     |           |
| 4        | 1725868  | Fuel Tank Cap   | 1                    | ●        | 1100770  | Hex Screw, 3/8-16 x 2-3/4 (4)(5)           | 1                                     |           |
| 5        | 1727271  | Shield Assy. (2)                                      | 1                    | 49       | 1716584  | Idler Pulley (1)(2)(3)                     | 1                                     |           |
|          | 1729384  | Shield Assy. (3)(4)(5)                                | 1                    |          | 1727978  | Idler Pulley (4)(5)                        | 2                                     |           |
| 6        | 1185712  | No. 8 Self-Tapping Screw                              | 12                   | 50       | 1724730  | Shoulder Bolt                              | 1                                     |           |
| 7        | 1725623  | Shield Assy.  | 1                    | 51       | ●        | 1107385                                    | Flat Washer, 1/2                      | 1         |
| 8        | 1724899  | Muffler   | 1                    | 52       | 1185581  | Bearing Sleeve                             | 2                                     |           |
| 9        | 1725392  | L.H. Pipe   | 1                    | 53       | 1725091  | Idler Arm Assy. (1)                        | 1                                     |           |
| 10       | 1723521  | Fuel Line Filter (1)(2)                               | 1                    |          | 1727587  | Idler Arm Assy. (2)(3)                     | 1                                     |           |
|          | 1727491  | Fuel Line Filter (3)(4)(5)                            | 1                    |          | 1733187  | Idler Arm Assy. (4)(5)                     | 1                                     |           |
| 11       | 1723474  | Hose Clamp  | 1                    | 54       | 1725407  | PTO Belt (Matched Set of 2)                | 1                                     |           |
| 12       | 1723518  | Shut Off Valve (1)(2)(3)(4)                           | 1                    | 55       | 1185688  | Snap Ring                                  | 2                                     |           |
|          | 1718029  | Shut Off Valve (5)                                    | 1                    | 56       | 1725093  | PTO Sheave                                 | 1                                     |           |
| 13       | 1725124  | Fuel Line   | 1                    | 57       | 1725087  | Ball Double Seal Bearing                   | 2                                     |           |
| 14       | 1718185  | Hose Clamp  | 4                    | 58       | 1725090  | PTO Shaft                                  | 1                                     |           |
| 15       | 1725123  | Fuel Line   | 1                    | 59       | 1725065  | L.H. Engine Assy. Support (1)(2)           | 1                                     |           |
| 16       | 1105070  | Elbow, 90°  | 2                    | 60       | 1806734  | Clip                                       | 2                                     |           |
| 17       | 1725391  | R.H. Pipe   | 1                    | 61       | 1186350  | Whiz-Lock Screw, 3/8-16 x 1-3/4 (1)(2)     | 4                                     |           |
| 18       | 1723131  | "U" Bolt, 4/16-24                                     | 2                    | 62       | 1186393  | Whiz-Lock Nut, 3/8-16                      | 5                                     |           |
| 19       | 1725636  | Muffler Assy. Support                                 | 1                    | 63       | ●        | 1100049                                    | Capscrew, 3/8-16 x 2-1/4 (1)(2)       | 4         |
| 20       | 1723599  | Clamp   | 2                    | 64       | 1714132  | Crutch Tip (1)(2)                          | 2                                     |           |
| 21       | ●        | 1100046   | Capscrew, 3/8-16 x 1 | 65       | 1724872  | Engine Mount (1)(2)                        | 2                                     |           |
| 22       | ●        | 1100243   | Lockwasher, 3/8      | 66       | ●        | 1185750                                    | Thread Cutting Screw, No. 10-24 x 1/2 | 2         |
| 23       | ●        | 1704487   | Flat Washer, 13/32   | 67       | 1724898  | Mount                                      | 2                                     |           |
| 24       | 1725376  | Clutch (1)  | 1                    | 68       | ●        | 1186047                                    | Flat Washer, 3/8                      | As Req'd. |
|          | 1727165  | Clutch Assy. (Incl. Ref. Nos. 25 and 26 (2)(3)(4)(5)) | 1                    | 69       | ●        | 1110108                                    | Locknut, 3/8-16                       | 5         |
| 25       | 1103996  | External Shakeproof Lockwasher, 3/8 (2)(3)(4)(5)      | 2                    | 70       | 1186328  | Whiz-Lock Screw, 5/16-18 x 5/8 (1)(2)      | 6                                     |           |
| 26       | 1110816  | Socket Head Capscrew, No. 10-32 x 1/2                 | 4                    | 71       | 1725064  | R.H. Engine Assy. Support (1)(2)           | 1                                     |           |
| 27       | ●        | 1100240   | Lockwasher, No. 10   | 72       | 1724898  | Spacer (1)(2)                              | 2                                     |           |
| 28       | 1724836  | Universal Joint Assy. (3)(4)(5)                       | 1                    | 73       | 1725856  | Mount                                      | 2                                     |           |
| 29       | 1186345  | Lock Screw, 3/8-16 x 3/4                              | 1                    | 74       | 1186016  | Woodruff Key, 3/16 x 5/8 (1)(2)(3)(4)      | 1                                     |           |
| 30       | ●        | 1186231   | Hex Nut, 3/8-16 (5)  |          | 1200033  | Woodruff Key, 3/16 x 3/4 (5)               | 1                                     |           |
| 31       | ●        | 1186211   | Nut, 5/16-24         | 75       | 1186348  | Whiz-Lock Screw, 3/8-16 x 1-1/4 (3)(4)     | 4                                     |           |
| 32       | ●        | 1100242   | Lockwasher, 5/16     | 76       | 1186308  | Whiz-Lock Capscrew, 1/4-20 x 1/2 (3)(4)(5) | 2                                     |           |
| 33       | 1723130  | Saddle Clamp  | 2                    | 77       | 1186389  | Locknut, 1/4-20 (3)(4)(5)                  | 2                                     |           |
| 34       | 1108842  | Key, 1/4 x 1/4 x 3/4                                  | 1                    | 78       | 1727876  | Engine Mount Assy. (3)(4)(5)               | 1                                     |           |
| 35       |          | Onan Engine (Model BF-MS)                             | 1                    | 79       | ●        | 1100048                                    | Capscrew, 3/8-16 x 2 (3)(4)(5)        | 3         |
| 36       | 1100276  | Woodruff Key, 1/4 x 7/8                               | 1                    | 80       | ●        | 1100049                                    | Capscrew, 3/8-16 x 2-1/4 (3)(4)(5)    | 1         |
| 37       | 1186331  | Whiz-Lock Screw, 5/16-18 x 1                          | 4                    | 81       | 1734710  | (Hot Surface) Decal (5)                    | 1                                     |           |
| 38       | ●        | 1110106   | Locknut, 1/4-20      |          |          |  |                                       |           |
| 39       | 1100113  | Set Screw, 1/4-20 x 1/2                               | 1                    |          |          |  |                                       |           |
| 40       | 1724818  | Fan   | 1                    |          |          |  |                                       |           |
| 41       | 1725408  | Drive Shaft (1)(2)(3)(4)                              | 1                    |          |          |  |                                       |           |
|          | 1734370  | Drive Shaft (5)                                       | 1                    |          |          |  |                                       |           |
| 42       | ●        | 1100807   | Capscrew, 1/4-20 x 2 |          |          |  |                                       |           |
| 43       | 1725396  | Drive Shaft   | 1                    |          |          |  |                                       |           |
| 44       | 1725484  | Spacer (If required use one only)                     | As Req'd.            |          |          |  |                                       |           |
| 45       | ●        | 1186259   | Hex Nut, 3/8-16 (4)  |          |          |  |                                       |           |

- (1) Serial Numbers 0100101 thru 0199999
- (2) Serial Numbers 0200101 thru 0299999
- (3) Serial Numbers 0300101 thru 0399999
- (4) Serial Numbers 0400101 thru 0499999
- (5) Starting With Serial Number 0500101

● Common Hardware - Purchase Locally (Grade 5 where applicable).

# BOLENS 16 HP TRACTOR

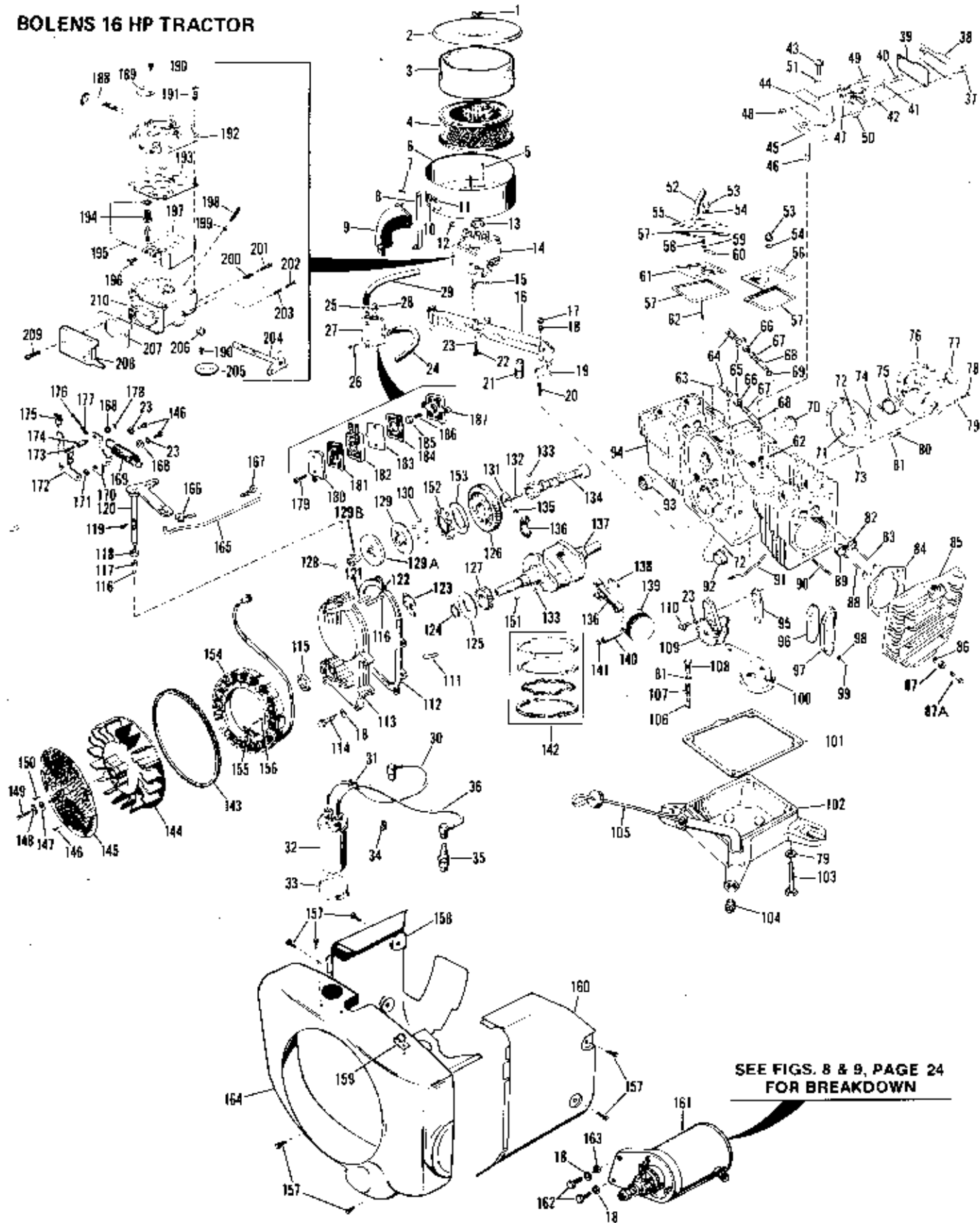


Figure 2A ONAN ENGINE ASSEMBLY (BF/MS 2425, 2938 & 3283)

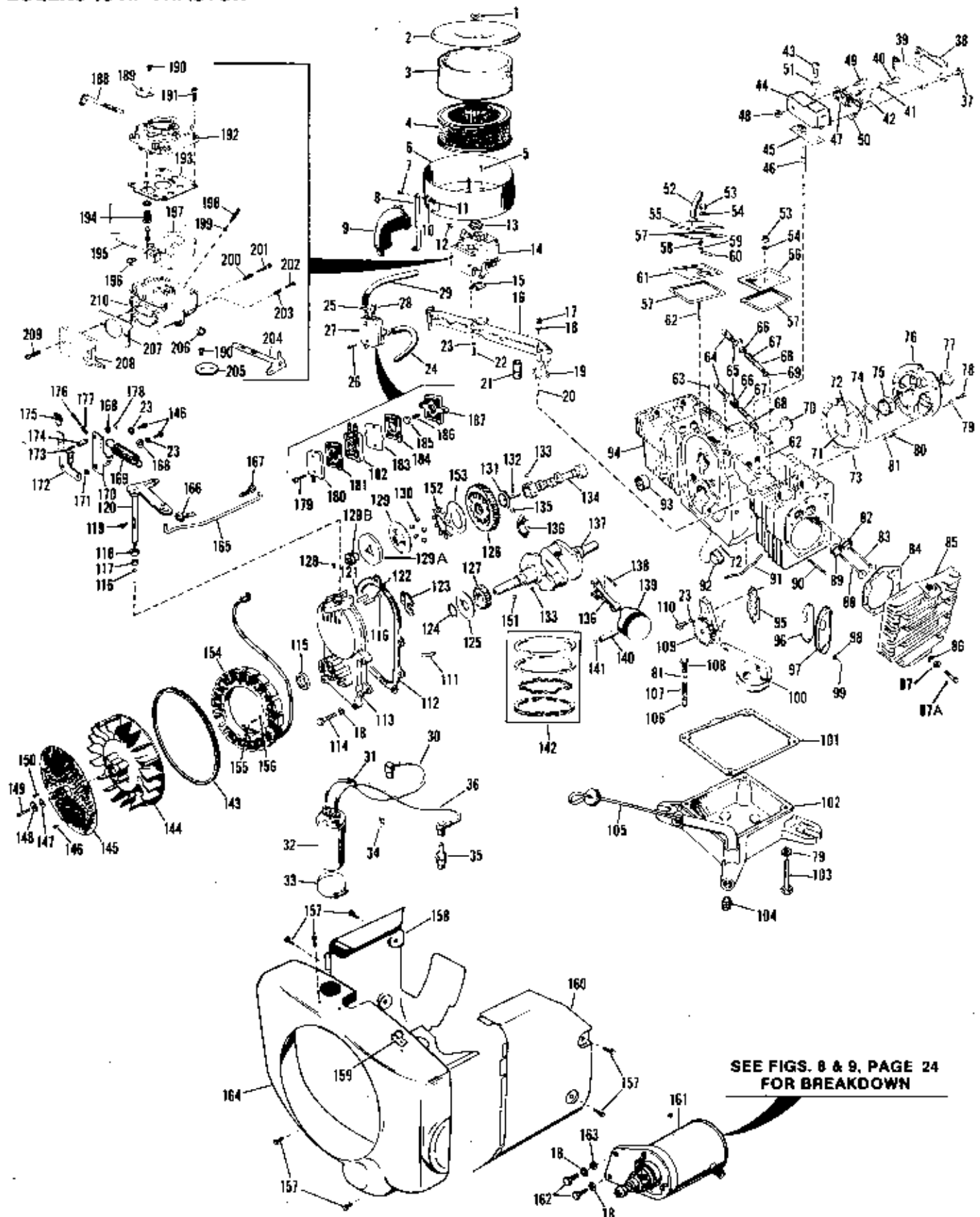
| REF. NO.              | ONAN PART NO. | DESCRIPTION   | NO. REQ'D. |
|-----------------------|---------------|---|------------|
| 1                     | B8650020      | Wing Nut, 1/4-20 . . . . .  | 1          |
| 2                     | B1401168      | Cover, Air Cleaner . . . . .  | 1          |
| 3                     | B1401218      | Wrapper, Air Cleaner . . . . .  | 1          |
| 4                     | B1401216      | Element, Air Cleaner . . . . .  | 1          |
| 5                     | B8150377      | Screw, Round Head, No. 10-32 x 3/8 . . . . .                              | 3          |
| 6                     | B1401213      | Housing, Air Cleaner . . . . .  | 1          |
| 7                     | B8000003      | Capscrew, 1/4-20 x 1/2 . . . . .  | 1          |
| 8                     | B1401198      | Support, Air Cleaner . . . . .  | 1          |
| 9                     | B1401169      | Tube, Air Intake . . . . .  | 1          |
| 10                    | B8530013      | Lockwasher, 1/4 . . . . .   | 1          |
| 11                    | B8620001      | Nut, 1/4 20 . . . . .   | 1          |
| 12                    | B5180328      | Clip, Bracket . . . . .   | 2          |
| 13                    | B1401215      | Gasket, Air Cleaner Mounting . . . . .                                    | 1          |
| 14                    | B1420558      | Carburetor (1)(2)(3)(4)(5) . . . . .                                      | 1          |
|                       | B1420587      | Carburetor (6) . . . . .  | 1          |
| 15                    | B1450438      | Gasket, Carburetor Mounting . . . . .                                     | 1          |
| 16                    | B1541468      | Manifold, Intake . . . . .  | 1          |
| 17                    | B8620015      | Nut, 5/16-18 (1)(2)(3) . . . . .  | 4          |
| 18                    | B8500045      | Lockwasher, 5/16 . . . . .  | 11         |
| 19                    | B1541446      | Gasket, Intake Manifold . . . . .   | 2          |
| 20                    | B5200758      | Stud, 5/16-18 x 2-1/2 (1)(2)(3) . . . . .                                 | 4          |
|                       | B8000034      | Capscrew, 5/16-18 x 2-1/4 (4)(5)(6) . . . . .                             | 4          |
| 21                    | B5050086      | Nipple, Exhaust, 1 x 2-1/2 . . . . .                                      | 2          |
| 22                    | B8000023      | Capscrew, 1/4-20 x 1-3/8 . . . . .  | 2          |
| 23                    | B8500040      | Lockwasher, 1/4 . . . . .   | 6          |
| 24                    | B5030663      | Hose, Fuel Pump Vacuum . . . . .  | 1          |
| 25                    | B5030301      | Clamp, Hose 7/16 . . . . .  | 3          |
| 26                    | B8090045      | Screw, Sheet Metal, No. 10 x 5/8 . . . . .                                | 2          |
| 27                    | B1491322      | Fuel Pump . . . . .   | 1          |
| 28                    | B1491321      | Cap, Fuel Pump . . . . .  | 1          |
| 29                    | B5030664      | Hose, Fuel Pump to Carburetor . . . . .                                   | 1          |
| <b>IGNITION GROUP</b> |               |   |            |
| 30                    | B1671462      | Cable, Spark Plug 15" (1)(2)(3)(4)(5) . . . . .                           | 1          |
|                       | B1671581      | Cable, Spark Plug 15-1/2(6) . . . . .                                     | 1          |
| 31                    | B5090035      | "O" Ring . . . . .  | 1          |
| 32                    | B1650535      | Coil, Ignition . . . . .  | 1          |
| 33                    | B5030311      | Clamp, Coil . . . . .   | 1          |
| 34                    | B1670188      | Clip . . . . .  | 1          |
| 35                    | B1670237      | Spark Plug . . . . .  | 2          |
| 36                    | B1671463      | Cable, Spark Plug 17" (1)(2)(3)(4)(5) . . . . .                           | 1          |
|                       | B1671557      | Cable, Spark Plug 17-1/2" (6) . . . . .                                   | 1          |
| 37                    | B8150358      | Screw, Pan Head, No. 8-32 x 5/16 . . . . .                                | 2          |
| 38                    | B1601149      | Cover, Breaker Box . . . . .  | 1          |
| 39                    | B1601148      | Gasket . . . . .  | 1          |
| 40                    | B8150403      | Screw, Pan Head, No. 8-32 x 5/16 . . . . .                                | 2          |
| 41                    | B8500025      | Lockwasher, No. 8 . . . . .   | 2          |
| 42                    | B3120069      | Condenser . . . . .   | 1          |
| 43                    | B8020034      | Screw, Socket Head, 1/4-20 x 3/4 . . . . .                                | 2          |
| 44                    | B1601158      | Breaker Box Assembly (Incl. Ref. Nos. 37 thru 42, & 47 thru 51) . . . . . | 1          |
| 45                    | B1601150      | Gasket . . . . .  | 1          |
| 46                    | B1601151      | Plunger . . . . .   | 1          |
| 47                    | B1601154      | Breaker Point Set . . . . .   | 1          |
| 48                    | B8700221      | Nut, No. 8 . . . . .  | 1          |
| 49                    | B8150405      | Screw, Pan Head, No. 8-32 x 1/2 . . . . .                                 | 1          |
| 50                    | B3362132      | Lead Assembly . . . . .   | 1          |
| 51                    | B8500038      | Washer, Lock 1/4" . . . . .   | 1          |

| REF. NO.                    | ONAN PART NO. | DESCRIPTION   | NO. REQ'D. |
|-----------------------------|---------------|---|------------|
| <b>CYLINDER BLOCK GROUP</b> |               |   |            |
| 52                          | B1231176      | Tube, Breather . . . . .  | 1          |
| 53                          | B8660001      | Acorn Nut, 1/4-20 (1)(2)(3) . . . . .                             | 2          |
|                             | B8000010      | Capscrew, 1/4-20 x 1-3/4 (4)(5)(6) . . . . .                      | 2          |
| 54                          | B5260063      | Flat Washer, Copper 1/4 . . . . .                                 | 2          |
| 55                          | B1101878      | Cover, Breather . . . . .   | 1          |
| 56                          | B1101879      | Cover, Breather . . . . .   | 1          |
| 57                          | B1101921      | Gasket, Valve Cover . . . . .                                     | 3          |
| 58                          | B1231174      | Spring, Breather Valve . . . . .                                  | 1          |
| 59                          | B5260018      | Flat Washer, Steel 1/4 . . . . .                                  | 2          |
| 60                          | B1231175      | Valve, Breather . . . . .   | 1          |
| 61                          | B1231173      | Baffle, Breather . . . . .  | 1          |
| 62                          | B5260757      | Stud, 1/4 x 2-1/16 (1)(2)(3) . . . . .                            | 2          |
| 63                          | B5170120      | Plug, Breather . . . . .  | 1          |
| 64                          | B1150006      | Tappet, Valve (Standard) . . . . .                                | 4          |
|                             | B1150006-01   | Tappet, Valve (.001 oversize) . . . . .                           | 4          |
|                             | B1150006-02   | Tappet, Valve (.002 oversize) . . . . .                           | 4          |
|                             | B1150006-15   | Tappet, Valve (.005 oversize) . . . . .                           | 4          |
| 65                          | B1100639      | Lock, Valve . . . . .   | 8          |
| 66                          | B1100893      | Retainer, Valve Spring . . . . .                                  | 4          |
| 67                          | B1100539      | Spring, Valve . . . . .   | 4          |
| 68                          | B1101807      | Guide, Valve . . . . .  | 4          |
| 69                          | B1100068      | Gasket, Valve Guide . . . . .                                     | 2          |
| 70                          | B5170048      | Plug, Camshaft . . . . .  | 1          |
| 71                          | B1040575      | Thrust Washer . . . . .   | 2          |
| 72                          | B5160072      | Pin, Stop . . . . .   | 4          |
| 73                          | B1010415      | Gasket . . . . .  | 1          |
| 74                          | B1040776      | Shim, .005 . . . . .  | As Req'd.  |
| 75                          | B1010420      | Rear Bearing (Standard) (Incl. Ref. Nos. 69 & 70) . . . . .       | 1          |
|                             | B1010420-02   | Rear Bearing (.002 undersize) (Incl. Ref. Nos. 69 & 70) . . . . . | 1          |
|                             | B1010420-10   | Rear Bearing (.010 undersize) (Incl. Ref. Nos. 69 & 70) . . . . . | 1          |
|                             | B1010420-20   | Rear Bearing (.020 undersize) (Incl. Ref. Nos. 69 & 70) . . . . . | 1          |
|                             | B1010420-30   | Rear Bearing (.030 undersize) (Incl. Ref. Nos. 71 & 72) . . . . . | 1          |
| 76                          | B1010439      | Bearing Plate (Excludes Bearing) . . . . .                        | 1          |
| 77                          | B5090041      | Seal, Bearing Plate . . . . .                                     | 1          |
| 78                          | B8000051      | Capscrew, 3/8-16 x 1-1/4 . . . . .                                | 5          |
| 79                          | B8500050      | Lockwasher, 3/8 . . . . .   | 9          |
| 80                          | B8000046      | Capscrew, 3/8-16 x 1/2 . . . . .                                  | 2          |
| 81                          | B5260066      | Washer, Copper 3/8 . . . . .                                      | 2          |
| 82                          | B1100197      | Insert, Intake (Standard) . . . . .                               | 2          |
|                             | B1100197-02   | Insert, Intake (.002 oversize) . . . . .                          | 2          |
|                             | B1100197-05   | Insert, Intake (.005 oversize) . . . . .                          | 2          |
|                             | B1100197-10   | Insert, Intake (.010 oversize) . . . . .                          | 2          |
|                             | B1100197-25   | Insert, Intake (.025 oversize) . . . . .                          | 2          |
| 83                          | B1101808      | Valve, Intake . . . . .   | 2          |
| 84                          | B1101920      | Gasket, Cylinder Head . . . . .                                   | 2          |
| 85                          | B1101924      | Cylinder Head, Right Side (No. 2) . . . . .                       | 1          |
|                             | B1101925      | Cylinder Head, Left Side (No. 1) . . . . .                        | 1          |
|                             |               | Cylinder) . . . . .   | 1          |
| 86                          | B5260122      | Flat Washer, Steel 5/16 . . . . .                                 | 18         |
| 87                          | B1100445      | Nut, 5/16-24 (1)(2)(3)(4)(5) . . . . .                            | 18         |
| 87A                         | B8000540      | Screw, Cap Hex Head, 5/16-18 x 1-5/8" (6) . . . . .               | 6          |
|                             | B8000541      | Screw, Cap Hex Head, 5/16-18 x 2" (6) . . . . .                   | 12         |

- {1} Specification No. 2425A
- {2} Specification No. 2425B
- {3} Specification No. 2425C
- {4} Specification No. 2938D
- {5} Specification No. 2938E
- {6} Specification No. 3283F

SEE PAGE 9 FOR REF. NOS. 88 THRU 141

# BOLENS 16 HP TRACTOR



SEE FIGS. 8 & 9, PAGE 24  
FOR BREAKDOWN

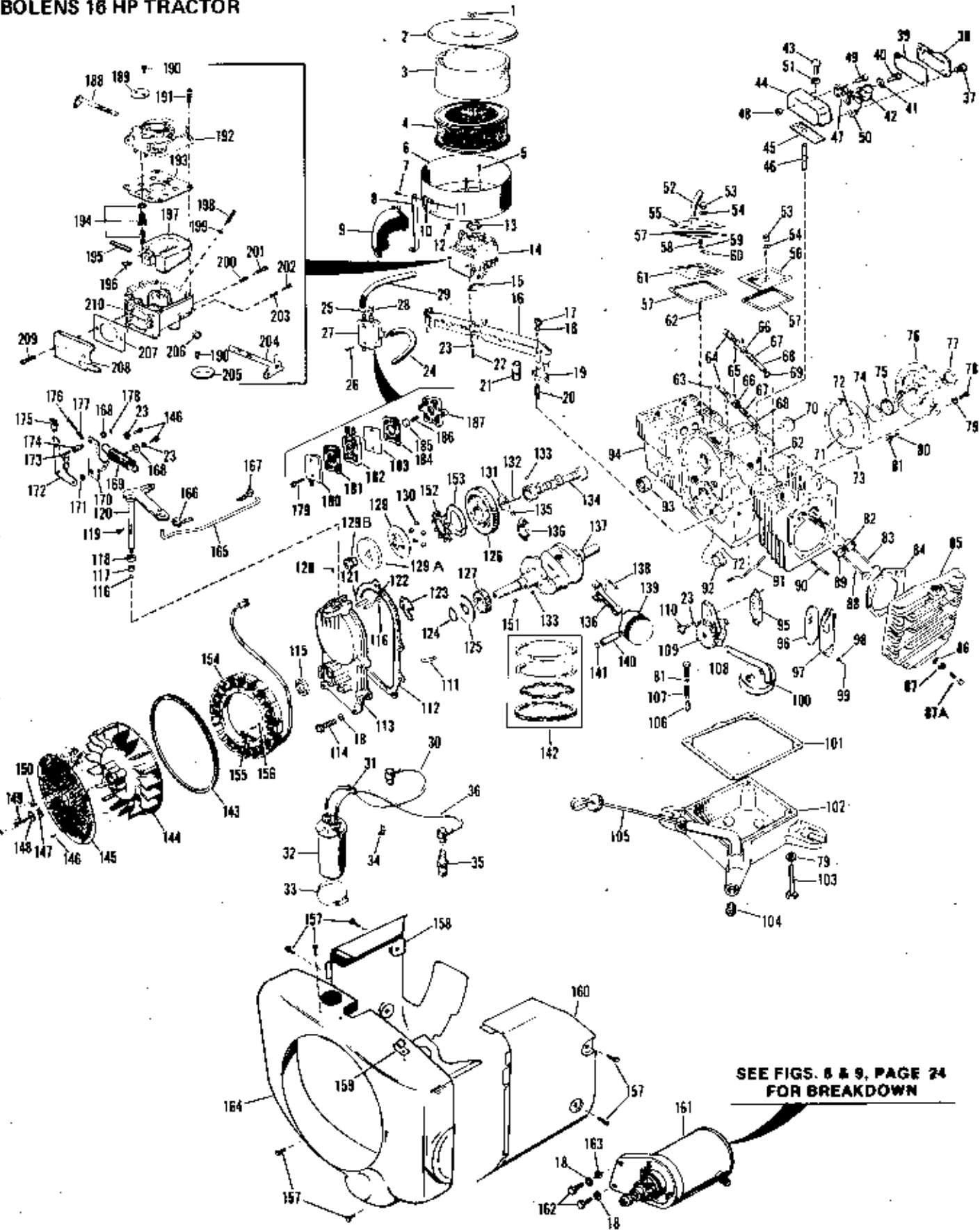
Figure 2A ONAN ENGINE ASSEMBLY (BF/MS 2425, 2938 & 3283) (Continued)



| REF. NO.   | ONAN PART NO. | DESCRIPTION   | NO. REQ'D. |
|--|---------------|---|------------|
| <b>CYLINDER BLOCK GROUP (Continued)</b>  |               |   |            |
| 88   | B1101809      | Valve, Exhaust  | 2          |
| 89   | B1100245      | Insert, Exhaust (Standard)  | 2          |
|  | B1100245-02   | Insert, Exhaust (.002 Oversize)   | 2          |
|  | B1100245-05   | Insert, Exhaust (.005 Oversize)   | 2          |
|  | B1100245-10   | Insert, Exhaust (.010 Oversize)   | 2          |
|  | B1100245-25   | Insert, Exhaust (.025 Oversize)   | 2          |
| 90   | B5200424      | Stud, Cylinder Head 5/16 x 2-5/16 (1)(2)(3)(4)(5)   | 6          |
|  | B5200759      | Stud, Cylinder Head 5/16 x 2-1/16   | 12         |
| 91   | B1200706      | Tube, Crankcase Oil   | 1          |
| *92  | B1010432      | Flanged Front Bearing (Standard) (Incl. Ref. No. 70)  | 1          |
|  | B1010432-02   | Flanged Front Bearing (.002 Undersize)  | 1          |
|  | B1010432-10   | Flanged Front Bearing (.010 Undersize)  | 1          |
|  | B1010432-20   | Flanged Front Bearing (.020 Undersize)  | 1          |
|  | B1010432-30   | Flanged Front Bearing (.030 Undersize)  | 1          |
| 93   | B1010405      | Bearing, Camshaft (Precision)   | 2          |
| 94   | B1102351      | Block Assembly (Incl. Ref. Nos. 88 thru 79, 82, 89, 91 and 93)  | 1          |
| N1   | B1102162      | Short Block Assembly  |            |
| (EXCLUDES magneto flywheel, ignition system, oil base, cylinder heads, oil fill tube and indicator, muffler or exhaust manifold, carburetor, choke, air cleaner, fuel tank, oil pickup tube and cup assembly, valve covers necessary studs and gaskets, sheet metal parts such as blower housing, and accessories) |               |   |            |
| <b>GEAR COVER, OIL BASE AND OIL PUMP GROUP</b>   |               |   |            |
| 95   | B120161       | Gasket Kit, Oil Pump  | 1          |
| 96   | B122321       | Gasket (1)(2)(3)(4)   | 1          |
| 97   | B122359       | Cover (1)(2)(3)(4)  | 1          |
| 98   | B5260122      | Flat Washer, Copper 5/16 (1)(2)(3)(4)   | 2          |
| 99   | B8000026      | Capscrew, 5/16 18 x 3/4 (1)(2)(3)(4)  | 4          |
| 100  | B1200713      | Intake, Oil Pump (Incl. Cup, Screen & Pipe)   | 1          |
| 101  | B102693       | Gasket, Oil Base  | 1          |
| 102  | B102730       | Base, Oil   | 1          |
| 103  | B8000056      | Capscrew, 3/8-16 x 2-1/2  | 4          |
| 104  | B5050056      | Plug, Oil Drain   | 2          |
| 105  | B1231138      | Oil Cap and Indicator   | 1          |
| 106  | B1200398      | Valve, Oil By-pass  | 1          |
| 107  | B1200140      | Spring, Oil By-pass   | 1          |
| 108  | B8010050      | Screw, 3/8-24 x 1   | 1          |
| 109  | B1200491      | Oil Pump, Complete  | 1          |
| 110  | B8000007      | Capscrew, 1/4-20 x 1  | 2          |
| 111  | B1491299      | Tube, Fuel Pump Vacuum  | 1          |
| 112  | B1030408      | Gasket, Gear Cover  | 1          |
| 113  | B1030409      | Gear Cover Assembly (Incl. Ref. Nos. 111, 115 thru 120, 122 and 123)(Use w/B1501349 Shaft & Arm Assy. only) (1)(2)(3) | 1          |
|  | B1030501      | Gear Cover Assembly (Incl. Ref. Nos. 111, 115 thru 120, 122 and 123)(Use w/B1501470 Shaft & Arm Assy. only) (4)(5)(6) | 1          |
| 114  | B8000032      | Capscrew, 5/16-18 x 1-3/4   | 4          |
|  | B8000034      | Capscrew, 5/16-18 x 2-1/4   | 1          |
| 115  | B5090040      | Seal, Gear Cover  | 1          |
| 116  | B5100014      | Ball Bearing  | 1          |
| 117  | B5100105      | Bearing   | 1          |
| 118  | B5090008      | Seal, Oil   | 1          |

| REF. NO.   | ONAN PART NO.           | DESCRIPTION  | NO. REQ'D.              |
|--|-------------------------|--|-------------------------|
| <b>GEAR COVER, OIL BASE AND OIL PUMP GROUP (Cont'd.)</b> |                         |  |                         |
| 119  | B8150046                | Screw, Yoke Retaining  | 2                       |
| 120  | B1501349                | Shaft and Arm Assy. Governor (Use w/B1030409 Gear Cover Assembly Only) (1)(2)(3) | 1                       |
|  | B1501470                | Shaft and Arm Assy. Governor (Use w/B1030501 Gear Cover Assembly Only) (4)(5)(6) | 1                       |
| 121  | B5160141                | Pin, Gear Cover 5/16 x 1-1/8   | 2                       |
| 122  | B5160130                | Pin, Cup Stop  | 1                       |
| 123  | B1501187                | Yoke, Governor   | 1                       |
| <b>CRANKSHAFT, FLYWHEEL, CAMSHAFT AND PISTON GRP.</b>    |                         |  |                         |
| 124  | B5180014                | Lock, Gear Washer  | 1                       |
| 125  | B1040043                | Washer, Retaining  | 1                       |
| 126  | B1050332                | Gear, Camshaft   | 1                       |
| 127  | B1040032                | Gear, Crankshaft   | 1                       |
| 128  | B1500078                | Ring, Center Pin   | 1                       |
| 129  | B1501116                | Cup, Governor (1)(2)(3)(4)(5)  | 1                       |
| 129A   | B1501520                | Cup, Governor (6)  | 1                       |
| 129B   | B1501519                | Hub, Governor Cup (6)  | 1                       |
| 130  | B5100015                | Ball, Fly-Governor   | 5                       |
| 131  | B1050004                | Thrust Washer  | 1                       |
| 132  | B1500075                | Pin, Camshaft Center   | 1                       |
| 133  | B5150001                | Key  | 2                       |
| 134  | B1050388                | Camshaft (Incl. Ref. No. 132) (1)(2)(3)(4)                                       | 1                       |
|  | B1050400                | Camshaft (Incl. Ref. No. 132)(5)(6)  | 1                       |
| 135  | B8700137                | Locking Nut, Connecting Rod Cap  | 4                       |
| 136  | B1140225                | Connecting Rod Assy. (Standard) (Incl. Ref. Nos. 135, 138 and 139)               | 2                       |
|  | B1140225-10             | Connecting Rod Assy. (.010 Undersize) (Incl. Ref. Nos. 135, 136 and 138)         | 2                       |
|  | B1140225-20             | Connecting Rod Assy. (.020 Undersize) (Incl. Ref. Nos. 135, 136 and 138)         | 2                       |
|  | B1140225-30             | Connecting Rod Assembly (.030 Undersize) (Incl. Ref. Nos. 135, 136 and 138)      | 2                       |
| 137  | B1040763                | Crankshaft (Use w/B5150002 Flywheel Mounting Key Only) (1)(2)(3)                 | 1                       |
|  | B1040889                | Crankshaft (Use w/B5150098 Flywheel Mounting Key Only)(4)                        | 1                       |
| 138  | B1140228                | Bolt, Connecting Rod (Special)   | 4                       |
| 139  | B1120134                | Piston Assembly (Incl. Ref. Nos. 140 and 141)(Standard)                          | 2                       |
|  | B1120134-05             | Piston Assembly (.005 oversize) (Incl. Ref. Nos. 140 and 141)                    | 2                       |
|  | B1120134-10             | Piston Assembly (.010 oversize) (Incl. Ref. Nos. 140 and 141)                    | 2                       |
|  | B1120134-20             | Piston Assembly (.020 oversize) (Incl. Ref. Nos. 140 and 141)                    | 2                       |
|  | B1120134-30             | Piston Assembly (.030 oversize) (Incl. Ref. Nos. 140 and 141)                    | 2                       |
|  | B1120134-40             | Piston Assembly (.040 oversize) (Incl. Ref. Nos. 140 and 141)                    | 2                       |
| 140  | B1120122                | Pin, Piston  | 2                       |
| 141  | B51B0311                | Retaining Ring   | 4                       |
| <b>SEE PAGE 11 FOR REF. NOS. 142 THRU 210</b>            |                         |  |                         |
| * Replaces unflanged bearing & thrust washer (Ref. 71)   |                         |  |                         |
| (1)  | Specification No. 2425A | (4)  | Specification No. 2938D |
| (2)  | Specification No. 2425B | (5)  | Specification No. 2938E |
| (3)  | Specification No. 2425C | (6)  | Specification No. 3263F |

# BOLENS 16 HP TRACTOR



SEE FIGS. 8 & 9, PAGE 24  
FOR BREAKDOWN

Figure 2A ONAN ENGINE ASSEMBLY (BF/MS 2425, 2938 & 3283) (Continued)

| REF. NO.   | ONAN PART NO. | DESCRIPTION                                    | NO. REQ'D. |
|--|---------------|--|------------|
| <b>CRANKSHAFT, FLYWHEEL, CAMSHAFT AND PISTON GRP</b> |               |  |            |
| 142  | B1130174      | Ring Set, Piston (Standard) . . . . .          | 2          |
|  | B1130174-05   | Ring Set, Piston (.005 oversize) . . . . .     | 2          |
|  | B1130174-10   | Ring Set, Piston (.010 oversize) . . . . .     | 2          |
|  | B1130174-20   | Ring Set, Piston (.020 oversize) . . . . .     | 2          |
|  | B1130174-30   | Ring Set, Piston (.030 oversize) . . . . .     | 2          |
|  | B1130174-40   | Ring Set, Piston (.040 oversize) . . . . .     | 2          |
| 143  | B1040779      | Ring Gear, Flywheel . . . . .                  | 1          |
| 144  | B1342432      | Flywheel (Incl. Ref. No. 143) . . . . .        | 1          |
| 145  | B1342384      | Guard, Flywheel . . . . .                      | 1          |
| 146  | B8210010      | Locking Screw, 1/4-20 x 1/2 . . . . .          | 3          |
| 147  | B5260017      | Washer, 7/16 . . . . .                         | 1          |
| 148  | B8500055      | Lockwasher, 7/16 . . . . .                     | 1          |
| 149  | B1040170      | Capscrew, 7/16-14 x 4 . . . . .                | 1          |
| 150  | B8210014      | Locking Screw, 5/16-18 x 1/2 . . . . .         | 2          |
| 151  | B5150002      | Key (Use w/B1040763 Crankshaft Only) . . . . . | 1          |
|  | B5150098      | Key (Use w/B1040889 Crankshaft Only) . . . . . | 1          |
| 152  | B1501257      | Spacer, Governor Flyball . . . . .             | 1          |
| 153  | B1500077      | Plate, Governor Flyball . . . . .              | 1          |
| N.I.   | B1680123      | Gasket Kit, Carbon Removal . . . . .           | 1          |
| N.I.   | B1680124      | Gasket Kit, Engine . . . . .                   | 1          |
| N.I.   | B5220266      | Overhaul Kit . . . . .                         | 1          |

**GOVERNOR, STARTER, CHARGING ALTERNATOR AND BLOWER HOUSING GROUP**

|     |          |  |   |
|-----|----------|--|---|
| 154 | B1910935 | Stator, Alternator . . . . .                   | 1 |
| 155 | B8130108 | Screw, Round Head, No. 10-32 x 1-1/2 . . . . . | 3 |
| 156 | B8500030 | Lockwasher, No. 10 . . . . .                   | 3 |
| 157 | B8150261 | Capscrew, 1/4-20 x 7/16 . . . . .              | 7 |
| 158 | B1342382 | Housing, Left . . . . .                        | 1 |
| 159 | B3320051 | Clip, Fuel Line . . . . .                      | 1 |
| 160 | B1342383 | Housing, Right . . . . .                       | 1 |
| 161 | B1910883 | Starting Motor (1) . . . . .                   | 1 |
|     | B1910933 | Starting Motor (2)(3)(4)(5)(6) . . . . .       | 1 |
| 162 | B8000028 | Capscrew, Hex 5/16-18 x 1 . . . . .            | 1 |
| 163 | B5260113 | Flat Washer . . . . .                          | 1 |
| 164 | B1342393 | Housing, Blower . . . . .                      | 1 |
| 165 | B1501350 | Rod, Governor . . . . .                        | 1 |
| 166 | B8700278 | Clip, Control Rod . . . . .                    | 1 |
| 167 | B5180004 | Clip, Control Rod . . . . .                    | 1 |
| 168 | B5260214 | Flat Washer . . . . .                          | 1 |
| 169 | B1501214 | Spring, Governor . . . . .                     | 1 |
| 170 | B1501345 | Arm, Governor . . . . .                        | 1 |
| 171 | B1501269 | Bushing, Governor Control . . . . .            | 1 |
| 172 | B1501343 | Bracket, Governor . . . . .                    | 1 |
| 173 | B8150104 | Screw, Round Head No. 8-32 x 5/16 . . . . .    | 1 |

| REF. NO.   | ONAN PART NO. | DESCRIPTION  | NO. REQ'D. |
|--|---------------|--|------------|
| <b>GOVERNOR, STARTER, CHARGING ALTERNATOR AND BLOWER HOUSING GROUP (Continued)</b> |               |  |            |
| 174  | B1520155      | Swivel, Throttle Cable . . . . .   | 1          |
| 175  | B5180176      | Clip, Throttle Cable . . . . .   | 1          |
| 176  | B8120086      | Screw, Round Head, No. 8-32 x 3/4 . . . . .  | 1          |
| 177  | B1501398      | Spring . . . . .   | 1          |
| 178  | B5160059      | Cotter Pin . . . . .   | 1          |
| 179  | B1420540      | Screw, Pump Cover . . . . .  | 2          |
| 180  | B1491326      | Cover, Pump . . . . .  | 1          |
| 181  | B1491323      | Gasket . . . . .   | 1          |
| 182  | B1420537      | Valve Plate Assembly . . . . .   | 1          |
| 183  | B1420555      | Diaphragm . . . . .  | 1          |
| 184  | B1420541      | Gasket . . . . .   | 1          |
| 185  | B1420552      | Plate, Pump Spring . . . . .   | 1          |
| 186  | B1520545      | Spring, Pump Diaphragm . . . . .   | 1          |
| 187  | B1491324      | Base . . . . .   | 1          |
| 188  | B1420536      | Shaft, Choke . . . . .   | 1          |
| 189  | B1420546      | Fly, Choke . . . . .   | 1          |
| 190  | B1420334      | Screw, Fly . . . . .   | 4          |
| 191  | B1420539      | Screw, Bowl Cover . . . . .  | 4          |
| 192  | B1420533      | Sleeve Assembly (1)(2)(3)(4) . . . . .   | 1          |
|  | B1420573      | Sleeve Assembly (5)(6) . . . . .   | 1          |
| 193  | B1420543      | Gasket (1)(2)(3)(4) . . . . .  | 1          |
|  | B1420572      | Gasket (5)(6) . . . . .  | 1          |
| 194  | B1420553      | Valve Assembly, Float . . . . .  | 1          |
| 195  | B1420548      | Shaft, Float Lever . . . . .   | 1          |
| 196  | B1420554      | Clip, Float Valve . . . . .  | 1          |
| 197  | B1420547      | Float and Lever Assembly . . . . .   | 1          |
| 198  | B1420549      | Needle Assembly, Power . . . . .   | 1          |
| 199  | B1420550      | Gasket, "O" Ring . . . . .   | 1          |
| 200  | B1420282      | Spring, Idle Needle . . . . .  | 1          |
| 201  | B1420016      | Needle, Idle . . . . .   | 1          |
| 202  | B1420064      | Screw, Throttle Stop . . . . .   | 1          |
| 203  | B1420544      | Spring, Throttle Stop Screw . . . . .  | 1          |
| 204  | B1420534      | Shaft, Throttle . . . . .  | 1          |
| 205  | B1420538      | Fly, Throttle (1)(2)(3)(4) . . . . .   | 1          |
|  | B1420584      | Fly, Throttle (5)(6) . . . . .   | 1          |
| 206  | B1420535      | Packing, Shaft . . . . .   | 1          |
| 207  | B1420559      | Gasket, Plate . . . . .  | 1          |
| 208  | B1491326      | Plate, Carburetor Inlet . . . . .  | 1          |
| 209  | B1420539      | Screw, Plate . . . . .   | 2          |
| 210  | B1420532      | Body Assembly, Lower (1)(2)(3)(4) . . . . .  | 1          |
|  | B1420574      | Body Assembly, Lower (5)(6) . . . . .  | 1          |
| N.I.   | B1420560      | Gasket Set (Incl. Ref. Nos. 193, 206 & 207) (1)(2)(3)(4) . . . . .                                   | 1          |
| N.I.   | B1420561      | Repair Kit (Incl. Ref. Nos. 190, 194, 195, 200, 201, 203 and Gasket Set above)(1)(2)(3)(4) . . . . . | 1          |

- (1) Specification No. 2425A
- (2) Specification No. 2425B
- (3) Specification No. 2425C
- (4) Specification No. 2938D
- (5) Specification No. 2938E
- (6) Specification No. 3283F

# BOLENS 16 HP TRACTOR

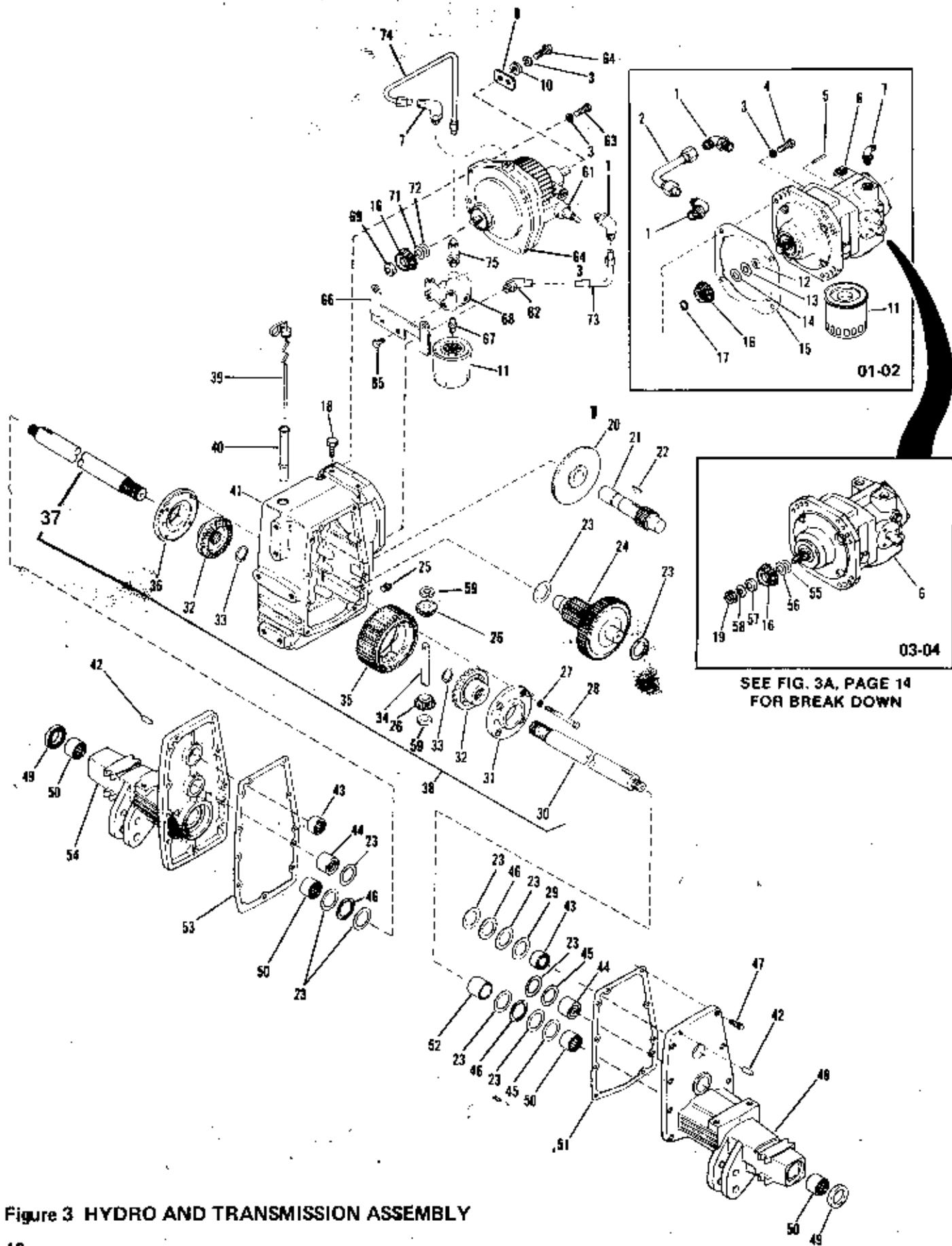


Figure 3 HYDRO AND TRANSMISSION ASSEMBLY

**MODEL 1666 (QT-16)**

| REF. NO. | PART. NO. | DESCRIPTION  | NO. REQ'D. |
|----------|-----------|--|------------|
| 1        | 1724390   | 90° Elbow Fitting  | 2          |
| 2        | 1724247   | 37° Flare Tube Assy. (1)(2)(3)(4)                                    | 1          |
| 3        | ● 1100243 | Lockwasher, 3/8  | 4          |
| 4        | ● 1100043 | Capscrew, 3/8 x 1-1/4 (1)(2)(3)(4)                                   | 3          |
| 5        | 1185376   | Roll Pin, 3/16 x 1-1/2 (1)(2)(3)(4)                                  | 1          |
| 6        | **        | L.H. Hydrostatic Package (1)(2)                                      | 1          |
|          | **        | L.H. Hydrostatic Package (Incl. Ref. Nos. 16, 19, 55 thru 58) (3)(4) | 1          |
| 7        | 1185737   | 90° Elbow Fitting  | 2          |
| 8        | 1725415   | Neutral Anchor (1)(2)(3)(4)  | 1          |
|          | 1734197   | Neutral Anchor (5)   | 1          |
| 9        | ● 1100047 | Capscrew, 3/8 x 1-1/2 (1)(2)(3)(4)                                   | 1          |
| 10       | ● 1107383 | Flat Washer, 3/8 (1)(2)(3)(4)  | 1          |
| 11       | 1726450   | Oil Filter   | 1          |
| 12       | 1728130   | "O" Ring (1)(2)  | 1          |
| 13       | 1726630   | Shim, .005 (1)(2)  | 1          |
| 14       | 1725863   | Shim, .010 (1)(2)  | 2          |
| 15       | 1720282   | Gasket (1)(2)(3)(4)  | 1          |
| 16       | 1724078   | Bevel Pinion 18T (1)   | 1          |
|          | 1727265   | Bevel Pinion 18T (2)(3)(4)   | 1          |
|          | 1729531   | Bevel Pinion 18T (5)   | 1          |
| 17       | 1185438   | Retaining Ring (1)(2)  | 1          |
| 18       | 1186347   | Lock Screw, 3/8-16 x 1   | 2          |
| 19       | ● 1186212 | Nut, 3/8-24 (2)(3)(4)  | 1          |
| 20       | 1724079   | Bevel Gear, 56T  | 1          |
| 21       | 1724810   | Pinion Shaft, 17T (1)(2)(3)(4)                                       | 1          |
|          | 1734358   | Pinion Shaft, 25T (5)  | 1          |
| 22       | 1100279   | Woodruff Key   | 1          |
| 23       | 1186002   | Thrust Race .125   | 8          |
| 24       | 1724812   | Cluster Gear, 16T & 53T (1)(2)(3)(4)                                 | 1          |
|          | 1734361   | Cluster Gear, 16T & 45T (5)  | 1          |
| 25       | 1185930   | Square Head Magnetic Pipe Plug                                       | 1          |
| 26       | 1731865   | Bevel Pinion 10T   | 2          |
| 27       | ● 1100242 | Lockwasher, 5/16   | 4          |
| 28       | 1186015   | Capscrew, 5/16-18 x 3-1/2 H.T.                                       | 4          |
| 29       | 1718781   | Shim   | 2-3        |
| 30       | 1724808   | R.H. Axle  | 1          |
| 31       | 1724071   | R.H. Bull Gear Carrier   | 1          |
| 32       | 1724074   | Bevel Gear, 22T  | 2          |
| 33       | 1185732   | External Retaining Ring  | 2          |
| 34       | 1724075   | Pinion Shaft   | 1          |

| REF. NO. | PART. NO. | DESCRIPTION                                     | NO. REQ'D. |
|----------|-----------|---|------------|
| 35       | 1724085   | Bull Gear, 44T                                  | 1          |
| 36       | 1724072   | L.H. Bull Gear Carrier                          | 1          |
| 37       | 1724807   | L.H. Axle                                       | 1          |
| 38       | 1724205   | Differential Assy. (Incl. Ref. Nos. 26 thru 37) | 1          |
| 39       | 1724092   | Dip Stick                                       | 1          |
| 40       | 1724090   | Tube  | 1          |
| 41       | 1724102   | Transaxle Housing                               | 1          |
| 42       | 1110189   | Dowel Pin, 3/8 x 1                              | 4          |
| 43       | 1185774   | Closed End Needle Bearing                       | 2          |
| 44       | 1186010   | Closed End Needle Bearing                       | 2          |
| 45       | 1719271   | Shim  | As Req'd.  |
| 46       | 1185764   | Thrust Roller Bearing                           | 3          |
| 47       | 1185771   | Counterbore Capscrew, 3/8-16 x 1                | 17         |
| 48       | 1724534   | R.H. Transaxle Housing Cover                    | 1          |
| 49       | 1185301   | Oil Seal  | 2          |
| 50       | 1187206   | Needle Bearing                                  | 4          |
| 51       | 1724086   | R.H. Cover Gasket                               | 1          |
| 52       | 1724809   | Spacer  | 1          |
| 53       | 1724087   | L.H. Cover Gasket                               | 1          |
| 54       | 1724536   | L.H. Transaxle Housing Cover                    | 1          |
| 55       | 1728832   | Shim (2)(3)(4)                                  | 1          |
| 56       | 1728833   | Shim (2)(3)(4)                                  | 2          |
| 57       | 1727281   | Washer (2)(3)(4)                                | 1          |
| 58       | 1727266   | Washer (2)(3)(4)                                | 1          |
| 59       | 1715301   | Thrust Washer                                   | 2          |
| 60       | 1732194   | Eaton Hydrostatic (5)                           | 1          |
| 61       | 1724370   | Control Shaft Seal (5)                          | 1          |
| 62       | 1734742   | 45° Elbow (5)                                   | 1          |
| 63       | ● 1100062 | Hex Screw, 3/8-16 x 2-1/2 (5)                   | 1          |
| 64       | ● 1100770 | Hex Screw, 3/8-16 x 2 (5)                       | 3          |
| 65       | 1186345   | Flange Screw, 3/8-16 x 3/4 (5)                  | 2          |
| 66       | 1732230   | Filter Bracket (5)                              | 1          |
| 67       | 1721921   | Special Coupling (5)                            | 1          |
| 68       | 1734749   | Filter Manifold (5)                             | 1          |
| 69       | 1729559   | Spacer (5)                                      | 1          |
| 70       | ● 1111599 | Hex Screw, 1/4-20 x 5/8 (5)                     | 1          |
| 71       | 1730374   | Shim (5)  | 1          |
| 72       | 1730375   | Shim (5)  | 2          |
| 73       | 1734635   | Tube Assy. (5)                                  | 1          |
| 74       | 1734730   | Tube Assy. (5)                                  | 1          |
| 75       | 1185739   | 90° Elbow (5)                                   | 1          |
| NI       | 1721514   | Trans. Fluid, 2-1/2 Gal.                        |            |
| NI       | 1719650   | Trans. Fluid, 1 Gal.                            |            |
| NI       | 1721599   | Trans. Fluid, 1 Quart                           |            |

- (1) Serial Numbers 0100101 thru 0199999
- (2) Serial Numbers 0200101 thru 0299999
- (3) Serial Numbers 0300101 thru 0399999
- (4) Serial Numbers 0400101 thru 0499999
- (5) Starting With Serial Number 0500101

● Common Hardware - Purchase Locally  
(Grade 5 where applicable).

# BOLENS 16 HP TRACTOR

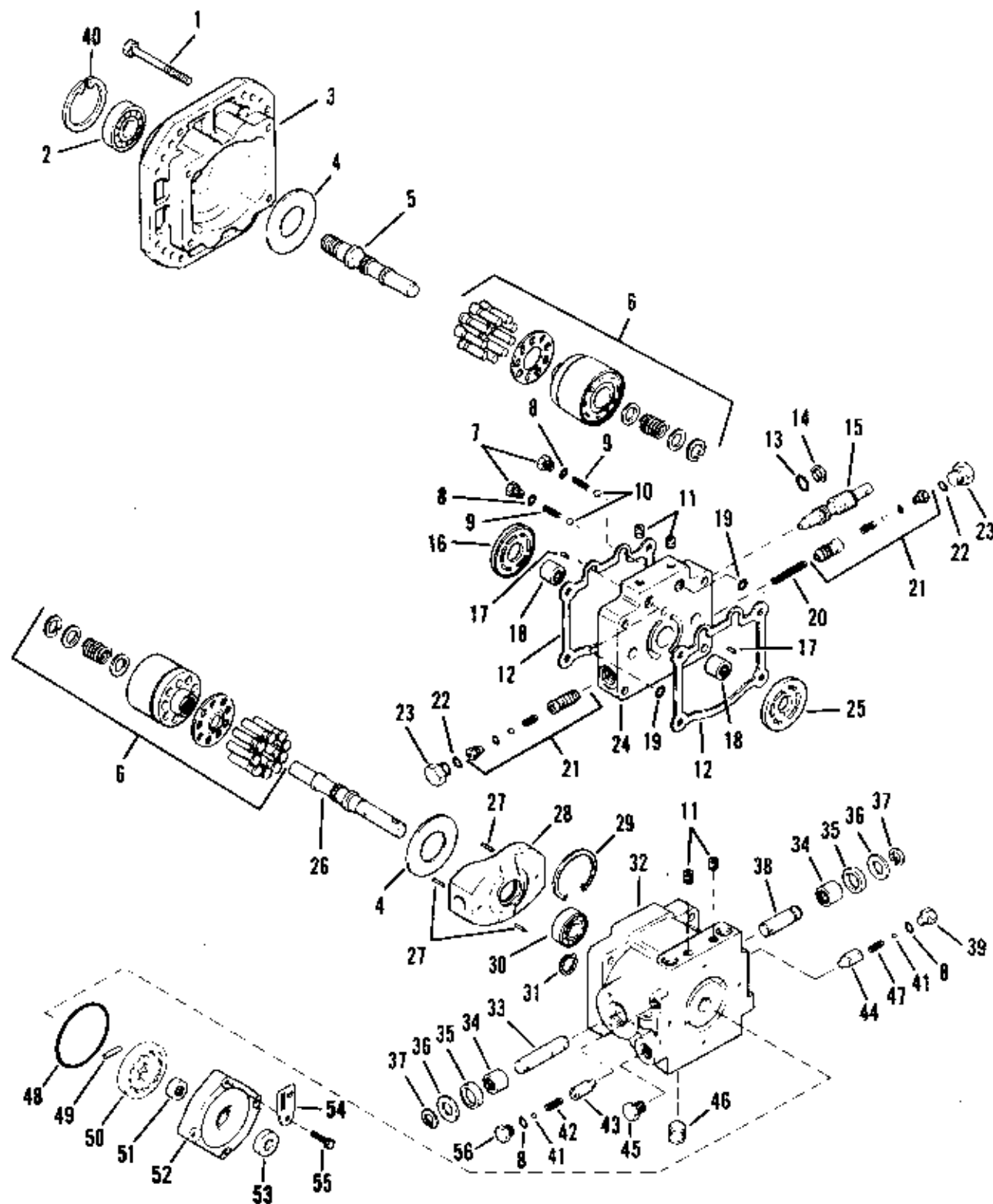


Figure 3A. HYDRO ASSEMBLY

## MODEL 1666 (QT-16)

| REF. NO. | PART NO. | DESCRIPTION                          | NO. REQ'D. |
|----------|----------|--------------------------------------|------------|
| 1        | 1110644  | Cap Screw                            | 4          |
| 2        | 1728251  | Bearing                              | 1          |
| 3        | 1728201  | Motor Housing (1) (2) (3)<br>(4) (5) | 1          |
|          | 1728887  | Motor Housing (5)(6)                 | 1          |
| 4        | 1728202  | Thrust Plate                         | 2          |
| 5        | 1728203  | Motor Shaft (1) (2) (3) (4)          | 1          |
|          | 1728885  | Motor Shaft, (5) (6)                 | 1          |
| 6        | 1728204  | Cylinder Block Assy.                 | 2          |
| 7        | 1728205  | Check Valve Cap                      | 2          |
| 8        | 1728252  | "O" Ring                             | 4          |
| 9        | 1728206  | Spring                               | 2          |
| 10       | 1728207  | Ball                                 | 2          |
| 11       | 1728208  | Pipe Plugs                           | 4          |
| 12       | 1728209  | Gaskets                              | 2          |
| 13       | 1177388  | "O" Ring                             | 1          |
| 14       | 1728210  | Back Up Ring                         | 1          |
| 15       | 1728211  | Free Wheeling Valve                  | 1          |
| 16       | 1728212  | Motor Valve Plate                    | 1          |
| 17       | 1728213  | Pin                                  | 2          |
| 18       | 1728253  | Bearing                              | 2          |
| 19       | 1728214  | "O" Ring                             | 2          |
| 20       | 1728215  | Acceleration Valve<br>Spring         | 1          |
| 21       | 1728216  | Acceleration Valve<br>Assembly       | 2          |
| 22       | 1185773  | "O" Ring                             | 2          |
| 23       | 1728217  | Hex Plug                             | 2          |
| 24       | 1728218  | Center Section                       | 1          |
| 25       | 1728220  | Pump Valve Plate L.H.                | 1          |
| 26*      | 1728221  | Pump Shaft, (1) (2)                  | 1          |
|          | 1728222  | Pump Shaft, (3) (4) (5) (6)          | 1          |
| 27       | 1728223  | Roll Pins                            | 3          |
| 28       | 1728224  | Pump Swash Plate                     | 1          |
| 29       | 1728254  | Snap Ring                            | 1          |

| REF. NO. | PART NO. | DESCRIPTION                        | NO. REQ'D. |
|----------|----------|------------------------------------|------------|
| 30       | 1728255  | Bearing                            | 1          |
| 31       | 1728226  | Snap Ring                          | 1          |
| 32       | 1728227  | Pump Housing                       | 1          |
| 33       | 1728228  | Control Shaft                      | 1          |
| 34       | 1728229  | Bearing                            | 2          |
| 35       | 1728230  | Seal                               | 2          |
| 36       | 1728231  | Washer                             | 2          |
| 37       | 1728225  | Retaining Ring                     | 2          |
| 38       | 1728232  | Trunnion Shaft                     | 1          |
| 39       | 1728233  | Hex Plug (Implement)               | 1          |
| 40       | 1728886  | Snap Ring (6)                      | 1          |
| 41       | 1728234  | Shim Pack                          | As Req'd.  |
| 42       | 1728235  | Charge Relief Valve<br>Spring      | 1          |
| 43       | 1728236  | Poppet Valve (Charge)              | 1          |
| 44       | 1728237  | Poppet Valve (Implement)           | 1          |
| 45       | 1728238  | Hex Plug                           | 1          |
| 46       | 1728239  | Filter Union                       | 1          |
| 47       | 1728240  | Implement Relief Valve<br>Spring   | 1          |
| 48       | 1728241  | "O" Ring                           | 1          |
| 49       | 1728242  | Drive Pin                          | 1          |
| 50       | 1728243  | Charge Pump (Geroter)              | 1          |
| 51*      | 1728244  | Ball Bearing, (1) (2) (3)          | 1          |
|          | 1728250  | Needle Bearing (4) (5) (6)         | 1          |
| 52*      | 1728245  | Charge Pump Housing<br>(1) (2) (3) | 1          |
|          | 1728246  | Charge Pump Housing<br>(4) (5) (6) | 1          |
| 53       | 1728247  | Seal (1) (2) (3)                   | 1          |
|          | 1728248  | Seal (4) (5) (6)                   | 1          |
| 54       | 1728249  | Identification Tag                 | 1          |
| 55       | 1100808  | Cap Screw                          | 4          |
| 56       | 1728888  | Hex Plug (charge)                  | 1          |

- (1) Sundstrand Type 90-1121-01 (Bolens #1724348)
- (2) Sundstrand Type 90-1121-02 (Bolens #1724348)
- (3) Sundstrand Type 90-1121-03 (Bolens #1724348)
- (4) Sundstrand Type 90-1121-04 (Bolens #1724348)
- (5) Sundstrand Type 90-1149 (Bolens #1727788)
- (6) Sundstrand Type 90-1154 (Bolens #1729134)

**NOTE: ALWAYS REFER TO IDENTIFICATION TAG (REF. #54)  
TO OBTAIN SUNDSTRAND MODEL AND TYPE NUMBER.  
TYPE NUMBER PRECEDES SERIAL NUMBER.**

\*No longer available - must be replaced by one or each of the following parts: 1728222, Pump Shaft; 1728250, Needle Bearing; 1728246, Charge Pump Housing; & 1728248, Seal.

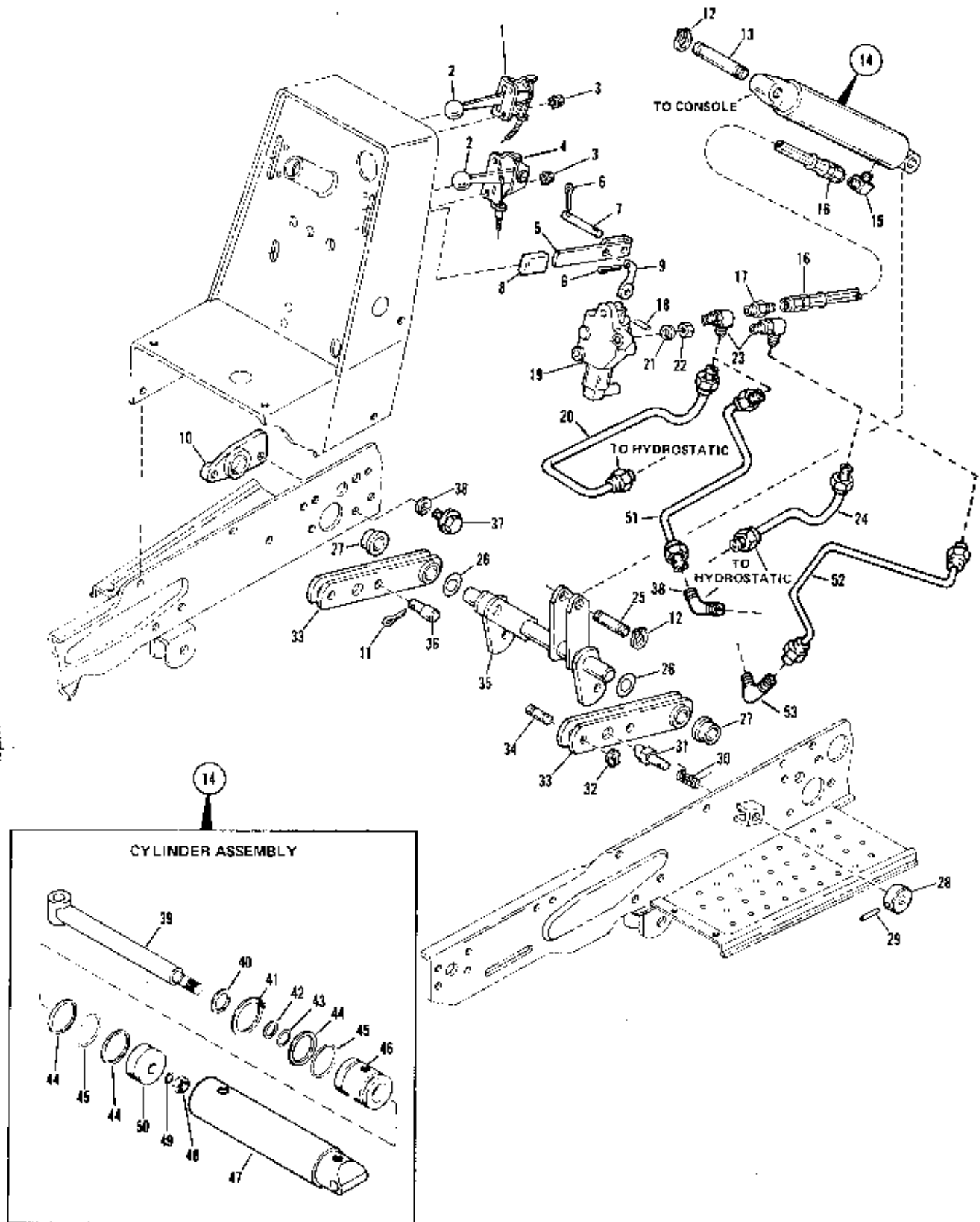


Figure 4 HAND CONTROLS AND LIFT ASSEMBLY



| REF. NO. | PART. NO. | DESCRIPTION  | NO. REQ'D. | REF. NO. | PART. NO. | DESCRIPTION                    | NO. REQ'D. |
|----------|-----------|--|------------|----------|-----------|--------------------------------|------------|
| 1        | 1725393   | Choke Control . . . . .                            | 1          | 25       | 1724704   | Cylinder Rod Pin. . . . .      | 1          |
| 2        | 1725511   | Knob Only (1) . . . . .                            | 2          | 26       | 1725602   | Bowed Washer . . . . .         | 2          |
|          | 1724527   | Knob Only (2)(3)(4)(5) . . .                       | 2          | 27       | 1186037   | Flange Bearing . . . . .       | 2          |
| 3        | 1185985   | External Lockwasher Nut,<br>No. 10-24 . . . . .    | 4          | 28       | 1725452   | Latch Pin Knob. . . . .        | 2          |
| 4        | 1725251   | Throttle Control . . . . .                         | 1          | 29       | 1185376   | Drive Pin, 3/16 x 1-1/2. . . . | 2          |
| 5        | 1724744   | Lift Lever . . . . .                               | 1          | 30       | 1724738   | Torsion Spring . . . . .       | 2          |
| 6        | ● 1185850 | Cotter Pin, 5/64 x 3/4 . . . .                     | 3          | 31       | 1724739   | Latch Pin. . . . .             | 2          |
| 7        | 1724741   | Pin . . . . .                                      | 1          | 32       | 1118808   | Retaining Ring . . . . .       | 4          |
| 8        | 1724743   | Handle Grip . . . . .                              | 1          | 33       | 1724697   | Lift Arm Anchor. . . . .       | 2          |
| 9        | 1724742   | Lever Link . . . . .                               | 1          | 34       | 1724702   | Anchor Pin. . . . .            | 2          |
| 10       | 1724707   | Bearing Support . . . . .                          | 1          | 35       | 1724694   | Pivot Shaft Assy. . . . .      | 1          |
| 11       | ● 1100350 | Cotter Pin, 1/8 x 1. . . . .                       | 2          | 36       | 1724705   | Shoulder Pin. . . . .          | 2          |
| 12       | 1113527   | Retaining Ring . . . . .                           | 4          | 37       | 1186345   | Flange Screw, 3/8-16 x 3/4 .   | 2          |
| 13       | 1724703   | Cylinder Anchor Pin . . . . .                      | 1          | 38       | 1185902   | 45° Elbow (5) . . . . .        | 1          |
| 14       | 1724520   | Cylinder (Incl. Ref. Nos.<br>39 thru 50) . . . . . | 1          | 39       | 1724512   | Piston Rod Assy. . . . .       | 1          |
| 15       | 1185739   | 90° Elbow . . . . .                                | 2          | 40       | 1185266   | Oil Seal . . . . .             | 1          |
| 16       | 1719178   | Cylinder Hose . . . . .                            | 2          | 41       | 1118735   | Snap Ring . . . . .            | 1          |
| 17       | 1717563   | Connector . . . . .                                | 2          | 42       | 1186019   | Ring Washer. . . . .           | 1          |
| 18       | 1185479   | Roll Pin, 3/32 x 5/8. . . . .                      | 1          | 43       | 1177395   | "O" Ring. . . . .              | 1          |
| 19       | 1724722   | Valve (1)(2)(3)(4) . . . . .                       | 1          | 44       | 1186018   | Ring Washer. . . . .           | 3          |
|          | 1734335   | Valve (5) . . . . .                                | 1          | 45       | 1186017   | "O" Ring. . . . .              | 2          |
|          | 1726213   | Valve Repair Kit (1)(2)(3)<br>(4) . . . . .        | 1          | 46       | 1724511   | Cylinder Head. . . . .         | 1          |
| 20       | 1724737   | L.H. Tubing Assy. . . . .                          | 1          | 47       | 1724516   | Cylinder Tube Assy. . . . .    | 1          |
| 21       | ● 1100241 | Lockwasher, 1/4 . . . . .                          | 2          | 48       | 1110154   | Locknut, 5/8-18 . . . . .      | 1          |
| 22       | ● 1186229 | Nut, 1/4-20 . . . . .                              | 2          | 49       | 1177509   | "O" Ring. . . . .              | 1          |
| 23       | 1185737   | 90° Elbow . . . . .                                | 2          | 50       | 1724515   | Piston . . . . .               | 1          |
| 24       | 1724736   | R.H. Tubing Assy. (1)(2)(3)<br>(4) . . . . .       | 1          | 51       | 1734633   | Tubing Assy. (5) . . . . .     | 1          |
|          |           |  |            | 52       | 1734634   | Tubing Assy. (5) . . . . .     | 1          |
|          |           |  |            | 53       | 1185739   | 90° Elbow (5) . . . . .        | 1          |

- (1) Serial Numbers 0100101 thru 0199999
- (2) Serial Numbers 0200101 thru 0299999
- (3) Serial Numbers 0300101 thru 0399999
- (4) Serial Numbers 0400101 thru 0499999
- (5) Starting With Serial Number 0500101

● Common Hardware - Purchase Locally  
(Grade 5 where applicable).

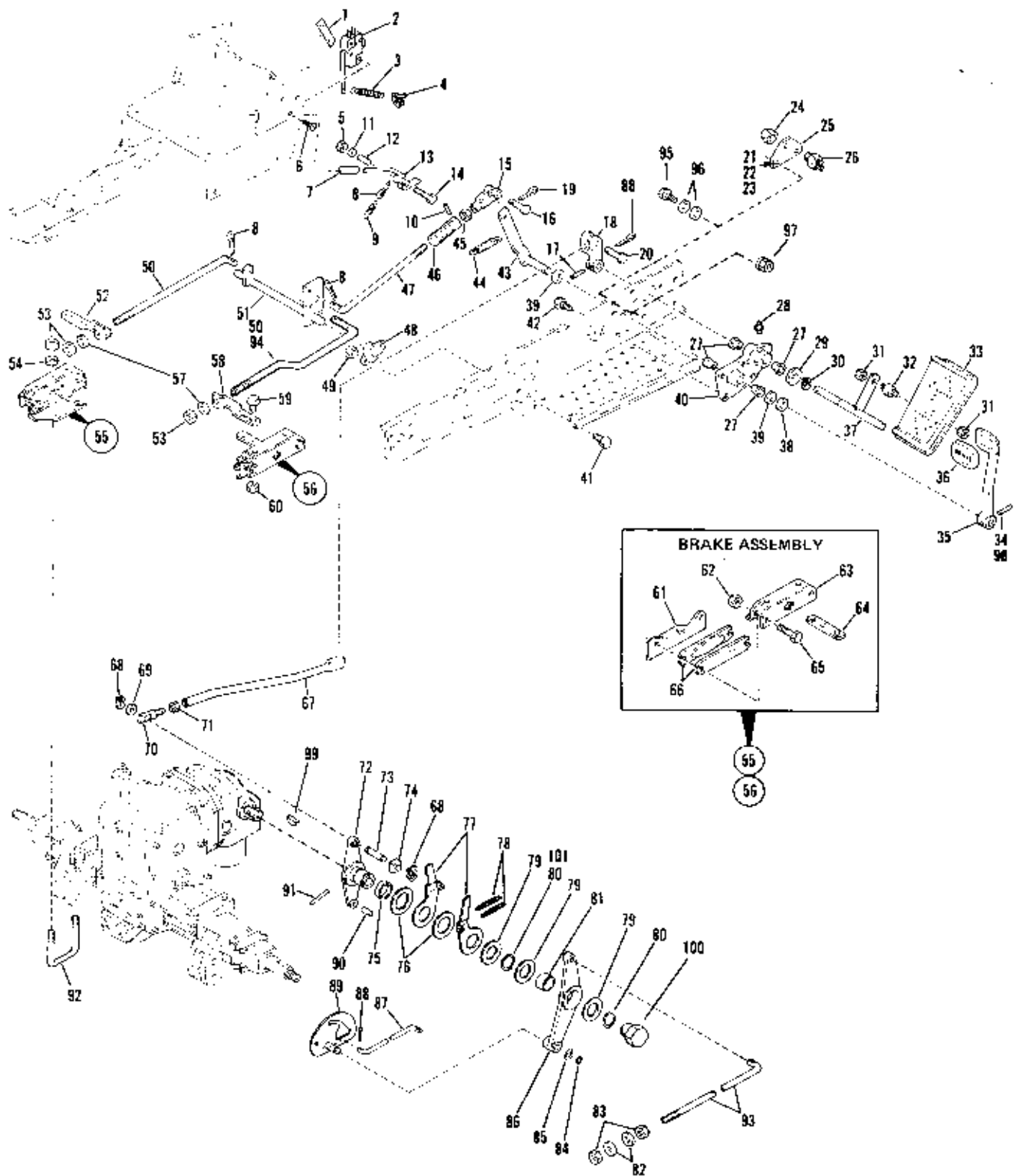


Figure 5 BRAKE AND HYDRO CONTROL ASSEMBLIES

| REF. NO. | PART NO. | DESCRIPTION  | NO. REQ'D. |
|----------|----------|--|------------|
| 1        | 1727777  | Twin Type Speed Nut (2)(3)(4)(5) . . . . .             | 2          |
| 2        | 1725550  | Brake Switch (2)(3)(4)(5) . . . . .                    | 1          |
| 3        | 1725826  | Spring (2)(3)(4)(5) . . . . .                          | 1          |
| 4        | 1725536  | Clamp (2)(3)(4)(5) . . . . .                           | 1          |
| 5        | 1110107  | Locknut, 5/16-18 . . . . .                             | 1          |
| 6        | 1725552  | Fill. Hd. Screw, No. 4-40 x 3/4 (2)(3)(4)(5) . . . . . | 2          |
| 7        | 1725483  | Handle Grip . . . . .                                  | 1          |
| 8        | 1185147  | Cotter Pin, 3/32 x 6/8 . . . . .                       | 8          |
| 9        | 1725354  | Extension Spring . . . . .                             | 1          |
| 10       | 1177625  | Drive Pin . . . . .                                    | 1          |
| 11       | 1107382  | Flat Washer, 5/16 . . . . .                            | 1          |
| 12       | 1725353  | Spacer . . . . .                                       | 1          |
| 13       | 1725355  | Brake Latch . . . . .                                  | 1          |
| 14       | 1103202  | Capscrew, 5/16-18 x 2 . . . . .                        | 1          |
| 15       | 222007   | Clutch Rod Yoke . . . . .                              | 1          |
| 16       | 1112587  | Clevis Pin, 5/16 x 1-3/16 . . . . .                    | 1          |
| 17       | 1713432  | Drive Pin, 3/16 x 1-1/4 . . . . .                      | 1          |
| 18       | 1724467  | Control Arm . . . . .                                  | 1          |
| 19       | 1100349  | Cotter Pin, 1/8 x 3/4 . . . . .                        | 2          |
| 20       | 1724632  | Clevis Pin . . . . .                                   | 1          |
| 21       | 1103195  | Capscrew, 5/16-18 x 5/8 H.T. (1) . . . . .             | 2          |
| 22       | 1186391  | Flange Nut, 5/16-18 (1) . . . . .                      | 2          |
| 23       | 1100255  | Flat Washer, 5/16 (1) . . . . .                        | 2          |
| 24       | 1721070  | Pal Nut, 9/16-18 (1) . . . . .                         | 1          |
| 25       | 1725349  | Switch Support (1) . . . . .                           | 1          |
| 26       | 1720963  | Interlock Safety Switch (1) . . . . .                  | 1          |
| 27       | 1185802  | Flange Bearing . . . . .                               | 4          |
| 28       | 1185976  | Grease Fitting . . . . .                               | 1          |
| 29       | 1100266  | Flat Washer, 5/8 . . . . .                             | 1          |
| 30       | 1185668  | Retaining Ring . . . . .                               | 1          |
| 31       | 1186389  | Flange Nut, 1/4-20 . . . . .                           | 2          |
| 32       | 1725335  | Rubber Mount . . . . .                                 | 1          |
| 33       | 1725287  | R.H. Pedal . . . . .                                   | 1          |
| 34       | 1185232  | Roll Pin, 3/16 x 1-1/4 . . . . .                       | 1          |
| 35       | 1725520  | Brake Pedal . . . . .                                  | 1          |
| 36       | 1725518  | Pedal Pad . . . . .                                    | 1          |
| 37       | 1725338  | Control Shaft . . . . .                                | 1          |
| 38       | 1701411  | Bowed Washer . . . . .                                 | 1          |
| 39       | 1715301  | Thrust Washer . . . . .                                | As Req'd.  |
| 40       | 1725030  | Speed Control Bearing Support . . . . .                | 1          |
| 41       | 1186345  | Flange Lockscrew, 3/8-16 x 3/4 . . . . .               | 4          |
| 42       | 1186345  | Whiz-Lock Screw, 3/8-16 x 3/4 . . . . .                | 5          |
| 43       | 1725346  | Brake Arm . . . . .                                    | 1          |
| 44       | 1725367  | Extension Spring . . . . .                             | 1          |
| 45       | 1186212  | Nut, 3/8-24 . . . . .                                  | 1          |
| 46       | 1725348  | Brake Ratchet . . . . .                                | 1          |
| 47       | 1725347  | Adjusting Rod . . . . .                                | 1          |
| 48       | 1724457  | Flanged Bearing . . . . .                              | 2          |
| 49       | 1186393  | Flange Nut, 3/8-16 . . . . .                           | 4          |
| 50       | 1725364  | Brake Rod (1)(2)(3)(4) . . . . .                       | 2          |
|          | 1725364  | L.H. Brake Rod (5) . . . . .                           | 1          |
| 51       | 1725358  | Transfer Shaft . . . . .                               | 1          |
| 52       | 1725363  | L.H. Brake Arm Extension . . . . .                     | 1          |
| 53       | 1110108  | Locknut, 3/8-16 . . . . .                              | 6          |
| 54       | 1185715  | Lockwasher, 3/8 . . . . .                              | 4          |
| 55       | 1724580  | L.H. Brake Assy. [Incl. Ref. Nos. 61 thru 66]. . . . . | 1          |

| REF. NO. | PART NO. | DESCRIPTION   | NO. REQ'D. |
|----------|----------|---|------------|
| 56       | 1724599  | R.H. Brake Assy. (Incl. Ref. Nos. 61 thru 66) . . . . . | 1          |
| 57       | 1100256  | Flat Washer, 3/8 . . . . .                              | 2          |
| 58       | 1725362  | R.H. Brake Arm Extension . . . . .                      | 1          |
| 59       | 1186347  | Whiz-Lock Screw, 3/8 16 x 1 . . . . .                   | 4          |
| 60       | 1186393  | Whiz-Lock Nut, 3/8-16 . . . . .                         | 4          |
| 61       | 1724473  | Brake Support . . . . .                                 | 1          |
| 62       | 1724591  | Locknut . . . . .                                       | 2          |
| 63       | 1724587  | Secondary Bracket . . . . .                             | 1          |
| 64       | 1724588  | Actuating Lever . . . . .                               | 1          |
| 65       | 1724590  | Bolt . . . . .  | 2          |
| 66       | 1724589  | Stator Plate . . . . .                                  | 2          |
| 67       | 1725343  | Speed Control Rod (1)(2)(3)(4) . . . . .                | 1          |
|          | 1734372  | Speed Control Rod (5) . . . . .                         | 1          |
| 68       | 1185219  | Retaining Ring . . . . .                                | 2          |
| 69       | 1890948  | Washer . . . . .  | 1          |
| 70       | 1724446  | Rod End . . . . .                                       | 1          |
| 71       | 1186233  | Nut, 1/2-13 . . . . .                                   | 1          |
| 72       | 1724449  | Speed Control Arm (1)(2)(3)(4) . . . . .                | 1          |
|          | 1732391  | Speed Control Arm (5) . . . . .                         | 1          |
| 73       | 1724445  | Control Pin . . . . .                                   | 1          |
| 74       | 1720699  | Cushion Block . . . . .                                 | 1          |
| 75       | 1720706  | Bearing . . . . .                                       | 1          |
| 76       | 1720361  | Thrust Washer . . . . .                                 | 2          |
| 77       | 1725359  | Neutralizer Arm . . . . .                               | 2          |
| 78       | 1724582  | Extension Spring . . . . .                              | 2          |
| 79       | 1720529  | Thrust Washer . . . . .                                 | 3          |
| 80       | 1185732  | External Retaining Ring (1)(2)(3)(4) . . . . .          | 2          |
| 81       | 1724581  | Bearing (1)(2)(3)(4) . . . . .                          | 1          |
|          | 1732833  | Bearing (5) . . . . .                                   | 1          |
| 82       | 1100265  | Flat Washer, 7/16 (1)(2)(3)(4) . . . . .                | 2          |
| 83       | 1186232  | Nut, 7/16-14 . . . . .                                  | 2          |
| 84       | 1118804  | Retaining Ring . . . . .                                | 1          |
| 85       | 1706782  | Wave Washer . . . . .                                   | 1          |
| 86       | 1724452  | Neutral Stop Arm (1)(2)(3)(4) . . . . .                 | 1          |
|          | 1732420  | Neutral Stop Arm (5) . . . . .                          | 1          |
| 87       | 1724820  | Lockplate Control Rod (1)(2)(3)(4) . . . . .            | 1          |
|          | 1733259  | Lockplate Control Rod (5) . . . . .                     | 1          |
| 88       | 1100348  | Cotter Pin . . . . .                                    | 2          |
| 89       | 1724443  | Lockplate Assy. . . . .                                 | 1          |
| 90       | 1110187  | Dowel Pin . . . . .                                     | 1          |
| 91       | 1186022  | Spiral Roll Pin (1)(2)(3)(4) . . . . .                  | 1          |
| 92       | 1724468  | "U" Bolt, 3/8-16 . . . . .                              | 2          |
| 93       | 1724444  | Neutral Adjuster Rod (1)(2)(3)(4) . . . . .             | 1          |
|          | 1732189  | Neutral Adjuster Rod (5) . . . . .                      | 1          |
| 94       | 1734371  | R.H. Brake Rod (5) . . . . .                            | 1          |
| 95       | 1103195  | Hex Screw, 5/16-18 x 5/8 (5) . . . . .                  | 1          |
| 96       | 1100242  | Flat Washer, 5/16 (5) . . . . .                         | 2          |
| 97       | 1186391  | Flange Nut, 5/16-18 (5) . . . . .                       | 1          |
| 98       | 1713432  | Drive Pin, 3/16 x 1-1/4 (5) . . . . .                   | 1          |
| 99       | 1104435  | Woodruff Key (5) . . . . .                              | 1          |
| 100      | 1730087  | Hydro Control Nut (5) . . . . .                         | 1          |
| 101      | 1185732  | Retaining Ring (5) . . . . .                            | 1          |

(1) Serial Numbers 0100101 thru 0199999  
 (2) Serial Numbers 0200101 thru 0299999  
 (3) Serial Numbers 0300101 thru 0399999  
 (4) Serial Numbers 0400101 thru 0499999  
 (5) Starting With Serial Number 0500101

•Common Hardware - Purchase Locally  
 (Grade 5 where applicable).

# BOLENS 16 HP TRACTOR

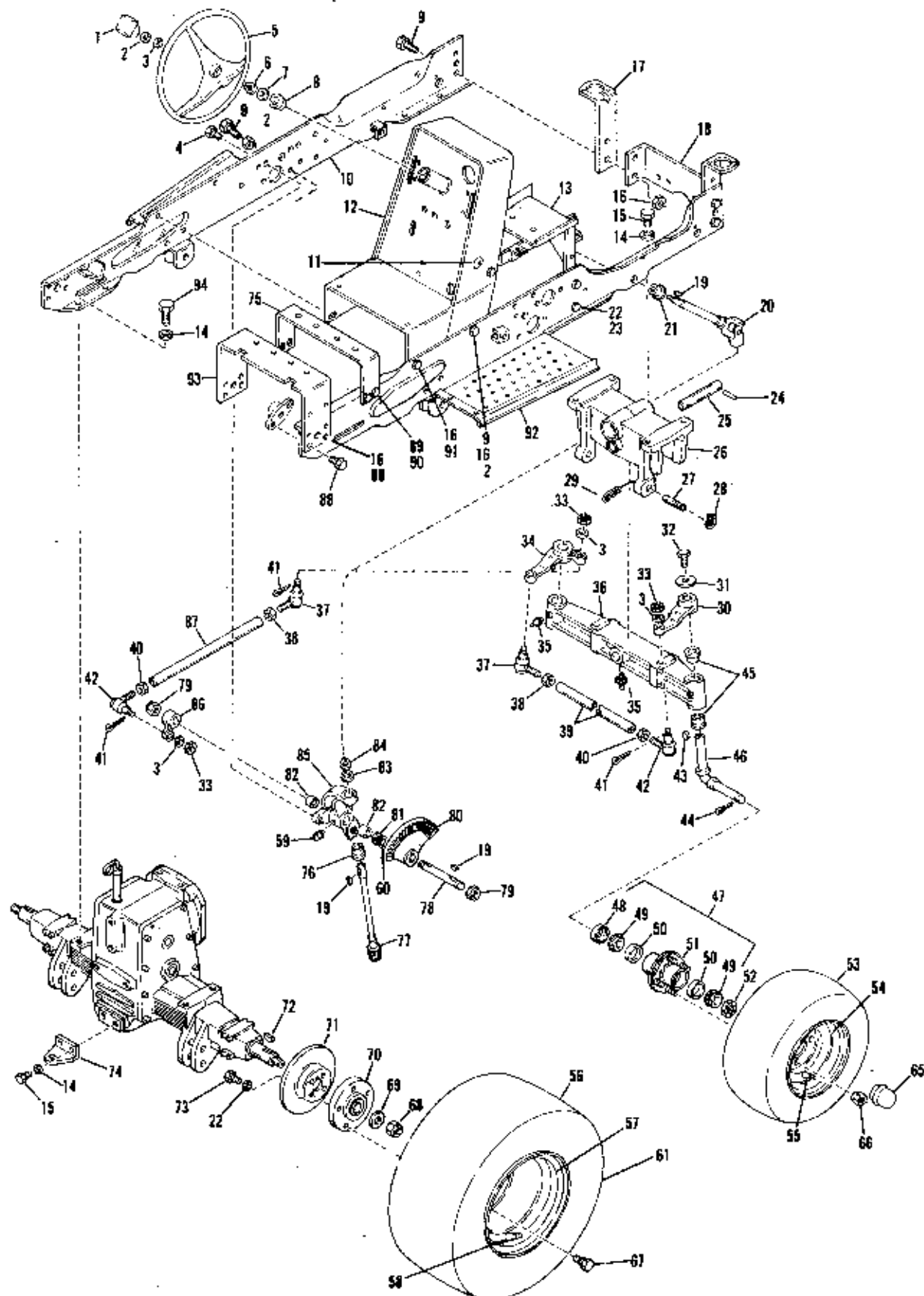


Figure 6 FRAME, STEERING AND AXLE ASSEMBLIES

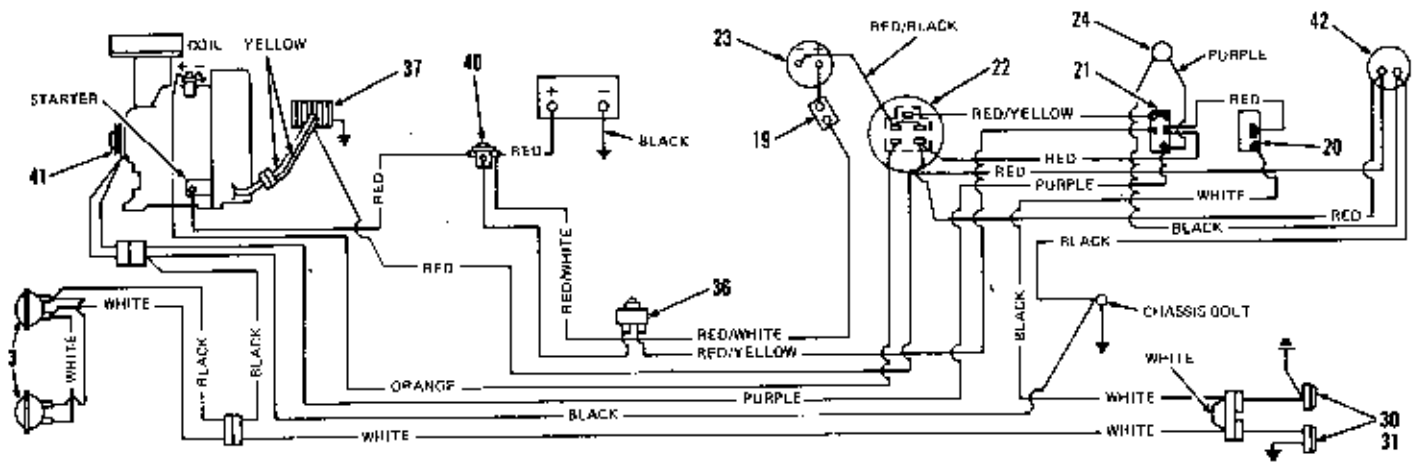
| REF. NO. | PART NO.  | DESCRIPTION  | NO. REQ'D. | REF. NO. | PART NO.  | DESCRIPTION                 | NO. REQ'D. |
|----------|-----------|--|------------|----------|-----------|-----------------------------|------------|
| 1        | 1725510   | Cap, Steering Wheel (1)                              | 1          | 49       | 1185661   | Bearing Cone                | 4          |
|          | 1727415   | Cap, Steering Wheel (2)(3)                           | 1          | 50       | 1185660   | Bearing Cup                 | 4          |
|          | 1731551   | Cap, Steering Wheel (4)(5)                           | 1          | 51       | 1724661   | Wheel Hub                   | 2          |
| 2        | ● 1110108 | Lock Nut, 3/8-16                                     | 3          | 52       | 1185758   | Castle Nut, 1-14            | 2          |
| 3        | ● 1107383 | Flat Washer, 3/8                                     | 5          | 53       | 1717441   | Tire, 16 x 6.50-8 (1)(2)(3) | 2          |
| 4        | 1186345   | Lock Screw, 3/8-16 x 3/4                             | 2          |          | 1732927   | Tire 16 x 6.50-8 (4)(5)     | 2          |
| 5        | 1721805   | Steering Wheel (1)(2)(3)                             | 1          | 54       | 1724713   | Wheel                       | 2          |
|          | 1731552   | Steering Wheel (4)(5)                                | 1          | 55       | 1718086   | Valve Stem                  | 2          |
| 6        | 1113527   | Retaining Ring                                       | 1          | 56       | 1722522   | Tire, 23 x 10.50-12         |            |
| 7        | 1708012   | Flat Washer  | As Req'd   |          |           | (1)(2)(3)                   | 2          |
| 8        | 1723994   | Bearing, Steering                                    | 1          |          | 1732926   | Tire, 23 x 10.50-12 (4)     | 2          |
| 9        | ● 1100043 | Capscrew, 3/8-16 x 1-1/4                             | 6          | 57       | 1724717   | Wheel                       | 2          |
| 10       | 1725024   | Frame, Left Hand                                     | 1          | 58       | 1718086   | Valve Stem                  | 2          |
| 11       | 1700311   | Plug   | 1          | 59       | 1185976   | Grease Fitting (1)(2)(5)    | 1          |
| 12       | 1724666   | Support, Panel (1)                                   | 1          |          | 1186426   | Grease Fitting (3)(4)       | 1          |
|          | 1727162   | Support, Panel (2)(3)(4)                             | 1          | 60       | 1709224   | Shim .030 (3)(4)(5)         | As Req'd   |
|          | 1734727   | Support, Panel (5)                                   | 1          |          |           |                             |            |
| 13       | 1725018   | Support (1)(2)                                       | 1          |          |           |                             |            |
|          | 1727741   | Support (3)(4)(5)                                    | 1          |          |           |                             |            |
| 14       | ● 1100245 | Lockwasher, 1/2                                      | 10         |          |           |                             |            |
| 15       | ● 1100055 | Capscrew, 1/2-13 x 1 1/4                             | 6          |          |           |                             |            |
| 16       | 1186393   | Nut, 3/8-16  | 14         |          |           |                             |            |
| 17       | 1724875   | Support Hanger (1)(2)                                | 2          | 61       | 1723199   | Tire, 23 x 10.50-12         | 2          |
|          | 1727738   | Support Hanger (3)(4)(5)                             | 2          |          | 1732967   | Wheel                       | 2          |
| 18       | 1725045   | Brace  | 1          |          | 1718086   | Valve Stem                  | 2          |
| 19       | 1104436   | Woodruff Key, 3/16 x 3/8                             | 4          | 65       | 1719599   | Cap                         | 2          |
| 20       | 1725078   | Shaft, Steering                                      | 1          | 66       | 1724322   | Nut                         | 8          |
| 21       | 1725077   | Bearing, Steering                                    | 1          | 67       | 101085    | Bolt, Hub                   | 10         |
| 22       | ● 1100243 | Lockwasher, 3/8                                      | 12         | 68       | ● 1120390 | Lock Nut, 3/4-10            | 2          |
| 23       | ● 1103212 | Capscrew, 3/8-16 x 5/8                               | 4          | 69       | 1708599   | Spacer                      | 2          |
| 24       | 1185376   | Roll Pin, 3/16 x 1 1/2                               | 2          | 70       | 1724815   | Wheel Hub                   | 2          |
| 25       | 1724676   | Axle Pivot   | 1          | 71       | 1724478   | Disc Brake                  | 2          |
| 26       | 1725097   | Bolster  | 1          | 72       | 1100281   | Woodruff Key,               |            |
| 27       | 1724935   | Pin, Pivot   | 2          |          |           | 5/16 x 1 1/8                | 2          |
| 28       | 1185668   | Retaining Ring                                       | 2          | 73       | ● 1100046 | Capscrew, 3/8 16 x 1 H.T.   | 8          |
| 29       | 1719672   | Pin, Klik  | 2          | 74       | 1724698   | Draw Bar                    | 1          |
| 30       | 1724653   | Knuckle Arm, R.H.                                    | 1          | 75       | 1725318   | Support, Transmission       | 1          |
| 31       | ● 1186033 | Flat Washer, 5/16                                    | 2          | 76       | 1725075   | Flange Bushing              | 1          |
| 32       | 1186329   | Lock Screw, 5/16-18 x 3/4                            | 2          | 77       | 1725080   | Bevel Pinion, 11T           | 1          |
| 33       | 1120103   | Castle Nut, 3/8-24                                   | 4          | 78       | 1725071   | Shaft, Steering             | 1          |
| 34       | 1724655   | Knuckle Arm, L.H.                                    | 1          | 79       | ● 1185093 | Self-Locking Nut, 3/4-16    | 2          |
| 35       | 1185976   | Grease Fitting                                       | 3          | 80       | 1725082   | Gear, Steering              | 1          |
| 36       | 1724660   | Front Axle   | 1          | 81       | 1725069   | Nylon Washer                | 1          |
| 37       | 1724657   | Socket, L.H. (Incl. No. 33)                          | 2          | 82       | 1185583   | Sleeve Bearing              | 2          |
| 38       | 1186030   | Nut, 1/2-20 L.H.                                     | 2          | 83       | 1715301   | Thrust Washer               | 1          |
| 39       | 1724658   | Tie Rod  | 1          | 84       | 1118808   | Retaining Ring              | 1          |
| 40       | ● 1186247 | Nut, 1/2-20  | 2          | 85       | 1725084   | Support, Steering           | 1          |
| 41       | ● 1100346 | Cotter Pin, 3/32 x 3/4                               | 4          | 86       | 1725073   | Arm, Steering               | 1          |
| 42       | 1724656   | Socket, R.H. (Incl. 33)                              | 2          | 87       | 1725074   | Drag Link                   | 1          |
| 43       | 1186034   | Woodruff Key, 1/4 x 7/8                              | 2          | 88       | 1186347   | Screw, Whiz-Lock            | 8          |
| 44       | ● 1104222 | Cotter Pin, 3/16 x 1-1/2                             | 2          | 89       | 1186329   | Flange Screw, 5/16-18 x 3/4 | 4          |
| 45       | 1185728   | Flange Bearing                                       | 4          | 90       | 1186391   | Nut, 5/16-18 x 7/8          | 4          |
| 46       | 1724664   | Spindle, Wheel                                       | 2          | 91       | ● 1100046 | Capscrew, 3/8-16 x 1        | 5          |
| 47       | 1724662   | Wheel Hub Assembly (Incl. Ref. Nos. 48 thru 51 & 65) | 2          | 92       | 1725023   | R.H. Frame (1)(2)(3)(4)     | 1          |
|          |           |  |            |          | 1734251   | R.H. Frame (5)              | 1          |
| 48       | 1719601   | Felt Seal  | 2          | 93       | 1725298   | Support, Seat               | 1          |
|          |           |  |            | 94       | ● 1100054 | Capscrew, 1/2-13 x 1        | 4          |
|          |           |  |            | NI       | 1723479   | Multi Purpose Grease        |            |
|          |           |  |            | NI       | 1723284   | Grease Gun                  |            |

### MODEL 1662 - AGRI. TIRE KIT

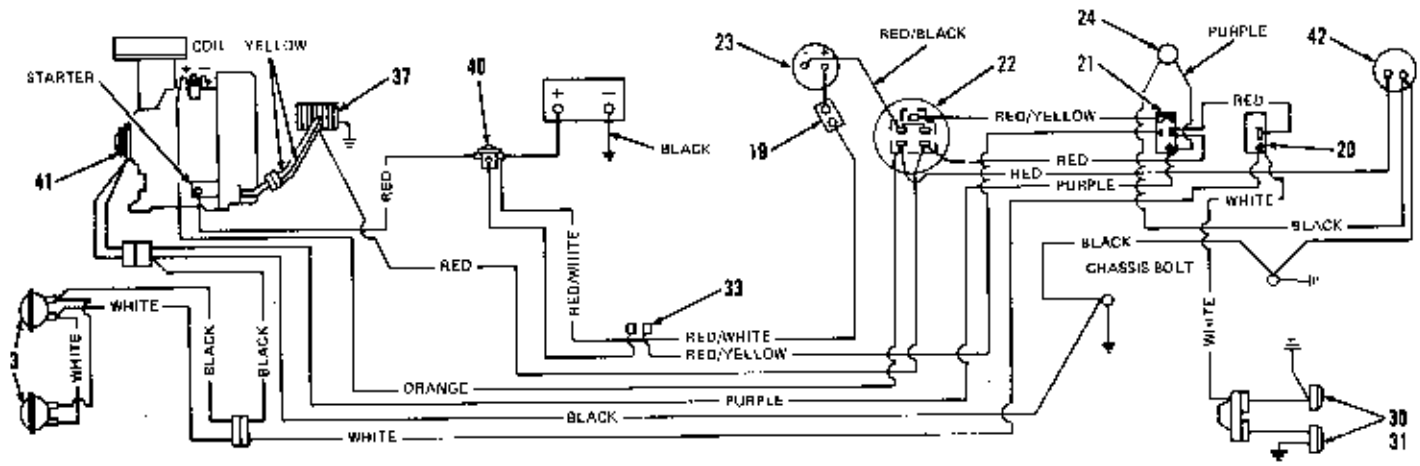
- (1) Serial Numbers 0100101 thru 0199999
- (2) Serial Numbers 0200101 thru 0299999
- (3) Serial Numbers 0300101 thru 0399999
- (4) Serial Numbers 0400101 thru 0499999
- (5) Starting With Serial Number 0500101

● Common Hardware - Purchase Locally  
(Grade 5 where applicable).

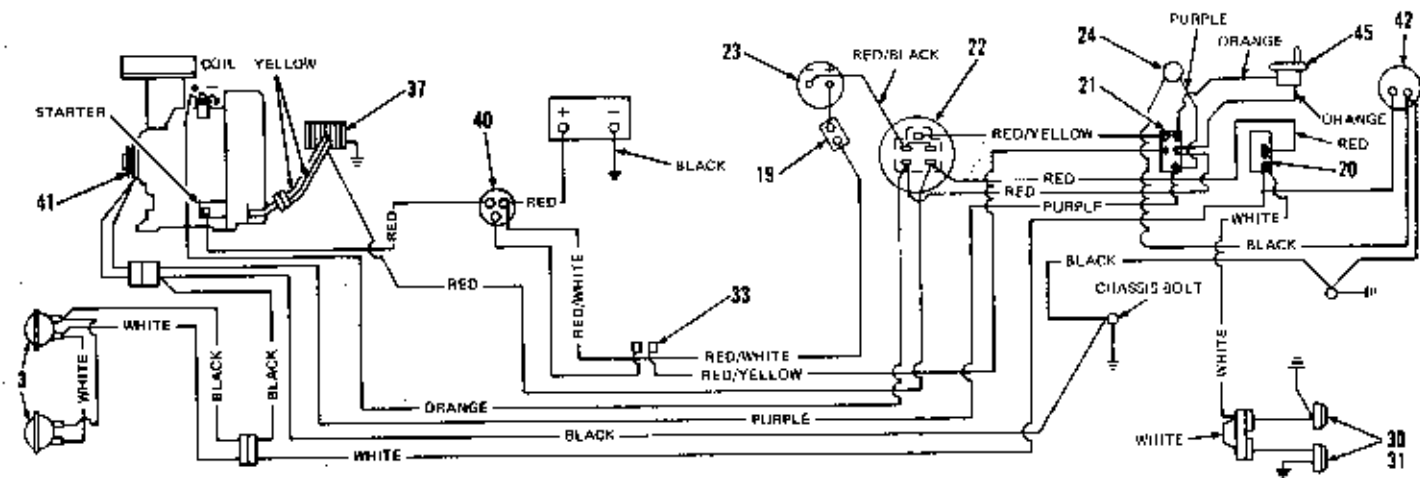
# BOLENS 16 HP TRACTOR



Serial Number 0100101 thru 0199999



Serial Number 0200101 thru 0499999



Serial Number 0500101 and up

Figure 7 ELECTRICAL SYSTEM

REAR VIEW OF IGNITION SWITCH



OFF

POSITION NO. 1



RUN

POSITION NO. 2



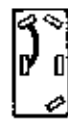
START

POSITION NO. 3

REAR VIEW OF ATTACHMENT DRIVE SWITCH



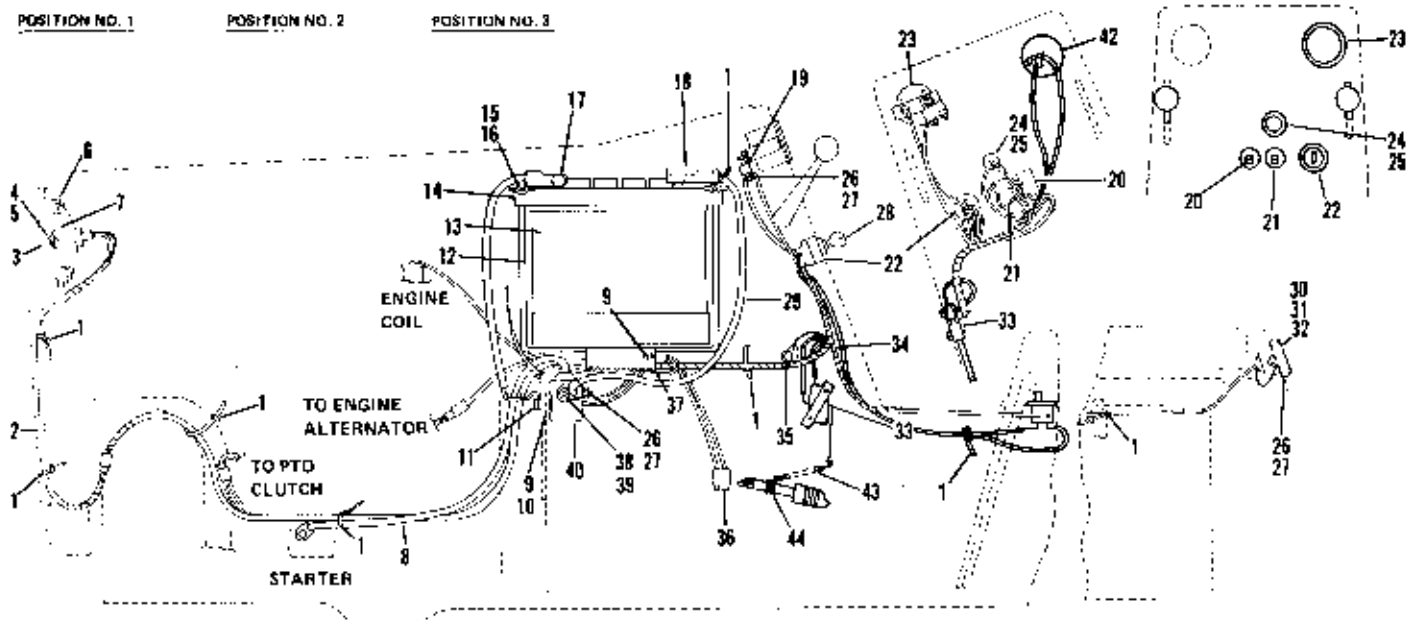
DRIVE ON



DRIVE OFF

REAR VIEW OF CONSOLE

FRONT VIEW OF CONSOLE



| REF. NO. | PART NO. | DESCRIPTION                                  | NO. REQ'D. |
|----------|----------|--|------------|
| 1        | 1805345  | Cable Ties                                   | 7          |
| 2        | 1725020  | Headlight Harness (1)                        | 1          |
|          | 1727159  | Headlight Harness (2)(3)(4)(5)               | 1          |
| 3        | 1726435  | Headlight (Mfg. No. 4406-1)                  | 2          |
| 4        | 1107381  | Flat Washer, No. 10                          | 4          |
| 5        | 1185878  | Pop Rivet, 3/16 x 3/8                        | 4          |
| 6        | 1806805  | Retaining Plate                              | 2          |
| 7        | 1806808  | Retainer                                     | 2          |
| 8        | 1722731  | Starter Cable                                | 1          |
| 9        | 1186389  | Nut, 1/4-20                                  | 8          |
| 10       | 1100805  | Capscrew, 1/4-20 x 3/4                       | 2          |
| 11       | 1719191  | Jumper Wire (1)                              | 1          |
| 12       | 1724895  | "U" Bolt                                     | 1          |
| 13       | 1718027  | Battery                                      | 1          |
| 14       | 1724360  | Battery Clamp                                | 1          |
| 15       | 1107381  | Flat Washer, 1/4                             | 2          |
| 16       | 1709652  | Wing Nut                                     | 2          |
| 17       | 1725373  | Battery Cable - Neg.                         | 1          |
| 18       | 1721413  | Battery Boot                                 | 1          |
| 19       | 1725375  | Circuit Breaker, 20 Amp.                     | 1          |
| 20       | 1724894  | Headlight Switch                             | 1          |
| 21       | 1725098  | PTO Switch                                   | 1          |
| 22       | 1721409  | Ignition Switch (Incl. Ref. No. 28)          | 1          |
| 23       | 1725031  | Ammeter                                      | 1          |
| 24       | 1725099  | Clutch Lamp (Incl. Ref. No. 25) (1)(2)(3)(4) | 1          |
|          | 1734824  | Clutch Lamp (Incl. Ref. No. 25) (5)          | 1          |

| REF. NO. | PART NO. | DESCRIPTION                               | NO. REQ'D. |
|----------|----------|---|------------|
| 25       | **       | Bulb (Mfg. No. GE 1895R/Rad) (1)(2)(3)(4) | 1          |
|          | 1735285  | Bulb (Mfg. No. 73) (5)                    | 1          |
| 26       | 1100240  | Lockwasher, No. 10                        | 6          |
| 27       | 1186208  | Nut, No. 10-32                            | 6          |
| 28       | 1718266  | Key Only                                  | 1          |
| 29       | 1725374  | Battery Cable - Pos.                      | 1          |
| 30       | 1725312  | Tail Light (Incl. Ref. No. 31)            | 2          |
| 31       | **       | Bulb (Mfg. No. GE194)                     | 2          |
| 32       | 1726893  | Lens and Reflector Assy.                  | 2          |
| 33       | 1725550  | Brake Switch (2)(3)(4)(5)                 | 1          |
| 34       | 1727787  | Main Harness (1)(2)(3)(4)                 | 1          |
|          | 1734729  | Main Harness (5)                          | 1          |
| 35       | 1186231  | Nut, 3/8-16                               | 1          |
| 36       | 1720963  | Interlock Switch (1)                      | 1          |
| 37       | 1725406  | Rectifier Regulator, 15 Amp               | 1          |
| 38       | 1100243  | Lockwasher, 5/16 (1)(2)                   | 2          |
| 39       | 1188211  | Nut, 5/16-24 (1)(2)                       | 2          |
| 40       | 1717048  | Starter Solenoid (1)(2)(3)(4)             | 1          |
|          | 1729547  | Starter Solenoid (5)                      | 1          |
| 41       | 1725376  | PTO Clutch (1)                            | 1          |
|          | 1727165  | PTO Clutch (2)(3)(4)(5)                   | 1          |
| 42       | 1732263  | Hour Meter                                | 1          |
| 43       | 1725826  | Spring (2)(3)(4)(5)                       | 1          |
| 44       | 1725536  | Clamp (2)(3)(4)(5)                        | 1          |
| 45       | 1734366  | Seat Switch (5)                           | 1          |
| 46       | 1734472  | Switch Seal (5)                           | 1          |

- (1) Serial Numbers 0100101 thru 0189999
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- (5) Starting With Serial Number 0600101

\*\* Not Stocked. Purchase from your local automotive or electrical supplier.

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